South Carolina Department of Transportation

Bridge Management Parametric Study

Final Report

Job No. 10103440

Statewide South Carolina

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Submitted to:
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Executive Summary

A Parametric Study was performed for the South Carolina Department of Transportation, Department of Bridges and Structures examining the resulting maximum moments and shears at specific points of interest from a suite of Design (AASHTO HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane for LRFR, HS-20 for LFR), Legal (AASHTO Legal Loads and specific South Carolina Legal Loads), and Permit Trucks (including South Carolina specific trucks and trucks from adjacent states) crossing the bridges of South Carolina. The purpose of the study was to summarize which trucks need to be used for load rating the South Carolina bridges in order to be compliant with Federal Highway Administration, Department of Transportation (FHWA) 23 CFR 650.307 c (2) and 650.313 c Load Rating.

The final results of the study show that for Legal Loads, the HL-93 Variable Axle Design Truck with the Design Lane Load (using Inventory level Rating Factor of 1.75) controls the Rating Factor for all Legal Trucks (using an average Legal Load Rating Factor of 1.45) for all span lengths and critical force effects for 1-Span bridge arrangements.

For 2-Span bridge arrangements, a specific South Carolina Legal Truck (SC SHV2B) using a Legal Load Rating Factor of 1.45 controls the Rating Factor (over HL-93 Design Truck + Lane using Inventory level Rating Factor of 1.75) for span lengths 15’ and less for both moment and shear. However, the HL-93 Design Tandem + Lane (using an Inventory level Rating Factor of 1.75) control the Rating Factor over the SC SHV2B Legal Truck for span lengths less than 15’ in all 2-Span arrangements.

For 3-Span bridge arrangements, HL-93 Design Truck + Lane or HL-93 Truck Train + Lane design loading with a 1.75 Inventory level Rating Factor controls over all the state and federal legal loads with a 1.45 factor.

Concerning the South Carolina specific School Bus (with a Legal Rating Factor 1.45), the bus controls the Rating Factor (specifically over the SC-SU2 2-Axle Truck) for span lengths 20’-30’ and less and therefore must be included in Legal Load Ratings.

Another result is that the South Carolina Specialized Hauling Vehicles, allowed only on non-Interstate roadways, control the Rating Factor over the AASHTO Specialized Hauling Vehicles. When only comparing the AASHTO SHV Trucks, SU7 controls the Rating Factor, but when the Gross Vehicle Weight (GVW) is divided out, the SU4 controls the actual Rating Tonnage. For non-Interstate System roads, it is recommended the South Carolina Specialized Hauling Vehicles are load rated with only the SU4 and SU7 AASHTO Specialized Hauling Vehicles additionally run. For all Interstate System roads, the SU4, SU5, SU6 and SU7 AASHTO Specialized Hauling Vehicles must be load rated and the South Carolina Specialized Hauling Vehicles can be omitted since they are precluded from traveling on Interstates.

Final results for Rating Tons of Single Unit Trucks (comparing Legal Trucks with the Gross Vehicle Weight of the trucks divided out) show that for spans less than 20’-30’, the South Carolina School Bus (2-Axle Truck) controls and for spans greater than 20’-30’ the SC-SU2 (2-Axle Truck) controls. For 3-Axle Trucks, a South Carolina Specific Legal Truck (SC SHV1A (65k)) controls almost all bridge arrangements, span lengths, and critical force effects, except for a couple of isolated locations where AAHSTO’s SC-Type 3 Truck controls. For 4-or-More Axle Trucks, a South Carolina Specific Legal Truck (SC SHV2A (66k)) controls almost all bridge arrangements, span lengths, and critical force effects, except for a couple of isolated locations where AAHSTO’s SU4 Truck controls. For Combination Unit Trucks of 5 or More Axles, South Carolina Specific Legal Trucks (SC SHV3A (85k) and SC SHV3B (90k)), as well as modified AASHTO SC-Type 3S2 Truck, control.

For Permit Loads the study shows that for short simple span bridges less than 35’, the South Carolina Permit Cranes (with a 1.3 Permit Rating Factor) do not control over the remaining standard 100k, 120k and 130k Permit Trucks (with a 1.3 Permit Rating Factor) being analyzed. However, for all 2- and 3-span bridges, the Permit Cranes control for every span length and every critical force effect. In addition, the 177.7k Permit Crane controls over the smaller 160k Permit Crane for all span lengths greater than 35’. For Permit Loads, controlling Rating Factors for all span arrangements, span lengths, and critical force effects, can be obtained by rating the 177.7k Crane, SC-120k, and SC-130k Permit Trucks. However, it is recommended that all 5 Permit Trucks from the study be run as SCDOT finalizes their permitting procedures and methods because vehicles of certain weight may have different permitting allowances such as yearly, monthly or daily permits.

Additionally, for design purposes, the study results show that the HL-93 Design Loading Trucks and Lanes control the Rating Factor over all standard 100k, 120k and 130k permit trucks for all span arrangements and span lengths. However, there are instances when the special permit cranes actually control over the HL-93 Design Loadings as noted below.
The HL-93 Design Loading Trucks and Lanes control the Rating Factor over all Permit Trucks except for the 177.7k Crane at Span Lengths of 70’-150’ for 1-Span arrangements.
The HL-93 Design Loadings (Trucks and Lanes) control the Rating Factor over all Permit Trucks except for the 177.7k Permit Crane at 65’-120’ Span Lengths (for Shear points of interest), 177.7k Permit Crane at 80’-140’ Span Lengths (for Moment at .4L of Span 1) and both Permit Cranes at 30’-45’ Span Lengths (for Max Moment at Interior Bent) for 2-Span arrangements.
For 3-Span arrangements, the HL-93 Design Loadings (Trucks and Lanes) control the Rating Factor over all Permit Trucks except for the 177.7k and 160k Permit Crane at 55’-110’ Span Lengths (for Shear points of interest), 177.7k Permit Crane at 70’-140’ Span Lengths (for Moment at .4L of End Spans and 0.5L of Center Span) and both Permit Cranes at 25-45’ Span Lengths (for Max Moment at Interior Bent). .

This report contains details on the background and scope of the project, the methodology used, data analysis, and corresponding conclusions and recommendations.

Definitions

AASHTO Design Loads – Vehicles/loads specified by AASHTO to be used for the initial design of a structure.

AASHTO Legal Loads – Vehicles/loads provided by AASHTO for load rating bridges for routine legal commercial traffic (including Type 3, 3S2, and 3-3, and Specialized Hauling Vehicles SU4 to SU7 as defined in AASHTO MBE).

Legal Loads – The National Bridge Inspection Standards (NBIS) define Legal Loads as the maximum Legal Load for each vehicle configuration permitted by law for the state in which the bridge is located.

Posting Vehicles – Vehicles developed to represent legal loads and used as vehicle models for load rating and bridge posting.

Routine Permit Loads (Permit Vehicles) – The NBIS defines routine Permit Loads as a live load, which has a gross weight, axle weight or distance between axles not conforming to the State statutes for legally configured vehicles, authorized for unlimited trips over an extended period of time to move alongside other heavy vehicles on a regular basis. The Permit Vehicles within this study are developed to represent Permit Loads and are used in the permitting process to evaluate bridges for overweight vehicles.

Study Vehicles – Live loads, identified from various sources, used in this expanded parametric study.

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1 Introduction / Project Scope

In 2018, HDR Engineering, Inc. (HDR) performed a Parametric Study for the South Carolina Department of Transportation (SCDOT) to ensure SCDOT's compliance with Federal Highway Administration, Department of Transportation (FHWA) 23 CFR 650.307 c (2) and 650.313 c Load Rating and FHWA 23 CFR 650.313 (g) Quality Control and Quality Assurance. FHWA 23 CFR 650.307 c (2) states that 'each state transportation department must include a bridge inspection organization that is responsible for bridge inspections, reports, load ratings, and other requirements of these standards'.

In order to ensure compliance with the load rating portion of these requirements, HDR performed a Parametric Study (study) to determine maximum moments and shears at specific points of interest for six specialized hauling vehicles, South Carolina Representative School Bus, annual Permit Loads, AASHTO Legal Vehicles (with an additional 2-Axle Truck and adjustments to axle weights for Type 3 and Type 3S2 Trucks to encompass South Carolina State Statutes), and SCDOT Special Permit Loads (evaluated super and mega loads for common configurations along with Permit Trucks from adjacent states) all compared to the LRFR HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane. Based on the results of the Parametric Study, HDR has developed a list of recommended rating vehicles. In addition, for reference, graphs comparing unfactored maximum moments and shears (with no impact included) of Legal and Permit Trucks to the HS-20 Design Truck (LFR) are included in the Appendix for future rating of any South Carolina bridges using LFR.

2 Analysis Procedures

The following sections summarize the project approach and procedures used to evaluate the live load analysis with respect to Legal and Permit Study Vehicles compared to the LRFR HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane (and LFR HS-20 Design Truck).

2.1 Live Loads

Live loads were identified from various sources for this study. These sources include AASHTO, South Carolina Statutes and Permit Trucks from adjacent states to South Carolina. See Appendix B for figures showing the axle weights and spacing of the vehicles used in the Parametric Study.

In order to encapsulate maximum loading scenarios, various truck configurations were included in the Parametric Study. The study included LRFR HL-93 Design Loading Vehicles (HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane - for in-depth rating comparison), LFR HS-20 Design Truck (simple live load comparison), AASHTO and South Carolina Legal Loads and Permit Loads developed for this study using State Statutes and previously permitted truck databases provided by the SCDOT. See the table in Appendix B for final trucks chosen for the Parametric Study.

Design Loadings used for evaluation and comparison in the study are the following:

- HL-93 Design Truck with Design Lane (.64 kips/ft.) – LRFR
- HL-93 Design Tandem with Design Lane (.64 kips/ft.) – LRFR
- HL-93 Truck Train (90%) with 90% Design Lane (.576 kips/ft.) – LRFR
- HS-20 Design Truck - LFR

Only the Design Loading Vehicles (HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane) for LRFR are used for an in depth comparison (for determining trucks to be rated and posted) because the purpose of the study is to see how the chosen Legal Loads (specifically South Carolina Specialized Hauling Vehicles and Permits) compare to the HL-93 Design Loading Vehicles. In order to simplify the comparison (since live load and impact factors must be applied) LRFR's HL-93 Design Loading Vehicles and Lanes are chosen for this study due to the fact that LFR's impact factors vary with span length and load factors vary from operating to inventory ratings, while LRFR's impact factor is constant and the load factors for Legal and Permit Vehicles are the same for inventory and operating ratings (according to the most recent *Manual for Bridge Evaluation*). However, in Appendix C, graphs comparing the unfactored moments and shears of all Legal and Permit Trucks are compared to LFR HS-20 Design Truck for reference in rating any bridges designed using LFD.

The Design Trucks HS-15, and HS-25 were not included for comparison in the study because they are straight ratios from and have the same axle spacing as the HS-20 Design Truck (which is used for the LFR comparison).

Legal Trucks used for evaluation in the study included the following (note that 'SC' stands for specific South Carolina Legal Trucks):

- AASHTO Type 3 (modified to encompass SC State Statute Requirements)
- AASHTO Type 3S2 (modified to encompass SC State Statute Requirements)
- AASHTO Type 3-3
- 2-0.75 AASHTO Type 3-3 + .2klf Lane
- SC SHV1A (65k)
- SC SHV1B (70k)
- SC SHV2A (66k)
- SC SHV2B (80k)
- SC SHV3A (85k)
- SC SHV3B (90k)
- SC School Bus
- SC-SU2 (40k)
- SHV-SU4 (Specialized Hauling Vehicle)
- SHV-SU5 (Specialized Hauling Vehicle)
- SHV-SU6 (Specialized Hauling Vehicle)
- SHV-SU7 (Specialized Hauling Vehicle)

Note that AASHTO's EV2 (Emergency Vehicle – 57.5k) and EV3 (Emergency Vehicle – 86k) Trucks are not included within the study because they must always be run in rating analysis. Therefore, including EV2 and EV3 Trucks in the study is unnecessary.

The SC SHV Legal Trucks are developed from the South Carolina Code of Laws Section 56-5-4140[1]. Within this section of the South Carolina Legislature, subsection 'e', a weight limit is given: 'Combination of vehicles with five or more axles 73,280 lbs'. This weight limit does not include the 15% tolerance (also mentioned in the Code of Laws). Other vehicles are allowed up to 80,000 lbs. if they meet the FHWA

[1] South Carolina Legislature, *South Carolina Code of Laws,* Title 56 Chapter 5 (accessed September 7th,2018); available from https://www.scstatehouse.gov/code/t56c005.php

wheel spacing formula. The 73,280 lbs. limit is for wheel spacings that do not meet Federal Bridge Weight Formula B and is a special State Statute for South Carolina. The SC SHV Legal Trucks within this study envelope the State Statutes that allow for heavier axles and closer wheel spacings than what FHWA would allow on Interstate routes. SC SHV1A/SHV1B Trucks envelope the Well Drilling Truck in SC Code of Laws 56-5-4140 (C-(3)) limited to 70k Gross Vehicle Weight with 25k max axle weight. SC SHV2A Truck envelopes the Concrete Mixing Truck in SC Code of Laws 56-5-4140 (C-(2)) limited to 66k Gross Vehicle Weight with at least three axles. SC SHV2B Truck is developed to encompass the allowed tolerance within the code on non-Interstate highways. For combination vehicles SC SHV3A/SHV3B the code states (in 56-5-4140 (A-(g))) that a max of 73,280 lbs. with an additional 15% tolerance is allowed on non-Interstate highways. SC SHV3A encompasses this weight and tolerance, while SC SHV3B is developed to encompass AASHTO's SU trucks' 17k axle weight plus a tolerance of 15%. South Carolina Code of Law states in Section 56-5-4140 that these South Carolina specific Legal Trucks are only allowed on non-Interstates: 'Enforcement tolerance is fifteen percent for a vehicle or trailer transporting sod only on non-Interstate routes.'

Within the Parametric Study, the South Carolina Specialized Hauling Vehicles and AASHTO Specialized Hauling Vehicles were compared, and the controlling trucks were determined.

The South Carolina Legal School Bus consisting of a front axle weight of 12.05k and a back axle weight of 23k (with a spacing of 20'-10") is included in the study to encompass the max weights and spacing of two types of buses (Types C and D). See Table 2-1 below for the South Carolina Department of Education's School Bus Requirements (School Bus Routing) with type and associated gross weight. After the study was completed, it was determined that the SC-SU2 Truck controls over this School Bus for span lengths over approximately 30', so both the SC-SU2 Truck and School Bus are included in the template to encompass maximum loading scenarios.

Table 2-1: School Bus Requirements[2]

Bus Type	Capacity (Number of Passengers)	Gross Weight (Pounds)
C	16 or 36	21,700
C	19	21,000
C	54	21,700
C	60	24,500
C	66	25,500
D	35	31,350
D	78	35,050

See Tables 2-2 and 2-3 below showing the South Carolina Legal Truck type or axle spacing with associated max load from SC Title 56 Chapter 5 (used for research to ensure that truck configurations used in the study representing South Carolina's trucks are conservative).

[2] South Carolina Department of Education, *School Bus Routing*, pg. 18 (accessed September 7th, 2018) available from https://ed.sc.gov/districts-schools/district-schools-files/south-carolina-school-bus-routing-manual/
2007 South Carolina School Bus Specifications, (accessed September 7th, 2018) available from https://ed.sc.gov/scdoe/assets/File/districts-schools/transportation/maintenance/SC_School_Bus_Specifications_2007.pdf

Table 2-2: (Legal Loads on SC Highways in SC State Statutes)[3]

(a)	Single-unit vehicle with two axles	35,000 lbs.
(b)	Single-unit vehicle with three axles	46,000 lbs.
(c)	Single-unit vehicle with four axles	63,500 lbs.
(d)	Single-unit vehicle with five or more axles	65,000 lbs.
(e)	Combination of vehicles with three axle	50,000 lbs.
(f)	Combination of vehicles with four axles	65,000 lbs.
(g)	Combination of vehicles with five or more axles	73,280 lbs.

For (a) in Table 2-2 above, SC-SU2 Truck covers this weight requirement. Type 3 Truck covers the weight requirement for (b) in Table 2-2. Table 2-2 (c) is covered by SC SHV2A Truck, and (d) is covered by AASHTO's SU6 Truck (69,500 lbs). Table 2-3 below shows the grandfathered weight allowances for SC Legal Trucks according to State Statutes (SC Code of Law Title 56 Chapter 5 Section 4140). Note that for two axles, a tandem back axle weight of 35.2k is allowed. To encompass this grandfathered state allowance and still meet AASHTO's Gross Vehicle Weight requirement, AASHTO's Type 3 and Type 3S2 axle weights are modified (see Appendix B).

Table 2-3 (Cont. on Pg. 5): (SC Legal Trucks State Statute Requirements)[4]

Distance between the extremes of any group of 2 or more consecutive axles (ft.)	**Maximum load in pounds carried on any group of 2 or more consecutive axles**					
	2 axles	3 axles	4 axles	5 axles	6 axles	7 axles
4	35,200					
5	35,200					
6	35,200					
7	35,200					
8 and less	35,200	35,200				
more than 8	38,000	42,000				
9	39,000	42,500				
10	40,000	43,500				
11		44,000				
12		45,000	50,000			
13		45,500	50,500			
14		46,500	51,500			
15		47,500	52,000			

[3] South Carolina Legislature, *South Carolina Code of Laws,* Title 56 Chapter 5 Section 4140 (accessed September 7th,2018); available from https://www.scstatehouse.gov/code/t56c005.php
[4] South Carolina Legislature, *South Carolina Code of Laws,* Title 56 Chapter 5 Section 4140 (accessed September 7th,2018); available from https://www.scstatehouse.gov/code/t56c005.php

Distance between the extremes of any group of 2 or more consecutive axles (ft.)	Maximum load in pounds carried on any group of 2 or more consecutive axles					
16	2 axles	3 axles	4 axles	5 axles	6 axles	7 axles
16		48,000	52,500	58,000		
17		48,500	53,500	58,500		
18		49,500	54,000	59,000		
19		50,500	54,500	60,000		
20		51,000	55,500	60,500	66,000	
21		51,500	56,000	61,000	66,500	
22		52,500	56,500	61,500	67,000	
23		53,000	57,500	62,500	68,000	
24		54,000	58,000	63,000	68,500	74,000
25		54,500	58,500	63,500	69,000	74,500
26		55,500	59,500	64,000	69,500	75,000
27		56,000	60,000	65,000	70,000	75,500
28		57,000	60,500	65,500	71,000	76,500
29		57,500	61,500	66,000	71,500	77,000
30		58,500	62,000	66,500	72,000	77,500
31		59,000	62,500	67,500	72,500	78,000
32		60,000	63,500	68,000	73,000	78,500
33			64,000	68,500	74,000	79,000
34			64,500	69,000	74,500	80,000
35			65,500	70,000	75,000	
36			68,000	70,500	75,500	
37			68,000	71,000	76,000	
38			68,000	71,500	77,000	
39			68,000	72,500	77,500	
40			68,500	73,000	78,000	
41			69,500	73,500	78,500	
42			70,000	74,000	79,000	
43			70,500	75,000	80,000	
44			71,500	75,500		
45			72,000	76,000		
46			72,500	76,500		
47			73,500	77,500		
48			74,000	78,000		
49			74,500	78,500		
50			75,500	79,000		
51			76,000	80,000		
52			76,500			
53			77,500			
54			78,000			
55			78,500			
56			79,500			
57			80,000			

Permit Trucks: South Carolina's standard Permitting Vehicles included in the load rating analysis encompass most of the possible truck loading scenarios. Statutes of SC Permit Vehicles as well as the database history for trucks permitted within the state were researched and the common configurations were chosen and used in the study.

The following Permit Trucks were used in the study:

- SC-100k Permit (5 axles)
- SC-120k Permit (6 axles)
- SC-130k Permit (7 axles)
- SC Crane #544726 (160k)
- SC Crane #527568 (177.7k)

The 5, 6, and 7 axle "general" Permit Trucks not only encompass the maximum allowable sizes and weights granted by permit (Section E of 'Guidelines for Movement Over South Carolina Highways of Oversize and Overweight (OSOW) Vehicles and Loads') and South Carolina Code of Law, but also encompass the regulations of Permit Trucks found in Georgia and North Carolina. In South Carolina the weight limit for 5 axles is 90k, for 6 axles is 110k, and for 7 axles is 130k (per State Statutes 56-5-4010 through 56-4-4230 and 57-3-130 through 57-3-190). Information gathered from the State Statutes was taken (including tolerances) and was compiled to develop these guidelines for oversize and overweight vehicles and loads. The 100k and 120k Permit Trucks are conservative for South Carolina and also allow safety for across the border travel from Georgia and North Carolina. Standard Permit Trucks for the study follow standards of a typical annual Georgia oversize truck permit, the Oversize/Overweight Permit Handbook of North Carolina, a typical South Carolina oversize/overweight truck multiple-trip permit, and oversize/overweight permits for typical South Carolina Cranes (see Appendix A for the documents supporting these Permit Trucks).

See Table 2-4 below for the summary of the requirements from the SC State Statutes for all Permit Trucks. Trucks over 80k GVW will require permits except those trucks that are allowed on "non-Interstates" by State Statutes. Those off system "legal" trucks (SC SHV) will be used to post non-Interstate bridges. Any other trucks used (Permit or those over 80k GVW used on Interstates) will require permits. The study "Permit" Trucks envelope SC State Statutes and neighboring state permit vehicles.

Table 2-4: Limits for all SC Vehicles (State Statutes)[5]

Truck Type	**Max Load – Gross Weight (lbs)**
Two Axle Single Unit	40,000
Three Axle Single Unit	50,000
Four or More Axle Single Unit	65,000
Combination of Vehicles with Three Axles	55,000
Combination of Vehicles with Four Axles	70,000
Combination of Vehicles with Five Axles	90,000
Combination of Vehicles with Six Axles	110,000
Combination of Vehicles with Seven Axles	130,000
Gross Tandem Axles	
Single Axles	20,000
Tandem Axle	40,000
Tridem or Quad Axle	60,000

[5] 'Guidelines for Movement Over South Carolina Highways of Oversize and Overweight (OSOW) Vehicles and Loads' : Statue Authority – SC Code of Law Section 56-5-4010 through 56-5-4230 and 57-3-130 through 57-3-190 (Full Document in Appendix C)

2.2 Structure Types

The structures investigated were assumed to be typical bridges with uniform stiffness and with girder spacings and span lengths within the range of application for the distribution factors of the AASHTO Standard Specifications for Highway Bridges (LFD) and AASHTO LRFD Bridge Design Specifications (LRFD). The analysis utilized base span lengths, 'ℓ' shown in Figures 2-1 through 2-3, ranging from 10 feet to 200 feet (increments of 5 feet from 10 to 70 feet and increments of 10 feet from 70 to 200 feet).

Simple span (Figure 2-1), two-span continuous (Figure 2-2), and three span continuous structures (Figure 2-3) were considered. For the two-span continuous structures, the span arrangement of equal span lengths was used ('ℓ-ℓ'). For the three-span continuous structures, the span arrangement of 'ℓ-1.3ℓ-ℓ' (ℓ=length of Spans 1 and 3) was used.

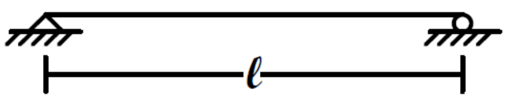


Figure 2-1: Simple Span Structures

Figure 2-2: Two-Span Structure with Equal Spans

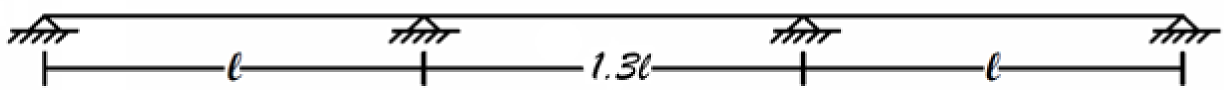


Figure 2-3: Three-Span Structure

2.3 Force Effects

Influence line ordinates were determined for each of the force effects listed below for the different span configurations described in the preceding section. The analysis assumed a prismatic cross-section for the entire structure length. Influence line ordinates obtained at 20th points were found to provide sufficient accuracy for this analysis.
The critical live load force effects (moments and shears) of interest were:

- For simple span structures:
  - Positive moment at midspan
  - Positive end shear
- For two-span continuous structures:
  - Positive moment at 0.4L of first span
  - Negative moment at interior support
  - Positive end shear
  - Negative shear left of interior support
  - Positive shear right of interior support

- For three-span continuous structures:
    - Positive moment at 0.4L of first span
    - Positive moment at 0.5L in center span
    - Negative moment at interior support
    - Positive end shear
    - Negative shear left of interior support
    - Positive shear right of interior support

2.4 Load Factors and Impact

Impact was included in the evaluation of the study vehicles in comparison to LRFR's HL-93 Design Loadings. In order to compare across categories (compare Legal Trucks and Permit Trucks to HL-93 Design Loadings) impact factors affect the results and must be included in the study. For LRFR evaluations and comparisons, an impact factor of 33% and the appropriate load factors were applied to all trucks (Permit, Legal, and Design), but not the lanes according to AASHTO LRFD Code.
A load factor of 1.75 is applied to the HL-93 Design Loadings according to Table 6A.4.2.2-1 'Limit States and Load Factors for Load Rating' in *AASHTO Manual for Bridge Evaluation 2016* (See Figure 2-4 below).

Table 6A.4.2.2-1—Limit States and Load Factors for Load Rating

Bridge Type	Limit State*	Dead Load γ_{DC}	Dead Load γ_{DW}	Design Load Inventory γ_{LL}	Design Load Operating γ_{LL}	Legal Load γ_{LL}	Permit Load γ_{LL}
Steel	Strength I	1.25	1.50	1.75	1.35	Tables 6A.4.4.2.3a-1 and 6A.4.4.2.3b-1	—
	Strength II	1.25	1.50	—	—	—	Table 6A.4.5.4.2a-1
	Service II	1.00	1.00	1.30	1.00	1.30	1.00
	Fatigue	0.00	0.00	0.75	—	—	—
Reinforced Concrete	Strength I	1.25	1.50	1.75	1.35	Tables 6A.4.4.2.3a-1 and 6A.4.4.2.3b-1	—
	Strength II	1.25	1.50	—	—	—	Table 6A.4.5.4.2a-1
	Service I	1.00	1.00	—	—	—	1.00
Prestressed Concrete	Strength I	1.25	1.50	1.75	1.35	Tables 6A.4.4.2.3a-1 and 6A.4.4.2.3b-1	—
	Strength II	1.25	1.50	—	—	—	Table 6A.4.5.4.2a-1
	Service III	1.00	1.00	0.80	—	1.00	—
	Service I	1.00	1.00	—	—	—	1.00
Wood	Strength I	1.25	1.50	1.75	1.35	Tables 6A.4.4.2.3a-1 and 6A.4.4.2.3b-1	—
	Strength II	1.25	1.50	—	—	—	Table 6A.4.5.4.2a-1

Figure 2-4: Design Load Factors

A load factor of 1.3 (average of load factors) is applied to all Permit Trucks (encompassing the range of load factors due to different criteria) according to 2013 revision of Table 6A.4.5.2a-1 'Permit Load Factors' in *AASHTO Manual for Bridge Evaluation* (See Figure 2-5 below).

Table 6A.4.5.4.2a-1—Permit Load Factors: γ_L

Permit Type	Frequency	Loading Condition	DF[a]	*ADTT* (one direction)	Load Factor by Permit Weight Ratio[b]: GVW / AL < 2.0 (kip/ft)	2.0 < GVW/AL < 3.0 (kip/ft)	GVW/AL > 3.0 (kip/ft)
Routine or Annual	Unlimited Crossings	Mix with traffic (other vehicles may be on the bridge)	Two or more lanes	>5000	1.40	1.35	1.30
				=1000	1.35	1.25	1.20
				<100	1.30	1.20	1.15
					All Weights		
Special or Limited Crossing	Single-Trip	Escorted with no other vehicles on the bridge	One lane	N/A	1.10		
	Single-Trip	Mix with traffic (other vehicles may be on the bridge)	One lane	All ADTTs	1.20		
	Multiple-Trips (less than 100 crossings	Mix with traffic (other vehicles may be on the bridge)	One lane	All ADTTs	1.40		

Figure 2-5: Permit Load Factors

A load factor of 1.45 is applied to all Legal Trucks according to the 2013 revision of Table 6A.4.4.2.3a-1 'Generalized Live Load Factors for Routine Commercial Traffic' in *AASHTO Manual for Bridge Evaluation* (See Figure 2-6 below).

Table 6A.4.4.2.3a-1—Generalized Live Load Factors, γ_L for Routine Commercial Traffic

Traffic Volume (one direction)	Load Factor ~~for Type 3, Type 3S2, Type 3-3, and Lane Loads~~
Unknown	~~1.80~~ 1.45
$ADTT \geq 5{,}000$	~~1.80~~ 1.45
$ADTT \leq 1{,}000$	~~1.65~~ 1.30
~~$ADTT \leq 100$~~	~~1.40~~

Figure 2-6: Legal Load Factors

For the LFR comparison (Legal and Permit Trucks to HS-20 Design Truck), no impact or load factors were applied due to this comparison being for reference only (unfactored moments and shears).

2.5 Method of Evaluation

The critical force effects for all structure types and base span lengths were calculated for all study vehicles. LARSA, a structural analysis software, was used to create models for each span arrangement (1-span, 2-span, 3-span). Each of the trucks chosen were applied to a prismatic section as part of a single lane moving load analysis. Maximum shear and moment results were enveloped and exported from LARSA into Excel and then evaluated at the predetermined specific points of interest. As a part of the post-processing of the LARSA data, the maximum moment and shear values at the points of interest were sub-divided into the four categories of trucks (Legal – SU's vs. HL-93 Design Loadings, AASHTO Legal Trucks vs. HL-93 Design Loadings, SC Specific Legal Trucks vs. HL-93 Design Loadings, Permit vs. HL-93 Design Loadings). Once divided into these categories, the moments and shears were normalized to HL-93 Design Truck + Lane (1.0) by dividing the force effect of the Legal Trucks, Permit Trucks, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane force effect by the corresponding HL-93 Design Truck + Lane's force effect. The normalized moments and shears (compared to the HL-93 Design Truck + Lane) for each category were then graphed for each point of interest for Rating Factors.

For a Rating Ton comparison, only Legal Trucks were divided by their individual Gross Vehicle Weight and the resulting moments and shears were then graphed for each point..

3 Results and Recommendations

3.1 Methodology

The following recommendations are based on the observations made from studying the results of the Parametric Study. As discussed, the study divided the trucks into two groups to evaluate separately: Legal Trucks and Permit Trucks compared to the LRFR HL-93 Design Loadings. In addition, the Rating Tons of all Legal Trucks were compared to each other by dividing out the Gross Vehicle Weight of each individual truck. One-, two- and three-span arrangements were analyzed for a suite of span lengths up to 200' for one-span, 200'-200' for two-span and 200'-260'-200' for three-span. There are 2 critical force effects of interest for the one-span (simple) bridges, 5 for the two-span (continuous) bridges, and 6 for the three-span (continuous) bridges that were investigated. These were at locations of maximum positive and negative live load shear and moment.

The graphs from which conclusions were drawn (for Rating Factor results) and referenced in this section plot the maximum live load shear or moment at the critical locations for each truck for the different span lengths normalized to the HL-93 Design Truck + Lane. The normalized shear or moment simply means that the shear and moment results of each truck are divided by the corresponding shear and moment result of the HL-93 Design Truck + Lane. This results in having the moment or shear of the HL-93 Design Truck + Lane being equal to 1.0, with the values assigned to the other trucks as a ratio of the HL-93 Design Truck + Lane.

The graphs from which conclusions were drawn (for Rating Ton results for Legal Trucks) and referenced in this section plot the maximum live load shear or moment divided by the Gross Vehicle Weight of the truck being graphed at the critical locations for each truck for the different span lengths. The span lengths are plotted on the X-Axis, and the live load shears and moments are plotted on the Y-Axis. Note that for 2-Span Graphs the 'x' Axis is labeled 'Max Span Length' indicating 'ℓ' in 'ℓ-ℓ' (see Figure 2-2) and for 3-Span Graphs 'x' Axis is labeled 'Min Span Length' indicating 'ℓ' in 'ℓ-1.3ℓ-ℓ' (see Figure 2-3).

The series represent each individual Legal or Permit Rating Truck (and HL-93 Design Loadings for comparison for the Rating Factor graphs). Since the Legal and Permit Trucks are graphed separately and there are 3 different span arrangements and 13 critical force effects of interest, and since the presentation of graphs is further subdivided by range of span lengths, this produces 221 unique graphs (and an additional 52 unique graphs for the HS-20 LFR Design Truck comparison) where the controlling trucks can be observed. These are all located in Appendix C, while only "representative" graphs are shown in the body of the report to summarize the results of all the plots which show similar conclusions.

For rating of Design Loads, HDR recommends following the standards and processes of the *Manual for Bridge Evaluation (MBE)*. HS-20 Design Live Loading (Design Truck and Lane Loading) must be used for rating according to the *MBE* 6B.6.2 (the max of Design Truck or Lane Loading). The extreme live load force effect to be used in the basic rating equation 6B.4.1-1 (*MBE*) should be determined using the HS-20 Truck or Lane Loading as defined in the AASHTO Standard Specifications and shown in the *MBE* Figures 6B.6.2-1 and 6B.6.2-2.

3.2 Legal Loads

The various families of Legal Loads were analyzed and compared within the graphs in the following figures. These families of Legal Loads include the AASHTO Legal Loads ('modified' SC-Type 3, 'modified' SC-Type 3S2, and Type 3-3), 2-0.75 AASHTO Type 3-3 + .2klf Lane, the AASHTO Specialized Hauling Vehicles (SU4, SU5, SU6 & SU7) and the SCDOT Specialized Hauling Vehicles (SC SHV Types 1A, 1B, 2A, 2B, 3A & 3B, and SC-SU2). The SCDOT Specialized Hauling Vehicles cannot legally run on the Interstate.

Figure 3-1 shows the normalized end shear for simple span lengths up to 200' for the South Carolina Legal Trucks vs. HL-93 Design Truck + Lane, HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane. One observation from this figure is that the HL-93 Design Truck + Lane controls (this is consistent for 1-Span arrangements, all span lengths, and critical force effects for rating factors). Another observation from this figure is that the SC SHV1B, 2B, and 3B Legal Trucks control for all Legal Trucks (this is consistent for all span arrangements, span lengths, and critical force effects for rating factors). Figure 3-2 shows the normalized end shear for simple span lengths up to 200' for AAHSTO's SHV-SU Trucks vs. HL-93 Design Tandem + Lane, and HL-93 Truck Train + Lane. From this graph it can be concluded that the SHV-SU7 Truck always controls (this is consistent for all span arrangements, span lengths, and critical force effects) for Rating Factors. Another result found through analyzing the graphs in Figures 3-1 and 3-2 is that the South Carolina Specialized Hauling Vehicles control over the AASHTO Specialized Hauling Vehicles for Rating Factors (due to the normalized ratios in Figure 3-1 being greater than those in Figure 3-2).

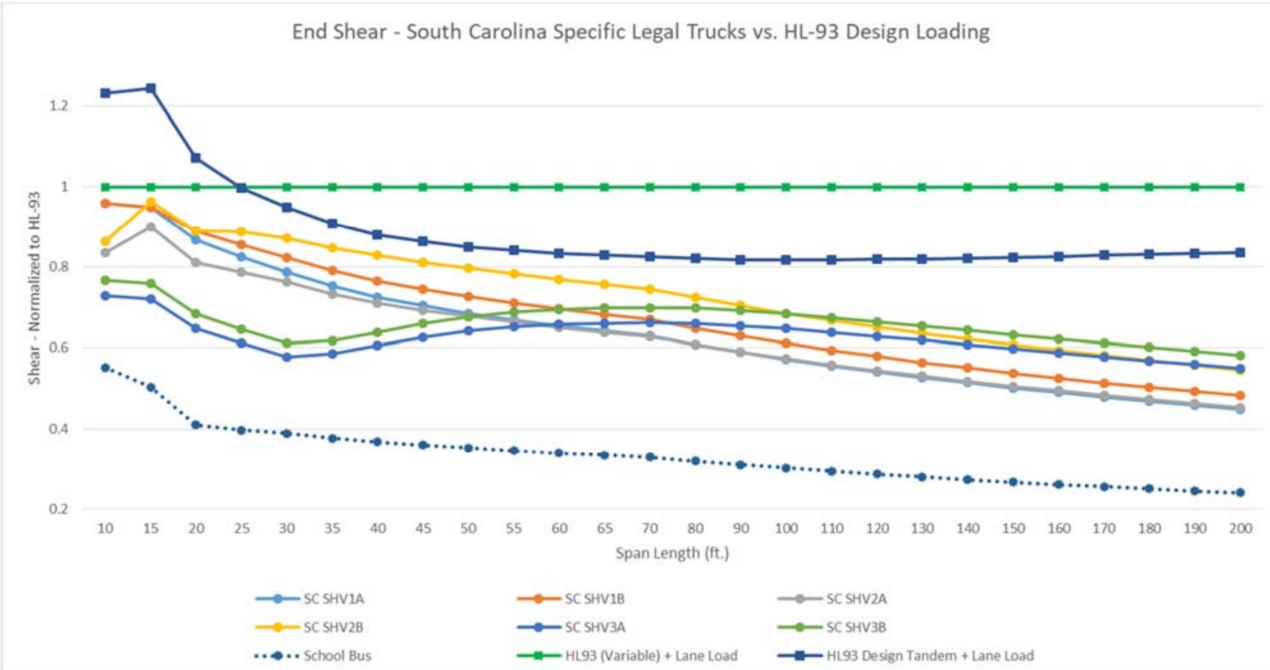


Figure 3-1: 1-Span Arrangements - HL-93 Design Loading Vehicles control Legal Trucks Rating Factor

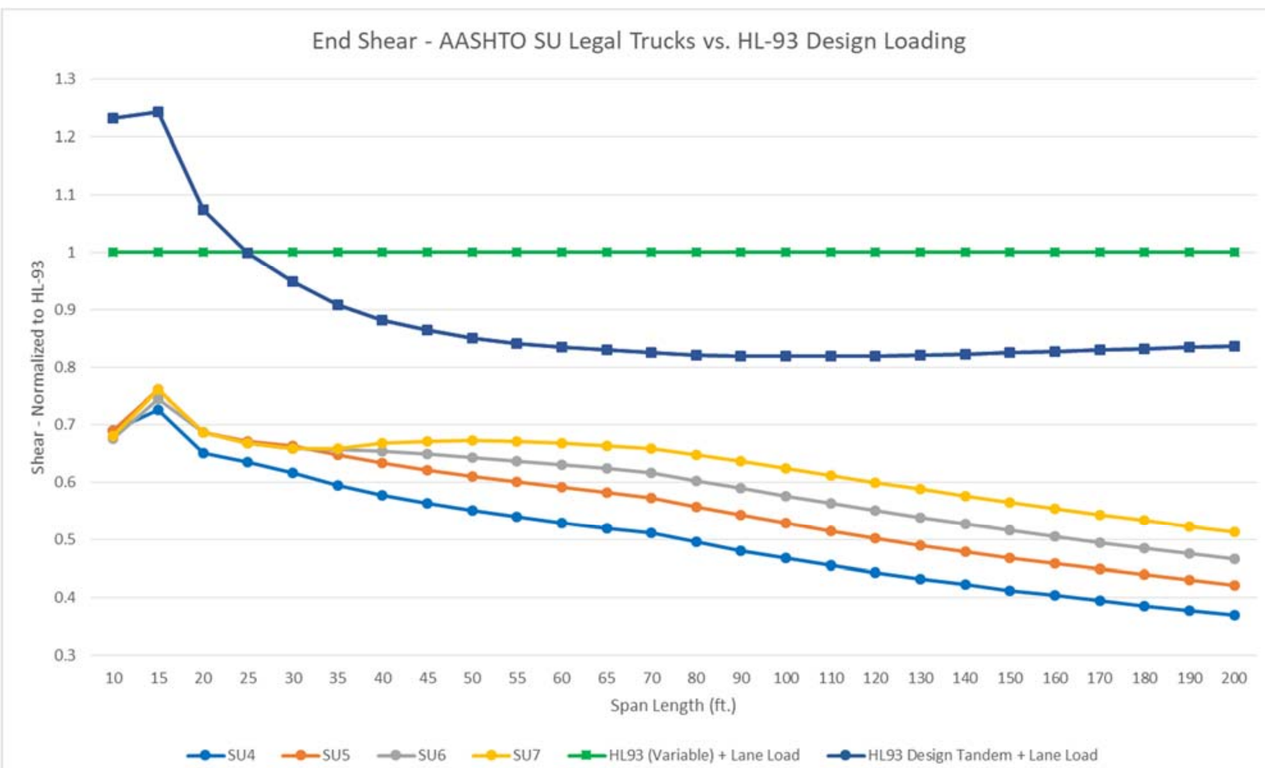


Figure 3-2: 1-Span Arrangements - SHV-SU7 controls Legal Trucks Rating Factor of AASHTO SHV Trucks (HL-93 Design Loading Vehicles control overall Rating Factor)

Graphs in Figures 3-3, 3-4 and 3-5 below show, for 2-span and 3-span arrangements, the HL-93 Design Loadings (Truck + Lane, Design Tandem + Lane and Truck Train + Lane) controlling over South Carolina Specialized Hauling Vehicles and AAHSTO Legal Trucks. Results from these graphs show that in order to encapsulate the maximum moments and shears resulting from Legal Trucks SC SHV 1B, 2B, 3B and AASHTO's 2-0.75 Type 3-3 + Lane for Rating Factors for all 2-and 3-span bridges, HL-93 Design Tandem + Lane must be rated in addition to the HL-93 Design Truck + Lane. Another result from Figures 3-3 and 3-4 is that South Carolina School Bus controls the Rating Factor (specifically over the SC-SU2, 2-Axle Truck) for span lengths 20'-30' and less (this is consistent for all span arrangements, span lengths, and critical force effects for rating factors).

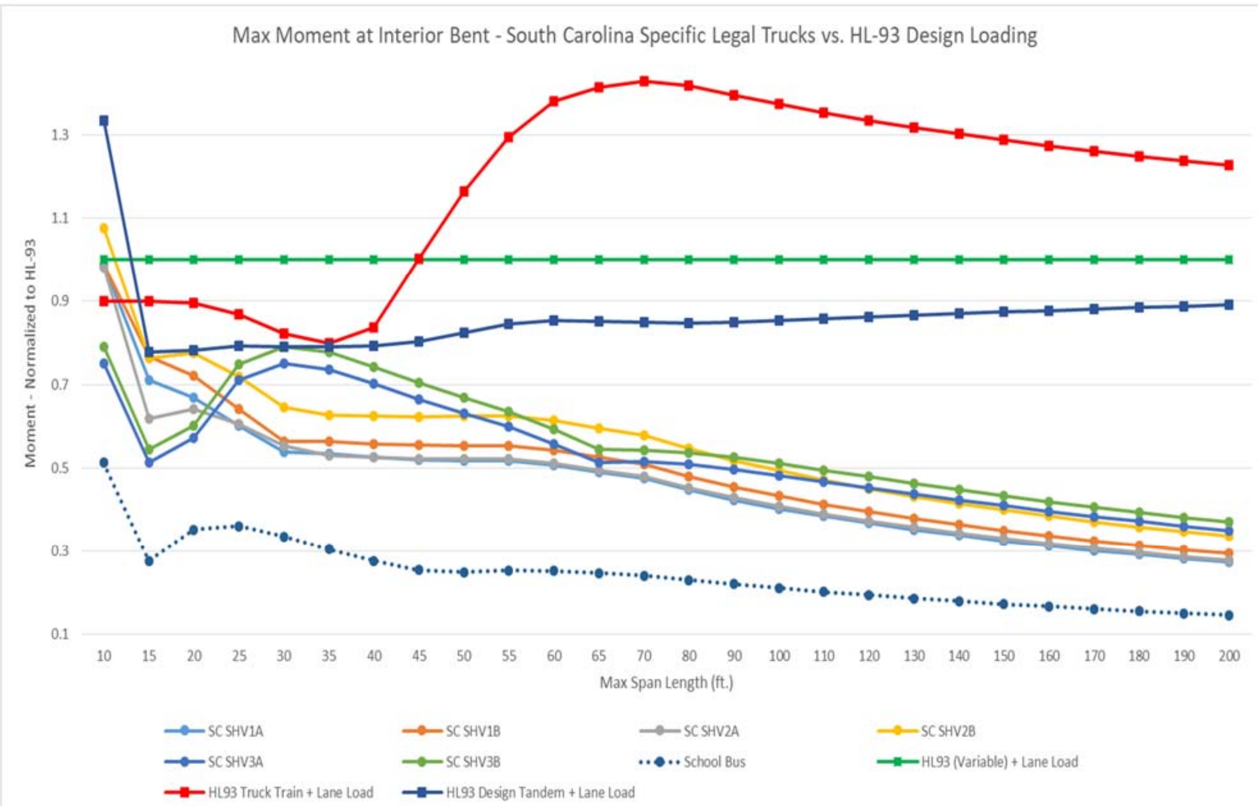


Figure 3-3: 2-Span Arrangements – HL-93 Design Loadings control South Carolina Legal Trucks Rating Factor

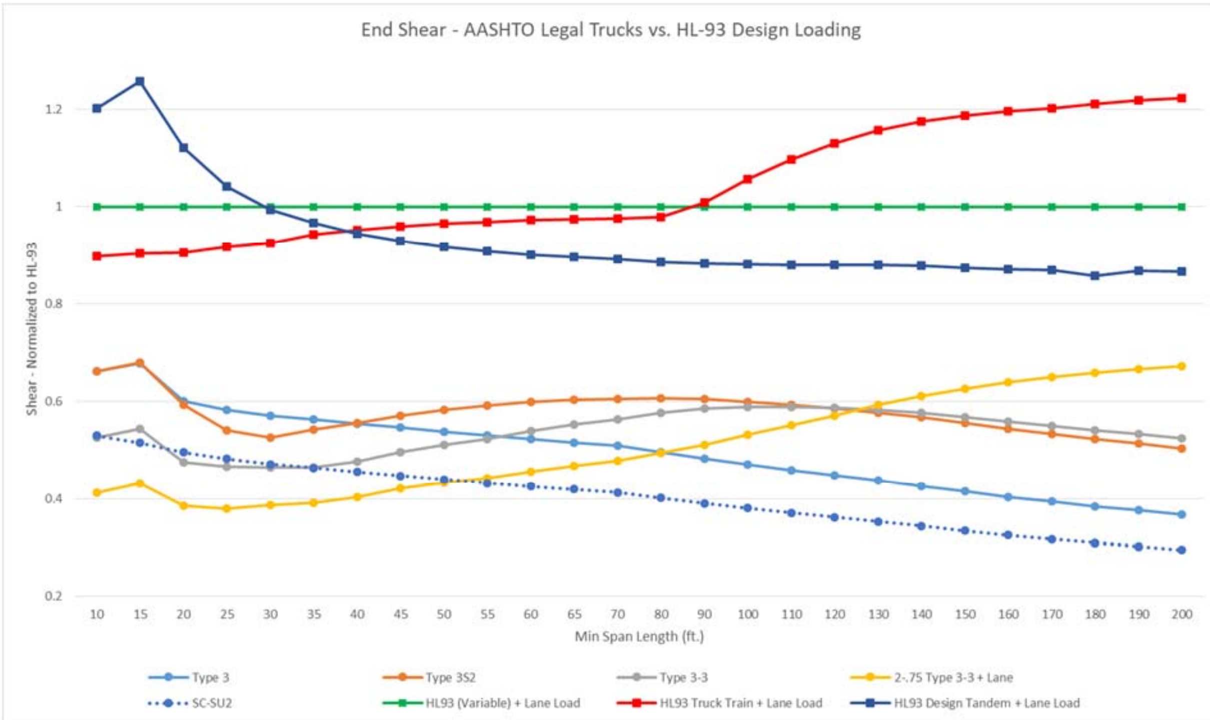


Figure 3-4: 3-Span Arrangements – HL-93 Design Loadings control AASHTO Legal Trucks Rating Factor

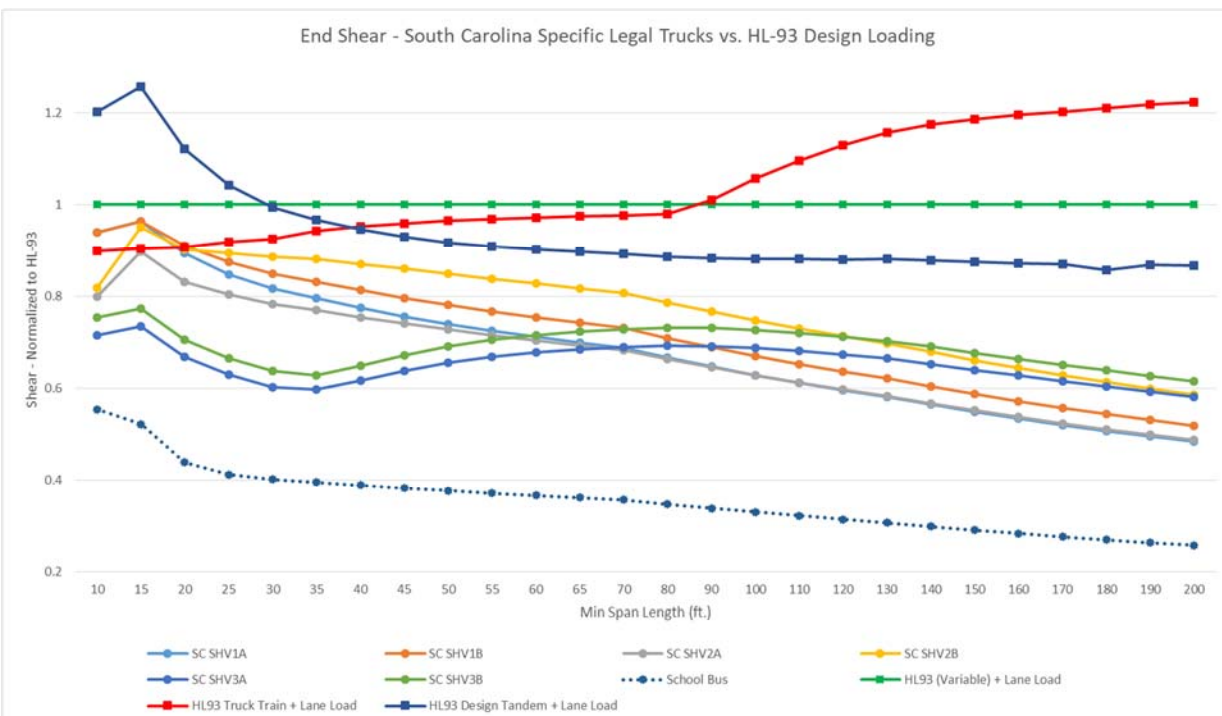


Figure 3-5: 3-Span Arrangements – HL-93 Design Loadings control South Carolina Legal Trucks Rating Factor

In conclusion, based on the results of the Parametric Study, HDR recommends load rating non-Interstate bridges using the standard Design Vehicles as described by the *MBE* (use the appropriate loading based on LRFR or LFR) as well as the following Legal Trucks:

- AASHTO SC-Type 3
- AASHTO SC-Type 3S2
- AASHTO Type 3-3
- SCDOT Specialized Hauling Vehicles
- SC School Bus
- SC-SU2 (controls for spans greater than approximately 30')
- 2-0.75 AASHTO Type 3-3 + .2klf Lane
- SHV-SU4
- SHV-SU7

For Interstate bridges, the suite of vehicles that should be rated includes the standard design vehicles as described by the *MBE* (use the appropriate loading based on LRFR or LFR) as well as the following Legal Trucks:

- AASHTO SC-Type 3
- AASHTO SC-Type 3S2
- AASHTO Type 3-3
- AASHTO Specialized Hauling Vehicles (SU4, SU5, SU6, SU7)
- SC School Bus
- SC-SU2 (controls for spans greater than approximately 30')
- 2-0.75 AASHTO Type 3-3 + .2klf Lane

The SCDOT Specialized Hauling Vehicles can be omitted from Interstate bridge ratings since they are precluded from traveling on Interstates (according to South Carolina Code of Laws Title 56 Chapter 5 Section 4140). For Rating Tonnage (or load effect per unit weight of vehicle), Table 3-1 is HDR's recommendation (based on the results of this study) for posting vehicles.

<u>Table 3-1: Suite of Proposed Posting Vehicles</u>

		Proposed Vehicles (Total Required = 14)
Single Unit	2 Axles	SC – SU2 School Bus
	3 Axles	SC SHV1A (65k) – Non-Interstate Only SC – Type 3 (AASHTO)
	4 or More Axles	SC SHV2A (66k) – Non-Interstate Only SU4 SU5 SU6 SU7
Combination Unit	5 or More Axles	SC SHV3A (85k) – Non-Interstate Only SC SHV3B (90k) – Non-Interstate Only SC – Type 3S2 (AASHTO) Type 3-3 (AASHTO)
	Dual Trucks	2-0.75 AASHTO Type 3-3 + .2klf Lane

These posting vehicle recommendations come from conclusions based on the following "example" graphs. Figure 3-4 above shows Dual Truck (2-0.75 AASHTO Type 3-3 + .2klf Lane) controlling the Rating Factor for longer span lengths as well as other legal load comparison graphs in Appendix C and must therefore be included among the Posting Vehicles in Table 3-1. See Appendix C for the entire set of graphs from which these conclusions are based. For determining what vehicle to use for the 2-axle trucks, Figure 3-6 shows the South Carolina School Bus controlling up to slightly over 30' span lengths. Figure 3-7 shows a typical location of SC-SU2 Legal Truck controlling for all span arrangements, span lengths over 30', and all critical force effects. Other typical results shown in Figure 3-7 are SC SHV1A (65k) controlling for 3-Axle Trucks and SC SHV2A (66k) controlling for 4-or-More Axle Trucks. Figures 3-7(a), 3-7(b), and 3-7(c) separate out the Legal Trucks in Figure 3-7 by number of axles in order to more clearly see the controlling truck (for 2, 3, and 4-or-More axles).

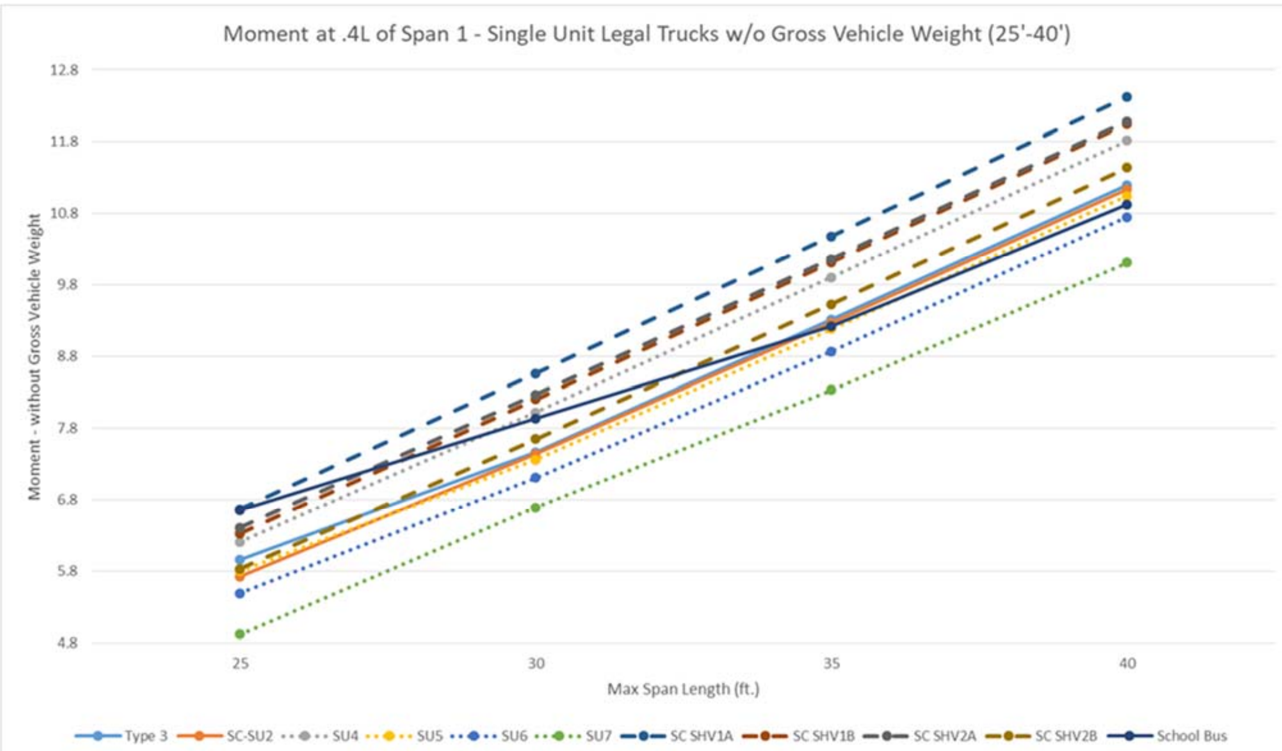


Figure 3-6: 2-Span Arrangement – South Carolina School Bus controlling over SC-SU2 up to 30'

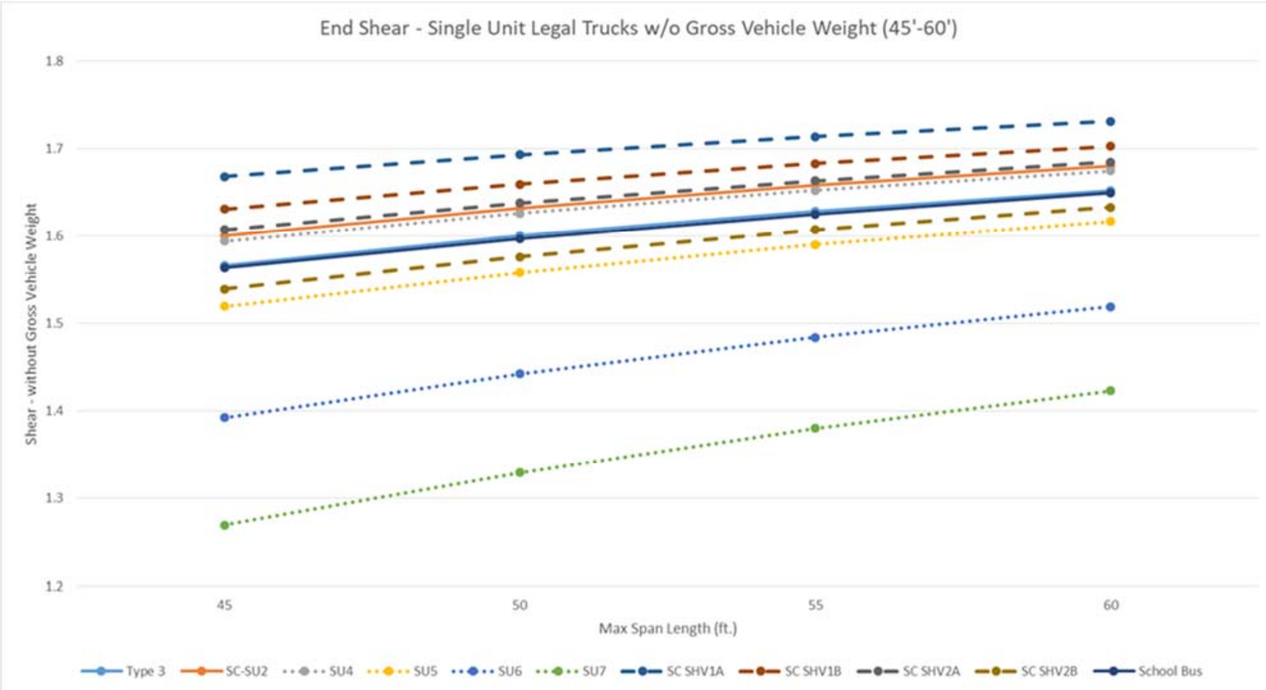


Figure 3-7: 2-Span Arrangement – SC-SU2 Legal Truck controlling for 2-Axle Trucks; SC SHV1A controlling for 3-Axle Trucks; SC SHV2A (66k) controlling 4-or-More Axle Trucks

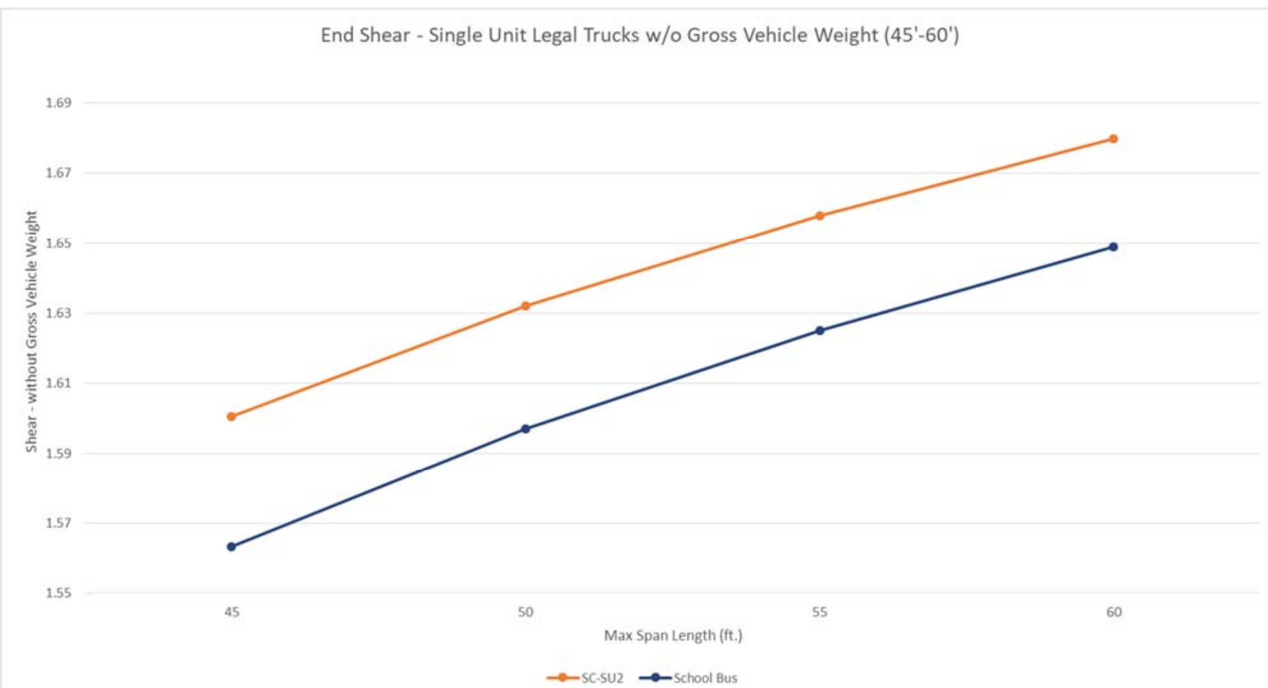


Figure 3-7(a): 2-Span Arrangement – SC-SU2 Legal Truck controlling for 2-Axle Trucks

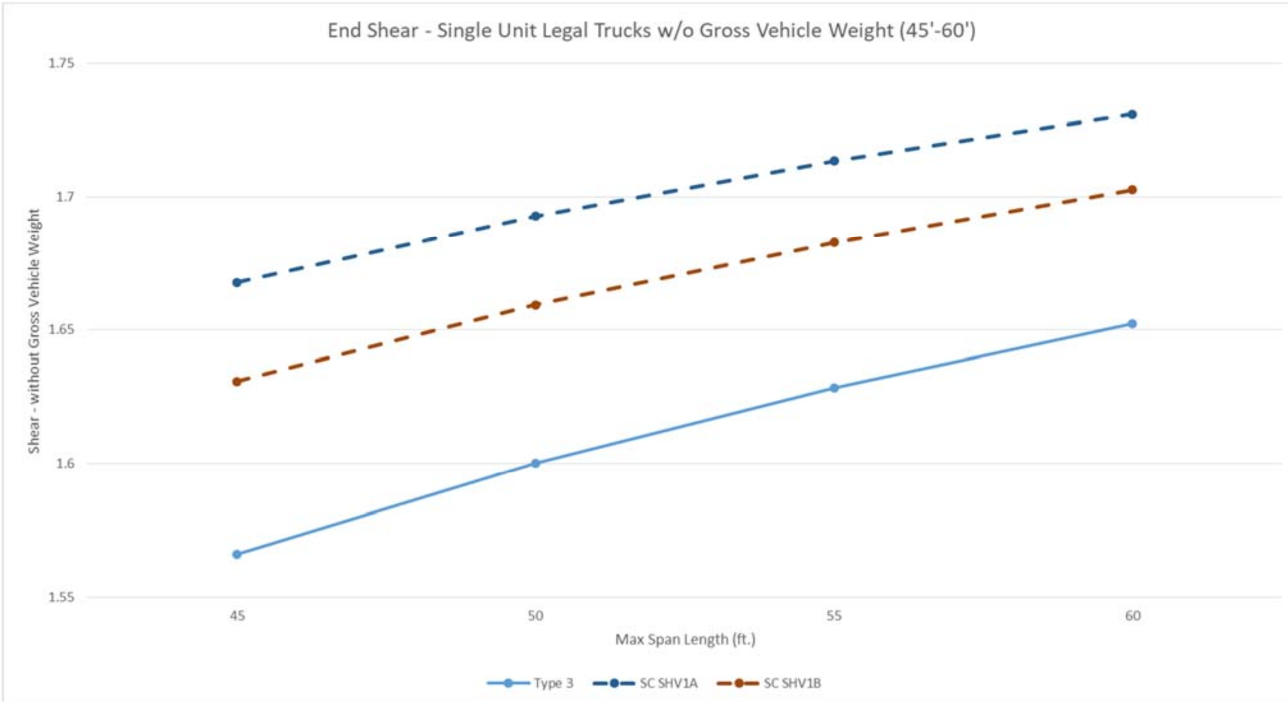


Figure 3-7(b): 2-Span Arrangement – SC SHV1A controlling for 3-Axle Trucks

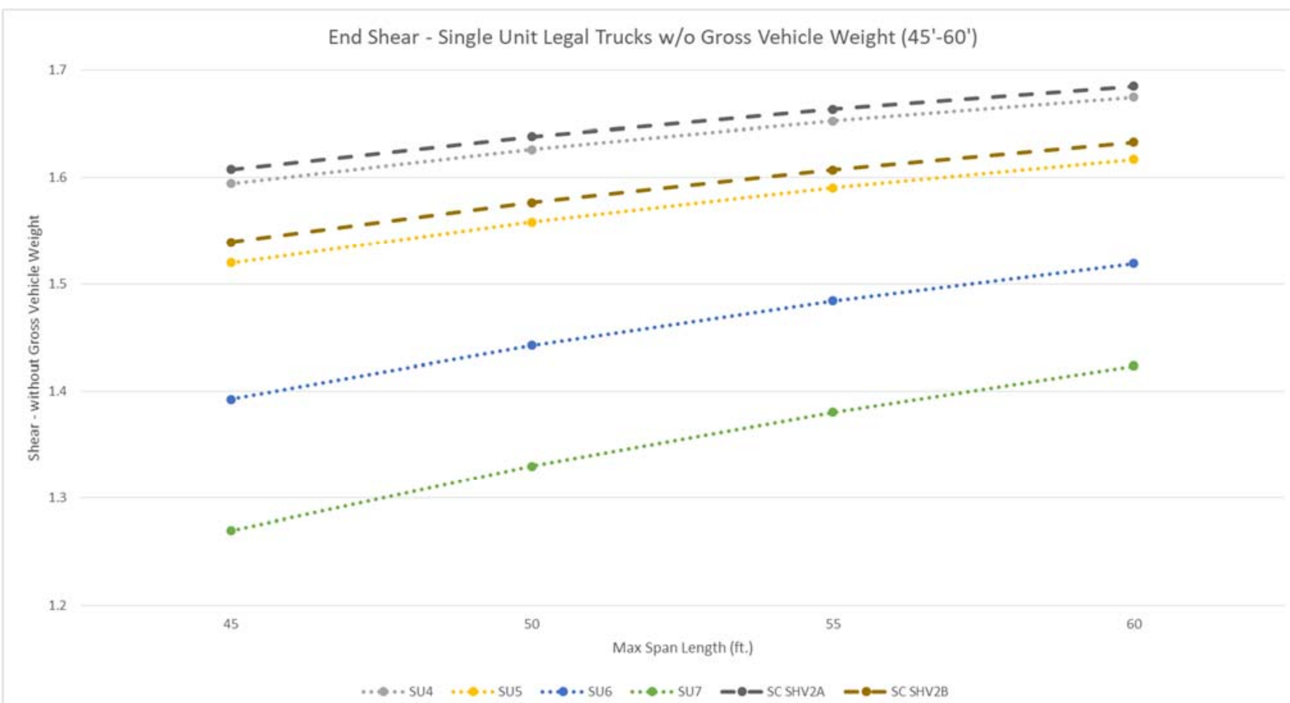
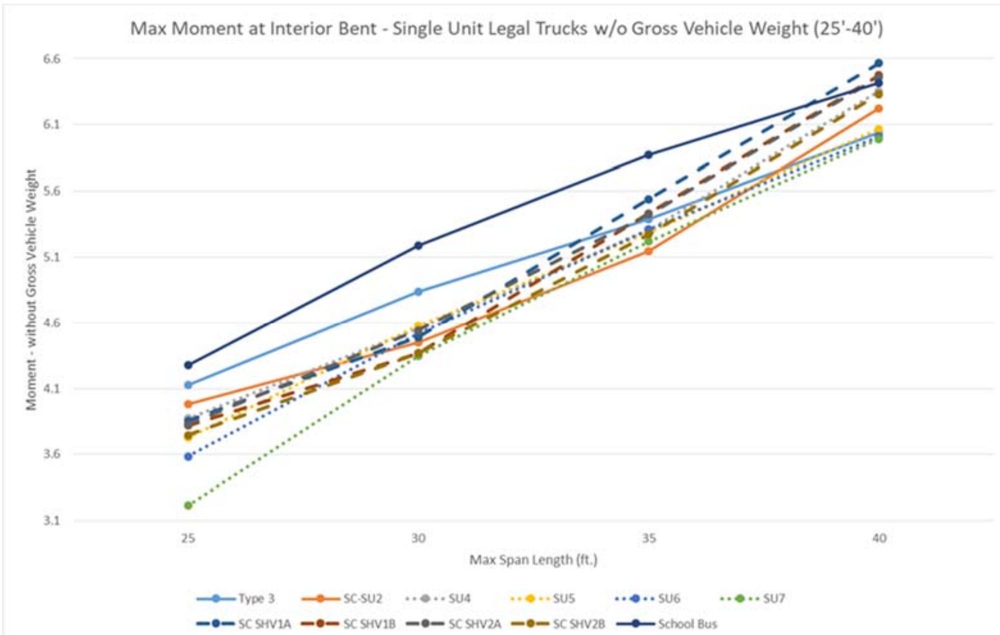
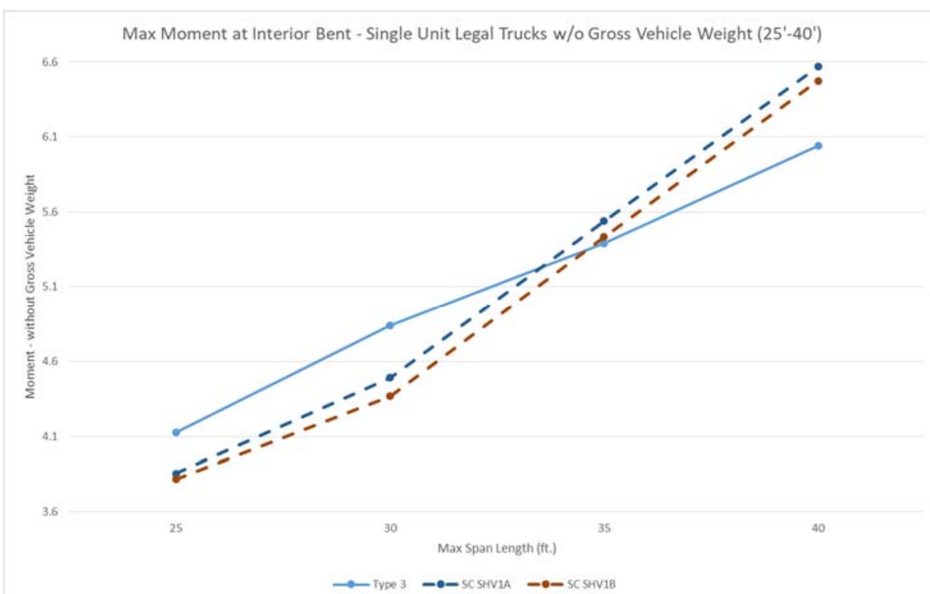


Figure 3-7(c): 2-Span Arrangement – SC SHV2A controlling for 4-or-More Axle Trucks

SU4, SU7 and Type 3 Legal Trucks are included in the suite of posting vehicles for 3- and 4-or-More Axle Trucks because they control at isolated locations for either Rating Factor or Rating Tonnage. See a representative example of these results in Figures 3-8, 3-8(a) (3-Axle Trucks only), 3-9, and 3-9(a) (4-or-More Axle Trucks only) below.



<u>Figure 3-8: 2-Span Arrangement – SC-Type 3 (AASHTO) Legal Truck controlling for 3-Axle Trucks (up to approximately 33' max span length)</u>



<u>Figure 3-8(a): 2-Span Arrangement – SC-Type 3 (AASHTO) Legal Truck controlling 3-Axle Trucks (up to approximately 33' max span length)</u>

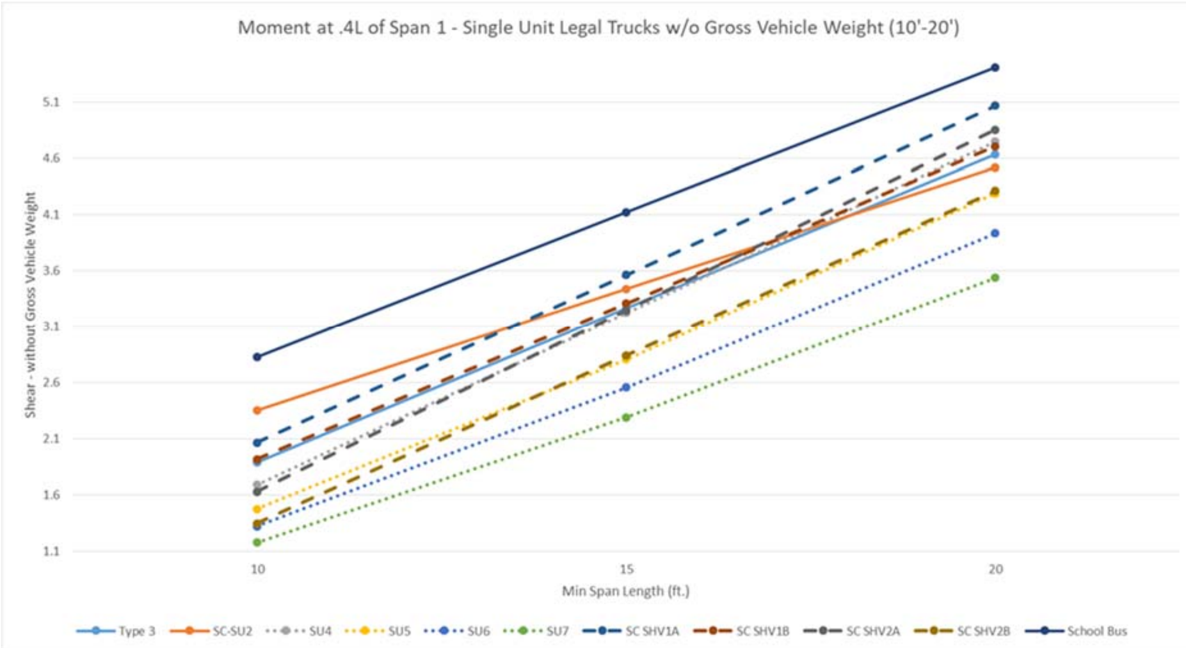


Figure 3-9: 3-Span Arrangement - SU4 Legal Truck controlling for 4-or-More Axle Trucks
SU4 controls over all of AASHTO's SU Trucks

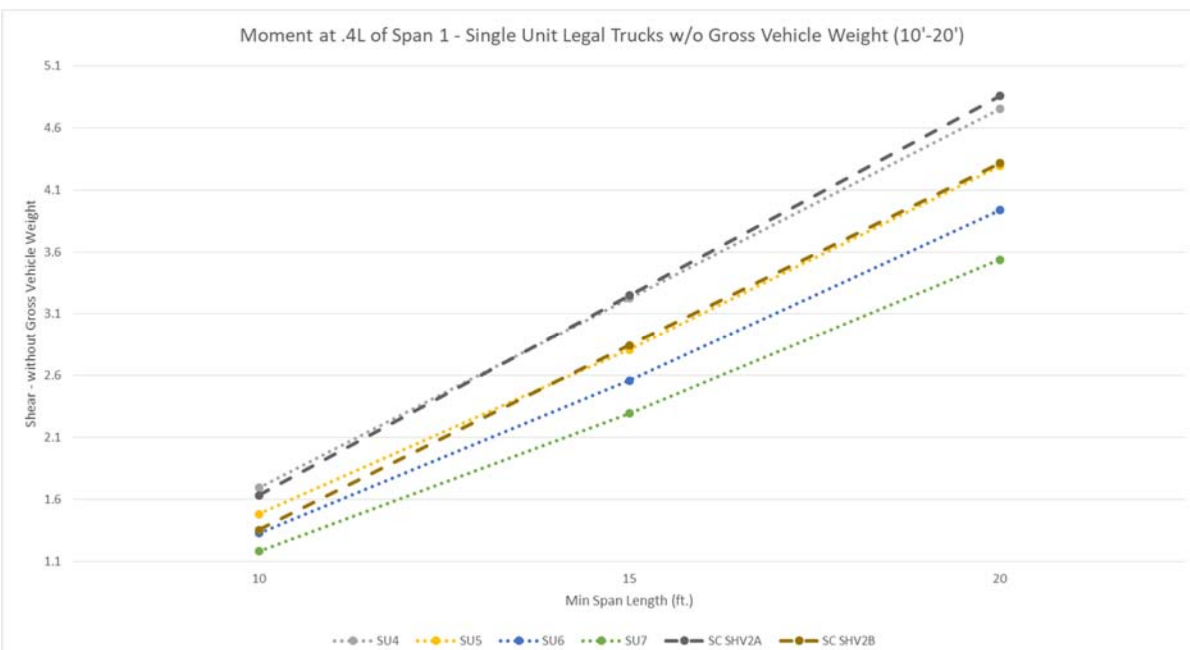


Figure 3-9(a): 3-Span Arrangement – SU4 Legal Truck controlling for 4-or-More Axle Trucks
(up to approximately 15' max span length)

For 5-or-More Axle Combination Trucks, Figures 3-10 and 3-11 show a representative example of the recommended posting vehicles controlling (typical within span arrangements, span lengths, and critical force effects). Other graphs can be found in Appendix C.

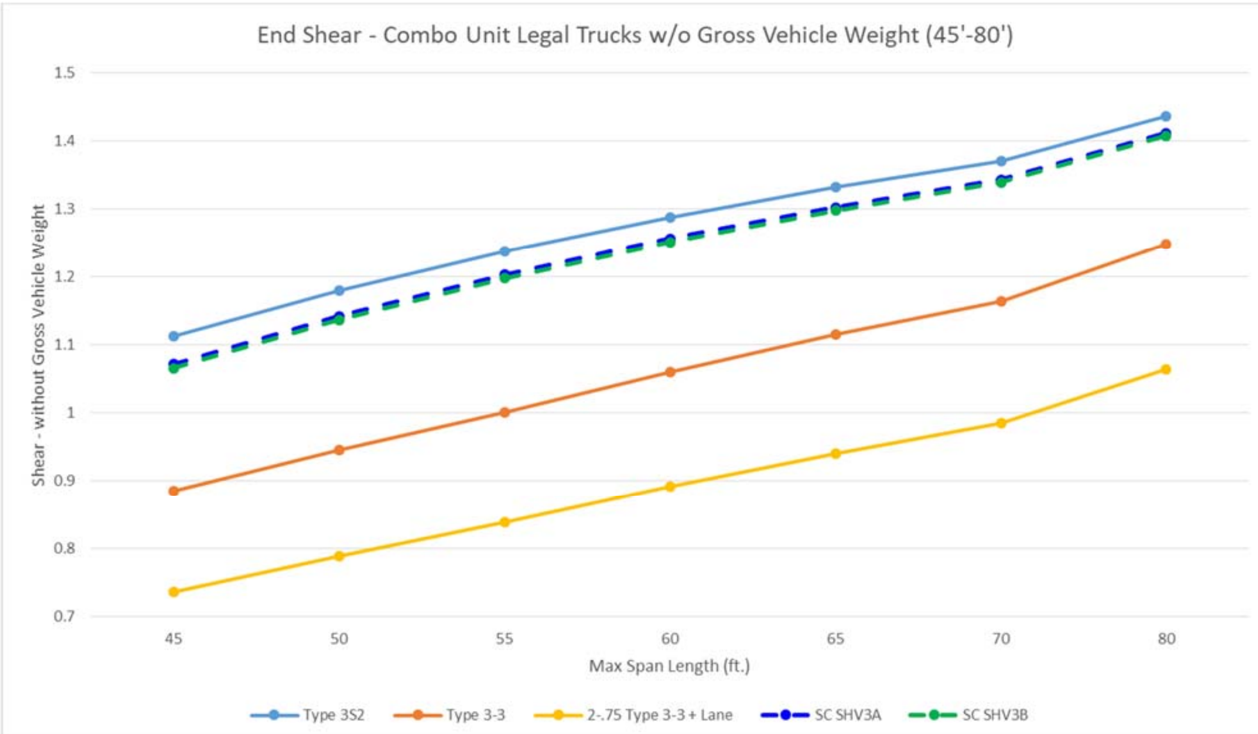


Figure 3-10: 2-Span Arrangement - SC-Type 3S2 (AASHTO) controlling for 5-or-More Axle Trucks (Combination Trucks)

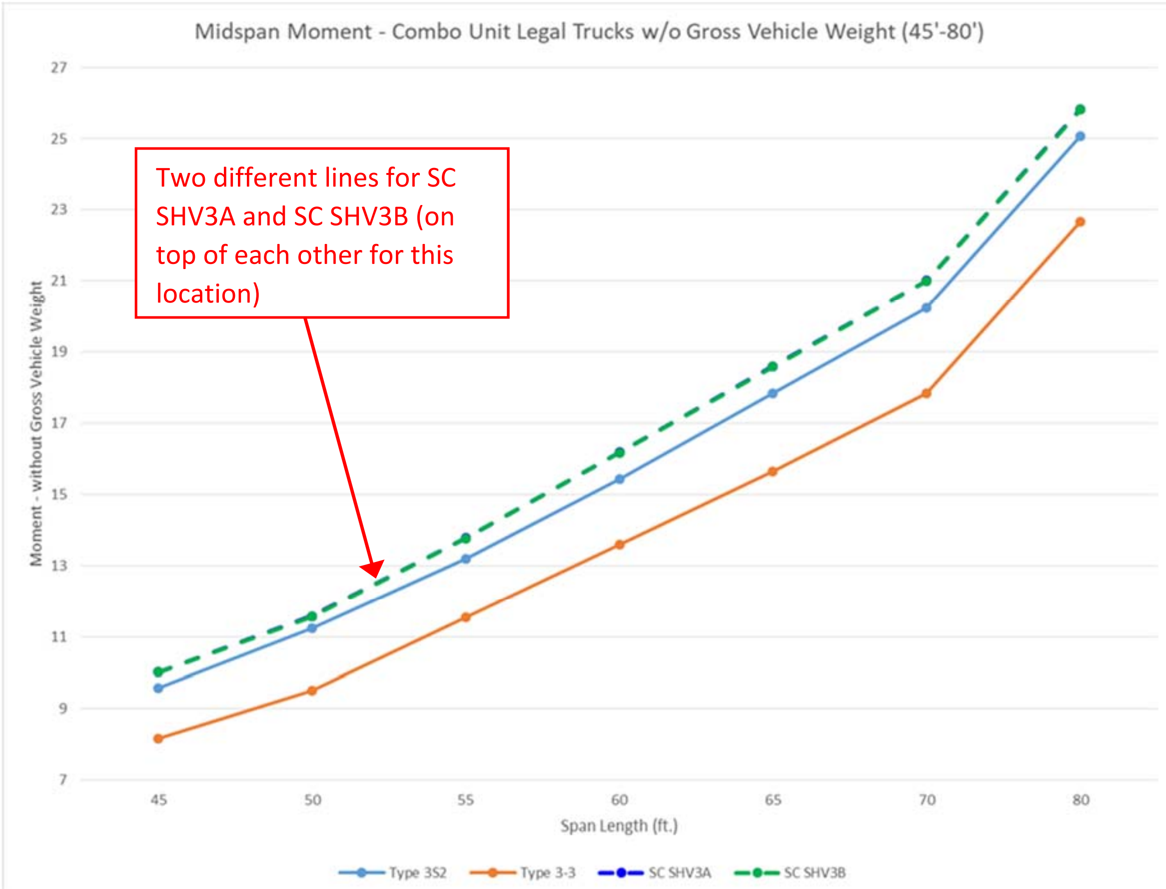


Figure 3-11: 1-Span arrangement - SC SHV3A and SC SHV3B controlling for 5-or-More Axle Trucks (Combination Trucks)

3.3 Permit Loads

The Permit Trucks that were evaluated in the parametric study consisted of the SCDOT 100k, 120k and 130k Permit Trucks and the SCDOT 160k & 177.7k Cranes. As illustrated in Figure 3-12, for short 1-span bridges less than 35’, the Permit Cranes do not control over the SCDOT “general” Permit Trucks. Figure 3-12 is representative for all span arrangements (including 2- and 3-span bridges) that for under approximately 20’-35’, the SC-120k and SC-130k Permit Trucks control, while for over that length, the 177.7k Crane Permit Trucks control. However, it is still recommended that all 5 permit trucks from the study be run as SCDOT finalizes their permitting procedures and methods as certain weight vehicles may have different permitting allowances such as yearly, monthly or daily permits.
In comparison to the HL-93 Design Loading Vehicles, Figures 3-13 through 3-15 show locations where the Permit Cranes do control over the HL-93 Design Loading Vehicles, while all the standard permit trucks are less than the HL-93 Design Loadings. Appendix C has graphs with additional comparisons between the HL-93 Design Loadings and the Permit Trucks for all span lengths and arrangements. For an overall summary, please see the Executive Summary at the beginning of the report.

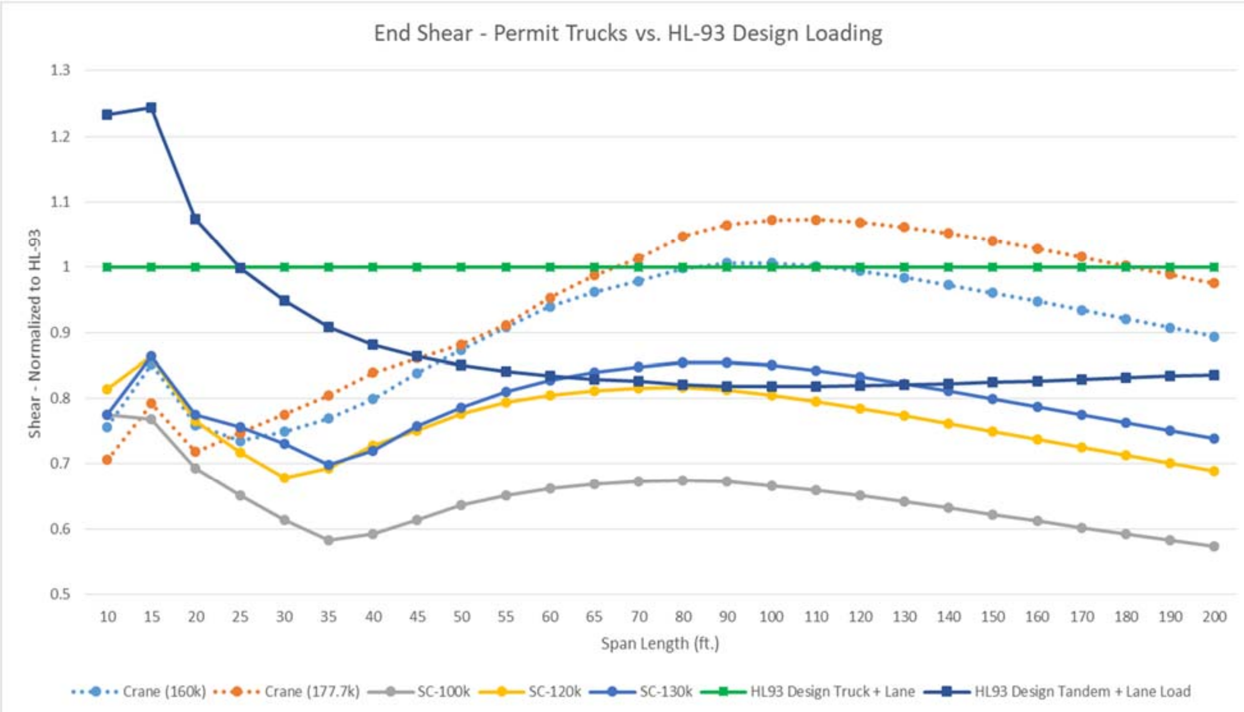


Figure 3-12: 1-Span arrangement – 177.7k Permit Crane controls Permit Vehicles over 30’

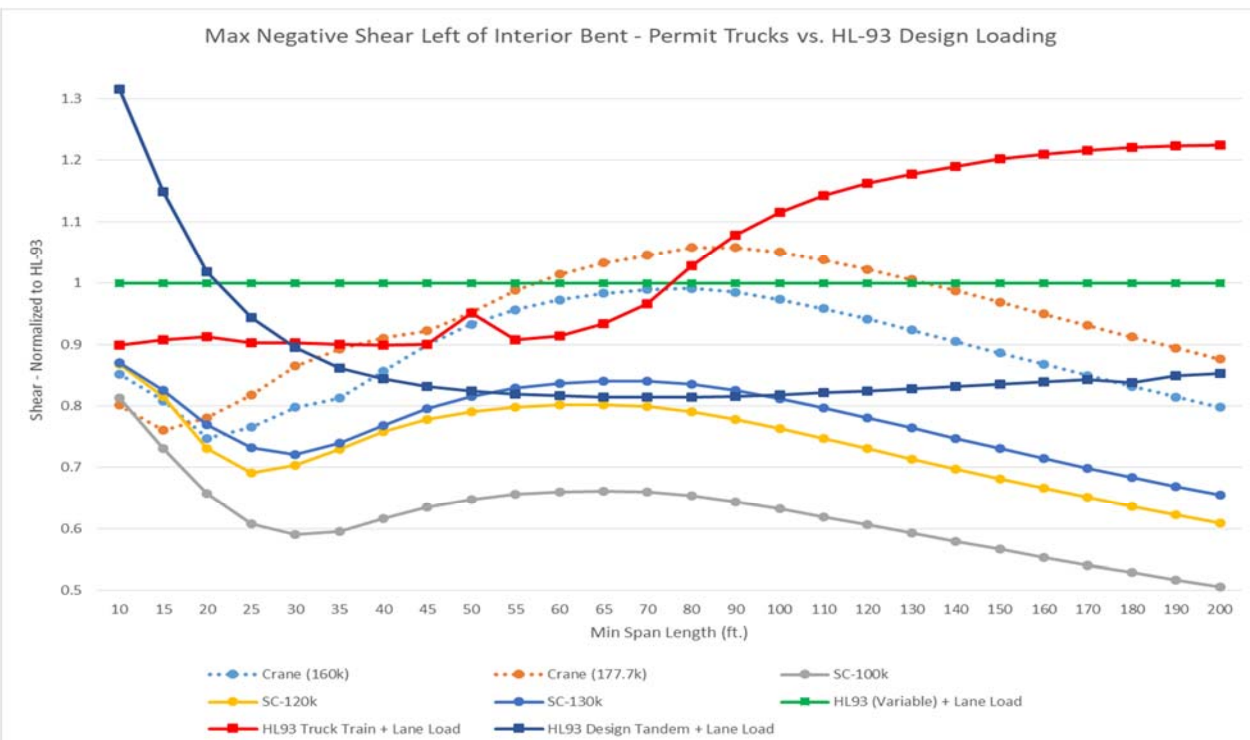
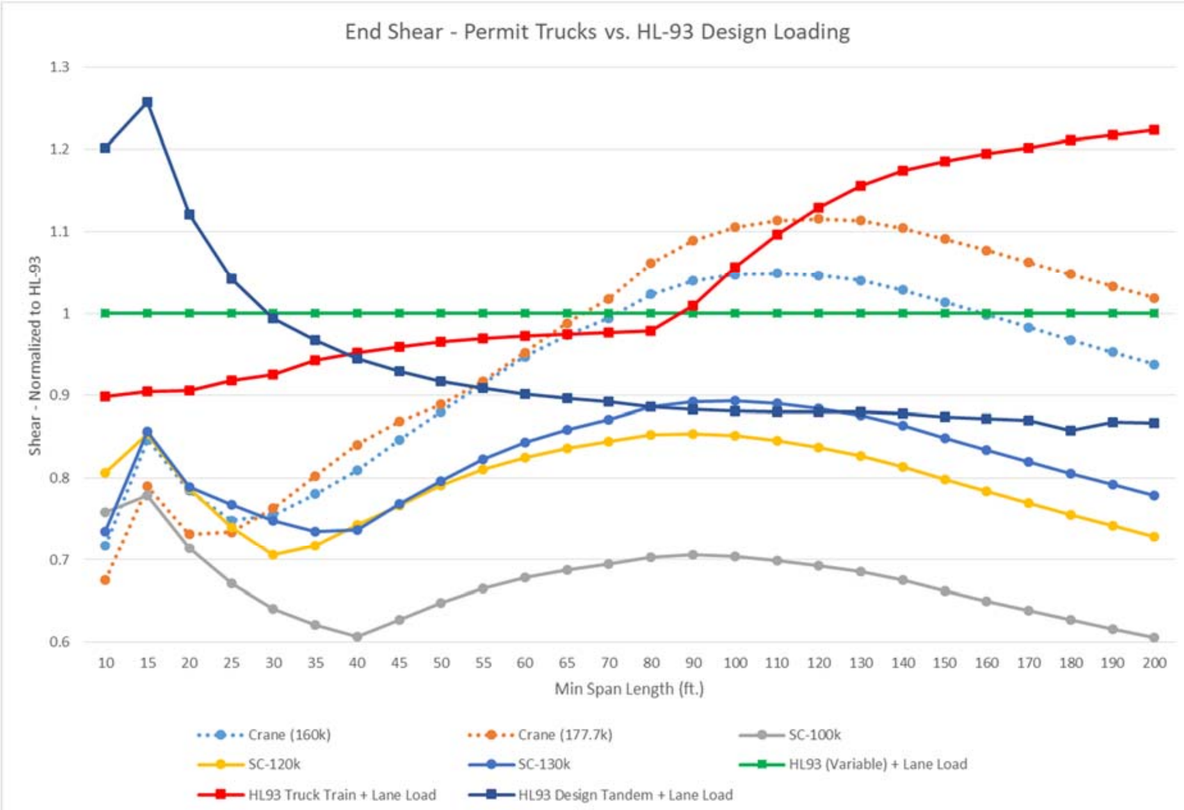


Figure 3-13: 3-Span arrangement – 177.7k Permit Crane controls Rating Factor for Span Lengths 55’-90’



<u>Figure 3-14: 3-Span arrangement – 177.7k & 160k Permit Cranes control Rating Factor for Span Lengths 70'-110'</u>

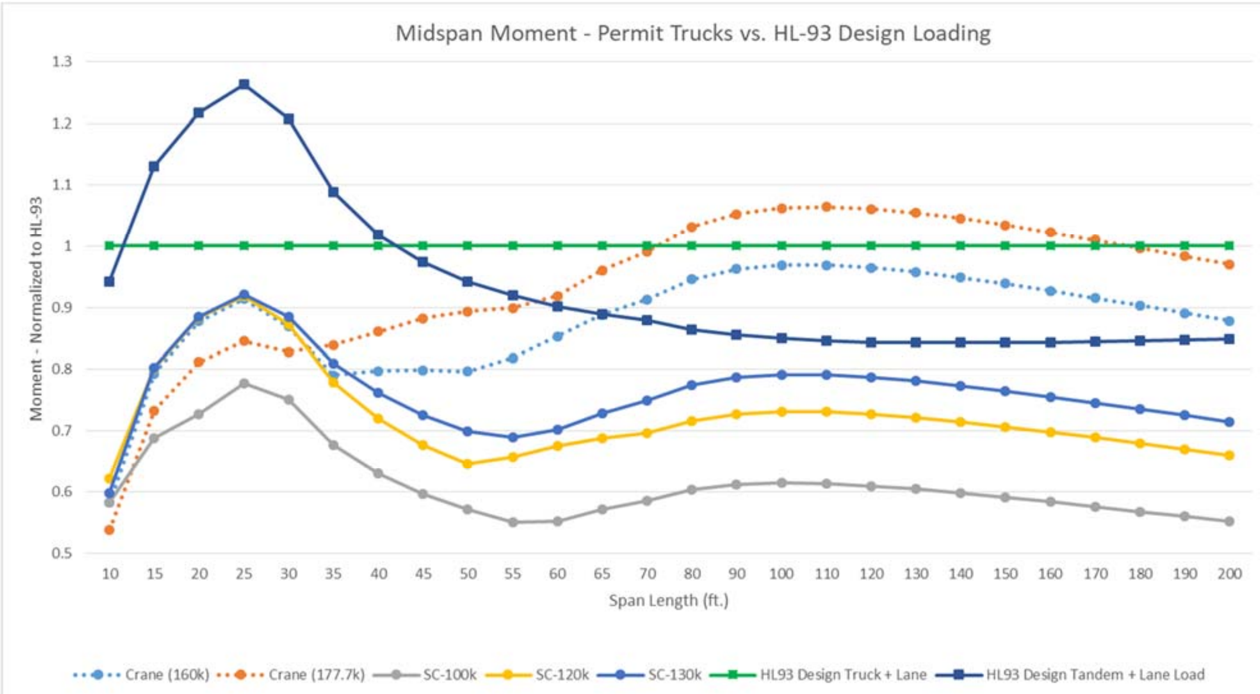


Figure 3-15: 1-Span arrangement – 177.7k Permit Crane controls Rating Factor for Span Lengths 70'-170'

APPENDIX A

Permit Truck Requirement Documents

Web publication 05/01/2017

**GUIDELINES FOR MOVEMENT OVER
SOUTH CAROLINA HIGHWAYS OF
OVERSIZE AND OVERWEIGHT (OSOW) VEHICLES AND LOADS**

Statute Authority: SC Code of Law Section 56-5-4010 through 56-5-4230 and 57-3-130 through 57-3-190
The caption and/or section headings contained in these guidelines are not binding and are only used for reference purposes.

A. **PARTIAL EXEMPTIONS FOR IMPLEMENTS OF HUSBANDRY, FIRE APPARATUS, FORESTRY AND ROAD MACHINERY:** SC Code of Law 56-5-4020

(A) Except as provided in Section 56-5-4140(2), the provisions of this article governing size, weight, and load do not apply to fire apparatus, road machinery or implements, and products of husbandry including farm tractors, timber equipment, liquid fertilizer storage facilities, and vehicles or combinations of vehicles used to transport, store, or spread lime, nitrogen, or other soil improvement products for agricultural purposes moved upon the highways so as not to damage the highways nor unduly interfere with highway traffic, or to vehicles operated under terms of special permits issued pursuant to this chapter. The exemptions do not apply to Section 56-5-4230. With regard to vehicles or combinations of vehicles used to transport, store, or spread soil improvement products and to transport products of husbandry exempted pursuant to this section, the owners shall obtain an annual permit to operate the vehicle as provided in Section 57-3-130 which prescribes the specific conditions of the exemption.

(B) For purposes of this section, 'timber equipment' means implements of silviculture including, but not limited to, machinery used in establishing, tending, harvesting, and protecting forest crops such as tree shears, chippers, slashers, log loaders, skidders, and fellers.

(C) None of the vehicles or devices exempted by this section may exceed twelve feet in width, except farm implements which may not exceed sixteen feet in width, and they may be moved only in clear weather conditions during daylight hours.

B. **DISCRETIONARY OS/OW PERMIT**: The Department may exercise its discretion in issuing permits for transporting non-divisible loads and/or vehicles which exceed the legal size and weight limits, provided that:

1) Non-divisible is defined as a load consisting of one single item that cannot be readily disassembled so as to reduce the size and/or gross weight to the legal limits. Emergency exceptions shall only be approved by the Permit Director. See Code of Federal Regulations, Title 23, Part 658.5 for definition of non-divisible load or vehicle.
2) Every such movement shall be routed over highways having 12 foot wide or wider lanes whenever possible, except in emergencies or where there is good cause to show that such movement is in the public interest.
3) The Department may limit or prescribe conditions of operation of such vehicles.
4) The Department may require such insurance and/or other security as it deems necessary.
5) Such movement is made so as not to damage the highways nor unduly interfere with highway traffic.
6) The permit must be carried in the vehicle or combination of vehicles to which it refers and must be open to inspection by a police officer or an authorized agent of the authority granting the permit. South Carolina Code of Law

E. **MAXIMUM ALLOWABLE SIZES AND WEIGHTS GRANTED BY PERMIT:** Any exceptions to the maximum limits shall be submitted to the Department with the appropriate drawings, pictures, requested route and reasons for the move. The request shall be submitted no less than 5 days minimum of the proposed move date for approval or disapproval. Any approval shall be at the discretion of the Department.

1) **Overall Length**:
   a) Non Divisible Loads: The maximum overall length shall be 125 feet.
   b) Mobile Homes: The maximum overall length shall be 100 feet (mobile home 80 feet or less).
   c) Structural Material: A pole, pipe, log or other structural material exceeding 80 feet in length may not be transported unless a permit is obtained. The load must be non-divisible. (See SC Code of Law 56-5-4090 for legal dimensions.)

2) **Overhang**:
   a) Permits may be issued for a non-divisible load with a maximum rear overhang of 15 feet on a trailer that is LESS than 48 feet. A maximum rear overhang of 10 feet is allowed on a 48 foot or 53 foot trailer. Flags and a rotating amber beacon or strobe light must be on the rear of the load OR flags on the rear of the load and a rear civilian escort with such warning devices required by the Department.
   b) A maximum of 3 feet front overhang is allowed on all trailers.
   c) In all cases, loads on expandable or pole trailers with more than a 6 feet rear overhang shall be equipped with flags and a rotating amber beacon or strobe light on the rear of the load OR flags and a rear escort with such warning devices required by the Department.

3) **Overall Height**:
   a) The maximum overall height of any permitted load must be at least 3 inches less than any overhead structures on a route granted by the permit.
   b) The transporter shall be responsible for checking all overhead vertical clearances and shall make all provisions for raising or removing overhead wires, cables, traffic signals, etc., sufficiently in advance and no less than a minimum of 3 working days prior to the move, to eliminate delays to the highway traffic.
   c) **Route Survey**: ALL loads 16 feet in height and above must provide a department approved route survey prior to permit issuance. A front escort vehicle with a height pole shall be required during the entire move.

4) **Overall Width**:
   a) Mobile homes - 16 feet maximum
   b) Non Divisible Loads - 16 feet maximum

5) **Gross Weights**:

a) Two axle single unit vehicle	40,000 lbs.
b) Three axle single unit vehicle	50,000 lbs.
c) Four or more axle single unit vehicle	65,000 lbs.
d) Combination of vehicles with three axles	55,000 lbs.
e) Combination of vehicles with four axles	70,000 lbs.
f) Combination of vehicles with five axles	90,000 lbs.
g) Combination of vehicles with six axles	110,000 lbs.
h) Combination of vehicles with seven axles	130,000 lbs.

Oversize/Overweight Permission # 50624Z00011

Valid From: 6/24/15 To 8/20/15

South Carolina Department of Transportation

For the movement of : CRANE (SELF-PROPELLED)

Issued to:
ALLSTATE CRANE RENTAL INC
117 MEDWAY RD
GOOSE CREEK, SC 29445
Self-propelled - License #: SM19338 (SC)
Truck/Tractor VIN: 0000000000052204022

USDOT #: 544726
State fee: $10.00
Sent by: Fax - (843) 572-1422
Telephone #: (843) 572-1697
Ordered by: BRANDI

COPY

Overall Dimensions - Length: 67' Width: 12' 0" Height: 13' 6" Overhang Front: 4' 0" Rear:
Gross Weight: 160,000 Trailer Length: Total Axles: 8

Axles:	1	2	3	4	5	6	7	8
Weight:	20000	20000	20000	20000	20000	20000	20000	20000
Spacing:	10'2"	5'4"	8'1"	5'5"	14'9"	4'1"	4'2"	

MAXIMUM AXLE WEIGHTS: 20,000 lbs on single axle, 40,000 lbs on tandem axle, 60,000 lbs on tridem axle. Total not to exceed gross vehicle weight on permit. When transporting multiple pieces, gross weight must be legal.

SEE ATTACHED PAGE(S) FOR ORIGIN, DESTINATION AND DEFINED ROUTES OF TRAVEL

No travel shall be allowed during inclement weather such as heavy rain or fog when visibility is restricted to less than 1000 feet. Travel prohibited during periods of high wind or when highways are slippery or hazardous due to ice, snow or sleet.

The South Carolina Transport Police or Highway Patrol may direct a vehicle off the highway to a safe place. Detour vertical obstructions where necessary.

The mover shall be responsible for checking all overhead vertical clearances and shall make provisions for raising or removal of overhead wires, cables, traffic signals, etc. at least three (3) days in advance of move.

In pursuant to SC Code of Law 57-3-130 (B)(3)(c), it is the responsibility of the carrier to comply with all Federal Motor Carrier Safety Regulations and applicable State and Federal Laws, including, but not limited to, speed, tire size, brakes and lighting.

For all railroad grade crossing, comply with 56-5-2725 of the SC Code of Laws.

Special Restrictions

The permittee shall provide signs, front and rear, reading WIDE LOAD or OVERSIZED LOAD with letters 12 inches high and at least 1 1/2 inches wide. Red flags must be displayed at each outer four corners of the load or mobile home. Turn signals and brake lights in working order must be displayed.
TRAVEL PERMITTED one half (1/2) hour after sunrise to one half (1/2) hour before sunset Monday through Saturday EXCEPT travel prohibited in close proximity of large urban areas between 7am-9am all days and 3pm-6pm on school days and 4:30pm-6pm on non-school days. REDUCE SPEED WHENTRAVELING THROUGH SCDOT WORK ZONE CONSTRUCTION SITES. Permittee is responsible for immediately replacing to SCDOT standards all traffic control devices (signs, cones, barrels, etc.) that are knocked over or destroyed upon contact. TRAVEL IS PROHIBITED on Friday and Saturday from Memorial Day through Labor Day over routes east of I-95, including but not limited to; US-378, US-327, US-76, US-576, US-501 AND SC-9. And on US-17 from the NC State line to points south of Myrtle Beach and on any routes in the Myrtle Beach vicinity.
TRAVEL IS PROHIBITED OVER POSTED BRIDGES WITH WEIGHT. BRIDGES MAY BECOME POSTED ALONG THE PERMITTED ROUTE DURING THE PERMIT DATE RANGE. IT IS THE RESPONSIBILITY OF THE PERMITTEE TO CALL THE PERMIT OFFICE (803) 737-6769 FOR ROUTE MODIFICATION.
TRAVEL IS PROHIBITED on Sunday and from 12 noon the day before until 12 noon the day after the following holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Reduce speed to 45 MPH over all bridge crossings.

South Carolina Department of Transportation

Oversize/Overweight Permission # 61215Z00081

Valid From: **12/15/16** To **2/12/17**

For the movement of : CRANE (SELF-PROPELLED)

Issued to:
WHITE CRANE COMPANY
3414 AUGUSTA ROAD
WEST COLUMBIA, SC 29169
Crane (300) - License #: SM23084 (SC)
Truck/Tractor VIN: WMG6315L6DZ000234

USDOT #: 527568
State fee: $10.00
Sent by: Email -
Telephone #: (803) 794-7194
Ordered by: TONY

COPY

Overall Dimensions - Length: **75'** Width: 10' **6"** Height: **14' 0"** Overhang Front: Rear:
Gross Weight: **177,700** Trailer Length: Total Axles: **9**

Axles:	1	2	3	4	5	6	7	8	9
Weight:	15300	15600	22800	22900	22800	22800	18500	18500	18500
Spacing:	5'5"	8'0"	5'5"	10'0"	5'5"	14'0"	4'1"	4'1"	

MAXIMUM AXLE WEIGHTS: 20,000 lbs on single axle, 40,000 lbs on tandem axle, 60,000 lbs on tridem axle. Total not to exceed gross vehicle weight on permit. When transporting multiple pieces, gross weight must be legal.

SEE ATTACHED PAGE(S) FOR ORIGIN, DESTINATION AND DEFINED ROUTES OF TRAVEL

No travel shall be allowed during inclement weather such as heavy rain or fog when visibility is restricted to less than 1000 feet. Travel prohibited during periods of high wind or when highways are slippery or hazardous due to ice, snow or sleet.

The South Carolina Transport Police or Highway Patrol may direct a vehicle off the highway to a safe place. Detour vertical obstructions where necessary.

The mover shall be responsible for checking all overhead vertical clearances and shall make provisions for raising or removal of overhead wires, cables, traffic signals, etc. at least three (3) days in advance of move.

In pursuant to SC Code of Law 57-3-130 (B)(3)(c), it is the responsibility of the carrier to comply with all Federal Motor Carrier Safety Regulations and applicable State and Federal Laws, including, but not limited to, speed, tire size, brakes and lighting.

For all railroad grade crossing, comply with 56-5-2725 of the SC Code of Laws.

Special Restrictions

TRAVEL PERMITTED SUNRISE TO SUNSET Monday through Saturday EXCEPT travel prohibited in close proximity of large urban areas between 7am-9am all days and 3pm-6pm on school days and 4:30pm-6pm on non-school days.

TRAVEL IS PROHIBITED on Sunday and from 12 noon the day before until 12 noon the day after the following holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

REDUCE SPEED WHEN TRAVELING THROUGH SCDOT WORK ZONE CONSTRUCTION SITES. Permittee is responsible for immediately replacing to SCDOT standards all traffic control devices (signs, cones, barrels, etc.) that are knocked over or destroyed upon contact.

TRAVEL IS PROHIBITED on Friday and Saturday from Memorial Day through Labor Day over routes east of I-95, including but not limited to; US-378, US-327, US-76, US-576, US-501 AND SC-9. And on US-17 from the NC State line to points south of Myrtle Beach and on any routes in the Myrtle Beach vicinity.

TRAVEL IS PROHIBITED OVER POSTED BRIDGES WITH WEIGHT. Bridges may become posted along the permitted route during the permit date range. It is the responsiblity of the permittee to call the permit office for route modification.

Reduce speed to 45 MPH over all bridge crossings.

South Carolina Department of Transportation

Oversize/Overweight Multiple Trip Permit # RC252172715

Valid From: **3/7/18** To **3/6/19**

Continuous travel time (24hr/7days/365 days) is authorized.
MUST HAVE INTERNATIONAL BILL OF LADING

For the movement of : CONTAINERIZED CARGO UP TO 100,000 LBS

Issued To:
LEWIS TRUCKING LINES
PO DRAWER 1697
CONWAY, SC 29528
USDOT #: 1403513
Truck-tractor - License #: P752263 (SC)
Truck/Tractor Vin: 5KJJABAVX4PM72715

State Fee: $100.00
Sent by: Fax - (843) 248-2179
Telephone #: (843) 248-5984
Ordered by: KRISTIE
Trailer Length: N/A

Overall Dimensions - Length: **75'** Width: **8' 6"** Height: **13' 6"** Overhang Front: Rear:
Gross Weight: **100,000** Total Axles: **5 or more**

MAXIMUM AXLE WEIGHTS: 20,000 lbs on single axle, 48,000 lbs on tandem axle, 55,000 lbs on tridem axle. Total weight not to exceed gross vehicle weight of permit.

SEE ATTACHED PAGE(S) FOR ORIGIN, DESTINATION AND DEFINED ROUTES OF TRAVEL.

TRAVEL IS PROHIBITED OVER POSTED BRIDGES WITH WEIGHT. Bridges may become posted along the permitted route during the permit date range. It is the responsibility of the permittee to select an alternate route or call the permit office for route modifications.

The towing vehicle must be a truck or truck tractor at least three-quarter (3/4) ton or larger.
No travel shall be allowed during inclement weather such as heavy rain or fog when visibility is restricted to less than 1,000 feet. Travel prohibited during periods of high wind or when highways are slippery or hazardous due to ice, snow or sleet.
The South Carolina Transport Police or Highway Patrol may direct a vehicle off the highway to a safe place.
Detour vertical obstructions where necessary; Observe all traffic, motor vehicle and other applicable SC laws.
Assume all liability and move at own risk.
In pursuant to SC Code of Law 57-3-130 (B)(3)(c), it is the responsibility of the carrier to comply with all Federal Motor Carrier Safety Regulations and applicable State and Federal Laws, including, but not limited to, speed, tire size, brakes and lighting.
Trailer length must be 40 feet or greater.
For any railroad grade crossing, comply with 56-5-2725 of the SC Code of Laws.
The permittee must exercise caution and use flagmen where necessary over narrow roadways and bridges.
Movement is prohibited on Friday and Saturday from Memorial Day though Labor Day over routes East of I-95, including, but not limited to 9, 38, 76, 327, 378, 501 and 576. Including US-17 to and from the Myrtle Beach area from the North Carolina line to Georgetown, and any other routes in the Myrtle Beach vicinity.
This permit shall be open to inspection at any time by any uniformed officer or authorized agent of the authority granting the permit.

Oversize Permit Unit

GEORGIA ANNUAL PERMIT # M1087931

The issuance of this permit authorizes the movement of the vehicle or load below pursuant to authority contained in the Georgia Code of Public Transportation, Chapter 32-6, as amended, and the Regulations set forth by the State Transportation Board.
For information, call 1 (888) 262-8306.

PERMIT INFORMATION

Issued to: **RJ CORMAN RAILROAD CO MATERIAL SALES-DOT# !**
One Jay Station
NICHOLASVILLE, KY 40359

Account No: **99000**
Valid: **10/09/13 to 10/01/14**
DOT #: **933168**

Load Description: **STEEL - RAILROAD MATERIAL**

Tractor Make: **N/A** License: **N/A** Trailer License: **N/A**

Overall Dimensions: Width: **12'0"** Height: **14'6"** Length: **100'0"**

Gross Weight: **100,000** on **5** axles

Origin: **N/A** Destination: **N/A**

State Fee: **$150.00** Issued: 10/08/13 10:41 **9840**

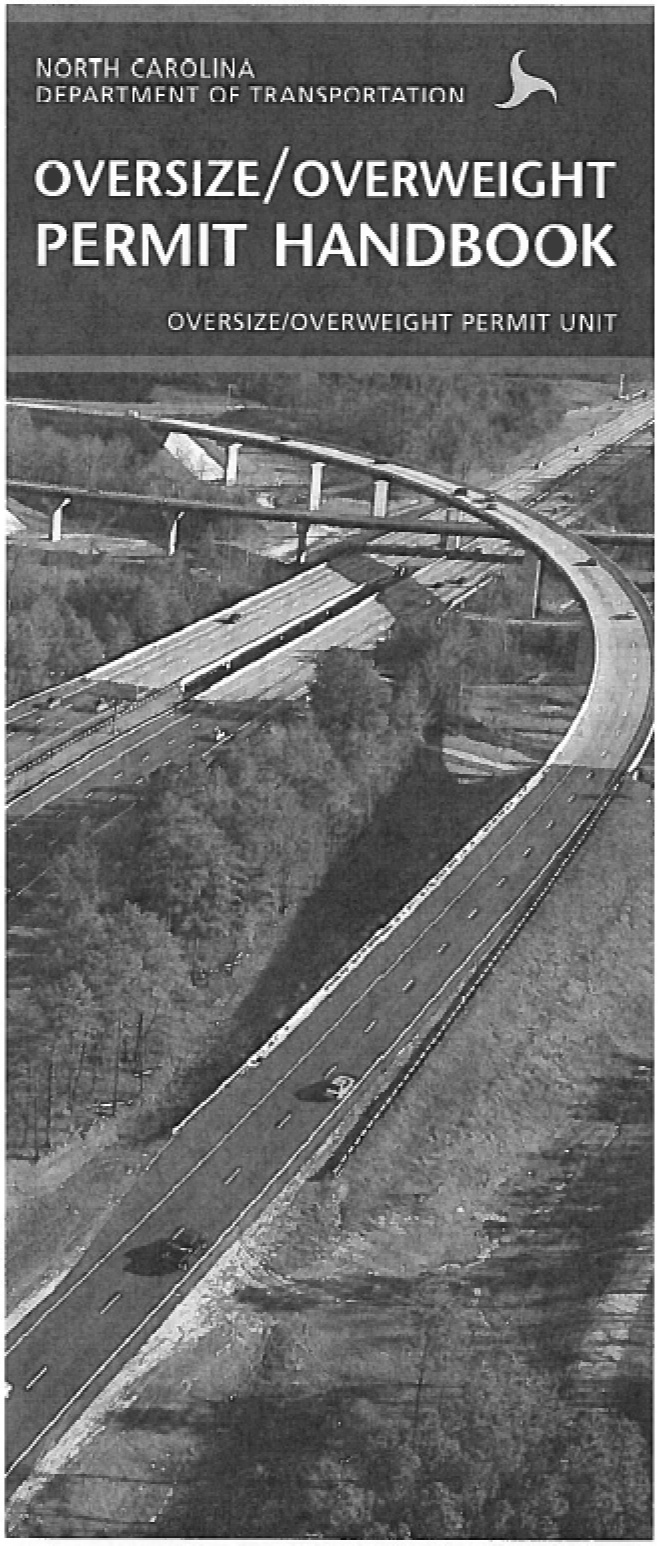
SPECIAL CIRCUMSTANCES

Refer to GDOT Rule 672-2-.06 for escort requirements and Rule 672-2-.03 (i) for requirements on reporting accidents/incidents involving permitted loads.
Travel allowed on all authorized highways and roads during daylight hours 30 minutes after sunrise and 30 minutes before sunset only.
No permitted load is authorized to travel during inclement weather and holidays as defined in Department Rule 672-2-.03.(c).
COPY OF THIS PERMIT NOT VALID

ALL PERMITTED LOADS WITH OR WITHOUT TRANSPONDERS MUST STOP AT EVERY WEIGH STATION.

GENERAL CONDITIONS

This permit is granted under and subject to the vehicle laws of Georgia and to all applicable general and specific conditions for operating oversize, as promulgated and published by the State Transportation Board. In addition to complying with all applicable Federal and State Laws and regulations, permittee must comply with applicable County and Municipal ordinances when traveling off the State Highway System. Any false statement of a material fact on the permit application may result in the denial of future permits to the permittee. Non-compliance with specific conditions stated in the preceding sections of this permit renders this permit subject to immediate revocation and confiscation by any police officer or any authorized member of the Department.
This permit does not give the permittee the right to use or damage private property in any way. The permittee shall comply with all rules posted on any bridge or road traversed. Any damage caused directly or indirectly to any road surface, bridge, or other structure, whether maintained by the Georgia Department of Transportation or by another, by the operation of the vehicle, is the responsibility of the permittee.


NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
OVERSIZE/OVERWEIGHT
PERMIT HANDBOOK
OVERSIZE/OVERWEIGHT PERMIT UNIT

Gross Weights

5, 6 or 7 axles **90,000 lbs.**
(minimum 51-foot wheelbase)
(annual permit – not to cross posted roads or posted bridges)

5 axles **94,500 lbs.***
(*112,000 pounds with minimum 51-foot wheelbase)
(annual permit - up to 10 specific routes) (PF-2A)

6 axles **108,000 lbs.***
(*120,000 pounds with minimum 51-foot wheelbase)
(annual permit - one specific route) (PF-2A)

7 axles **122,000 lbs.***
(*132,000 pounds with minimum 51-foot wheelbase)
(annual permit - one specific route) (PF-2A)

Annual Permit inquiries: 1-888-221-8166

Single Trip Permit

Fee	$12 - $48 (state fee)
Valid	10 calendar days for one single trip
Width	15 feet maximum (mobile home may be permitted up to 16 feet)
Length	No overall length limitations, with the following exception: 105 feet maximum for mobile homes/total combination
Height	Maximum determined by vertical clearance along authorized route of travel
Overweight	One item route specific (exact origin, detailed route and destination)
Identified by	Power unit license and serial number
Issued to	Registered owner of power unit

- The following weights do not apply to self-propelled vehicles or off-road equipment.
- Maximum permit weight allowed is determined by the number of load supporting axles; allowable bridge structure weights.

Axle weights:

Steer axle	20,000 lbs.
Single axle	25,000 lbs.
Tandem axles	50,000 lbs.
Tridem axles	60,000 lbs.
4 or more axle grouping	68,000 lbs.

Rev. 8/2012

NC

Publication C-11

Sealed Ship Containers

A sealed ship container is defined as containerized freight being transported to or from a designated seaport and has or will be transported by marine shipment for International trade with the original unbroken seal or a replacement seal affixed by an authorized government agency.

A sealed ship container may qualify for a permit if:

- **All dimensions of width, height and length do not exceed limits as specified in North Carolina General Statutes, and**
- **Traveling to or from a designated seaport (either in state or out of state), and**
- **Has been or will be transported intact by marine shipment, and**
- **Power unit is licensed for 80,000 lbs., and**
- **Vehicle/vehicle combination has at least five axles, and**
- **Proper documentation (shipper's bill of lading and/or trucking bill of lading) of sealed commodity being transported is available for enforcement inspection.**

Annual Permit

Gross Weights -
5 axles - 112,000 lbs. (94,500 lbs. – wheelbase less than 51')
(Maximum of 10 specific routes with exact origin, detailed route of travel and exact destination)

6 axles - 120,000 lbs. (108,000 lbs. – wheelbase less than 51')
(One specific route with exact origin, detailed route of travel and exact destination)

7 axles - 132,000 lbs. (122,000 lbs. – wheelbase less than 51')
(One specific route with exact origin, detailed route of travel and exact destination)

or

90,000 lbs. gross weight with a minimum of 5 axles and a minimum of a 51' wheelbase – good on all roads, posted roads and posted bridges must be observed. (A combination with an extreme wheelbase less than 51' does not qualify for this permit.)

Axle Weights -

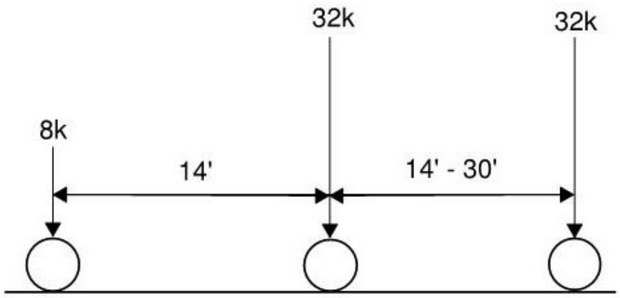
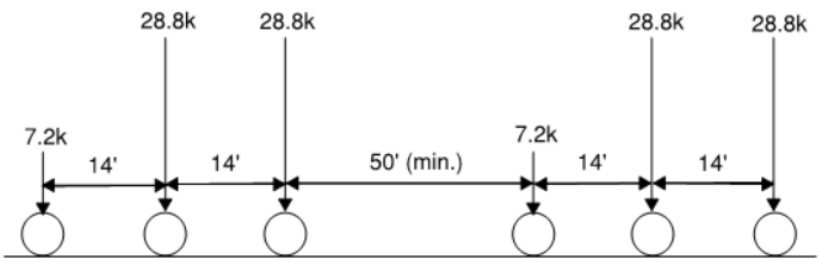
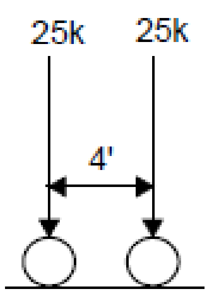
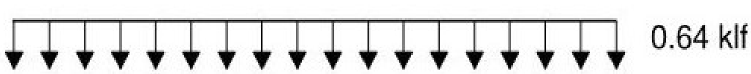
Steer	20,000 lbs.
Single	25,000 lbs.
Tandem	50,000 lbs.
Tridem	60,000 lbs.
Four or more grouping	68,000 lbs.

Width-	8'6" (legal)
Height-	13'6" (legal)
Length-	Legal limit as allowed by North Carolina General Statutes
Fee-	$100 per vehicle
Identified-	Truck license and last five digits of truck serial number
Issued-	To the registered owner of the power unit, if leased, copy of lease is required.

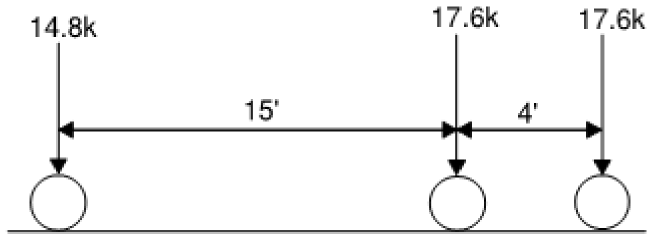
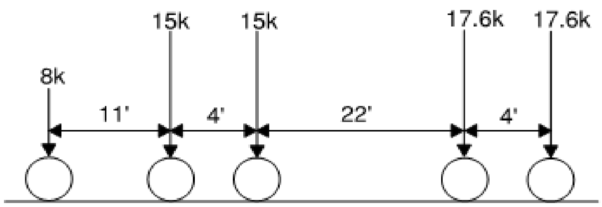
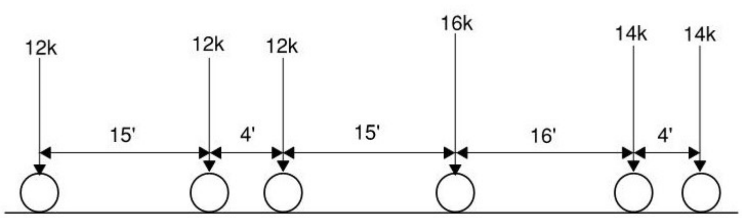
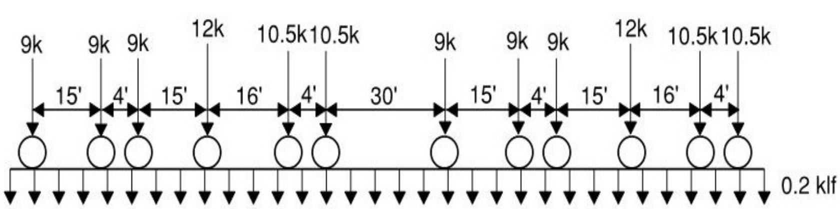
APPENDIX B

Study Vehicle Configurations

AASHTO Design Loads (LRFR)

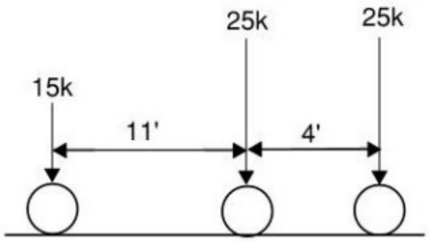
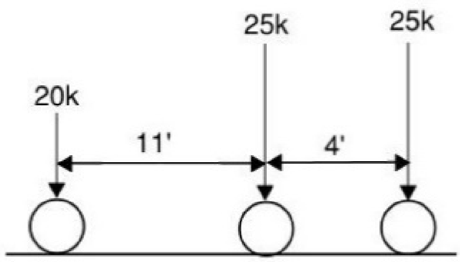
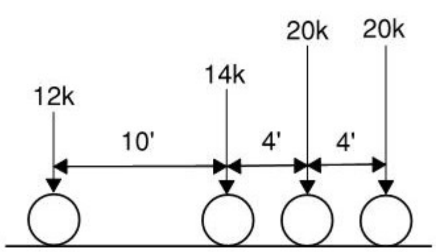
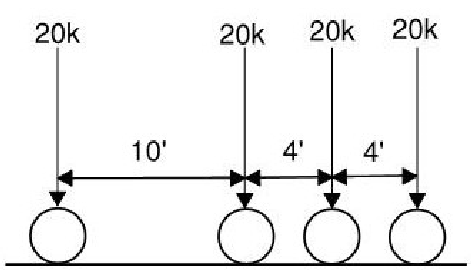
	HL-93 Design Truck w/Lane (.64 kips/ft.) (HS-20 Truck same configuration without Lane)
	HL-93 Truck Train w/Lane (.576 kips/ft.)
	HL-93 Design Tandem w/Lane (.64 kips/ft.)
	HL-93 Design Lane

AASHTO Legal Loads

AASHTO Legal Loads	
	AASHTO SC - Type 3
	AASHTO SC - Type 3S2
	AASHTO Type 3-3
	2-0.75 AASHTO Type 3-3 + .2 klf Lane (For Spans > 200’)

![HDR]

South Carolina Posting Vehicles (Legal)

<table>
<tr><td></td><td>SC SHV1A (65K)
(Well Drilling Rig)</td></tr>
<tr><td></td><td>SC SHV1B (70K)
(Well Drilling Rig)</td></tr>
<tr><td></td><td>SC SHV2A (66K)
(Concrete Mixing/
Aggregate Hauling)</td></tr>
<tr><td></td><td>SC SHV2B (80K)</td></tr>
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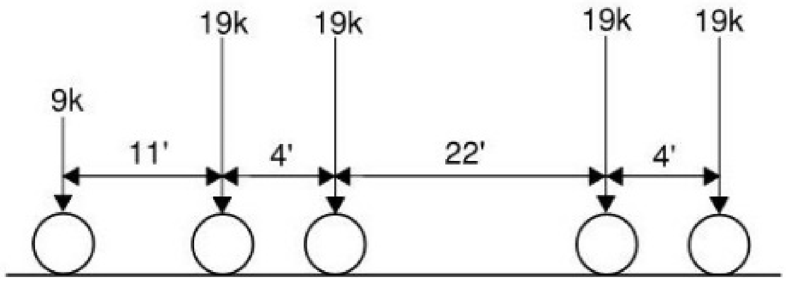
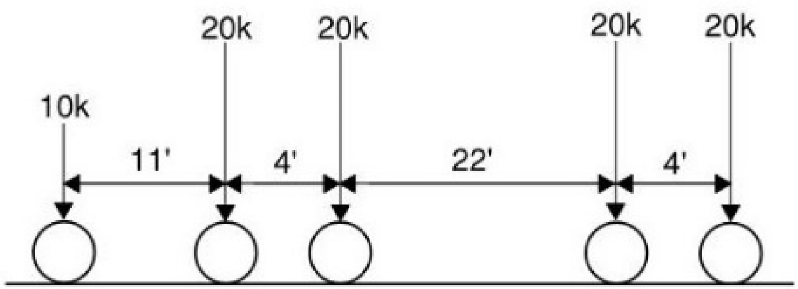
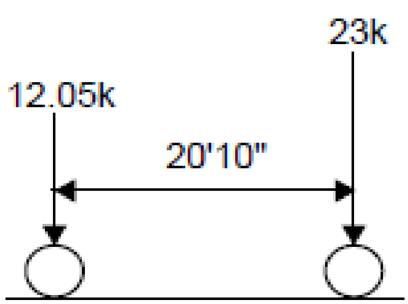
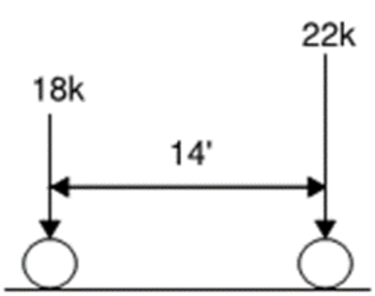
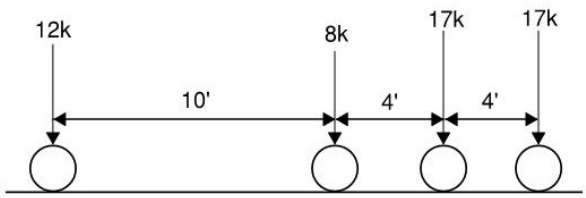
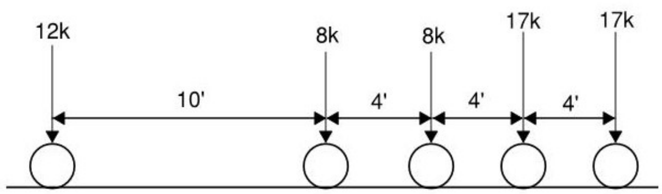
South Carolina Posting Vehicles (Legal) - (cont.)

	SC SHV3A (85K)
	SC SHV3B (90K)
	SC Representative School Bus
	SC-SU2

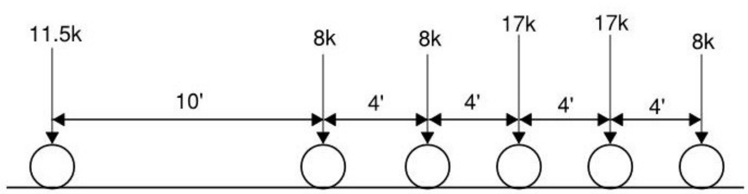
AASHTO Specialized Hauling Vehicles



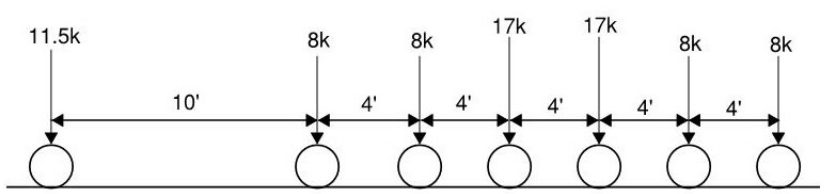
SHV-SU4



SHV-SU5

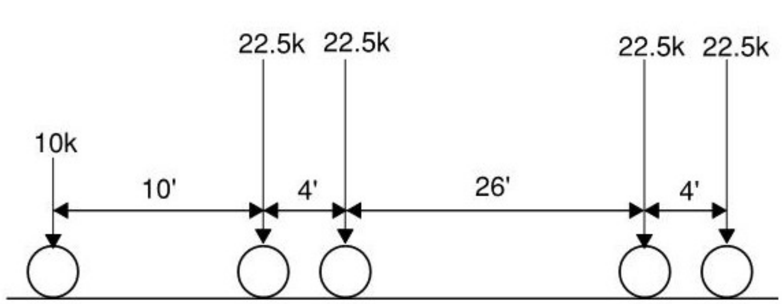


SHV-SU6



SHV-SU7

South Carolina Standard Permitting Vehicles



SC – 100k Permit (Assumed Similar to NCDOT and IDOT)

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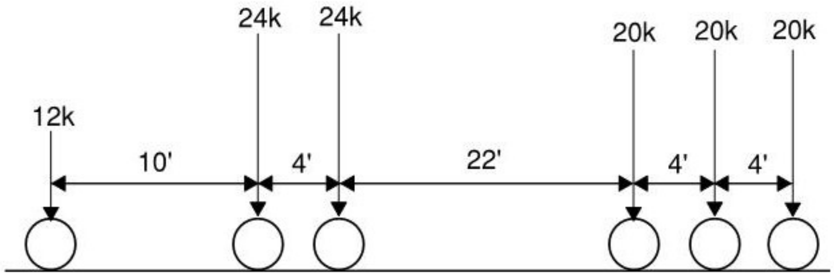
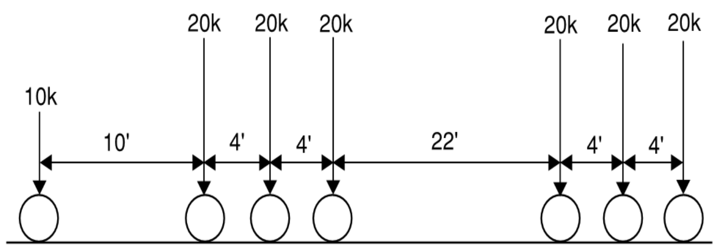
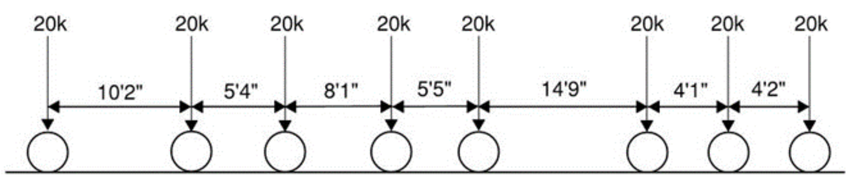
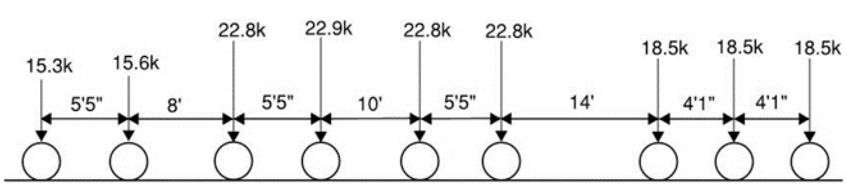
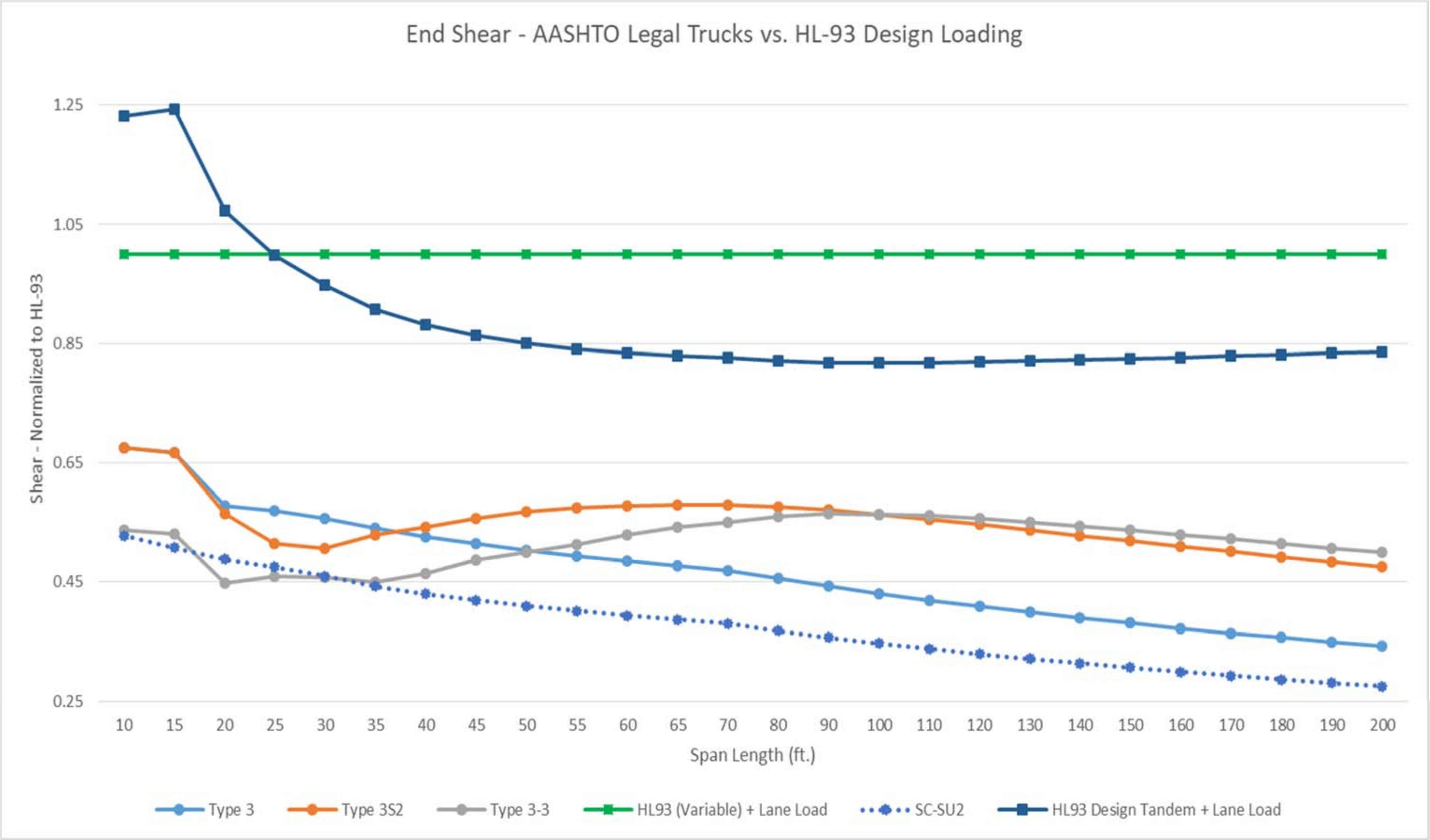
<tr><td>
</td><td>SC – 120k Permit
(Assumed Similar to
NCDOT and IDOT)</td></tr>
<tr><td>
</td><td>SC – 130k Permit</td></tr>
<tr><td>
</td><td>SC Crane #544726
(160k)</td></tr>
<tr><td>
</td><td>SC Crane #527568
(177.7k)</td></tr>
</table>

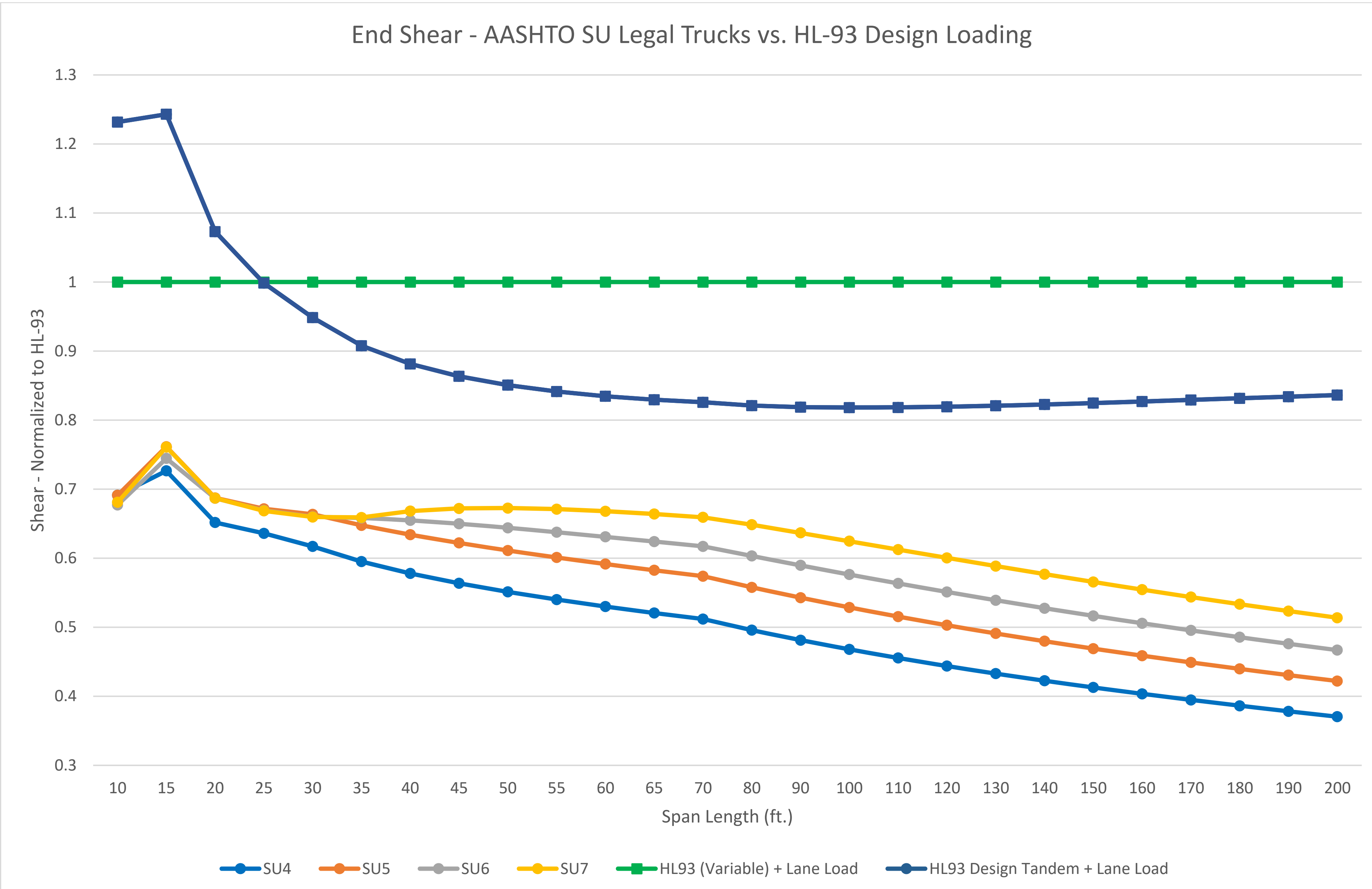
APPENDIX C

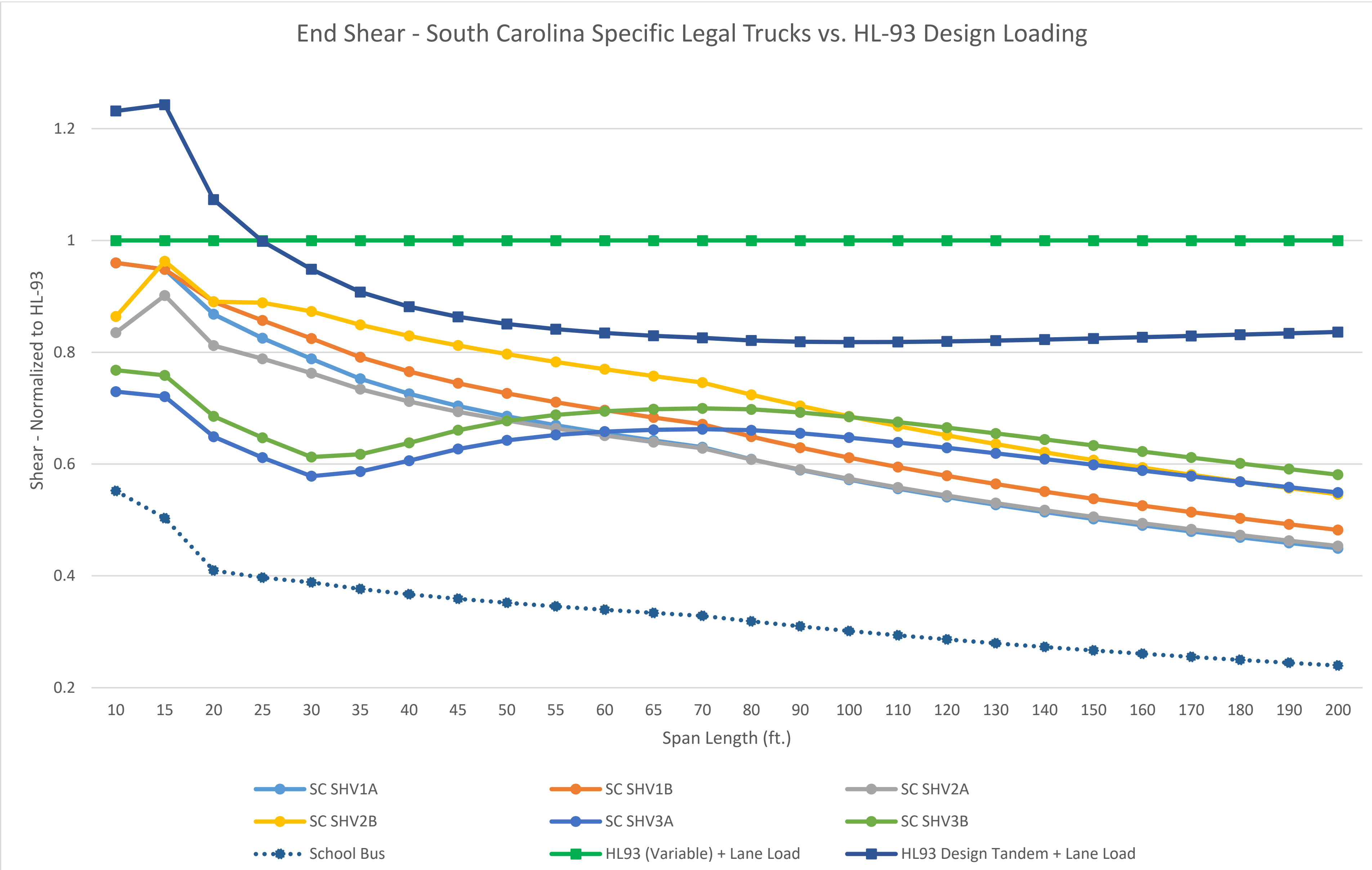
Live Load Results (All Spans – All Trucks)

Note: 2-Span Graphs – ‘y’ Axis is labeled ‘Max Span Length’ indicating ‘ℓ’ in ‘ℓ-ℓ’
3-Span Graphs – ‘y’ Axis is labeled ‘Min Span Length’ indicating ‘ℓ’ in ‘ℓ-1.3ℓ-ℓ’

Legal Trucks: 1-Span (Normalized to HL-93 Design Truck) – *End Shear*

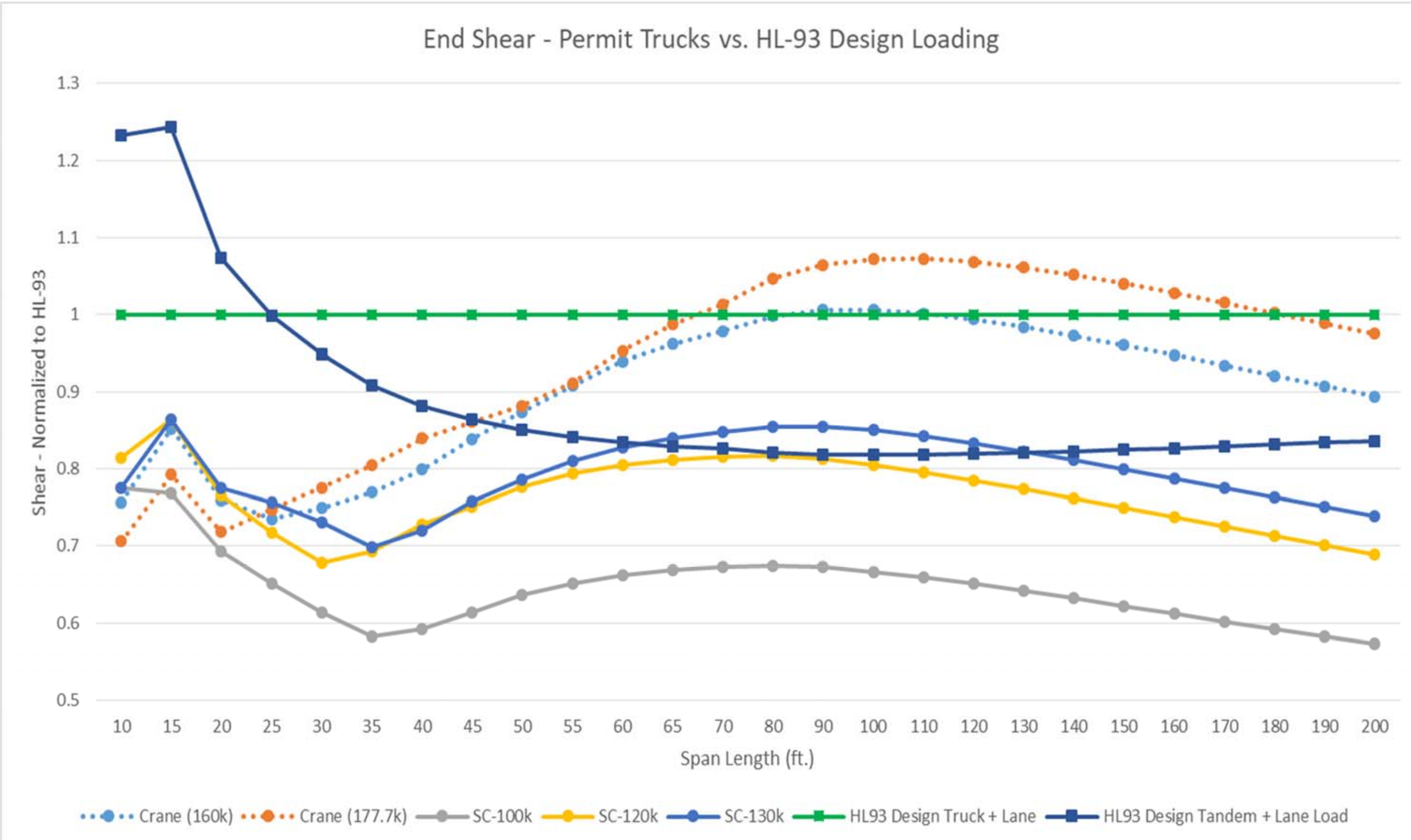



End Shear - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Design Tandem + Lane Load

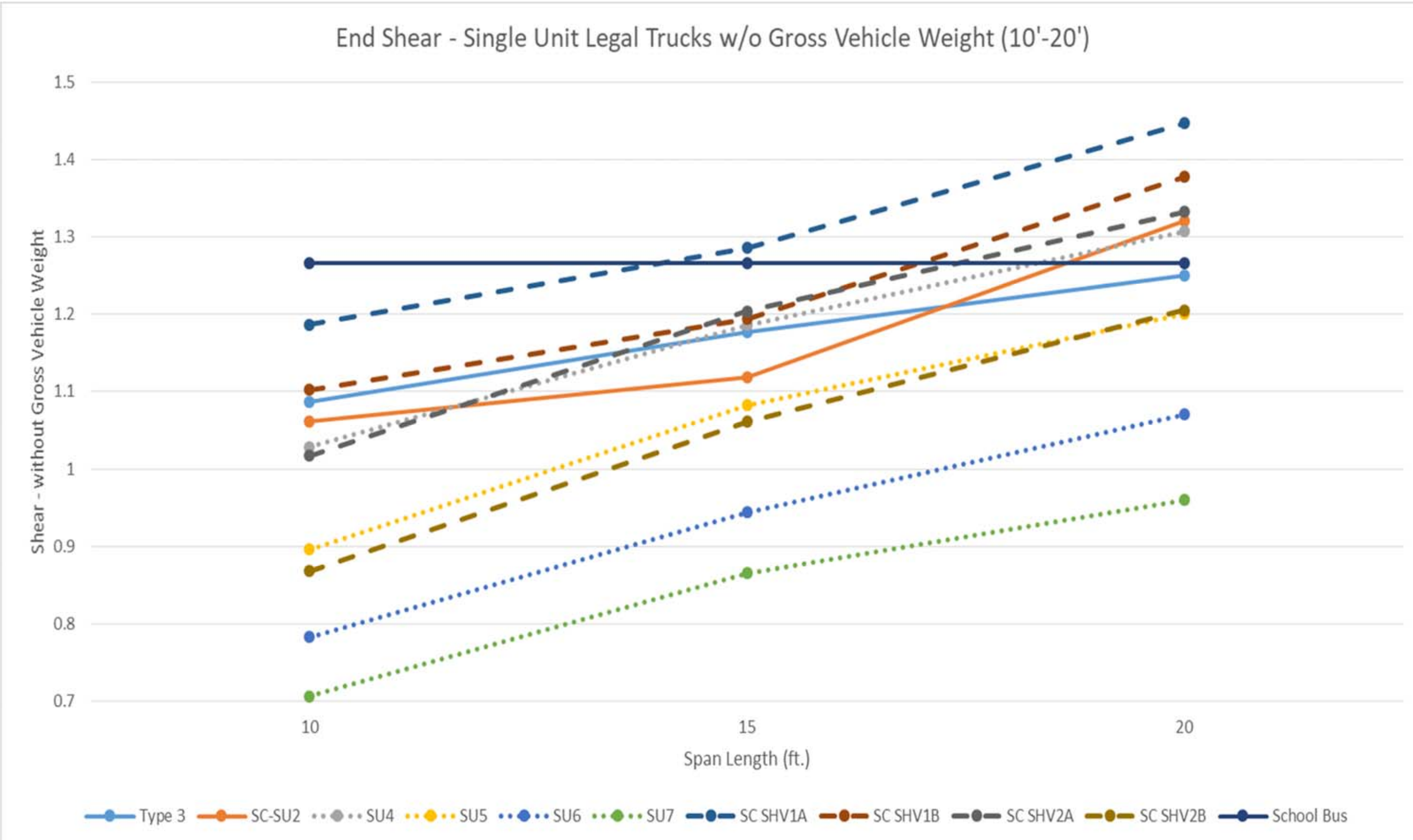


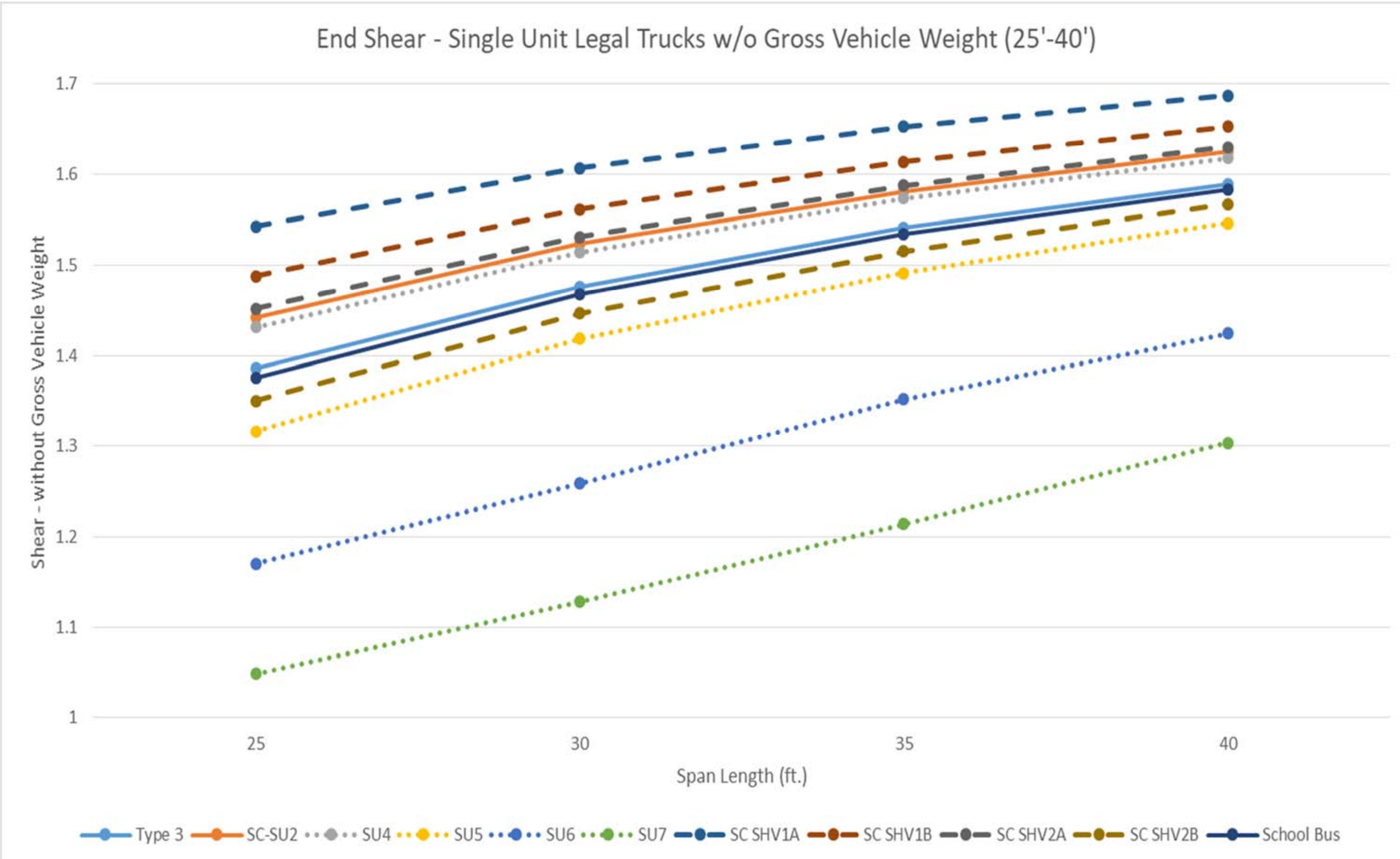
End Shear - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Design Tandem + Lane Load

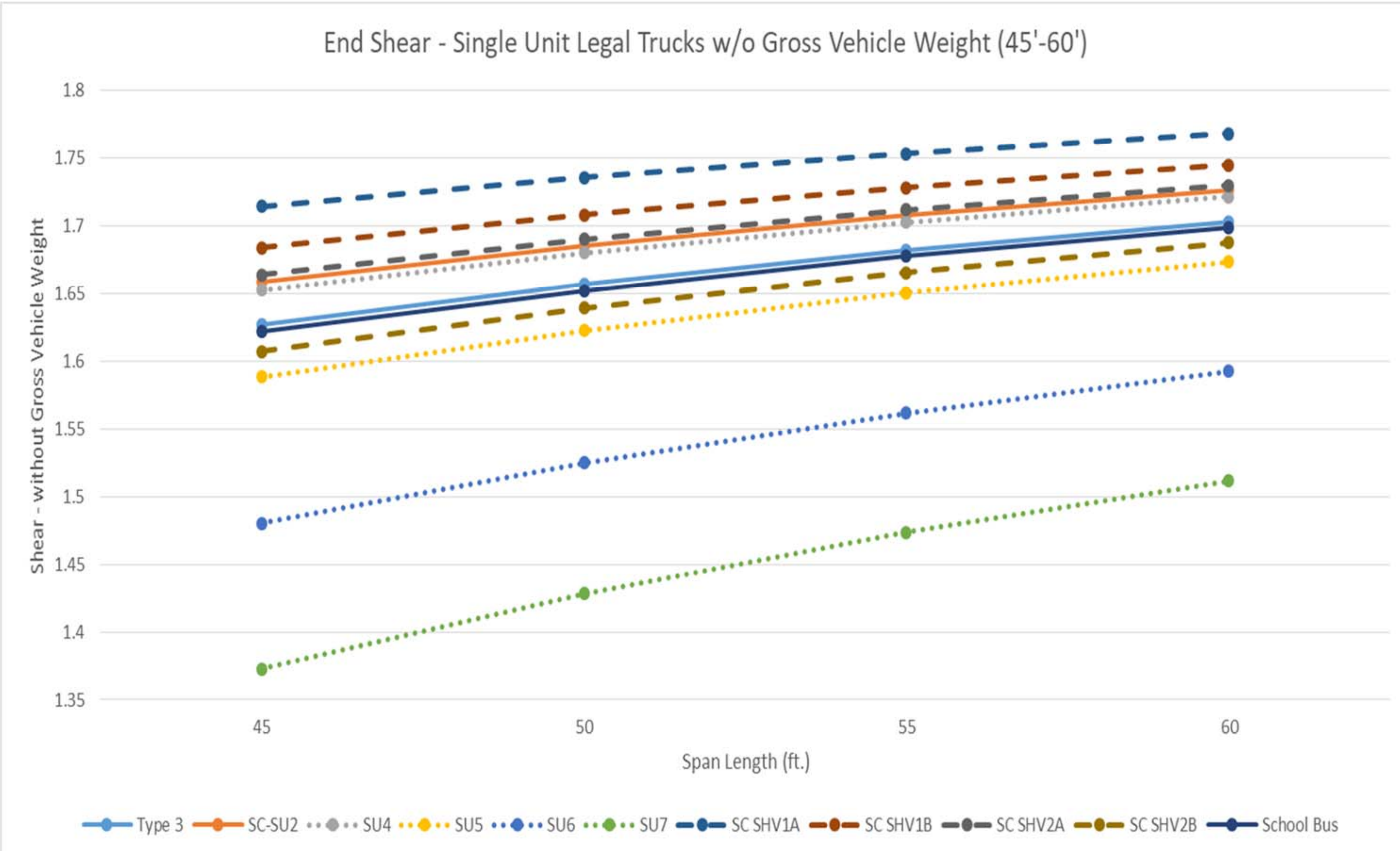
Permit Trucks: 1-Span (Normalized to HL-93 Design Truck) – *End Shear*



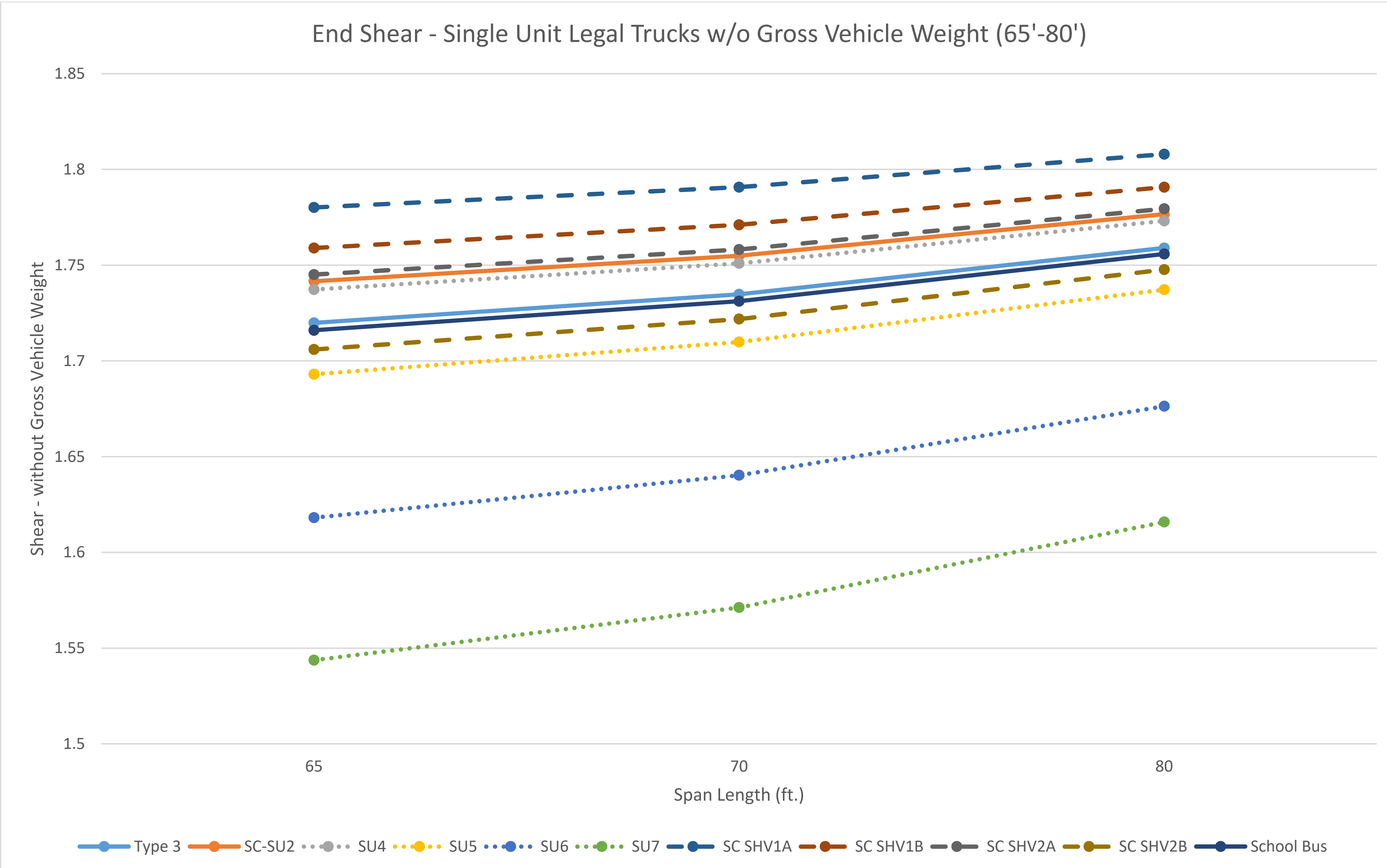
Legal Trucks: 1-Span (Without Gross Vehicle Weight) – *End Shear*



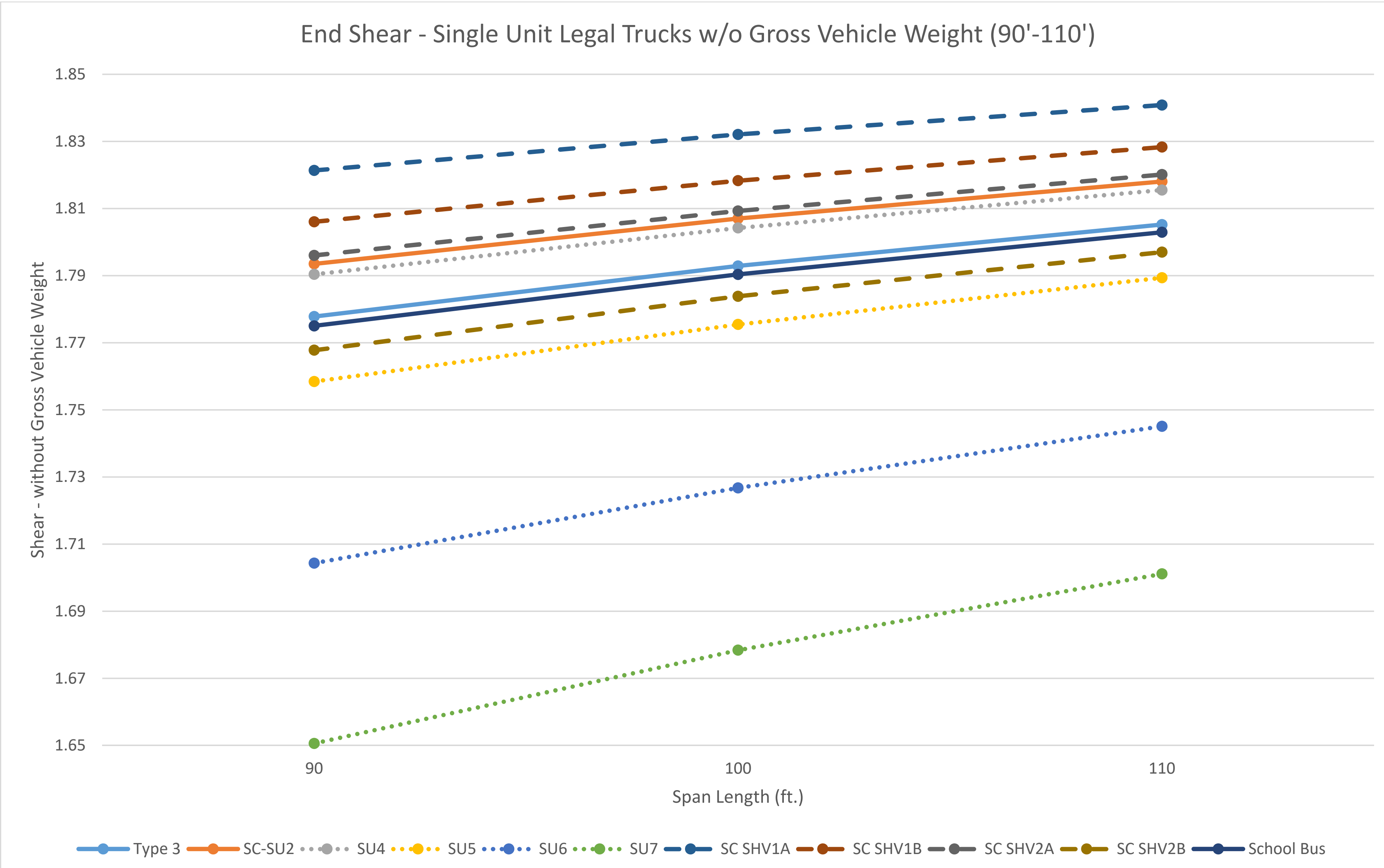

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
25
30
35
40
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

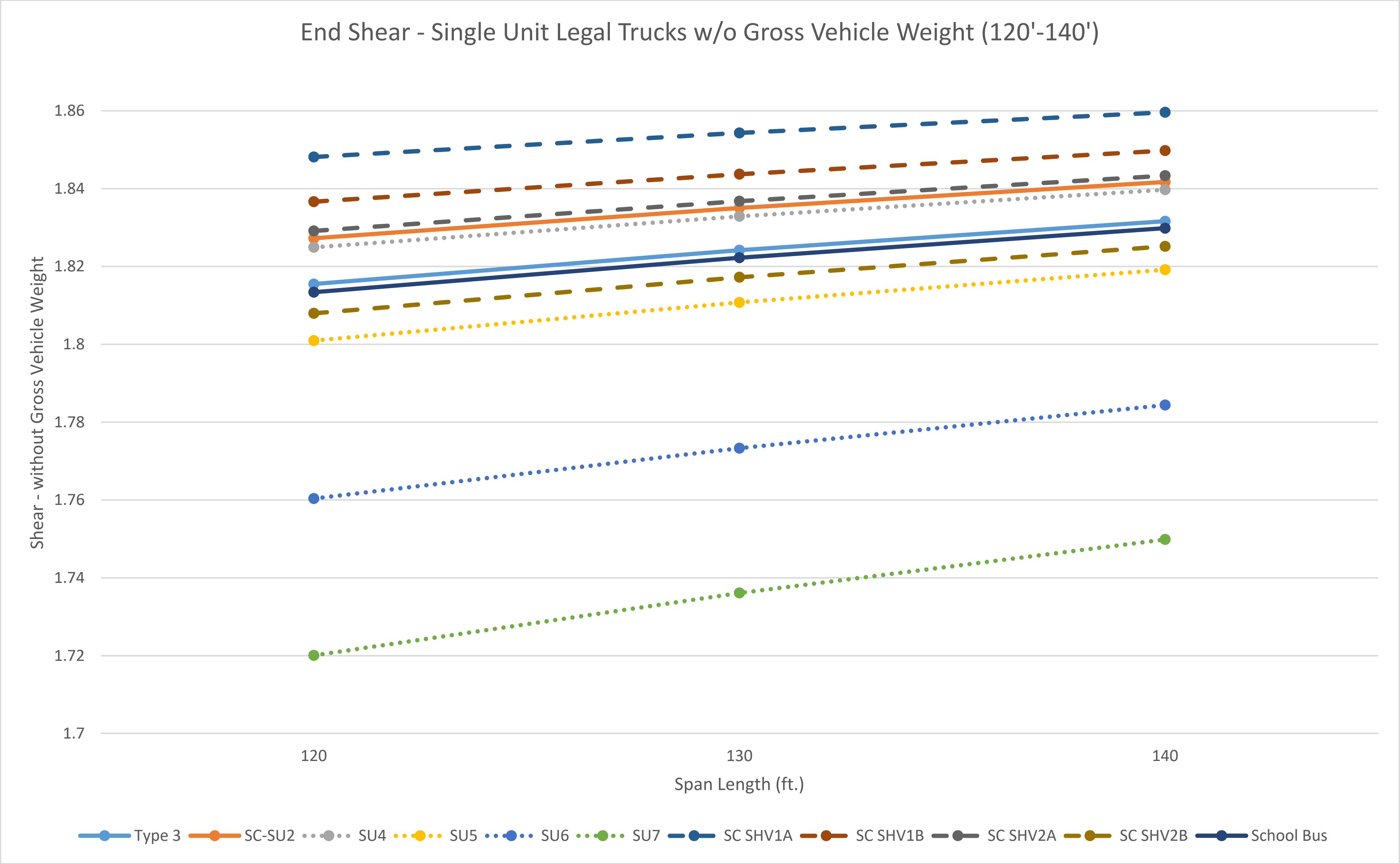


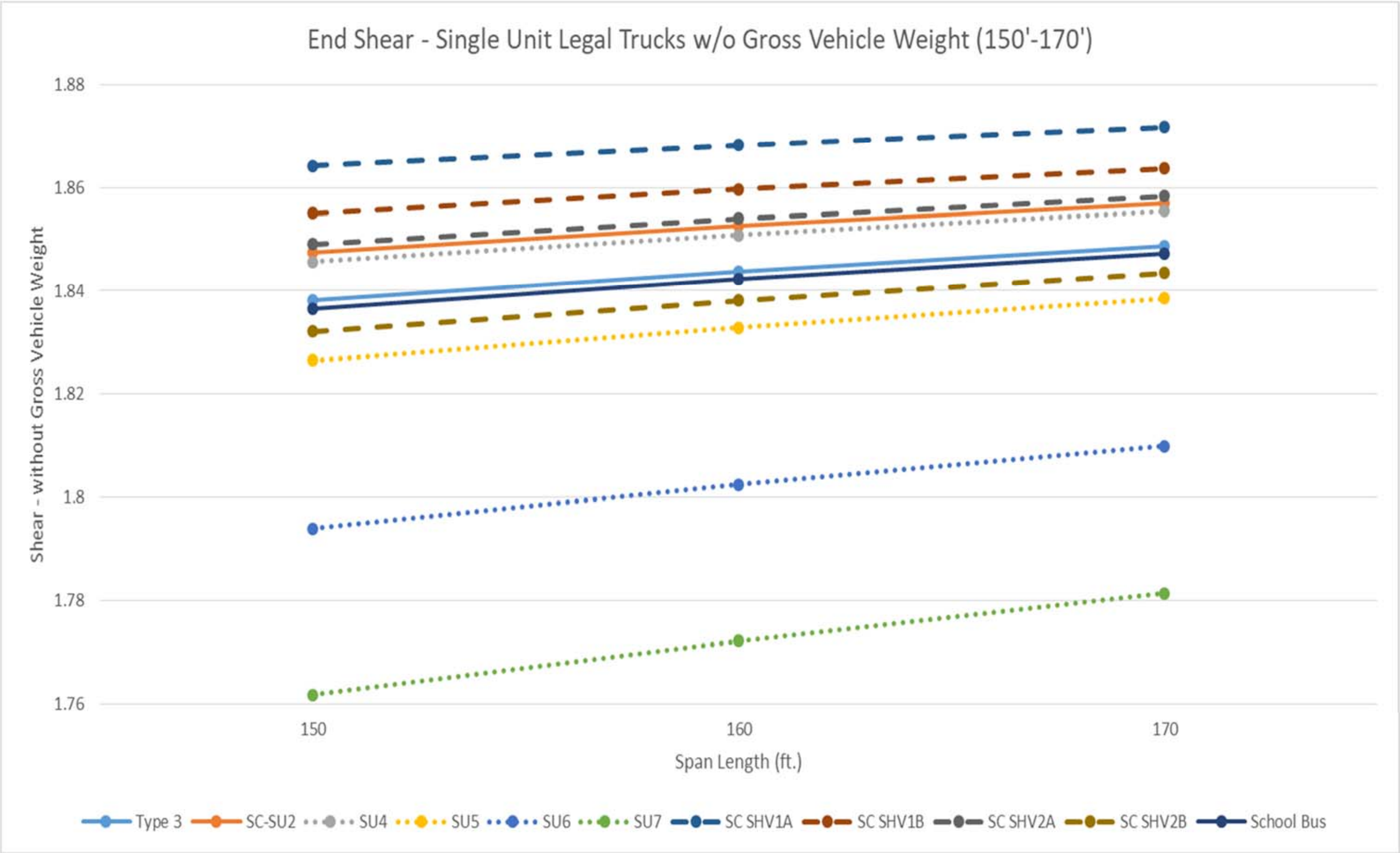
End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
1.4
1.35
Shear - without Gross Vehicle Weight
45
50
55
60
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

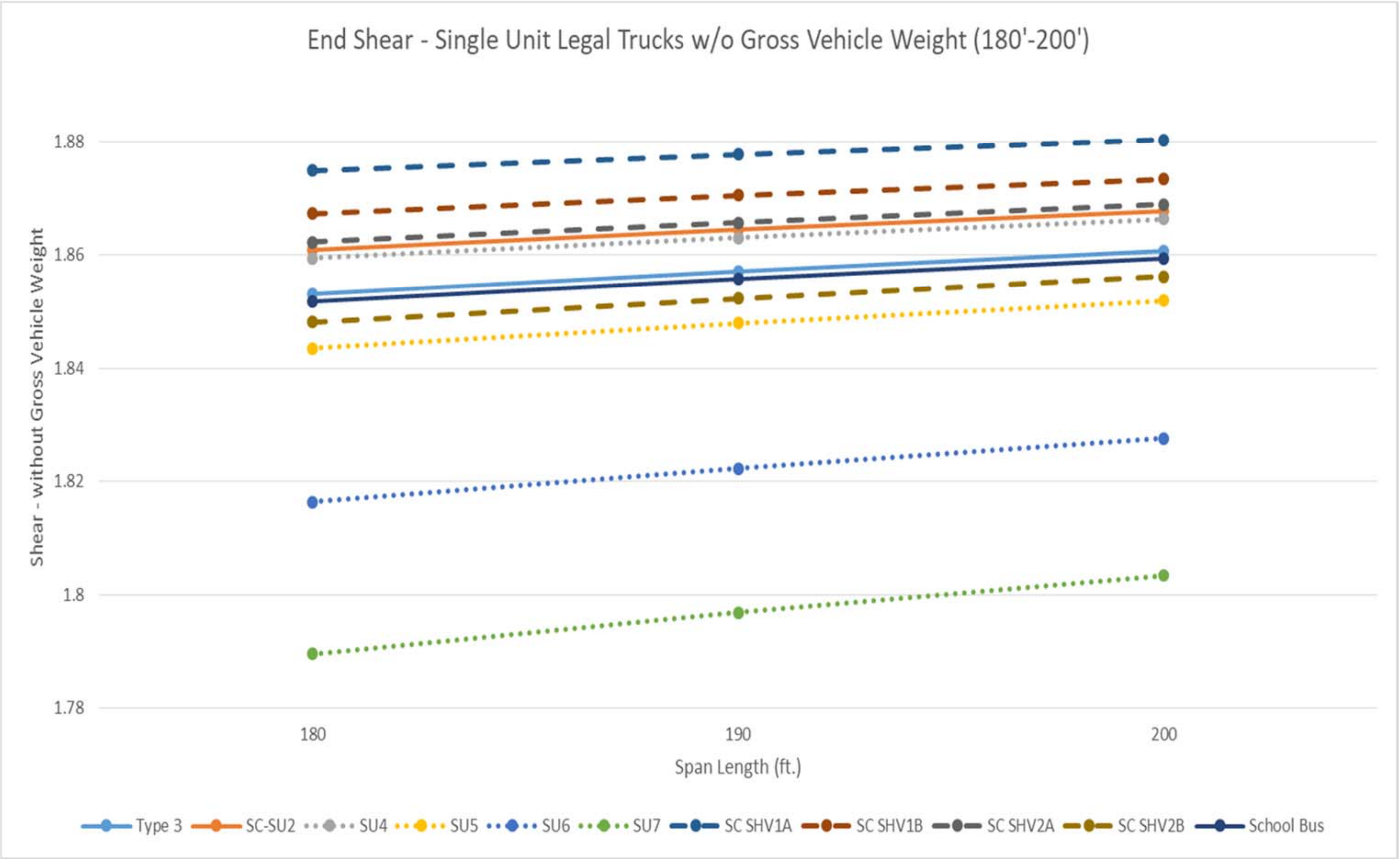


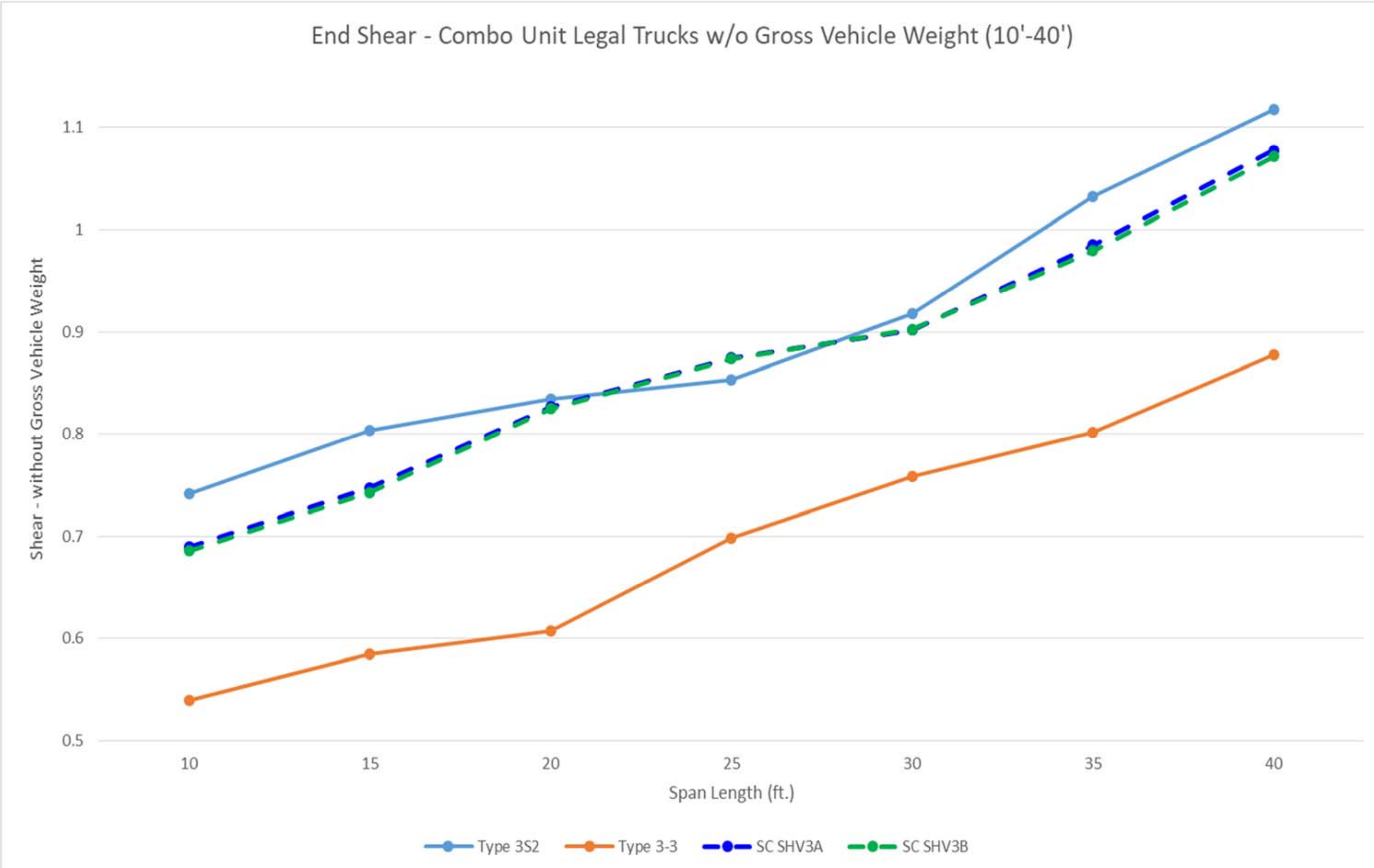
End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
1.85
1.8
1.75
1.7
1.65
1.6
1.55
1.5
Shear - without Gross Vehicle Weight
65
70
80
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

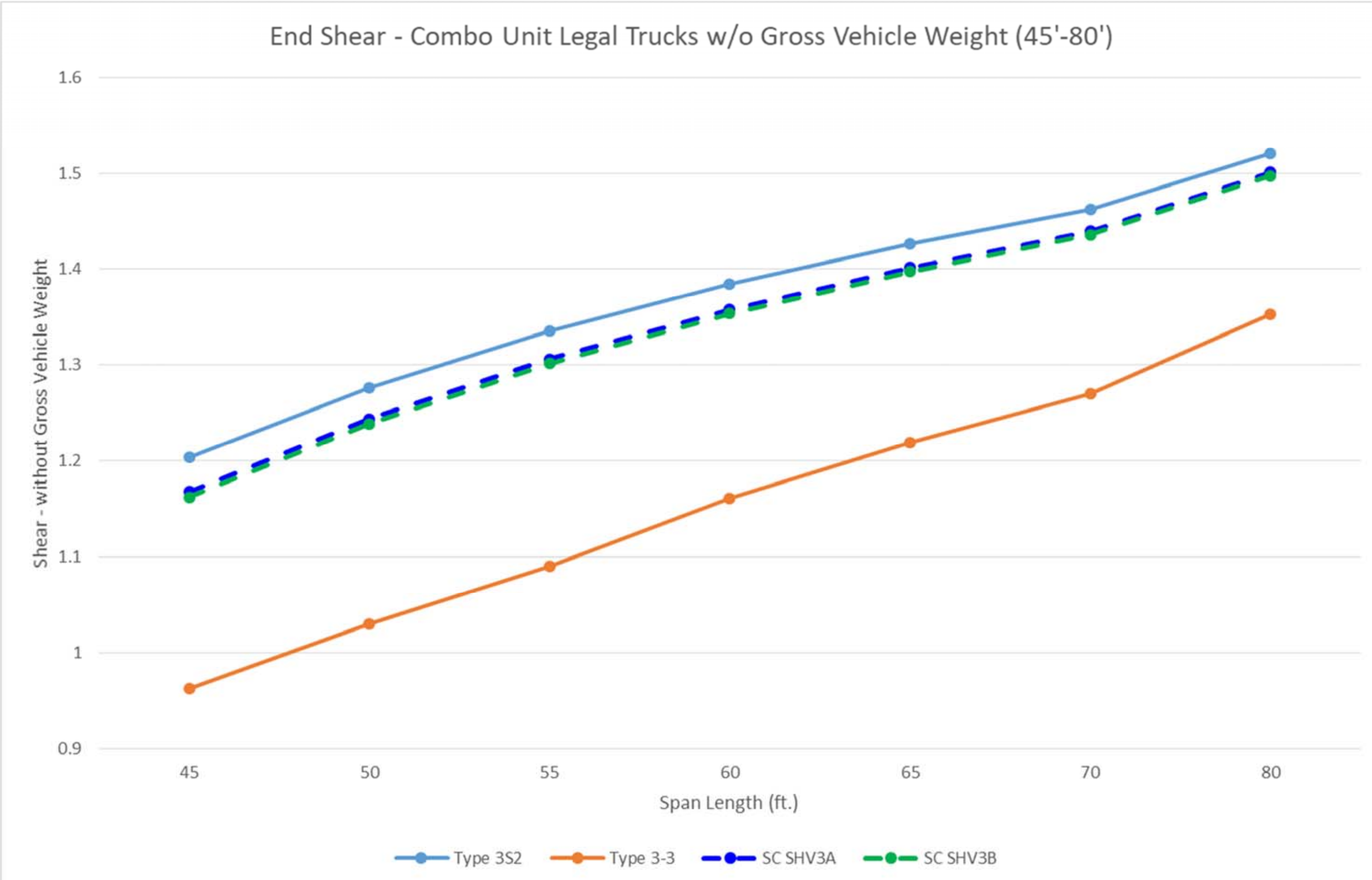

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
1.85
1.83
1.81
1.79
1.77
1.75
1.73
1.71
1.69
1.67
1.65
90
100
110
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

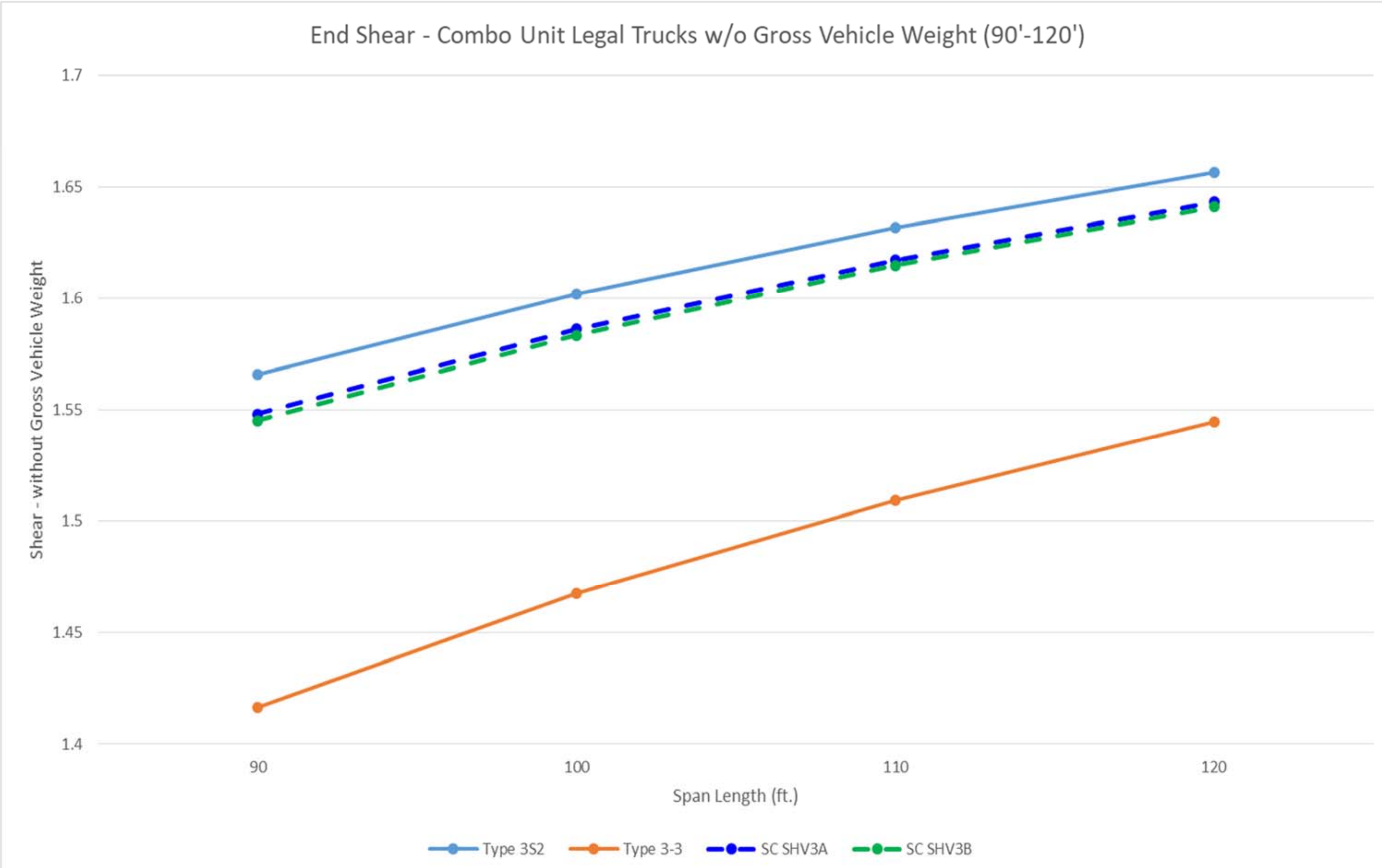

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
1.86
1.84
1.82
1.8
1.78
1.76
1.74
1.72
1.7
120
130
140
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

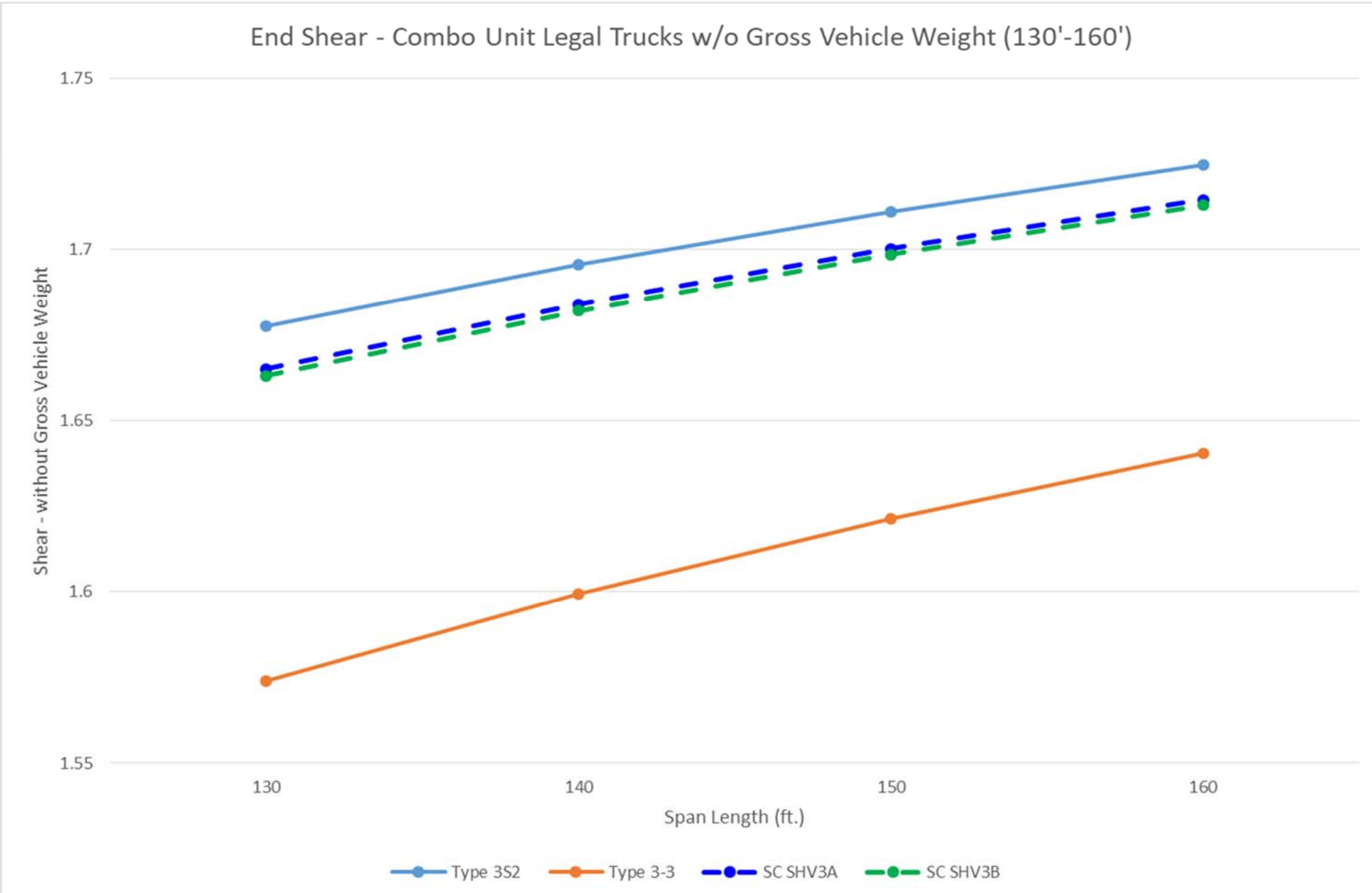

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
1.88
1.86
1.84
1.82
1.8
1.78
1.76
Shear - without Gross Vehicle Weight
150
160
170
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

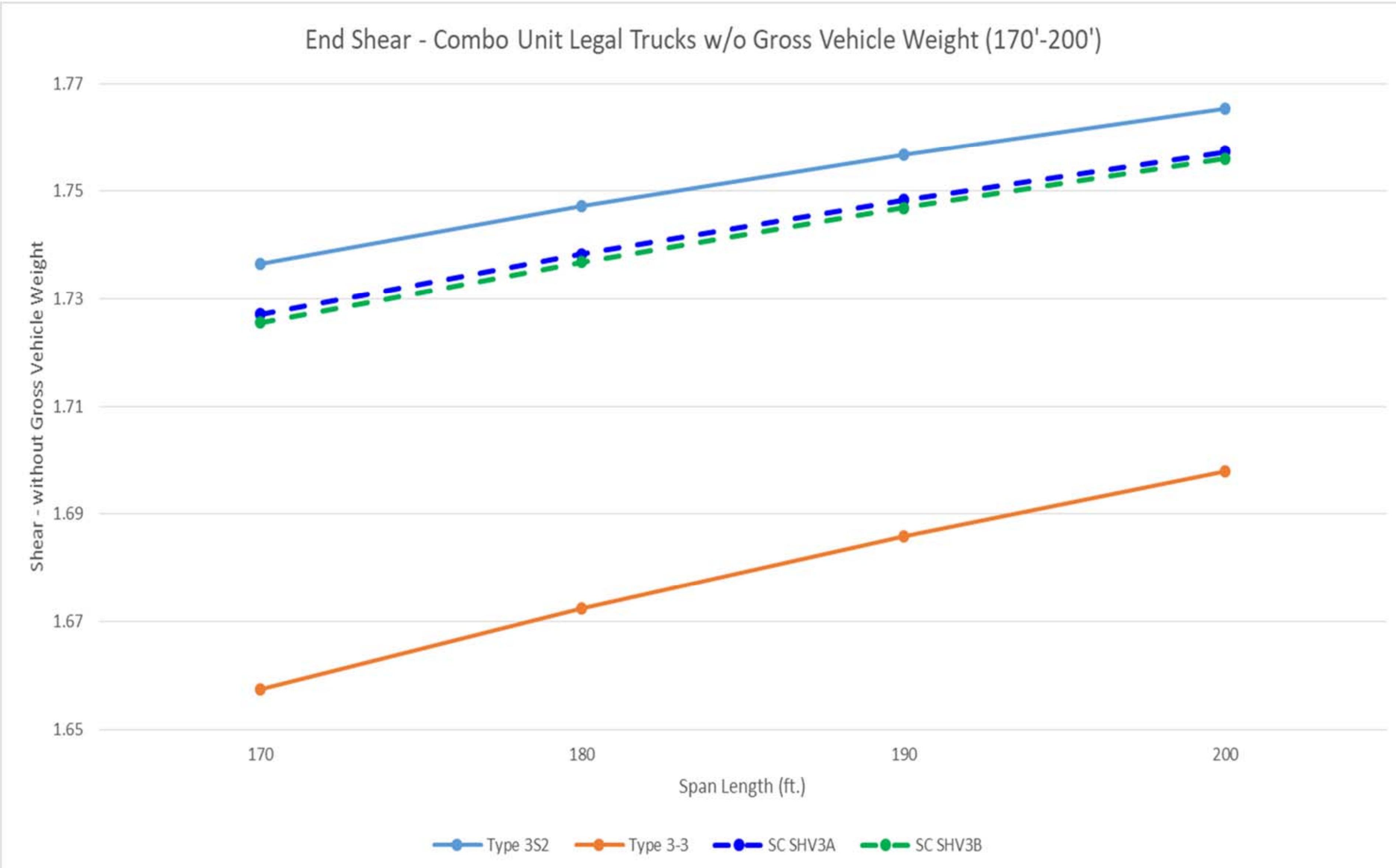

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
1.88
1.86
1.84
1.82
1.8
1.78
180
190
200
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
1.1
1
0.9
0.8
0.7
0.6
0.5
10
15
20
25
30
35
40
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
45
50
55
60
65
70
80
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

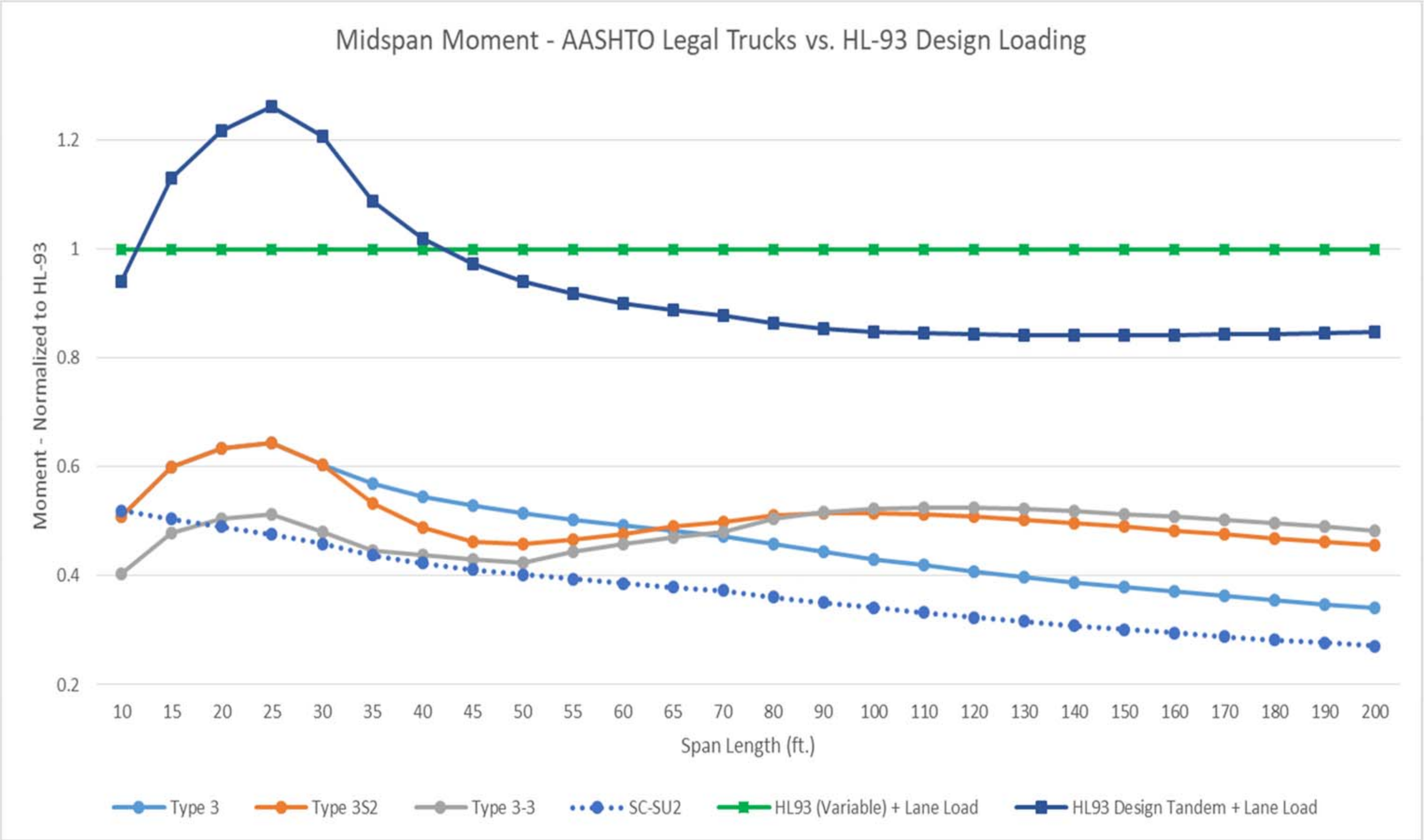

End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
1.7
1.65
1.6
1.55
1.5
1.45
1.4
90
100
110
120
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

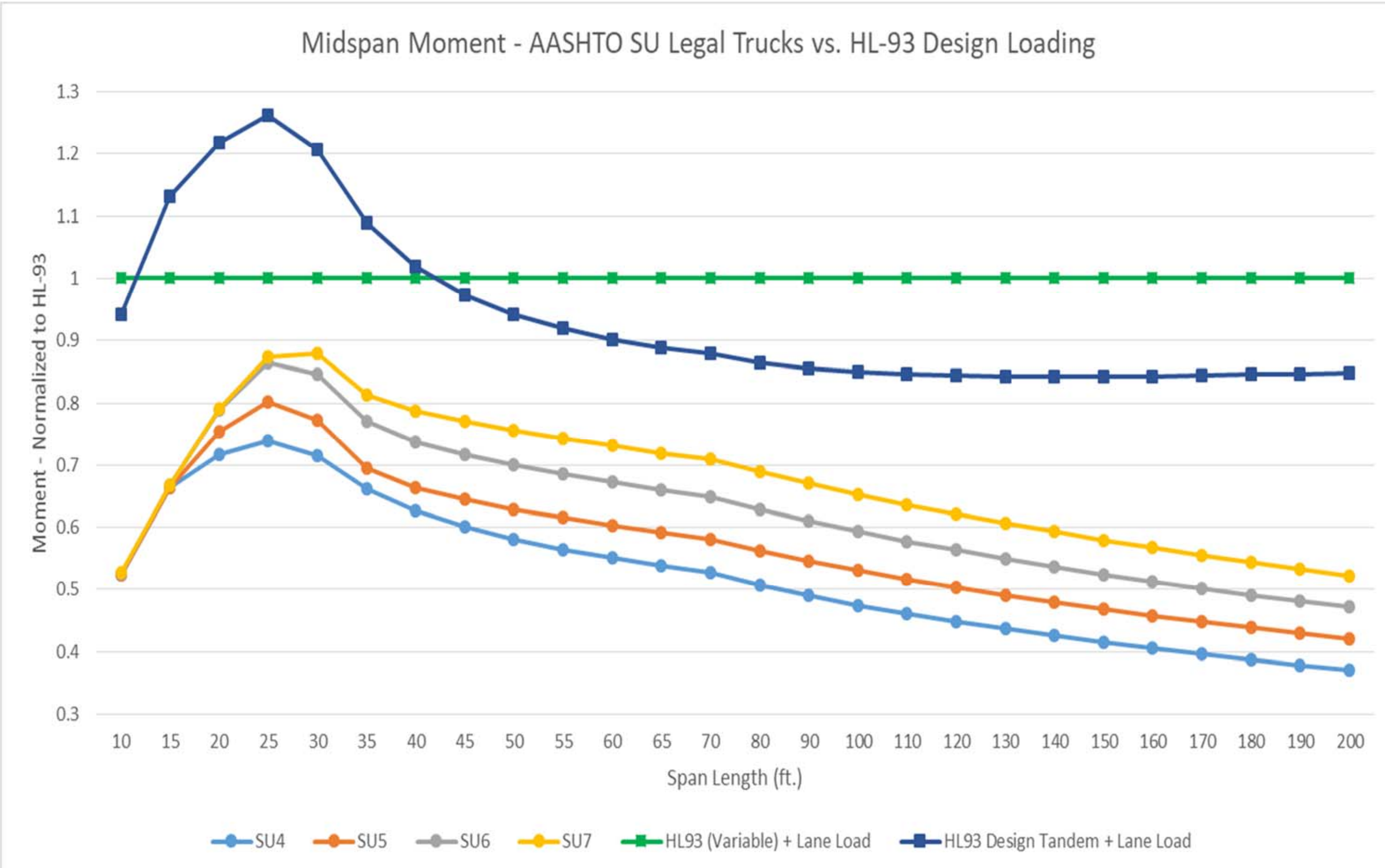

End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
1.75
1.7
1.65
1.6
1.55
Shear - without Gross Vehicle Weight
130
140
150
160
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

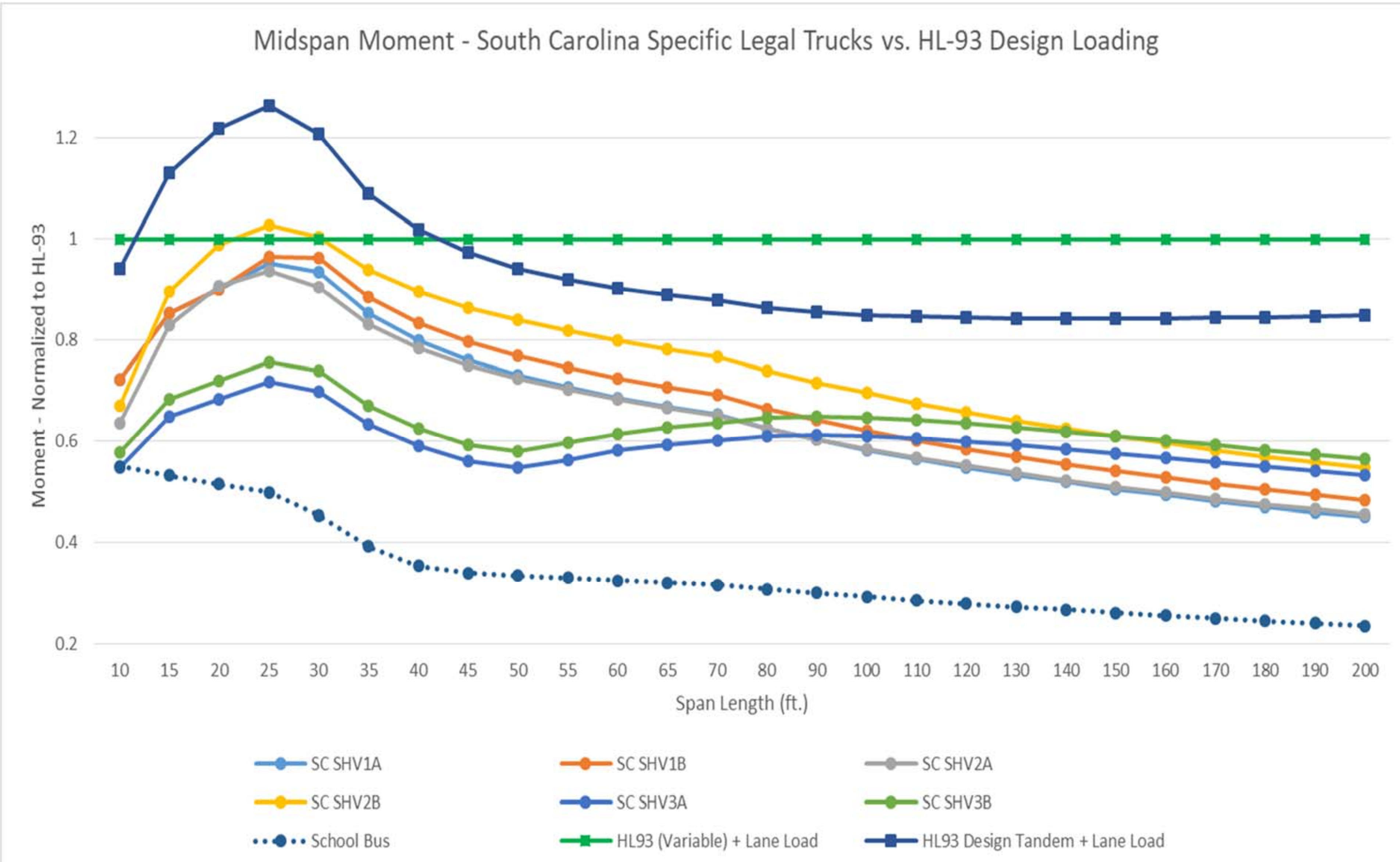


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
1.77
1.75
1.73
1.71
1.69
1.67
1.65
Shear - without Gross Vehicle Weight
170
180
190
200
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

Legal Trucks: 1-Span (Normalized to HL-93 Design Truck) – *Midspan Moment*

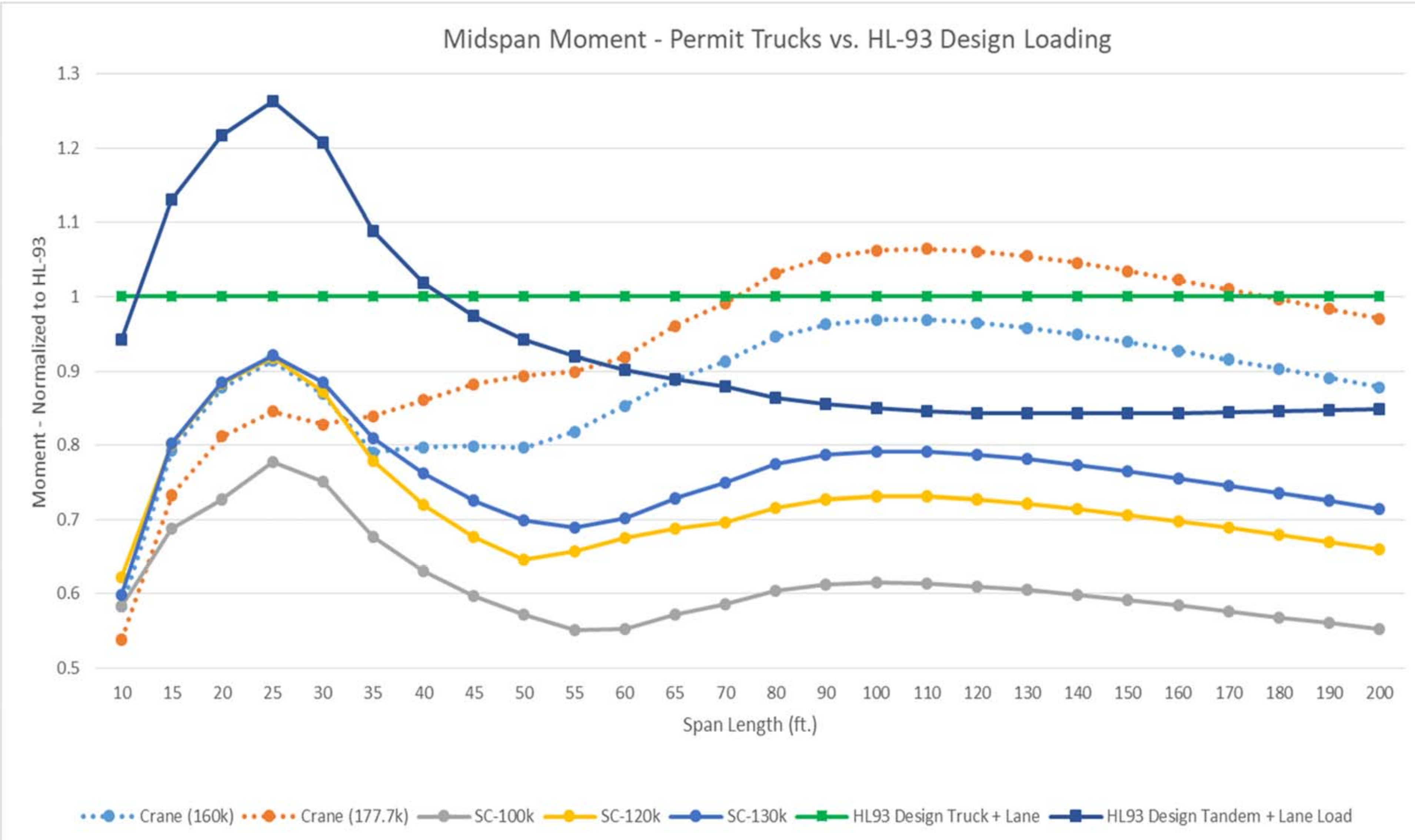



Midspan Moment - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Design Tandem + Lane Load

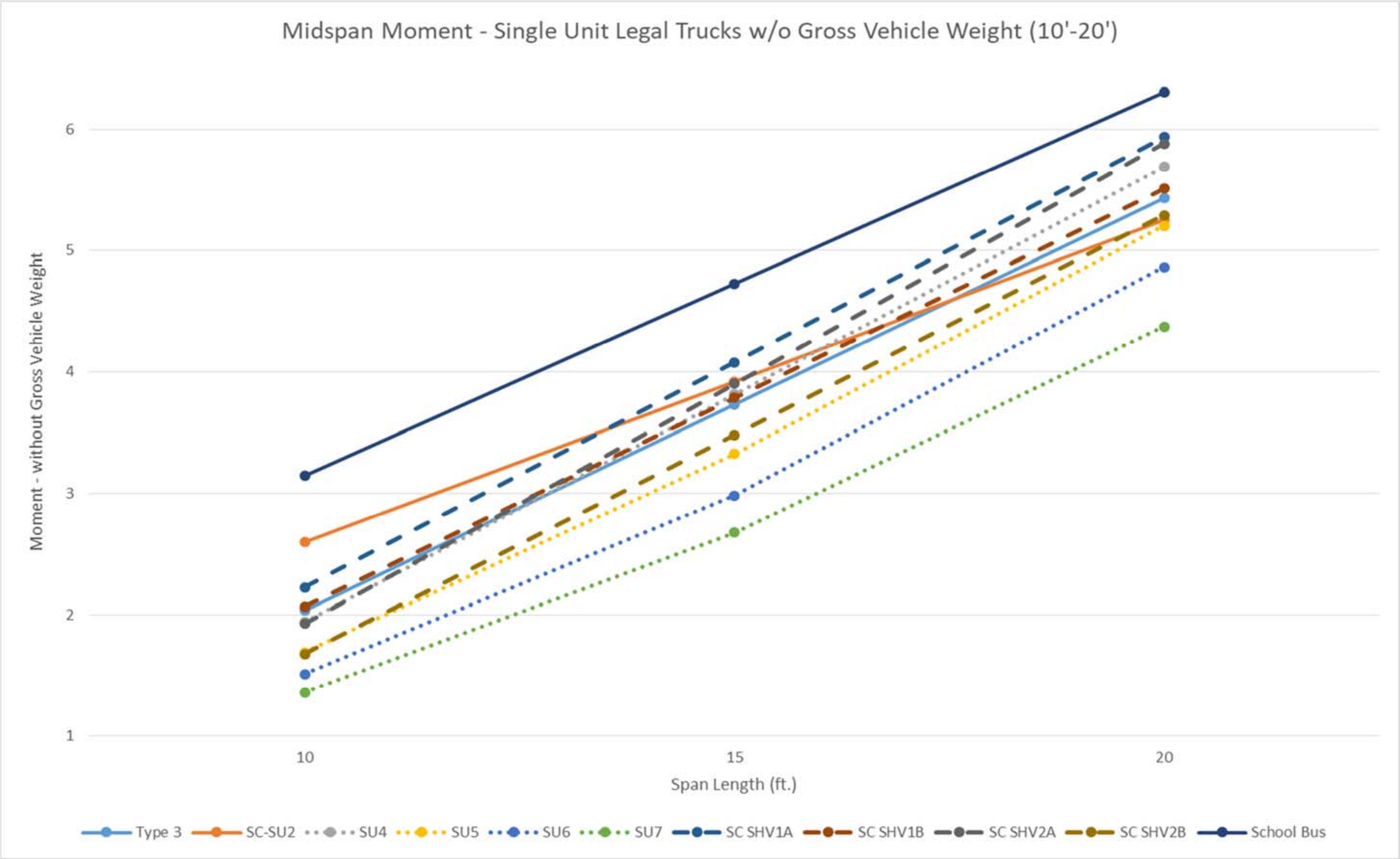


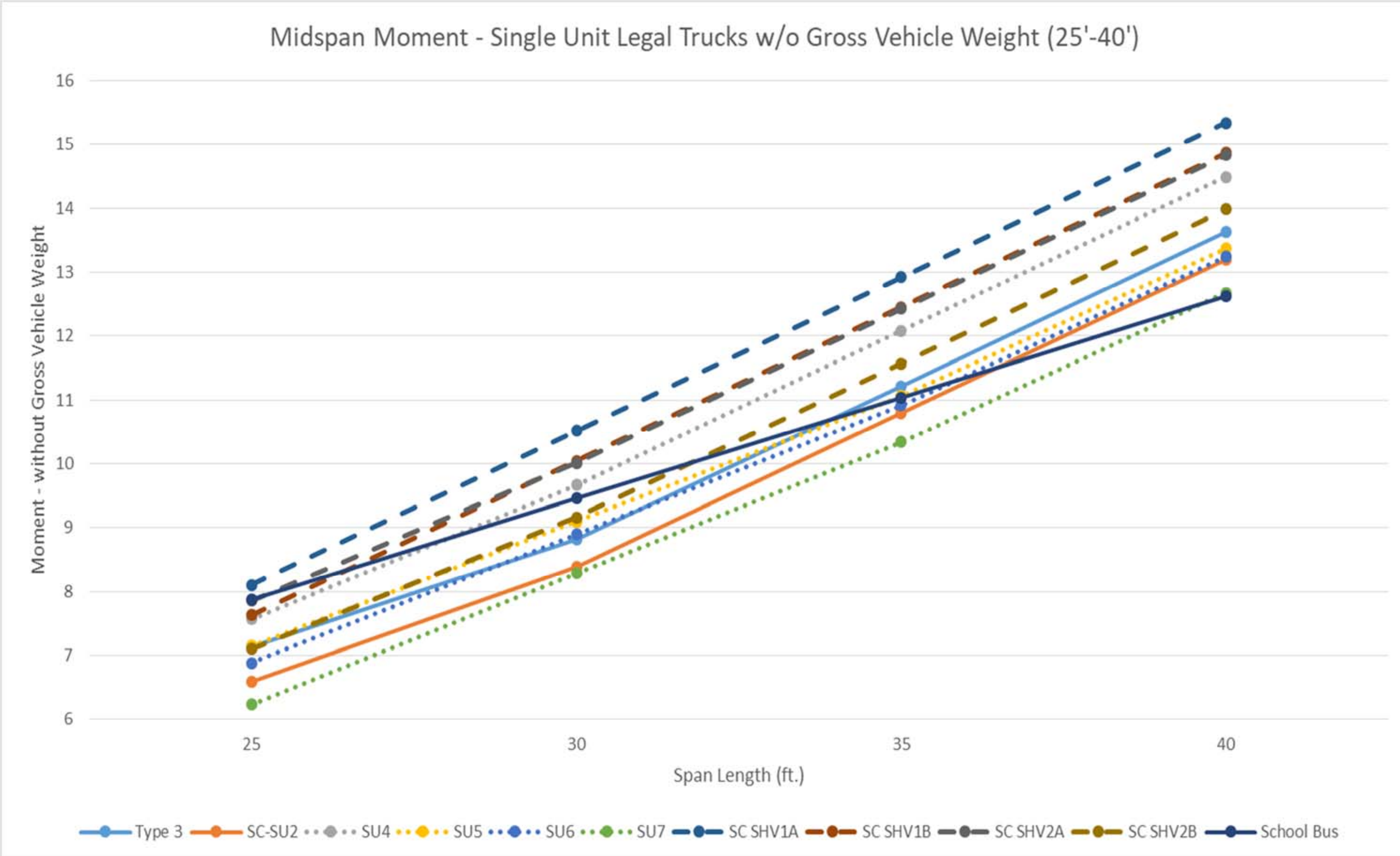
Midspan Moment - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Design Tandem + Lane Load

Permit Trucks: 1-Span (Normalized to HL-93 Design Truck) – *Midspan Moment*

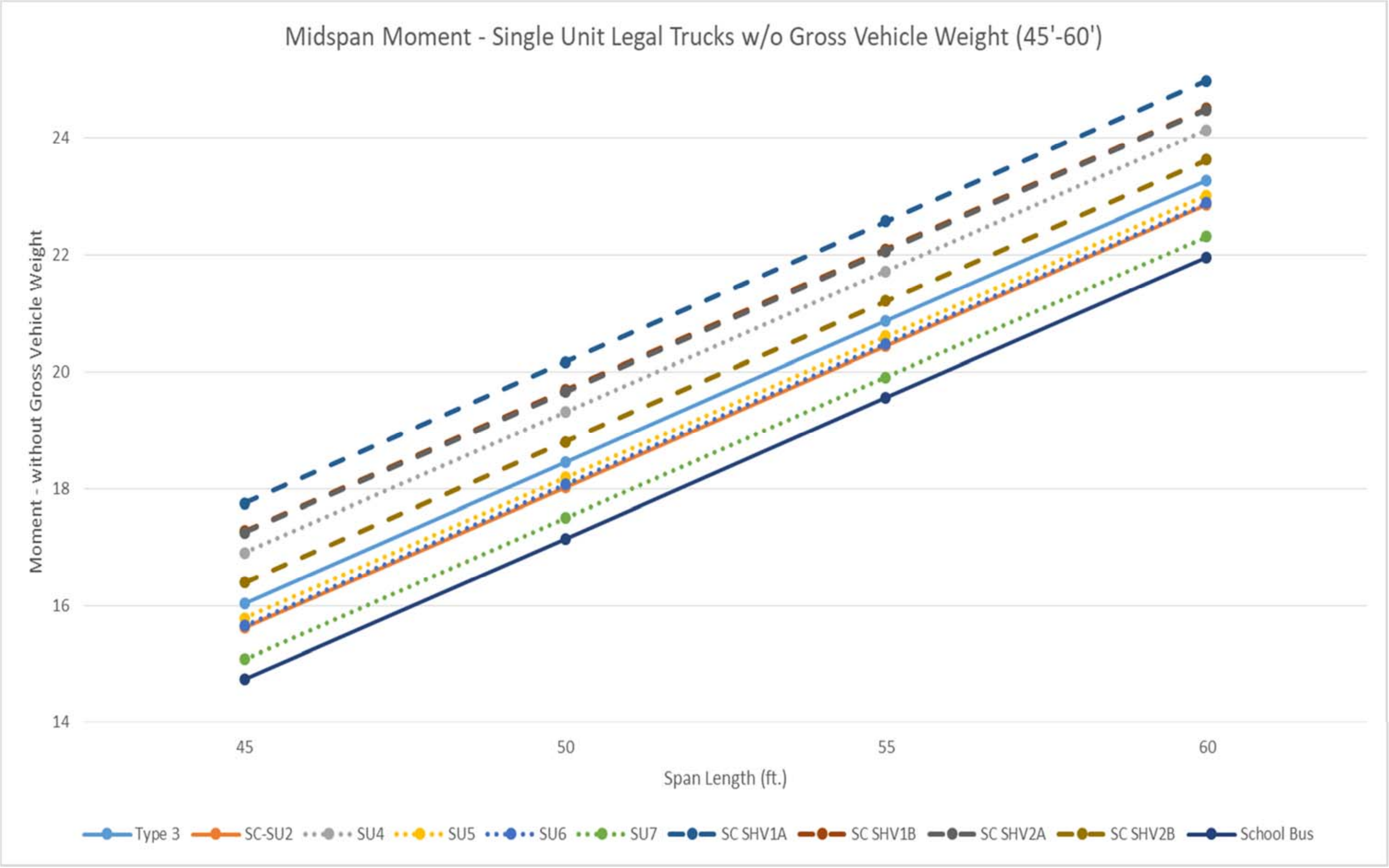


Legal Trucks: 1-Span (Without Gross Vehicle Weight) – *Midspan Moment*

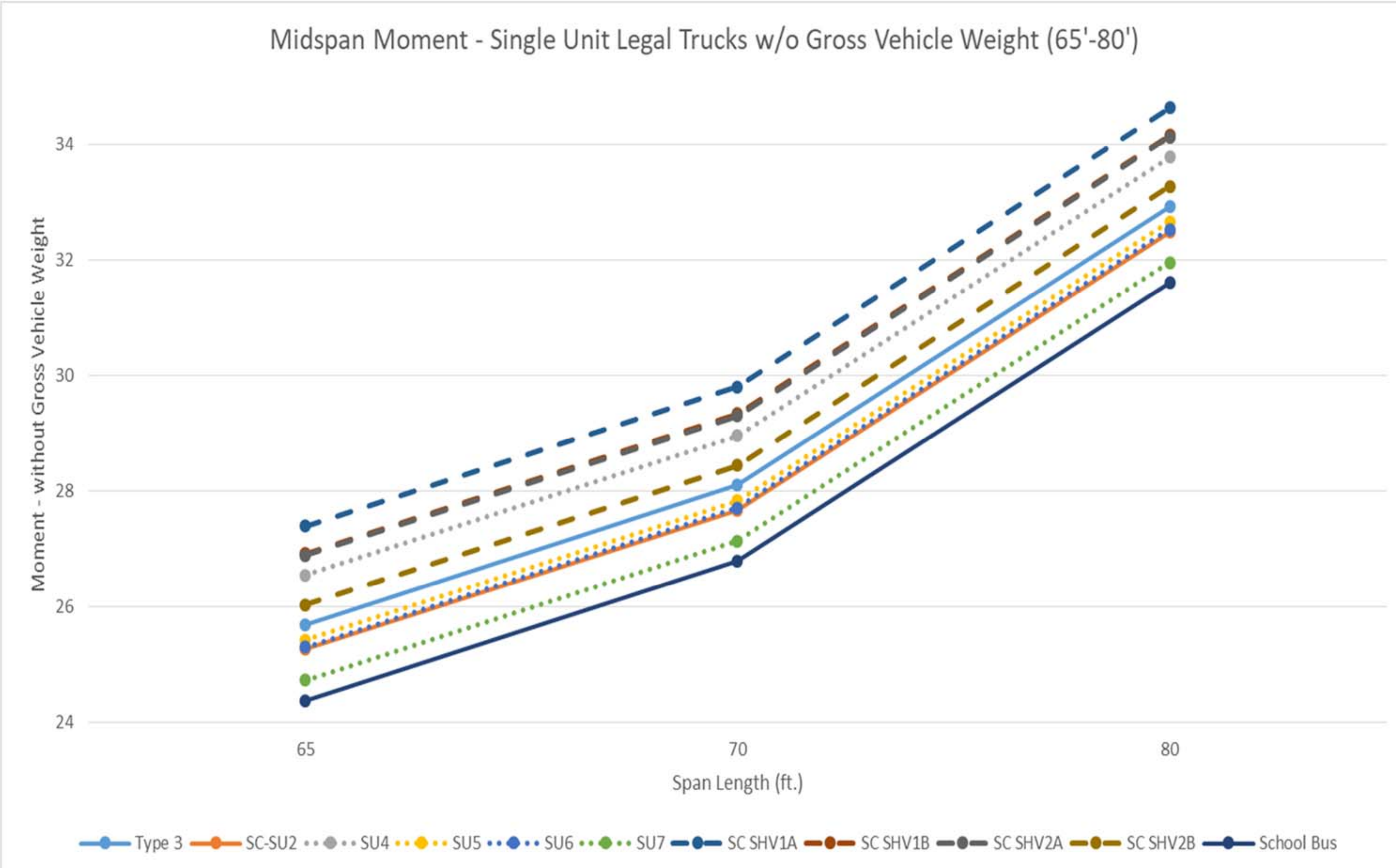




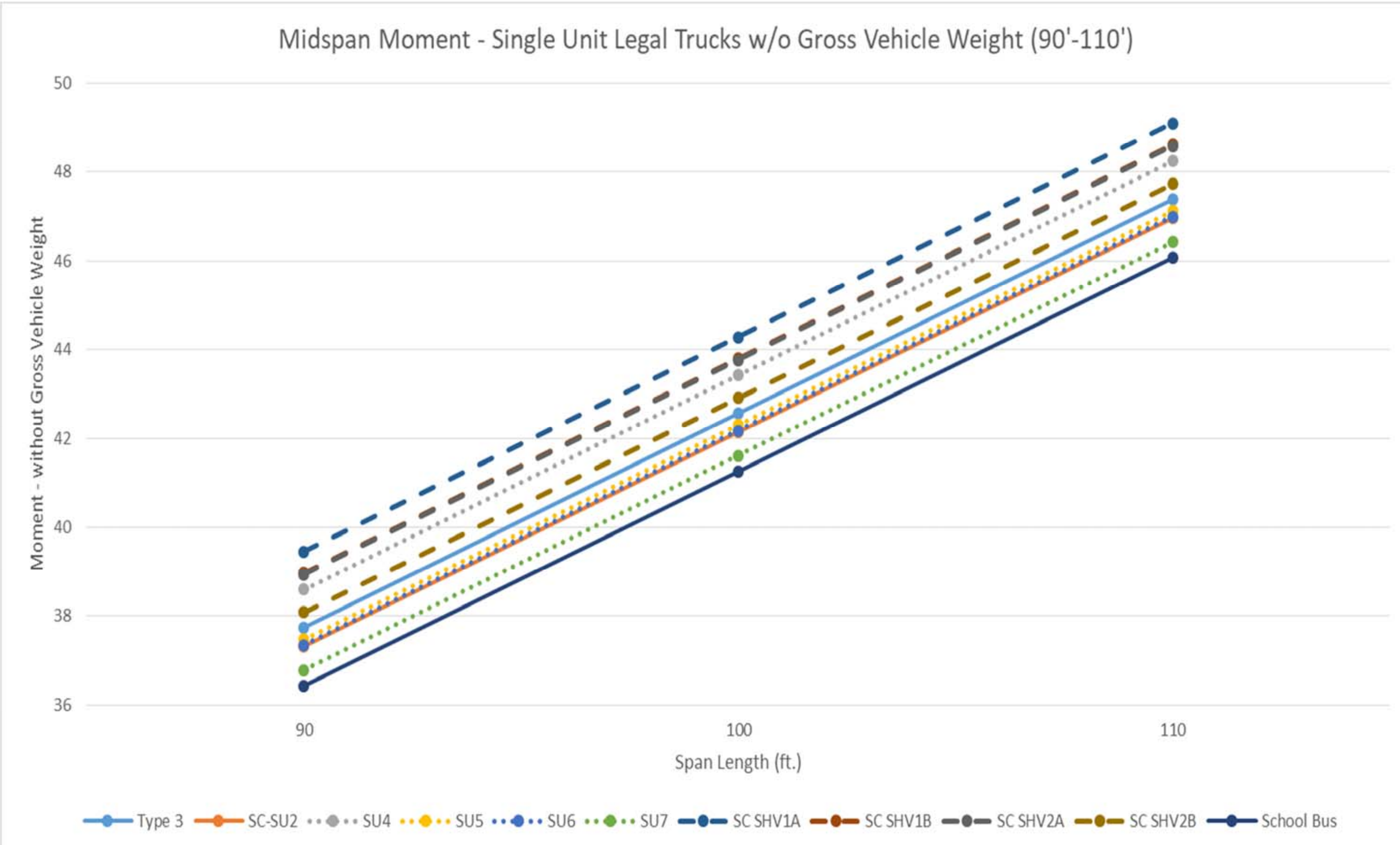
Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Moment - without Gross Vehicle Weight
16
15
14
13
12
11
10
9
8
7
6
25
30
35
40
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

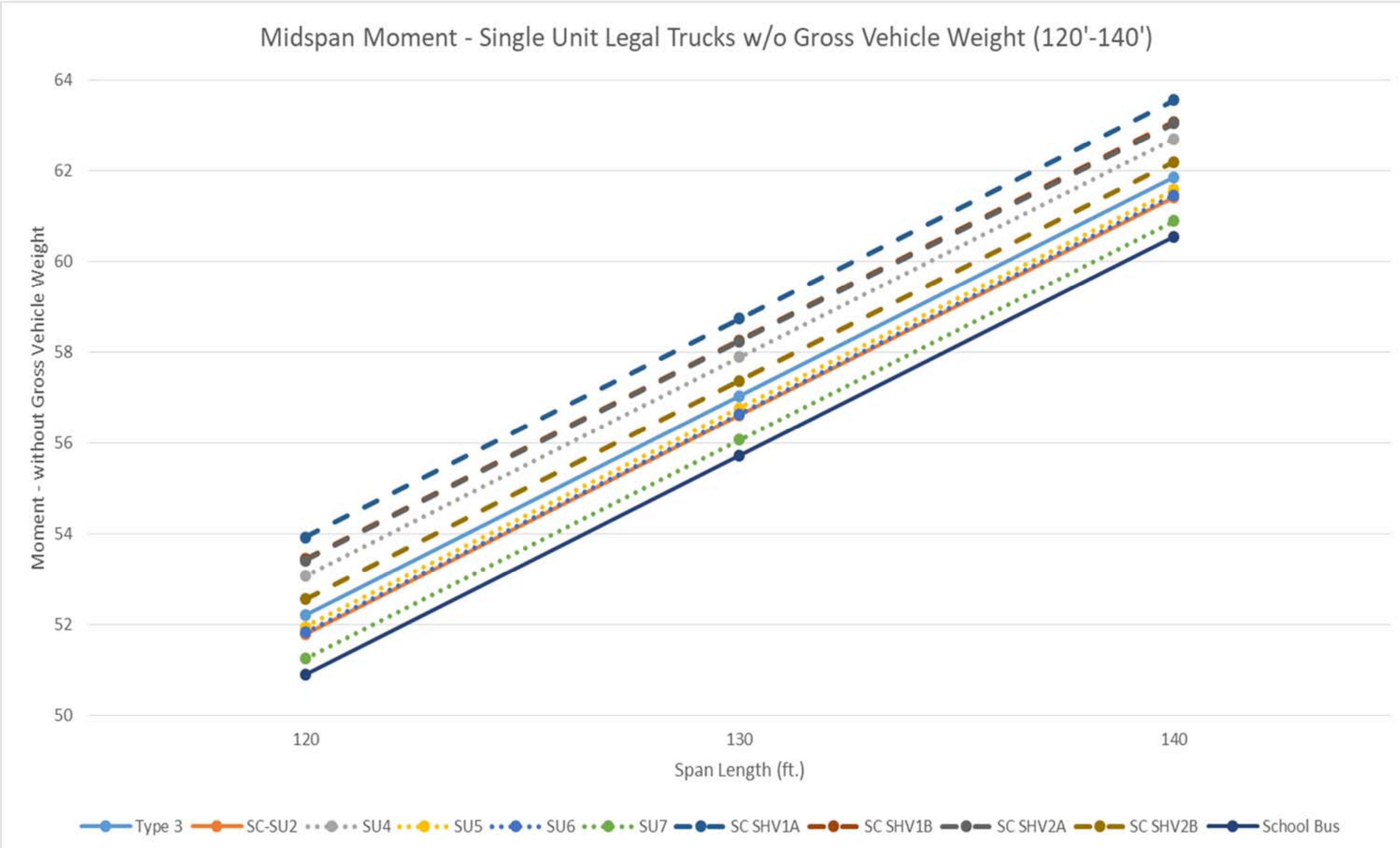


Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
Moment - without Gross Vehicle Weight
24
22
20
18
16
14
45
50
55
60
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

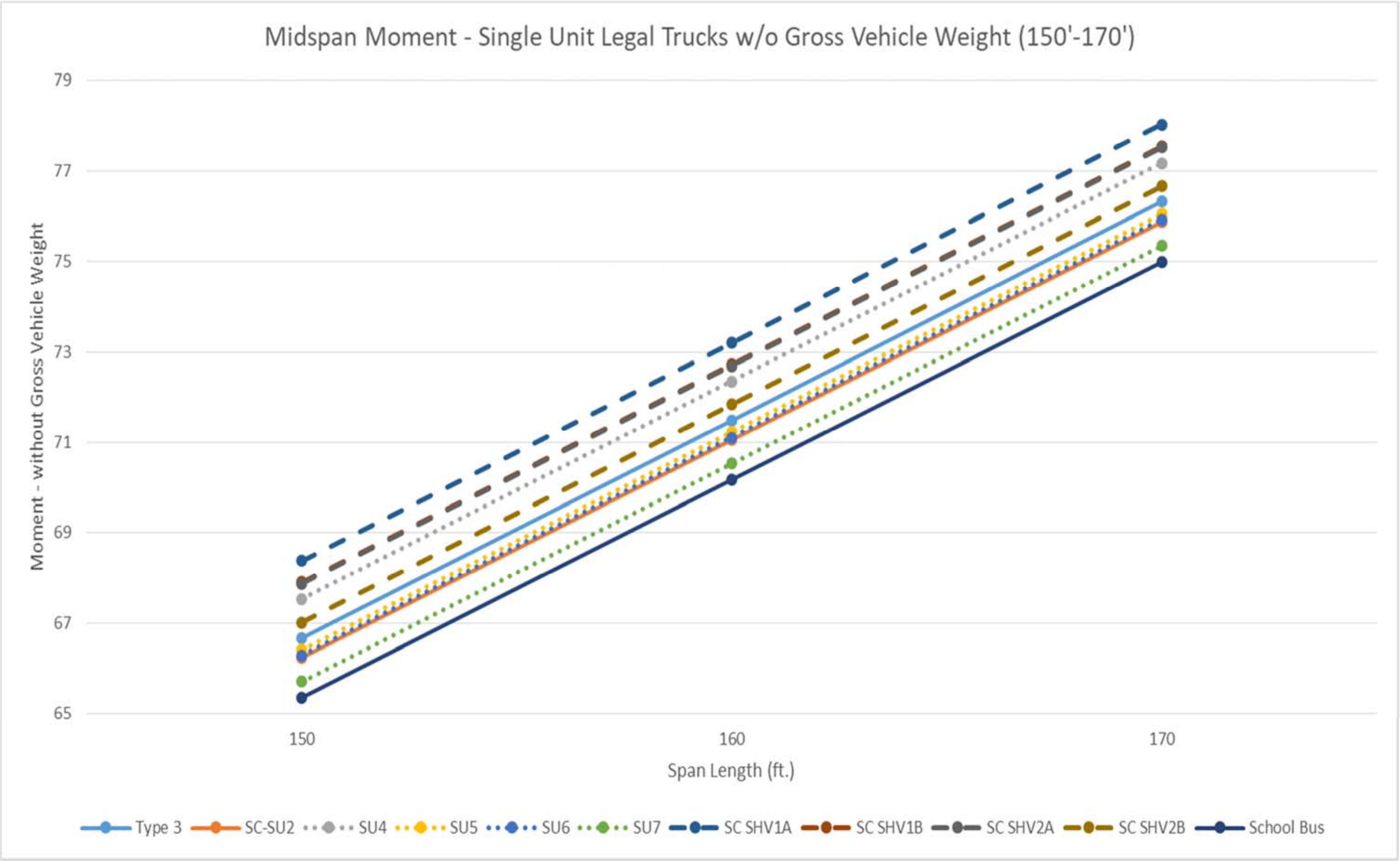


Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
Moment - without Gross Vehicle Weight
24
26
28
30
32
34
65
70
80
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

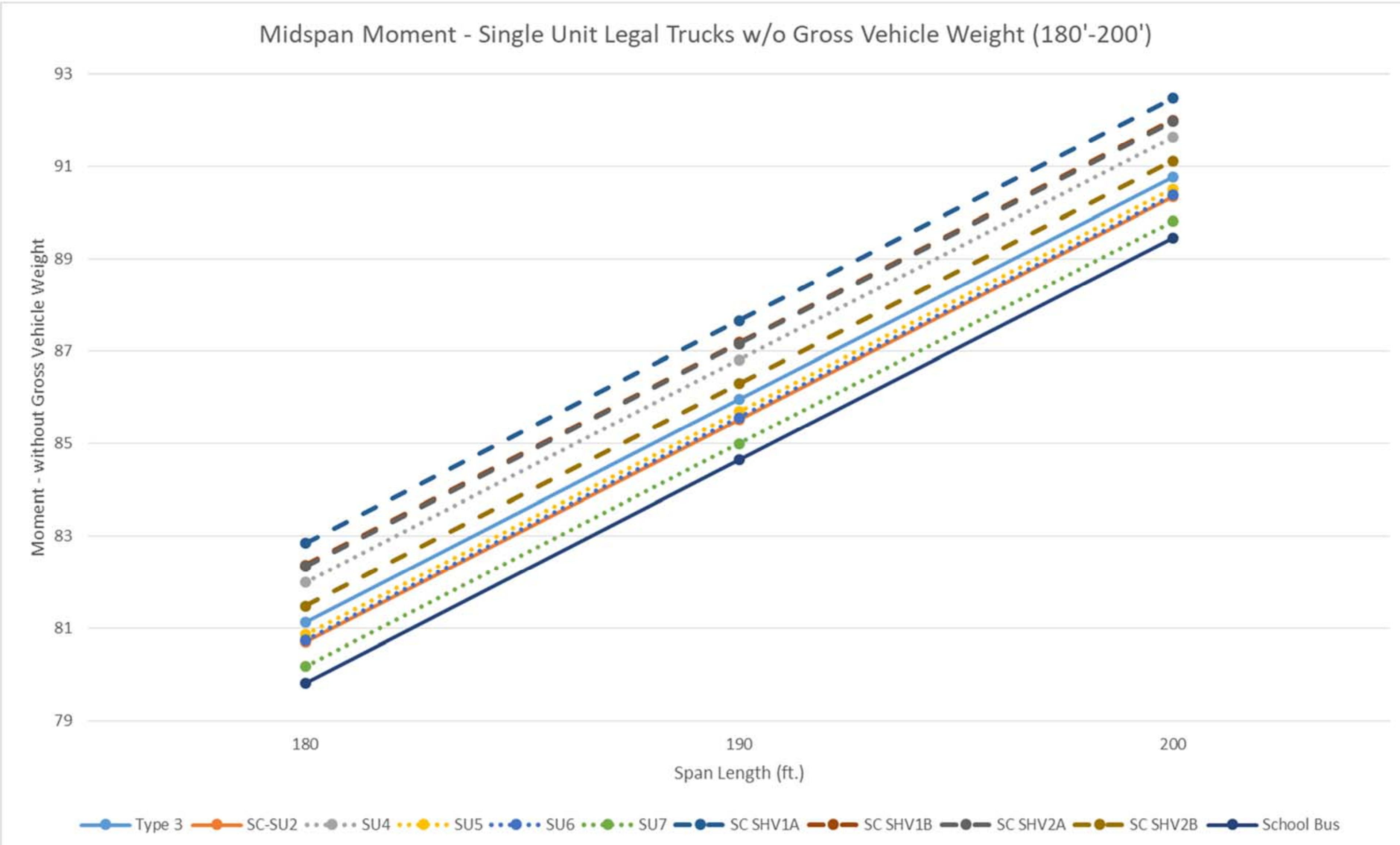

Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Moment - without Gross Vehicle Weight
50
48
46
44
42
40
38
36
90
100
110
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



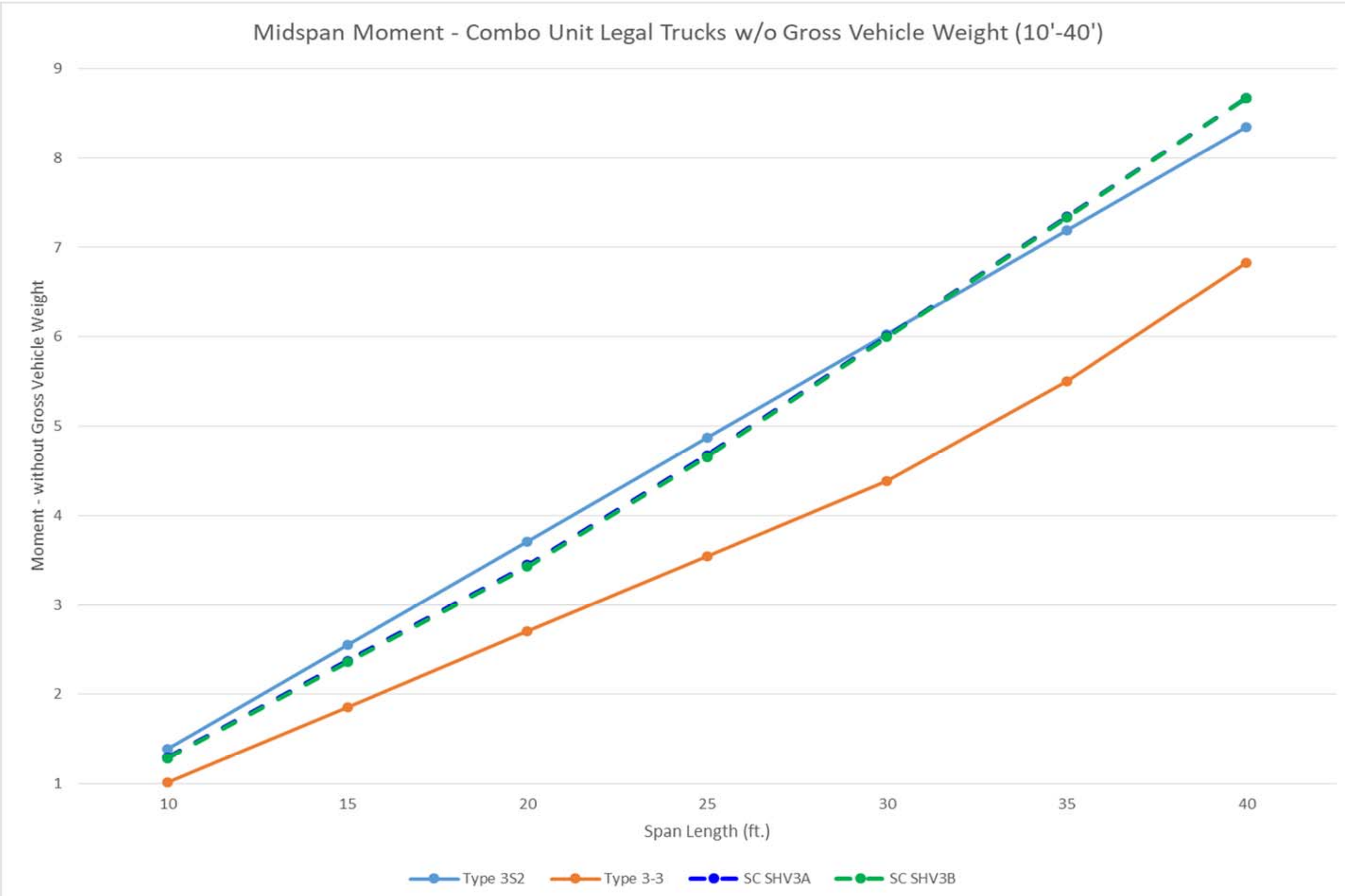
Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Moment - without Gross Vehicle Weight
64
62
60
58
56
54
52
50
120
130
140
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

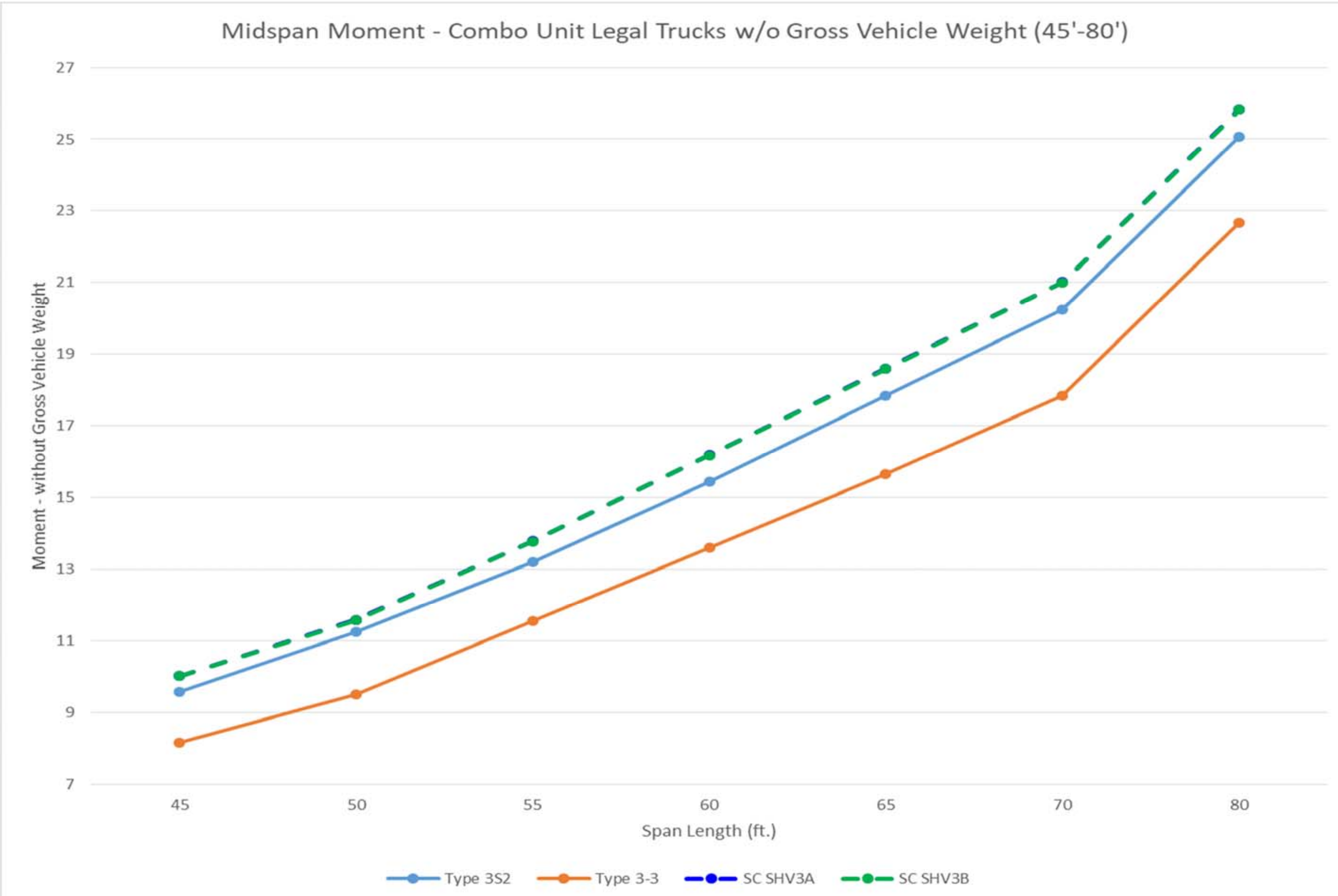


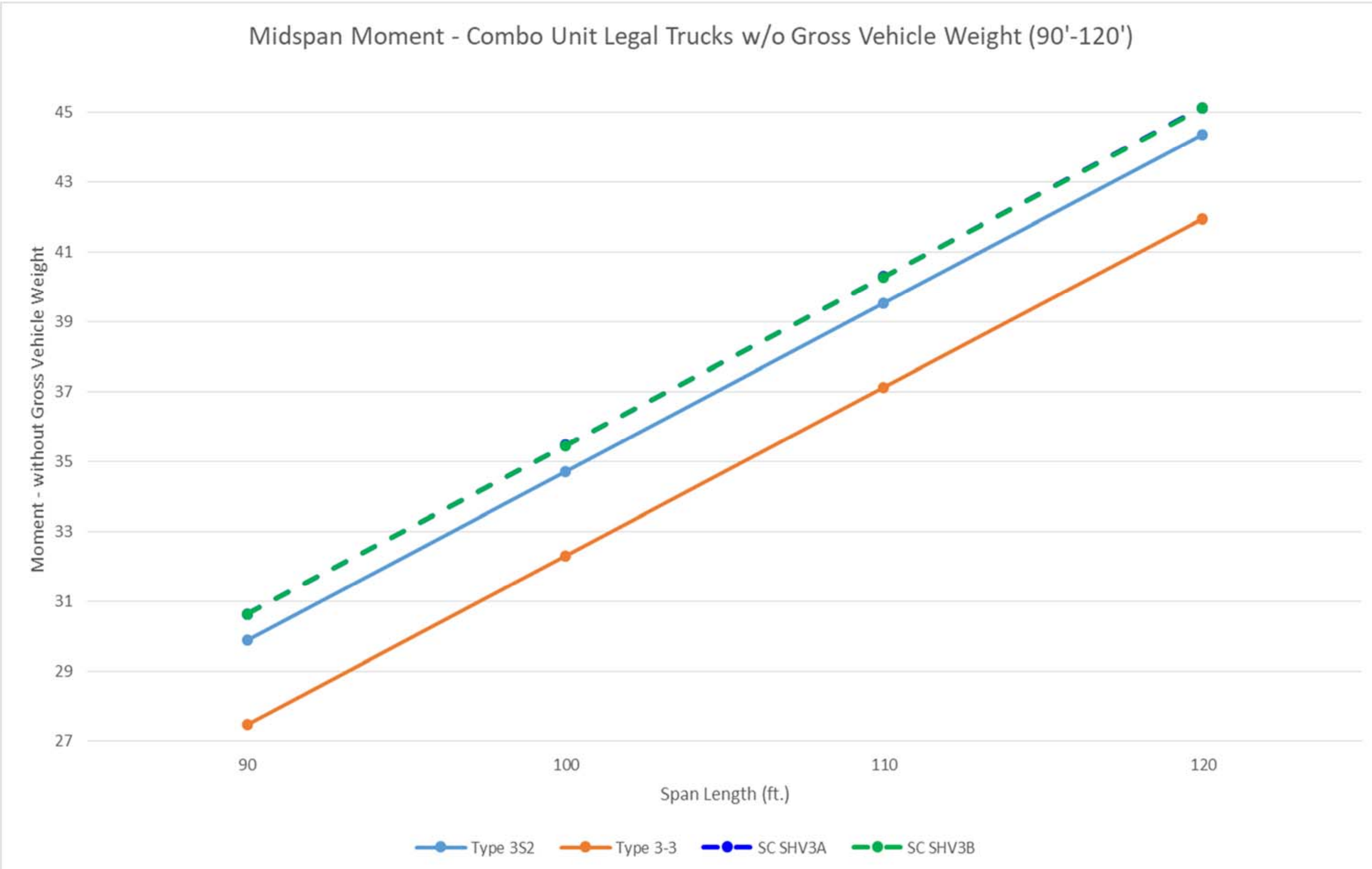
Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Moment - without Gross Vehicle Weight
79
77
75
73
71
69
67
65
150
160
170
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

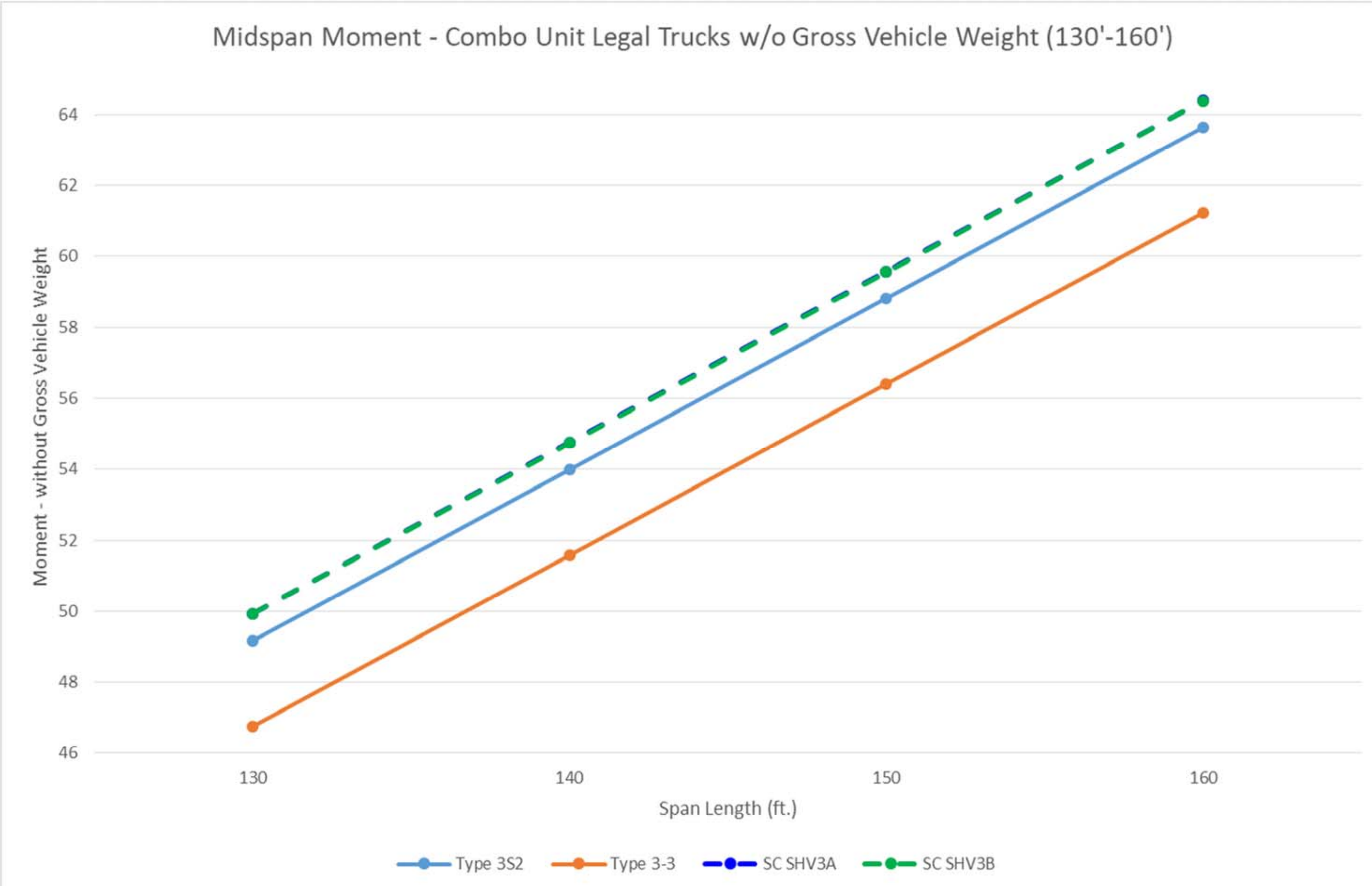


Midspan Moment - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
93
91
89
87
85
83
81
79
Moment - without Gross Vehicle Weight
180
190
200
Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

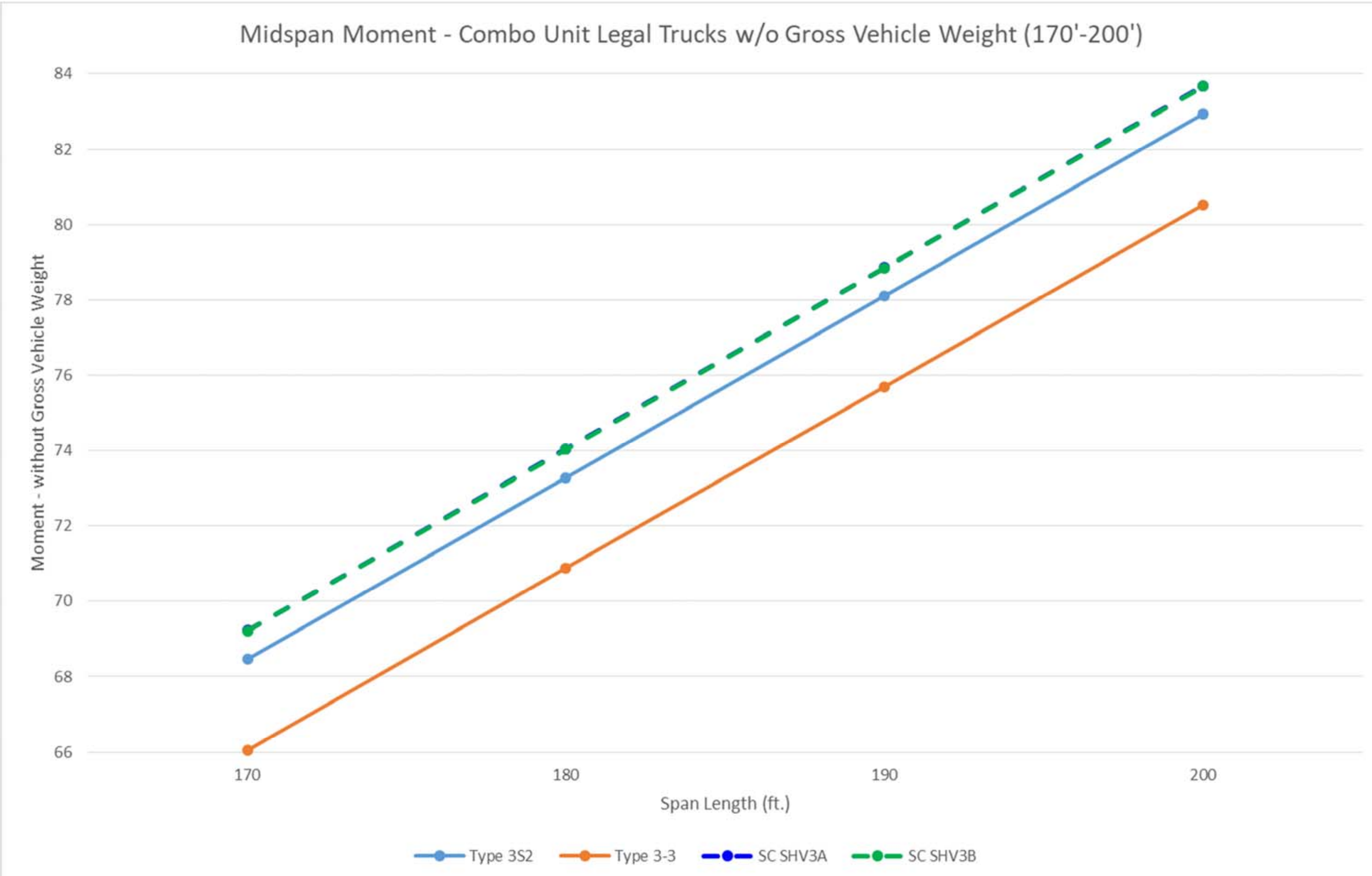

Midspan Moment - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Moment - without Gross Vehicle Weight
Span Length (ft.)
1
2
3
4
5
6
7
8
9
10
15
20
25
30
35
40
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B


Midspan Moment - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Moment - without Gross Vehicle Weight
27
25
23
21
19
17
15
13
11
9
7
45
50
55
60
65
70
80
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

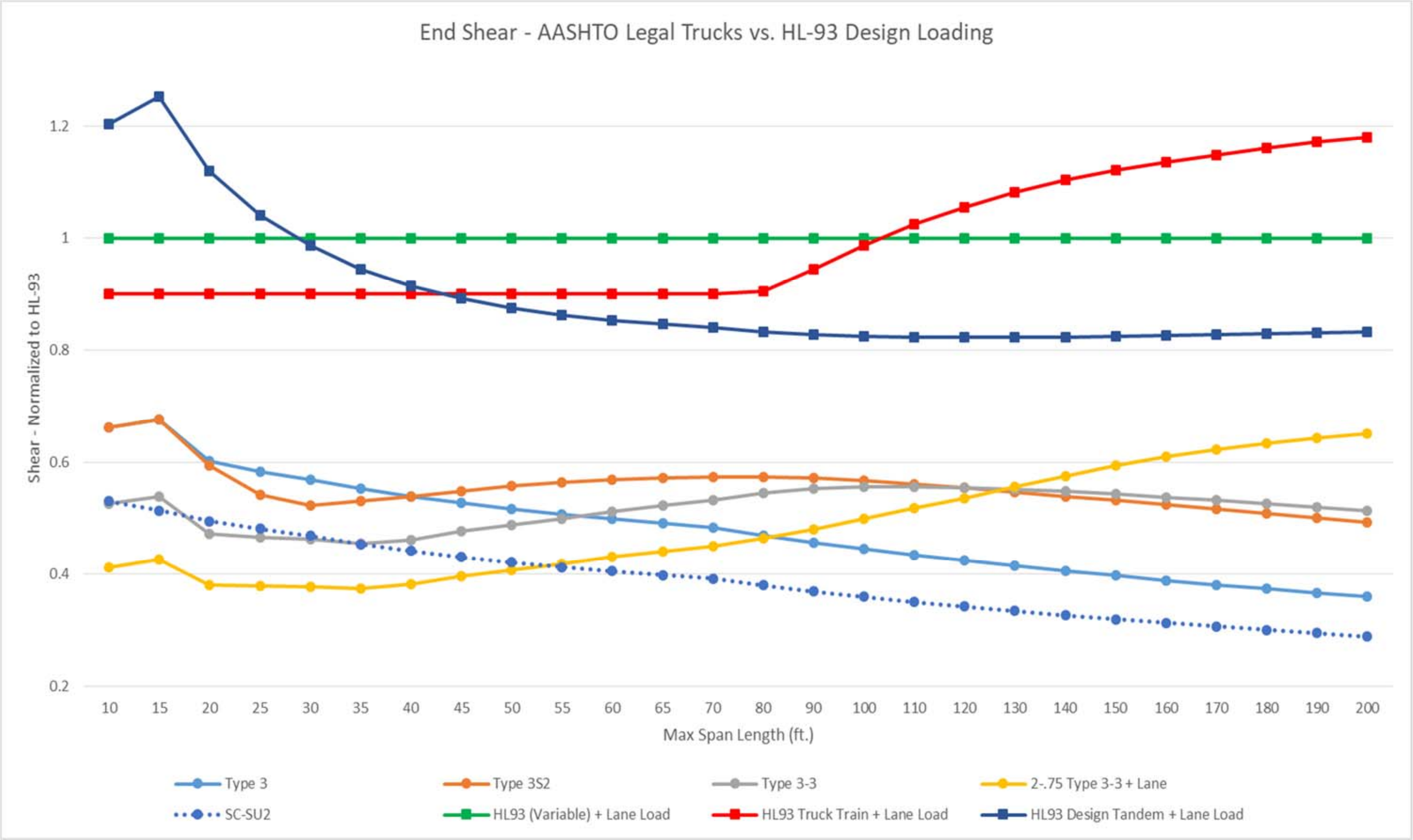

Midspan Moment - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Moment - without Gross Vehicle Weight
45
43
41
39
37
35
33
31
29
27
90
100
110
120
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

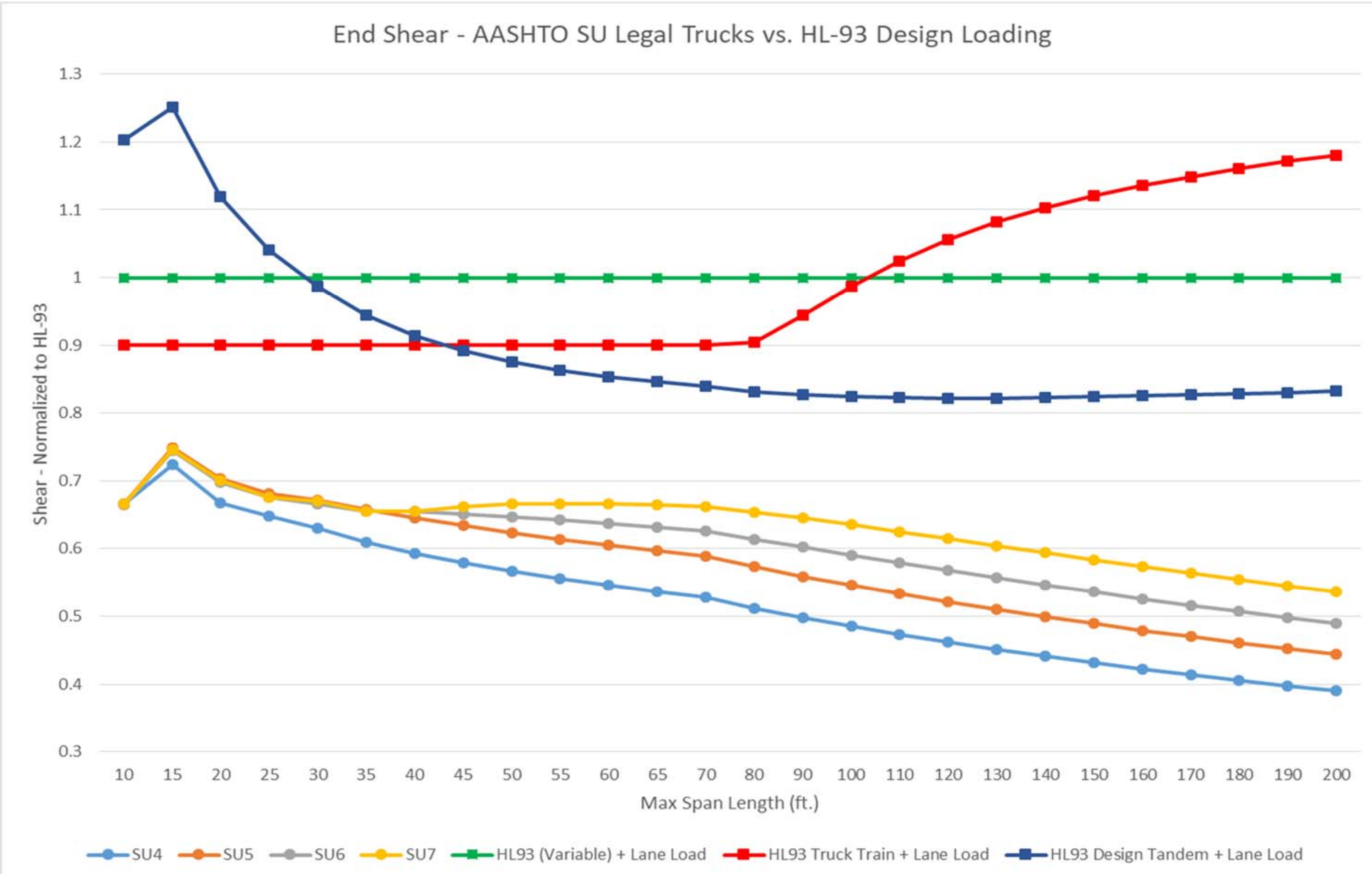


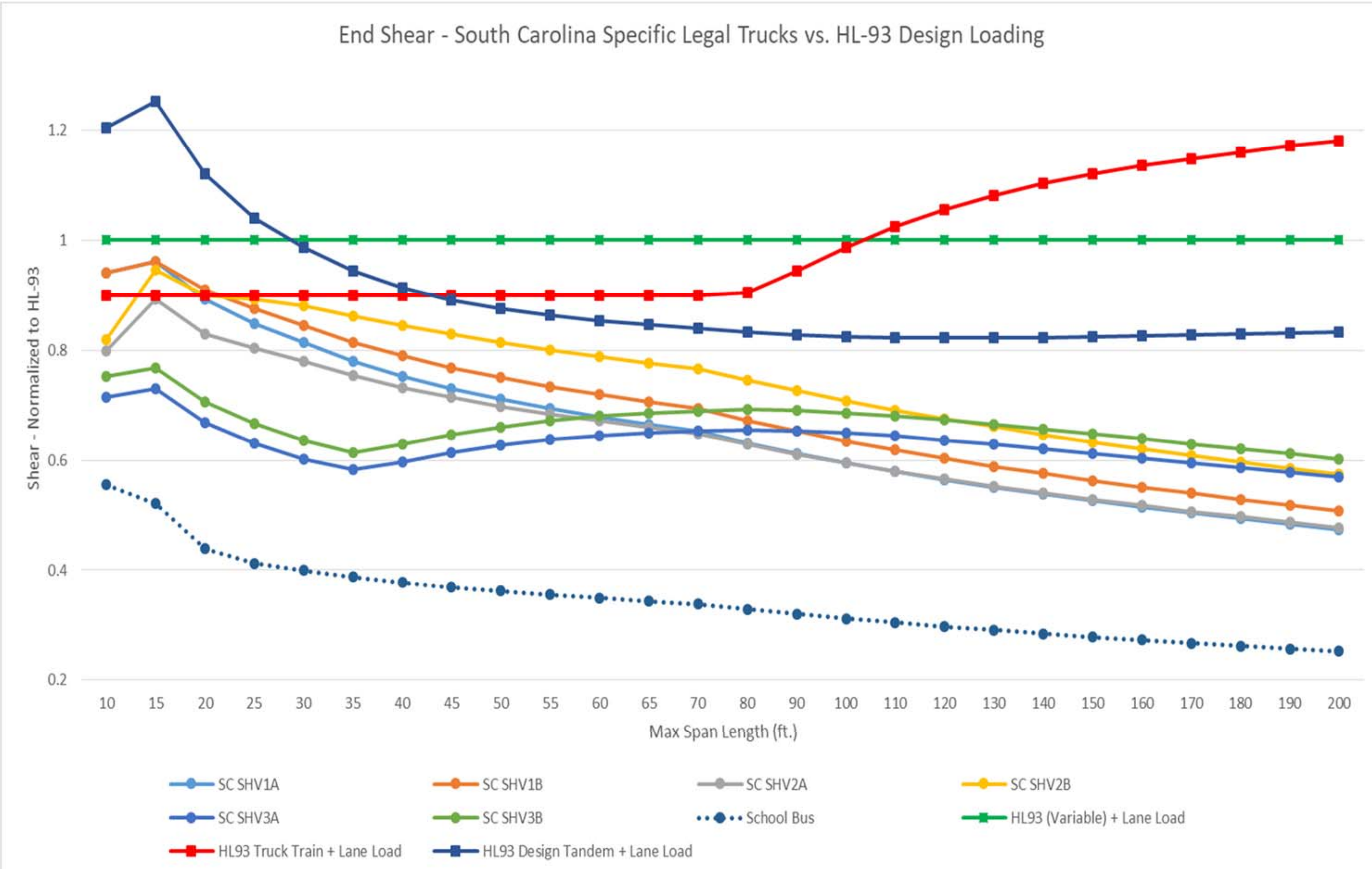
Midspan Moment - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Moment - without Gross Vehicle Weight
64
62
60
58
56
54
52
50
48
46
130
140
150
160
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B


Midspan Moment - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
84
82
80
78
76
74
72
70
68
66
Moment - without Gross Vehicle Weight
170
180
190
200
Span Length (ft.)
Type 3S2
Type 3-3
SC SHV3A
SC SHV3B

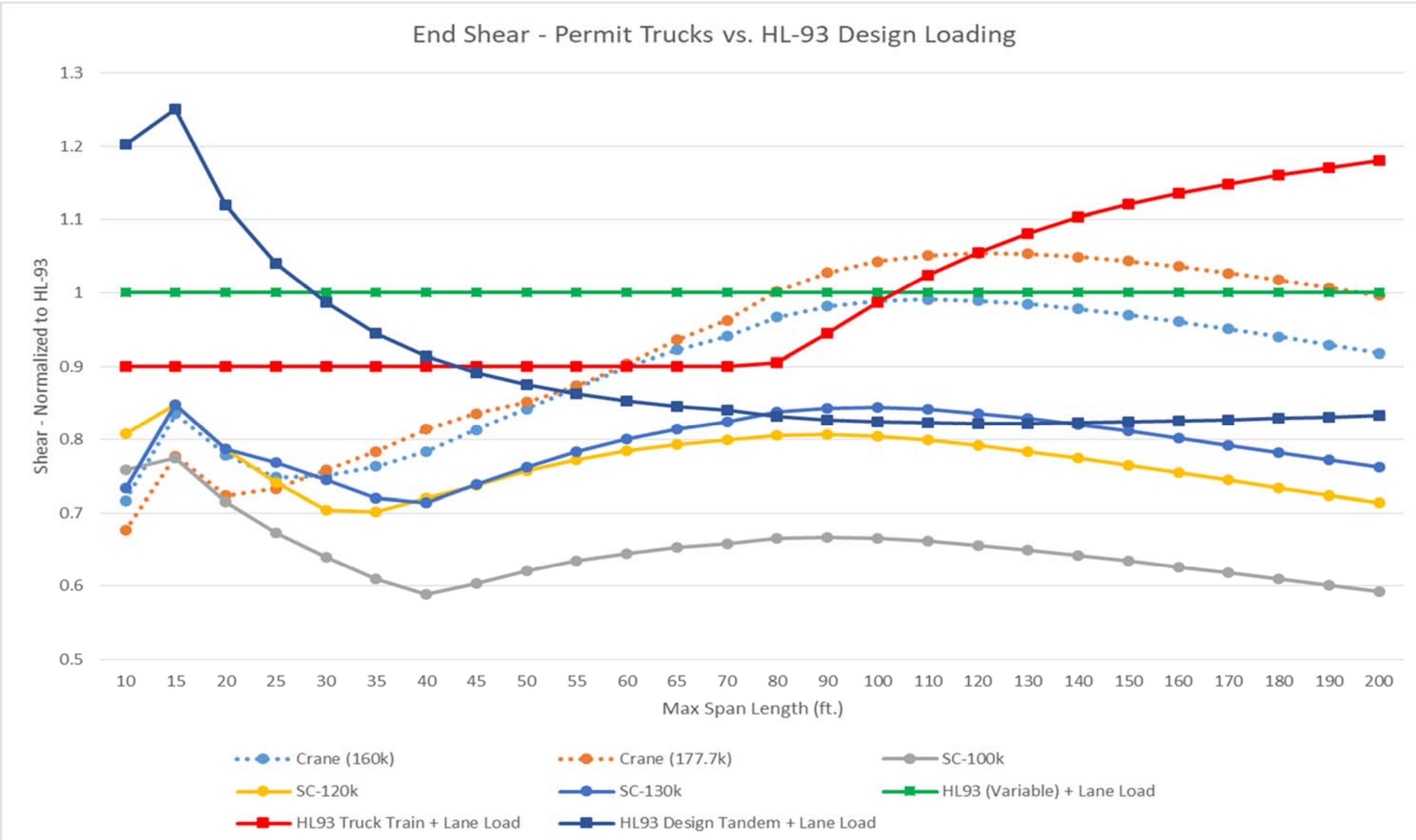
Legal Trucks: 2-Span (Normalized to HL-93 Design Truck) – *End Shear*



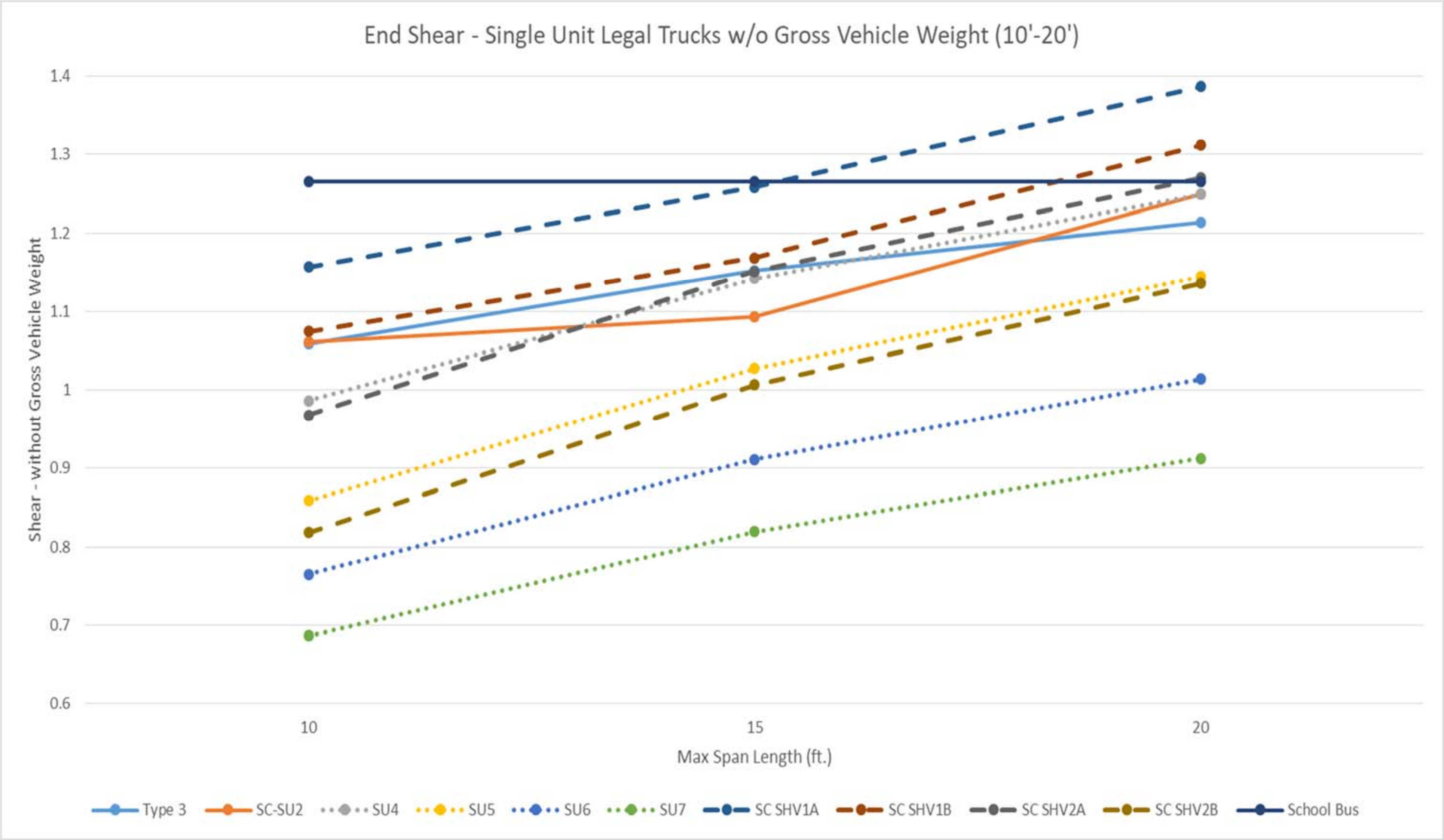

End Shear - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

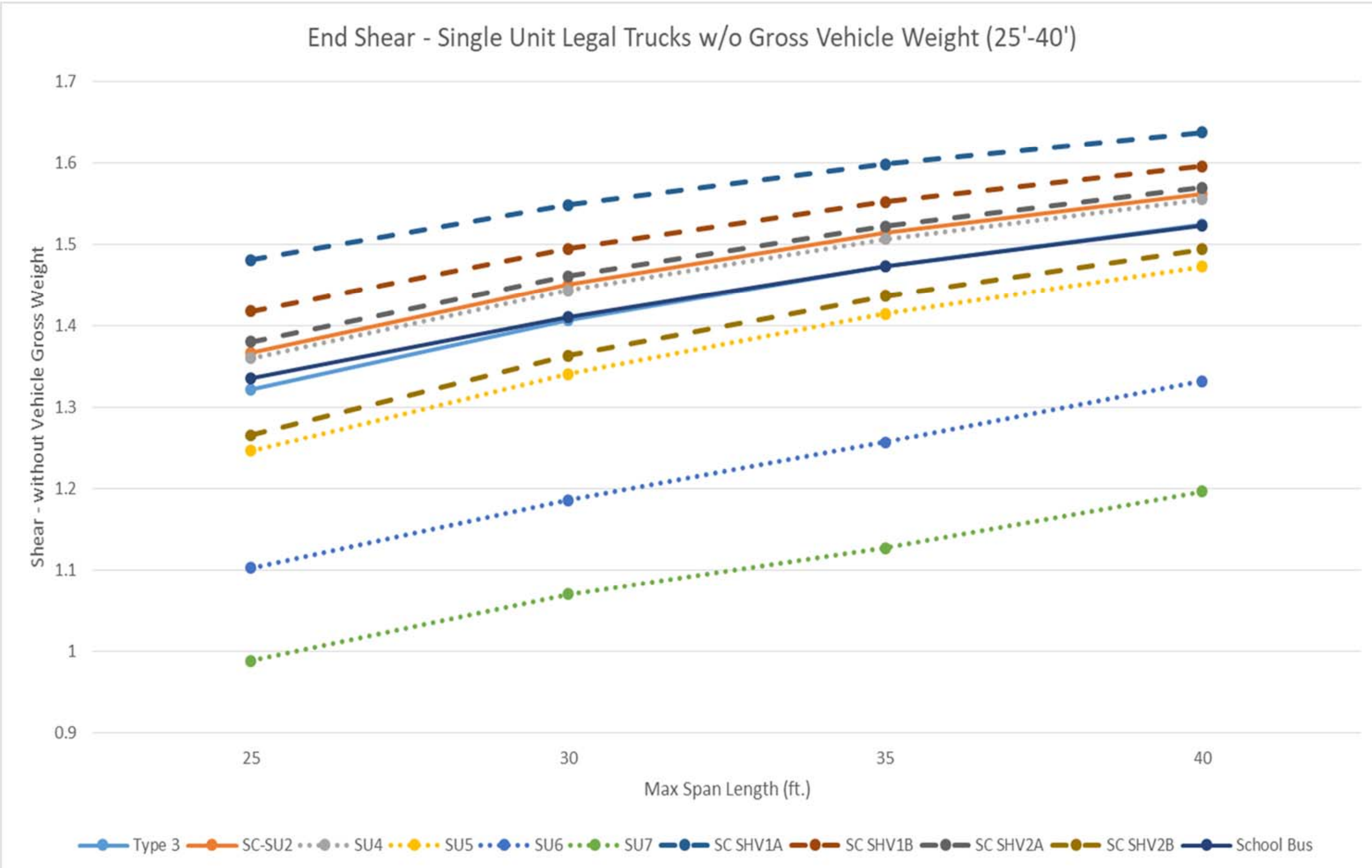

End Shear - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

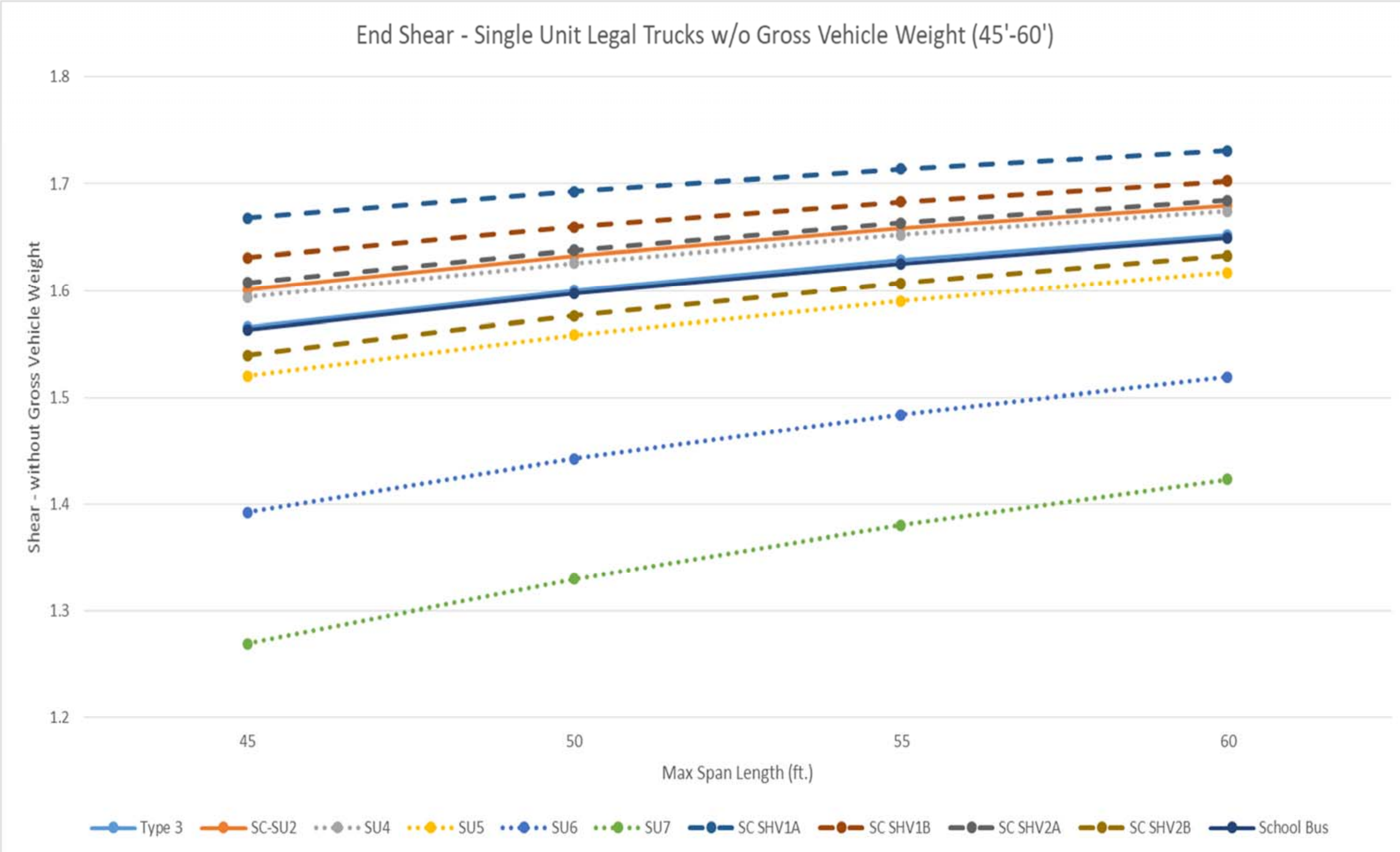
Permit Trucks: 2-Span (Normalized to HL-93 Design Truck) – *End Shear*

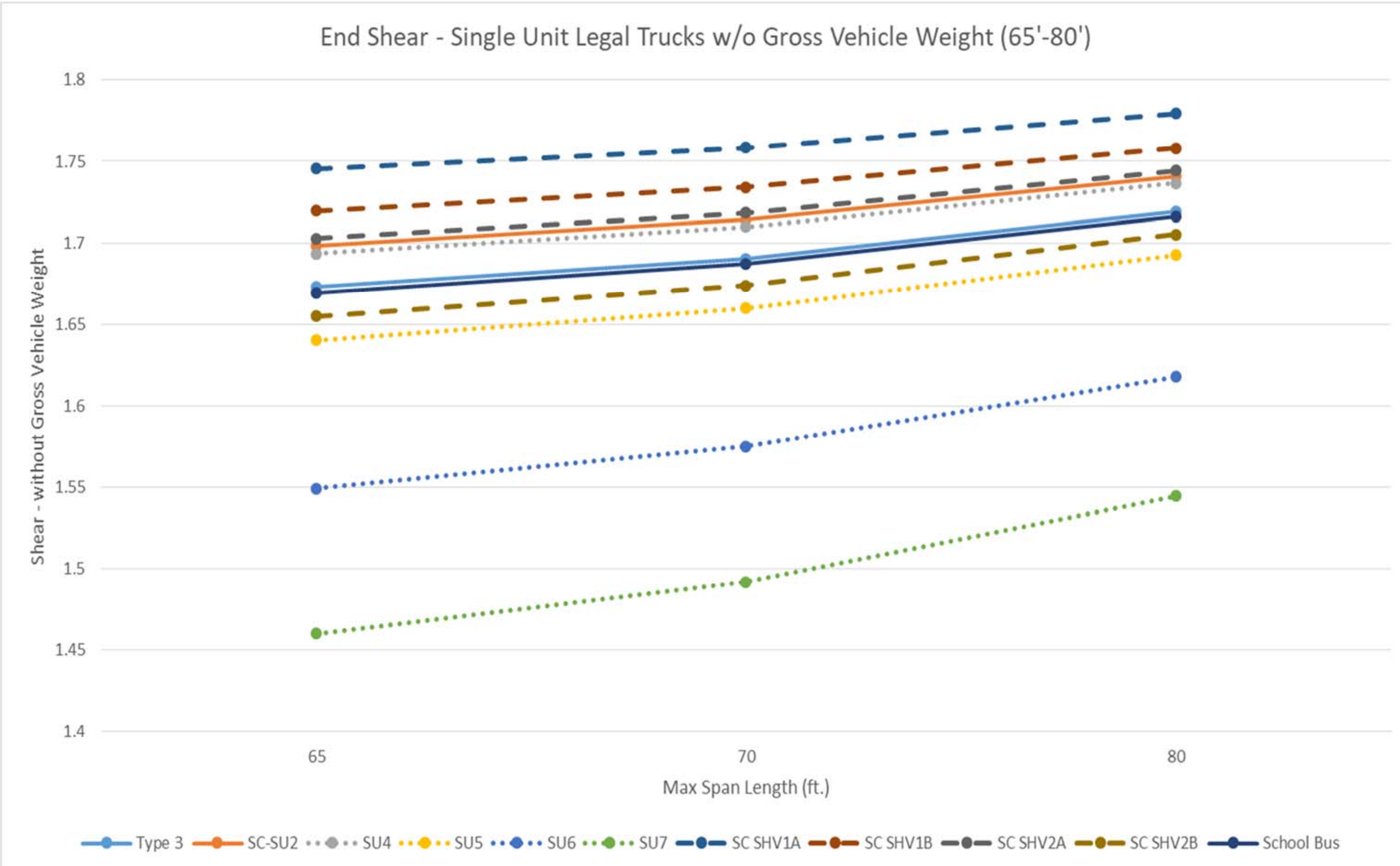


Legal Trucks: 2-Span (Without Gross Vehicle Weight) – *End Shear*

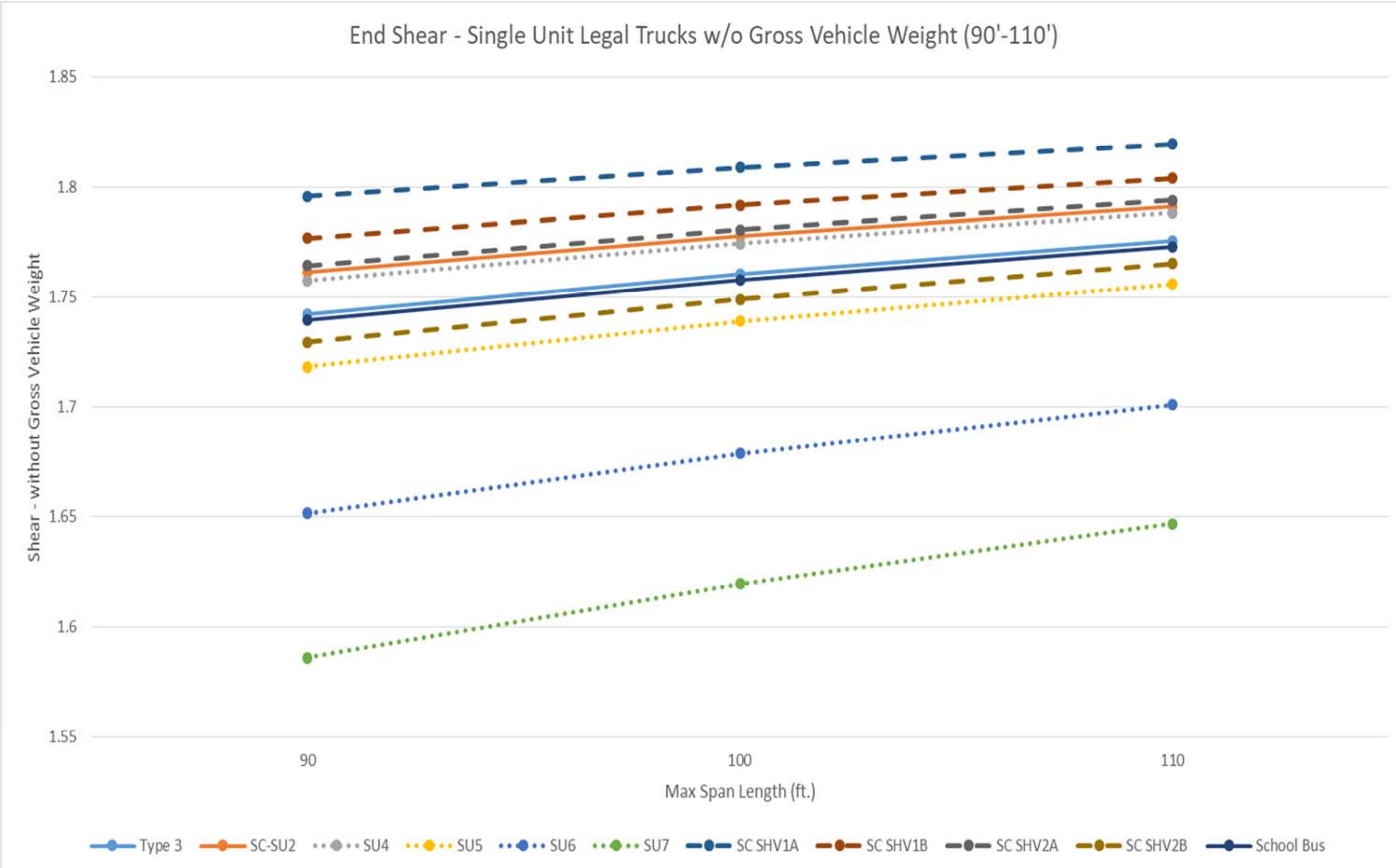


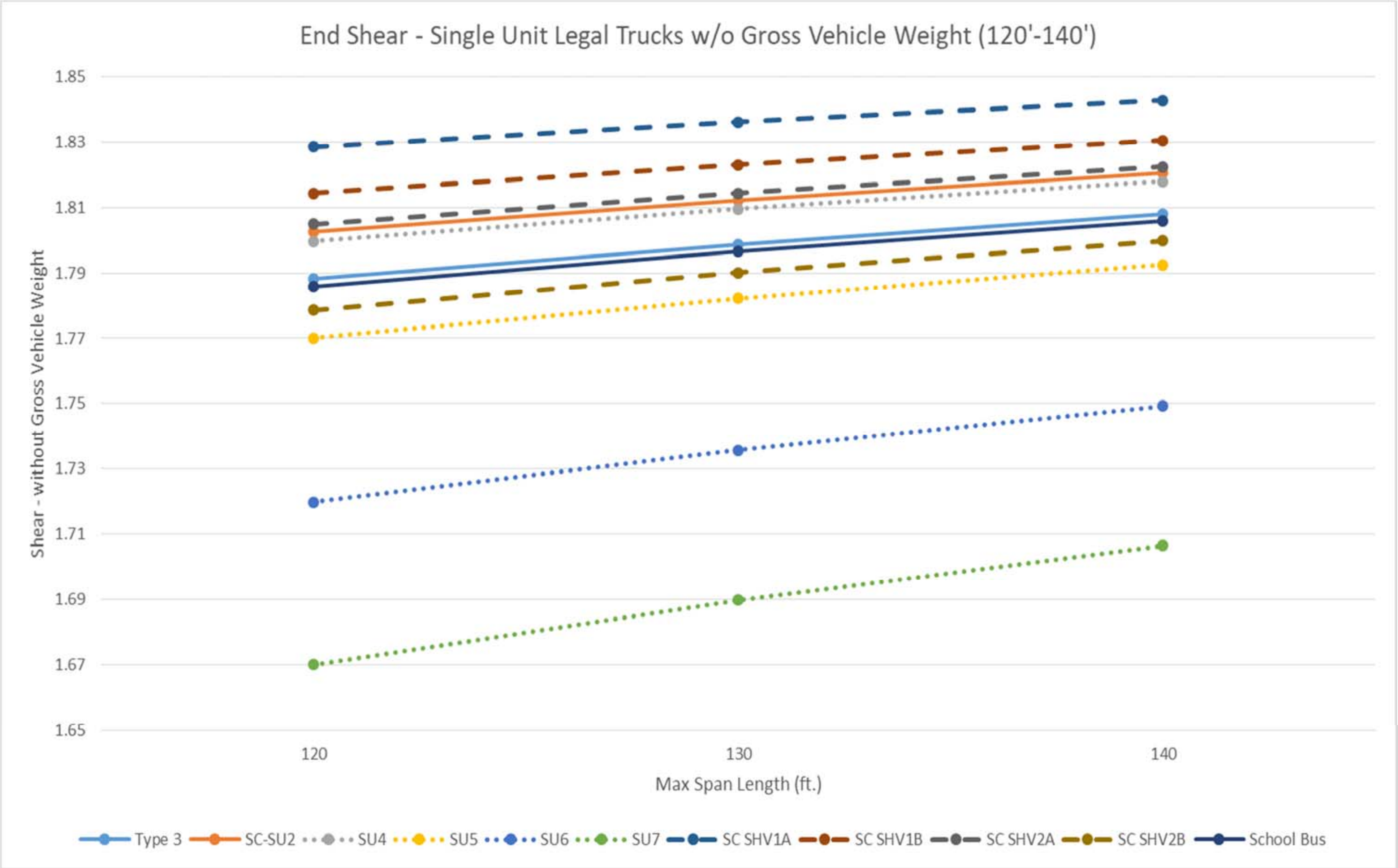

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Vehicle Gross Weight
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
25
30
35
40
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

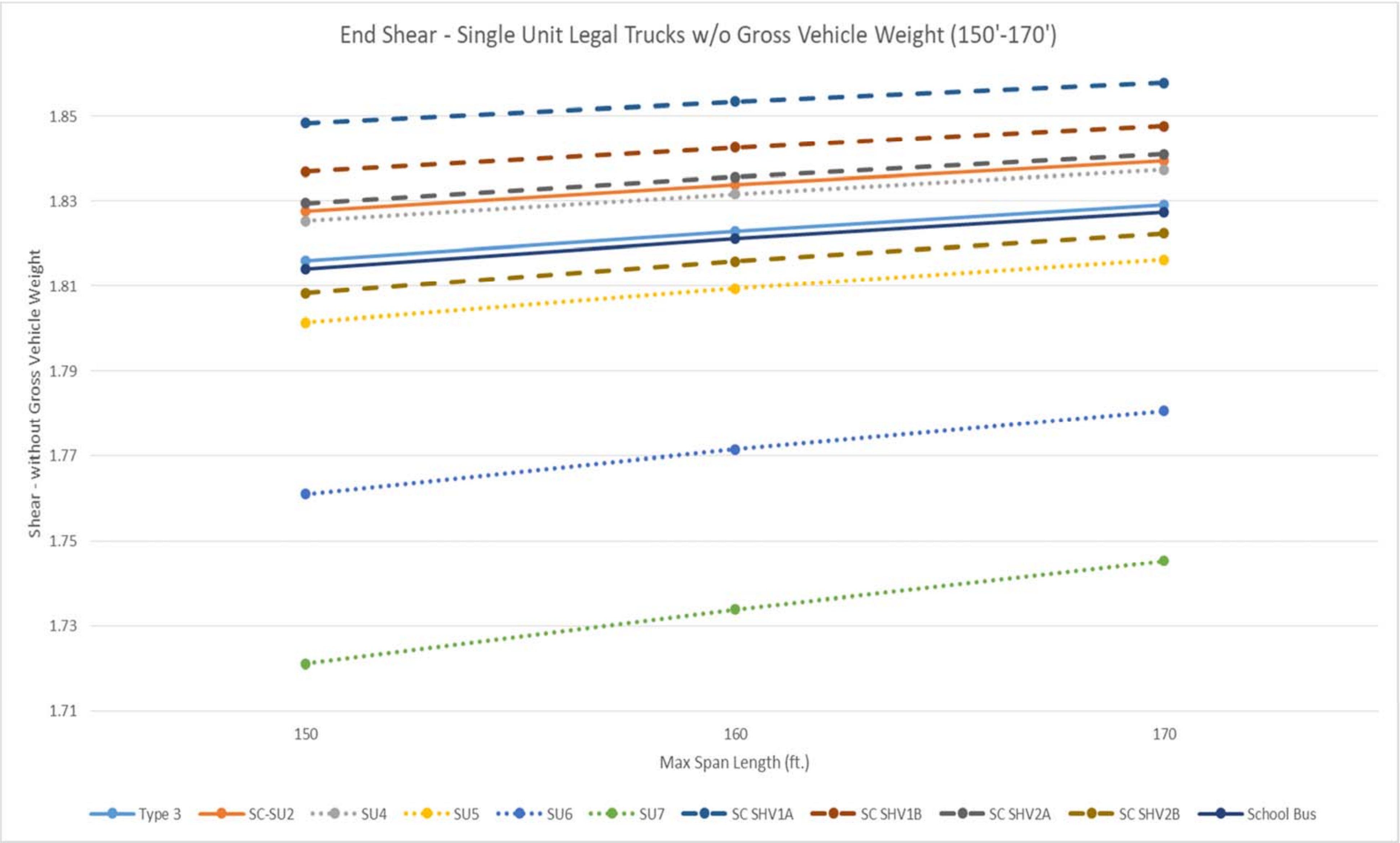

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.8
1.7
1.6
1.5
1.4
1.3
1.2
Shear - without Gross Vehicle Weight
45
50
55
60
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



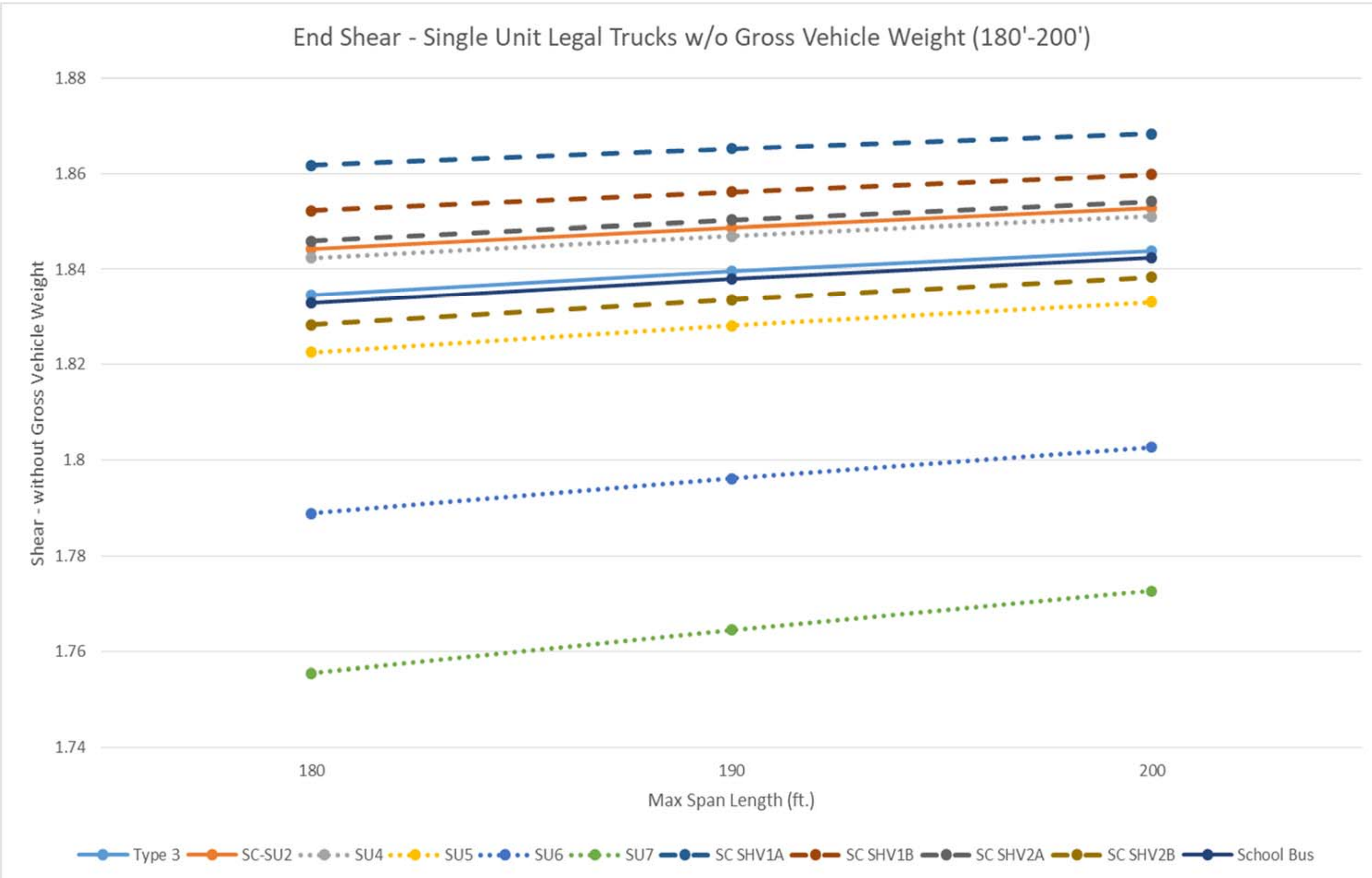
End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
1.4
Shear - without Gross Vehicle Weight
65
70
80
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
1.85
1.8
1.75
1.7
1.65
1.6
1.55
90
100
110
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

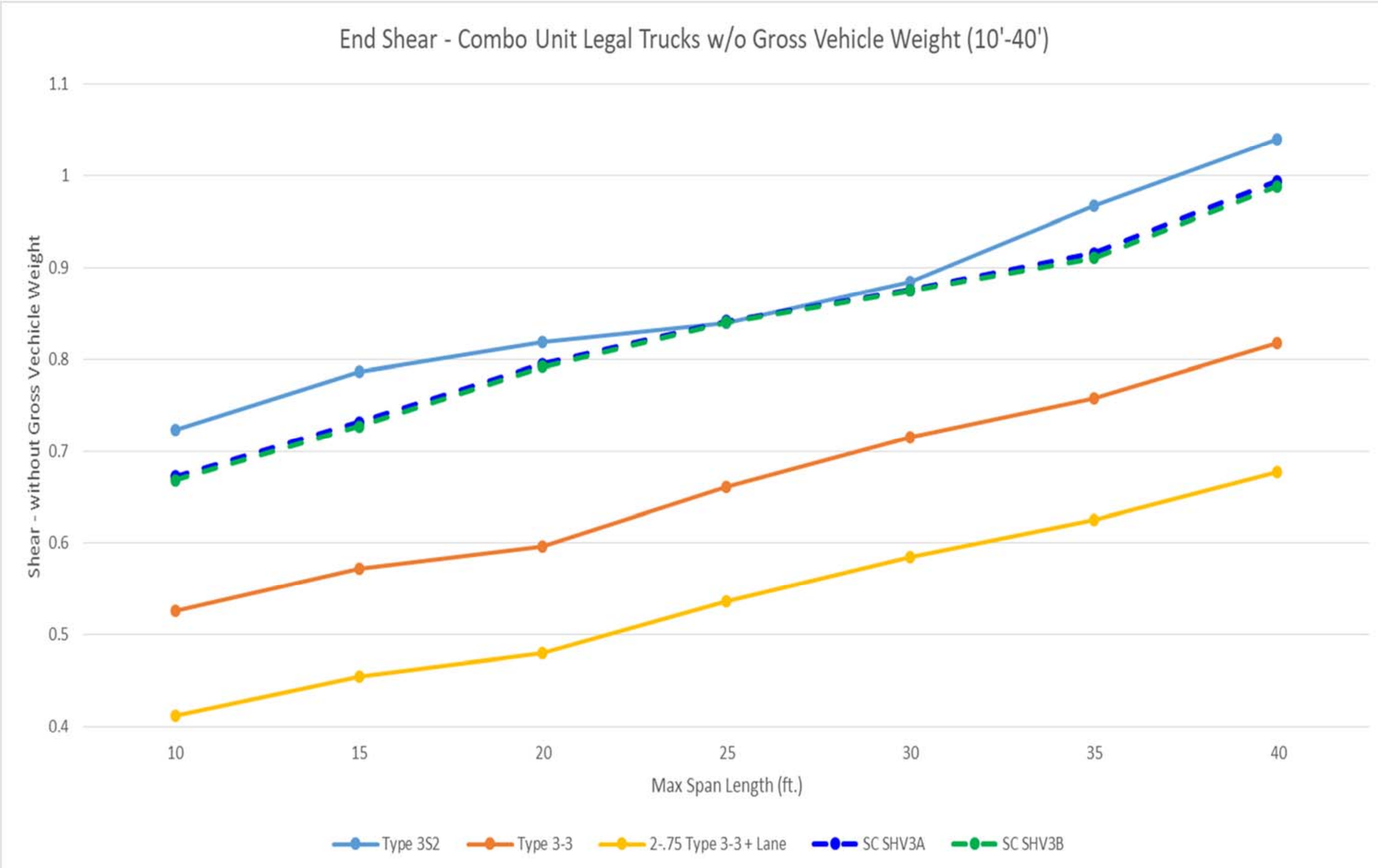

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
1.85
1.83
1.81
1.79
1.77
1.75
1.73
1.71
1.69
1.67
1.65
Shear - without Gross Vehicle Weight
120
130
140
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

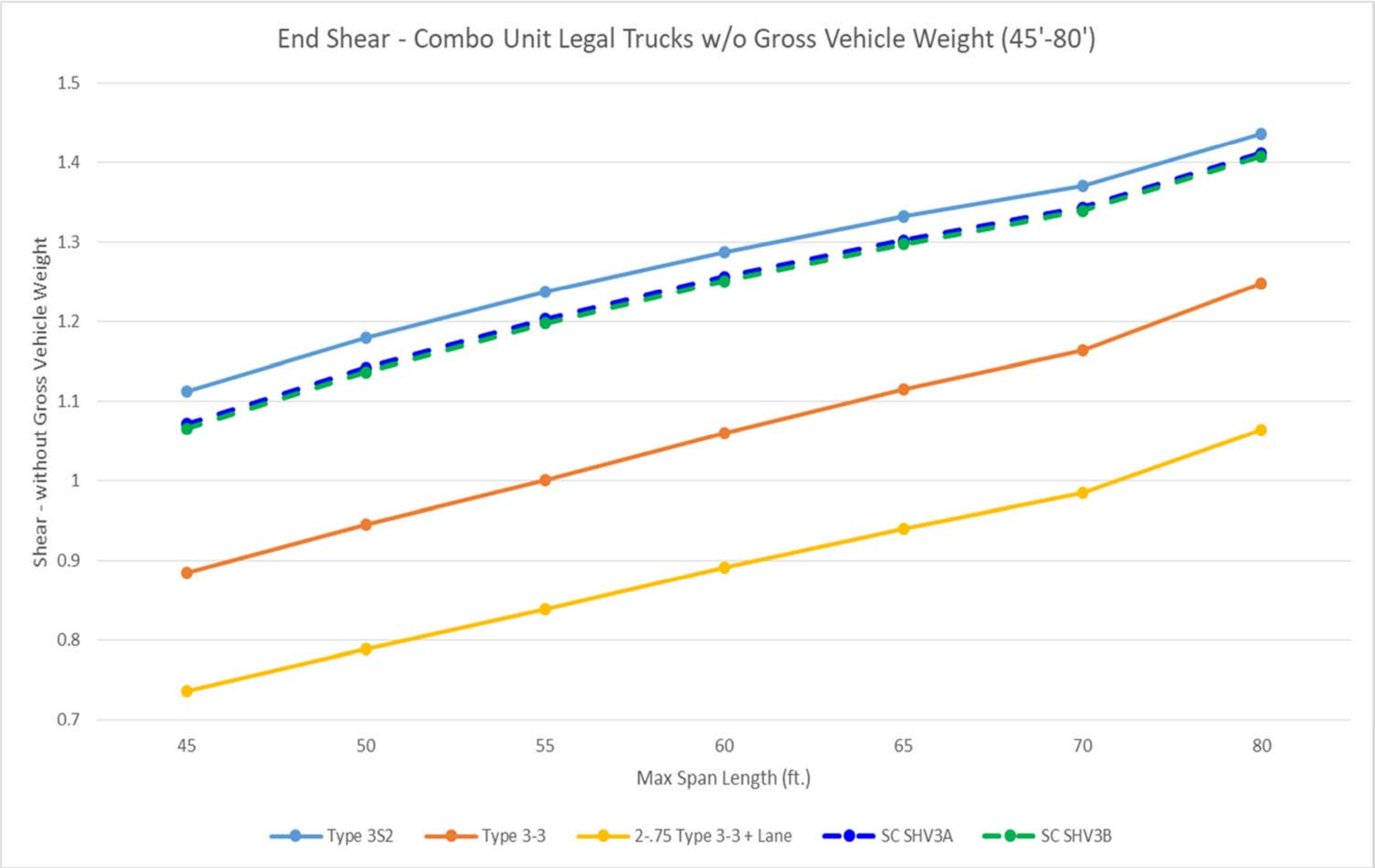


End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Shear - without Gross Vehicle Weight
1.85
1.83
1.81
1.79
1.77
1.75
1.73
1.71
150
160
170
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

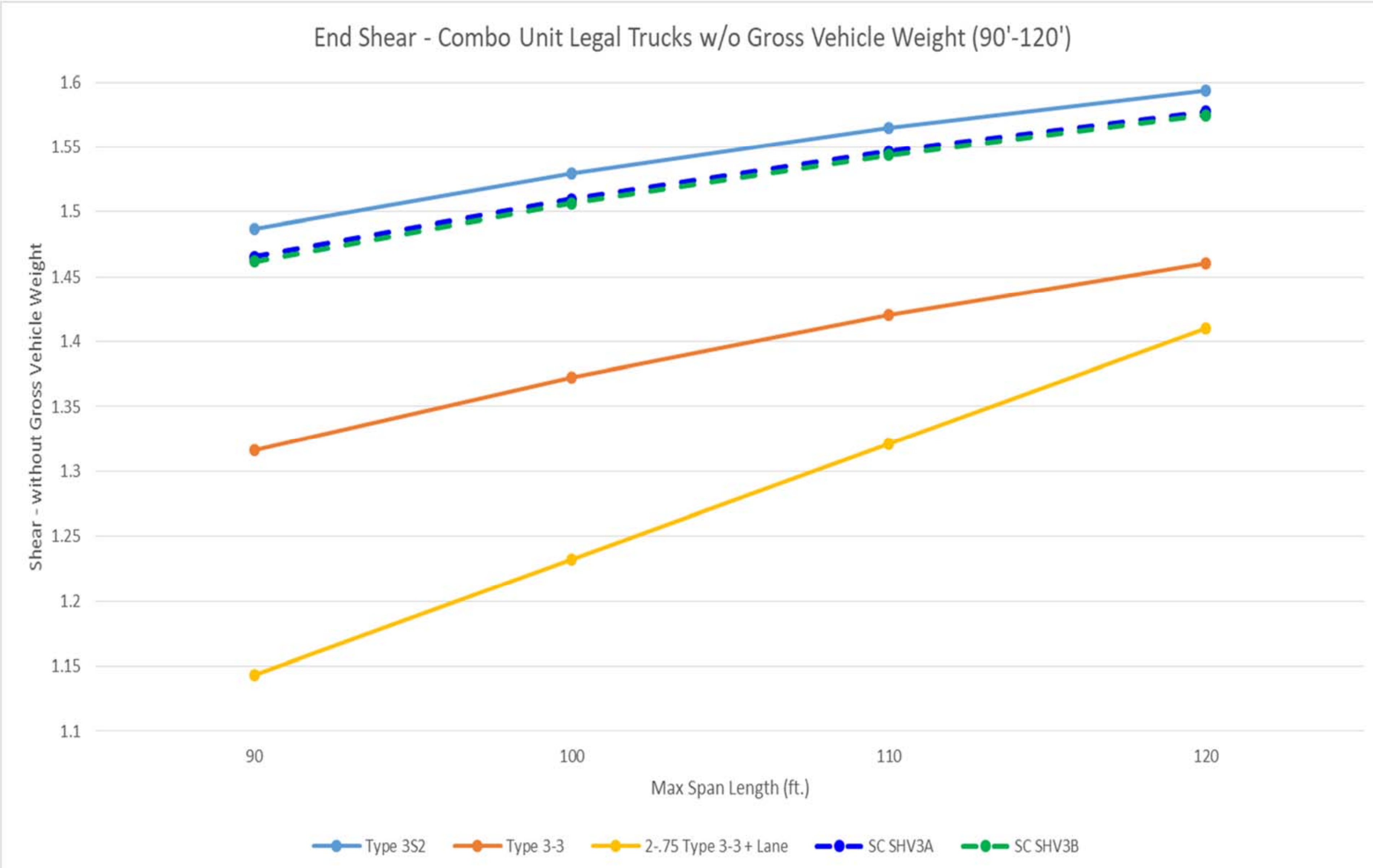


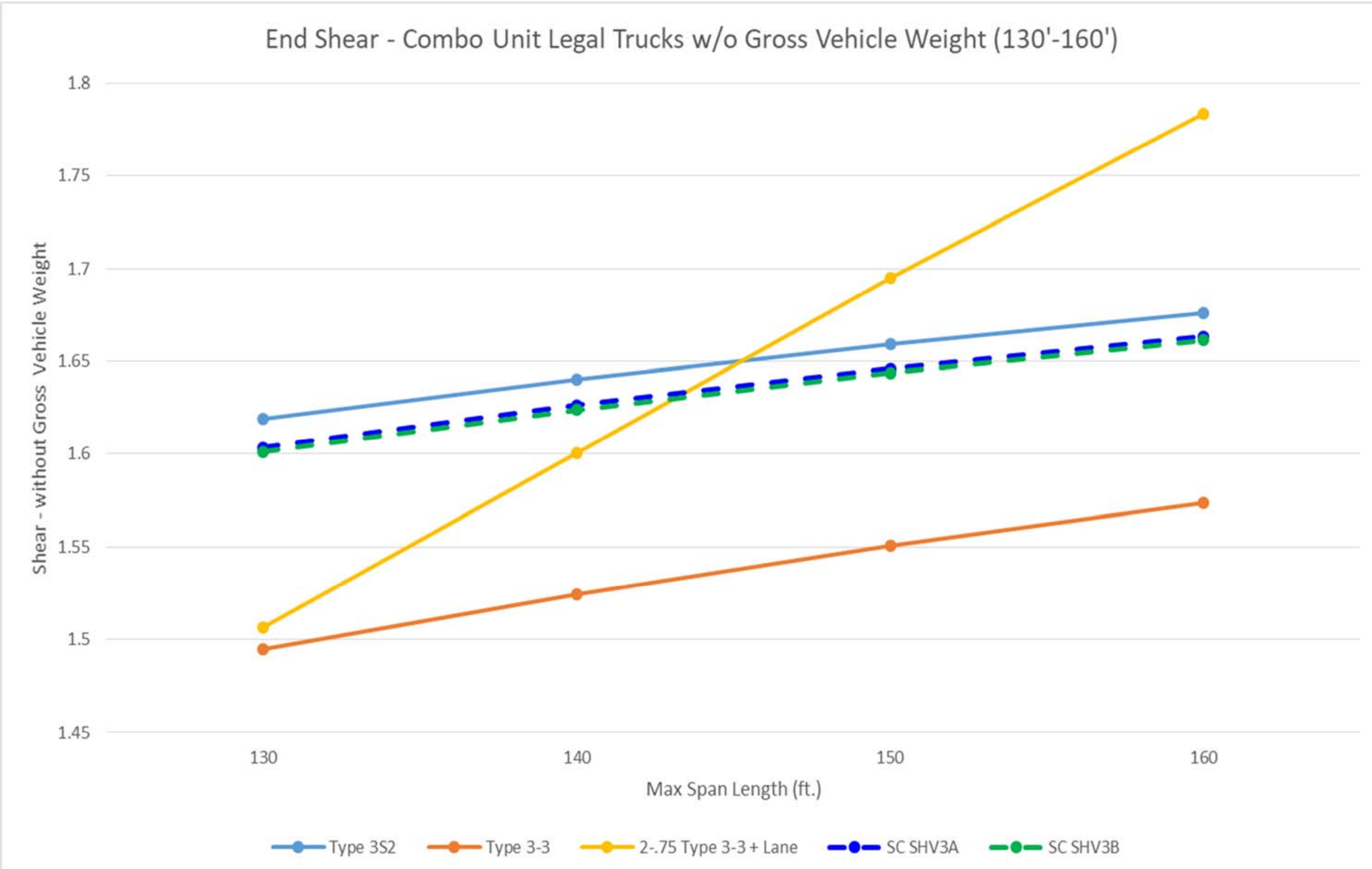
End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
1.88
1.86
1.84
1.82
1.8
1.78
1.76
1.74
180
190
200
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vechicle Weight
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
10
15
20
25
30
35
40
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

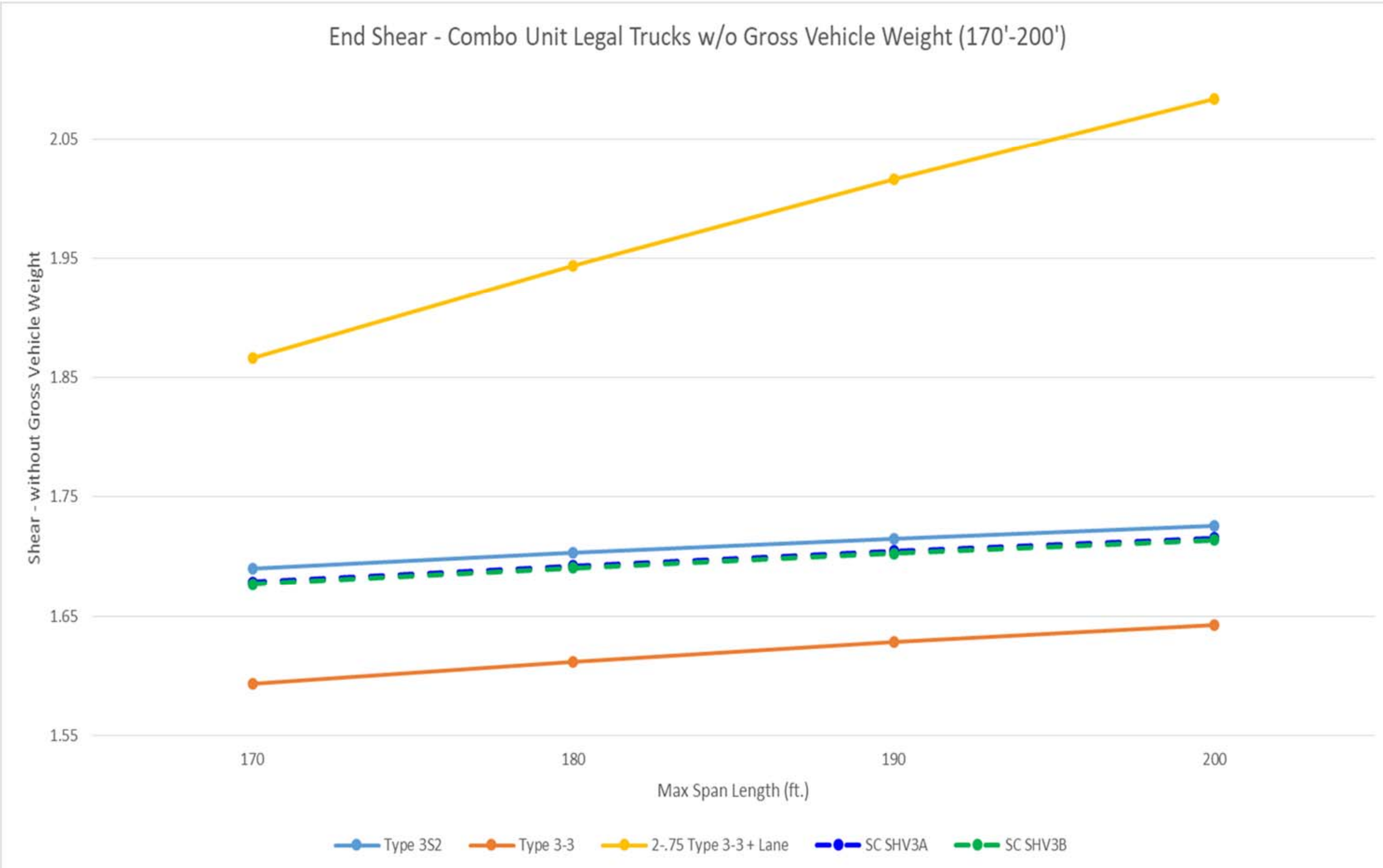


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
Shear - without Gross Vehicle Weight
45
50
55
60
65
70
80
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
1.6
1.55
1.5
1.45
1.4
1.35
1.3
1.25
1.2
1.15
1.1
90
100
110
120
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



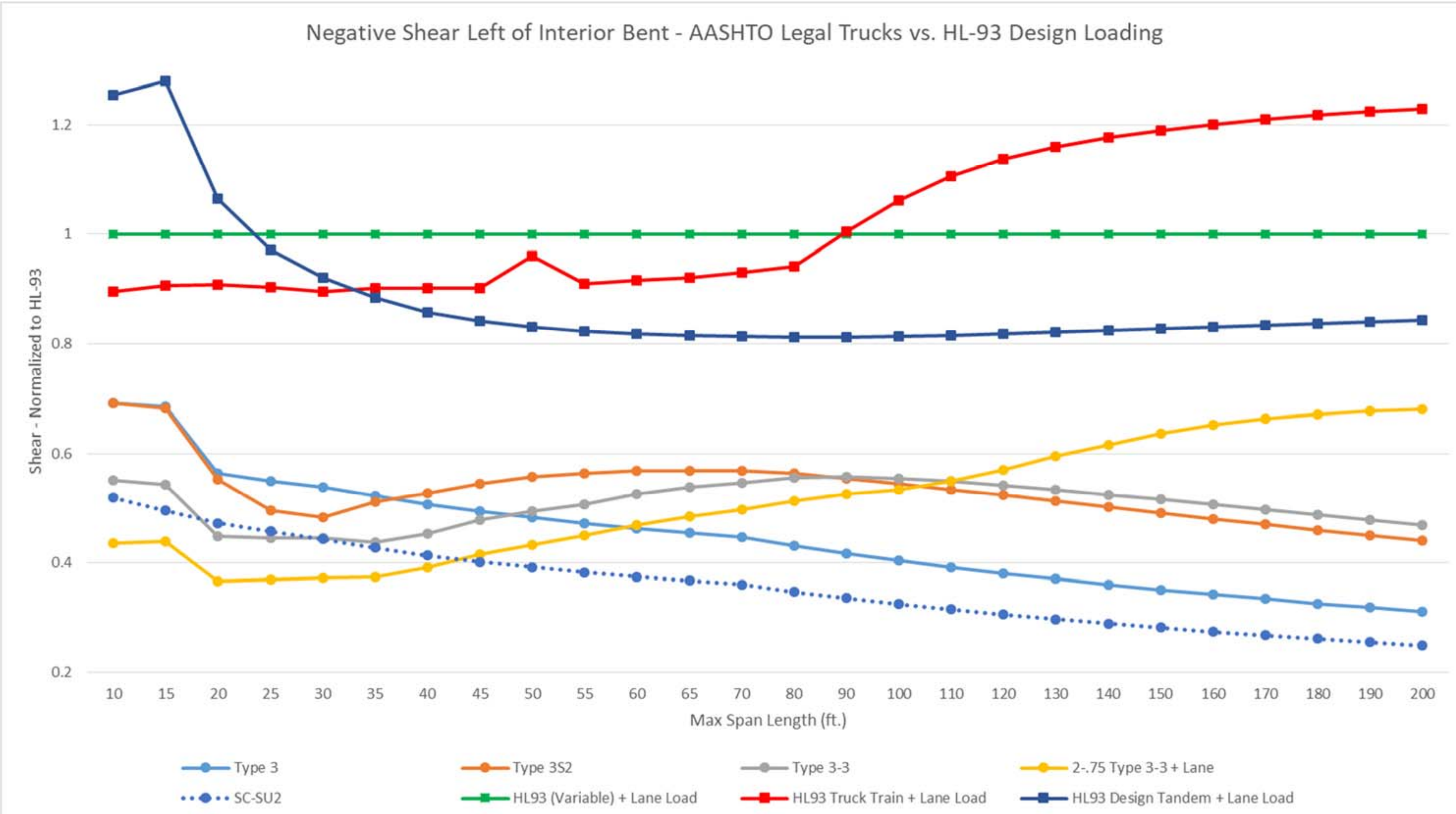
End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
Shear - without Gross Vehicle Weight
130
140
150
160
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

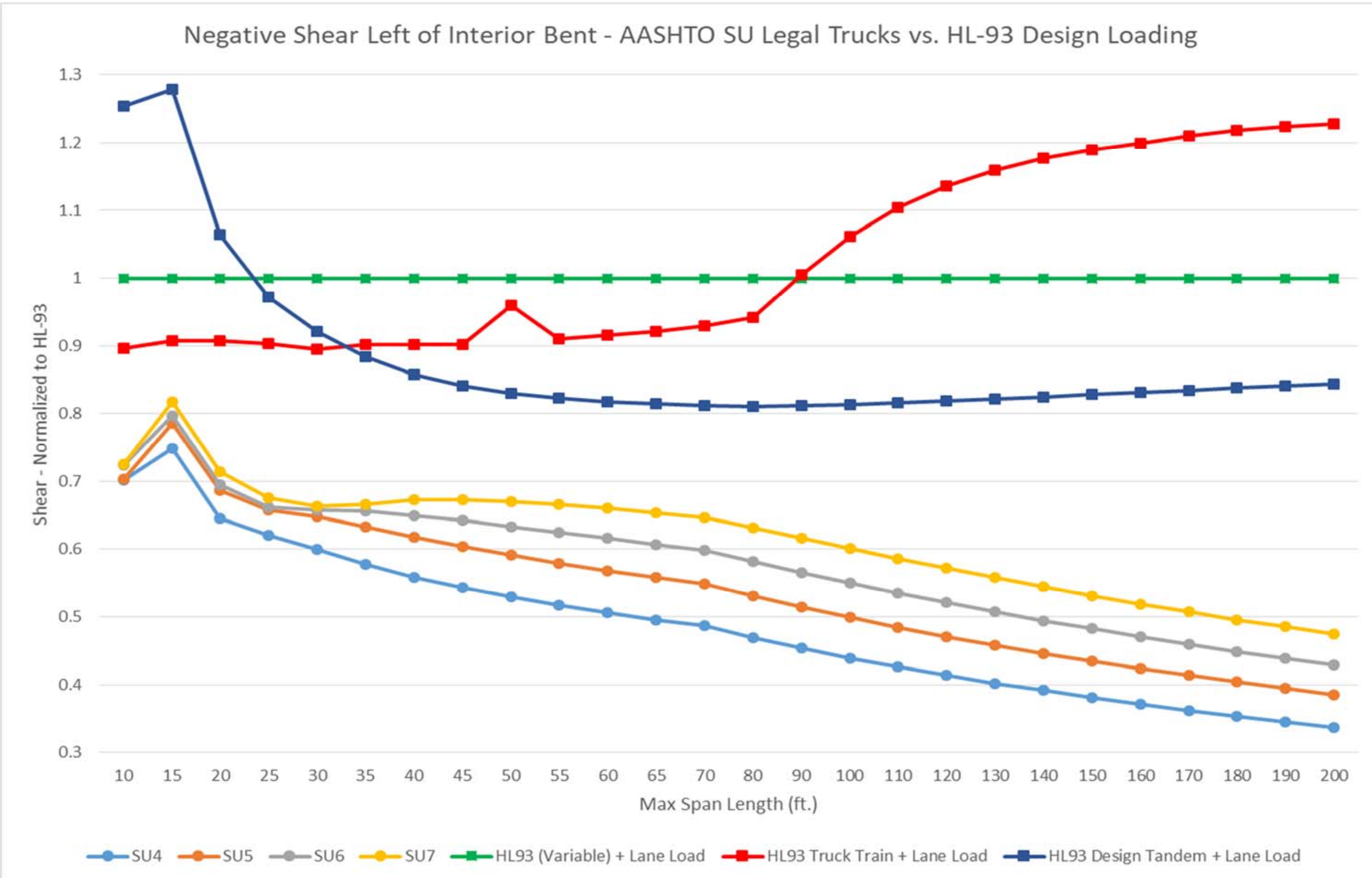


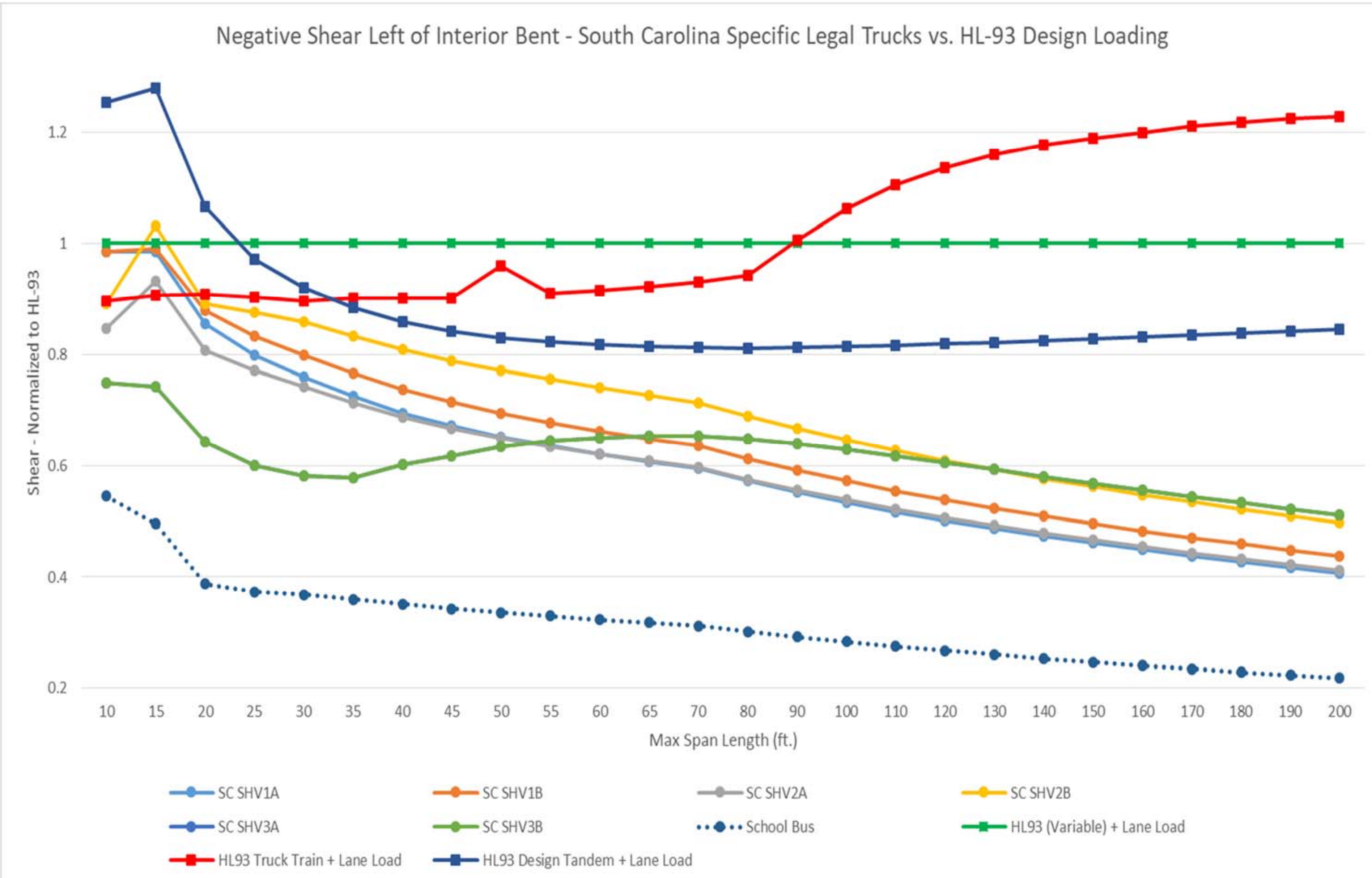
End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
2.05
1.95
1.85
1.75
1.65
1.55
170
180
190
200
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Negative Shear Left of Interior Bent*

Note: Spike at 50' in the graphs for Max Negative Shear Left of Interior Bent is due to the spacing of the Truck Train Vehicles at 50' (causing a spike at that location)

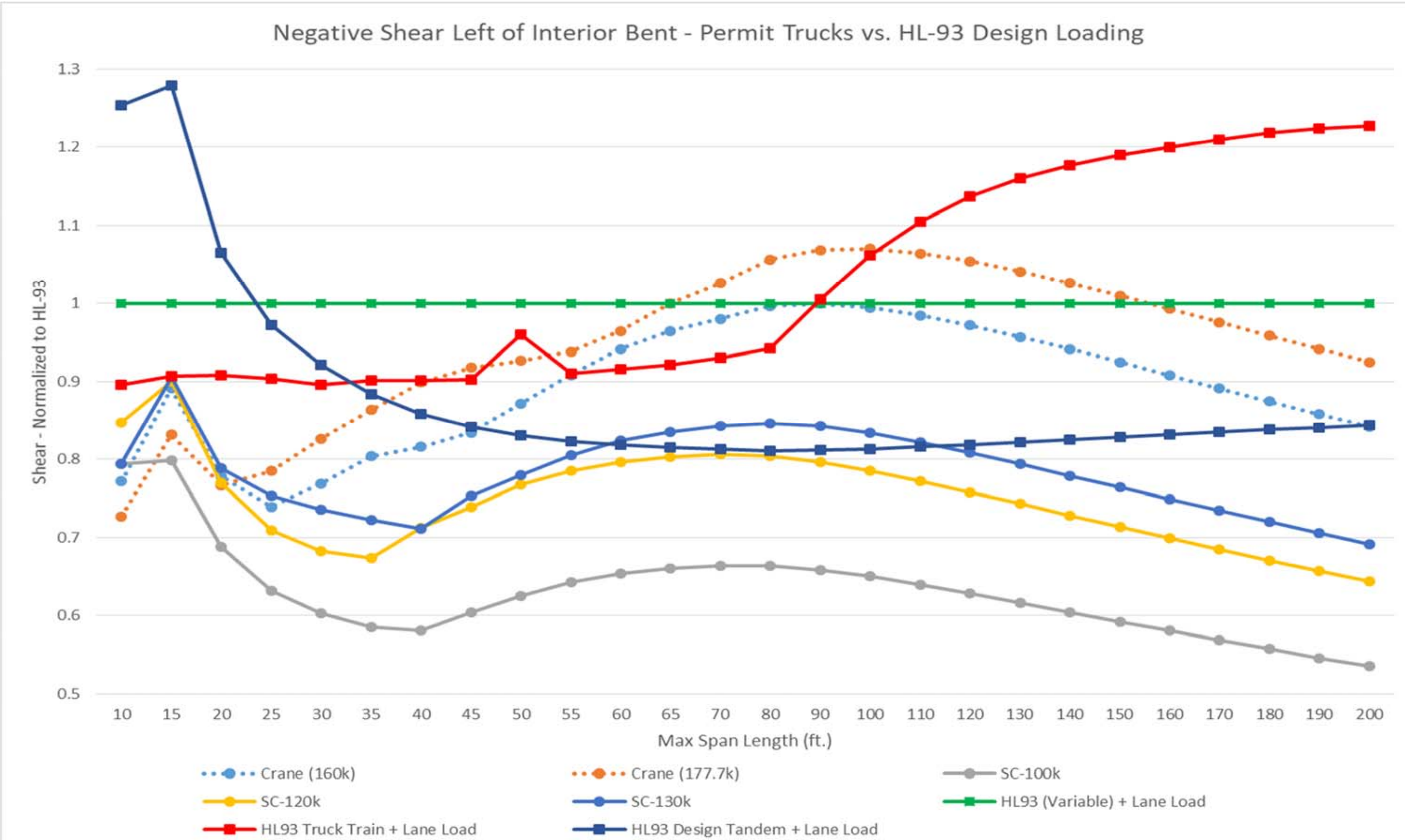



Negative Shear Left of Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

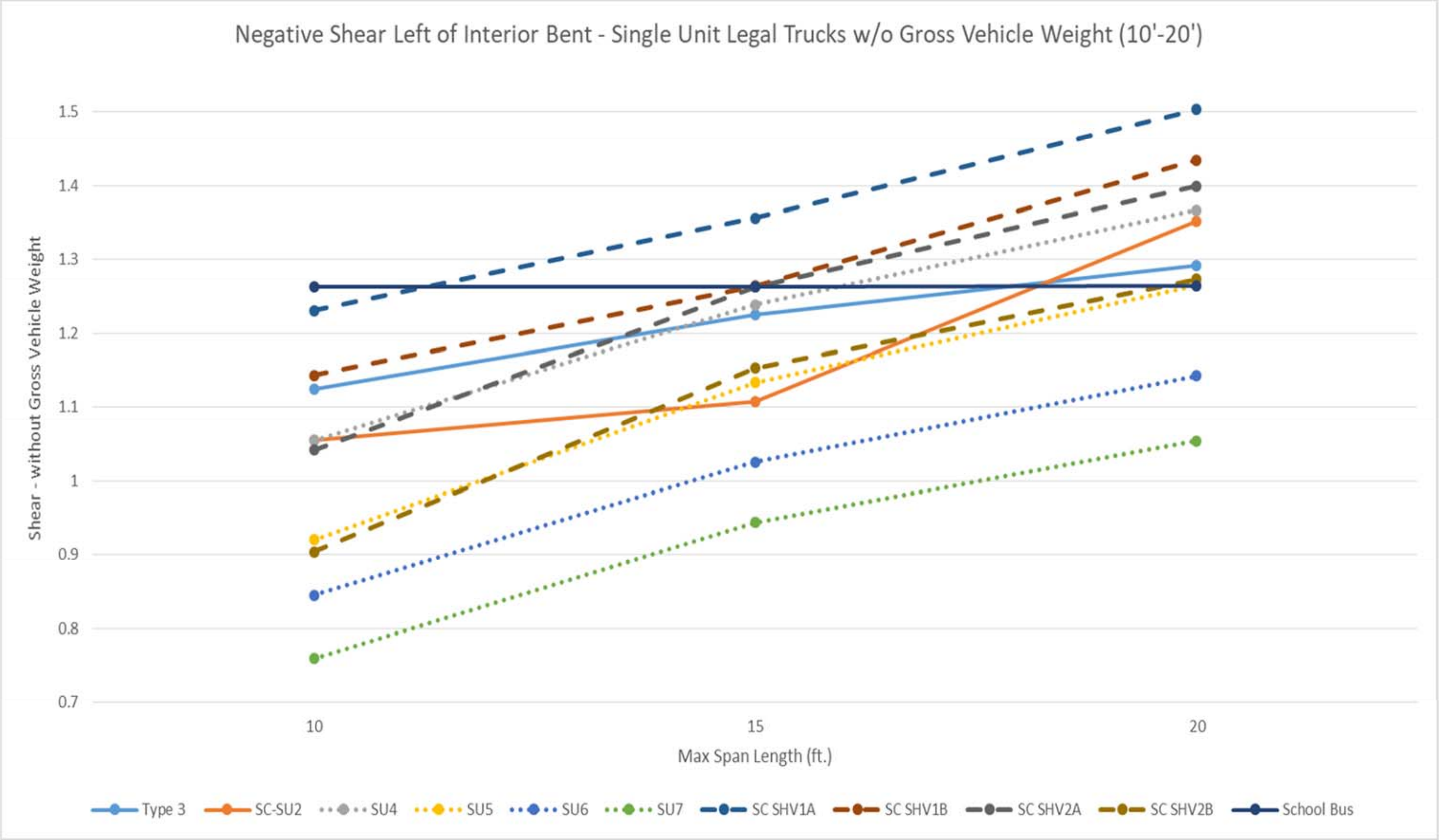


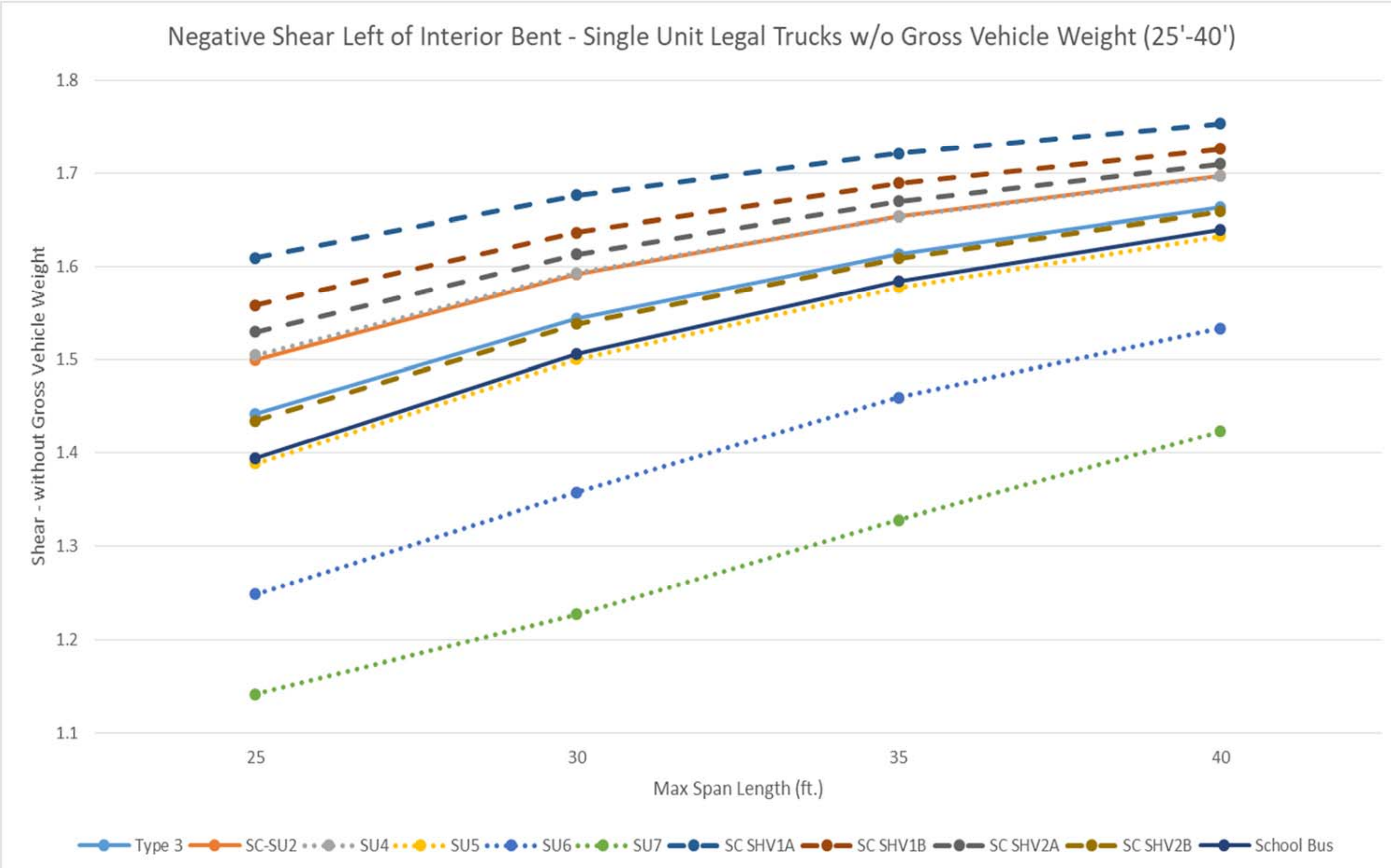
Negative Shear Left of Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

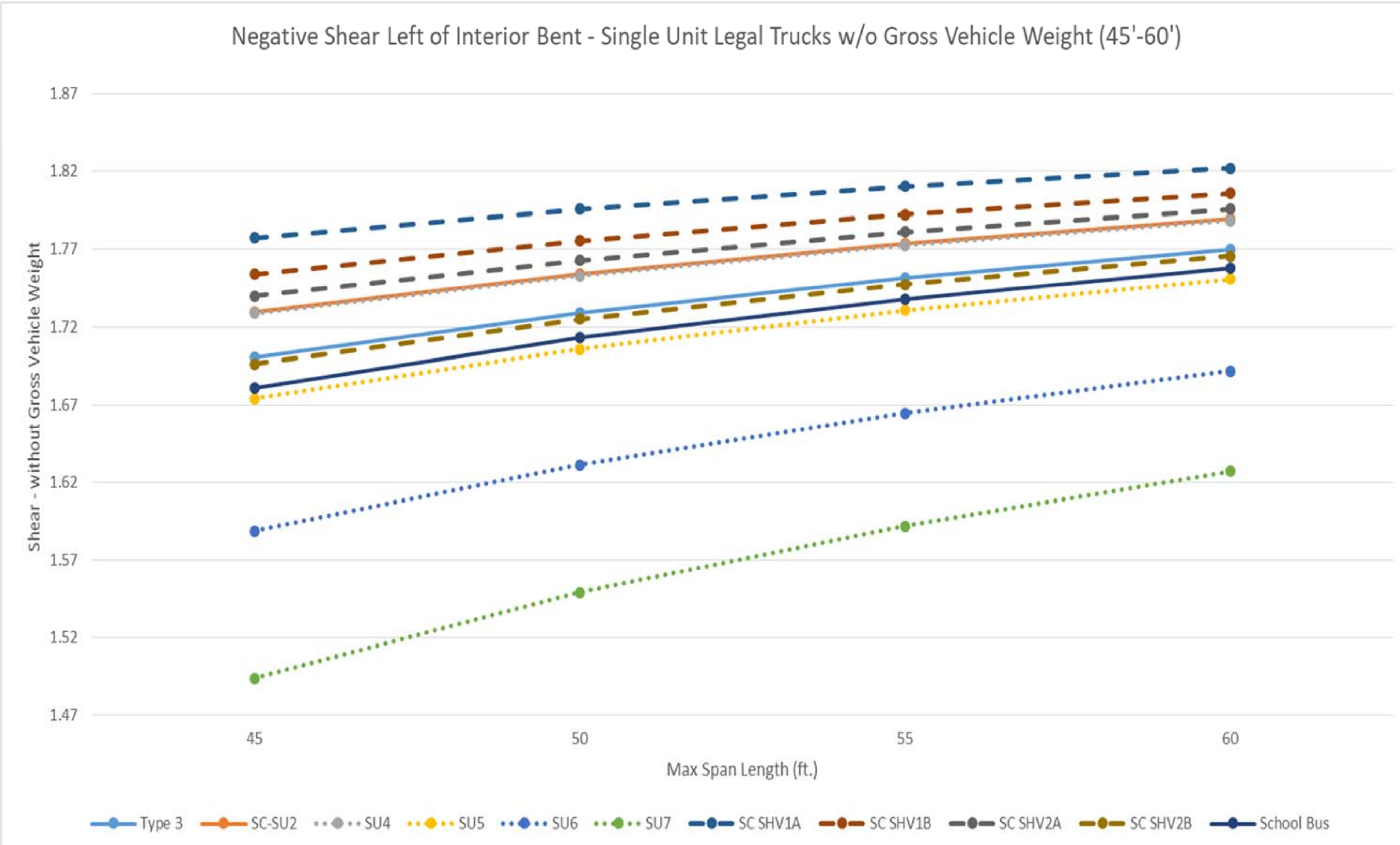
Permit Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Negative Shear Left of Interior Bent*

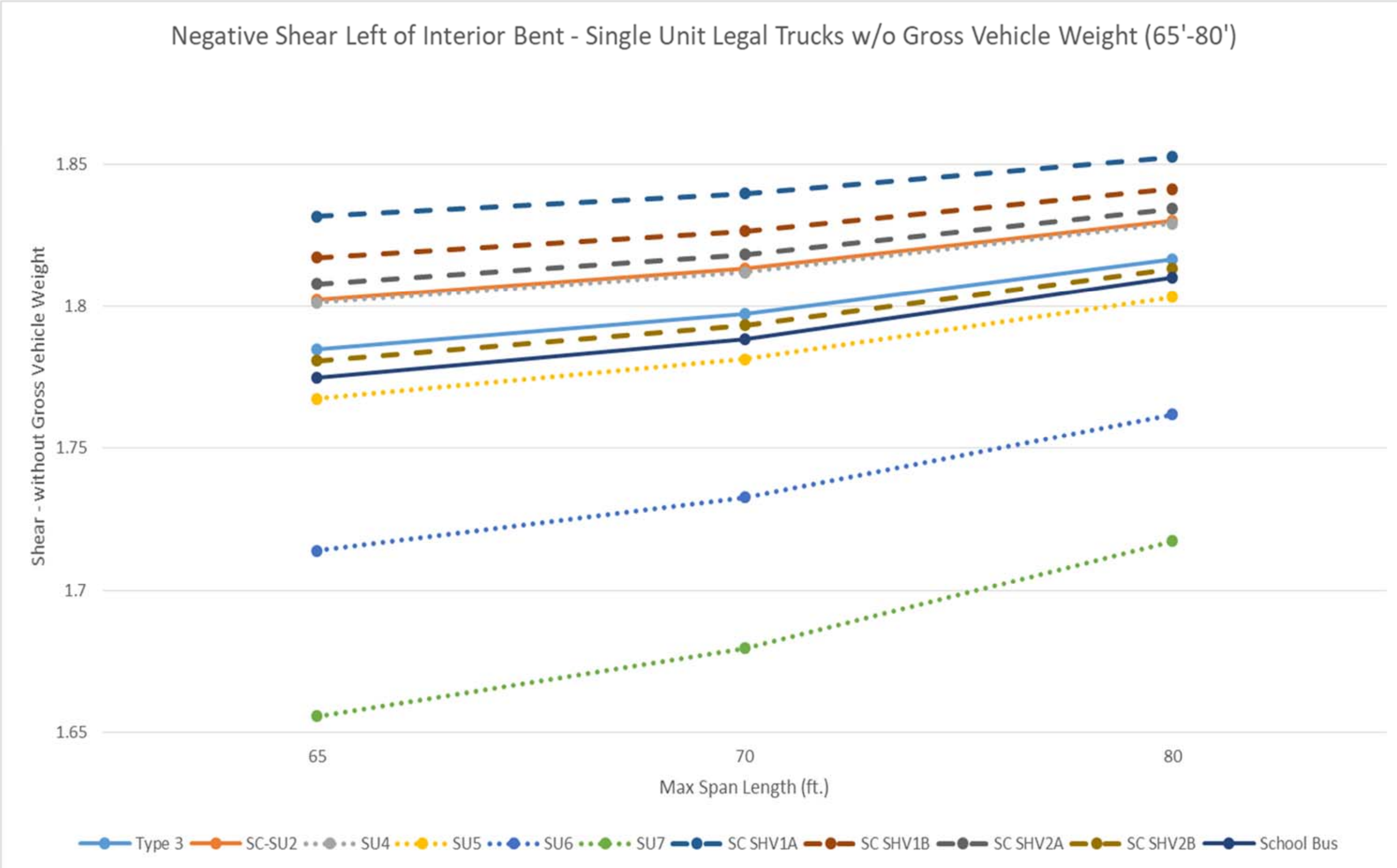


Legal Trucks: 2-Span (Without Gross Vehicle Weight) – *Negative Shear Left of Interior Bent*

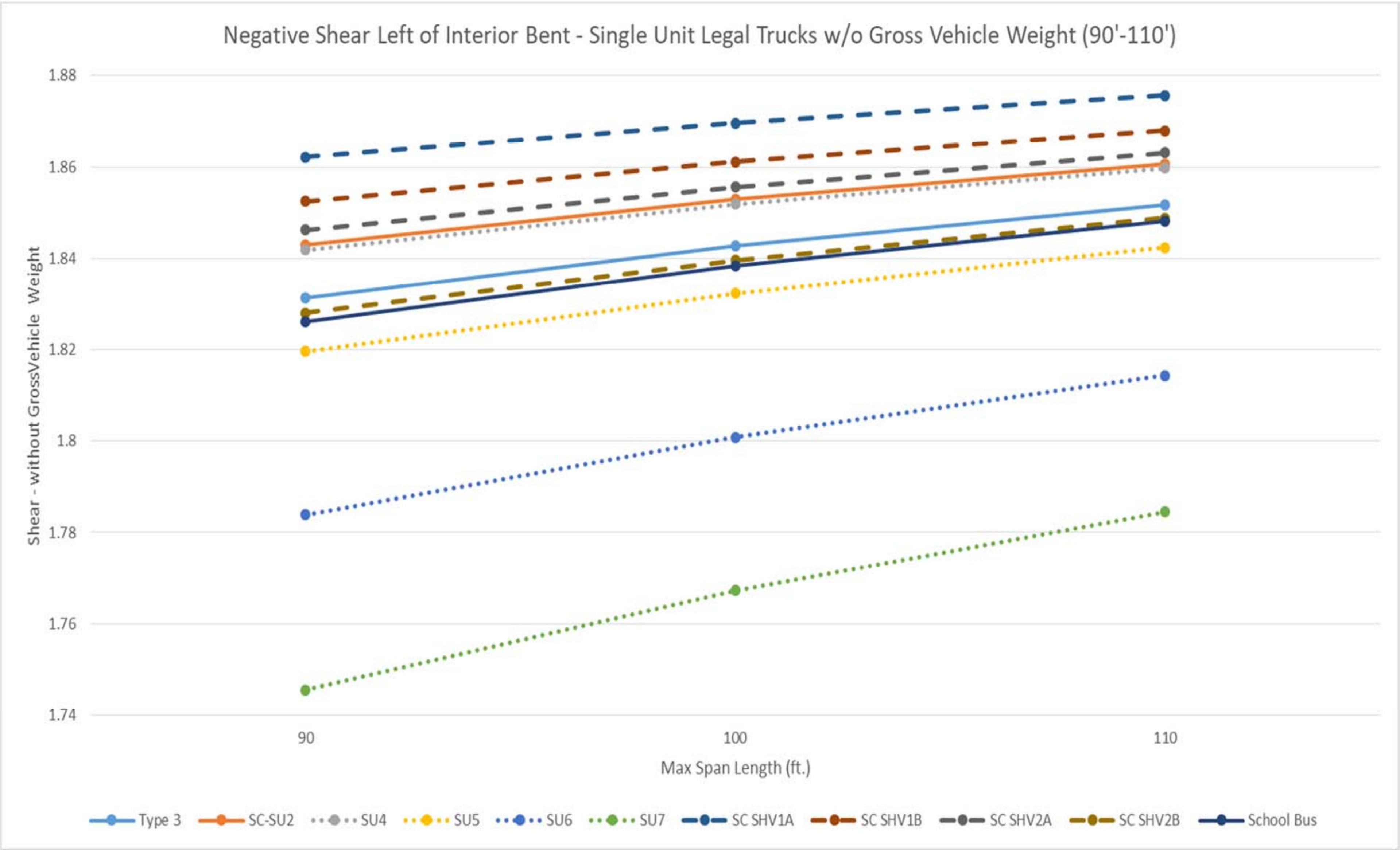


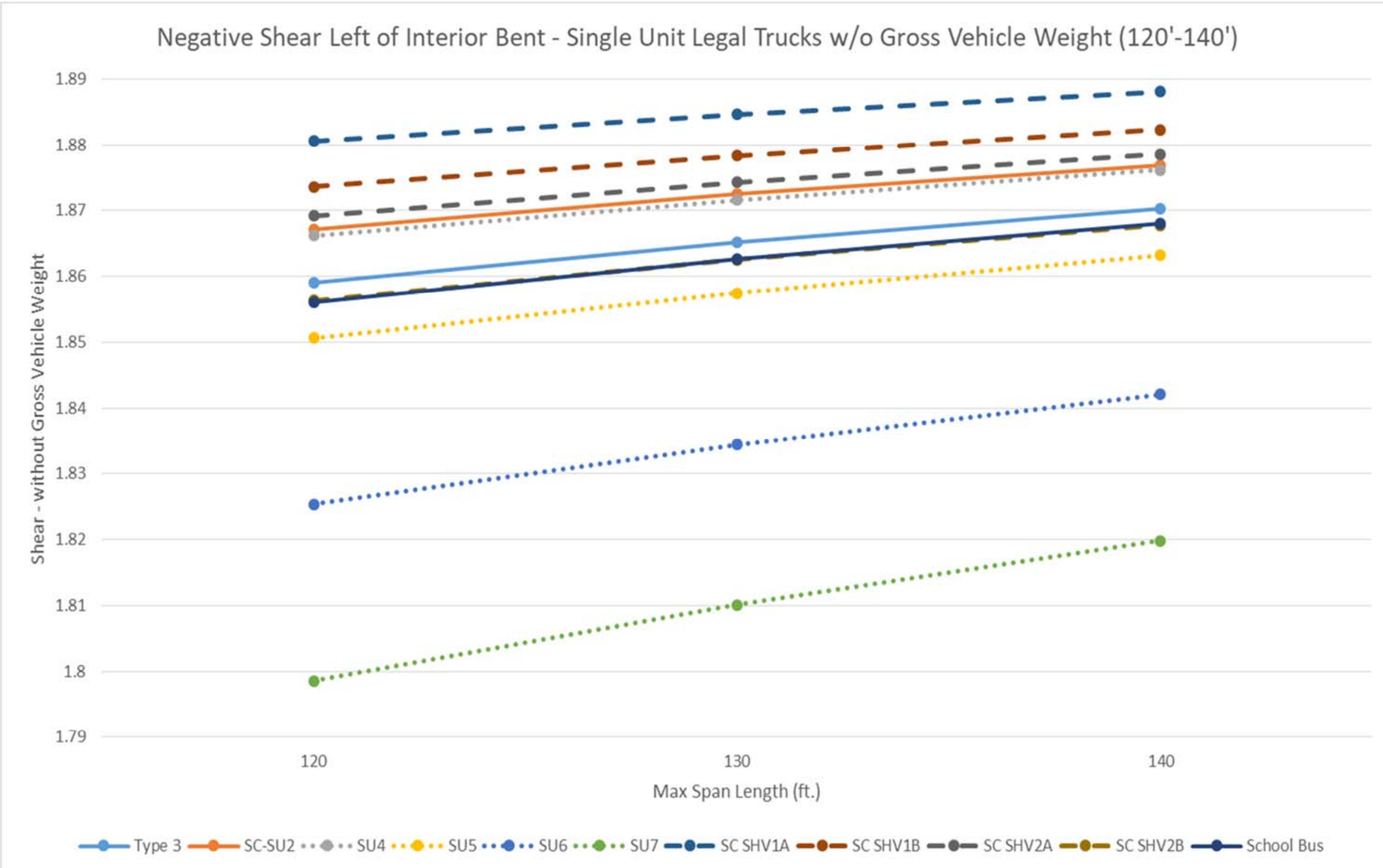

Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
25
30
35
40
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

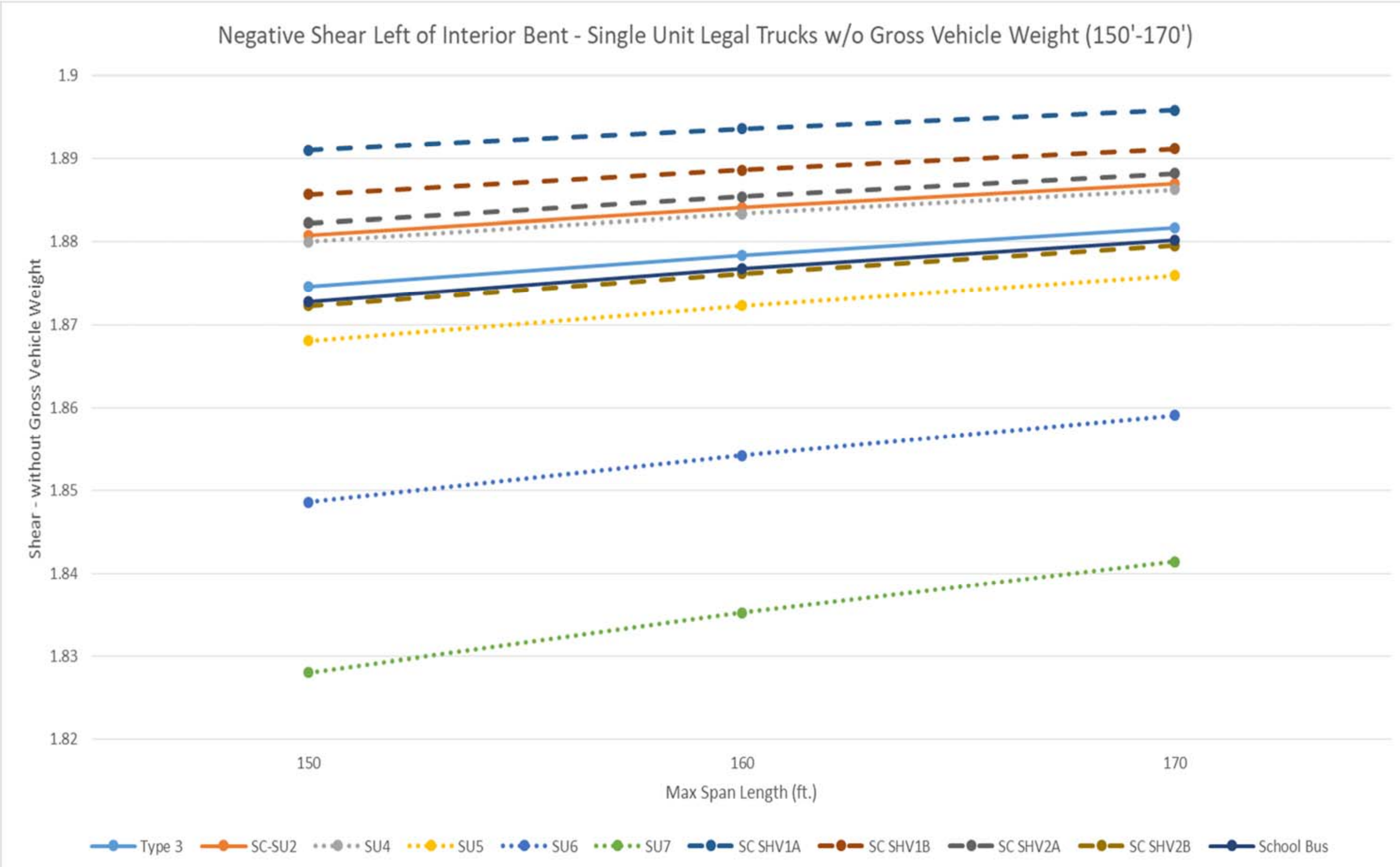

Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.87
1.82
1.77
1.72
1.67
1.62
1.57
1.52
1.47
Shear - without Gross Vehicle Weight
45
50
55
60
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

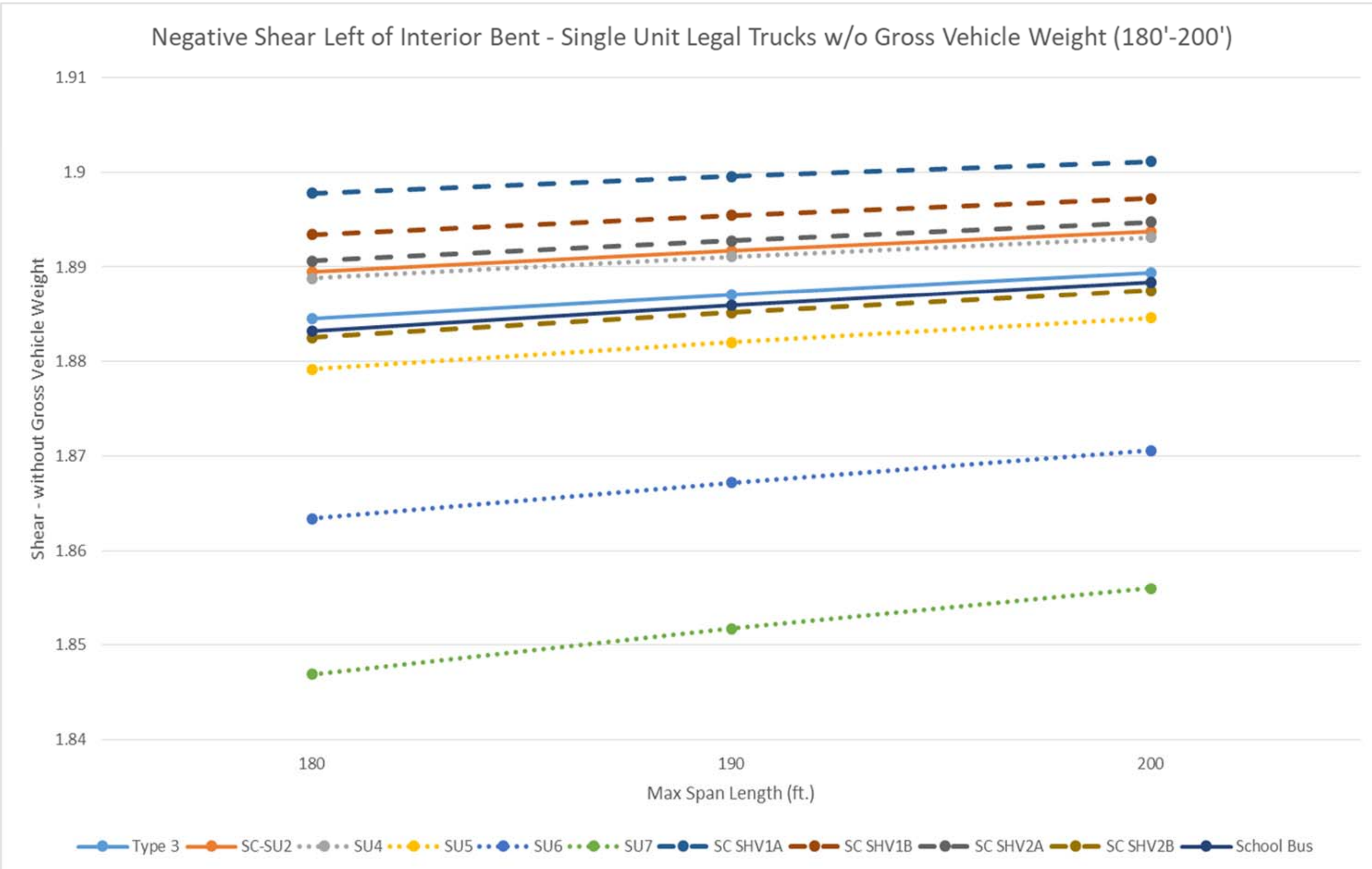


Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
Shear - without Gross Vehicle Weight
1.85
1.8
1.75
1.7
1.65
65
70
80
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

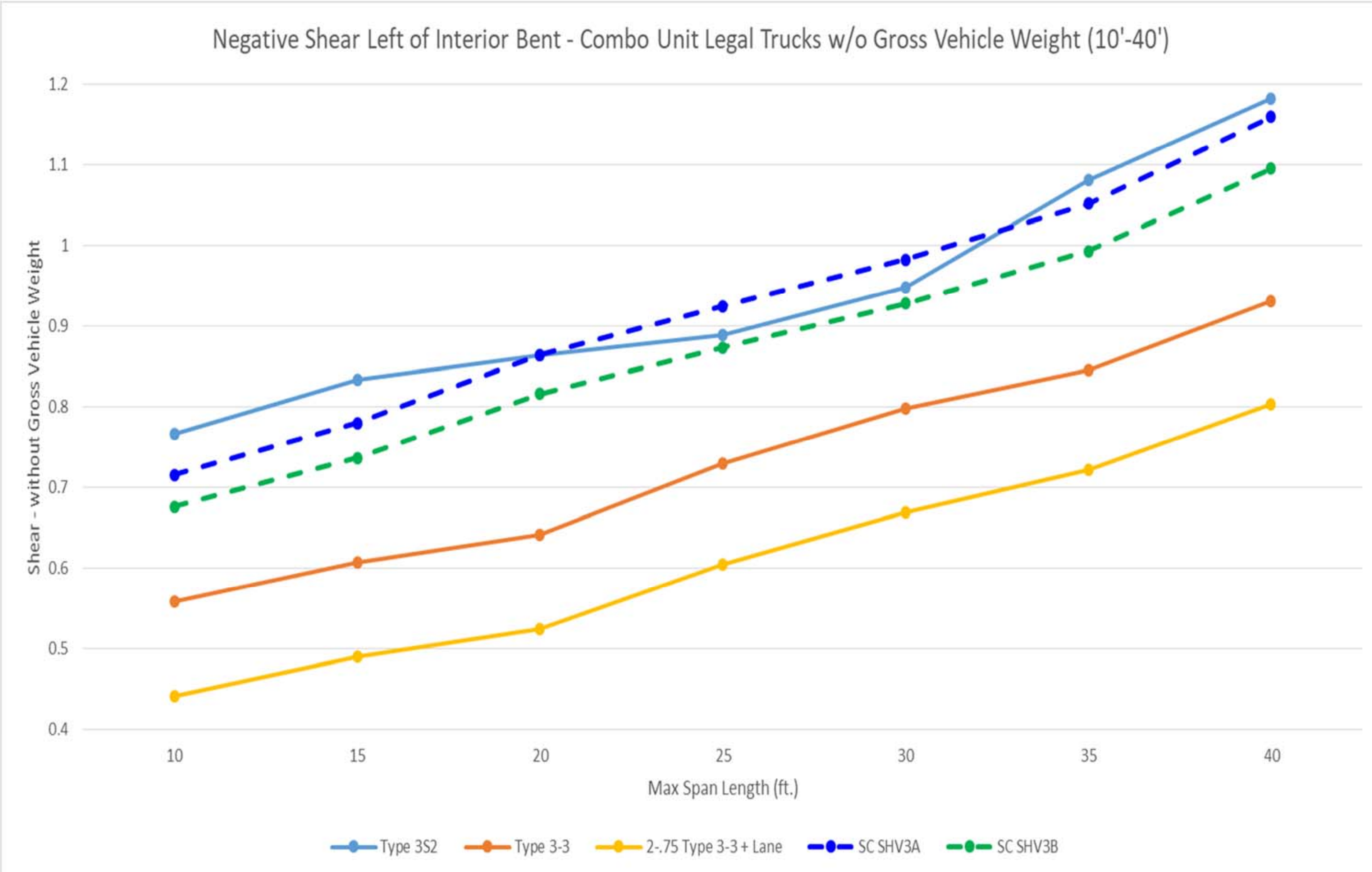

Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
1.88
1.86
1.84
1.82
1.8
1.78
1.76
1.74
Shear - without GrossVehicle Weight
90
100
110
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
1.89
1.88
1.87
1.86
1.85
1.84
1.83
1.82
1.81
1.8
1.79
120
130
140
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

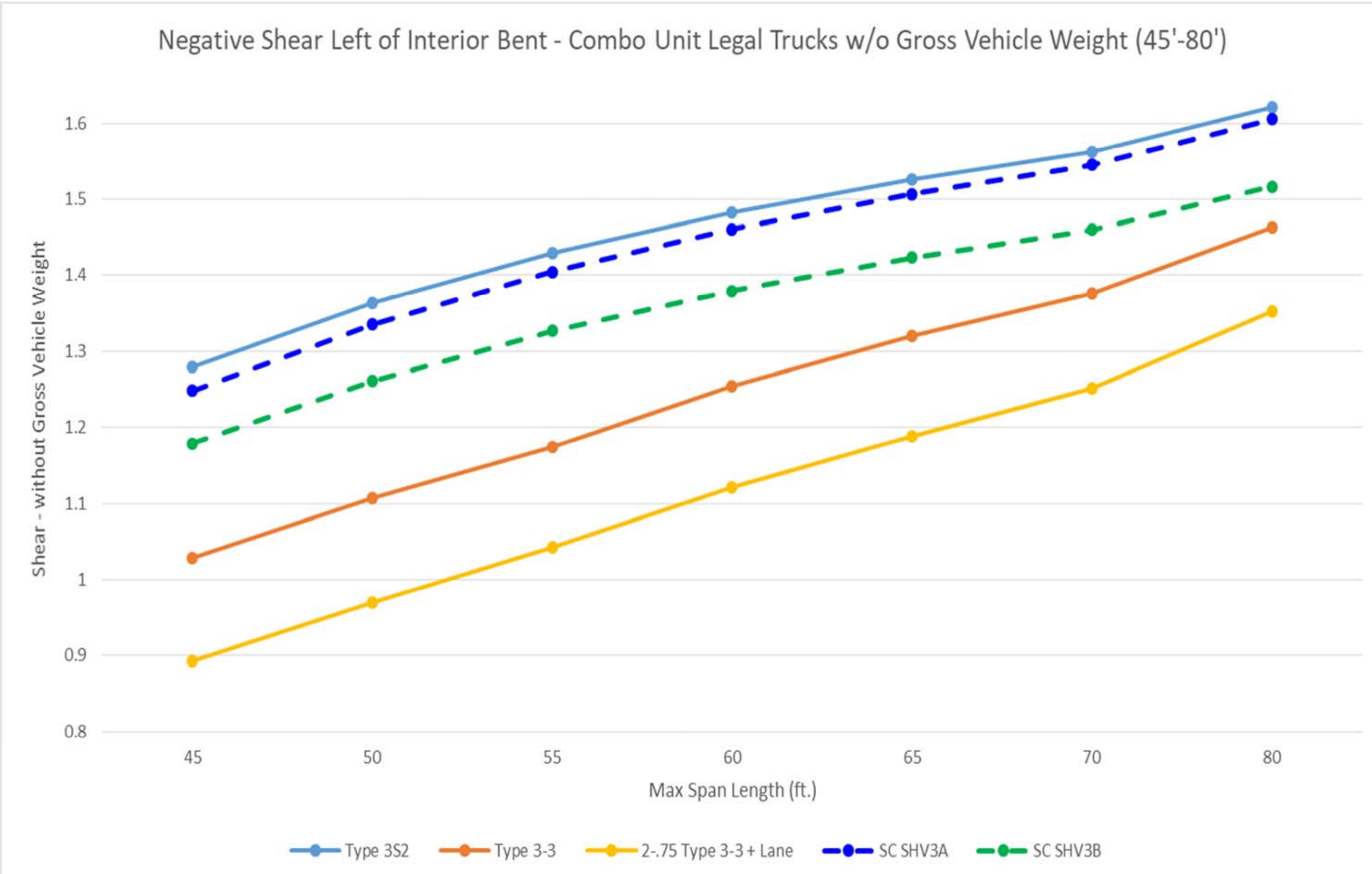

Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Shear - without Gross Vehicle Weight
1.9
1.89
1.88
1.87
1.86
1.85
1.84
1.83
1.82
150
160
170
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

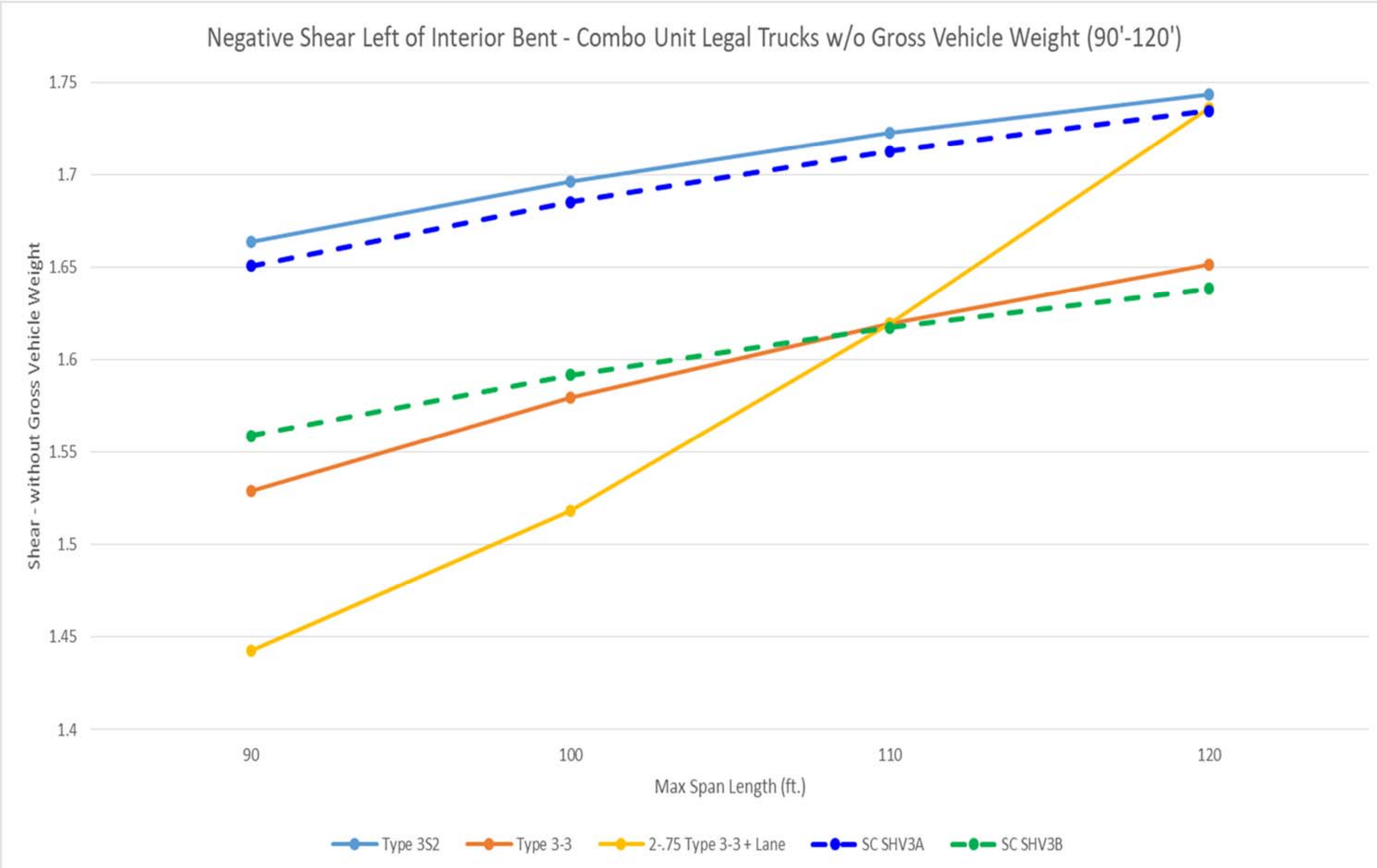


Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
1.91
1.9
1.89
1.88
1.87
1.86
1.85
1.84
Shear - without Gross Vehicle Weight
180
190
200
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

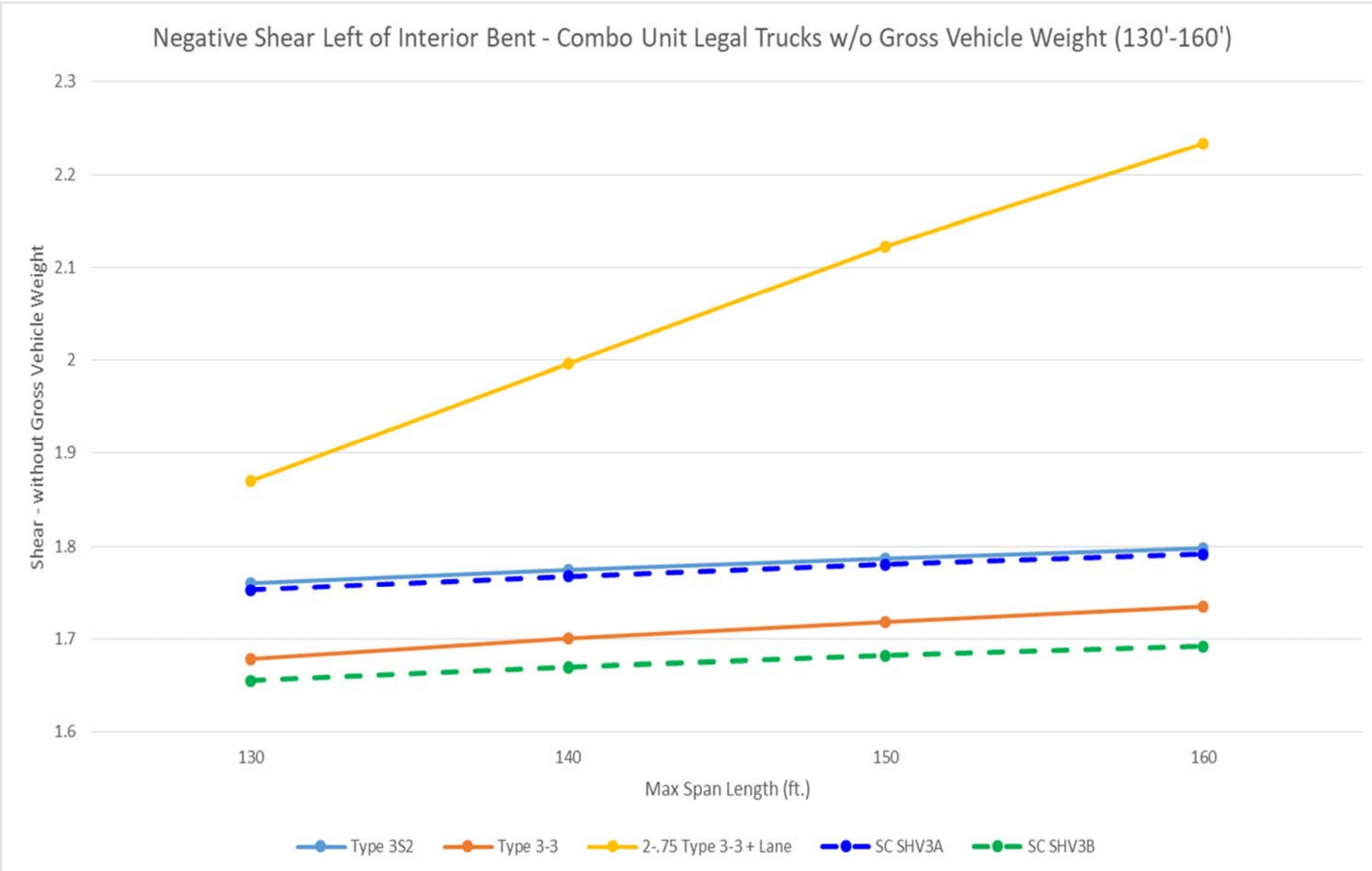


Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
Shear - without Gross Vehicle Weight
10
15
20
25
30
35
40
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

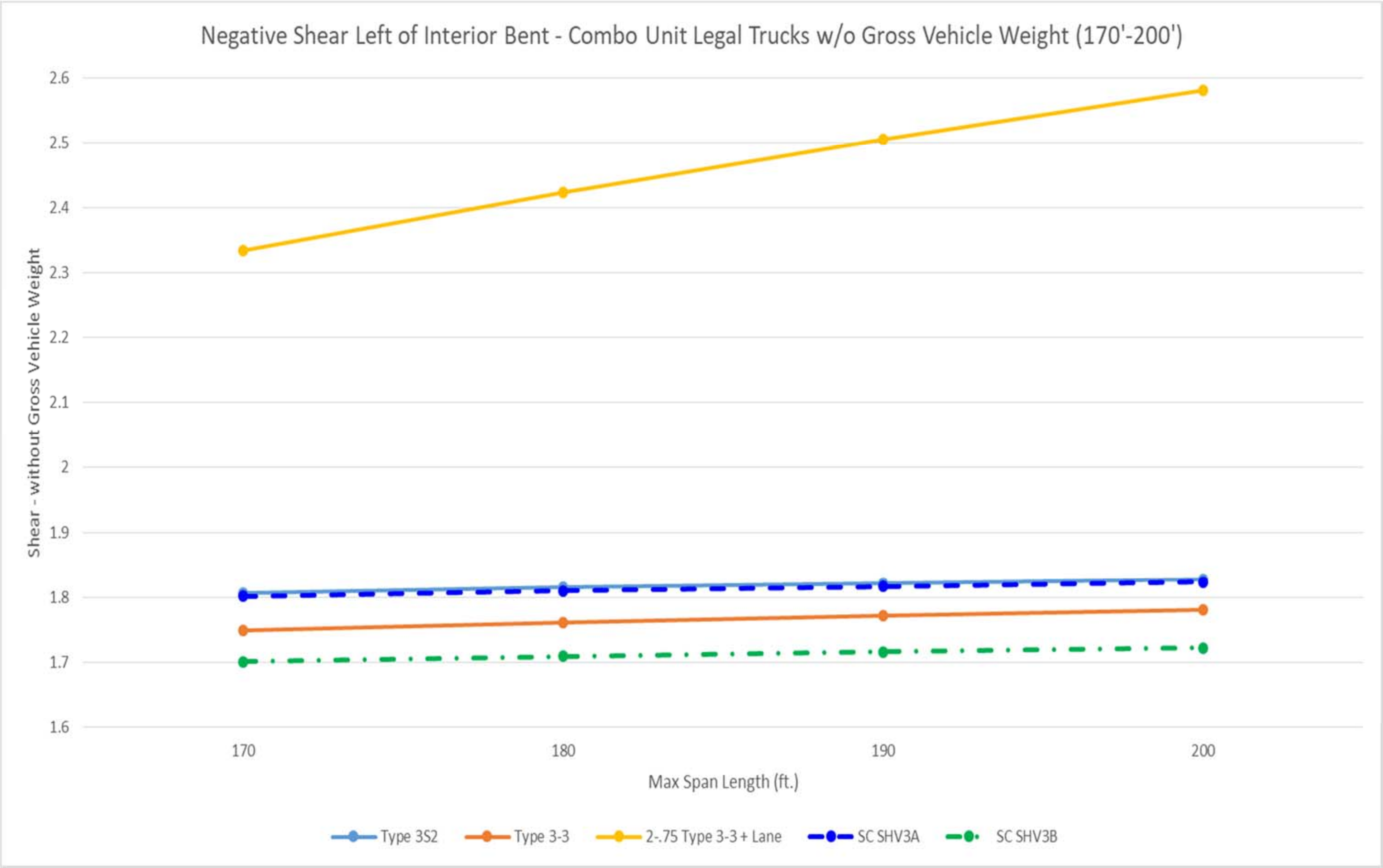

Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
45
50
55
60
65
70
80
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
1.75
1.7
1.65
1.6
1.55
1.5
1.45
1.4
Shear - without Gross Vehicle Weight
90
100
110
120
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

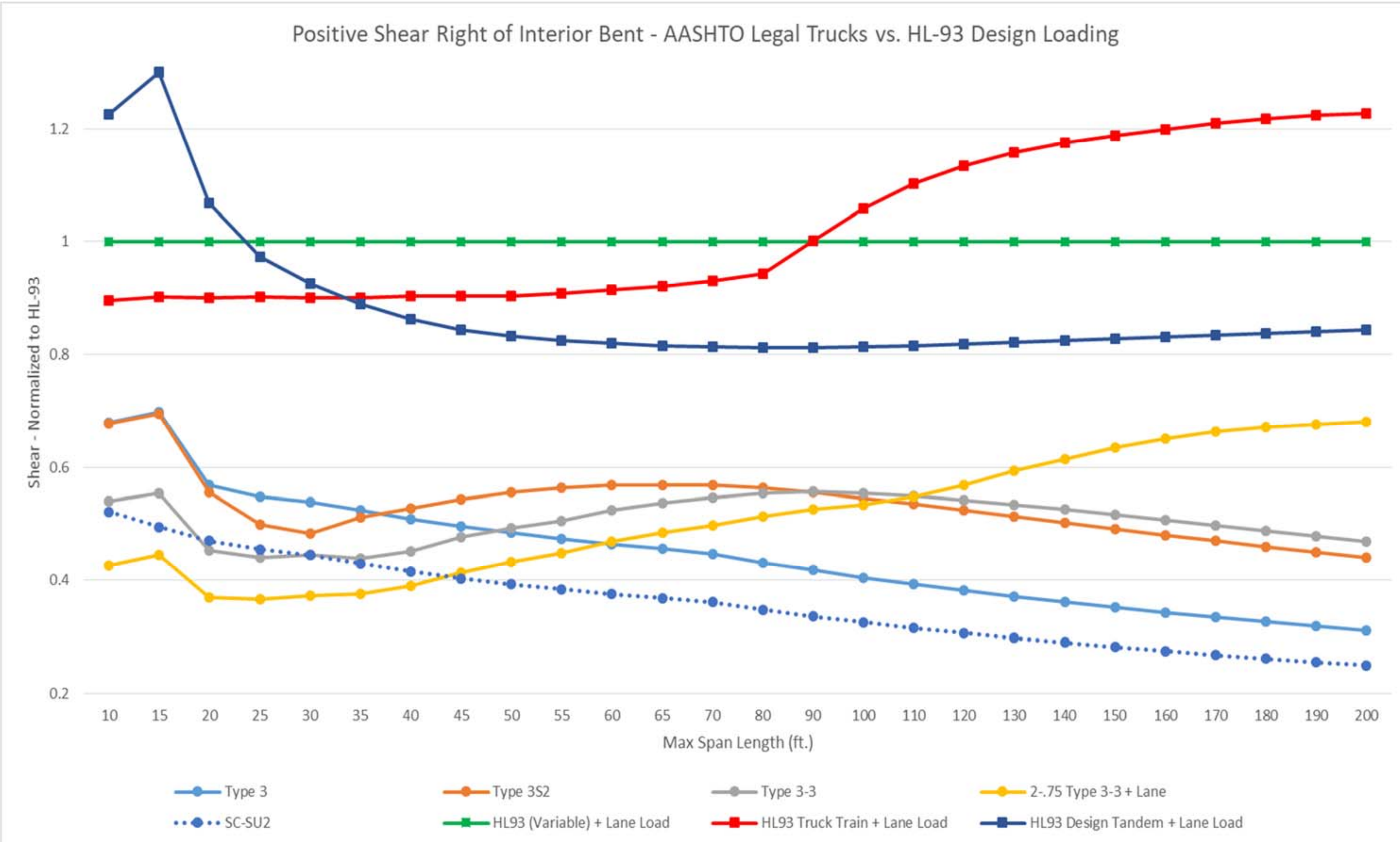


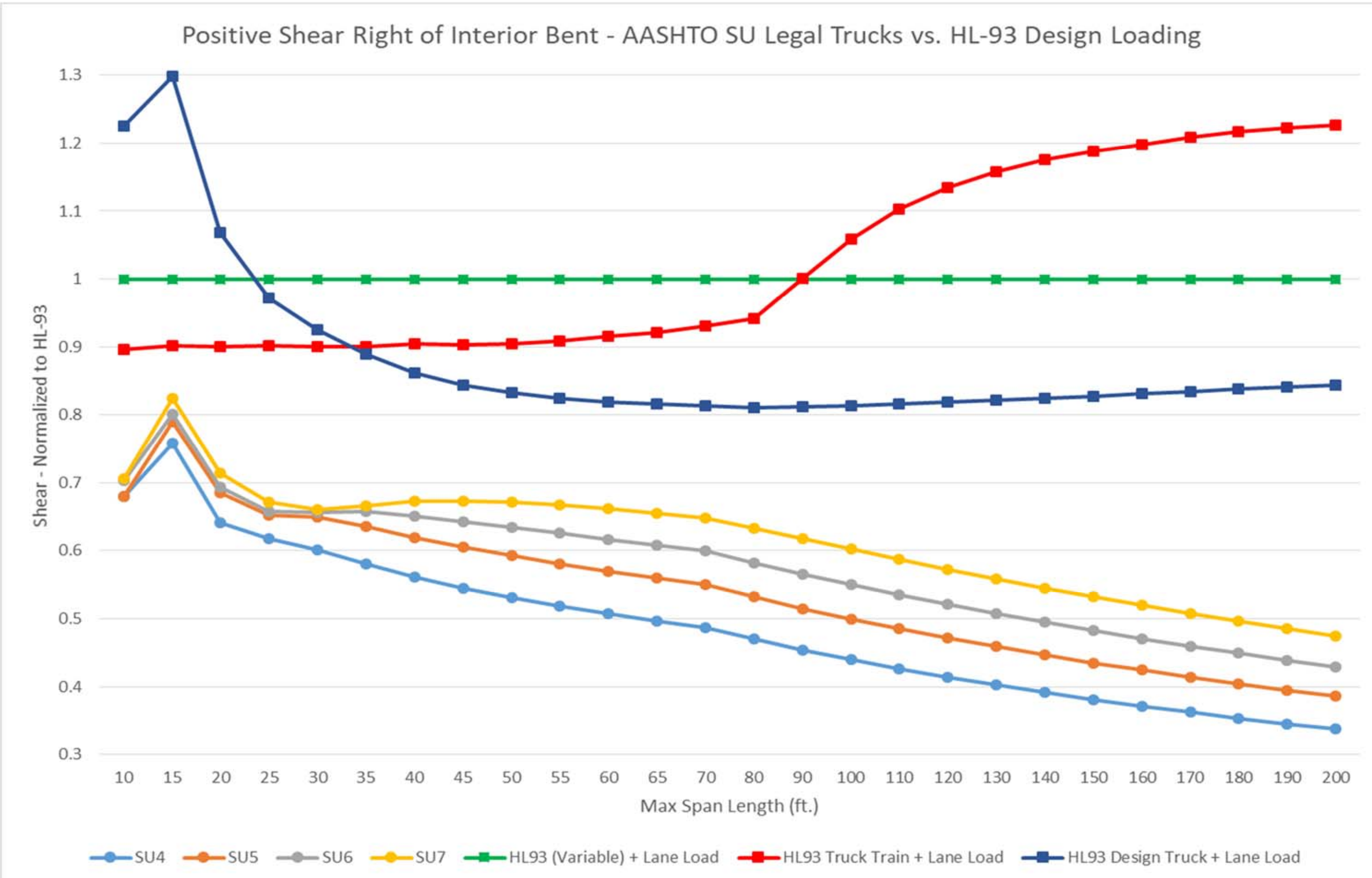
Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
Shear - without Gross Vehicle Weight
130
140
150
160
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

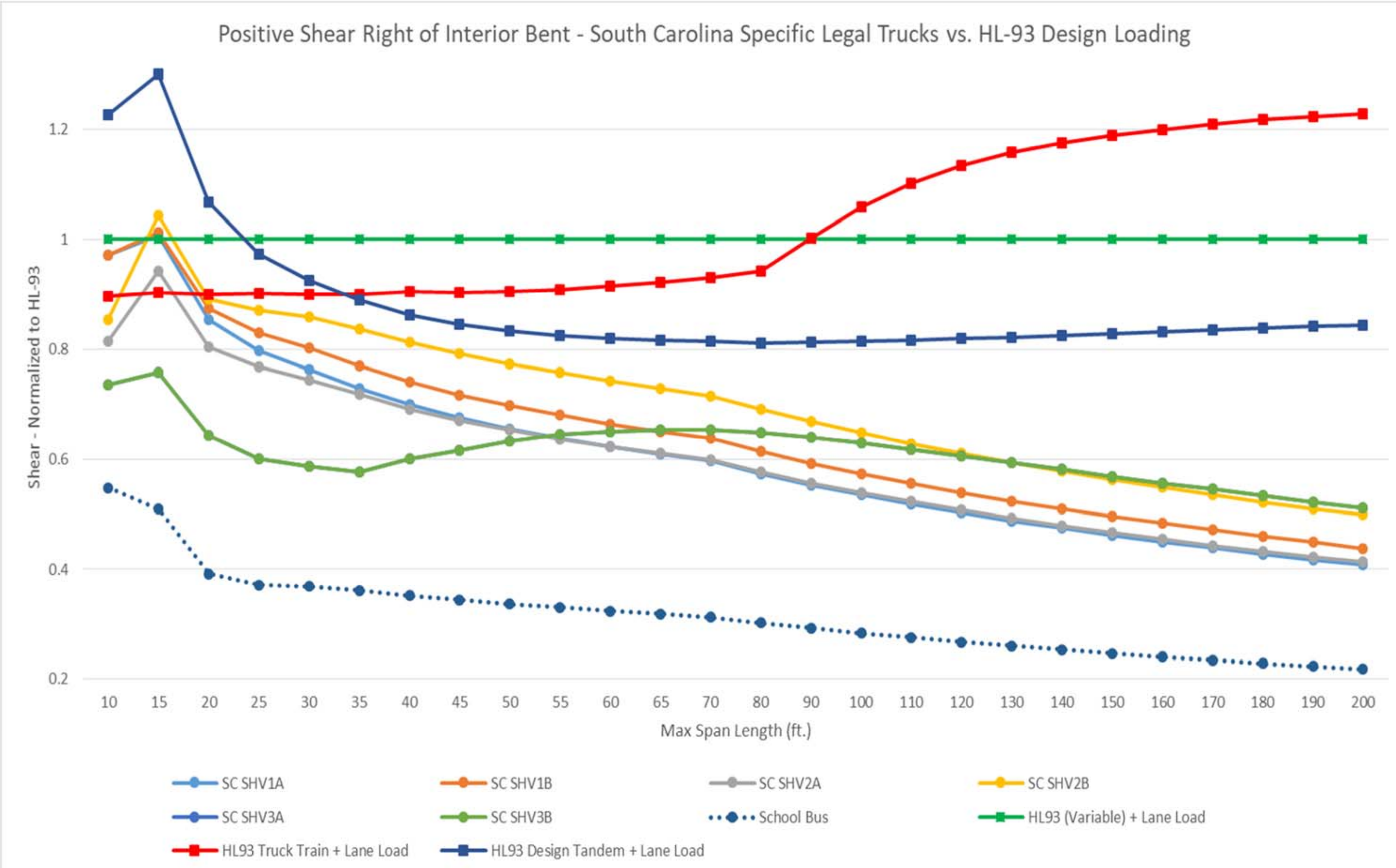


Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
170
180
190
200
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

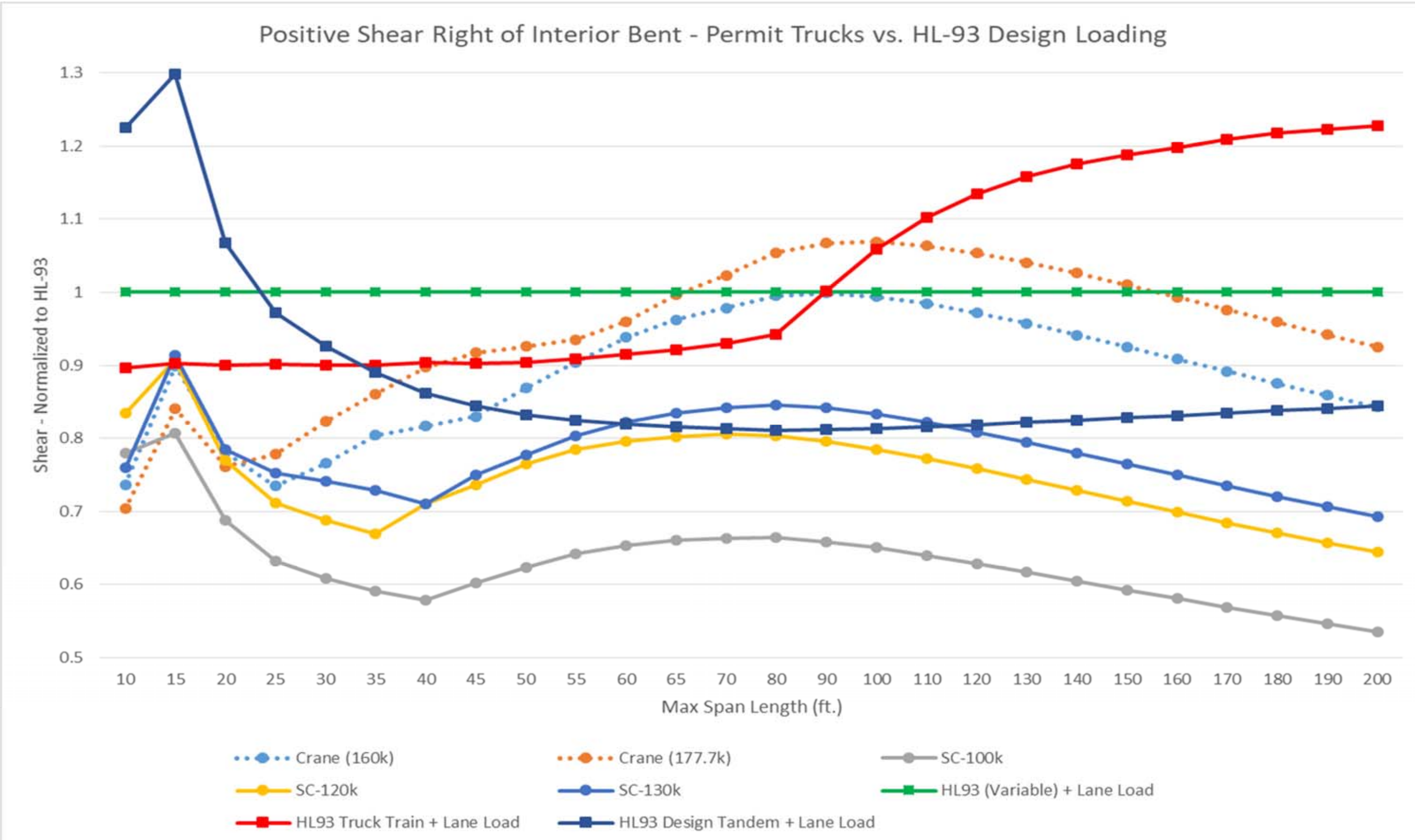
Legal Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Positive Shear Right of Interior Bent*



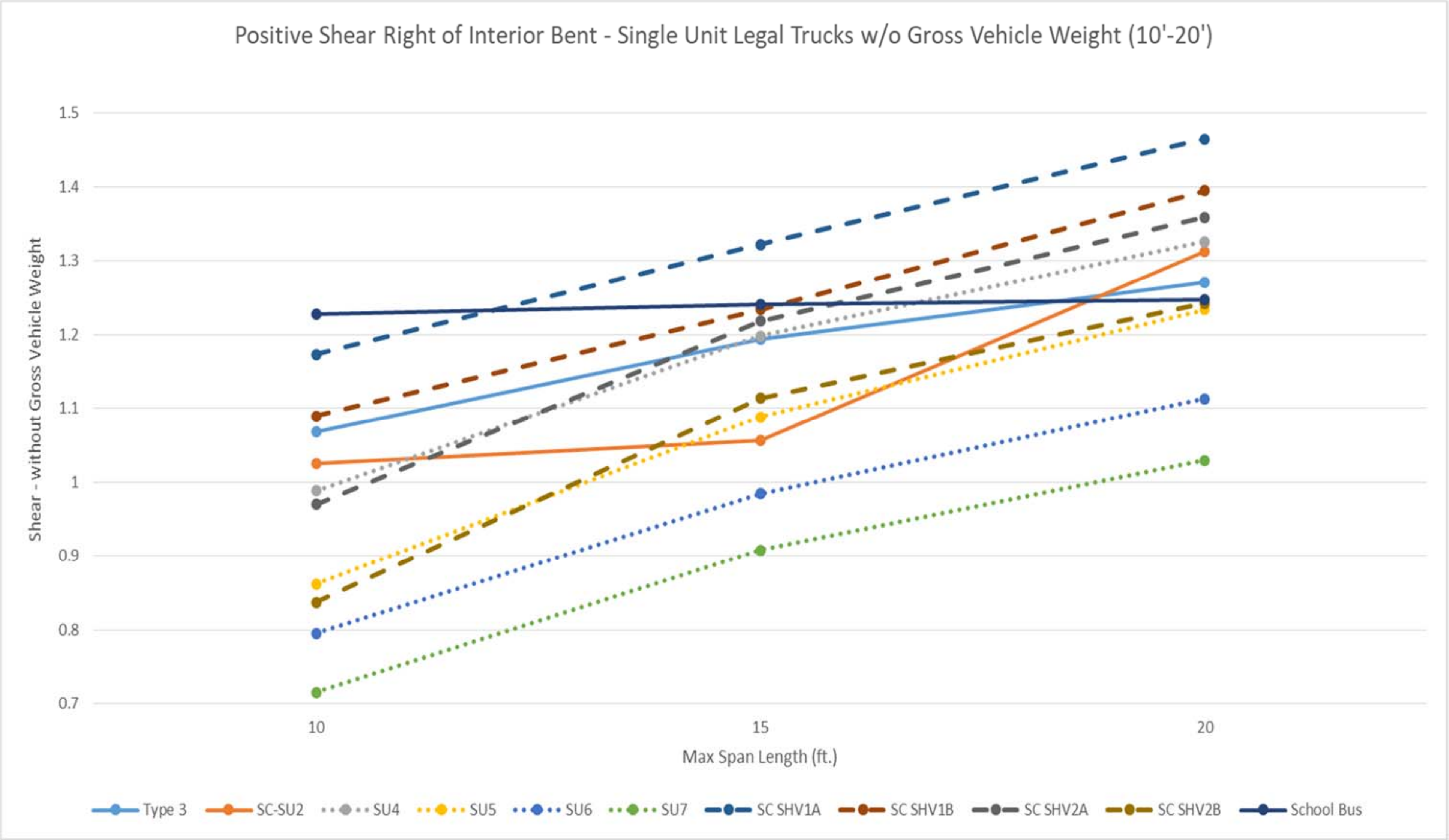

Positive Shear Right of Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Truck + Lane Load

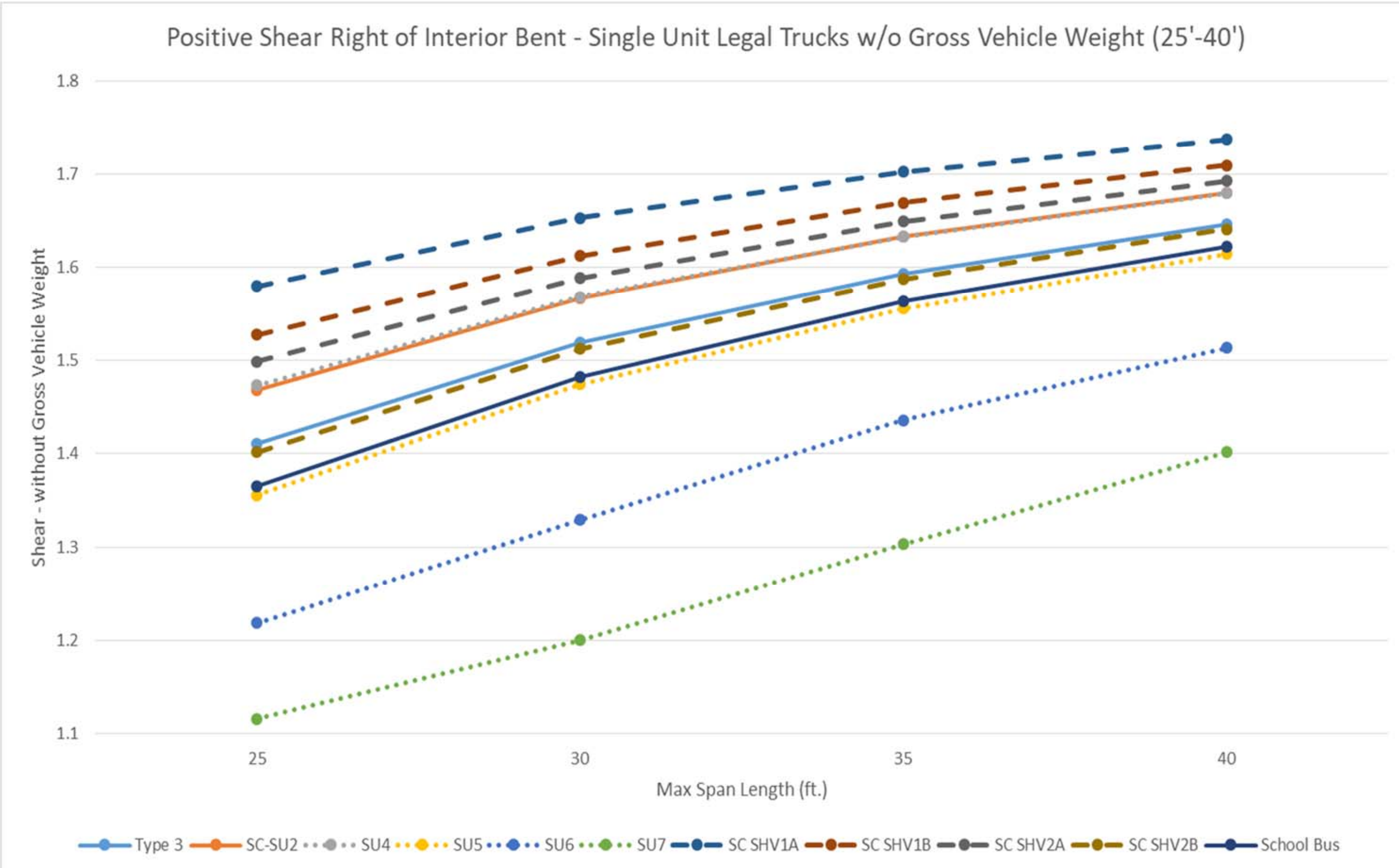

Positive Shear Right of Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

Permit Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Positive Shear Right of Interior Bent*

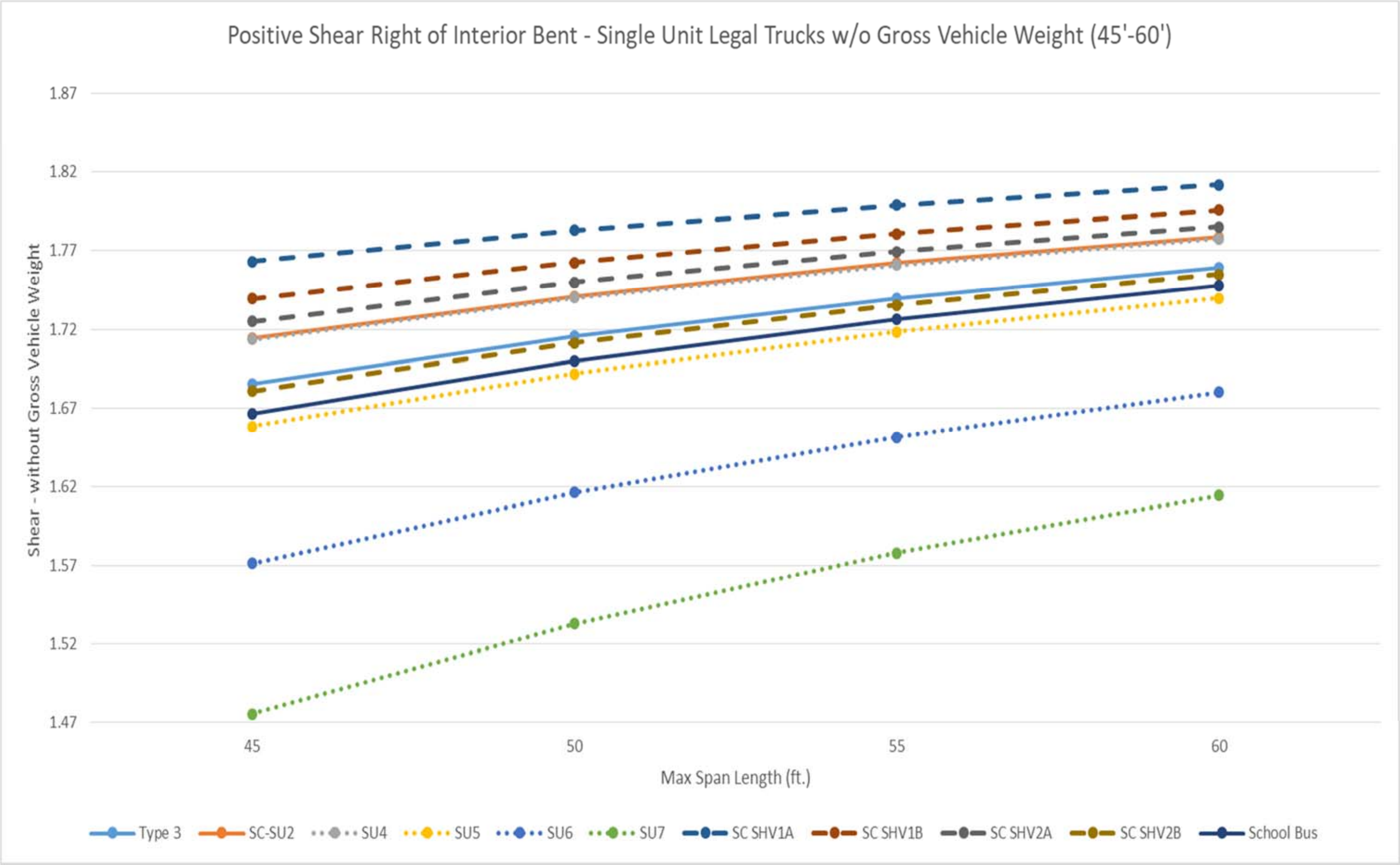


Legal Trucks: 2-Span (Without Gross Vehicle Weight) – *Positive Shear Right of Interior Bent*

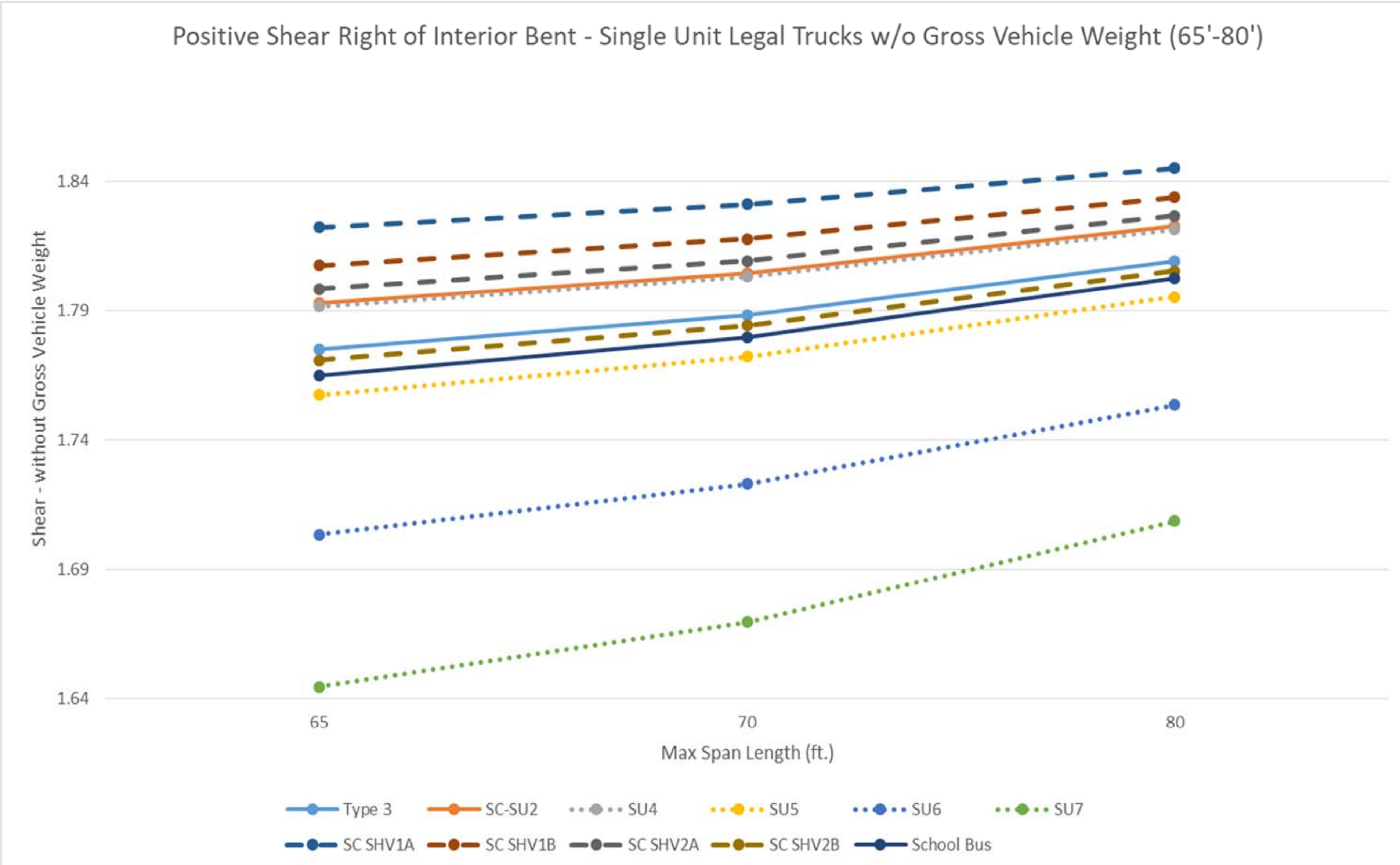




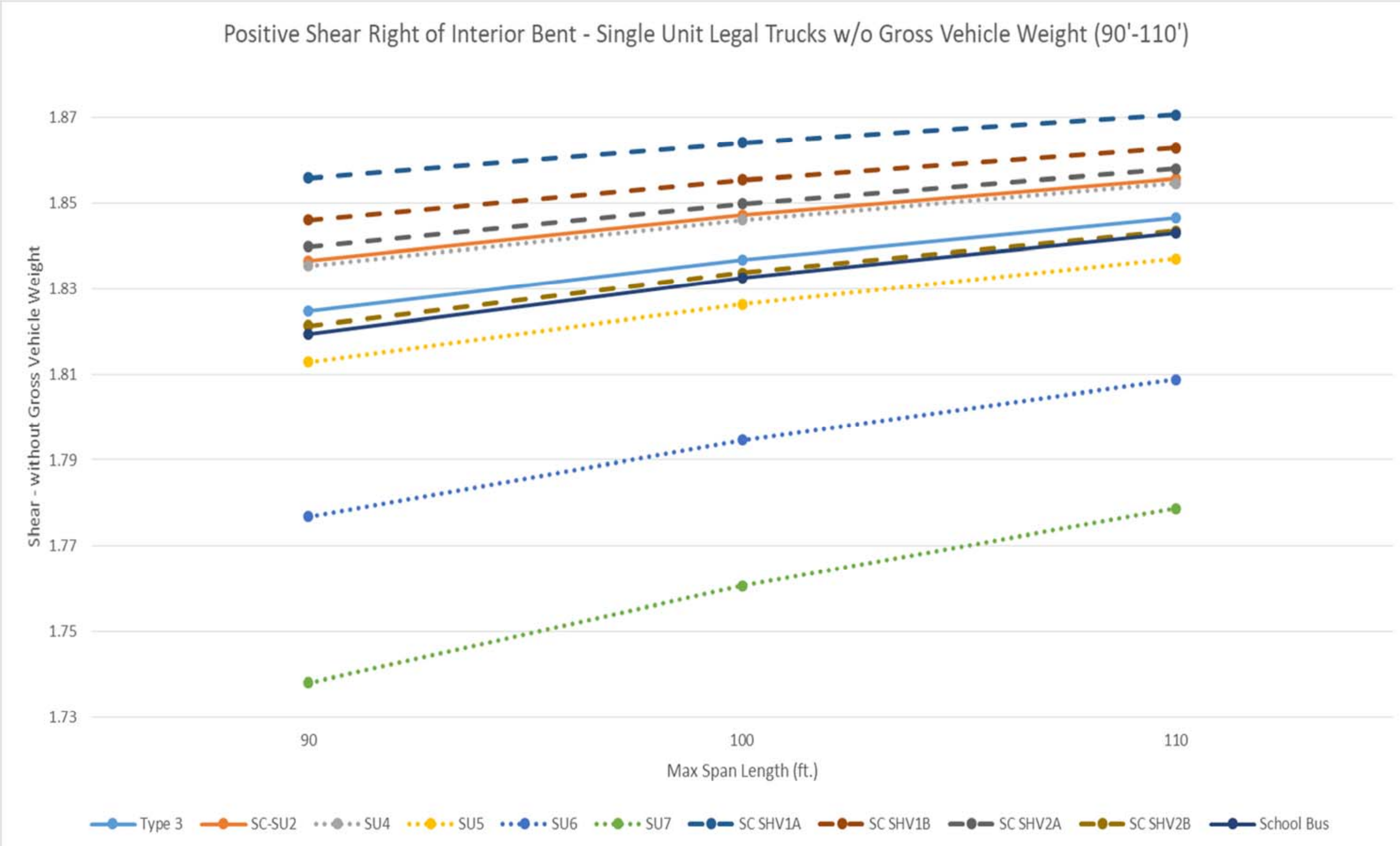
Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
Shear - without Gross Vehicle Weight
25
30
35
40
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

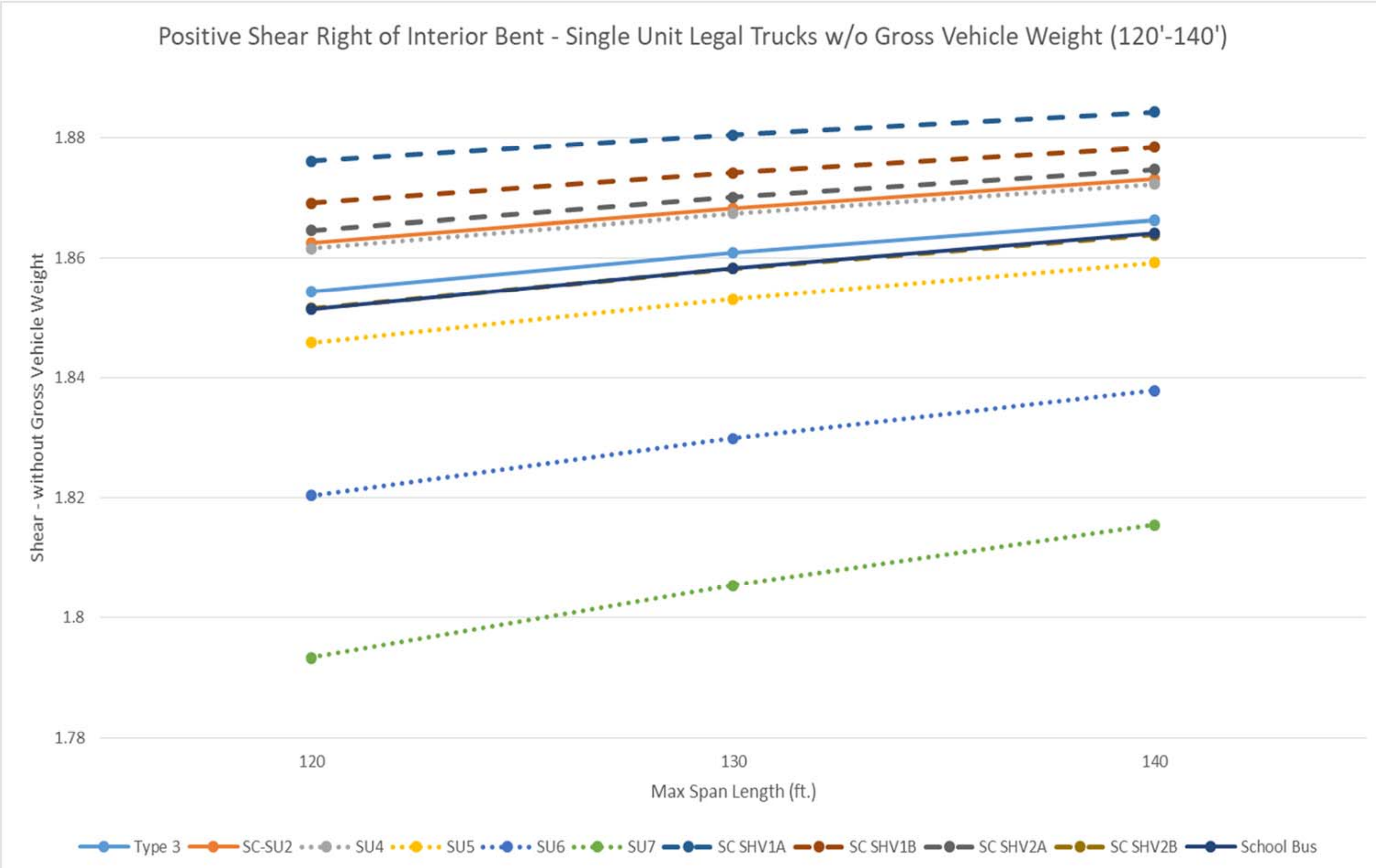


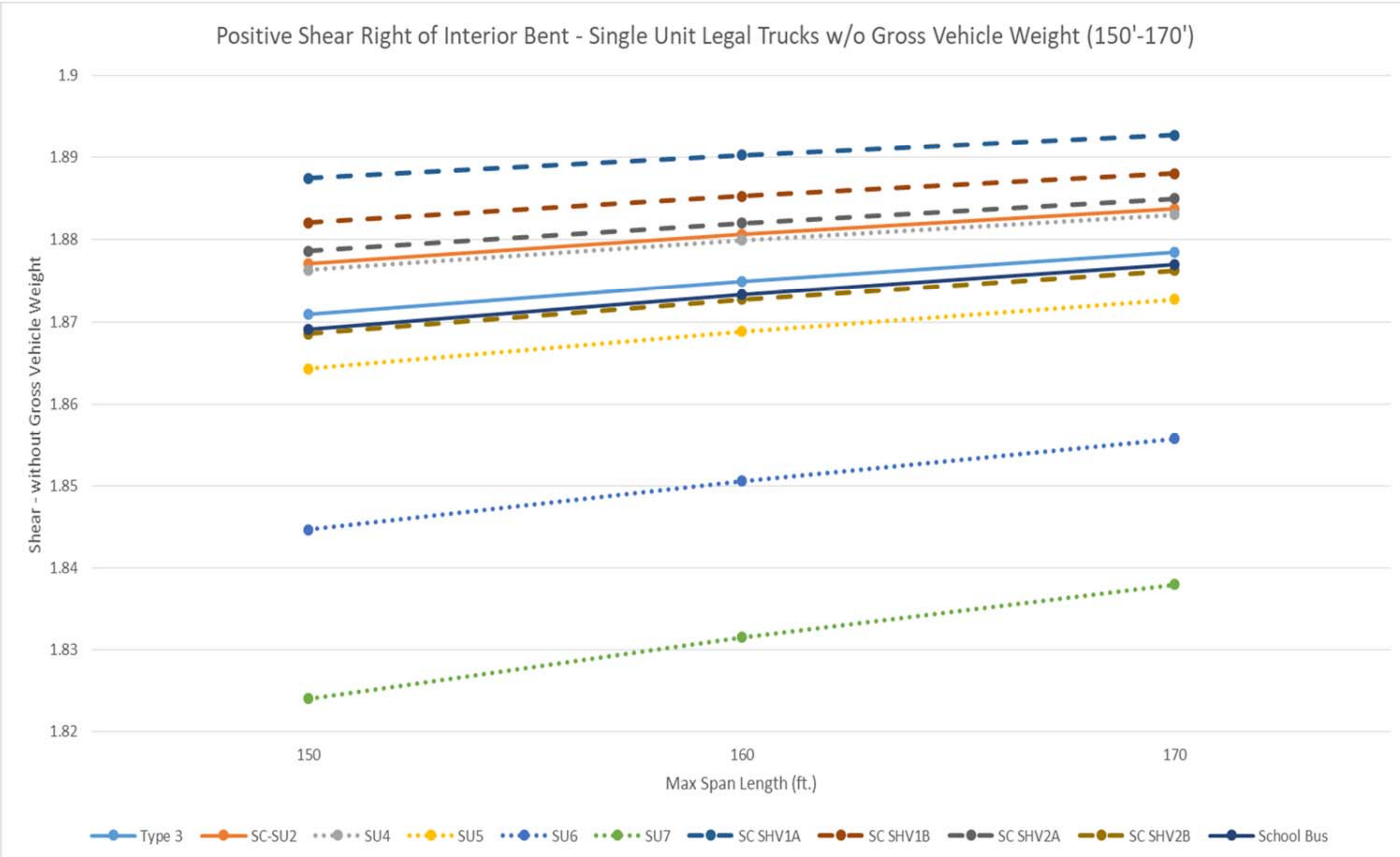
Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.87
1.82
1.77
1.72
1.67
1.62
1.57
1.52
1.47
Shear - without Gross Vehicle Weight
45
50
55
60
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

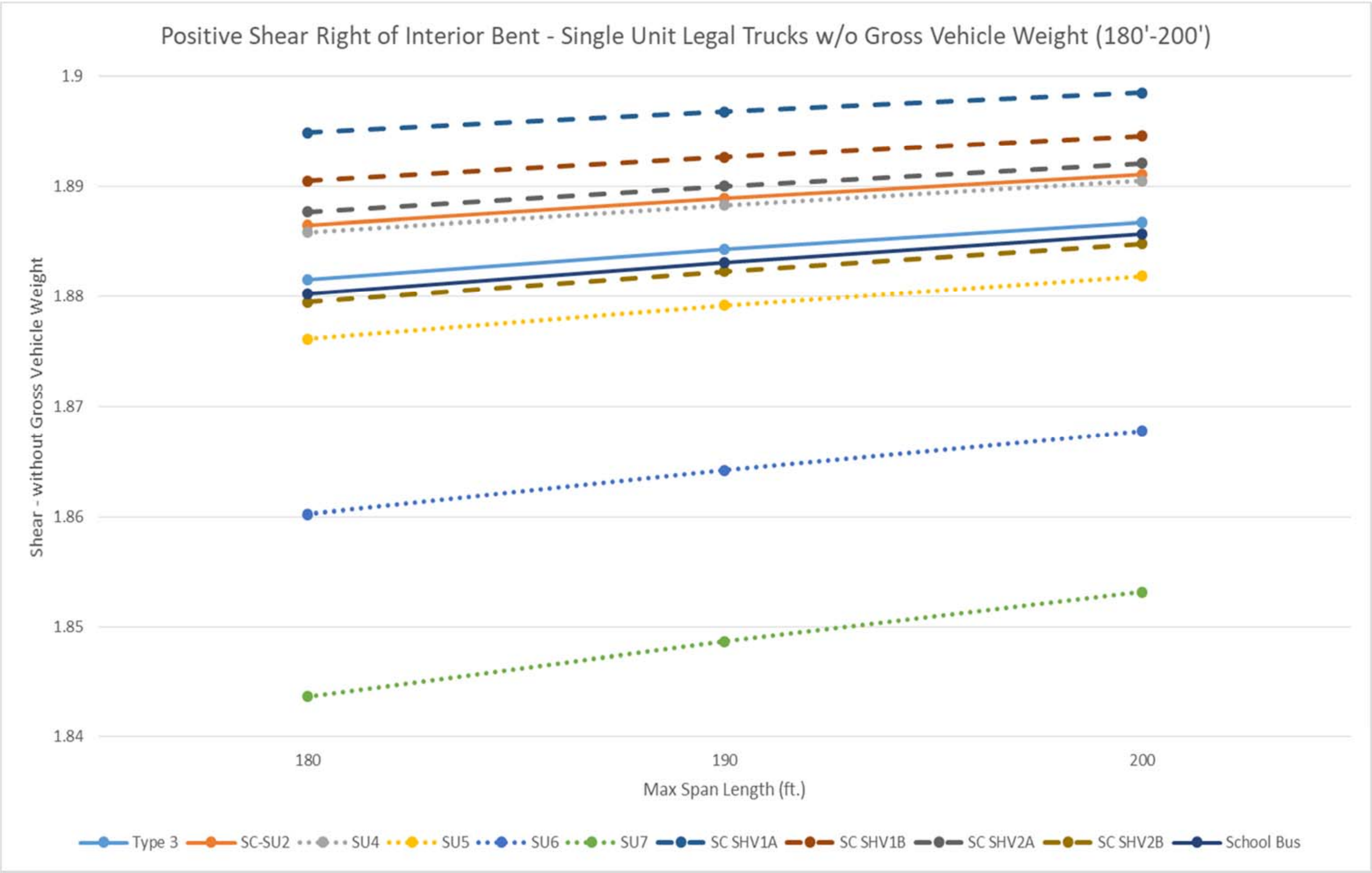


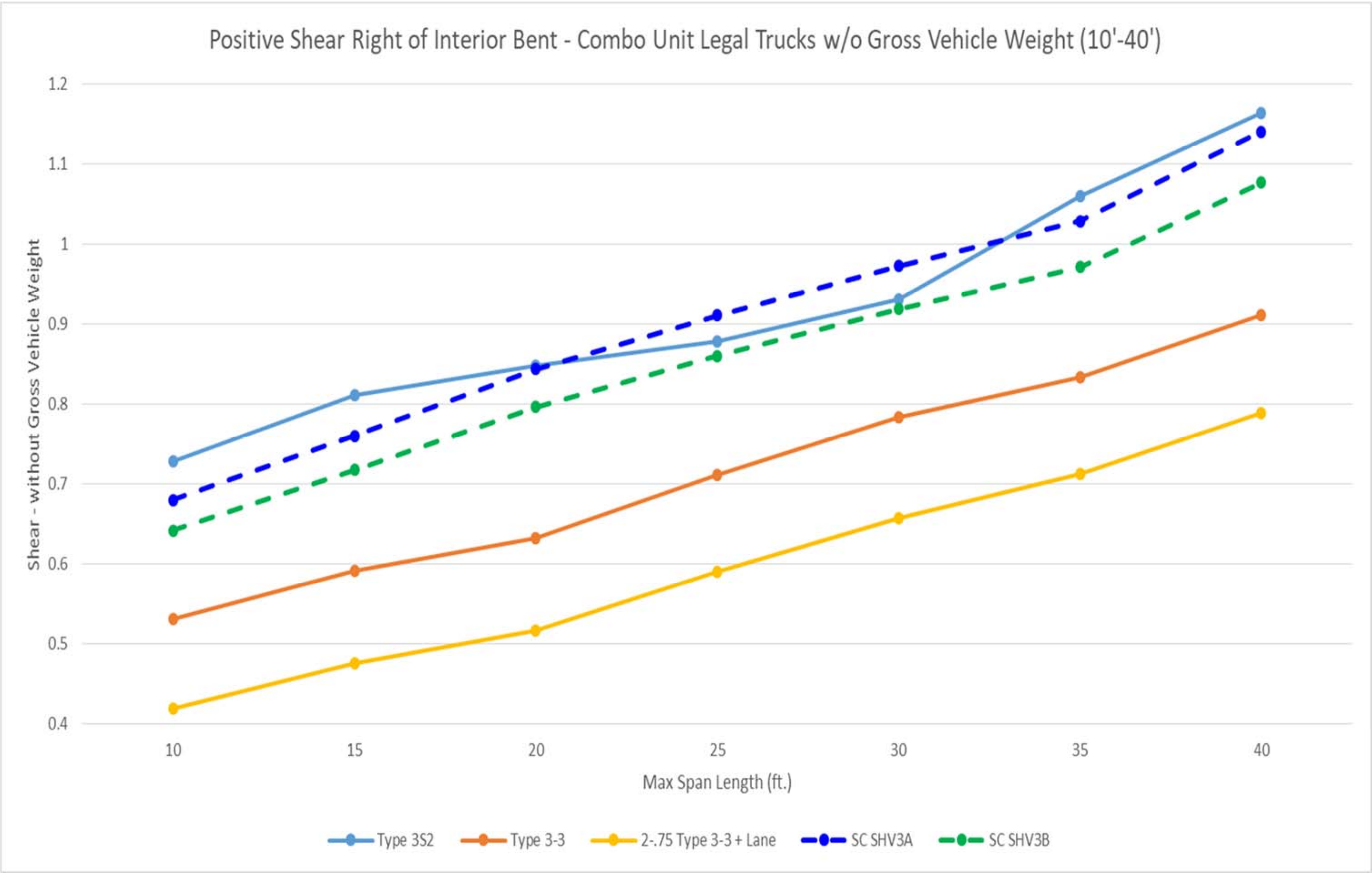
Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
Shear - without Gross Vehicle Weight
1.84
1.79
1.74
1.69
1.64
65
70
80
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

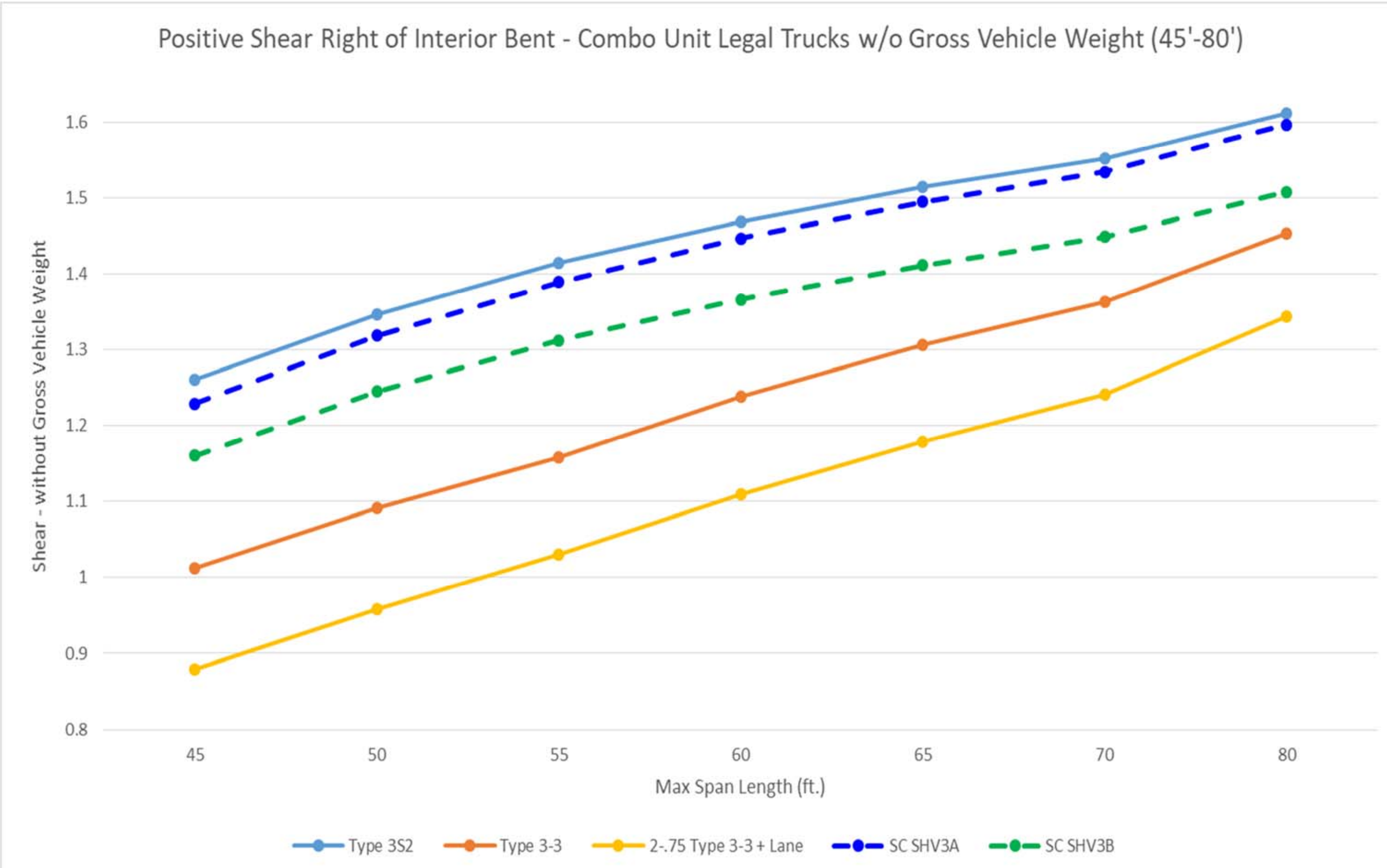

Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
1.87
1.85
1.83
1.81
1.79
1.77
1.75
1.73
90
100
110
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

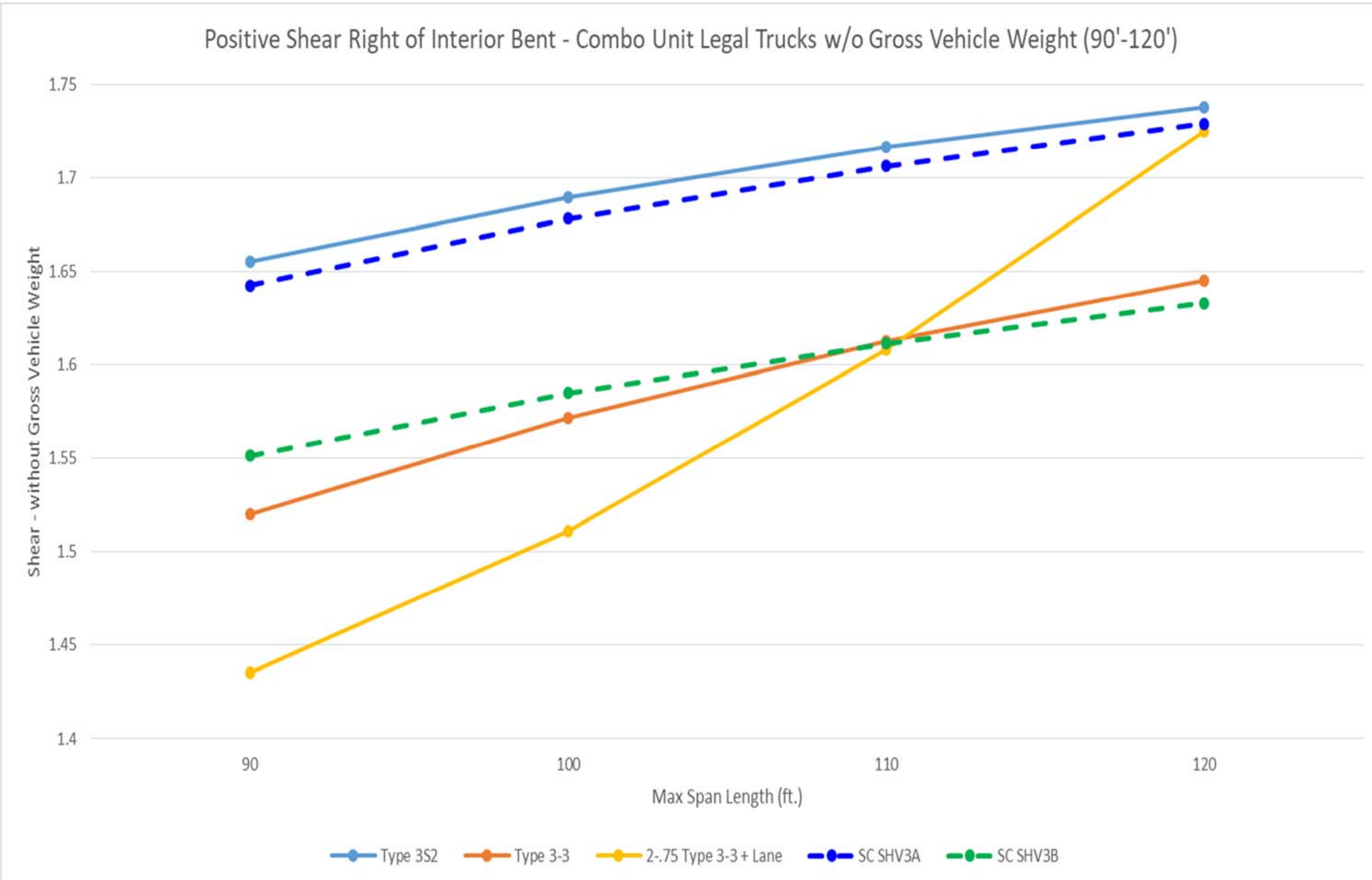

Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
1.88
1.86
1.84
1.82
1.8
1.78
120
130
140
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
1.9
1.89
1.88
1.87
1.86
1.85
1.84
1.83
1.82
Shear - without Gross Vehicle Weight
150
160
170
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

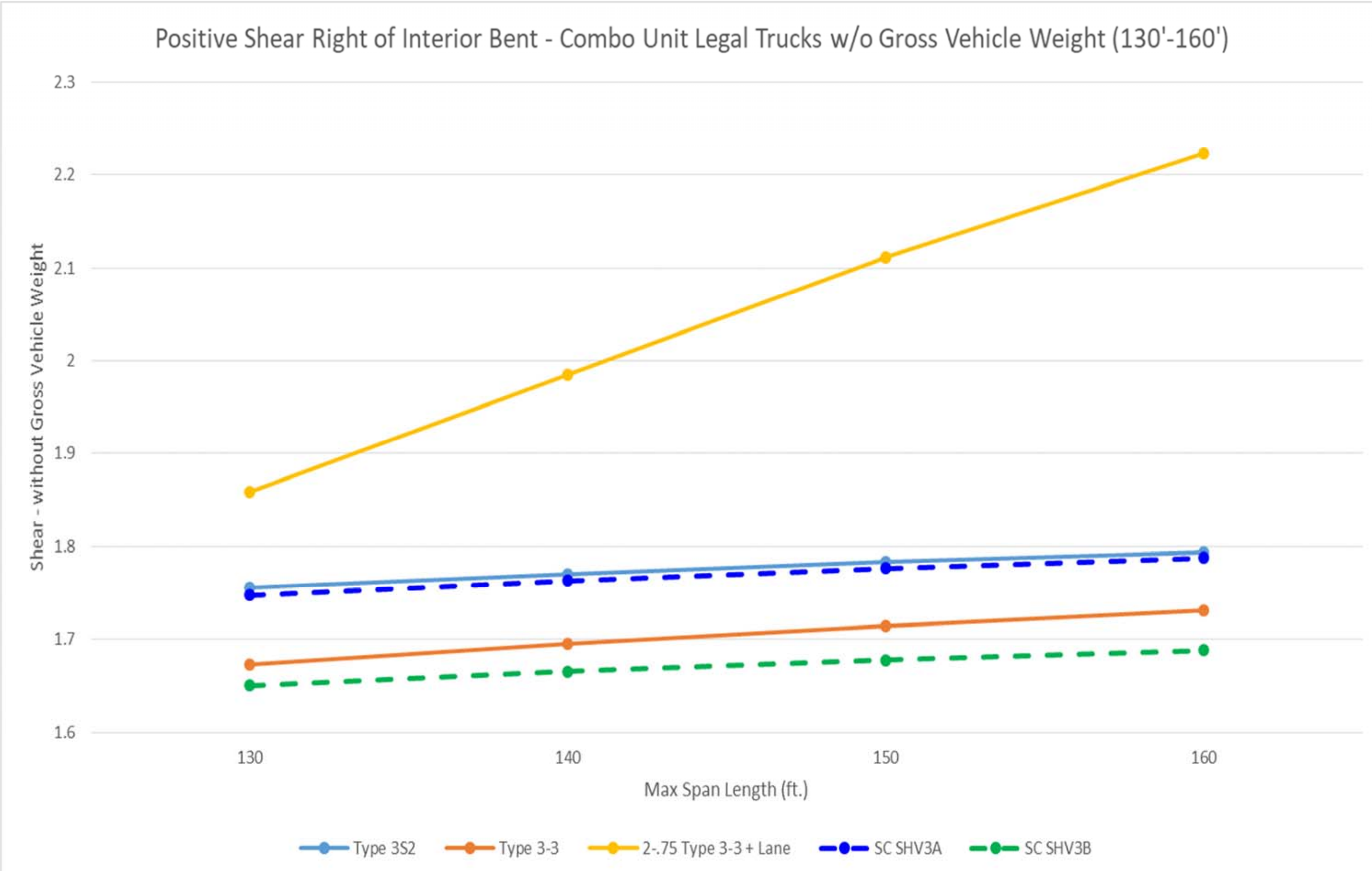

Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
1.9
1.89
1.88
1.87
1.86
1.85
1.84
Shear - without Gross Vehicle Weight
180
190
200
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
10
15
20
25
30
35
40
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

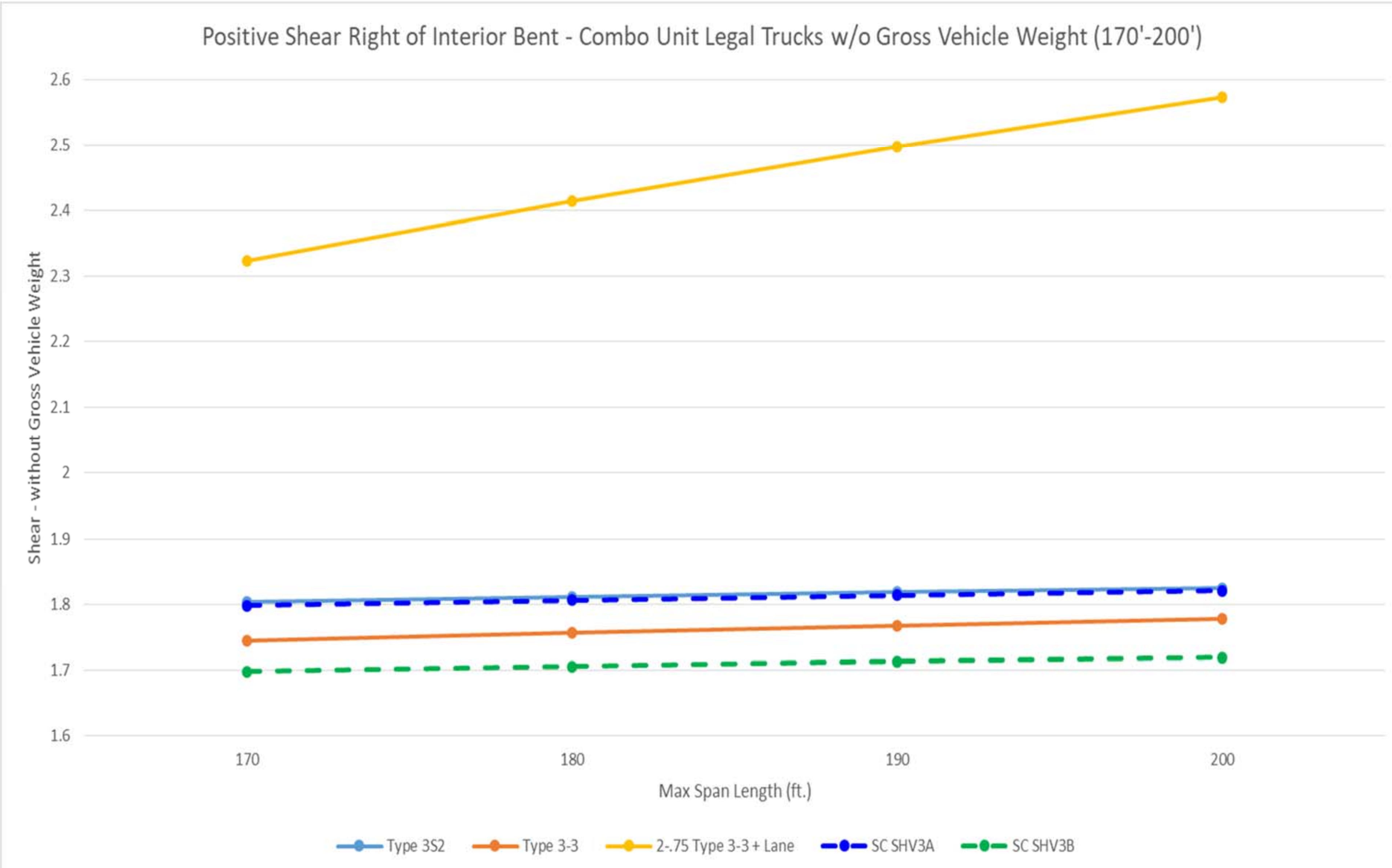

Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
45
50
55
60
65
70
80
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



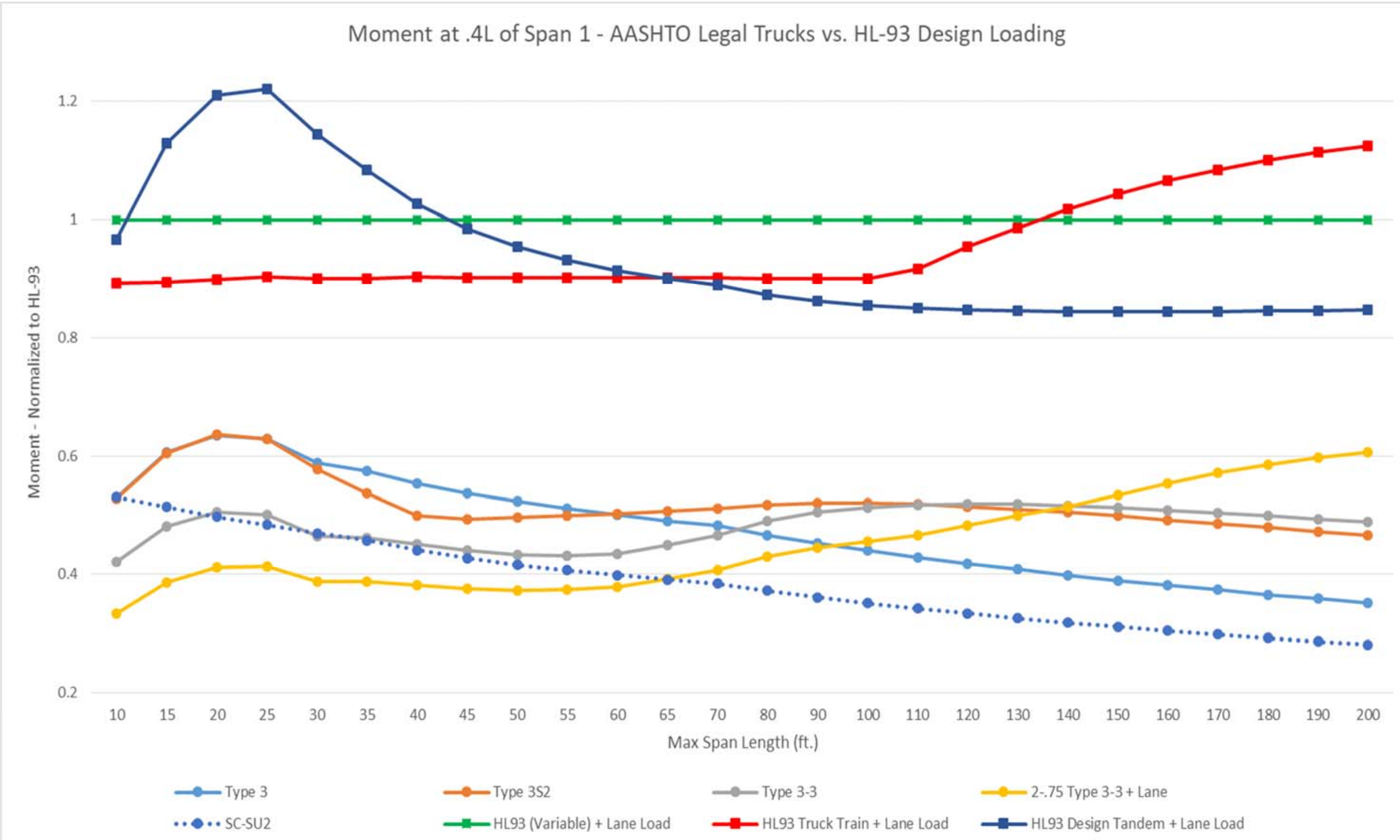
Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
1.75
1.7
1.65
1.6
1.55
1.5
1.45
1.4
Shear - without Gross Vehicle Weight
90
100
110
120
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

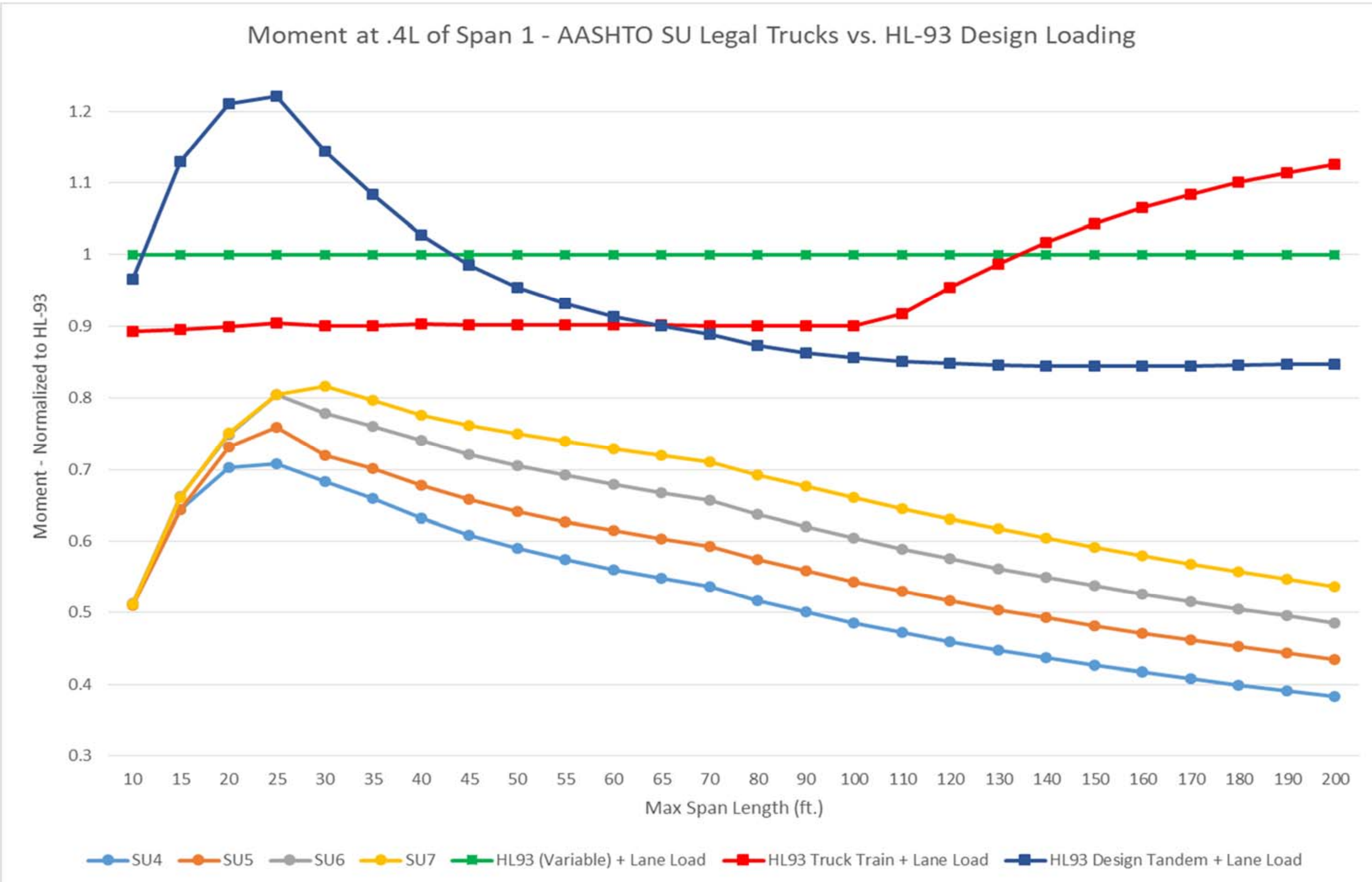


Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
Shear - without Gross Vehicle Weight
130
140
150
160
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

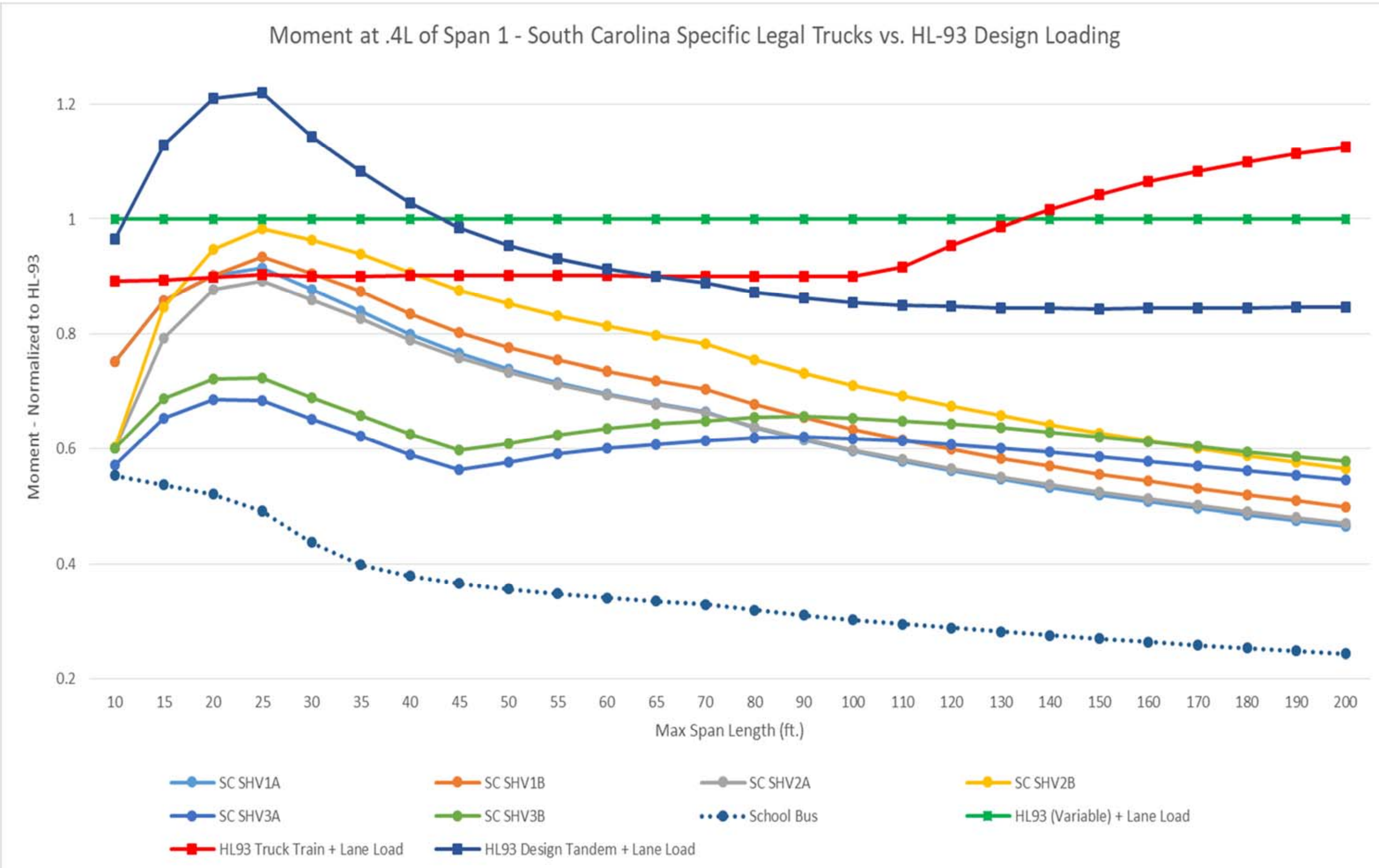

Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
170
180
190
200
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Moment at .4L of Span 1*

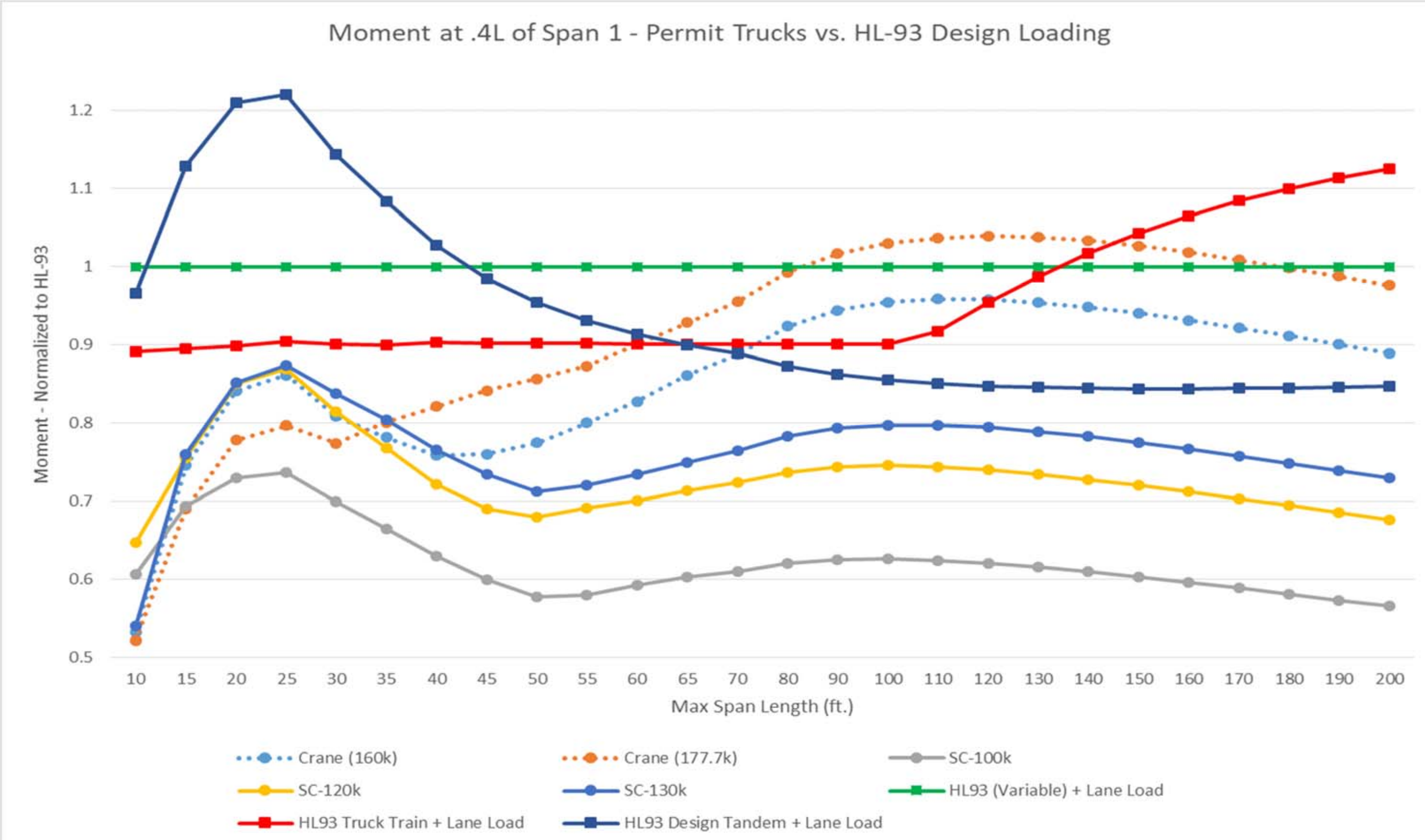




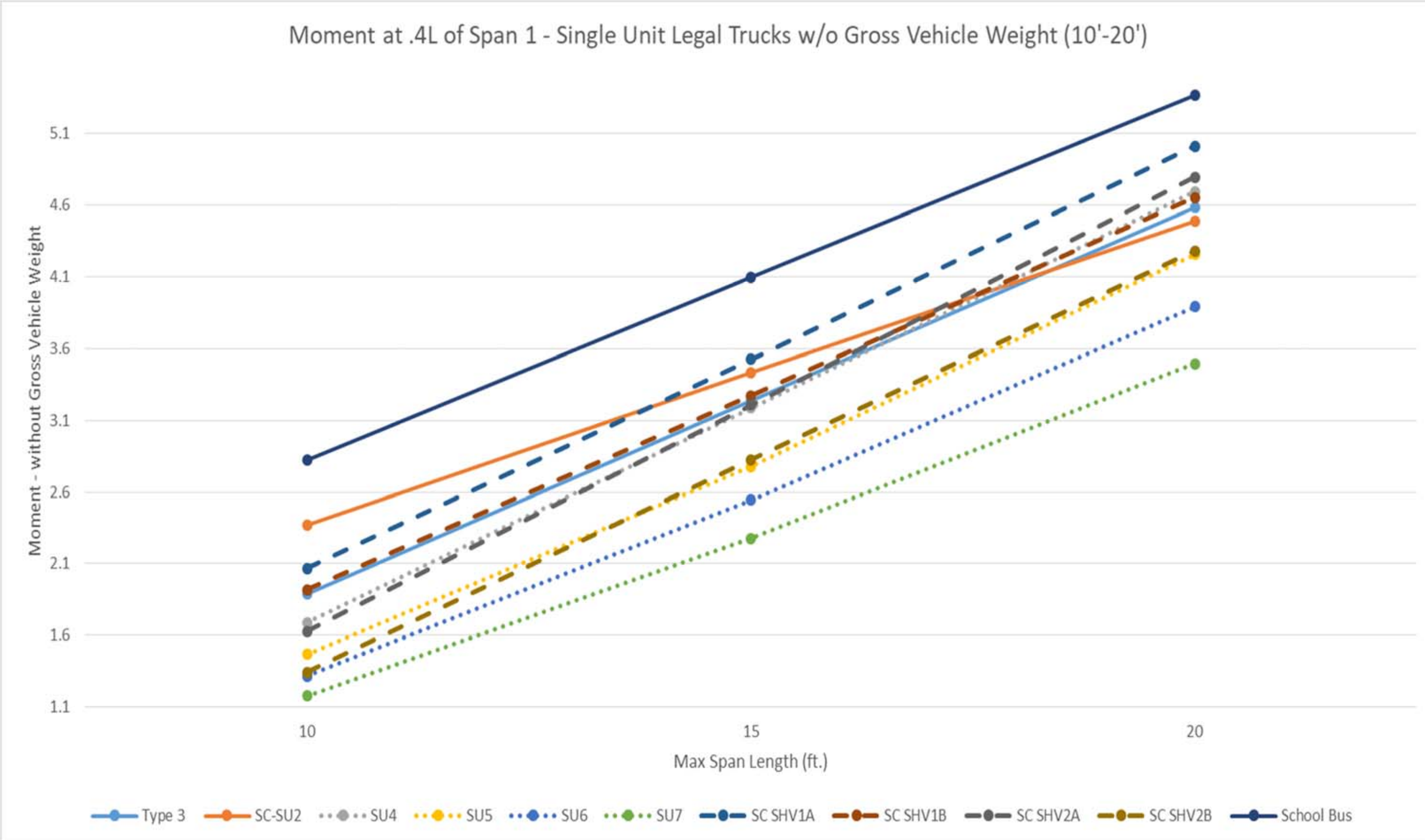
Moment at .4L of Span 1 - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

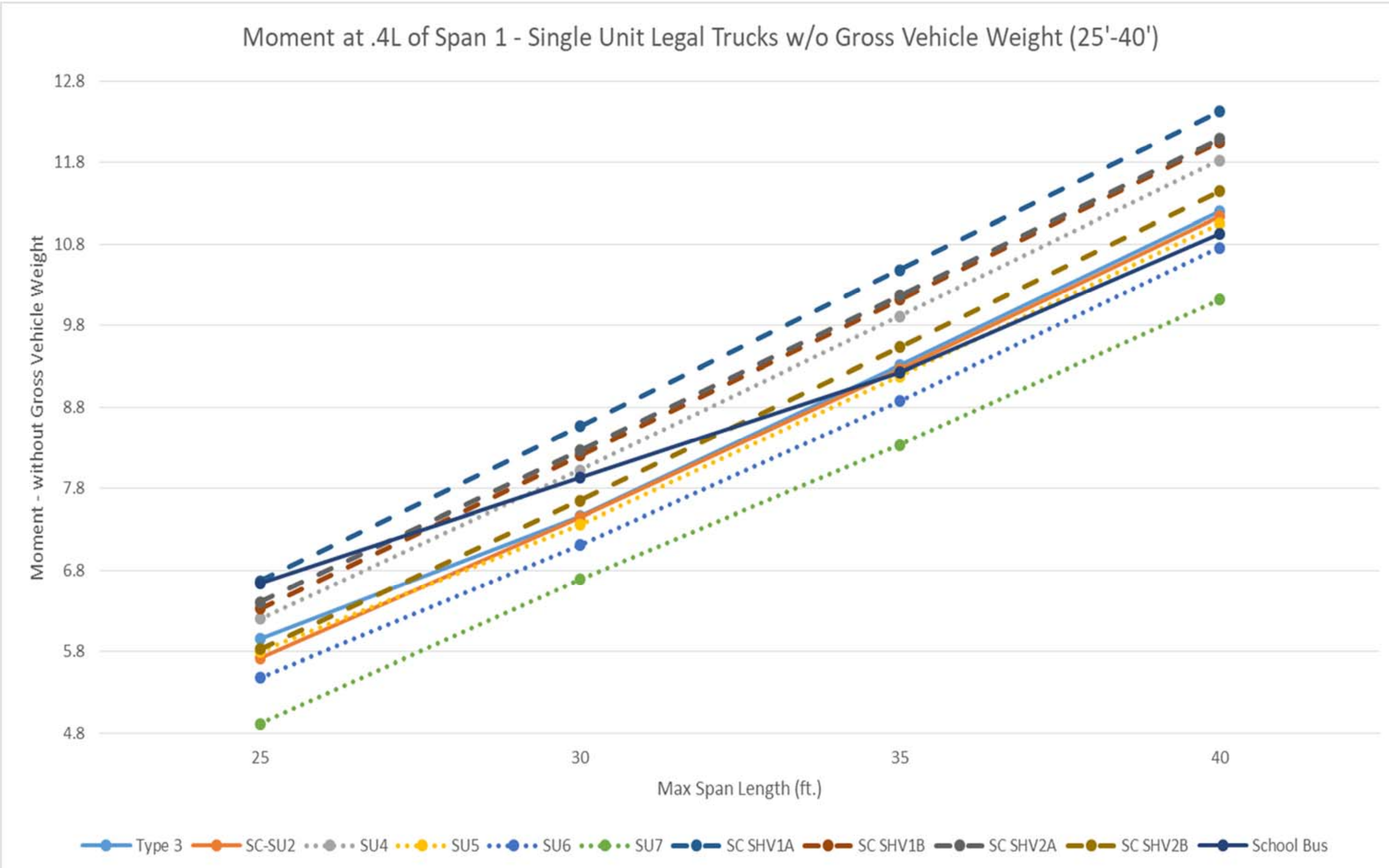

Moment at .4L of Span 1 - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

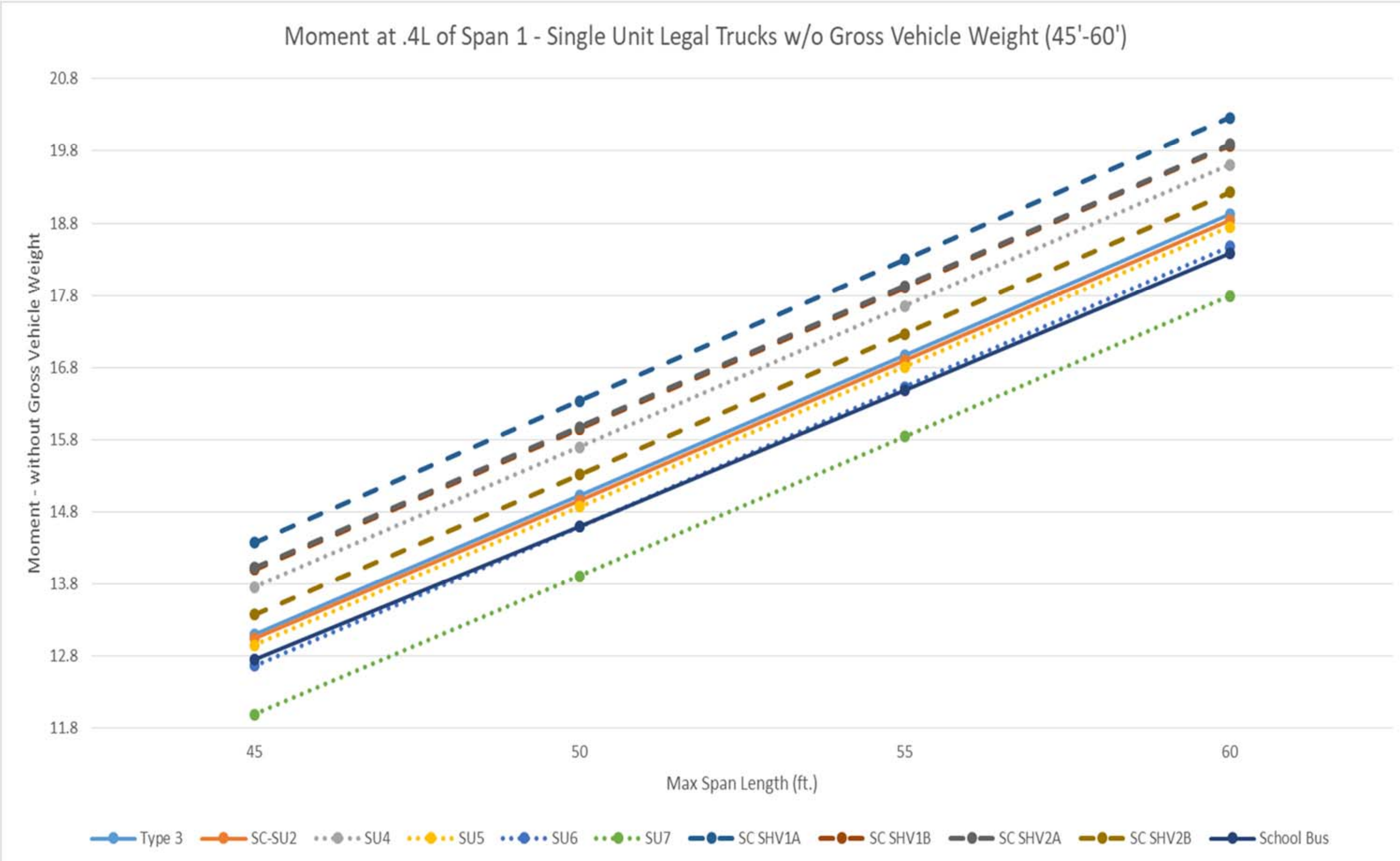
Permit Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Moment at .4L of Span 1*

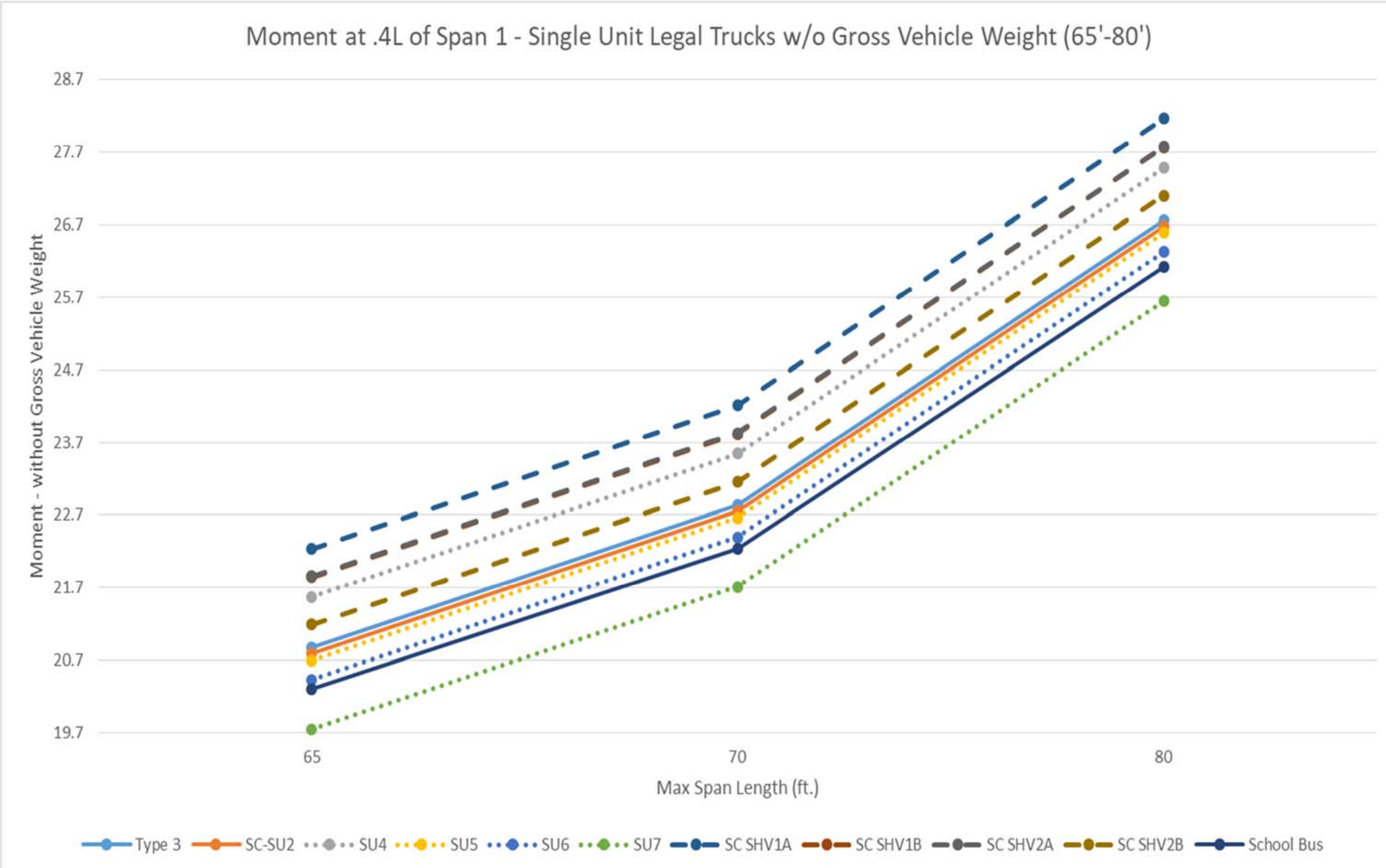


Legal Trucks: 2-Span (Without Gross Vehicle Weight) – *Moment at .4L of Span 1*

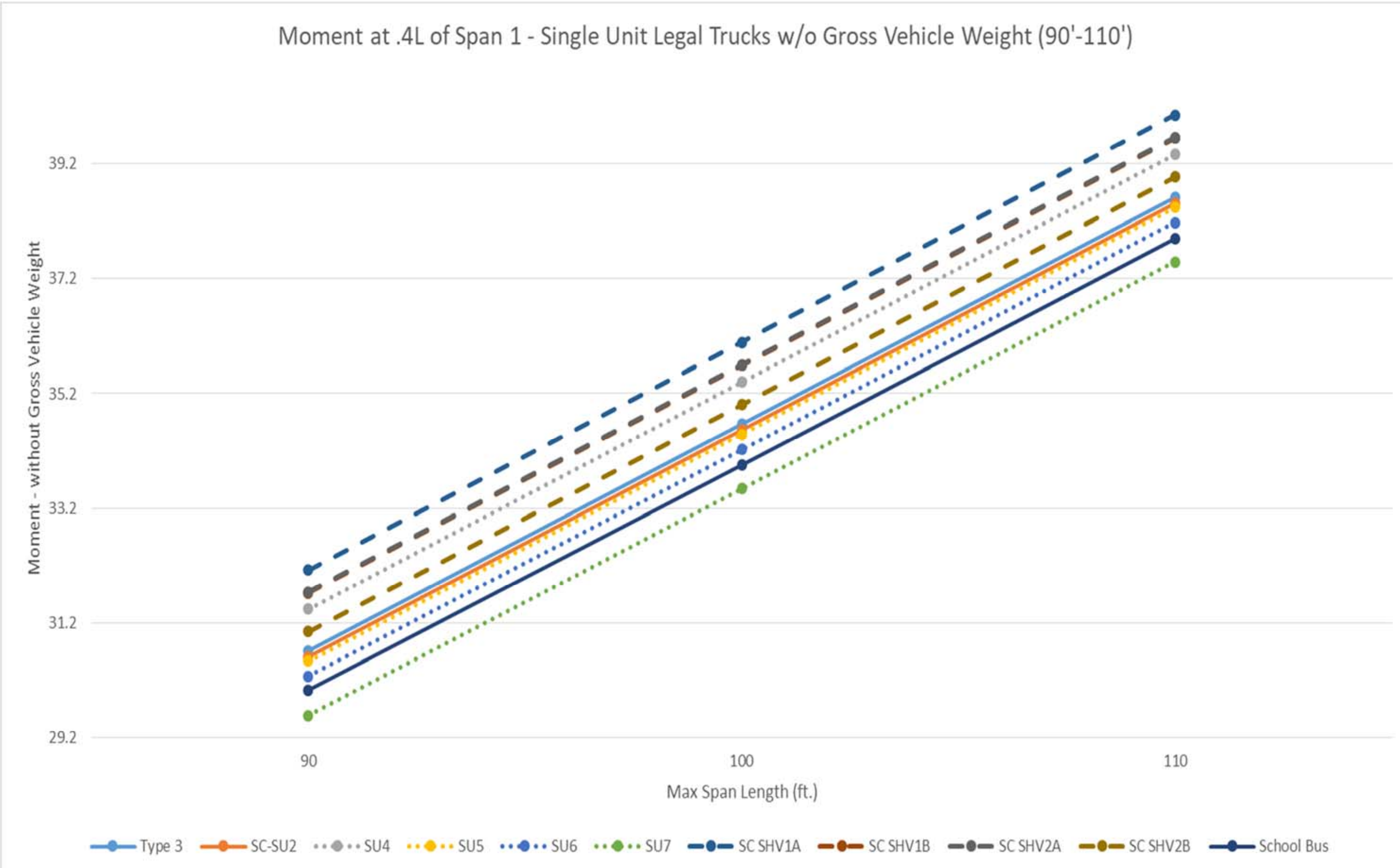


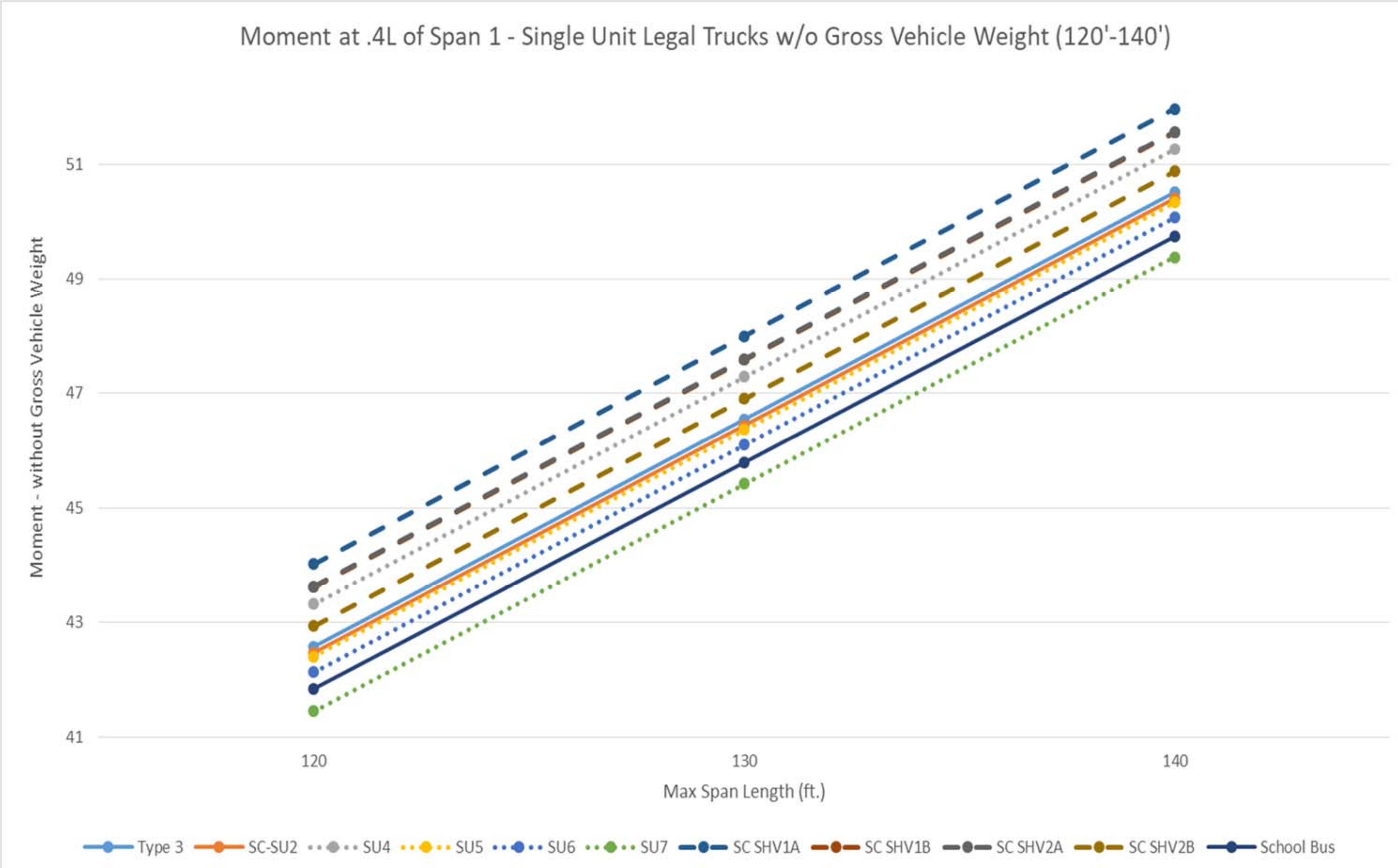

Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
12.8
11.8
10.8
9.8
8.8
7.8
6.8
5.8
4.8
Moment - without Gross Vehicle Weight
25
30
35
40
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
20.8
19.8
18.8
17.8
16.8
15.8
14.8
13.8
12.8
11.8
Moment - without Gross Vehicle Weight
45
50
55
60
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

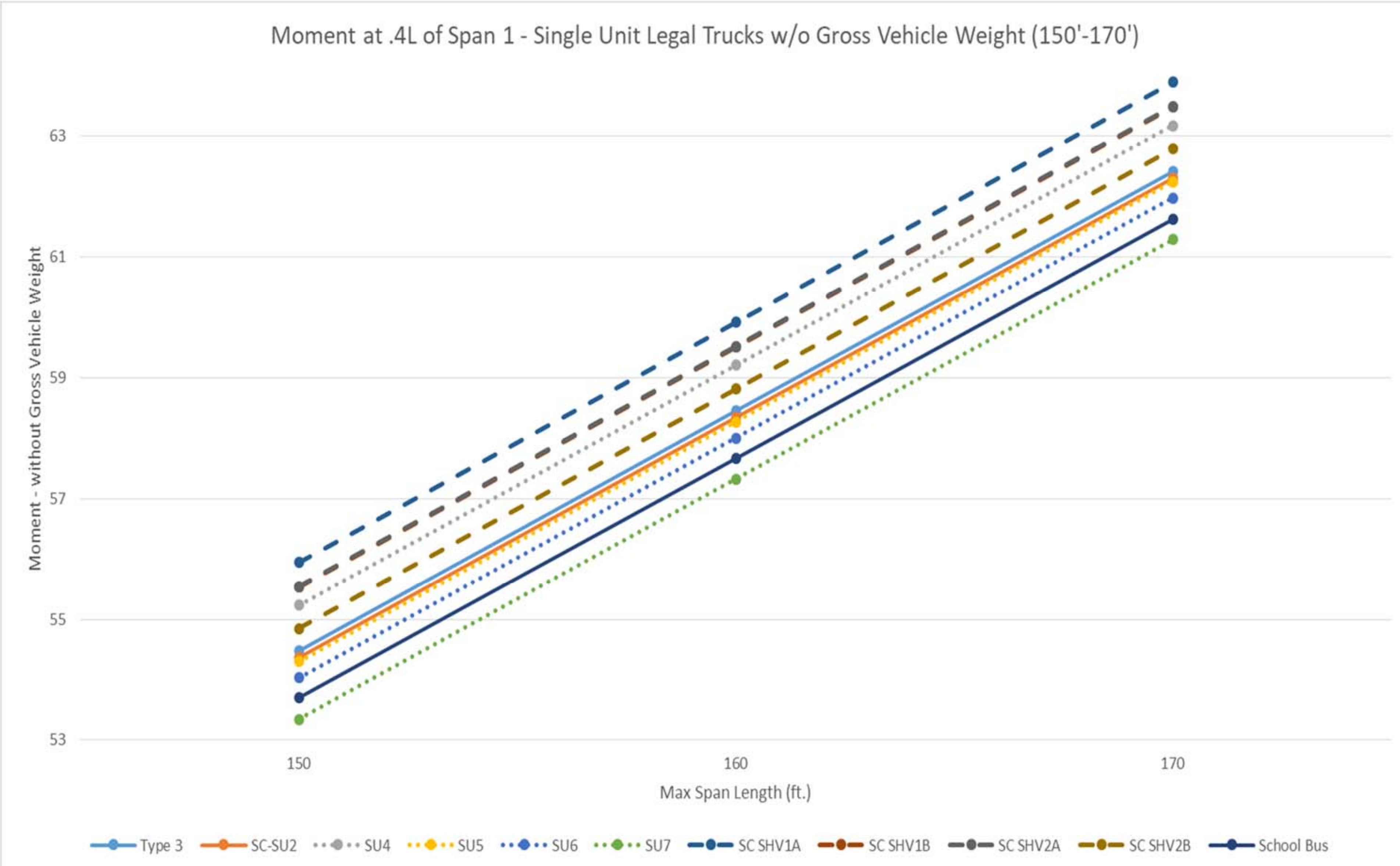


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
28.7
27.7
26.7
25.7
24.7
23.7
22.7
21.7
20.7
19.7
Moment - without Gross Vehicle Weight
65
70
80
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

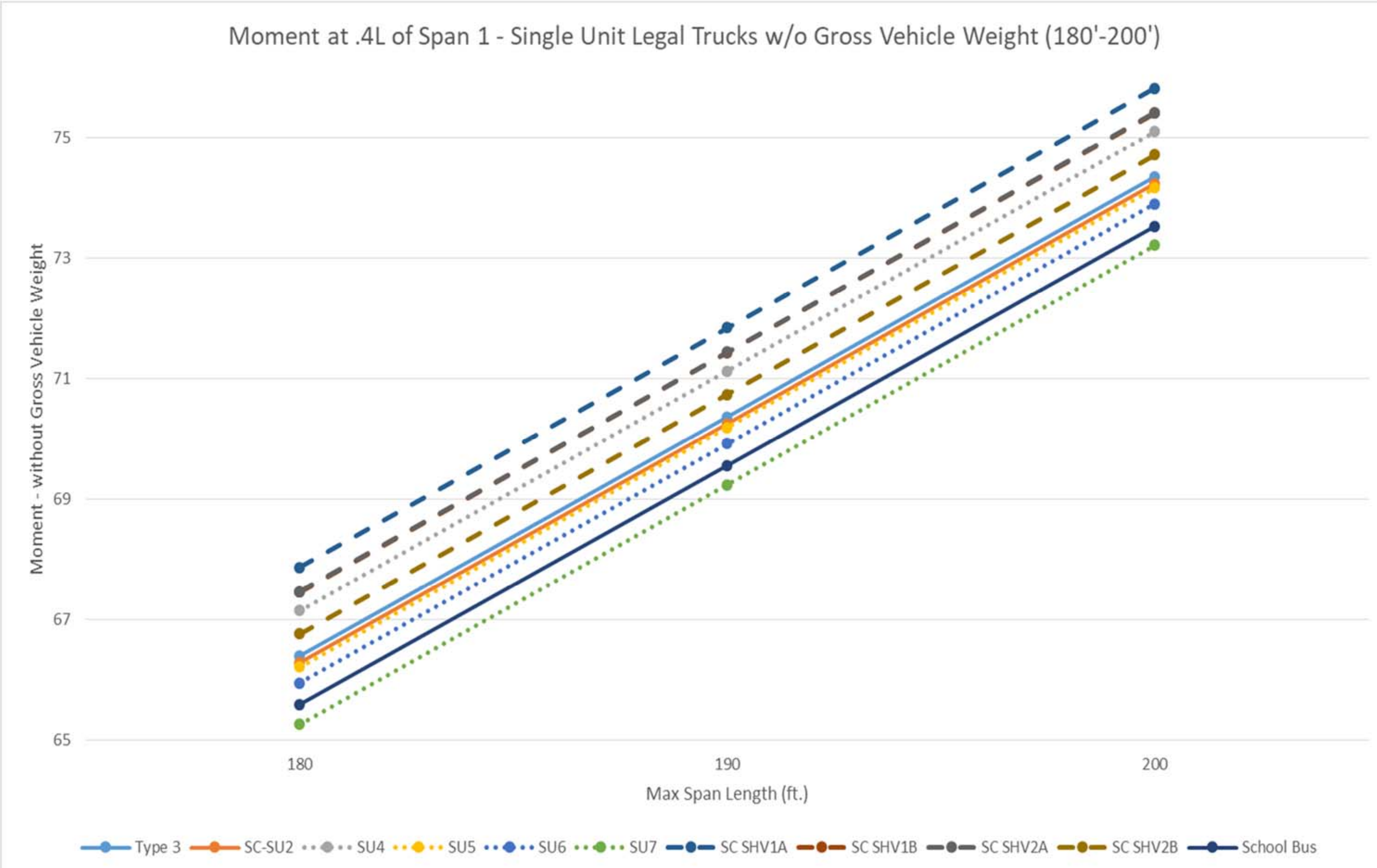

Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Moment - without Gross Vehicle Weight
39.2
37.2
35.2
33.2
31.2
29.2
90
100
110
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



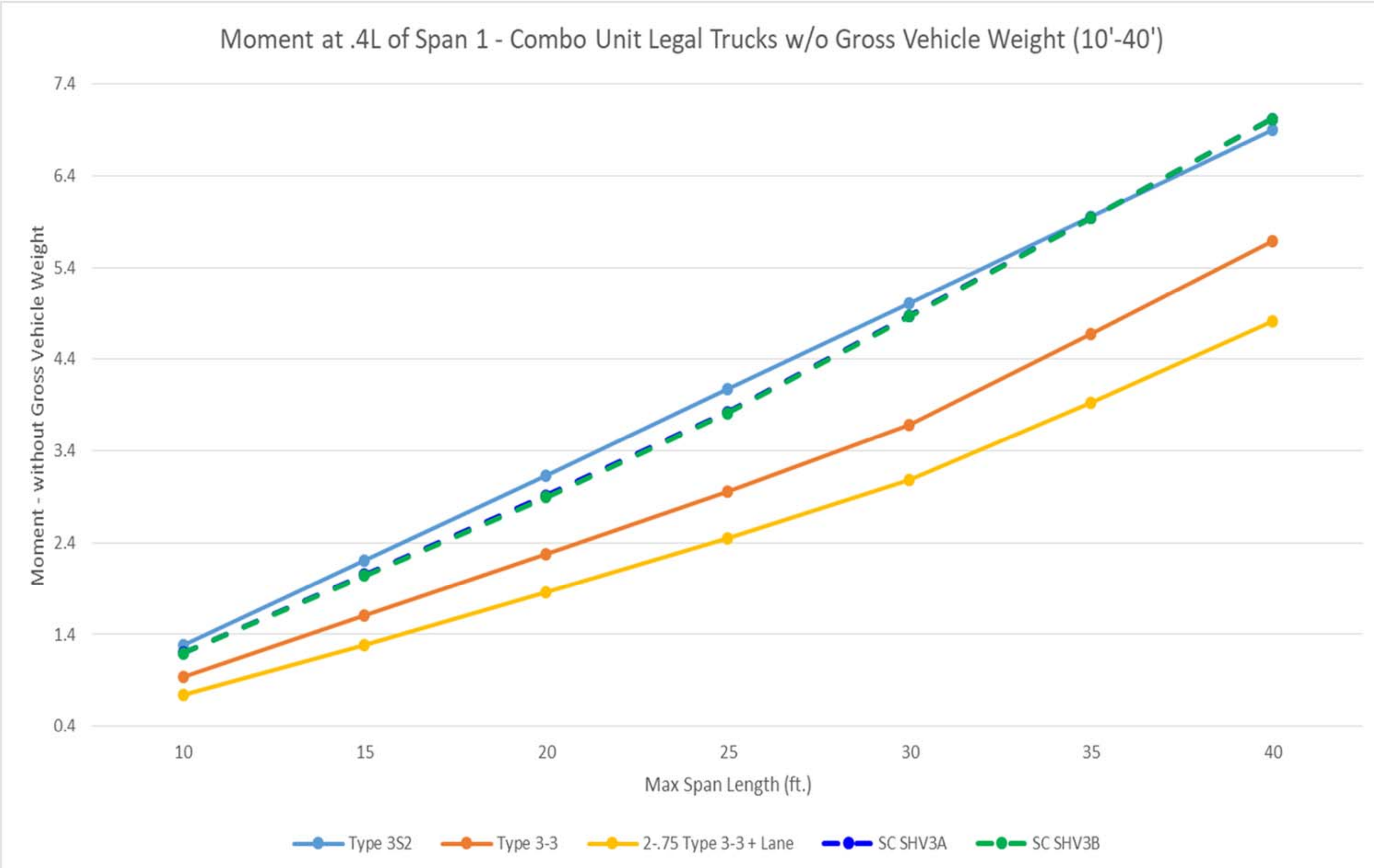
Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Moment - without Gross Vehicle Weight
51
49
47
45
43
41
120
130
140
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

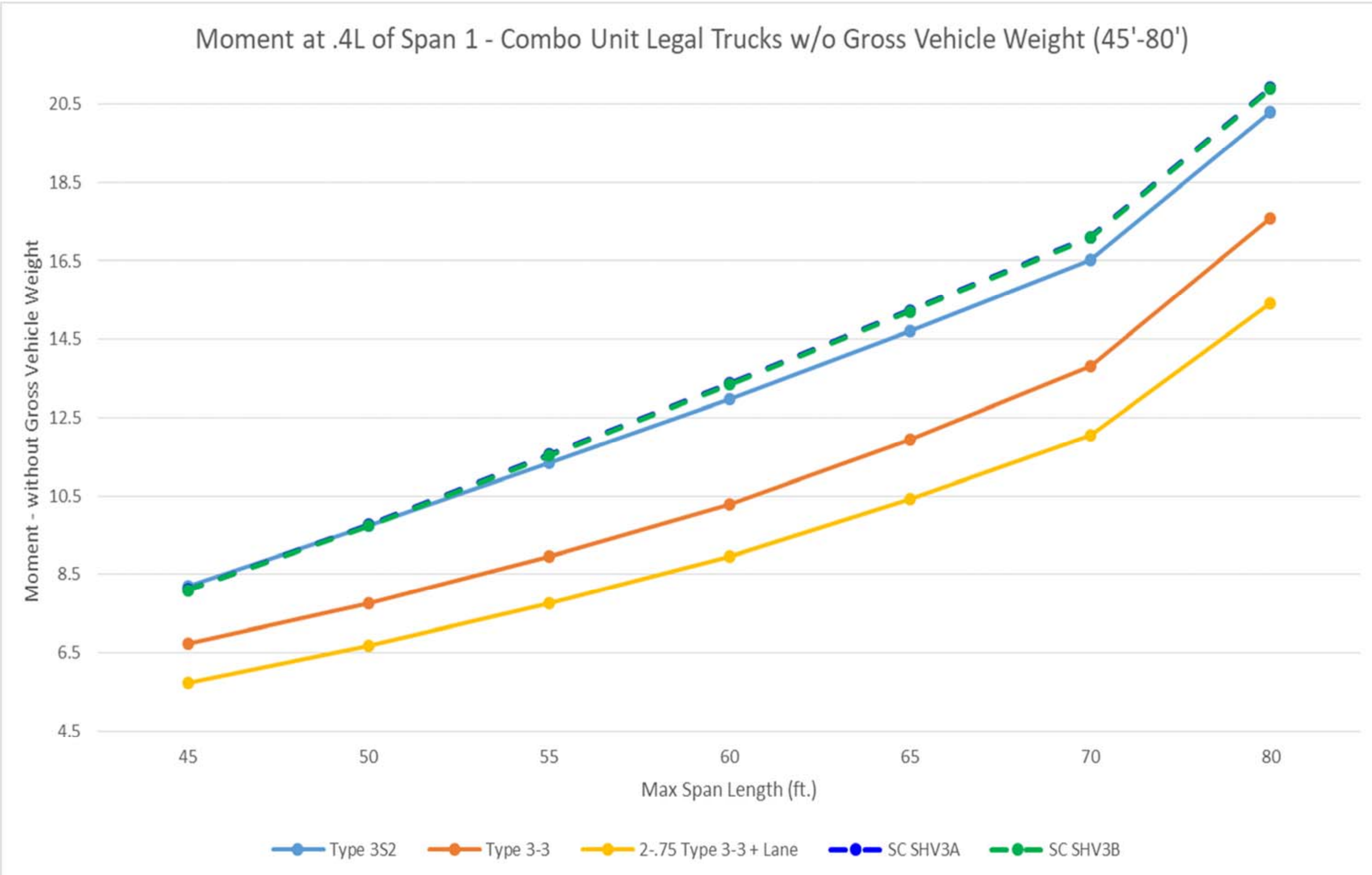


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Moment - without Gross Vehicle Weight
63
61
59
57
55
53
150
160
170
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

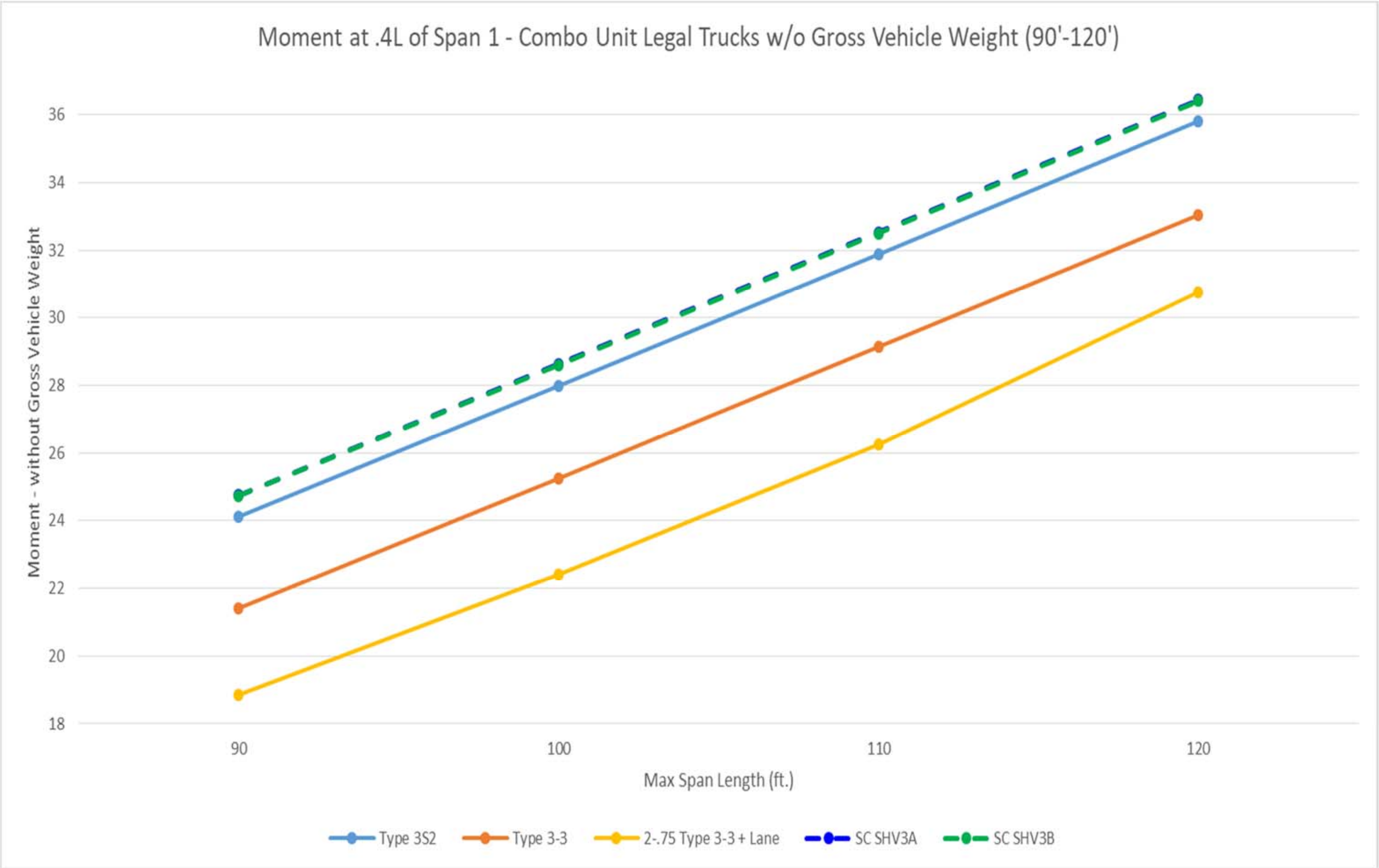


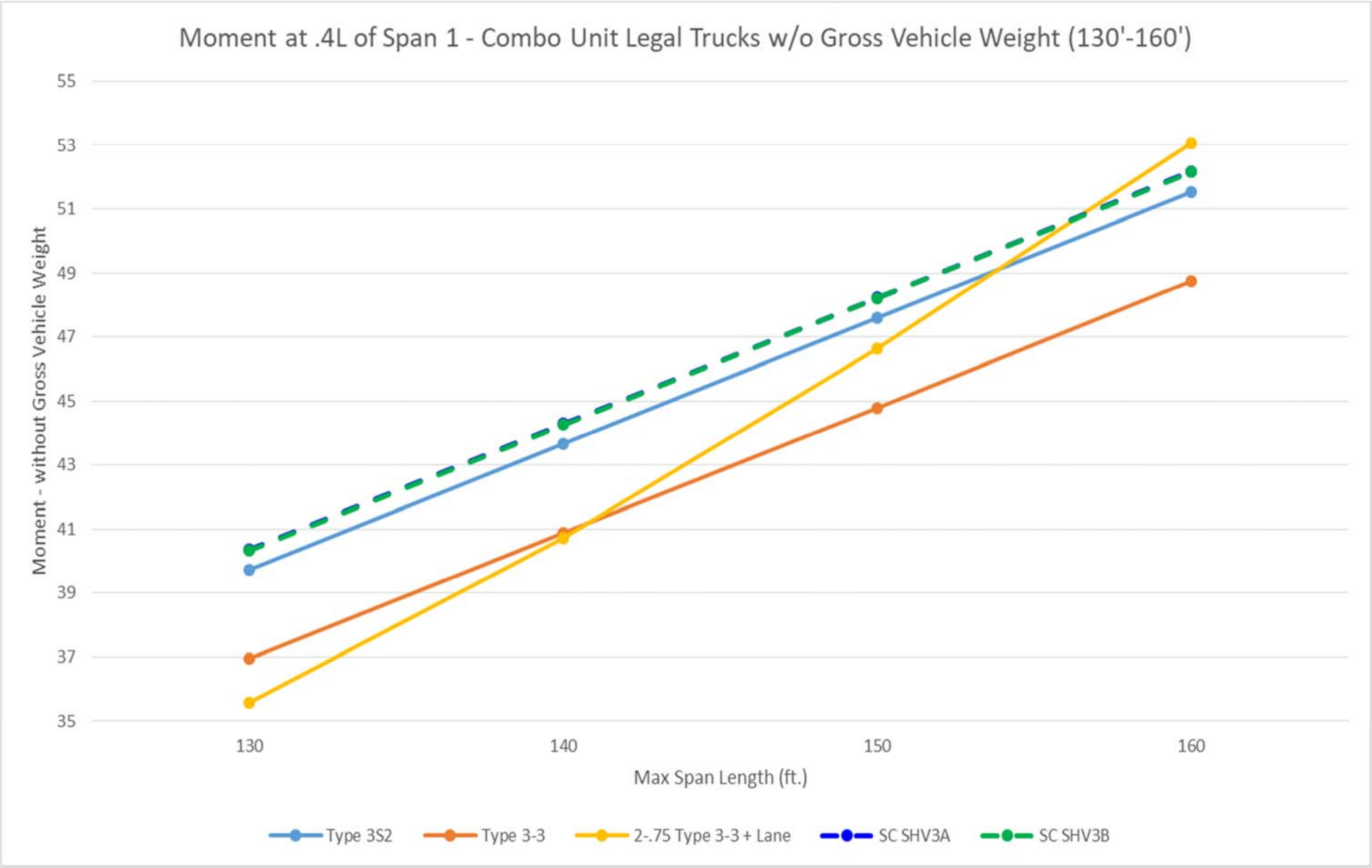
Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Moment - without Gross Vehicle Weight
75
73
71
69
67
65
180
190
200
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Moment - without Gross Vehicle Weight
7.4
6.4
5.4
4.4
3.4
2.4
1.4
0.4
10
15
20
25
30
35
40
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

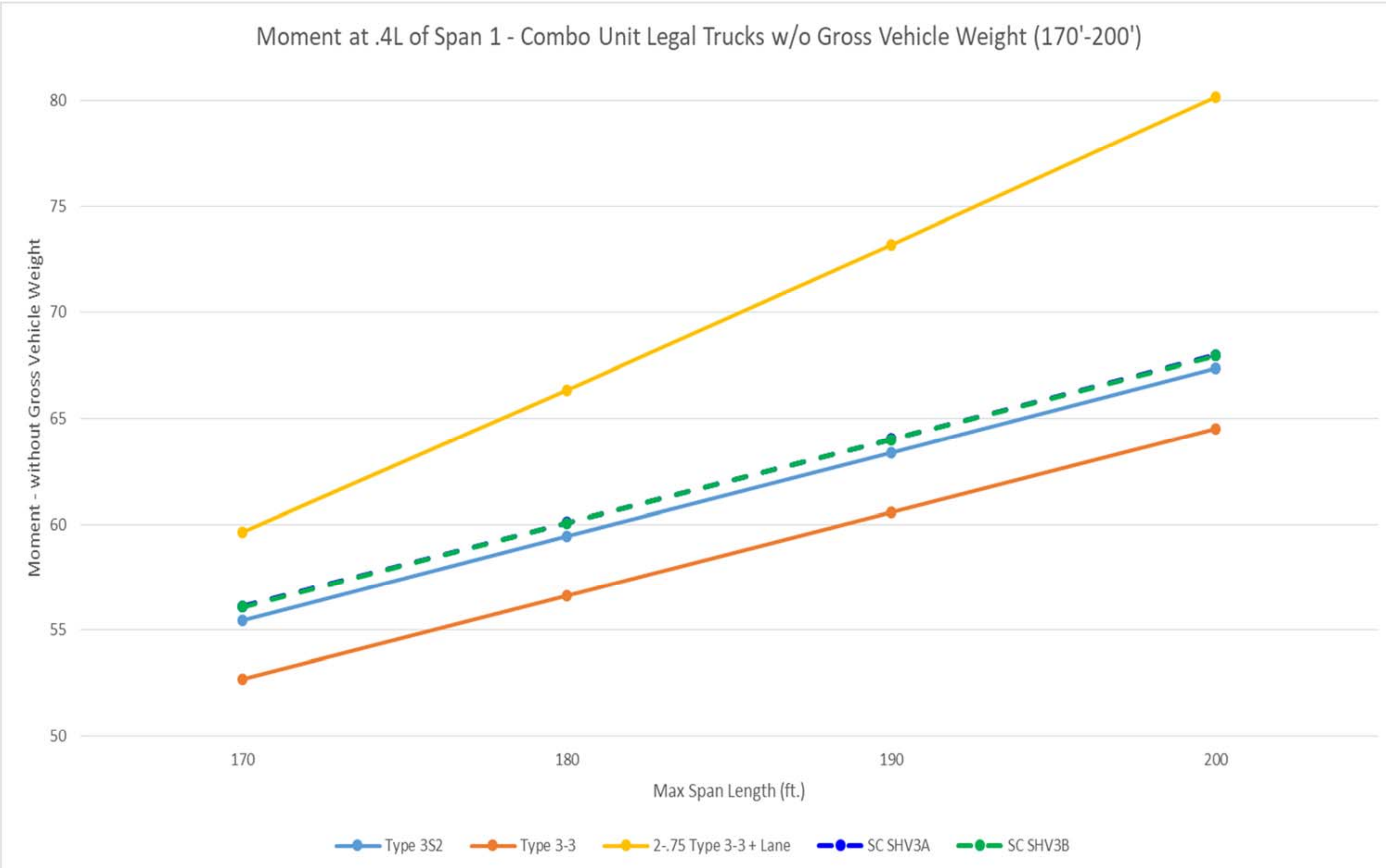


Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Moment - without Gross Vehicle Weight
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
45
50
55
60
65
70
80
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

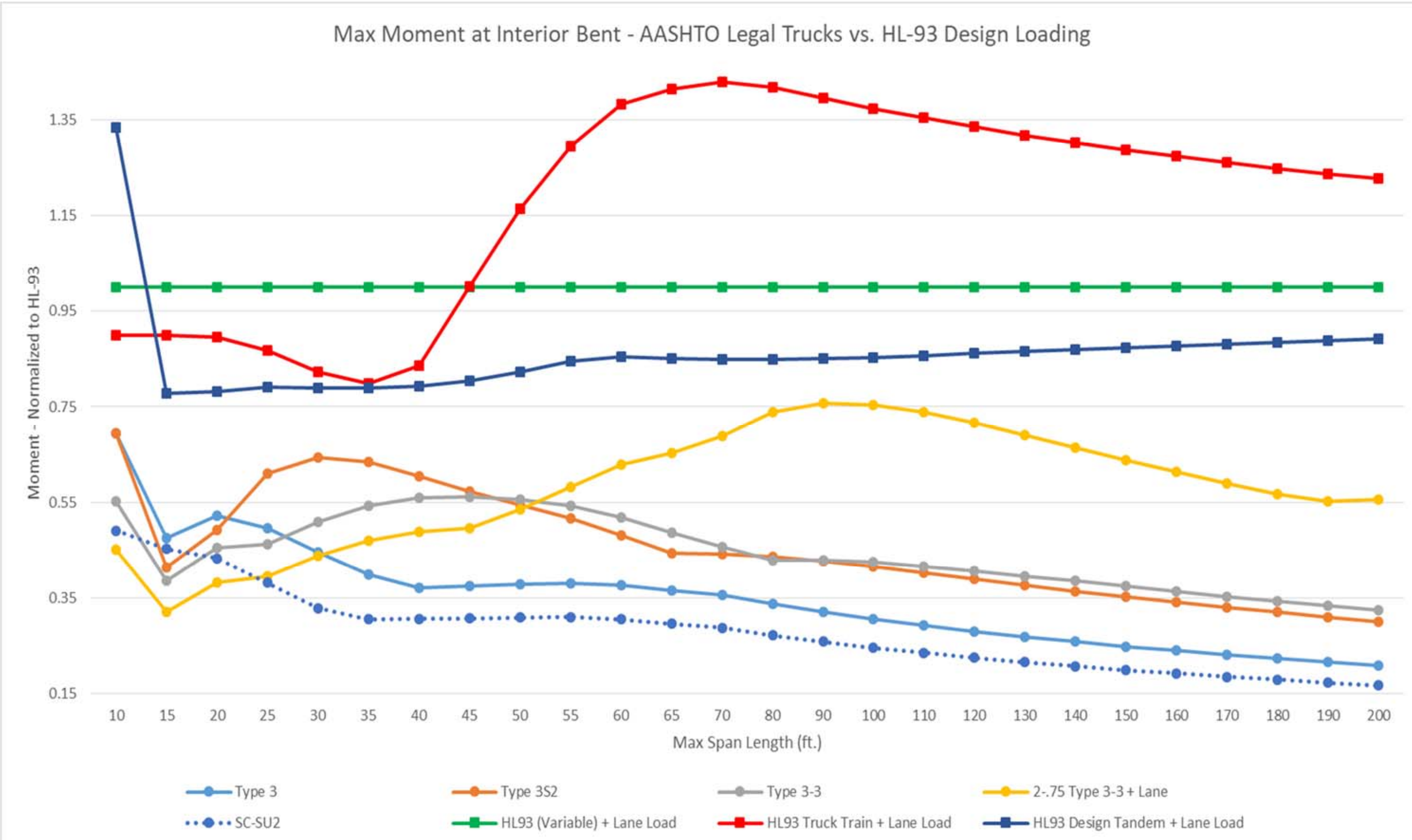

Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Moment - without Gross Vehicle Weight
36
34
32
30
28
26
24
22
20
18
90
100
110
120
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

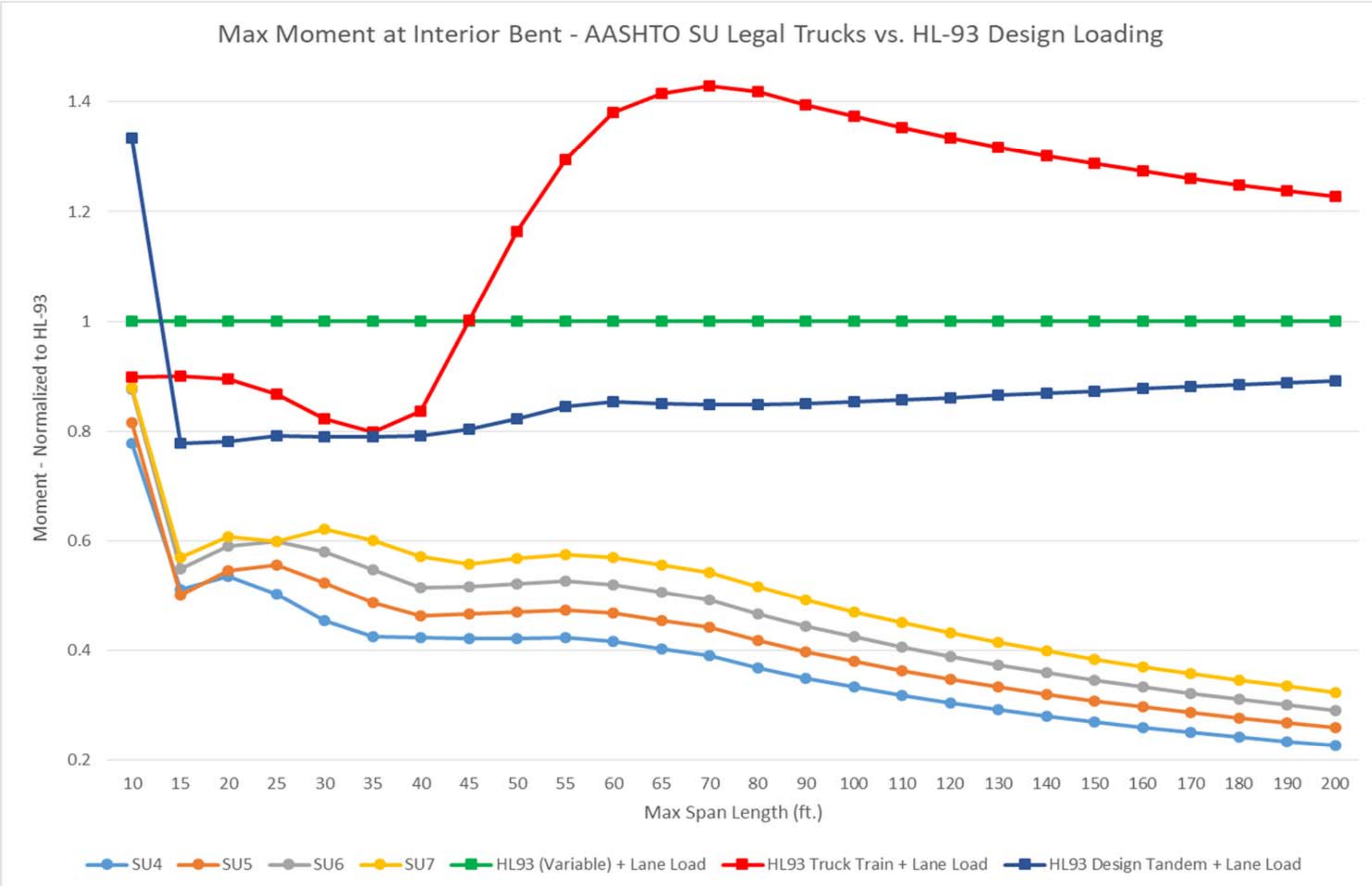


Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Moment - without Gross Vehicle Weight
55
53
51
49
47
45
43
41
39
37
35
130
140
150
160
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

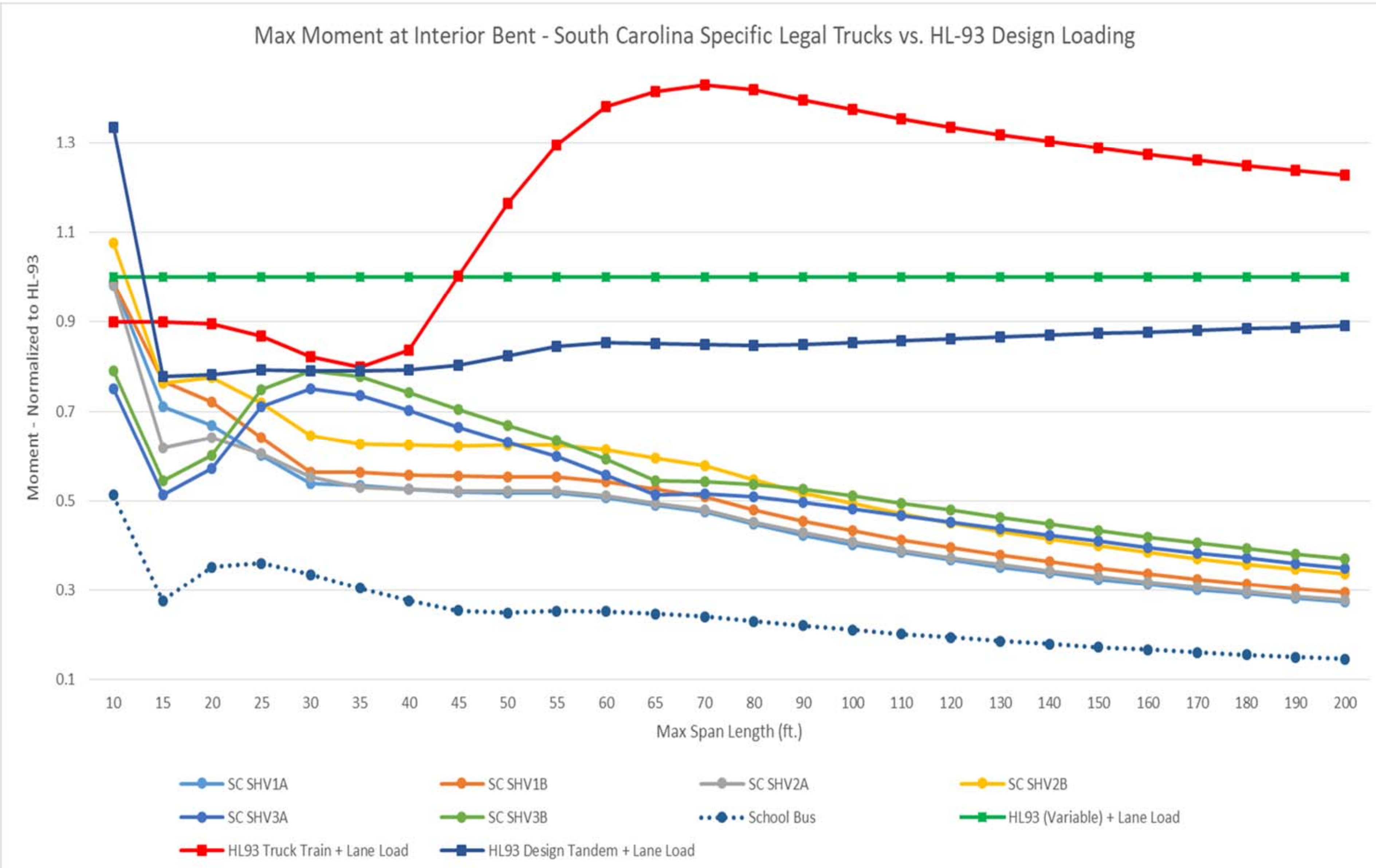

Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Moment - without Gross Vehicle Weight
80
75
70
65
60
55
50
170
180
190
200
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Max Moment at Interior Bent*

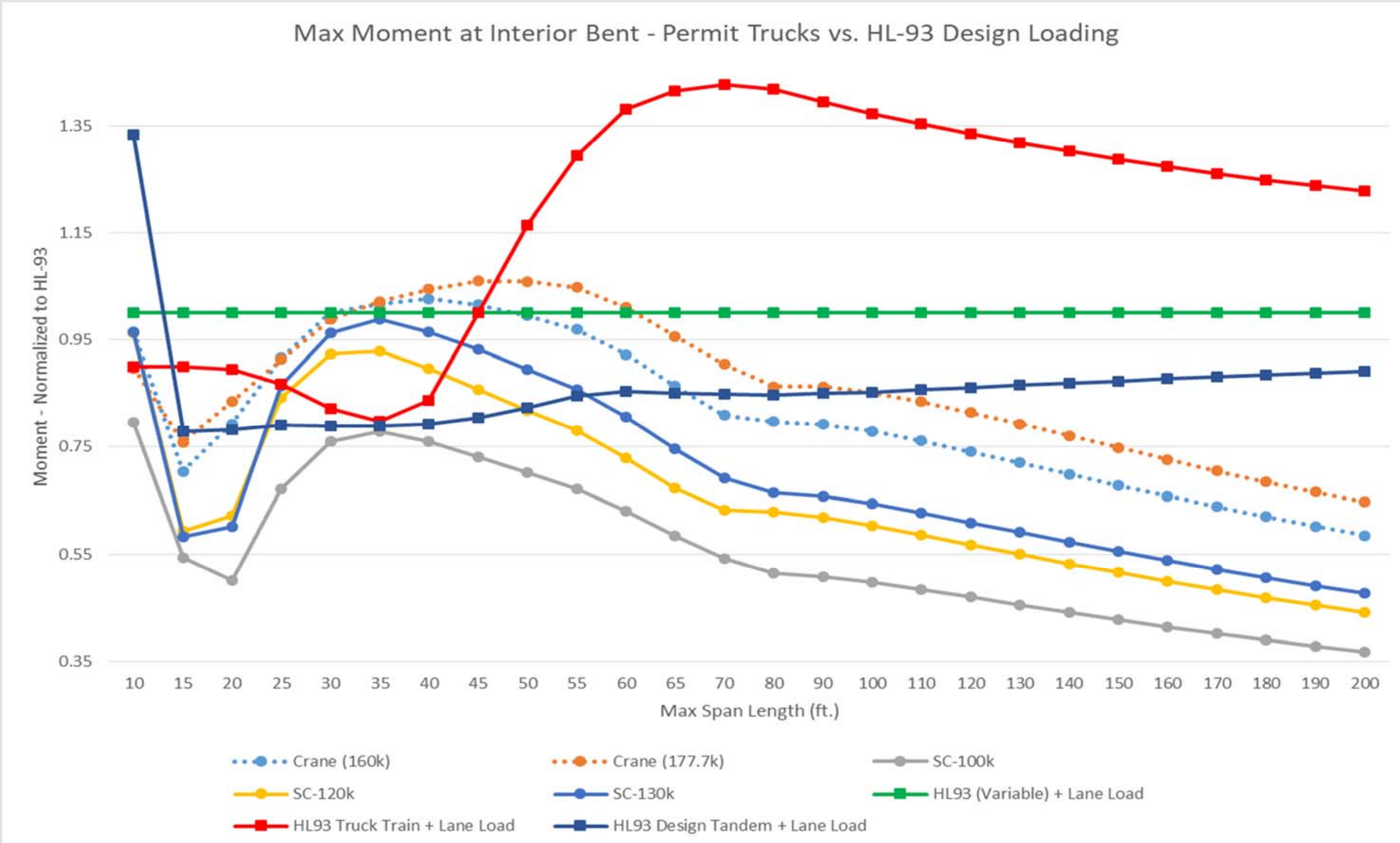




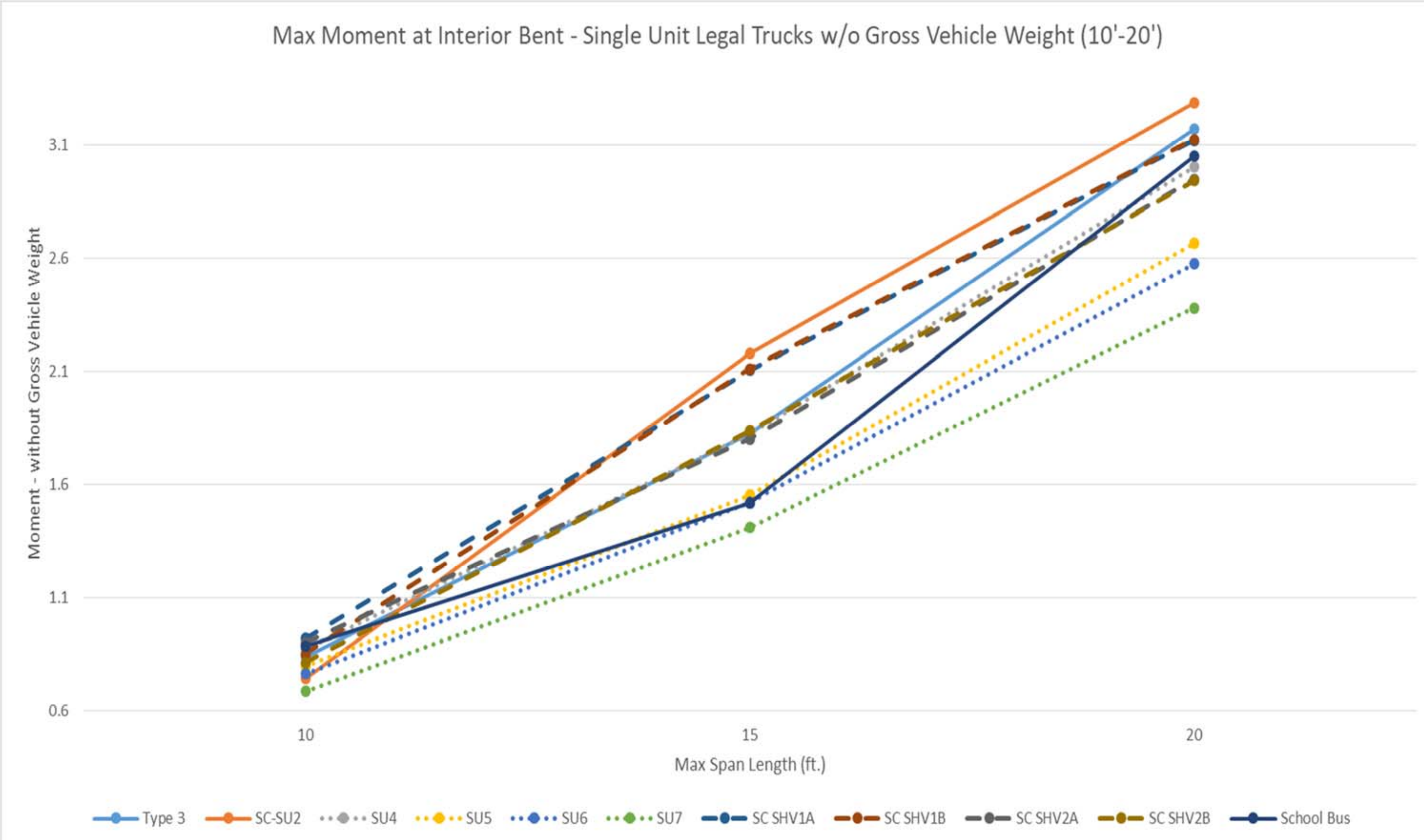
Max Moment at Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.4
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load


Max Moment at Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Moment - Normalized to HL-93
1.3
1.1
0.9
0.7
0.5
0.3
0.1
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

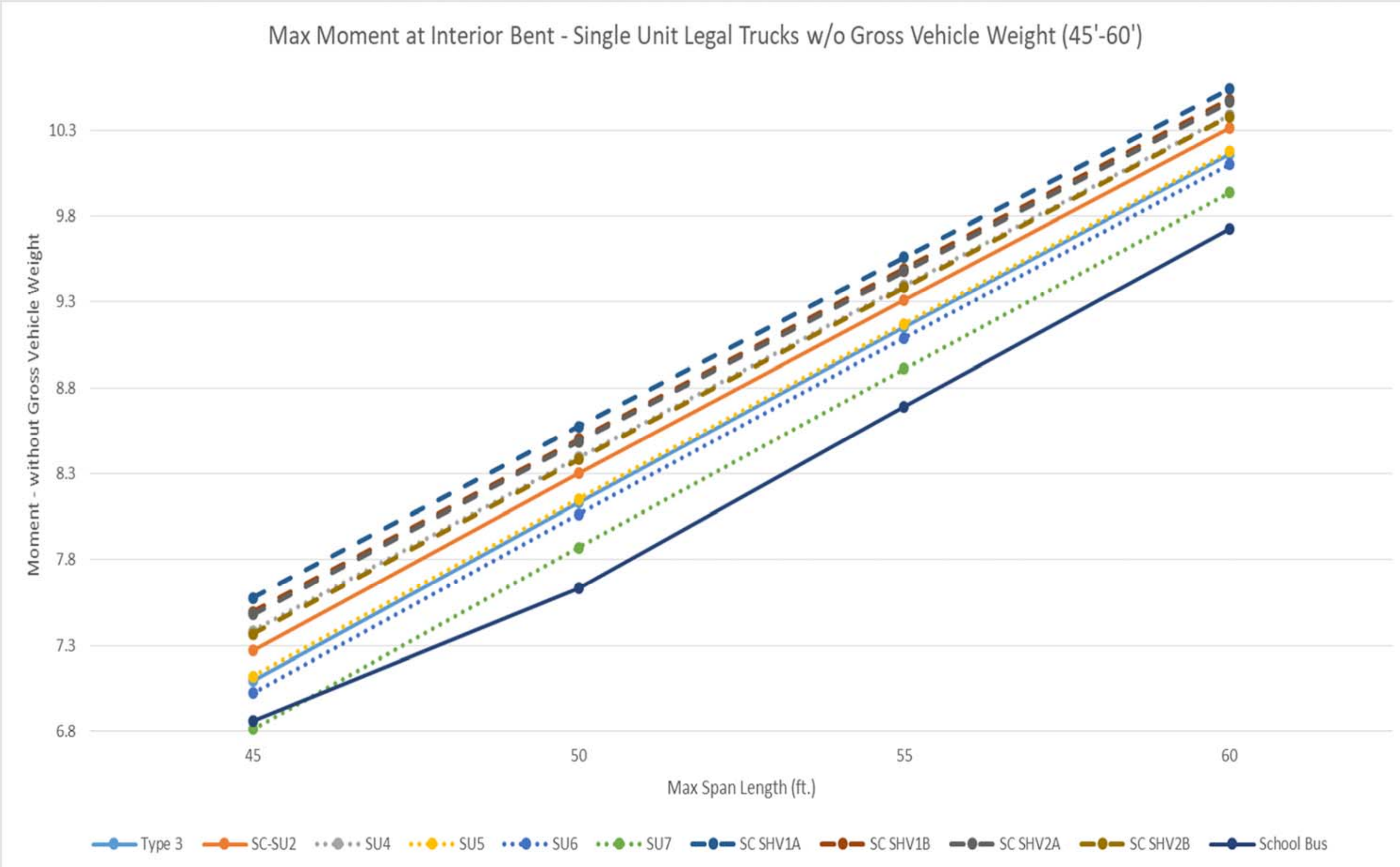
Permit Trucks: 2-Span (Normalized to HL-93 Design Truck) – *Max Moment at Interior Bent*

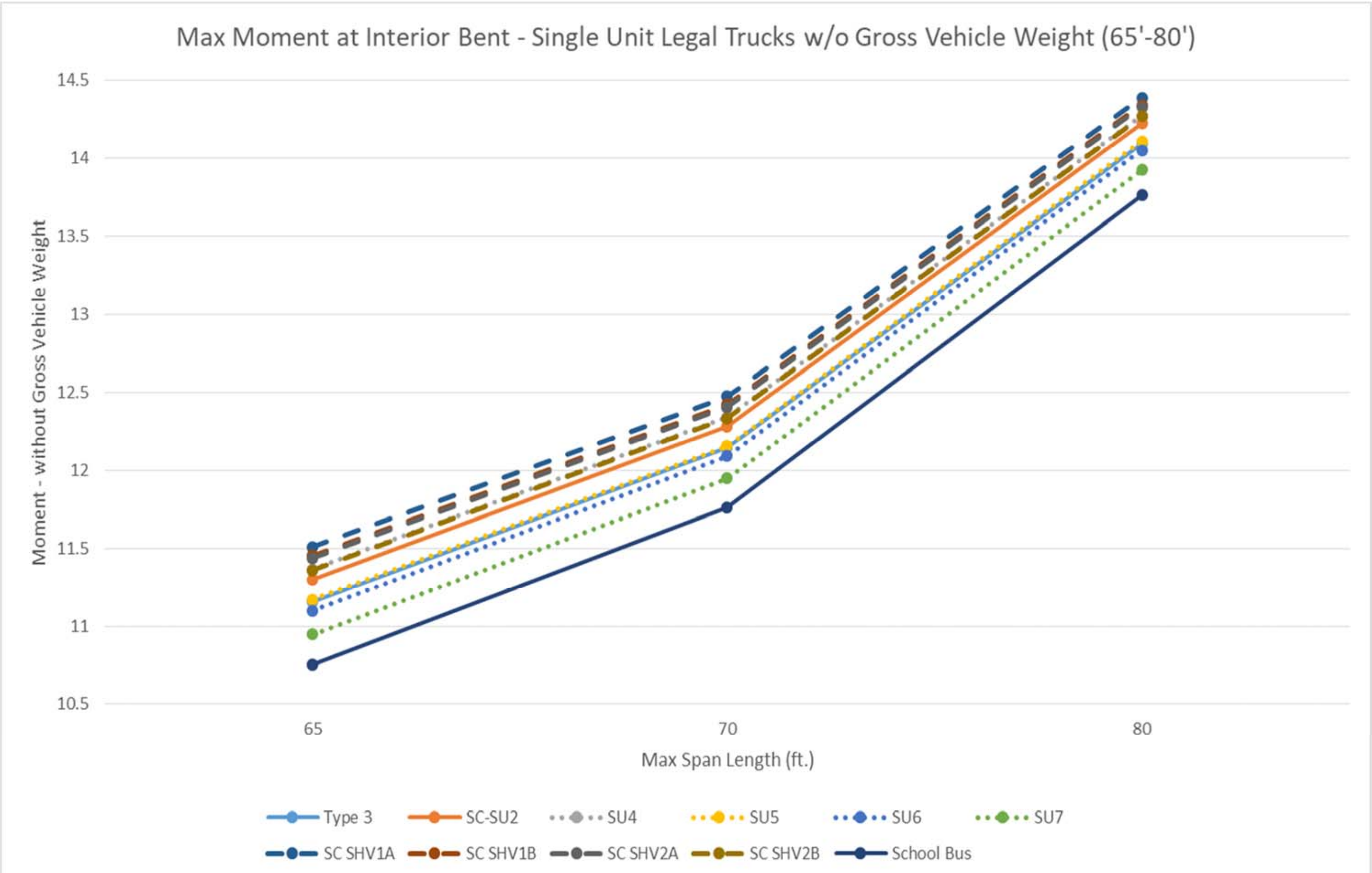


Legal Trucks: 2-Span (Without Gross Vehicle Weight) – *Max Moment at Interior Bent*

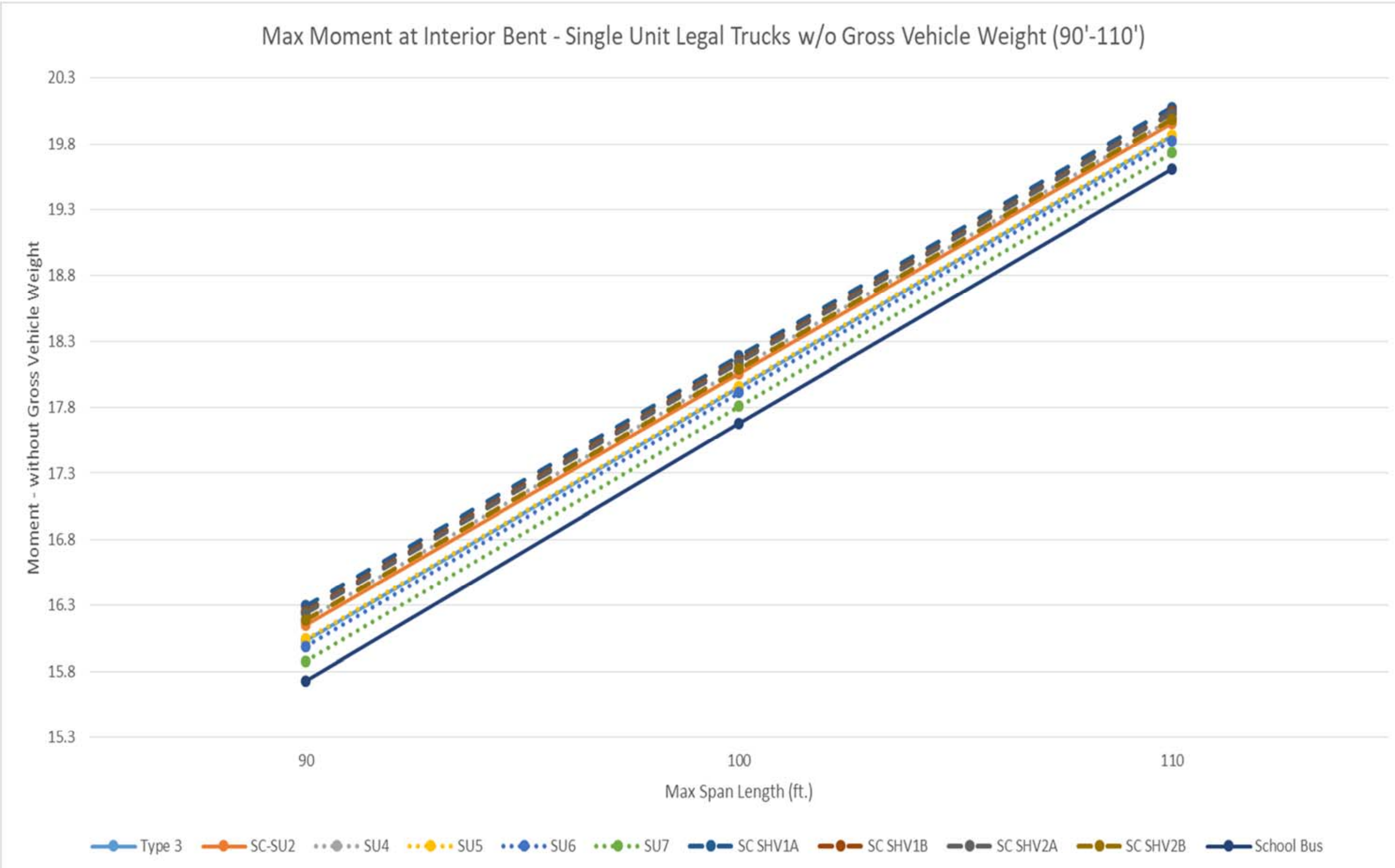


Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
6.6
6.1
5.6
5.1
4.6
4.1
3.6
3.1
Moment - without Gross Vehicle Weight
25
30
35
40
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

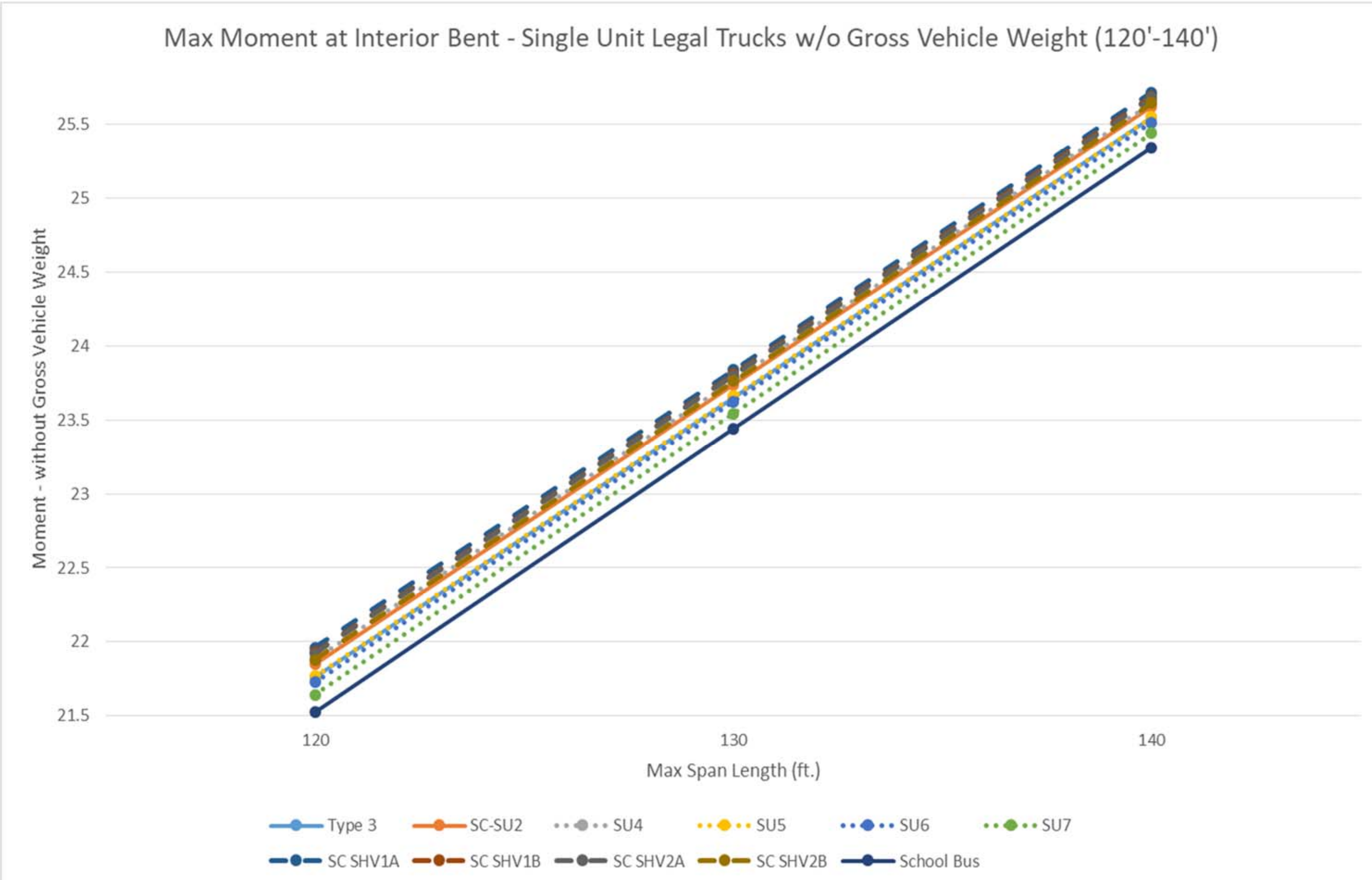

Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
Moment - without Gross Vehicle Weight
10.3
9.8
9.3
8.8
8.3
7.8
7.3
6.8
45
50
55
60
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

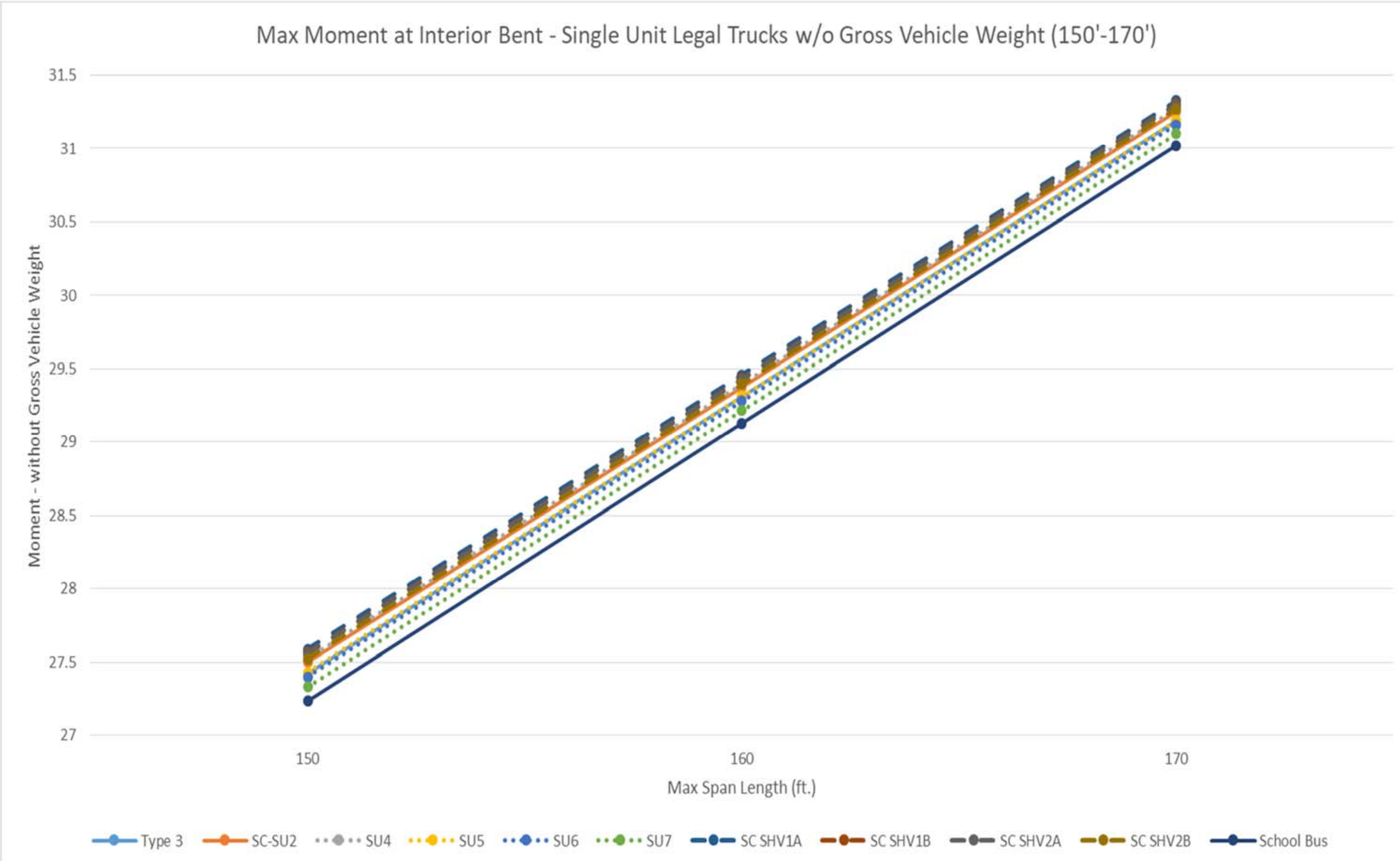


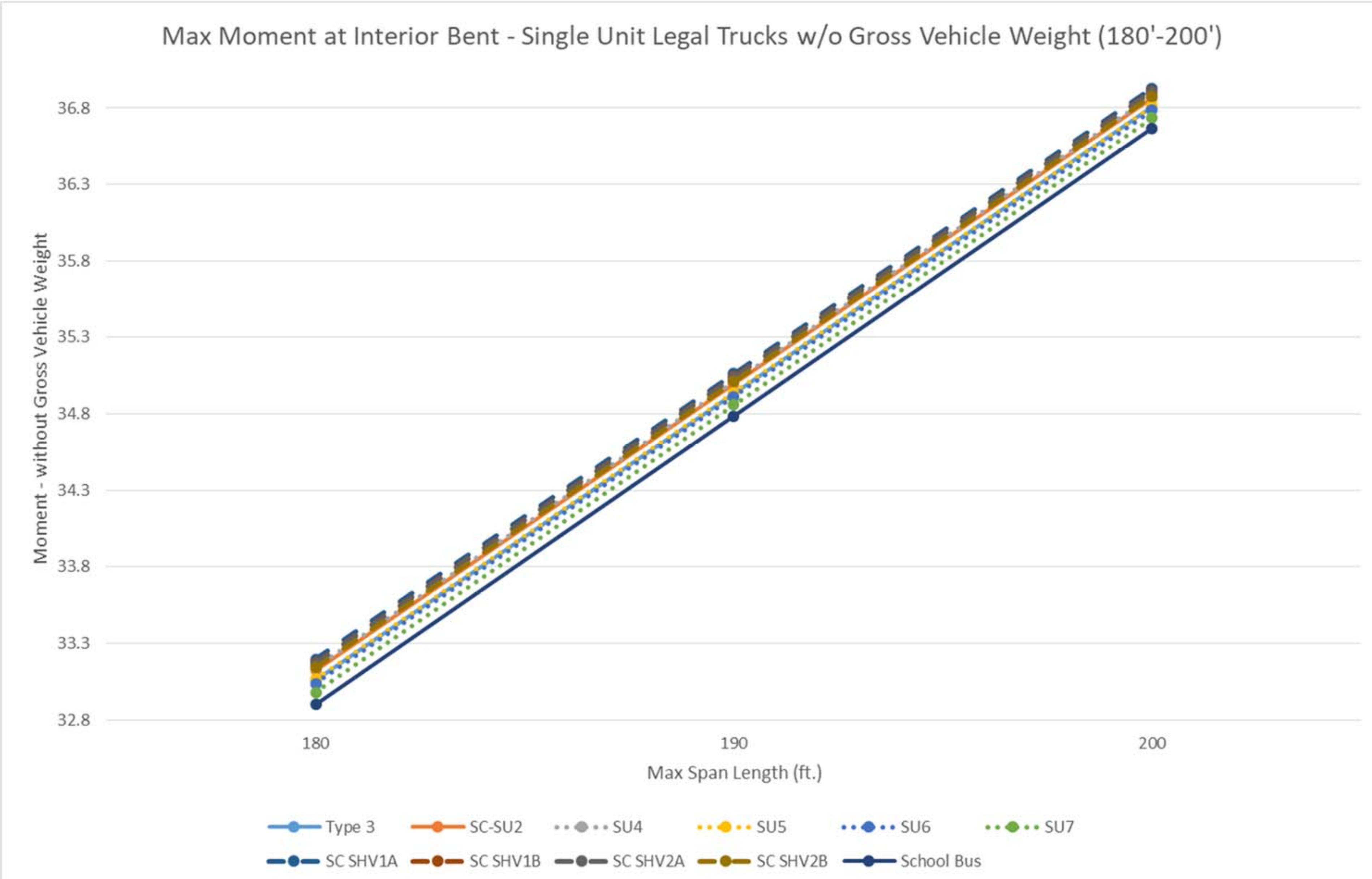
Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
14.5
14
13.5
13
12.5
12
11.5
11
10.5
Moment - without Gross Vehicle Weight
65
70
80
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



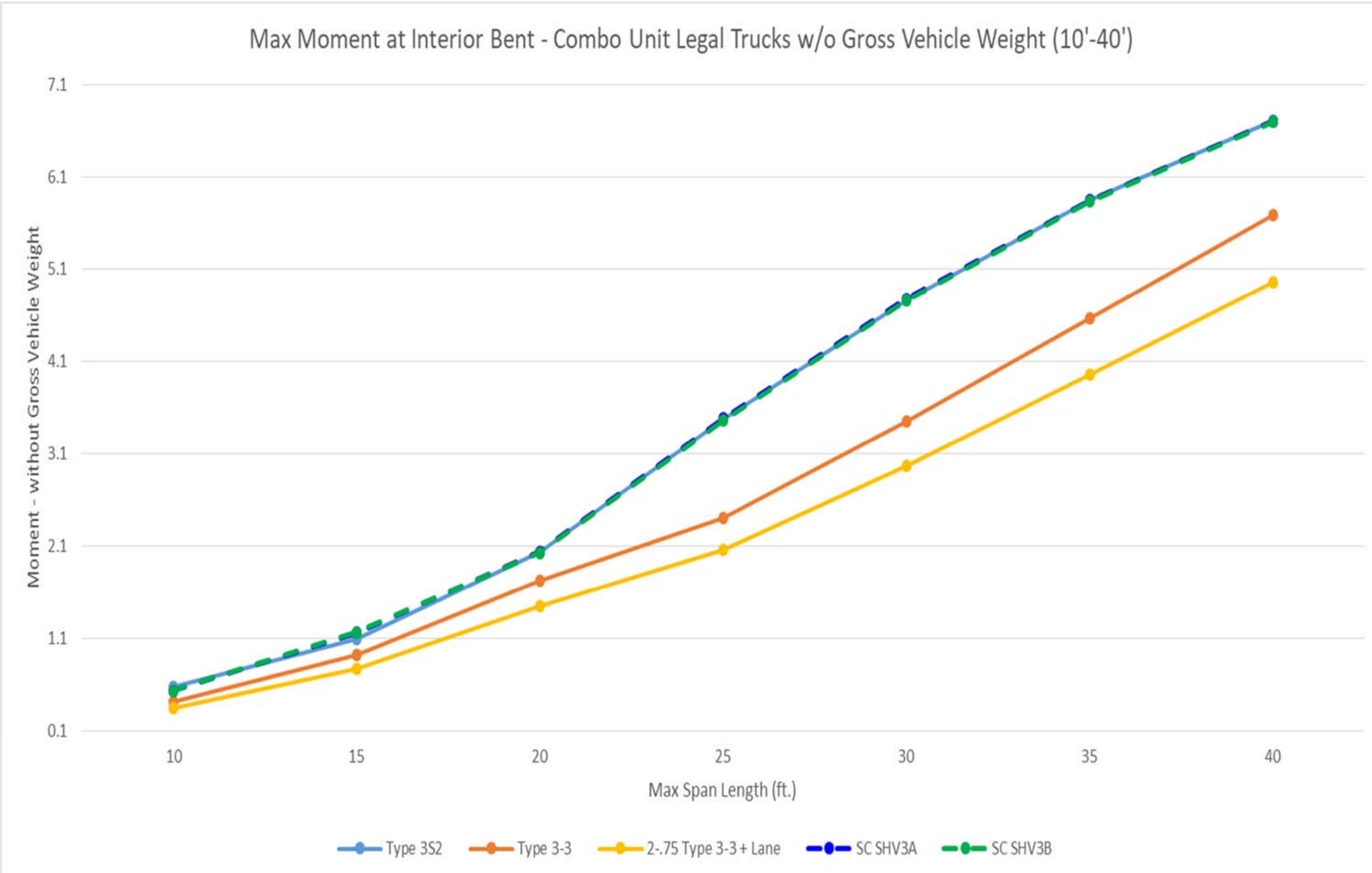
Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
20.3
19.8
19.3
18.8
18.3
17.8
17.3
16.8
16.3
15.8
15.3
Moment - without Gross Vehicle Weight
90
100
110
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

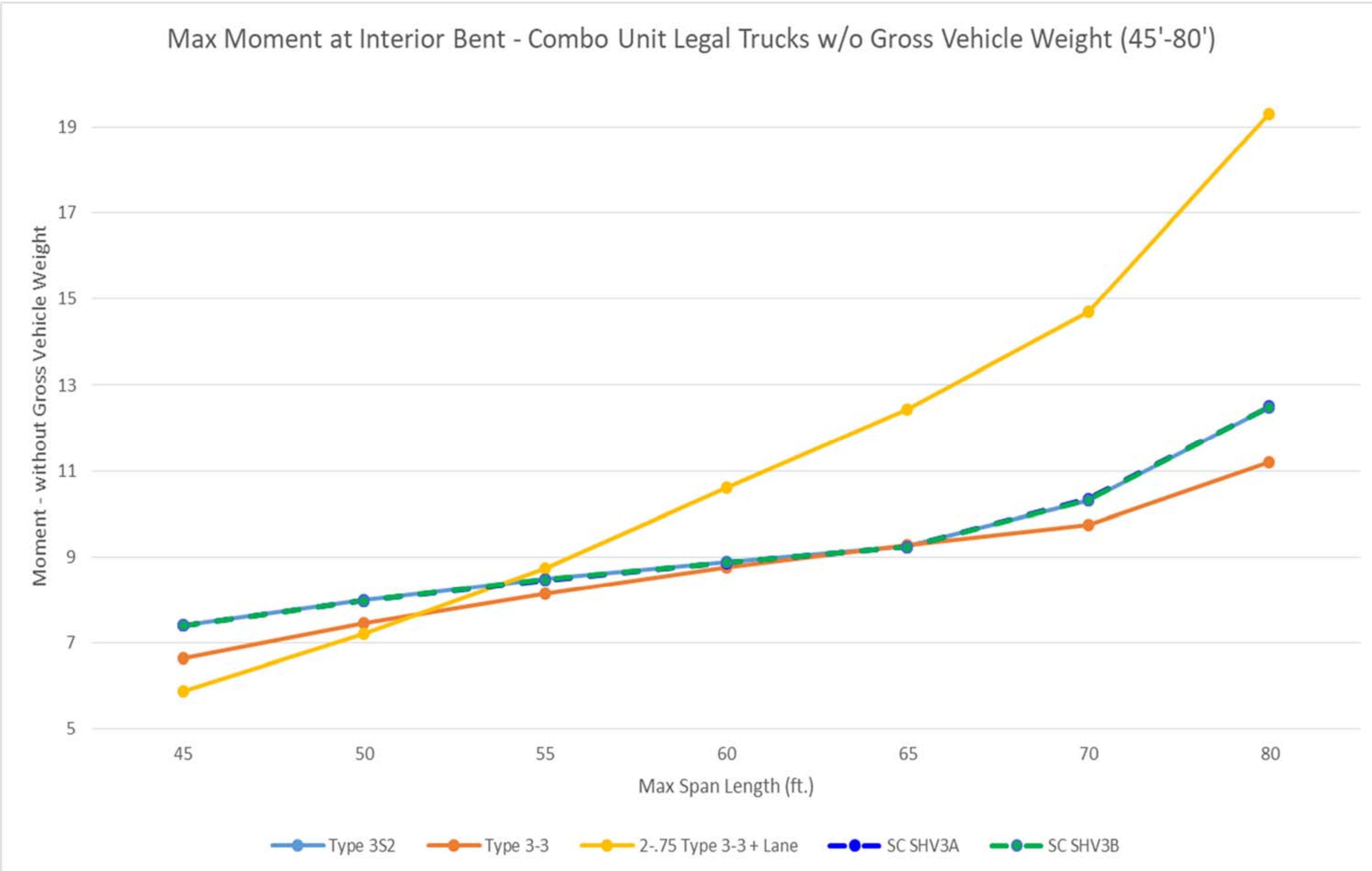

Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Moment - without Gross Vehicle Weight
25.5
25
24.5
24
23.5
23
22.5
22
21.5
120
130
140
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

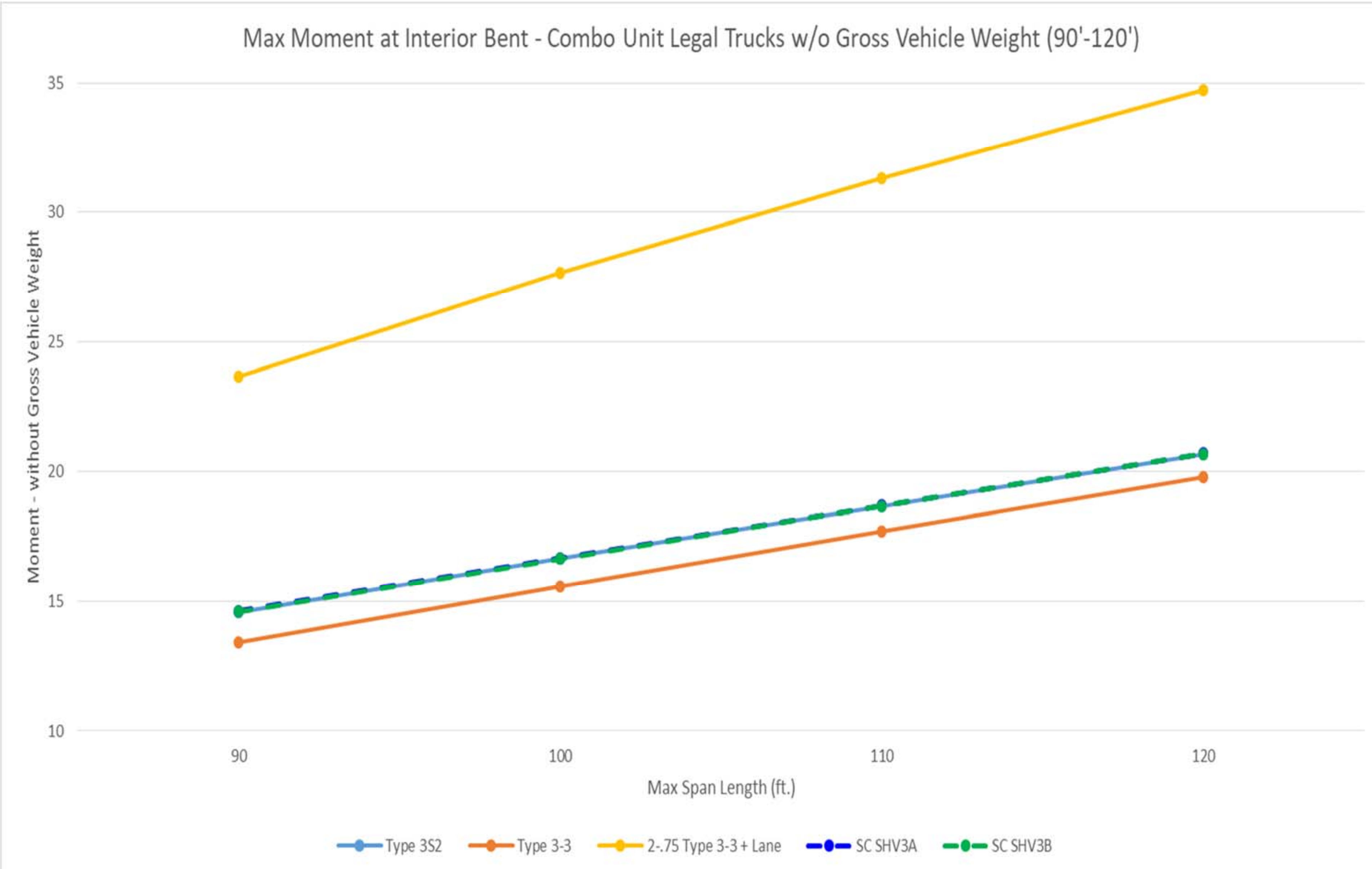

Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
31.5
31
30.5
30
29.5
29
28.5
28
27.5
27
Moment - without Gross Vehicle Weight
150
160
170
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



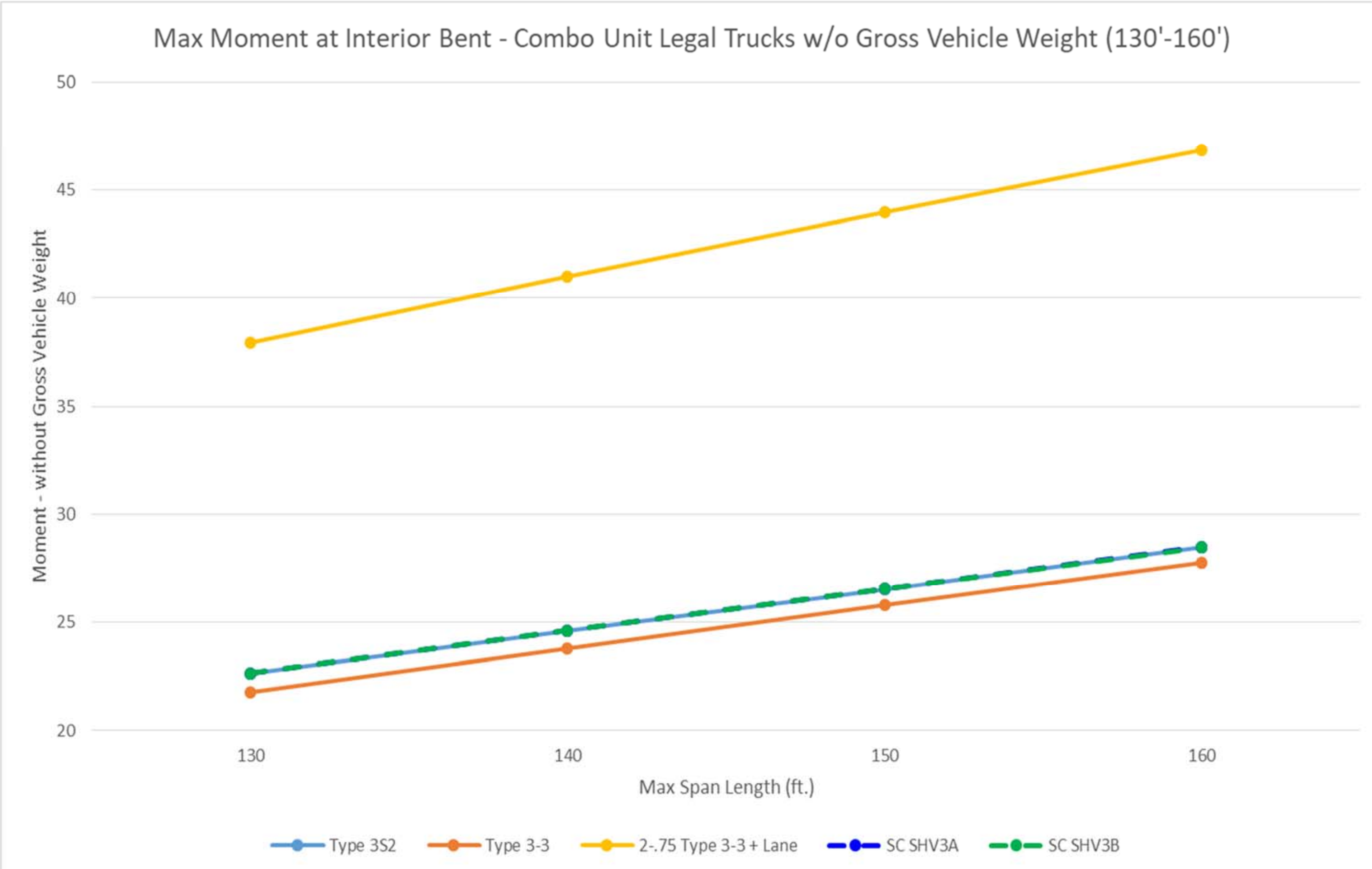
Max Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Moment - without Gross Vehicle Weight
36.8
36.3
35.8
35.3
34.8
34.3
33.8
33.3
32.8
180
190
200
Max Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

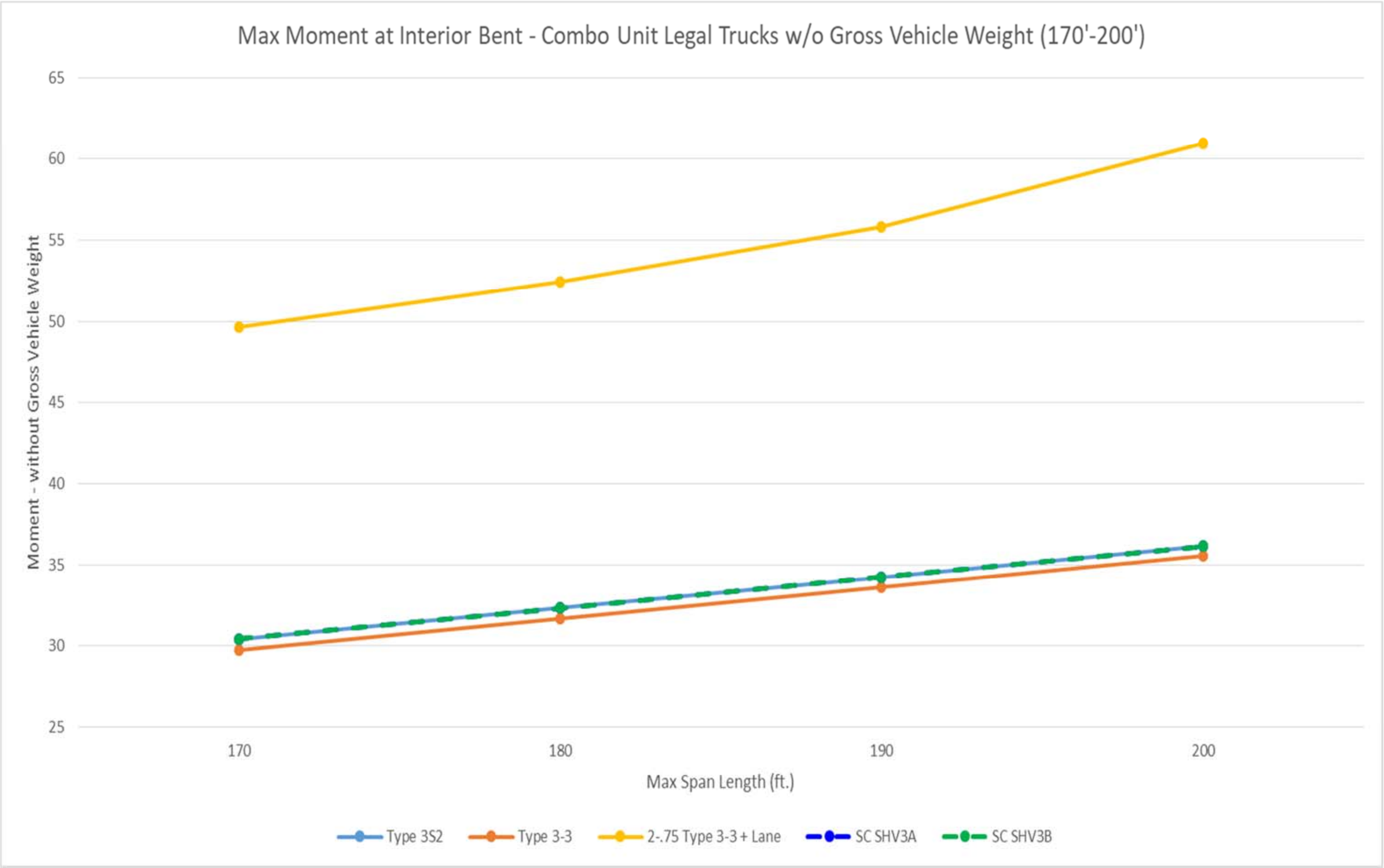

Max Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Moment - without Gross Vehicle Weight
7.1
6.1
5.1
4.1
3.1
2.1
1.1
0.1
10
15
20
25
30
35
40
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Max Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Moment - without Gross Vehicle Weight
19
17
15
13
11
9
7
5
45
50
55
60
65
70
80
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



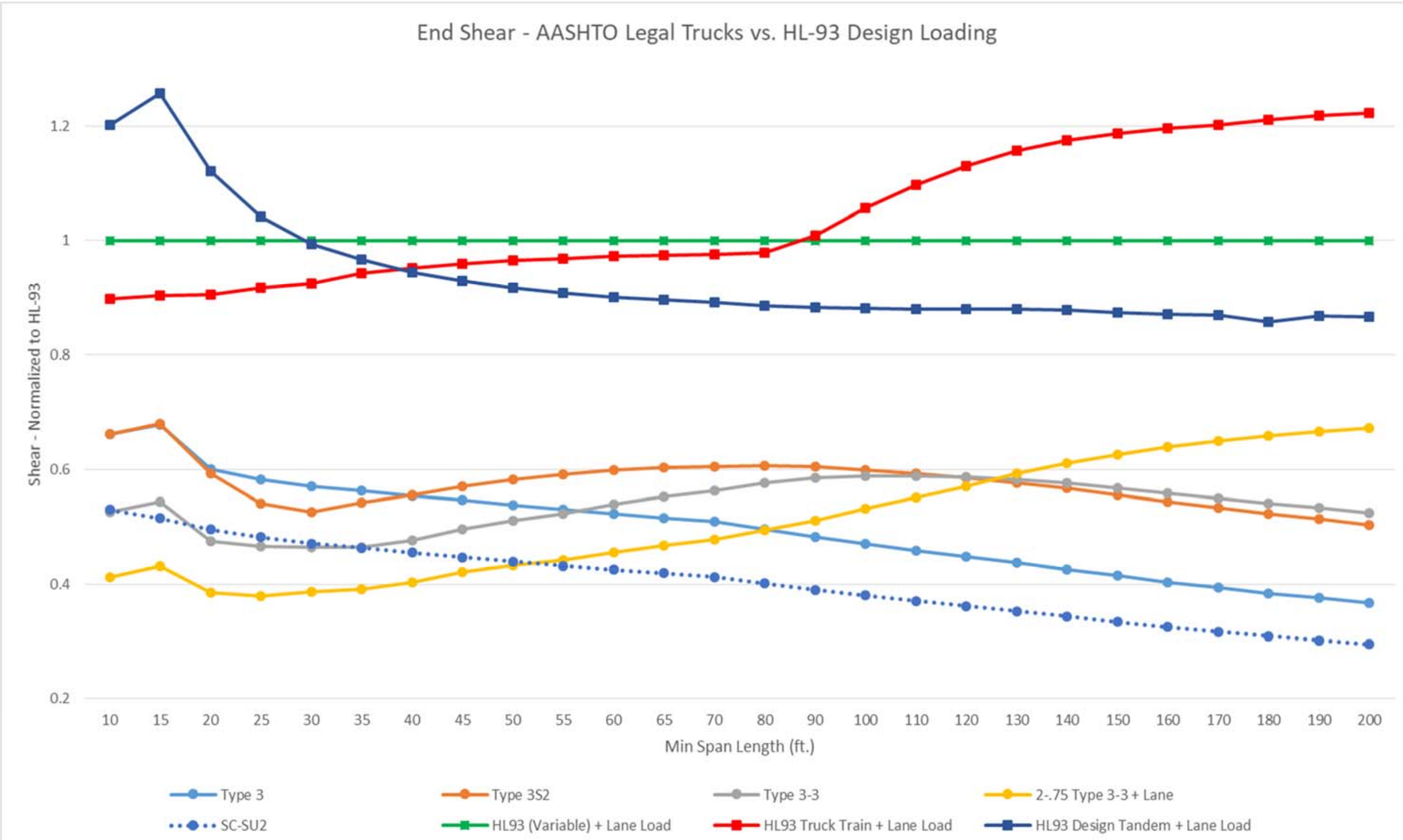
Max Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Moment - without Gross Vehicle Weight
35
30
25
20
15
10
90
100
110
120
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

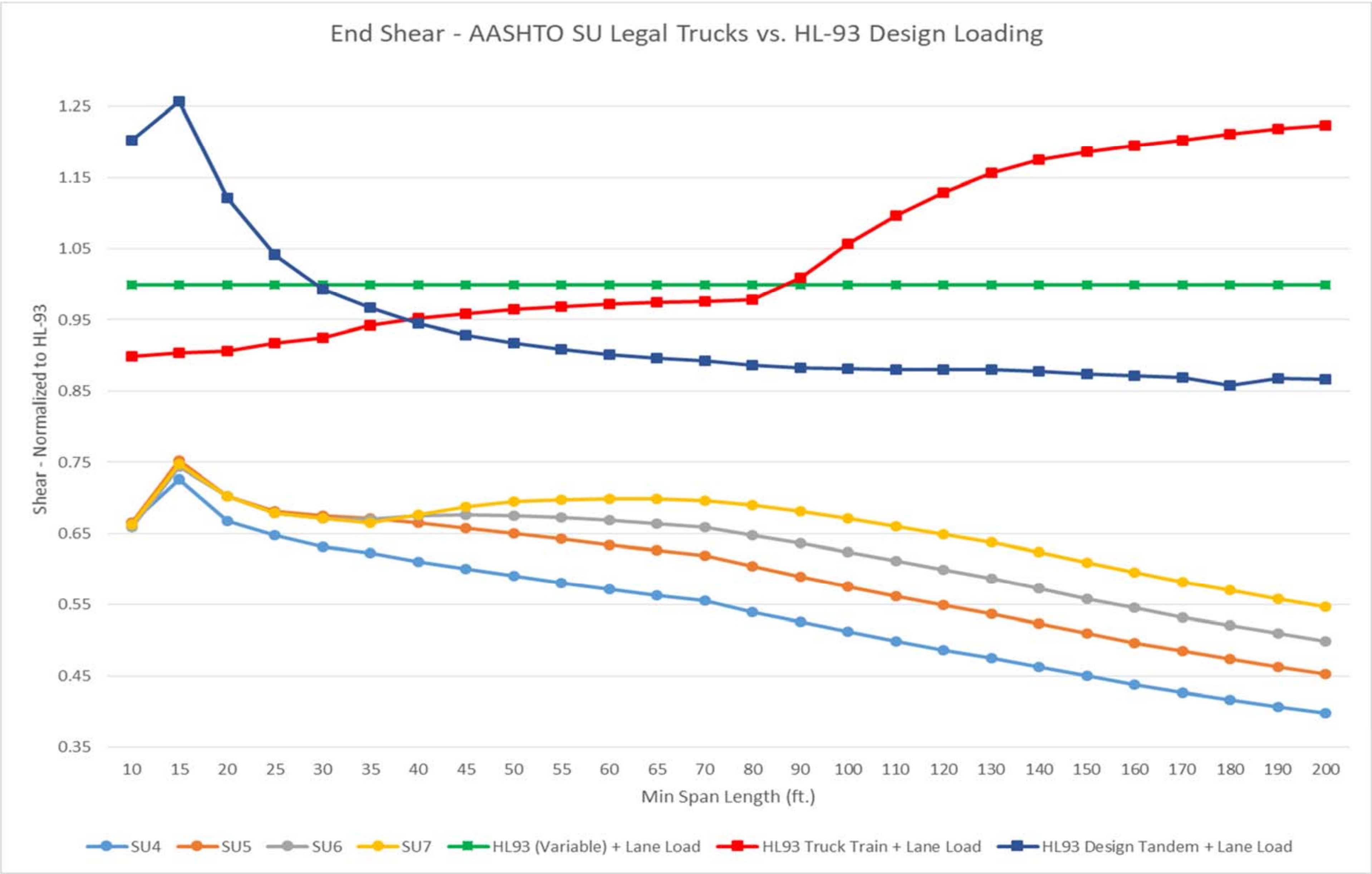

Max Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Moment - without Gross Vehicle Weight
50
45
40
35
30
25
20
130
140
150
160
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



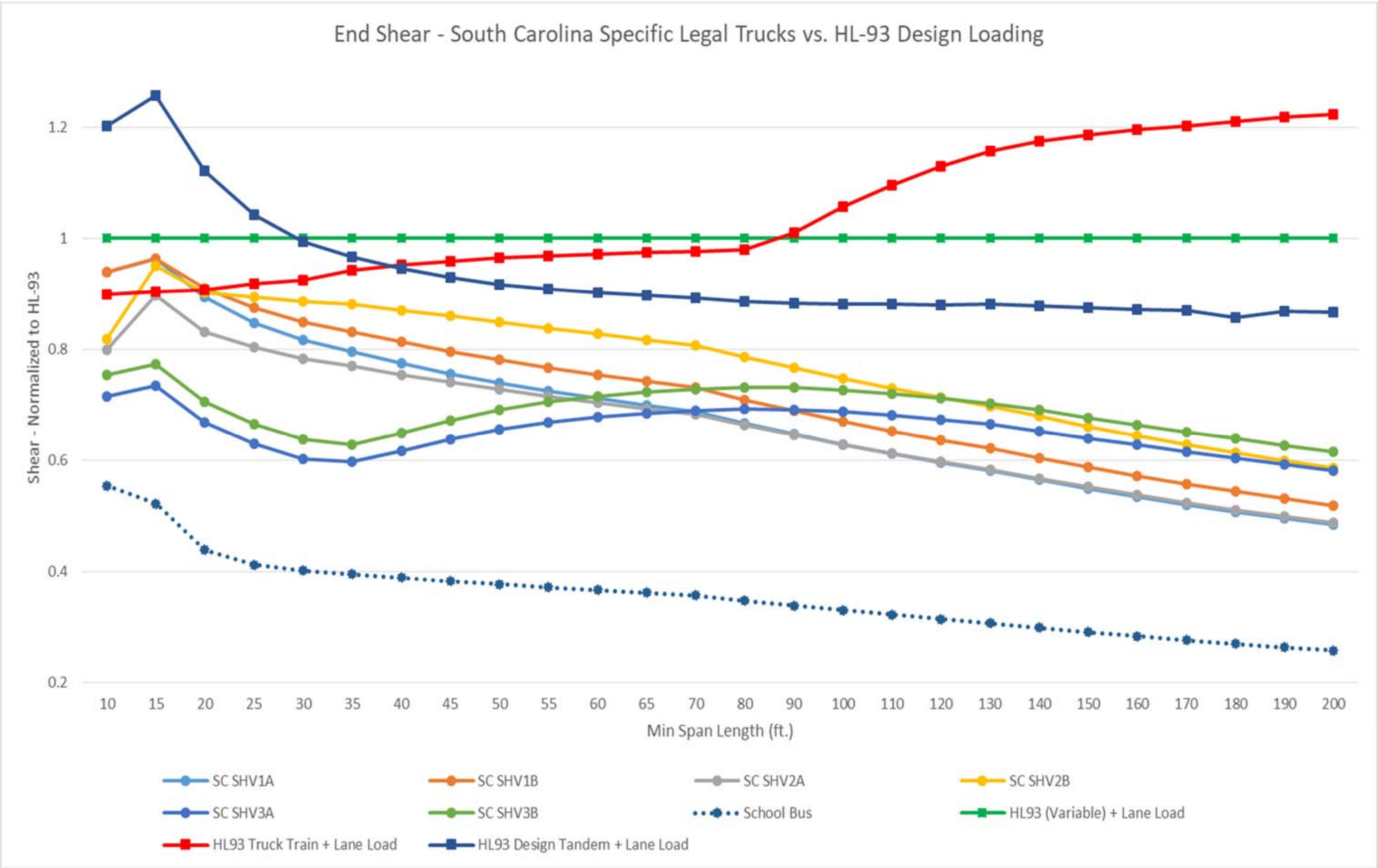
Max Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Moment - without Gross Vehicle Weight
65
60
55
50
45
40
35
30
25
170
180
190
200
Max Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *End Shear*

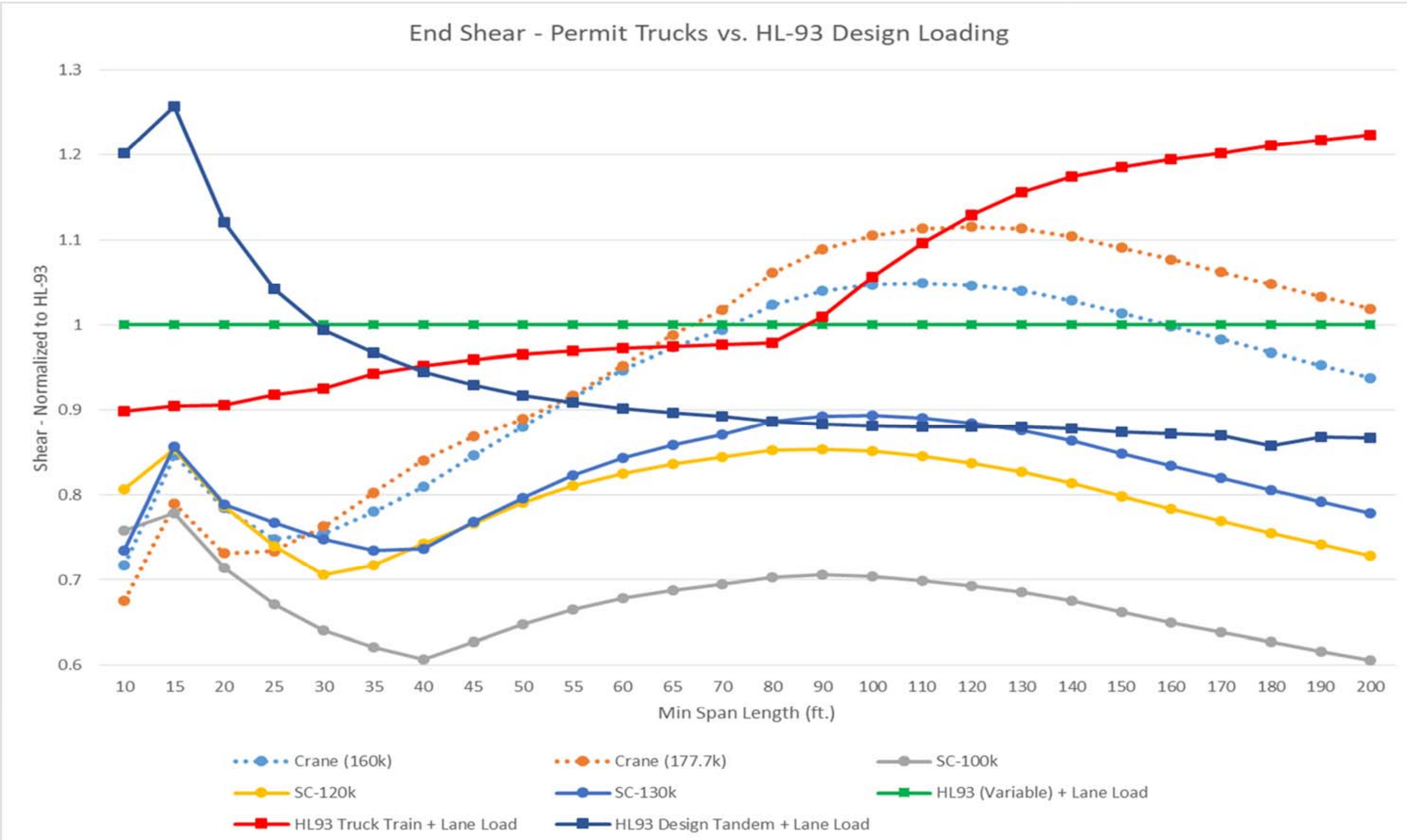




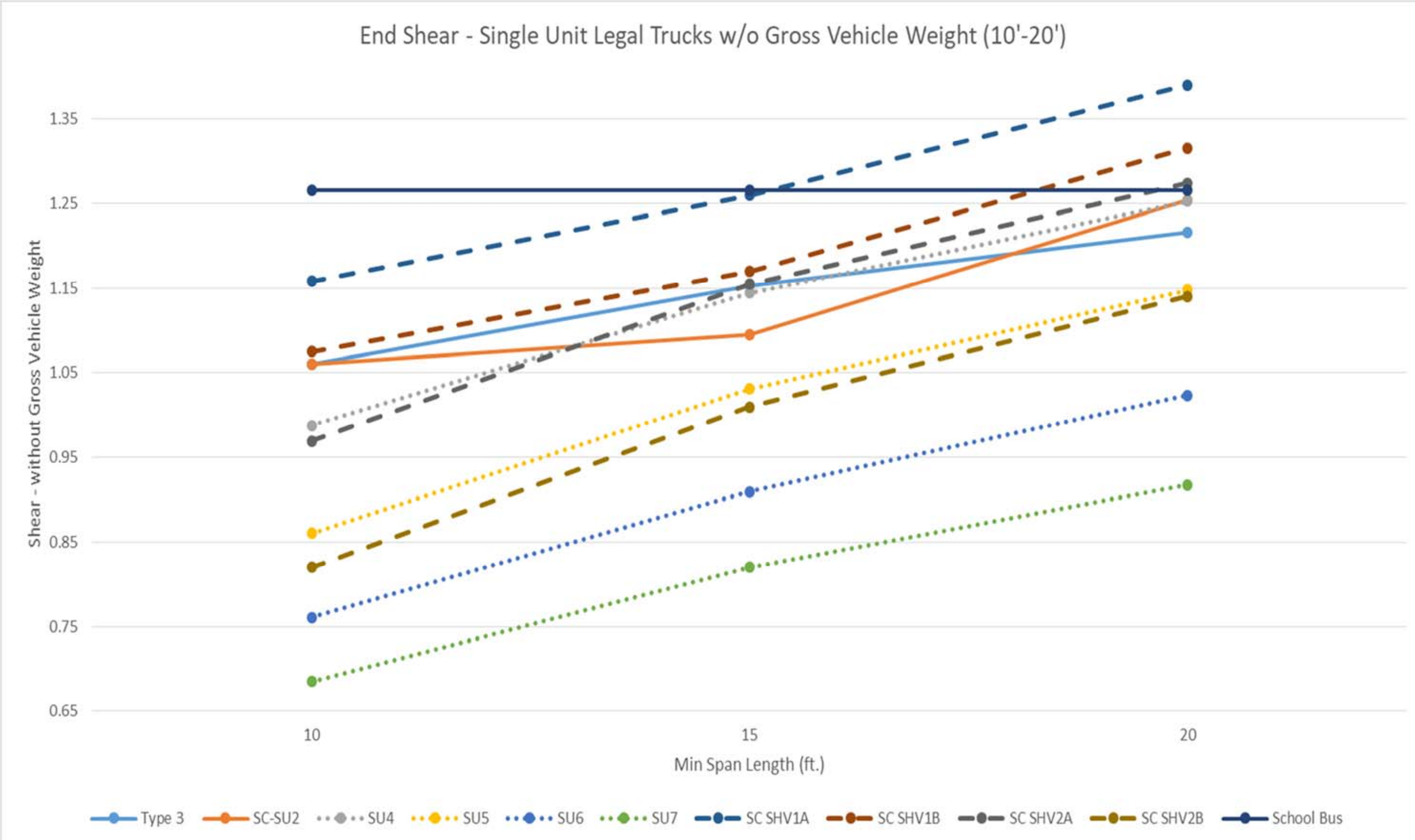
End Shear - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
0.35
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

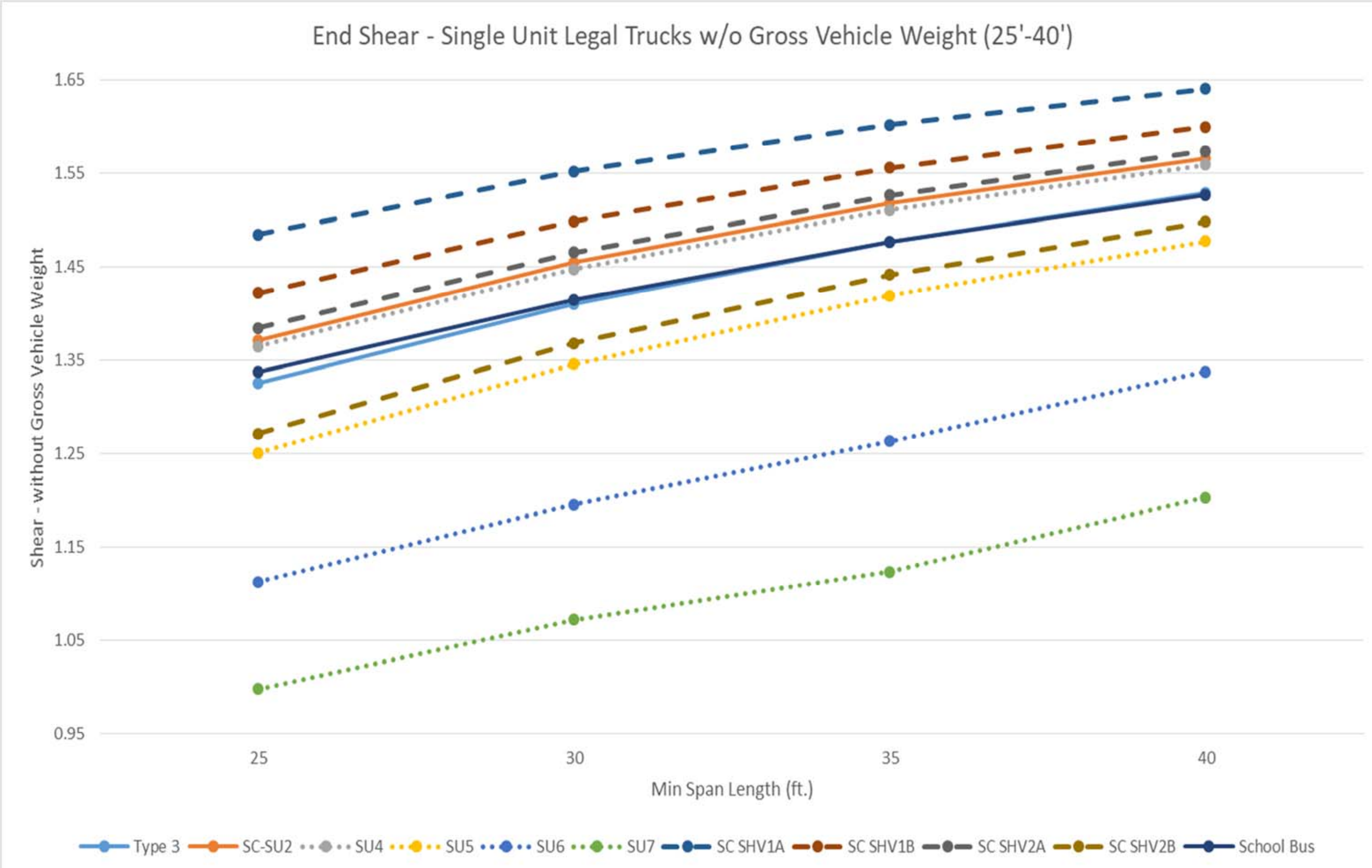

End Shear - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

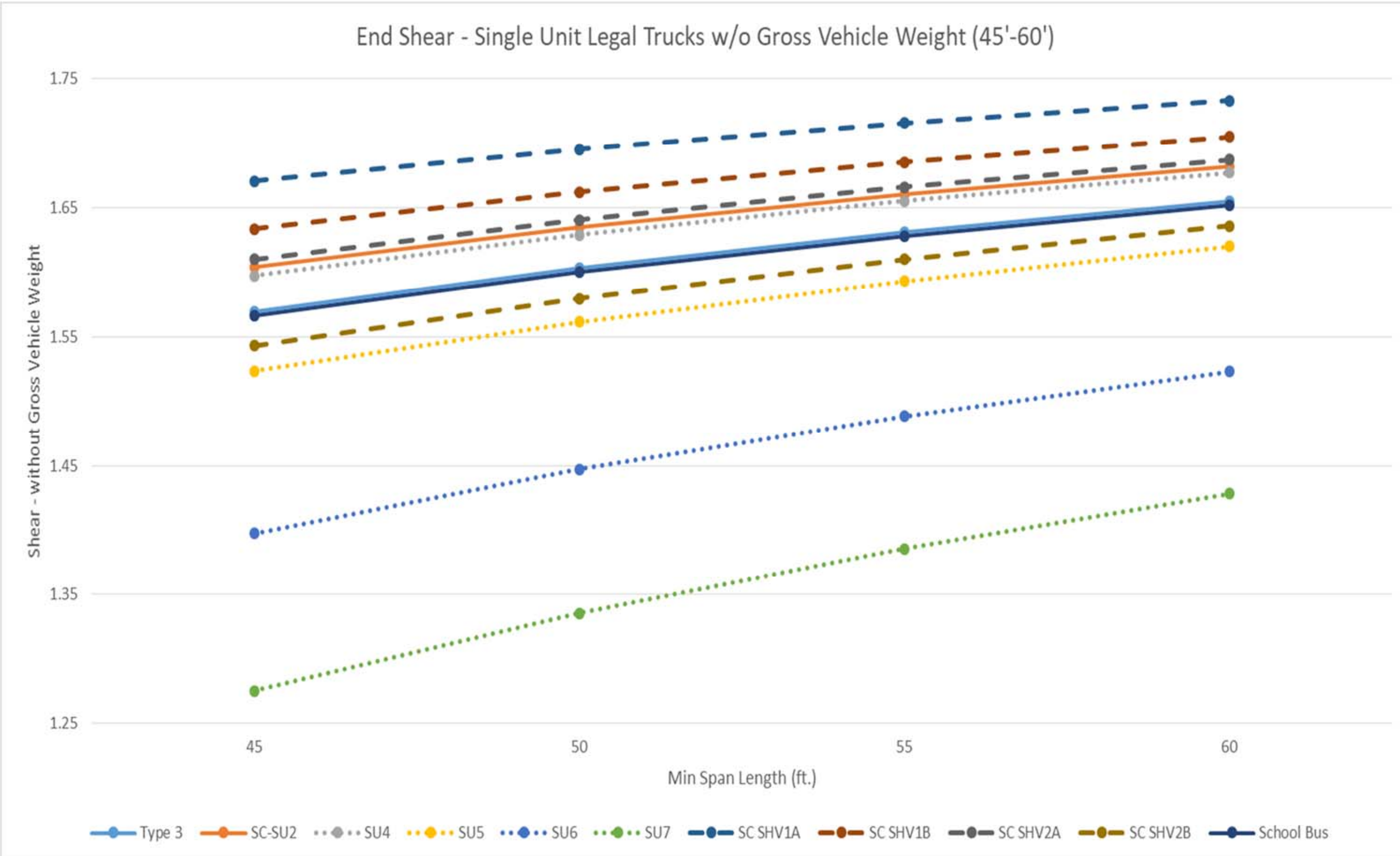
Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *End Shear*

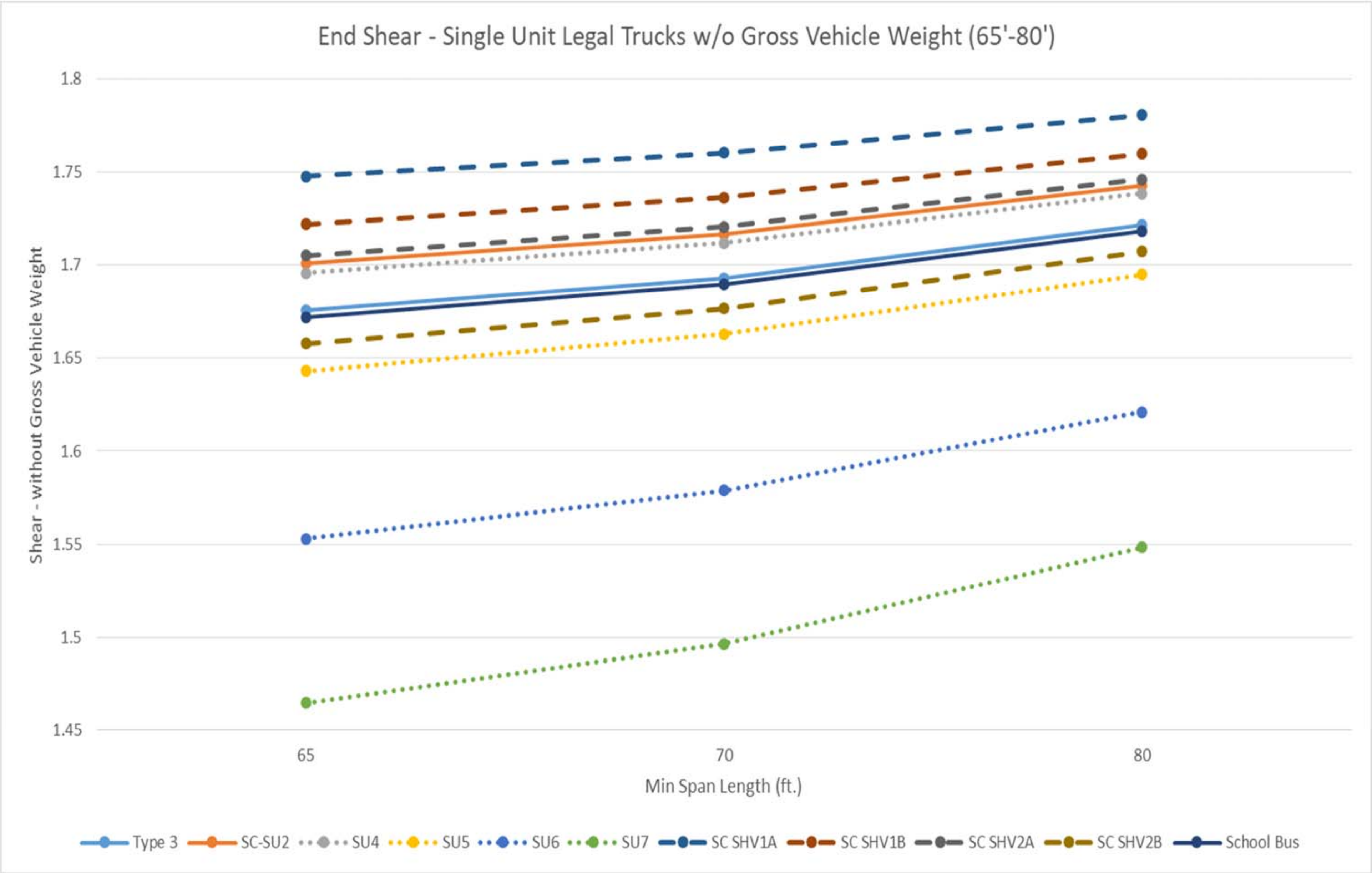


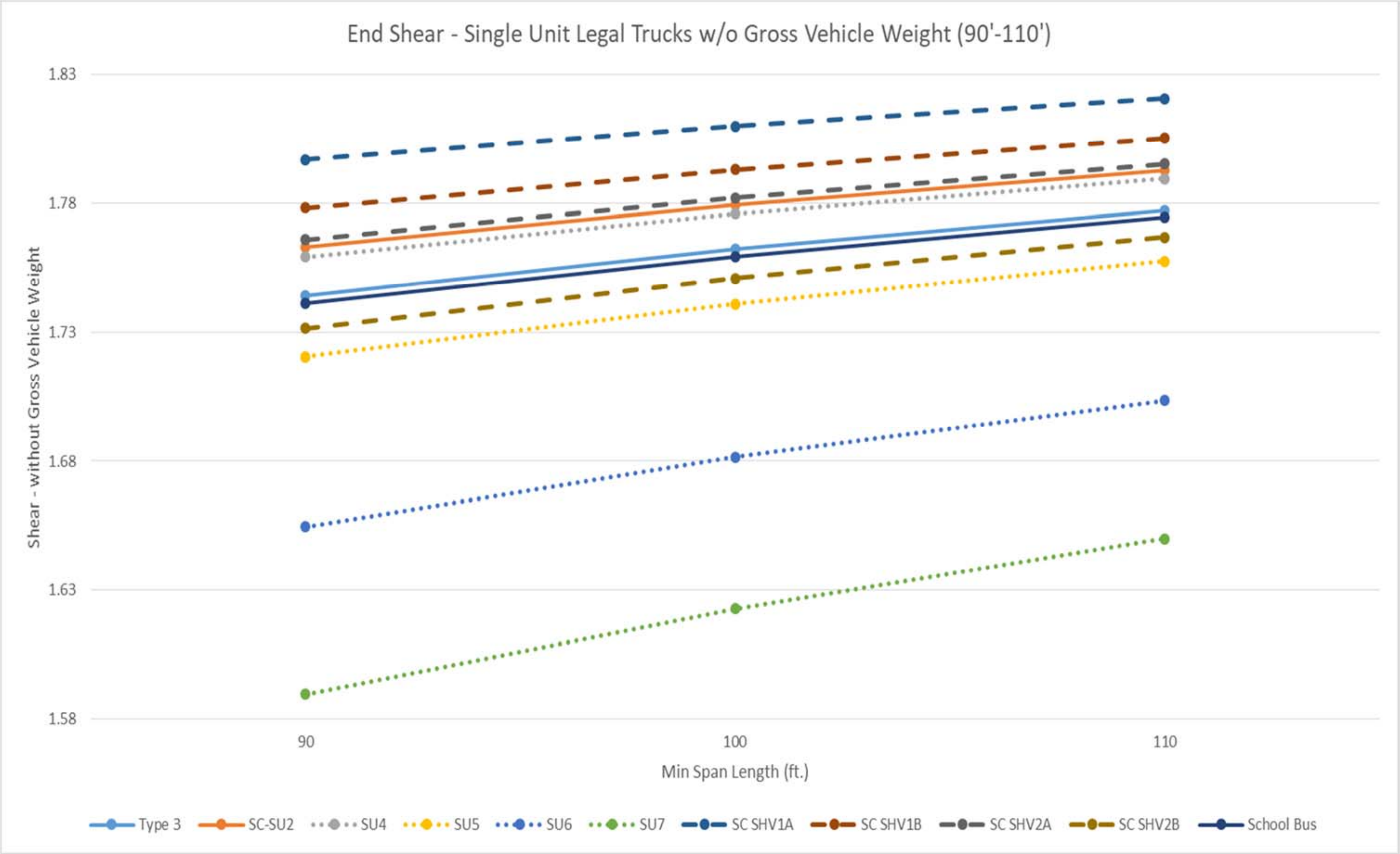
Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *End Shear*

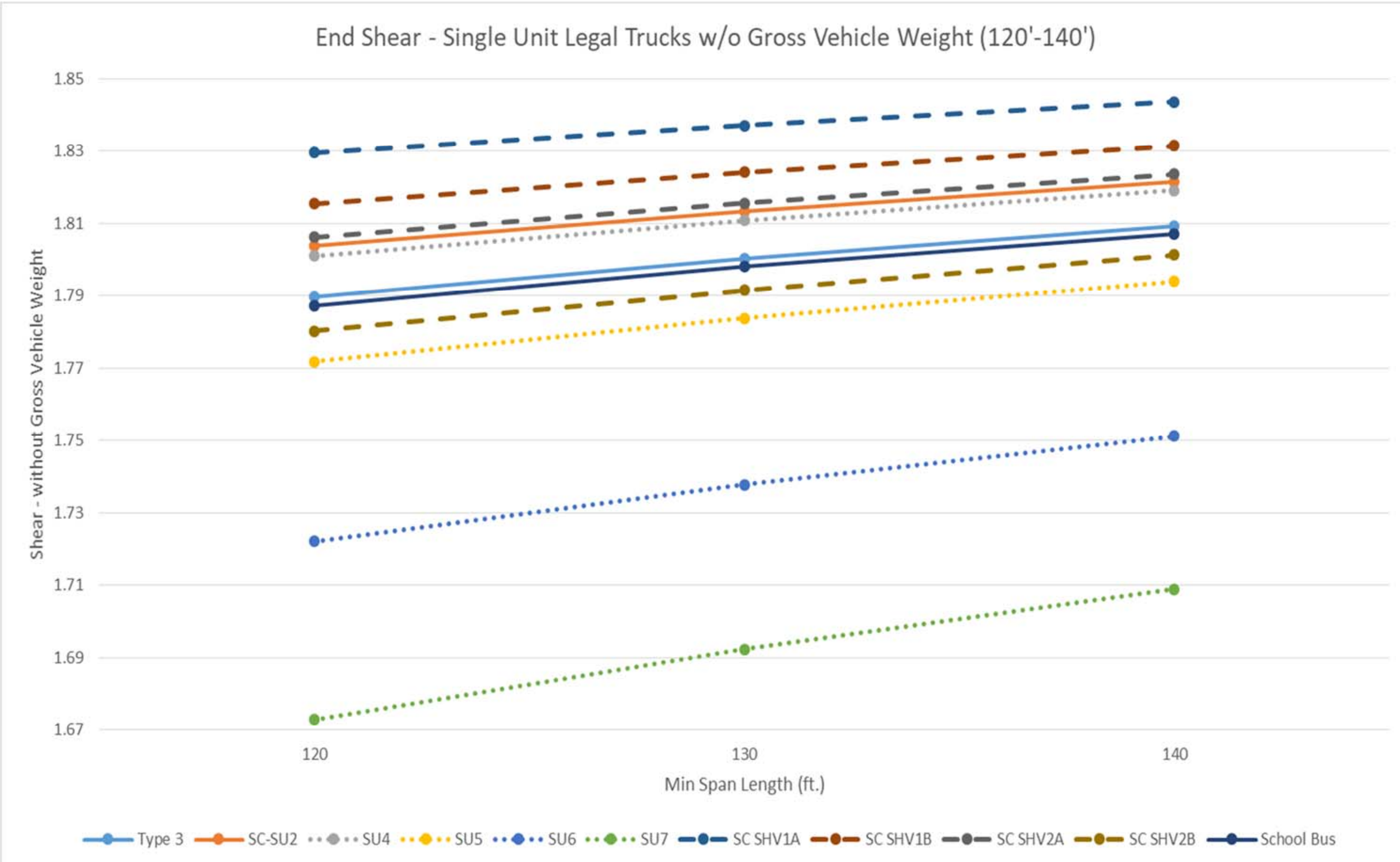



End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
1.65
1.55
1.45
1.35
1.25
1.15
1.05
0.95
25
30
35
40
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

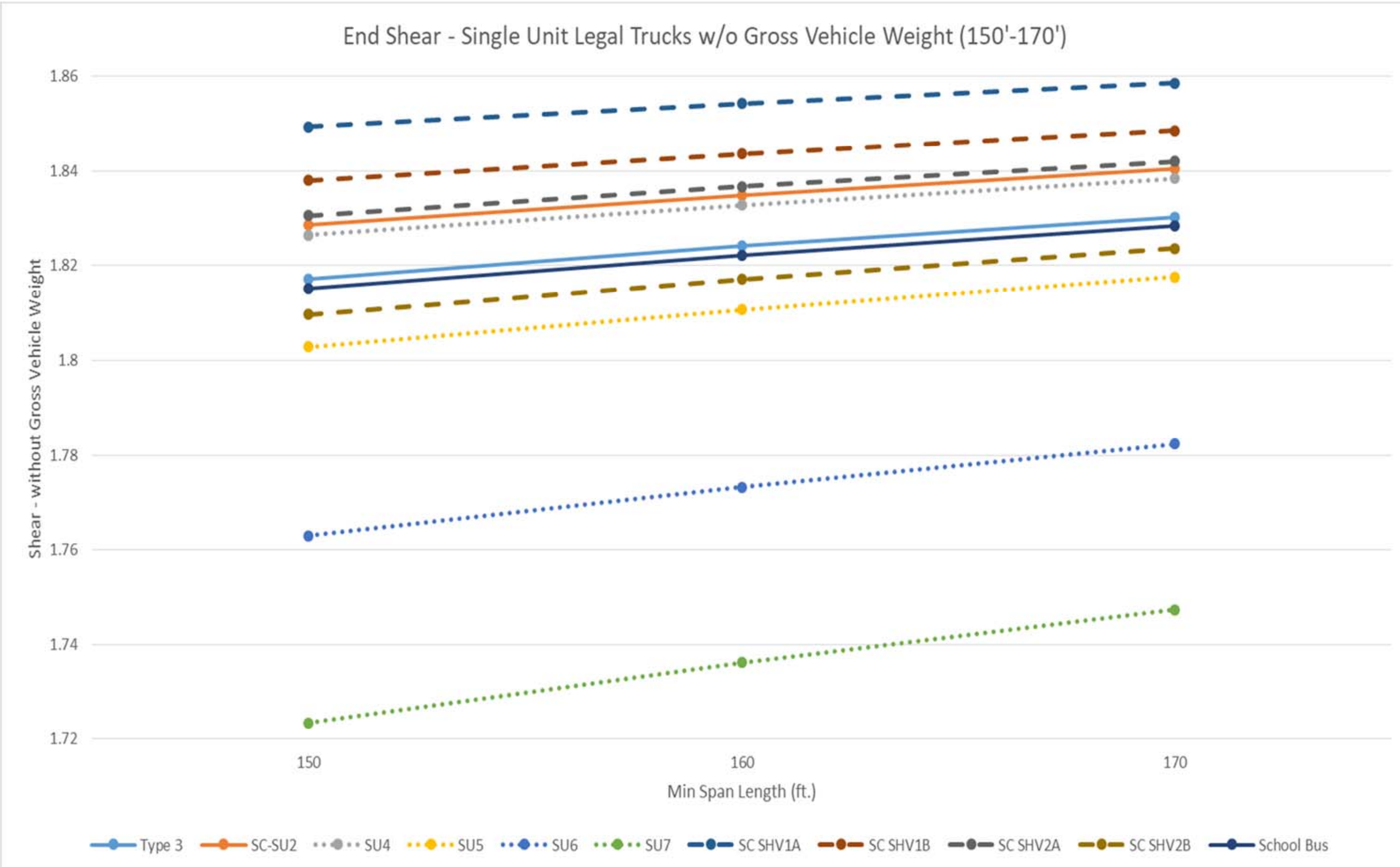

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
Shear - without Gross Vehicle Weight
1.75
1.65
1.55
1.45
1.35
1.25
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
Shear - without Gross Vehicle Weight
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

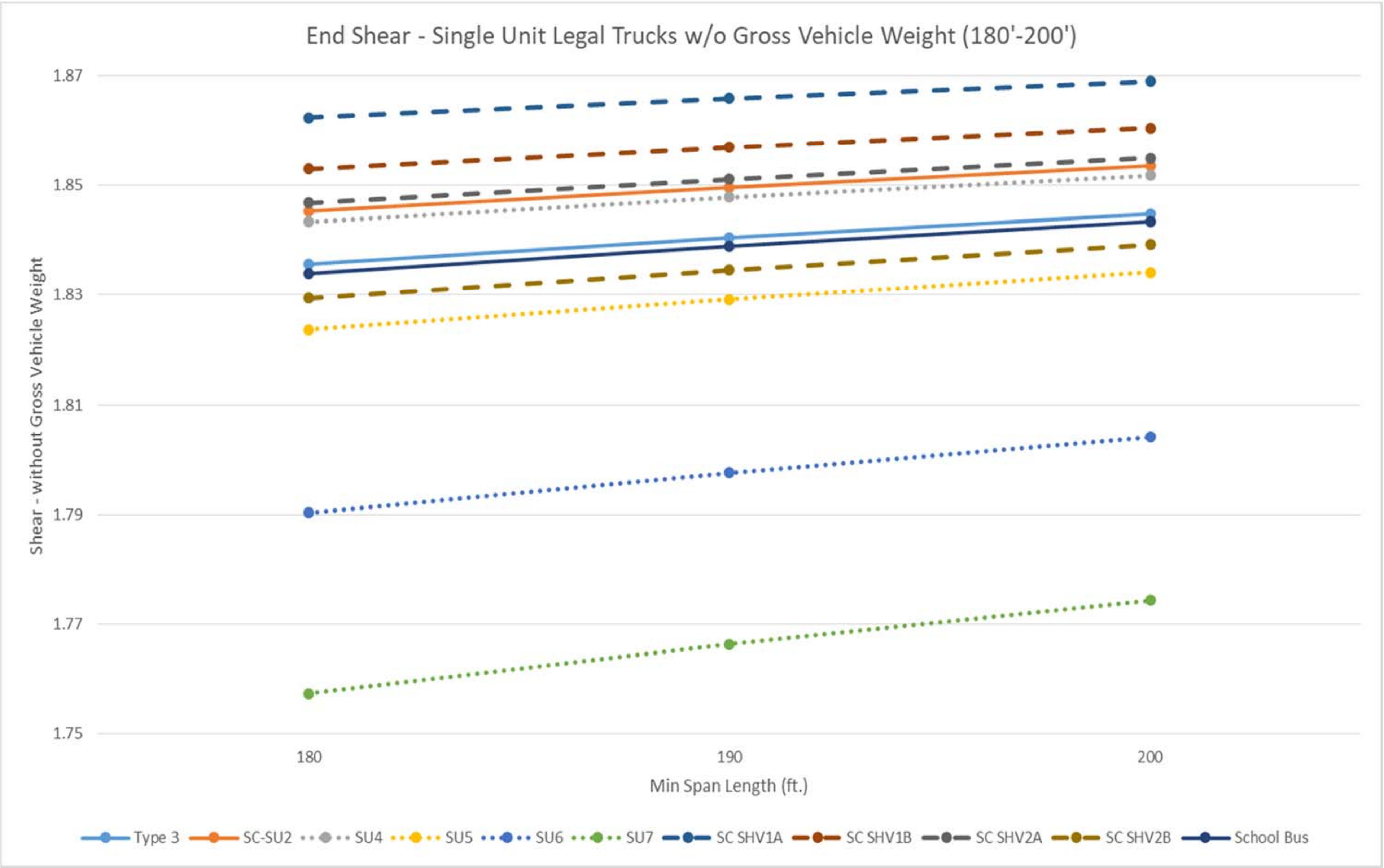

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
1.83
1.78
1.73
1.68
1.63
1.58
Shear - without Gross Vehicle Weight
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

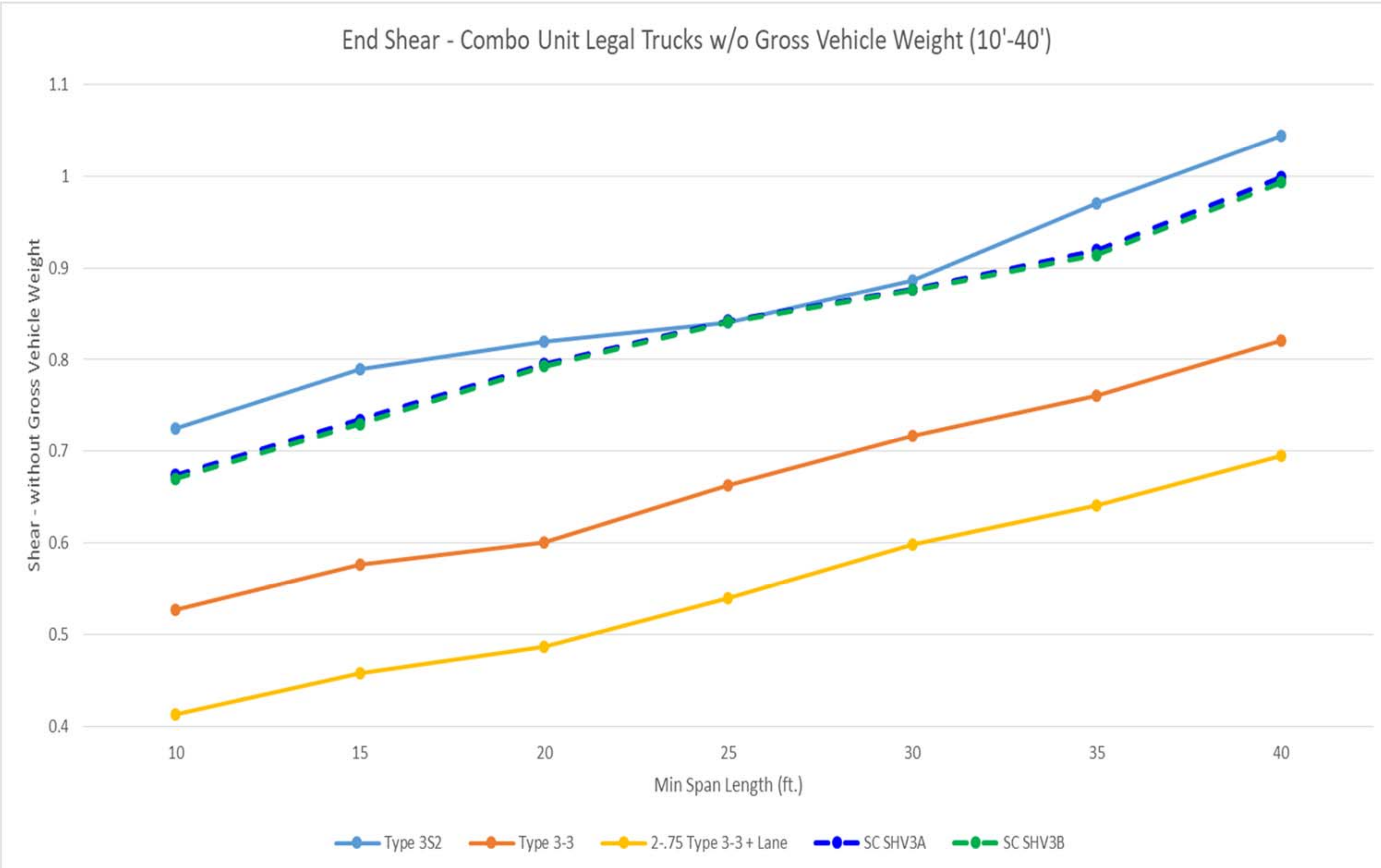


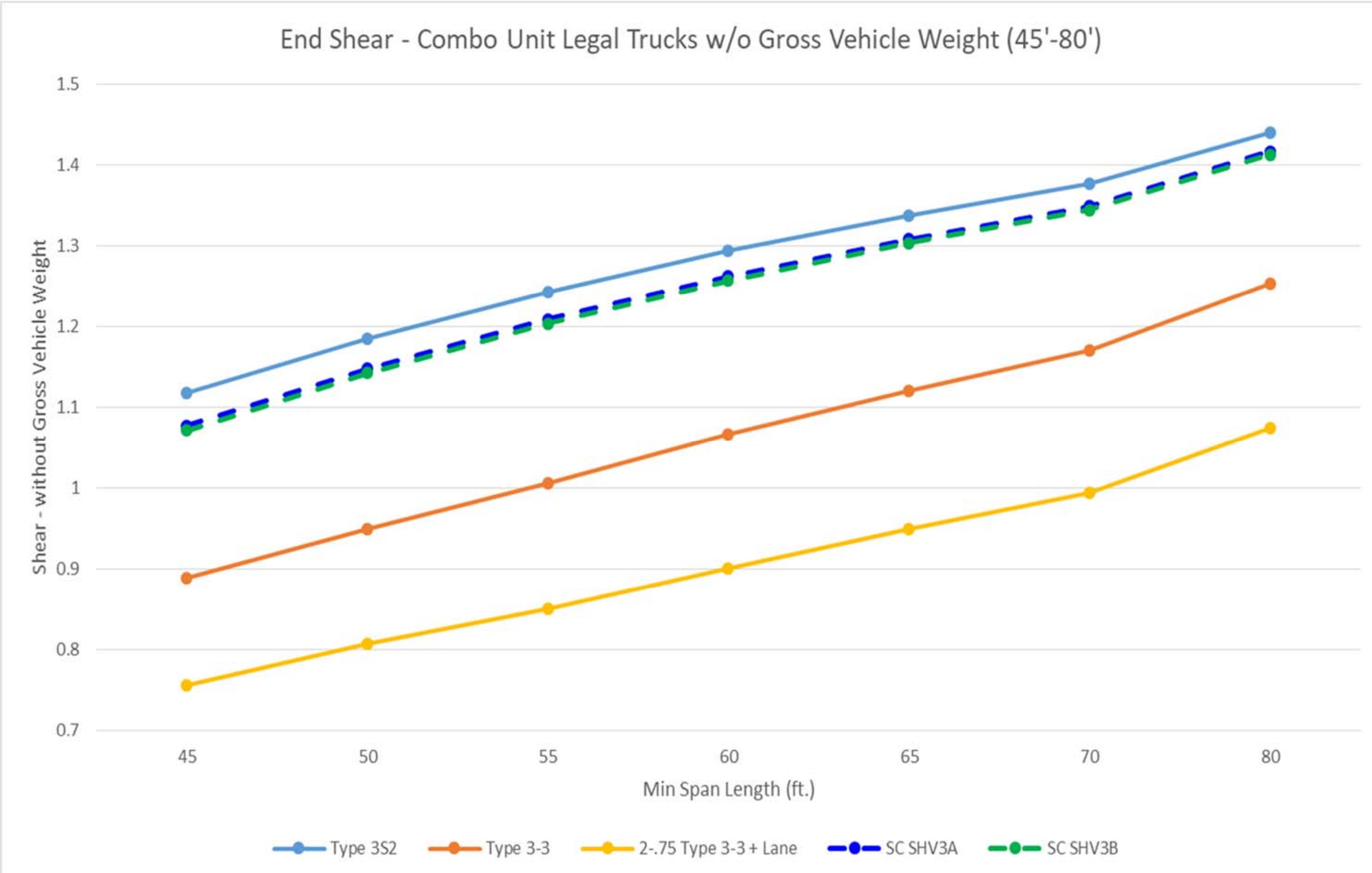
End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
1.85
1.83
1.81
1.79
1.77
1.75
1.73
1.71
1.69
1.67
120
130
140
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

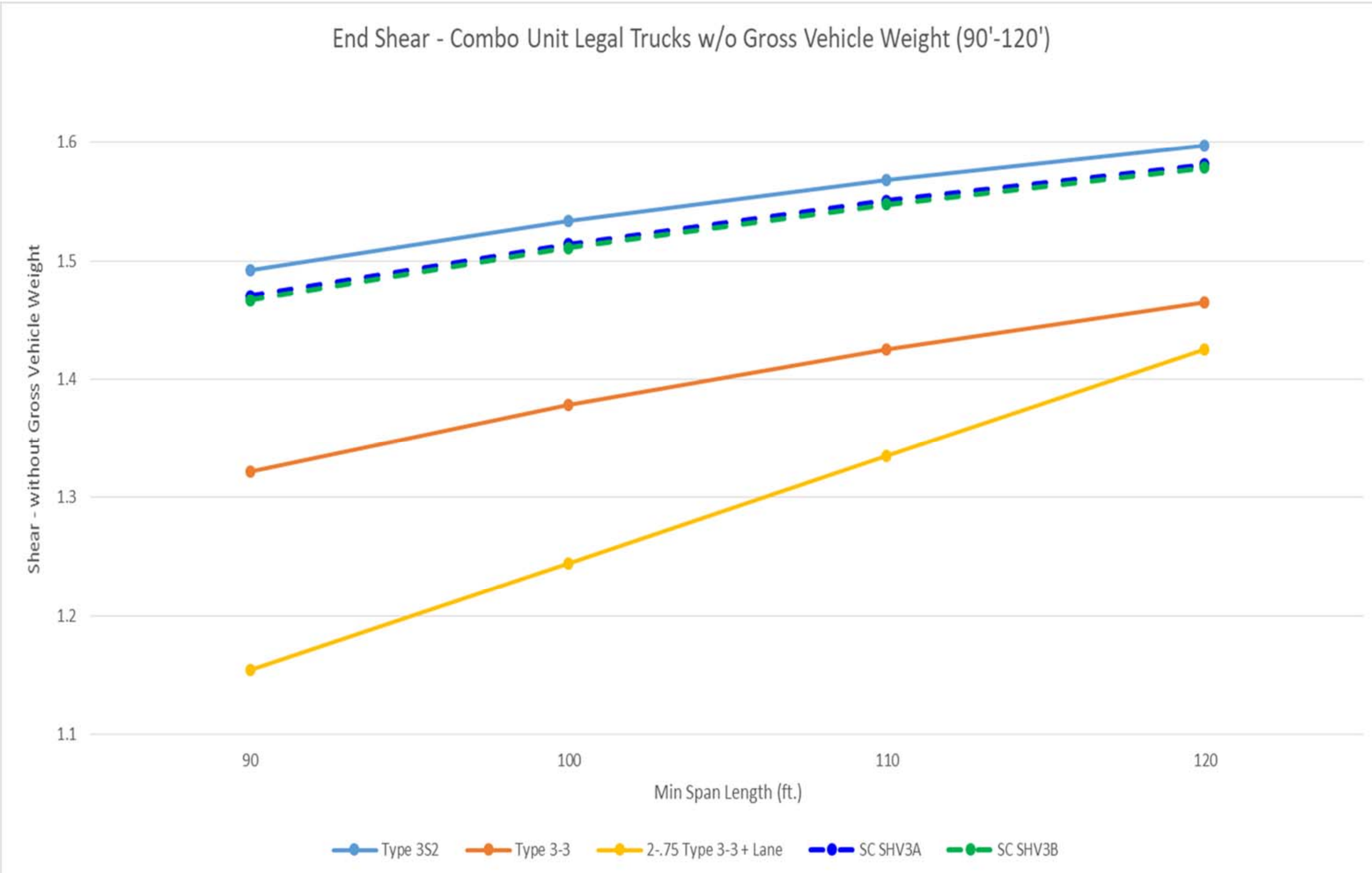


End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
1.86
1.84
1.82
1.8
1.78
1.76
1.74
1.72
Shear - without Gross Vehicle Weight
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

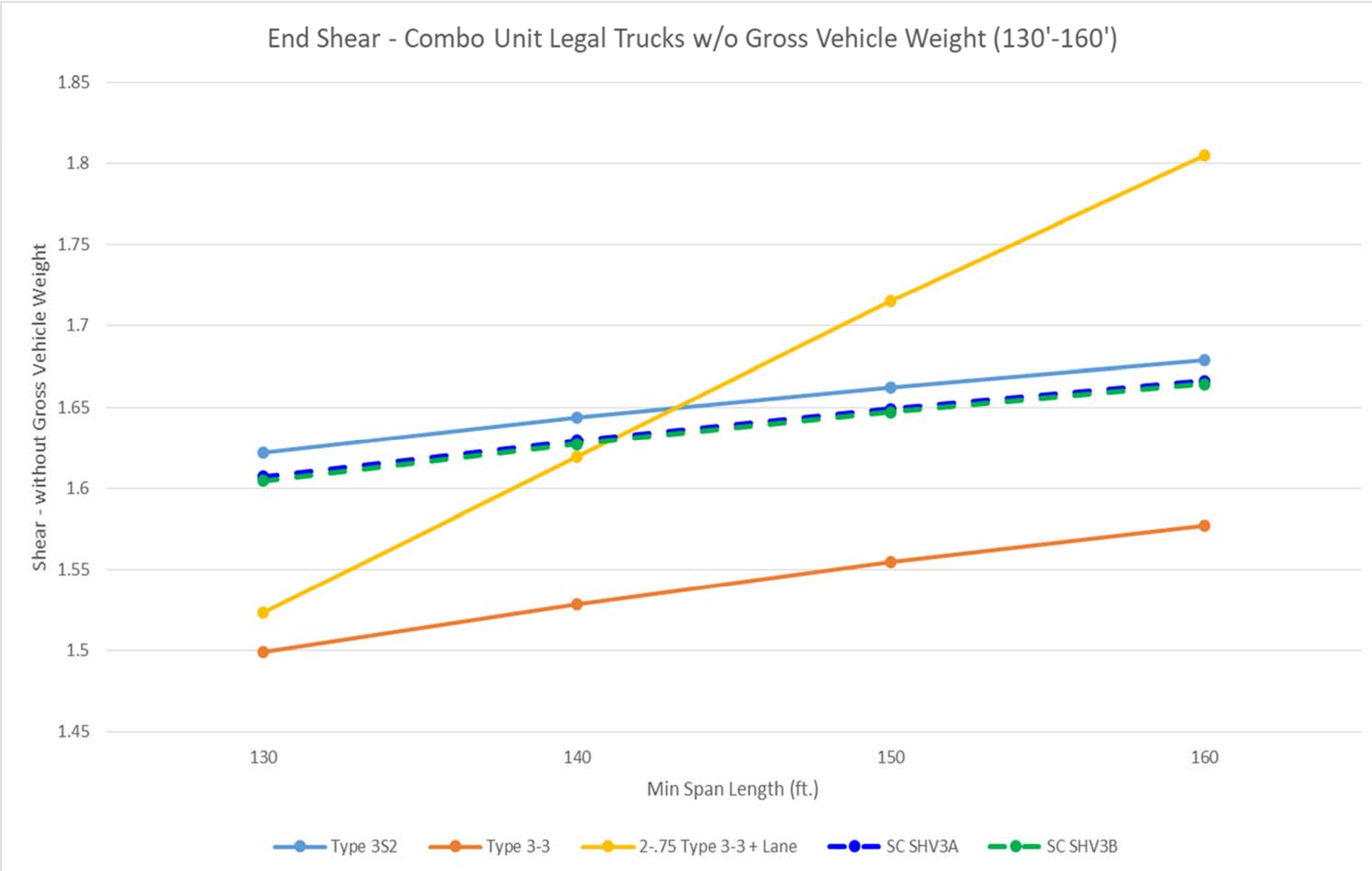

End Shear - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
1.87
1.85
1.83
1.81
1.79
1.77
1.75
Shear - without Gross Vehicle Weight
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

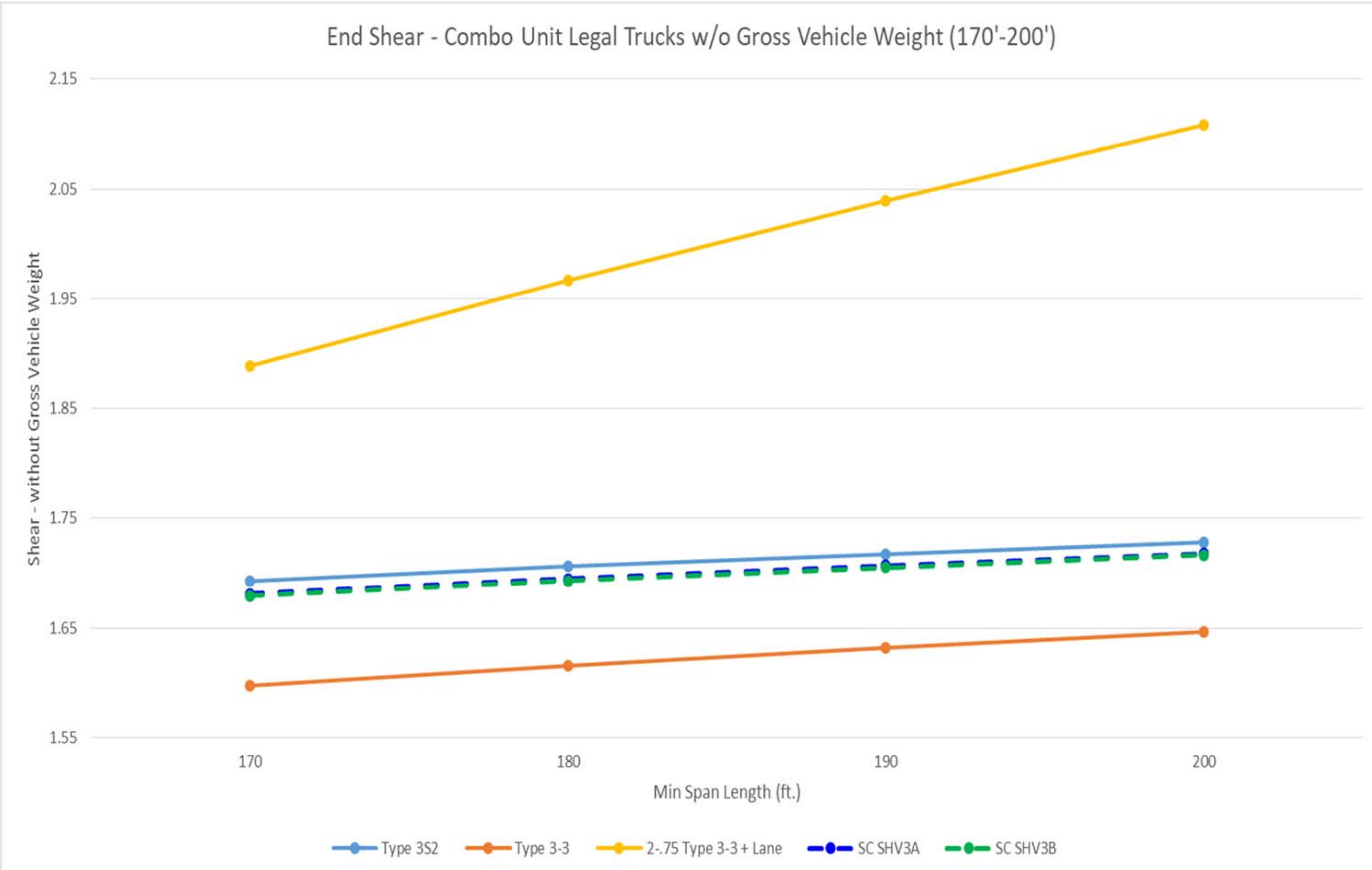

End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
1.6
1.5
1.4
1.3
1.2
1.1
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



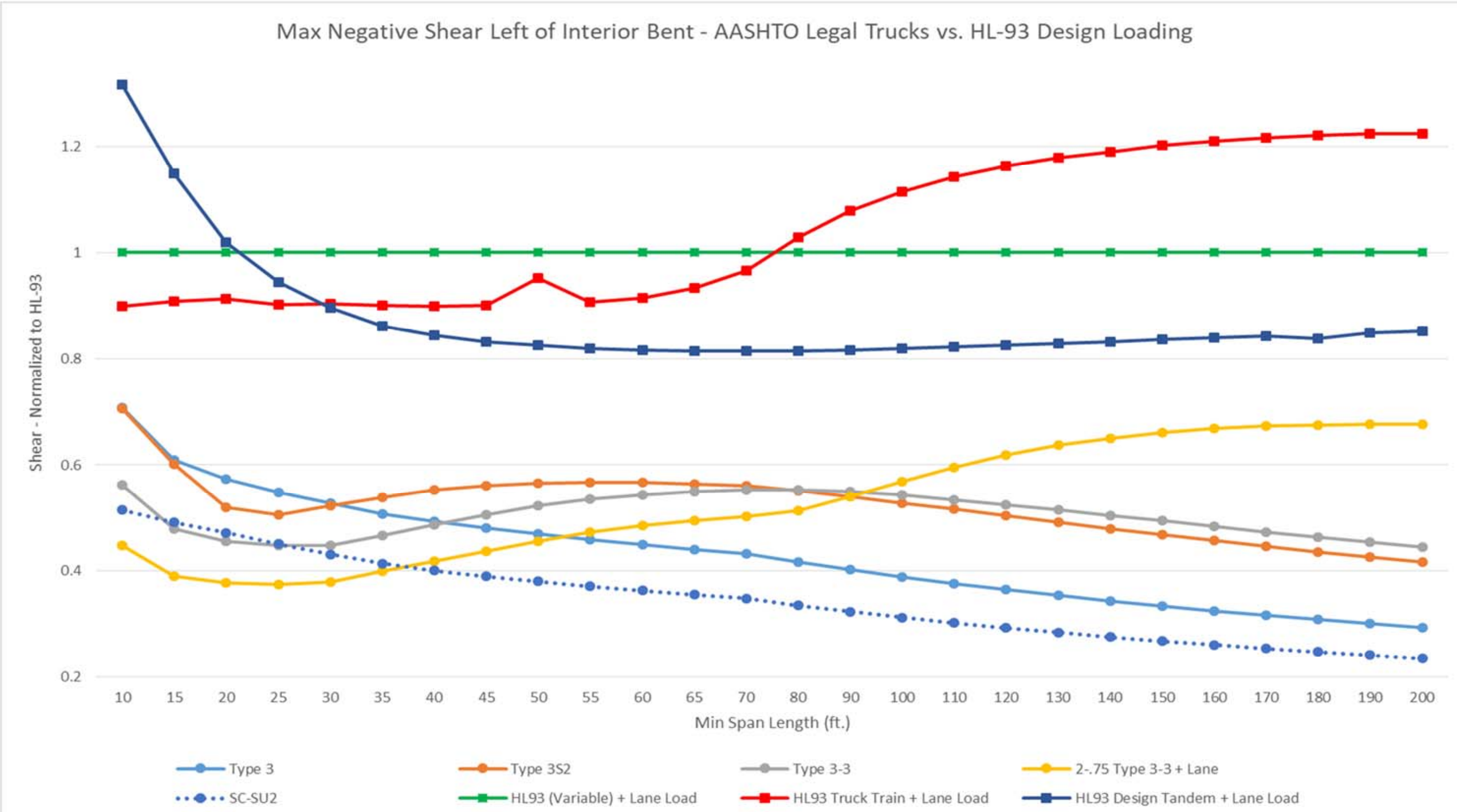
End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
1.85
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
Shear - without Gross Vehicle Weight
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

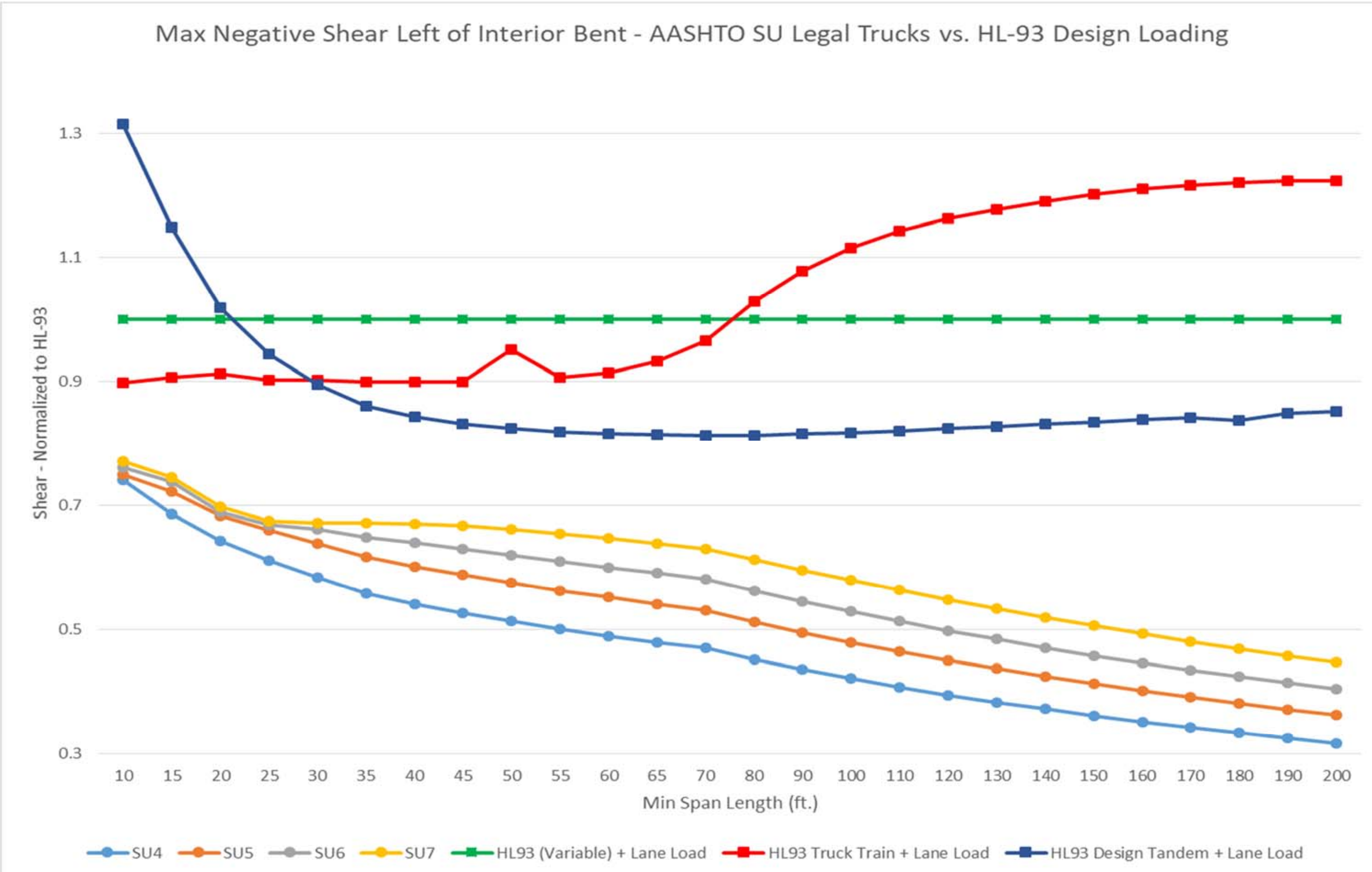


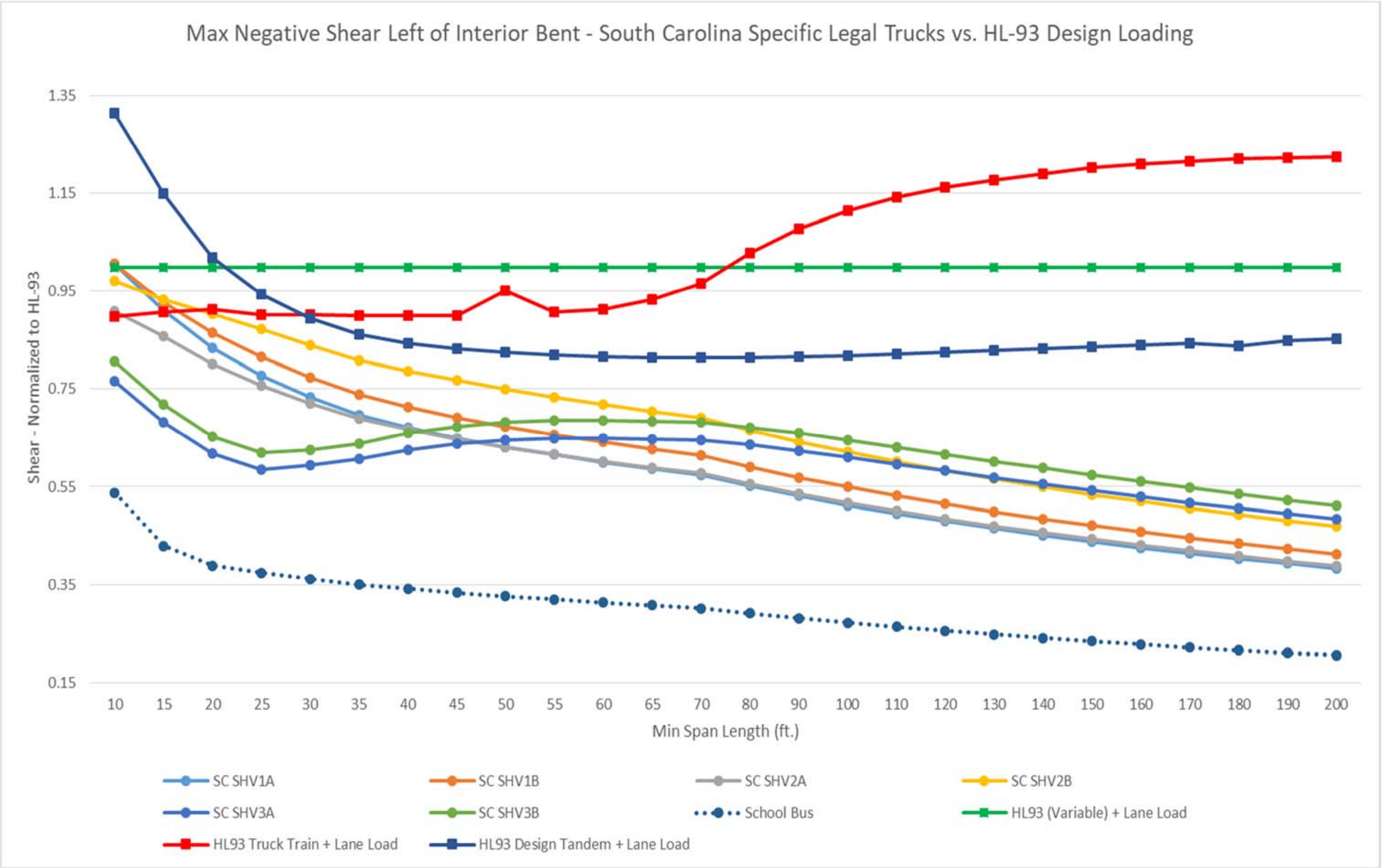
End Shear - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
2.15
2.05
1.95
1.85
1.75
1.65
1.55
Shear - without Gross Vehicle Weight
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Negative Shear Left of Interior Bent*

Note: Spike at 50' in the graphs for Max Negative Shear Left of Interior Bent is due to the spacing of the Truck Train Vehicles at 50' (causing a spike at that location)

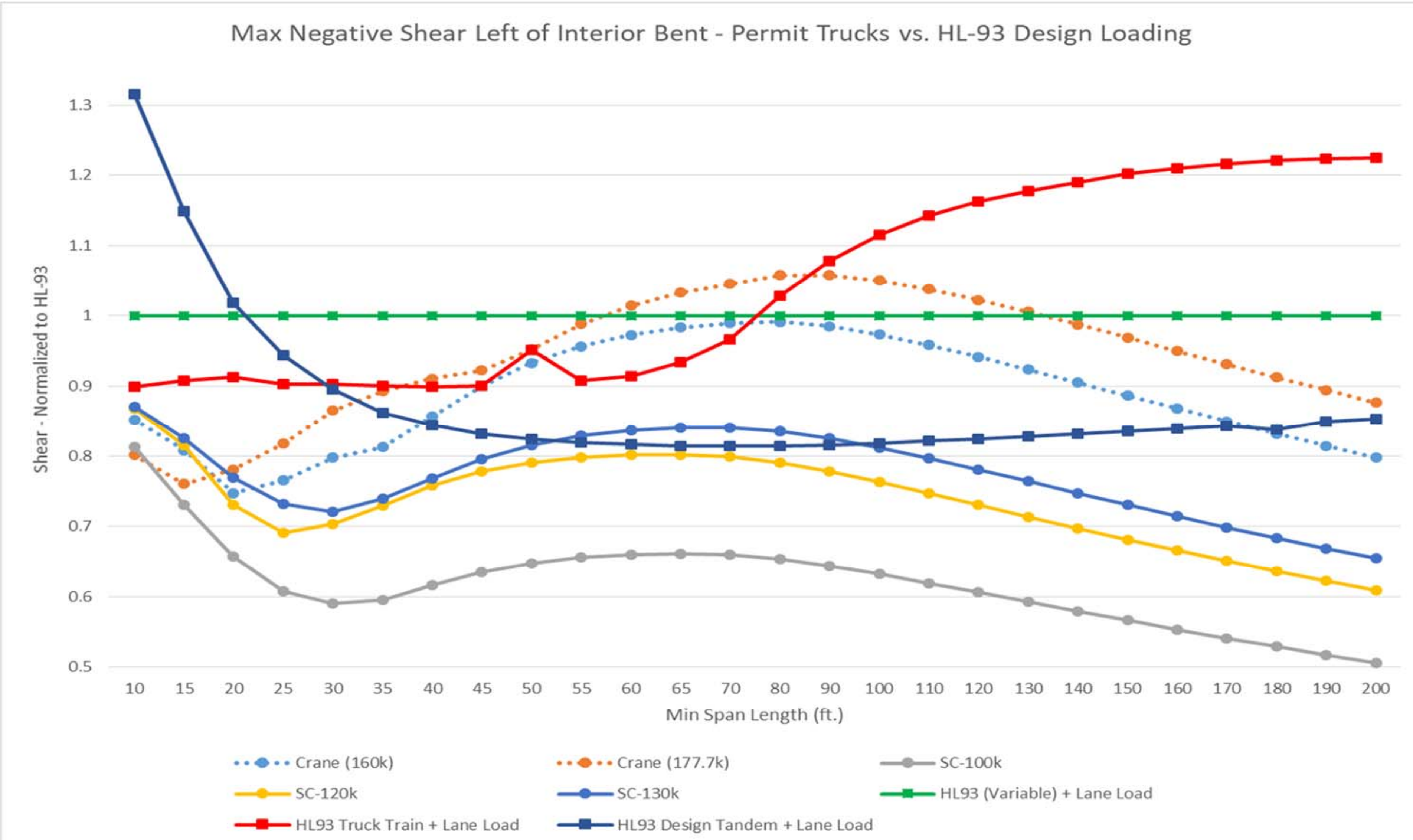



Max Negative Shear Left of Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.1
0.9
0.7
0.5
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

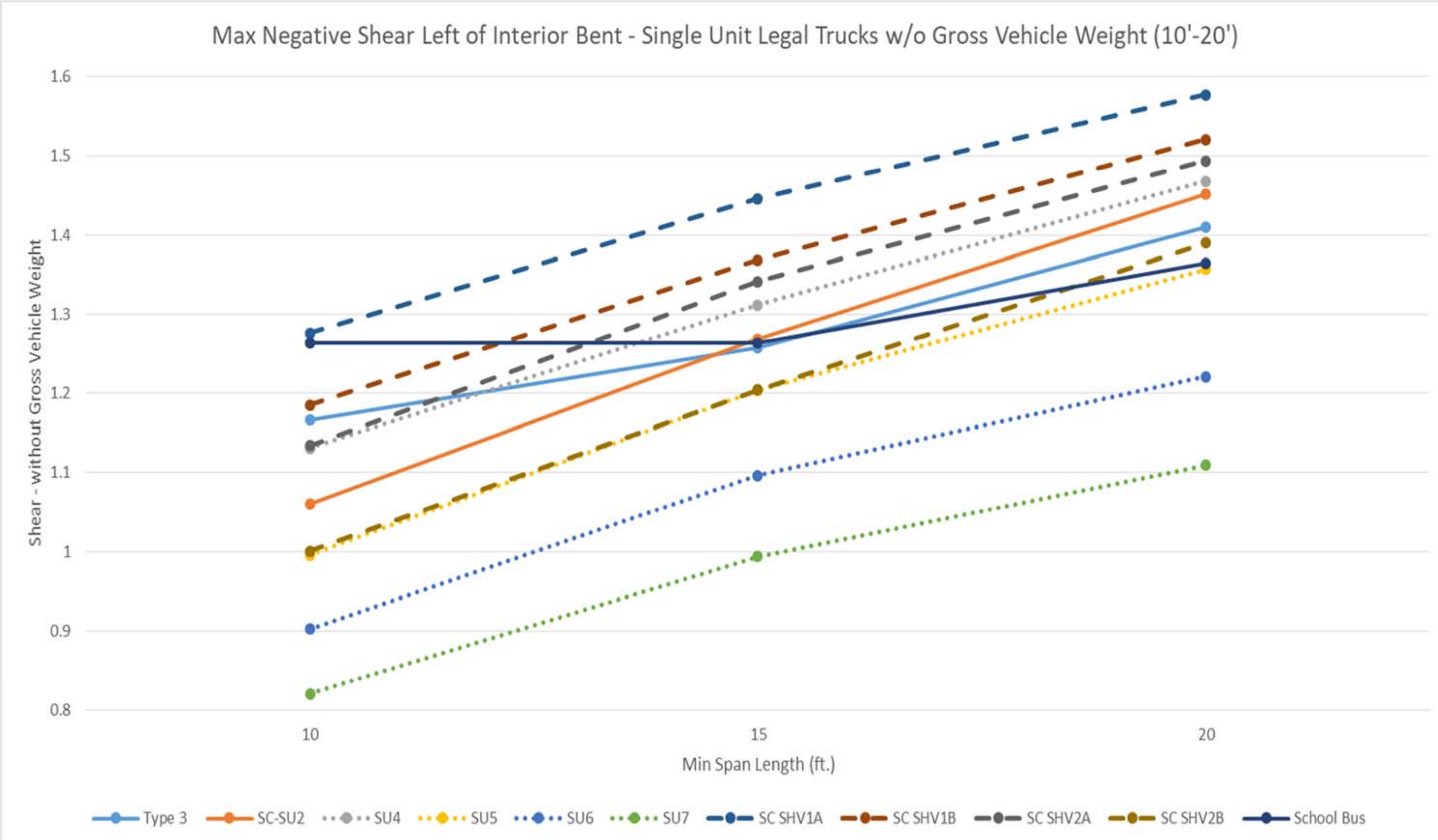


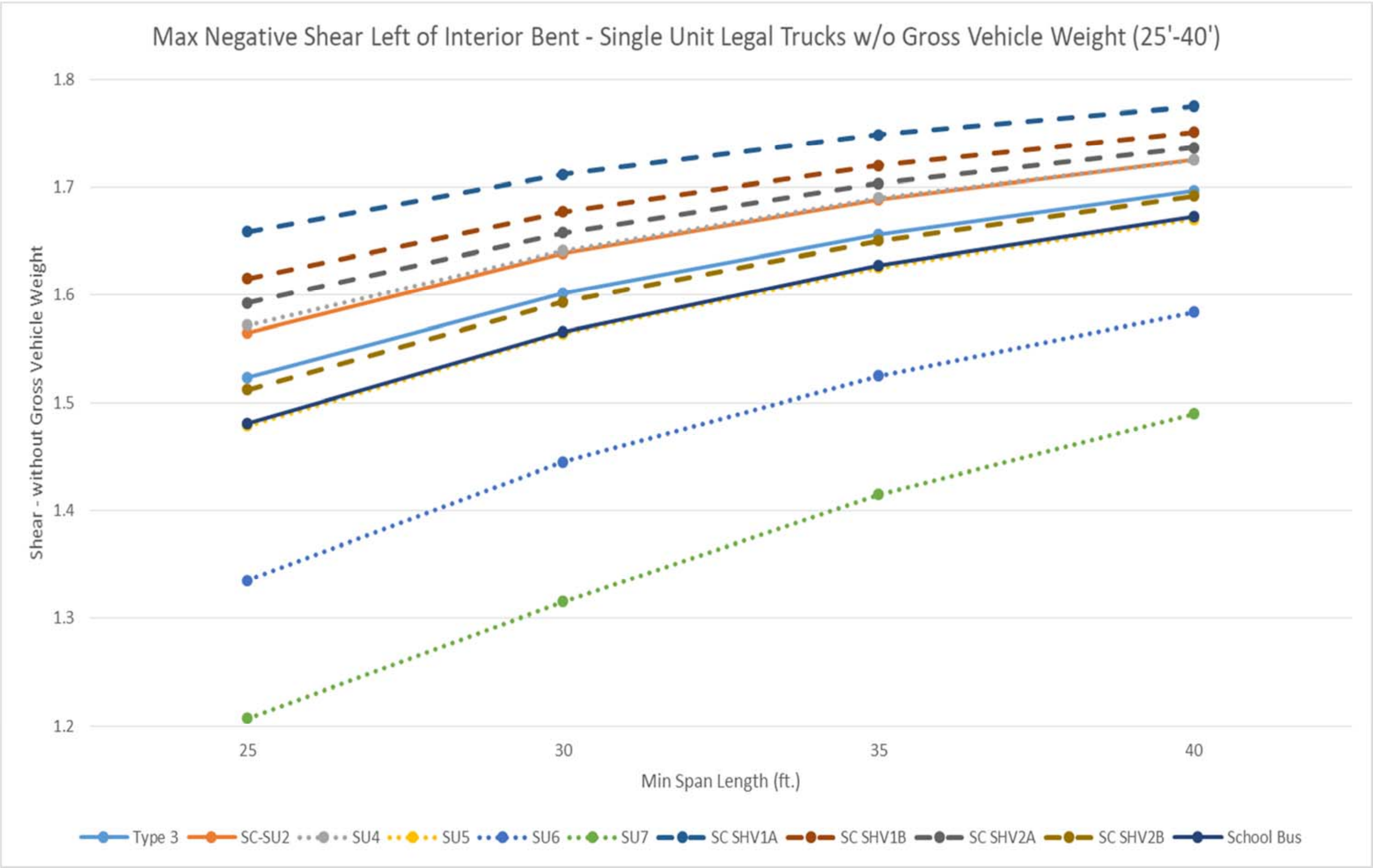
Max Negative Shear Left of Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.35
1.15
0.95
0.75
0.55
0.35
0.15
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

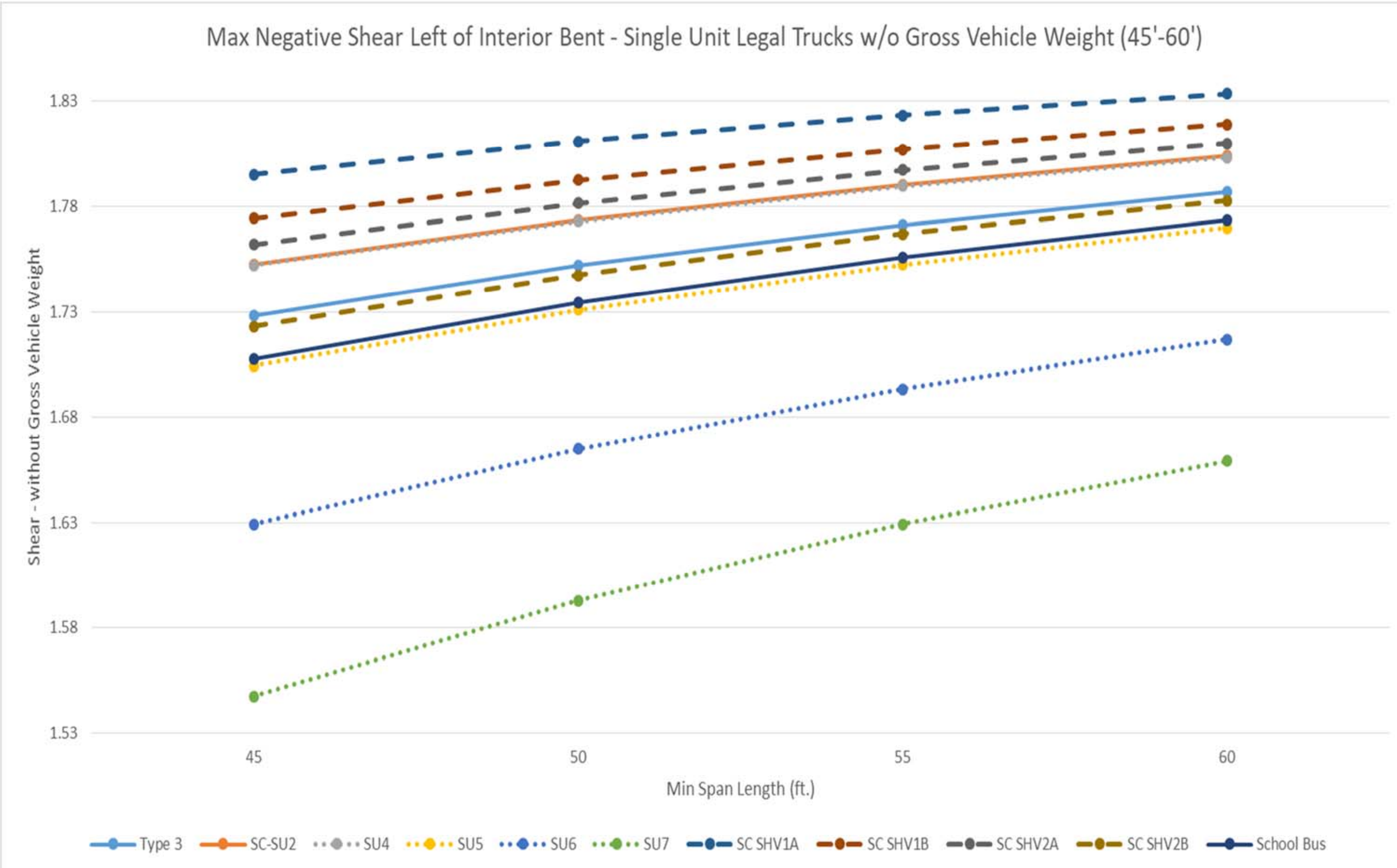
Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Negative Shear Left of Interior Bent*



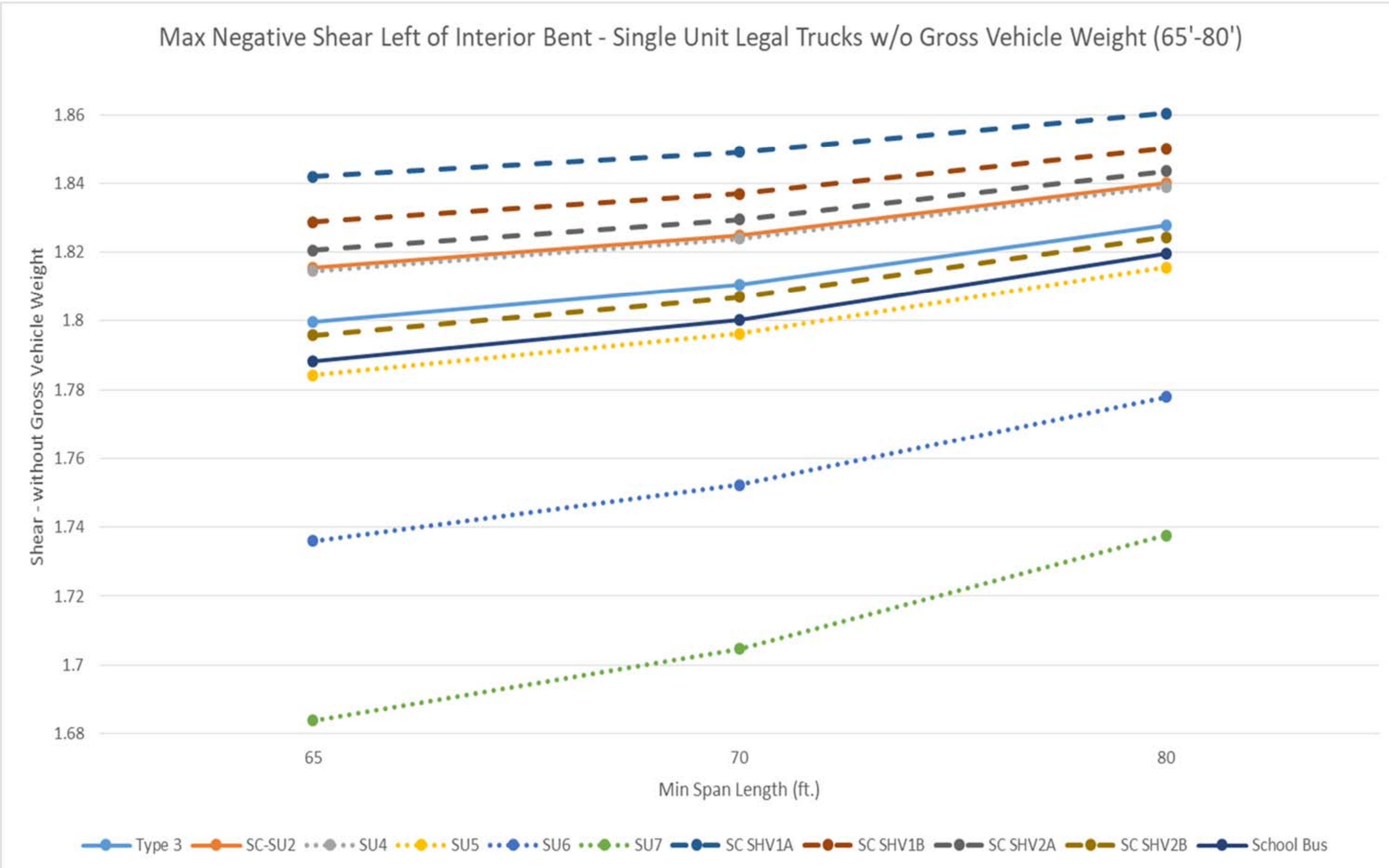
Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *Max Negative Shear Left of Interior Bent*

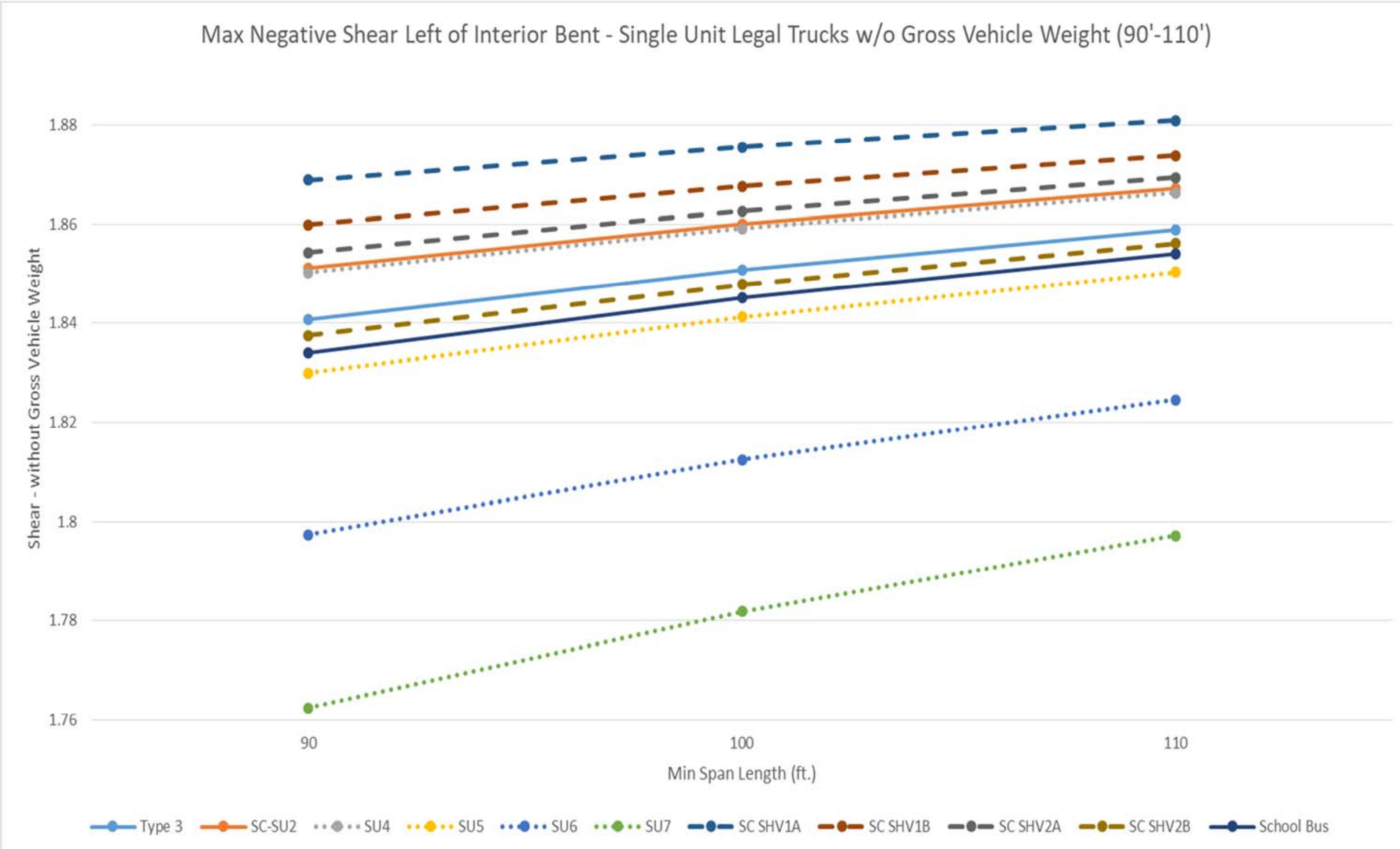



Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
1.8
1.7
1.6
1.5
1.4
1.3
1.2
25
30
35
40
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

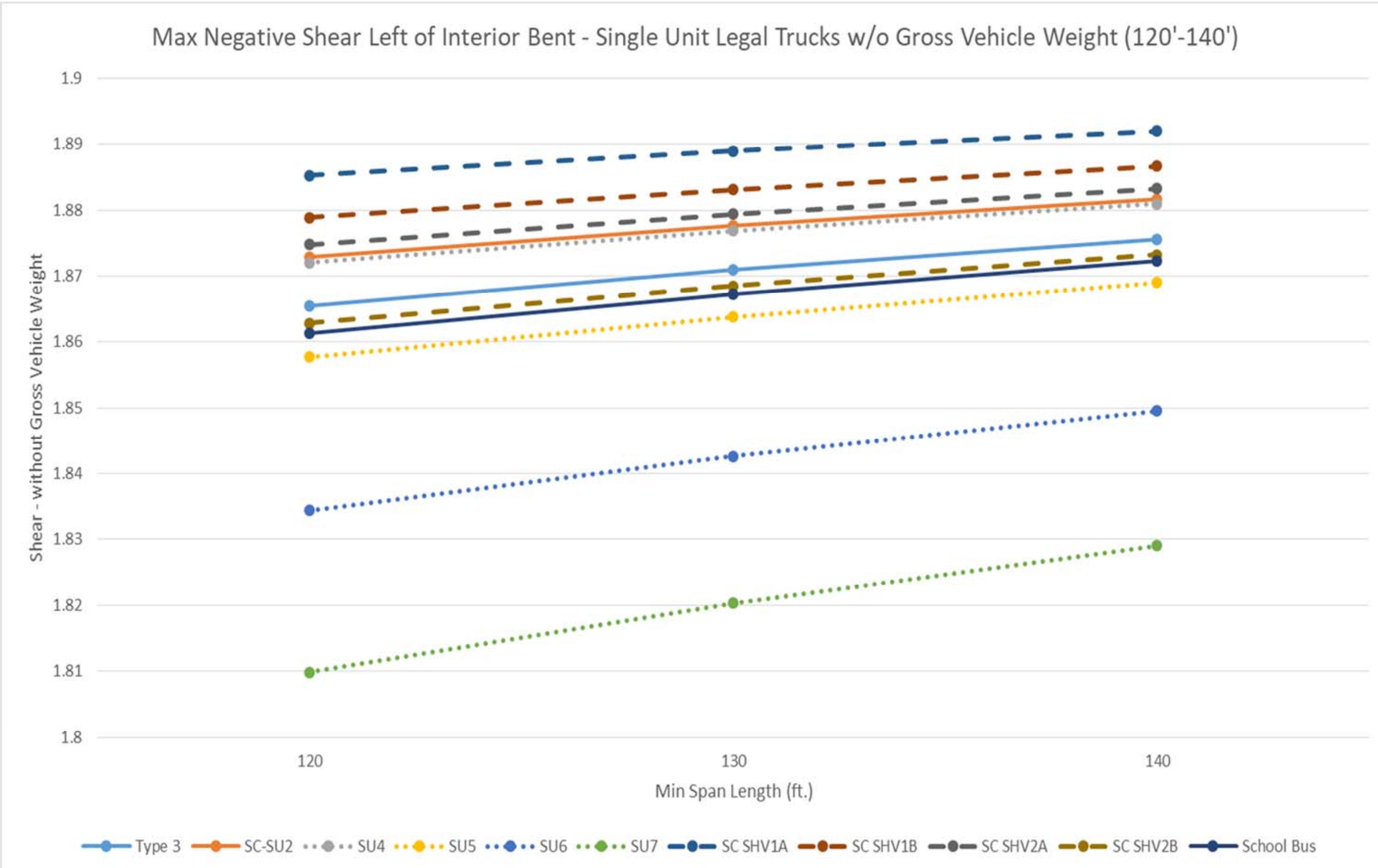


Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.83
1.78
1.73
1.68
1.63
1.58
1.53
Shear - without Gross Vehicle Weight
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

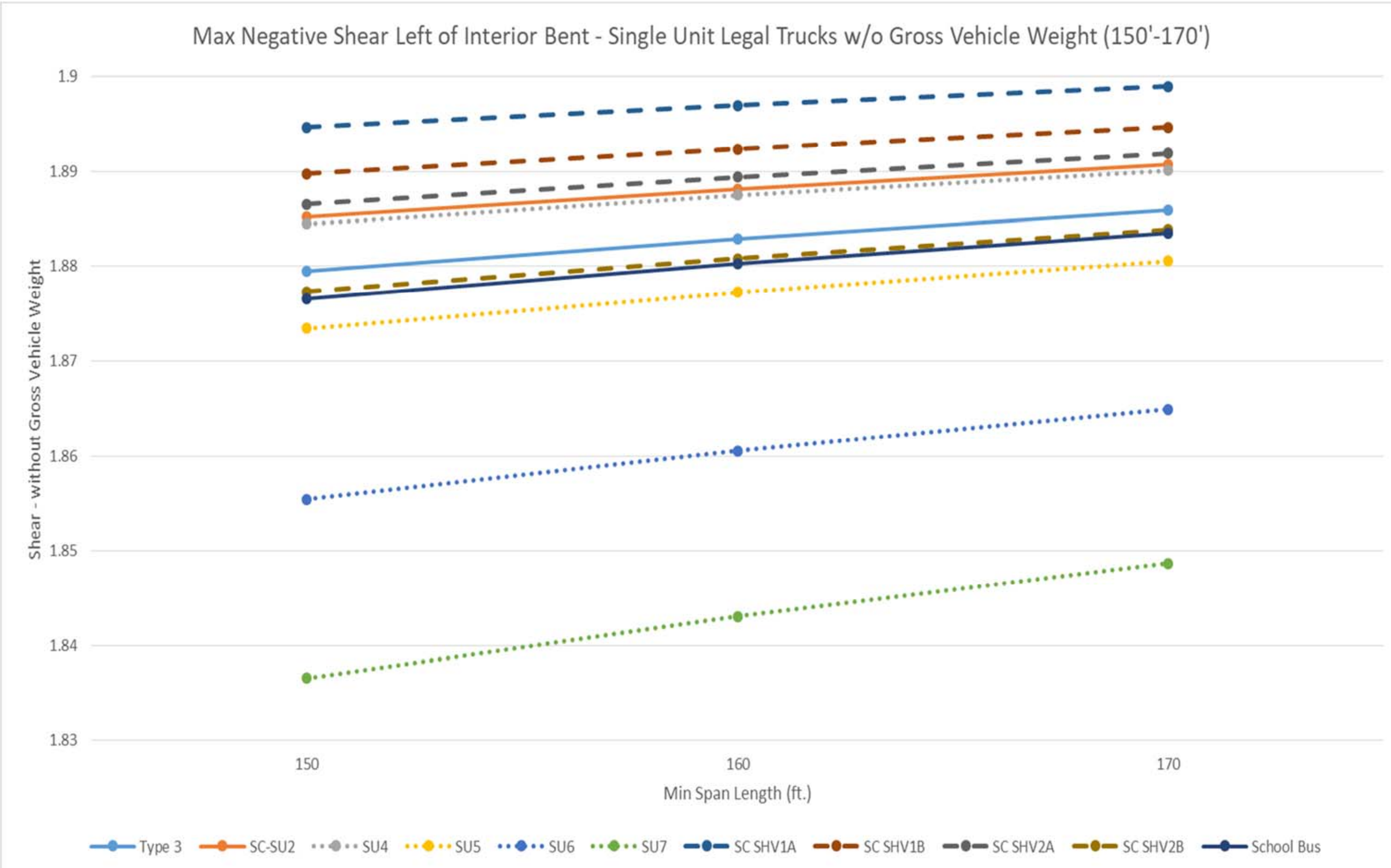

Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
1.86
1.84
1.82
1.8
1.78
1.76
1.74
1.72
1.7
1.68
Shear - without Gross Vehicle Weight
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

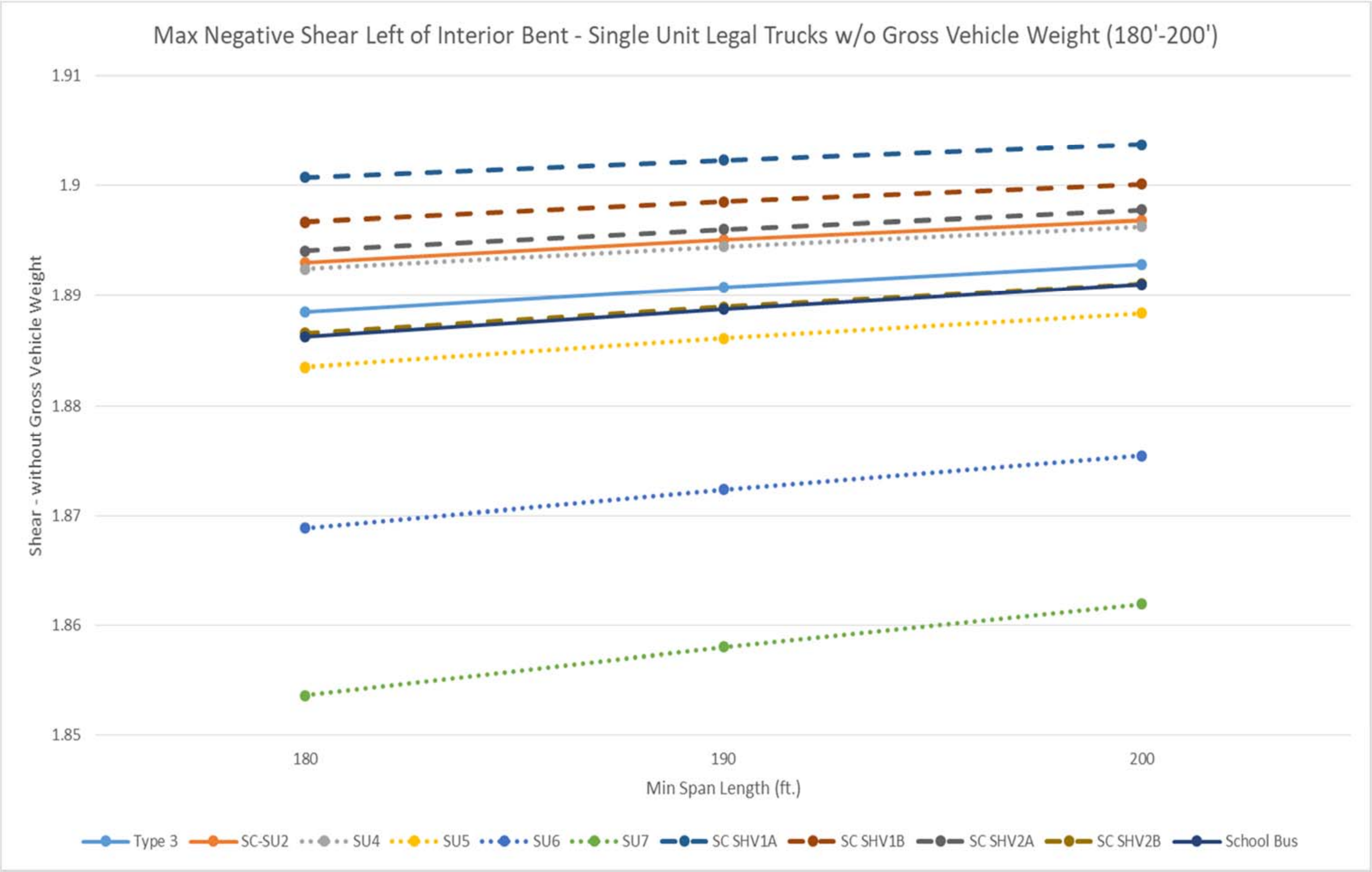


Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
1.88
1.86
1.84
1.82
1.8
1.78
1.76
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

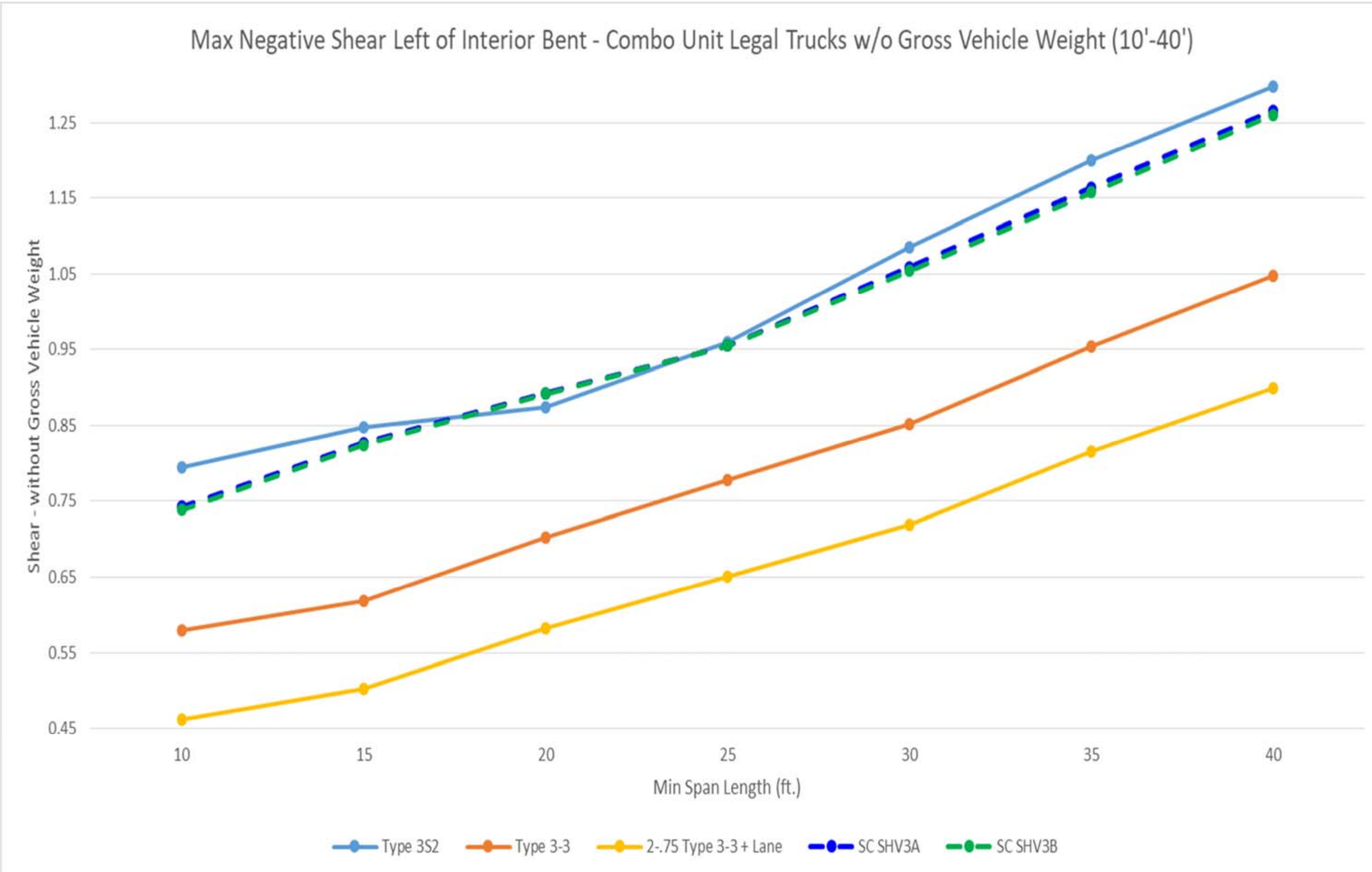


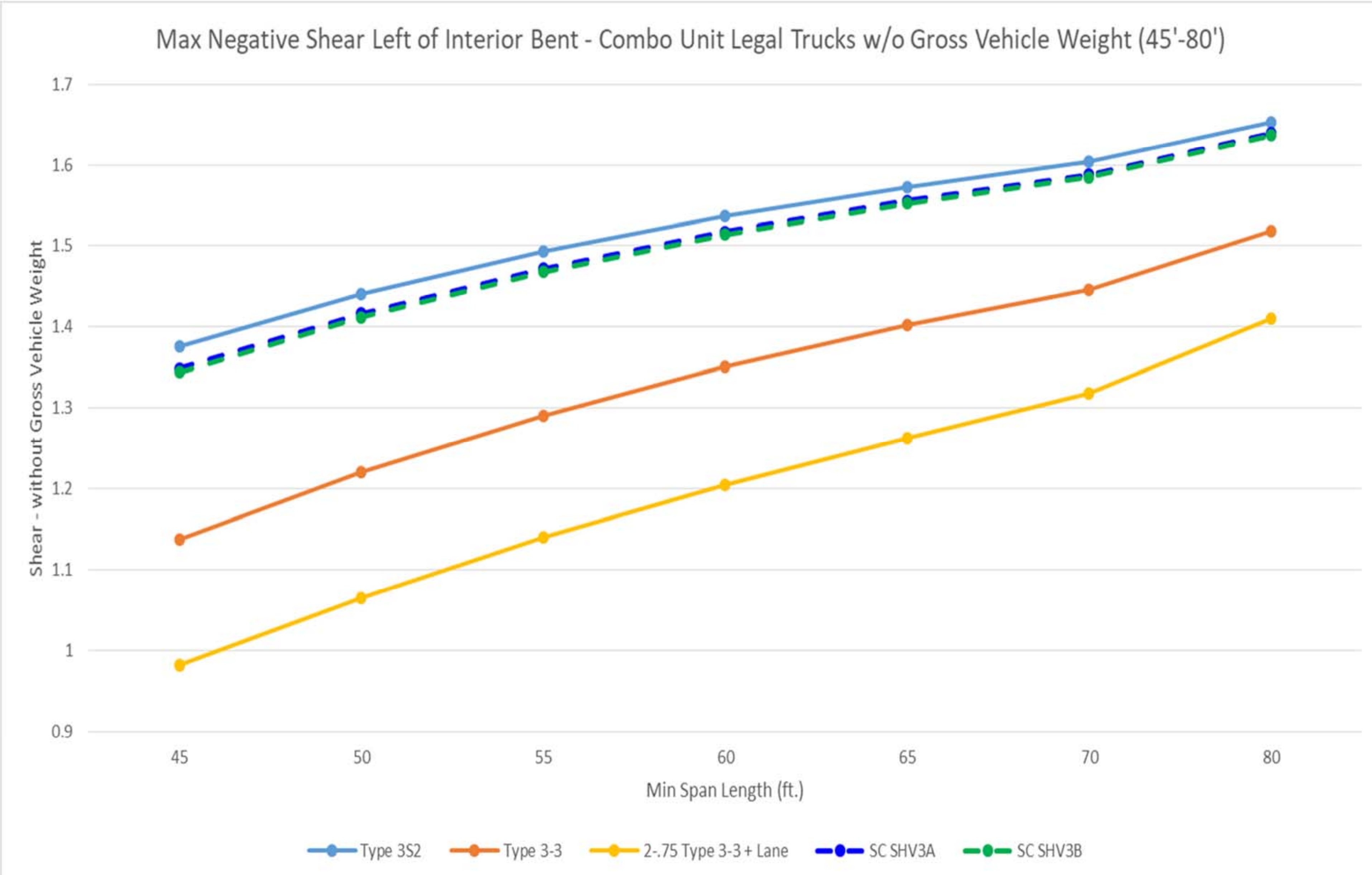
Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
1.9
1.89
1.88
1.87
1.86
1.85
1.84
1.83
1.82
1.81
1.8
Shear - without Gross Vehicle Weight
120
130
140
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
1.9
1.89
1.88
1.87
1.86
1.85
1.84
1.83
Shear - without Gross Vehicle Weight
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

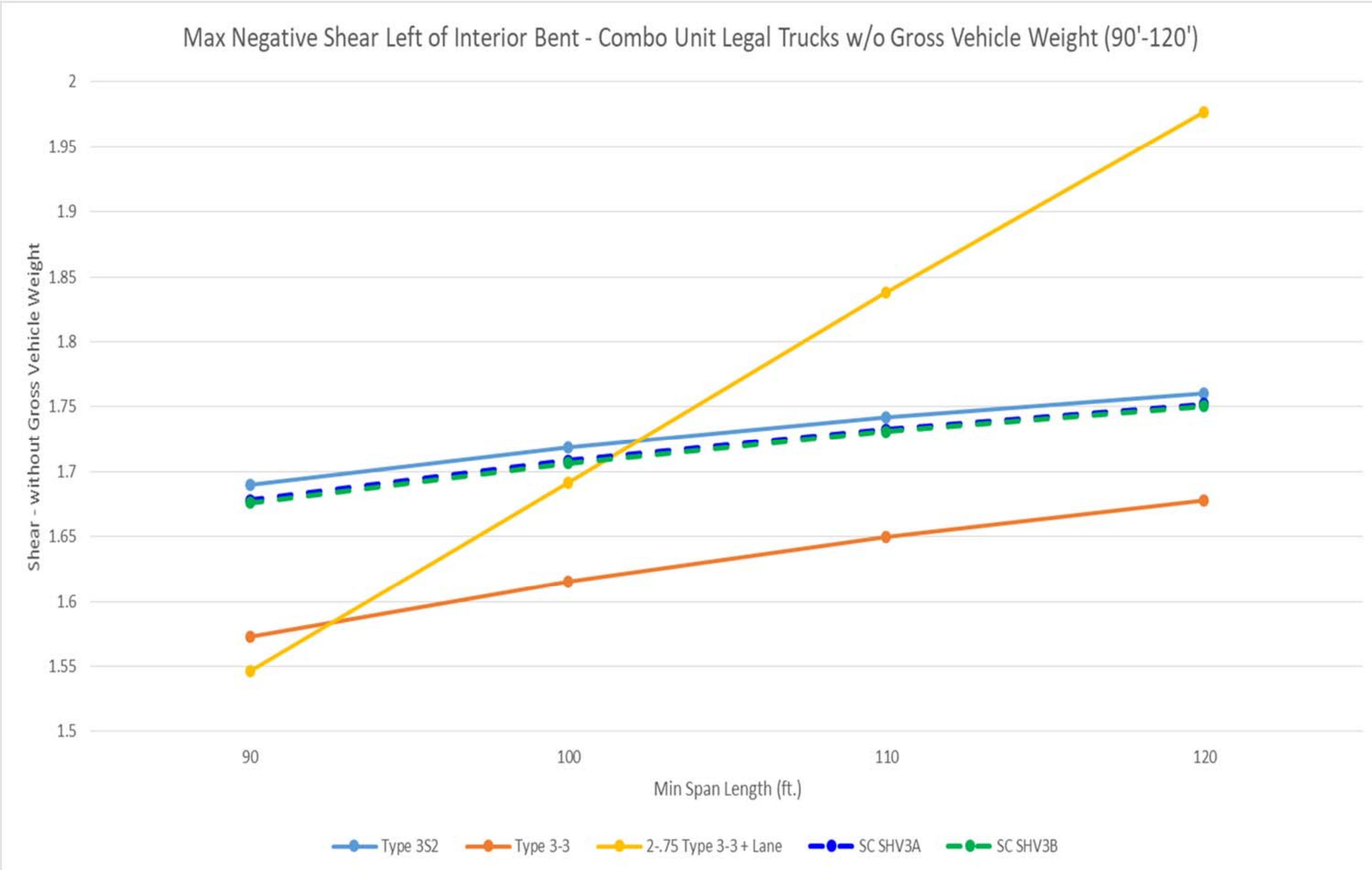


Max Negative Shear Left of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
1.91
1.9
1.89
1.88
1.87
1.86
1.85
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

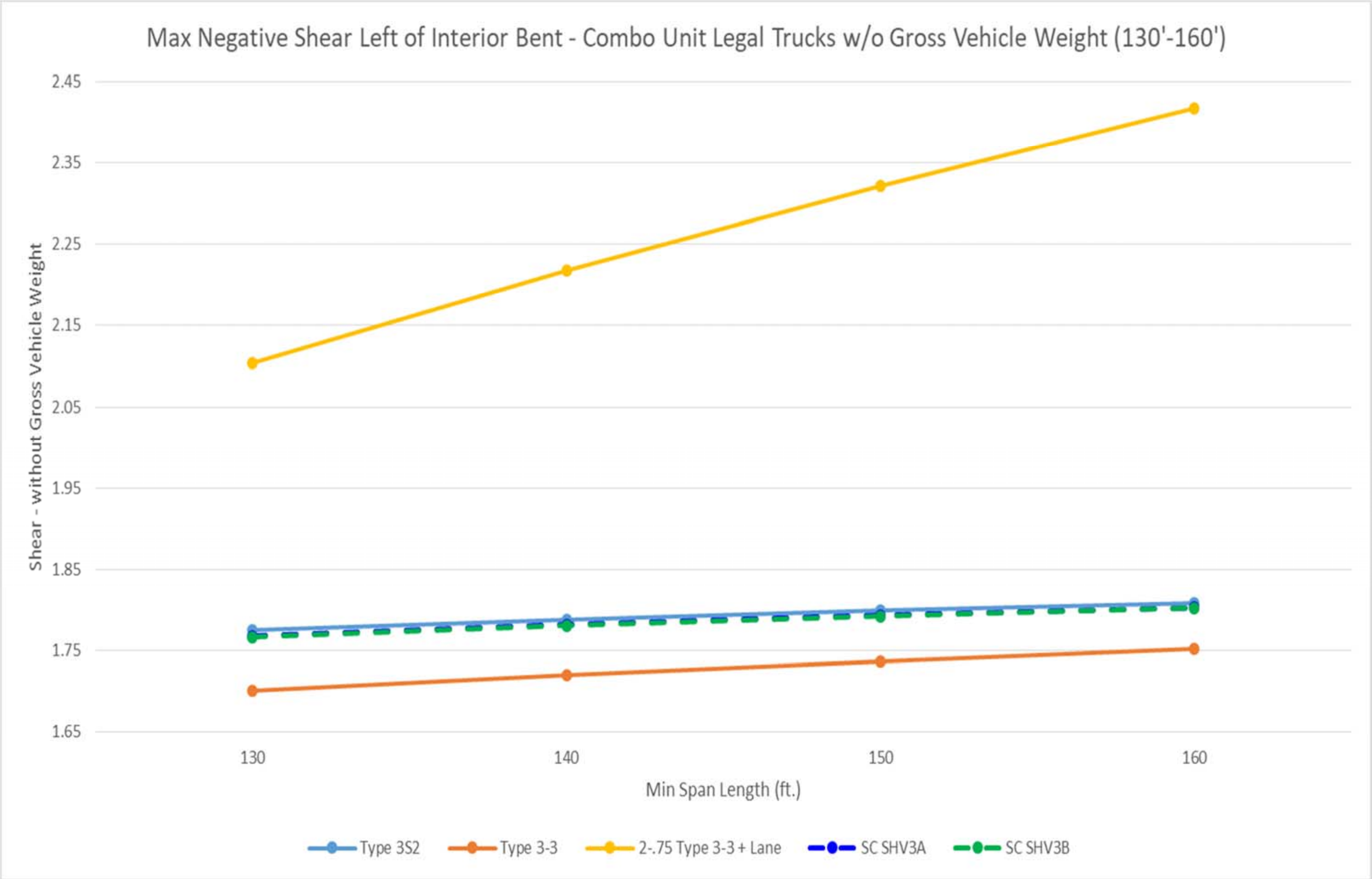

Max Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

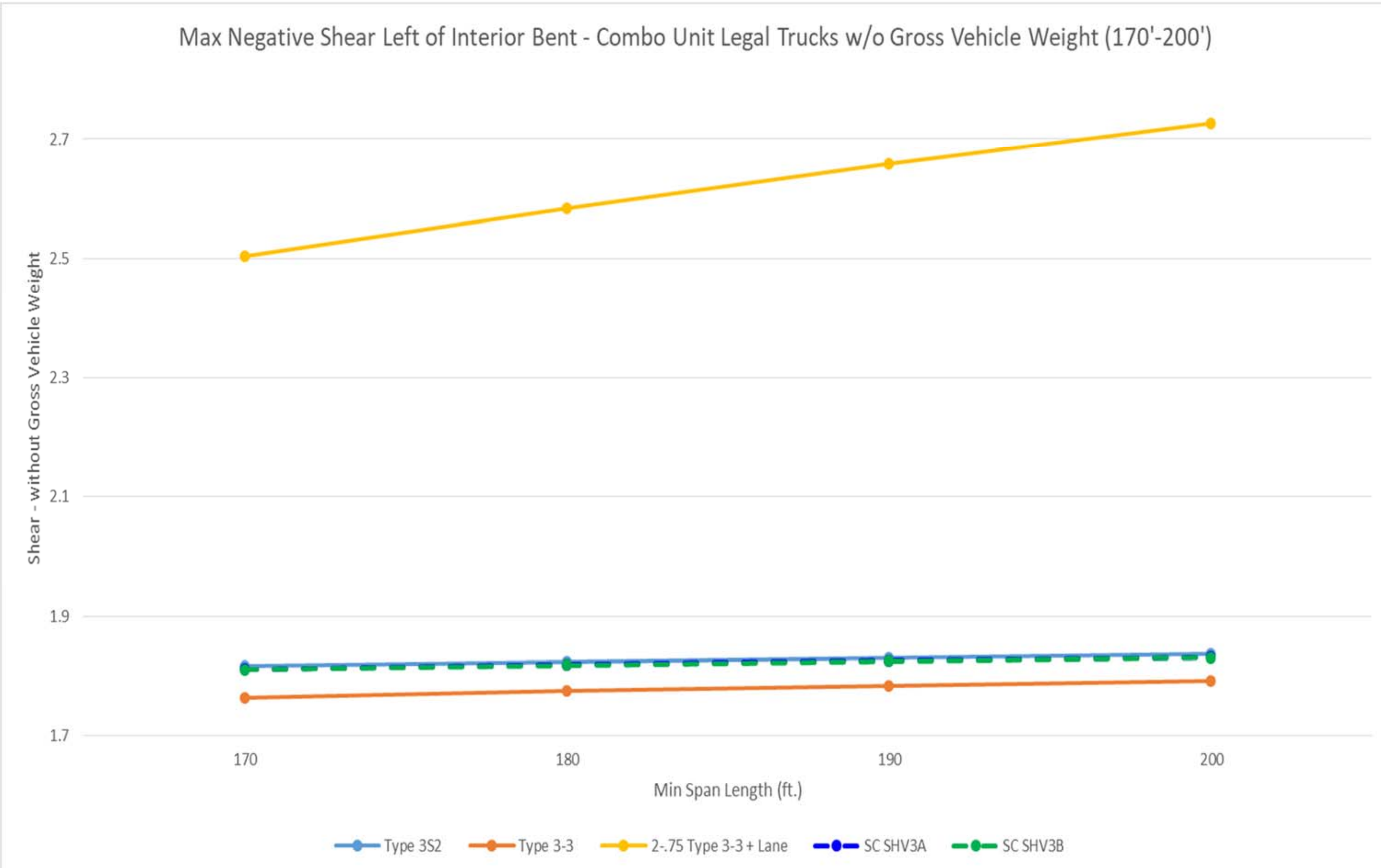


Max Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

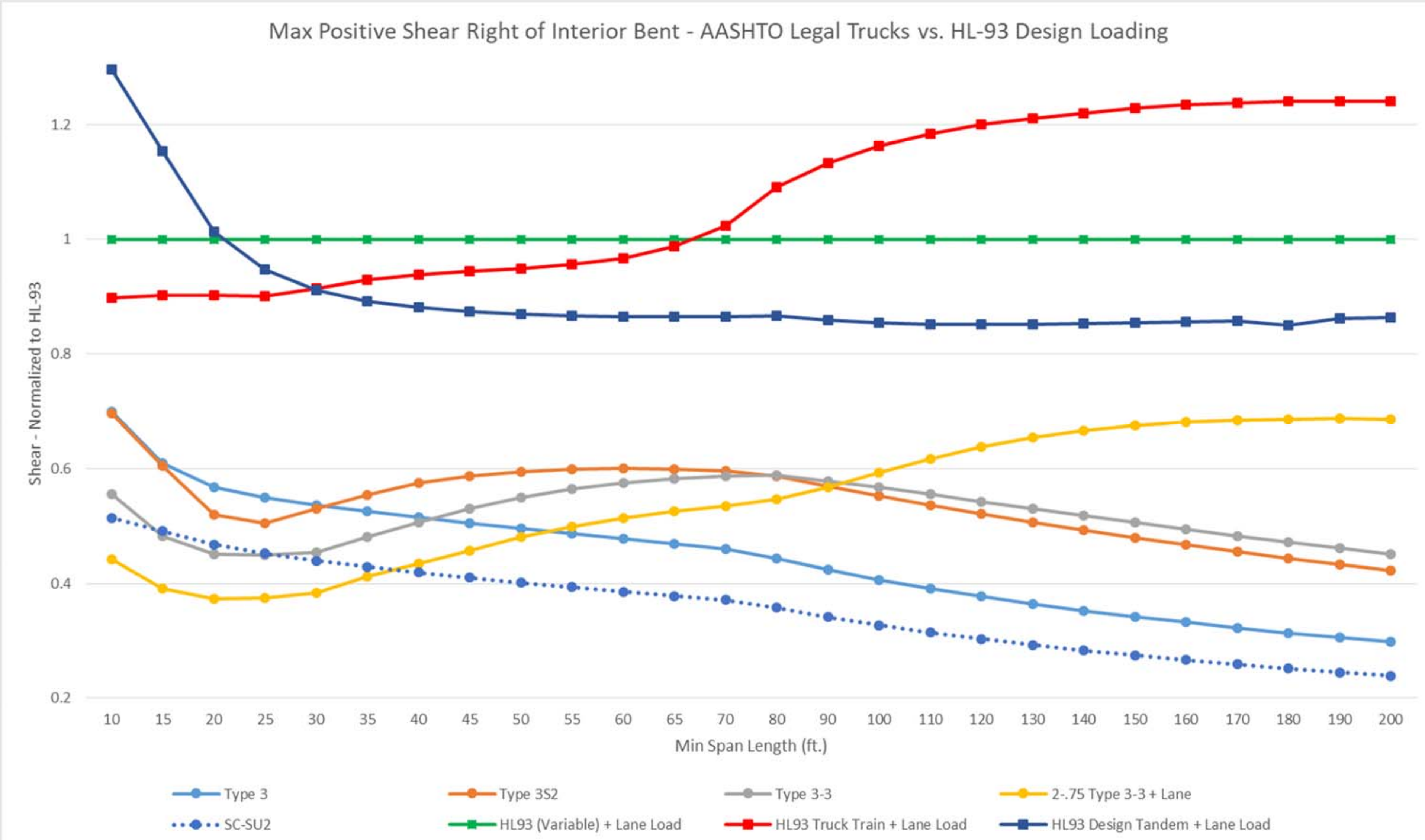


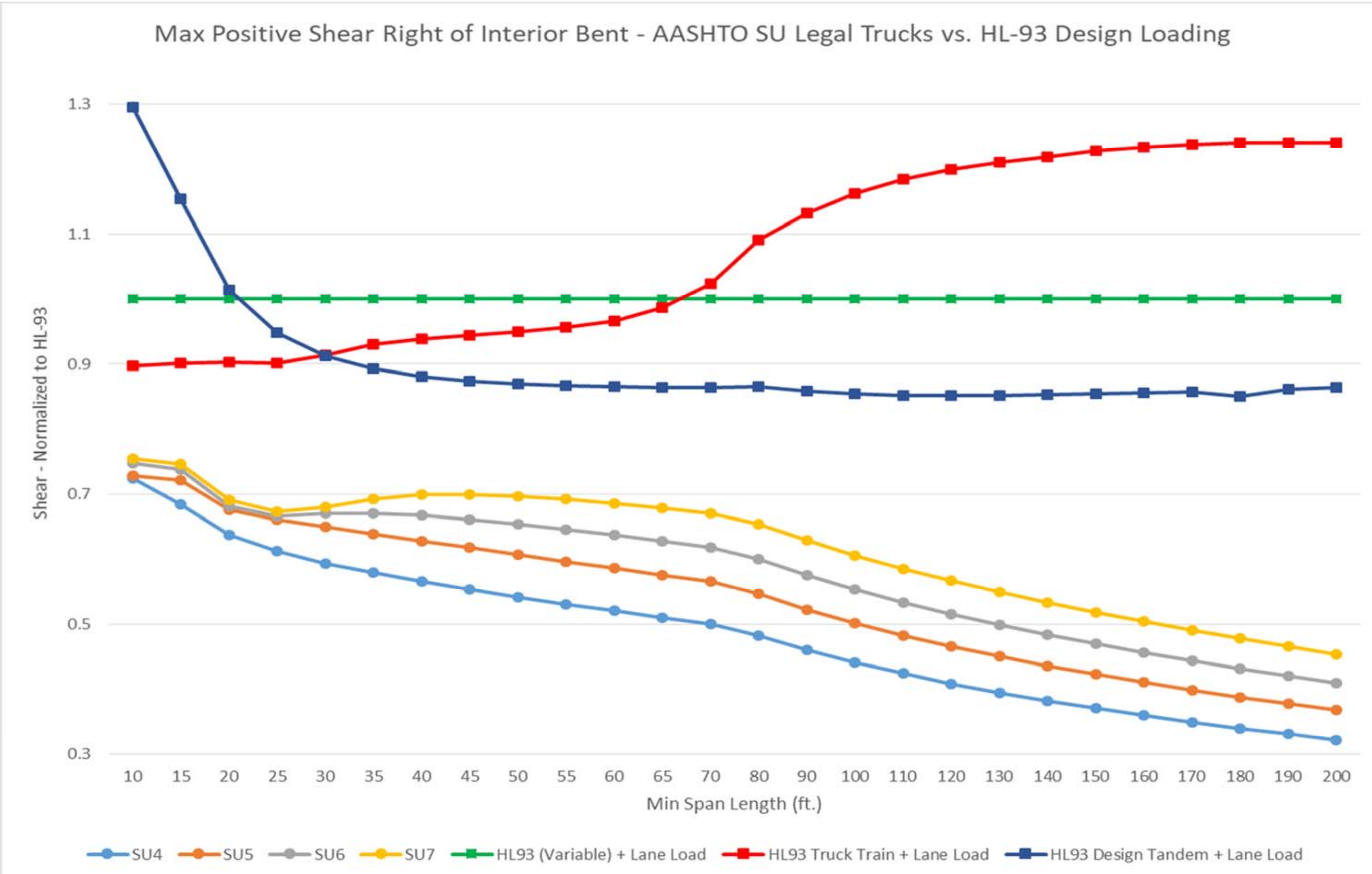
Max Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
2
1.95
1.9
1.85
1.8
1.75
1.7
1.65
1.6
1.55
1.5
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

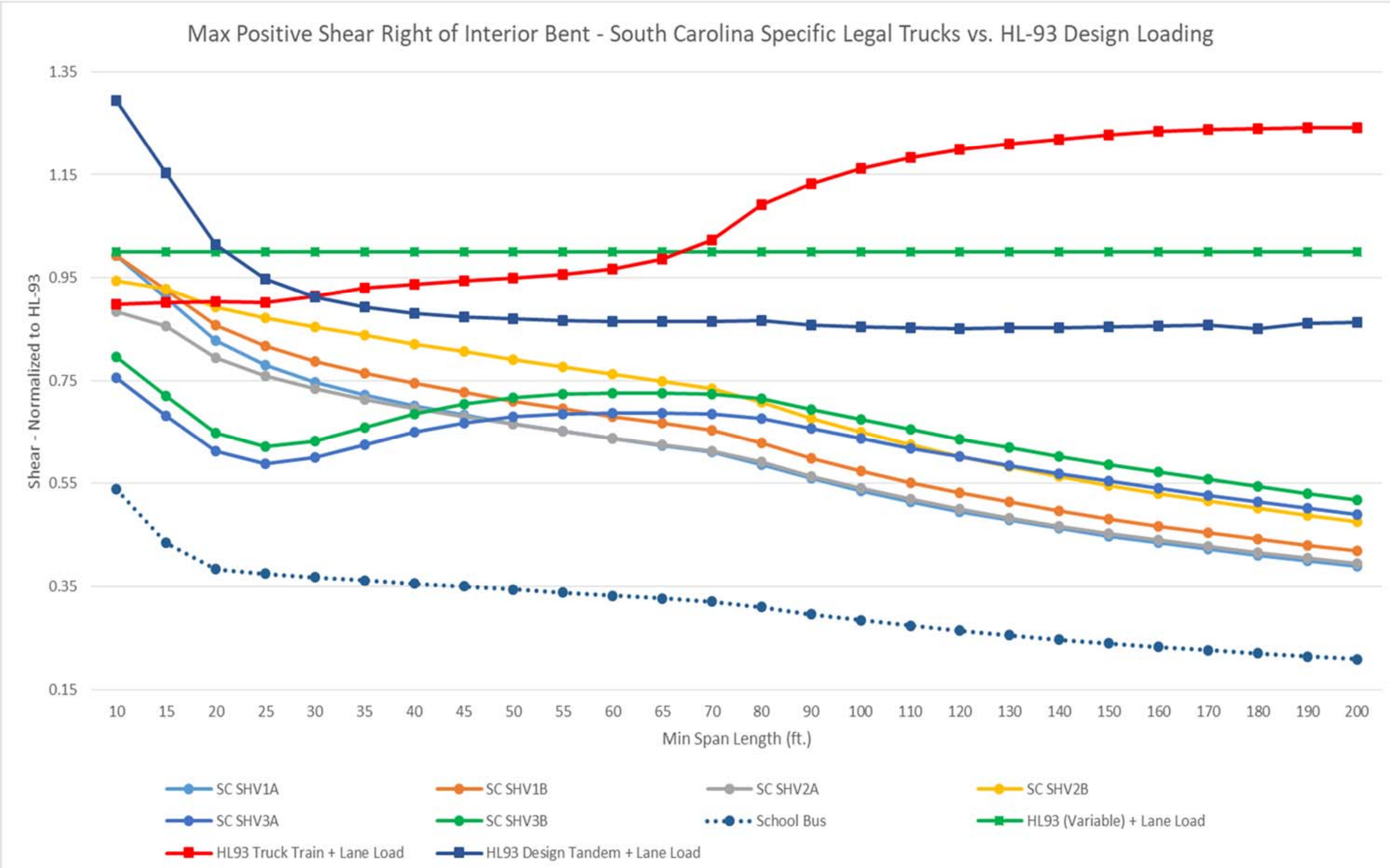

Max Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
2.45
2.35
2.25
2.15
2.05
1.95
1.85
1.75
1.65
Shear - without Gross Vehicle Weight
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Max Negative Shear Left of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
2.7
2.5
2.3
2.1
1.9
1.7
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Positive Shear Right of Interior Bent*

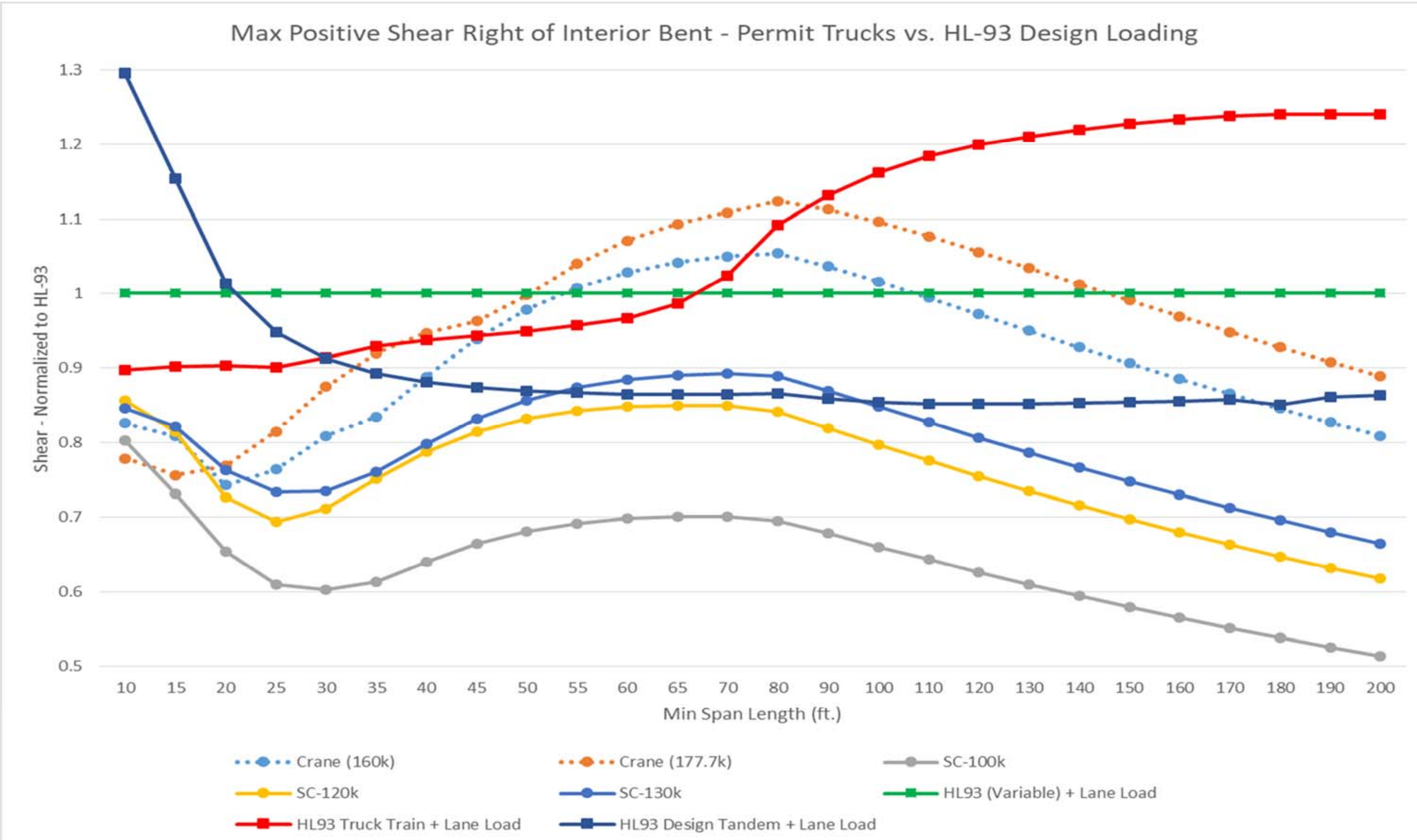



Max Positive Shear Right of Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
1.3
1.1
0.9
0.7
0.5
0.3
Shear - Normalized to HL-93
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

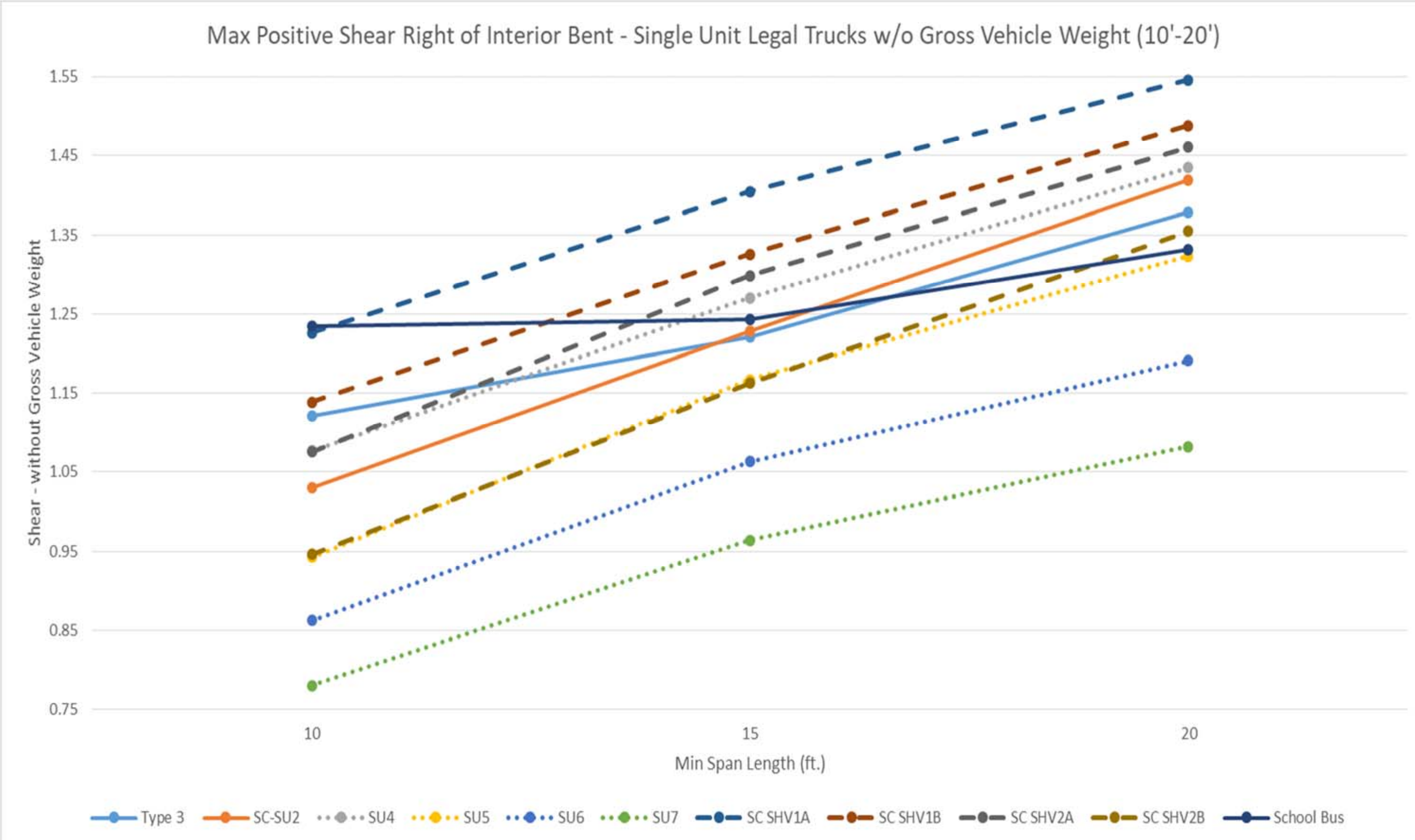


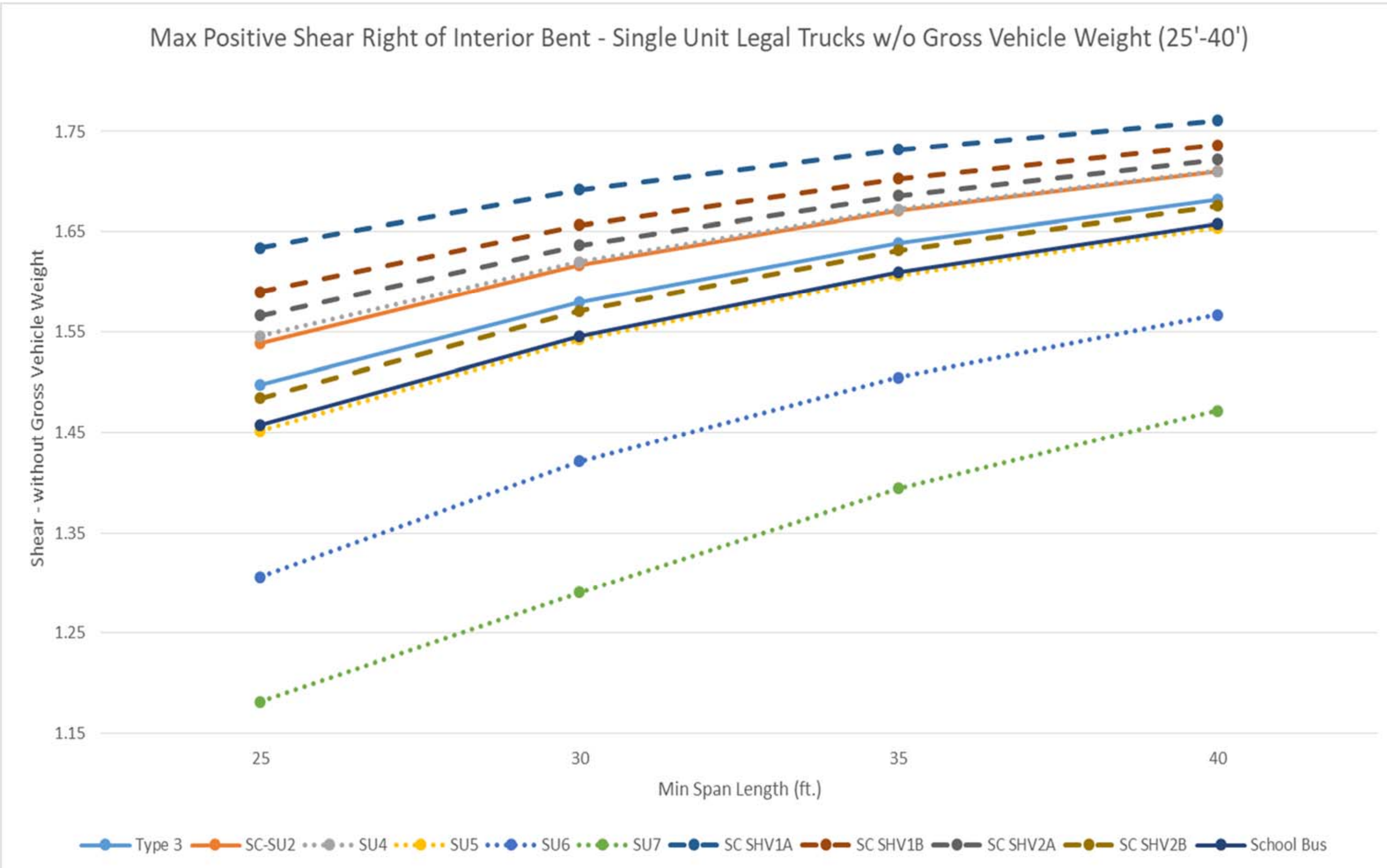
Max Positive Shear Right of Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.35
1.15
0.95
0.75
0.55
0.35
0.15
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Positive Shear Right of Interior Bent*

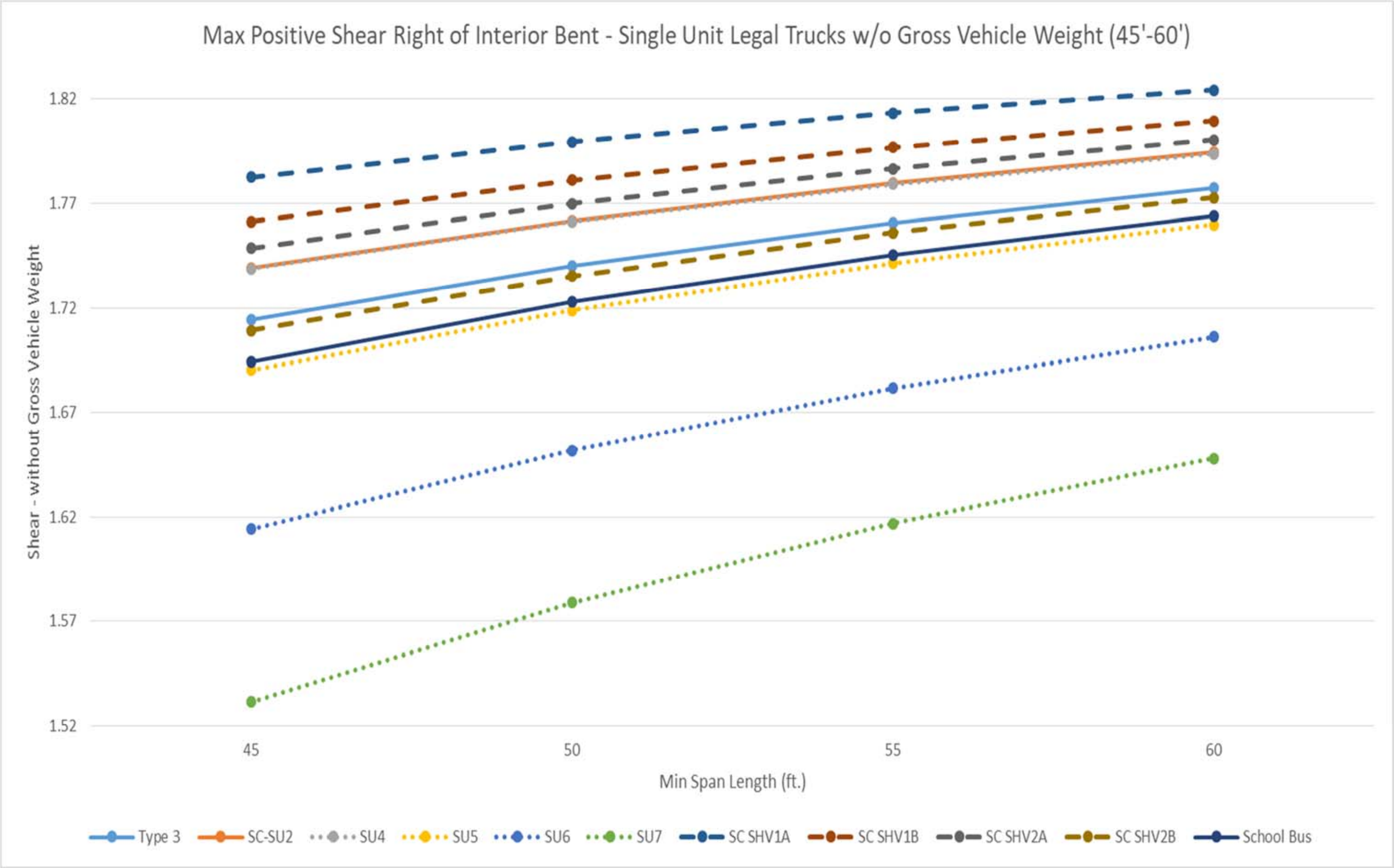


Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *Max Positive Shear Right of Interior Bent*

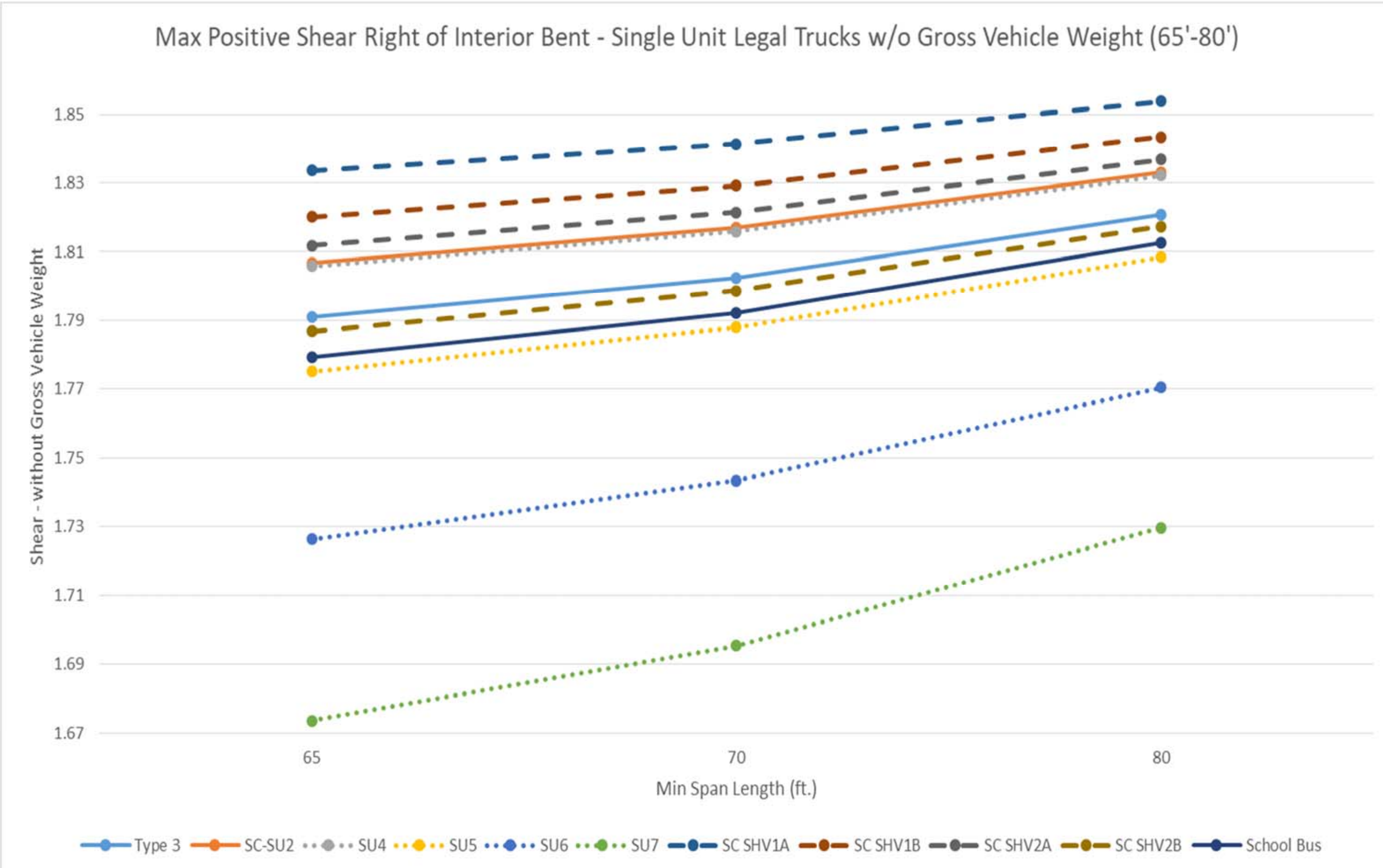


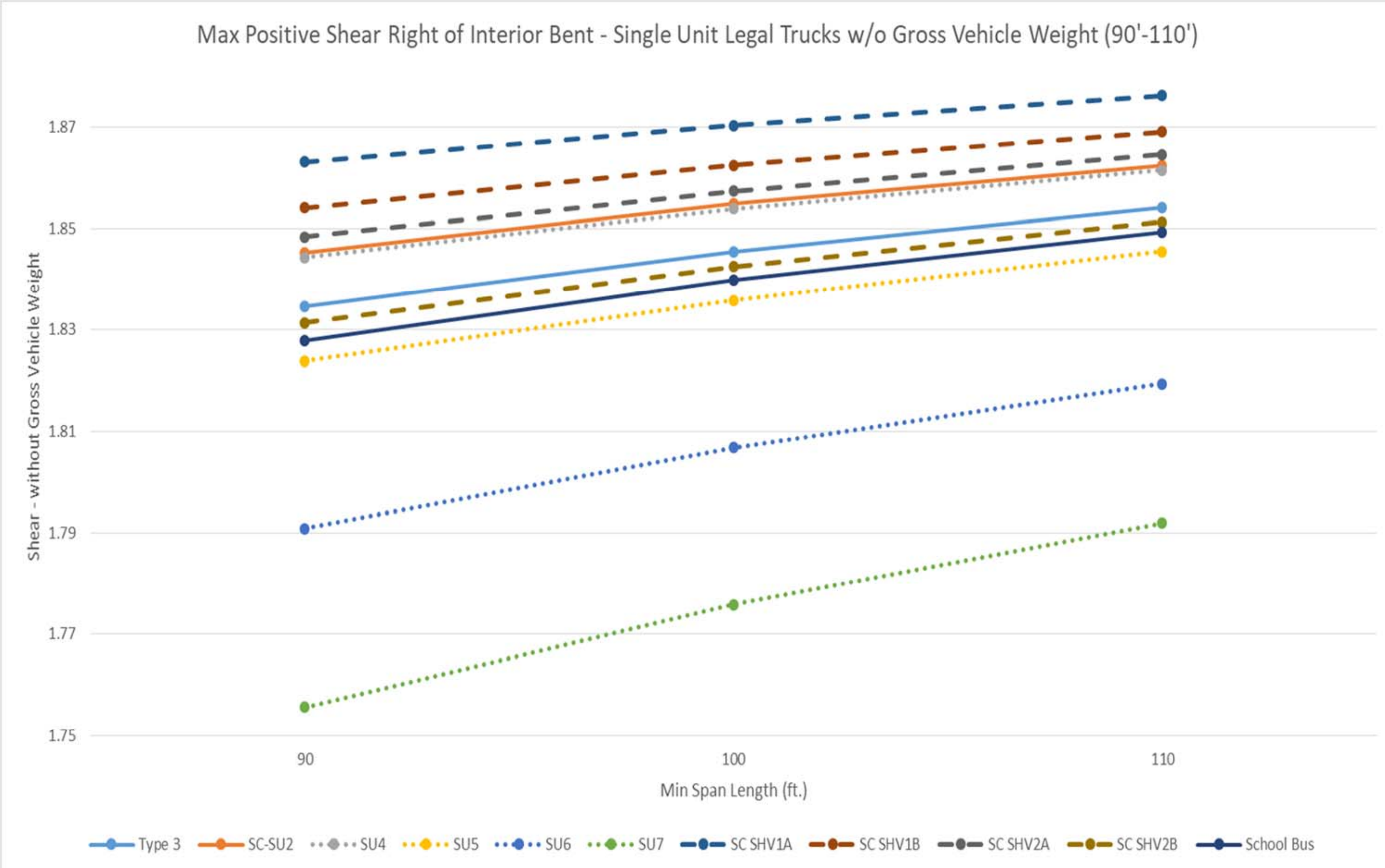


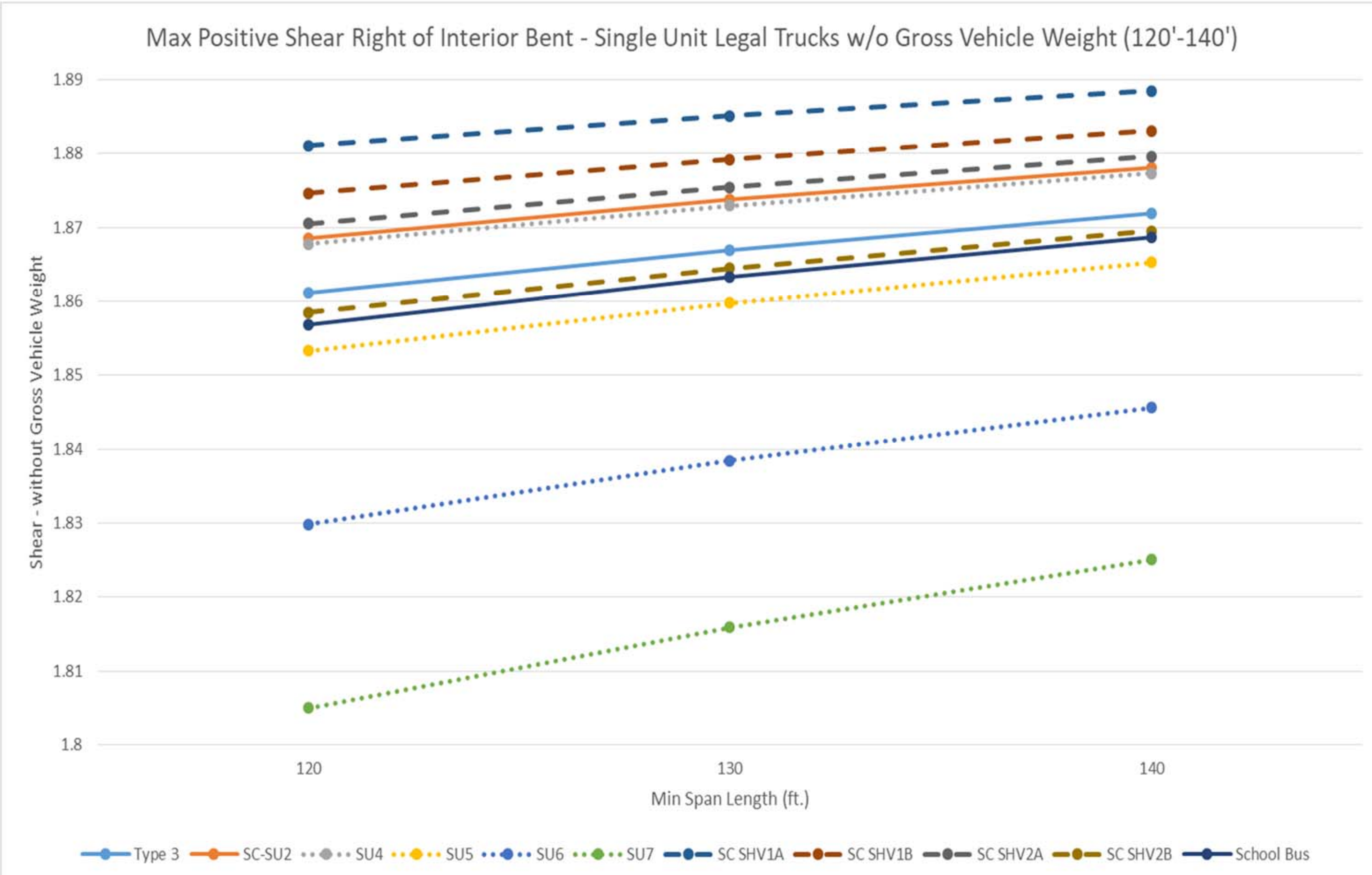
Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
1.75
1.65
1.55
1.45
1.35
1.25
1.15
25
30
35
40
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

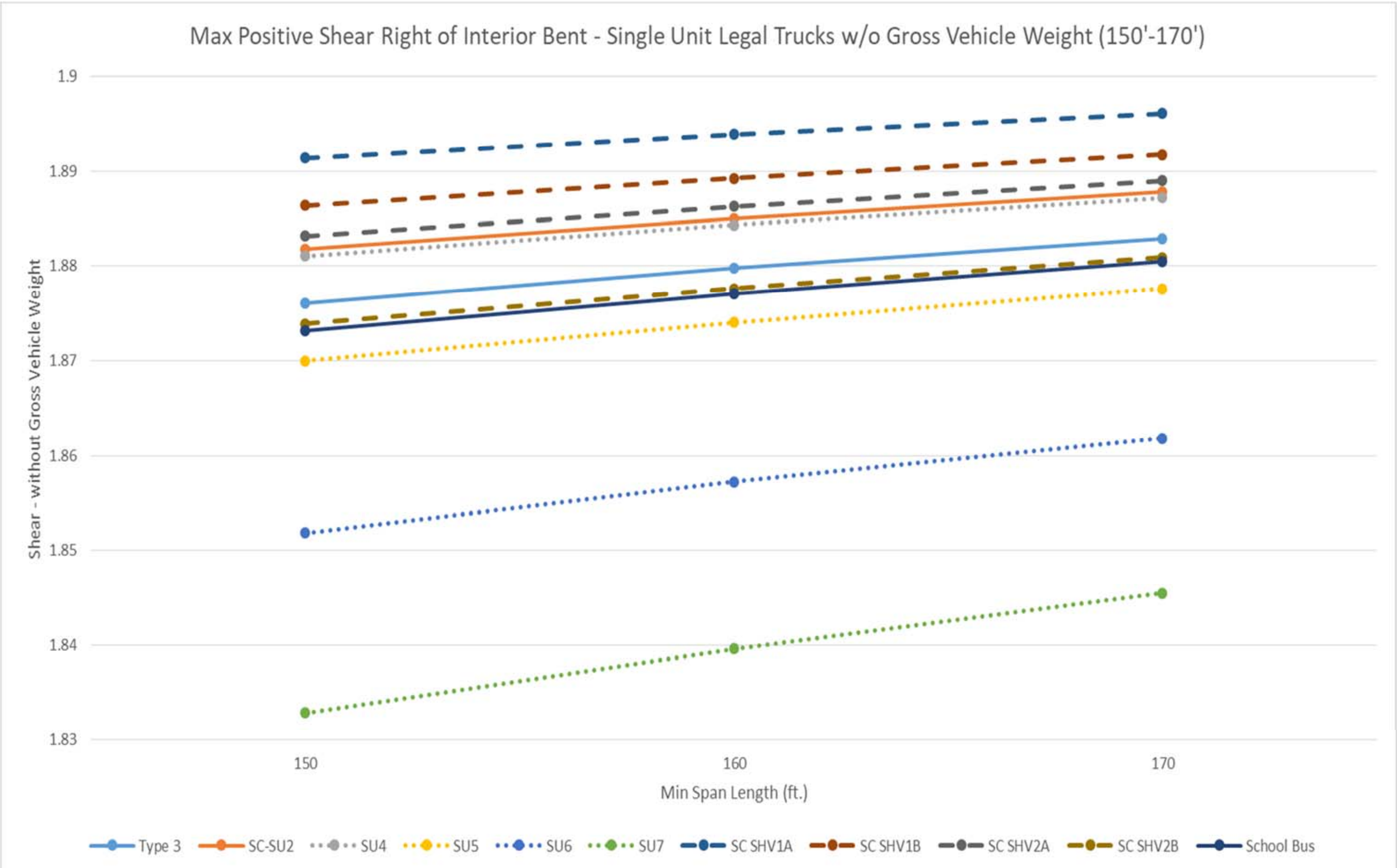


Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
1.82
1.77
1.72
1.67
1.62
1.57
1.52
Shear - without Gross Vehicle Weight
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

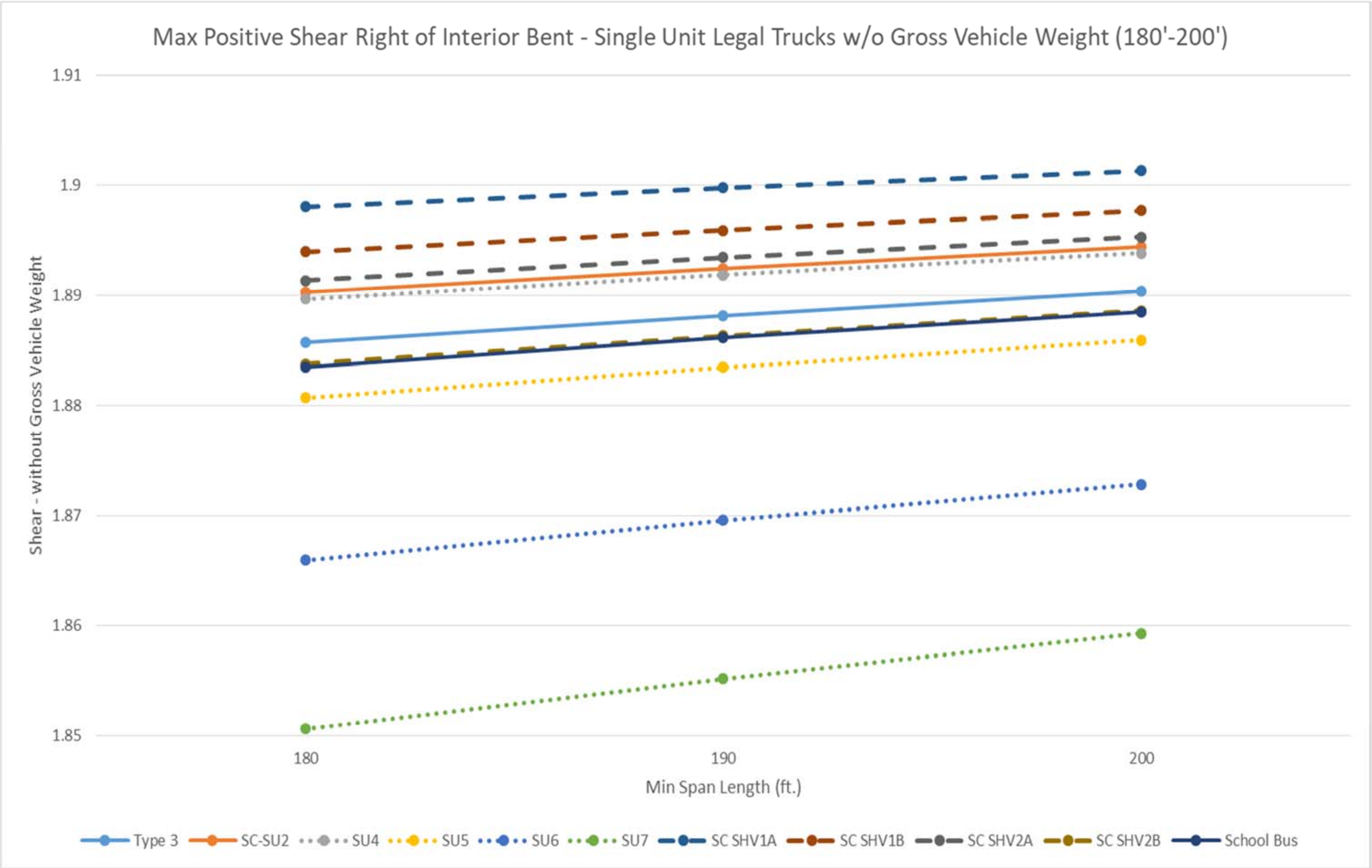

Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
Shear - without Gross Vehicle Weight
1.85
1.83
1.81
1.79
1.77
1.75
1.73
1.71
1.69
1.67
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

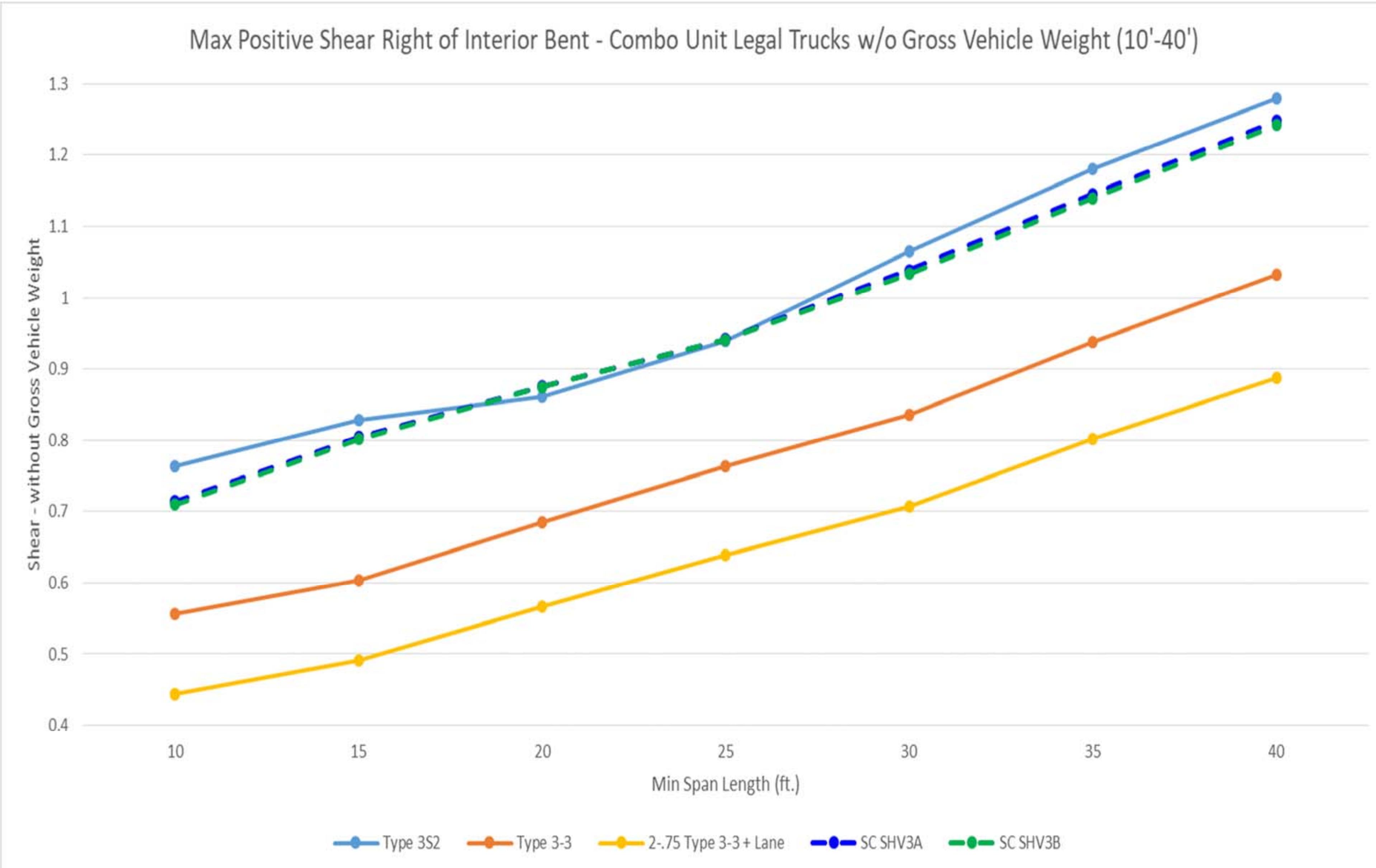

Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
1.87
1.85
1.83
1.81
1.79
1.77
1.75
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
1.89
1.88
1.87
1.86
1.85
1.84
1.83
1.82
1.81
1.8
120
130
140
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



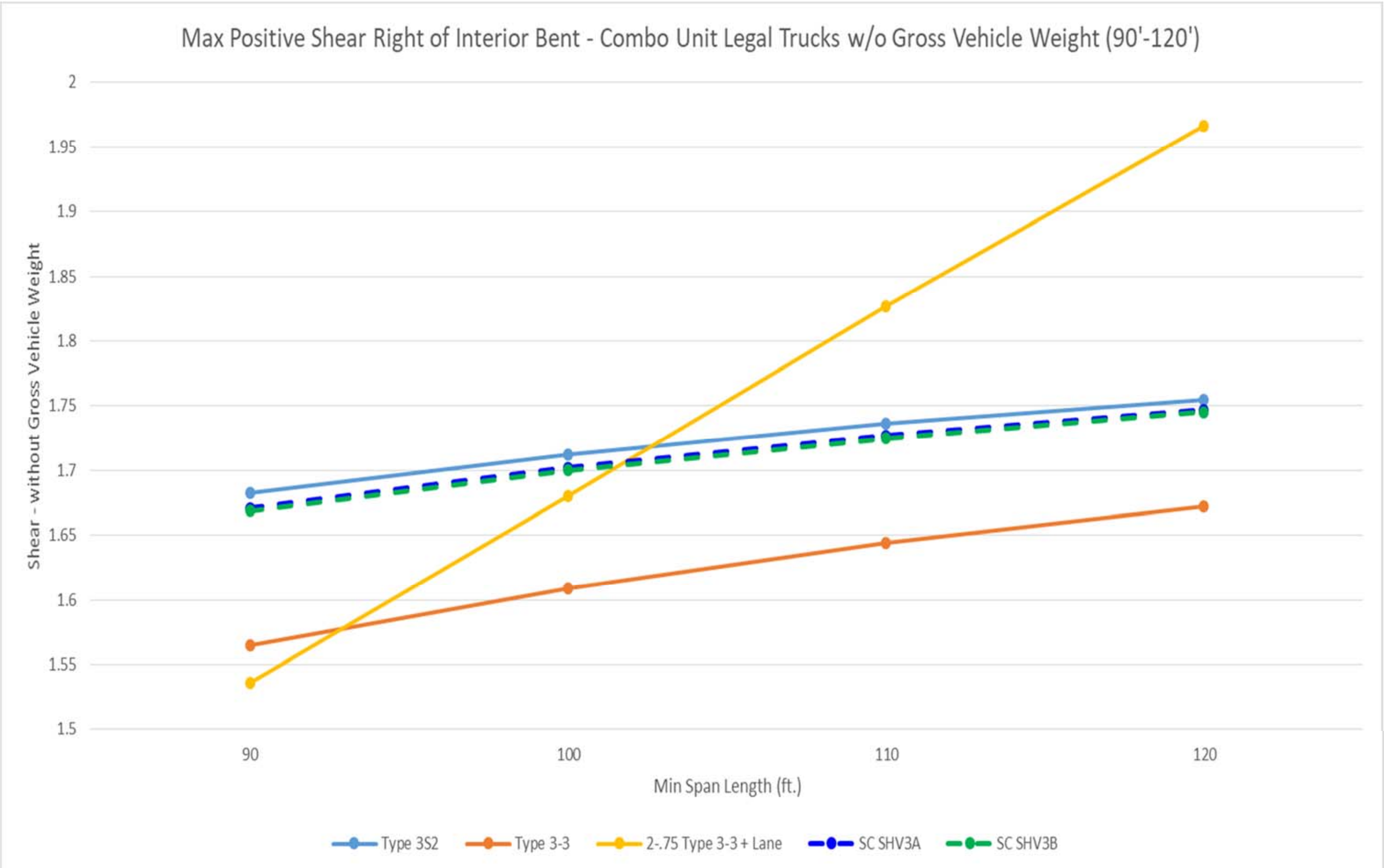
Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
1.9
1.89
1.88
1.87
1.86
1.85
1.84
1.83
Shear - without Gross Vehicle Weight
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

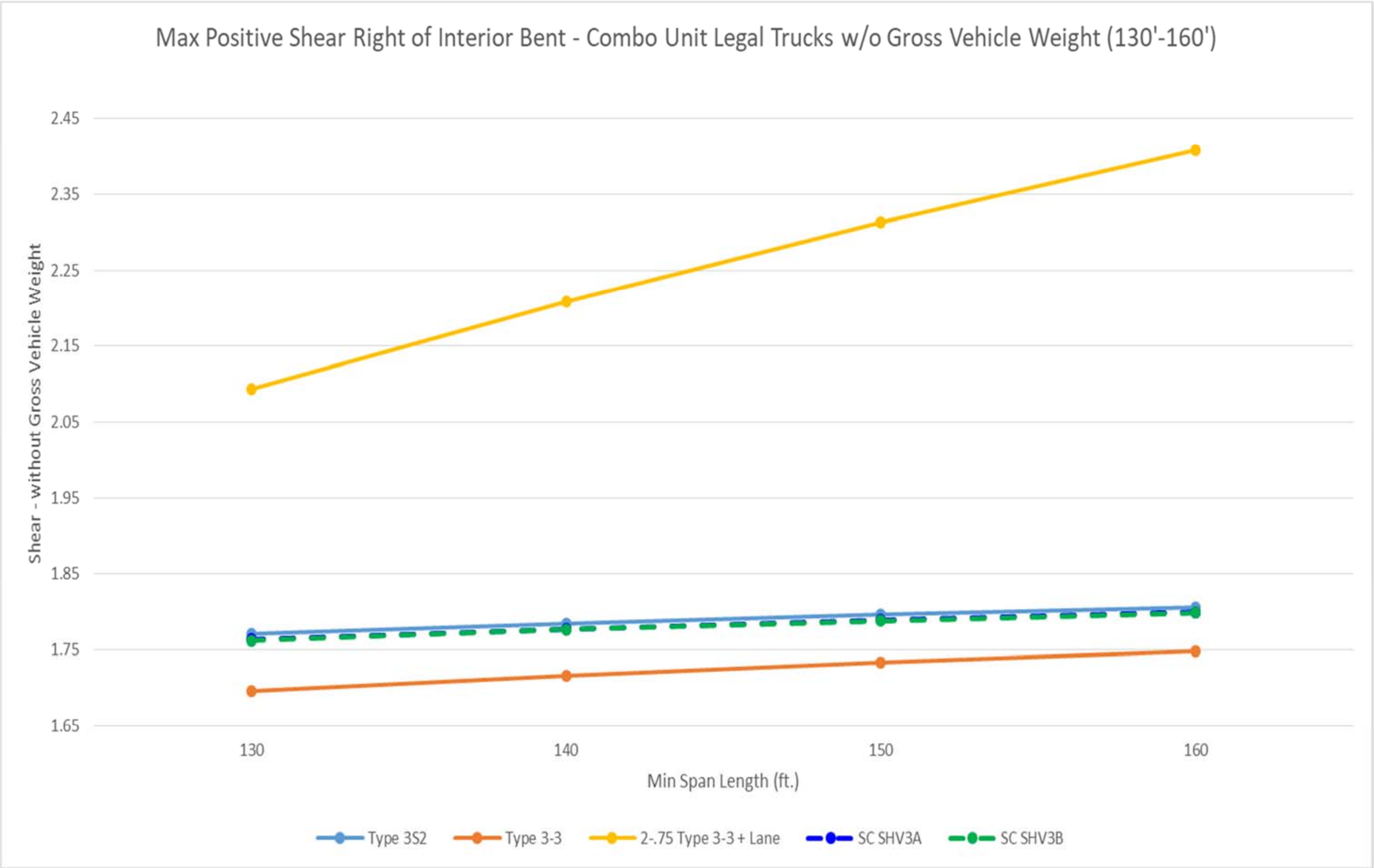

Max Positive Shear Right of Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
1.91
1.9
1.89
1.88
1.87
1.86
1.85
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



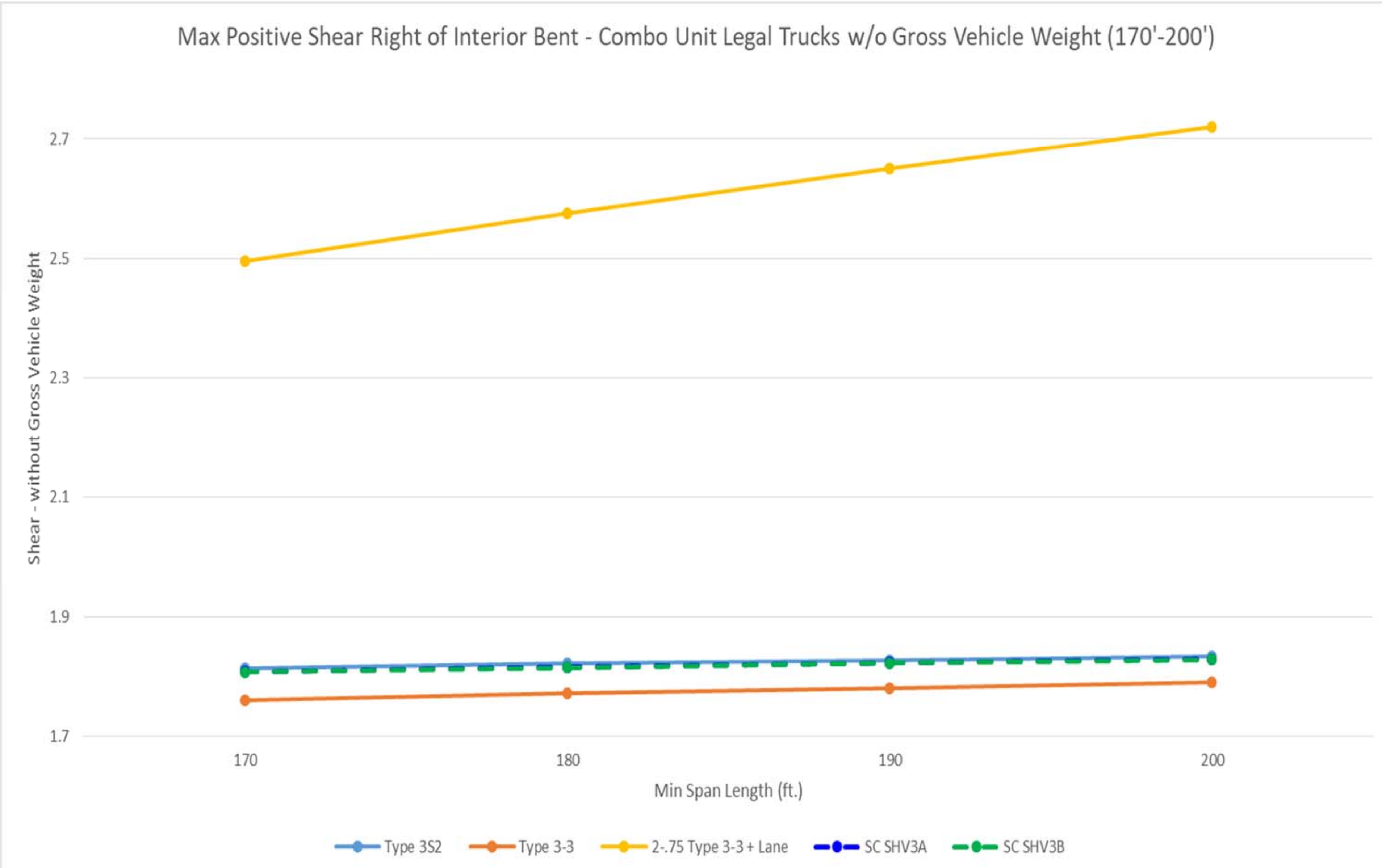
Max Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Max Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

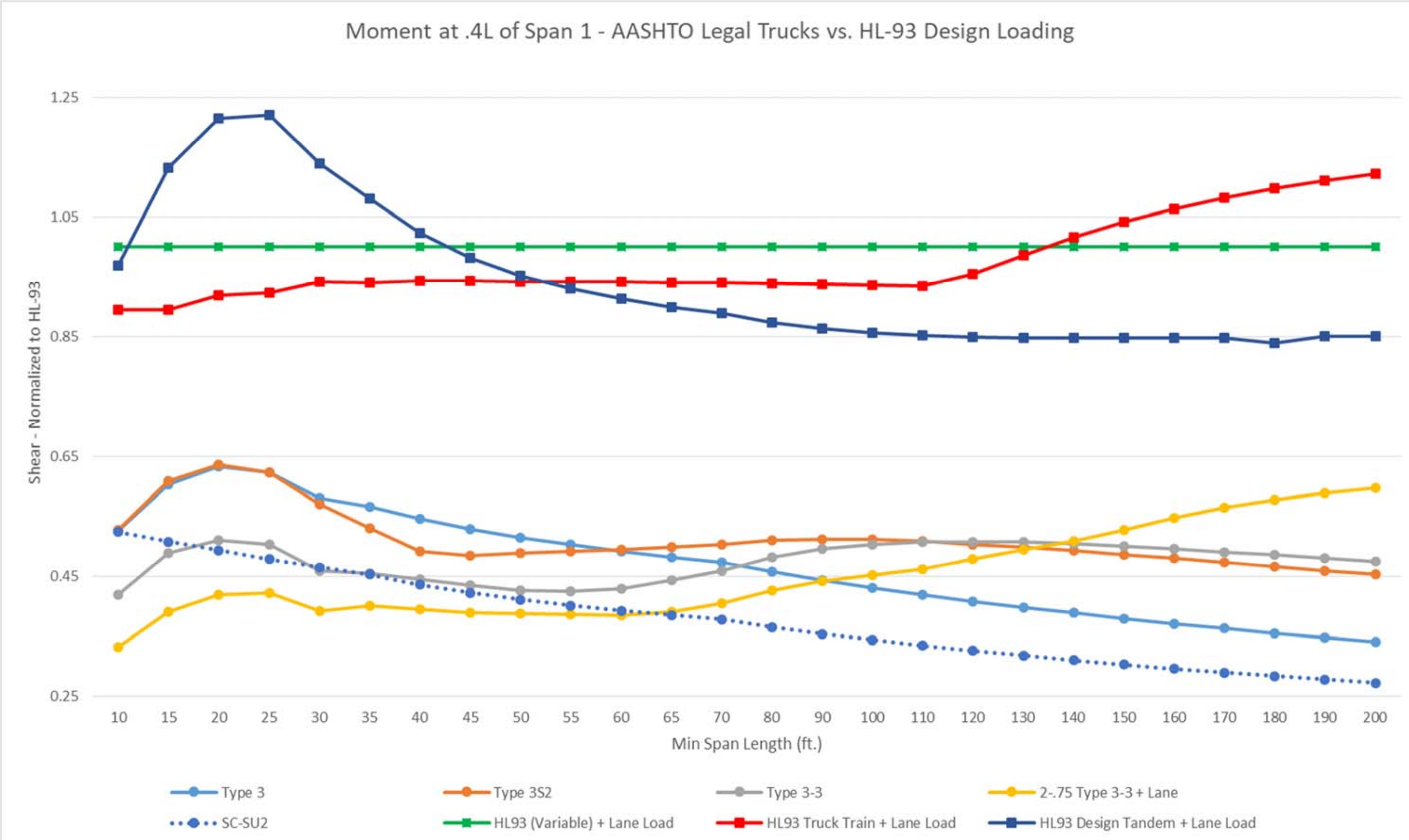

Max Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
2
1.95
1.9
1.85
1.8
1.75
1.7
1.65
1.6
1.55
1.5
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

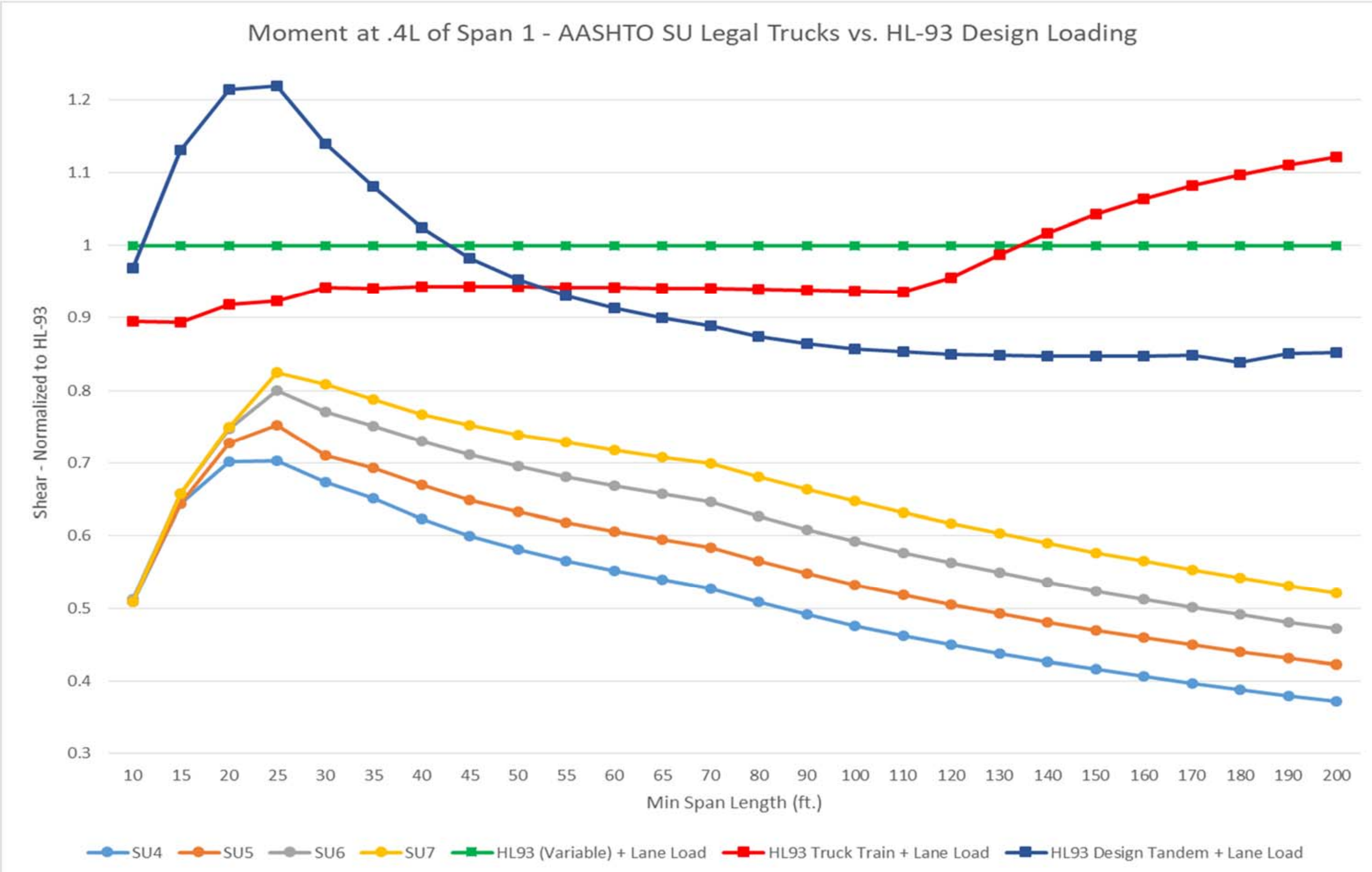


Max Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Shear - without Gross Vehicle Weight
2.45
2.35
2.25
2.15
2.05
1.95
1.85
1.75
1.65
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

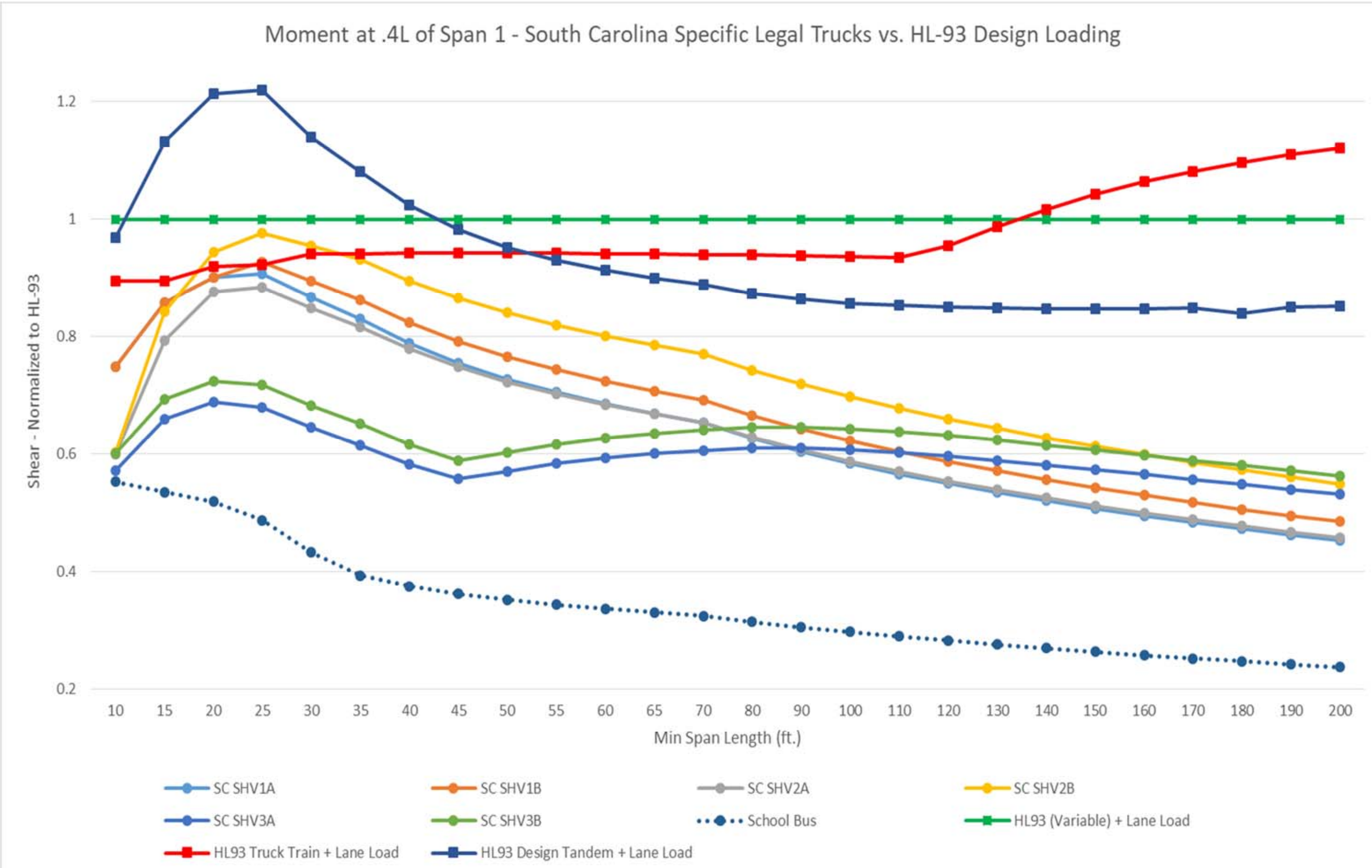

Max Positive Shear Right of Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
2.7
2.5
2.3
2.1
1.9
1.7
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Moment at .4L of Span 1*

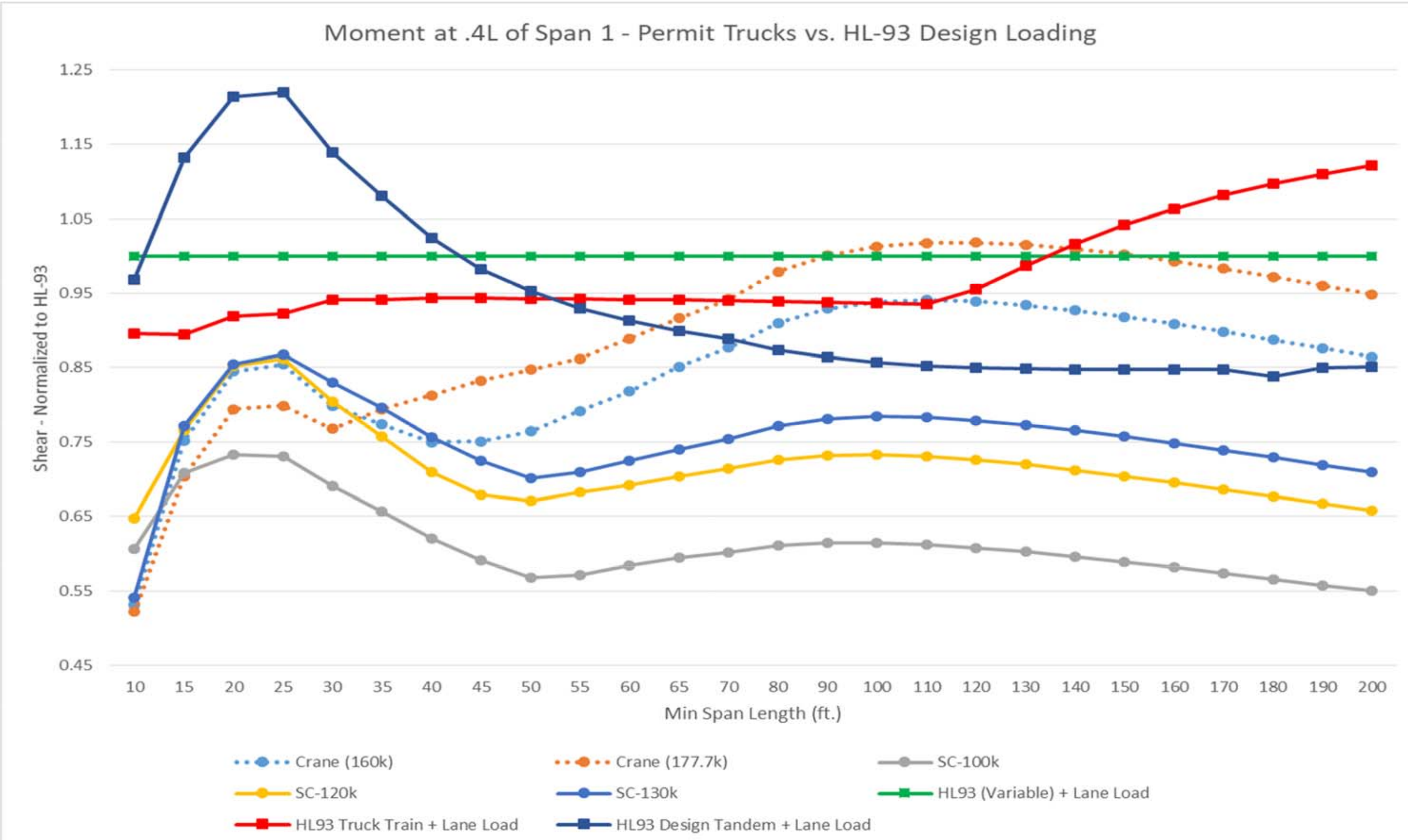




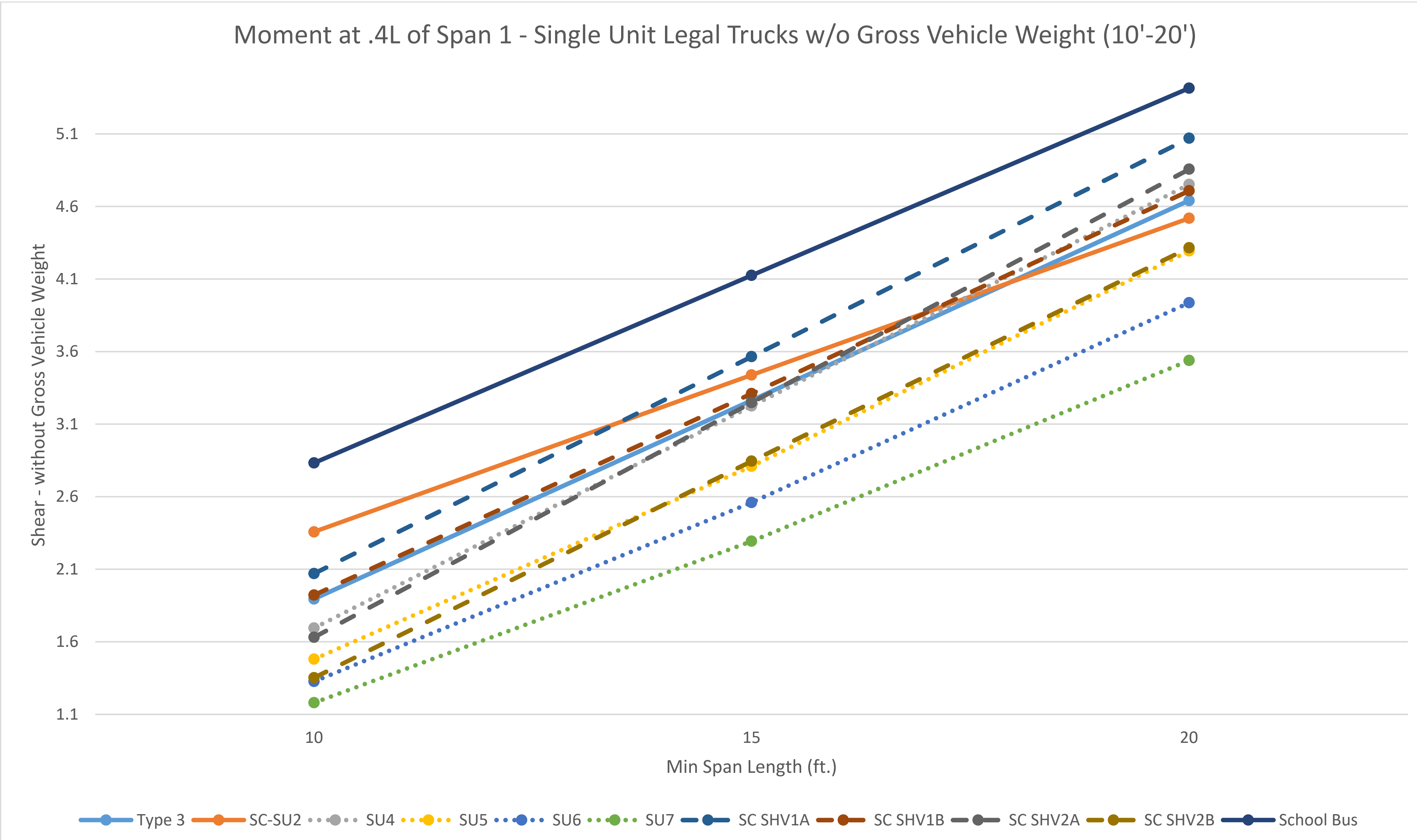
Moment at .4L of Span 1 - AASHTO SU Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

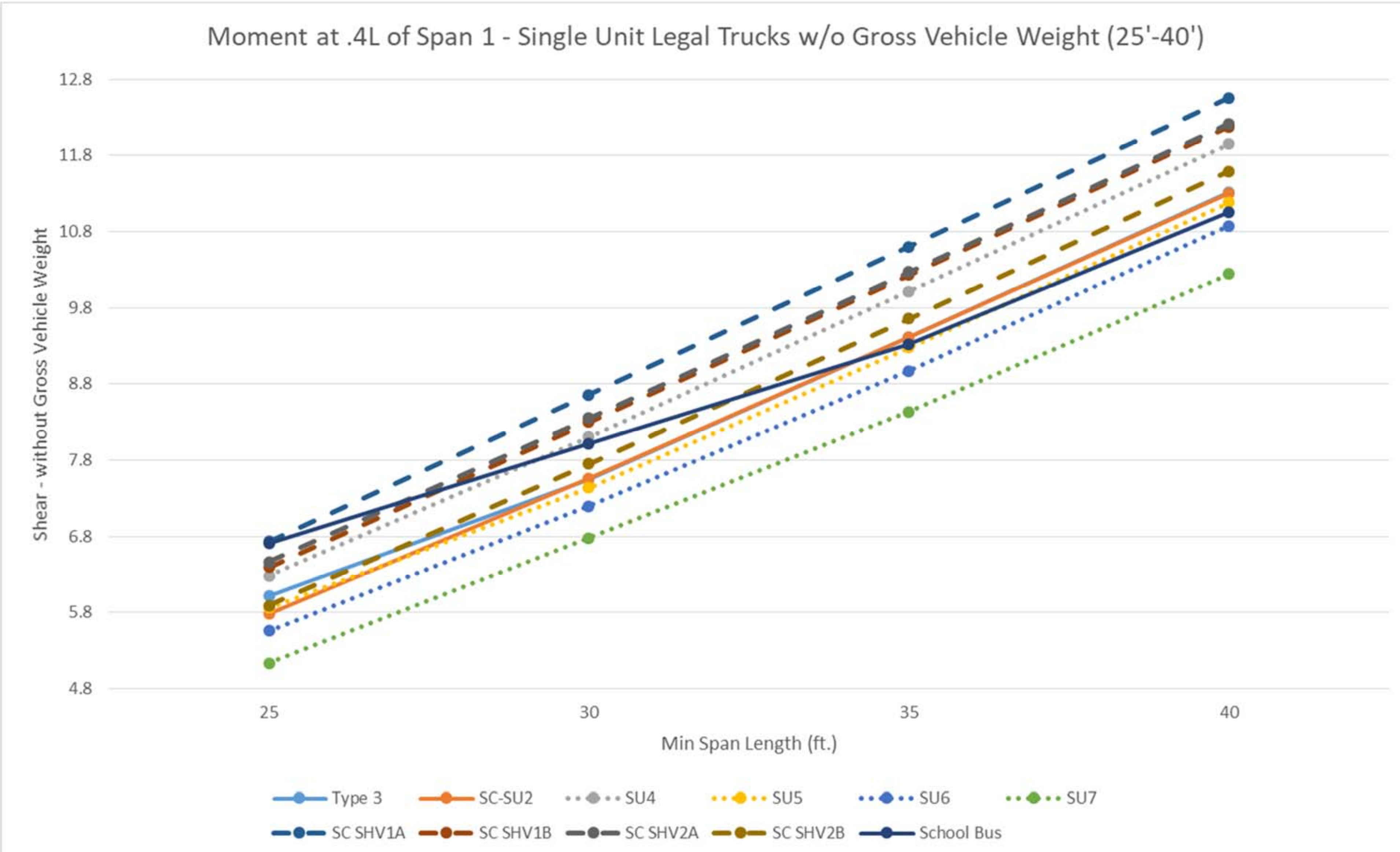

Moment at .4L of Span 1 - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.2
1
0.8
0.6
0.4
0.2
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Moment at .4L of Span 1*

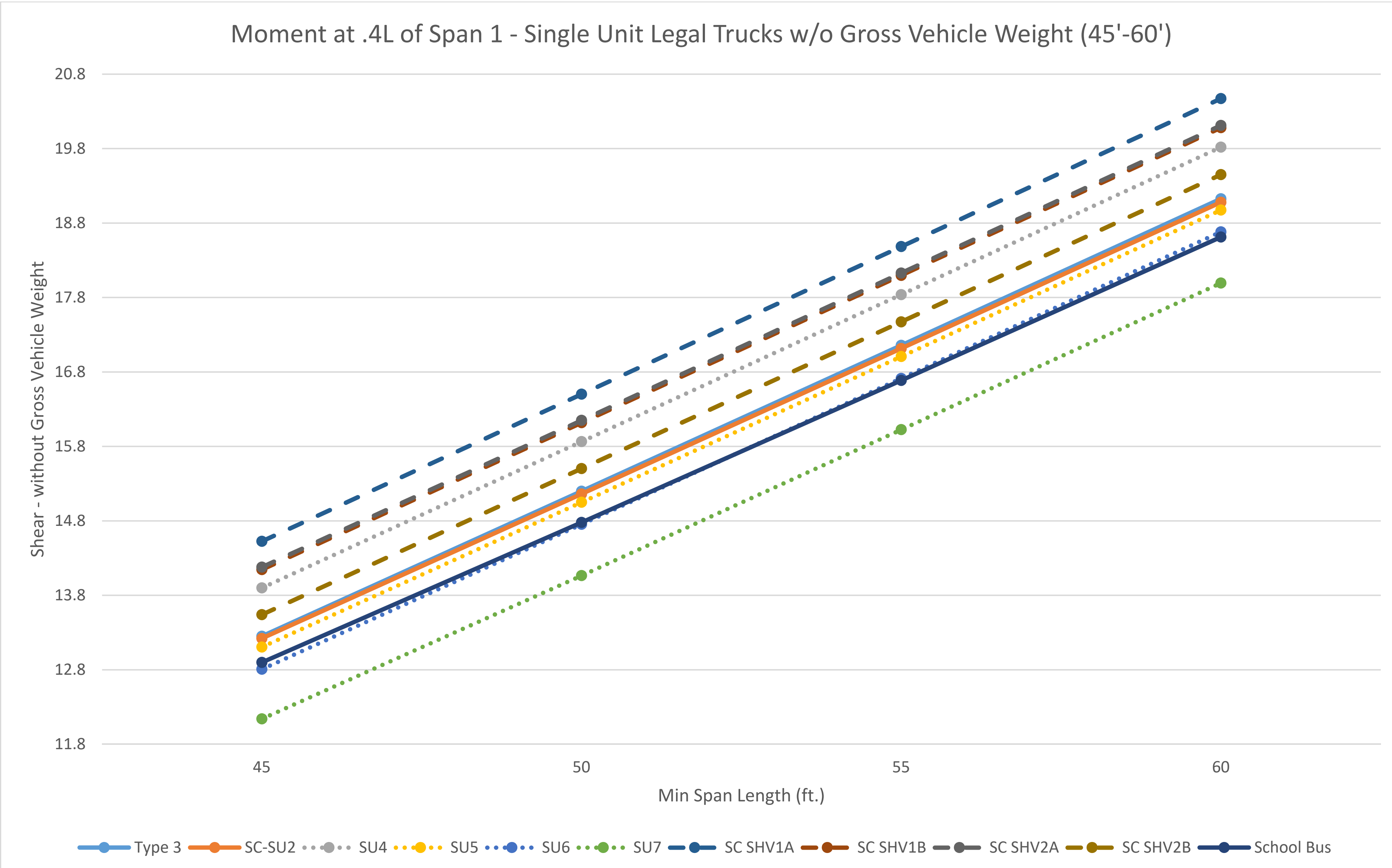


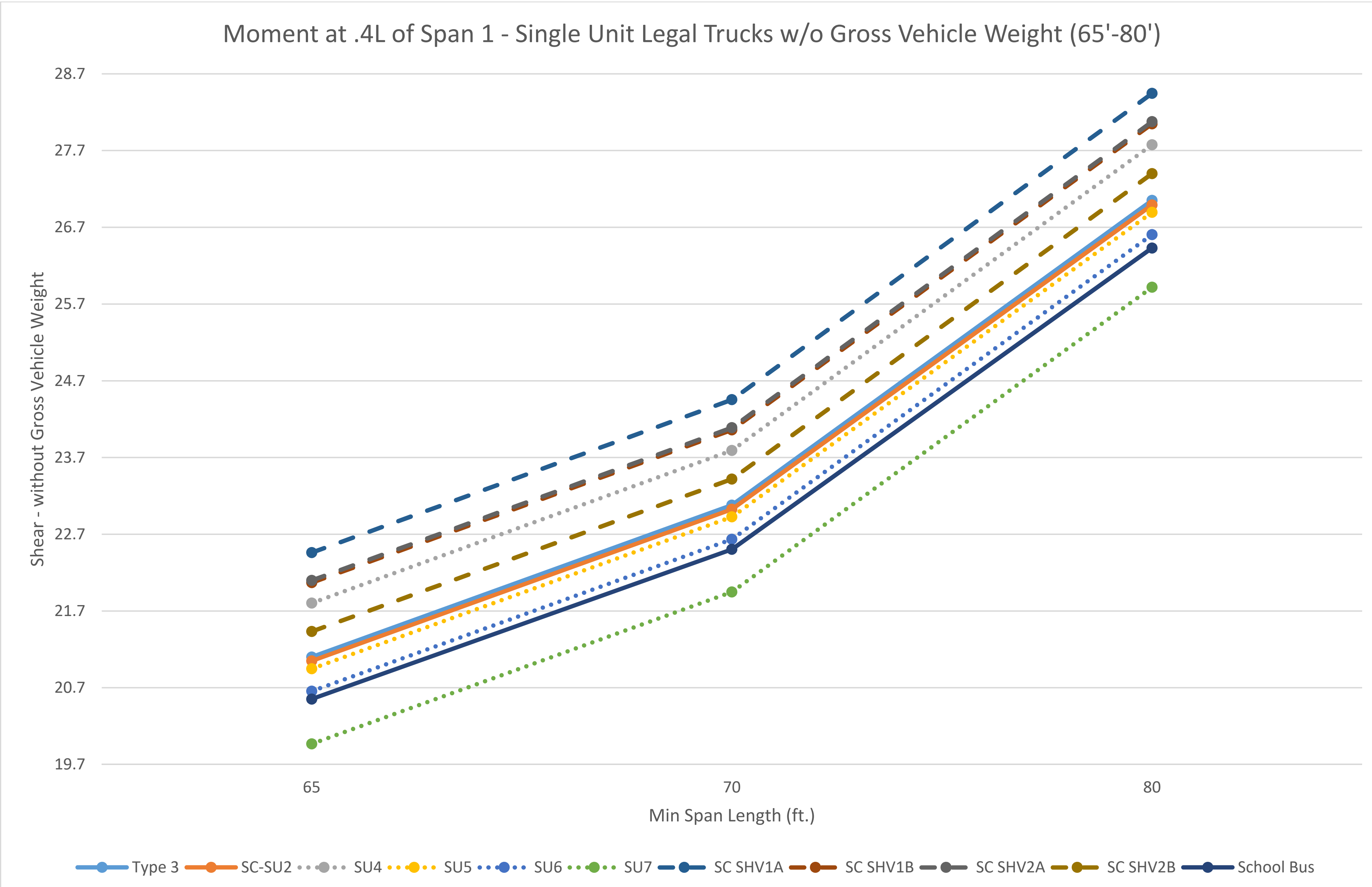
Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *Moment at .4L of Span 1*



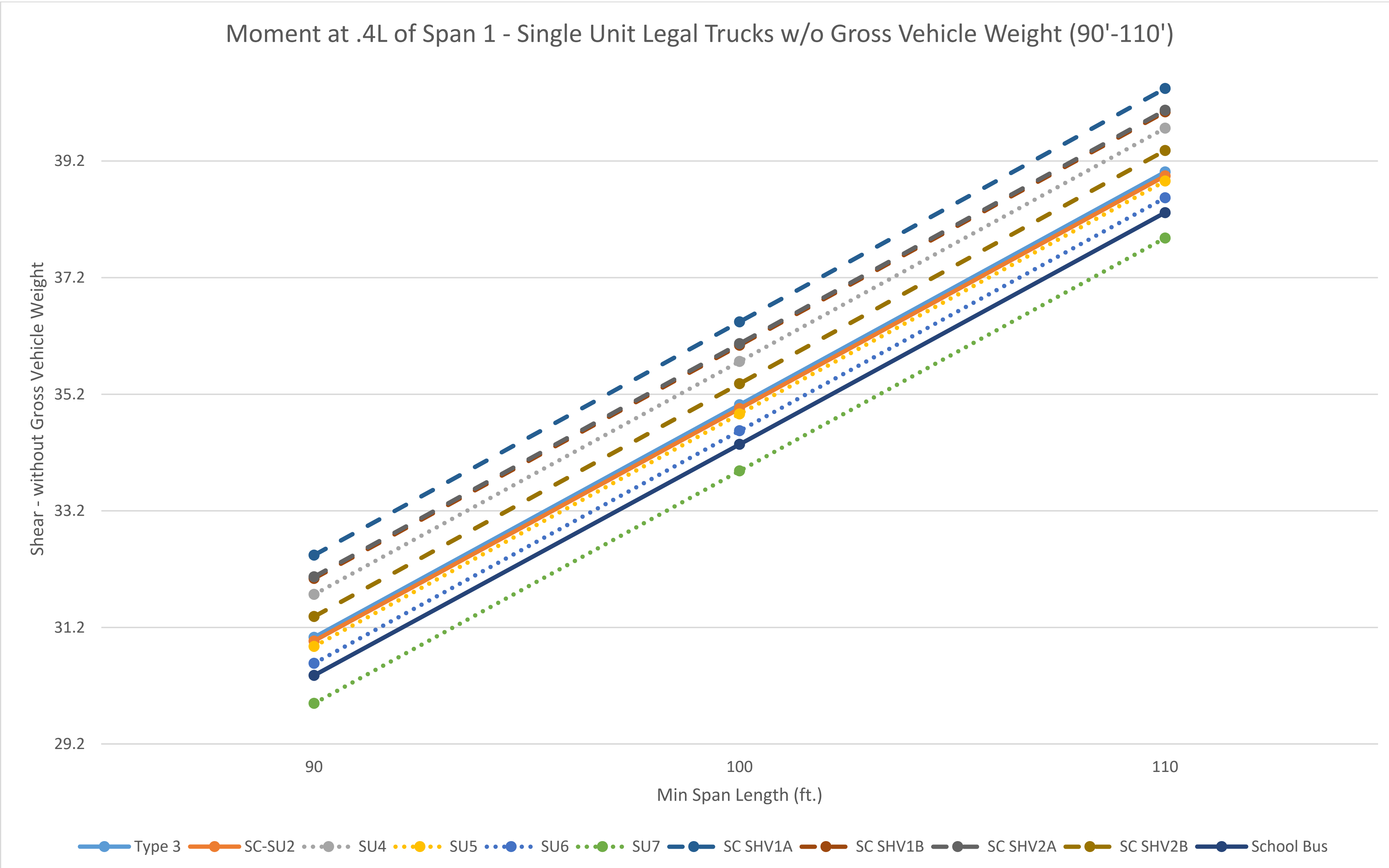


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
12.8
11.8
10.8
9.8
8.8
7.8
6.8
5.8
4.8
25
30
35
40
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

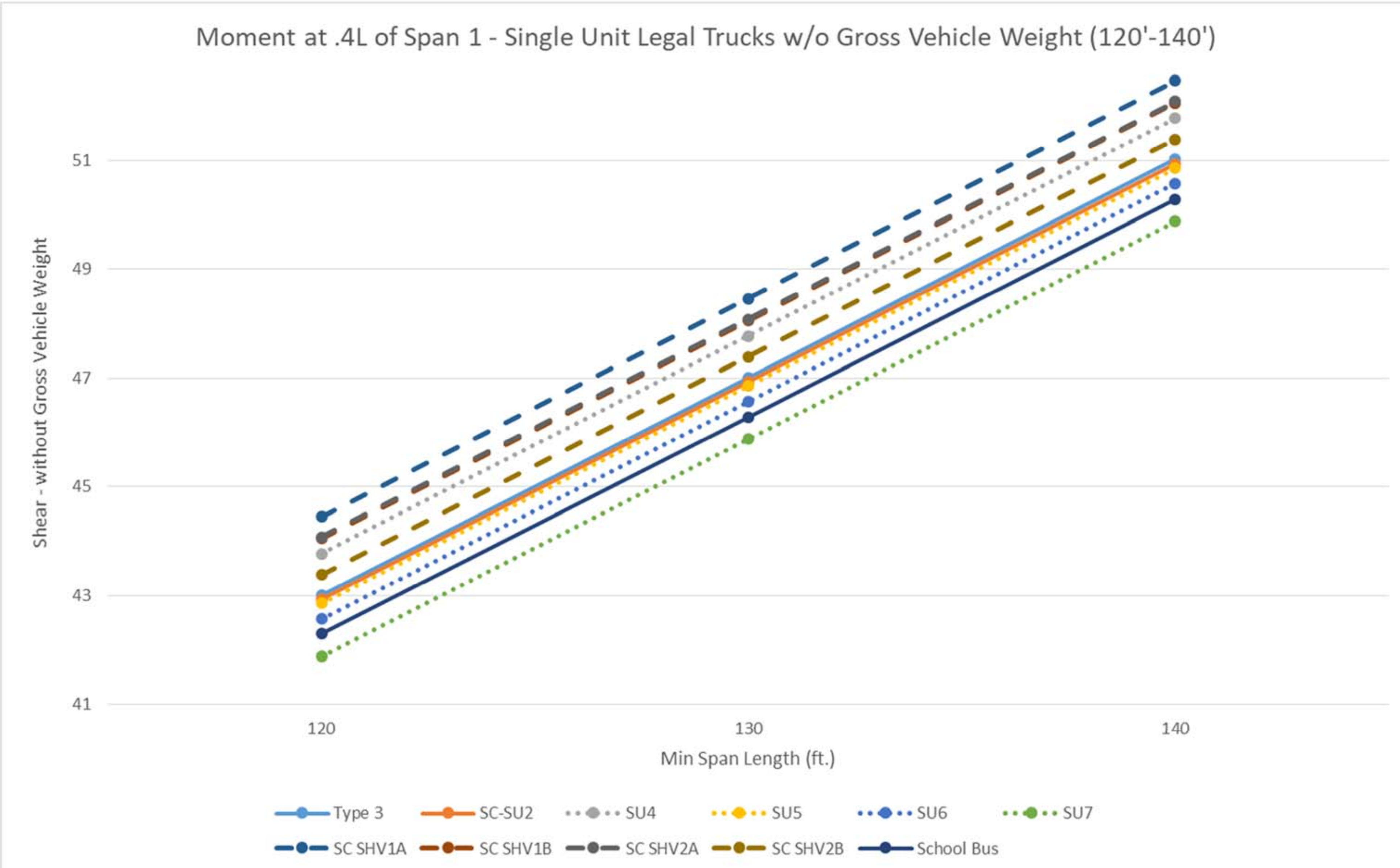

Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
20.8
19.8
18.8
17.8
16.8
15.8
14.8
13.8
12.8
11.8
Shear - without Gross Vehicle Weight
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
28.7
27.7
26.7
25.7
24.7
23.7
22.7
21.7
20.7
19.7
Shear - without Gross Vehicle Weight
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

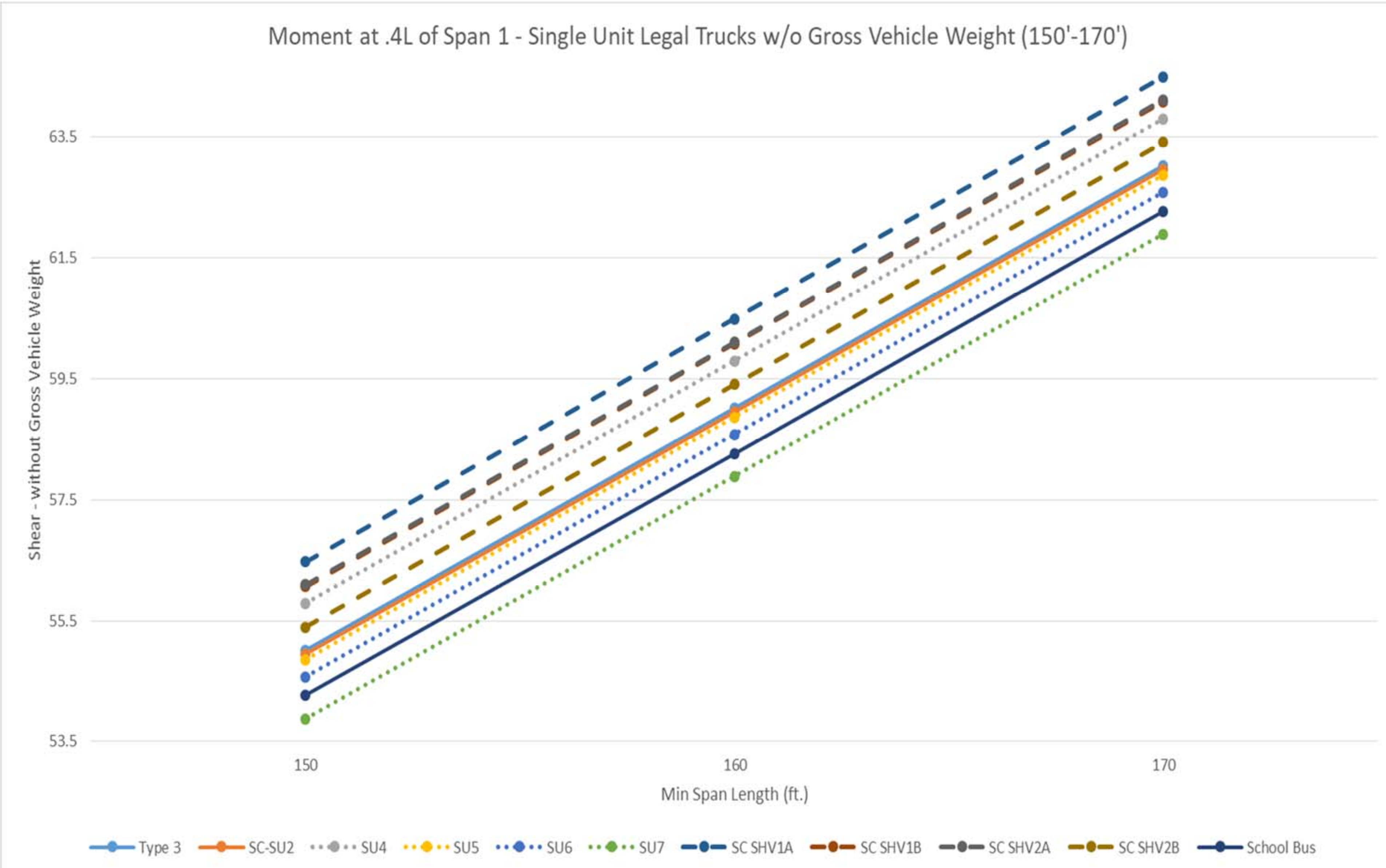


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
39.2
37.2
35.2
33.2
31.2
29.2
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

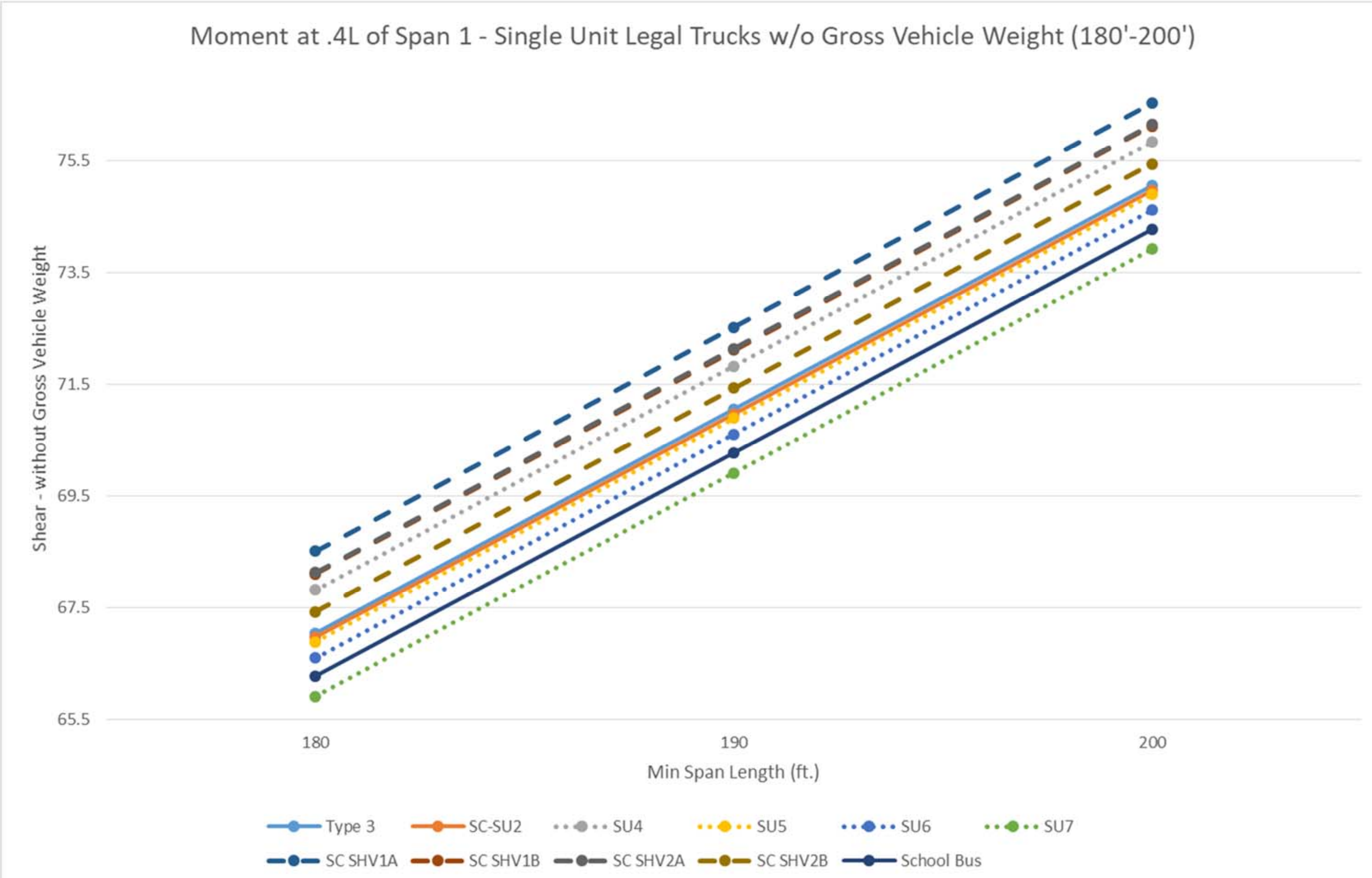


Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
51
49
47
45
43
41
120
130
140
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

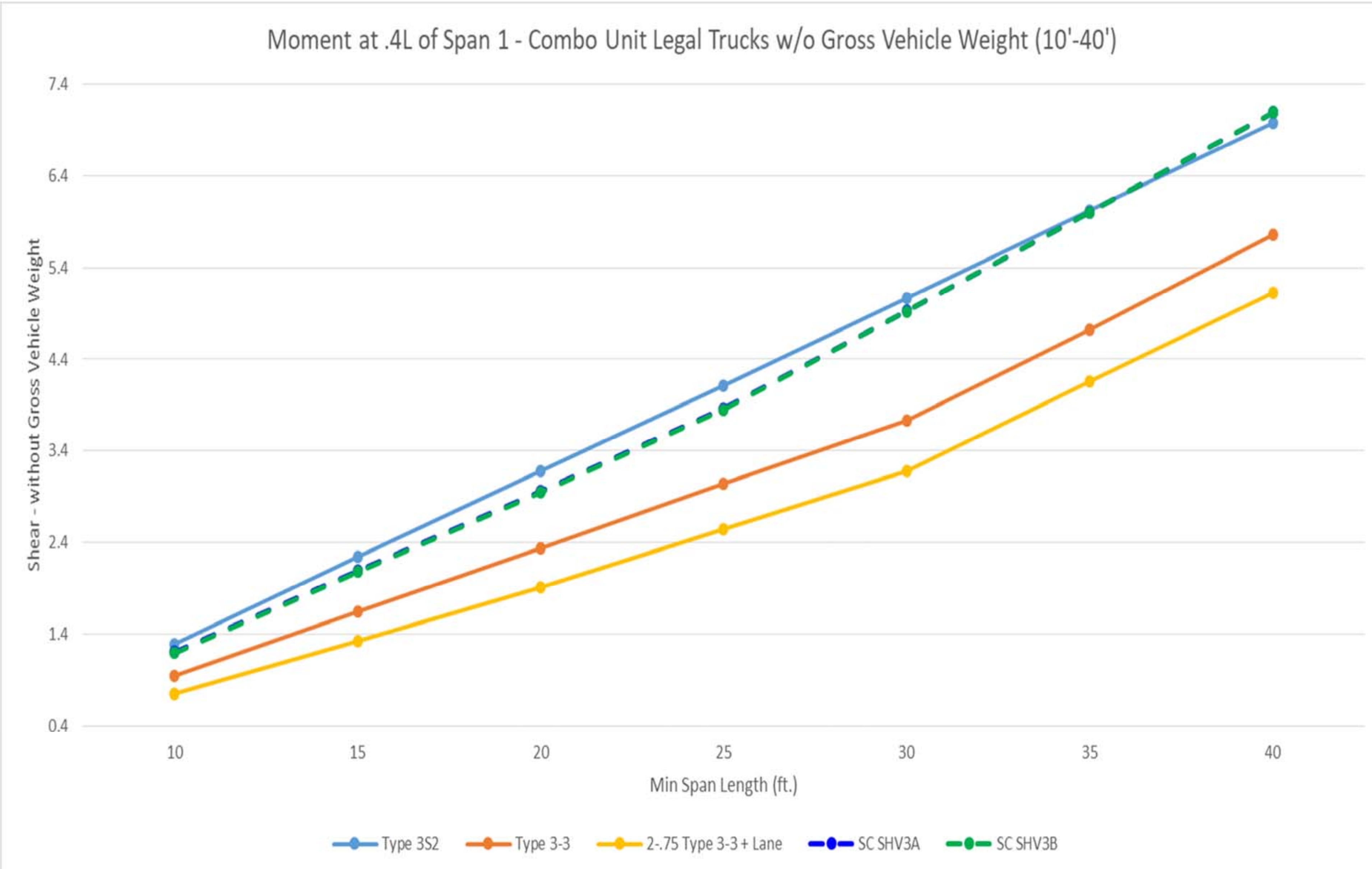
HDR



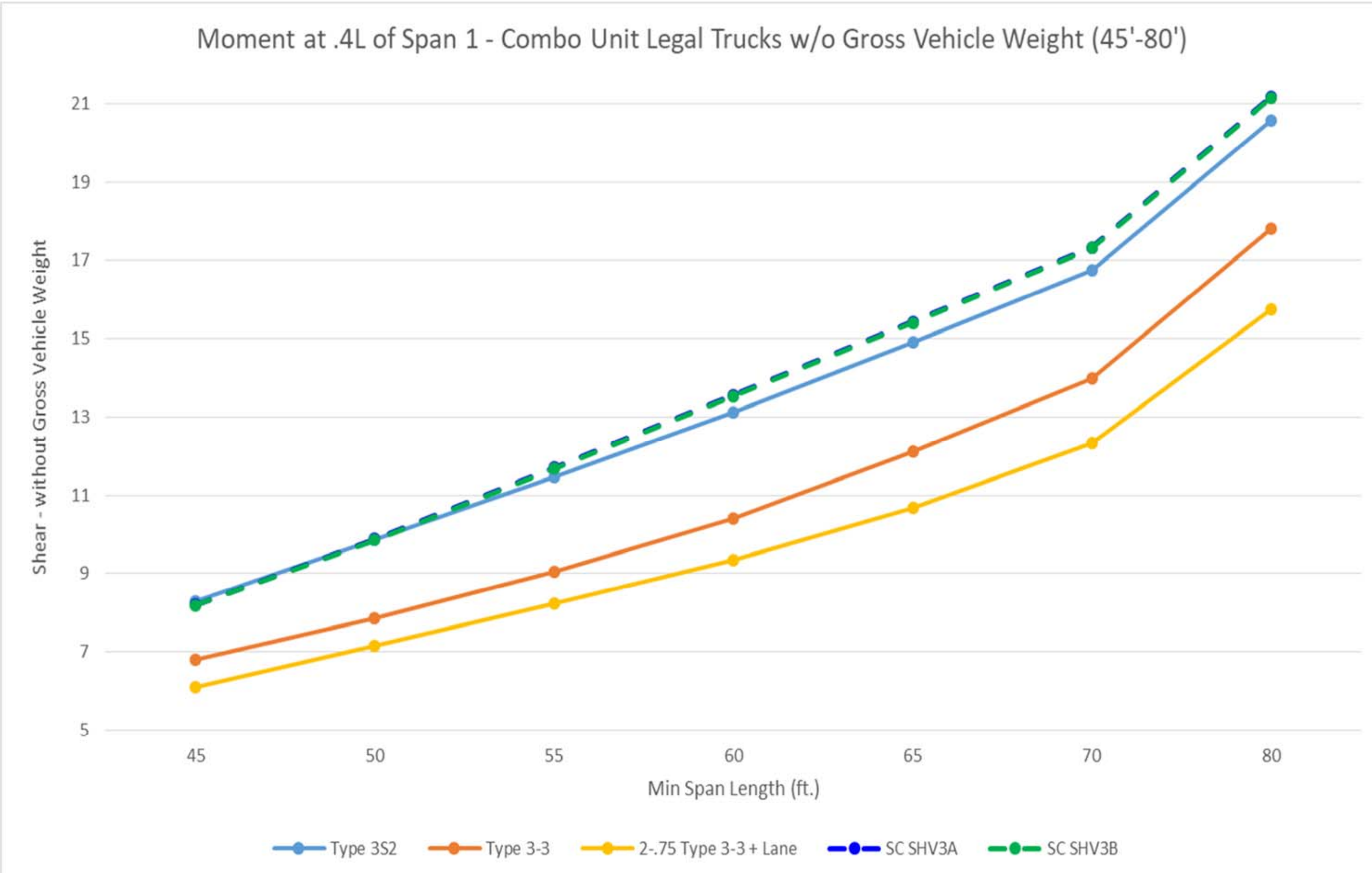
Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Shear - without Gross Vehicle Weight
63.5
61.5
59.5
57.5
55.5
53.5
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

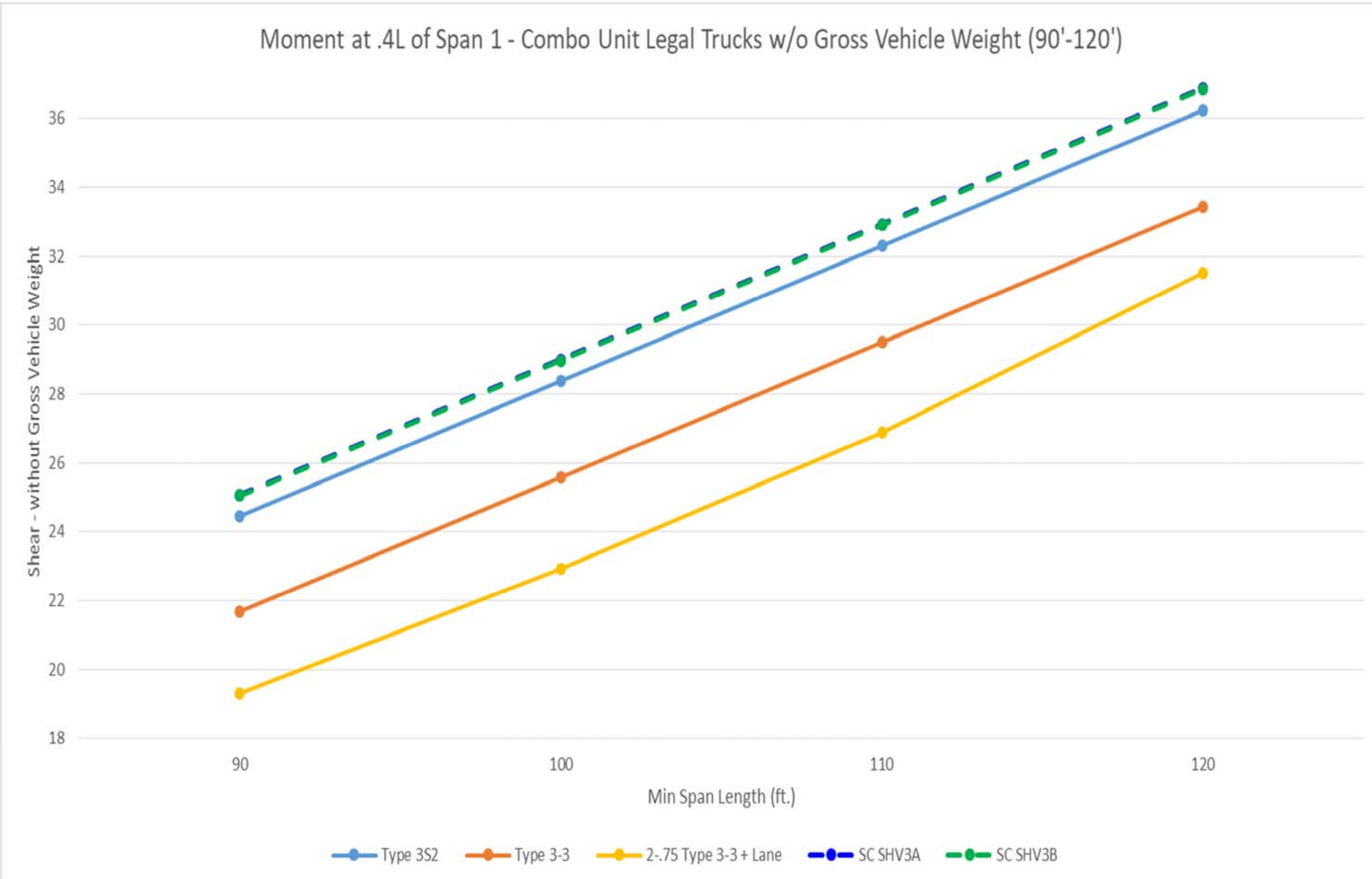


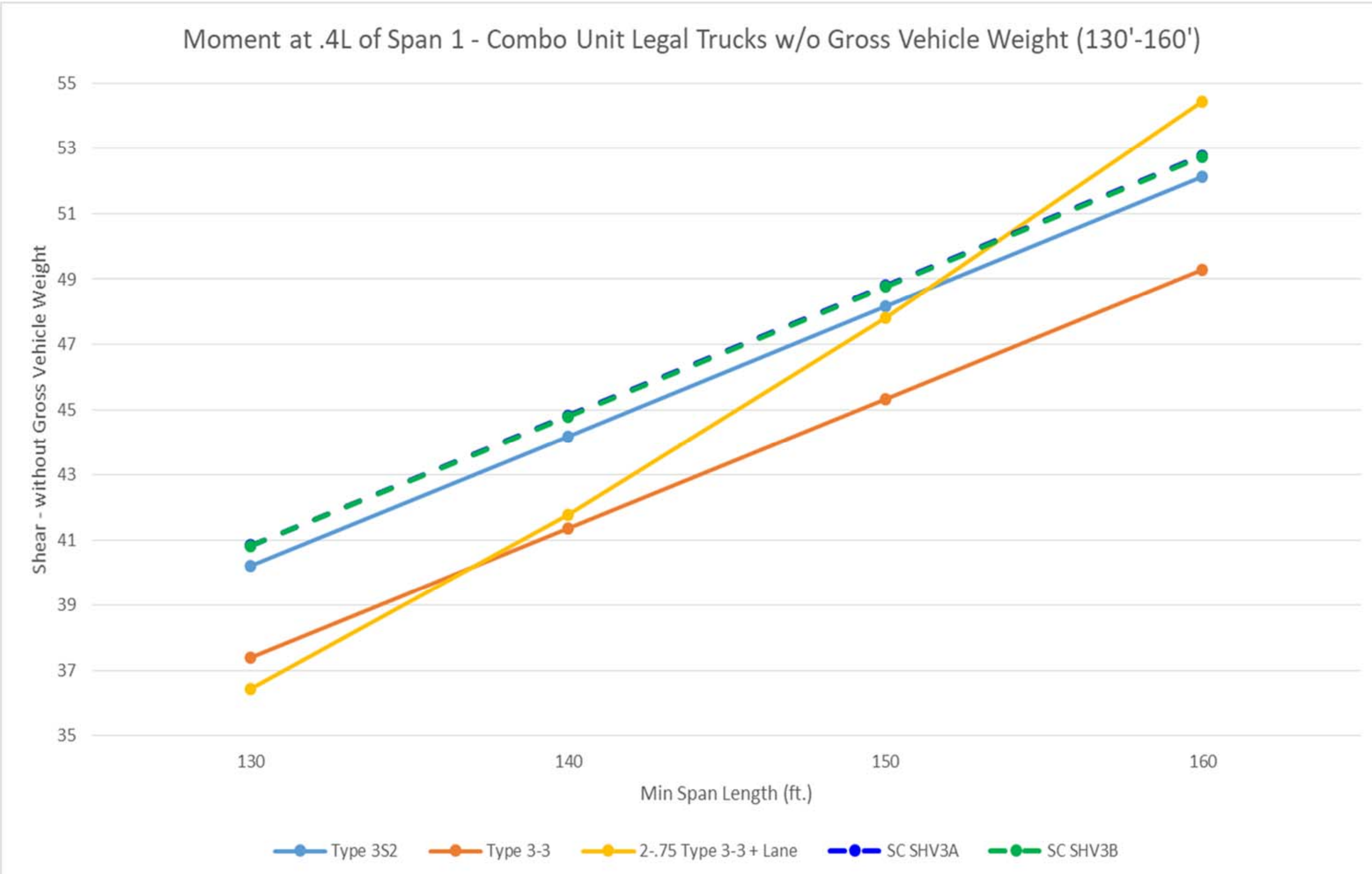
Moment at .4L of Span 1 - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
75.5
73.5
71.5
69.5
67.5
65.5
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

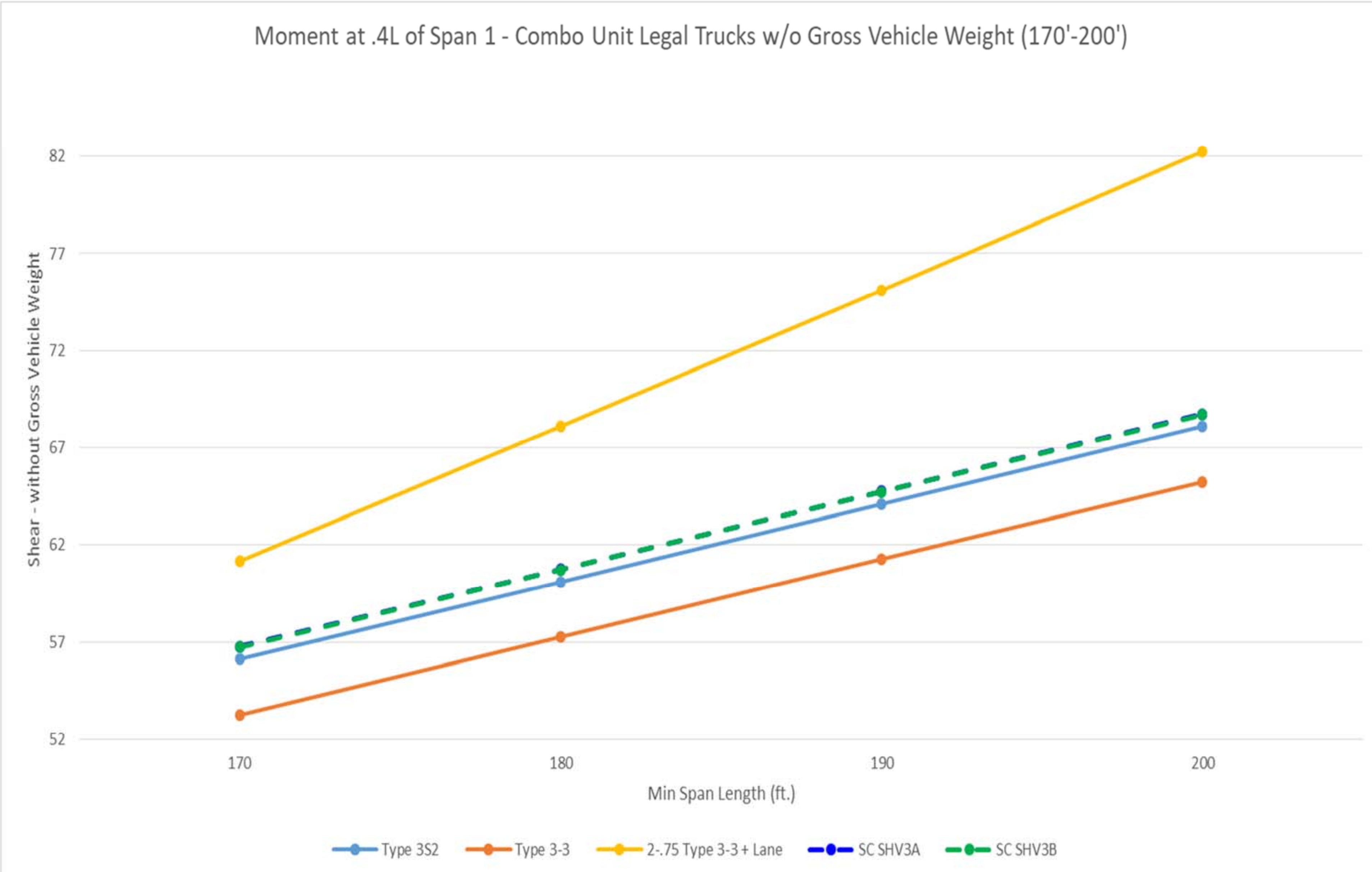


Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
7.4
6.4
5.4
4.4
3.4
2.4
1.4
0.4
Shear - without Gross Vehicle Weight
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

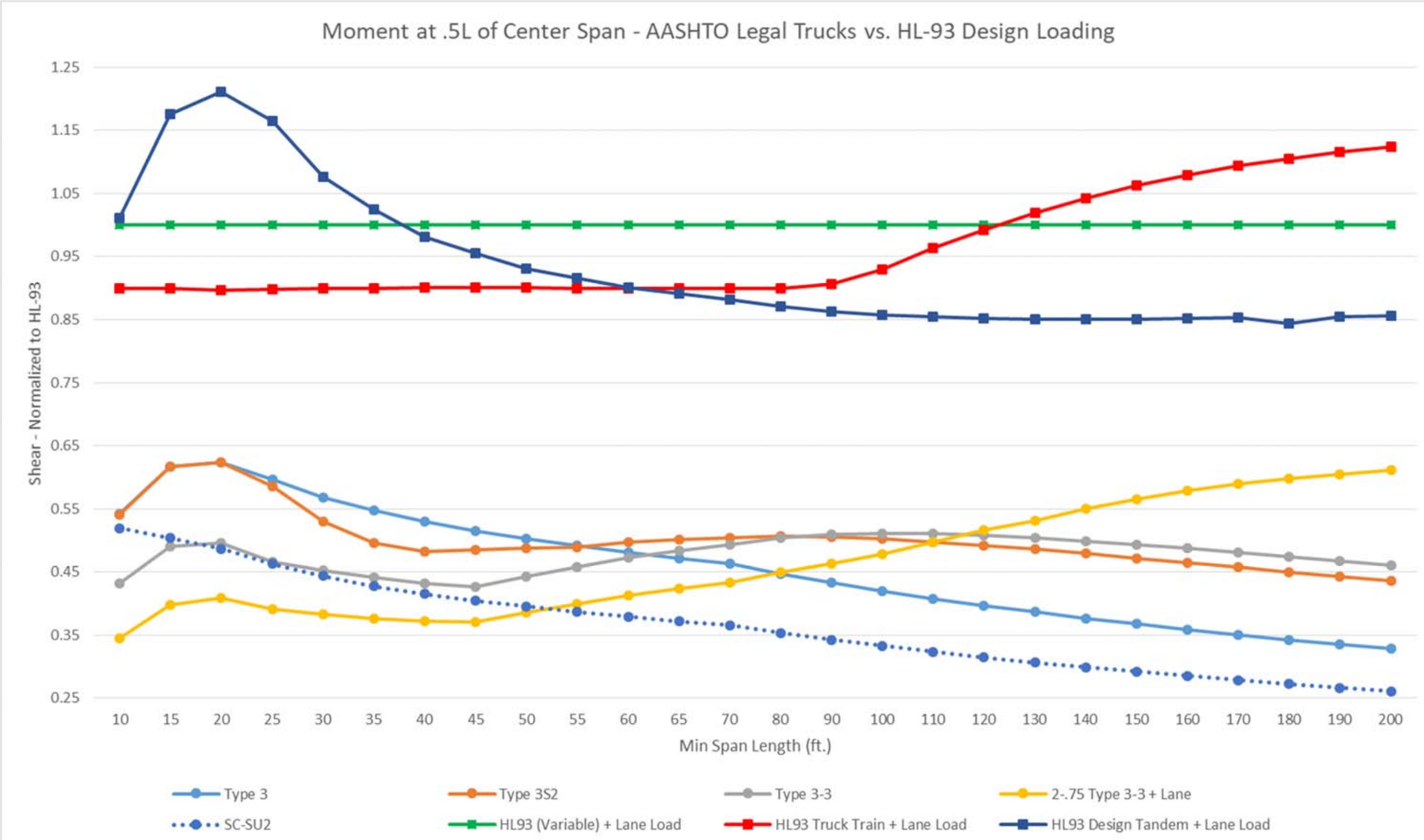

Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
21
19
17
15
13
11
9
7
5
Shear - without Gross Vehicle Weight
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

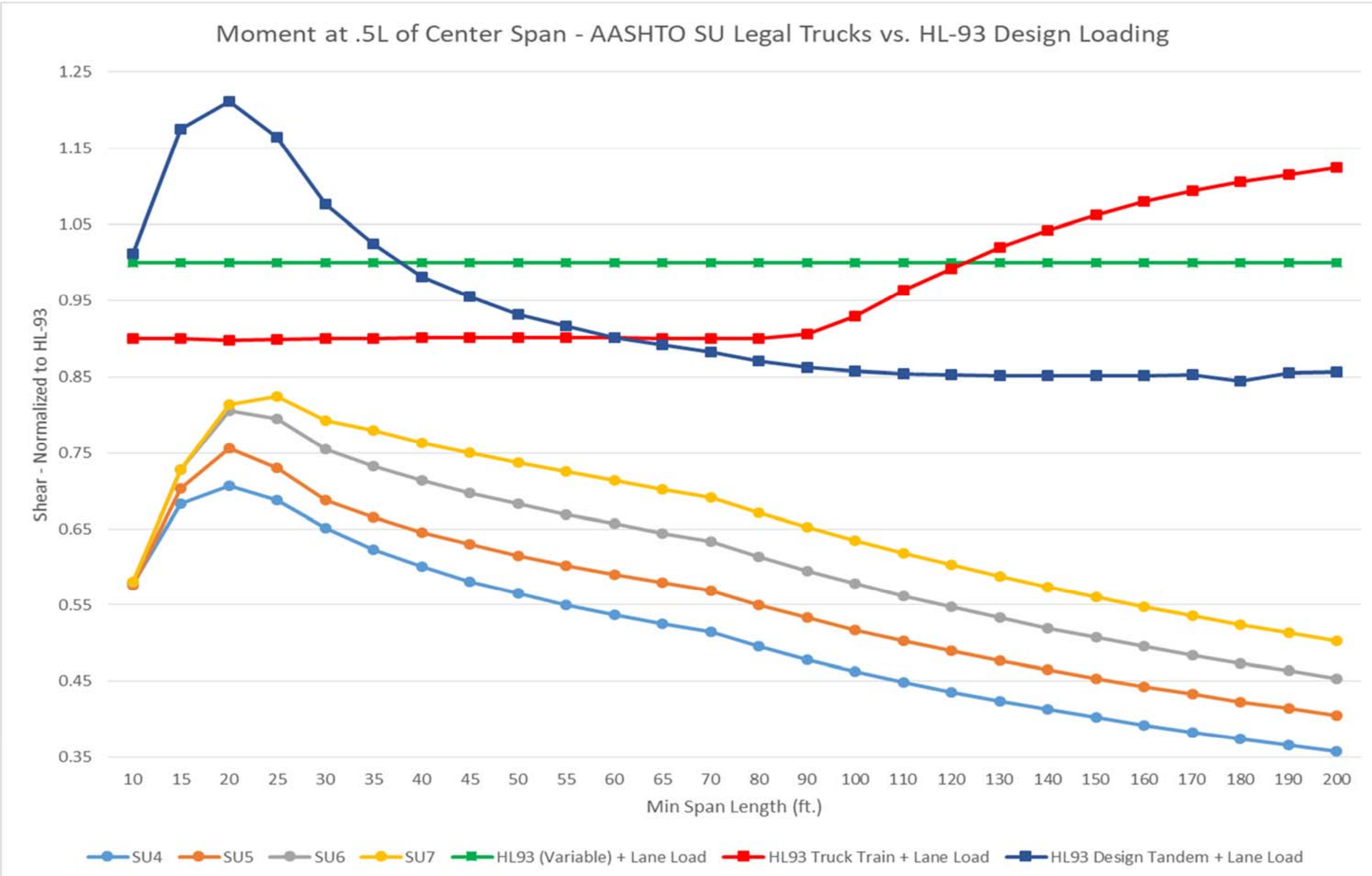

Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
36
34
32
30
28
26
24
22
20
18
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

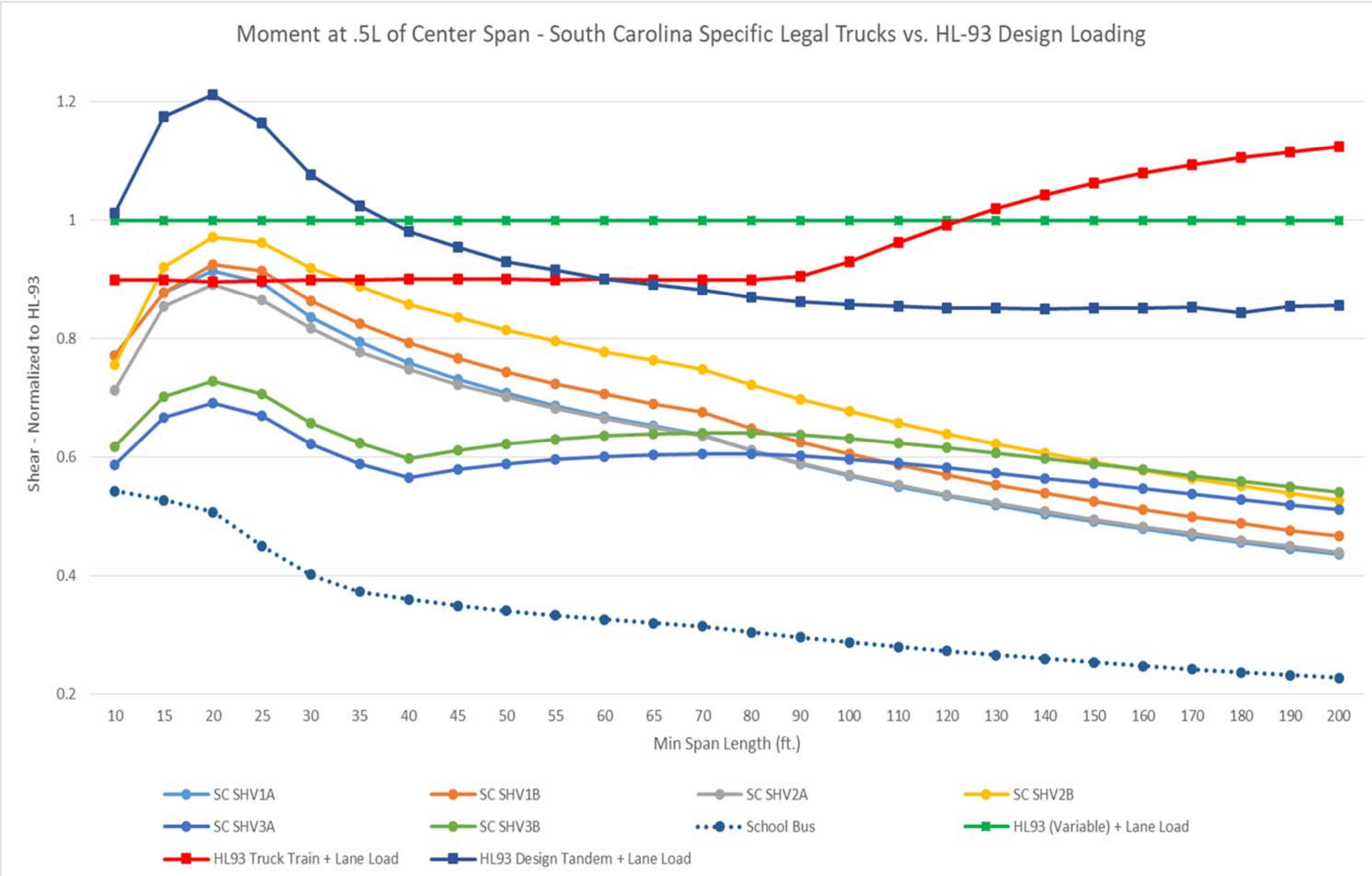

Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Shear - without Gross Vehicle Weight
55
53
51
49
47
45
43
41
39
37
35
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Moment at .4L of Span 1 - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
82
77
72
67
62
57
52
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

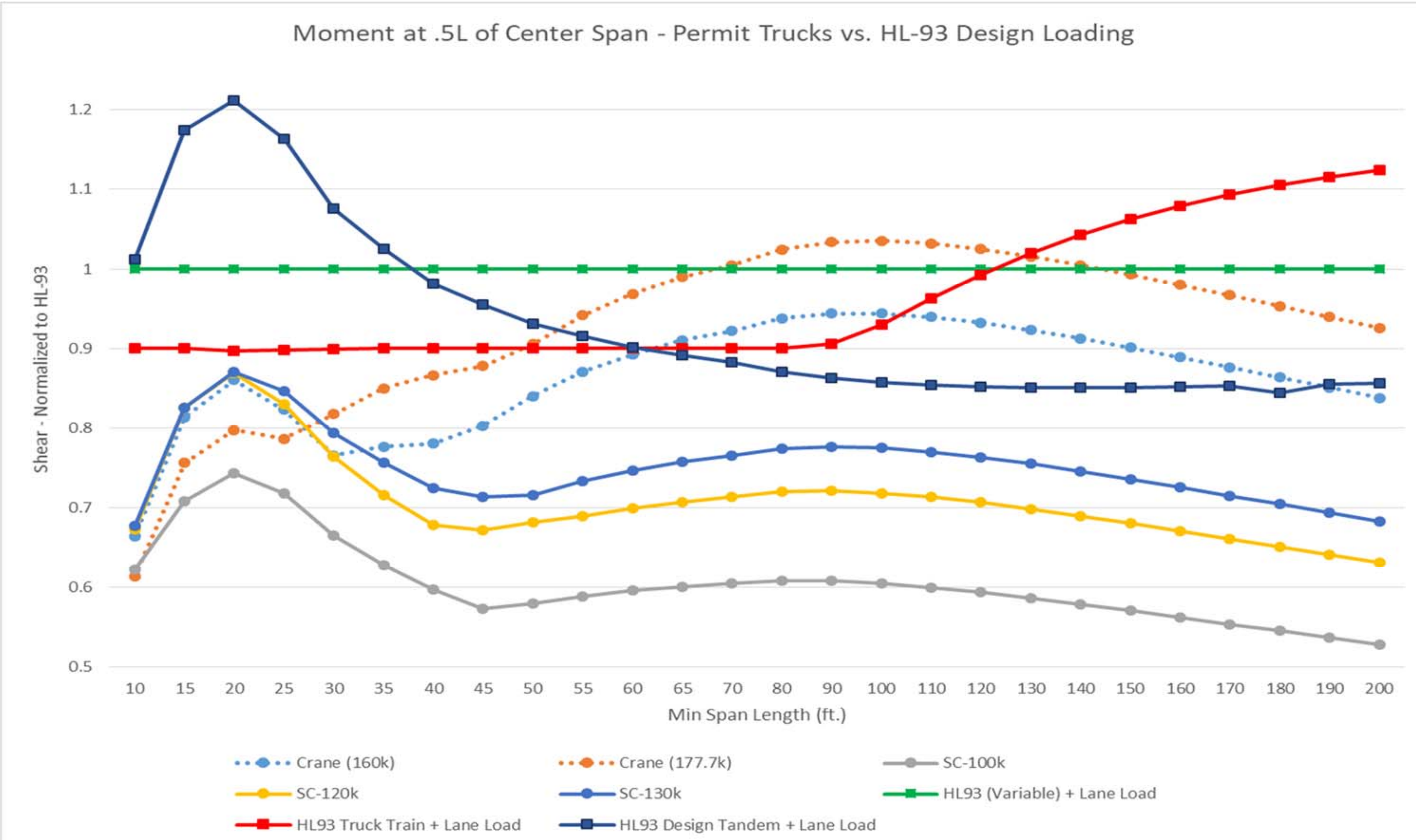
Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Moment at .5L of Center Span*



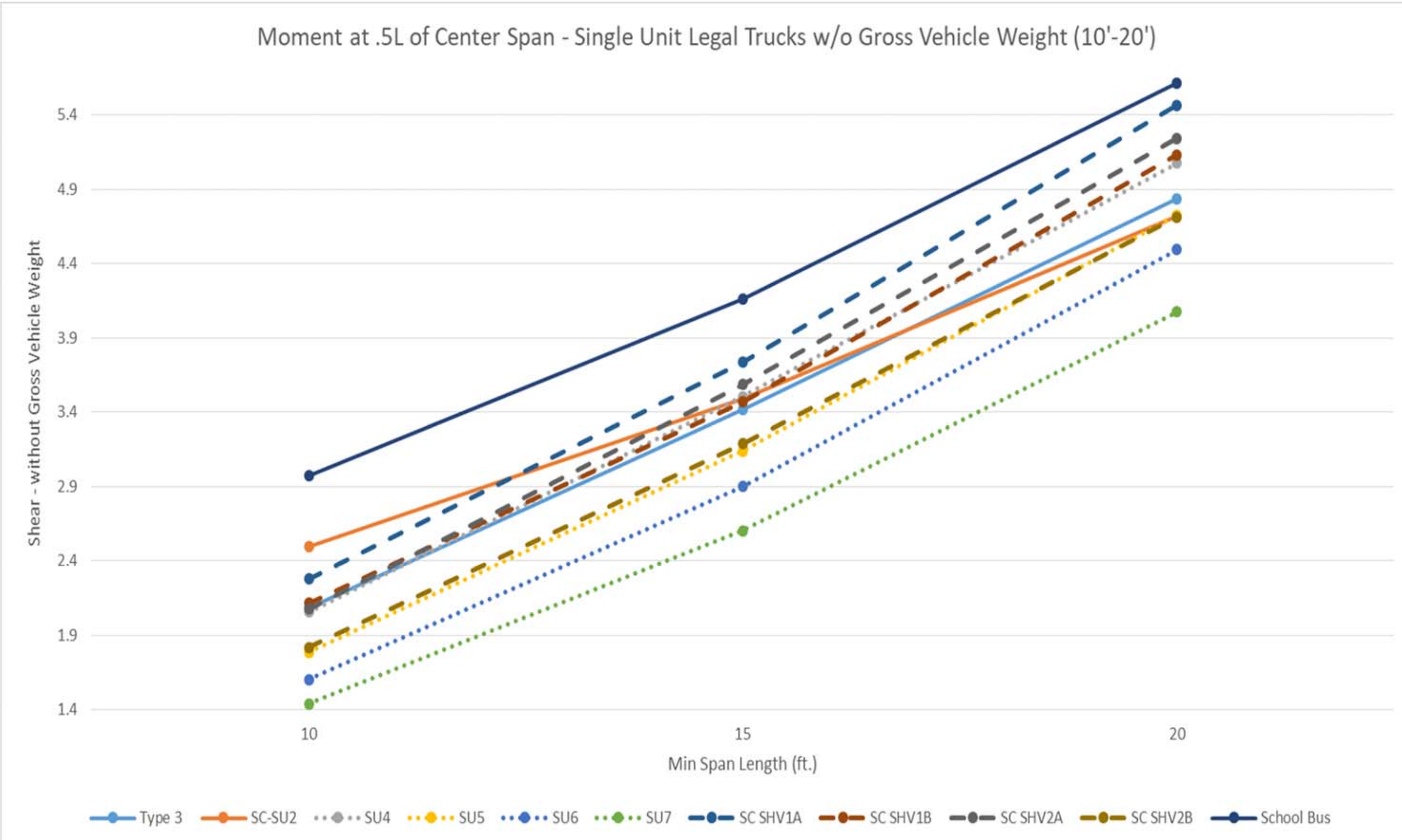

Moment at .5L of Center Span - AASHTO SU Legal Trucks vs. HL-93 Design Loading
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
0.35
Shear - Normalized to HL-93
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

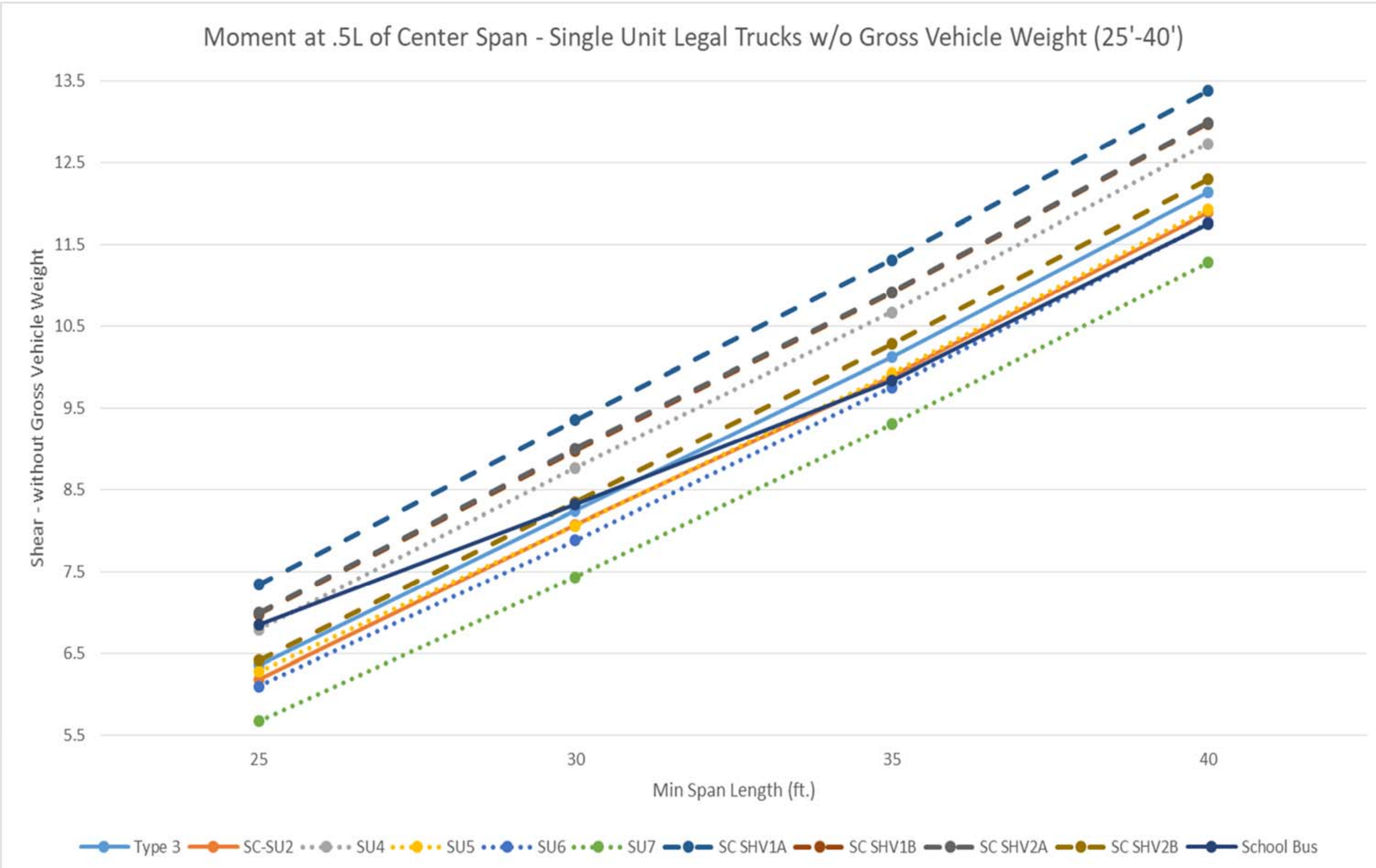

Moment at .5L of Center Span - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
1.2
1
0.8
0.6
0.4
0.2
Shear - Normalized to HL-93
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Moment at .5L of Center Span*

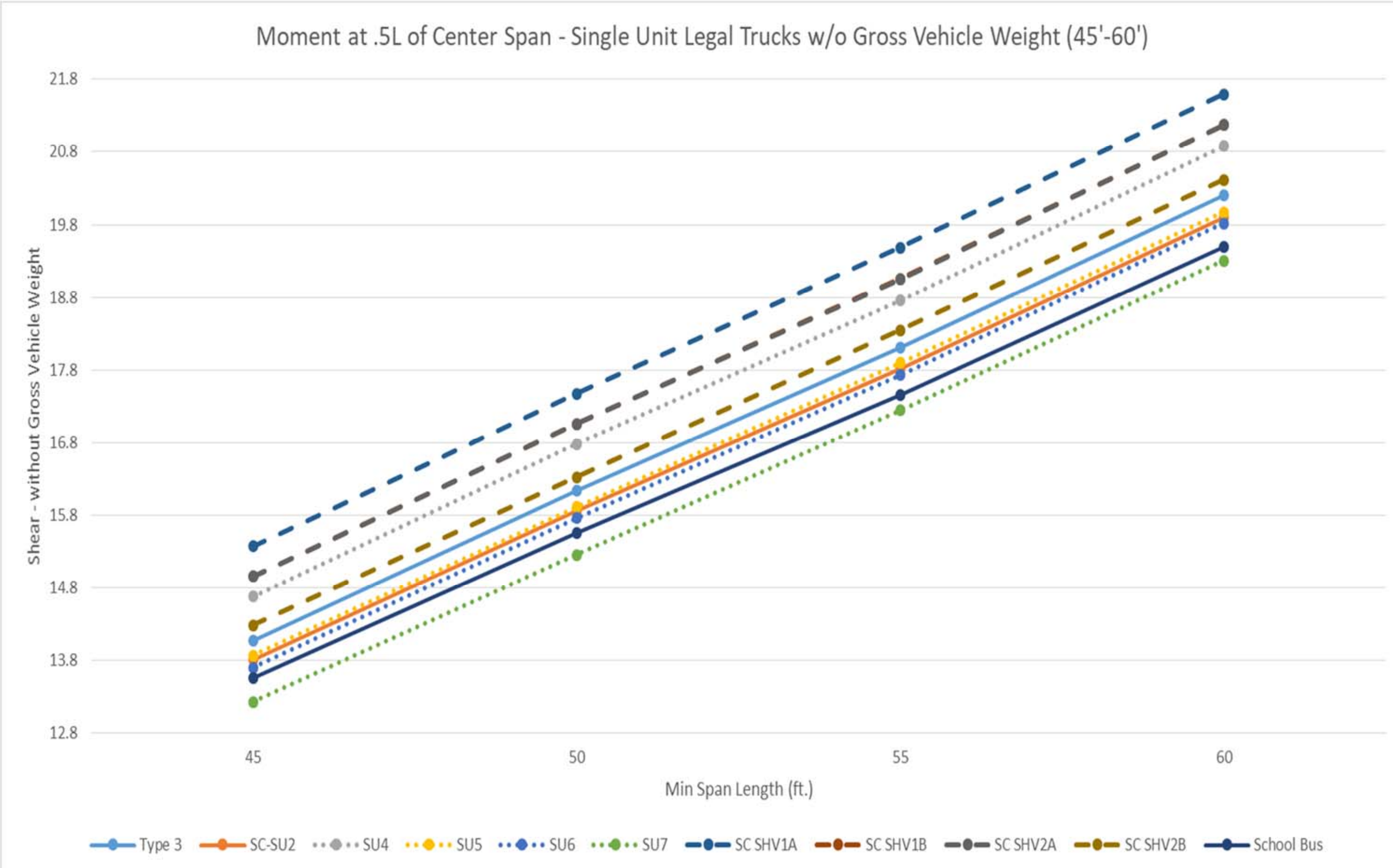


Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *Moment at .5L of Center Span*

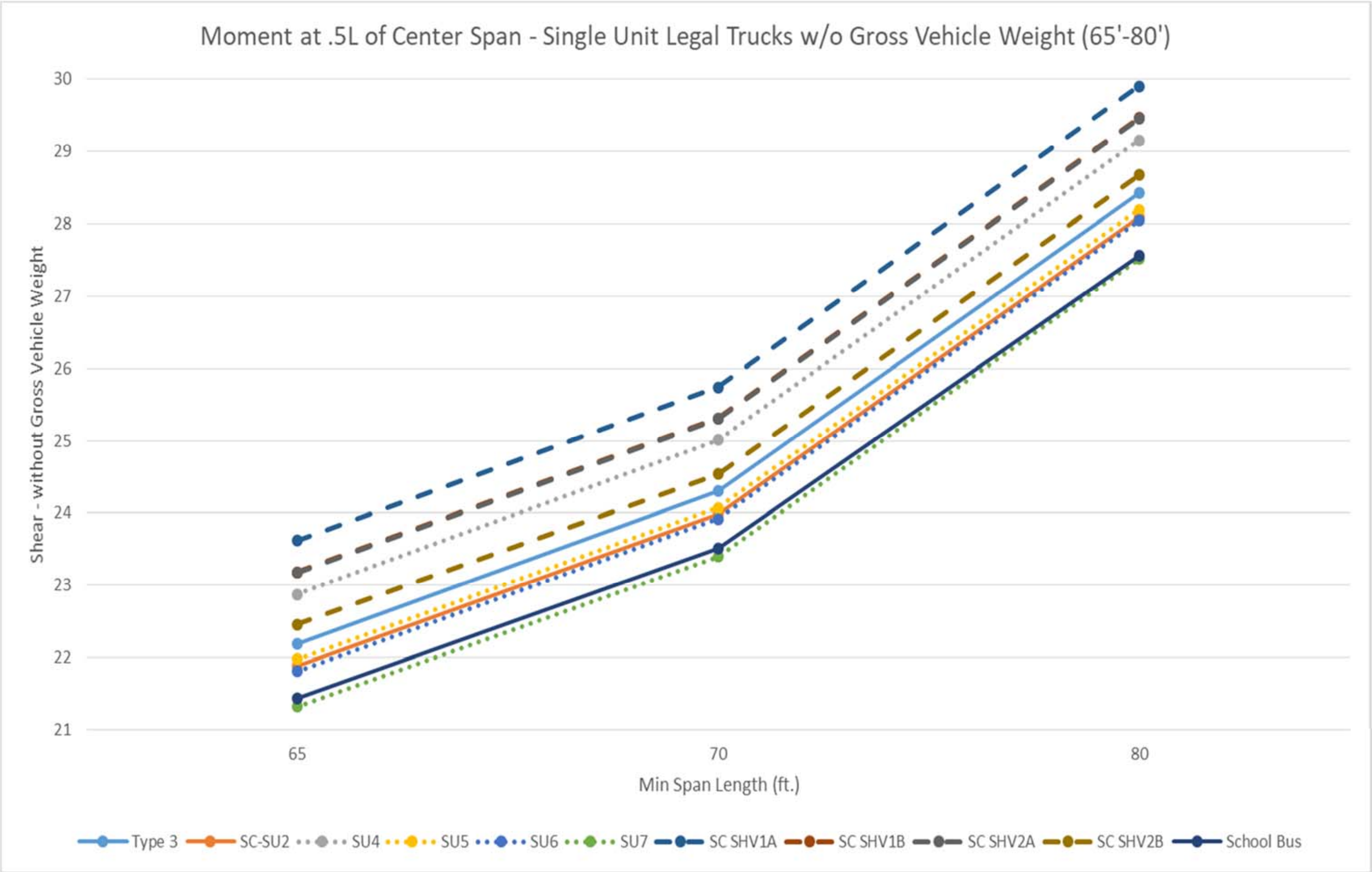




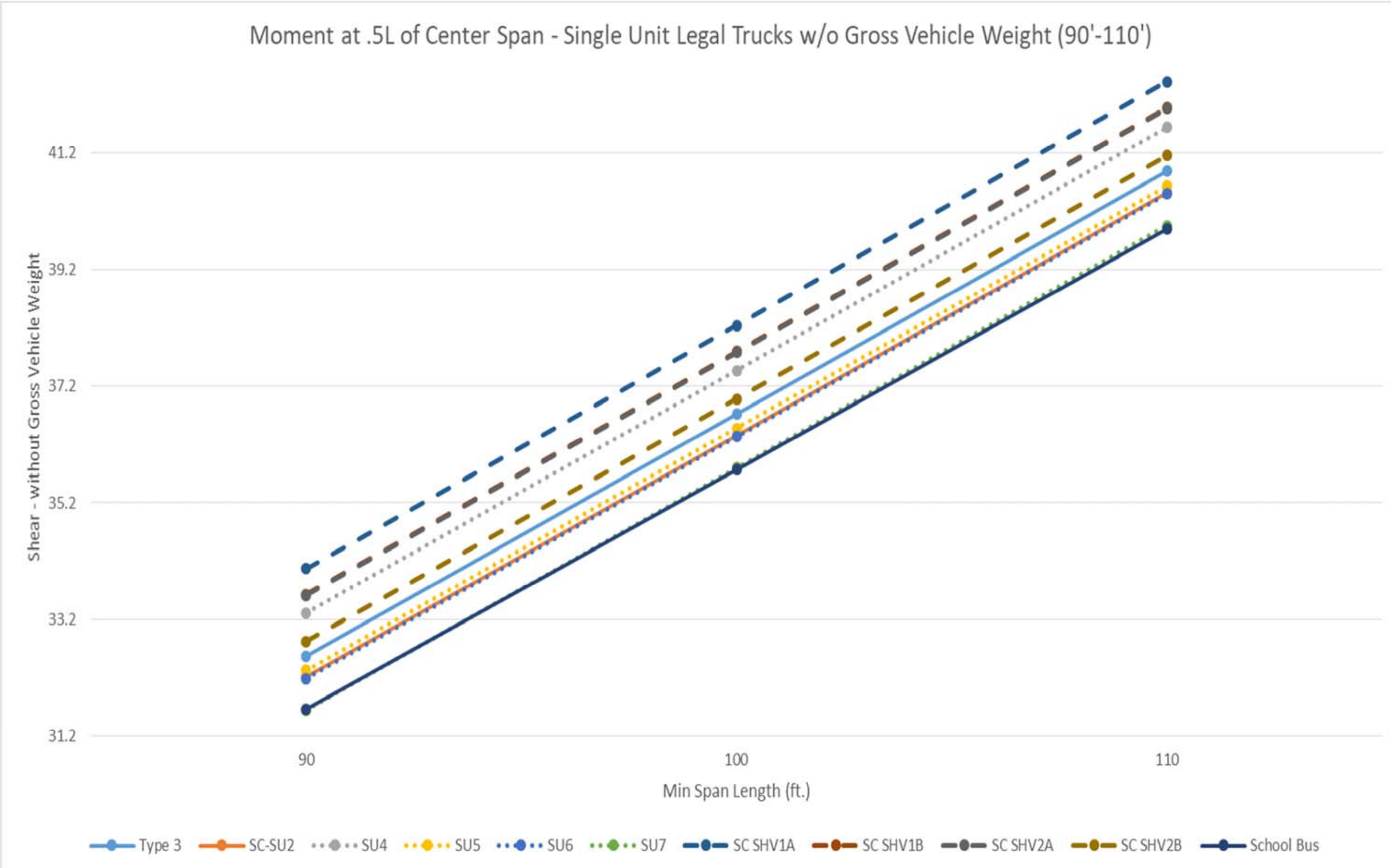
Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')
Shear - without Gross Vehicle Weight
13.5
12.5
11.5
10.5
9.5
8.5
7.5
6.5
5.5
25
30
35
40
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

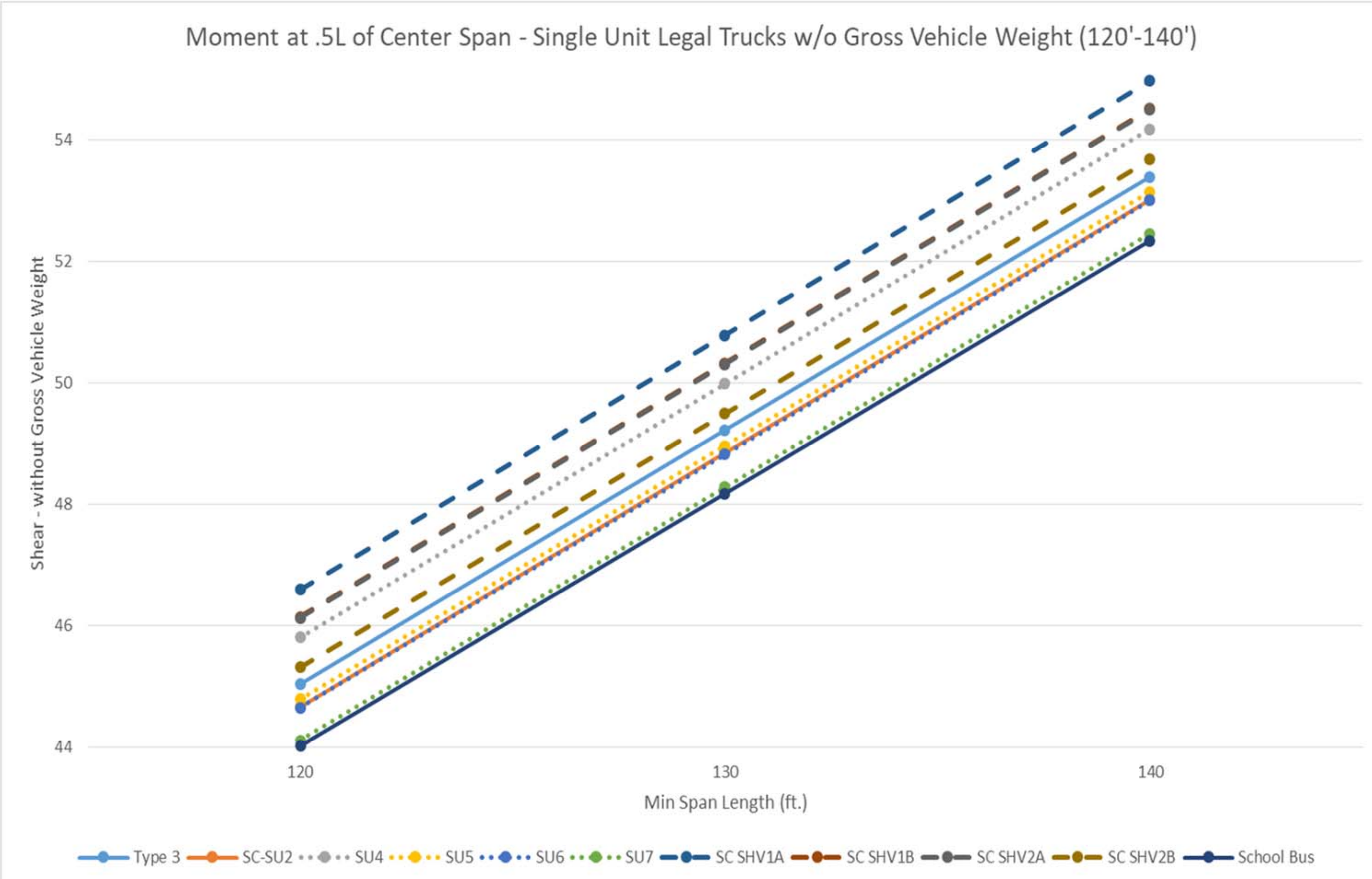


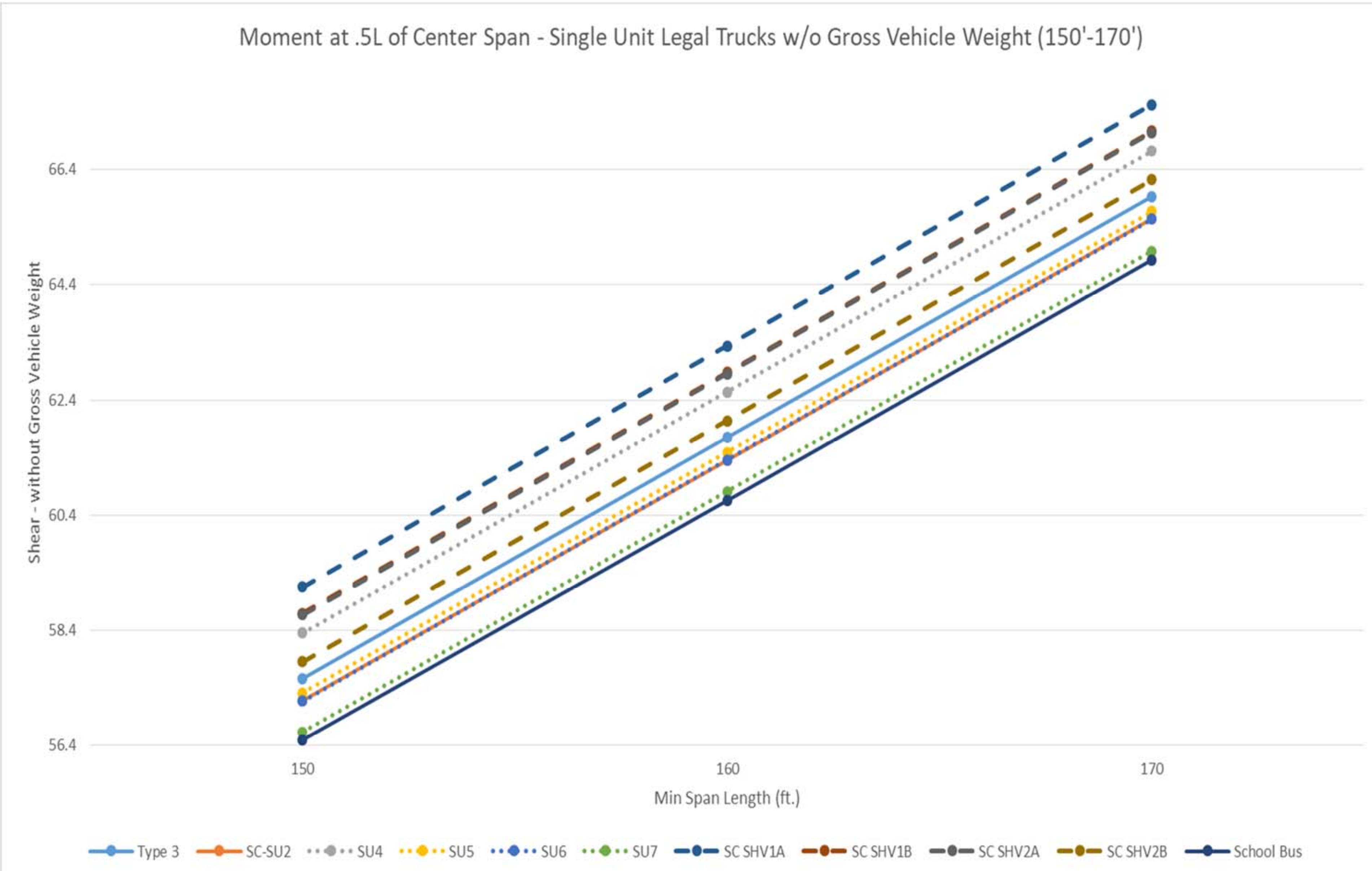
Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
21.8
20.8
19.8
18.8
17.8
16.8
15.8
14.8
13.8
12.8
Shear - without Gross Vehicle Weight
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

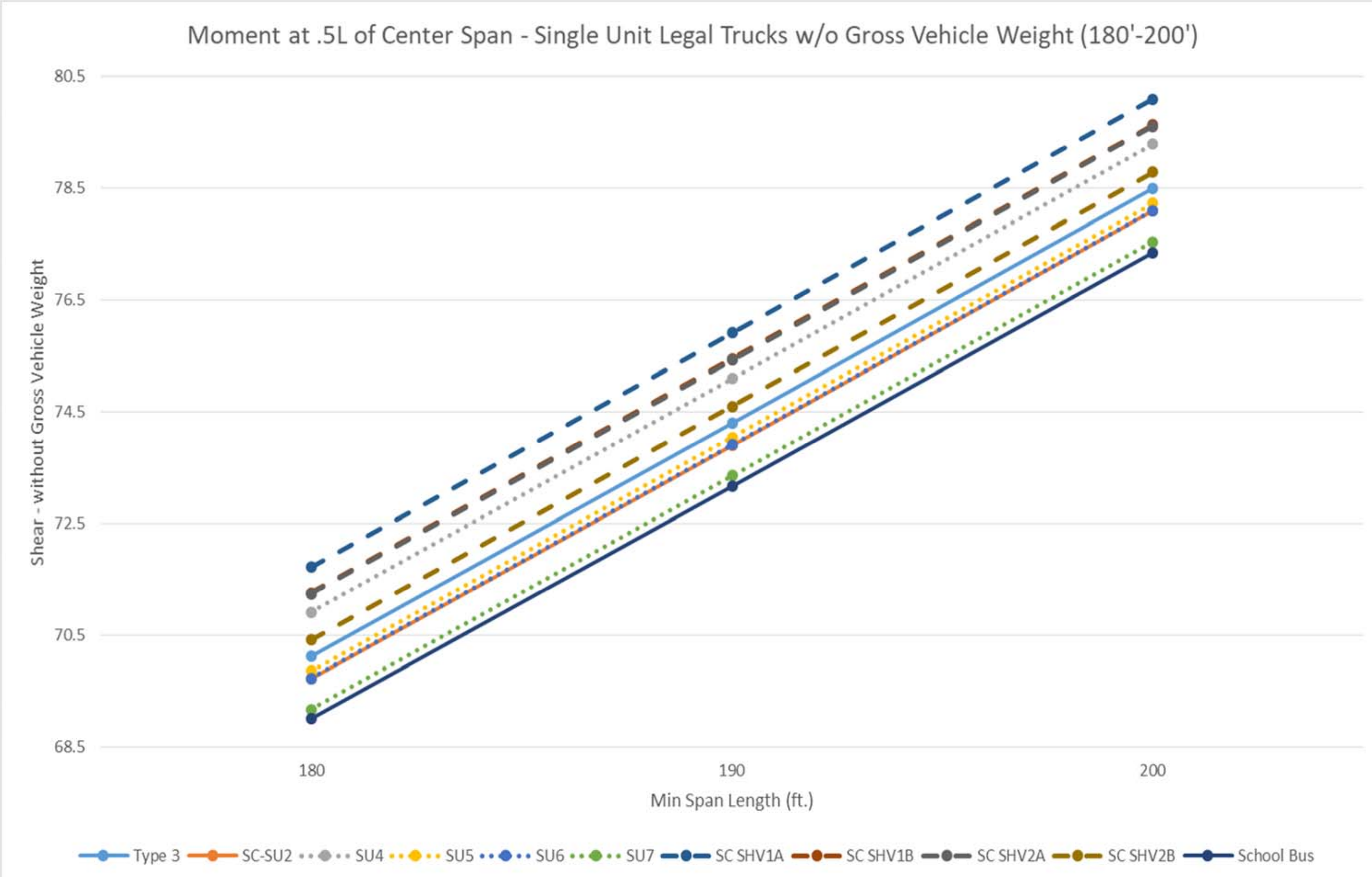


Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
30
29
28
27
26
25
24
23
22
21
Shear - without Gross Vehicle Weight
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

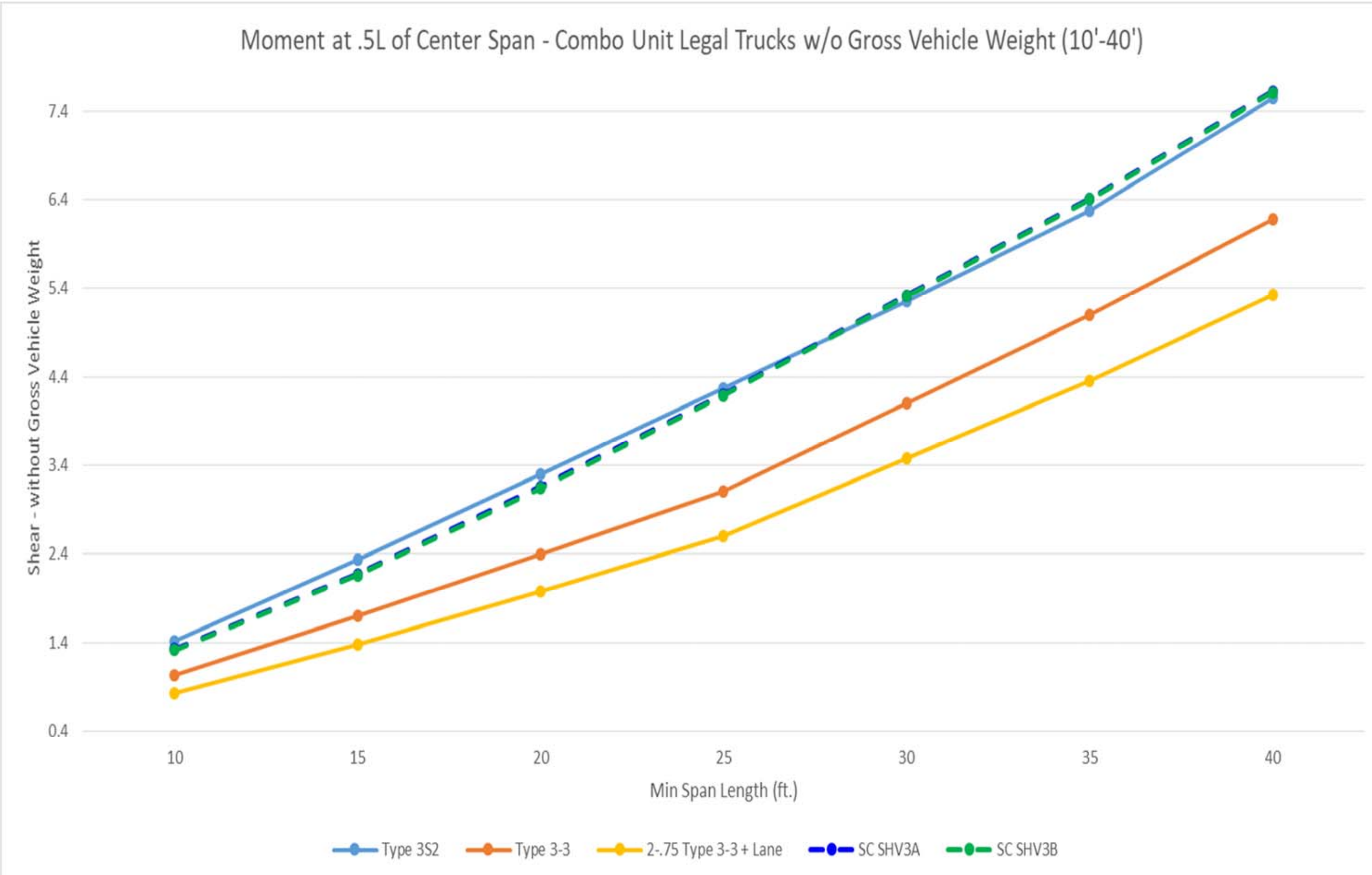

Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
Shear - without Gross Vehicle Weight
41.2
39.2
37.2
35.2
33.2
31.2
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')
Shear - without Gross Vehicle Weight
54
52
50
48
46
44
120
130
140
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

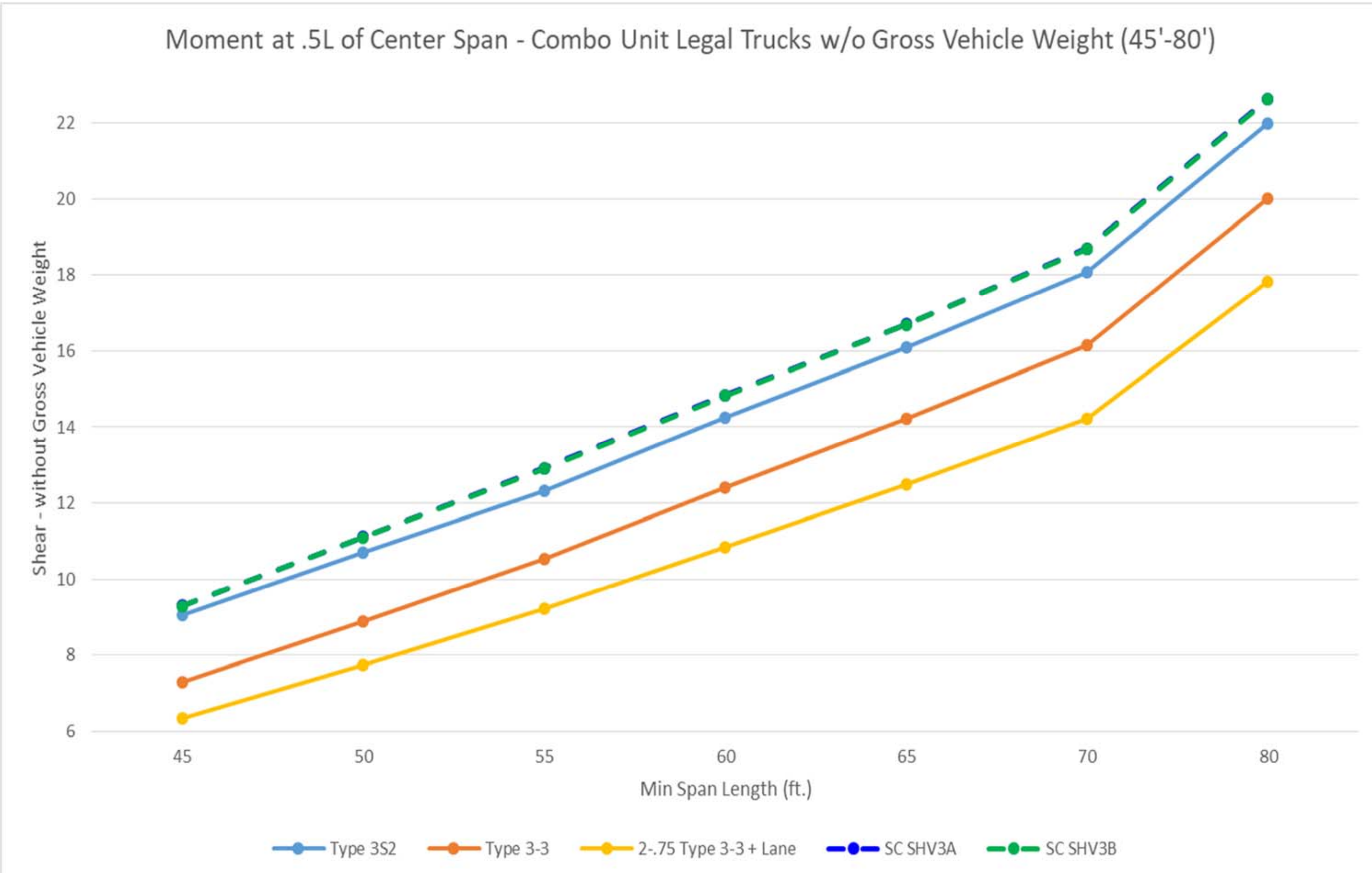

Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Shear - without Gross Vehicle Weight
66.4
64.4
62.4
60.4
58.4
56.4
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



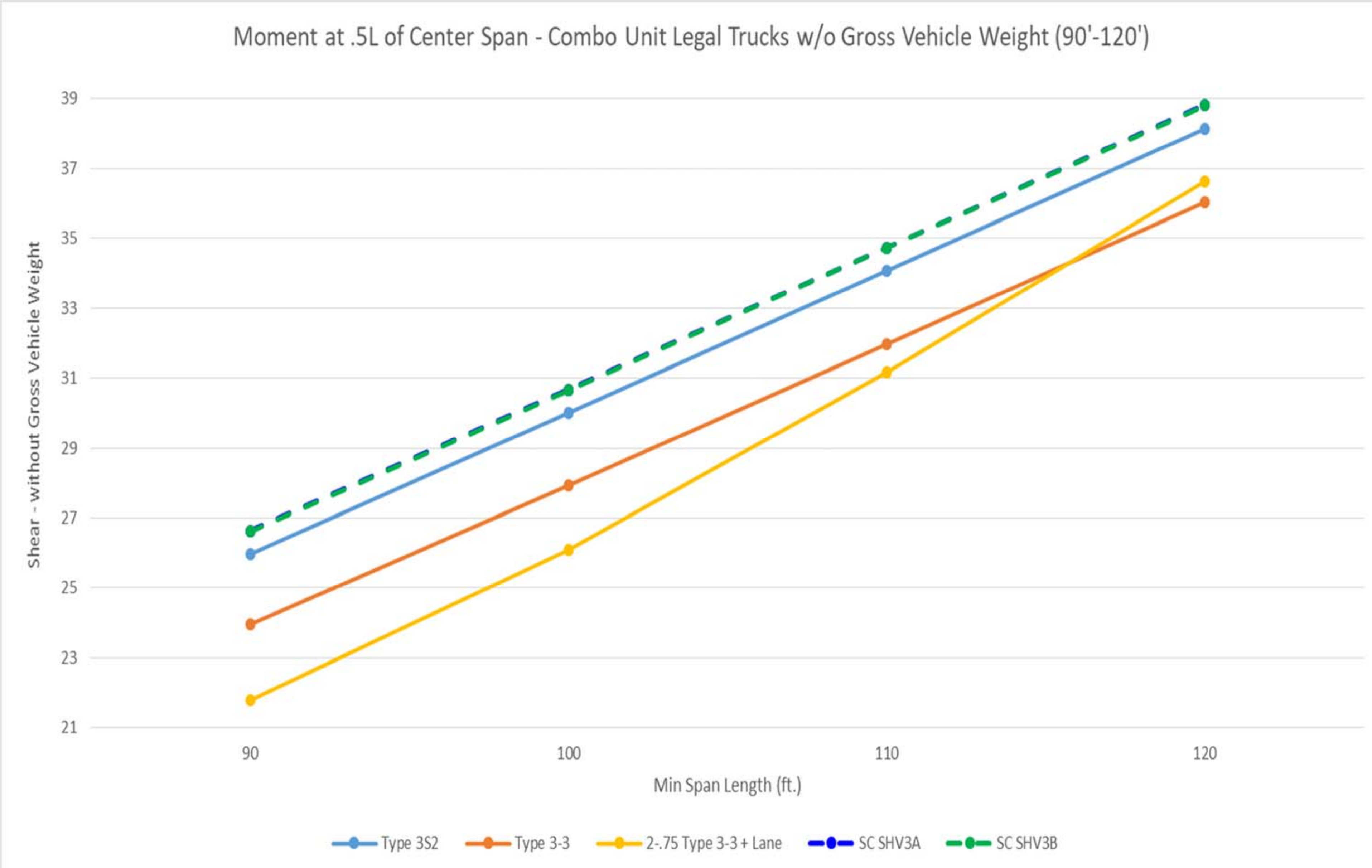
Moment at .5L of Center Span - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
80.5
78.5
76.5
74.5
72.5
70.5
68.5
Shear - without Gross Vehicle Weight
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



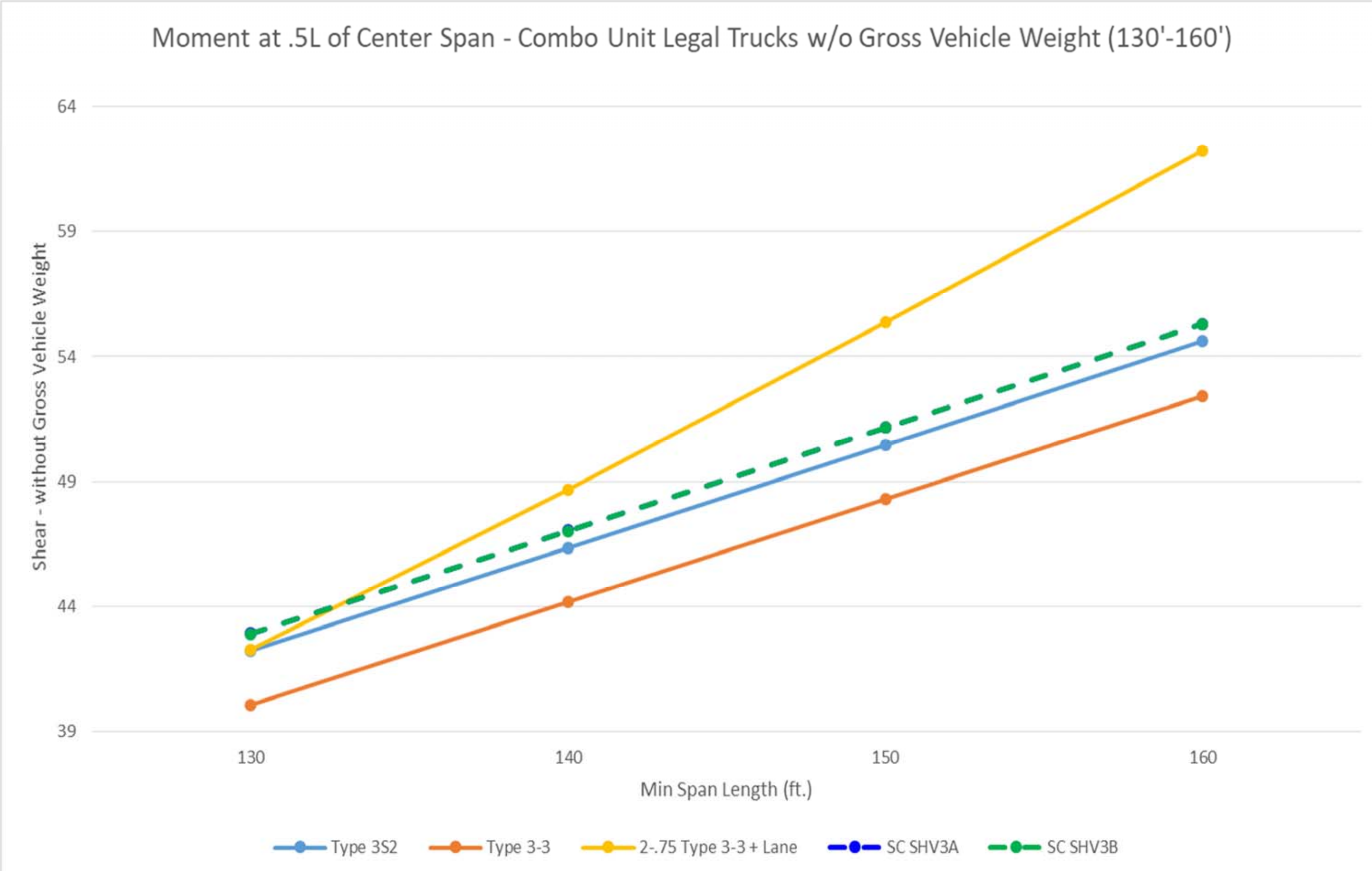
Moment at .5L of Center Span - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
7.4
6.4
5.4
4.4
3.4
2.4
1.4
0.4
Shear - without Gross Vehicle Weight
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



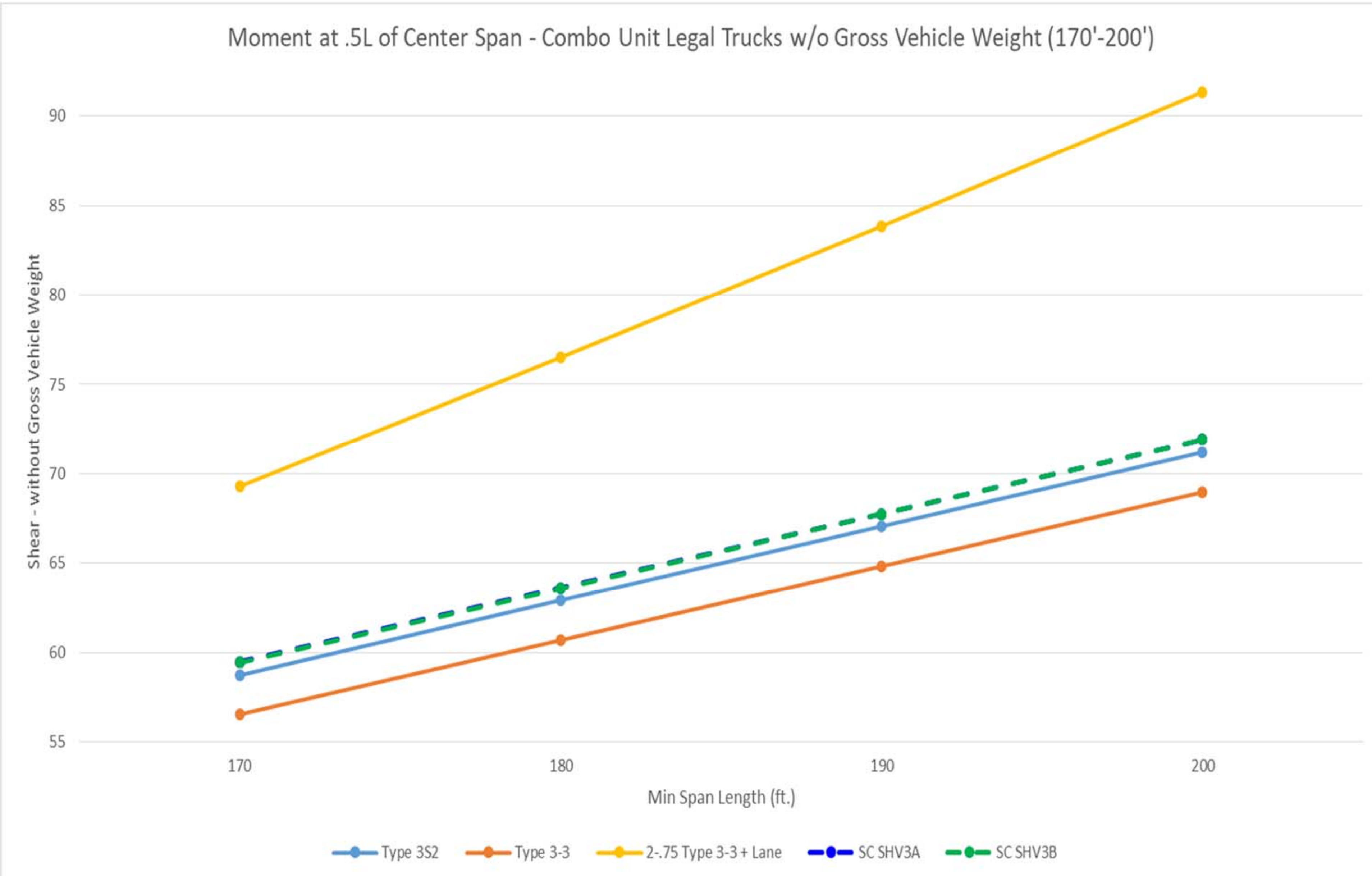
Moment at .5L of Center Span - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
22
20
18
16
14
12
10
8
6
Shear - without Gross Vehicle Weight
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B



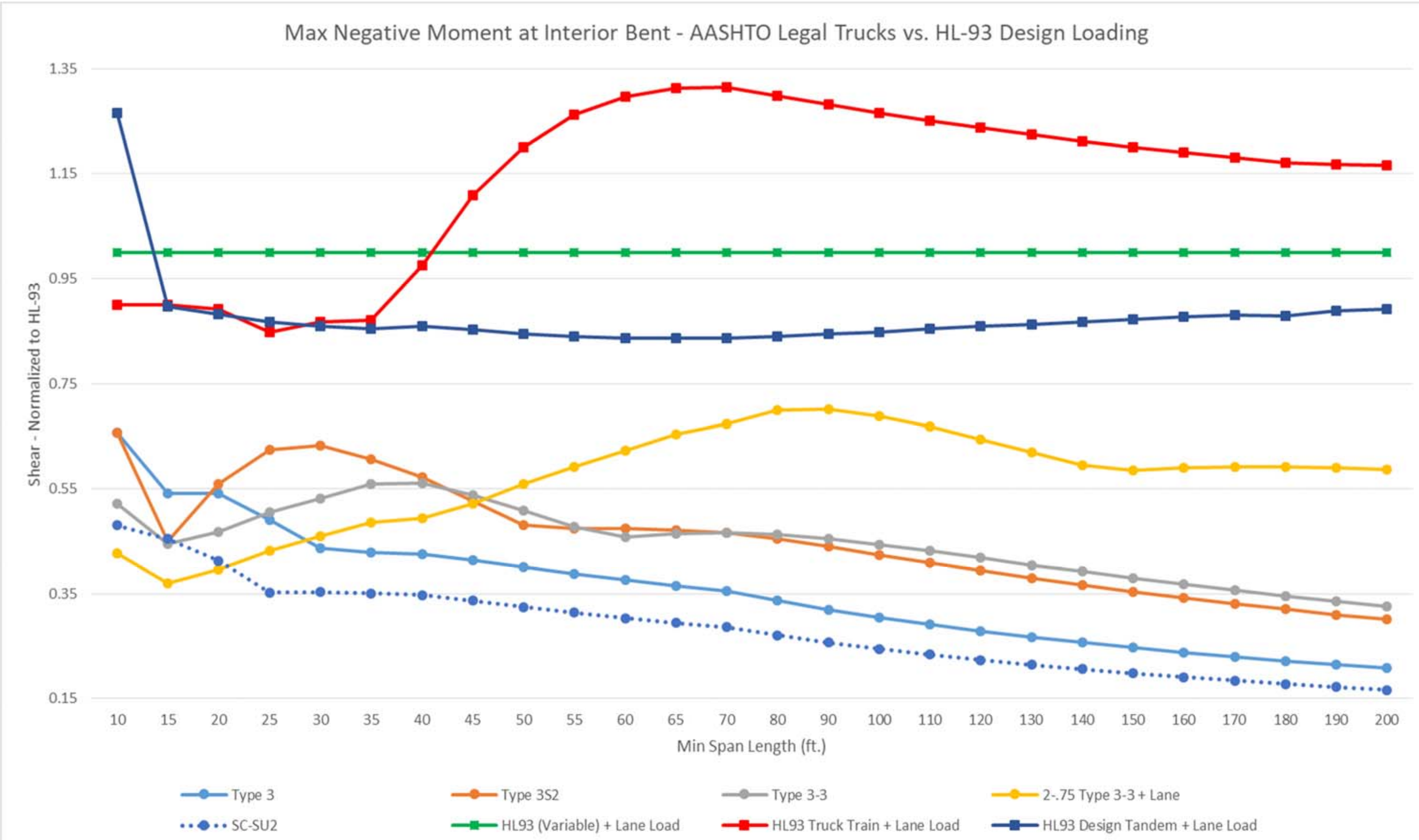
Moment at .5L of Center Span - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
39
37
35
33
31
29
27
25
23
21
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

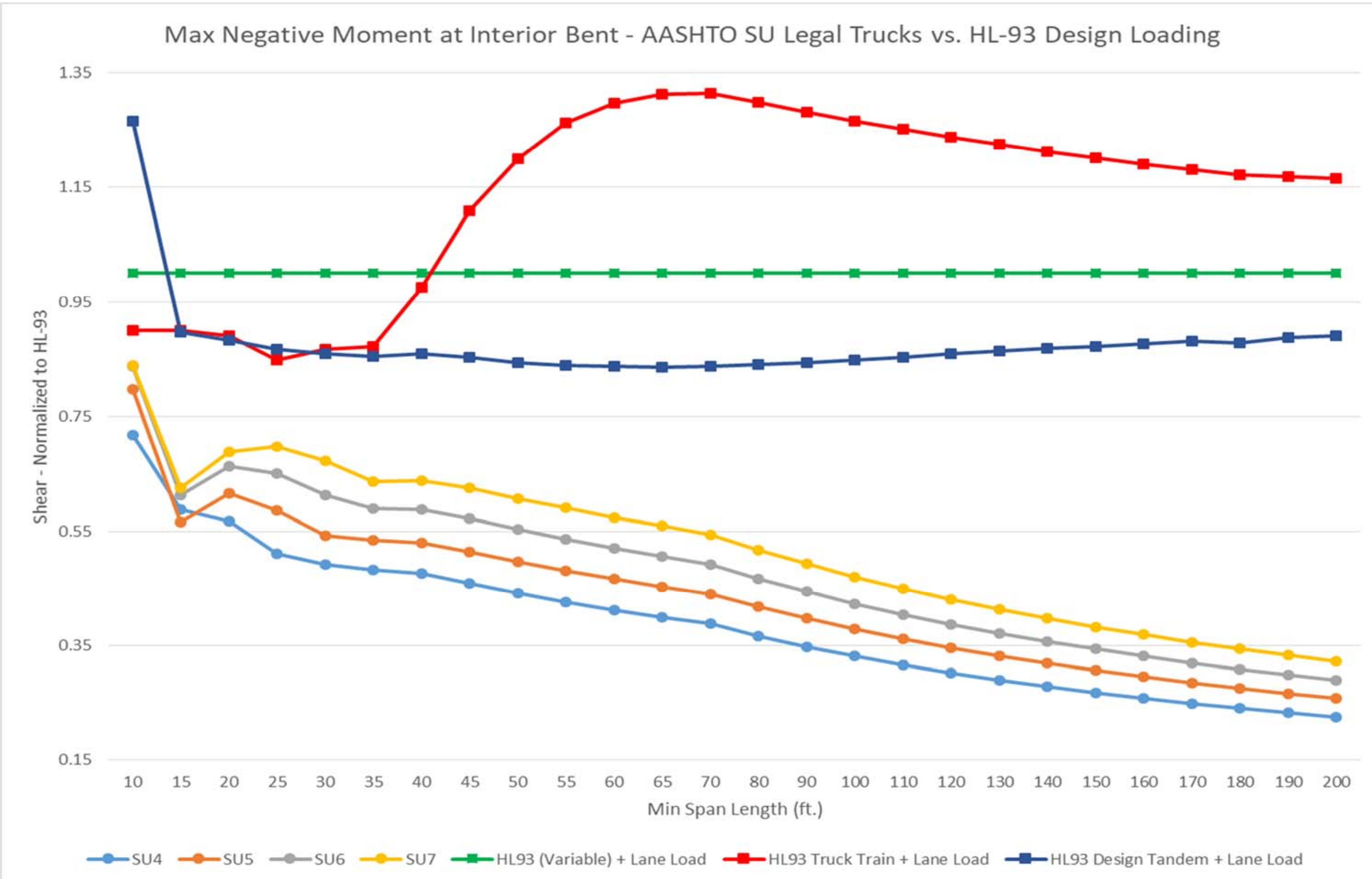


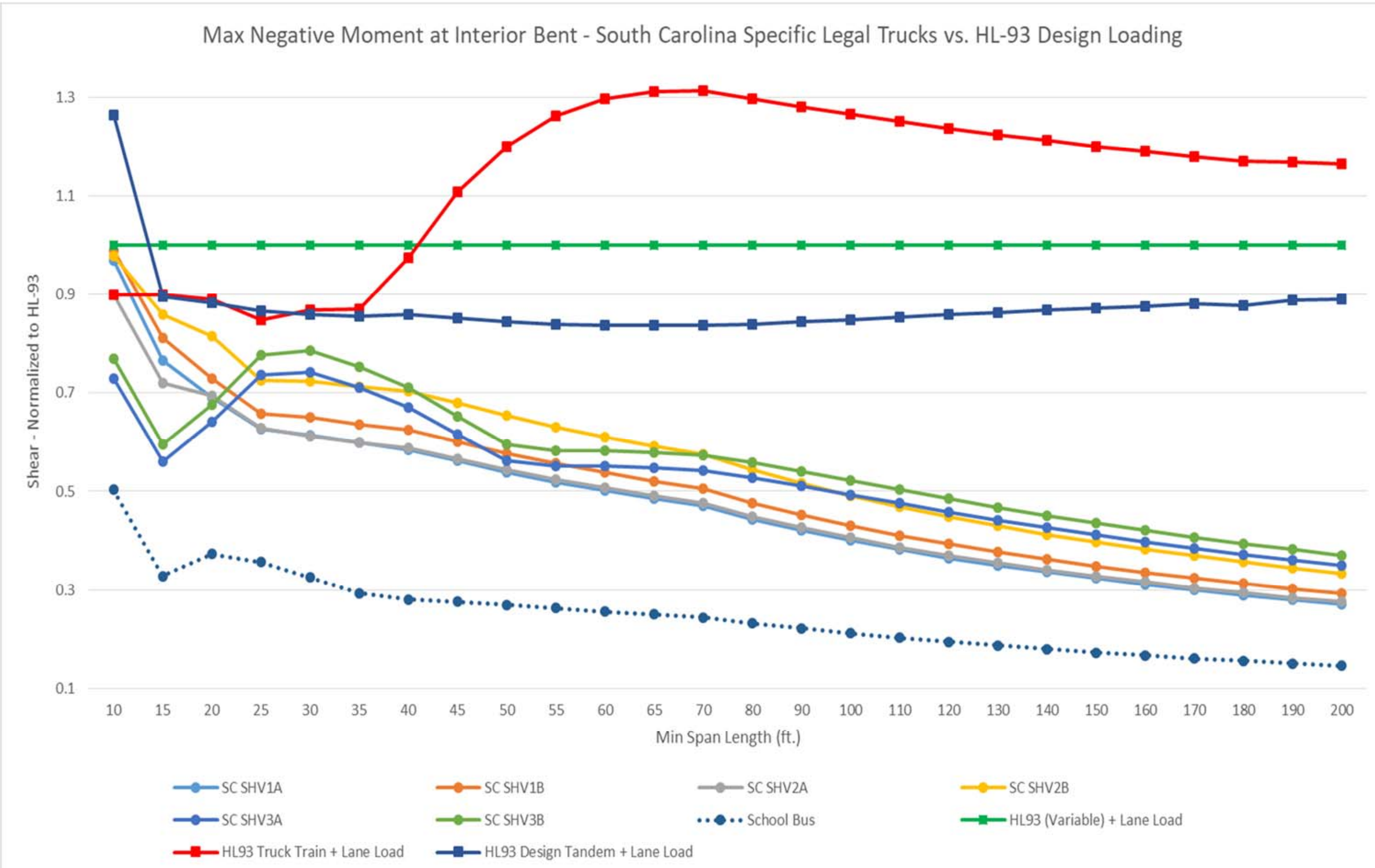
Moment at .5L of Center Span - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Shear - without Gross Vehicle Weight
64
59
54
49
44
39
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Moment at .5L of Center Span - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
Shear - without Gross Vehicle Weight
90
85
80
75
70
65
60
55
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

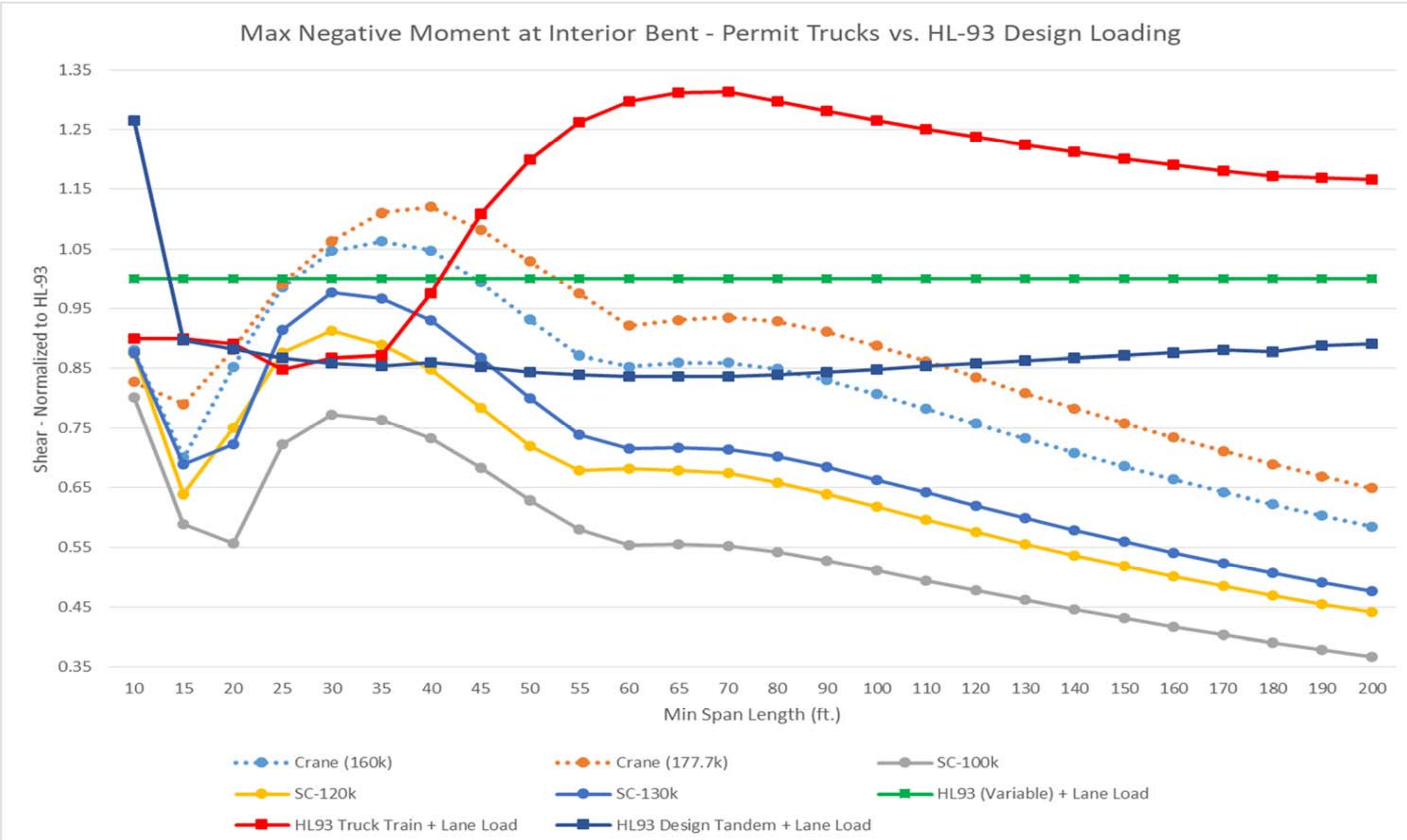
Legal Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Negative Moment at Interior Bent*



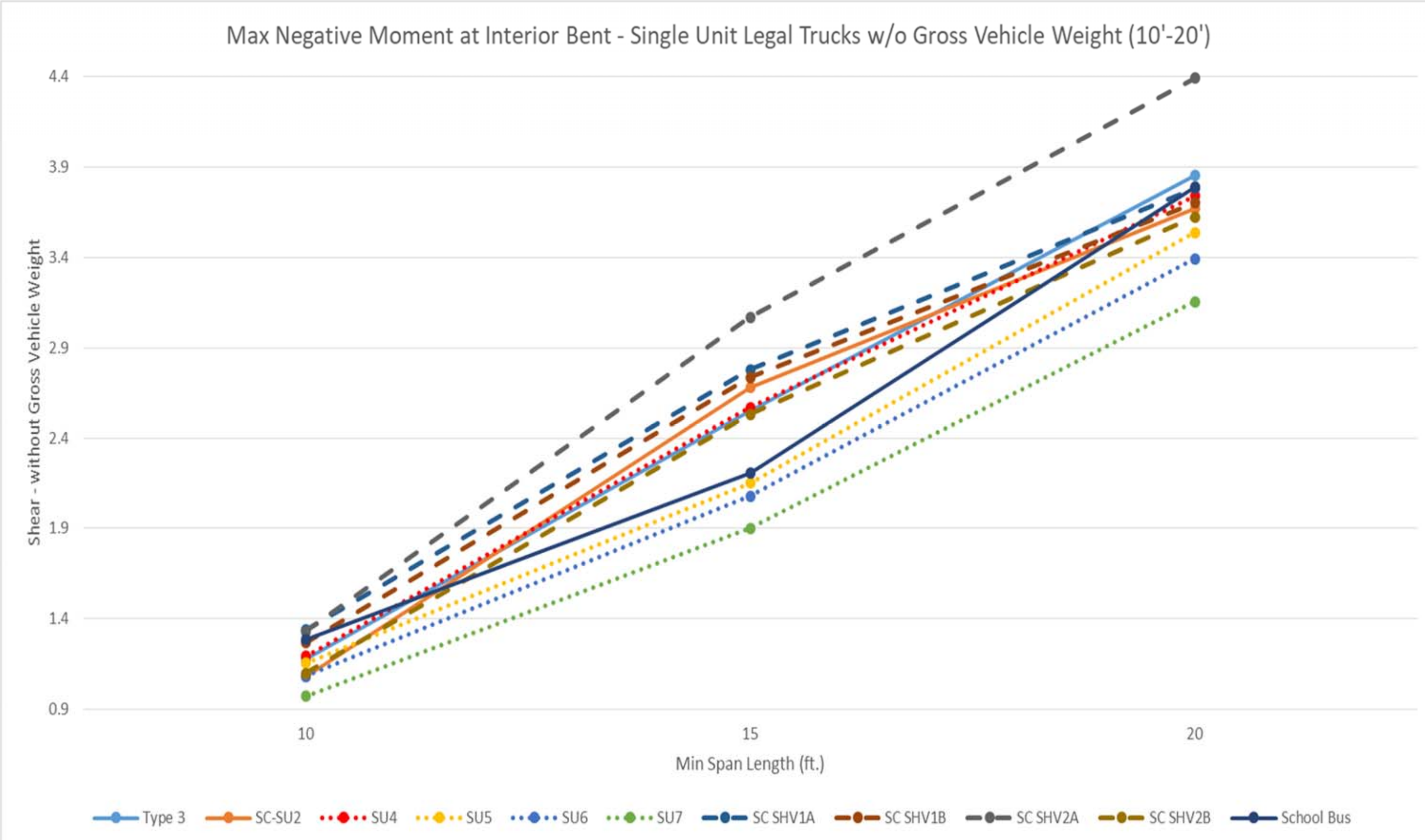

Max Negative Moment at Interior Bent - AASHTO SU Legal Trucks vs. HL-93 Design Loading
1.35
1.15
0.95
0.75
0.55
0.35
0.15
Shear - Normalized to HL-93
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
SU4
SU5
SU6
SU7
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load


Max Negative Moment at Interior Bent - South Carolina Specific Legal Trucks vs. HL-93 Design Loading
Shear - Normalized to HL-93
1.3
1.1
0.9
0.7
0.5
0.3
0.1
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus
HL93 (Variable) + Lane Load
HL93 Truck Train + Lane Load
HL93 Design Tandem + Lane Load

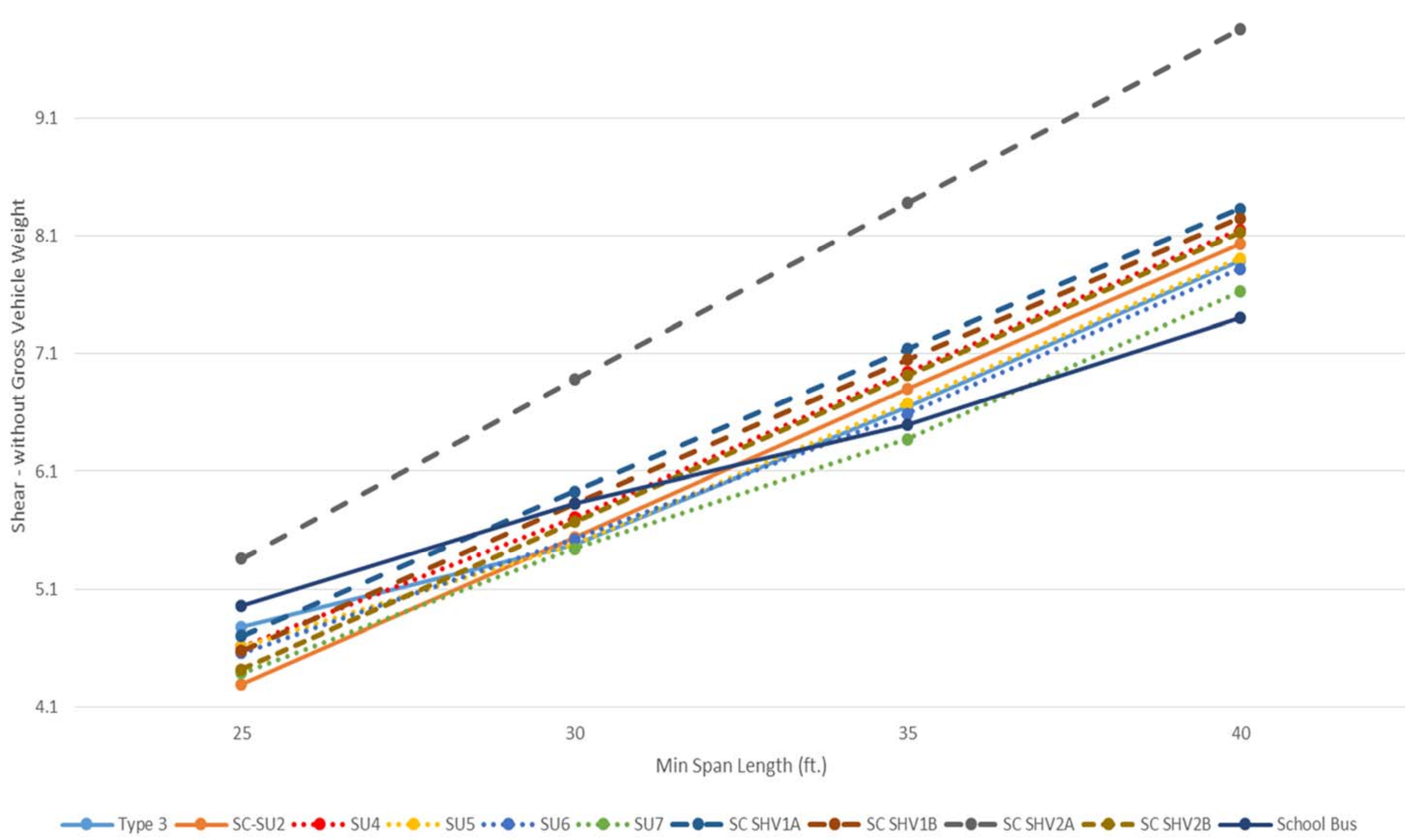
Permit Trucks: 3-Span (Normalized to HL-93 Design Truck) – *Max Negative Moment at Interior Bent*

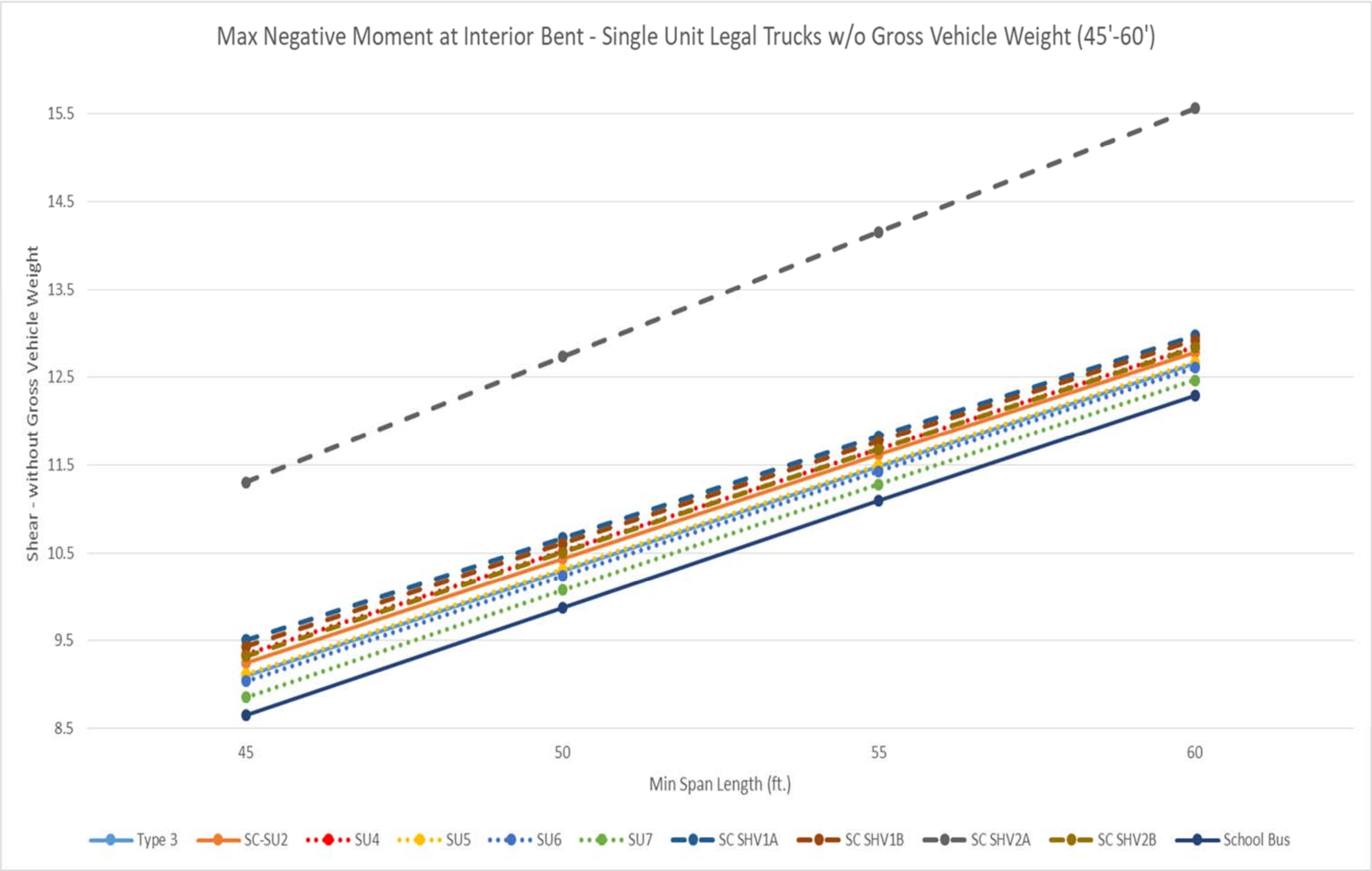


Legal Trucks: 3-Span (Without Gross Vehicle Weight) – *Max Negative Moment at Interior Bent*

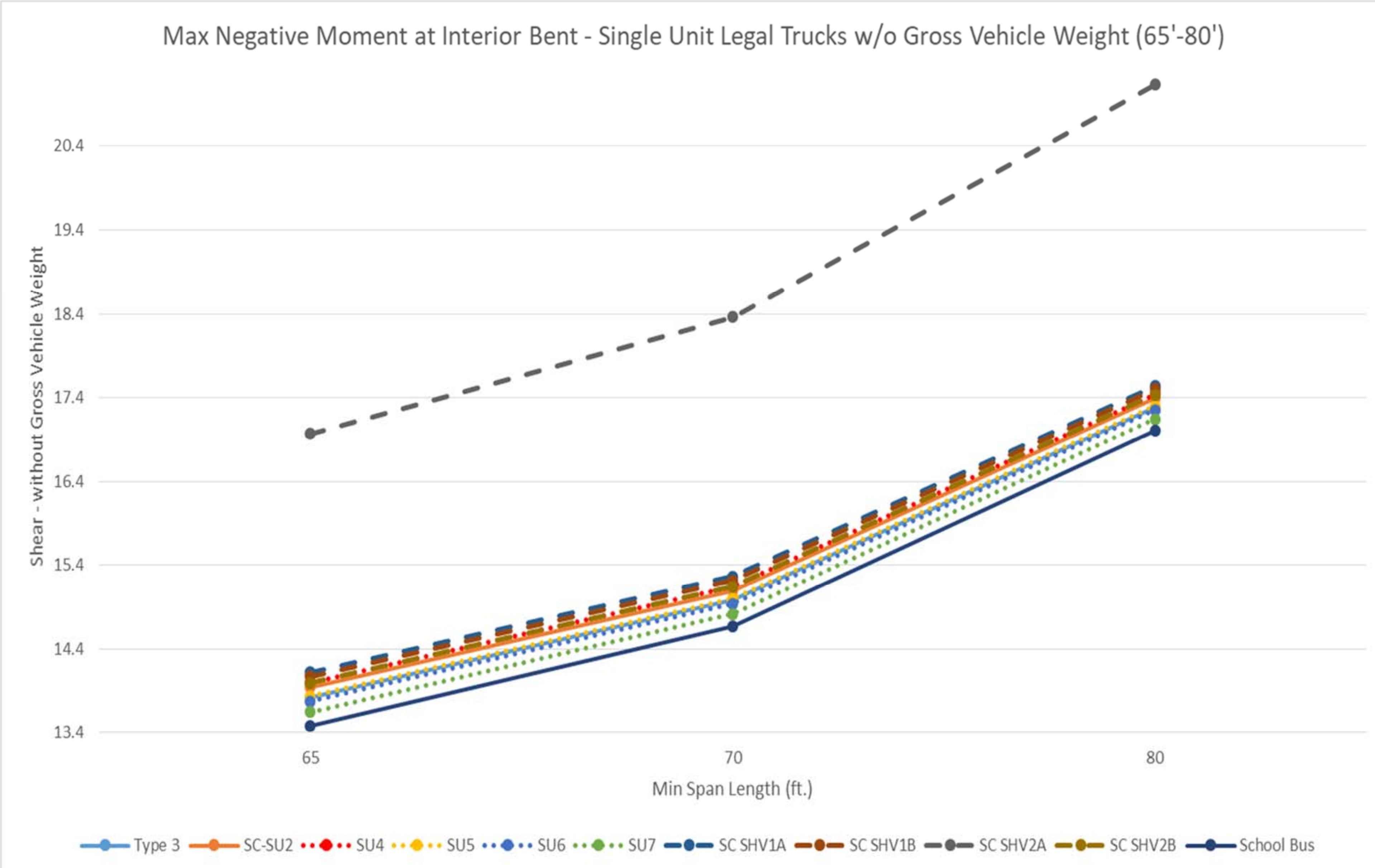


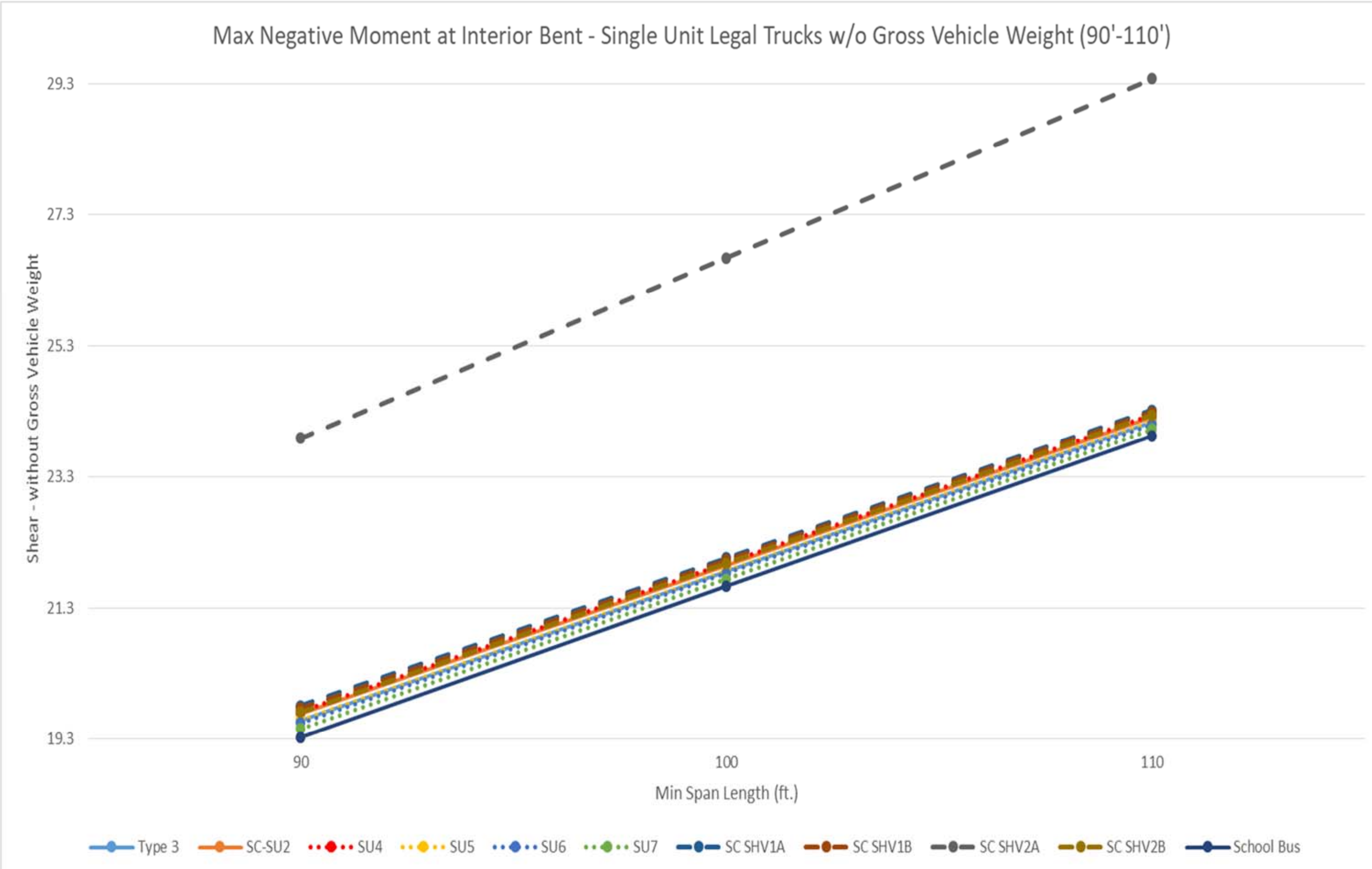
Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (25'-40')





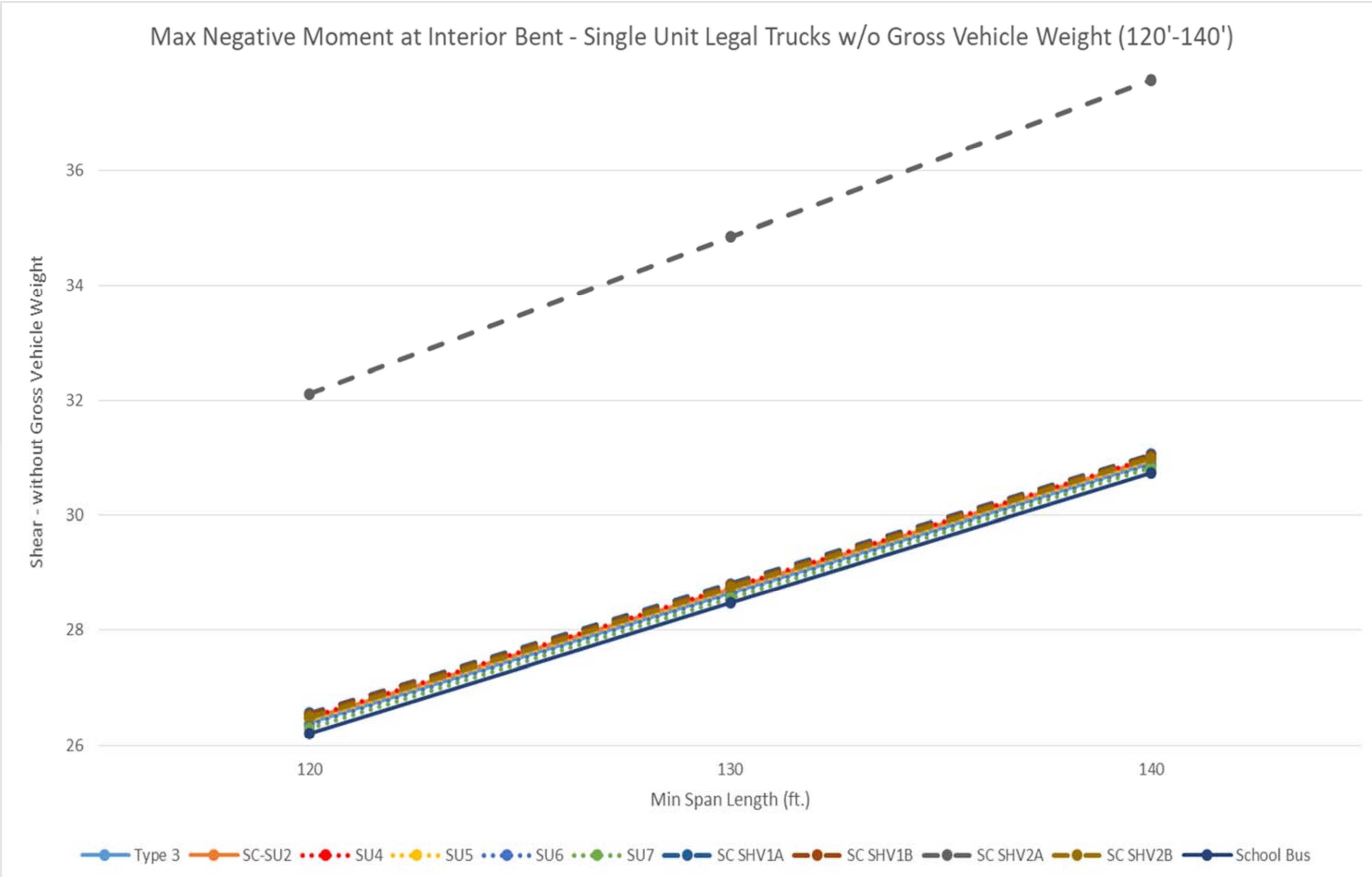
Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (45'-60')
15.5
14.5
13.5
12.5
11.5
10.5
9.5
8.5
Shear - without Gross Vehicle Weight
45
50
55
60
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus


Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (65'-80')
Shear - without Gross Vehicle Weight
20.4
19.4
18.4
17.4
16.4
15.4
14.4
13.4
65
70
80
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

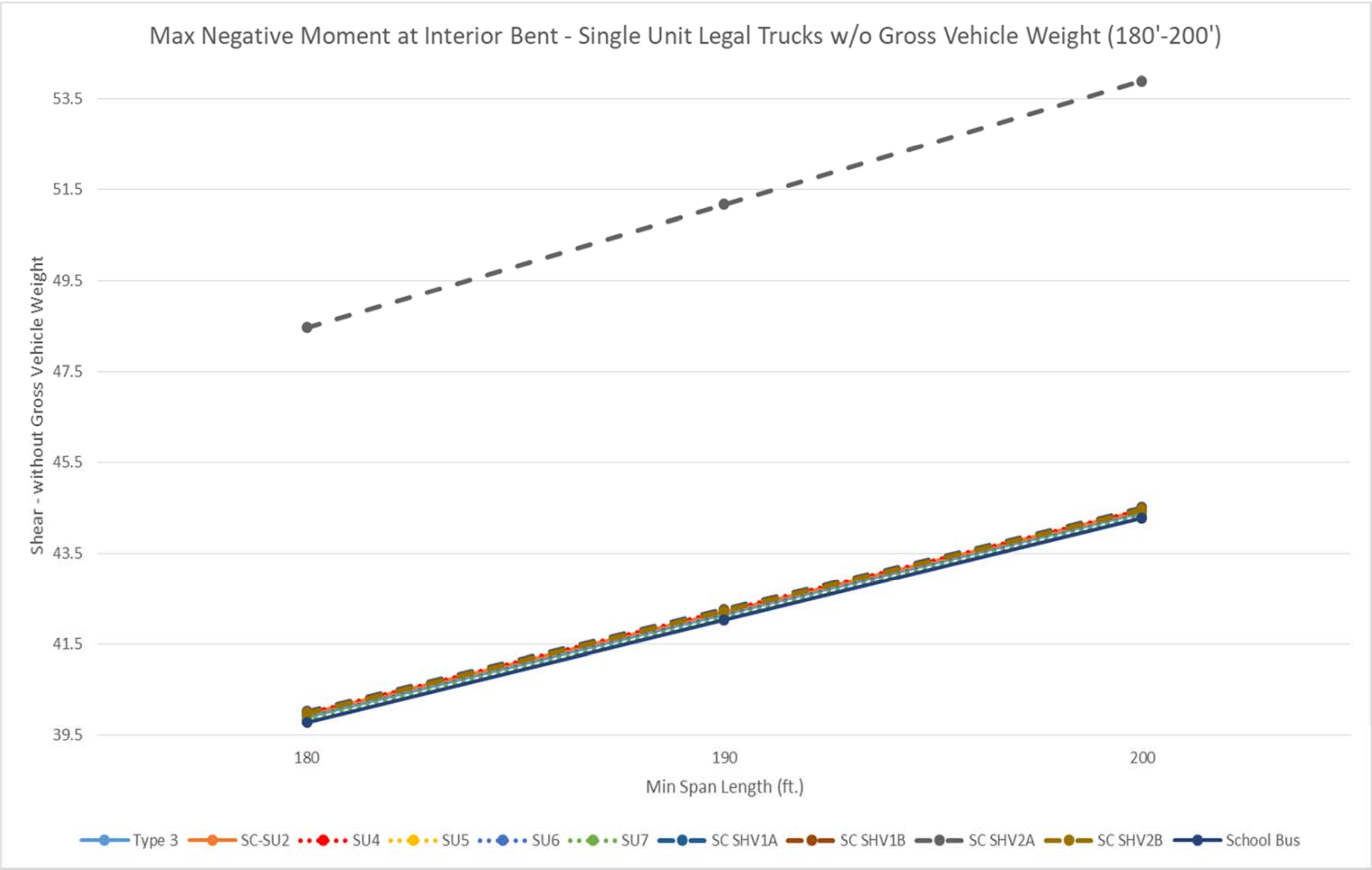


Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (90'-110')
29.3
27.3
25.3
23.3
21.3
19.3
Shear - without Gross Vehicle Weight
90
100
110
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

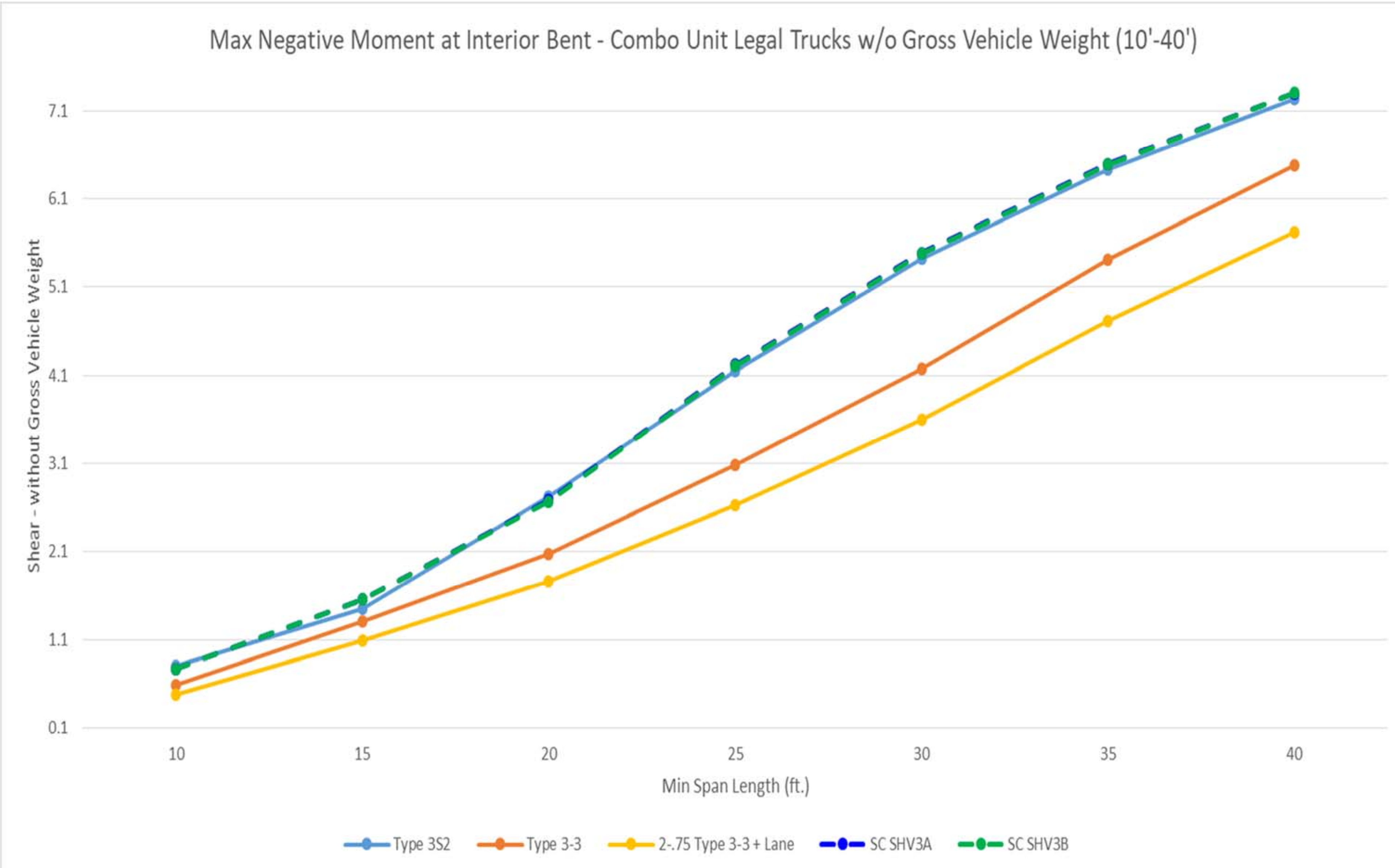
Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (120'-140')



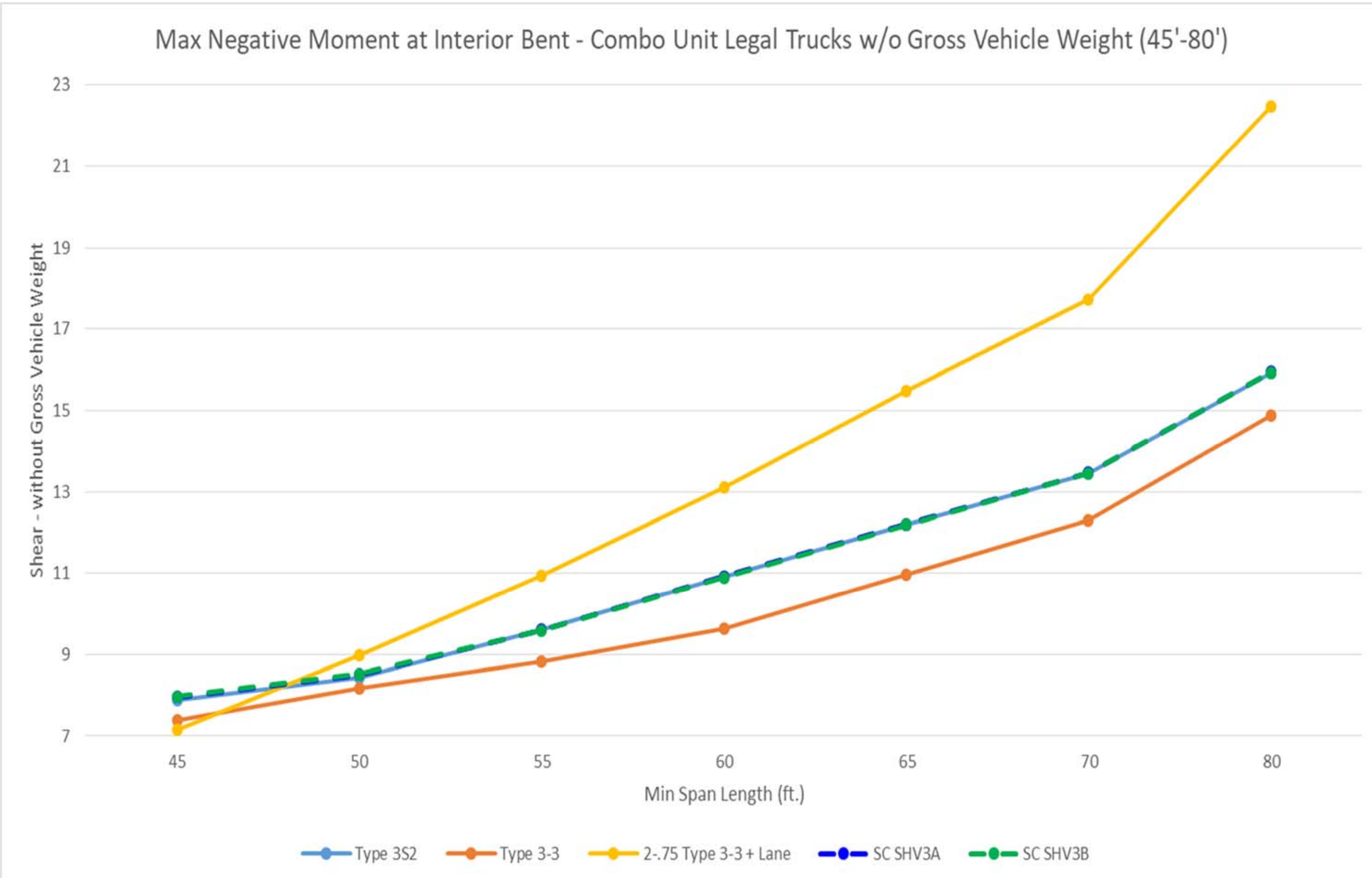
Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (150'-170')
Shear - without Gross Vehicle Weight
44.5
42.5
40.5
38.5
36.5
34.5
32.5
150
160
170
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus



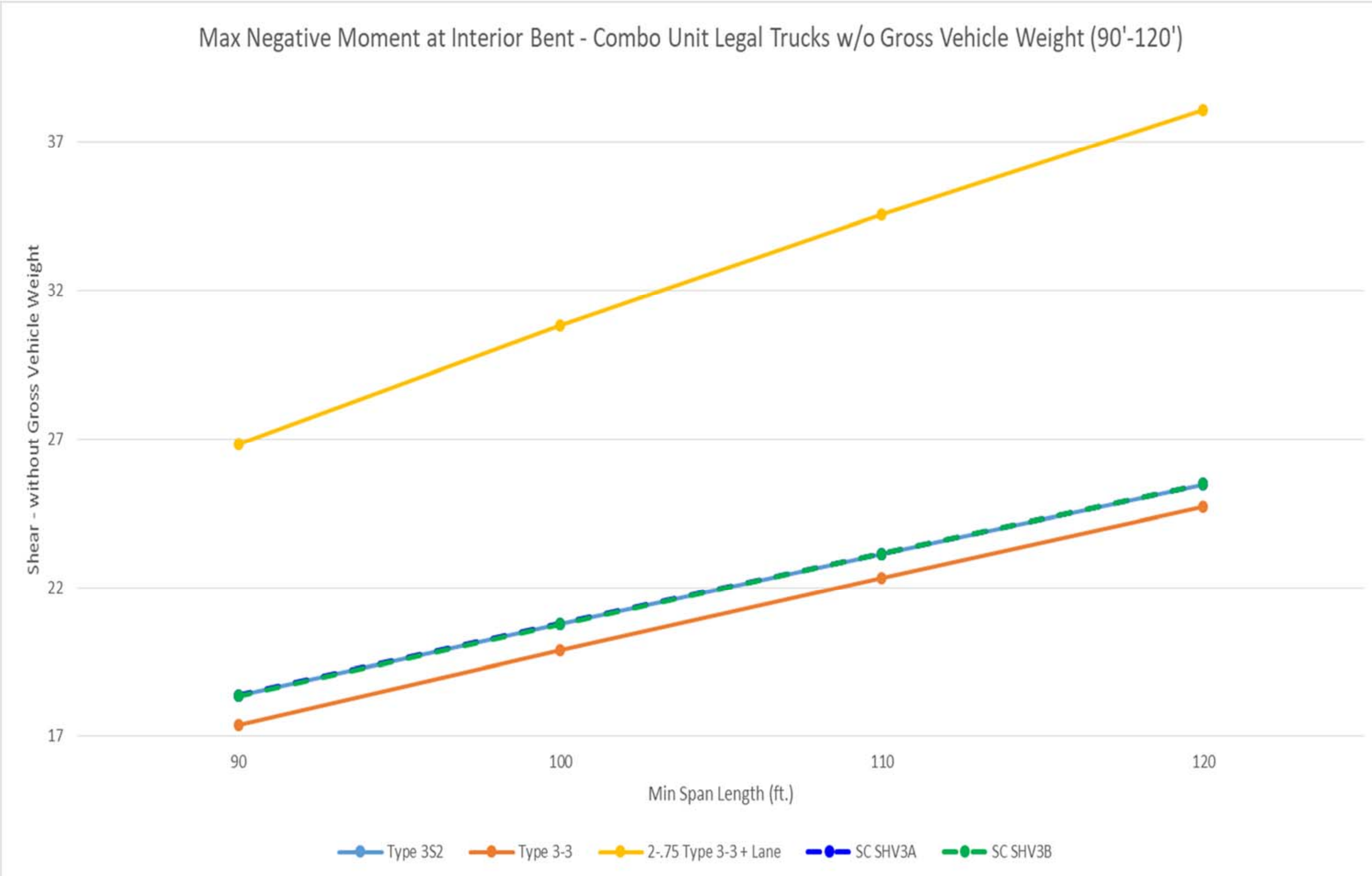
Max Negative Moment at Interior Bent - Single Unit Legal Trucks w/o Gross Vehicle Weight (180'-200')
Shear - without Gross Vehicle Weight
53.5
51.5
49.5
47.5
45.5
43.5
41.5
39.5
180
190
200
Min Span Length (ft.)
Type 3
SC-SU2
SU4
SU5
SU6
SU7
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
School Bus

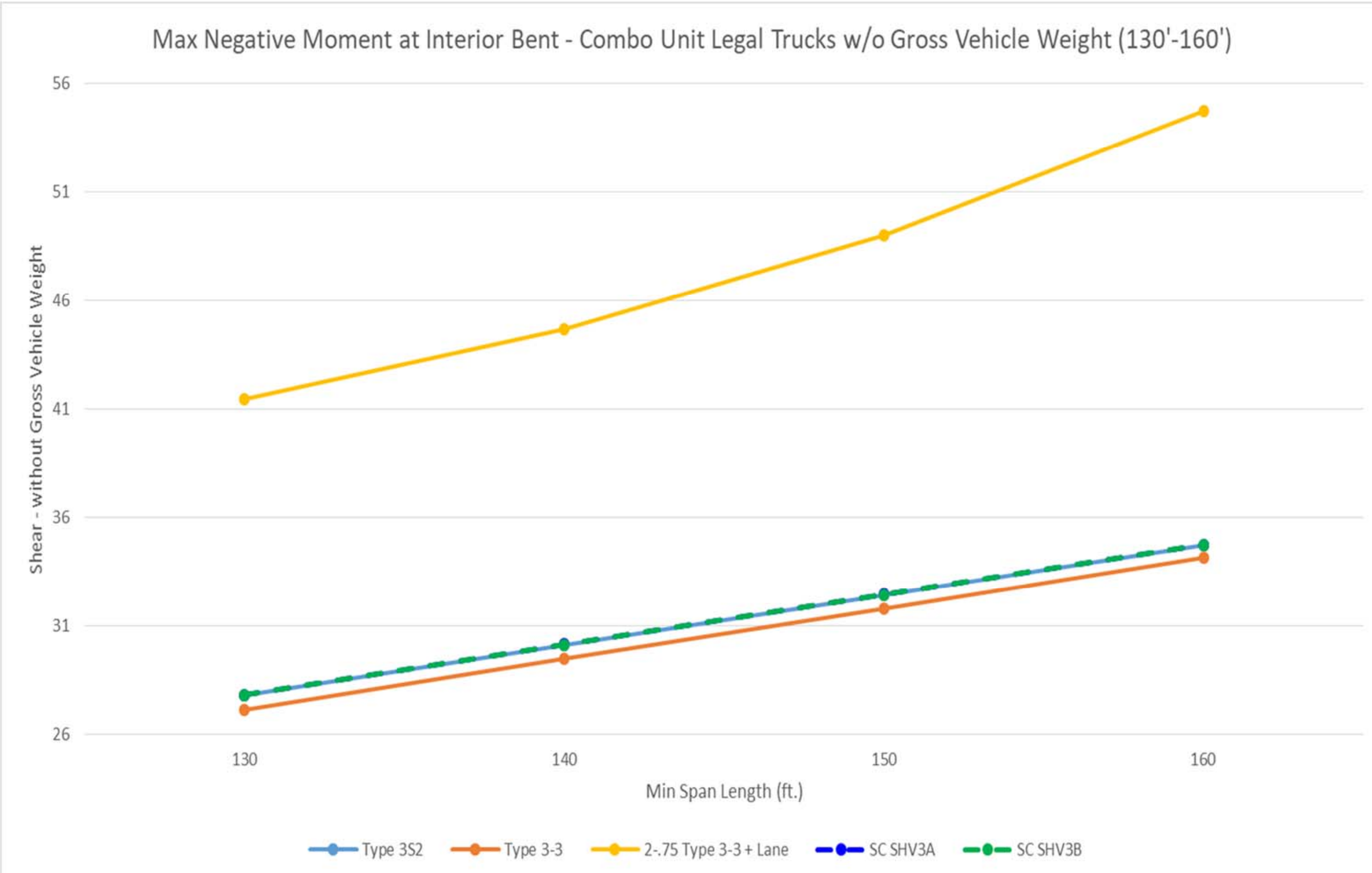


Max Negative Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (10'-40')
Shear - without Gross Vehicle Weight
7.1
6.1
5.1
4.1
3.1
2.1
1.1
0.1
10
15
20
25
30
35
40
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

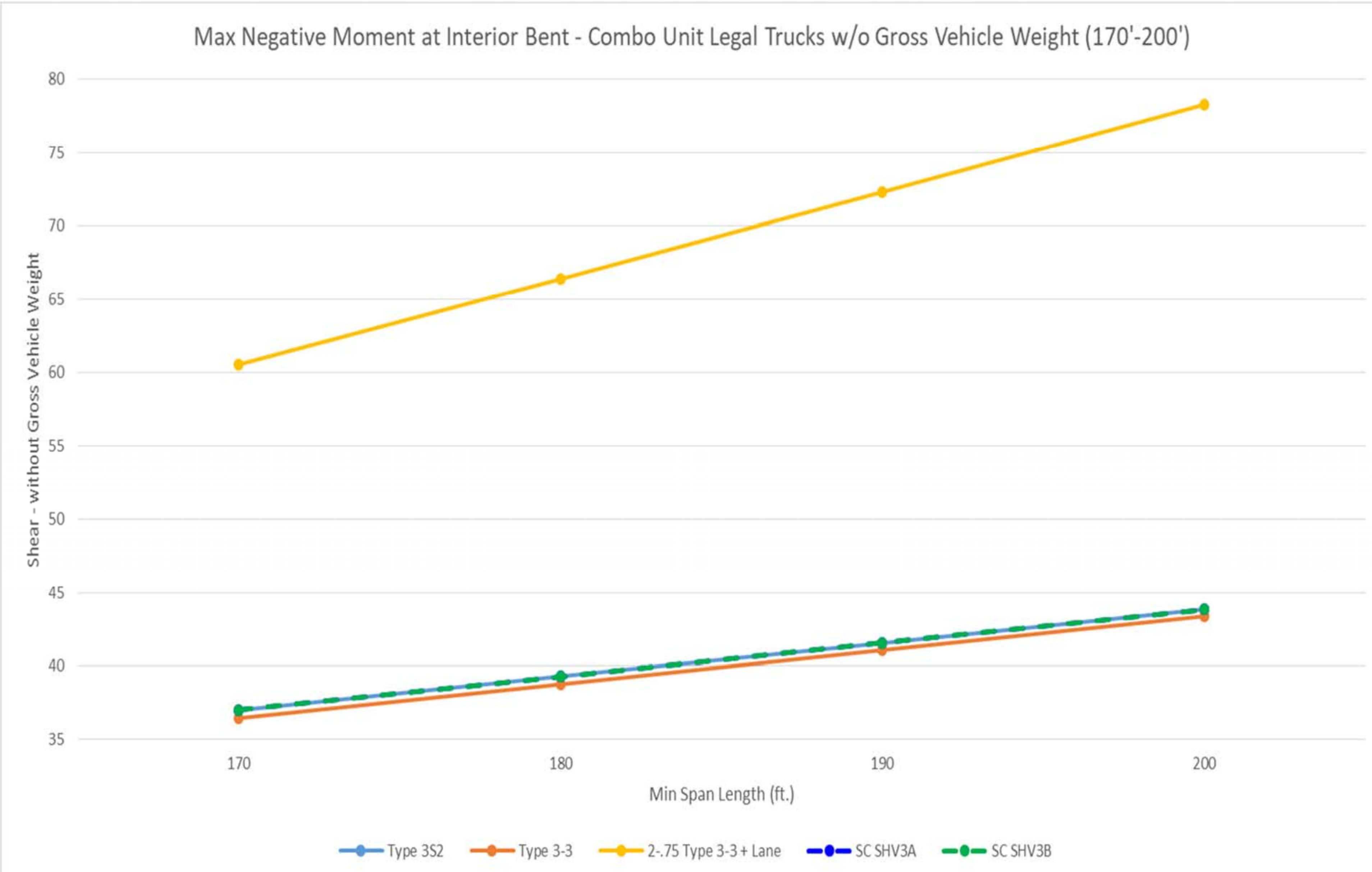


Max Negative Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (45'-80')
Shear - without Gross Vehicle Weight
23
21
19
17
15
13
11
9
7
45
50
55
60
65
70
80
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B


Max Negative Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (90'-120')
Shear - without Gross Vehicle Weight
37
32
27
22
17
90
100
110
120
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

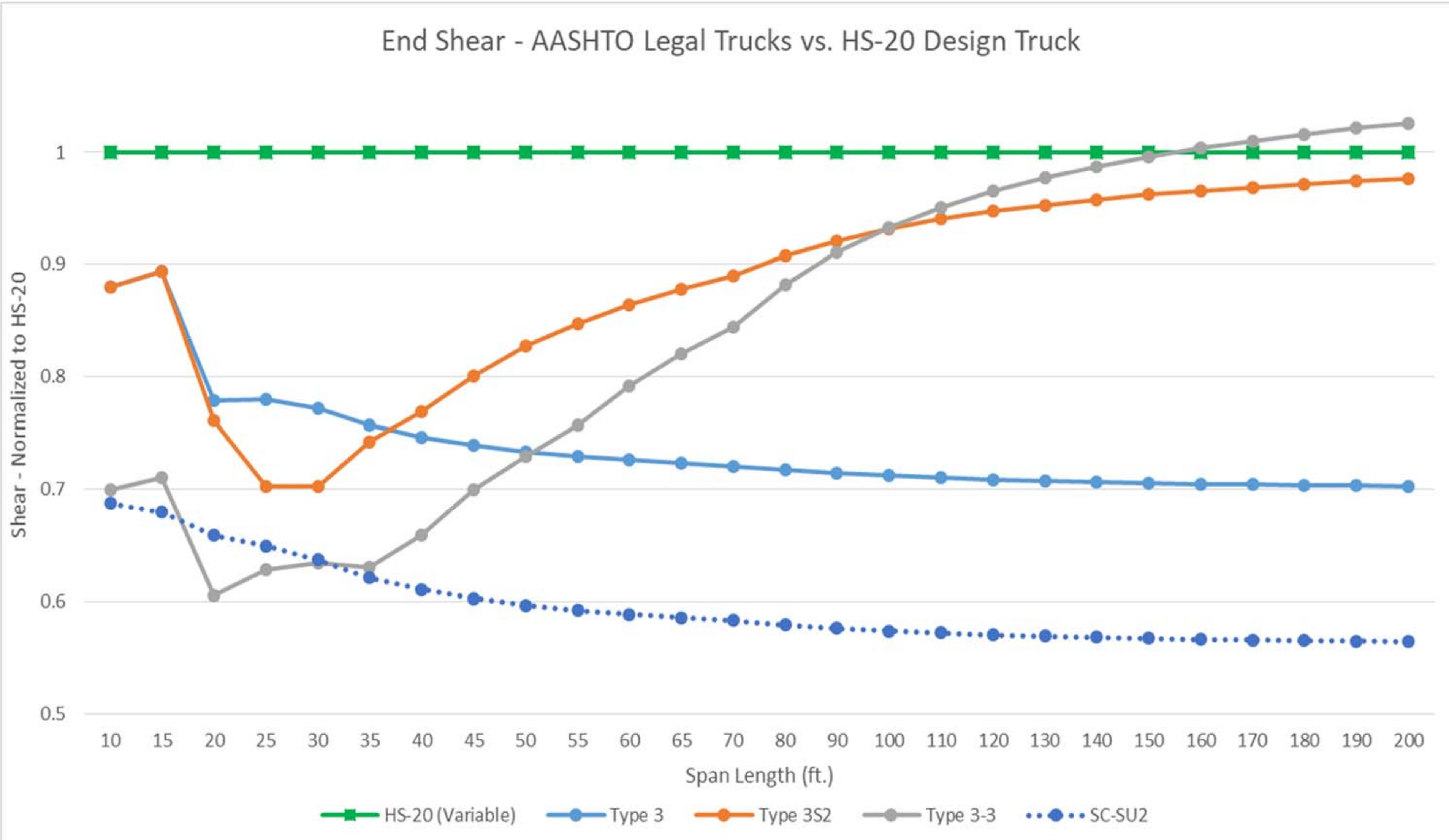


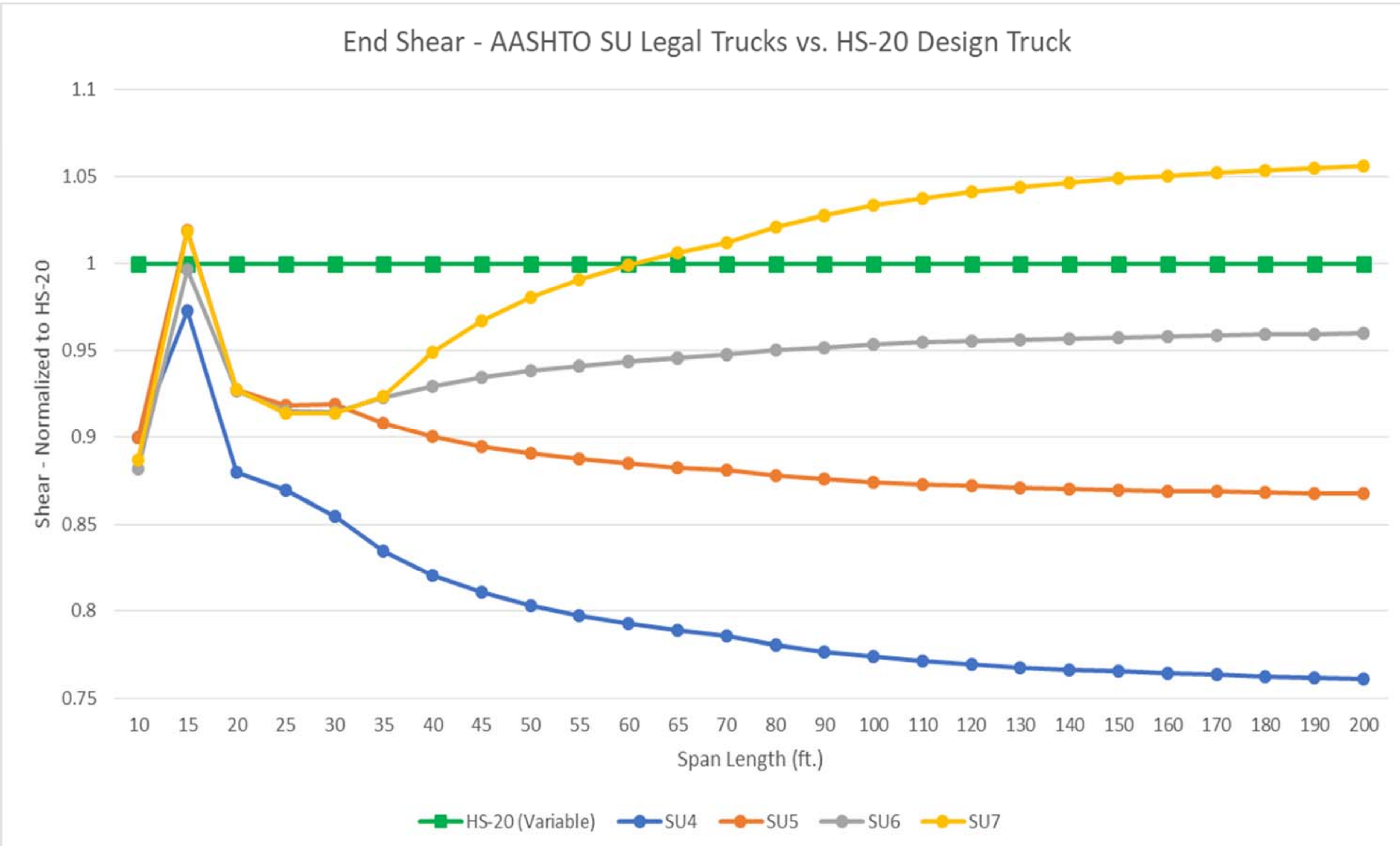
Max Negative Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (130'-160')
Shear - without Gross Vehicle Weight
56
51
46
41
36
31
26
130
140
150
160
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

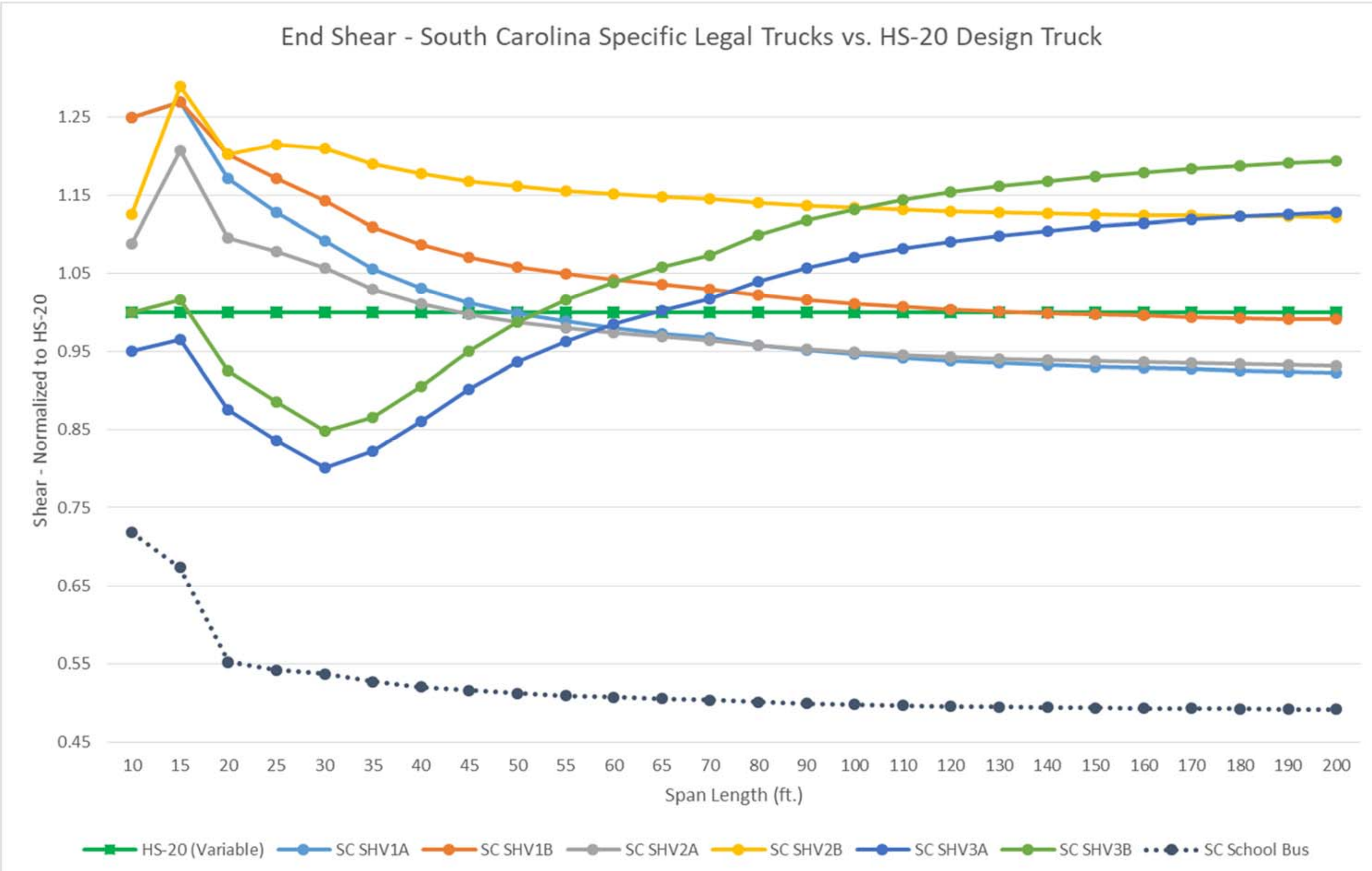


Max Negative Moment at Interior Bent - Combo Unit Legal Trucks w/o Gross Vehicle Weight (170'-200')
80
75
70
65
60
55
50
45
40
35
Shear - without Gross Vehicle Weight
170
180
190
200
Min Span Length (ft.)
Type 3S2
Type 3-3
2-.75 Type 3-3 + Lane
SC SHV3A
SC SHV3B

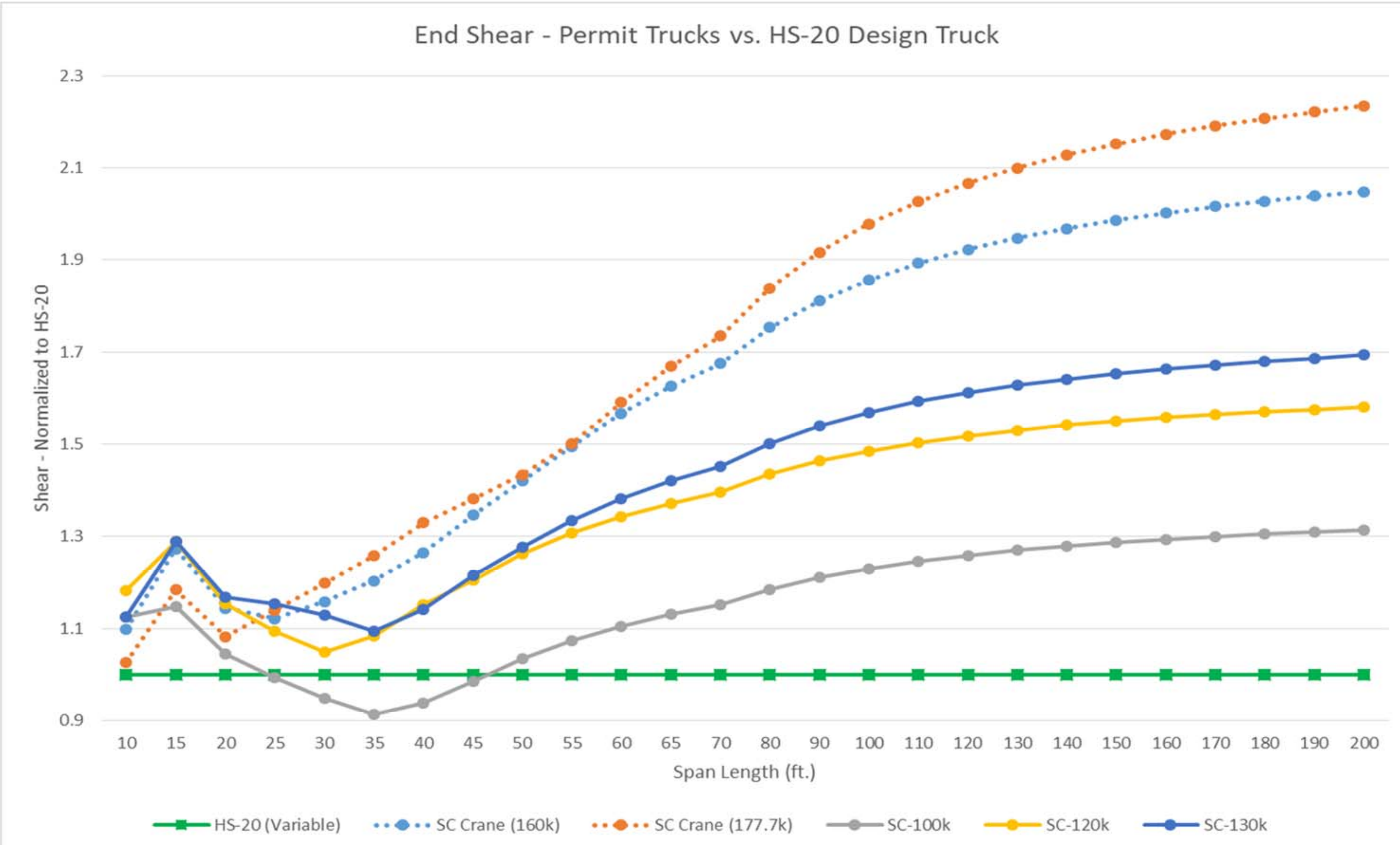
Legal Trucks: 1-Span (Normalized to HS-20 Design Truck) – *End Shear*



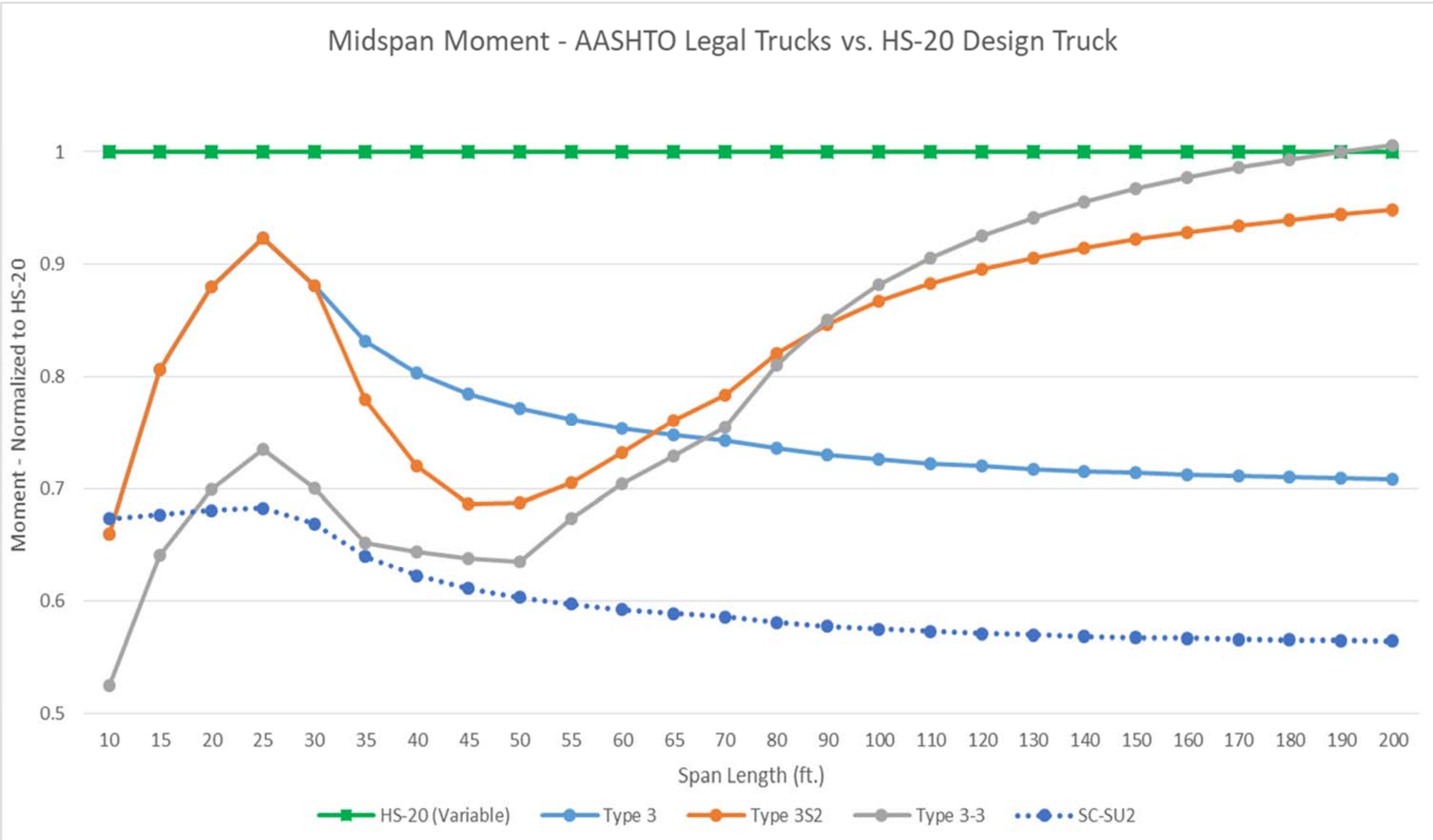

End Shear - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
Shear - Normalized to HS-20
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

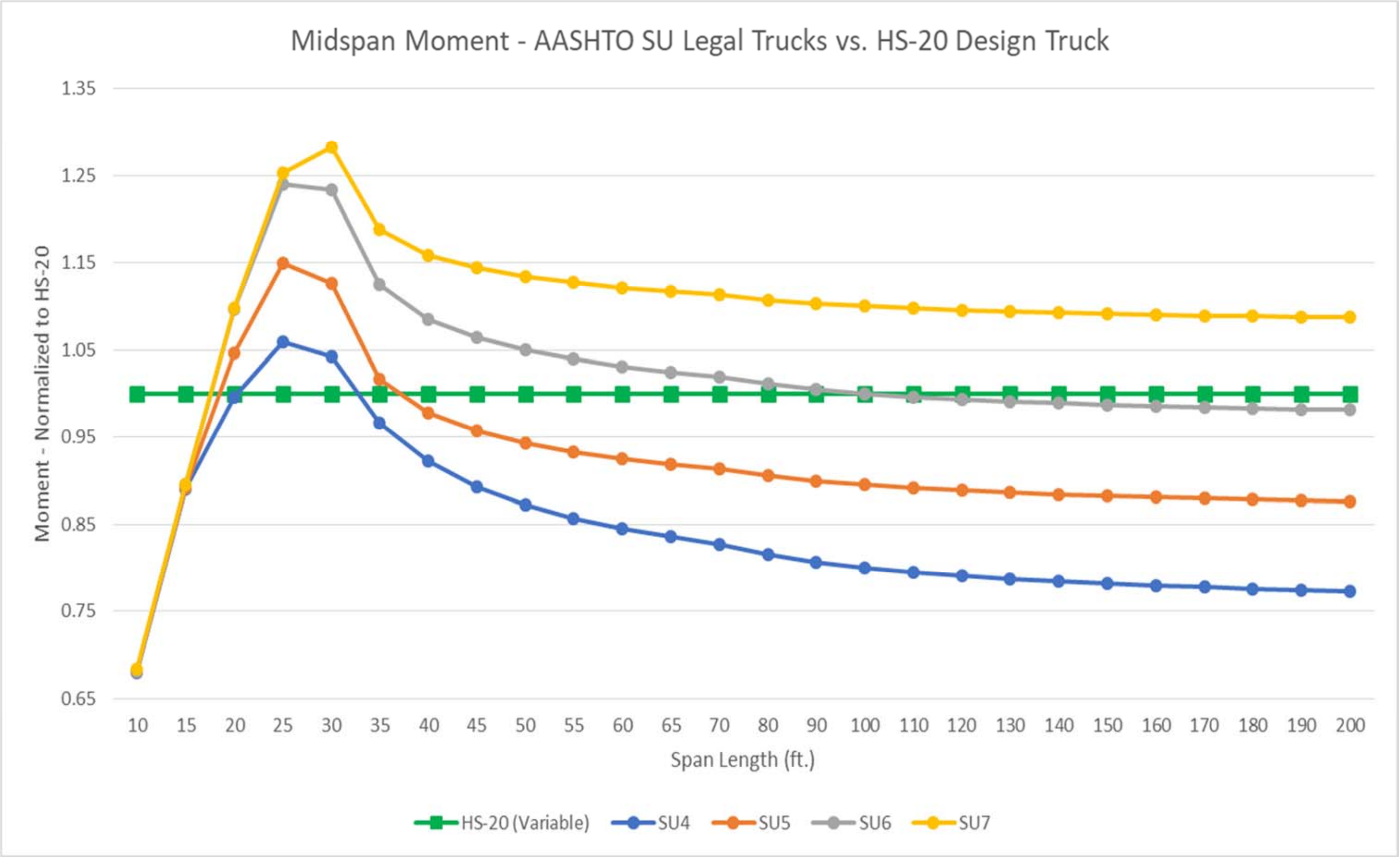

End Shear - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
SC School Bus

Permit Trucks: 1-Span (Normalized to HS-20 Design Truck) – *End Shear*

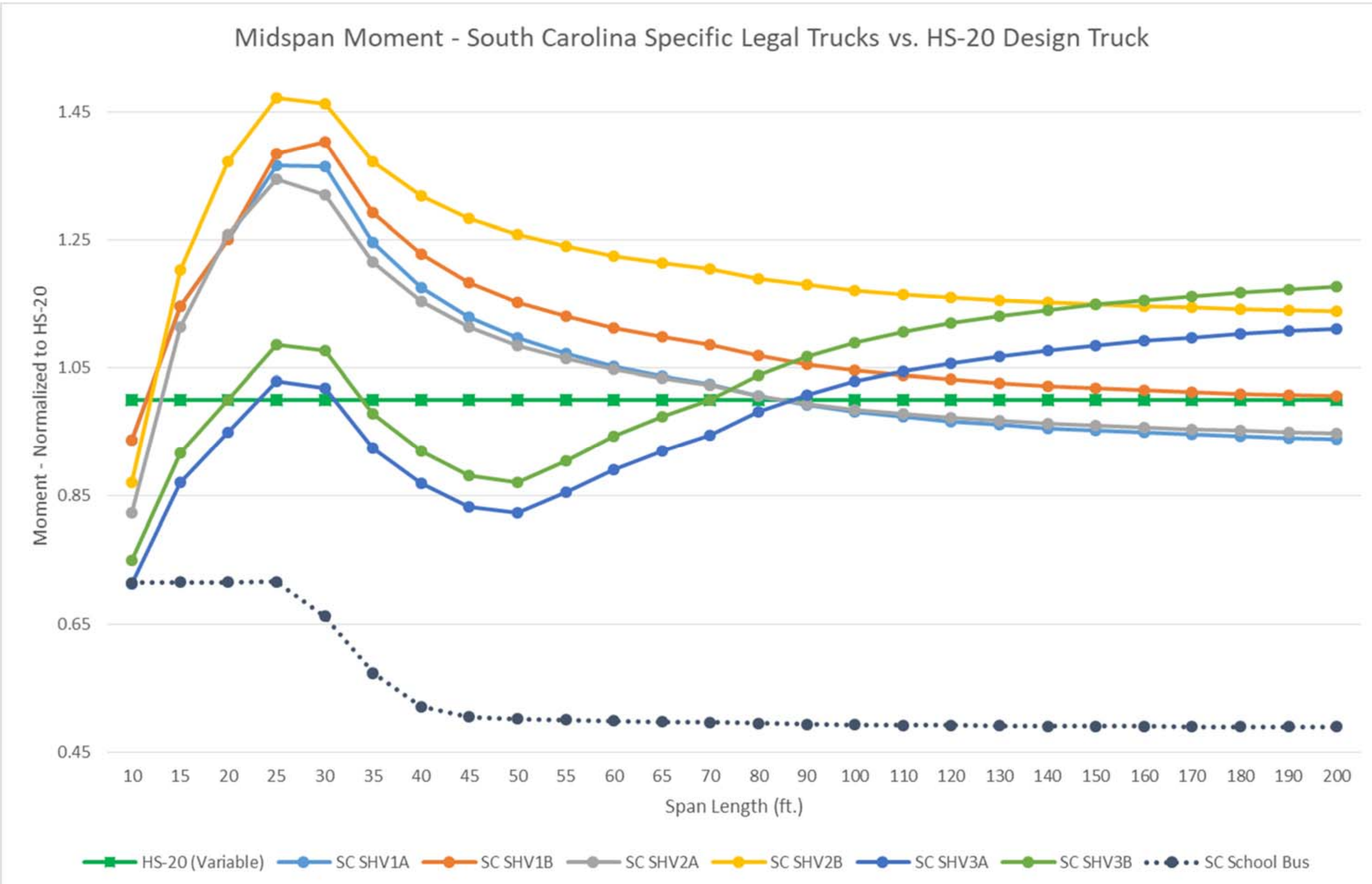


Legal Trucks: 1-Span (Normalized to HS-20 Design Truck) – *Midspan Moment*

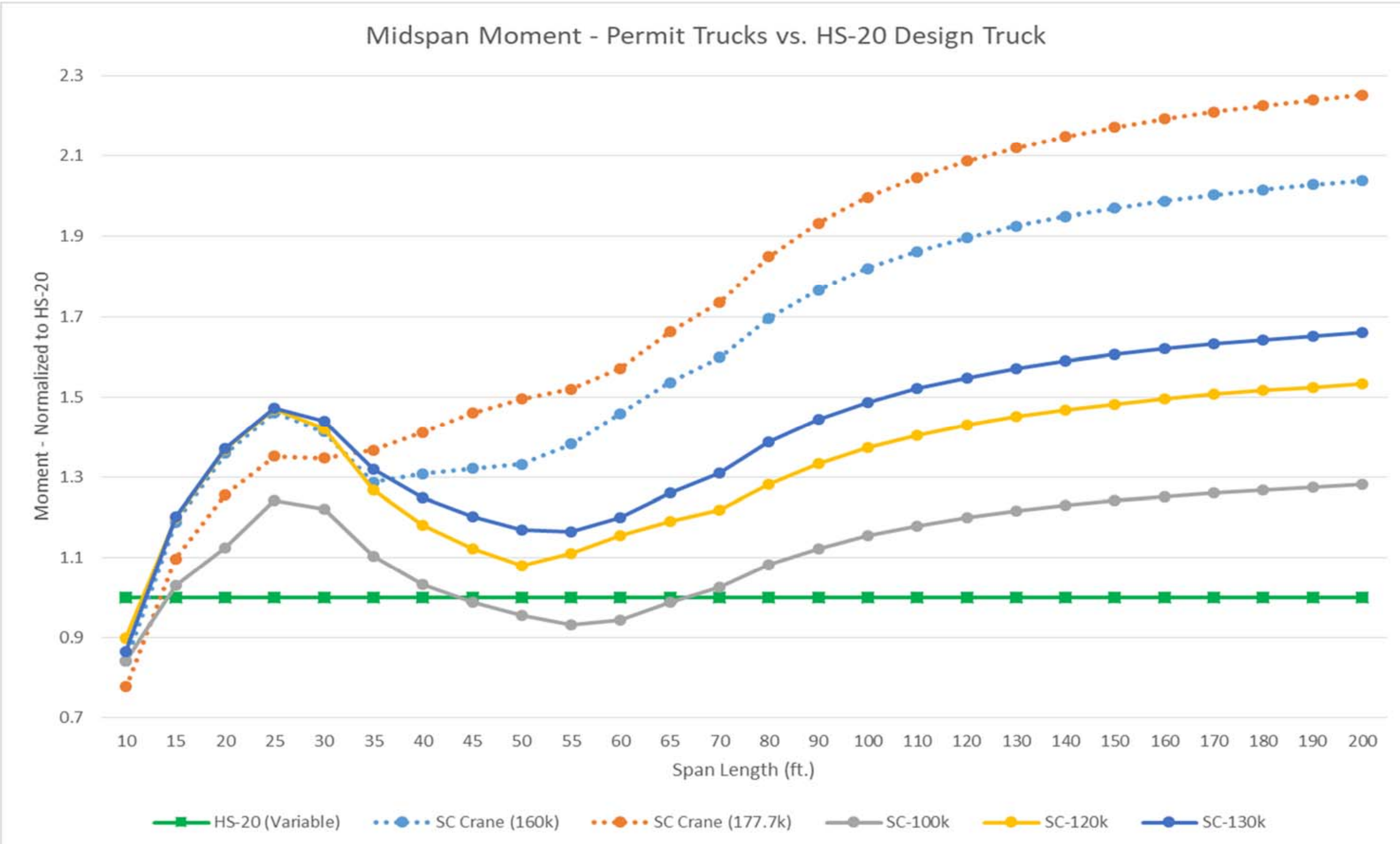




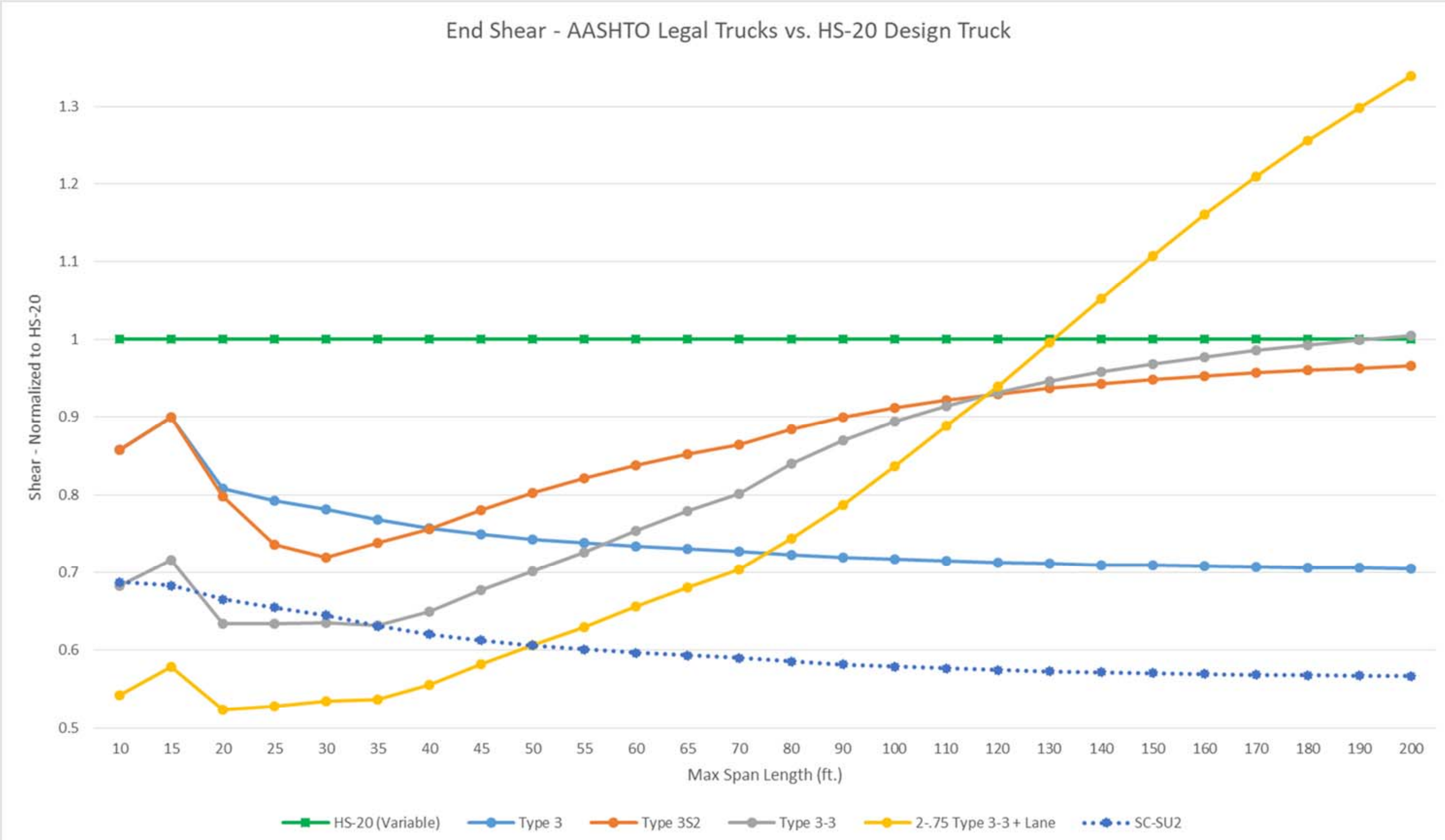
Midspan Moment - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

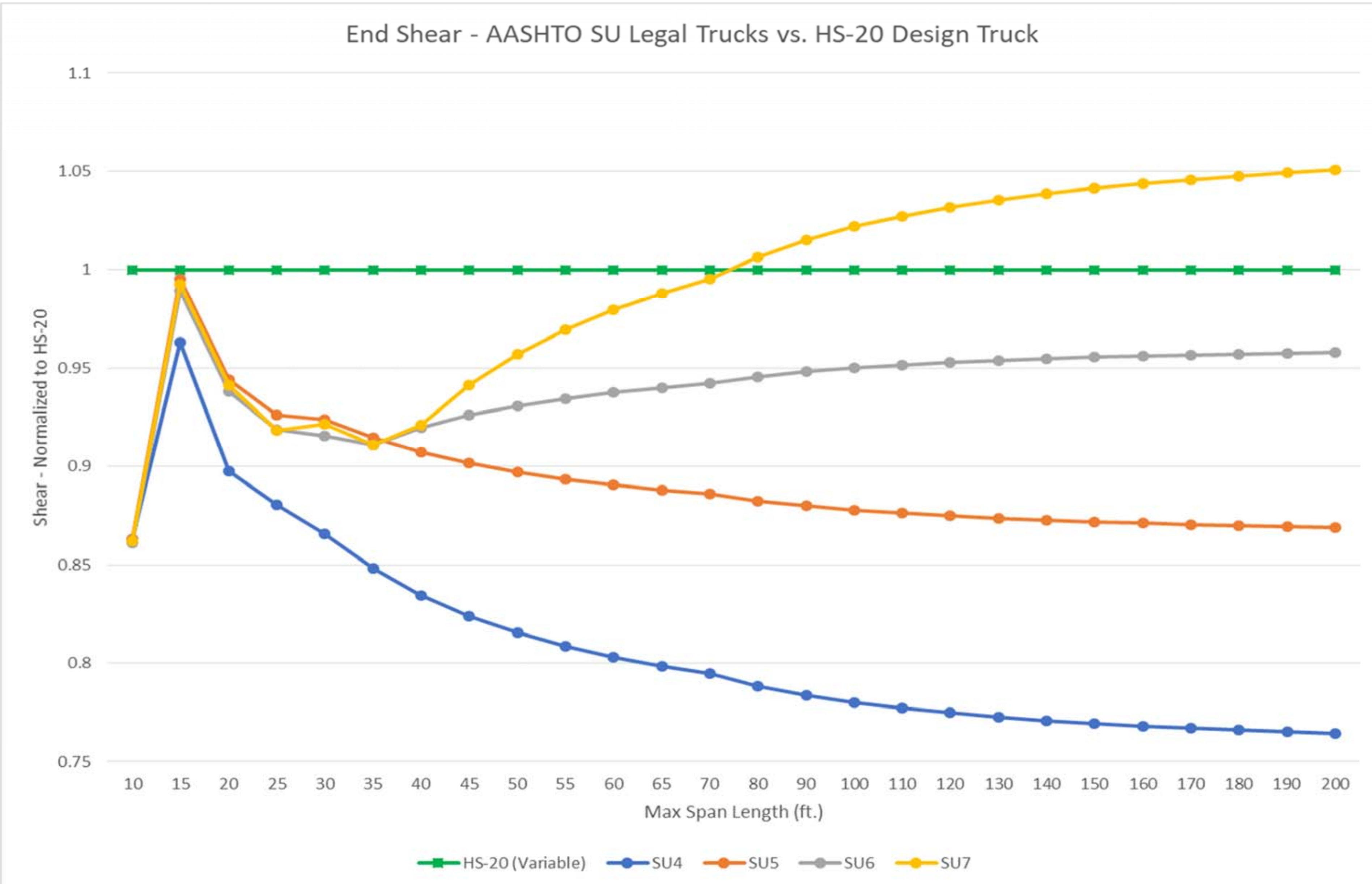

Midspan Moment - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.45
1.25
1.05
0.85
0.65
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
SC School Bus

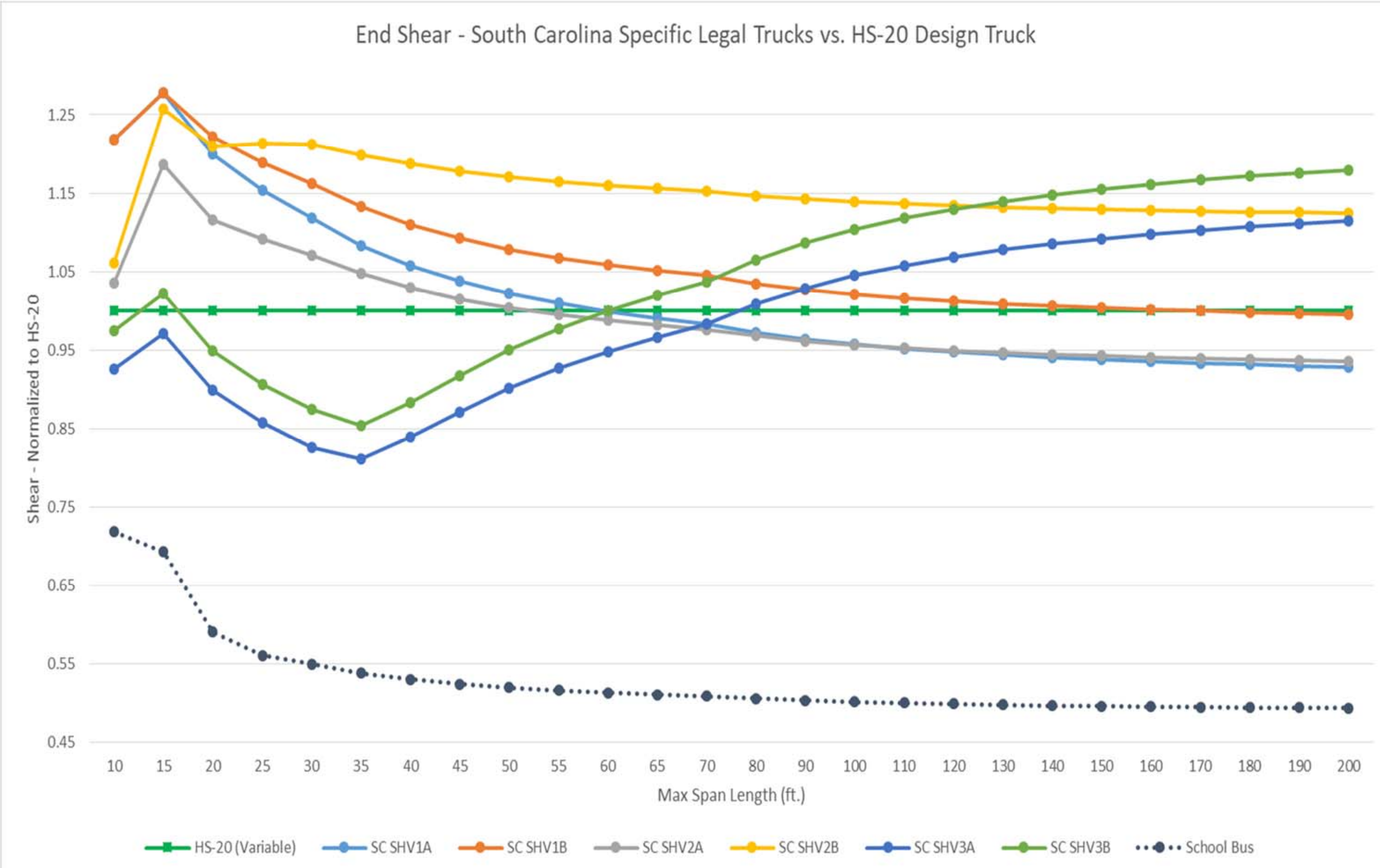
Permit Trucks: 1-Span (Normalized to HS-20 Design Truck) – *Midspan Moment*



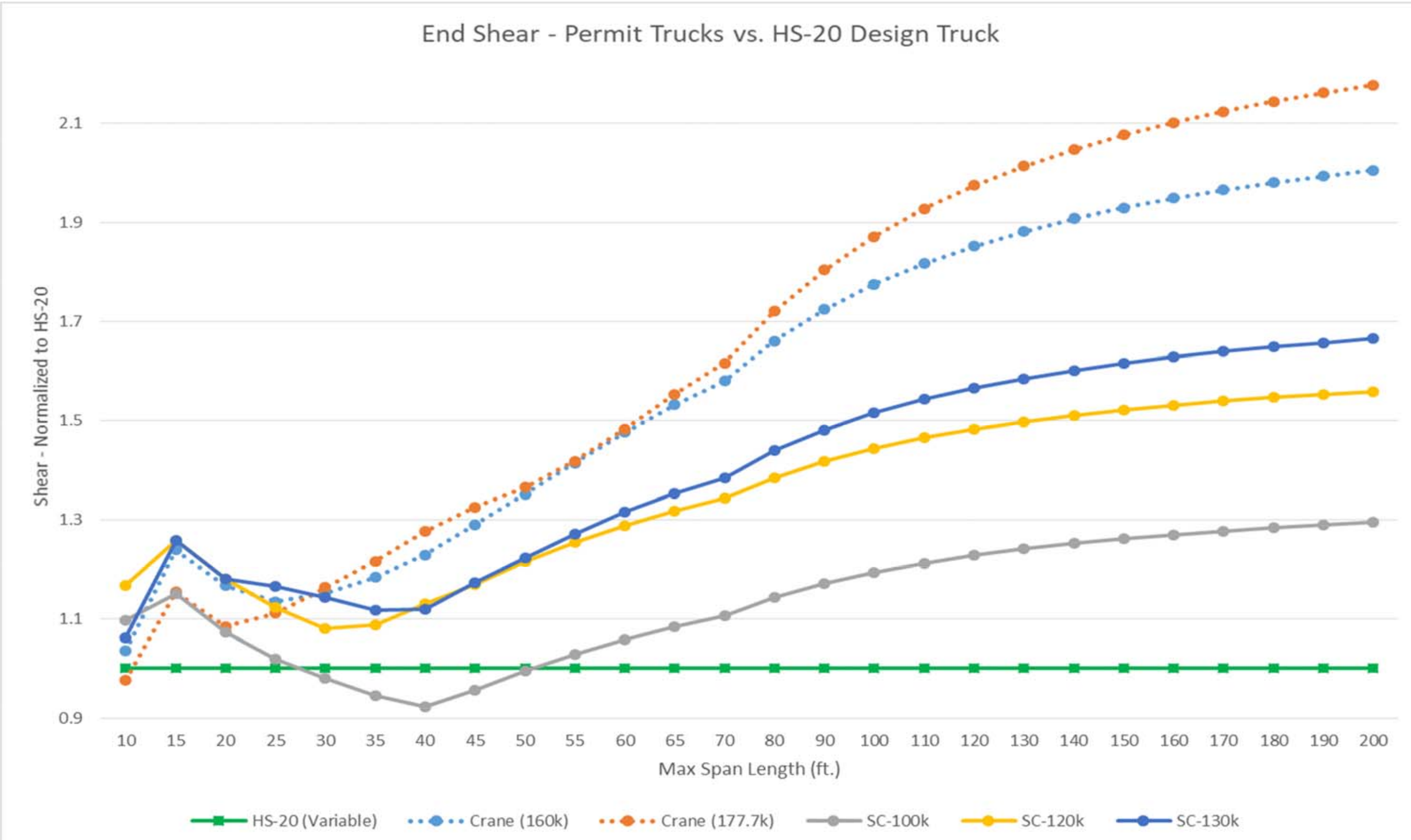
Legal Trucks: 2-Span (Normalized to HS-20 Design Truck) – *End Shear*



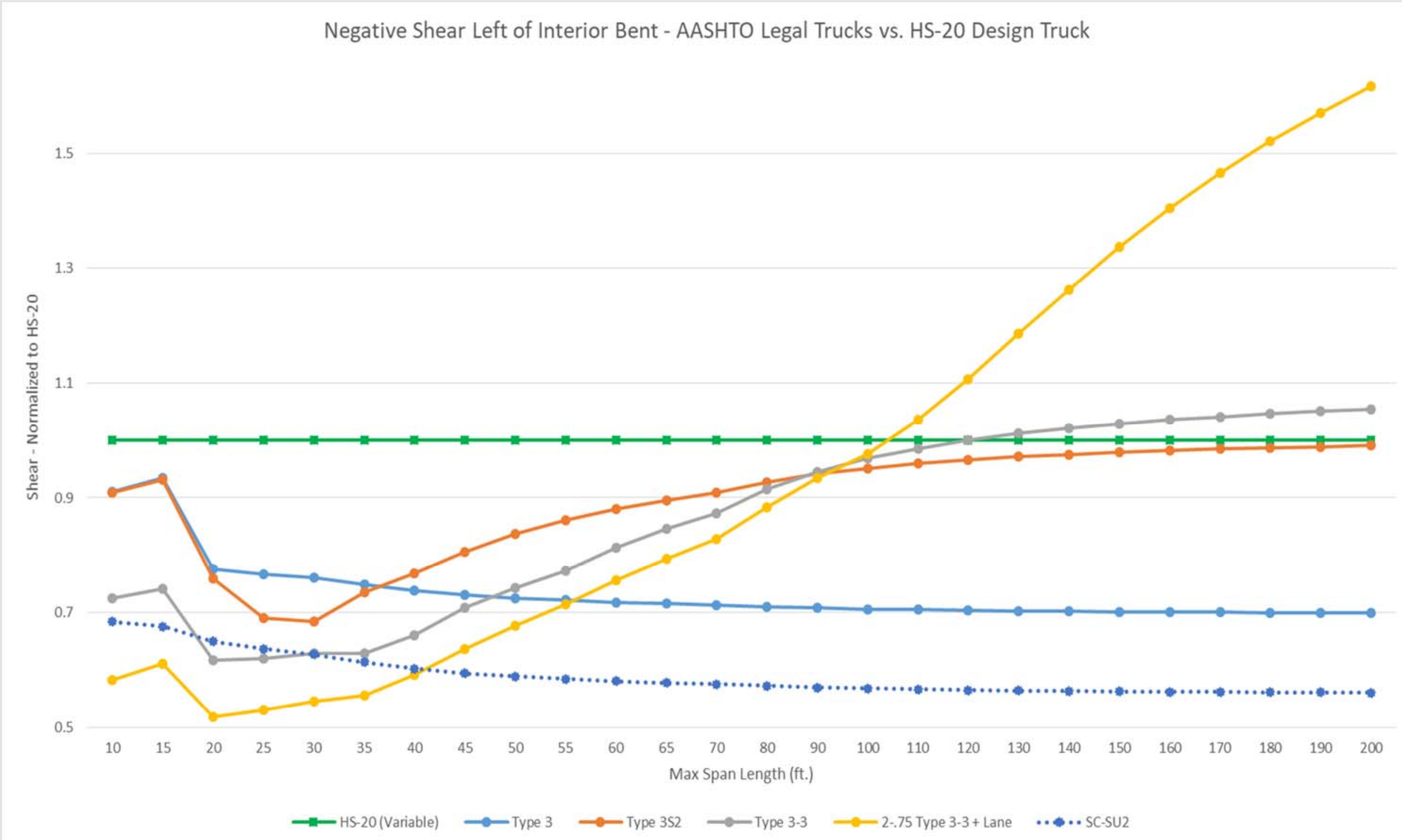

End Shear - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
Shear - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

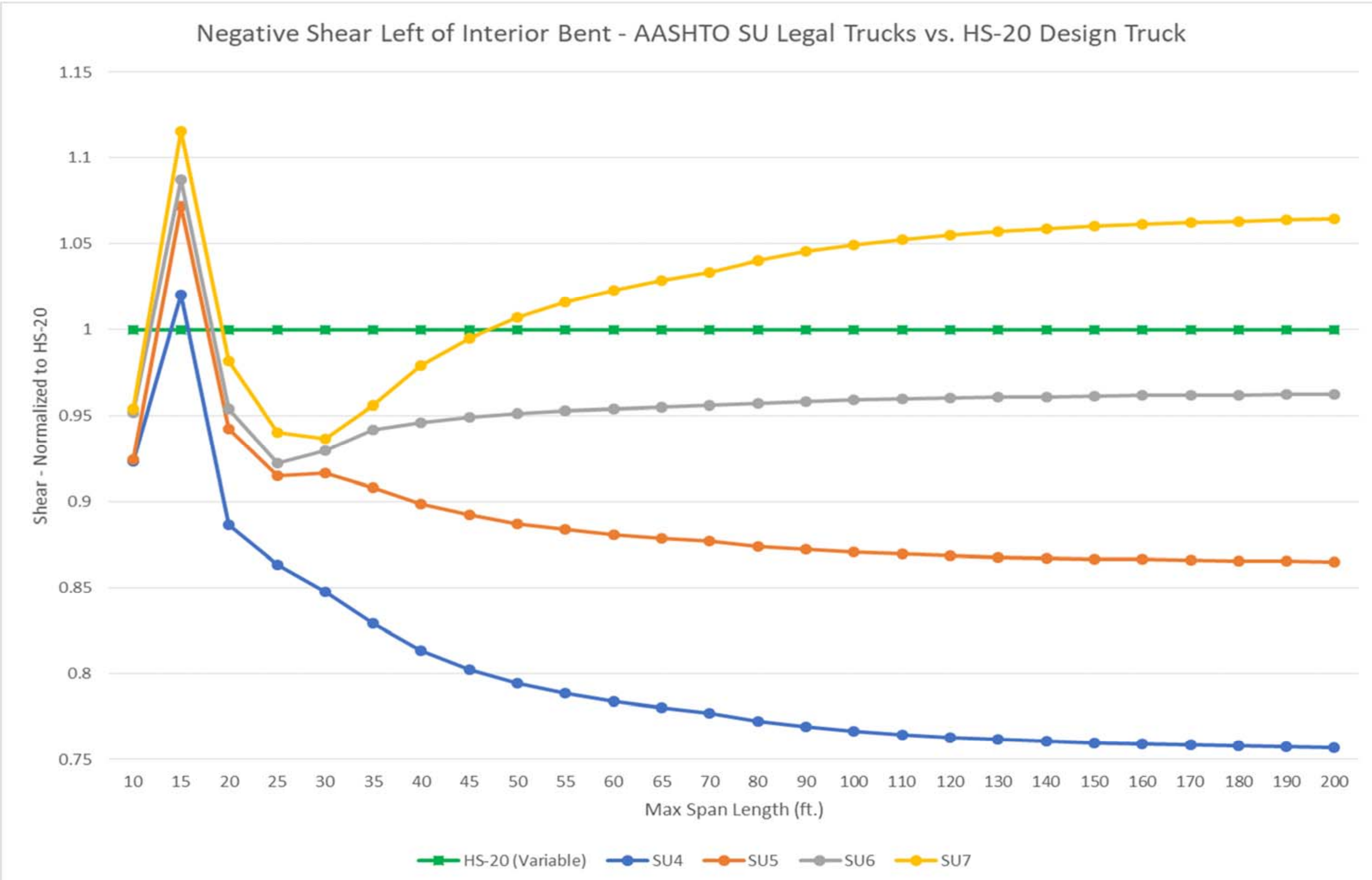

End Shear - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

Permit Trucks: 2-Span (Normalized to HS-20 Design Truck) – *End Shear*

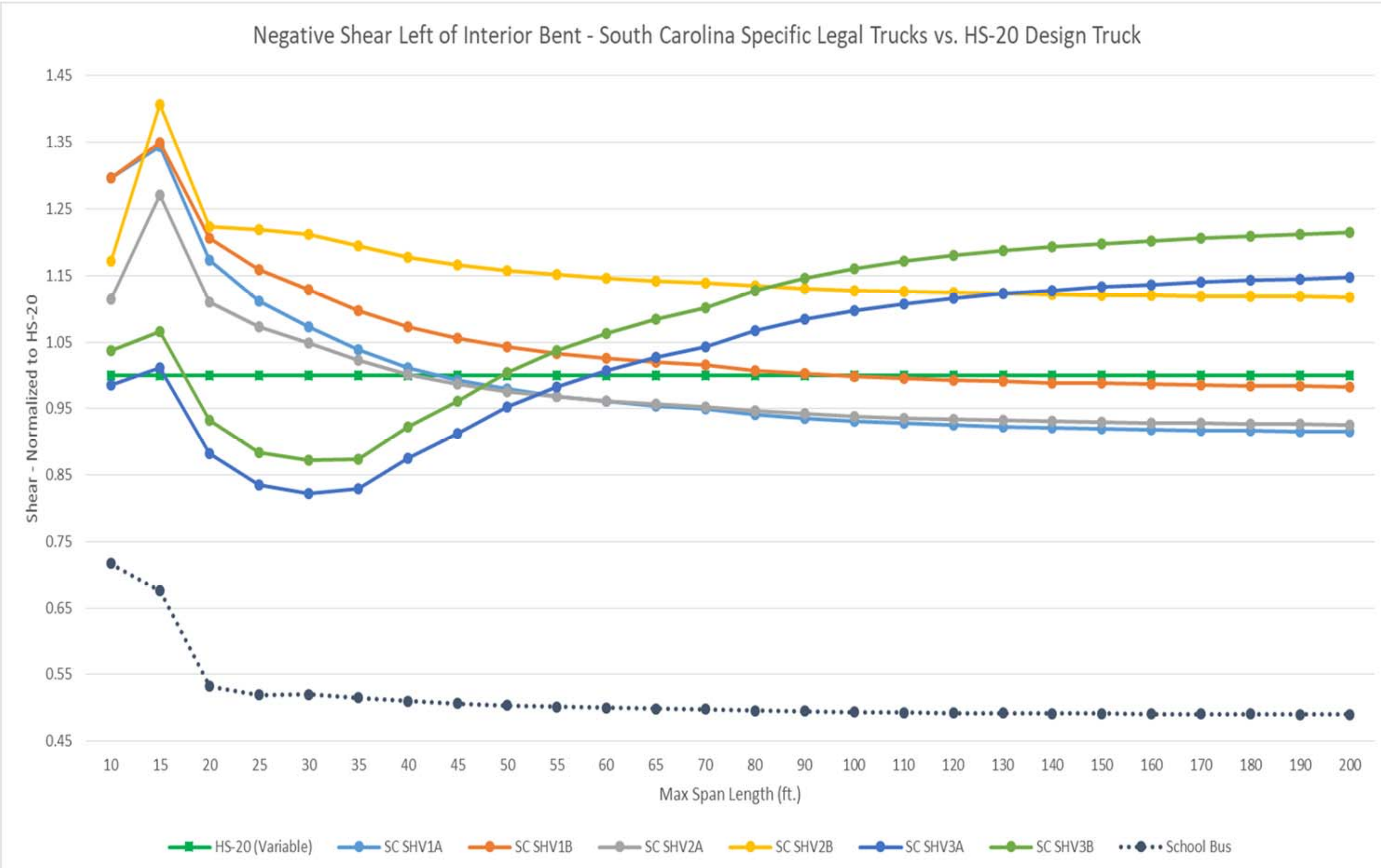


Legal Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Negative Shear Left of Interior Bent*



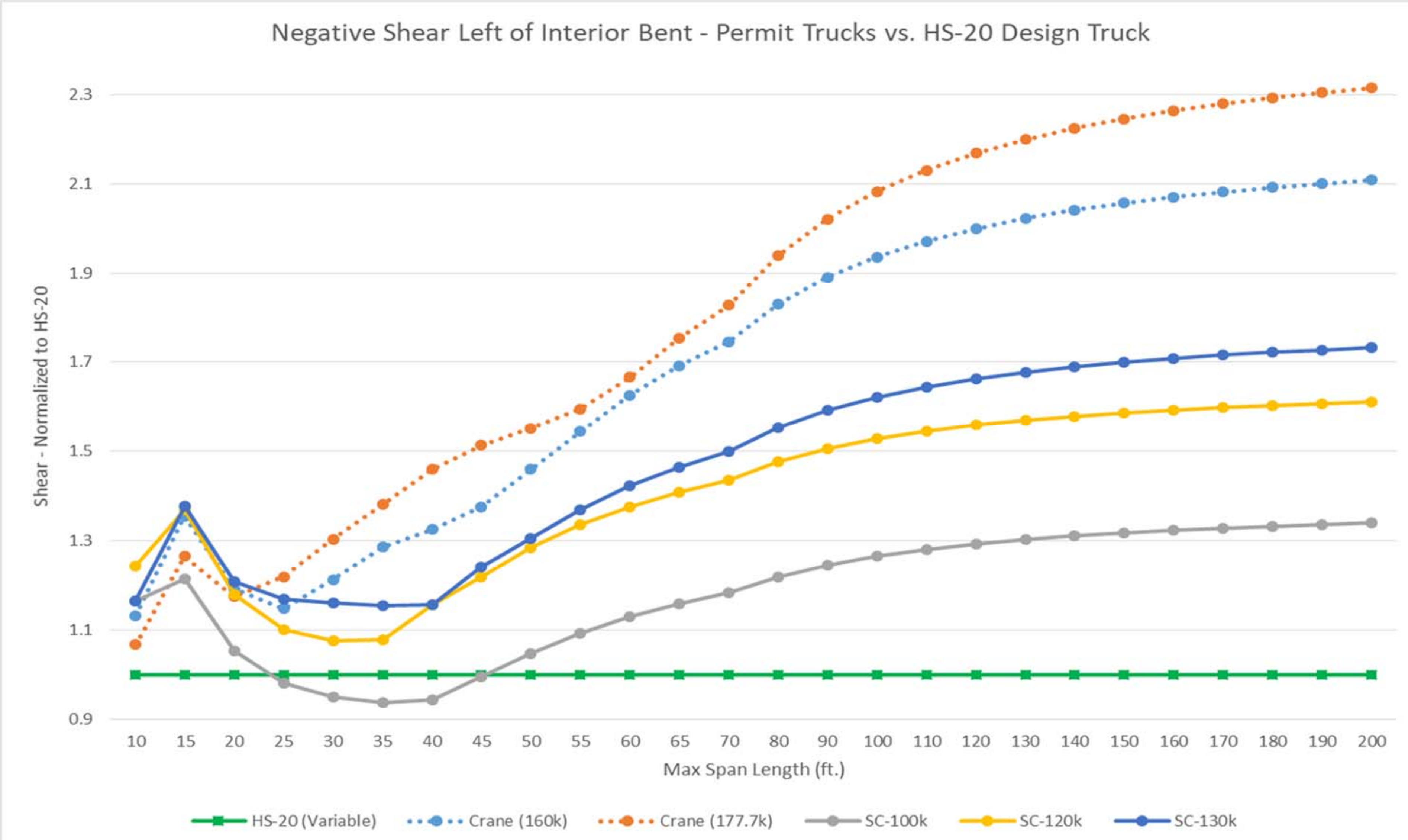


Negative Shear Left of Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

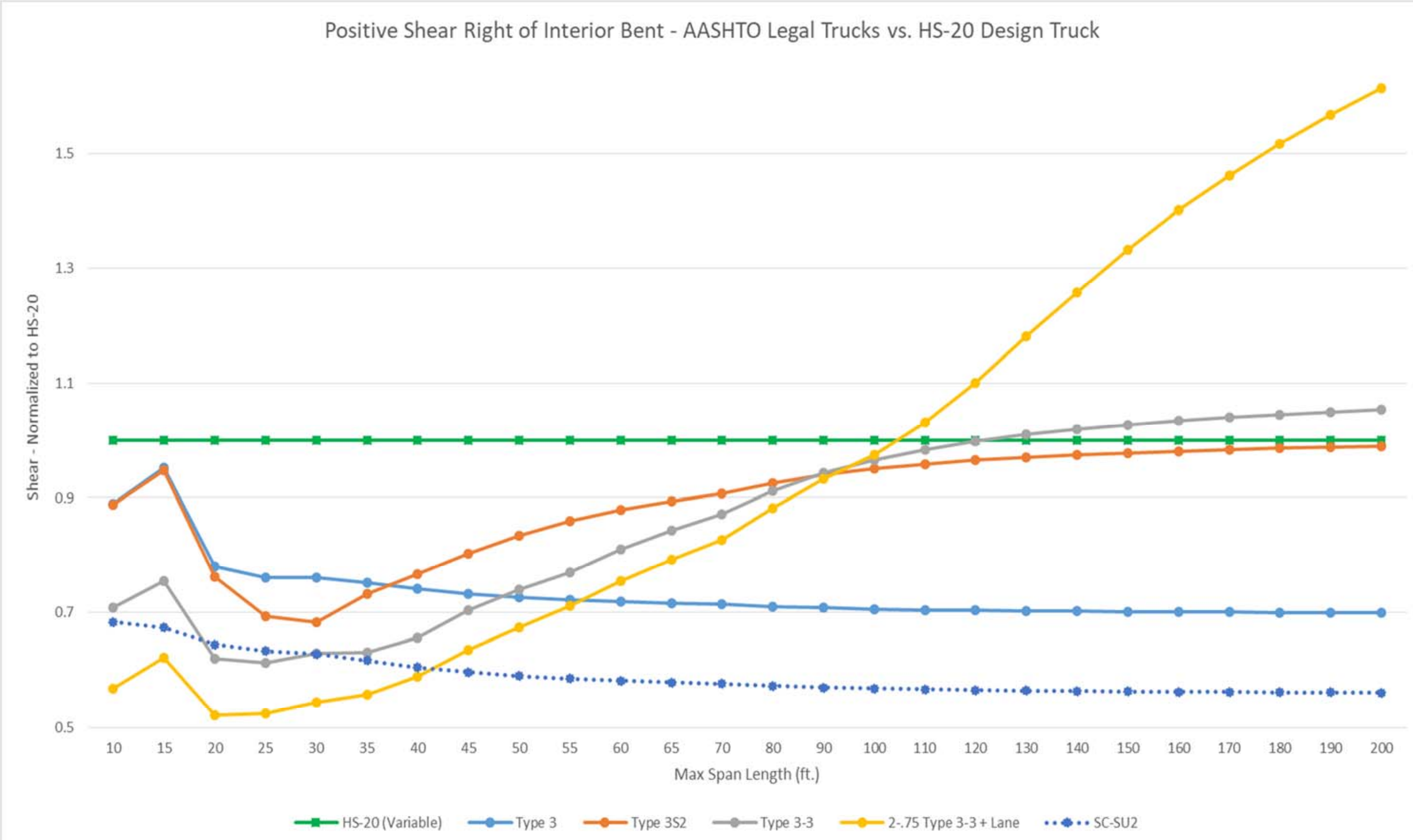


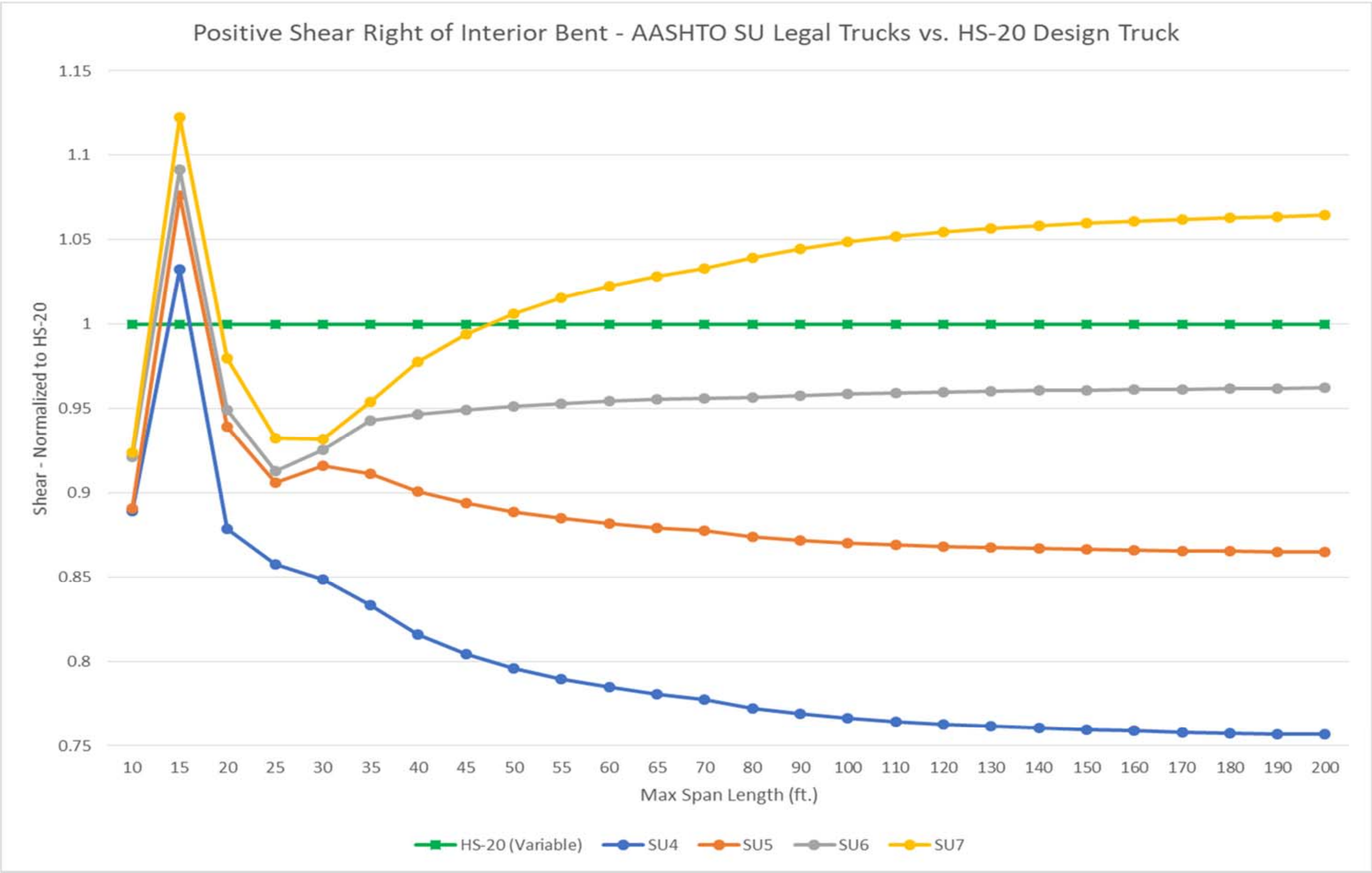
Negative Shear Left of Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.45
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

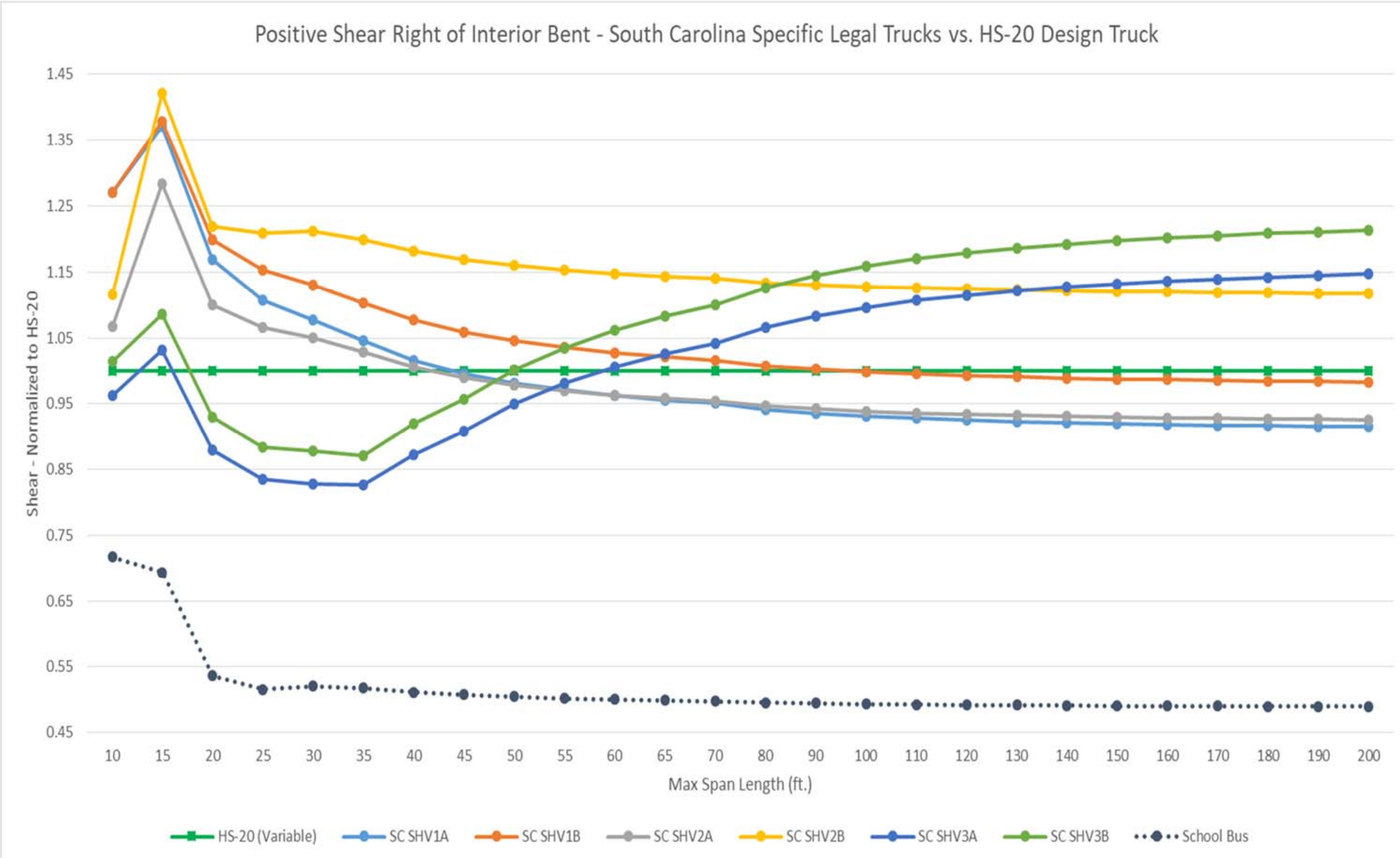
Permit Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Negative Shear Left of Interior Bent*



Legal Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Positive Shear Right of Interior Bent*

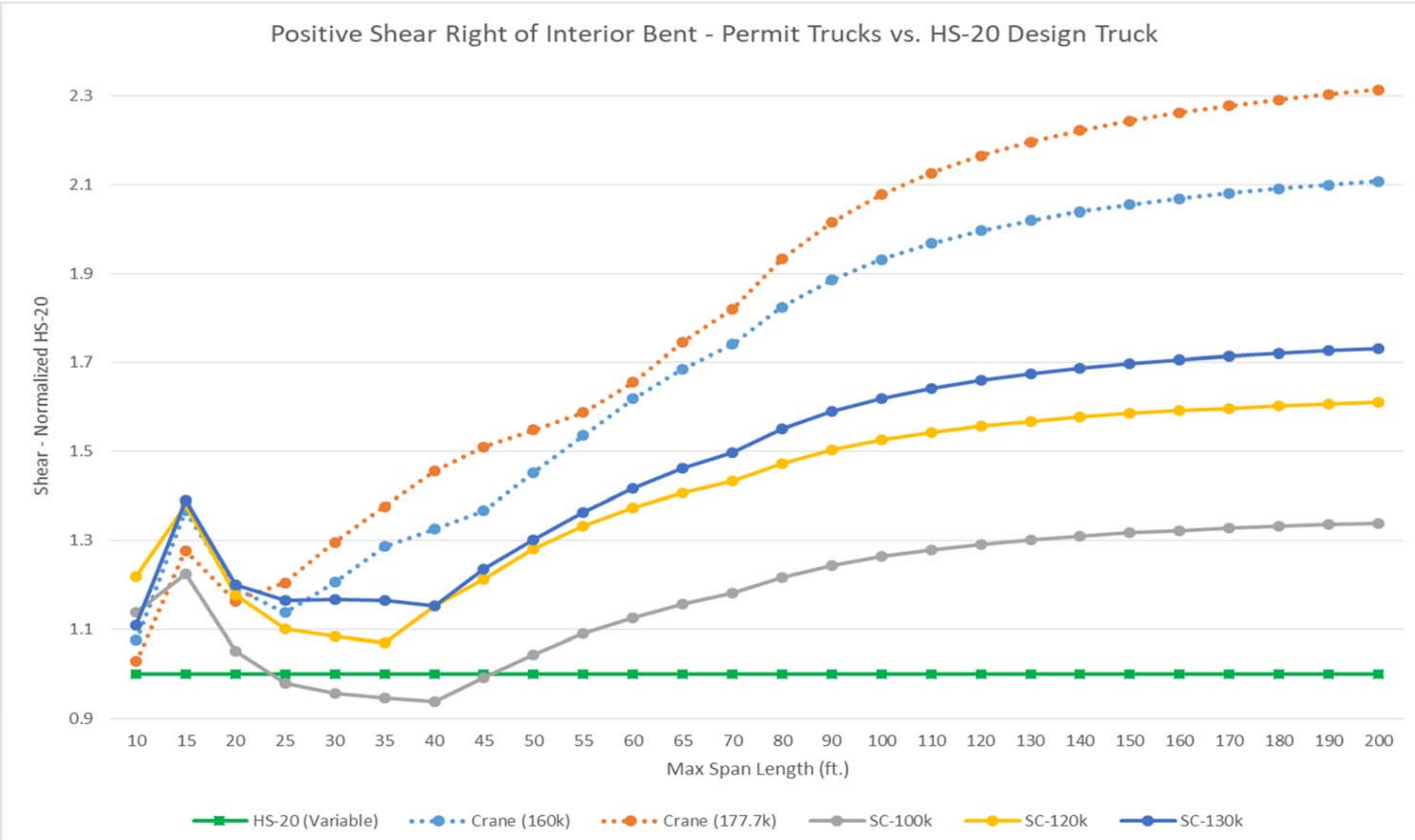



Positive Shear Right of Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

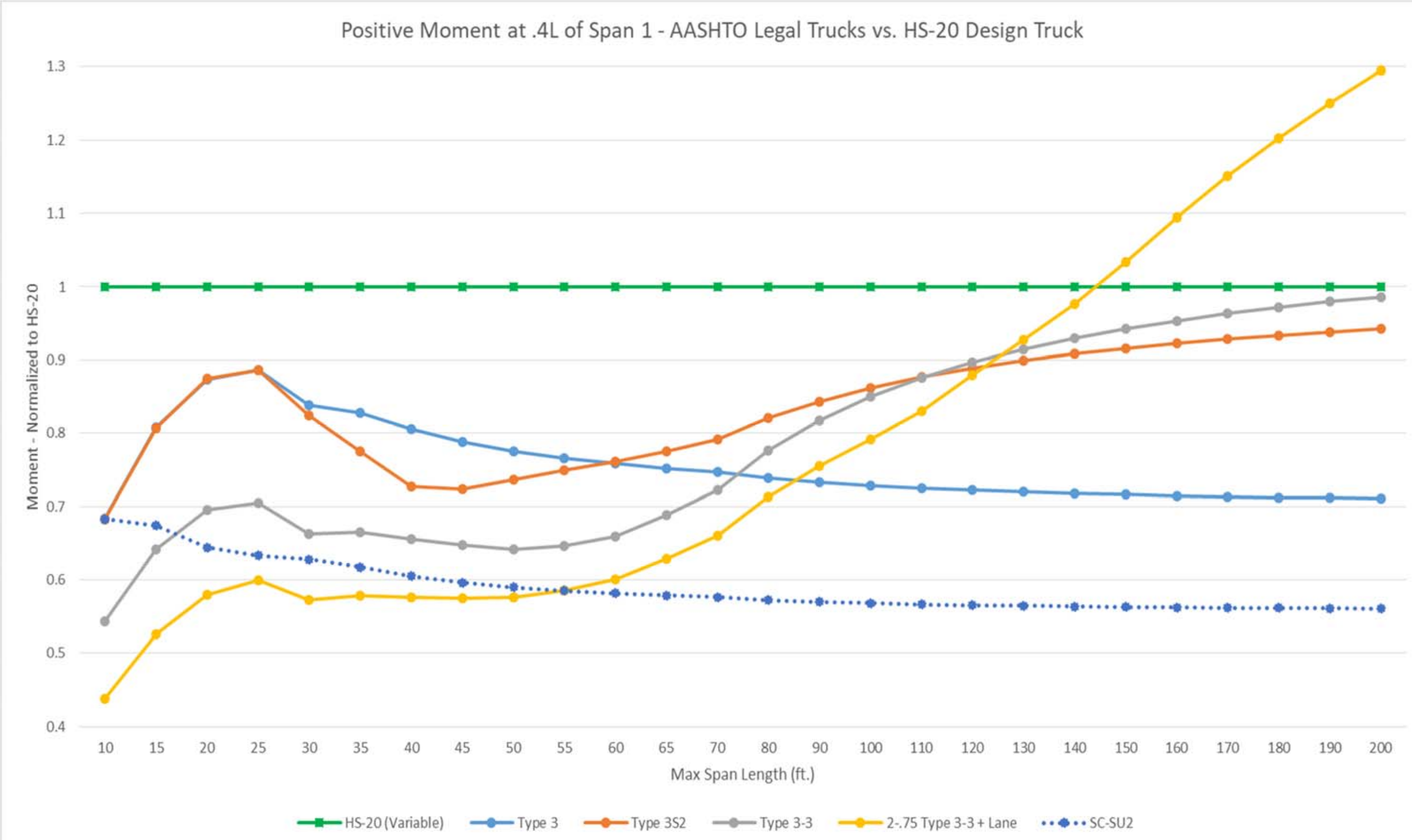


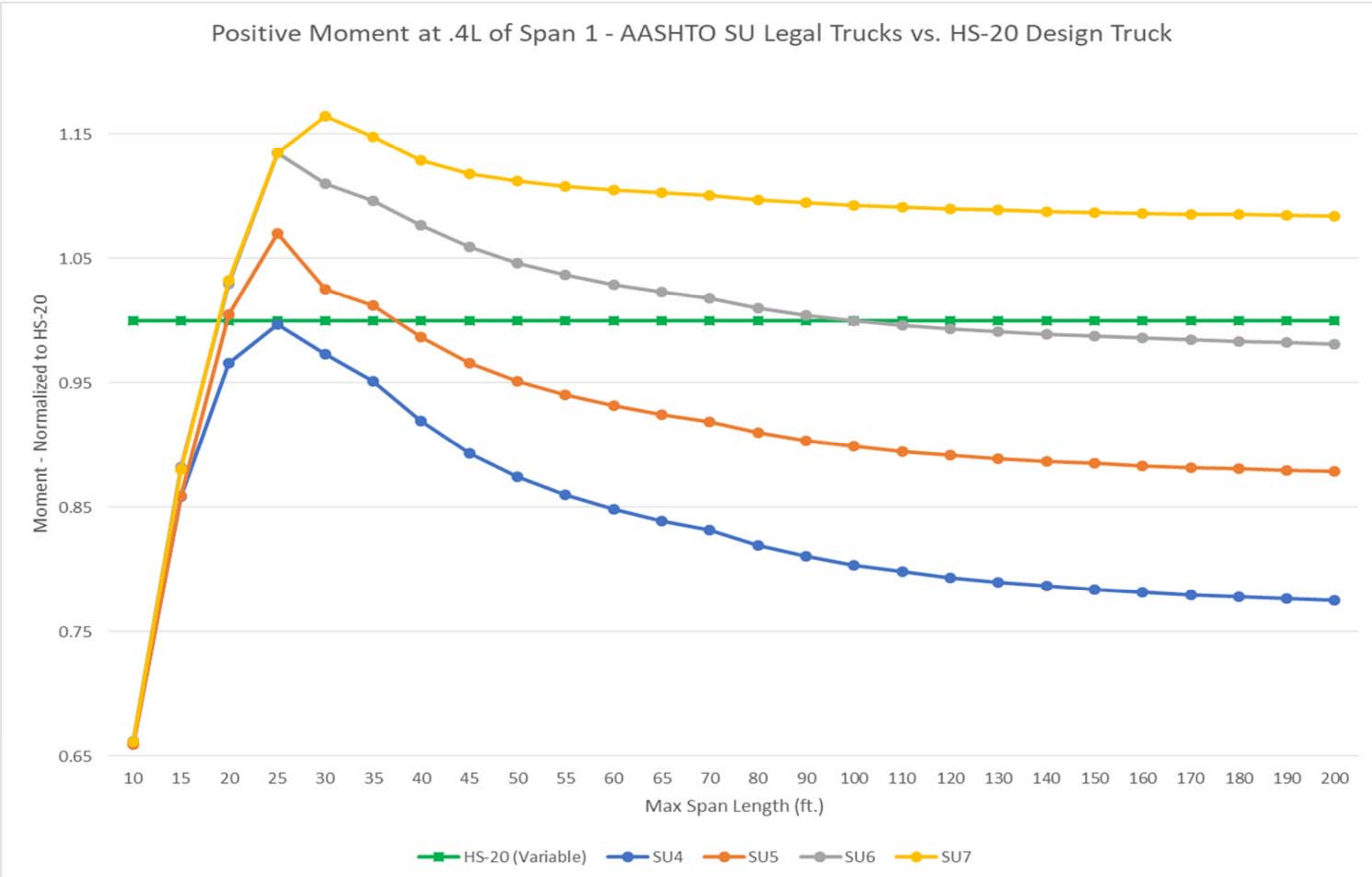
Positive Shear Right of Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.45
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

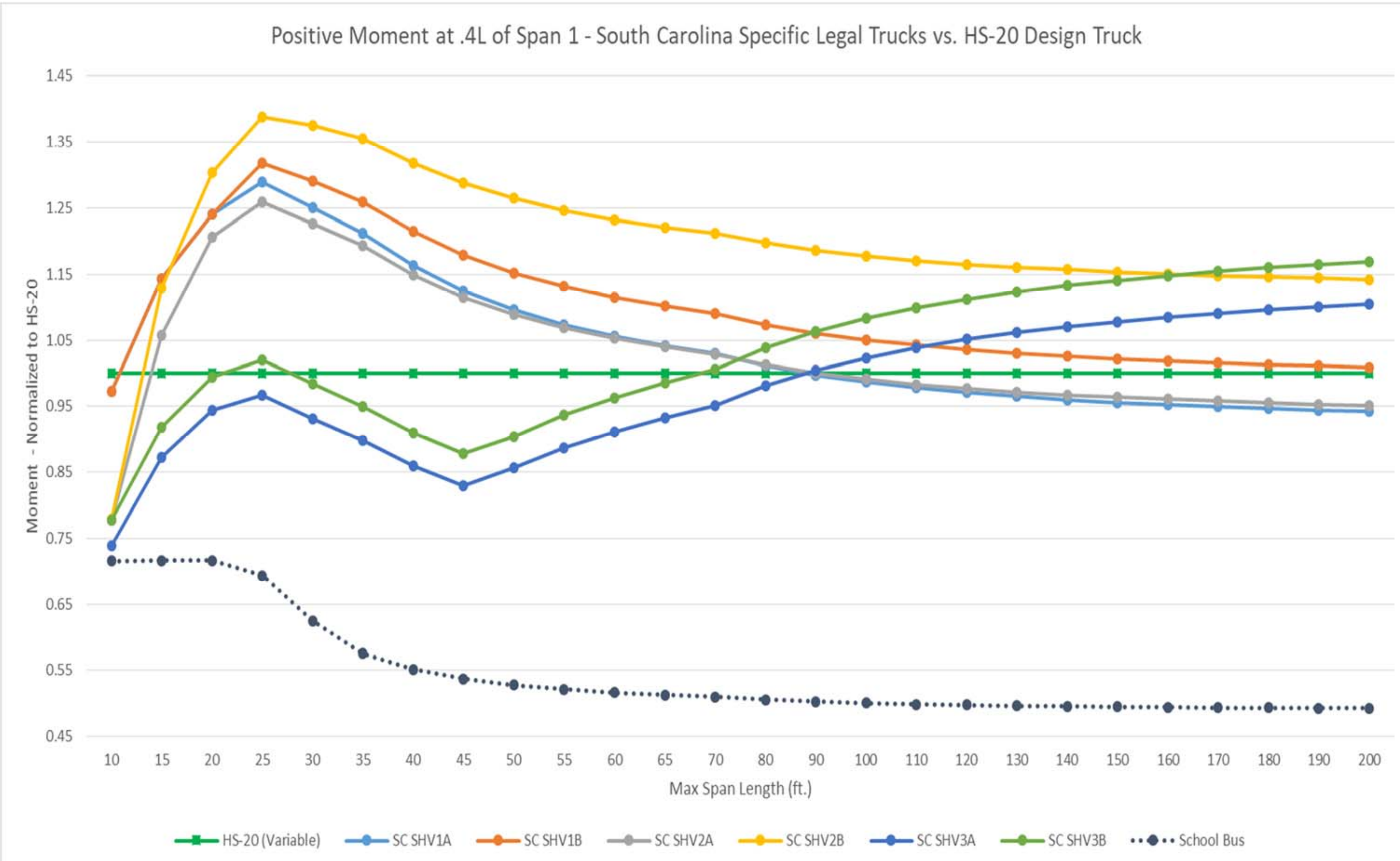
Permit Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Positive Shear Right of Interior Bent*



Legal Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .4L of Span 1*

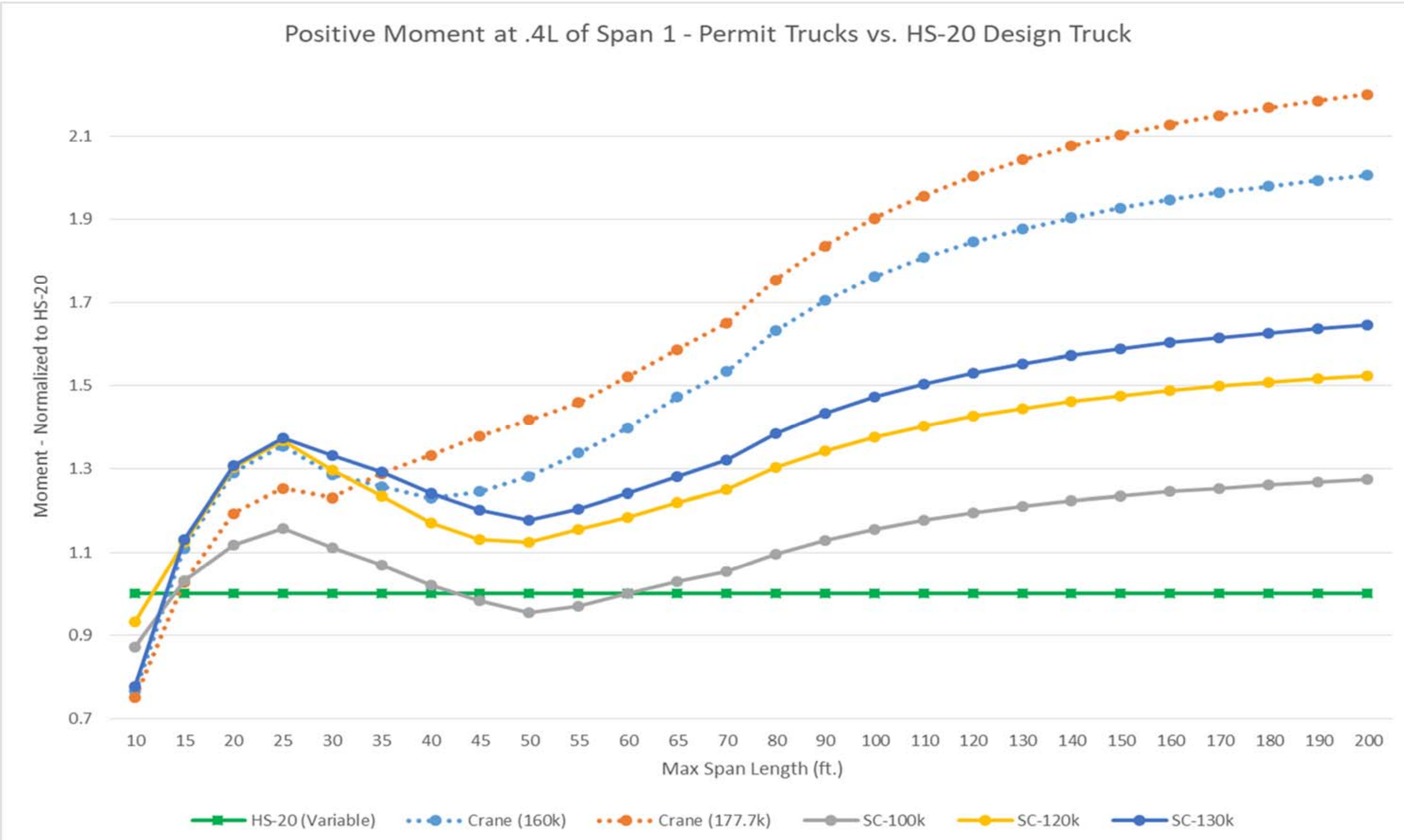



Positive Moment at .4L of Span 1 - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.15
1.05
0.95
0.85
0.75
0.65
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

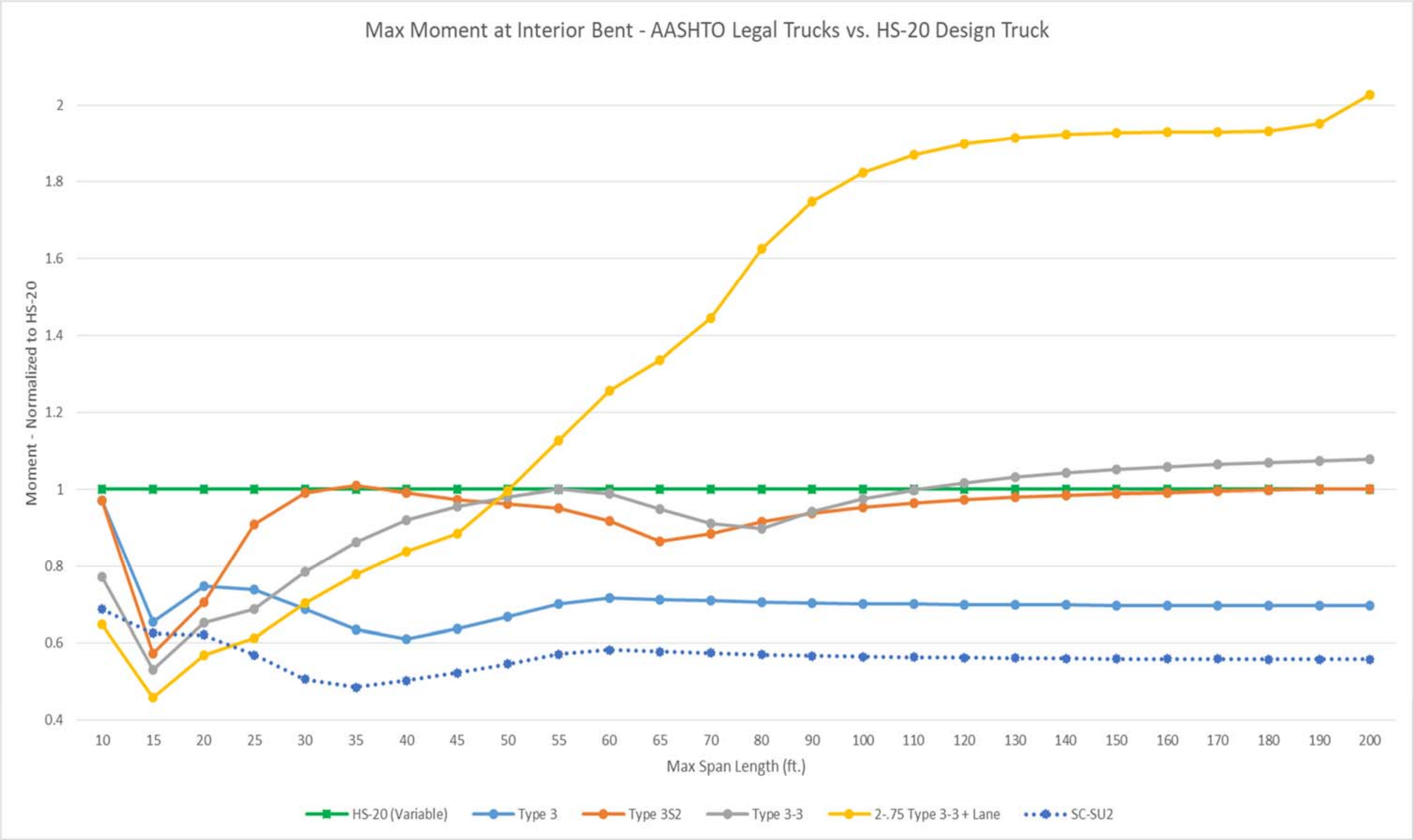


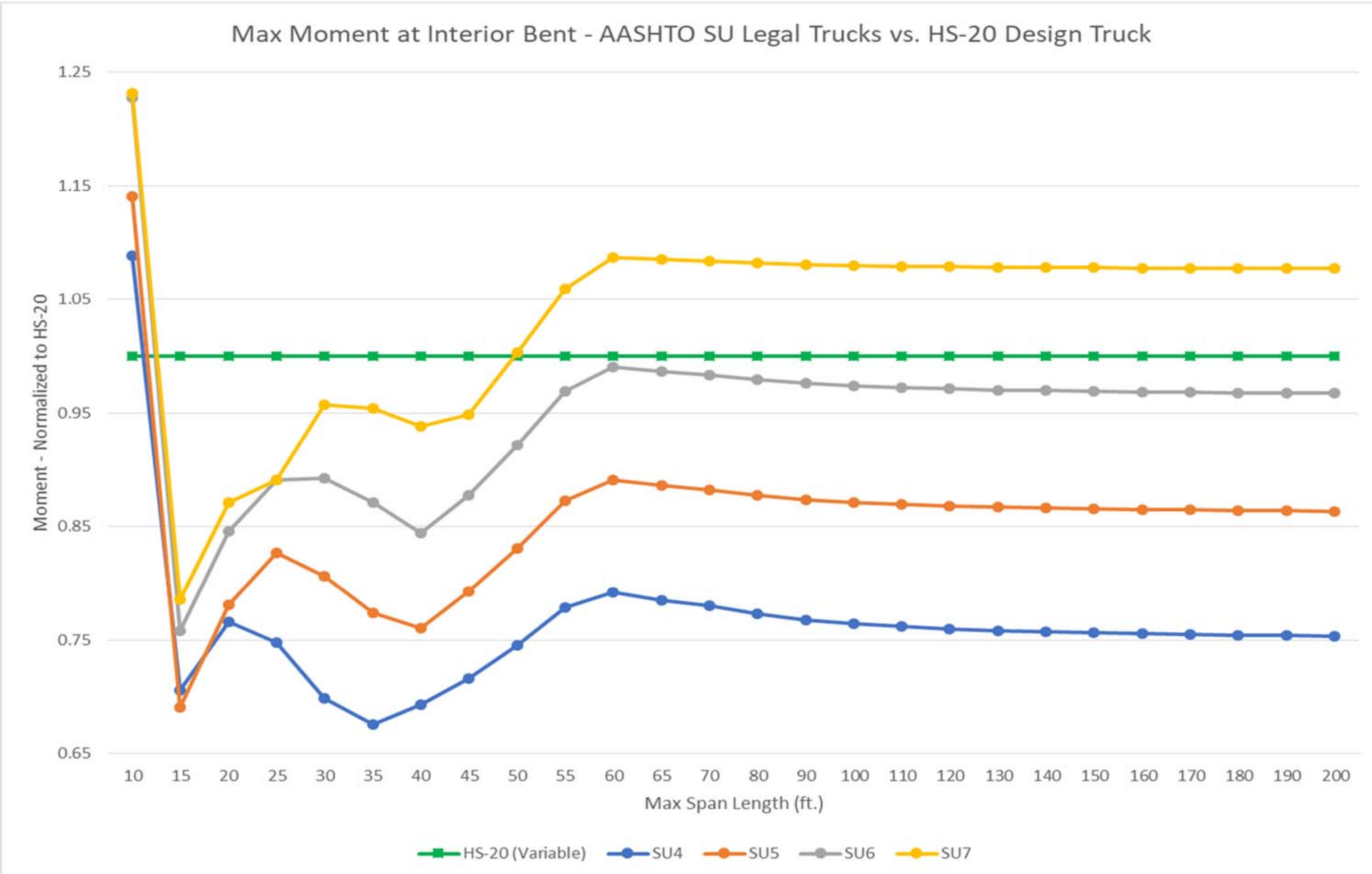
Positive Moment at .4L of Span 1 - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.45
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

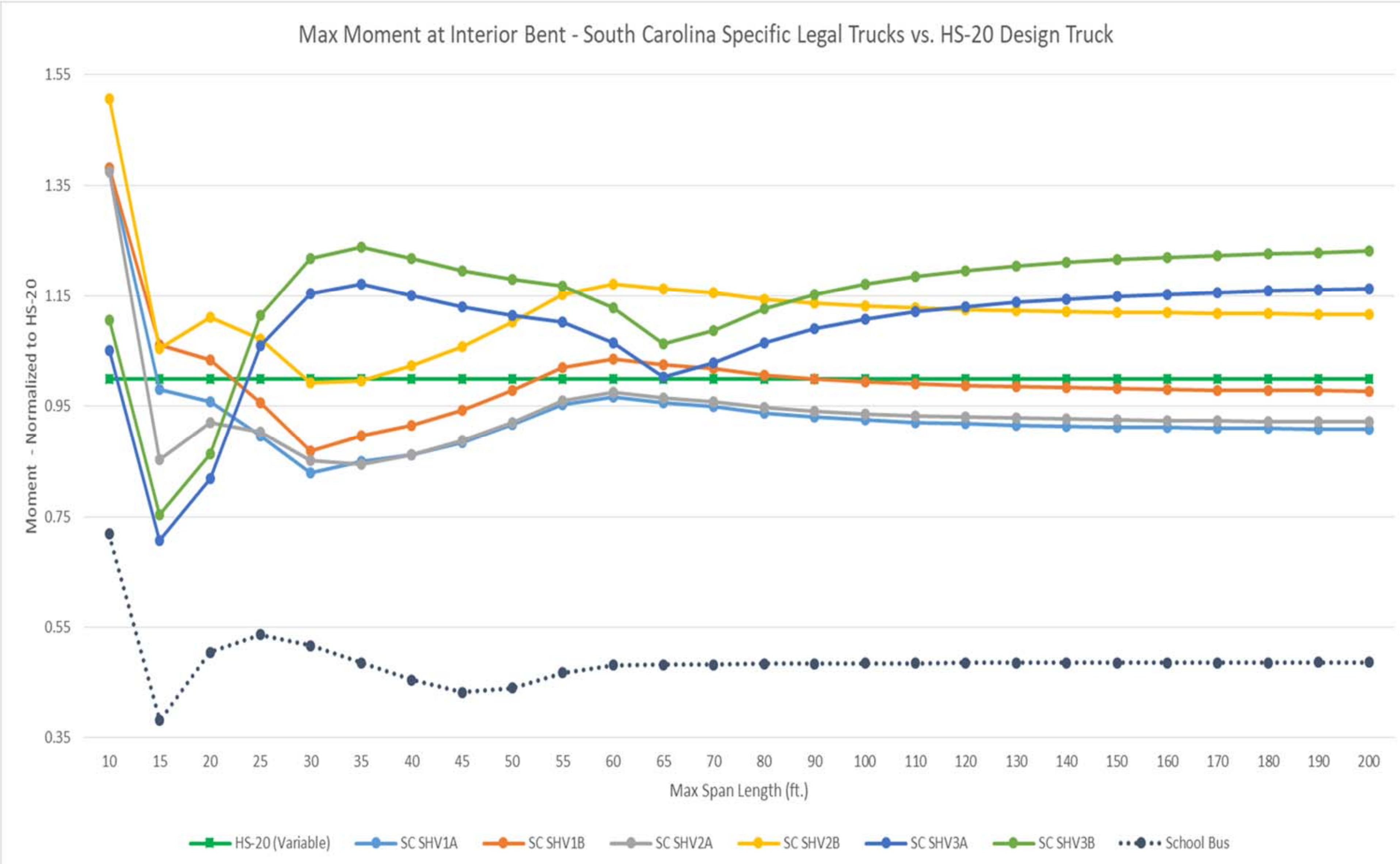
Permit Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .4L of Span 1*



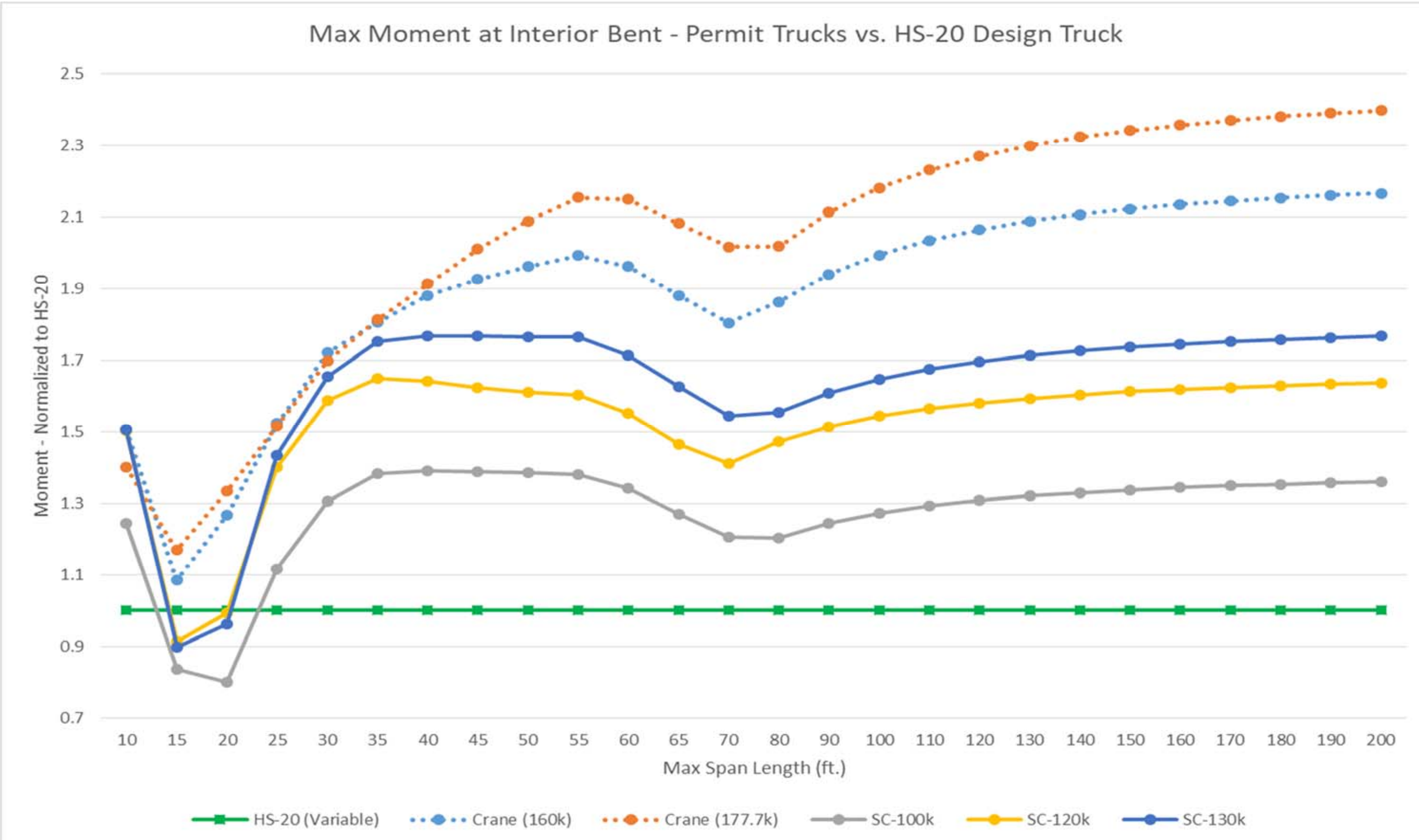
Legal Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Max Moment at Interior Bent*



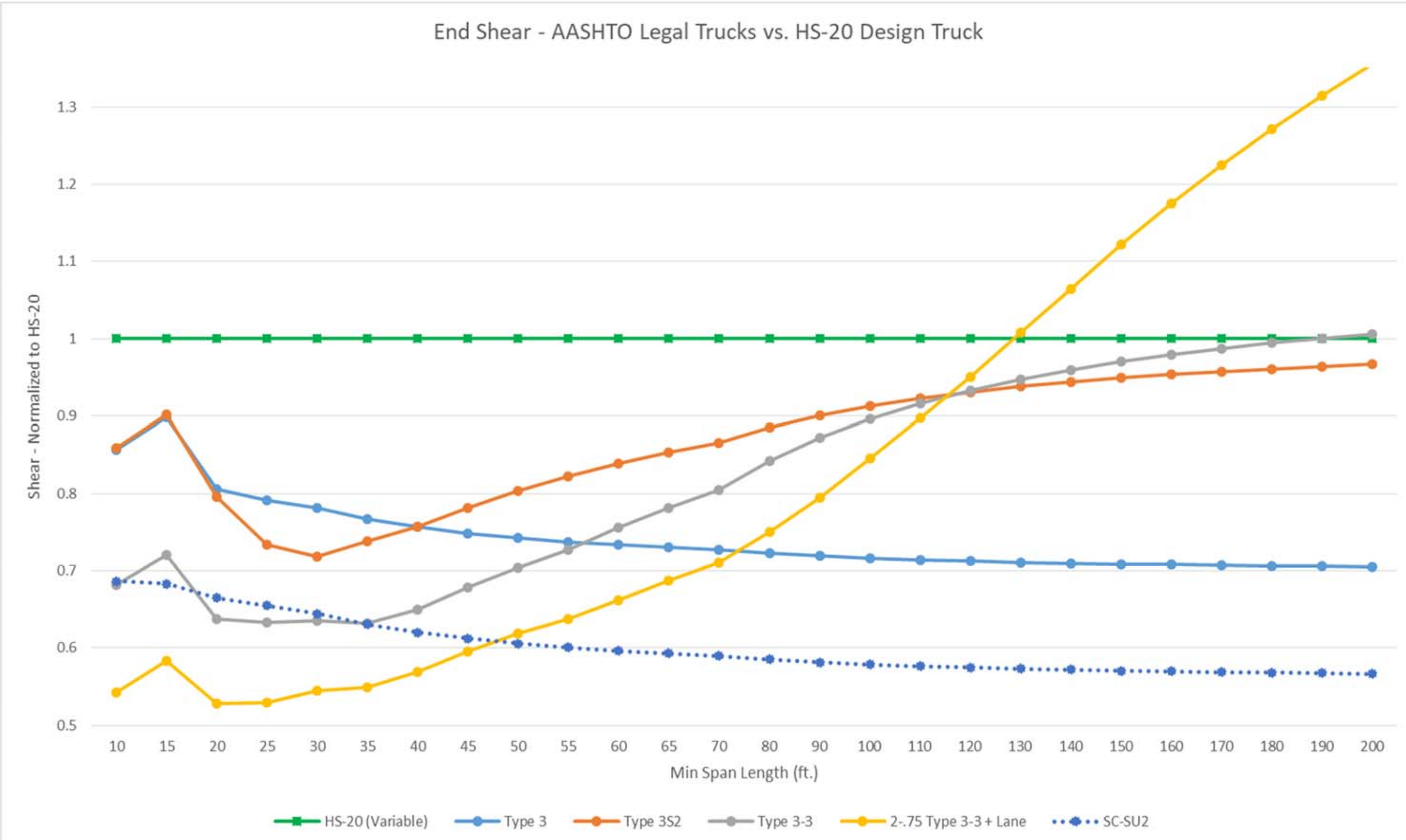

Max Moment at Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.25
1.15
1.05
0.95
0.85
0.75
0.65
Moment - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Max Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

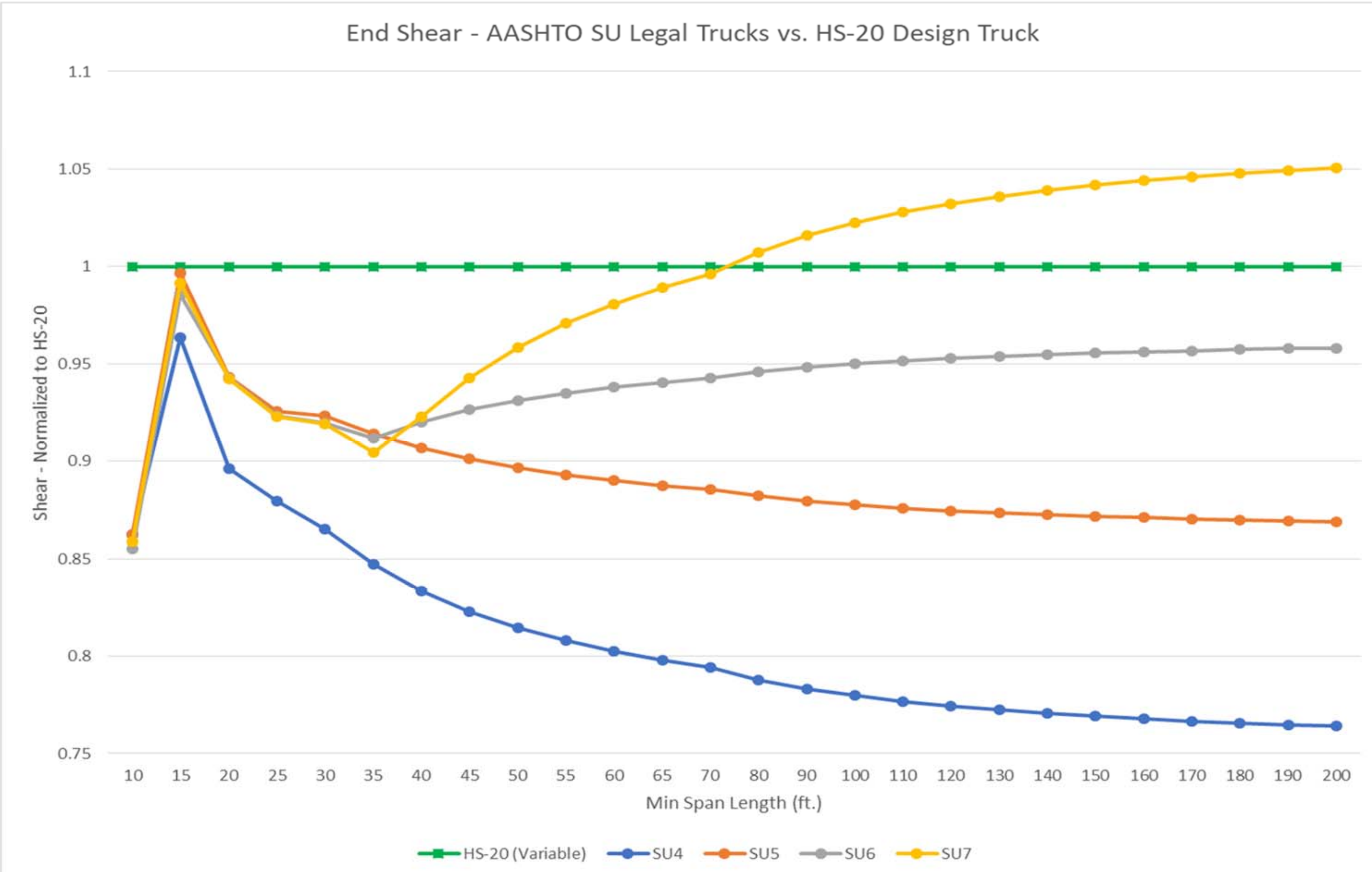

Max Moment at Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.55
1.35
1.15
0.95
0.75
0.55
0.35
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Max Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

Permit Trucks: 2-Span (Normalized to HS-20 Design Truck) – *Max Moment at Interior Bent*

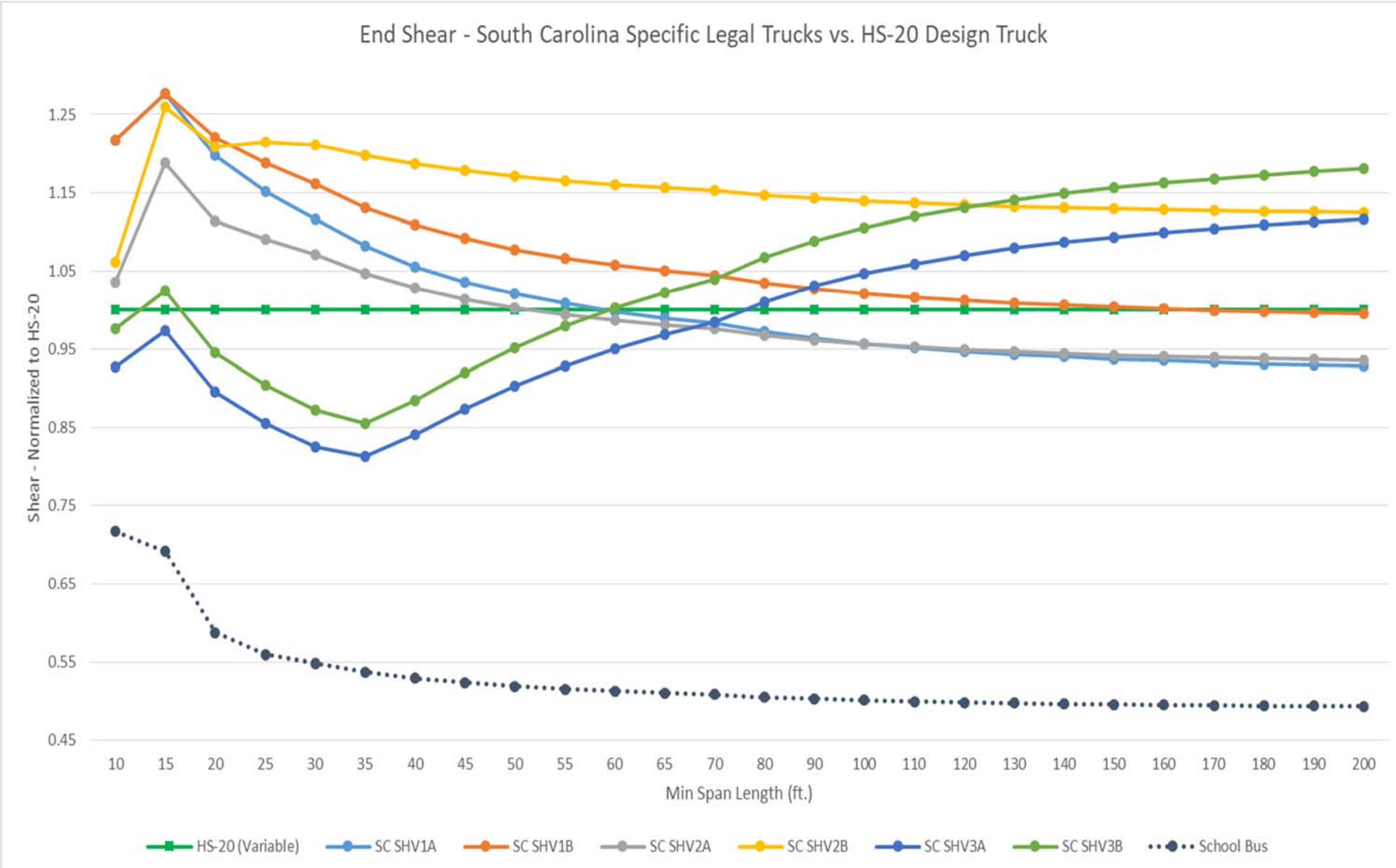


Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *End Shear*



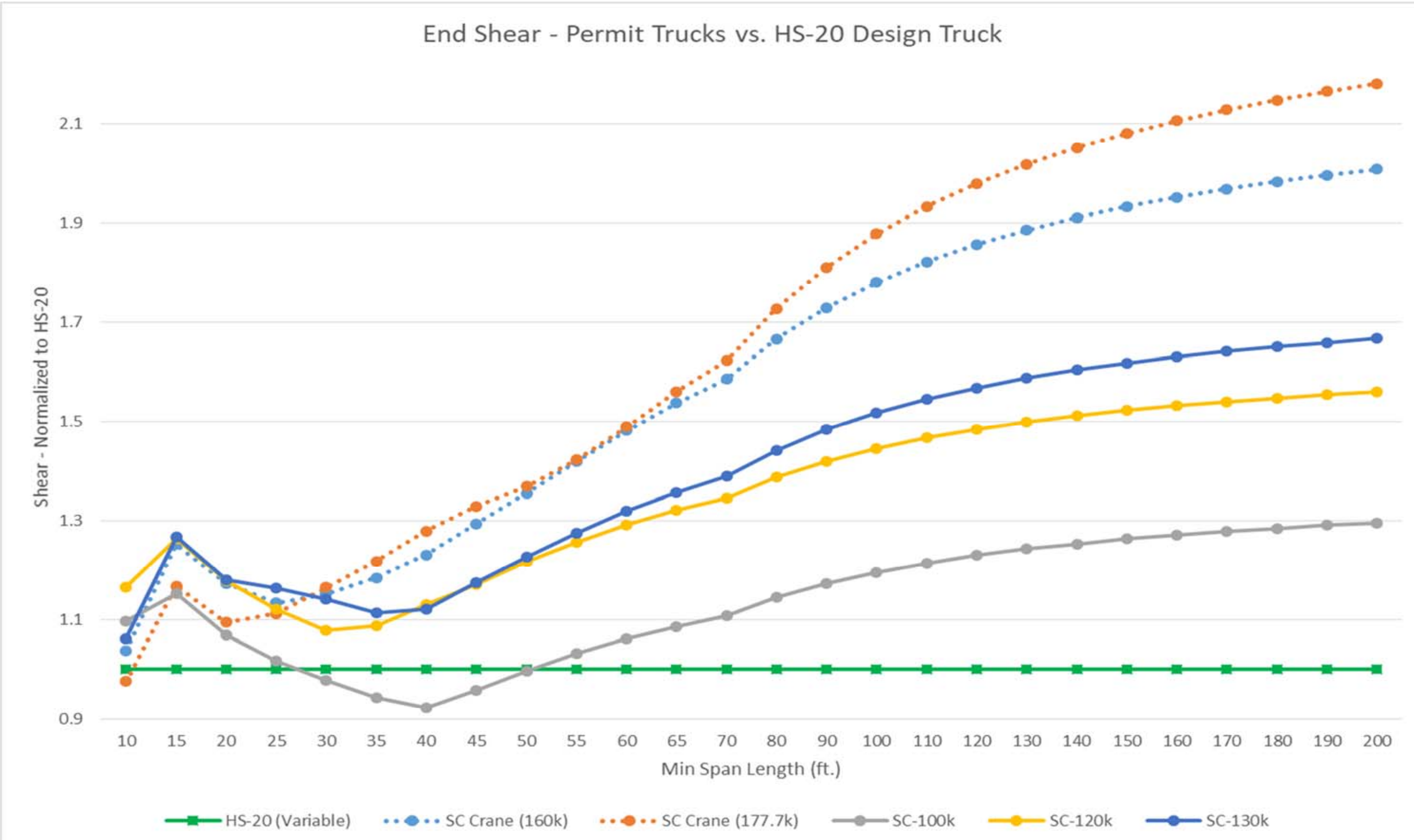


End Shear - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

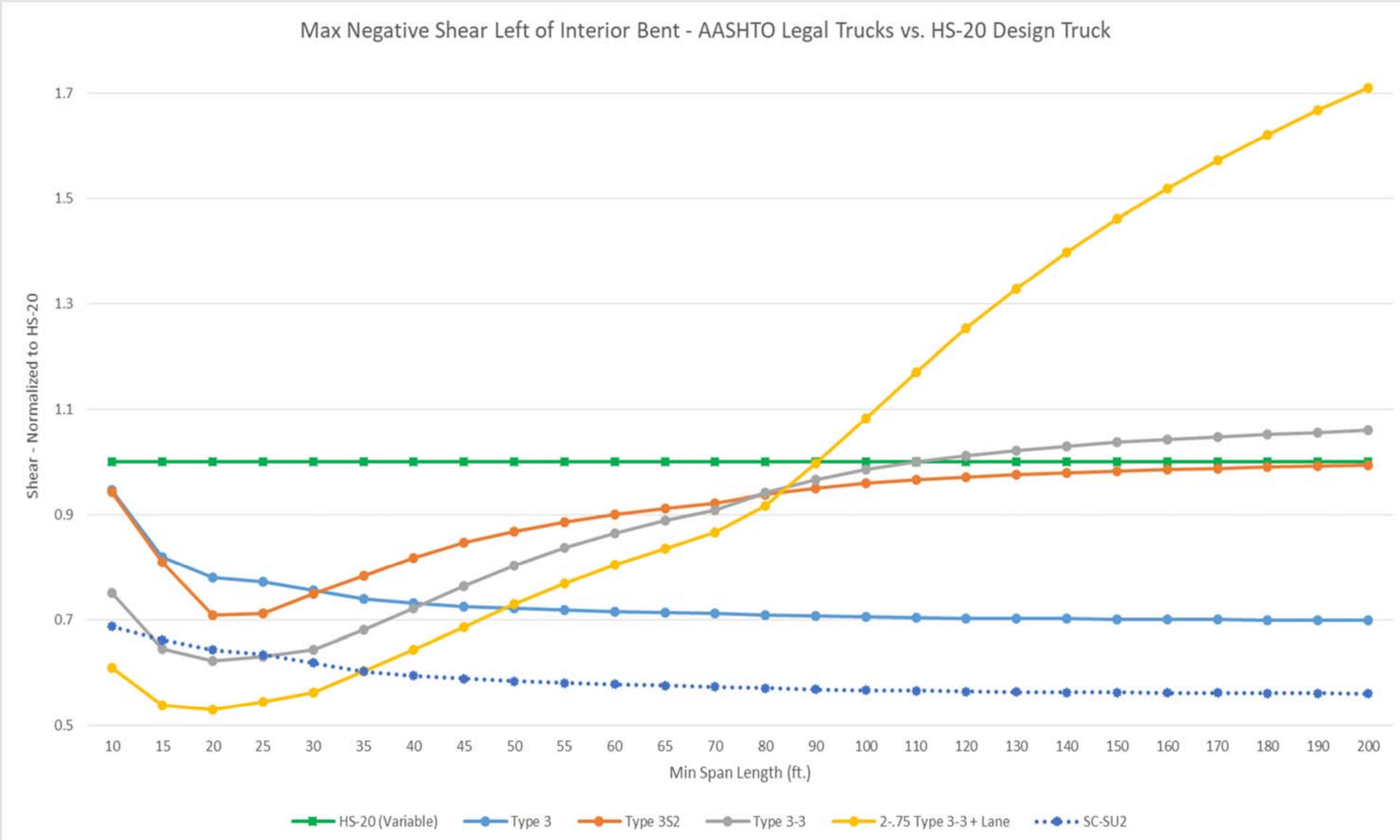


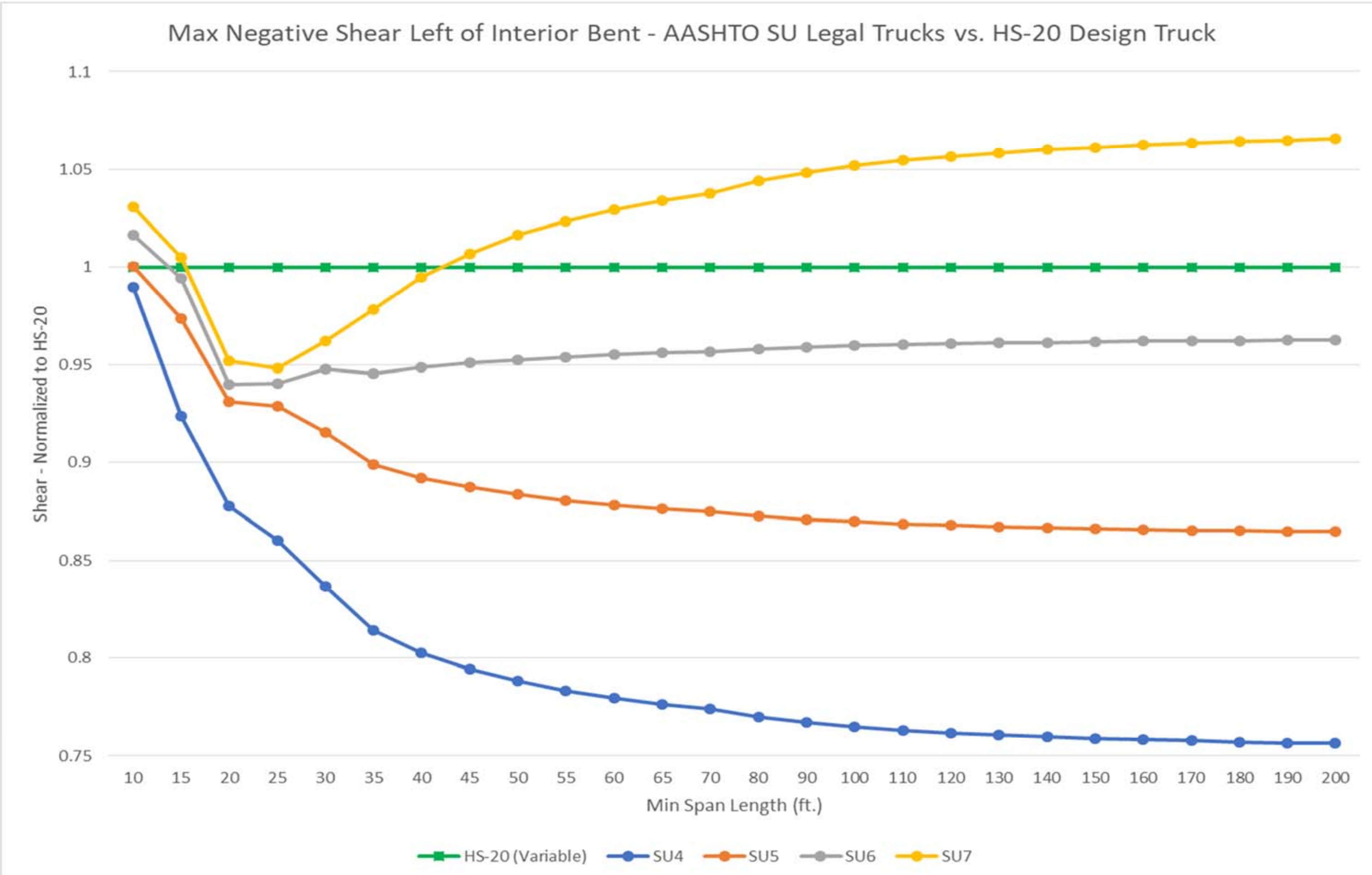
End Shear - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Shear - Normalized to HS-20
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *End Shear*

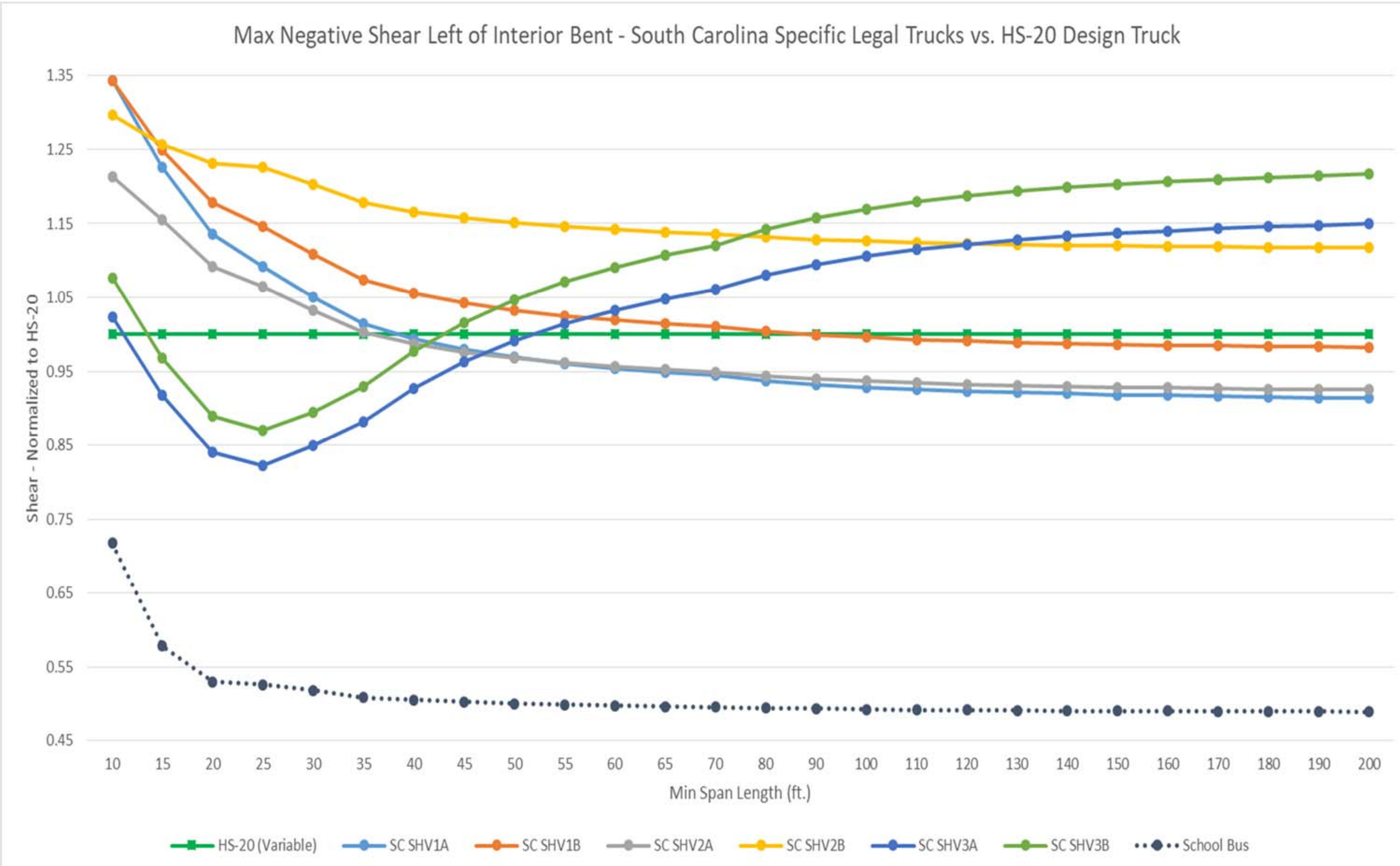


Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Negative Shear Left of Interior Bent*

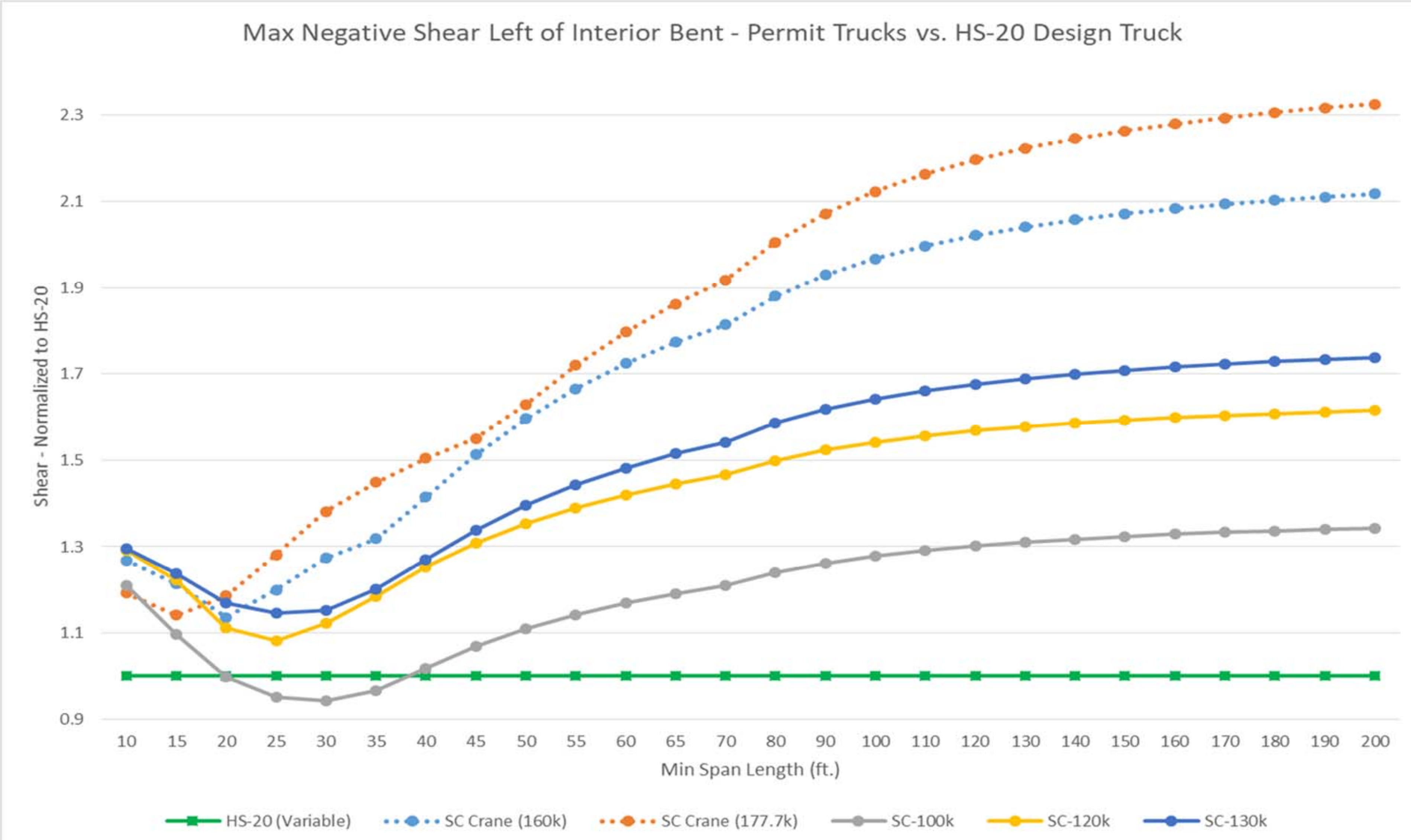




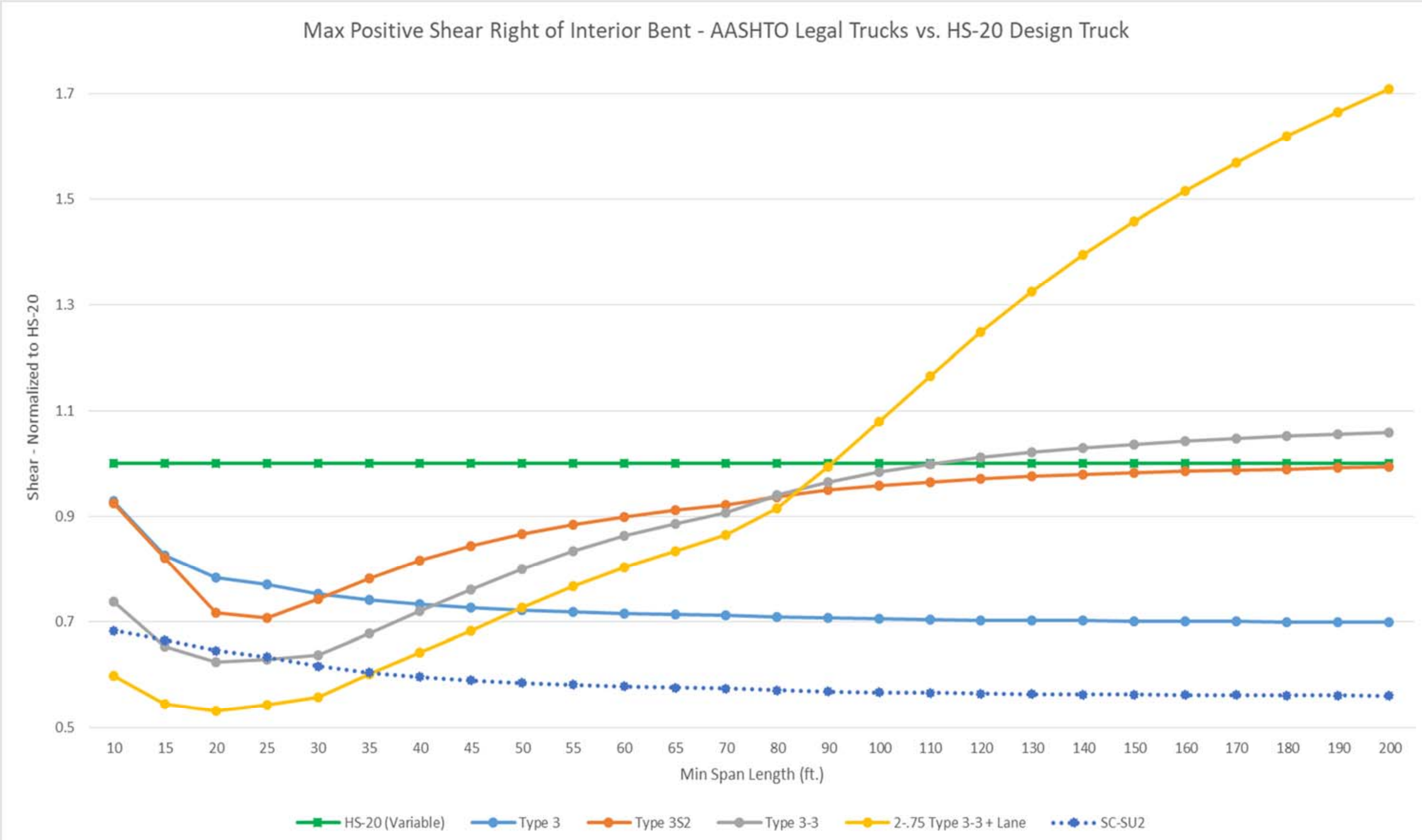
Max Negative Shear Left of Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
Shear - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

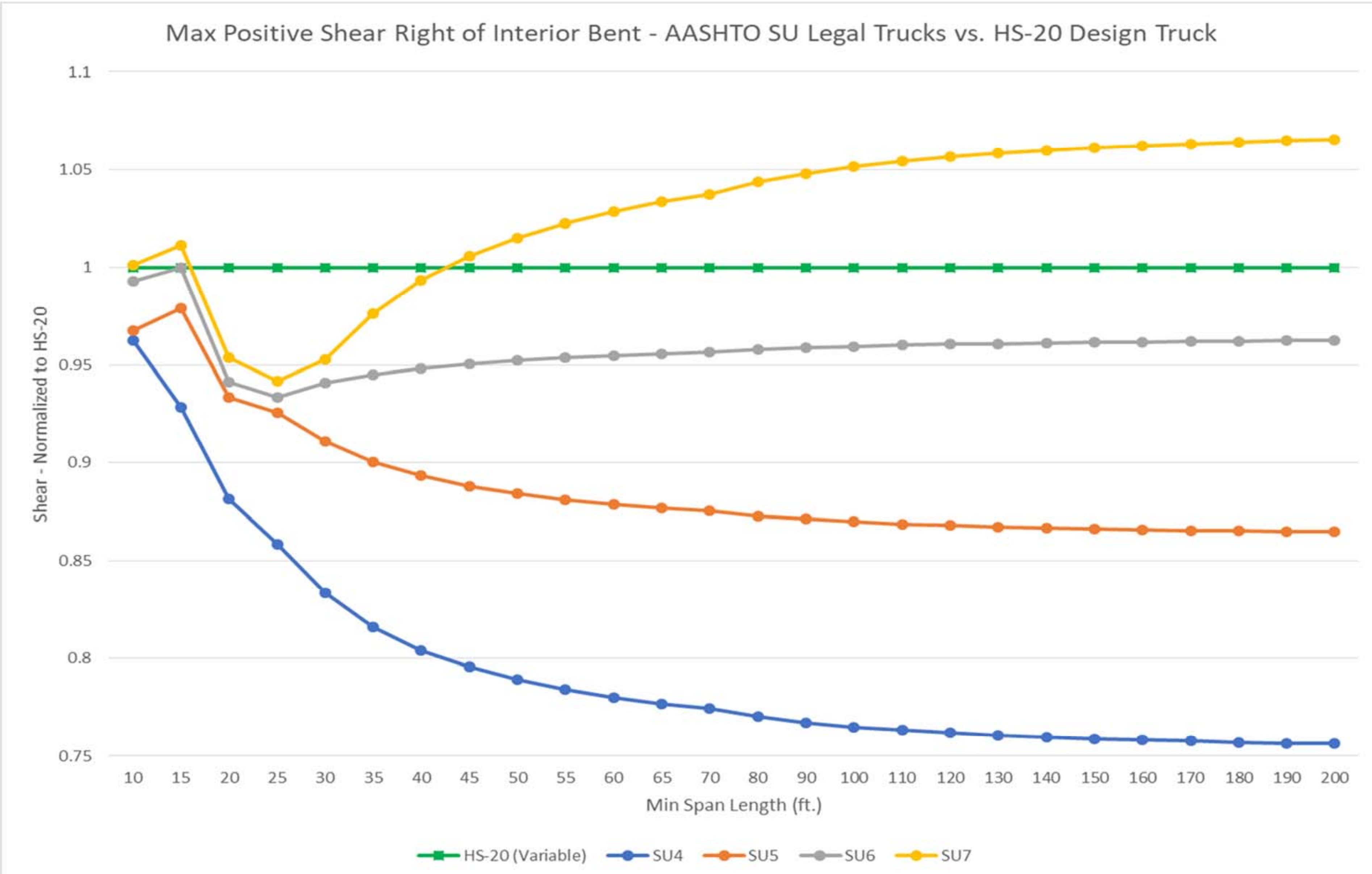

Max Negative Shear Left of Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
Shear - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Negative Shear Left of Interior Bent*

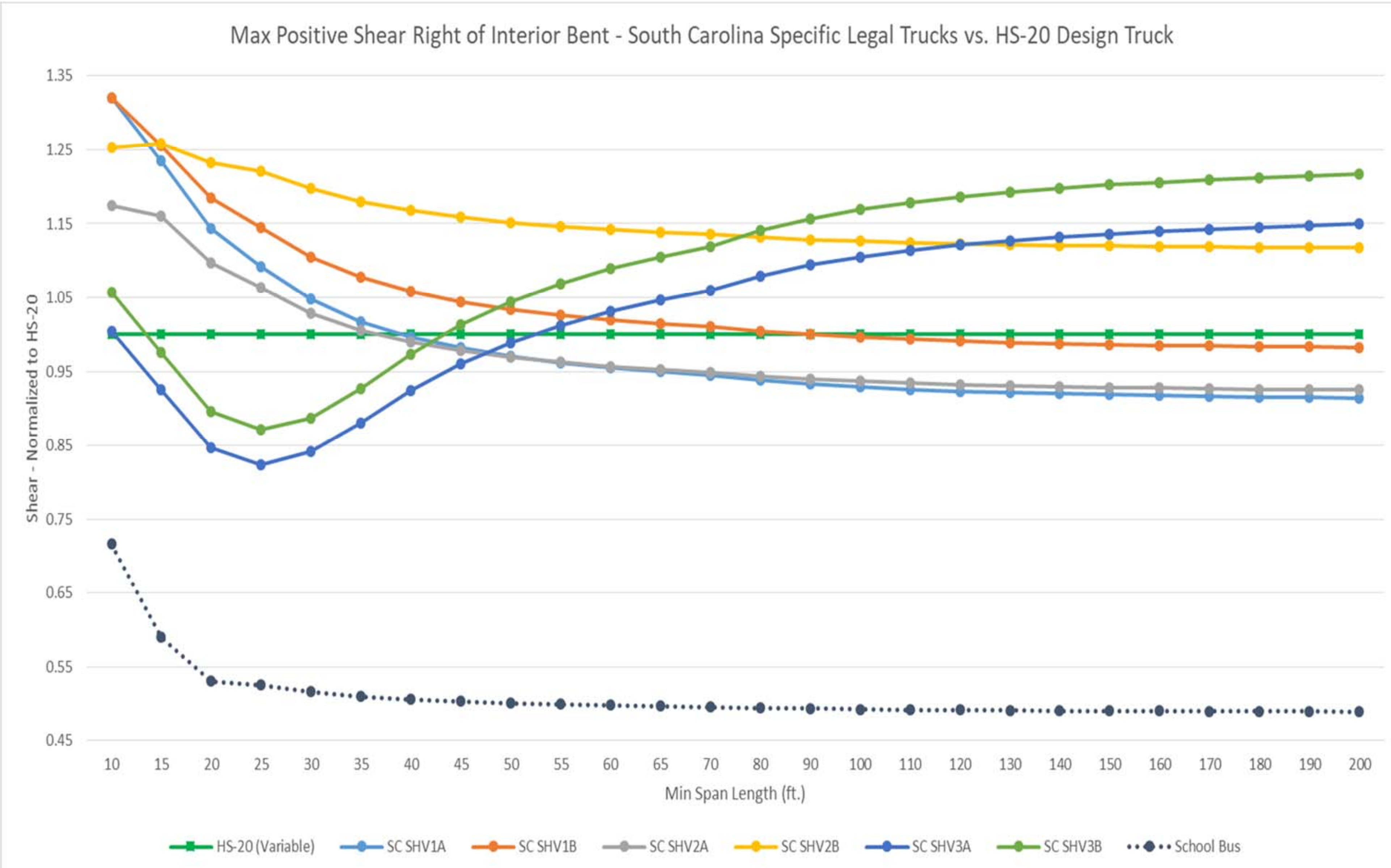


Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Positive Shear Right of Interior Bent*



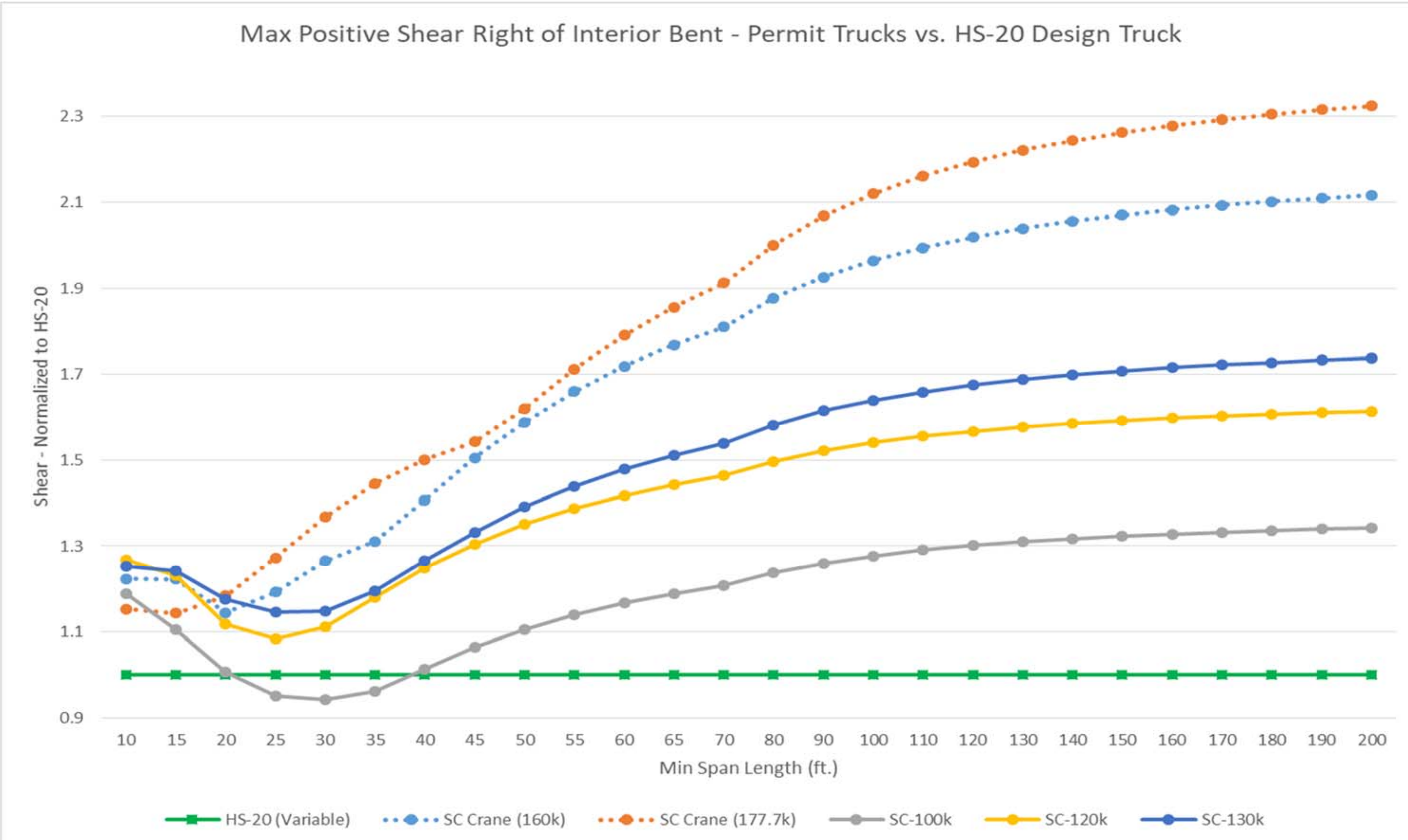


Max Positive Shear Right of Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
Shear - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

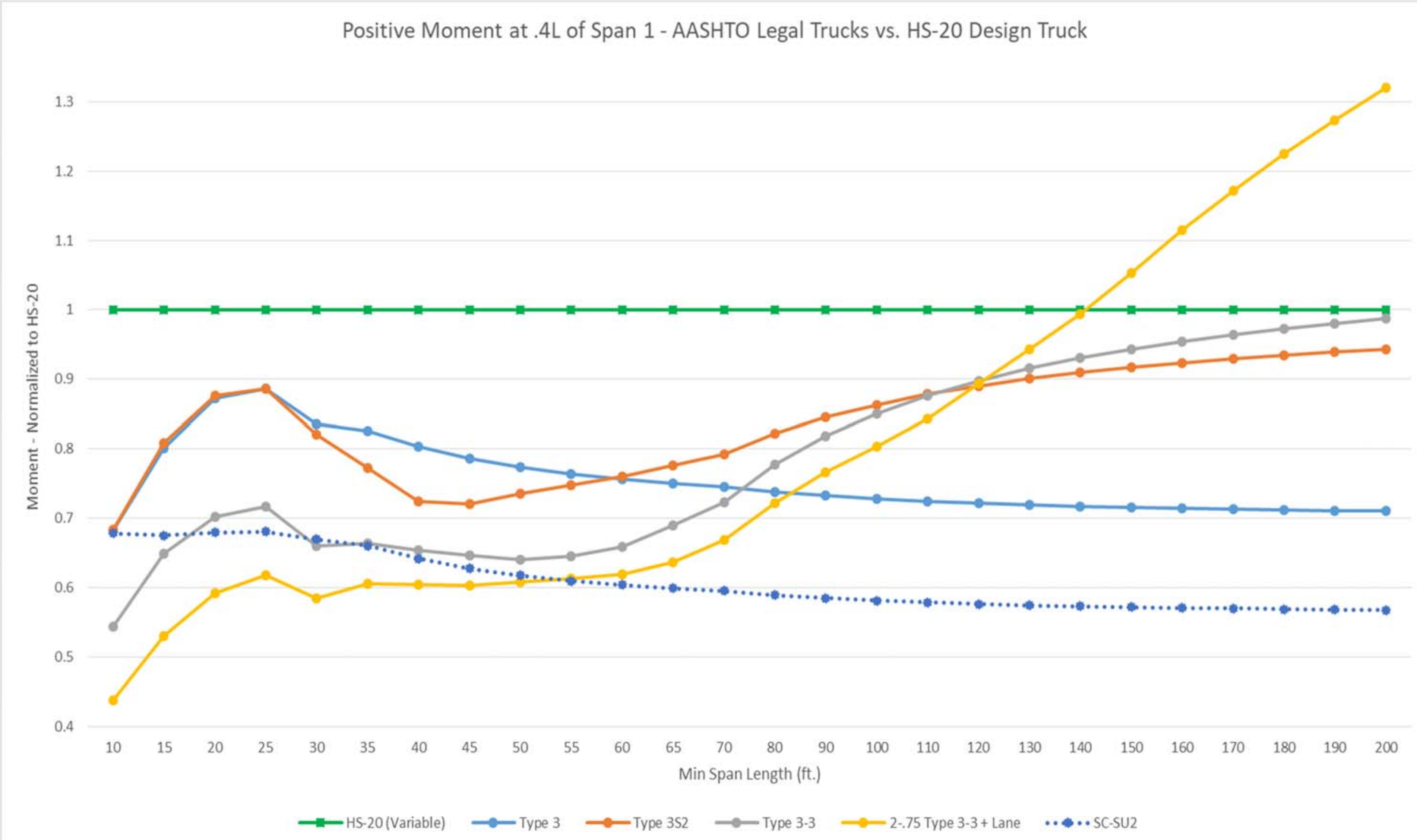


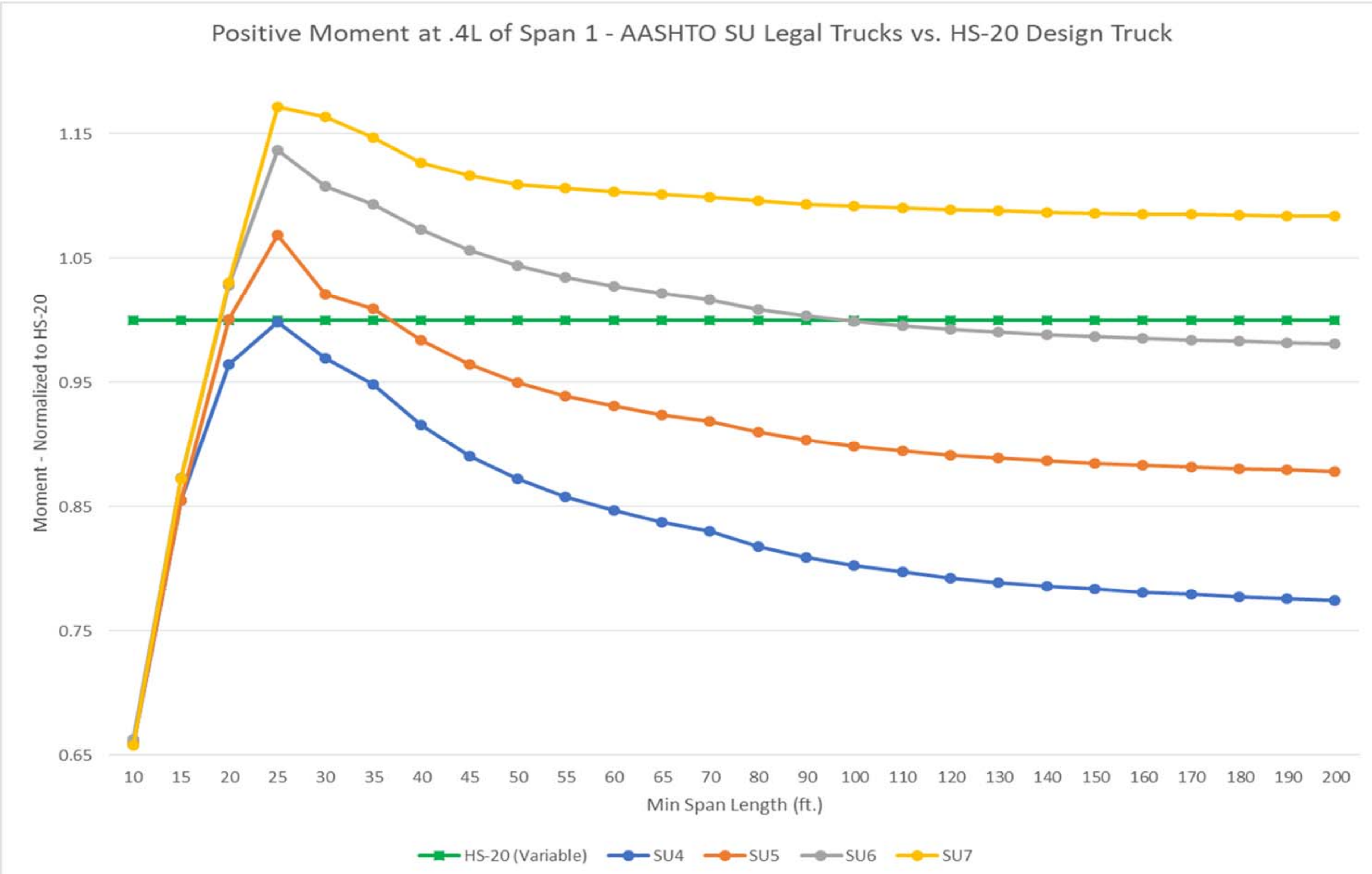
Max Positive Shear Right of Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
Shear - Normalized to HS-20
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

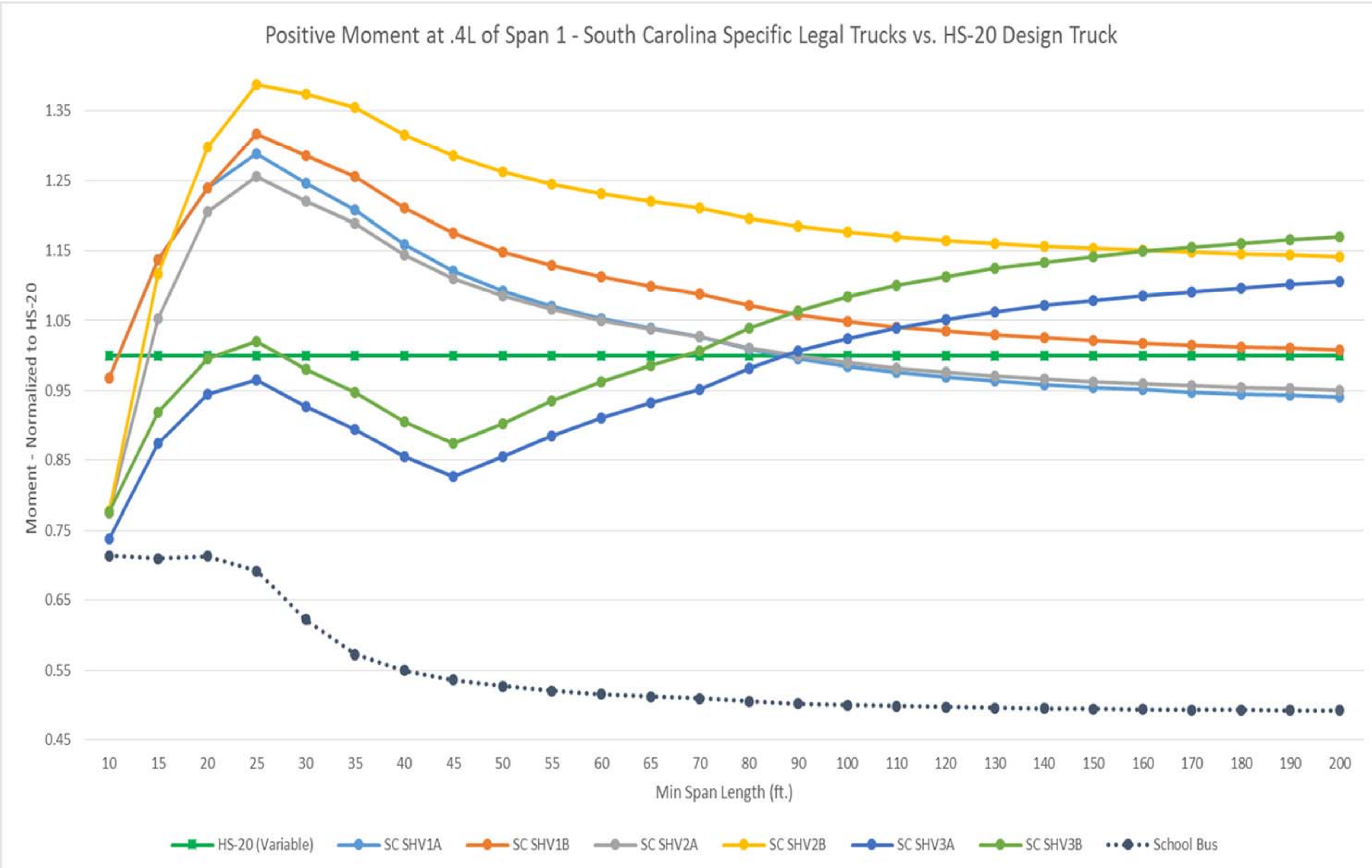
Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Positive Shear Right of Interior Bent*



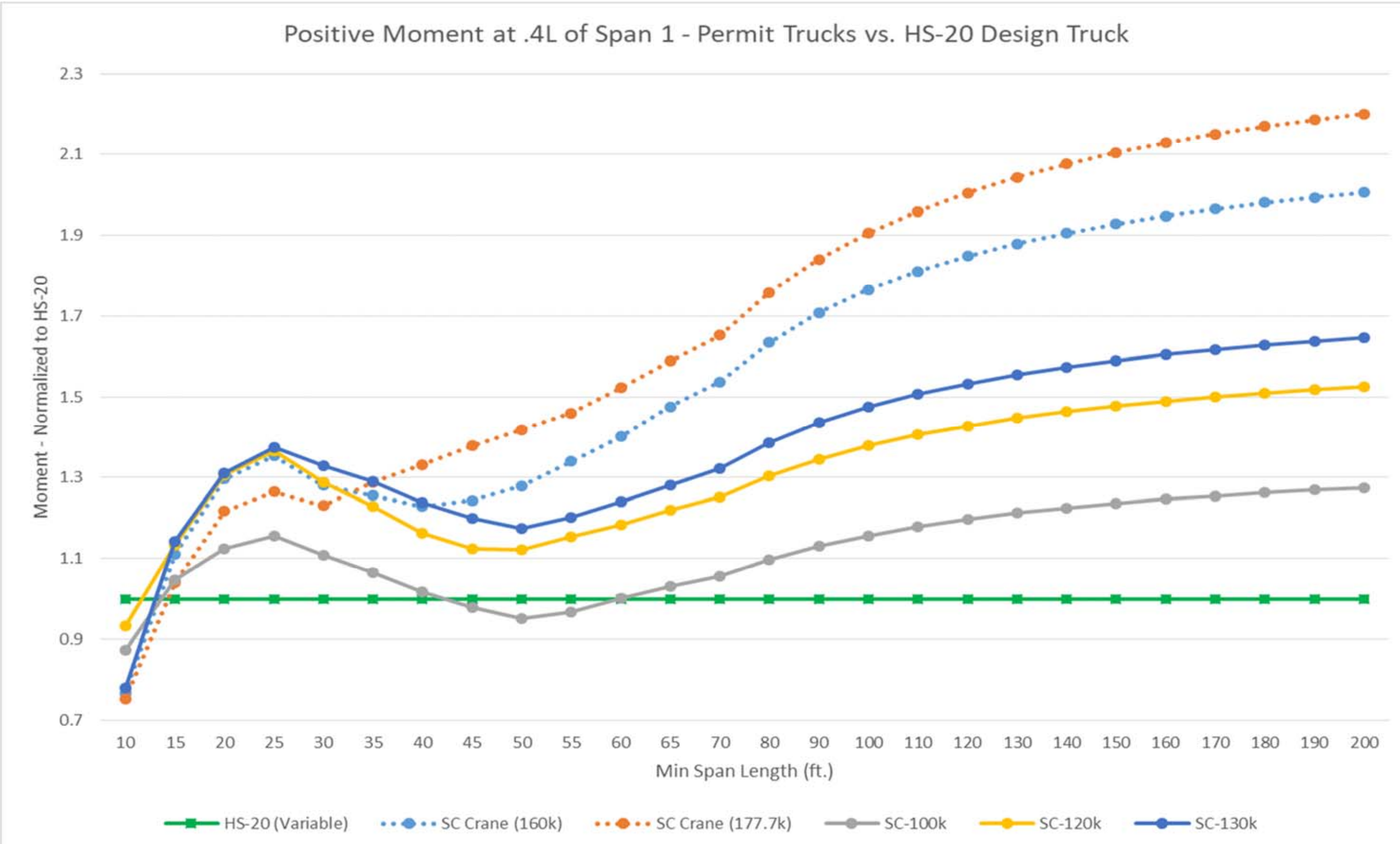
Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .4L of Span 1*



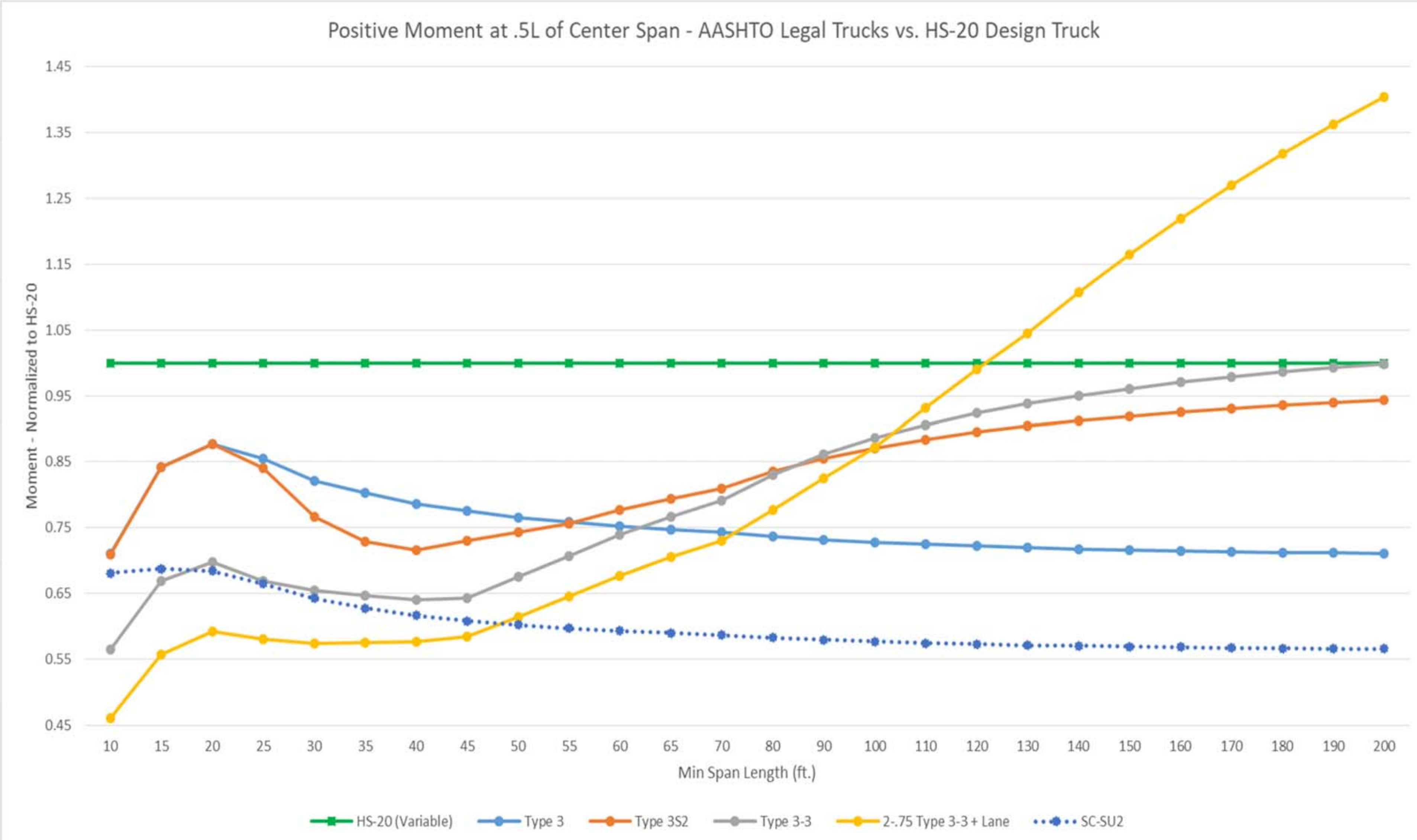

Positive Moment at .4L of Span 1 - AASHTO SU Legal Trucks vs. HS-20 Design Truck
1.15
1.05
0.95
0.85
0.75
0.65
Moment - Normalized to HS-20
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

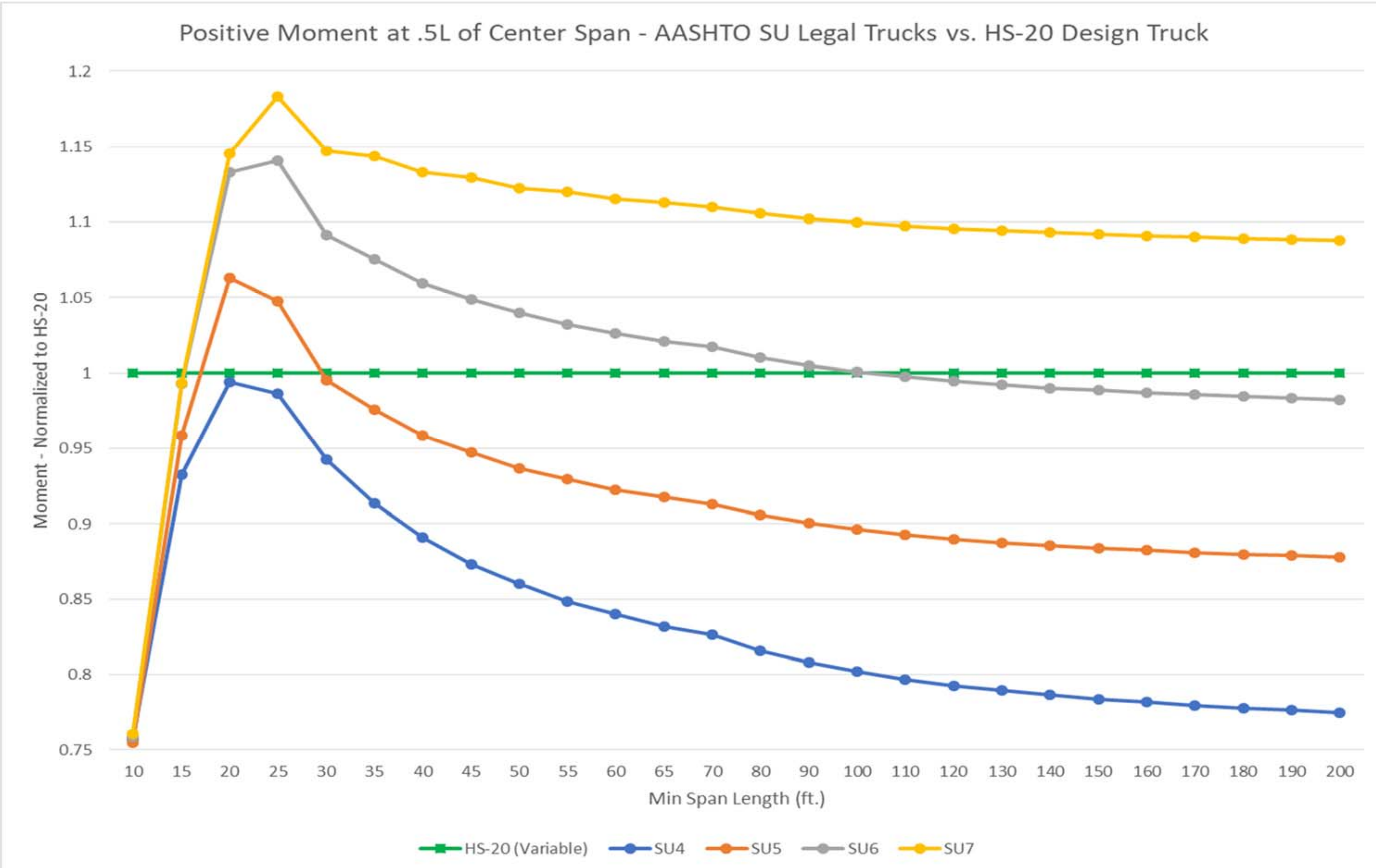

Positive Moment at .4L of Span 1 - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

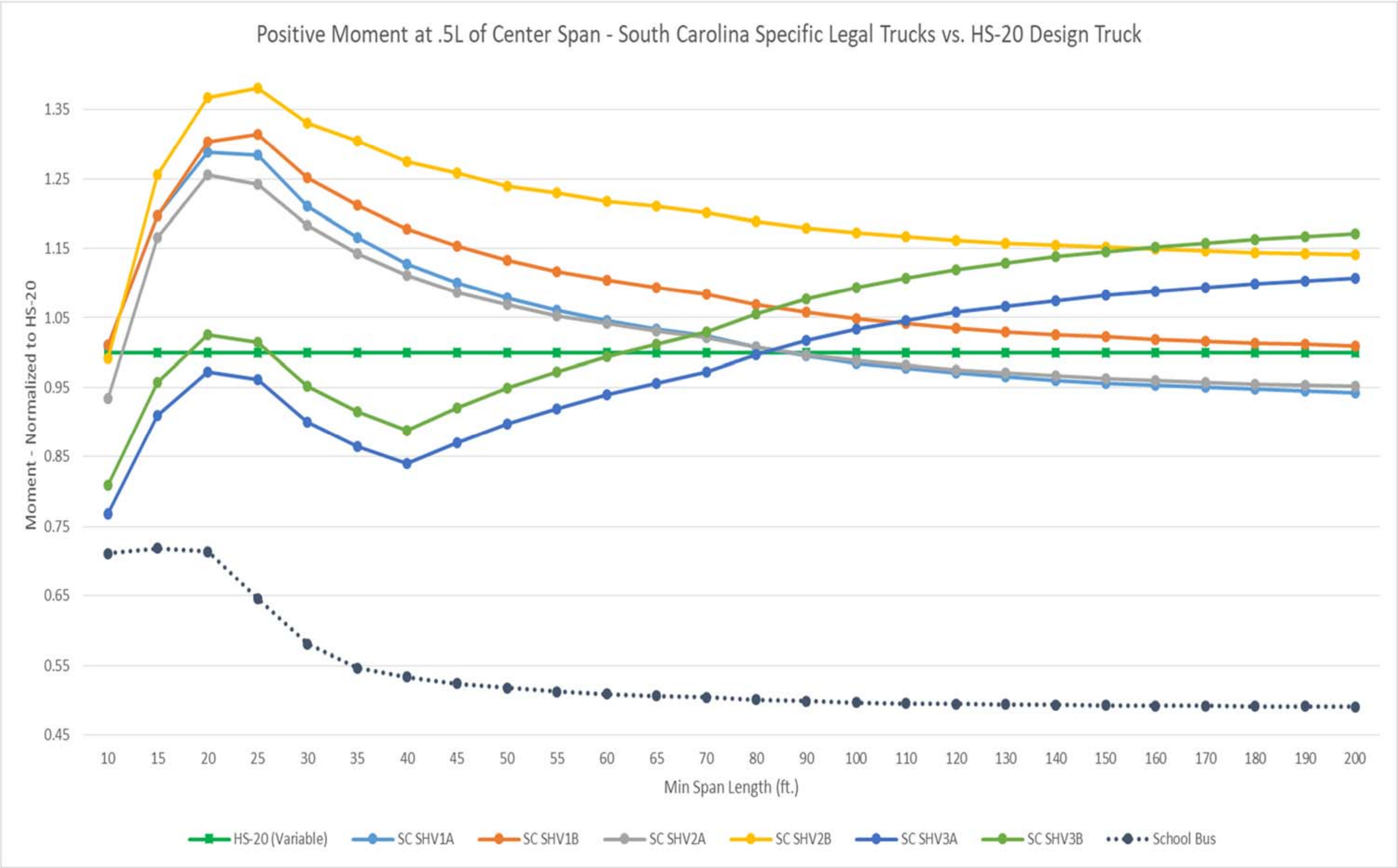
Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .4L of Span 1*



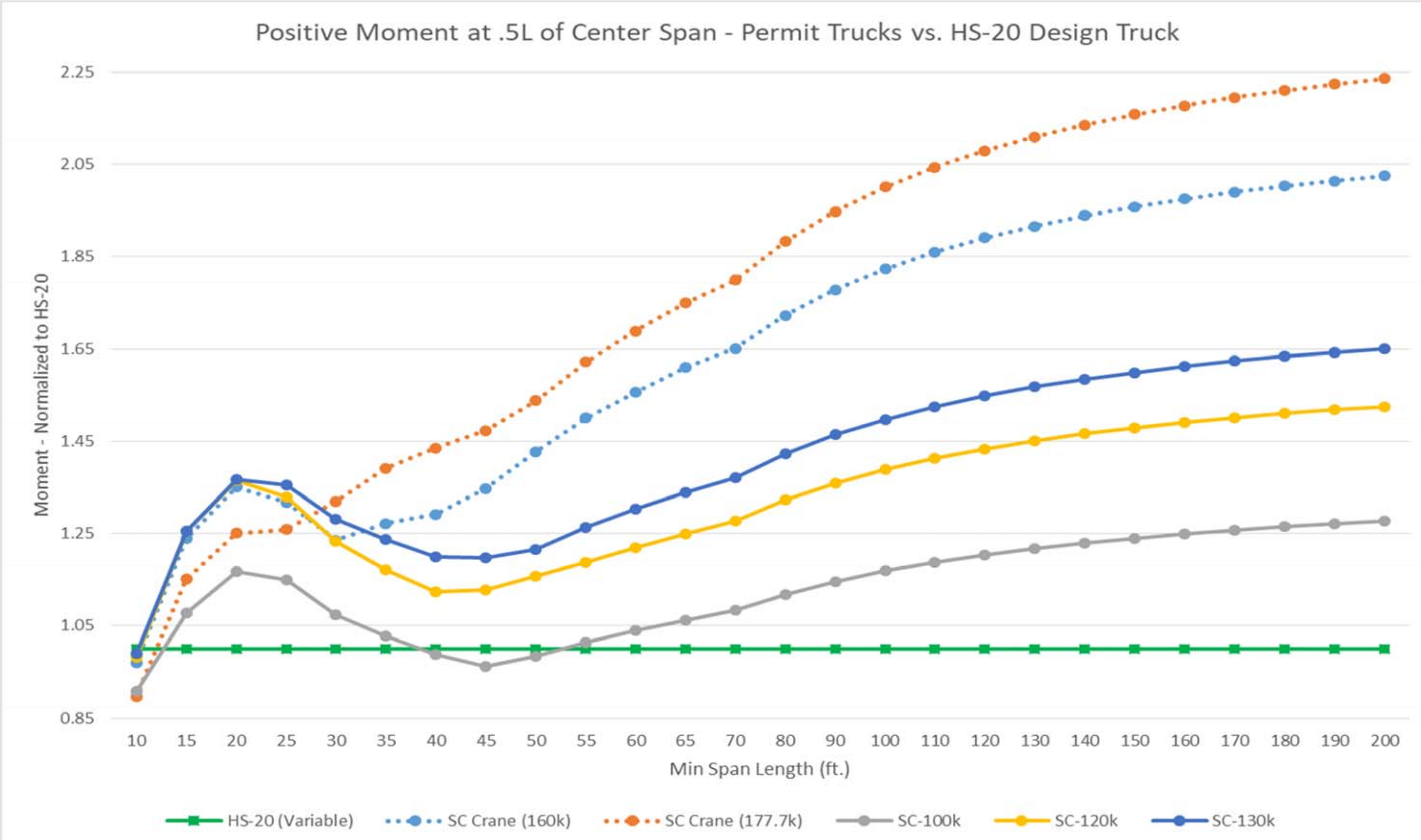
Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .5L of Center Span*



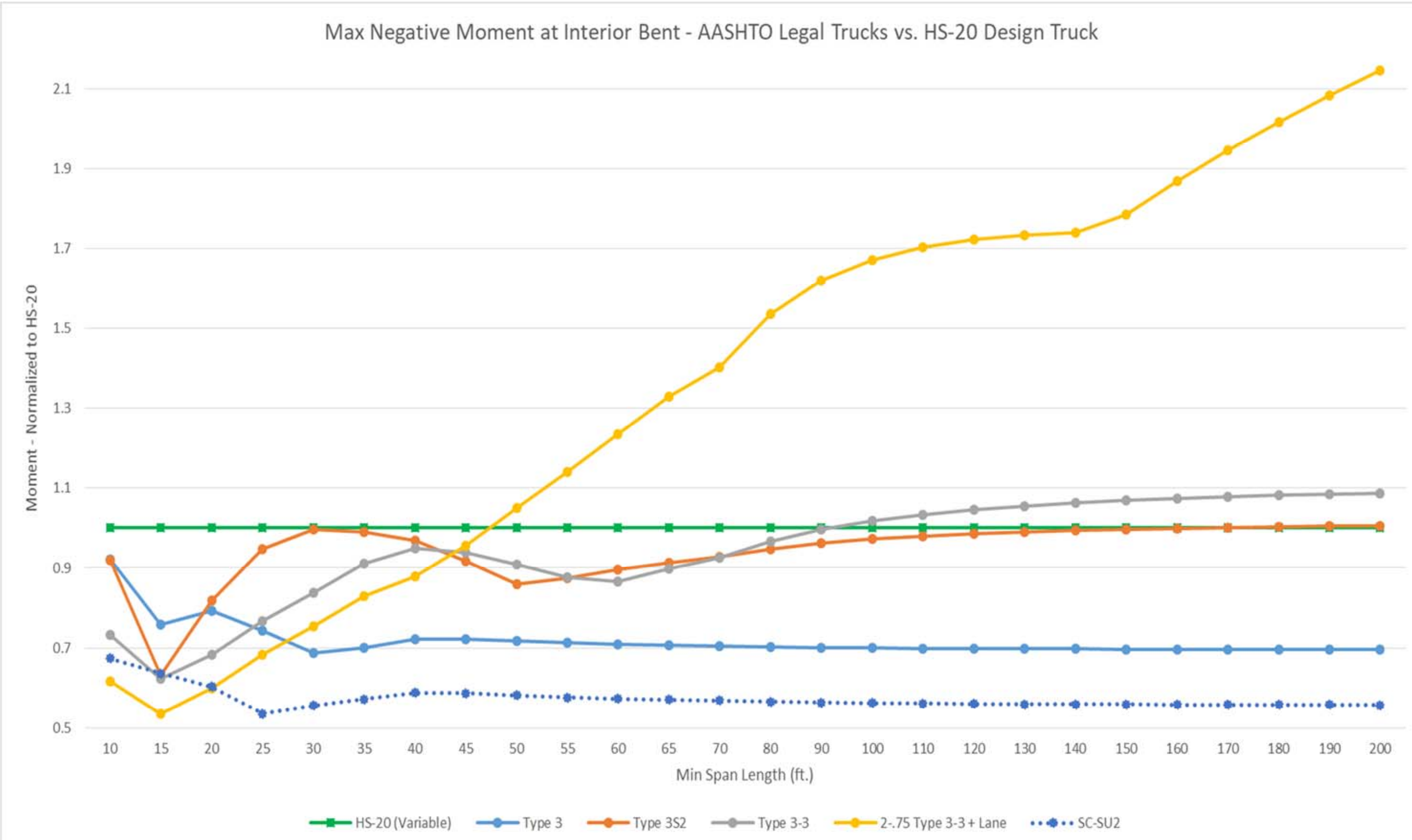

Positive Moment at .5L of Center Span - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7

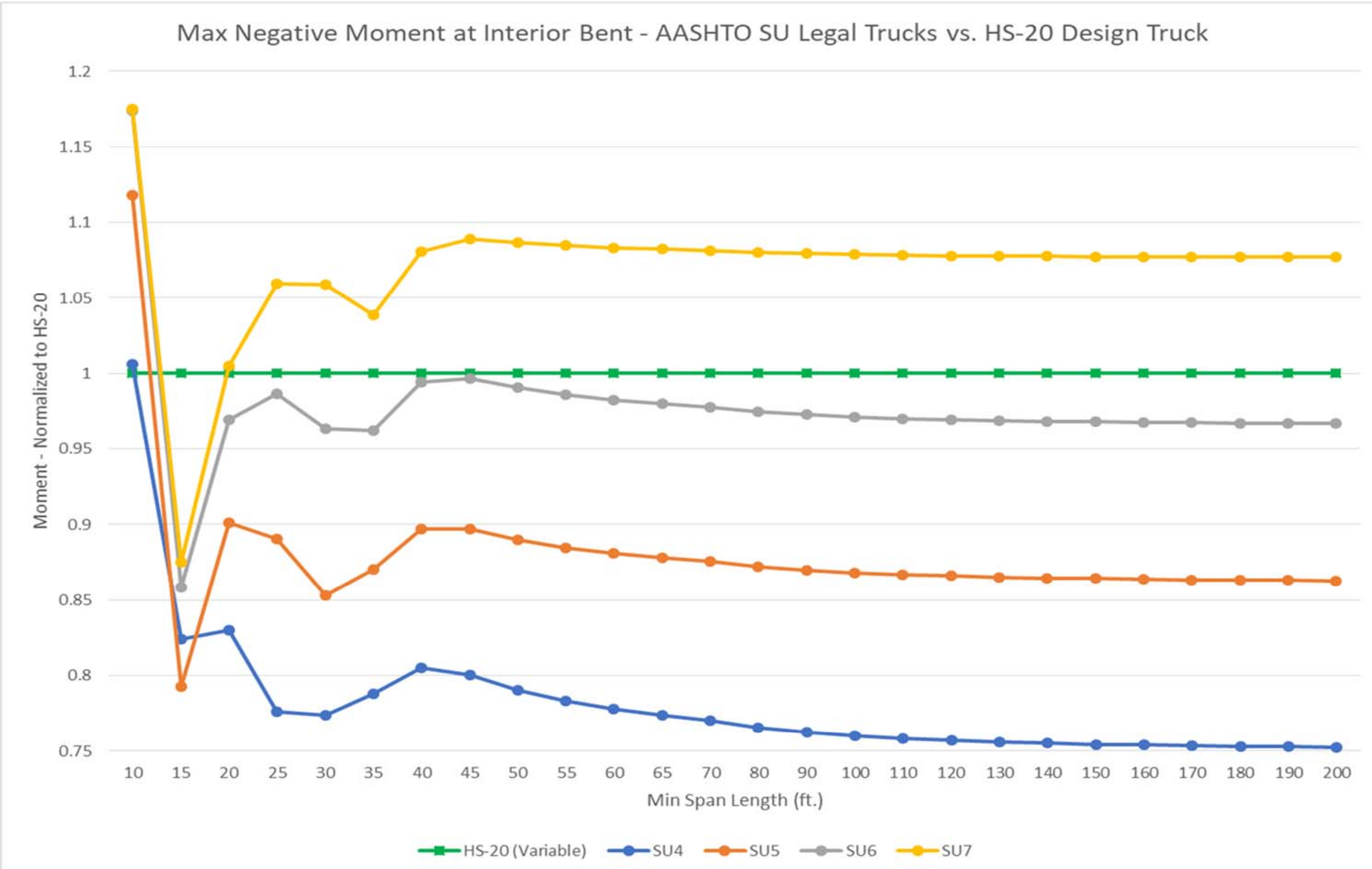

Positive Moment at .5L of Center Span - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

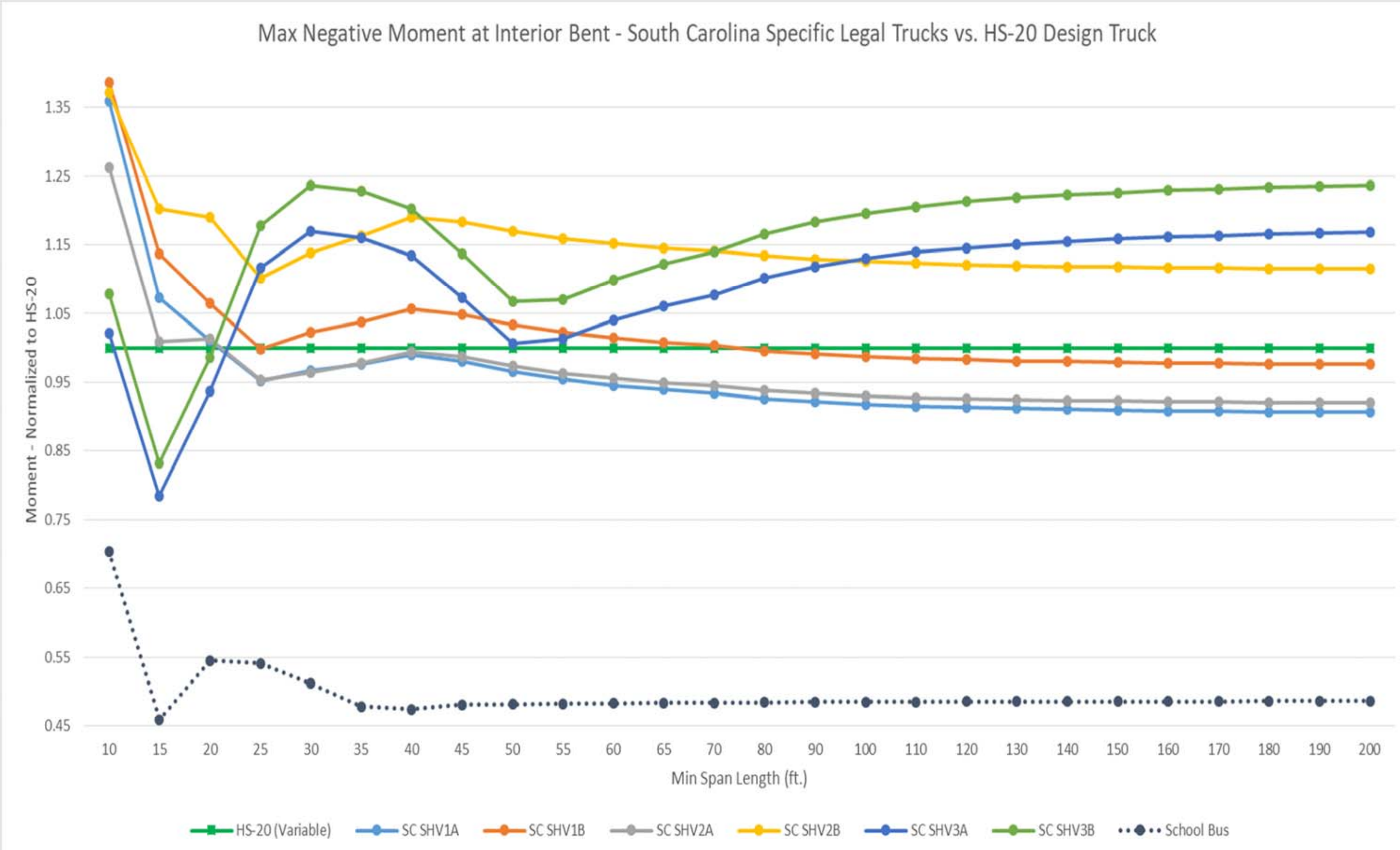
Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Positive Moment at .5L of Center Span*



Legal Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Negative Moment at Interior Bent*

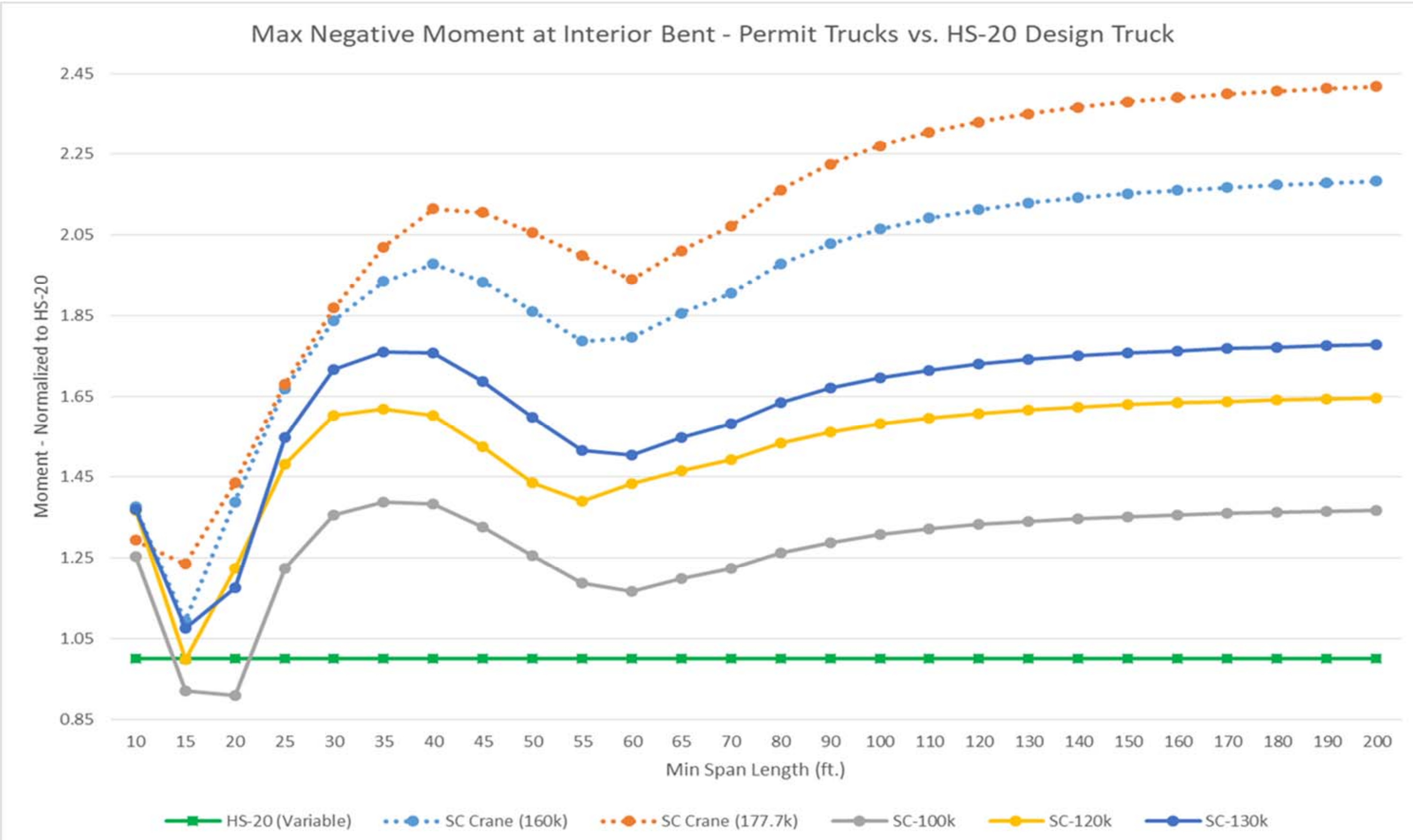



Max Negative Moment at Interior Bent - AASHTO SU Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
10 15 20 25 30 35 40 45 50 55 60 65 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Min Span Length (ft.)
HS-20 (Variable)
SU4
SU5
SU6
SU7



Max Negative Moment at Interior Bent - South Carolina Specific Legal Trucks vs. HS-20 Design Truck
Moment - Normalized to HS-20
1.35
1.25
1.15
1.05
0.95
0.85
0.75
0.65
0.55
0.45
10
15
20
25
30
35
40
45
50
55
60
65
70
80
90
100
110
120
130
140
150
160
170
180
190
200
Min Span Length (ft.)
HS-20 (Variable)
SC SHV1A
SC SHV1B
SC SHV2A
SC SHV2B
SC SHV3A
SC SHV3B
School Bus

Permit Trucks: 3-Span (Normalized to HS-20 Design Truck) – *Max Negative Moment at Interior Bent*



APPENDIX D

Raw Data (Moment and Shear)

(Note: the HL-93 Design Loading Vehicles are only included in the first page of raw data (with the South Carolina Legal Trucks), but all Legal and Permit Trucks are compared to those three Design Vehicles)

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Land Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	80.35999987	98.98000126	72.32399978	77.14	77.14	67.1118	69.426	58.6264	61.712	44.3555
-1	0	0	0	0	0	0	0	0	0	0
+1	76.075999	91.53447843	68.06019498	70.78893	70.78893	60.10934	63.06692	54.25761	57.11327	41.91484975
-2	-7.532001794	-5.708792864	-6.692862936	-4.72853	-4.72853	-3.80713	-3.80713	-3.62892	-3.81991	-4.412086589
+2	67.59200171	79.24889576	60.51053412	61.33187	61.33187	49.875	51.69544	46.99976	49.47343	37.49096438
-3	-7.532001794	-5.708792864	-6.692862936	-4.72853	-4.72853	-3.80713	-3.80713	-3.62892	-3.81991	-4.412086589
+3	67.59200171	79.24889576	60.51053412	61.33187	61.33187	49.875	51.69544	46.99976	49.47343	37.49096438
-4	-15.17599911	-11.52958222	-13.48652184	-9.61932	-9.61932	-7.59762	-7.59762	-7.25784	-7.63983	-8.824166303
+4	59.21999993	67.07531654	53.06167561	51.8748	51.8748	41.39625	42.427	39.74193	41.83361	33.07888175
-5	-15.17599911	-11.52958222	-13.48652184	-9.61932	-9.61932	-7.59762	-7.59762	-7.25784	-7.63983	-8.824166303
+5	59.21999993	67.07531654	53.06167561	51.8748	51.8748	41.39625	42.427	39.74193	41.83361	33.07888175
-6	-22.93200088	-17.46237472	-20.38098435	-14.4058	-14.4058	-11.3881	-11.3881	-10.8868	-11.4597	-13.2362484
+6	50.95999818	54.04389947	45.71360451	42.41773	42.41773	33.81525	34.56336	32.48408	34.19377	28.66679933
-7	-22.93200088	-17.46237472	-20.38098435	-14.4058	-14.4058	-11.3881	-11.3881	-10.8868	-11.4597	-13.2362484
+7	50.95999818	54.04389947	45.71360451	42.41773	42.41773	33.81525	34.56336	32.48408	34.19377	28.66679933
-8	-30.79999821	-24.2829986	-27.37624407	-19.285	-19.285	-15.428	-15.428	-14.6566	-15.428	-17.64832849
+8	42.81200086	40.25175285	38.46634983	32.96066	32.96066	26.23425	26.76625	25.22626	26.55395	24.25471915
-9	-30.79999821	-24.2829986	-27.37624407	-19.285	-19.285	-15.428	-15.428	-14.6566	-15.428	-17.64832849
+9	42.81200086	40.25175285	38.46634983	32.96066	32.96066	26.23425	26.76625	25.22626	26.55395	24.25471915
-10	-38.77999997	-34.51291386	-34.49389191	-28.3248	-28.3248	-22.5103	-23.0423	-21.6326	-22.7711	-22.06040994
+10	34.77599909	28.41417373	30.89004821	23.50359	23.50359	18.65325	19.18525	17.96843	18.91414	19.8426366
-11	-38.77999997	-34.51291386	-34.49389191	-28.3248	-28.3248	-22.5103	-23.0423	-21.6326	-22.7711	-22.06040994
+11	34.77599909	28.41417373	30.89004821	23.50359	23.50359	18.65325	19.18525	17.96843	18.91414	19.8426366
-12	-46.87199951	-46.40649572	-42.12033586	-37.7819	-37.7819	-30.0912	-30.6232	-28.8904	-30.411	-26.47249133
+12	26.85199955	21.14962465	23.82305307	16.87437	16.87437	13.4995	13.4995	12.82452	13.4995	15.43055528
-13	-46.87199951	-46.40649572	-42.12033586	-37.7819	-37.7819	-30.0912	-30.6232	-28.8904	-30.411	-26.47249133
+13	26.85199955	21.14962465	23.82305307	16.87437	16.87437	13.4995	13.4995	12.82452	13.4995	15.43055528
-14	-55.07599905	-60.25470078	-49.41800519	-47.239	-47.239	-37.6723	-38.4204	-36.1483	-38.0508	-30.88457264
+14	19.04	14.38500336	16.87819642	11.99518	11.99518	9.459625	9.459625	9.054676	9.531238	11.01847395
-15	-55.07599905	-60.25470078	-49.41800519	-47.239	-47.239	-37.6723	-38.4204	-36.1483	-38.0508	-30.88457264
+15	19.04	14.38500336	16.87819642	11.99518	11.99518	9.459625	9.459625	9.054676	9.531238	11.01847395
-16	-63.39199969	-73.34205989	-56.81646267	-56.696	-56.696	-45.2533	-46.284	-43.4061	-45.6906	-35.29665456
+16	11.34000044	8.508209016	10.03413985	7.208697	7.208697	5.669125	5.669125	5.42575	5.711316	6.606392632
-17	-63.39199969	-73.34205989	-56.81646267	-56.696	-56.696	-45.2533	-46.284	-43.4061	-45.6906	-35.29665456
+17	11.34000044	8.508209016	10.03413985	7.208697	7.208697	5.669125	5.669125	5.42575	5.711316	6.606392632
-18	-71.81999978	-85.57164478	-64.31571963	-66.1531	-66.1531	-55.082	-57.4809	-50.6639	-53.3304	-39.70873405
+18	3.752000055	2.743419666	3.290856997	2.317913	2.317913	1.878626	1.878626	1.796837	1.891408	2.194310834
-19	-71.81999978	-85.57164478	-64.31571963	-66.1531	-66.1531	-55.082	-57.4809	-50.6639	-53.3304	-39.70873405
+19	3.752000055	2.743419666	3.290856997	2.317913	2.317913	1.878626	1.878626	1.796837	1.891408	2.194310834
-20	-80.35999987	-97.91322426	-71.91578937	-75.6102	-75.6102	-65.3163	-68.8524	-57.9218	-60.9703	-44.12090031
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	***54.30656081***	***54.30656***	***43.1984***	***33.92130051***	***42.427***	***55.5408***	***55.5408***	***54.41888***	***54.72589***
-1	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+1	***49.78100443***	***50.25968***	***40.08315***	***31.61548601***	***39.49953727***	***50.09444***	***50.26372***	***50.42376***	***50.72543***
-2	***-3.337591516***	***-3.36152***	***-3.02032***	***-2.172871384***	***-4.157847072***	***-3.23606***	***-3.22878***	***-3.24522***	***-3.1685***
+2	***43.10583505***	***43.53662***	***34.72488***	***27.31098137***	***35.29926353***	***42.1344***	***42.28674***	***43.10001***	***42.7245***
-3	***-3.337591516***	***-3.36152***	***-3.02032***	***-2.172871384***	***-4.157847072***	***-3.23606***	***-3.22878***	***-3.24522***	***-3.1685***
+3	***43.10583505***	***43.53662***	***34.72488***	***27.31098137***	***35.29926353***	***42.1344***	***42.28674***	***43.10001***	***42.7245***
-4	***-6.67518101***	***-6.72305***	***-6.08219***	***-4.530051934***	***-8.315691616***	***-6.45798***	***-6.45755***	***-6.51813***	***-6.46191***
+4	***36.43065138***	***36.81358***	***29.3666***	***23.03541428***	***31.14141849***	***35.18681***	***35.26817***	***36.06295***	***35.60317***
-5	***-6.67518101***	***-6.72305***	***-6.08219***	***-4.530051934***	***-8.315691616***	***-6.45798***	***-6.45755***	***-6.51813***	***-6.46191***
+5	***36.43065138***	***36.81358***	***29.3666***	***23.03541428***	***31.14141849***	***35.18681***	***35.26817***	***36.06295***	***35.60317***
-6	***-10.01277253***	***-10.0846***	***-9.14405***	***-6.916238285***	***-12.47353869***	***-9.67991***	***-9.68633***	***-9.75228***	***-9.80537***
+6	***29.75546806***	***30.09052***	***24.00835***	***18.78890904***	***26.98357414***	***28.74296***	***28.81062***	***29.33992***	***29.12623***
-7	***-10.01277253***	***-10.0846***	***-9.14405***	***-6.916238285***	***-12.47353869***	***-9.67991***	***-9.68633***	***-9.75228***	***-9.80537***
+7	***29.75546806***	***30.09052***	***24.00835***	***18.78890904***	***26.98357414***	***28.74296***	***28.81062***	***29.33992***	***29.12623***
-8	***-13.57663919***	***-13.5766***	***-12.2059***	***-9.331423478***	***-16.63138364***	***-13.1138***	***-13.1138***	***-13.1138***	***-13.0438***
+8	***23.08028591***	***23.36748***	***18.6501***	***14.57140489***	***22.82572282***	***22.29911***	***22.35306***	***22.87162***	***22.64929***
-9	***-13.57663919***	***-13.5766***	***-12.2059***	***-9.331423478***	***-16.63138364***	***-13.1138***	***-13.1138***	***-13.1138***	***-13.0438***
+9	***23.08028591***	***23.36748***	***18.6501***	***14.57140489***	***22.82572282***	***22.29911***	***22.35306***	***22.87162***	***22.64929***
-10	***-19.7992695***	***-20.0386***	***-15.9917***	***-12.48035019***	***-20.7892303***	***-19.1337***	***-19.174***	***-19.571***	***-19.4508***
+10	***16.40510207***	***16.64444***	***13.72499***	***10.54600503***	***18.66787803***	***15.85526***	***15.89551***	***16.29252***	***16.17235***
-11	***-19.7992695***	***-20.0386***	***-15.9917***	***-12.48035019***	***-20.7892303***	***-19.1337***	***-19.174***	***-19.571***	***-19.4508***
+11	***16.40510207***	***16.64444***	***13.72499***	***10.54600503***	***18.66787803***	***15.85526***	***15.89551***	***16.29252***	***16.17235***
-12	***-26.47444808***	***-26.7616***	***-21.35***	***-16.68336008***	***-24.94707641***	***-25.5776***	***-25.6315***	***-26.1501***	***-25.9277***
+12	***11.8795598***	***11.87956***	***10.66313***	***8.116306125***	***14.51003419***	***11.47457***	***11.47457***	***11.47457***	***11.40461***
-13	***-26.47444808***	***-26.7616***	***-21.35***	***-16.68336008***	***-24.94707641***	***-25.5776***	***-25.6315***	***-26.1501***	***-25.9277***
+13	***11.8795598***	***11.87956***	***10.66313***	***8.116306125***	***14.51003419***	***11.47457***	***11.47457***	***11.47457***	***11.40461***
-14	***-33.14962852***	***-33.4847***	***-26.7082***	***-20.91536923***	***-29.10492227***	***-32.0214***	***-32.0891***	***-32.6184***	***-32.4047***
+14	***8.315688126***	***8.38749***	***7.601261***	***5.71562482***	***10.35218219***	***8.040681***	***8.0471***	***8.113058***	***8.166141***
-15	***-33.14962852***	***-33.4847***	***-26.7082***	***-20.91536923***	***-29.10492227***	***-32.0214***	***-32.0891***	***-32.6184***	***-32.4047***
+15	***8.315688126***	***8.38749***	***7.601261***	***5.71562482***	***10.35218219***	***8.040681***	***8.0471***	***8.113058***	***8.166141***
-16	***-39.82481108***	***-40.2077***	***-32.0665***	***-25.17637946***	***-33.26276856***	***-38.4653***	***-38.5466***	***-39.3414***	***-38.8816***
+16	***4.978103252***	***5.025958***	***4.539397***	***3.343943546***	***6.194338353***	***4.818757***	***4.818325***	***4.878912***	***4.822746***
-17	***-39.82481108***	***-40.2077***	***-32.0665***	***-25.17637946***	***-33.26276856***	***-38.4653***	***-38.5466***	***-39.3414***	***-38.8816***
+17	***4.978103252***	***5.025958***	***4.539397***	***3.343943546***	***6.194338353***	***4.818757***	***4.818325***	***4.878912***	***4.822746***
-18	***-46.49999437***	***-46.9308***	***-37.4248***	***-29.46639062***	***-37.42061257***	***-46.1843***	***-46.3366***	***-47.1499***	***-46.7744***
+18	***1.640511554***	***1.664439***	***1.477532***	***1.012914976***	***2.036494088***	***1.596832***	***1.58955***	***1.605996***	***1.529276***
-19	***-46.49999437***	***-46.9308***	***-37.4248***	***-29.46639062***	***-37.42061257***	***-46.1843***	***-46.3366***	***-47.1499***	***-46.7744***
+19	***1.640511554***	***1.664439***	***1.477532***	***1.012914976***	***2.036494088***	***1.596832***	***1.58955***	***1.605996***	***1.529276***
-20	***-53.17517819***	***-53.6538***	***-42.783***	***-33.78539991***	***-41.57846061***	***-54.1443***	***-54.3136***	***-54.4736***	***-54.7753***
+20	***0.00E+00***	***0.00E+00***	***0.00E+00***	***0.00E+00***	***0.00E+00***	***0.00E+00***	***0***	***0***	***0.00E+00***

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0
End Shear	60.80316641	56.77596915	62.244	65.39392	62.244
-1	0	0	0	0	0
+1	54.79283521	52.58609032	57.64644	61.28204	56.17787
-2	-3.437415916	-3.934176013	-3.85489	-4.09773	-3.4287
+2	44.51490758	44.69438824	49.93667	53.53928	45.89176
-3	-3.437415916	-3.934176013	-3.85489	-4.09773	-3.4287
+3	44.51490758	44.69438824	49.93667	53.53928	45.89176
-4	-6.867970333	-7.706505432	-7.70977	-8.2096	-6.85739
+4	37.65378244	36.80268329	42.2269	45.31552	38.038
-5	-6.867970333	-7.706505432	-7.70977	-8.2096	-6.85739
+5	37.65378244	36.80268329	42.2269	45.31552	38.038
-6	-10.3534155	-11.64372398	-11.5647	-12.3215	-10.2861
+6	30.79268363	28.9109792	34.51712	37.09177	30.71173
-7	-10.3534155	-11.64372398	-11.5647	-12.3215	-10.2861
+7	30.79268363	28.9109792	34.51712	37.09177	30.71173
-8	-13.78396998	-15.58094041	-15.561	-16.5843	-13.832
+8	23.79430582	22.07623008	26.80735	28.86801	23.85435
-9	-13.78396998	-15.58094041	-15.561	-16.5843	-13.832
+9	23.79430582	22.07623008	26.80735	28.86801	23.85435
-10	-20.35691724	-19.51815874	-22.9878	-24.7939	-20.455
+10	16.89892273	17.54709087	19.09758	20.64425	16.99694
-11	-20.35691724	-19.51815874	-22.9878	-24.7939	-20.455
+11	16.89892273	17.54709087	19.09758	20.64425	16.99694
-12	-27.2523639	-25.27489721	-30.6976	-33.0176	-27.3123
+12	12.05497716	13.60987349	13.61587	14.50945	12.103
-13	-27.2523639	-25.27489721	-30.6976	-33.0176	-27.3123
+13	12.05497716	13.60987349	13.61587	14.50945	12.103
-14	-34.25066456	-32.86178877	-38.4074	-41.2414	-34.1697
+14	8.624421693	9.67265605	9.619518	10.24668	8.557094
-15	-34.25066456	-32.86178877	-38.4074	-41.2414	-34.1697
+15	8.624421693	9.67265605	9.619518	10.24668	8.557094
-16	-41.11177534	-40.75349337	-46.1171	-49.4651	-41.496
+16	5.138974256	5.735438644	5.764647	6.134805	5.128392
-17	-41.11177534	-40.75349337	-46.1171	-49.4651	-41.496
+17	5.138974256	5.735438644	5.764647	6.134805	5.128392
-18	-49.68815879	-48.64519801	-53.8269	-57.2079	-51.0788
+18	1.708425015	1.954455	1.909761	2.022927	1.699702
-19	-49.68815879	-48.64519801	-53.8269	-57.2079	-51.0788
+19	1.708425015	1.954455	1.909761	2.022927	1.699702
-20	-59.97982621	-56.65668256	-61.5367	-65.4316	-61.3649
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 10' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***
-0	***-8.33E-15***	***-6.41E-15***	***-6.83E-15***	***-5.12E-15***	***-5.12E-15***	***-3.80E-15***	***-4.26E-15***	***-3.79E-15***	***-3.99E-15***	***-4.74E-15***
End Shear	***8.33E-15***	***6.52E-15***	***7.26E-15***	***5.35E-15***	***5.35E-15***	***4.28E-15***	***4.28E-15***	***4.07E-15***	***4.28E-15***	***4.59E-15***
-1	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+1	***38.0379995***	***45.76723921***	***34.03009749***	***35.39446549***	***35.39446549***	***30.05466976***	***31.53346234***	***27.12880495***	***28.55663679***	***20.95742487***
-2	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+2	***72.07199924***	***85.62968929***	***64.49956707***	***66.06039792***	***66.06039792***	***54.99217016***	***57.38118043***	***50.62868349***	***53.29335104***	***39.70876944***
-3	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+3	***102.1020025***	***119.5873436***	***91.40840113***	***91.99779811***	***91.99779811***	***75.15913623***	***77.54315586***	***70.49963665***	***74.21014384***	***56.25407304***
-4	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+4	***128.1280039***	***147.6402153***	***114.7566115***	***113.3457068***	***113.3457068***	***90.80907184***	***92.26874886***	***86.74171965***	***91.30707331***	***70.59333718***
-5	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+5	***150.1499998***	***169.7882914***	***134.544189***	***130.3823477***	***130.3823477***	***103.9893955***	***106.0674994***	***99.61907799***	***104.8621874***	***82.72655332***
-6	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+6	***168.1680061***	***186.0315736***	***150.7711466***	***142.6904583***	***142.6904583***	***113.9145115***	***114.9785183***	***108.938005***	***114.6715842***	***92.65373878***
-7	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+7	***182.1819937***	***195.8851454***	***163.4374157***	***150.2700204***	***150.2700204***	***120.0491237***	***120.8471272***	***114.6279979***	***120.6610504***	***100.3748729***
-8	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+8	***192.1920114***	***199.34907***	***172.5431201***	***153.1210387***	***153.1210387***	***122.3932638***	***123.4240064***	***116.6890903***	***122.8306213***	***105.889983***
-9	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+9	***198.1980038***	***196.9081802***	***178.0881741***	***151.2435413***	***151.2435413***	***126.9509883***	***130.7639335***	***115.1212545***	***121.1802679***	***109.1990331***
-10	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+10	***200.1999998***	***188.562506***	***180.0726027***	***144.6375035***	***144.6375035***	***127.1563269***	***134.3715575***	***109.924506***	***115.7100064***	***110.3020497***
-11	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+11	***198.1979949***	***196.8112046***	***178.2814805***	***151.1971884***	***151.1971884***	***127.1222384***	***130.8803185***	***115.1036333***	***121.1617192***	***109.1990257***
-12	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+12	***192.1920204***	***199.1551259***	***172.7149631***	***153.0283444***	***153.0283444***	***122.3267592***	***122.8587571***	***116.6538702***	***122.7935475***	***105.8899777***
-13	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+13	***182.1819971***	***195.5942236***	***163.5878194***	***150.1309472***	***150.1309472***	***119.9493746***	***121.4954985***	***114.5751482***	***120.6054191***	***100.3748624***
-14	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+14	***168.1679972***	***186.1285443***	***150.9000147***	***142.5050273***	***142.5050273***	***113.7814978***	***114.8454904***	***108.867511***	***114.59738***	***92.65371695***
-15	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+15	***150.1499999***	***170.2731531***	***134.6515859***	***130.1505722***	***130.1505722***	***103.8231212***	***106.0259258***	***99.53094294***	***104.7694136***	***82.72653464***
-16	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+16	***128.1280106***	***148.0281438***	***114.8425347***	***113.3920802***	***113.3920802***	***90.65613834***	***92.56801517***	***86.8121827***	***91.38124495***	***70.59331517***
-17	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+17	***102.1020038***	***119.8782794***	***91.47284102***	***92.13686464***	***92.13686464***	***74.96128428***	***77.69278774***	***70.55250624***	***74.26579604***	***56.25404265***
-18	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+18	***72.07198331***	***85.8236355***	***64.54250817***	***66.15310609***	***66.15310609***	***55.0819435***	***57.48092187***	***50.66391623***	***53.33043813***	***39.70872634***
-19	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+19	***38.03800066***	***45.86421868***	***34.05157946***	***35.44082124***	***35.44082124***	***30.0995659***	***31.58335506***	***27.14641922***	***28.57517813***	***20.95738674***
-20	***-1.70E-14***	***-2.42E-14***	***-1.53E-14***	***-2.11E-14***	***-2.11E-14***	***-1.54E-14***	***-1.66E-14***	***-1.53E-14***	***-1.61E-14***	***-9.85E-15***
+20	***4.18E-15***	***3.12E-15***	***3.53E-15***	***2.66E-15***	***2.66E-15***	***1.97E-15***	***2.14E-15***	***1.94E-15***	***2.04E-15***	***2.40E-15***

1-Span: Moment (Max and Min) Raw Data Results - 10' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*
-0	***-3.33E-15***	***-3.51E-15***	***-3.15E-15***	***-2.21E-15***	***-4.05E-15***	***-3.23E-15***	***-3.25E-15***	***-3.41E-15***	***-3.53E-15***
End Shear	***3.77E-15***	***3.77E-15***	***3.00E-15***	***2.26E-15***	***3.49E-15***	***3.64E-15***	***3.64E-15***	***3.64E-15***	***3.33E-15***
-1	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+1	***24.89050222***	***25.12984038***	***20.04157484***	***15.80774301***	***19.74976864***	***25.0472209***	***25.131858***	***25.21187973***	***25.3627156***
-2	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+2	***46.44342604***	***46.89814892***	***37.40401302***	***29.52485843***	***37.42061436***	***46.11442122***	***46.27522933***	***47.42741969***	***46.72496369***
-3	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+3	***64.65875258***	***65.30492658***	***52.08731536***	***41.15134705***	***53.0125389***	***63.2190607***	***63.43011465***	***64.98230127***	***64.26901536***
-4	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+4	***79.5364876***	***80.35022452***	***64.09148141***	***50.68708497***	***66.52553975***	***77.03858432***	***76.99390149***	***78.48668986***	***77.92435578***
-5	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+5	***91.50090059***	***92.27872487***	***73.57227226***	***58.1833494***	***77.95961427***	***88.39098614***	***88.54298446***	***90.15737451***	***89.30779098***
-6	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+6	***100.2408599***	***100.9109941***	***80.41548368***	***63.6024908***	***87.31477081***	***96.82733476***	***96.96264671***	***97.15732607***	***97.59387107***
-7	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+7	***105.6432289***	***106.1817243***	***84.57955621***	***66.93099942***	***94.59099576***	***102.0417552***	***102.1535238***	***102.3075761***	***102.6414749***
-8	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+8	***107.7080143***	***108.0909468***	***86.06450678***	***68.16888305***	***99.78831041***	***104.0342742***	***104.1156279***	***104.9104055***	***104.4506226***
-9	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+9	***106.4352052***	***106.6386357***	***84.87031993***	***67.3161315***	***102.9066881***	***105.7898726***	***105.9988353***	***106.2023681***	***106.6172421***
-10	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+10	***101.8248027***	***101.8248032***	***80.99700322***	***64.37275233***	***103.9461515***	***104.870499***	***105.0155868***	***105.1553777***	***105.4325025***
-11	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+11	***106.4069216***	***106.6223129***	***84.85994167***	***67.31274317***	***102.9066929***	***105.688455***	***105.9097137***	***106.1228837***	***106.6807313***
-12	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+12	***107.6514518***	***108.0583218***	***86.04374864***	***68.1620491***	***99.78831527***	***103.9777453***	***104.0659588***	***104.1794039***	***104.4106462***
-13	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+13	***105.5583774***	***106.1327688***	***84.5484045***	***66.92074608***	***94.59099664***	***101.9569684***	***102.0790125***	***103.2711737***	***102.5815024***
-14	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+14	***100.1277181***	***100.8456944***	***80.37397397***	***63.58882368***	***87.31476328***	***96.71427314***	***96.86329831***	***97.06870192***	***97.51388898***
-15	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+15	***91.35946704***	***92.19708399***	***73.52037184***	***58.16626936***	***77.95961617***	***88.24965305***	***88.41880816***	***89.74203398***	***89.20781306***
-16	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+16	***79.64963059***	***80.41549556***	***64.13301518***	***50.70076721***	***66.52554142***	***76.93055037***	***77.09325778***	***78.6828129***	***77.82320093***
-17	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+17	***64.7436093***	***65.35390052***	***52.11845442***	***41.16151516***	***53.01253952***	***63.30634834***	***63.52216198***	***64.84289406***	***64.16084338***
-18	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+18	***46.4999921***	***46.93078556***	***37.42476208***	***29.53163678***	***37.42061106***	***46.18424569***	***46.33658713***	***47.31599144***	***46.77434666***
-19	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
+19	***24.91879095***	***25.14615675***	***20.05194828***	***15.81113407***	***19.74976596***	***25.08213928***	***25.16254396***	***25.23924473***	***25.38740903***
-20	***-1.36E-14***	***-1.42E-14***	***-1.14E-14***	***-8.92E-15***	***-9.42E-15***	***-1.31E-14***	***-1.32E-14***	***-1.44E-14***	***-1.39E-14***
+20	***1.73E-15***	***1.79E-15***	***1.60E-15***	***1.12E-15***	***2.12E-15***	***1.68E-15***	***1.68E-15***	***1.82E-15***	***1.82E-15***

1-Span: Moment (Max and Min) Raw Data Results - 10' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*
-0	-3.82E-15	-4.35E-15	-4.04E-15	-4.59E-15	-3.61E-15
End Shear	3.82E-15	4.37E-15	4.32E-15	3.84E-15	3.84E-15
-1	0	0	0	0	0
+1	27.39641761	26.29304516	28.82321987	30.64102151	28.08893549
-2	0	0	0	0	0
+2	49.64703126	48.64023874	53.79153889	57.1701726	51.03479756
-3	0	0	0	0	0
+3	66.82379021	67.26735473	74.90500268	80.42209055	68.83764678
-4	0	0	0	0	0
+4	82.16869163	82.37513571	92.16353635	99.05283403	81.99564241
-5	0	0	0	0	0
+5	94.13445611	93.54569606	105.8324885	113.5717216	95.09499948
-6	0	0	0	0	0
+6	102.6696646	100.7790441	115.7172594	123.0168132	102.9194567
-7	0	0	0	0	0
+7	107.7743927	104.0751654	121.7471379	129.5523989	108.2676314
-8	0	0	0	0	0
+8	109.4484945	103.4340824	123.9221507	131.976134	110.6560058
-9	0	0	0	0	0
+9	114.0899947	105.8159912	122.2422697	130.2880162	117.4108499
-10	0	0	0	0	0
+10	116.6045892	107.7753873	116.7075046	124.4880049	119.7112702
-11	0	0	0	0	0
+11	114.1379873	105.8229849	122.2245889	130.2691524	117.462112
-12	0	0	0	0	0
+12	109.4896324	103.4291663	123.8867793	131.938436	110.1578312
-13	0	0	0	0	0
+13	107.8703807	104.0677886	121.6940934	129.495818	108.9269987
-14	0	0	0	0	0
+14	102.7519936	100.7692121	115.6464891	122.9413326	102.8608304
-15	0	0	0	0	0
+15	94.20304418	93.53340563	105.7440533	113.4774093	94.06931025
-16	0	0	0	0	0
+16	82.22356199	82.36038643	92.23430365	98.93963444	82.9920136
-17	0	0	0	0	0
+17	66.81350062	67.25014183	74.95805148	80.36550621	68.90358098
-18	0	0	0	0	0
+18	49.68814839	48.6451846	53.82691242	57.20788163	51.07875256
-19	0	0	0	0	0
+19	27.41699383	26.29553087	28.84089717	30.6598887	28.11091005
-20	-1.41E-14	-1.29E-14	-1.63E-14	-1.80E-14	-1.46E-14
+20	1.91E-15	2.18E-15	2.06E-15	2.26E-15	1.92E-15

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1		*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0	0	0
End Shear	32	28.16	28.16000042	22.40000033	17.85000027	22	28.80000043	28.80000043	28.21824335	28.37743928
-1	0	0	0	0	0	0	0	0	0	0
+1	30.39999962	25.81333	26.06154045	20.78462519	16.62953644	20.48200014	25.97585782	26.06363288	26.14662144	26.30304962
-2	-3.200000763	-1.73067	-1.743077379	-1.566150276	-1.130437587	-2.156000556	-1.678017921	-1.674242848	-1.682769795	-1.642987643
+2	27.20000076	22.352	22.57537865	18.00615863	14.35158614	18.30399976	21.84827638	21.92727151	22.34897901	22.15426734
-3	-3.200000763	-1.73067	-1.743077379	-1.566150276	-1.130437587	-2.156000556	-1.678017921	-1.674242848	-1.682769795	-1.642987643
+3	27.20000076	22.352	22.57537865	18.00615863	14.35158614	18.30399976	21.84827638	21.92727151	22.34897901	22.15426734
-4	-6.399999619	-3.46133	-3.486153709	-3.153845013	-2.361408833	-4.311999801	-3.348706793	-3.348484683	-3.379897959	-3.350744713
+4	24	18.89067	19.08922965	15.22769158	12.09360347	16.14800025	18.24568941	18.2878791	18.6999999	18.46158591
-5	-6.399999619	-3.46133	-3.486153709	-3.153845013	-2.361408833	-4.311999801	-3.348706793	-3.348484683	-3.379897959	-3.350744713
+5	24	18.89067	19.08922965	15.22769158	12.09360347	16.14800025	18.24568941	18.2878791	18.6999999	18.46158591
-6	-9.600000381	-5.192	-5.229231193	-4.741534601	-3.612383089	-6.468000357	-5.019398301	-5.022727531	-5.056925298	-5.084452447
+6	20.79999924	15.42933	15.60306733	12.44923528	9.85565286	13.99200111	14.90431031	14.93939568	15.21385309	15.10304745
-7	-9.600000381	-5.192	-5.229231193	-4.741534601	-3.612383089	-6.468000357	-5.019398301	-5.022727531	-5.056925298	-5.084452447
+7	20.79999924	15.42933	15.60306733	12.44923528	9.85565286	13.99200111	14.90431031	14.93939568	15.21385309	15.10304745
-8	-12.79999924	-7.04	-7.03999958	-6.329229422	-4.883356744	-8.623999811	-6.799999595	-6.799999595	-6.799999595	-6.763719379
+8	17.60000038	11.968	12.11691923	9.670779648	7.637702825	11.83599835	11.56293017	11.5909064	11.85979987	11.74450978
-9	-12.79999924	-7.04	-7.03999958	-6.329229422	-4.883356744	-8.623999811	-6.799999595	-6.799999595	-6.799999595	-6.763719379
+9	17.60000038	11.968	12.11691923	9.670779648	7.637702825	11.83599835	11.56293017	11.5909064	11.85979987	11.74450978
-10	-16	-10.2667	-10.39077064	-8.29230759	-6.539765461	-10.78000016	-9.921554523	-9.942424832	-10.14831831	-10.08597488
+10	14.39999962	8.506664	8.630770096	7.116924888	5.524328511	9.679998977	8.221550799	8.242422721	8.448288538	8.385974332
-11	-16	-10.2667	-10.39077064	-8.29230759	-6.539765461	-10.78000016	-9.921554523	-9.942424832	-10.14831831	-10.08597488
+11	14.39999962	8.506664	8.630770096	7.116924888	5.524328511	9.679998977	8.221550799	8.242422721	8.448288538	8.385974332
-12	-19.19999981	-13.728	-13.87692368	-11.0707685	-8.74771848	-12.93600022	-13.26292963	-13.2909091	-13.55979603	-13.4445157
+12	11.19999981	6.16	6.159999895	5.529232718	4.243347745	7.5240001	5.949999899	5.949999899	5.949999899	5.913719661
-13	-19.19999981	-13.728	-13.87692368	-11.0707685	-8.74771848	-12.93600022	-13.26292963	-13.2909091	-13.55979603	-13.4445157
+13	11.19999981	6.16	6.159999895	5.529232718	4.243347745	7.5240001	5.949999899	5.949999899	5.949999899	5.913719661
-14	-22.39999962	-17.1893	-17.36307771	-13.8492302	-10.97567111	-15.09200014	-16.60431216	-16.6393943	-16.91385022	-16.80305101
+14	8	4.311998	4.349229739	3.941540531	2.982376106	5.367996987	4.169396501	4.172724919	4.20692673	4.234452249
-15	-22.39999962	-17.1893	-17.36307771	-13.8492302	-10.97567111	-15.09200014	-16.60431216	-16.6393943	-16.91385022	-16.80305101
+15	8	4.311998	4.349229739	3.941540531	2.982376106	5.367996987	4.169396501	4.172724919	4.20692673	4.234452249
-16	-25.5999999	-20.6507	-20.84923108	-16.62769136	-13.2236243	-17.24800029	-19.94569413	-19.98787893	-20.39999954	-20.16158566
+16	4.800000191	2.581334	2.606148784	2.353848358	1.741404484	3.211998109	2.498707105	2.498483373	2.529899887	2.50077582
-17	-25.5999999	-20.6507	-20.84923108	-16.62769136	-13.2236243	-17.24800029	-19.94569413	-19.98787893	-20.39999954	-20.16158566
+17	4.800000191	2.581334	2.606148784	2.353848358	1.741404484	3.211998109	2.498707105	2.498483373	2.529899887	2.50077582
-18	-28.79999995	-24.112	-24.33538506	-19.40615305	-15.49157797	-19.40399926	-23.94827619	-24.02727133	-24.44897897	-24.25426722
+18	1.600000024	0.850667	0.863074354	0.766156017	0.526475228	1.055999009	0.828017533	0.82424165	0.832769406	0.792987263
-19	-28.79999995	-24.112	-24.33538506	-19.40615305	-15.49157797	-19.40399926	-23.94827619	-24.02727133	-24.44897897	-24.25426722
+19	1.600000024	0.850667	0.863074354	0.766156017	0.526475228	1.055999009	0.828017533	0.82424165	0.832769406	0.792987263
-20	-32	-27.5733	-27.82154087	-22.18461485	-17.77953068	-21.56000031	-28.07586223	-28.16363728	-28.24662585	-28.40305402
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1		*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	32	40.0000006	40.0000006	34.80000052	36.00000054	30.40000045	32.00000048	23
-1	0	0	0	0	0	0	0	0
+1	30.39999962	36.70673113	36.70673113	31.16896009	32.70257956	28.13461753	29.61538687	21.73443077
-2	-3.200000763	-2.451923627	-2.451923627	-1.974138731	-1.974138731	-1.881731261	-1.980769749	-2.287833336
+2	27.20000076	31.80288587	31.80288587	25.8620696	26.80603435	24.3711474	25.65383937	19.44047932
-3	-3.200000763	-2.451923627	-2.451923627	-1.974138731	-1.974138731	-1.881731261	-1.980769749	-2.287833336
+3	27.20000076	31.80288587	31.80288587	25.8620696	26.80603435	24.3711474	25.65383937	19.44047932
-4	-6.399999619	-4.987981019	-4.987981019	-3.939655051	-3.939655051	-3.76346139	-3.961538306	-4.575663108
+4	24	26.89903963	26.89903963	21.46551696	21.99999988	20.6076911	21.69230642	17.15264804
-5	-6.399999619	-4.987981019	-4.987981019	-3.939655051	-3.939655051	-3.76346139	-3.961538306	-4.575663108
+5	24	26.89903963	26.89903963	21.46551696	21.99999988	20.6076911	21.69230642	17.15264804
-6	-9.600000381	-7.469952397	-7.469952397	-5.905174471	-5.905174471	-5.645192765	-5.942308174	-6.863494113
+6	20.79999924	21.99519362	21.99519362	17.53448271	17.92240858	16.84422041	17.73075833	14.86481687
-7	-9.600000381	-7.469952397	-7.469952397	-5.905174471	-5.905174471	-5.645192765	-5.942308174	-6.863494113
+7	20.79999924	21.99519362	21.99519362	17.53448271	17.92240858	16.84422041	17.73075833	14.86481687
-8	-12.79999924	-9.999999404	-9.999999404	-7.999999523	-7.999999523	-7.599999547	-7.999999523	-9.15132408
+8	17.60000038	17.09134617	17.09134617	13.60344725	13.87931095	13.08076507	13.76922639	12.57698686
-9	-12.79999924	-9.999999404	-9.999999404	-7.999999523	-7.999999523	-7.599999547	-7.999999523	-9.15132408
+9	17.60000038	17.09134617	17.09134617	13.60344725	13.87931095	13.08076507	13.76922639	12.57698686
-10	-16	-14.68750052	-14.68750052	-11.67241709	-11.94827698	-11.21730922	-11.80769391	-11.43915475
+10	14.39999962	12.18749977	12.18749977	9.672412705	9.948276305	9.317308626	9.807693291	10.28915561
-11	-16	-14.68750052	-14.68750052	-11.67241709	-11.94827698	-11.21730922	-11.80769391	-11.43915475
+11	14.39999962	12.18749977	12.18749977	9.672412705	9.948276305	9.317308626	9.807693291	10.28915561
-12	-19.19999981	-19.5913406	-19.5913406	-15.60344663	-15.87931026	-14.98076988	-15.76923145	-13.72698539
+12	11.19999981	8.749999851	8.749999851	6.999999881	6.999999881	6.649999887	6.999999881	8.001325011
-13	-19.19999981	-19.5913406	-19.5913406	-15.60344663	-15.87931026	-14.98076988	-15.76923145	-13.72698539
+13	11.19999981	8.749999851	8.749999851	6.999999881	6.999999881	6.649999887	6.999999881	8.001325011
-14	-22.39999962	-24.4951916	-24.4951916	-19.53448489	-19.92240906	-18.74423162	-19.73077013	-16.01481599
+14	8	6.219954492	6.219954492	4.905172354	4.905172354	4.695191196	4.942306522	5.713494398
-15	-22.39999962	-24.4951916	-24.4951916	-19.53448489	-19.92240906	-18.74423162	-19.73077013	-16.01481599
+15	8	6.219954492	6.219954492	4.905172354	4.905172354	4.695191196	4.942306522	5.713494398
-16	-25.5999999	-29.39903223	-29.39903223	-23.4655225	-23.99999946	-22.50769264	-23.69230805	-18.30264691
+16	4.800000191	3.737981467	3.737981467	2.939655418	2.939655418	2.813456073	2.961532709	3.425663797
-17	-25.5999999	-29.39903223	-29.39903223	-23.4655225	-23.99999946	-22.50769264	-23.69230805	-18.30264691
+17	4.800000191	3.737981467	3.737981467	2.939655418	2.939655418	2.813456073	2.961532709	3.425663797
-18	-28.79999995	-34.302883	-34.302883	-28.56206947	-29.8060345	-26.27115432	-27.65384665	-20.59047656
+18	1.600000024	1.201925296	1.201925296	0.974138274	0.974138274	0.931727995	0.980766311	1.137832945
-19	-28.79999995	-34.302883	-34.302883	-28.56206947	-29.8060345	-26.27115432	-27.65384665	-20.59047656
+19	1.600000024	1.201925296	1.201925296	0.974138274	0.974138274	0.931727995	0.980766311	1.137832945
-20	-32	-39.20673411	-39.20673411	-33.86896571	-35.70258572	-30.03461798	-31.61538735	-22.87835121
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 10' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1		*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**32**	***35.16666652***	***32.83746047***	***36.00000054***	***37.82181745***	***36.00000054***
-1	**0**	***0***	***0***	***0***	***0***	***0***
+1	**30.39999962**	***31.69047728***	***30.41416444***	***33.34091368***	***35.4436339***	***32.49153902***
-2	**-3.200000763**	***-1.988094804***	***-2.275405444***	***-2.229546006***	***-2.370001023***	***-1.983051296***
+2	**27.20000076**	***25.74604255***	***25.84984861***	***28.88182097***	***30.96546051***	***26.54237393***
-3	**-3.200000763**	***-1.988094804***	***-2.275405444***	***-2.229546006***	***-2.370001023***	***-1.983051296***
+3	**27.20000076**	***25.74604255***	***25.84984861***	***28.88182097***	***30.96546051***	***26.54237393***
-4	**-6.399999619**	***-3.972221129***	***-4.457203836***	***-4.45909067***	***-4.748180854***	***-3.9661014***
+4	**24**	***21.77778048***	***21.28553111***	***24.42272747***	***26.20909411***	***21.99999988***
-5	**-6.399999619**	***-3.972221129***	***-4.457203836***	***-4.45909067***	***-4.748180854***	***-3.9661014***
+5	**24**	***21.77778048***	***21.28553111***	***24.42272747***	***26.20909411***	***21.99999988***
-6	**-9.600000381**	***-5.988094565***	***-6.734368991***	***-6.688636676***	***-7.126364404***	***-5.949152696***
+6	**20.79999924**	***17.80953362***	***16.72121411***	***19.9636341***	***21.45272777***	***17.76271021***
-7	**-9.600000381**	***-5.988094565***	***-6.734368991***	***-6.688636676***	***-7.126364404***	***-5.949152696***
+7	**20.79999924**	***17.80953362***	***16.72121411***	***19.9636341***	***21.45272777***	***17.76271021***
-8	**-12.79999924**	***-7.972220924***	***-9.011532916***	***-8.999999464***	***-9.59181691***	***-7.999999523***
+8	**17.60000038**	***13.76188885***	***12.7682071***	***15.50454176***	***16.69636272***	***13.79661592***
-9	**-12.79999924**	***-7.972220924***	***-9.011532916***	***-8.999999464***	***-9.59181691***	***-7.999999523***
+9	**17.60000038**	***13.76188885***	***12.7682071***	***15.50454176***	***16.69636272***	***13.79661592***
-10	**-16**	***-11.77380986***	***-11.28869794***	***-13.29545523***	***-14.34000147***	***-11.83050962***
+10	**14.39999962**	***9.773813032***	***10.14869339***	***11.04544809***	***11.93999608***	***9.830505177***
-11	**-16**	***-11.77380986***	***-11.28869794***	***-13.29545523***	***-14.34000147***	***-11.83050962***
+11	**14.39999962**	***9.773813032***	***10.14869339***	***11.04544809***	***11.93999608***	***9.830505177***
-12	**-19.19999981**	***-15.76192244***	***-14.61821701***	***-17.7545453***	***-19.09636188***	***-15.79660953***
+12	**11.19999981**	***6.97222508***	***7.87152891***	***7.874999866***	***8.391815045***	***6.999999881***
-13	**-19.19999981**	***-15.76192244***	***-14.61821701***	***-17.7545453***	***-19.09636188***	***-15.79660953***
+13	**11.19999981**	***6.97222508***	***7.87152891***	***7.874999866***	***8.391815045***	***6.999999881***
-14	**-22.39999962**	***-19.80952259***	***-19.00623989***	***-22.21363665***	***-23.85272828***	***-19.76271059***
+14	**8**	***4.988098145***	***5.594364401***	***5.563631061***	***5.92636414***	***4.949157718***
-15	**-22.39999962**	***-19.80952259***	***-19.00623989***	***-22.21363665***	***-23.85272828***	***-19.76271059***
+15	**8**	***4.988098145***	***5.594364401***	***5.563631061***	***5.92636414***	***4.949157718***
-16	**-25.5999999**	***-23.77777637***	***-23.57055718***	***-26.67272715***	***-28.60909369***	***-23.99999946***
+16	**4.800000191**	***2.972223399***	***3.31719991***	***3.334093224***	***3.548181291***	***2.966102716***
-17	**-25.5999999**	***-23.77777637***	***-23.57055718***	***-26.67272715***	***-28.60909369***	***-23.99999946***
+17	**4.800000191**	***2.972223399***	***3.31719991***	***3.334093224***	***3.548181291***	***2.966102716***
-18	**-28.79999995**	***-28.73809068***	***-28.1348745***	***-31.13182058***	***-33.08726795***	***-29.54237402***
+18	**1.600000024**	***0.988100067***	***1.130396183***	***1.104546563***	***1.169998186***	***0.983055129***
-19	**-28.79999995**	***-28.73809068***	***-28.1348745***	***-31.13182058***	***-33.08726795***	***-29.54237402***
+19	**1.600000024**	***0.988100067***	***1.130396183***	***1.104546563***	***1.169998186***	***0.983055129***
-20	**-32**	***-34.69047207***	***-32.7684688***	***-35.59090992***	***-37.84363447***	***-35.49152802***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 10’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1					Moment Z (kips-ft)					
-0	-2.67E-33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.55E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	15.19999981	12.9067	13.0308	10.3923	8.3148	10.2410	12.9879	13.0318	13.0733	13.1515
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	28.79999971	24.0827	24.3185	19.3954	15.5331	19.4040	23.9121	23.9955	24.5929	24.2287
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	40.80000114	33.5280	33.8631	27.0092	21.6549	27.4890	32.7815	32.8909	33.6958	33.3259
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	51.20000172	41.2427	41.6646	33.2339	26.6802	34.4960	39.9474	39.9242	40.6983	40.4067
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	60	47.4467	47.8500	38.1500	30.6355	40.4250	45.8341	45.9129	46.7500	46.3095
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	67.20000267	51.9787	52.3262	41.6985	33.5013	45.2760	50.2086	50.2788	50.3797	50.6061
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	72.79999733	54.7800	55.0592	43.8577	35.2707	49.0490	52.9125	52.9705	53.0503	53.2235
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	76.80000496	55.8507	56.0492	44.6277	35.9436	51.7440	53.9457	53.9879	54.4000	54.1616
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	79.20000172	55.1907	55.2962	44.0085	35.5201	53.3610	54.8560	54.9644	55.0699	55.2851
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	80	52.8000	52.8000	42.0000	34.0000	53.9000	54.3793	54.4545	54.5270	54.6707
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	79.1999979	55.1760	55.2877	44.0031	35.5183	53.3610	54.8035	54.9182	55.0287	55.3180
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	76.80000877	55.8213	56.0323	44.6169	35.9401	51.7440	53.9164	53.9621	54.0210	54.1409
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	72.79999876	54.7360	55.0338	43.8415	35.2654	49.0490	52.8685	52.9318	53.5500	53.1924
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	67.19999886	51.9200	52.2923	41.6769	33.4943	45.2760	50.1500	50.2273	50.3338	50.5646
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	60	47.3733	47.8077	38.1231	30.6266	40.4250	45.7608	45.8485	46.5346	46.2576
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	51.20000458	41.3013	41.6985	33.2554	26.6873	34.4960	39.8914	39.9758	40.8000	40.3543
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	40.80000162	33.5720	33.8885	27.0254	21.6602	27.4890	32.8267	32.9386	33.6235	33.2698
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	28.7999928	24.1120	24.3354	19.4062	15.5366	19.4040	23.9483	24.0273	24.5351	24.2543
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	15.20000023	12.9213	13.0392	10.3977	8.3165	10.2410	13.0060	13.0477	13.0875	13.1643
-20	-3.55E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.78E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 10' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1								
-0	**-2.67E-33**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**3.55E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**15.19999981**	**18.3534**	**18.3534**	**15.5845**	**16.3513**	**14.0673**	**14.8077**	**10.8672**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**28.79999971**	**34.2548**	**34.2548**	**28.5155**	**29.7543**	**26.2529**	**27.6346**	**20.5905**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**40.80000114**	**47.7043**	**47.7043**	**38.9728**	**40.2091**	**36.5567**	**38.4808**	**29.1699**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**51.20000172**	**58.7740**	**58.7740**	**47.0879**	**47.8448**	**44.9789**	**47.3462**	**36.6053**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**60**	**67.6082**	**67.6082**	**53.9224**	**55.0000**	**51.6562**	**54.3750**	**42.8968**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**67.20000267**	**73.9904**	**73.9904**	**59.0690**	**59.6207**	**56.4885**	**59.4615**	**48.0445**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**72.79999733**	**77.9207**	**77.9207**	**62.2500**	**62.6638**	**59.4389**	**62.5673**	**52.0482**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**76.80000496**	**79.3990**	**79.3990**	**63.4655**	**64.0000**	**60.5077**	**63.6923**	**54.9080**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**79.20000172**	**78.4255**	**78.4255**	**65.8289**	**67.8060**	**59.6947**	**62.8365**	**56.6238**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**80**	**75.0000**	**75.0000**	**65.9354**	**69.6767**	**57.0000**	**60.0000**	**57.1958**
-11	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**79.1999979**	**78.4014**	**78.4014**	**65.9177**	**67.8664**	**59.6856**	**62.8269**	**56.6238**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**76.80000877**	**79.3510**	**79.3510**	**63.4310**	**63.7069**	**60.4894**	**63.6731**	**54.9079**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**72.79999876**	**77.8486**	**77.8486**	**62.1983**	**63.0000**	**59.4115**	**62.5385**	**52.0482**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**67.19999886**	**73.8942**	**73.8942**	**59.0000**	**59.5517**	**56.4519**	**59.4231**	**48.0444**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**60**	**67.4880**	**67.4880**	**53.8362**	**54.9784**	**51.6105**	**54.3269**	**42.8968**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**51.20000458**	**58.7981**	**58.7981**	**47.0086**	**48.0000**	**45.0154**	**47.3846**	**36.6053**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**40.80000162**	**47.7764**	**47.7764**	**38.8703**	**40.2866**	**36.5841**	**38.5096**	**29.1698**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**28.7999928**	**34.3029**	**34.3029**	**28.5621**	**29.8060**	**26.2712**	**27.6538**	**20.5905**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**15.20000023**	**18.3774**	**18.3774**	**15.6078**	**16.3772**	**14.0764**	**14.8173**	**10.8672**
-20	**-3.55E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**1.78E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 10' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1						
-0	**-2.67E-33**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**3.55E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**15.19999981**	**15.8452**	**15.2071**	**16.6705**	**17.7218**	**16.2458**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**28.79999971**	**28.7143**	**28.1320**	**31.1114**	**33.0655**	**29.5169**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**40.80000114**	**38.6488**	**38.9054**	**43.3227**	**46.5136**	**39.8136**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**51.20000172**	**47.5238**	**47.6432**	**53.3045**	**57.2891**	**47.4237**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**60**	**54.4445**	**54.1039**	**61.2102**	**65.6864**	**55.0000**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**67.20000267**	**59.3810**	**58.2875**	**66.9273**	**71.1491**	**59.5254**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**72.79999733**	**62.3334**	**60.1938**	**70.4148**	**74.9291**	**62.6186**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**76.80000496**	**63.3016**	**59.8231**	**71.6727**	**76.3309**	**64.0000**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**79.20000172**	**65.9861**	**61.2007**	**70.7011**	**75.3545**	**67.9068**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**80**	**67.4405**	**62.3339**	**67.5000**	**72.0000**	**69.2373**
-11	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**79.1999979**	**66.0139**	**61.2047**	**70.6909**	**75.3436**	**67.9364**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**76.80000877**	**63.3254**	**59.8202**	**71.6523**	**76.3091**	**63.7119**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**72.79999876**	**62.3889**	**60.1896**	**70.3841**	**74.8964**	**63.0000**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**67.19999886**	**59.4286**	**58.2818**	**66.8863**	**71.1055**	**59.4915**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**60**	**54.4841**	**54.0968**	**61.1591**	**65.6318**	**54.4068**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**51.20000458**	**47.5556**	**47.6347**	**53.3455**	**57.2236**	**48.0000**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**40.80000162**	**38.6429**	**38.8954**	**43.3534**	**46.4809**	**39.8517**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**28.7999928**	**28.7381**	**28.1349**	**31.1318**	**33.0873**	**29.5424**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**15.20000023**	**15.8571**	**15.2085**	**16.6807**	**17.7327**	**16.2585**
-20	**-3.55E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**1.78E-15**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Shear (Max and Min) Raw Data Results - 15' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	88.12533344	*109.5383341*	*79.31279994*	83.56833	83.56833	79.4542	84.854	63.51193	66.85467	44.3555
-1	-2.50133542	*-1.909762056*	*-2.225810972*	-1.60708	-1.60708	-1.26676	-1.26676	-1.22138	-1.28567	-1.471769347
+1	77.09333352	*100.3392719*	*69.04122053*	76.07725	76.07725	71.03119	76.50187	58.10142	61.15939	41.20268493
-2	-7.5600018	*-5.78528291*	*-6.804001618*	-4.75645	-4.75645	-3.857	-3.857	-3.63201	-3.82317	-4.415299932
+2	71.10133385	*91.16632408*	*63.69919999*	69.7526	69.7526	64.1907	68.84462	53.25874	56.06183	38.25915417
-3	-10.11733276	*-7.751041592*	*-9.004036037*	-6.33761	-6.33761	-5.06704	-5.06704	-4.84268	-5.09756	-5.88706404
+3	68.13333178	*86.89879975*	*61.05339033*	66.59028	66.59028	60.77045	65.04434	50.83741	53.51306	36.78738778
-4	-15.28799913	*-11.73856284*	*-13.60685351*	-9.49993	-9.49993	-7.70454	-7.70454	-7.31223	-7.69708	-8.830594473
+4	62.2533321	*78.41975893*	*55.81217395*	60.26562	60.26562	53.92994	57.44378	45.99473	48.4155	33.843857
-5	-17.90133454	*-13.76032414*	*-15.93346447*	-11.0811	-11.0811	-8.9713	-8.9713	-8.5229	-8.97147	-10.3023611
+5	59.34133449	*74.20824195*	*53.21676743*	57.1033	57.1033	50.50969	53.6435	43.57339	45.86672	32.37209265
-6	-23.1840009	*-19.36302465*	*-20.63708184*	-16.0708	-16.0708	-12.7243	-12.8472	-12.2138	-12.8567	-13.24589116
+6	53.5733348	*65.84119787*	*48.07635113*	50.77865	50.77865	43.66918	46.04294	38.73071	40.76917	29.42856189
-7	-25.85333185	*-23.33187454*	*-23.01409057*	-19.2072	-19.2072	-15.2578	-15.3807	-14.5387	-15.3039	-14.71765534
+7	50.71733273	*61.68567414*	*45.53134118*	47.61632	47.61632	40.24893	42.24266	36.30937	38.22039	27.95679542
-8	-31.24799821	*-31.32558553*	*-27.81850696*	-25.5319	-25.5319	-20.3249	-20.4478	-19.3814	-20.4015	-17.66118613
+8	45.06133303	*51.53954005*	*40.49172479*	41.6416	41.6416	33.40843	34.6421	31.4667	33.12284	25.01326464
-9	-33.97333361	*-35.35043855*	*-30.2459187*	-28.6942	-28.6942	-22.8584	-22.9813	-21.8028	-22.9503	-19.13295268
+9	42.26133541	*47.44001782*	*37.99711852*	38.47928	38.47928	30.42115	30.84655	29.04535	30.57406	23.54150036
-10	-39.47999995	*-43.45614549*	*-35.1636969*	-35.1744	-35.1744	-27.9254	-28.2279	-26.6454	-28.0478	-22.07648345
+10	36.71733348	*39.29697954*	*32.67754427*	31.96023	31.96023	25.3541	25.65662	24.20267	25.4765	20.59796837
-11	-42.26133313	*-47.53700117*	*-38.02250819*	-38.5311	-38.5311	-30.459	-30.856	-29.0668	-30.5966	-23.54824892
+11	33.97333363	*35.25345746*	*30.22053373*	28.64237	28.64237	22.82058	23.1231	21.78134	22.92773	19.12620298
-12	-47.87999948	*-55.75471208*	*-43.02852453*	-44.5058	-44.5058	-36.8797	-38.4991	-33.9095	-35.6942	-26.49177829
+12	28.54133393	*27.22241286*	*25.38250033*	22.31772	22.31772	17.75354	17.87644	16.93866	17.83017	16.18267221
-13	-50.71733265	*-61.05527095*	*-45.55673269*	-47.6682	-47.6682	-40.3	-42.2994	-36.3308	-38.2429	-27.96354368
+13	25.85333408	*23.23489071*	*22.98870067*	19.15539	19.15539	15.22003	15.428	14.51733	15.2814	14.71090682
-14	-56.44799899	*-70.11236247*	*-50.66354902*	-53.9928	-53.9928	-47.1405	-49.8999	-41.1735	-43.3405	-30.90707445
+14	20.53333437	*15.75226032*	*18.2514842*	12.85667	12.85667	10.28061	10.28061	9.771067	10.28533	11.76737602
-15	-59.34133216	*-74.30521631*	*-53.24215718*	-57.1551	-57.1551	-50.5607	-53.7002	-43.5948	-45.8893	-32.37883984
+15	17.90133341	*14.09975006*	*15.9080666*	11.24958	11.24958	8.999667	8.999667	8.549683	8.999667	10.29561
-16	-65.18399962	*-82.74692962*	*-58.44977451*	-63.4798	-63.4798	-57.4012	-61.3008	-48.4375	-50.9868	-35.32237127
+16	12.69333371	*9.686976518*	*11.27165024*	7.892851	7.892851	6.418883	6.418883	6.090847	6.411418	7.352079225
-17	-68.13333279	*-86.99578503*	*-61.0787912*	-66.6421	-66.6421	-60.8215	-65.1011	-50.8588	-53.5356	-36.79413666
+17	10.11733385	*7.702552452*	*8.978650549*	6.311691	6.311691	5.048134	5.048134	4.88018	5.137032	5.88031947
-18	-74.08799969	*-95.5494888*	*-66.38720796*	-72.9668	-72.9668	-67.662	-72.7016	-55.7015	-58.6332	-39.73766772
+18	5.021333594	*3.789696633*	*4.519200234*	3.149364	3.149364	2.571333	2.571333	2.410628	2.537503	2.936788371
-19	-77.09333286	*-99.85434429*	*-69.38399943*	-76.1291	-76.1291	-71.0822	-76.5019	-58.1228	-61.1819	-41.20943315
+19	2.501333463	*1.86127241*	*2.200416746*	1.5682	1.5682	1.247854	1.247854	1.19996	1.263116	1.465017179
-20	-87.22531184	*-109.4656026*	*-78.89384975*	-83.5683	-83.5683	-77.9227	-83.9181	-63.5119	-66.8547	-44.15321805
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 15’ Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**58.83210721**	**58.83211**	**46.79827**	**37.34620037**	**44.74120012**	**64.0262**	**67.1118**	**65.6195**	**67.0594**
-1	**-1.131387611**	**-1.12146**	**-0.98262**	**-0.677617441**	**-1.390663961**	**-1.07675**	**-1.07844**	**-1.04728**	**-1.06609**
+1	**53.51459078**	**53.73094**	**42.82555**	**34.23399918**	**39.266408**	**57.47497**	**59.457**	**59.26771**	**60.52272**
-2	**-3.345672738**	**-3.36439**	**-3.07458**	**-2.235505091**	**-4.242701012**	**-3.27845**	**-3.25688**	**-3.2069**	**-3.26063**
+2	**49.05369442**	**49.2451**	**39.25141**	**31.27704102**	**36.16901707**	**52.15459**	**53.11326**	**52.91591**	**53.64374**
-3	**-4.460895661**	**-4.48585**	**-4.09577**	**-3.023733681**	**-5.598007563**	**-4.30698**	**-4.33532**	**-4.2867**	**-4.34157**
+3	**46.82324654**	**47.00218**	**37.46433**	**29.80583153**	**34.77835447**	**49.49439**	**49.94138**	**49.8678**	**50.46451**
-4	**-6.764072906**	**-6.72877**	**-6.13814**	**-4.61469186**	**-8.379331016**	**-6.54886**	**-6.49219**	**-6.55039**	**-6.50345**
+4	**42.36234979**	**42.51632**	**33.89017**	**26.87783211**	**31.997029**	**44.174**	**44.2743**	**44.53228**	**45.1269**
-5	**-7.879297423**	**-7.85024**	**-7.15933**	**-5.41742143**	**-9.769995125**	**-7.62561**	**-7.57063**	**-7.6302**	**-7.64972**
+5	**40.13190097**	**40.2734**	**32.1031**	**25.42112414**	**30.60636628**	**41.5138**	**41.60993**	**42.427**	**42.03082**
-6	**-11.16840488**	**-11.1352**	**-9.2017**	**-7.037379598**	**-12.55132119**	**-10.8157**	**-10.7125**	**-10.8371**	**-10.8747**
+6	**35.67100674**	**35.78754**	**28.52894**	**22.52216597**	**27.82504156**	**36.19341**	**36.28118**	**36.76204**	**36.68971**
-7	**-13.39885027**	**-13.3781**	**-10.671**	**-8.321704226**	**-13.94198332**	**-12.9692**	**-12.8694**	**-12.9967**	**-13.1019**
+7	**33.44055907**	**33.54462**	**26.74186**	**21.07991576**	**26.43437804**	**33.53321**	**33.6168**	**34.09428**	**34.01916**
-8	**-17.85974459**	**-17.864**	**-14.2452**	**-11.12400475**	**-16.72330947**	**-17.2761**	**-17.1831**	**-17.3159**	**-17.4257**
+8	**28.97966478**	**29.05878**	**23.16772**	**18.20995758**	**23.65305189**	**28.21282**	**28.28805**	**28.75876**	**28.67805**
-9	**-20.09019327**	**-20.1069**	**-16.0323**	**-12.53240547**	**-18.11397333**	**-19.4296**	**-19.34**	**-19.6642**	**-19.5876**
+9	**26.74921389**	**26.81586**	**21.38064**	**16.78220841**	**22.26239078**	**25.85797**	**25.78185**	**26.11702**	**26.04943**
-10	**-24.55108747**	**-24.5928**	**-19.6064**	**-15.36370597**	**-20.89529939**	**-23.7366**	**-23.6537**	**-23.9834**	**-24.042**
+10	**22.28831839**	**22.33001**	**17.80648**	**13.94124938**	**19.48106373**	**21.55099**	**21.4681**	**21.7978**	**21.85633**
-11	**-26.78153406**	**-26.8357**	**-21.3935**	**-16.78660636**	**-22.28596273**	**-25.8901**	**-25.8106**	**-26.2276**	**-26.0732**
+11	**20.05787126**	**20.08709**	**16.01941**	**12.5279997**	**18.09040068**	**19.3975**	**19.31122**	**19.63818**	**19.5638**
-12	**-31.24242834**	**-31.3215**	**-24.9676**	**-19.64690688**	**-25.06728884**	**-30.9127**	**-30.9879**	**-31.4587**	**-31.378**
+12	**15.59697675**	**15.60123**	**12.44525**	**9.716041378**	**15.30907457**	**15.09051**	**14.99747**	**15.13031**	**15.24004**
-13	**-33.47287607**	**-33.5645**	**-26.7547**	**-21.08430831**	**-26.4579519**	**-33.5729**	**-33.6523**	**-34.1264**	**-34.0485**
+13	**13.36652961**	**13.35831**	**10.65818**	**8.317291691**	**13.91841421**	**12.93702**	**12.8406**	**12.9707**	**13.07817**
-14	**-37.93377893**	**-38.0503**	**-30.3289**	**-23.97360753**	**-29.23927261**	**-38.8933**	**-38.9811**	**-39.4619**	**-39.3896**
+14	**8.97836227**	**8.961781**	**8.173165**	**6.222479695**	**11.13708802**	**8.738515**	**8.63469**	**8.696998**	**8.715804**
-15	**-40.16422554**	**-40.2932**	**-32.116**	**-25.42550792**	**-30.62993566**	**-41.5535**	**-41.6454**	**-42.1297**	**-42.0602**
+15	**7.9197067**	**7.919707**	**7.15198**	**5.414908155**	**9.746424414**	**7.649717**	**7.649717**	**7.649717**	**7.634868**
-16	**-44.62512106**	**-44.7791**	**-35.6901**	**-28.34381058**	**-33.41126241**	**-46.8739**	**-46.9742**	**-47.2322**	**-47.8268**
+16	**5.632691106**	**5.597391**	**5.109607**	**3.8142892**	**6.965098305**	**5.45605**	**5.399376**	**5.45758**	**5.410632**
-17	**-46.85556818**	**-47.022**	**-37.4772**	**-29.81021148**	**-34.80192546**	**-49.5341**	**-49.9837**	**-49.8999**	**-50.4994**
+17	**4.517467541**	**4.475931**	**4.088419**	**3.021217927**	**5.574435232**	**4.290914**	**4.320942**	**4.368015**	**4.329692**
-18	**-51.31646261**	**-51.5079**	**-41.0513**	**-32.75751085**	**-37.58325175**	**-54.8545**	**-56.3274**	**-56.1301**	**-56.8579**
+18	**2.214288655**	**2.233002**	**2.046049**	**1.449598812**	**2.828466814**	**2.185633**	**2.164064**	**2.114081**	**2.167816**
-19	**-53.54690982**	**-53.7508**	**-42.8384**	**-34.23841176**	**-39.59853319**	**-57.5147**	**-59.4993**	**-59.306**	**-60.2014**
+19	**1.099060651**	**1.111542**	**1.024861**	**0.675420866**	**1.402448309**	**1.060676**	**1.085626**	**1.034275**	**1.086876**
-20	**-58.0078046**	**-58.2366**	**-46.4126**	**-37.21471165**	**-44.71977266**	**-62.8351**	**-65.843**	**-65.8341**	**-67.0943**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 15' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	75.11544404	69.83712599	67.75158	76.076	76.076
-1	-1.144192123	-1.313312169	-1.28594	-1.36591	-1.14366
+1	67.46208107	63.33250774	61.61723	68.32431	68.4711
-2	-3.450936919	-3.833386124	-3.89025	-4.1496	-3.458
+2	60.59692048	56.94260247	56.47347	61.46596	61.60913
-3	-4.595127146	-5.145901217	-5.14377	-5.50687	-4.60616
+3	57.16435279	53.74766056	53.90157	58.03676	58.17815
-4	-6.883509636	-7.770943388	-7.71566	-8.25021	-6.89349
+4	50.29921749	47.35775461	48.75781	51.99679	51.31618
-5	-8.027701839	-9.083460431	-9.00161	-9.62188	-8.03715
+5	46.86665105	44.16281508	46.18592	49.25344	47.8852
-6	-10.98988587	-11.7085026	-12.773	-13.613	-11.4276
+6	40.00149028	37.77293412	41.04213	44.00305	41.02323
-7	-13.27826733	-13.02101771	-15.3449	-16.5926	-13.7149
+7	36.56892235	35.07900613	38.47026	41.2597	37.59224
-8	-17.85503011	-16.85214165	-20.4886	-22.0793	-18.2896
+8	29.71223891	29.81741797	33.32647	35.77301	30.73027
-9	-20.27905928	-19.29730603	-23.0605	-24.8227	-20.5769
+9	27.42386172	27.18661966	30.75458	33.02966	27.42086
-10	-25.15242887	-24.55888361	-28.2043	-30.3094	-25.1515
+10	22.84710413	21.92503088	25.61081	27.54298	22.84621
-11	-27.44081068	-27.18969375	-30.7762	-33.0527	-27.664
+11	20.55165116	19.29423202	23.03892	24.79963	20.55889
-12	-33.16176781	-32.45127133	-35.92	-38.5394	-34.1883
+12	15.54970208	14.71969928	17.89515	19.31292	15.98425
-13	-36.59434131	-35.0820793	-38.4919	-41.2828	-37.6193
+13	13.26132395	13.0194849	15.561	16.5984	13.832
-14	-43.45948871	-40.97159524	-43.6356	-46.5331	-44.4812
+14	9.163417727	10.3944527	10.27674	10.98203	9.171805
-15	-46.89206273	-44.16654092	-46.2075	-49.2765	-47.9122
+15	8.019228198	9.081926071	9.07725	9.610355	8.068667
-16	-53.75720461	-50.55643525	-51.3513	-54.7632	-54.7742
+16	5.730841326	6.456893928	6.418909	6.867013	5.74082
-17	-57.18977795	-53.75138205	-53.9232	-58.0656	-58.2052
+17	4.586652281	5.144377831	5.132972	5.495337	4.597159
-18	-64.05492557	-60.14128146	-59.067	-64.9239	-65.0671
+18	2.29827395	2.630053555	2.5935	2.7664	2.305333
-19	-67.48749975	-63.33622774	-62.244	-68.3531	-68.4981
+19	1.135711607	1.311780687	1.275133	1.380319	1.134656
-20	-74.35264796	-69.72612849	-68.5639	-75.2115	-75.3601
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.68E-14	-1.24E-14	-1.49E-14	-1.01E-14	-1.01E-14	-8.53E-15	-8.53E-15	-8.10E-15	-8.53E-15	-9.67E-15
End Shear	1.68E-14	1.39E-14	1.48E-14	1.13E-14	1.13E-14	8.83E-15	9.37E-15	8.88E-15	9.35E-15	9.35E-15
-1	0	0	0	0	0	0	0	0	0	0
+1	58.08600014	75.70227323	52.02031539	57.65087452	57.65087452	53.9178766	57.73092002	43.61622267	45.91181333	30.95772689
-2	0	0	0	0	0	0	0	0	0	0
+2	111.8879989	144.4439049	100.6991988	110.558261	110.558261	102.4217744	109.4778189	83.52012683	87.91592298	59.60653449
-3	0	0	0	0	0	0	0	0	0	0
+3	155.6799965	197.9022994	139.5121282	151.5194545	151.5194545	139.5177571	147.4238986	115.147517	121.2079127	82.989353
-4	0	0	0	0	0	0	0	0	0	0
+4	198.9120059	251.3098426	178.2971538	192.6555992	192.6555992	174.7703192	184.1717571	145.6499401	153.3157264	105.9671431
-5	0	0	0	0	0	0	0	0	0	0
+5	228.4100043	285.433748	204.8548777	216.9562492	216.9562492	196.3135022	206.6401941	164.8867519	173.565002	121.7750996
-6	0	0	0	0	0	0	0	0	0	0
+6	261.0720093	322.1252426	234.2221202	244.5618058	244.5618058	216.3365871	225.3083652	186.0681102	195.8611687	139.081858
-7	0	0	0	0	0	0	0	0	0	0
+7	276.275997	339.7149357	248.0485412	256.9648618	256.9648618	227.809023	239.8926369	195.5016949	205.7912578	147.3149475
-8	0	0	0	0	0	0	0	0	0	0
+8	298.3680175	356.0172893	267.9980147	269.0957573	269.0957573	246.9359376	261.5102901	204.6942194	215.4675994	158.9506939
-9	0	0	0	0	0	0	0	0	0	0
+9	299.2780142	356.8909046	269.09315	269.504	269.504	253.0624546	271.5569202	204.9272357	215.7128797	159.6089214
-10	0	0	0	0	0	0	0	0	0	0
+10	310.8000003	351.5312471	279.6247489	265.1687643	265.1687643	257.6320038	278.2853875	201.5282603	212.1350108	165.5736272
-11	0	0	0	0	0	0	0	0	0	0
+11	299.2780329	356.8181721	269.2645607	269.4651115	269.4651115	253.0667134	271.5143938	204.9111688	215.6959671	159.6038692
-12	0	0	0	0	0	0	0	0	0	0
+12	298.3680314	355.8718371	268.1503772	269.0180055	269.0180055	247.0437178	261.567022	204.6620848	215.4337735	158.9506879
-13	0	0	0	0	0	0	0	0	0	0
+13	276.2759977	339.8604221	248.1818488	257.0426362	257.0426362	227.8785201	239.9068259	195.5338478	205.825103	147.2997601
-14	0	0	0	0	0	0	0	0	0	0
+14	261.0719969	322.5616345	234.3363737	244.4062621	244.4062621	216.2826964	225.2799972	186.0038362	195.7935118	139.0818369
-15	0	0	0	0	0	0	0	0	0	0
+15	228.4100306	285.4337761	204.9501186	216.9562808	216.9562808	196.2213338	206.640194	164.8867741	173.5650254	121.7497997
-16	0	0	0	0	0	0	0	0	0	0
+16	198.9120172	251.6008237	178.3733371	192.8111516	192.8111516	174.7689124	184.058346	145.5535529	153.2142662	105.9671216
-17	0	0	0	0	0	0	0	0	0	0
+17	155.6799837	198.120512	139.5692698	151.4416697	151.4416697	139.4908119	147.4097159	115.1153772	121.1740813	82.95390474
-18	0	0	0	0	0	0	0	0	0	0
+18	111.8879761	144.0802262	100.2611957	109.8000625	109.8000625	102.2147387	109.2792895	83.55224222	87.94972865	59.60648977
-19	0	0	0	0	0	0	0	0	0	0
+19	58.08600951	75.41136047	52.27740845	57.6897841	57.6897841	53.81440594	57.63169615	43.592138	45.88646106	30.91220026
-20	-1.67E-14	-1.19E-14	-1.49E-14	-1.07E-14	-1.07E-14	-8.47E-15	-8.56E-15	-7.83E-15	-8.24E-15	-9.17E-15
+20	3.39E-14	3.91E-14	2.96E-14	3.08E-14	3.08E-14	2.51E-14	2.51E-14	2.32E-14	2.45E-14	1.86E-14

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.51E-15	-7.27E-15	-6.73E-15	-4.50E-15	-9.30E-15	-7.25E-15	-7.11E-15	-7.21E-15	-7.08E-15
End Shear	7.51E-15	7.47E-15	6.39E-15	4.80E-15	8.83E-15	7.35E-15	7.58E-15	7.80E-15	7.84E-15
-1	0	0	0	0	0	0	0	0	0
+1	40.19655329	40.29820532	32.11916392	25.74437439	29.62658248	43.60501976	44.86553234	45.20265058	45.48115108
-2	0	0	0	0	0	0	0	0	0
+2	76.92621179	77.2320296	61.55770735	49.32543499	57.27644943	82.89145899	84.75757486	85.44633304	86.01529568
-3	0	0	0	0	0	0	0	0	0
+3	106.5038882	106.528984	84.79614354	67.85029426	79.11750701	113.4511016	114.6962669	114.7560796	114.8054901
-4	0	0	0	0	0	0	0	0	0
+4	134.3844846	134.51592	107.1860386	85.94088035	100.5519803	142.4977282	142.8143084	143.3570034	143.1502617
-5	0	0	0	0	0	0	0	0	0
+5	152.7371995	152.7371999	121.4955	97.2297503	116.0997184	160.3491059	160.4207521	160.605021	161.0297486
-6	0	0	0	0	0	0	0	0	0
+6	171.8899509	172.0898632	137.0392199	109.8988974	131.7888749	178.0544432	178.2524068	182.8516414	183.3856966
-7	0	0	0	0	0	0	0	0	0
+7	180.7875165	180.9623238	144.0396674	115.6085663	140.5659562	186.6759665	186.7270139	196.0469578	196.1043532
-8	0	0	0	0	0	0	0	0	0
+8	189.3213939	189.477498	150.8087087	121.09432	150.5098009	200.4222178	200.1529378	207.4457718	207.7277525
-9	0	0	0	0	0	0	0	0	0
+9	189.67294	189.7603431	150.9919119	121.3923962	152.516234	204.381302	204.3042782	207.8331854	207.9766761
-10	0	0	0	0	0	0	0	0	0
+10	186.6788082	186.6788089	148.4945079	119.527132	156.7147497	206.0091779	206.1465038	207.3137486	207.3137467
-11	0	0	0	0	0	0	0	0	0
+11	189.648696	189.7454665	150.9822694	121.3890961	152.4985623	204.4153375	204.33473	207.8044888	207.950476
-12	0	0	0	0	0	0	0	0	0
+12	189.2729292	189.4477371	150.7894283	121.0877628	150.4037468	200.5470124	200.2645901	207.3883921	207.6753671
-13	0	0	0	0	0	0	0	0	0
+13	180.8359963	180.9921008	144.0589612	115.6151349	140.5129162	186.6504452	186.7041807	196.0584408	196.1148381
-14	0	0	0	0	0	0	0	0	0
+14	171.792995	172.0303515	137.0006455	109.8857474	131.5767329	178.0126018	178.4122497	182.9262582	183.3280321
-15	0	0	0	0	0	0	0	0	0
+15	152.7372206	152.7372214	121.4955175	97.22976396	116.0113428	160.3774698	160.446132	161.0297478	160.7467641
-16	0	0	0	0	0	0	0	0	0
+16	134.239051	134.4266441	107.1281556	85.92113487	100.2691432	142.6168427	142.2814549	143.2583277	143.4804277
-17	0	0	0	0	0	0	0	0	0
+17	106.4554017	106.4992228	84.77685961	67.84368298	78.99375603	113.4199025	114.6835758	114.744595	114.7950008
-18	0	0	0	0	0	0	0	0	0
+18	76.97469351	77.26179278	61.57700431	49.33201166	56.48090583	82.70994814	84.60532642	85.38604854	85.88948285
-19	0	0	0	0	0	0	0	0	0
+19	40.16019114	40.31310288	32.12882155	25.74769389	29.69890463	43.47068911	44.78943664	45.13381767	45.41830058
-20	-7.40E-15	-6.54E-15	-6.19E-15	-4.31E-15	-9.38E-15	-7.20E-15	-7.02E-15	-7.28E-15	-7.28E-15
+20	2.22E-14	2.01E-14	1.64E-14	1.31E-14	1.80E-14	2.14E-14	2.18E-14	2.10E-14	2.07E-14

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.02E-14	-1.02E-14	-8.35E-15	-9.04E-15	-7.66E-15
End Shear	8.17E-15	8.72E-15	9.45E-15	1.01E-14	8.40E-15
-1	0	0	0	0	0
+1	50.5965608	47.49938081	46.21292447	51.24323266	51.35332667
-2	0	0	0	0	0
+2	96.04427078	90.20634946	89.47574901	97.34267904	97.56017582
-3	0	0	0	0	0
+3	130.402834	120.9322363	122.1214291	132.1172136	132.1503068
-4	0	0	0	0	0
+4	162.5344816	151.6581657	154.2484167	164.7160789	164.9844282
-5	0	0	0	0	0
+5	182.238932	169.8171668	175.0612499	186.7319991	185.2089942
-6	0	0	0	0	0
+6	198.5108226	184.3554374	197.3005208	210.4192857	202.0025885
-7	0	0	0	0	0
+7	211.3501227	196.2912129	207.4475785	221.2601313	215.0950286
-8	0	0	0	0	0
+8	231.0545963	214.209562	217.2056377	234.3659672	234.5091454
-9	0	0	0	0	0
+9	239.6031863	222.3783697	217.5136104	243.3135391	243.4141705
-10	0	0	0	0	0
+10	246.329519	227.6909214	213.9637602	249.0480509	249.387988
-11	0	0	0	0	0
+11	239.594723	222.3755871	217.497398	243.2919385	243.3939207
-12	0	0	0	0	0
+12	231.0800327	214.2133032	217.1732189	234.3947873	234.5361718
-13	0	0	0	0	0
+13	211.3564845	196.2921505	207.480016	221.2947392	215.1017889
-14	0	0	0	0	0
+14	198.4980986	184.3721796	197.2356647	210.3501375	201.9890733
-15	0	0	0	0	0
+15	182.207157	169.8218366	175.0612746	186.7320262	185.2089945
-16	0	0	0	0	0
+16	162.4836785	151.6693306	154.1511788	164.6584704	164.930422
-17	0	0	0	0	0
+17	130.3964746	120.9406109	122.0889986	132.1100072	132.1435509
-18	0	0	0	0	0
+18	96.08239961	90.21192006	88.60043743	97.38592229	97.60069647
-19	0	0	0	0	0
+19	50.61563716	47.50219444	46.68302135	51.26487255	51.37361301
-20	-7.63E-15	-8.75E-15	-7.56E-15	-8.81E-15	-7.68E-15
+20	2.28E-14	2.10E-14	2.32E-14	2.62E-14	2.16E-14

1-Span: Shear (Max and Min) Raw Data Results - 15' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**34.13333344**	***30.50666695***	***30.50666695***	***24.26666689***	***19.7500002***	***23.20000006***	***33.20000029***	***34.80000031***	***34.02618855***	***34.77282693***
-1	**-1.066667557**	***-0.586667156***	***-0.581520938***	***-0.509523944***	***-0.352197274***	***-0.721111725***	***-0.558333791***	***-0.559210988***	***-0.543055288***	***-0.552808714***
+1	**29.86666679**	***27.74933408***	***27.86151954***	***22.20666419***	***18.08740949***	***20.36111382***	***29.80293966***	***30.83069955***	***30.73254097***	***31.38331603***
-2	**-3.200000763**	***-1.734857526***	***-1.744561729***	***-1.594287486***	***-1.164156128***	***-2.200000525***	***-1.700000405***	***-1.688815958***	***-1.662897611***	***-1.690761455***
+2	**27.73333359**	***25.43619104***	***25.53544222***	***20.35333485***	***16.50862641***	***18.75499977***	***27.04412104***	***27.54122905***	***27.43889338***	***27.81630385***
-3	**-4.266666412**	***-2.313142681***	***-2.32608169***	***-2.123811731***	***-1.576190658***	***-2.902778098***	***-2.233333198***	***-2.24802654***	***-2.222817264***	***-2.251269029***
+3	**26.66666603**	***24.27961968***	***24.37240299***	***19.42666609***	***15.72424503***	***18.03388876***	***25.66470882***	***25.8964903***	***25.85833393***	***26.16775324***
-4	**-6.399999619**	***-3.507426967***	***-3.489122465***	***-3.182857085***	***-2.410260235***	***-4.344999231***	***-3.395832117***	***-3.366446515***	***-3.396625447***	***-3.372282996***
+4	**24.53333282**	***21.96647643***	***22.04631658***	***17.57332953***	***14.16544056***	***16.59166658***	***22.9058845***	***22.95789635***	***23.09166704***	***23.39999974***
-5	**-7.466667175**	***-4.085712949***	***-4.070643382***	***-3.712382236***	***-2.832295273***	***-5.066111032***	***-3.954166036***	***-3.925658017***	***-3.95654819***	***-3.966666937***
+5	**23.46666718**	***20.80990457***	***20.88327822***	***16.64666869***	***13.39105997***	***15.8705555***	***21.52647266***	***21.57631627***	***22.00000033***	***21.79456432***
-6	**-9.600000381**	***-5.791239243***	***-5.774034944***	***-4.771427576***	***-3.686364844***	***-6.508333519***	***-5.608332689***	***-5.554822868***	***-5.619443639***	***-5.638950492***
+6	**21.33333397**	***18.49676264***	***18.55719194***	***14.79333222***	***11.85227689***	***14.42833371***	***18.76764866***	***18.81316107***	***19.06250197***	***19.02500043***
-7	**-10.66666603**	***-6.94780932***	***-6.937074976***	***-5.533333317***	***-4.360606289***	***-7.229444293***	***-6.724998649***	***-6.673244192***	***-6.739282896***	***-6.793838864***
+7	**20.26666641**	***17.34019138***	***17.39415294***	***13.86666368***	***11.08787439***	***13.70722222***	***17.38823642***	***17.43158052***	***17.67916953***	***17.64021538***
-8	**-12.79999924**	***-9.260951302***	***-9.263156805***	***-7.386666247***	***-5.832727379***	***-8.671666824***	***-8.958332388***	***-8.910088466***	***-8.978967591***	***-9.035871122***
+8	**18.13333321**	***15.02704941***	***15.06807559***	***12.01333432***	***9.569091309***	***12.26499969***	***14.62941238***	***14.66841993***	***14.91250018***	***14.87065145***
-9	**-13.86666679**	***-10.41752309***	***-10.42619853***	***-8.313333391***	***-6.573788164***	***-9.392778494***	***-10.07500005***	***-10.02850699***	***-10.19662605***	***-10.15688386***
+9	**17.06666756**	***13.87047648***	***13.90503725***	***11.08666637***	***8.814689356***	***11.54388944***	***13.40833469***	***13.36886056***	***13.54266043***	***13.50761123***
-10	**-16**	***-12.73066501***	***-12.75228032***	***-10.16666719***	***-8.065909244***	***-10.83500098***	***-12.30833373***	***-12.26535121***	***-12.43630853***	***-12.46666694***
+10	**14.9333334**	***11.55733388***	***11.57895029***	***9.23332934***	***7.315905829***	***10.10166644***	***11.17500035***	***11.13201787***	***11.30297936***	***11.33333342***
-11	**-17.0666666**	***-13.8872357***	***-13.91532092***	***-11.09333337***	***-8.816969855***	***-11.55611238***	***-13.42500029***	***-13.3837731***	***-13.5999997***	***-13.51992746***
+11	**13.86666679**	***10.4007629***	***10.41591162***	***8.306668222***	***6.571503607***	***9.380555186***	***10.05833349***	***10.01359791***	***10.18313487***	***10.1445665***
-12	**-19.19999981**	***-16.20037767***	***-16.24140162***	***-12.94666718***	***-10.32909094***	***-12.99833489***	***-16.02941183***	***-16.06841937***	***-16.31249958***	***-16.27065085***
+12	**11.73333359**	***8.08762082***	***8.089825206***	***6.453331639***	***5.092720448***	***7.938332677***	***7.824999658***	***7.776755693***	***7.84563488***	***7.902534139***
-13	**-20.26666641**	***-17.35694896***	***-17.40444288***	***-13.87333395***	***-11.0901521***	***-13.71944615***	***-17.40882416***	***-17.45000003***	***-17.6958322***	***-17.65543607***
+13	**10.66666698**	***6.931049838***	***6.926786532***	***5.526670517***	***4.358318224***	***7.217222821***	***6.70833496***	***6.658333562***	***6.725794703***	***6.781522343***
-14	**-22.39999962**	***-19.67009537***	***-19.73052468***	***-15.72666686***	***-12.62227251***	***-15.16166586***	***-20.16764546***	***-20.21315788***	***-20.46249881***	***-20.42499994***
+14	**8.533333778**	***4.655619534***	***4.647021304***	***4.238094287***	***3.256364894***	***5.77500027***	***4.531249727***	***4.477412439***	***4.509721729***	***4.519472989***
-15	**-23.46666622**	***-20.82666608***	***-20.89356526***	***-16.65333303***	***-13.39333312***	***-15.88277711***	***-21.54705719***	***-21.59473515***	***-21.84583287***	***-21.80978401***
+15	**7.466666698**	***4.106666684***	***4.106666684***	***3.708571388***	***2.830992044***	***5.053888729***	***3.966666684***	***3.966666684***	***3.966666684***	***3.958966845***
-16	**-25.5999999**	***-23.13980869***	***-23.21964775***	***-18.5066665***	***-14.94545532***	***-17.32499995***	***-24.30588178***	***-24.35789364***	***-24.49166703***	***-24.79999979***
+16	**5.333333492**	***2.920762824***	***2.902458585***	***2.649524006***	***1.990258855***	***3.61166622***	***2.829167896***	***2.799780106***	***2.829961226***	***2.805616592***
-17	**-26.66666651**	***-24.29637966***	***-24.38268866***	***-19.43333296***	***-15.7265162***	***-18.04611121***	***-25.68529385***	***-25.9184216***	***-25.87499914***	***-26.1858669***
+17	**4.266666889**	***2.342477335***	***2.320939246***	***2.119999295***	***1.574886143***	***2.890554956***	***2.225000747***	***2.2405712***	***2.264980688***	***2.245108528***
-18	**-28.79999995**	***-26.60952171***	***-26.70877057***	***-21.28666775***	***-17.29863669***	***-19.48833381***	***-28.44411791***	***-29.20789532***	***-29.10555332***	***-29.48297322***
+18	**2.133333445**	***1.148192199***	***1.157895975***	***1.060953831***	***0.754152872***	***1.466666743***	***1.133333392***	***1.122148954***	***1.096230628***	***1.124094449***
-19	**-29.86666656**	***-27.76609272***	***-27.87181151***	***-22.21333422***	***-18.08969757***	***-20.53333326***	***-29.82352724***	***-30.85263047***	***-30.75237708***	***-31.21667128***
+19	**1.066666722**	***0.569904408***	***0.576376576***	***0.531429064***	***0.351058266***	***0.727222353***	***0.550000283***	***0.562937829***	***0.536310478***	***0.563586328***
-20	**-33.74664318**	***-30.07923495***	***-30.1978937***	***-24.06666749***	***-19.68181834***	***-23.18888912***	***-32.58235156***	***-34.14210454***	***-34.13748007***	***-34.7909404***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 15' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	34.13333344	43.33333373	43.33333373	41.20000035	44.00000036	32.93333364	34.66666698	23
-1	-1.066667557	-0.833334029	-0.833334029	-0.656863284	-0.656863284	-0.633333862	-0.666667223	-0.763167927
+1	29.86666679	39.4489242	39.4489242	36.83235102	39.6691061	30.12777783	31.71345035	21.36514645
-2	-3.200000763	-2.466399443	-2.466399443	-2.000000477	-2.000000477	-1.883333685	-1.982456511	-2.289499576
+2	27.73333359	36.1693545	36.1693545	33.2852985	35.69853278	27.61666681	29.07017559	19.83881471
-3	-4.266666412	-3.286291604	-3.286291604	-2.627450821	-2.627450821	-2.511110915	-2.643274647	-3.052664786
+3	26.66666603	34.5295698	34.5295698	31.51176853	33.72794336	26.36111301	27.74854001	19.07564832
-4	-6.399999619	-4.926074118	-4.926074118	-3.995096609	-3.995096609	-3.791664668	-3.991225966	-4.578996356
+4	24.53333282	31.24999981	31.24999981	27.96470865	29.78676583	23.85000184	25.1052651	17.54931657
-5	-7.466667175	-5.745967554	-5.745967554	-4.651960043	-4.651960043	-4.419444184	-4.652046509	-5.342162875
+5	23.46666718	29.61021453	29.61021453	26.19117913	27.81617774	22.59444428	23.78362556	16.78615123
-6	-9.600000381	-8.333334327	-8.333334327	-6.598038457	-6.6617643	-6.333334088	-6.666667461	-6.86849425
+6	21.33333397	26.33064639	26.33064639	22.64411969	23.87500062	20.08333324	21.14035078	15.25981949
-7	-10.66666603	-9.959678092	-9.959678092	-7.911763116	-7.975488845	-7.538885103	-7.93566853	-7.631659497
+7	20.26666641	24.69086027	24.69086027	20.87058967	21.90441138	18.82777973	19.81871551	14.49665306
-8	-12.79999924	-13.23924948	-13.23924948	-10.53921457	-10.6029403	-10.04999617	-10.57894334	-9.157991251
+8	18.13333321	21.59273807	21.59273807	17.32353017	17.96323415	16.31666867	17.17544071	12.97032131
-9	-13.86666679	-14.87903644	-14.87903644	-11.85294123	-11.91666707	-11.30555508	-11.9005843	-9.921157731
+9	17.06666756	19.95295944	19.95295944	15.7745114	15.99509767	15.06111114	15.8538012	12.20715601
-10	-16	-18.23925058	-18.23925058	-14.48039262	-14.6372531	-13.81666128	-14.54385398	-11.44748947
+10	14.9333334	16.57258364	16.57258364	13.14705923	13.30392466	12.54999934	13.21052562	10.68082363
-11	-17.0666666	-19.97983889	-19.97983889	-15.79411799	-15.99999964	-15.07222364	-15.86549857	-12.21065539
+11	13.86666679	14.85214892	14.85214892	11.83333352	11.99019895	11.29444623	11.88889077	9.917657756
-12	-19.19999981	-23.07795791	-23.07795791	-19.12352954	-19.96323338	-17.58332987	-18.50876828	-13.73698641
+12	11.73333359	11.57258058	11.57258058	9.205881951	9.269607736	8.783335043	9.245615835	8.391326009
-13	-20.26666641	-24.71774408	-24.71774408	-20.89705971	-21.93382307	-18.8388834	-19.83040358	-14.50015228
+13	10.66666698	9.932794906	9.932794906	7.892158777	8.000000268	7.527781932	7.923980981	7.628160135
-14	-22.39999962	-27.9973154	-27.9973154	-24.44411567	-25.87500017	-21.34999927	-22.47368344	-16.02648403
+14	8.533333778	6.666667014	6.666667014	5.330882032	5.330882032	5.066666931	5.333333611	6.101828374
-15	-23.46666622	-29.63709427	-29.63709427	-26.21764501	-27.84558771	-22.60555198	-23.79531787	-16.7896499
+15	7.466666698	5.833333358	5.833333358	4.666666687	4.666666687	4.433333352	4.666666687	5.338662172
-16	-25.5999999	-32.91666657	-32.91666657	-29.76470514	-31.7867619	-25.11666862	-26.43859855	-18.31598199
+16	5.333333492	4.092741141	4.092741141	3.328432819	3.328432819	3.158334064	3.324562173	3.812330425
-17	-26.66666651	-34.55645224	-34.55645224	-31.53823497	-33.75735092	-26.37222173	-27.7602334	-19.07914787
+17	4.266666889	3.272849883	3.272849883	2.617647938	2.617647938	2.53055751	2.663744747	3.049167472
-18	-28.79999995	-37.8360237	-37.8360237	-35.08529446	-37.69852817	-28.88332805	-30.40350322	-20.60547976
+18	2.133333445	1.633064037	1.633064037	1.333333403	1.333333403	1.250001337	1.315790881	1.522835557
-19	-29.86666656	-39.47580943	-39.47580943	-36.85882072	-39.66911635	-30.13888119	-31.72513809	-21.36864566
+19	1.066666722	0.813171111	0.813171111	0.647059156	0.647059156	0.622224713	0.654973382	0.759666673
-20	-33.74664318	-43.33333373	-43.33333373	-40.4058806	-43.51470194	-32.93333364	-34.66666698	-22.89510918
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 15' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**34.13333344**	***43.44444421***	***40.39162868***	***39.18542***	***44***	***44***
-1	**-1.066667557**	***-0.661765253***	***-0.759579045***	***-0.74375***	***-0.79***	***-0.66146***
+1	**29.86666679**	***39.01797633***	***36.62955913***	***35.6375***	***39.51666***	***39.60156***
-2	**-3.200000763**	***-1.995914933***	***-2.217111697***	***-2.25***	***-2.4***	***-2***
+2	**27.73333359**	***35.04738027***	***32.93383601***	***32.6625***	***35.55***	***35.63281***
-3	**-4.266666412**	***-2.65767909***	***-2.976229738***	***-2.975***	***-3.185***	***-2.66406***
+3	**26.66666603**	***33.06208953***	***31.08598066***	***31.175***	***33.56667***	***33.64844***
-4	**-6.399999619**	***-3.981208581***	***-4.494472752***	***-4.4625***	***-4.77167***	***-3.98698***
+4	**24.53333282**	***29.09150809***	***27.39025715***	***28.2***	***30.07333***	***29.67969***
-5	**-7.466667175**	***-4.64297388***	***-5.253591921***	***-5.20625***	***-5.565***	***-4.64844***
+5	**23.46666718**	***27.10621807***	***25.54240317***	***26.7125***	***28.48666***	***27.69531***
-6	**-9.600000381**	***-6.356209297***	***-6.771834932***	***-7.3875***	***-7.87334***	***-6.60938***
+6	**21.33333397**	***23.13562191***	***21.84669411***	***23.7375***	***25.45***	***23.72656***
-7	**-10.66666603**	***-7.679738191***	***-7.530952982***	***-8.875***	***-9.59667***	***-7.93229***
+7	**20.26666641**	***21.15033103***	***20.28860968***	***22.25***	***23.86333***	***21.74219***
-8	**-12.79999924**	***-10.3267959***	***-9.746756302***	***-11.85***	***-12.77***	***-10.5781***
+8	**18.13333321**	***17.18463789***	***17.2454702***	***19.275***	***20.69***	***17.77344***
-9	**-13.86666679**	***-11.72877922***	***-11.16096358***	***-13.3375***	***-14.3567***	***-11.901***
+9	**17.06666756**	***15.86111146***	***15.72389801***	***17.7875***	***19.10333***	***15.85938***
-10	**-16**	***-14.54738512***	***-14.20409694***	***-16.3125***	***-17.53***	***-14.5469***
+10	**14.9333334**	***13.21405676***	***12.68075817***	***14.8125***	***15.93001***	***13.21354***
-11	**-17.0666666**	***-15.87091422***	***-15.72567597***	***-17.8***	***-19.1167***	***-16***
+11	**13.86666679**	***11.88643792***	***11.15918567***	***13.325***	***14.34334***	***11.89063***
-12	**-19.19999981**	***-19.17973847***	***-18.76880933***	***-20.775***	***-22.29***	***-19.7734***
+12	**11.73333359**	***8.993465633***	***8.513417744***	***10.35***	***11.17***	***9.244792***
-13	**-20.26666641**	***-21.16503257***	***-20.2903871***	***-22.2625***	***-23.8767***	***-21.7578***
+13	**10.66666698**	***7.669938662***	***7.530066454***	***9***	***9.6***	***8***
-14	**-22.39999962**	***-25.135621***	***-23.69670054***	***-25.2375***	***-26.9133***	***-25.7266***
+14	**8.533333778**	***5.299836742***	***6.011829209***	***5.943747***	***6.351667***	***5.304688***
-15	**-23.46666622**	***-27.1209154***	***-25.54455808***	***-26.725***	***-28.5***	***-27.7109***
+15	**7.466666698**	***4.638072989***	***5.252704494***	***5.25***	***5.558331***	***4.666667***
-16	**-25.5999999**	***-31.09150064***	***-29.24027487***	***-29.7***	***-31.6733***	***-31.6797***
+16	**5.333333492**	***3.314540963***	***3.73446728***	***3.712498***	***3.971668***	***3.320313***
-17	**-26.66666651**	***-33.07679465***	***-31.08813305***	***-31.1875***	***-33.5833***	***-33.6641***
+17	**4.266666889**	***2.652777491***	***2.975348659***	***2.968752***	***3.178333***	***2.658854***
-18	**-28.79999995**	***-37.04738321***	***-34.78385278***	***-34.1625***	***-37.55***	***-37.6328***
+18	**2.133333445**	***1.329250405***	***1.521141443***	***1.5***	***1.6***	***1.333333***
-19	**-29.86666656**	***-39.0326777***	***-36.63171067***	***-36***	***-39.5333***	***-39.6172***
+19	**1.066666722**	***0.656860386***	***0.758693283***	***0.737497***	***0.798334***	***0.65625***
-20	**-33.74664318**	***-43.00326661***	***-40.32743117***	***-39.6552***	***-43.5***	***-43.5859***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	22.4000001	20.8434	20.8961	16.6550	13.6131	15.3625	22.6108	23.2645	23.4393	23.5837
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	43.19999957	39.8891	40.0477	31.9200	26.0795	29.7000	42.9823	43.9500	44.3071	44.6022
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	59.99999857	55.2263	55.2393	43.9700	35.8932	41.0254	58.8287	59.4743	59.5054	59.5310
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	76.80000257	69.6834	69.7516	55.5800	45.4568	52.1400	73.8904	74.0546	74.3360	74.2288
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	88.00000191	79.2000	79.2000	63.0000	51.4625	60.2021	83.1471	83.1842	83.2798	83.5000
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	100.800004	89.1314	89.2351	71.0600	58.1591	68.3375	92.3279	92.4306	94.8155	95.0924
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	106.3999987	93.7451	93.8358	74.6900	61.2159	72.8888	96.7985	96.8250	101.6577	101.6875
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	115.2000074	98.1703	98.2512	78.2000	64.1318	78.0450	103.9265	103.7868	107.5685	107.7147
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	115.200006	98.3526	98.3979	78.2950	64.3267	79.0854	105.9794	105.9395	107.7693	107.8438
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	120	96.8000	96.8000	77.0000	63.3750	81.2625	106.8235	106.8947	107.5000	107.5000
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	115.2000139	98.3400	98.3902	78.2900	64.3250	79.0763	105.9971	105.9553	107.7545	107.8302
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	115.2000132	98.1452	98.2358	78.1900	64.1284	77.9900	103.9912	103.8447	107.5387	107.6875
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	106.3999987	93.7703	93.8512	74.7000	61.2193	72.8612	96.7853	96.8132	101.6637	101.6929
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	100.7999983	89.0811	89.2042	71.0400	58.1523	68.2275	92.3062	92.5135	94.8542	95.0625
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	88.00001264	79.2000	79.2000	63.0000	51.4625	60.1563	83.1618	83.1974	83.5000	83.3533
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	76.80000687	69.6080	69.7053	55.5500	45.4466	51.9933	73.9522	73.7783	74.2848	74.4000
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	59.99999249	55.2011	55.2239	43.9600	35.8898	40.9612	58.8125	59.4678	59.4994	59.5255
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	43.1999892	39.9143	40.0632	31.9300	26.0830	29.2875	42.8882	43.8711	44.2759	44.5369
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	22.40000349	20.8246	20.9039	16.6600	13.6148	15.4000	22.5412	23.2250	23.4036	23.5511
-20	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.42E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	22.4000001	29.8942	29.8942	27.9585	29.9357	22.6167	23.8070	16.0527
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	43.19999957	57.3286	57.3286	53.1096	56.7684	43.3083	45.5877	30.9082
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	59.99999857	78.5686	78.5686	72.3452	76.4449	59.7083	62.8509	43.0331
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	76.80000257	99.8992	99.8992	90.6250	95.5000	75.5250	79.5000	54.9480
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	88.00000191	112.5000	112.5000	101.7960	107.1507	85.5000	90.0000	63.1450
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	100.800004	126.8145	126.8145	112.1787	116.8309	96.4833	101.5614	72.1192
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	106.3999987	133.2460	133.2460	118.1276	124.3934	101.3750	106.7105	76.3884
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	115.2000074	139.5363	139.5363	128.0456	135.6030	106.1417	111.7281	82.4219
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	115.200006	139.7480	139.7480	131.2224	140.8125	106.2625	111.8553	82.7632
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	120	137.5000	137.5000	133.5919	144.3015	104.5000	110.0000	85.8562
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	115.2000139	139.7278	139.7278	131.2246	140.7905	106.2542	111.8465	82.7606
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	115.2000132	139.4960	139.4960	128.1015	135.6324	106.1250	111.7105	82.4219
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	106.3999987	133.2863	133.2863	118.1636	124.4007	101.3917	106.7281	76.3805
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	100.7999983	126.7339	126.7339	112.1507	116.8162	96.4500	101.5263	72.1192
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	88.00001264	112.5000	112.5000	101.7482	107.1507	85.5000	90.0000	63.1319
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	76.80000687	99.9799	99.9799	90.6243	95.4412	75.4750	79.4474	54.9479
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	59.99999249	78.5282	78.5282	72.3312	76.4375	59.6917	62.8333	43.0147
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	43.1999892	56.9355	56.9355	53.0022	56.6654	43.3250	45.6053	30.9082
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	22.40000349	29.9143	29.9143	27.9048	29.8842	22.6042	23.7939	16.0291
-20	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.42E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 15' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	22.4000001	29.2635	27.4722	26.7281	29.6375	29.7012
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	43.19999957	55.5490	52.1726	51.7500	56.3000	56.4258
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	59.99999857	75.4210	69.9435	70.6312	76.4125	76.4316
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	76.80000257	94.0049	87.7144	89.2125	95.2667	95.4219
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	88.00000191	105.4013	98.2170	101.2500	108.0000	107.1191
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	100.800004	114.8125	106.6255	114.1125	121.7000	116.8320
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	106.3999987	122.2384	113.5288	119.9812	127.9700	124.4043
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	115.2000074	133.6348	123.8922	125.6250	135.5500	135.6328
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	115.200006	138.5791	128.6168	125.8031	140.7250	140.7832
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	120	142.4694	131.6894	123.7500	144.0417	144.2383
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000
+11	115.2000139	138.5742	128.6151	125.7938	140.7125	140.7715
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	115.2000132	133.6495	123.8943	125.6063	135.5667	135.6485
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	106.3999987	122.2420	113.5293	120.0000	127.9900	124.4082
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	100.7999983	114.8051	106.6352	114.0750	121.6600	116.8242
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	88.00001264	105.3830	98.2197	101.2500	108.0000	107.1191
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	76.80000687	93.9755	87.7208	89.1563	95.2334	95.3906
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	59.99999249	75.4173	69.9483	70.6125	76.4083	76.4277
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	43.1999892	55.5711	52.1758	51.2437	56.3250	56.4492
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	22.40000349	29.2745	27.4738	27.0000	29.6500	29.7129
-20	-7.11E-15	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.42E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem*	*HL-93 Truck Train*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**108.3040006**	***116.2175004***	***97.47360036***	**94.01438**	**96.425**	**87.9396**	**96.425**	**70.28012**	**74.23267**	**44.3555**
-1	**-1.875998211**	***-1.439592405***	***-1.671298414***	**-1.18857**	**-1.18857**	**-0.95189**	**-0.95189**	**-0.90865**	**-0.95647**	**-1.104435091**
+1	**99.68554658**	***109.1618271***	***89.14229732***	**87.59441**	**89.51119**	**81.55516**	**88.68628**	**65.41533**	**69.0615**	**41.9640443**
-2	**-7.588001773**	***-5.842376329***	***-6.760801528***	**-4.75429**	**-4.75429**	**-3.83845**	**-3.83845**	**-3.64568**	**-3.83756**	**-4.417739529**
+2	**86.92374838**	***98.34146765***	***77.79149407***	**78.32356**	**79.52719**	**72.60803**	**78.10425**	**58.47962**	**61.67895**	**38.65074088**
-3	**-9.519999995**	***-7.337969023***	***-8.482499715***	**-5.94286**	**-5.94286**	**-4.82125**	**-4.82125**	**-4.55433**	**-4.79403**	**-5.522172547**
+3	**82.73838987**	***95.00028081***	***74.03309631***	**74.89836**	**75.86428**	**68.83633**	**74.59957**	**56.23191**	**59.28776**	**37.54630833**
-4	**-15.39999909**	***-12.14149928***	***-13.72319937***	**-9.6425**	**-9.6425**	**-7.714**	**-7.714**	**-7.3283**	**-7.714**	**-8.835474383**
+4	**69.97992627**	***85.06071803***	***62.96175835***	**64.46748**	**64.55119**	**61.12603**	**66.0604**	**49.48876**	**52.11421**	**34.23300686**
-5	**-17.38800176**	***-14.65318647***	***-15.49530103***	**-11.7518**	**-11.7518**	**-9.41998**	**-9.41998**	**-9.0274**	**-9.50253**	**-9.939909643**
+5	**65.33487785**	***81.7755286***	***59.25374782***	**62.09034**	**62.09034**	**58.55594**	**63.20474**	**47.31629**	**49.80663**	**33.12857045**
-6	**-23.43600086**	***-23.66875172***	***-20.88720056***	**-18.8832**	**-18.8832**	**-15.3909**	**-15.4095**	**-14.6197**	**-15.3891**	**-13.25321198**
+6	**55.56600077**	***72.00396969***	***50.00940059***	**54.9589**	**54.9589**	**50.84564**	**54.63775**	**41.86439**	**44.06778**	**29.81527096**
-7	**-25.47999907**	***-26.70193682***	***-22.93199914***	**-21.3776**	**-21.3776**	**-17.3565**	**-17.3565**	**-16.437**	**-17.3021**	**-14.35764534**
+7	**53.3259981**	***68.77477586***	***47.88224896***	**52.58176**	**52.58176**	**48.27555**	**51.78208**	**40.04709**	**42.15483**	**28.71083643**
-8	**-31.69599817**	***-35.88549964***	***-28.25279871***	**-28.8438**	**-28.8438**	**-23.006**	**-23.142**	**-21.8889**	**-23.0409**	**-17.67094665**
+8	**46.68999902**	***58.58933033***	***41.96115093***	**45.59262**	**45.59262**	**40.56526**	**43.2151**	**34.59519**	**36.41599**	**25.39753301**
-9	**-33.79600083**	***-38.97468767***	***-30.12570003***	**-31.2209**	**-31.2209**	**-25.1781**	**-25.4043**	**-23.7062**	**-24.9539**	**-18.77538236**
+9	**44.50600081**	***54.57243376***	***40.01265282***	**43.21547**	**43.21547**	**37.99517**	**40.35943**	**32.77789**	**34.50304**	**24.29310058**
-10	**-40.17999993**	***-48.32625146***	***-35.8284176***	**-38.4947**	**-38.4947**	**-32.8883**	**-34.6852**	**-29.1581**	**-30.6927**	**-22.08868384**
+10	**38.0379995**	***45.13687023***	***33.90086653***	**36.08404**	**36.08404**	**30.28487**	**31.79244**	**27.32599**	**28.7642**	**20.97979597**
-11	**-42.33600037**	***-51.4714373***	***-38.09385328***	**-40.8718**	**-40.8718**	**-35.4584**	**-37.6057**	**-30.9754**	**-32.6056**	**-23.19311935**
+11	**35.90999907**	***42.01968405***	***31.99409838***	**33.74875**	**33.74875**	**27.71478**	**28.90896**	**25.64905**	**26.999**	**19.87536257**
-12	**-48.88799946**	***-61.83470429***	***-43.93935125***	**-47.861**	**-47.861**	**-43.1687**	**-46.1078**	**-36.4273**	**-38.3445**	**-26.50642064**
+12	**29.60999997**	***32.75212574***	***26.37539361***	**26.43317**	**26.43317**	**21.07752**	**21.2135**	**20.05678**	**21.1124**	**16.5620633**
-13	**-51.0999999**	***-65.61778115***	***-45.91305124***	**-50.2381**	**-50.2381**	**-45.7388**	**-48.9635**	**-38.2446**	**-40.2574**	**-27.61085414**
+13	**27.53799953**	***29.69093948***	***24.52770001***	**24.05603**	**24.05603**	**19.17375**	**19.19228**	**18.23949**	**19.19946**	**15.45762557**
-14	**-57.81999899**	***-75.30534401***	***-52.03799898***	**-57.3695**	**-57.3695**	**-53.4491**	**-57.5305**	**-43.6965**	**-45.9963**	**-30.92415558**
+14	**21.40600043**	***20.59137051***	***19.06019562***	**16.4726**	**16.4726**	**13.46242**	**13.48096**	**12.78759**	**13.46062**	**12.14432216**
-15	**-61.11925631**	***-78.56253061***	***-55.5925473***	**-59.7467**	**-59.7467**	**-56.0192**	**-60.3862**	**-45.5138**	**-47.9092**	**-32.02859105**
+15	**19.38999999**	***17.5861839***	***17.26290202***	**14.09546**	**14.09546**	**11.55864**	**11.55864**	**10.97029**	**11.54767**	**11.03989289**
-16	**-73.50732048**	***-88.4180942***	***-66.71655449***	**-67.5511**	**-67.9261**	**-63.7295**	**-68.9531**	**-51.7548**	**-54.5248**	**-35.34189309**
+16	**13.42599977**	***10.57481232***	***11.94659671***	**8.437187**	**8.437187**	**6.74975**	**6.74975**	**6.412262**	**6.74975**	**7.72658673**
-17	**-77.66468081**	***-91.73128646***	***-70.44974635***	**-70.6414**	**-71.2541**	**-66.2996**	**-71.781**	**-54.0025**	**-56.916**	**-36.4463265**
+17	**11.46600044**	***8.818469936***	***10.19970402***	**7.206766**	**7.206766**	**5.729873**	**5.729873**	**5.455596**	**5.742732**	**6.62214964**
-18	**-90.97992678**	***-101.7548444***	***-81.59670605***	**-81.4574**	**-82.9021**	**-75.2115**	**-80.997**	**-60.7456**	**-64.0896**	**-39.75962606**
+18	**5.670000222**	***4.331685***	***5.034598627***	**3.548974**	**3.548974**	**2.874208**	**2.883481**	**2.729645**	**2.87331**	**3.308845575**
-19	**-95.47968174**	***-105.8368243***	***-85.38030689***	**-84.5477**	**-86.2301**	**-77.713**	**-84.1865**	**-62.9933**	**-66.4808**	**-40.86406346**
+19	**3.766000055**	***2.864091794***	***3.338105267***	**2.360407**	**2.360407**	**1.92232**	**1.92232**	**1.820994**	**1.916836**	**2.204416471**
-20	**-108.2037352**	***-116.028395***	***-96.80669172***	**-93.8185**	**-96.2141**	**-87.8784**	**-96.3508**	**-70.2227**	**-74.1725**	**-44.17749865**
+20	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	62.52197043	61.09488	48.5982	39.42115029	52.84090041	70.5831	74.4401	74.37599	74.41056
-1	-0.837932461	-0.8417	-0.7714	-0.582174445	-1.045521472	-0.8091	-0.81008	-0.74114	-0.68301
+1	57.50369912	57.16696	45.54731	36.98570214	48.85992539	65.35946	68.52566	69.60603	69.5125
-2	-3.367643896	-3.36679	-2.85932	-2.270398384	-4.182090802	-3.26269	-3.24033	-3.26537	-3.11774
+2	52.0473222	52.11678	41.52447	33.55548743	43.15707766	58.14428	61.37787	61.57915	62.35153
-3	-4.205575763	-4.20848	-3.62558	-2.865254463	-5.227612355	-4.09806	-4.09806	-4.09806	-4.09806
+3	50.37145497	50.43339	40.18351	32.41933217	41.25612957	55.21074	58.99529	58.87362	59.96453
-4	-6.788319595	-6.78832	-6.16348	-4.671571296	-8.462668223	-6.5569	-6.5569	-6.5569	-6.54485
+4	45.34385549	45.3832	36.16066	29.03261651	34.60280141	49.21384	51.8475	51.71867	52.33089
-5	-8.294478131	-8.36223	-6.92975	-5.280926147	-9.508191817	-8.00698	-8.14847	-7.89967	-7.79435
+5	43.6679881	43.69981	34.81971	27.91096234	32.70185299	47.21488	49.4649	49.3337	49.9439
-6	-13.52360739	-13.4124	-10.6916	-8.344244449	-12.64476175	-13.0823	-13.009	-13.0876	-12.6638
+6	38.64038883	38.64963	30.79686	24.56774711	28.63822551	41.21798	42.31712	42.17875	42.78293
-7	-15.19947112	-15.0958	-12.0326	-9.400646661	-13.78877449	-14.753	-14.6291	-14.7094	-14.295
+7	36.96452289	36.96623	29.45591	23.46059141	27.26692301	39.21901	39.93453	39.79377	40.39593
-8	-20.22707246	-20.146	-16.0554	-12.59160738	-16.8268491	-19.5551	-19.4896	-19.6707	-19.6466
+8	31.9369246	31.91605	25.43305	20.16087678	24.130356	33.22213	33.28008	33.65668	33.84517
-9	-21.90293974	-21.8294	-17.3964	-13.66251275	-17.87237241	-21.2543	-21.2954	-21.6579	-21.646
+9	30.26105642	30.23266	24.0921	19.06822204	23.08483424	31.22316	31.2787	31.6533	31.65151
-10	-26.93054119	-26.8796	-21.4192	-16.89697352	-21.00893879	-27.2512	-27.2995	-27.6681	-27.6612
+10	25.23345755	25.18247	20.06926	15.81200692	19.94826734	25.22627	25.27456	25.64316	25.63629
-11	-28.60640593	-28.563	-22.7602	-17.98237628	-22.05446094	-29.2502	-29.3009	-29.6715	-29.6663
+11	23.55759206	23.49908	18.72831	14.7338517	18.90274314	23.2273	23.27318	23.63977	23.63122
-12	-33.63400723	-33.6131	-26.783	-21.26033699	-25.19103093	-35.247	-35.305	-35.6816	-35.8701
+12	18.52999345	18.4489	14.70545	11.52116771	15.76617697	17.91589	17.8504	18.03147	18.00737
-13	-35.30987347	-35.2965	-28.124	-22.36024083	-26.23655334	-37.246	-37.58	-37.5827	-38.2807
+13	16.85412184	16.7655	13.3645	10.45751273	14.72065456	16.29768	16.23023	16.31378	16.38421
-14	-40.33746892	-40.3467	-32.1468	-25.68170169	-29.69889949	-43.2429	-44.7277	-44.5894	-45.1935
+14	11.82652654	11.71533	9.341652	7.288297871	11.5840866	11.44305	11.36974	11.44842	11.0246
-15	-42.01334054	-42.0301	-33.4878	-26.79610491	-30.82844926	-45.2419	-47.1103	-46.9744	-47.5805
+15	10.18248003	10.03194	8.000703	6.23914269	10.5385642	9.824845	9.749576	9.826633	9.401444
-16	-47.04093597	-47.0803	-37.5106	-30.16106595	-36.53129852	-51.2388	-54.2581	-54.1293	-54.7415
+16	5.939779899	5.93978	5.392084	4.064023662	7.401997635	5.737287	5.737287	5.737287	5.725234
-17	-48.71680144	-48.7637	-38.8516	-31.28996925	-38.47363248	-53.2377	-56.6407	-57.5657	-57.1285
+17	5.032901121	5.04334	4.625828	3.46191738	6.356475851	4.870392	4.91291	4.87844	4.913658
-18	-53.74440985	-53.8139	-42.8744	-34.69843019	-45.08556992	-60.1692	-63.7885	-63.9898	-64.7621
+18	2.519103224	2.518249	2.087921	1.677348009	3.121413734	2.443077	2.420718	2.445759	2.298132
-19	-55.42026839	-55.4973	-44.2154	-35.84183523	-46.9865204	-62.1923	-66.1711	-66.7236	-67.1491
+19	1.697080025	1.676551	1.336448	1.089741525	2.075895537	1.633972	1.610636	1.634867	1.486554
-20	-62.5069077	-60.5474	-48.2382	-39.29379682	-52.68937569	-70.533	-73.5334	-74.4016	-74.4342
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**
End Shear	**82.27158299**	**77.79275321**	**75.13378**	**82.992**	**84.00841**
-1	**-0.858577971**	**-0.95855806**	**-0.96508**	**-1.00149**	**-0.86137**
+1	**76.39178611**	**71.4685179**	**70.4156**	**77.02696**	**78.00076**
-2	**-3.45701313**	**-3.864795462**	**-3.86033**	**-4.08975**	**-3.43608**
+2	**68.66457182**	**64.27935255**	**63.11382**	**69.30632**	**70.0245**
-3	**-4.315592752**	**-4.84925701**	**-4.85907**	**-5.18301**	**-4.3225**
+3	**66.08884124**	**61.88294585**	**60.45555**	**66.73276**	**66.93297**
-4	**-6.891327077**	**-7.802650969**	**-7.7805**	**-8.27127**	**-6.916**
+4	**58.36164585**	**54.6937793**	**53.31222**	**59.0121**	**59.20886**
-5	**-8.250251196**	**-8.787114485**	**-9.6583**	**-10.3022**	**-8.63873**
+5	**55.78589495**	**52.29739175**	**50.95313**	**56.43856**	**56.63415**
-6	**-13.40172436**	**-12.64055065**	**-15.4488**	**-16.5226**	**-13.7882**
+6	**48.05868126**	**45.10820828**	**44.73788**	**48.71792**	**48.91003**
-7	**-15.11888133**	**-14.48604629**	**-17.3789**	**-18.6612**	**-15.561**
+7	**45.48294911**	**42.7118185**	**42.45609**	**46.14436**	**46.33531**
-8	**-20.60194073**	**-20.40577284**	**-23.1694**	**-24.8377**	**-20.748**
+8	**37.75575537**	**35.52265365**	**36.66561**	**39.23367**	**38.6112**
-9	**-22.31910372**	**-22.37901512**	**-25.0996**	**-26.8966**	**-23.1818**
+9	**35.18000441**	**33.12626579**	**34.73544**	**37.17484**	**36.0365**
-10	**-30.04631015**	**-28.33608808**	**-30.8901**	**-33.0731**	**-30.9059**
+10	**27.45279031**	**26.32336231**	**28.94496**	**30.99831**	**28.31238**
-11	**-32.62204722**	**-30.73248084**	**-33.0671**	**-35.2716**	**-33.7155**
+11	**24.87705857**	**24.35011225**	**27.01479**	**28.93948**	**25.73767**
-12	**-40.34925512**	**-37.92165435**	**-38.6107**	**-41.1848**	**-41.2047**
+12	**18.87294178**	**18.43037776**	**21.22431**	**22.76295**	**19.019**
-13	**-42.92499176**	**-40.31804885**	**-40.5409**	**-43.5907**	**-43.7794**
+13	**16.9586315**	**16.45713514**	**19.29414**	**20.70412**	**17.20856**
-14	**-50.65220085**	**-47.50722275**	**-46.683**	**-51.3114**	**-51.5035**
+14	**11.67270916**	**11.04121279**	**13.50366**	**14.44781**	**12.05915**
-15	**-53.2279375**	**-49.90361134**	**-48.6123**	**-53.8849**	**-54.0782**
+15	**9.95555462**	**9.770500729**	**11.5735**	**12.34506**	**10.34267**
-16	**-60.95514601**	**-57.09278534**	**-55.6896**	**-61.6056**	**-61.8024**
+16	**6.026825723**	**6.817113754**	**6.807937**	**7.233873**	**6.0515**
-17	**-63.53087747**	**-59.48917617**	**-58.0487**	**-64.1792**	**-64.3771**
+17	**5.168242282**	**5.832651756**	**5.816673**	**6.204451**	**5.146282**
-18	**-71.25809272**	**-66.67835083**	**-65.4913**	**-71.8998**	**-72.618**
+18	**2.592510761**	**2.879257224**	**2.88777**	**3.052353**	**2.571576**
-19	**-73.83382313**	**-69.07474826**	**-68.0748**	**-74.4734**	**-75.0189**
+19	**1.718143649**	**1.89479484**	**1.922687**	**2.022931**	**1.713335**
-20	**-81.5610373**	**-77.7963637**	**-75.1521**	**-82.194**	**-84.075**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Moment (Max and Min) Raw Data Results - 20' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.61E-14	*-4.71E-14*	*-3.07E-14*	-4.18E-14	-4.18E-14	-3.28E-14	-3.43E-14	-3.20E-14	-3.36E-14	-1.84E-14
End Shear	4.27E-14	*2.73E-14*	*3.56E-14*	2.37E-14	2.70E-14	1.81E-14	2.33E-14	1.96E-14	2.09E-14	1.91E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	99.95154659	*109.4278271*	*89.38169733*	87.59441284	89.51119465	81.55515727	88.68628171	65.6000122	69.25590021	41.9685353
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	184.0016792	*206.3309028*	*164.4857855*	162.8276808	165.7103873	150.1744808	161.8641757	122.0983342	128.8303925	79.51929222
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	251.7851696	*289.6909557*	*225.3122888*	225.5323522	228.4301259	209.4987587	225.2605329	169.6058331	178.840179	112.652319
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	303.9107294	*360.3807944*	*272.3741905*	275.3737483	277.3357284	258.5648649	277.1600577	206.9459236	218.0215783	141.3676025
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	339.7050635	*418.3276429*	*304.7737388*	312.8539276	312.9292596	297.3505738	317.7389026	237.5418066	250.0440069	165.6651436
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	359.8560117	*464.4189431*	*322.9983083*	346.2594962	346.2594962	325.8559301	346.8951254	263.1982554	277.0507952	185.5449689
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	389.8439866	*497.9854309*	*350.0815423*	370.382463	370.382463	348.6375668	371.9965248	281.585482	296.4057706	201.0070203
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	411.264022	*519.0272642*	*369.5220291*	384.9969226	384.9969226	371.9953113	400.4110126	292.7035419	308.1089915	212.0513846
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	424.116007	*526.6714746*	*381.3196747*	390.102743	390.102743	385.0726303	417.4028177	296.5523686	312.160388	218.6779717
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	428.3999988	*521.5000042*	*385.474464*	385.7000027	385.7000027	388.0302675	423.0955929	293.1320139	308.5600082	220.8868363
-11	0	*0*	*0*	0	0	0	0	0	0	0
+11	424.1159888	*526.6132486*	*381.473562*	390.0692389	390.0692389	385.1999082	417.4893098	296.5375765	312.1448173	218.6779637
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	411.2640397	*519.2018651*	*369.6588478*	384.9299827	384.9299827	372.0892728	400.4604739	292.6740123	308.0779076	212.051389
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	389.8439932	*498.3927961*	*350.2012505*	370.2820323	370.2820323	348.6981345	372.0088829	281.5411604	296.3591162	201.0070236
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	359.8559935	*464.7680612*	*323.8703932*	346.1255736	346.1255736	325.8089472	346.8703922	263.1391481	276.9885769	185.5449335
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	339.5977258	*418.6186149*	*304.9447353*	313.3812529	313.3812529	297.2702409	317.6771011	238.1697522	250.7050023	165.6651259
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	303.1945665	*360.0316791*	*272.5110069*	275.2130605	277.1884319	258.4511956	277.0612245	207.0190676	218.0993908	141.3675805
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	251.4987598	*289.2836075*	*225.4149197*	225.3281353	228.2359473	209.3516666	225.1245435	169.5128434	178.7429089	112.6522811
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	183.9014296	*206.010862*	*164.5542003*	162.9147046	165.8041108	150.4229817	161.9939817	121.9871846	128.7138026	79.51923515
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	99.9730134	*109.4860241*	*89.41588973*	87.63794956	89.55808211	81.4723469	88.61211952	65.47057807	69.11985862	41.96849934
-20	-3.89E-14	*-2.54E-14*	*-3.00E-14*	-2.15E-14	-2.38E-14	-2.21E-14	-2.45E-14	-1.63E-14	-1.71E-14	-1.83E-14
+20	4.40E-14	*4.11E-14*	*3.70E-14*	3.22E-14	3.43E-14	3.29E-14	3.65E-14	2.37E-14	2.49E-14	1.97E-14

1-Span: Moment (Max and Min) Raw Data Results - 20' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.87E-14	-2.43E-14	-2.01E-14	-1.69E-14	-1.85E-14	-2.79E-14	-2.73E-14	-2.91E-14	-2.85E-14
End Shear	1.51E-14	1.51E-14	1.37E-14	9.36E-15	2.12E-14	1.57E-14	1.60E-14	1.61E-14	1.63E-14
-1	0	0	0	0	0	0	0	0	0
+1	57.60974072	57.16696441	45.54731013	37.05457714	48.85992539	65.35946495	69.04981149	69.60603075	69.51604521
-2	0	0	0	0	0	0	0	0	0
+2	108.2843089	107.6003507	85.7308259	69.78203379	90.11605366	120.123264	128.8551945	129.410562	129.477033
-3	0	0	0	0	0	0	0	0	0
+3	152.069002	151.3959551	120.6135336	98.20460655	123.7683887	167.8950808	179.1301935	179.5879606	179.8935996
-4	0	0	0	0	0	0	0	0	0
+4	189.2456473	188.7590984	150.3304374	122.3701522	149.3622972	207.6932598	219.8747881	220.6204072	220.5211475
-5	0	0	0	0	0	0	0	0	0
+5	219.7188205	219.3886539	174.6835377	142.2085769	167.2009585	239.4955739	251.0890208	262.4324248	262.892804
-6	0	0	0	0	0	0	0	0	0
+6	243.4885688	243.2846426	193.6728317	157.7198967	177.7161042	263.3020637	272.7728729	293.9341866	294.2796296
-7	0	0	0	0	0	0	0	0	0
+7	260.5548055	260.4470257	207.2983122	168.9040836	191.5654667	281.1586091	288.5002372	314.369599	314.5908005
-8	0	0	0	0	0	0	0	0	0
+8	270.9176268	270.8758768	215.5600249	175.7611822	201.9222111	297.7258088	308.9927977	323.7387458	323.9880145
-9	0	0	0	0	0	0	0	0	0
+9	274.5769409	274.5711242	218.457912	178.2911452	208.0968419	306.2971139	320.3838433	335.999565	336.5445076
-10	0	0	0	0	0	0	0	0	0
+10	271.5328016	271.5328122	215.99201	176.4940082	210.089383	307.1754356	322.6257052	338.1491554	338.9055092
-11	0	0	0	0	0	0	0	0	0
+11	274.5557111	274.5574202	218.4488979	178.2879579	207.9301745	306.4318109	320.2548837	336.1031668	336.5785149
-12	0	0	0	0	0	0	0	0	0
+12	270.8752069	270.848515	215.5420454	175.7548322	201.7404096	297.8346011	309.0264421	323.7202971	323.9880349
-13	0	0	0	0	0	0	0	0	0
+13	260.4911615	260.4059589	207.2713078	168.8945373	191.3685093	281.2414279	288.5058397	314.3213798	314.5463847
-14	0	0	0	0	0	0	0	0	0
+14	243.4036868	243.2298637	193.6368278	157.7071459	178.193397	263.2476658	272.7504396	293.8562077	294.2078013
-15	0	0	0	0	0	0	0	0	0
+15	219.6127632	219.3201936	174.6385559	142.1926357	167.03565	239.4152456	251.0385608	262.3247077	262.7935838
-16	0	0	0	0	0	0	0	0	0
+16	189.1183787	188.6769647	150.2765055	122.3512032	149.1694896	207.5869975	219.7963353	220.1536978	220.455006
-17	0	0	0	0	0	0	0	0	0
+17	151.9204381	151.3412042	120.577527	98.19186341	123.6995492	167.7628227	179.023635	179.4905217	179.8841308
-18	0	0	0	0	0	0	0	0	0
+18	108.0191172	107.6277117	85.7488202	69.78835231	90.17113118	120.3383845	128.7206438	129.2874424	129.5242854
-19	0	0	0	0	0	0	0	0	0
+19	57.70072048	57.18065956	45.55631804	37.05773897	48.88747667	65.28777769	68.8872359	69.54449184	69.53611732
-20	-1.69E-14	-1.33E-14	-1.48E-14	-8.80E-15	-1.84E-14	-1.72E-14	-1.78E-14	-1.72E-14	-1.78E-14
+20	2.18E-14	1.97E-14	1.61E-14	1.35E-14	2.11E-14	2.57E-14	2.63E-14	2.51E-14	2.70E-14

1-Span: Moment (Max and Min) Raw Data Results - 20’ Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.61E-14	-2.50E-14	-3.44E-14	-3.53E-14	-3.07E-14
End Shear	2.17E-14	2.61E-14	1.94E-14	2.12E-14	1.86E-14
-1	0	0	0	0	0
+1	76.39178611	71.4685179	70.41560367	77.026962	78.28191054
-2	0	0	0	0	0
+2	142.4806464	133.3514811	131.394857	143.7597033	144.2273848
-3	0	0	0	0	0
+3	199.0984923	185.6488375	181.1684441	200.6836929	201.3627407
-4	0	0	0	0	0
+4	245.5101114	228.3606811	222.6852312	247.6992011	248.199202
-5	0	0	0	0	0
+5	281.6187707	261.4869588	254.9776149	284.4204955	284.7368713
-6	0	0	0	0	0
+6	307.424501	285.0275861	279.1703203	310.8476054	310.9756927
-7	0	0	0	0	0
+7	329.7959004	305.8406005	298.7636785	333.4642544	333.5309924
-8	0	0	0	0	0
+8	355.5818811	329.346686	310.6364689	358.7542129	359.0180926
-9	0	0	0	0	0
+9	370.8477921	343.2671952	314.7885483	373.7499806	374.206341
-10	0	0	0	0	0
+10	375.8107835	347.6108661	311.2200141	378.5179985	379.1584333
-11	0	0	0	0	0
+11	370.7707379	343.2732764	314.7735787	373.7964764	374.250159
-12	0	0	0	0	0
+12	355.4871291	329.3501856	310.6065707	358.7808211	359.0431712
-13	0	0	0	0	0
+13	329.8018234	305.8414521	298.718825	333.4708974	333.5372522
-14	0	0	0	0	0
+14	307.4126513	285.0433397	280.0979972	310.8342976	310.9631509
-15	0	0	0	0	0
+15	281.5891302	261.500011	254.9194713	284.3872588	284.7055129
-16	0	0	0	0	0
+16	245.4627614	228.3711772	222.7583756	247.6460461	248.1491364
-17	0	0	0	0	0
+17	199.033288	185.6567092	181.2232562	200.6105804	201.2938
-18	0	0	0	0	0
+18	142.5161584	133.3566808	131.3192197	143.7995776	145.2359836
-19	0	0	0	0	0
+19	76.40956453	71.47113488	70.43387885	77.04690073	78.17846671
-20	-2.05E-14	-2.00E-14	-1.72E-14	-1.78E-14	-2.29E-14
+20	2.69E-14	2.65E-14	2.50E-14	2.89E-14	3.43E-14

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	41.6	32.42	31.68	25.2	20.95	27.4	36.6	38.6	38.56676	38.58468
-1	-0.8	-0.4345	-0.43645	-0.4	-0.3025	-0.54214	-0.41955	-0.42006	-0.38431	-0.35417
+1	38.37231	29.81784	29.64323	23.618	19.63812	25.33571	33.89135	35.53314	36.09335	36.04485
-2	-3.2	-1.74625	-1.74581	-1.48267	-1.18349	-2.16857	-1.69183	-1.68023	-1.69322	-1.61667
+2	33.55693	26.9885	27.02452	21.532	17.79058	22.37857	30.15	31.82674	31.93111	32.33162
-3	-4	-2.18075	-2.18226	-1.88	-1.49505	-2.71071	-2.125	-2.125	-2.125	-2.125
+3	31.96923	26.1195	26.15161	20.83666	17.17973	21.39286	28.62885	30.59128	30.52819	31.09387
-4	-6.4	-3.52	-3.52	-3.196	-2.44472	-4.38821	-3.4	-3.4	-3.4	-3.39375
+4	27.0831	23.5125	23.5329	18.75067	15.36218	17.94286	25.51923	26.88488	26.81808	27.13554
-5	-7.2	-4.301	-4.33613	-3.59334	-2.76627	-4.93036	-4.15192	-4.22529	-4.09628	-4.04167
+5	25.27385	22.6435	22.66	18.05533	14.76133	16.95714	24.48269	25.64942	25.58138	25.8978
-6	-9.6	-7.0125	-6.95484	-5.544	-4.37519	-6.55679	-6.78365	-6.74564	-6.78644	-6.56667
+6	21.6	20.0365	20.04129	15.96933	12.97378	14.85	21.37308	21.94302	21.87127	22.18456
-7	-10.4	-7.8815	-7.82774	-6.23933	-4.93104	-7.15	-7.65	-7.58576	-7.62739	-7.4125
+7	20.8	19.1675	19.16839	15.274	12.38293	14.13893	20.33654	20.70756	20.63457	20.94682
-8	-12.8	-10.4885	-10.4465	-8.32533	-6.61358	-8.72536	-10.1401	-10.1061	-10.2	-10.1875
+8	18.4	16.5605	16.54968	13.188	10.62538	12.5125	17.22693	17.25698	17.45226	17.55
-9	-13.6	-11.3575	-11.3194	-9.02067	-7.17943	-9.2675	-11.0212	-11.0424	-11.2305	-11.2243
+9	17.6	15.6915	15.67677	12.49267	10.04453	11.97036	16.19039	16.21919	16.41343	16.4125
-10	-16	-13.9645	-13.9381	-11.1067	-8.89198	-10.8939	-14.1308	-14.1558	-14.3469	-14.3434
+10	15.2	13.0845	13.05806	10.40667	8.316979	10.34393	13.08077	13.10581	13.29694	13.29338
-11	-16.8	-14.8335	-14.811	-11.802	-9.46783	-11.4361	-15.1673	-15.1936	-15.3858	-15.3831
+11	14.4	12.2155	12.18516	9.711336	7.746129	9.801785	12.04423	12.06802	12.25811	12.25368
-12	-19.2	-17.4405	-17.4297	-13.888	-11.2104	-13.0625	-18.2769	-18.307	-18.5023	-18.6
+12	12	9.608501	9.566448	7.625328	6.048596	8.175358	9.290066	9.256104	9.35	9.3375
-13	-20	-18.3095	-18.3026	-14.5833	-11.7962	-13.6046	-19.3135	-19.4866	-19.488	-19.85
+13	11.2	8.739498	8.693545	6.929996	5.487746	7.633215	8.450964	8.415987	8.45931	8.495833
-14	-22.4	-20.9165	-20.9213	-16.6693	-13.5688	-15.4	-22.4231	-23.193	-23.1213	-23.4346
+14	8.8	6.1325	6.074841	4.843999	3.820197	6.006786	5.933655	5.89564	5.936437	5.71667
-15	-23.6431	-21.7855	-21.7942	-17.3647	-14.1646	-15.9857	-23.4596	-24.4285	-24.358	-24.6723
+15	8	5.28	5.201938	4.148666	3.269347	5.464643	5.094553	5.055523	5.09548	4.875003
-16	-28.4062	-24.3925	-24.4129	-19.4507	-15.9672	-18.9429	-26.5692	-28.1349	-28.0681	-28.3855
+16	5.6	3.08	3.08	2.795999	2.124718	3.838215	2.975	2.975	2.975	2.96875
-17	-29.9938	-25.2615	-25.2858	-20.146	-16.573	-19.95	-27.6058	-29.3703	-29.85	-29.6233
+17	4.8	2.609749	2.615162	2.398666	1.808161	3.296073	2.525482	2.547529	2.529655	2.547917
-18	-35.0831	-27.8685	-27.9045	-22.232	-18.4056	-23.3786	-31.2	-33.0767	-33.1811	-33.5816
+18	2.4	1.30625	1.305807	1.082666	0.87349	1.618571	1.266827	1.255234	1.268218	1.191668
-19	-36.7938	-28.7375	-28.7774	-22.9273	-19.0214	-24.3643	-32.2491	-34.3122	-34.5987	-34.8194
+19	1.6	0.88	0.869355	0.692999	0.566933	1.07643	0.847276	0.835175	0.84774	0.770835
-20	-41.5569	-32.4122	-31.3961	-25.0133	-20.884	-27.3214	-36.574	-38.1298	-38.5801	-38.5969
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	41.6	48.75	50	45.6	50	36.44289	38.49244	23
-1	-0.8	-0.61632	-0.61632	-0.49359	-0.49359	-0.47117	-0.49597	-0.57269
+1	38.37231	45.42101	46.41493	42.28943	45.98718	33.92032	35.81099	21.75994
-2	-3.2	-2.46528	-2.46528	-1.99038	-1.99038	-1.89042	-1.98992	-2.29076
+2	33.55693	40.61372	41.23785	37.65	40.5	30.32389	31.98286	20.04187
-3	-4	-3.0816	-3.0816	-2.5	-2.5	-2.36159	-2.48589	-2.86345
+3	31.96923	38.83762	39.33849	35.69423	38.68269	29.15837	30.74294	19.46918
-4	-6.4	-5	-5	-4	-4	-3.8	-4	-4.58153
+4	27.0831	33.42882	33.47222	31.69615	34.25481	25.66179	27.02318	17.75111
-5	-7.2	-6.09375	-6.09375	-4.88461	-4.88461	-4.68105	-4.92742	-5.15422
+5	25.27385	32.19618	32.19618	30.36346	32.77404	24.53528	25.82661	17.17841
-6	-9.6	-9.79167	-9.79167	-7.98077	-7.99038	-7.58085	-7.97984	-6.87229
+6	21.6	28.49826	28.49826	26.36538	28.33173	21.70827	22.85081	15.46034
-7	-10.4	-11.0851	-11.0851	-9	-9	-8.52318	-8.97177	-7.44498
+7	20.8	27.26562	27.26562	25.03269	26.85096	20.76593	21.85887	14.88765
-8	-12.8	-14.9566	-14.9566	-11.9295	-12	-11.3502	-11.9476	-9.16305
+8	18.4	23.6415	23.6415	21.03462	22.40866	17.93891	18.88306	13.16958
-9	-13.6	-16.1892	-16.1892	-13.0558	-13.1731	-12.2925	-12.9395	-9.73574
+9	17.6	22.40885	22.40885	19.70193	20.92789	16.99657	17.89113	12.59689
-10	-16	-19.9609	-19.9609	-17.0538	-17.9856	-15.1196	-15.9153	-11.4538
+10	15.2	18.71094	18.71094	15.70385	16.48558	14.16956	14.91532	10.87882
-11	-16.8	-21.1936	-21.1936	-18.3865	-19.5	-16.0619	-16.9073	-12.0265
+11	14.4	17.5	17.5	14.37116	14.99039	13.3	14	10.30613
-12	-19.2	-24.8177	-24.8177	-22.3846	-23.9087	-18.8889	-19.8831	-13.7446
+12	12	13.7066	13.7066	10.92949	11	10.4002	10.94758	8.588055
-13	-20	-26.0503	-26.0503	-23.7173	-25.3894	-19.8313	-20.875	-14.3173
+13	11.2	12.47396	12.47396	9.94231	9.951923	9.457864	9.955647	8.015362
-14	-22.4	-29.7483	-29.7483	-27.7154	-29.8317	-22.6583	-23.8508	-16.0353
+14	8.8	8.541665	8.541665	6.98077	6.990387	6.630848	6.97984	6.297289
-15	-23.6431	-30.9809	-30.9809	-29.0481	-31.3125	-23.6006	-24.8427	-16.608
+15	8	7.309027	7.309027	5.993591	5.993591	5.688508	5.987904	5.724601
-16	-28.4062	-35.0278	-35.2222	-33.0462	-35.7548	-26.8368	-28.2732	-18.3261
+16	5.6	4.375	4.375	3.5	3.5	3.325	3.5	4.006527
-17	-29.9938	-36.6302	-36.9479	-34.3788	-37.2212	-28.0023	-29.5131	-18.8988
+17	4.8	3.73698	3.73698	2.971155	2.971155	2.828932	2.977823	3.433834
-18	-35.0831	-42.2387	-42.9878	-39	-42	-31.4989	-33.2329	-20.6169
+18	2.4	1.840277	1.840277	1.490385	1.495194	1.415424	1.48992	1.715761
-19	-36.7938	-43.8411	-44.7135	-40.2971	-43.6539	-32.6644	-34.4728	-21.1896
+19	1.6	1.22396	1.22396	0.996796	0.996796	0.944254	0.993952	1.143073
-20	-41.5569	-48.6484	-49.8906	-45.5683	-49.9615	-36.4131	-38.4612	-22.9077
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 20' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	41.6	47.58333	44.99292	43.45505	48	48.58786
-1	-0.8	-0.49657	-0.5544	-0.55817	-0.57923	-0.49819
+1	38.37231	44.18264	41.33518	40.7262	44.55001	45.11322
-2	-3.2	-1.99943	-2.23528	-2.23269	-2.36538	-1.98732
+2	33.55693	39.71346	37.17718	36.50307	40.08463	40.5
-3	-4	-2.49601	-2.80466	-2.81034	-2.99769	-2.5
+3	31.96923	38.22374	35.79118	34.96561	38.59616	38.71196
-4	-6.4	-3.98573	-4.51281	-4.5	-4.78385	-4
+4	27.0831	33.75457	31.63319	30.83414	34.13077	34.24457
-5	-7.2	-4.77169	-5.08219	-5.58606	-5.95846	-4.99638
+5	25.27385	32.26483	30.24719	29.46971	32.64231	32.75543
-6	-9.6	-7.75114	-7.3109	-8.9351	-9.55617	-7.97464
+6	21.6	27.79565	26.08919	25.875	28.17693	28.28804
-7	-10.4	-8.74429	-8.37828	-10.0514	-10.7931	-9
+7	20.8	26.30593	24.70319	24.55529	26.68847	26.79891
-8	-12.8	-11.9155	-11.8021	-13.4005	-14.3654	-12
+8	18.4	21.83676	20.5452	21.20625	22.69154	22.33152
-9	-13.6	-12.9087	-12.9433	-14.5168	-15.5562	-13.4076
+9	17.6	20.34702	19.15921	20.0899	21.50078	20.84239
-10	-16	-17.3779	-16.3887	-17.8659	-19.1285	-17.875
+10	15.2	15.87784	15.22462	16.74087	17.92846	16.375
-11	-16.8	-18.8676	-17.7747	-19.125	-20.4	-19.5
+11	14.4	14.38812	14.08335	15.62452	16.7377	14.88587
-12	-19.2	-23.3368	-21.9327	-22.3312	-23.82	-23.8315
+12	12	10.91552	10.65956	12.27548	13.16538	11
-13	-20	-24.8265	-23.3187	-23.4476	-25.2115	-25.3206
+13	11.2	9.808347	9.518297	11.15914	11.97462	9.9529
-14	-22.4	-29.2957	-27.4767	-27	-29.6769	-29.788
+14	8.8	6.751133	6.385895	7.810099	8.356165	6.97464
-15	-23.6431	-30.7854	-28.8627	-28.1159	-31.1654	-31.2772
+15	8	5.757984	5.650955	6.693751	7.140001	5.98188
-16	-28.4062	-35.2546	-33.0207	-32.2091	-35.6308	-35.7446
+16	5.6	3.485729	3.942807	3.9375	4.183848	3.5
-17	-29.9938	-36.7443	-34.4067	-33.5736	-37.1192	-37.2337
+17	4.8	2.989151	3.373425	3.364183	3.588462	2.97645
-18	-35.0831	-41.2135	-38.5647	-37.8782	-41.5846	-42
+18	2.4	1.499428	1.665273	1.670197	1.765386	1.48732
-19	-36.7938	-42.7032	-39.9507	-39.3724	-43.0731	-43.3886
+19	1.6	0.993721	1.095891	1.112022	1.17	0.99094
-20	-41.5569	-47.1724	-44.995	-43.4656	-47.5385	-48.6264
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 20' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.50E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	38.37231	29.8728	29.6432	23.6180	19.6856	25.3357	33.8913	35.8049	36.0934	36.0467
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	70.39385	56.1495	55.7948	44.4547	37.0779	46.7286	62.2884	66.8163	67.1043	67.1387
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	95.9077	78.8535	78.5045	62.5427	52.1882	64.1786	87.0599	92.8858	93.1231	93.2816
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	115.1754	98.1310	97.8787	77.9520	65.0415	77.4500	107.6968	114.0134	114.4000	114.3485
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	127.9077	113.9325	113.7613	90.5800	75.6014	86.7000	124.1875	130.1991	136.0811	136.3198
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	134.4	126.2580	126.1523	100.4267	83.8679	92.1525	136.5321	141.4430	152.4160	152.5951
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	145.6	135.1075	135.0516	107.4920	89.8410	99.3339	145.7913	149.5983	163.0125	163.1272
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	153.6	140.4810	140.4594	111.7760	93.5208	104.7043	154.3821	160.2244	167.8708	168.0000
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	158.4	142.3785	142.3755	113.2787	94.9071	107.9061	158.8266	166.1311	174.2284	174.5110
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	160	140.8000	140.8000	112.0000	94.0000	108.9393	159.2821	167.2936	175.3431	175.7353
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	158.4	142.3675	142.3684	113.2740	94.9054	107.8196	158.8965	166.0642	174.2822	174.5287
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	153.6	140.4590	140.4452	111.7667	93.5175	104.6100	154.4385	160.2419	167.8612	168.0000
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	145.6	135.0745	135.0303	107.4780	89.8361	99.2318	145.8343	149.6012	162.9875	163.1042
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	134.4	126.2140	126.1239	100.4080	83.8613	92.4000	136.5038	141.4314	152.3755	152.5578
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	127.8615	113.8775	113.7258	90.5567	75.5931	86.6143	124.1458	130.1730	136.0253	136.2684
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	115.1815	98.0650	97.8361	77.9240	65.0317	77.3500	107.6417	113.9727	114.1580	114.3142
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	95.9354	78.7765	78.4761	62.5240	52.1816	64.1429	86.9914	92.8305	93.0726	93.2767
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	70.35078	56.0120	55.8090	44.4640	37.0811	46.7571	62.4000	66.7465	67.0404	67.1632
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	38.38153	29.9200	29.6503	23.6227	19.6873	25.3500	33.8542	35.7206	36.0614	36.0571
-20	-1.64E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 20' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.50E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	38.37231	45.4210	46.4149	42.2894	45.9872	34.0161	35.9118	21.7623
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	70.39385	84.4323	85.9271	77.8711	83.9327	63.3126	66.8034	41.2338
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	95.9077	116.9470	118.4496	108.6330	116.8061	87.9470	92.7354	58.4145
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	115.1754	142.7917	143.8090	134.0756	143.7179	107.3093	113.0524	73.3044
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	127.9077	162.2266	162.2656	154.1875	164.7596	123.1744	129.6573	85.9036
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	134.4	179.5486	179.5486	168.9686	179.8782	136.4782	143.6613	96.2121
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	145.6	192.0573	192.0573	180.7817	192.8942	146.0127	153.6976	104.2297
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	153.6	199.6354	199.6354	192.8936	207.6282	151.7778	159.7661	109.9566
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	158.4	202.2830	202.2830	199.6747	216.4391	153.7736	161.8669	113.3928
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	160	200.0000	200.0000	201.2083	219.3910	152.0000	160.0000	114.5382
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	158.4	202.2656	202.2656	199.7407	216.4840	153.7659	161.8589	113.3928
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	153.6	199.6007	199.6007	192.9423	207.6539	151.7625	159.7500	109.9566
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	145.6	192.0052	192.0052	180.8131	192.9006	145.9897	153.6734	104.2297
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	134.4	179.4792	179.4792	168.9442	179.8654	136.4476	143.6290	96.2120
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	127.8615	162.5000	162.5000	154.1458	164.7276	123.5000	130.0000	85.9036
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	115.1815	142.7084	143.7327	134.0167	143.6667	107.3472	113.0928	73.3044
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	95.9354	116.8411	118.3489	108.5567	116.7356	87.8988	92.6849	58.4145
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	70.35078	84.4774	85.9757	78.0000	84.0000	63.2550	66.7430	41.2337
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	38.38153	45.4436	46.4392	42.2465	45.9487	33.9490	35.8413	21.7623
-20	-1.64E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 20' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.50E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	38.37231	44.1826	41.3352	40.7262	44.5500	45.2758
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	70.39385	82.4064	77.1264	75.9947	83.1462	83.4166
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	95.9077	115.1524	107.3735	104.7822	116.0692	116.4620
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	115.1754	141.9954	132.0767	128.7942	143.2615	143.5507
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	127.9077	162.8796	151.2360	147.4711	164.5000	164.6830
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	134.4	177.8048	164.8511	161.4635	179.7846	179.8587
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	145.6	190.7437	176.8887	172.7956	192.8654	192.9040
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	153.6	205.6575	190.4839	179.6625	207.4923	207.6449
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	158.4	214.4869	198.5351	182.0639	216.1654	216.4293
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	160	217.3573	201.0473	180.0000	218.9231	219.2935
-11	0	0.0000	0.0000	0.0000	0.0000	0.0000
+11	158.4	214.4423	198.5386	182.0553	216.1923	216.4547
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	153.6	205.6027	190.4859	179.6452	207.5077	207.6594
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	145.6	190.7472	176.8892	172.7697	192.8692	192.9076
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	134.4	177.7979	164.8602	162.0000	179.7769	179.8514
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	127.8615	162.8624	151.2435	147.4375	164.4808	164.6648
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	115.1815	141.9681	132.0828	128.8365	143.2308	143.5218
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	95.9354	115.1147	107.3781	104.8139	116.0269	116.4221
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	70.35078	82.4269	77.1294	75.9510	83.1692	84.0000
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	38.38153	44.1929	41.3367	40.7368	44.5615	45.2160
-20	-1.64E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.77E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	121.5311995	*121.3449982*	*109.3780793*	100.282	104.139	95.80788	107.996	74.31899	78.63603	48.22857202
-1	-3.012801599	*-2.322309541*	*-2.686694656*	-1.90498	-1.90498	-1.52527	-1.52527	-1.45472	-1.53129	-1.767863355
+1	110.867396	*112.5706293*	*99.29388297*	92.53154	95.79235	88.04085	98.58141	68.92121	72.8937	43.94035724
-2	-7.616001779	*-5.889772397*	*-6.792334403*	-4.76246	-4.76246	-3.81317	-3.81317	-3.63681	-3.82822	-4.419654422
+2	100.4480428	*104.1589078*	*89.93348492*	85.10212	87.79144	80.49077	89.42981	63.07361	66.67285	39.89925403
-3	-10.74079893	*-8.32407831*	*-9.579825472*	-6.66744	-6.66744	-5.33844	-5.33844	-5.12708	-5.39692	-6.187513719
+3	93.41416378	*98.03491077*	*83.74361173*	80.14917	82.45749	75.2383	83.10964	59.47508	62.84463	37.20519127
-4	-15.51199911	*-14.19308516*	*-13.83666517*	-11.3358	-11.3358	-9.08148	-9.08148	-8.68458	-9.14167	-8.839304603
+4	83.16278788	*89.79118365*	*74.53441387*	72.42583	74.16266	66.64896	72.65186	54.0773	57.10231	34.47010418
-5	-18.74880073	*-19.02810049*	*-16.72496007*	-15.1458	-15.1458	-12.132	-12.132	-11.594	-12.2042	-10.60716692
+5	76.3845637	*84.35137118*	*68.44535515*	66.52854	67.78912	61.61557	66.73048	50.47878	53.27409	32.70224789
-6	-23.68800088	*-26.36462454*	*-21.13299982*	-20.8607	-20.8607	-16.7603	-16.7603	-16.1168	-16.965	-13.25895724
+6	65.70535662	*76.27564403*	*59.41838927*	59.09912	59.7882	55.17526	59.86677	45.08099	47.53177	30.05045405
-7	-27.03679801	*-31.31164233*	*-24.12209124*	-24.6707	-24.6707	-20.194	-20.3807	-19.0262	-20.0276	-15.02681705
+7	59.03911599	*70.94782534*	*53.43011589*	54.14616	54.45425	51.05704	55.29097	41.48246	43.70355	28.28259511
-8	-32.14399817	*-38.81616947*	*-28.68133026*	-30.8207	-30.8207	-26.3714	-27.2444	-23.3904	-24.6215	-17.67860751
+8	49.12375167	*63.04010263*	*44.52331809*	48.2125	48.2125	44.8797	48.42726	36.6415	38.57	25.63080127
-9	-35.60479976	*-43.87518199*	*-31.77122514*	-34.6718	-34.6718	-30.4896	-31.8202	-26.2998	-27.684	-19.44646983
+9	44.4528015	*56.67993244*	*40.00752127*	44.13208	44.13208	40.76147	43.85146	33.56252	35.32897	23.86294472
-10	-40.87999992	*-51.54770913*	*-36.48803098*	-40.3868	-40.3868	-36.6669	-39.302	-30.664	-32.2779	-22.09826029
+10	39.11039912	*48.94020518*	*34.89513967*	38.45829	38.45829	34.58414	36.98776	29.19835	30.73511	21.21114981
-11	-44.45279929	*-56.71872781*	*-39.98889873*	-44.1556	-44.1556	-40.7851	-43.8778	-33.5735	-35.3405	-23.86612128
+11	35.60479976	*43.83638691*	*32.04431973*	34.64832	34.64832	30.46591	32.36592	26.28891	27.67253	19.44329209
-12	-52.23680314	*-65.70360389*	*-47.50698997*	-50.141	-50.141	-46.9625	-50.7415	-38.1072	-40.1128	-26.51791175
+12	30.4303996	*36.26466081*	*27.13909923*	28.89222	28.89222	24.28858	24.93025	21.92474	23.07867	16.79149836
-13	-58.85823967	*-70.98662241*	*-53.45493384*	-54.1767	-54.4872	-51.0807	-55.3173	-41.496	-43.7179	-28.28577274
+13	27.03680023	*31.27285198*	*24.10968346*	24.78836	24.78836	20.17036	20.35444	19.0153	20.0161	15.02363897
-14	-68.8743986	*-78.99514351*	*-62.45245702*	-61.6062	-62.4881	-57.258	-62.181	-46.8938	-49.4603	-30.93756151
+14	22.03040005	*23.86912478*	*19.64116447*	18.93222	18.93222	15.21768	15.21768	14.65113	15.42224	12.37184514
-15	-75.60784026	*-84.39016349*	*-68.4701689*	-66.5591	-67.8221	-61.6445	-66.7568	-50.4923	-53.2885	-32.70542365
+15	18.74879958	*18.98930677*	*16.7125482*	15.12226	15.12226	12.11449	12.11449	11.58309	12.19272	10.60398691
-16	-85.8773073	*-92.5666883*	*-77.61888605*	-74.9327	-76.8624	-69.1946	-75.7375	-55.8901	-59.0308	-35.35721353
+16	13.91040052	*11.75358065*	*12.39523009*	9.407323	9.407323	7.538677	7.538677	7.218917	7.59886	7.952193709
-17	-93.52056051	*-98.07370727*	*-83.76843574*	-80.1797	-82.4904	-74.8289	-82.7064	-59.4886	-62.859	-37.21003305
+17	10.74080003	*8.459850025*	*9.567413721*	6.74975	6.74975	5.3998	5.3998	5.12981	5.3998	6.184335457
-18	-103.8727132	*-106.9904047*	*-93.06835343*	-87.6092	-90.4913	-83.0364	-92.5154	-64.8864	-68.6014	-41.25113088
+18	6.070399862	*4.670017767*	*5.401294724*	3.798206	3.798206	3.041772	3.041772	2.90398	3.056821	3.532541626
-19	-110.8301654	*-112.6094222*	*-99.31870697*	-92.5621	-95.8253	-88.0698	-98.6165	-68.7295	-72.6921	-43.94519846
+19	3.012799932	*2.302913336*	*2.674278802*	1.893225	1.893225	1.516504	1.516504	1.449256	1.525532	1.76468369
-20	-121.3503182	*-120.5497686*	*-108.7698246*	-99.9916	-103.826	-95.6198	-107.768	-74.3325	-78.6504	-47.98629592
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	69.30257496	62.45254	55.84936	45.58451959	57.70071992	77.29428	81.61412	81.32734	81.25486
-1	-1.342579503	-1.34753	-1.07321	-0.875114667	-1.675867388	-1.29648	-1.29772	-1.24833	-1.206
+1	63.44208156	57.89323	50.249	41.15353697	52.90839621	70.93943	74.42765	74.27961	74.20222
-2	-3.356447664	-3.36883	-2.91204	-2.29420082	-4.189667154	-3.2412	-3.26821	-3.19649	-3.15551
+2	57.72086546	53.85063	45.18958	36.94652195	48.33784862	64.7621	66.47455	67.23827	67.17138
-3	-4.74805056	-4.71636	-4.13856	-3.254758708	-5.865532133	-4.53767	-4.58983	-4.58983	-4.58983
+3	53.34103179	51.15557	41.81664	34.15636987	45.29082027	60.45765	62.54528	63.40908	63.34881
-4	-7.995131968	-8.04467	-6.41226	-4.994625809	-8.379332095	-7.71926	-7.73168	-7.64131	-7.56385
+4	47.23196792	47.11297	37.52861	30.51217523	40.72027272	53.43698	56.82004	56.7335	57.61497
-5	-10.68029024	-10.7397	-8.55868	-6.676327261	-10.17717833	-10.3122	-10.4842	-10.2389	-10.1632
+5	44.80291176	44.4179	35.38219	28.67387923	36.91148733	49.31875	53.00322	52.91358	53.44804
-6	-14.926758	-14.7823	-11.7783	-9.220628763	-12.69097616	-14.2463	-14.4252	-14.4252	-14.4252
+6	40.4206746	40.37531	32.16256	25.9381599	32.34094563	44.25118	47.27798	47.18372	47.98108
-7	-17.61191735	-17.4774	-13.9247	-10.93133022	-14.36684311	-17.0436	-17.0696	-17.3331	-16.8792
+7	37.73551684	37.68024	30.01614	24.12886328	29.29391114	41.04812	43.46116	43.3638	43.89163
-8	-21.63965478	-21.52	-17.1444	-13.51913101	-16.88064105	-21.8482	-21.8788	-22.1813	-22.2091
+8	33.70777942	33.63764	26.79651	21.43666867	24.72336959	36.24353	37.73592	37.63393	38.15778
-9	-24.32480894	-24.2151	-19.2908	-15.25883165	-18.55651042	-25.0512	-25.085	-25.39	-25.42
+9	31.02262338	30.94258	24.65008	19.65637317	22.91058091	33.04046	33.91911	33.81402	34.33522
-10	-28.35254637	-28.2576	-22.5104	-17.89013399	-21.07030836	-29.8558	-30.1224	-30.168	-30.5299
+10	26.99488783	26.89998	21.43046	17.00765334	20.22176791	28.23587	28.27422	28.58315	28.61653
-11	-31.03770671	-30.9527	-24.6568	-19.65883523	-22.74617647	-33.0589	-33.9392	-33.8326	-34.3524
+11	24.3097283	24.20491	19.28403	15.25635725	18.6678799	25.0328	25.0681	25.37442	25.40558
-12	-35.06544414	-34.9953	-27.8765	-22.33363757	-26.26617027	-37.8635	-39.6644	-39.5624	-40.0863
+12	20.28199103	20.16232	16.0644	12.65116271	16.03210186	20.22821	20.2589	20.56133	20.58915
-13	-37.75059892	-37.6904	-30.0229	-24.13133869	-29.31319999	-41.0665	-43.4812	-43.3824	-43.9088
+13	17.59683682	17.46726	13.91798	10.92886665	14.35623689	17.02515	17.05276	17.35261	16.9391
-14	-41.77833055	-41.733	-33.2425	-26.84963899	-33.88374464	-45.8711	-49.2065	-49.1122	-49.9096
+14	13.56909921	13.42467	10.69835	8.367147201	11.84243576	12.93503	13.1138	13.1138	13.1138
-15	-44.46349659	-44.428	-35.3889	-28.67634225	-36.93077928	-49.3424	-53.0233	-52.9321	-53.4653
+15	10.6652112	10.7296	8.55193	6.67385076	10.1665703	10.29731	10.47055	10.22624	10.15149
-16	-49.16046066	-48.4706	-38.6086	-31.43814224	-42.26308006	-55.5198	-58.7485	-58.662	-59.5435
+16	6.637474388	6.686997	5.36123	4.225506974	7.530792747	6.407875	6.420301	6.329926	6.252477
-17	-52.9854181	-51.1657	-41.8272	-34.16025987	-45.31010667	-60.1088	-62.5654	-62.964	-63.366
+17	4.75182402	4.751824	4.134707	3.253351799	5.854927306	4.58983	4.58983	4.58983	4.449324
-18	-59.64935724	-55.2083	-46.8867	-38.3498467	-49.88065394	-66.8449	-68.866	-69.6039	-69.5216
+18	2.677619079	2.690002	2.294915	1.816855057	3.341126175	2.585506	2.612515	2.540799	2.499818
-19	-63.46350523	-57.9034	-50.2596	-41.15740703	-52.92768246	-70.9631	-74.2818	-74.3024	-74.2234
+19	1.335036582	1.342469	1.069834	0.873700029	1.665261008	1.289029	1.29089	1.242025	1.200149
-20	-69.18472161	-61.946	-55.319	-45.39049369	-57.49822983	-77.1404	-81.5518	-81.3502	-81.276
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	89.33166606	90.8171774	79.0965	87.1416	91.97054
-1	-1.374334079	-1.520366025	-1.55332	-1.65688	-1.37385
+1	80.18126322	81.35535347	73.43155	80.20584	84.232
-2	-3.458000824	-3.883232035	-3.8708	-4.12885	-3.43464
+2	73.51797063	72.83902414	67.76661	74.02591	76.94401
-3	-4.834549816	-5.458478665	-5.41578	-5.80796	-4.83419
+3	69.39496316	67.54675266	63.64272	69.90594	72.13552
-4	-8.006601523	-7.821344682	-9.33104	-9.95311	-8.25714
+4	63.21046922	59.60834156	57.85296	63.726	64.92278
-5	-10.75527257	-10.11345242	-12.421	-13.2491	-11.0048
+5	59.08746331	55.26252074	54.07633	59.60603	60.1143
-6	-14.87826837	-14.75540446	-17.056	-18.2553	-15.2012
+6	52.9029694	49.51079337	48.41138	53.4261	53.6434
-7	-17.87076547	-17.9128093	-20.1459	-21.5512	-18.6697
+7	48.77996243	45.67630745	44.63475	49.30613	49.52183
-8	-24.05526758	-22.6714025	-24.7809	-26.4952	-24.8065
+8	42.59546788	39.92459394	38.9698	43.1262	43.33949
-9	-28.17826635	-26.50588415	-27.8709	-29.7912	-28.928
+9	38.47246289	36.09011048	35.7903	39.00623	39.21793
-10	-34.36276846	-32.25760114	-32.5058	-34.9011	-35.1104
+10	32.28795089	30.33839503	30.94972	33.01303	33.03558
-11	-38.48576688	-36.09208306	-35.5958	-39.0211	-39.2319
+11	28.164976	26.50391023	27.85975	29.77931	28.91403
-12	-44.67026831	-41.8438025	-40.8717	-45.201	-45.4143
+12	21.98046644	21.06858851	23.22479	24.83536	22.73169
-13	-48.793267	-45.67828106	-44.6483	-49.321	-49.5358
+13	17.86189259	17.91119421	20.13482	21.53939	18.65568
-14	-54.9777692	-51.4299987	-50.3133	-55.5009	-55.7182
+14	13.49506971	13.17508681	15.49987	16.59544	13.81799
-15	-59.10076768	-55.26448499	-54.0899	-59.6209	-60.1307
+15	10.74639856	10.11213817	12.40989	13.23722	10.99551
-16	-65.2852689	-62.25719896	-59.7549	-65.8008	-67.3434
+16	6.62340303	7.032915325	7.774944	8.293274	6.873947
-17	-69.40826687	-67.54945838	-63.5315	-69.9208	-72.1519
+17	4.830114115	5.457673148	5.44635	5.802032	4.8412
-18	-75.59276881	-75.4878807	-69.6685	-76.1007	-79.3646
+18	2.766399938	3.09480113	3.092747	3.298931	2.743036
-19	-80.19900081	-81.35857938	-73.4452	-80.2207	-84.1731
+19	1.369903216	1.519559223	1.547766	1.65095	1.369186
-20	-88.44500412	-90.82042919	-79.1101	-86.4006	-91.9274
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.34E-14	-5.22E-14	-3.50E-14	-4.02E-14	-4.05E-14	-3.27E-14	-3.51E-14	-3.25E-14	-3.42E-14	-1.97E-14
End Shear	1.03E-13	1.46E-13	9.23E-14	1.25E-13	1.25E-13	1.04E-13	1.09E-13	9.58E-14	1.01E-13	5.70E-14
-1	0	0	0	0	0	0	0	0	0	0
+1	139.382245	140.7960657	124.8510615	115.6644268	119.7404405	110.0510577	123.2267672	86.15150922	91.11712685	54.92544655
-2	0	0	0	0	0	0	0	0	0	0
+2	262.2948925	269.8990329	234.8768262	218.9464825	226.1460198	207.5186592	231.2008595	163.0674757	172.4118872	103.1157245
-3	0	0	0	0	0	0	0	0	0	0
+3	356.9671139	374.707081	321.0136734	300.559374	309.2155759	282.9103974	314.3345427	223.8074632	236.5218909	139.5194673
-4	0	0	0	0	0	0	0	0	0	0
+4	442.9235835	472.7194692	397.0423624	375.9810421	385.6176606	351.5721323	385.5904305	279.3828006	295.0820858	176.786108
-5	0	0	0	0	0	0	0	0	0	0
+5	493.8499898	545.6368708	444.464988	426.5262935	436.1908403	398.0626699	433.9125047	319.2522019	337.0467522	204.885854
-6	0	0	0	0	0	0	0	0	0	0
+6	542.5644531	612.7526687	486.4965273	469.7808529	477.0921025	435.6481633	493.6740961	352.1966501	371.5456943	232.0317534
-7	0	0	0	0	0	0	0	0	0	0
+7	555.9827049	655.2098536	500.1082679	492.3187203	497.5147948	470.7506917	530.2827135	371.0005884	391.1221115	248.1761789
-8	0	0	0	0	0	0	0	0	0	0
+8	560.3262524	688.5681523	503.2393461	508.7007049	524.1639797	497.6538168	555.0135407	380.9996495	401.1280023	265.1791434
-9	0	0	0	0	0	0	0	0	0	0
+9	539.0560159	700.4438802	485.1504127	523.8743974	534.8412718	510.8152833	558.3007636	392.9367464	414.7228609	269.3682604
-10	0	0	0	0	0	0	0	0	0	0
+10	552.9999979	698.4687705	497.6224533	526.589269	534.0122327	518.3775567	567.8665859	397.1540569	418.7831188	276.2282507
-11	-1.33E-13	-1.04E-13	-1.20E-13	-8.56E-14	-8.56E-14	-6.85E-14	-6.85E-14	-6.51E-14	-6.85E-14	-7.88E-14
+11	539.0560464	700.3954138	484.9409576	523.7773896	534.7707202	510.8185792	558.0213619	392.9522218	414.7408546	269.3643028
-12	0	0	0	0	0	0	0	0	0	0
+12	560.0602279	688.9560803	503.4875836	508.6771481	523.9052729	497.5048019	554.9258845	381.0716242	401.1280255	265.1791434
-13	0	0	0	0	0	0	0	0	0	0
+13	555.5836716	655.3068159	500.1702648	492.2922463	497.5088999	470.6750709	530.2607835	370.9822299	391.1041121	248.1642494
-14	0	0	0	0	0	0	0	0	0	0
+14	542.0324076	613.0436115	486.6827046	469.7161736	477.045059	435.294244	493.608342	352.1613748	371.5096988	232.0317113
-15	0	0	0	0	0	0	0	0	0	0
+15	493.8500086	545.6368996	444.4650091	426.4234121	436.1026531	398.0243336	433.9125158	319.2684074	337.0647574	204.8659781
-16	0	0	0	0	0	0	0	0	0	0
+16	443.05666	472.9134519	397.1664167	375.9869432	385.6353278	351.4976199	385.5465972	279.4504384	295.1540411	176.7860771
-17	0	0	0	0	0	0	0	0	0	0
+17	357.3661016	374.610076	320.9516386	300.6739912	309.3390098	282.9092577	314.3016928	223.789806	236.5038725	139.5375978
-18	0	0	0	0	0	0	0	0	0	0
+18	262.2017957	269.9959796	234.9388911	219.0228976	226.2283151	207.5909419	231.2884752	162.9645179	172.3038893	103.1278048
-19	0	0	0	0	0	0	0	0	0	0
+19	139.3357009	141.559731	124.8665835	115.702629	119.7815889	110.087174	123.270544	86.11711104	91.08110839	54.93148587
-20	-8.85E-14	-6.88E-14	-6.40E-14	-6.39E-14	-6.39E-14	-6.24E-14	-6.77E-14	-4.80E-14	-5.05E-14	-3.80E-14
+20	6.70E-14	5.23E-14	5.52E-14	4.10E-14	4.10E-14	3.43E-14	3.43E-14	3.24E-14	3.41E-14	3.62E-14

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (AAHSTO Legal Trucks for Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-2.83E-14**	**-2.63E-14**	**-2.14E-14**	**-1.77E-14**	**-1.88E-14**	**-2.76E-14**	**-2.92E-14**	**-2.81E-14**	**-2.86E-14**
End Shear	**9.03E-14**	**7.38E-14**	**6.08E-14**	**5.10E-14**	**5.63E-14**	**8.71E-14**	**8.63E-14**	**8.95E-14**	**9.16E-14**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**79.30260196**	**72.41718942**	**62.81125404**	**51.64854622**	**66.13549527**	**88.67429255**	**93.03455913**	**92.84950642**	**92.75277617**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**149.0698372**	**137.9953978**	**117.1901308**	**96.51736839**	**124.653421**	**167.0530306**	**173.9808317**	**173.9527746**	**173.751193**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**202.0087657**	**193.0618455**	**158.4347101**	**130.3353441**	**169.840576**	**227.3679555**	**237.7388484**	**237.7840474**	**237.7629546**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**249.8028785**	**243.0117223**	**193.4815768**	**159.9612288**	**211.2189729**	**282.162568**	**297.3033698**	**309.7922257**	**310.0563194**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**280.0181985**	**280.0181985**	**222.7417488**	**184.0394368**	**235.2589249**	**318.5120453**	**339.5139243**	**364.8666347**	**364.9427905**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**315.0157742**	**314.491729**	**250.3144821**	**207.0653**	**258.7685423**	**348.8656616**	**374.0908404**	**411.5919969**	**411.8914537**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**335.4278601**	**335.1606433**	**266.7163933**	**220.8657853**	**264.2527369**	**370.9590351**	**397.9329155**	**439.4768975**	**446.1765456**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**352.4835214**	**352.2834205**	**280.3171226**	**232.1693488**	**267.8325003**	**395.0050202**	**424.6376177**	**458.0029997**	**476.2422196**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**357.7916023**	**357.7039323**	**284.5863318**	**235.9576093**	**257.7440352**	**404.9192606**	**438.194381**	**472.1858083**	**485.9729606**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**356.3868102**	**356.3868102**	**283.4895078**	**235.2733806**	**263.3788492**	**408.4530542**	**443.2988823**	**478.0872571**	**483.0892677**
-11	**-6.03E-14**	**-6.03E-14**	**-4.80E-14**	**-3.62E-14**	**-7.54E-14**	**-5.82E-14**	**-5.82E-14**	**-3.94E-14**	**-3.94E-14**
+11	**357.7727579**	**357.6912729**	**284.5779154**	**235.9545287**	**257.5783176**	**404.9455725**	**438.1642607**	**472.2006572**	**485.9445645**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**352.4458285**	**352.2581125**	**280.3002765**	**232.1631909**	**267.7601885**	**395.1014537**	**424.6677479**	**457.9863194**	**476.1854271**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**335.3712945**	**335.1859585**	**266.733245**	**220.8719746**	**264.1562837**	**370.8965537**	**397.9379363**	**439.4332948**	**446.1644745**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**314.9403728**	**314.4410566**	**250.2807767**	**207.0529138**	**258.6479988**	**348.4558574**	**374.0707557**	**411.5215192**	**412.1204609**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**280.0182206**	**280.018209**	**222.7417586**	**184.0394474**	**235.2468713**	**318.473705**	**339.4687646**	**364.8480672**	**364.9255524**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**249.7214689**	**242.9357353**	**193.4310197**	**159.9427415**	**211.3154028**	**282.0946354**	**297.2330776**	**309.6679678**	**310.0872921**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**201.9948285**	**193.0364846**	**158.4322749**	**130.3344471**	**169.9128944**	**227.3635392**	**237.7287783**	**237.7701097**	**237.7689504**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**149.1233849**	**138.02073**	**117.2166262**	**96.52709847**	**124.7016363**	**167.1121747**	**173.8723518**	**174.0097756**	**173.8040787**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**79.32935329**	**72.37917742**	**62.82449206**	**51.65337597**	**66.15960097**	**88.70383834**	**93.02299394**	**92.87800443**	**92.77922747**
-20	**-4.52E-14**	**-4.12E-14**	**-3.33E-14**	**-2.76E-14**	**-3.70E-14**	**-5.00E-14**	**-5.45E-14**	**-5.72E-14**	**-5.77E-14**
+20	**2.99E-14**	**2.95E-14**	**2.65E-14**	**1.70E-14**	**3.54E-14**	**2.91E-14**	**2.91E-14**	**2.91E-14**	**3.11E-14**

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (Permit Trucks for Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.29E-14	-3.05E-14	-3.42E-14	-3.43E-14	-3.05E-14
End Shear	1.02E-13	9.49E-14	1.03E-13	1.07E-13	1.07E-13
-1	0	0	0	0	0
+1	100.3097087	102.7927141	91.78944117	100.3252281	105.1959213
-2	0	0	0	0	0
+2	189.0983069	189.7755831	174.1373122	190.2146806	198.3706323
-3	0	0	0	0	0
+3	262.6722278	256.1716723	239.231853	264.3887964	272.6606732
-4	0	0	0	0	0
+4	328.4878336	313.6326453	298.7063412	330.683599	337.2718114
-5	0	0	0	0	0
+5	376.7086488	350.0891231	342.1027132	379.5155024	384.0015485
-6	0	0	0	0	0
+6	416.3398909	385.7102791	378.354626	419.7641625	424.2913535
-7	0	0	0	0	0
+7	447.3538072	414.5916719	399.3604173	451.0158182	462.6491498
-8	0	0	0	0	0
+8	479.8640062	444.4855292	411.3538092	483.1566968	489.8444115
-9	0	0	0	0	0
+9	496.2756599	459.8636429	423.6690769	499.9712391	500.5455122
-10	0	0	0	0	0
+10	505.3168711	467.5343556	429.3631958	508.0172616	508.9159498
-11	-6.14E-14	-5.68E-14	-6.91E-14	-6.14E-14	-6.14E-14
+11	496.2590401	459.8611973	423.6829802	499.9527104	500.2213375
-12	0	0	0	0	0
+12	479.7753461	444.4887971	411.3507319	483.181407	489.8911123
-13	0	0	0	0	0
+13	447.3039001	414.5924621	399.3403139	451.0219905	462.6754222
-14	0	0	0	0	0
+14	416.3288111	385.7250045	378.3175687	419.7518106	424.2971983
-15	0	0	0	0	0
+15	376.6809557	350.0858416	342.118183	379.4846334	383.986974
-16	0	0	0	0	0
+16	328.4434906	313.6259723	298.7742814	330.6342047	337.2367876
-17	0	0	0	0	0
+17	262.6666528	256.1716961	239.2133021	264.3825873	272.6636045
-18	0	0	0	0	0
+18	189.0207383	189.7635015	174.1712753	190.2517383	198.4114834
-19	0	0	0	0	0
+19	100.2764365	102.7866358	91.80640603	100.2819573	105.2163274
-20	-5.98E-14	-6.24E-14	-5.12E-14	-5.94E-14	-6.01E-14
+20	3.02E-14	3.47E-14	3.45E-14	3.68E-14	3.07E-14

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	46.08	35.936	32.384	28.96	24.27	29.92	40.08	42.32	42.1713	42.13371
-1	-1.28	-0.69618	-0.69875	-0.5565	-0.45527	-0.869	-0.67227	-0.67292	-0.64731	-0.62536
+1	42.20571	32.89711	30.01982	26.056	21.89942	27.435	36.78477	38.59354	38.51678	38.47665
-2	-3.2	-1.74044	-1.74687	-1.51	-1.19707	-2.1725	-1.68068	-1.69469	-1.6575	-1.63625
+2	38.39314	29.93045	27.92358	23.4325	19.64944	25.065	33.58159	34.46956	34.86558	34.83089
-3	-4.48	-2.46204	-2.44561	-2.146	-1.70161	-3.0415	-2.35295	-2.38	-2.38	-2.38
+3	35.78972	27.65934	26.52609	21.6835	18.15947	23.485	31.34957	32.43209	32.88	32.84875
-4	-6.4	-4.14578	-4.17146	-3.325	-2.6172	-4.345	-4.00273	-4.00917	-3.96231	-3.92214
+4	31.97714	24.49156	24.42985	19.46	16.20878	21.115	27.70909	29.46334	29.41846	29.87554
-5	-7.68	-5.53813	-5.56896	-4.438	-3.50063	-5.27725	-5.34727	-5.43646	-5.30923	-5.27
+5	29.43543	23.232	23.03236	18.347	15.21735	19.14	25.57363	27.48417	27.43769	27.71482
-6	-9.6	-7.74009	-7.66519	-6.1075	-4.84079	-6.58075	-7.38724	-7.48	-7.48	-7.48
+6	25.36686	20.95964	20.93612	16.6775	13.74518	16.77	22.94591	24.51542	24.46654	24.88
-7	-10.88	-9.13244	-9.06269	-7.2205	-5.74423	-7.44975	-8.83773	-8.85125	-8.98788	-8.7525
+7	22.82514	19.56729	19.53863	15.5645	12.77374	15.19	21.285	22.53625	22.48577	22.75947
-8	-12.8	-11.221	-11.1589	-8.89	-7.11439	-8.75325	-11.3291	-11.345	-11.5018	-11.5162
+8	19.01257	17.47876	17.44238	13.895	11.33159	12.82	18.79364	19.5675	19.51461	19.78625
-9	-14.08	-12.6133	-12.5564	-10.003	-8.03783	-9.62225	-12.99	-13.0075	-13.1657	-13.1812
+9	17.28	16.0864	16.0449	12.782	10.38015	11.88	17.13273	17.58834	17.53385	17.80411
-10	-16	-14.7019	-14.6527	-11.6725	-9.43799	-10.9257	-15.4814	-15.6196	-15.6433	-15.8309
+10	15.36	13.99787	13.94866	11.1125	8.967982	10.48575	14.64136	14.66125	14.82144	14.83875
-11	-17.28	-16.0942	-16.0501	-12.7855	-10.3814	-11.7948	-17.1423	-17.5988	-17.5435	-17.813
+11	14.08	12.60551	12.55116	9.999498	8.036546	9.68	12.98045	12.99875	13.15759	13.17375
-12	-20.2057	-18.1828	-18.1464	-14.455	-11.8116	-13.62	-19.6336	-20.5675	-20.5146	-20.7862
+12	12.16	10.51698	10.45493	8.33	6.654391	8.31325	10.48909	10.505	10.66182	10.67625
-13	-22.7474	-19.5751	-19.5439	-15.568	-12.775	-15.2	-21.2945	-22.5467	-22.4954	-22.7684
+13	10.88	9.124624	9.057431	7.216998	5.742954	7.44425	8.828183	8.8425	8.997981	8.783563
-14	-26.56	-21.6636	-21.6401	-17.2375	-14.2352	-17.57	-23.7859	-25.5154	-25.4665	-25.88
+14	8.96	7.03609	6.961195	5.5475	4.390787	6.14075	6.707301	6.8	6.8	6.8
-15	-29.1017	-23.056	-23.0376	-18.3505	-15.2186	-19.15	-25.5859	-27.4946	-27.4473	-27.7238
+15	7.68	5.530314	5.563701	4.434498	3.49935	5.27175	5.339545	5.429375	5.302689	5.26393
-16	-32.9509	-25.4916	-25.1339	-20.02	-16.7088	-21.915	-28.7891	-30.4633	-30.4185	-30.8755
+16	5.76	3.441781	3.46746	2.78	2.213416	3.905	3.322725	3.329168	3.282305	3.242145
-17	-35.8354	-27.4749	-26.5313	-21.689	-18.1615	-23.495	-31.1687	-32.4425	-32.6492	-32.8577
+17	4.48	2.464	2.464	2.144001	1.70088	3.036001	2.38	2.38	2.38	2.307142
-18	-39.648	-30.9304	-28.6276	-24.3125	-20.3995	-25.865	-34.6616	-35.7096	-36.0923	-36.0496
+18	2.56	1.388447	1.394868	1.19	0.94707	1.7325	1.340682	1.354687	1.3175	1.29625
-19	-42.1897	-32.9082	-30.0251	-26.0615	-21.9014	-27.445	-36.797	-38.5179	-38.5286	-38.4876
+19	1.28	0.692267	0.696121	0.554749	0.454535	0.863501	0.66841	0.669375	0.644037	0.622323
-20	-46.0023	-35.8749	-32.1213	-28.685	-24.1694	-29.815	-40.0002	-42.2877	-42.1831	-42.1447
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	46.08	52	54	49.68	56	38.5372	40.77575	25.00833
-1	-1.28	-0.98781	-0.98781	-0.79091	-0.79091	-0.75433	-0.79403	-0.9167
+1	42.20571	47.98109	49.67195	45.6525	51.11818	35.73825	37.79813	22.78473
-2	-3.2	-2.46951	-2.46951	-1.97727	-1.97727	-1.88582	-1.98508	-2.29176
+2	38.39314	44.12866	45.52317	41.7375	46.37273	32.70605	34.57239	20.68927
-3	-4.48	-3.45732	-3.45732	-2.76818	-2.76818	-2.65858	-2.79851	-3.20846
+3	35.78972	41.56037	42.75732	39.0139	43.09549	30.84007	32.58731	19.2923
-4	-6.4	-5.87805	-5.87805	-4.70909	-4.70909	-4.50328	-4.7403	-4.58351
+4	31.97714	37.55553	38.45614	34.56	37.67273	28.04112	29.6097	17.87405
-5	-7.68	-7.85366	-7.85366	-6.29091	-6.29091	-6.01194	-6.32836	-5.50022
+5	29.43543	34.49756	35.15122	31.95	34.60227	26.17515	27.62463	16.95735
-6	-9.6	-10.8171	-10.8171	-8.69087	-8.69087	-8.35716	-8.79702	-6.87527
+6	25.36686	30.64512	31.00244	28.61045	31.04318	23.37619	24.64702	15.58229
-7	-10.88	-12.7927	-12.7927	-10.4714	-10.5682	-9.86582	-10.3851	-7.79197
+7	22.82514	28.07683	28.23658	26.475	28.67045	21.51022	22.66194	14.66559
-8	-12.8	-15.9817	-15.9817	-13.6745	-14.1273	-12.1288	-12.7672	-9.16702
+8	19.01257	25	25	23.27182	25.11136	19	20	13.29054
-9	-14.08	-17.9787	-17.9787	-15.81	-16.5	-13.6375	-14.3552	-10.0837
+9	17.28	22.88415	22.88415	21.13636	22.73864	17.40343	18.3194	12.37384
-10	-16	-20.9421	-20.9421	-19.0132	-20.3795	-15.9004	-16.7373	-11.4588
+10	15.36	19.94207	19.94207	17.93318	19.17955	15.14045	15.93731	10.99878
-11	-17.28	-22.8963	-22.8963	-21.1486	-22.7523	-17.4091	-18.3254	-12.3755
+11	14.08	17.96646	17.96646	15.79772	16.78295	13.63179	14.34925	10.08208
-12	-20.2057	-26	-26	-24.3518	-26.3114	-19.76	-20.8	-13.7505
+12	12.16	14.98171	14.98171	12.59455	12.92727	11.3688	11.96716	8.707025
-13	-22.7474	-28.0927	-28.2537	-26.4873	-28.6841	-21.5172	-22.6694	-14.6672
+13	10.88	12.8537	12.8537	10.45909	10.55455	9.86015	10.3791	7.790324
-14	-26.56	-31.9451	-32.4024	-29.6905	-32.2432	-24.3162	-25.647	-16.0423
+14	8.96	9.81707	9.81707	7.890942	7.890942	7.597165	7.997015	6.415268
-15	-29.1017	-34.5134	-35.1683	-31.965	-34.6159	-26.1822	-27.6321	-16.959
+15	7.68	7.841461	7.841461	6.281817	6.281817	6.006268	6.322388	5.498567
-16	-32.9509	-38.8554	-39.856	-35.88	-39.2727	-28.9811	-30.6097	-18.334
+16	5.76	4.878052	4.878052	3.909088	3.909088	3.743281	3.940296	4.123512
-17	-35.8354	-41.5762	-42.7744	-38.8016	-42.8864	-30.8471	-32.5948	-19.2948
+17	4.48	3.5	3.5	2.8	2.8	2.66	2.8	3.206811
-18	-39.648	-45.4287	-46.9232	-43.0575	-47.9727	-33.646	-35.5724	-21.3903
+18	2.56	1.969513	1.969513	1.577274	1.577274	1.505823	1.585077	1.831756
-19	-42.1897	-47.9969	-49.689	-45.6675	-51.1364	-35.6389	-37.6936	-22.7872
+19	1.28	0.981709	0.981709	0.786365	0.786365	0.751494	0.791046	0.915055
-20	-46.0023	-51.8494	-53.8378	-49.5825	-55.8818	-38.5442	-40.7832	-24.8827
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 25' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**46.08**	***52.52584***	***45.74696***	***50.4***	***53.19291***	***44***
-1	**-1.28**	***-0.87933***	***-0.89839***	***-0.95829***	***-0.79459***	***-0.66146***
+1	**42.20571**	***47.05341***	***42.47053***	***46.38857***	***48.71718***	***39.60156***
-2	**-3.2**	***-2.24594***	***-2.23875***	***-2.388***	***-1.98649***	***-2***
+2	**38.39314**	***42.12783***	***39.19411***	***42.81429***	***44.50203***	***35.63281***
-3	**-4.48**	***-3.15701***	***-3.13232***	***-3.35914***	***-2.79594***	***-2.66406***
+3	**35.78972**	***39.06695***	***36.80897***	***40.43143***	***41.72095***	***33.64844***
-4	**-6.4**	***-4.52362***	***-5.39679***	***-5.75657***	***-4.77567***	***-3.98698***
+4	**31.97714**	***34.47562***	***33.46036***	***36.85714***	***37.54932***	***29.67969***
-5	**-7.68**	***-5.84931***	***-7.18393***	***-7.66286***	***-6.36486***	***-4.64844***
+5	**29.43543**	***31.96213***	***31.27607***	***34.47428***	***34.76825***	***27.69531***
-6	**-9.6**	***-8.53407***	***-9.86464***	***-10.5583***	***-8.79189***	***-6.60938***
+6	**25.36686**	***28.63551***	***27.99964***	***30.9***	***31.02568***	***23.72656***
-7	**-10.88**	***-10.3602***	***-11.6518***	***-12.4646***	***-10.798***	***-7.93229***
+7	**22.82514**	***26.41776***	***25.81536***	***28.51714***	***28.64189***	***21.74219***
-8	**-12.8**	***-13.1124***	***-14.3325***	***-15.324***	***-14.3473***	***-10.5781***
+8	**19.01257**	***23.09115***	***22.53893***	***24.94286***	***25.06622***	***17.77344***
-9	**-14.08**	***-15.3302***	***-16.1196***	***-17.2303***	***-16.7311***	***-11.901***
+9	**17.28**	***20.8734***	***20.7***	***22.55999***	***22.68243***	***15.85938***
-10	**-16**	***-18.6568***	***-18.8004***	***-20.1857***	***-20.3068***	***-14.5469***
+10	**15.36**	***17.54679***	***17.90036***	***19.09371***	***19.10676***	***13.21354***
-11	**-17.28**	***-20.8745***	***-20.5875***	***-22.5686***	***-22.6905***	***-16***
+11	**14.08**	***15.32904***	***16.11321***	***17.22343***	***16.72298***	***11.89063***
-12	**-20.2057**	***-24.2012***	***-23.6389***	***-26.1429***	***-26.2662***	***-19.7734***
+12	**12.16**	***12.18542***	***13.4325***	***14.364***	***13.1473***	***9.244792***
-13	**-22.7474**	***-26.4189***	***-25.8232***	***-28.5257***	***-28.65***	***-21.7578***
+13	**10.88**	***10.35928***	***11.64536***	***12.45771***	***10.78987***	***8***
-14	**-26.56**	***-29.7455***	***-29.0996***	***-32.1***	***-32.2257***	***-25.7266***
+14	**8.96**	***7.620062***	***8.964645***	***9.598286***	***7.991895***	***5.304688***
-15	**-29.1017**	***-31.9633***	***-31.2839***	***-34.4829***	***-34.7777***	***-27.7109***
+15	**7.68**	***5.848547***	***7.177498***	***7.655998***	***6.35946***	***4.666667***
-16	**-32.9509**	***-36.0076***	***-34.5604***	***-38.0571***	***-38.9493***	***-31.6797***
+16	**5.76**	***4.06762***	***4.496787***	***4.796572***	***3.975678***	***3.320313***
-17	**-35.8354**	***-39.0685***	***-36.7446***	***-40.44***	***-41.7304***	***-33.6641***
+17	**4.48**	***3.156549***	***3.15***	***3.355715***	***2.8***	***2.658854***
-18	**-39.648**	***-43.6599***	***-40.2941***	***-44.0143***	***-45.902***	***-37.6328***
+18	**2.56**	***1.789937***	***1.788749***	***1.907999***	***1.586487***	***1.333333***
-19	**-42.1897**	***-47.0553***	***-42.4784***	***-46.3971***	***-48.6831***	***-39.6172***
+19	**1.28**	***0.878866***	***0.89518***	***0.954858***	***0.791895***	***0.65625***
-20	**-46.0023**	***-52.5277***	***-45.7548***	***-49.9714***	***-53.168***	***-43.5859***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.76E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.26E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	52.75714	41.1214	37.5510	32.5700	27.5168	34.2937	45.9810	48.2419	48.1460	48.0958
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	99.16	77.2983	71.5558	60.7675	51.4436	64.6375	86.6233	90.2156	90.2011	90.0965
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	134.2114	104.7492	100.1098	82.1544	69.5595	88.0687	117.8989	123.2766	123.3000	123.2891
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	166.24	129.5322	126.0107	100.3275	85.4271	109.5250	146.3119	154.1630	160.6390	160.7759
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	184	145.2000	145.2000	115.5000	98.3375	121.9906	165.1605	176.0508	189.1971	189.2366
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	201.5315	163.3476	163.0758	129.7975	110.6277	134.1813	180.9000	193.9802	213.4260	213.5813
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	204.68	173.9320	173.7934	138.3025	118.0537	137.0250	192.3563	206.3432	227.8854	231.3594
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	204.6515	182.7760	182.6722	145.3550	124.1104	138.8813	204.8250	220.1906	237.4918	246.9496
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	194.4	185.5284	185.4830	147.5687	126.1895	133.6500	209.9659	227.2203	244.8462	251.9953
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	200	184.8000	184.8000	147.0000	125.8750	136.5719	211.7983	229.8672	247.9063	250.5000
-11	-5.68E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	194.4	185.5187	185.4764	147.5644	126.1879	133.5641	209.9796	227.2047	244.8539	251.9806
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	204.5372	182.7565	182.6591	145.3463	124.1072	138.8438	204.8750	220.2062	237.4832	246.9201
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	204.5086	173.9027	173.8066	138.3112	118.0569	136.9750	192.3239	206.3458	227.8627	231.3531
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	201.5829	163.3085	163.0495	129.7800	110.6213	134.1187	180.6875	193.9698	213.3894	213.7000
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	184	145.2000	145.2000	115.5000	98.3375	121.9844	165.1406	176.0274	189.1875	189.2277
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	166.2972	129.4900	125.9713	100.3013	85.4175	109.5750	146.2767	154.1266	160.5745	160.7920
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	134.3829	104.7419	100.0967	82.1531	69.5590	88.1062	117.8966	123.2713	123.2928	123.2922
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	99.12	77.3261	71.5690	60.7812	51.4486	64.6625	86.6540	90.1594	90.2306	90.1240
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	52.73714	41.1353	37.5313	32.5769	27.5193	34.3062	45.9963	48.2359	48.1607	48.1095
-20	-3.54E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.84E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.76E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.26E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	52.75714	59.9764	62.0899	57.0656	63.8977	44.6728	47.2477	28.4809
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	99.16	113.5320	117.2652	107.6063	119.8864	84.5566	89.4021	53.4694
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	134.2114	155.8514	160.3399	146.6997	162.9943	116.0526	122.6455	72.3461
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	166.24	194.9604	199.9573	182.3034	199.9432	144.8705	153.0112	91.6703
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	184	221.1700	226.1814	206.4105	225.0000	165.5443	174.7715	106.2410
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	201.5315	243.5991	247.3903	225.9000	255.9886	182.6272	192.6605	120.3172
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	204.68	255.2858	257.9802	244.1020	274.9716	192.3778	202.8116	128.6887
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	204.6515	263.7805	271.7988	258.0523	287.7955	197.5627	208.0000	137.5054
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	194.4	271.6486	277.3354	264.8770	289.5000	203.7525	215.0494	139.6776
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	200	273.0564	276.9055	268.7983	294.4602	205.9394	217.1548	143.2348
-11	-5.68E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	194.4	271.5983	277.2988	264.8787	289.3551	203.7606	215.0588	139.6756
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	204.5372	263.7683	271.6646	257.9750	287.7500	197.6000	208.0000	137.5054
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	204.5086	255.2721	257.9771	244.0628	274.9602	192.3683	202.8022	128.6825
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	201.5829	243.5656	247.3659	225.7165	255.9545	182.6090	192.6418	120.3172
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	184	221.1166	226.1357	206.3906	225.0000	165.5527	174.7808	106.2307
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	166.2972	194.9634	199.9665	182.2648	199.9205	144.9056	153.0485	91.6702
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	134.3829	155.9108	160.4039	146.6991	162.9773	116.0435	122.6362	72.3555
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	99.12	113.5716	117.3079	107.6437	119.9318	84.5033	89.3461	53.4757
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	52.73714	59.9962	62.1113	57.0844	63.9204	44.6550	47.2290	28.4840
-20	-3.54E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.84E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 25' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.76E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.26E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	52.75714	58.0160	59.4521	53.0882	58.0250	60.8421
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	99.16	109.3686	109.7603	100.7156	110.0143	114.7314
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	134.2114	151.9215	148.1618	138.3643	152.9143	157.6985
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	166.24	189.9872	181.3954	172.7625	191.2571	195.0676
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	184	217.8766	202.4807	197.8616	219.5000	222.0946
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	201.5315	240.7981	223.0829	218.8286	242.7786	245.3970
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	204.68	258.7356	239.7870	230.9777	260.8536	267.5819
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	204.6515	277.5385	257.0767	237.9143	279.4429	283.3108
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	194.4	287.0305	265.9709	245.0371	289.1679	289.5000
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	200	292.2596	270.4074	248.3304	293.8214	294.3412
-11	-5.68E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+11	194.4	287.0208	265.9695	245.0451	289.1571	289.3125
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	204.5372	277.4872	257.0785	237.9125	279.4571	283.3378
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	204.5086	258.7067	239.7874	230.9661	260.8571	267.5971
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	201.5829	240.7917	223.0914	218.8072	242.7714	245.4003
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	184	217.8606	202.4788	197.8706	219.4821	222.0862
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	166.2972	189.9615	181.3915	172.8018	191.2286	195.0473
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	134.3829	151.9182	148.1618	138.3536	152.9107	157.7002
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	99.12	109.3237	109.7533	100.7353	110.0357	114.7551
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	52.73714	57.9968	59.4486	53.0980	58.0000	60.8539
-20	-3.54E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.84E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	132.5240018	125.6966668	119.2716013	104.4604	109.2817	101.0534	115.71	76.64035	81.17668	51.456131
-1	-2.510668744	-1.939876496	-2.240666199	-1.58962	-1.58962	-1.27255	-1.27255	-1.2129	-1.27674	-1.473734384
+1	122.2043903	117.5747701	109.9702609	97.90893	102.2262	94.48371	107.7467	72.51489	76.78789	47.86497687
-2	-7.644001785	-5.931626125	-6.846461916	-4.76885	-4.76885	-3.81764	-3.81764	-3.63871	-3.83022	-4.421197687
+2	110.14276	107.8552712	98.71700927	89.64293	93.32438	86.0849	97.56636	66.19623	70.06947	43.37329685
-3	-10.26666608	-8.094332877	-9.187924829	-6.42833	-6.42833	-5.14267	-5.14267	-4.88553	-5.14267	-5.894928085
+3	104.2305289	103.05152	93.4040895	85.50993	88.87346	81.88549	92.47617	63.13884	66.81337	41.12745989
-4	-15.6239991	-15.91216584	-13.97165014	-12.647	-12.647	-10.1279	-10.1279	-9.66928	-10.1782	-8.842391423
+4	92.36496988	93.55602308	82.87903051	77.24393	79.97161	73.28995	82.09906	57.13817	60.42968	36.63578408
-5	-18.35866783	-19.98791646	-16.41392079	-15.8263	-15.8263	-12.673	-12.673	-12.0951	-12.7317	-10.31612429
+5	86.56474406	88.86427151	77.66689954	73.11094	75.52069	68.30339	76.22171	54.13784	57.23783	34.38994097
-6	-23.94000087	-28.25141776	-21.39925076	-22.1847	-22.1847	-18.5805	-18.9308	-16.9467	-17.8386	-13.26358705
+6	74.82795792	79.59277445	67.34344033	63.81169	65.50612	59.8386	65.75266	48.13717	50.85414	30.20911226
-7	-26.78666514	-32.43916372	-23.94230928	-25.364	-25.364	-22.0164	-22.7484	-19.5379	-20.5662	-14.7373181
+7	68.924607	75.01301874	62.23210877	59.67869	61.05519	55.63919	60.66247	45.13683	47.6623	28.73537998
-8	-32.59199816	-40.9266645	-29.12923884	-32.1329	-32.1329	-28.8881	-30.3837	-24.3895	-25.6732	-17.68478144
+8	57.66014949	65.96552166	52.1102577	51.41269	52.15335	48.40535	52.0695	39.13616	41.2786	25.78791805
-9	-35.5506669	-45.22641653	-31.77310989	-35.3122	-35.3122	-32.324	-34.2014	-26.8153	-28.2266	-19.15851372
+9	52.0839185	61.08202939	47.09973015	47.2797	47.70243	44.33189	48.10427	36.13582	38.08676	24.31418559
-10	-43.566133	-53.9379173	-39.38178113	-41.7842	-41.7842	-39.1958	-42.3975	-31.756	-33.4273	-22.10597847
+10	41.04345887	51.71833607	36.89537843	40.17708	40.17708	37.46013	40.46898	30.53458	32.14167	21.36672234
-11	-49.08636491	-58.34966411	-44.62599042	-45.2359	-45.5014	-42.6317	-46.2151	-34.6462	-36.502	-23.57970943
+11	37.04399906	47.36258754	33.33959909	36.88431	36.88431	34.02425	36.5677	28.01972	29.49444	19.89298714
-12	-60.23883138	-68.24109746	-54.64704956	-53.5019	-54.4033	-50.141	-53.998	-40.6468	-42.8857	-26.52716995
+12	31.12666605	38.76308276	27.81044421	30.52585	30.52585	27.1525	28.45522	23.16811	24.38749	16.94552522
-13	-65.87105623	-72.76485514	-59.70798088	-57.6349	-58.8542	-53.5611	-58.1436	-43.6472	-46.0775	-28.00090373
+13	28.22399954	34.51933424	25.21697942	26.93612	26.93612	23.71662	24.63758	20.74231	21.83401	15.47179143
-14	-77.24752256	-81.9243522	-69.93063986	-65.9009	-67.756	-61.96	-68.324	-49.6478	-52.4612	-31.02482411
+14	22.53066652	26.1438372	20.13084985	20.57765	20.57765	16.84486	17.00229	15.72531	16.55296	12.52432951
-15	-82.99174534	-86.56010073	-75.09235929	-70.2811	-72.5336	-66.1594	-73.4142	-52.6482	-55.6531	-33.27066693
+15	19.74	22.01208804	17.63818495	17.39843	17.39843	13.93242	14.14233	13.2995	13.99948	11.05059569
-16	-95.36183276	-95.94359849	-85.51661926	-79.3331	-82.2215	-75.4112	-84.6703	-58.6488	-62.0368	-37.76234317
+16	14.27066697	13.86058342	12.7536554	11.03997	11.03997	8.842235	8.842235	8.447889	8.892515	8.103133769
-17	-101.2180777	-100.691347	-90.77915932	-83.4661	-86.6725	-79.8074	-89.9573	-61.6492	-65.2286	-40.00818031
+17	11.59200045	9.840834793	10.36179062	7.860733	7.860733	6.29714	6.29714	6.022101	6.339053	6.629399989
-18	-113.0425257	-110.2988525	-101.4050189	-91.7321	-95.5743	-88.2062	-100.138	-67.7068	-71.6764	-44.49986061
+18	6.346666854	4.905835282	5.67886483	3.965305	3.965305	3.174809	3.174809	3.02801	3.187379	3.68193774
-19	-119.1679973	-115.1586009	-107.2511973	-95.8651	-100.025	-92.4057	-105.228	-71.0252	-75.2031	-46.74569913
+19	3.780000056	2.909957112	3.3877998	2.375687	2.375687	1.902261	1.902261	1.815106	1.910638	2.208209435
-20	-131.4067967	-124.9900999	-119.2396411	-104.131	-108.927	-100.804	-115.408	-76.6508	-81.1878	-51.23737956
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**73.8229805**	**67.21465**	**60.68347**	**49.93510046**	**60.94060097**	**81.7684**	**87.9396**	**87.46572**	**87.41512**
-1	**-1.120073725**	**-1.12353**	**-0.90148**	**-0.731291392**	**-1.398520727**	**-1.08167**	**-1.08251**	**-1.04489**	**-1.0122**
+1	**68.86512887**	**61.72423**	**55.95827**	**46.14488259**	**56.89074969**	**76.3932**	**81.85785**	**81.58761**	**81.53359**
-2	**-3.360219153**	**-3.37059**	**-2.94645**	**-2.313030171**	**-4.195559822**	**-3.245**	**-3.24752**	**-3.21135**	**-3.17992**
+2	**62.50107451**	**55.315**	**50.33461**	**41.37824203**	**51.80522723**	**69.52144**	**73.96192**	**73.75011**	**73.69155**
-3	**-4.525546397**	**-4.52555**	**-3.96893**	**-3.118396122**	**-5.594078076**	**-4.37127**	**-4.37127**	**-4.37127**	**-4.26378**
+3	**59.31905036**	**52.76661**	**47.52278**	**39.0094135**	**49.26246337**	**66.08556**	**69.85925**	**69.83137**	**69.77053**
-4	**-8.915326653**	**-8.95681**	**-7.13621**	**-5.565332263**	**-8.391117452**	**-8.60872**	**-8.61882**	**-8.55081**	**-8.49172**
+4	**52.44589897**	**48.27249**	**41.89913**	**34.30076475**	**44.17693857**	**59.04659**	**61.13103**	**61.85005**	**61.92849**
-5	**-11.15547416**	**-11.2039**	**-8.92555**	**-6.976537167**	**-9.789637673**	**-10.7721**	**-10.7838**	**-10.7173**	**-10.6594**
+5	**48.97747393**	**46.02543**	**39.0873**	**31.96094467**	**41.6341725**	**54.94163**	**57.18306**	**57.35614**	**58.00748**
-6	**-15.6357643**	**-15.698**	**-12.5042**	**-9.827955095**	**-12.71631542**	**-15.5658**	**-15.5845**	**-15.5058**	**-15.4375**
+6	**42.6134195**	**41.53131**	**33.46364**	**27.31029595**	**35.91295547**	**48.0472**	**50.59705**	**50.52896**	**51.00329**
-7	**-18.09652745**	**-17.945**	**-14.2936**	**-11.26815774**	**-14.11483216**	**-18.2381**	**-18.2589**	**-18.4447**	**-18.1153**
+7	**39.43139331**	**39.28426**	**31.28708**	**25.43024196**	**33.37019421**	**44.61132**	**47.4132**	**47.34299**	**47.81547**
-8	**-22.5768217**	**-22.4392**	**-17.8723**	**-14.17756534**	**-16.91187086**	**-23.5828**	**-23.6077**	**-23.8719**	**-23.9134**
+8	**34.88630593**	**34.79014**	**27.70839**	**22.37583436**	**28.28466907**	**38.76285**	**41.04551**	**40.97104**	**41.43983**
-9	**-24.8169687**	**-24.6862**	**-19.6616**	**-15.64678064**	**-18.31039282**	**-26.2552**	**-26.7334**	**-26.6483**	**-27.1078**
+9	**32.64616197**	**32.54308**	**25.91904**	**20.86313117**	**25.74190544**	**35.5946**	**37.86167**	**37.78508**	**38.25201**
-10	**-29.29725863**	**-29.1803**	**-23.2403**	**-18.61418823**	**-21.94204431**	**-31.5999**	**-33.1011**	**-33.0202**	**-33.4835**
+10	**28.16587102**	**28.04896**	**22.34035**	**17.86671267**	**20.65637907**	**30.2499**	**31.49398**	**31.41313**	**31.87637**
-11	**-31.53740259**	**-31.4274**	**-25.0297**	**-20.11239143**	**-24.48480642**	**-34.2722**	**-36.2849**	**-36.2062**	**-36.6713**
+11	**25.92572605**	**25.80189**	**20.55101**	**16.38300888**	**19.09214949**	**27.57755**	**28.31013**	**28.22715**	**28.68854**
-12	**-36.01769253**	**-35.9215**	**-28.6084**	**-23.13780932**	**-29.57033133**	**-40.1128**	**-42.6526**	**-42.5781**	**-43.0469**
+12	**21.44543178**	**21.30778**	**16.97231**	**13.44460127**	**16.20475756**	**22.23285**	**22.25781**	**22.52201**	**22.56345**
-13	**-38.4671464**	**-38.1686**	**-30.3977**	**-24.66501372**	**-32.1130964**	**-42.9111**	**-45.8364**	**-45.7641**	**-46.2347**
+13	**19.20528682**	**19.06072**	**15.18297**	**11.98988717**	**14.80623686**	**19.5605**	**19.58338**	**19.84579**	**19.44307**
-14	**-44.22050793**	**-42.6627**	**-34.8779**	**-28.47246271**	**-37.19862122**	**-49.7829**	**-52.2041**	**-52.136**	**-52.6104**
+14	**14.50437696**	**14.5666**	**11.60428**	**9.109479582**	**12.00919816**	**14.2158**	**14.23452**	**14.15587**	**14.08754**
-15	**-47.40253214**	**-44.9098**	**-37.6897**	**-30.79778243**	**-40.14142504**	**-53.2187**	**-56.0551**	**-56.0551**	**-56.0551**
+15	**12.26422735**	**12.31954**	**9.814932**	**7.683775622**	**10.48104409**	**11.84256**	**11.87144**	**12.02098**	**11.73434**
-16	**-54.05298211**	**-49.4039**	**-43.3133**	**-35.47743938**	**-45.46259855**	**-60.7821**	**-63.1238**	**-63.8269**	**-63.9052**
+16	**7.783937327**	**7.825413**	**6.236241**	**4.861357663**	**7.684002724**	**7.515899**	**7.526005**	**7.457995**	**7.398907**
-17	**-57.74410863**	**-51.6509**	**-46.1252**	**-37.83176012**	**-48.00536448**	**-64.3853**	**-67.2856**	**-67.8893**	**-67.8262**
+17	**5.543796625**	**5.578367**	**4.477148**	**3.523565836**	**6.285484736**	**5.352569**	**5.36099**	**5.291538**	**5.231183**
-18	**-64.10816368**	**-56.9285**	**-51.7488**	**-42.56940101**	**-53.09088968**	**-71.2571**	**-75.9547**	**-75.7268**	**-75.6683**
+18	**2.794526534**	**2.804893**	**2.432181**	**1.912829814**	**3.48844305**	**2.698587**	**2.701114**	**2.664941**	**2.633509**
-19	**-67.29018861**	**-60.1331**	**-54.5607**	**-44.95273697**	**-55.63364863**	**-74.693**	**-79.9027**	**-79.6456**	**-79.5893**
+19	**1.674451775**	**1.681362**	**1.409698**	**1.121963275**	**2.089924904**	**1.616922**	**1.618606**	**1.581709**	**1.549651**
-20	**-73.65423755**	**-66.5424**	**-60.1843**	**-49.7483786**	**-60.71918056**	**-81.5647**	**-87.7986**	**-87.4831**	**-87.4313**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	99.32144294	102.7294376	81.34801	89.908	96.78251
-1	-1.145723805	-1.269673884	-1.28811	-1.28177	-1.14537
+1	89.77491562	94.09199338	77.01855	84.08127	90.76931
-2	-3.437169355	-3.895237363	-3.86432	-4.02972	-3.44523
+2	80.60912638	83.57822381	70.72114	77.21138	82.25061
-3	-4.610087078	-5.2080181	-5.187	-5.52588	-4.61067
+3	76.0262478	78.32133984	67.57244	73.77643	78.24181
-4	-9.00723394	-8.428624065	-10.2703	-10.7705	-9.21039
+4	66.86045866	67.80756999	60.88145	66.90654	70.22421
-5	-11.29867364	-10.98743844	-12.8465	-13.6983	-11.5011
+5	63.05758145	62.91989787	57.73275	63.47159	66.21541
-6	-16.66621305	-16.25008164	-18.1242	-19.3579	-17.186
+6	56.1832463	54.09892522	51.43535	56.6017	58.19781
-7	-20.10338278	-18.89470503	-20.7005	-22.1058	-20.7316
+7	52.74607336	49.68844763	48.28664	53.16675	54.18901
-8	-26.97772452	-25.28587626	-25.8529	-27.5764	-27.6038
+8	45.87173931	42.86005021	41.98924	46.29685	46.683
-9	-30.41488388	-28.48146558	-28.4291	-30.8511	-31.0399
+9	42.43456947	39.66447622	38.84054	42.86191	43.05538
-10	-37.28922557	-34.8726368	-34.1281	-37.721	-37.9122
+10	35.56023293	33.27330082	32.54314	35.99201	36.18316
-11	-40.72639585	-38.06822272	-37.2768	-41.156	-41.3483
+11	32.12306206	30.07770249	29.82525	32.55707	32.74704
-12	-47.6007244	-44.45939497	-43.5742	-48.0259	-48.412
+12	25.24872649	23.68652788	24.55612	26.21856	25.87481
-13	-51.03789734	-47.65498402	-46.7229	-51.4608	-52.1974
+13	21.81155563	20.49095295	21.97991	23.47059	22.43871
-14	-57.91222699	-56.30630482	-53.0203	-58.3307	-60.215
+14	14.93722027	14.93314906	16.8275	17.97469	15.45699
-15	-61.34941002	-60.71679351	-56.169	-61.7656	-64.2238
+15	12.43746349	12.3018276	14.25128	15.20137	12.67933
-16	-69.16578295	-70.43855062	-62.4664	-68.6355	-72.2414
+16	7.854568894	7.3624039	8.973508	9.387318	8.057727
-17	-73.748677	-75.69543379	-65.6151	-72.0705	-76.2502
+17	5.563121577	5.863775414	6.397302	6.639365	5.690377
-18	-82.91445762	-86.20920365	-72.3061	-78.9404	-84.2678
+18	2.86084221	3.238211634	3.215935	3.338124	2.868902
-19	-87.49735244	-91.46609003	-75.4548	-82.3753	-88.3946
+19	1.715114066	1.925429744	1.927831	1.964142	1.72353
-20	-98.27987481	-102.732419	-81.3586	-89.2452	-96.7953
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.92E-14	*-7.78E-14*	*-5.92E-14*	-5.92E-14	-5.97E-14	-5.14E-14	-5.14E-14	-4.87E-14	-5.13E-14	-3.62E-14
End Shear	6.71E-14	*3.88E-14*	*5.58E-14*	3.16E-14	3.16E-14	3.58E-14	4.26E-14	2.43E-14	2.56E-14	2.04E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	184.1045855	*177.1601552*	*165.9576815*	146.8634012	153.3393358	141.7255617	161.6201053	108.7723392	115.1818396	71.79746531
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	343.1186187	*334.5934331*	*308.1566473*	275.1283018	286.6495177	264.5537946	300.3343579	204.0113646	215.9668929	133.4886534
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	477.6053803	*472.2998399*	*428.5692613*	384.7947051	399.9305478	368.484701	416.1427584	284.1247838	300.6601637	185.0735695
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	586.4584975	*590.2793986*	*526.7745272*	475.8626243	493.182441	453.5182506	509.0452723	351.8300623	372.1536407	226.552207
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	671.2855806	*688.5320365*	*602.7727518*	548.3320143	566.4051498	519.1625361	578.5500143	406.0337835	429.283759	257.9245573
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	731.3975222	*767.0578414*	*656.5638079*	601.5479064	618.9437077	565.8110847	655.5916198	447.379864	472.8039225	279.1906454
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	766.1738297	*825.856697*	*688.1475583*	636.0342177	651.3220374	617.1333128	709.6289843	475.324032	502.0026198	301.7465881
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	776.110943	*864.9288007*	*697.5242679*	659.4212531	686.4307365	650.5933064	740.268552	489.7666884	516.838026	318.3261024
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	761.3329977	*884.0660879*	*684.6937275*	680.7225029	704.6702297	665.1558903	748.0021807	506.1483941	535.2642247	328.2737837
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	730.6379186	*882.4375034*	*658.0172163*	683.4252958	702.8806123	660.8211883	732.8299847	510.4950515	539.3606128	331.5896732
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	761.5440137	*884.0244871*	*685.38961*	680.5050365	704.4763424	665.0545256	747.9628046	506.1627917	535.2809673	328.2737584
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	775.8627248	*865.2612705*	*697.4958763*	659.1697359	686.2001758	650.4595081	740.1898649	489.7653554	516.8380283	318.3260698
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	765.8013615	*826.1476167*	*688.0624157*	636.0106353	651.3167992	616.9670032	709.510882	475.3069401	501.9858632	301.7465602
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	731.0251073	*767.3071704*	*656.4501354*	601.4902405	618.9017697	565.8090923	655.6309578	447.3470367	472.7704255	279.2234193
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	671.5337088	*688.7398378*	*602.630732*	548.3713264	566.4575659	519.1280951	578.5500817	406.1125385	429.3675407	257.9518791
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	586.9550974	*590.4456552*	*526.604283*	475.9989518	493.3292516	453.5498141	509.1044106	351.8930521	372.2206507	226.5740682
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	477.2888608	*472.4244941*	*428.3704047*	384.8968278	400.0405237	368.5820647	416.2607764	284.1719754	300.7103674	185.0899746
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	342.9075266	*334.6765081*	*307.9294364*	275.1963931	286.7228558	264.6186956	300.4130335	203.9155559	215.866395	133.4995676
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	183.8112691	*177.2017281*	*165.7056205*	146.8974651	153.3760197	141.7580213	161.6594425	108.7880731	115.1985777	71.80293571
-20	-1.02E-13	*-5.18E-14*	*-8.58E-14*	-4.28E-14	-4.28E-14	-4.27E-14	-4.98E-14	-3.25E-14	-3.43E-14	-3.65E-14
+20	1.35E-13	*5.14E-14*	*6.96E-14*	5.52E-14	5.97E-14	4.88E-14	6.70E-14	3.78E-14	4.03E-14	3.86E-14

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.15E-14	-3.49E-14	-2.90E-14	-2.49E-14	-3.65E-14	-4.37E-14	-4.09E-14	-3.89E-14	-4.06E-14
End Shear	2.26E-14	2.02E-14	3.03E-14	2.05E-14	3.29E-14	3.19E-14	2.32E-14	2.27E-14	2.27E-14
-1	0	0	0	0	0	0	0	0	0
+1	103.2976933	92.58634545	83.93740629	69.42394889	85.33612453	114.5897959	122.7867739	122.3814083	122.3003888
-2	0	0	0	0	0	0	0	0	0
+2	192.2762685	171.2108842	155.2215813	128.6775805	159.2298227	213.7181412	227.8077134	227.128469	226.9561823
-3	0	0	0	0	0	0	0	0	0
+3	266.9357266	237.8858352	214.4350152	177.7608609	221.6810852	297.3850377	314.9854367	320.9993548	320.9273886
-4	0	0	0	0	0	0	0	0	0
+4	327.191241	297.2718511	261.2289427	216.673854	272.6899147	365.5904589	384.0107506	408.431379	408.2464767
-5	0	0	0	0	0	0	0	0	0
+5	372.7033591	346.5461011	295.369627	245.7010056	312.2562938	417.916287	435.2701811	475.5755994	475.6257003
-6	0	0	0	0	0	0	0	0	0
+6	403.8963718	385.7085755	316.8570892	264.9742302	340.0267046	454.6970141	480.7577502	529.2125298	540.2092165
-7	0	0	0	0	0	0	0	0	0
+7	420.7702446	414.7592825	335.756394	281.6496297	356.0010689	490.4397163	519.7093626	569.0517052	594.1079845
-8	0	0	0	0	0	0	0	0	0
+8	440.8898749	433.6982357	347.7539583	292.481864	360.5330807	516.411024	540.8951594	592.2601387	629.0711828
-9	0	0	0	0	0	0	0	0	0
+9	447.7085016	442.5254005	352.0590194	296.4481106	353.6226163	526.920814	559.4201045	612.977549	645.0986593
-10	0	0	0	0	0	0	0	0	0
+10	441.240804	441.2407997	350.9870107	295.8652494	335.2697187	521.9691872	563.9452599	618.0038637	642.1904966
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	447.5860468	442.5135901	352.0510658	296.4451135	353.5797674	526.8253603	559.3154709	613.0629308	645.0725607
-12	0	0	0	0	0	0	0	0	0
+12	440.7432661	433.674664	347.7743646	292.4895329	360.4688367	516.2890276	541.5228539	592.2449404	629.0190656
-13	0	0	0	0	0	0	0	0	0
+13	420.7692751	414.7238964	335.7643204	281.6526199	355.9153842	490.2911254	519.5974575	569.0119443	594.0297436
-14	0	0	0	0	0	0	0	0	0
+14	403.8712887	385.6614207	316.8525273	264.9725048	339.9195667	454.6891201	480.6177027	529.1482785	540.1048679
-15	0	0	0	0	0	0	0	0	0
+15	372.6541678	346.487125	295.3526201	245.6945956	312.3633835	417.8818535	435.2565245	475.5111075	475.7368314
-16	0	0	0	0	0	0	0	0	0
+16	327.1179931	297.2011463	261.1995018	216.6926683	272.7756408	365.6131496	383.9689796	408.4094591	408.29317
-17	0	0	0	0	0	0	0	0	0
+17	267.0080583	237.8033175	214.3930604	177.774939	221.7453535	297.4647029	314.9153839	321.0198216	320.9465269
-18	0	0	0	0	0	0	0	0	0
+18	192.3244788	171.1265272	155.2464839	128.6869282	159.2726393	213.7712406	227.8640457	227.1804123	227.0047789
-19	0	0	0	0	0	0	0	0	0
+19	103.3217983	92.60318091	83.94986627	69.42864876	85.35753212	114.6163504	122.8149955	122.4074347	122.324731
-20	-3.45E-14	-2.61E-14	-2.85E-14	-1.77E-14	-4.59E-14	-3.75E-14	-3.10E-14	-3.27E-14	-3.41E-14
+20	5.54E-14	3.08E-14	4.66E-14	3.42E-14	4.51E-14	4.11E-14	4.28E-14	4.28E-14	4.28E-14

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.35E-14	-3.88E-14	-5.14E-14	-4.95E-14	-4.61E-14
End Shear	4.10E-14	4.96E-14	2.54E-14	2.71E-14	2.88E-14
-1	0	0	0	0	0
+1	134.6623734	141.6068919	115.527818	126.1219031	136.1539592
-2	0	0	0	0	0
+2	249.2745593	260.8509464	215.705713	237.0286409	252.7650151
-3	0	0	0	0	0
+3	344.0970101	356.5665382	302.3048415	333.1350595	352.0881448
-4	0	0	0	0	0
+4	418.2964741	428.6512699	374.7348287	413.7843066	434.1322093
-5	0	0	0	0	0
+5	476.0955966	477.3067632	433.3234195	478.9762122	498.5511302
-6	0	0	0	0	0
+6	532.3236916	543.4775313	478.2068166	528.7109141	551.3731826
-7	0	0	0	0	0
+7	572.1514475	585.992319	508.9210609	569.4432645	602.2623975
-8	0	0	0	0	0
+8	604.1709195	605.5992004	525.4661639	607.6282547	635.1120713
-9	0	0	0	0	0
+9	627.2407454	607.4554369	542.333277	630.3559525	649.9220681
-10	0	0	0	0	0
+10	634.8432945	605.0252937	548.2802941	637.6840369	646.7882497
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	627.173014	607.4651176	542.346244	630.3962645	649.9850064
-12	0	0	0	0	0
+12	604.0877571	605.591505	525.4633028	607.6513251	635.1558582
-13	0	0	0	0	0
+13	572.1930789	585.9999696	508.9023199	569.4490089	602.2869959
-14	0	0	0	0	0
+14	532.3445095	543.4813842	478.1722312	528.6993724	551.378642
-15	0	0	0	0	0
+15	476.0695521	477.3067914	433.2729726	478.947388	498.5374359
-16	0	0	0	0	0
+16	418.2756821	428.6474708	374.798242	413.7382384	434.0994315
-17	0	0	0	0	0
+17	344.0553461	356.5589925	302.3523746	333.0716506	352.1455464
-18	0	0	0	0	0
+18	249.2120944	260.8395717	216.9181384	236.9479054	252.8032796
-19	0	0	0	0	0
+19	134.6832206	141.5916257	115.5436638	126.1392312	136.0910451
-20	-3.81E-14	-4.84E-14	-4.12E-14	-4.60E-14	-3.78E-14
+20	6.67E-14	6.89E-14	3.80E-14	4.15E-14	4.56E-14

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	49.6	38.28	34.85333	31.46667	26.65	31.6	42.4	45.6	45.35428	45.32804
-1	-1.06667	-0.5808	-0.58259	-0.46745	-0.38044	-0.72519	-0.56088	-0.56132	-0.54181	-0.52486
+1	45.876	35.70917	32.00634	29.01647	24.61143	29.5	39.61275	42.44638	42.30625	42.27824
-2	-3.2	-1.7424	-1.74778	-1.52784	-1.20808	-2.17556	-1.68265	-1.68396	-1.6652	-1.64891
+2	41.584	32.40916	28.68292	26.1004	22.04795	26.86296	36.04949	38.35205	38.24222	38.21185
-3	-4.26667	-2.34667	-2.34667	-2.05804	-1.63189	-2.90074	-2.26667	-2.26667	-2.26667	-2.21093
+3	39.46489	30.75917	27.36148	24.64236	20.7762	25.54445	34.26786	36.22466	36.2102	36.17865
-4	-6.4	-4.62293	-4.64444	-3.70039	-2.91809	-4.35111	-4.46395	-4.46918	-4.43392	-4.40328
+4	35.16089	27.19518	25.03111	21.72628	18.25271	22.90741	30.61789	31.69874	32.07159	32.11226
-5	-7.46667	-5.78453	-5.80963	-4.62824	-3.66102	-5.0763	-5.58572	-5.59182	-5.55731	-5.52732
+5	33.04178	25.39667	23.86592	20.26824	17.00096	21.58889	28.48931	29.65158	29.74132	30.07906
-6	-9.6	-8.10773	-8.14	-6.48392	-5.16688	-6.59389	-8.07143	-8.08113	-8.04035	-8.00492
+6	28.69687	22.09667	21.53555	17.35216	14.51747	18.62222	24.91428	26.23648	26.20117	26.44713
-7	-10.6667	-9.38373	-9.30518	-7.41176	-5.92981	-7.31907	-9.45714	-9.46792	-9.56428	-9.39344
+7	26.48533	20.44666	20.37037	16.22353	13.5091	17.3037	23.13265	24.58553	24.54912	24.79413
-8	-12.8	-11.7069	-11.6356	-9.26745	-7.47566	-8.76944	-12.2286	-12.2415	-12.3785	-12.4
+8	22.24711	18.08987	18.04	14.36784	11.86324	14.66667	20.1	21.28365	21.24503	21.48812
-9	-13.8667	-12.8685	-12.8007	-10.1953	-8.2586	-9.49463	-13.6143	-13.8623	-13.8181	-14.0564
+9	20.128	16.92827	16.87481	13.44	11.05031	13.34815	18.45714	19.6327	19.59299	19.83511
-10	-16.8533	-15.1917	-15.1311	-12.051	-9.84445	-11.3778	-16.3857	-17.1642	-17.1222	-17.3624
+10	15.88978	14.60507	14.54444	11.58431	9.444452	10.71111	15.68571	16.33082	16.28889	16.5291
-11	-18.9724	-16.3533	-16.2963	-12.9788	-10.6474	-12.6963	-17.7714	-18.8151	-18.7743	-19.0154
+11	14.4	13.44347	13.37926	10.65647	8.651524	9.9	14.3	14.67987	14.63684	14.87609
-12	-23.2107	-18.6765	-18.6267	-14.8345	-12.2732	-15.3333	-20.8	-22.117	-22.0784	-22.3214
+12	12.26667	11.12027	11.04889	8.800785	7.085668	8.402778	11.52857	11.54151	11.67851	11.7
-13	-25.3298	-19.9467	-19.7919	-15.7624	-13.0962	-16.6519	-22.251	-23.7679	-23.7304	-23.9745
+13	11.2	9.958666	9.883703	7.872942	6.312735	7.677592	10.14286	10.15472	10.29079	10.08197
-14	-29.568	-22.93	-22.1222	-18.0855	-15.1375	-19.2889	-25.8143	-27.0698	-27.0345	-27.2805
+14	9.066667	7.521067	7.553333	6.017256	4.786879	6.227222	7.371431	7.381135	7.340354	7.30492
-15	-31.6871	-24.58	-23.2874	-19.5435	-16.3792	-20.8148	-27.5959	-29.0667	-29.0667	-29.0667
+15	8	6.359465	6.388146	5.089412	4.033952	5.434817	6.140814	6.155788	6.233333	6.084697
-16	-36.256	-28.0285	-25.6178	-22.4596	-18.8827	-23.5741	-31.5178	-32.7321	-33.0966	-33.1373
+16	5.866667	4.036265	4.057772	3.233726	2.548091	3.984445	3.897277	3.902517	3.867252	3.836613
-17	-38.3751	-29.9425	-26.783	-23.9176	-20.1445	-24.8926	-33.3862	-34.8901	-35.2032	-35.1705
+17	4.8	2.874668	2.892594	2.32157	1.845711	3.259261	2.775509	2.779876	2.743862	2.712566
-18	-42.6133	-33.2425	-29.5196	-26.8337	-22.6879	-27.5296	-36.9495	-39.3854	-39.2672	-39.2369
+18	2.666667	1.449067	1.454443	1.261178	0.998077	1.808889	1.399319	1.400629	1.381873	1.365574
-19	-44.8	-34.8925	-31.1813	-28.2918	-23.9697	-28.8481	-38.7311	-41.4325	-41.2992	-41.27
+19	1.6	0.868266	0.871849	0.730981	0.584261	1.083705	0.838435	0.839308	0.820176	0.803552
-20	-49.12	-38.1925	-34.5047	-31.2078	-26.5532	-31.4852	-42.2944	-45.5269	-45.3633	-45.3364
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	49.6	54.16667	56.66667	52.4	60	39.74091	42.09317	26.68195
-1	-1.06667	-0.82428	-0.82428	-0.65986	-0.65986	-0.62894	-0.66204	-0.76419
+1	45.876	50.76948	53.00815	48.99337	55.87075	37.60171	39.81742	24.8198
-2	-3.2	-2.47283	-2.47283	-1.97959	-1.97959	-1.88681	-1.98611	-2.29256
+2	41.584	46.48324	48.39221	44.63827	50.59184	34.32524	36.33366	22.49069
-3	-4.26667	-3.33333	-3.33333	-2.66667	-2.66667	-2.53333	-2.66667	-3.05674
+3	39.46489	44.34013	46.08424	42.46072	47.95238	32.73987	34.64525	21.32614
-4	-6.4	-6.55797	-6.55797	-5.2517	-5.2517	-5.01389	-5.27778	-4.58511
+4	35.16089	40.05389	41.46829	38.00361	42.57146	29.6283	31.33507	18.99704
-5	-7.46667	-8.20652	-8.20652	-6.57143	-6.57143	-6.27176	-6.60185	-5.3493
+5	33.04178	37.91078	39.16032	35.41788	39.52383	28.07251	29.67998	17.83248
-6	-9.6	-11.5036	-11.5036	-9.63469	-9.81633	-8.7875	-9.25	-6.87767
+6	28.69687	33.08877	33.96739	31.02857	34.09524	24.96094	26.36979	15.66456
-7	-10.6667	-13.1522	-13.1522	-11.4163	-11.7959	-10.1311	-10.6644	-7.64186
+7	26.48533	30.94565	31.65942	28.85102	31.45578	23.40515	24.7147	14.90038
-8	-12.8	-16.6621	-16.6621	-14.9796	-15.7551	-12.6469	-13.3125	-9.17023
+8	22.24711	26.65942	27.04348	25.1	27	20.29357	21.40451	13.37201
-9	-13.8667	-18.3107	-18.3107	-16.7612	-17.7347	-13.9047	-14.6366	-9.93441
+9	20.128	24.51631	24.73551	22.98776	24.94388	18.73779	19.74942	12.60782
-10	-16.8533	-21.6667	-21.6667	-20.3245	-21.9847	-16.4667	-17.3333	-11.4628
+10	15.88978	20.83333	20.83333	19.42449	20.9847	15.83333	16.66667	11.07945
-11	-18.9724	-23.4565	-23.5942	-22.1061	-23.9643	-17.9653	-18.9277	-12.227
+11	14.4	19.12591	19.12591	17.64286	18.96173	14.52928	15.29398	10.31526
-12	-23.2107	-27.7428	-28.2101	-26	-28	-21.0769	-22.2379	-13.7553
+12	12.26667	15.8288	15.8288	14.07959	14.7551	12.01354	12.64583	8.786894
-13	-25.3298	-29.8859	-30.5181	-27.7735	-30.1497	-22.6327	-23.8929	-14.5195
+13	11.2	13.96739	13.96739	12.29796	12.77551	10.75567	11.32176	8.022708
-14	-29.568	-34.1721	-35.1341	-32.1286	-35.4286	-25.7443	-27.2031	-16.0875
+14	9.066667	10.67029	10.67029	8.734697	8.81633	8.154167	8.583333	6.494337
-15	-31.6871	-36.4434	-37.6114	-34.3061	-38.068	-27.3001	-28.8582	-17.2521
+15	8	9.02174	9.02174	7.224487	7.333333	6.896294	7.259257	5.730151
-16	-36.256	-41.1372	-42.635	-39.1035	-43.9047	-30.4116	-32.1684	-19.5812
+16	5.866667	5.72464	5.72464	4.585032	4.585032	4.380549	4.611104	4.201781
-17	-38.3751	-43.2803	-44.9429	-41.3832	-46.6463	-31.9674	-33.8235	-20.7458
+17	4.8	4.076087	4.076087	3.265305	3.265305	3.122686	3.287038	3.437594
-18	-42.6133	-47.5666	-49.5589	-45.7383	-51.9252	-35.1085	-37.1669	-23.0749
+18	2.666667	2.05616	2.05616	1.646258	1.646258	1.570137	1.652776	1.909224
-19	-44.8	-49.7097	-51.8668	-47.9158	-54.5646	-36.8293	-38.9957	-24.2394
+19	1.6	1.231883	1.231883	0.986394	0.986394	0.941201	0.990738	1.14504
-20	-49.12	-53.9959	-56.4828	-52.2709	-59.8435	-39.7464	-42.099	-26.5685
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 30' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	49.6	57.44444	59.41552	47.04917	52	55.976
-1	-1.06667	-0.66265	-0.73434	-0.745	-0.74133	-0.66245
+1	45.876	51.92303	54.41989	44.54514	48.63	52.49815
-2	-3.2	-1.98795	-2.25288	-2.235	-2.33067	-1.99262
+2	41.584	46.62182	48.33905	40.90292	44.65667	47.5712
-3	-4.26667	-2.66633	-3.01216	-3	-3.196	-2.66667
+3	39.46489	43.97122	45.29863	39.08181	42.67	45.25264
-4	-6.4	-5.2095	-4.87485	-5.94	-6.22933	-5.32701
+4	35.16089	38.67002	39.2178	35.21194	38.69667	40.6155
-5	-7.46667	-6.5348	-6.35479	-7.43	-7.92265	-6.6519
+5	33.04178	36.47055	36.39092	33.39083	36.71	38.29694
-6	-9.6	-9.63922	-9.39854	-10.4825	-11.196	-9.93984
+6	28.69687	32.49465	31.28914	29.74861	32.73667	33.65981
-7	-10.6667	-11.6272	-10.9281	-11.9725	-12.7853	-11.9905
+7	26.48533	30.50669	28.73826	27.9275	30.75	31.34125
-8	-12.8	-15.6031	-14.6246	-14.9525	-15.9493	-15.9652
+8	22.24711	26.53079	24.78892	24.28528	26.77666	27
-9	-13.8667	-17.591	-16.4728	-16.4425	-17.8433	-17.9525
+9	20.128	24.54284	22.9407	22.46417	24.79	24.9019
-10	-16.8533	-21.5669	-20.1693	-19.7386	-21.8167	-21.9272
+10	15.88978	20.56694	19.24425	18.82194	20.81667	20.92722
-11	-18.9724	-23.5549	-22.0175	-21.5597	-23.8033	-23.9146
+11	14.4	18.57898	17.39601	17.25	18.83	18.93987
-12	-23.2107	-27.5308	-25.7139	-25.2019	-27.7767	-28
+12	12.26667	14.60308	13.69955	14.2025	15.164	14.96519
-13	-25.3298	-29.5187	-27.5622	-27.0231	-29.7633	-30.1893
+13	11.2	12.61513	11.85133	12.7125	13.57466	12.97785
-14	-29.568	-33.4946	-32.5658	-30.6653	-33.7367	-34.8265
+14	9.066667	8.639225	8.63687	9.732502	10.396	8.939842
-15	-31.6871	-35.4826	-35.1167	-32.4864	-35.7233	-37.145
+15	8	7.193443	7.114996	8.242498	8.791998	7.333333
-16	-36.256	-40.0033	-40.7395	-36.1286	-39.6967	-41.7822
+16	5.866667	4.542839	4.258186	5.189999	5.429334	4.660339
-17	-38.3751	-42.6539	-43.7799	-37.9497	-41.6833	-44.1007
+17	4.8	3.217537	3.391426	3.700001	3.840003	3.291138
-18	-42.6133	-47.9552	-49.8607	-41.8196	-45.6567	-48.7379
+18	2.666667	1.654622	1.872881	1.859997	1.930667	1.659284
-19	-44.8	-50.6058	-52.9012	-43.6407	-47.6433	-51.1247
+19	1.6	0.991969	1.113609	1.114998	1.135999	0.996836
-20	-49.12	-56.842	-59.4172	-47.0553	-51.6167	-55.9834
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.89E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.81E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	68.814	53.5638	48.0095	43.5247	37.0597	44.2500	59.4191	63.6696	63.4594	63.4174
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	127.9307	99.7025	88.7793	80.4882	68.7340	82.5667	110.8209	118.1269	117.7747	117.6853
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	177.592	138.4162	123.3528	111.1926	95.0229	114.9500	154.2054	163.3318	166.4503	166.4130
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	217.424	169.6610	154.1467	135.4571	115.9265	141.4000	189.5724	199.1241	211.7871	211.6912
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	247.8134	193.2608	179.6972	153.1603	131.5923	161.9167	216.7054	225.7040	246.6039	246.6299
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	268.768	209.4355	200.0044	164.3024	142.0886	176.3167	235.7776	249.2910	274.4167	280.1189
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	279.92	218.1852	215.0683	174.1024	151.1262	184.6000	254.3115	269.4889	295.0748	308.0674
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	281.4827	228.6180	224.8889	180.3235	157.0223	186.9500	267.7786	280.4745	307.1092	326.1971
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	273.5093	232.1537	229.4661	182.5559	159.2464	183.3667	273.2283	290.0804	317.8520	334.5080
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	259.78	228.8000	228.8000	182.0000	159.0000	173.8500	270.6607	292.4269	320.4583	333.0000
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	273.6	232.0902	229.4600	182.5518	159.2449	183.3444	273.1788	290.0262	317.8963	334.4945
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	281.376	228.5420	224.8767	180.3341	157.0263	186.9167	267.7153	280.8000	307.1013	326.1701
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	279.76	218.1847	215.0500	174.1065	151.1278	184.5556	254.2344	269.4309	295.0542	308.0268
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	268.608	209.4225	199.9800	164.3000	142.0877	176.2611	235.7735	249.2184	274.3833	280.0647
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	247.92	193.2352	179.6666	153.1515	131.5889	161.9722	216.6875	225.6969	246.5704	246.6875
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	217.536	169.6230	154.1100	135.4418	115.9363	141.4445	189.5842	199.1024	211.7757	211.7154
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	177.456	138.4538	123.3100	111.1709	95.0302	114.9833	154.2467	163.2955	166.4609	166.4229
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	127.84	99.7275	88.7356	80.5012	68.7388	82.5889	110.8485	118.1561	117.8016	117.7105
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	68.68798	53.5763	48.0182	43.5312	37.0621	44.2611	59.4329	63.6842	63.4729	63.4300
-20	-4.25E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.89E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.81E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	68.814	76.1542	79.5122	73.4901	83.8061	56.4026	59.7261	37.2297
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	127.9307	142.6644	148.6386	137.1811	155.7347	105.7876	111.9870	69.2189
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	177.592	199.5306	207.3791	191.0732	215.7857	147.3294	155.9036	95.9676
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	217.424	246.7527	255.7337	235.1663	263.9592	182.4372	192.9757	117.4759
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	247.8134	284.3308	293.7024	269.2054	300.0000	210.5438	222.5998	133.7436
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	268.768	311.9253	320.9457	293.3944	339.9490	231.9833	245.1667	144.7709
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	279.92	329.8077	337.7350	320.0069	367.9694	246.4734	260.3073	156.4670
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	281.4827	341.9348	355.9402	337.3572	383.8572	253.9625	268.0000	165.0641
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	273.5093	352.9803	365.3981	344.9084	387.8673	262.4570	277.5547	170.2223
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	259.78	354.3818	364.4701	342.6607	380.0000	264.7109	279.6788	171.9418
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	273.6	352.8675	365.2976	344.8559	387.8469	262.4645	277.5634	170.2223
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	281.376	341.8044	355.8207	337.2878	383.8164	253.9618	268.0000	165.0641
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	279.76	329.7955	337.7323	319.9207	367.9082	246.4646	260.2986	156.4670
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	268.608	311.8954	320.9239	293.3934	339.9694	231.9663	245.1493	144.7879
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	247.92	284.3512	293.7296	269.1875	300.0000	210.5847	222.6433	133.7578
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	217.536	246.8234	255.8098	235.1827	263.9898	182.4698	193.0104	117.4872
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	177.456	199.5835	207.4361	191.1237	215.8469	147.3539	155.9297	95.9761
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	127.84	142.6997	148.6766	137.2148	155.7755	105.7379	111.9349	69.2246
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	68.68798	76.1719	79.5313	73.5069	83.8265	56.4107	59.7348	37.2325
-20	-4.25E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 30' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.89E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.81E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	68.814	77.8845	81.9010	66.8177	72.9450	78.7472
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	127.9307	144.1727	150.8681	124.7575	137.0900	146.1914
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	177.592	199.0150	206.2270	174.8437	192.6750	203.6369
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	217.424	241.9297	247.9186	216.7350	239.3200	251.0886
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	247.8134	275.3589	276.0594	250.6208	277.0250	288.3465
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	268.768	307.8795	314.3306	276.5800	305.7900	318.8972
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	279.92	330.9147	338.9198	294.3442	329.3483	348.3299
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	281.4827	349.4337	350.2598	303.9133	351.4333	367.3291
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	273.5093	362.7766	351.3334	313.6688	364.5783	375.8948
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	259.78	367.1737	349.9279	317.1083	368.8167	374.0823
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	273.6	362.7374	351.3390	313.6763	364.6017	375.9312
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	281.376	349.3856	350.2554	303.9117	351.4467	367.3545
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	279.76	330.9387	338.9242	294.3333	329.3517	348.3441
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	268.608	307.8916	314.3328	276.5600	305.7833	318.9003
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	247.92	275.3439	276.0595	250.5917	277.0083	288.3386
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	217.536	241.9177	247.9164	216.7717	239.2934	251.0697
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	177.456	198.9909	206.2227	174.8712	192.6383	203.6701
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	127.84	144.1365	150.8615	125.4587	137.0433	146.2136
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	68.68798	77.8966	81.8922	66.8269	72.9550	78.7108
-20	-4.25E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 35' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	142.7720015	129.605	128.494801	107.445	112.955	104.8002	121.22	83.752	88.16	53.76153014
-1	-3.240002059	-2.510579756	-2.893558057	-2.04599	-2.04599	-1.6377	-1.6377	-1.56865	-1.65121	-1.895344844
+1	130.7122402	120.191515	117.8446866	99.99233	104.929	97.29971	112.1285	75.20685	79.1651	49.70817523
-2	-7.672001824	-5.970016834	-6.852432781	-4.77398	-4.77398	-3.82129	-3.82129	-3.64886	-3.8409	-4.422467726
+2	119.1320924	111.5606394	107.1741727	92.89955	97.29067	90.09386	103.3941	68.33089	72.38763	45.85705878
-3	-11.07999941	-10.2071874	-9.953296379	-8.12995	-8.12995	-6.50996	-6.50996	-6.23042	-6.55833	-6.317808795
+3	110.5309675	105.1714825	98.6362307	87.57997	91.56189	84.68947	96.84335	64.47156	68.28196	42.96872121
-4	-15.73599916	-17.17406186	-14.11377121	-13.5859	-13.5859	-10.8771	-10.8771	-10.3908	-10.9377	-8.844931709
+4	99.56799913	96.76460651	89.61119899	80.48719	83.92351	77.48361	88.10898	59.3258	62.80774	39.11760467
-5	-19.31200119	-22.4832209	-17.30972903	-17.6779	-17.6779	-14.4775	-14.6168	-13.5111	-14.2222	-10.74027554
+5	91.81486144	90.5434534	82.43735738	75.16761	78.19474	71.9006	81.37959	55.46647	58.70207	36.22926914
-6	-24.19200092	-29.67409658	-21.67180371	-23.1339	-23.1339	-20.3732	-21.1676	-17.6715	-18.6016	-13.26739902
+6	81.74004904	82.3605809	73.38200795	67.36584	69.84737	63.97264	71.73204	50.3207	53.22785	32.37815252
-7	-27.93599848	-35.15125036	-25.01895823	-27.2259	-27.2259	-24.795	-26.0807	-20.8223	-21.9182	-15.1627399
+7	73.89555463	76.30742281	66.6660932	61.86866	63.87279	58.56824	65.18126	46.46138	49.12219	29.48981136
-8	-33.03999819	-42.5661232	-29.73599831	-32.8304	-32.8304	-30.6907	-32.6314	-25.1018	-26.423	-17.68986221
+8	64.04475022	68.34854672	57.81234363	54.77589	56.23442	51.36239	56.4469	41.31561	43.64797	25.90114588
-9	-39.73170058	-48.21128258	-35.66576349	-37.1587	-37.1587	-35.1125	-37.5445	-28.4596	-29.9714	-19.58520653
+9	57.0000025	62.09980682	51.24763334	49.45631	50.50564	45.958	49.89612	37.45629	39.5423	24.00580366
-10	-49.26250072	-55.85015506	-44.50083889	-44.1543	-44.7958	-41.0082	-44.608	-33.6054	-35.4456	-22.11232881
+10	47.11385998	53.90765678	42.33363762	42.36354	42.86727	39.52048	42.95504	32.31051	34.06808	21.4786814
-11	-56.49460122	-61.66331414	-51.26259282	-49.4739	-50.5245	-45.9748	-49.9165	-37.4647	-39.5512	-24.00767097
+11	39.97775035	48.1904983	35.65080024	37.14523	37.14523	35.0987	37.52922	28.45119	29.96242	19.58333938
-12	-66.24939749	-70.34704473	-60.02994237	-56.5666	-58.1629	-53.1807	-58.6509	-42.6105	-45.0255	-26.60432469
+12	31.75200052	40.67962244	28.57680042	31.45292	31.45292	29.20301	30.97845	24.05491	25.32095	17.05621346
-13	-73.64949971	-76.32820486	-66.68105622	-61.8862	-63.8917	-58.5851	-65.2017	-46.4698	-49.1311	-29.49266153
+13	27.93600072	35.13046942	25.01147873	27.21238	27.21238	24.78123	26.06537	20.9346	22.03642	15.16087144
-14	-83.62829584	-84.41508068	-75.65000563	-69.1566	-71.7759	-65.7909	-73.936	-51.6156	-54.6054	-33.34377432
+14	22.96000096	27.84359353	20.56300396	21.7564	21.7564	18.88553	19.51459	16.62464	17.49962	12.63375035
-15	-91.88134059	-90.56423278	-82.45231619	-75.1852	-78.2136	-71.5603	-81.0429	-55.4749	-58.711	-36.232114
+15	19.31200003	22.46243406	17.30224688	17.66442	17.66442	14.46375	14.6015	13.50433	14.21508	10.73840767
-16	-102.1439976	-98.87510948	-91.92959764	-82.2779	-85.852	-79.3019	-90.313	-60.6206	-64.1852	-40.08322744
+16	14.56000029	15.39955782	13.05537213	12.20843	12.20843	9.775147	9.775147	9.343921	9.835707	8.211281749
-17	-109.8352078	-105.1922679	-98.65306266	-87.5975	-91.5808	-84.7063	-96.8638	-64.48	-68.2909	-42.97156433
+17	11.08000048	10.18639903	9.945816049	8.116449	8.116449	6.499759	6.499759	6.223621	6.55118	6.315939727
-18	-121.319354	-113.7271387	-109.7823722	-94.6903	-99.2192	-91.9122	-105.598	-69.6257	-73.7651	-46.82268114
+18	6.505453425	5.082764498	5.844431407	4.085234	4.085234	3.270289	3.270289	3.125405	3.2899	3.788818311
-19	-130.016478	-120.2123037	-117.8615169	-100.01	-104.948	-97.3165	-112.149	-75.2204	-79.1794	-49.71101721
+19	3.213406579	2.500185028	2.886075075	2.039241	2.039241	1.632595	1.632595	1.56525	1.647632	1.893476122
-20	-141.7246246	-128.9711732	-128.3853875	-107.103	-112.586	-104.522	-120.883	-83.5413	-87.9382	-53.56213788
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 35' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**77.0518403**	**75.57516**	**64.1364**	**53.24980034**	**63.25480083**	**84.9642**	**92.4578**	**93.97305**	**94.08325**
-1	**-1.441416911**	**-1.45307**	**-1.3224**	**-1.00422921**	**-1.800118137**	**-1.39204**	**-1.39294**	**-1.3635**	**-1.33764**
+1	**71.3853068**	**67.60863**	**58.83639**	**48.8849573**	**58.65395154**	**78.82744**	**85.48551**	**86.22923**	**86.17634**
-2	**-3.363304776**	**-3.37999**	**-2.9705**	**-2.332777284**	**-4.200274111**	**-3.24809**	**-3.25019**	**-3.2218**	**-3.19684**
+2	**65.92539543**	**60.47025**	**54.01453**	**44.72438191**	**54.2900278**	**72.93174**	**78.71202**	**78.63209**	**78.65525**
-3	**-5.730399926**	**-5.77133**	**-4.58554**	**-3.577751104**	**-6.000389538**	**-5.53347**	**-5.53945**	**-5.48423**	**-5.4357**
+3	**61.83046534**	**55.69071**	**50.39814**	**41.6256978**	**51.0170899**	**68.50996**	**73.63188**	**73.37325**	**73.3273**
-4	**-9.574175805**	**-9.62518**	**-7.654**	**-5.98887495**	**-8.400546046**	**-9.24558**	**-9.25395**	**-9.20081**	**-9.15411**
+4	**56.3705534**	**50.19459**	**45.57627**	**37.52311509**	**46.65317111**	**62.61426**	**66.43442**	**66.65062**	**66.60134**
-5	**-12.45700957**	**-12.5156**	**-9.95535**	**-7.818966756**	**-10.2006634**	**-12.2154**	**-12.2279**	**-12.1642**	**-12.1082**
+5	**51.81274702**	**46.23047**	**41.95988**	**34.46793267**	**43.3802311**	**58.04066**	**60.93157**	**61.47644**	**61.55688**
-6	**-16.3007853**	**-16.3694**	**-13.0238**	**-10.28808174**	**-12.6008198**	**-16.8009**	**-16.8164**	**-16.7553**	**-16.7016**
+6	**46.13322843**	**42.37662**	**37.13802**	**30.4233571**	**38.80413209**	**51.55983**	**54.15807**	**54.04566**	**54.70685**
-7	**-19.24527197**	**-19.2598**	**-15.3251**	**-12.16167132**	**-14.53124805**	**-20.2401**	**-20.2578**	**-20.1986**	**-20.4972**
+7	**42.03829436**	**39.48624**	**33.52162**	**27.41167288**	**35.19788127**	**47.13805**	**49.07795**	**49.00367**	**49.25251**
-8	**-23.24338248**	**-23.1137**	**-18.3936**	**-14.68879516**	**-16.97079899**	**-24.8256**	**-25.6747**	**-25.6073**	**-25.6502**
+8	**36.57838233**	**35.63238**	**28.69975**	**23.4250903**	**30.83395829**	**41.24236**	**43.41595**	**43.35925**	**43.78426**
-9	**-26.12621756**	**-26.0041**	**-20.6949**	**-16.60588686**	**-19.93518099**	**-28.2648**	**-29.7716**	**-29.7065**	**-30.1241**
+9	**32.84401022**	**32.74199**	**26.06047**	**21.14993353**	**27.56102158**	**36.82058**	**39.31908**	**39.26008**	**39.68306**
-10	**-29.96999514**	**-29.8579**	**-23.7634**	**-19.19101067**	**-24.29910173**	**-32.8503**	**-35.2341**	**-35.172**	**-35.6497**
+10	**29.00023169**	**28.88814**	**22.99201**	**18.539952**	**23.19710182**	**31.69321**	**33.85657**	**33.79452**	**34.2722**
-11	**-32.97183905**	**-32.7483**	**-26.0647**	**-21.15160089**	**-27.57203884**	**-36.8343**	**-39.3309**	**-39.2712**	**-39.6935**
+11	**26.11739845**	**25.99775**	**20.69066**	**16.60421848**	**19.92416052**	**28.25406**	**29.7597**	**29.69535**	**30.11361**
-12	**-37.95588673**	**-36.6021**	**-29.912**	**-24.42125353**	**-31.93596181**	**-42.73**	**-44.7935**	**-44.7368**	**-45.1618**
+12	**22.27362449**	**22.1439**	**17.62221**	**14.05224633**	**16.36470029**	**23.66852**	**24.2972**	**24.22978**	**24.27291**
-13	**-42.05081586**	**-39.4925**	**-33.5284**	**-27.41429504**	**-35.20889889**	**-47.1518**	**-49.0927**	**-49.0173**	**-49.2629**
+13	**19.39079075**	**19.25352**	**15.32086**	**12.16000367**	**14.52518699**	**20.22936**	**20.24783**	**20.36967**	**20.1378**
-14	**-47.51072727**	**-43.3464**	**-38.3502**	**-31.43400636**	**-39.90613076**	**-53.0475**	**-55.8662**	**-55.74**	**-56.4009**
+14	**15.33102339**	**15.39966**	**12.2524**	**9.666031522**	**11.9947201**	**15.64381**	**15.65932**	**15.59819**	**15.54446**
-15	**-51.60566078**	**-46.2368**	**-41.9666**	**-34.47054628**	**-43.39125123**	**-57.7509**	**-60.9463**	**-61.2257**	**-61.5697**
+15	**12.4481933**	**12.50927**	**9.951067**	**7.817297686**	**10.19460184**	**12.20465**	**12.21795**	**12.15488**	**12.09946**
-16	**-57.74805338**	**-51.5776**	**-46.7885**	**-38.5482718**	**-47.75517063**	**-64.102**	**-68.1425**	**-68.3449**	**-68.2957**
+16	**8.604415423**	**8.655422**	**6.882605**	**5.381316566**	**7.794446538**	**8.308875**	**8.31725**	**8.264109**	**8.217415**
-17	**-61.84298777**	**-55.6997**	**-50.4049**	**-41.62831271**	**-51.02810845**	**-68.5237**	**-73.6466**	**-73.3869**	**-73.3401**
+17	**5.721585705**	**5.765038**	**4.581259**	**3.57608293**	**5.994328905**	**5.524795**	**5.531377**	**5.476671**	**5.428604**
-18	**-67.30289994**	**-62.2665**	**-55.2267**	**-45.76403836**	**-55.39203166**	**-74.4194**	**-80.4201**	**-80.5468**	**-80.57**
+18	**2.87842388**	**2.895112**	**2.529703**	**1.987671811**	**3.594173287**	**2.779746**	**2.781836**	**2.753443**	**2.728495**
-19	**-71.39782768**	**-67.6203**	**-58.8431**	**-48.8875784**	**-58.66496887**	**-78.8412**	**-85.5002**	**-86.2447**	**-86.1909**
+19	**1.43700898**	**1.449916**	**1.214648**	**0.967650523**	**1.794055493**	**1.387706**	**1.388899**	**1.359727**	**1.334086**
-20	**-76.85774024**	**-74.7587**	**-63.665**	**-53.0813044**	**-63.02888835**	**-84.7369**	**-92.2737**	**-93.8418**	**-94.0105**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 35' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	109.8326654	114.8501642	83.29573	98.9976	99.79315
-1	-1.473581156	-1.653011716	-1.66725	-1.7784	-1.482
+1	99.0123756	103.8964625	77.8957	88.64398	92.91831
-2	-3.4383534	-3.903610706	-3.86594	-4.04957	-3.44771
+2	89.18851359	93.34431187	72.49566	80.39666	86.04348
-3	-5.789532617	-5.591560016	-6.59953	-6.8913	-5.88978
+3	81.82061349	85.43021379	68.44563	75.09572	80.88735
-4	-9.719077199	-9.423032046	-11.0177	-11.6041	-9.81825
+4	73.05960265	76.15406653	63.04559	69.20477	74.01252
-5	-12.8655247	-12.80633559	-14.3314	-15.1386	-13.2189
+5	67.16528136	69.39486156	58.99557	64.78656	68.85639
-6	-18.75984144	-17.56649912	-18.8851	-20.1459	-19.1116
+6	59.30619193	60.38259473	53.59553	58.89561	61.98156
-7	-23.18058094	-21.67532115	-22.1987	-23.6786	-23.7076
+7	54.11732708	53.94326548	49.5455	54.4774	56.82543
-8	-29.07489781	-27.15375554	-26.676	-29.4501	-29.6003
+8	48.22300981	46.38203486	44.14546	48.58644	49.9506
-9	-33.49563892	-31.26258112	-30.6539	-33.8683	-34.0198
+9	43.80226994	40.84858836	40.09544	44.16824	44.79448
-10	-39.38995565	-36.74101636	-36.0539	-39.7593	-39.9126
+10	37.90795197	35.37016596	34.6954	38.27728	38.43056
-11	-43.81068515	-40.84983677	-40.1039	-44.1775	-44.8048
+11	33.48721139	31.26133922	30.64537	33.85907	34.01101
-12	-49.70501425	-48.27406611	-45.504	-50.0684	-51.6796
+12	27.59289459	25.782897	25.5645	27.96812	28.1183
-13	-54.12575478	-53.94498714	-49.554	-54.4867	-56.8357
+13	23.17215904	21.67406985	22.1918	23.67125	23.69876
-14	-61.28219715	-62.63771916	-54.954	-60.3776	-63.7106
+14	17.27784211	16.19564842	17.77358	18.96034	17.62962
-15	-67.17651055	-69.39692335	-59.0041	-64.7958	-68.8667
+15	12.85710098	12.80530205	14.32445	15.13123	13.21009
-16	-75.03560769	-78.40919096	-64.4041	-70.6868	-75.7415
+16	8.731078605	8.294232785	9.906251	10.41847	8.83025
-17	-81.83465161	-85.43260878	-68.4541	-75.105	-80.8977
+17	5.783918151	5.591044932	6.669	7.1136	5.928
-18	-91.65851372	-95.9847596	-73.8541	-82.4714	-87.7725
+18	2.944352698	3.340445643	3.310188	3.456767	2.953707
-19	-99.02641486	-103.8988761	-77.9042	-88.6569	-92.9286
+19	1.470772424	1.65249517	1.65336	1.689484	1.48053
-20	-108.8502762	-114.8529006	-83.3042	-97.8305	-99.8034
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.54E-13	*-1.07E-13*	*-1.34E-13*	-8.52E-14	-8.52E-14	-7.13E-14	-7.46E-14	-6.48E-14	-6.82E-14	-7.39E-14
End Shear	1.67E-13	*1.04E-13*	*1.53E-13*	1.04E-13	1.12E-13	7.19E-14	8.56E-14	7.07E-14	7.52E-14	7.07E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	230.3424202	*211.9311512*	*207.6646015*	174.9865691	183.6258247	170.2744981	196.2248766	131.6119851	138.5389316	86.98930665
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	432.3449322	*403.2642512*	*389.8586387*	331.3545959	347.2009113	321.6336253	369.5220314	243.6606552	258.1466332	163.8694348
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	593.3775794	*566.0949222*	*534.7746186*	459.7948204	480.8676933	445.1522663	510.9185977	339.4138038	359.5055804	225.5857864
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	734.5076102	*712.364308*	*660.9167204*	575.8227126	600.8317668	554.9955534	632.0480643	424.2856482	449.2340512	280.562703
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	836.1499997	*826.8399931*	*752.5349961*	661.5924822	689.2733125	636.8581156	723.1874989	489.1823368	517.8225966	317.4238133
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	925.7509057	*927.3001258*	*832.0760711*	733.2861442	760.7743606	699.4607112	817.5233139	542.5615777	574.0606209	350.0797978
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	971.5511098	*996.2939148*	*873.8252021*	777.5932153	804.6501233	760.4901325	881.2887946	577.2057061	610.4892381	363.4927948
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	998.8160443	*1048.071732*	*898.9344368*	809.9653375	848.5258859	803.4952451	925.5014588	598.5337836	632.5480439	372.4206696
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	1003.139031	*1071.583497*	*903.6430497*	834.2854322	869.0728853	818.6308828	937.054595	617.2992685	653.4093374	379.1348694
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	985.6449424	*1073.40626*	*887.4961088*	840.2327602	871.7245109	819.983033	925.6800477	623.8306097	659.932066	386.965759
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	1003.70052	*1071.638069*	*903.7117744*	834.2074849	869.0162022	818.6282293	937.0188756	617.3127356	653.4249964	379.1316225
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	998.3738928	*1048.36275*	*897.8281929*	809.8566428	848.4361038	803.3739069	925.4301043	598.5325562	632.5480427	372.4605813
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	971.2020957	*996.366675*	*873.8775923*	777.5719767	804.6454245	760.4731769	881.3155595	577.18976	610.4736055	363.4949659
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	925.8672563	*927.5183693*	*831.9713168*	733.2341322	760.7365286	699.458905	817.559001	542.5309007	574.0293181	350.1096235
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	836.1501167	*826.8400775*	*752.535112*	661.6279265	689.320569	636.8714973	723.1876061	489.1964398	517.8382658	317.4160616
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	735.3921088	*712.5098412*	*661.8528959*	575.9456319	600.9641432	555.113429	632.190948	424.3445735	449.2967379	280.5826156
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	593.5841261	*566.0221835*	*534.7320366*	459.8869418	480.8488119	445.1513979	510.9365377	339.3984662	359.48993	225.6006913
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	430.2327267	*403.3369534*	*389.7865763*	331.4159739	347.2670152	321.6925087	369.5934152	243.6900564	258.1779116	163.8793615
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	229.6355433	*211.9675395*	*207.6941461*	175.0173209	183.658947	170.3040056	196.2606543	131.6358144	138.5640152	86.9942989
-20	-1.43E-13	*-1.14E-13*	*-1.07E-13*	-1.10E-13	-1.18E-13	-1.06E-13	-1.26E-13	-7.43E-14	-7.91E-14	-4.64E-14
+20	8.59E-14	*9.40E-14*	*7.73E-14*	7.81E-14	7.81E-14	6.06E-14	6.82E-14	6.18E-14	6.50E-14	3.73E-14

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.07E-14	-5.26E-14	-5.50E-14	-4.03E-14	-7.68E-14	-6.13E-14	-5.83E-14	-5.71E-14	-5.89E-14
End Shear	5.64E-14	5.94E-14	5.28E-14	4.24E-14	8.23E-14	6.25E-14	5.82E-14	5.82E-14	6.47E-14
-1	0	0	0	0	0	0	0	0	0
+1	124.9242869	119.3531595	103.1747508	85.96192528	102.6444152	137.9480165	149.5996453	150.9011465	150.8349994
-2	0	0	0	0	0	0	0	0	0
+2	235.5163022	219.6374862	193.4670866	161.5352072	193.8335323	260.4198209	281.4188565	281.859802	281.6648998
-3	0	0	0	0	0	0	0	0	0
+3	324.609943	295.0739307	266.6483385	222.577445	267.839722	359.9795277	387.5088136	405.2240091	405.1605888
-4	0	0	0	0	0	0	0	0	0
+4	404.1487388	363.6405867	329.2538748	275.0975584	334.2090526	448.6173433	479.7916943	515.5203415	515.357662
-5	0	0	0	0	0	0	0	0	0
+5	460.7927265	410.203691	373.5584688	313.4892008	379.5770221	513.9229346	546.6861084	597.7110633	608.3554777
-6	0	0	0	0	0	0	0	0	0
+6	505.2030202	457.043471	405.9728273	341.7025164	421.1265494	564.0612589	606.5066075	663.5321112	690.6175616
-7	0	0	0	0	0	0	0	0	0
+7	530.4080954	489.4808742	431.5790253	364.2475148	440.083748	608.0475635	653.8437958	702.0845525	742.1242018
-8	0	0	0	0	0	0	0	0	0
+8	556.7930533	515.1740065	449.5141212	380.1628149	453.2071738	641.5280265	684.5061573	739.1108999	781.8862704
-9	0	0	0	0	0	0	0	0	0
+9	565.3341189	525.6925748	450.4172669	381.655531	447.238438	652.8240682	689.439196	754.9435357	801.0627549
-10	0	0	0	0	0	0	0	0	0
+10	560.8332616	526.0948176	440.1640691	375.0026902	431.7236596	652.2035304	685.5817594	758.8647631	801.2917874
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	565.2999255	525.6815573	450.4108467	381.6530285	447.1998647	652.8133768	689.3884529	754.9262506	801.0386479
-12	0	0	0	0	0	0	0	0	0
+12	556.6598265	515.151984	449.5333795	380.1703293	453.1493319	641.4173896	684.4296982	739.0004996	781.8380735
-13	0	0	0	0	0	0	0	0	0
+13	530.4072318	489.4973979	431.5865195	364.250434	440.0065991	608.0265912	653.8121914	702.0793304	742.0812892
-14	0	0	0	0	0	0	0	0	0
+14	505.1802081	456.999414	405.9685364	341.7008511	421.1361765	564.0541004	606.449231	663.4998352	690.6084014
-15	0	0	0	0	0	0	0	0	0
+15	460.747998	410.1720643	373.5424122	313.497545	379.6735267	513.9296228	546.6736311	597.6848172	608.3802211
-16	0	0	0	0	0	0	0	0	0
+16	404.236455	363.5932917	329.2260592	275.1159392	334.2862475	448.7137864	479.7535263	515.5662899	515.4008515
-17	0	0	0	0	0	0	0	0	0
+17	324.6756722	295.0659488	266.6461932	222.5766188	267.8975549	359.9759758	387.5155294	405.242848	405.1782888
-18	0	0	0	0	0	0	0	0	0
+18	235.5601133	219.5680506	193.4156856	161.544371	193.8720885	260.4679967	281.4703623	281.913809	281.9948719
-19	0	0	0	0	0	0	0	0	0
+19	124.9462403	119.3185124	103.1490833	85.96654052	102.6637249	137.9721574	149.6254925	150.9282427	150.8340854
-20	-7.13E-14	-6.47E-14	-6.12E-14	-4.47E-14	-5.97E-14	-8.55E-14	-9.00E-14	-9.63E-14	-9.80E-14
+20	5.40E-14	5.72E-14	4.75E-14	3.11E-14	4.09E-14	5.15E-14	6.03E-14	5.43E-14	6.16E-14

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.85E-14	-7.79E-14	-6.86E-14	-7.22E-14	-6.14E-14
End Shear	6.97E-14	7.76E-14	6.97E-14	7.53E-14	6.16E-14
-1	0	0	0	0	0
+1	174.4136899	183.4799469	136.3174671	156.2556751	162.6070426
-2	0	0	0	0	0
+2	322.7450287	339.206945	258.4598298	290.5378844	307.1676414
-3	0	0	0	0	0
+3	437.6506831	458.0263978	360.5127038	396.7001305	426.9665261
-4	0	0	0	0	0
+4	529.0510945	554.9503376	450.7692194	496.9794517	530.9882633
-5	0	0	0	0	0
+5	615.8866584	641.3828179	520.395227	574.2035855	610.9519308
-6	0	0	0	0	0
+6	679.2169866	716.3448958	578.0587423	637.6822206	678.4549812
-7	0	0	0	0	0
+7	726.288074	762.9944461	615.6915241	687.0262626	738.0089787
-8	0	0	0	0	0
+8	757.1480831	805.640922	639.5787281	732.1558946	780.3759406
-9	0	0	0	0	0
+9	763.0678262	829.1420478	659.0630956	756.7752291	797.312154
-10	0	0	0	0	0
+10	778.4839402	826.7728626	667.1913615	767.4868806	798.1574217
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	763.0432997	829.140727	659.0752608	756.759042	797.3198803
-12	0	0	0	0	0
+12	757.2070898	805.6444361	639.5760564	732.177518	780.4171457
-13	0	0	0	0	0
+13	726.278248	762.9926497	615.6739948	687.031675	738.0321661
-14	0	0	0	0	0
+14	679.2661109	716.3521787	578.0263295	637.6714196	678.4601332
-15	0	0	0	0	0
+15	615.9112584	641.3859206	520.4087427	574.1766051	610.9390718
-16	0	0	0	0	0
+16	529.0314958	554.9468355	450.8286813	496.9362961	530.9574348
-17	0	0	0	0	0
+17	437.6261515	458.0210613	360.4964972	396.6947263	426.9691548
-18	0	0	0	0	0
+18	322.6958593	339.1973808	258.4894987	290.4751986	307.2036843
-19	0	0	0	0	0
+19	174.3891792	183.475175	136.3323374	156.2244011	162.6251037
-20	-9.78E-14	-1.04E-13	-7.65E-14	-8.47E-14	-9.78E-14
+20	5.63E-14	6.68E-14	6.51E-14	6.15E-14	6.10E-14

1-Span: Shear (Max and Min) Raw Data Results - 35’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**52.8**	***39.95429***	***39.18857***	***33.25714***	***28.49286***	***32.8***	***44.05714***	***47.94286***	***48.72857***	***48.78572***
-1	**-1.37143**	***-0.74743***	***-0.75347***	***-0.68571***	***-0.52286***	***-0.93343***	***-0.72183***	***-0.72229***	***-0.70703***	***-0.69361***
+1	**48.56036**	***37.01597***	***35.05762***	***30.50889***	***26.1324***	***30.41429***	***40.875***	***44.32746***	***44.71311***	***44.68569***
-2	**-3.2**	***-1.744***	***-1.75265***	***-1.54032***	***-1.21956***	***-2.178***	***-1.68426***	***-1.68535***	***-1.67062***	***-1.65768***
+2	**44.47179**	***34.1848***	***31.35611***	***28.00857***	***23.88353***	***28.15143***	***37.81786***	***40.81515***	***40.77371***	***40.78572***
-3	**-4.57143**	***-2.97143***	***-2.99265***	***-2.37778***	***-1.87469***	***-3.11143***	***-2.86931***	***-2.87241***	***-2.84378***	***-2.81861***
+3	**41.40536**	***32.06143***	***28.87774***	***26.13334***	***22.21188***	***26.45429***	***35.525***	***38.18091***	***38.0468***	***38.02297***
-4	**-6.4**	***-4.96457***	***-4.99102***	***-3.96889***	***-3.14268***	***-4.356***	***-4.79418***	***-4.79852***	***-4.77097***	***-4.74675***
+4	**37.48571**	***29.23026***	***26.02779***	***23.63302***	***20.00302***	***24.19143***	***32.46786***	***34.44876***	***34.56086***	***34.53531***
-5	**-7.77143**	***-6.45943***	***-6.4898***	***-5.16222***	***-4.10866***	***-5.28943***	***-6.33413***	***-6.34064***	***-6.3076***	***-6.27857***
+5	**34.71143**	***26.86686***	***23.97224***	***21.75778***	***18.36137***	***22.49429***	***30.09627***	***31.59532***	***31.87785***	***31.91956***
-6	**-9.6**	***-8.45257***	***-8.48816***	***-6.75333***	***-5.41664***	***-6.534***	***-8.71191***	***-8.71995***	***-8.68825***	***-8.66039***
+6	**31.07714**	***23.92182***	***21.97388***	***19.25746***	***16.1925***	***20.12141***	***26.73572***	***28.083***	***28.02471***	***28.36757***
-7	**-10.9714**	***-9.9794***	***-9.98694***	***-7.94667***	***-6.41262***	***-7.535***	***-10.4952***	***-10.5044***	***-10.4737***	***-10.6286***
+7	**28.19143**	***21.79844***	***20.4751***	***17.38222***	***14.58085***	***18.25143***	***24.44286***	***25.44877***	***25.41025***	***25.53929***
-8	**-12.8**	***-12.0526***	***-11.9853***	***-9.53778***	***-7.7606***	***-8.8***	***-12.873***	***-13.3133***	***-13.2783***	***-13.3006***
+8	**24.55714**	***18.96727***	***18.47674***	***14.8819***	***12.45198***	***15.98857***	***21.38572***	***22.51281***	***22.48341***	***22.70379***
-9	**-15.3657**	***-13.5474***	***-13.4841***	***-10.7311***	***-8.78659***	***-10.3371***	***-14.6563***	***-15.4377***	***-15.4039***	***-15.6205***
+9	**21.94286**	***17.03086***	***16.97796***	***13.51334***	***11.22969***	***14.29143***	***19.09286***	***20.38843***	***20.35783***	***20.57716***
-10	**-19**	***-15.5406***	***-15.4825***	***-12.3222***	***-10.1746***	***-12.6***	***-17.0341***	***-18.2702***	***-18.238***	***-18.4857***
+10	**18.19715**	***15.03771***	***14.97959***	***11.92222***	***9.824567***	***12.02857***	***16.43413***	***17.55591***	***17.52374***	***17.77143***
-11	**-21.7257**	***-17.0971***	***-16.9812***	***-13.5156***	***-11.2306***	***-14.2971***	***-19.1***	***-20.3946***	***-20.3636***	***-20.5826***
+11	**15.47143**	***13.54286***	***13.48082***	***10.72889***	***8.785725***	***10.33143***	***14.65079***	***15.43153***	***15.39816***	***15.61504***
-12	**-25.36**	***-19.6816***	***-18.9796***	***-15.5105***	***-12.9834***	***-16.56***	***-22.1571***	***-23.2271***	***-23.1977***	***-23.4181***
+12	**12.34286**	***11.54971***	***11.48245***	***9.137781***	***7.420605***	***8.485714***	***12.27302***	***12.59902***	***12.56406***	***12.58642***
-13	**-28.0857**	***-21.8049***	***-20.4784***	***-17.3857***	***-14.5822***	***-18.2571***	***-24.45***	***-25.4564***	***-25.4173***	***-25.5447***
+13	**10.97143**	***10.05486***	***9.983674***	***7.944446***	***6.411758***	***7.531857***	***10.48969***	***10.49926***	***10.56244***	***10.44221***
-14	**-31.72**	***-24.6361***	***-22.4767***	***-19.886***	***-16.7339***	***-20.6928***	***-27.5071***	***-28.9687***	***-28.9033***	***-29.246***
+14	**9.142858**	***7.949714***	***7.985307***	***6.353333***	***5.086638***	***6.219715***	***8.111906***	***8.119949***	***8.088249***	***8.060389***
-15	**-34.74**	***-26.7595***	***-23.9755***	***-21.7613***	***-18.3627***	***-22.5***	***-29.946***	***-31.603***	***-31.7478***	***-31.9262***
+15	**7.771429**	***6.454858***	***6.48653***	***5.160004***	***4.107796***	***5.286286***	***6.328573***	***6.335467***	***6.302764***	***6.274026***
-16	**-38.4**	***-29.9445***	***-26.7449***	***-24.2616***	***-20.5544***	***-24.7629***	***-33.2393***	***-35.3345***	***-35.4394***	***-35.4139***
+16	**5.942857**	***4.461714***	***4.488163***	***3.56889***	***2.822671***	***4.041715***	***4.308465***	***4.312808***	***4.285252***	***4.261039***
-17	**-41.1064**	***-32.0679***	***-28.8824***	***-26.1368***	***-22.2132***	***-26.46***	***-35.5321***	***-38.1885***	***-38.0539***	***-38.0296***
+17	**4.571429**	***2.966858***	***2.98939***	***2.375556***	***1.873829***	***3.108286***	***2.864815***	***2.868228***	***2.83986***	***2.814936***
-18	**-45.195**	***-34.8991***	***-32.2875***	***-28.6371***	***-24.445***	***-28.7229***	***-38.5893***	***-41.7009***	***-41.7666***	***-41.7786***
+18	**2.722859**	***1.492571***	***1.501225***	***1.311747***	***1.038126***	***1.863714***	***1.441403***	***1.442487***	***1.427764***	***1.414827***
-19	**-48.2614**	***-37.0225***	***-35.0637***	***-30.5124***	***-26.1338***	***-30.42***	***-40.8821***	***-44.3351***	***-44.7211***	***-44.6932***
+19	**1.360003**	***0.745143***	***0.751836***	***0.629841***	***0.50389***	***0.930285***	***0.719578***	***0.720197***	***0.70507***	***0.691774***
-20	**-52.35**	***-39.8536***	***-38.7652***	***-33.0127***	***-28.4055***	***-32.6829***	***-43.9393***	***-47.8474***	***-48.6605***	***-48.748***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 35' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0
End Shear	52.8	55.71429	58.57143	54.34286	62.85714	43.42857	45.71429	27.87738
-1	-1.37143	-1.06093	-1.06093	-0.84921	-0.84921	-0.8134	-0.85621	-0.98281
+1	48.56036	51.84979	54.40967	50.45357	58.14286	38.99759	41.05009	25.77556
-2	-3.2	-2.47549	-2.47549	-1.98148	-1.98148	-1.89207	-1.99165	-2.29322
+2	44.47179	48.17192	50.44888	46.71706	53.61376	35.43214	37.53571	23.77861
-3	-4.57143	-4.21569	-4.21569	-3.37566	-3.37566	-3.23071	-3.40074	-3.27602
+3	41.40536	45.41352	47.47829	43.91468	50.21693	33.43094	35.40677	22.2809
-4	-6.4	-7.04482	-7.04482	-5.64021	-5.64021	-5.38803	-5.67161	-4.58643
+4	37.48571	41.73564	43.51751	40.17817	45.68783	30.76266	32.56818	20.28395
-5	-7.77143	-9.16667	-9.16667	-7.50714	-7.57937	-7.00603	-7.37477	-5.56924
+5	34.71143	38.97724	40.54692	37.28318	42.19839	28.76146	30.43924	18.78624
-6	-9.6	-11.9958	-11.9958	-10.5643	-10.9762	-9.16336	-9.64564	-6.87965
+6	31.07714	34.93173	36.21849	33.17223	37.19577	26.09318	27.60065	16.78929
-7	-10.9714	-14.1176	-14.1176	-12.8571	-13.5238	-10.7972	-11.3654	-7.86245
+7	28.19143	32.08124	33.12045	30.36984	33.79894	24.09198	25.47171	15.29158
-8	-12.8	-17.0238	-17.0238	-15.9143	-16.9206	-13.0162	-13.7013	-9.17286
+8	24.55714	28.40336	29.15967	26.63334	29.26985	21.4237	22.63312	13.43072
-9	-15.3657	-19.2682	-19.2682	-18.2071	-19.4683	-14.7574	-15.5413	-10.1557
+9	21.94286	25.64496	26.18908	23.83096	25.87302	19.4225	20.50418	12.44791
-10	-19	-22.8957	-23.2283	-21.2643	-23.131	-17.4256	-18.3799	-11.4661
+10	18.19715	21.96709	22.2283	20.49286	22.27381	16.75422	17.66558	11.13751
-11	-21.7257	-25.6541	-26.1989	-23.8397	-25.8836	-19.4269	-20.5088	-12.4489
+11	15.47143	19.26121	19.26121	18.2	19.46032	14.75302	15.53664	10.1547
-12	-25.36	-29.3319	-30.1597	-27.5762	-30.4127	-22.0951	-23.3474	-13.7953
+12	12.34286	16.30953	16.30953	15.14286	16.0635	12.47338	13.12987	8.84429
-13	-28.0857	-32.0903	-33.1303	-30.3786	-33.8095	-24.0963	-25.4763	-15.2931
+13	10.97143	14.11065	14.11065	12.85	13.51588	10.85538	11.42671	7.861484
-14	-31.72	-35.8603	-37.2185	-34.1151	-38.3386	-26.7646	-28.3149	-17.29
+14	9.142858	11.28152	11.28152	9.792859	10.11905	8.620502	9.074213	6.551076
-15	-34.74	-38.9863	-40.5567	-37.1067	-42.0238	-28.7658	-30.4439	-18.7877
+15	7.771429	9.159666	9.159666	7.500002	7.571431	7.002504	7.371057	5.568269
-16	-38.4	-42.6642	-44.5175	-41.121	-46.8307	-31.4341	-33.2825	-20.7847
+16	5.942857	6.330534	6.330534	5.068782	5.068782	4.845176	5.100185	4.257859
-17	-41.1064	-45.4226	-47.4881	-43.9234	-50.2275	-33.4353	-35.4114	-22.2824
+17	4.571429	4.208685	4.208685	3.37037	3.37037	3.227182	3.397034	3.275053
-18	-45.195	-49.1005	-51.4489	-47.6599	-54.7566	-36.1036	-38.25	-24.2793
+18	2.722859	2.118348	2.118348	1.695768	1.695768	1.62064	1.705937	1.964645
-19	-48.2614	-51.8589	-54.4195	-50.4623	-58.1534	-39.0046	-41.0575	-25.777
+19	1.360003	1.057423	1.057423	0.846562	0.846562	0.811641	0.854359	0.981839
-20	-52.35	-55.5368	-58.3803	-54.1988	-62.6825	-43.3193	-45.5993	-27.774
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 35' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	52.8	63.52381	66.42577	48.17567	57.25714	57.71726
-1	-1.37143	-0.85227	-0.95605	-0.96429	-1.02857	-0.85714
+1	48.56036	57.26569	60.09049	45.05246	51.26893	53.74107
-2	-3.2	-1.98864	-2.25773	-2.23594	-2.34214	-1.99405
+2	44.47179	51.58387	53.98746	41.92924	46.49893	49.76488
-3	-4.57143	-3.34849	-3.23398	-3.81696	-3.98571	-3.40646
+3	41.40536	47.32251	49.41019	39.58683	43.43304	46.78274
-4	-6.4	-5.62121	-5.44999	-6.37232	-6.71143	-5.67857
+4	37.48571	42.25541	44.04515	36.46362	40.02589	42.80655
-5	-7.77143	-7.44102	-7.40679	-8.28884	-8.75571	-7.64541
+5	34.71143	38.84632	40.13584	34.12121	37.47054	39.8244
-6	-9.6	-10.8501	-10.1599	-10.9225	-11.6518	-11.0536
+6	31.07714	34.30086	34.92342	30.99799	34.0634	35.84821
-7	-10.9714	-13.4069	-12.5363	-12.8391	-13.695	-13.7117
+7	28.19143	31.29978	31.19911	28.65558	31.50804	32.86607
-8	-12.8	-16.816	-15.7049	-15.4286	-17.033	-17.1199
+8	24.55714	27.89069	26.82593	25.53237	28.10089	28.88988
-9	-15.3657	-19.3728	-18.0813	-17.7292	-19.5884	-19.676
+9	21.94286	25.33388	23.62556	23.18996	25.54554	25.90774
-10	-19	-22.7819	-21.2499	-20.8525	-22.9955	-23.0842
+10	18.19715	21.92478	20.45701	20.06674	22.13839	22.22704
-11	-21.7257	-25.3387	-23.6263	-23.1949	-25.5509	-25.9137
+11	15.47143	19.36796	18.08059	17.72433	19.58304	19.67092
-12	-25.36	-28.7478	-27.9202	-26.3181	-28.958	-29.8899
+12	12.34286	15.95887	14.91203	14.78571	16.17589	16.26275
-13	-28.0857	-31.3047	-31.2001	-28.6605	-31.5134	-32.872
+13	10.97143	13.40206	12.53561	12.83505	13.69072	13.70663
-14	-31.72	-35.4437	-36.2277	-31.7837	-34.9205	-36.8482
+14	9.142858	9.992968	9.367061	10.27969	10.96607	10.19642
-15	-34.74	-38.8528	-40.137	-34.1261	-37.4759	-39.8304
+15	7.771429	7.436149	7.40619	8.28482	8.751432	7.640305
-16	-38.4	-43.3983	-45.3494	-37.2493	-40.883	-43.8065
+16	5.942857	5.049785	4.797127	5.729468	6.025719	5.107143
-17	-41.1064	-47.3306	-49.4116	-39.5917	-43.4384	-46.7887
+17	4.571429	3.345239	3.233687	3.857143	4.114286	3.428572
-18	-45.195	-53.0124	-55.5146	-42.715	-47.6989	-50.7649
+18	2.722859	1.702922	1.93201	1.91451	1.999287	1.708333
-19	-48.2614	-57.2738	-60.0919	-45.0574	-51.2764	-53.747
+19	1.360003	0.850649	0.955752	0.956252	0.977145	0.856293
-20	-52.35	-62.9556	-66.4274	-48.1806	-56.5821	-57.7232
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**			**Moment Z (kips-ft)**						
-0	**-6.39E-14**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**6.97E-14**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**84.98063**	**64.7780**	**61.8891**	**53.5000**	**46.0167**	**53.2250**	**71.5313**	**77.5731**	**78.2479**	**78.2136**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**159.2288**	**122.1241**	**113.8903**	**100.3200**	**86.4976**	**100.5100**	**135.0375**	**145.9263**	**146.1549**	**146.0539**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**217.3781**	**168.3225**	**153.0070**	**138.2672**	**119.2886**	**138.8850**	**186.6630**	**200.9379**	**210.1239**	**210.0910**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**268.42**	**209.5664**	**188.5614**	**170.7306**	**147.5116**	**173.3000**	**232.6250**	**248.7901**	**267.3167**	**267.2324**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**304**	**238.9384**	**212.7061**	**193.7042**	**168.2534**	**196.8250**	**266.4884**	**283.4774**	**309.9357**	**315.4553**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**335.85**	**261.9668**	**236.9943**	**210.5122**	**183.5685**	**218.3700**	**292.4870**	**314.4966**	**344.0664**	**358.1113**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**350.385**	**275.0366**	**253.8143**	**223.7900**	**195.7893**	**228.2000**	**315.2956**	**339.0427**	**364.0573**	**384.8194**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**358.4**	**288.7182**	**267.1372**	**233.0900**	**204.4235**	**235.0050**	**332.6565**	**354.9423**	**383.2569**	**405.4375**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**358.0619**	**293.1471**	**272.5914**	**233.5583**	**205.4239**	**231.9100**	**338.5139**	**357.5002**	**391.4667**	**415.3813**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**349.7937**	**290.8132**	**272.8000**	**228.2417**	**202.0517**	**223.8650**	**338.1921**	**355.5000**	**393.5000**	**415.5000**
-11	**0.00E+00**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**358.3031**	**293.1293**	**272.5857**	**233.5550**	**205.4226**	**231.8900**	**338.5084**	**357.4739**	**391.4577**	**415.3688**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**358.21**	**288.6491**	**267.1257**	**233.1000**	**204.4274**	**234.9750**	**332.5991**	**354.9026**	**383.1996**	**405.4125**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**350.2351**	**275.0362**	**253.8229**	**223.7939**	**195.7908**	**228.1600**	**315.2847**	**339.0263**	**364.0546**	**384.7971**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**335.9**	**261.9550**	**236.9714**	**210.5100**	**183.5677**	**218.3750**	**292.4833**	**314.4668**	**344.0497**	**358.1065**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**304**	**238.9152**	**212.6897**	**193.6958**	**168.2578**	**196.8750**	**266.4919**	**283.4709**	**309.9221**	**315.4681**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**268.8**	**209.6119**	**188.5368**	**170.7161**	**147.5212**	**173.3400**	**232.6750**	**248.7703**	**267.3406**	**267.2548**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**217.4669**	**168.3566**	**153.0028**	**138.2661**	**119.2882**	**138.9150**	**186.6611**	**200.9414**	**210.1337**	**210.1002**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**158.3213**	**122.1468**	**113.8543**	**100.2933**	**86.5024**	**100.5300**	**135.0625**	**145.9530**	**146.1829**	**146.2250**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**84.67692**	**64.7893**	**61.8711**	**53.4867**	**46.0191**	**53.2350**	**71.5438**	**77.5865**	**78.2620**	**78.2132**
-20	**-5.62E-14**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**3.55E-14**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-6.39E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	6.97E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	84.98063	90.7371	95.2169	88.2938	101.7500	68.2458	71.8377	45.1072
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	159.2288	171.8199	180.0368	166.7792	191.6111	126.3472	133.8588	84.9725
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	217.3781	238.4210	249.3480	230.8282	264.9306	175.9989	186.4172	116.9747
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	268.42	298.5858	311.5539	287.7861	327.7408	220.0081	232.9448	145.4823
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	304	343.0607	357.4142	330.2350	375.0000	253.6595	268.5106	164.5962
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	335.85	380.2365	394.4902	362.6968	423.9167	281.3386	297.6721	181.5296
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	350.385	403.2114	417.2414	394.3428	456.9815	299.3029	316.5617	188.4847
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	358.4	419.9976	439.9927	416.6426	479.9074	310.3623	328.0000	193.1142
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	358.0619	432.6085	450.6471	424.4910	485.8982	320.0930	338.8174	196.5957
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	349.7937	435.6924	452.0220	425.1921	480.0000	323.4797	342.1997	200.6563
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	358.3031	432.5681	450.6177	424.4896	485.8796	320.0999	338.8255	196.5940
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	358.21	419.9412	439.9461	416.5797	479.8704	310.3617	328.0000	193.1349
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	350.2351	403.2004	417.2390	394.3340	456.9954	299.2947	316.5536	188.4859
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	335.9	380.2096	394.4706	362.6958	423.9352	281.3227	297.6559	181.5450
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	304	343.0790	357.4387	330.2419	375.0001	253.6668	268.5187	164.5922
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	268.8	298.6495	311.6226	287.8473	327.8149	220.0387	232.9773	145.4927
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	217.4669	238.4687	249.3382	230.8278	264.9399	175.9909	186.4091	116.9825
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	158.3213	171.8517	180.0710	166.8097	191.6481	126.3625	133.8750	84.9776
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	84.67692	90.7531	95.2341	88.3091	101.7686	68.2581	71.8507	45.1098
-20	-5.62E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.55E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 35' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-6.39E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	6.97E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	84.98063	100.8755	106.1191	78.8418	90.3734	94.0469
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	159.2288	186.6657	196.1868	149.4852	168.0381	177.6562
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	217.3781	253.1236	264.9083	208.5094	229.4391	246.9442
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	268.42	305.9868	320.9661	260.7109	287.4375	307.1072
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	304	356.2098	370.9559	300.9805	332.1016	353.3557
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	335.85	392.8380	414.3117	334.3313	368.8156	392.3973
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	350.385	420.0625	441.2923	356.0969	397.3547	426.8415
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	358.4	437.9110	465.9577	369.9125	423.4563	451.3453
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	358.0619	441.3348	479.5501	381.1817	437.6953	461.1406
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	349.7937	450.2510	478.1798	385.8828	443.8906	461.6295
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	358.3031	441.3206	479.5493	381.1887	437.6860	461.1451
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	358.21	437.9451	465.9598	369.9110	423.4688	451.3691
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	350.2351	420.0568	441.2913	356.0868	397.3578	426.8549
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	335.9	392.8665	414.3159	334.3125	368.8094	392.4003
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	304	356.2240	370.9577	300.9883	332.0859	353.3482
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	268.8	305.9754	320.9640	260.7453	287.4125	307.0893
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	217.4669	253.1094	264.9052	208.5000	229.4359	246.9457
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	158.3213	186.6373	196.1812	149.5023	168.0018	177.6771
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	84.67692	100.8613	106.1164	78.8504	90.3554	94.0573
-20	-5.62E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.55E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	151.1579979	133.2362481	136.0421977	109.6834	115.71	107.6103	125.3525	91.60375	96.425	55.49057938
-1	-2.835001768	-2.199787769	-2.533286408	-1.79183	-1.79183	-1.43412	-1.43412	-1.36568	-1.43756	-1.658825679
+1	140.2791142	124.6941963	126.4067746	103.115	108.6363	100.9968	117.3361	84.07996	88.50522	51.93456916
-2	-7.700001763	-6.070751375	-6.881427496	-4.82125	-4.82125	-3.857	-3.857	-3.66415	-3.857	-4.423531532
+2	127.2769817	114.9115746	114.7177143	95.35044	100.2745	93.10917	107.7754	74.97544	78.92151	47.72140062
-3	-10.7029991	-10.4670168	-9.565910226	-8.31881	-8.31881	-6.65986	-6.65986	-6.39272	-6.72917	-6.082353324
+3	119.5596984	109.1260018	107.7798689	90.6917	95.25736	88.37658	102.0389	69.51272	73.17128	45.19349755
-4	-15.84799908	-18.14963851	-14.24194994	-14.2916	-14.2916	-11.4403	-11.571	-10.945	-11.521	-8.847059477
+4	106.8375577	99.62338286	95.40699472	82.92711	86.8955	80.48893	92.47812	60.96743	64.59226	40.98032583
-5	-19.01900086	-22.84321213	-17.07763244	-17.8752	-17.8752	-15.2666	-15.6772	-13.6763	-14.3961	-10.50588412
+5	99.28827224	94.00580717	88.62034813	78.26837	81.87838	75.75634	86.74164	57.58917	60.99837	38.45242161
-6	-24.44400084	-30.80583403	-21.92977365	-23.848	-23.848	-21.7201	-22.8478	-18.2286	-19.188	-13.27059027
+6	87.1220002	84.7831853	78.40979998	70.50379	73.51653	67.07993	76.36368	51.95874	55.00855	34.23924985
-7	-27.78299815	-35.66740423	-24.91665852	-27.4316	-27.4316	-25.5923	-27.1502	-20.9599	-22.0631	-14.92941174
+7	80.40199888	79.3336123	72.36179881	65.06858	67.66323	62.34735	70.48831	48.58049	51.41466	31.71134845
-8	-36.86150347	-43.91002612	-33.1022082	-34.0242	-34.2309	-32.0458	-34.3208	-26.0657	-27.4628	-17.6941179
+8	69.08460771	70.39099313	62.31672155	57.304	59.30138	54.4597	60.92753	42.95006	45.42485	27.49817563
-9	-43.1286443	-48.93959913	-38.7357756	-38.683	-39.248	-35.9179	-38.6231	-29.4439	-31.0566	-19.35294095
+9	62.56547627	65.10942023	56.45635621	52.64525	54.28426	49.72711	55.19106	39.5718	41.83096	24.97027029
-10	-53.71388045	-57.46221824	-48.49994978	-46.4476	-47.6098	-43.4305	-47.5588	-35.0744	-37.0465	-22.11764711
+10	51.84023995	55.72753691	46.57215237	44.88068	45.92241	41.83946	45.63027	33.94138	35.84114	21.56320586
-11	-60.14902346	-62.65979296	-54.52764697	-51.1063	-52.627	-48.1631	-53.2952	-38.4526	-40.6403	-24.12992837
+11	45.48909659	50.61396295	40.6140841	40.22193	40.9053	37.19758	40.04497	30.56312	32.24725	19.90437871
-12	-71.01425251	-72.1816755	-64.29492939	-58.8709	-60.9888	-56.0507	-62.856	-44.0831	-46.6302	-28.34310014
+12	35.04386047	42.23134384	31.22480173	32.45734	32.54344	30.74405	32.87439	24.9327	26.25744	17.13967256
-13	-77.61739419	-77.54724849	-70.23089206	-63.5297	-66.0059	-60.7833	-68.5925	-47.4613	-50.2241	-30.87100091
+13	28.90999949	37.28577057	25.91881686	28.61541	28.61541	26.87194	28.57204	21.9849	23.142	15.48085082
-14	-89.37600063	-86.62986758	-80.43840036	-72.0707	-75.204	-68.6709	-78.2922	-53.0917	-56.2139	-35.08417268
+14	23.34499951	29.1831515	20.94067565	22.64265	22.64265	20.4184	21.40144	17.31255	18.22374	12.71614467
-15	-96.15261068	-92.16344202	-86.38440145	-76.7294	-80.2211	-74.1923	-84.8458	-56.47	-59.8078	-37.61207664
+15	20.08999997	24.40557833	18.02938871	19.059	19.059	16.54629	17.0991	14.58119	15.34862	11.0573229
-16	-108.7333832	-101.5260659	-97.69546852	-84.494	-88.5829	-82.0799	-94.4066	-62.2403	-65.7976	-41.82524782
+16	14.71737777	16.58295895	13.30325073	13.08626	13.08626	10.47601	10.60675	10.02894	10.55678	8.292616756
-17	-116.3666698	-107.227641	-104.7647575	-89.1528	-93.6	-86.8125	-100.143	-67.703	-71.2663	-44.35315225
+17	11.64681449	11.97338574	10.54316387	9.502605	9.502605	7.60777	7.60777	7.297577	7.68166	6.633790796
-18	-129.2288091	-116.870259	-117.056589	-96.9173	-101.962	-94.7002	-109.704	-76.8075	-80.85	-48.56632374
+18	6.669188807	5.287406161	5.993128408	4.218594	4.218594	3.374875	3.374875	3.206131	3.374875	3.869084329
-19	-137.0300933	-122.7398331	-124.070021	-101.576	-106.979	-99.4328	-115.44	-82.2702	-86.6002	-51.09422478
+19	3.766625225	2.938971376	3.384234869	2.383723	2.383723	1.908071	1.908071	1.818111	1.913801	2.210262429
-20	-150.172233	-132.6624511	-135.8850868	-109.341	-115.341	-107.32	-125.001	-91.3747	-96.1839	-55.30739607
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**79.47348351**	**81.84554**	**70.1974**	**58.52054961**	**64.99044917**	**87.36105**	**95.84645**	**98.98026**	**101.0052**
-1	**-1.262203978**	**-1.26505**	**-1.06981**	**-0.852437232**	**-1.57654972**	**-1.219**	**-1.21966**	**-1.19578**	**-1.17459**
+1	**74.4764619**	**74.82068**	**63.67196**	**53.27959469**	**60.93621847**	**81.95001**	**89.69611**	**92.14745**	**93.44673**
-2	**-3.394160809**	**-3.39416**	**-2.98816**	**-2.34914842**	**-4.204130901**	**-3.27845**	**-3.27845**	**-3.27845**	**-3.20919**
+2	**68.50011773**	**67.00996**	**56.95773**	**47.56080066**	**56.15879573**	**75.49649**	**82.28248**	**83.83304**	**84.17134**
-3	**-5.861997838**	**-5.92167**	**-4.68575**	**-3.662533339**	**-5.780678093**	**-5.66088**	**-5.66573**	**-5.62107**	**-5.58145**
+3	**64.91431547**	**62.32354**	**53.61281**	**44.62063454**	**53.29234639**	**71.62437**	**77.8343**	**78.8444**	**78.79896**
-4	**-10.06934168**	**-10.1385**	**-8.04286**	**-6.313496685**	**-8.408259641**	**-9.72422**	**-9.73127**	**-9.83535**	**-9.65065**
+4	**58.9379713**	**54.51282**	**48.33734**	**40.05609105**	**48.51492367**	**65.17084**	**70.42067**	**70.24219**	**70.48102**
-5	**-12.59374839**	**-12.6686**	**-10.0571**	**-7.925824482**	**-9.984809178**	**-12.7097**	**-12.7201**	**-12.6687**	**-12.6232**
+5	**55.35216704**	**49.96088**	**45.17206**	**37.33911668**	**45.64847299**	**61.29872**	**65.58217**	**65.73419**	**65.69398**
-6	**-16.80109151**	**-16.8854**	**-13.4142**	**-10.64928012**	**-12.61239073**	**-17.7291**	**-17.7422**	**-17.6933**	**-17.9351**
+6	**48.77819242**	**43.94711**	**39.8966**	**32.84706711**	**40.8710502**	**54.19984**	**57.8175**	**57.76527**	**58.33351**
-7	**-19.32549795**	**-19.4155**	**-15.4285**	**-12.30510789**	**-14.31670201**	**-20.7408**	**-21.2927**	**-21.2362**	**-21.186**
+7	**45.1923897**	**40.4945**	**36.73133**	**30.17358774**	**37.52685523**	**50.32772**	**53.36933**	**53.22669**	**53.57105**
-8	**-23.74144277**	**-23.6324**	**-18.7856**	**-15.10107126**	**-18.42594085**	**-25.7602**	**-27.2714**	**-27.2178**	**-27.1701**
+8	**39.21604514**	**36.27767**	**31.45586**	**25.75403796**	**32.74943583**	**43.8742**	**45.9557**	**45.86934**	**45.82071**
-9	**-26.26585083**	**-26.1625**	**-20.7999**	**-16.80039904**	**-21.29239432**	**-28.7718**	**-30.8587**	**-30.8067**	**-31.1892**
+9	**35.63024317**	**33.74757**	**28.29058**	**23.1240707**	**29.88298754**	**40.00208**	**41.61084**	**41.56457**	**42.0413**
-10	**-30.85921459**	**-30.3793**	**-24.157**	**-19.66885469**	**-26.06981348**	**-34.8503**	**-36.8374**	**-36.7883**	**-37.1734**
+10	**29.65389854**	**29.53075**	**23.48203**	**19.09013159**	**25.10556059**	**33.54855**	**35.6321**	**35.58299**	**35.96805**
-11	**-34.44501876**	**-32.9094**	**-27.2411**	**-22.2532453**	**-28.93626775**	**-38.7224**	**-40.4246**	**-40.3773**	**-40.7638**
+11	**27.10024569**	**27.00065**	**21.46776**	**17.36905326**	**22.23910997**	**29.76713**	**32.04486**	**31.99403**	**32.37758**
-12	**-40.42135842**	**-37.1262**	**-32.5165**	**-26.63654485**	**-33.71368691**	**-45.1759**	**-47.4503**	**-47.3519**	**-47.3033**
+12	**22.89290257**	**22.78382**	**18.11064**	**14.53683989**	**17.46169086**	**24.74772**	**26.06613**	**26.01244**	**25.96481**
-13	**-44.00716545**	**-39.6563**	**-35.6818**	**-29.28827367**	**-36.58014023**	**-49.048**	**-51.8985**	**-51.7663**	**-51.7195**
+13	**20.22710571**	**20.25372**	**16.09638**	**12.85926982**	**14.83739627**	**21.73608**	**22.47889**	**22.42349**	**22.37433**
-14	**-49.98350504**	**-45.1572**	**-40.9573**	**-33.74406111**	**-41.83530031**	**-55.5016**	**-59.3121**	**-59.2478**	**-59.8161**
+14	**15.95255445**	**16.03689**	**12.73927**	**10.09955646**	**12.08205044**	**16.71666**	**16.72974**	**16.6808**	**16.92259**
-15	**-54.02555426**	**-48.7655**	**-44.1226**	**-36.43929169**	**-44.70175375**	**-60.019**	**-63.7603**	**-64.2738**	**-64.2323**
+15	**13.42814308**	**13.50679**	**10.72499**	**8.465478681**	**10.50550306**	**13.70502**	**13.71646**	**13.66609**	**13.62139**
-16	**-60.1432868**	**-56.0845**	**-49.398**	**-40.967591**	**-49.47917228**	**-66.4726**	**-71.9153**	**-71.9176**	**-72.1564**
+16	**9.220803016**	**9.289963**	**7.367883**	**5.778265177**	**7.877922555**	**8.904607**	**8.91166**	**9.015737**	**8.831032**
-17	**-63.72909139**	**-60.771**	**-52.5633**	**-43.70632049**	**-52.34563085**	**-70.3447**	**-76.3634**	**-77.194**	**-77.1472**
+17	**6.6963916**	**6.759861**	**5.353618**	**4.187695054**	**6.301375312**	**6.466605**	**6.472339**	**6.428454**	**6.38951**
-18	**-69.70543491**	**-68.5817**	**-58.3077**	**-48.70374686**	**-57.12304955**	**-76.7982**	**-83.7771**	**-85.5084**	**-86.0396**
+18	**2.969889949**	**2.96989**	**2.602457**	**2.045372962**	**3.673790464**	**2.868644**	**2.868644**	**2.868644**	**2.799381**
-19	**-73.29123707**	**-73.2681**	**-62.3362**	**-52.13502904**	**-59.98949933**	**-80.6703**	**-88.2252**	**-90.4971**	**-91.6048**
+19	**1.679403189**	**1.684145**	**1.451448**	**1.147350697**	**2.097243047**	**1.62186**	**1.622964**	**1.599468**	**1.57862**
-20	**-79.26758045**	**-81.5455**	**-69.5072**	**-58.28187338**	**-64.76691777**	**-87.1239**	**-95.6389**	**-98.8115**	**-100.88**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	120.7418321	126.8958673	89.47575	109.9644	108.927
-1	-1.28977903	-1.448028101	-1.45026	-1.48592	-1.29068
+1	109.2941783	116.3407425	81.55224	99.57057	98.4498
-2	-3.458000824	-3.909736495	-3.89025	-4.06417	-3.458
+2	97.42821139	103.1468493	74.12293	87.96848	88.88991
-3	-5.95157246	-5.523440263	-6.77075	-7.07263	-6.03936
+3	90.97931951	95.53817659	70.57784	81.21775	84.37678
-4	-10.25082949	-10.22293833	-11.605	-12.2291	-10.374
+4	80.23117707	83.99621923	64.66937	72.1939	76.8549
-5	-13.87847516	-13.18346678	-14.5055	-15.323	-14.1878
+5	73.78228481	77.07105028	61.12429	67.06105	72.34177
-6	-20.32737063	-18.96724994	-19.3398	-20.6603	-20.6351
+6	63.95673794	66.64241171	55.21581	60.61543	64.81989
-7	-24.19670556	-22.56263945	-22.3546	-24.5276	-24.5035
+7	58.79762471	60.72783402	51.67072	56.74807	60.30676
-8	-30.64560108	-28.55495596	-28.0438	-30.9733	-31.0965
+8	50.19908349	50.87020296	45.76225	50.30246	52.78489
-9	-34.51492693	-32.15034747	-31.5889	-34.8406	-34.9649
+9	46.11596407	45.55561933	42.21717	46.4351	48.27176
-10	-40.96382246	-38.94065875	-37.4974	-41.2862	-42.2628
+10	39.66707329	37.28514247	36.30869	39.98948	40.74988
-11	-44.833158	-43.90294018	-41.0425	-45.1536	-46.7759
+11	35.79773739	33.34777188	32.7636	36.12212	36.24708
-12	-51.92809636	-52.84342214	-46.9509	-51.5992	-54.2978
+12	29.34884188	27.35546452	26.85513	29.67651	29.79975
-13	-57.08721138	-58.75800007	-50.496	-55.4666	-58.8109
+13	25.47950702	23.76007692	23.31576	25.80915	25.93136
-14	-65.68573215	-68.61563066	-56.4045	-61.9122	-66.3328
+14	19.03062132	17.76775111	18.36713	19.59145	19.33833
-15	-71.64427559	-74.76463692	-59.9496	-65.7796	-70.8459
+15	15.16128636	14.17236344	15.561	16.5984	15.561
-16	-82.39242613	-86.30659299	-65.8581	-74.0093	-78.3678
+16	9.386330229	9.2352474	10.6324	11.19172	9.5095
-17	-88.84131886	-93.2317648	-69.4031	-79.4236	-82.8809
+17	6.806773607	6.321721764	7.731877	8.097834	6.916
-18	-99.58946123	-105.7878947	-75.3116	-90.3026	-90.4028
+18	3.025749948	3.416970632	3.403969	3.545468	3.02575
-19	-106.7285585	-113.7042267	-79.63	-97.2639	-96.3128
+19	1.729000026	1.939942661	1.943697	1.998526	1.729
-20	-119.6263497	-126.8981215	-89.2984	-109.1	-108.759
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	**Type 3**	**Type 3S2**	**Type 3-3**	**2-.75 AASHTO Type 3-3 + Lane**	**SC-SU2**	**SU4**	**SU5**	**SU6**	**SU7**
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-6.03E-14**	**-5.93E-14**	**-4.11E-14**	**-3.66E-14**	**-6.26E-14**	**-6.12E-14**	**-6.05E-14**	**-6.10E-14**	**-6.33E-14**
End Shear	**5.70E-14**	**5.47E-14**	**4.22E-14**	**3.61E-14**	**3.96E-14**	**5.52E-14**	**5.70E-14**	**5.73E-14**	**5.71E-14**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**148.9529238**	**150.7379043**	**127.4434349**	**106.9724394**	**121.8724369**	**163.9000271**	**179.3922118**	**184.2948927**	**186.893457**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**278.7815547**	**276.5331726**	**234.3604456**	**196.6307452**	**228.4571209**	**307.148774**	**335.0608123**	**341.9836748**	**344.1218115**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**389.4858928**	**377.3341513**	**323.0303638**	**271.7910574**	**319.7540783**	**429.7462182**	**467.0058048**	**491.7771297**	**499.3214904**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**481.0659312**	**453.1408293**	**397.2638861**	**334.68301**	**395.7632648**	**531.692364**	**575.227183**	**622.6295408**	**626.6351625**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**553.5216704**	**503.9532026**	**454.6159579**	**384.1324102**	**456.4847299**	**612.9872**	**659.5297729**	**726.8758721**	**750.0375267**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**606.4996113**	**546.4795881**	**495.0865596**	**419.9527558**	**501.9184262**	**673.422412**	**732.0280142**	**804.3325889**	**847.4526744**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**640.1410614**	**570.2138516**	**528.7469741**	**449.5224834**	**531.7750921**	**727.3913795**	**792.0865858**	**854.8773266**	**915.0134333**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**672.6640596**	**596.699541**	**551.2810145**	**469.5836701**	**545.8619535**	**766.6196068**	**828.096359**	**900.0705881**	**952.6043472**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**686.6154667**	**610.5711037**	**556.9335523**	**475.792255**	**544.6610015**	**784.8492146**	**840.3824794**	**923.5198504**	**974.7027448**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**681.4427142**	**610.9488132**	**546.308553**	**468.1644554**	**528.1723264**	**782.4275828**	**828.9450759**	**920.3631847**	**982.1506854**
-11	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+11	**686.5134341**	**610.5607381**	**556.9629956**	**475.8039843**	**544.6259339**	**784.7699797**	**840.3358124**	**923.4426678**	**974.5999052**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**672.5418907**	**596.6788633**	**551.299313**	**469.590914**	**545.8093794**	**766.5183194**	**828.0260443**	**899.9684593**	**952.5907678**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**640.1402527**	**570.2136795**	**528.7540905**	**449.5252969**	**531.7049759**	**727.4069074**	**791.9924948**	**854.8724519**	**914.9734728**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**606.4787031**	**546.4646623**	**495.0825267**	**419.9511603**	**502.0235634**	**673.4158877**	**732.0402468**	**804.3027694**	**847.5020005**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**553.6221297**	**503.9455176**	**454.6007151**	**384.1263552**	**456.5724139**	**613.0974599**	**659.5182794**	**726.9432998**	**750.0604477**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**481.1463154**	**453.1140455**	**397.2374944**	**334.7007379**	**395.8334057**	**531.7806012**	**575.3220805**	**622.6720184**	**626.6862187**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**389.5461708**	**377.2881228**	**322.992773**	**271.804367**	**319.806668**	**429.8123682**	**467.0769092**	**491.7945715**	**499.3461122**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**278.8217291**	**276.4679801**	**234.3178392**	**196.6420226**	**228.4921689**	**307.1928622**	**335.1082095**	**342.0336986**	**344.1584148**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**148.9730226**	**150.6535653**	**127.3866303**	**106.9781017**	**121.8899862**	**163.9221125**	**179.4159568**	**184.3199232**	**186.9197914**
-20	**-1.16E-13**	**-1.19E-13**	**-8.15E-14**	**-7.01E-14**	**-7.41E-14**	**-1.11E-13**	**-1.11E-13**	**-1.11E-13**	**-1.14E-13**
+20	**6.89E-14**	**6.26E-14**	**5.78E-14**	**4.37E-14**	**5.90E-14**	**6.94E-14**	**7.08E-14**	**7.63E-14**	**7.88E-14**

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.36E-13	*-1.03E-13*	*-1.20E-13*	-9.79E-14	-1.02E-13	-7.50E-14	-8.52E-14	-6.40E-14	-6.75E-14	-3.96E-14
End Shear	1.36E-13	*1.08E-13*	*7.26E-14*	8.20E-14	8.21E-14	6.49E-14	6.75E-14	6.34E-14	6.67E-14	3.82E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	282.1542284	*250.9843926*	*254.2499492*	206.2300483	217.272648	201.993622	234.6722994	168.1599195	177.0104415	103.8691383
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	526.5096383	*474.4724014*	*474.5220976*	387.6134319	407.787349	378.7467903	438.7501086	307.2189012	323.3883171	194.256131
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	733.0661901	*670.4640103*	*660.8164128*	544.1501965	571.5441533	530.2594764	612.2333941	417.1545603	439.1100635	271.1609853
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	901.8238832	*838.9592444*	*812.2829195*	675.8402711	708.5429844	656.5316908	755.1221702	497.955759	526.3217427	334.5836722
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	1032.782722	*979.9580709*	*929.6501341*	782.6836599	818.7838461	757.5634119	867.8250084	575.9365217	610.0939016	384.5242161
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	1126.01665	*1093.460538*	*1013.039454*	864.6805125	902.2668948	833.1095714	979.4655703	637.742019	675.3160197	420.9826383
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	1194.423983	*1179.466571*	*1074.981581*	921.2924376	958.4537331	906.7173642	1060.511565	681.5301444	721.3707203	443.9588783
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	1246.823569	*1237.976297*	*1123.938935*	960.3801265	1010.495303	956.3693	1110.717955	707.3008996	748.2580236	453.4530183
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	1264.874298	*1268.989562*	*1140.550274*	991.2844524	1039.063261	980.3721427	1129.921197	730.5080025	773.947318	449.4648652
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	1247.648258	*1271.375033*	*1123.274858*	997.0194443	1040.550598	979.1345878	1118.530054	737.1617889	780.498654	442.3529421
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	1267.553721	*1269.118808*	*1140.7355*	991.1058717	1038.904052	980.2880068	1129.888535	730.5206628	773.9620382	449.506107
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	1249.660431	*1238.23487*	*1124.096946*	960.3887533	1010.521137	956.2582118	1110.652616	707.2997238	748.2580064	453.4896566
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	1194.128314	*1179.692813*	*1073.779401*	921.2731002	958.4494654	906.7426967	1060.576928	681.5151488	721.3560191	443.9909099
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	1126.607918	*1093.654461*	*1013.947122*	864.8482999	902.4475876	833.1079509	979.498224	637.7132348	675.2866488	421.0100608
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	1031.48204	*980.1196479*	*929.5438478*	782.8234866	818.9344319	757.6981754	867.8250016	575.9607664	610.0571455	384.547103
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	900.5862521	*839.0885688*	*812.149326*	675.952183	708.6635029	656.6395471	755.252898	497.9334464	526.3805738	334.6020325
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	731.8915702	*670.5609357*	*660.7769582*	544.234056	571.6344578	530.340314	612.3313836	417.1433986	439.0983143	271.1747263
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	525.3979595	*474.5370339*	*474.5767074*	387.669343	407.8475549	378.8006762	438.8154267	307.2300822	323.4000866	194.2652579
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	281.1057112	*251.016744*	*254.2773628*	206.2580586	217.3028101	202.020614	234.70501	168.1823051	177.0340053	103.8737213
-20	-2.33E-13	*-2.00E-13*	*-1.26E-13*	-1.65E-13	-1.65E-13	-1.30E-13	-1.37E-13	-1.28E-13	-1.35E-13	-7.55E-14
+20	1.40E-13	*1.09E-13*	*1.29E-13*	1.04E-13	1.13E-13	8.58E-14	1.05E-13	7.74E-14	8.24E-14	3.94E-14

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.17E-14	-8.15E-14	-6.74E-14	-7.45E-14	-7.35E-14
End Shear	6.60E-14	5.83E-14	6.88E-14	7.34E-14	6.10E-14
-1	0	0	0	0	0
+1	219.7270501	234.0925725	163.1044724	200.6987218	196.8995914
-2	0	0	0	0	0
+2	400.7980236	427.1246803	301.2185023	364.6267534	361.5771239
-3	0	0	0	0	0
+3	550.1403785	578.7911251	423.4670664	491.4280693	506.260674
-4	0	0	0	0	0
+4	665.088655	701.4013744	526.8085038	597.2250813	627.8407109
-5	0	0	0	0	0
+5	780.0369487	823.186403	611.6591451	680.8751184	725.500057
-6	0	0	0	0	0
+6	860.5911646	910.4075383	677.910385	756.5259835	805.536755
-7	0	0	0	0	0
+7	907.4368331	975.5821051	725.2544741	805.4673582	877.6217035
-8	0	0	0	0	0
+8	929.0493639	1028.087729	753.6914481	856.6788397	925.6366747
-9	0	0	0	0	0
+9	978.4723054	1060.468929	777.7239031	887.2643061	949.5815828
-10	0	0	0	0	0
+10	994.6630571	1073.556877	786.0974744	897.2747371	949.5294411
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	978.4025448	1060.476148	777.7353414	887.2999092	949.6374933
-12	0	0	0	0	0
+12	929.0493475	1028.084213	753.6889204	856.6991603	925.6755454
-13	0	0	0	0	0
+13	907.4136047	975.5740548	725.2379679	805.4724487	877.6435705
-14	0	0	0	0	0
+14	860.637635	910.4144024	677.879917	756.4508152	805.5415975
-15	0	0	0	0	0
+15	780.0602118	823.192151	611.6147007	680.880171	725.4878951
-16	0	0	0	0	0
+16	665.0886586	701.4026092	526.8644605	597.2088524	627.8115753
-17	0	0	0	0	0
+17	550.1171567	578.7860917	423.5089567	491.4087134	506.3116597
-18	0	0	0	0	0
+18	400.7515296	427.116693	301.2464365	364.5800391	361.6111004
-19	0	0	0	0	0
+19	219.6620229	234.0800998	163.1273582	200.624603	197.1060323
-20	-1.17E-13	-1.12E-13	-1.35E-13	-1.38E-13	-1.21E-13
+20	9.47E-14	1.13E-13	8.34E-14	9.10E-14	9.20E-14

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0	0	0
End Shear	55.2	41.21	42.44	36.4	31.35	33.7	45.3	49.7	51.325	52.375
-1	-1.2	-0.6545	-0.65598	-0.55474	-0.44388	-0.8175	-0.6321	-0.63244	-0.62006	-0.60907
+1	51.4703	38.61886	38.79735	33.01631	28.53498	31.59773	42.49417	46.51081	47.78193	48.45565
-2	-3.2	-1.76	-1.76	-1.54947	-1.22929	-2.18	-1.7	-1.7	-1.7	-1.66408
+2	46.99677	35.5199	34.74719	29.53473	25.45481	29.12045	39.14778	42.66657	43.47059	43.64601
-3	-4.4	-3.03967	-3.07061	-2.42974	-1.91963	-2.9975	-2.93538	-2.9379	-2.91474	-2.89419
+3	44.31265	33.66052	32.3171	27.80026	23.8651	27.63409	37.13994	40.36002	40.88379	40.86023
-4	-6.4	-5.22133	-5.2572	-4.17053	-3.31597	-4.36	-5.04237	-5.04603	-5.1	-5.00423
+4	39.83912	30.56156	28.26695	25.06474	21.39586	25.15682	33.79354	36.51578	36.42322	36.54707
-5	-7.6	-6.53033	-6.56915	-5.215	-4.16877	-5.1775	-6.59047	-6.59583	-6.56922	-6.5456
+5	37.155	28.70219	25.9066	23.42342	19.92932	23.67046	31.7857	34.00683	34.08566	34.06481
-6	-9.6	-8.712	-8.75573	-6.95579	-5.6151	-6.54	-9.19322	-9.2	-9.17463	-9.3
+6	32.8	25.29333	22.78823	20.68789	17.51007	21.19318	28.10466	29.98056	29.95347	30.24813
-7	-10.8	-10.021	-10.0677	-8.00026	-6.4979	-7.42375	-10.7549	-11.0411	-11.0118	-10.9857
+7	30.4	23.43396	20.99793	19.04658	16.07353	19.45909	26.09682	27.67401	27.60005	27.77861
-8	-14.2494	-12.3108	-12.2543	-9.74105	-7.99423	-9.55455	-13.3576	-14.1413	-14.1134	-14.0887
+8	26.28941	20.335	18.81134	16.31105	13.70429	16.98182	22.75043	23.82976	23.78498	23.75977
-9	-16.6353	-13.6198	-13.5662	-10.7855	-8.90704	-11.0409	-14.9193	-16.0014	-15.9744	-16.1728
+9	23.90353	18.47563	17.49939	14.66973	12.29775	15.49546	20.74259	21.57679	21.5528	21.8
-10	-20.6118	-16.0017	-15.7528	-12.5263	-10.4534	-13.5182	-18.0712	-19.1016	-19.0761	-19.2758
+10	19.92706	15.37667	15.31281	12.17632	10.14087	13.01818	17.39619	18.47659	18.45112	18.65079
-11	-22.9976	-17.861	-17.0648	-14.1255	-11.8325	-15.0045	-20.079	-20.9617	-20.9371	-21.1376
+11	17.54118	14.0525	14.00085	11.13184	9.213069	11.53182	15.43538	16.61647	16.59011	16.78899
-12	-26.9741	-20.96	-19.2513	-16.8611	-14.1768	-17.4818	-23.4254	-24.6048	-24.5537	-24.5285
+12	13.56471	11.87083	11.81427	9.391051	7.691734	9.054545	12.83263	13.51627	13.48843	13.46373
-13	-29.36	-22.8194	-20.5633	-18.5024	-15.5983	-18.9682	-25.4333	-26.9113	-26.8428	-26.8185
+13	11.2	10.48852	10.50232	8.346578	6.793938	7.69375	11.27098	11.65615	11.62742	11.60194
-14	-33.6	-25.9183	-23.4157	-21.2379	-17.9926	-21.6932	-28.7797	-30.7556	-30.7222	-31.0169
+14	9.2	8.272001	8.315732	6.605791	5.322603	6.264999	8.668219	8.675	8.649626	8.775
-15	-35.9882	-28.0143	-25.2868	-22.8792	-19.4441	-23.1795	-31.1221	-33.0621	-33.3284	-33.3069
+15	8	6.962999	7.003779	5.561313	4.454802	5.4475	7.106569	7.112501	7.086382	7.063203
-16	-40.4612	-31.1866	-29.082	-25.6147	-21.8884	-25.6568	-34.4685	-37.2908	-37.292	-37.4158
+16	5.962354	4.781334	4.817196	3.820525	3.033467	4.085	4.617374	4.621032	4.675	4.579223
-17	-43.1453	-33.0459	-31.512	-27.2561	-23.3699	-27.1432	-36.4764	-39.5973	-40.028	-40.0037
+17	4.769415	3.472332	3.505243	2.776053	2.19567	3.267501	3.353179	3.356152	3.333396	3.313202
-18	-47.6188	-36.1449	-35.5622	-30.2347	-26.0698	-29.6205	-39.8228	-43.4416	-44.3393	-44.6148
+18	2.781177	1.54	1.54	1.349472	1.069287	1.904999	1.4875	1.4875	1.4875	1.451585
-19	-50.3029	-38.0043	-37.9923	-32.3237	-27.9179	-31.1068	-41.8306	-45.7481	-46.9261	-47.5006
+19	1.588239	0.870834	0.873293	0.752631	0.598046	1.0875	0.840996	0.841568	0.829384	0.818574
-20	-54.7765	-41.1032	-42.2844	-36.0421	-31.2262	-33.5841	-45.177	-49.5924	-51.2375	-52.3102
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	55.2	56.875	60	55.8	65	47.5	50	28.77396
-1	-1.2	-0.92913	-0.92913	-0.74364	-0.74364	-0.70816	-0.74543	-0.86016
+1	51.4703	53.46903	56.33203	52.37066	60.84322	43.59863	45.8933	26.93003
-2	-3.2	-2.5	-2.5	-2	-2	-1.9	-2	-2.29377
+2	46.99677	49.4428	51.9961	48.28061	55.88559	38.87759	40.92378	24.74535
-3	-4.4	-4.31362	-4.31362	-3.45339	-3.45339	-3.31486	-3.48933	-3.15393
+3	44.31265	47.02707	49.39453	45.82659	52.91102	36.04497	37.94207	23.43453
-4	-6.4	-7.41071	-7.41071	-5.9322	-6	-5.67538	-5.97409	-4.58753
+4	39.83912	43.00084	45.05859	41.73655	47.95339	31.61391	33.49352	21.24984
-5	-7.6	-9.26897	-9.26897	-7.91631	-8.12924	-7.09169	-7.46494	-5.4477
+5	37.155	40.5851	42.45703	39.28252	44.97881	29.86216	31.62995	19.93903
-6	-9.6	-12.3661	-12.3661	-11.2627	-11.8475	-9.45221	-9.9497	-6.8813
+6	32.8	36.55887	38.12109	34.78348	39.59745	26.94257	28.52401	17.75434
-7	-10.8	-14.2243	-14.2243	-13.2706	-14.0784	-10.8685	-11.4405	-7.74146
+7	30.4	33.74051	35.08594	32.32945	36.55085	25.19082	26.66044	16.44353
-8	-14.2494	-17.6429	-17.75	-16.6169	-17.7966	-13.516	-14.2405	-9.17507
+8	26.28941	29.71429	30.75	28.23941	31.59322	22.27123	23.5545	14.25884
-9	-16.6353	-20.0586	-20.3516	-18.6248	-20.0275	-15.2678	-16.104	-10.0352
+9	23.90353	27.29855	28.14844	25.78538	28.61864	20.51947	21.69093	12.94803
-10	-20.6118	-24.0848	-24.6875	-22.5203	-24.661	-18.1874	-19.21	-11.4688
+10	19.92706	23.27232	23.8125	21.69534	23.66102	17.59988	18.58498	11.18134
-11	-22.9976	-26.5006	-27.2891	-24.9744	-27.6356	-19.9391	-21.0736	-12.5123
+11	17.54118	20.85659	21.21094	19.28835	20.76483	15.84813	16.72142	10.32117
-12	-26.9741	-30.5268	-31.625	-29.0644	-32.5932	-22.8587	-24.1795	-14.697
+12	13.56471	16.83036	16.875	15.94195	17.04661	12.92854	13.61547	8.887567
-13	-29.36	-32.9425	-34.2266	-31.5184	-35.5678	-24.6105	-26.0431	-16.0078
+13	11.2	14.83817	14.83817	13.93411	14.81568	11.4	12	8.027405
-14	-33.6	-37.3714	-38.9961	-35.6085	-40.5974	-27.5301	-29.149	-18.1925
+14	9.2	11.74107	11.74107	10.58771	11.09746	8.977211	9.449695	6.593801
-15	-35.9882	-39.7871	-41.5977	-38.4715	-43.9958	-29.2818	-31.0126	-19.5033
+15	8	9.882813	9.882813	8.579875	8.866528	7.560898	7.95884	5.733639
-16	-40.4612	-43.8133	-45.9336	-42.5615	-48.9534	-32.2739	-34.1185	-21.688
+16	5.962354	6.785717	6.785717	5.432205	5.5	5.200382	5.474087	4.300035
-17	-43.1453	-46.2291	-48.5352	-45.0156	-51.928	-35.1066	-36.9543	-22.9988
+17	4.769415	4.927459	4.927459	3.944916	3.944916	3.784069	3.983231	3.439871
-18	-47.6188	-50.2553	-52.8711	-49.1056	-56.8856	-39.8276	-41.9238	-25.1835
+18	2.781177	2.1875	2.1875	1.75	1.75	1.6625	1.75	2.006266
-19	-50.3029	-52.671	-55.4727	-51.5596	-59.8602	-42.6602	-44.9055	-26.4943
+19	1.588239	1.23605	1.23605	0.989407	0.989407	0.942759	0.992378	1.146104
-20	-54.7765	-56.6973	-59.8086	-55.6497	-64.8178	-47.3812	-49.875	-28.679
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 40' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	55.2	69.83333	73.39264	51.75	63.6	63
-1	-1.2	-0.74597	-0.83749	-0.83879	-0.85941	-0.74649
+1	51.4703	63.21236	67.28788	47.16729	57.58853	56.94031
-2	-3.2	-2	-2.26127	-2.25	-2.35059	-2
+2	46.99677	56.34946	59.65694	42.8704	50.87824	51.41117
-3	-4.4	-3.44221	-3.19459	-3.91599	-4.09059	-3.49298
+3	44.31265	52.61962	55.25632	40.82004	46.97383	48.80091
-4	-6.4	-5.92876	-5.91263	-6.71195	-7.07294	-6
+4	39.83912	46.40323	48.58081	37.40276	41.75471	44.45049
-5	-7.6	-8.02688	-7.62491	-8.38952	-8.86235	-8.20576
+5	37.155	42.67339	44.57551	35.35239	38.78603	41.84024
-6	-9.6	-11.7567	-10.9701	-11.1856	-11.9493	-11.9347
+6	32.8	36.99059	38.5439	31.93511	35.05809	37.48982
-7	-10.8	-13.9946	-13.0495	-12.9292	-14.186	-14.172
+7	30.4	34.00672	35.1231	29.88474	32.82132	34.87956
-8	-14.2494	-17.7245	-16.5153	-16.2197	-17.914	-17.9853
+8	26.28941	29.03359	29.42175	26.46746	29.09338	30.52914
-9	-16.6353	-19.9624	-18.5948	-18.27	-20.1507	-20.2226
+9	23.90353	26.67204	26.34796	24.4171	26.85662	27.91889
-10	-20.6118	-23.6922	-22.5221	-21.6873	-23.8787	-24.4435
+10	19.92706	22.94221	21.56457	20.99982	23.12868	23.56847
-11	-22.9976	-25.9301	-25.3921	-23.7377	-26.1154	-27.0537
+11	17.54118	20.7043	19.28732	18.94945	20.89191	20.96419
-12	-26.9741	-30.0336	-30.563	-27.155	-29.8434	-31.4041
+12	13.56471	16.97446	15.82155	15.53217	17.16397	17.23525
-13	-29.36	-33.0175	-33.9838	-29.2053	-32.0801	-34.0144
+13	11.2	14.73656	13.74209	13.48511	14.92721	14.99789
-14	-33.6	-37.9906	-39.6852	-32.6226	-35.8081	-38.3648
+14	9.2	11.00672	10.27632	10.62298	11.33109	11.18469
-15	-35.9882	-41.4368	-43.2415	-34.673	-38.0449	-40.9751
+15	8	8.768818	8.196856	9	9.6	9
-16	-40.4612	-47.6532	-49.9171	-38.0903	-42.8047	-45.3255
+16	5.962354	5.428762	5.341381	6.149451	6.472943	5.5
-17	-43.1453	-51.3831	-53.9224	-40.1406	-45.9362	-47.9357
+17	4.769415	3.936827	3.656288	4.471878	4.683536	4
-18	-47.6188	-57.5995	-61.1844	-43.5579	-52.2282	-52.2862
+18	2.781177	1.75	1.97627	1.96875	2.050589	1.75
-19	-50.3029	-61.7285	-65.763	-46.0555	-56.2544	-55.7044
+19	1.588239	1	1.122003	1.124174	1.155885	1
-20	-54.7765	-69.1882	-73.3939	-51.6474	-63.0998	-62.9031
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-5.55E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	102.9406	77.2377	78.1633	66.0842	57.3550	63.1955	84.9883	93.0216	95.5639	96.9113
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	191.5659	144.5588	143.3929	121.5247	105.5334	118.4636	159.2682	173.7417	177.3314	178.4401
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	265.8759	201.9631	195.6620	167.5034	145.9956	165.8046	222.8396	242.1601	255.0050	258.9170
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	325.8706	249.4508	234.9706	205.9963	179.8976	205.2182	275.7025	298.2770	322.8569	324.9340
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	371.55	287.0219	261.3187	235.7355	206.6308	236.7046	317.8570	341.9911	376.9126	388.9228
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	402.9459	314.4929	283.3703	256.7211	226.0982	260.2636	349.1949	379.5841	417.0768	439.4362
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	425.6	331.9373	295.6774	274.1753	242.1259	275.7454	377.1799	410.7268	443.2861	474.4690
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	443.3012	348.8017	309.4112	285.8600	253.0247	283.0500	397.5212	429.3992	466.7206	493.9613
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	448.1694	356.0360	316.6042	288.7911	256.5418	282.4273	406.9739	435.7700	478.8799	505.4201
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	439.8059	353.3538	316.8000	283.2816	252.6857	273.8773	405.7182	429.8393	477.2430	509.2822
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	449.3206	355.9831	316.5988	288.8063	256.5479	282.4091	406.9328	435.7458	478.8399	505.3668
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	444.5201	348.7383	309.4005	285.8695	253.0284	283.0228	397.4687	429.3627	466.6676	493.9542
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	425.473	331.9369	295.6773	274.1789	242.1274	275.7091	377.1879	410.6780	443.2836	474.4483
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	403.2	314.4821	283.3625	256.7190	226.0974	260.3182	349.1915	379.5905	417.0613	439.4618
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	370.9912	287.0740	261.3148	235.7276	206.6276	236.7500	317.9142	341.9851	376.9475	388.9346
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	325.3389	249.4925	234.9567	205.9826	179.9068	205.2546	275.7483	298.3262	322.8789	324.9604
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	265.3712	201.9944	195.6381	167.4839	146.0025	165.8318	222.8739	242.1970	255.0140	258.9298
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	191.0883	144.5796	143.3591	121.5026	105.5392	118.4818	159.2911	173.7662	177.3574	178.4591
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	102.4901	77.2481	78.1196	66.0548	57.3579	63.2046	84.9998	93.0339	95.5768	96.9250
-20	-9.62E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.67E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-5.55E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	102.9406	106.9381	112.6641	104.7413	121.6864	87.1973	91.7866	53.8601
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	191.5659	200.9922	211.4531	196.3945	227.5085	159.3046	167.6890	100.7291
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	265.8759	282.1624	296.3672	274.9595	317.4661	216.3104	227.6951	140.6072
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	325.8706	350.4487	367.4063	340.4364	391.5593	258.2088	272.9177	173.4943
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	371.55	405.8510	424.5703	392.8252	450.0000	298.6448	316.3567	199.3903
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	402.9459	448.3695	467.8594	431.9987	507.8898	330.6933	350.1768	218.2954
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	425.6	477.7249	496.9944	470.1672	549.9153	353.3991	374.0579	230.2094
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	443.3012	497.9933	523.9799	495.9136	575.9492	366.7622	388.0000	235.1325
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	448.1694	514.0184	538.7935	508.3599	585.9068	378.7960	401.3209	233.0645
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	439.8059	516.9922	539.5647	507.7182	580.0000	382.2462	404.7180	229.3767
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	449.3206	513.9258	538.7109	508.3163	585.8898	378.8025	401.3285	233.0859
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	444.5201	497.9978	523.9933	495.8560	575.9153	366.7616	388.0000	235.1515
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	425.473	477.7149	496.9922	470.1803	549.9491	353.3913	374.0503	230.2260
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	403.2	448.4565	467.9531	431.9979	507.9068	330.6784	350.1616	218.3096
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	370.9912	405.9235	424.6484	392.8951	450.0000	298.6574	316.3376	199.4022
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	325.3389	350.5067	367.4688	340.4924	391.6271	258.1973	272.9482	173.5038
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	265.3712	282.2059	296.4140	275.0015	317.5169	216.3046	227.6890	140.6143
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	191.0883	201.0212	211.4843	196.4224	227.5424	159.3104	167.6951	100.7339
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	102.4901	106.9526	112.6797	104.7553	121.7034	87.2089	91.7988	53.8624
-20	-9.62E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.67E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 40' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-5.55E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.61E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	102.9406	127.0833	135.3919	94.3346	116.0779	113.8806
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	191.5659	231.8092	247.0357	174.2154	210.8888	209.1250
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	265.8759	318.1841	334.7548	244.9202	284.2268	292.8055
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	325.8706	384.6667	405.6688	304.6897	345.4165	363.1236
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	371.55	451.1492	476.1055	353.7647	393.7971	419.6067
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	402.9459	497.7393	526.5515	392.0824	437.5512	465.8975
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	425.6	524.8333	564.2464	419.4647	465.8574	507.5892
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	443.3012	537.3334	594.6141	435.9118	495.4765	535.3596
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	448.1694	565.9180	613.3424	449.8114	513.1662	549.2085
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	439.8059	575.2823	620.9120	454.6544	518.9559	549.1784
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	449.3206	565.8777	613.3465	449.8180	513.1868	549.2409
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	444.5201	537.3333	594.6120	435.9103	495.4882	535.3820
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	425.473	524.8199	564.2418	419.4552	465.8603	507.6018
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	403.2	497.7661	526.5555	392.0647	437.5077	465.9003
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	370.9912	451.1626	476.1088	353.7390	393.8000	419.5997
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	325.3389	384.6667	405.6695	304.7221	345.4071	363.1068
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	265.3712	318.1707	334.7519	244.9445	284.2156	292.8350
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	191.0883	231.7823	247.0311	174.2316	210.8618	209.1447
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	102.4901	127.0457	135.3847	94.3478	116.0351	114.0000
-20	-9.62E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.67E-14	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 45’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	158.3026677	136.6827776	142.4724005	111.4244	117.8528	109.7959	128.5667	99.25347	104.5676	56.83539597
-1	-3.372444275	-2.622472192	-3.015070095	-2.12521	-2.12521	-1.70083	-1.70083	-1.61915	-1.70437	-1.966415552
+1	145.9600712	127.0077554	131.4878638	104.1693	110.0395	102.4762	119.6942	90.04651	94.81966	52.91829914
-2	-7.728001836	-6.628905419	-6.909909464	-5.27791	-5.27791	-4.22529	-4.22529	-4.02916	-4.24122	-4.424434874
+2	134.1195766	118.0249088	120.8414813	97.26235	102.6013	95.46025	111.1901	81.27113	85.54856	49.17249361
-3	-11.32444609	-12.03562726	-10.12657943	-9.52834	-9.52834	-7.62695	-7.62695	-7.32596	-7.71154	-6.390849577
+3	124.759181	110.9506327	112.4251801	91.7368	96.6507	89.84751	104.3868	74.79452	78.73108	46.17584859
-4	-15.95999918	-18.93402701	-14.36148195	-14.8414	-14.8414	-12.4368	-12.6759	-11.3738	-11.9725	-8.848866284
+4	113.1986794	102.2477832	101.3511217	84.82985	89.21245	82.83159	95.88261	66.69876	70.20922	42.43004147
-5	-19.78044341	-24.56475034	-17.77974917	-19.0918	-19.0918	-17.0291	-17.7784	-14.6121	-15.3812	-10.81528101
+5	104.0622696	95.3975068	92.98384119	79.30429	83.26184	77.21885	89.07929	60.22216	63.39175	39.43339642
-6	-24.69600093	-31.74315301	-22.17858918	-24.4048	-24.4048	-22.7694	-24.1565	-18.66	-19.6421	-13.27330057
+6	92.78177377	86.97465891	82.84145546	72.39735	75.8236	70.05226	80.42448	53.23307	56.39385	35.68759353
-7	-30.93806637	-37.59787604	-27.7887882	-28.895	-28.9749	-27.3616	-29.259	-21.8983	-23.0509	-15.23971527
+7	83.88489119	80.34838279	74.98813046	66.27903	69.28024	63.88859	72.92141	49.2278	52.13292	32.69094757
-8	-40.22541966	-45.05627576	-36.13846241	-35.802	-36.4132	-33.4273	-35.9987	-27.2046	-28.704	-17.69773069
+8	73.2280597	72.20553191	66.02244666	59.27415	61.69092	56.87267	64.41726	44.22121	46.80676	28.94513732
-9	-47.7673084	-51.13499659	-42.91900249	-41.3275	-42.3638	-38.6423	-42.3199	-31.2099	-32.9649	-19.66414542
+9	65.36260798	65.80325556	58.95071128	53.7486	55.74033	51.25993	57.61394	40.21594	42.54584	25.94849224
-10	-57.33466682	-58.87340043	-51.75207936	-48.2345	-49.802	-45.6582	-50.824	-36.2165	-38.2911	-22.9537267
+10	55.67080716	57.30034664	50.01047858	46.84165	48.30208	44.24401	49.10979	35.20935	37.21969	22.20268853
-11	-65.10054967	-65.52518905	-58.96076983	-53.76	-55.7526	-51.271	-57.6273	-40.2217	-42.552	-25.95037189
+11	48.0293692	51.12207037	42.90894655	41.31609	42.35147	38.63127	42.30647	31.20408	32.95876	19.66291519
-12	-74.94791112	-73.83459204	-67.81444438	-60.667	-63.1909	-58.2869	-66.1315	-45.2283	-47.8782	-29.69617778
+12	38.61756812	43.53922256	34.44726976	34.40915	34.91323	32.27023	34.713	26.19749	27.6326	17.20489491
-13	-83.28490694	-80.36131273	-74.99817872	-66.1925	-69.1415	-63.8996	-72.9348	-49.2336	-52.1391	-32.6928228
+13	31.20012991	37.584946	27.77872379	28.88359	28.96262	27.35256	29.24892	21.89365	23.04595	15.23848019
-14	-94.4409612	-88.65971604	-84.87004689	-73.7902	-77.3235	-71.4665	-82.1387	-54.2402	-57.4652	-36.43862954
+14	23.58321173	30.28209264	21.28259501	23.33344	23.33344	21.61226	22.87081	17.84577	18.78502	12.78046368
-15	-103.4778081	-95.41043177	-92.99515427	-79.3157	-83.2741	-77.2299	-89.0927	-60.2315	-63.4016	-39.43527458
+15	19.68159643	24.55181546	17.77472115	19.08302	19.08302	17.02002	17.76832	14.60747	15.37628	10.8140483
-16	-114.9138619	-103.9888409	-103.4306187	-86.2227	-90.7124	-84.2458	-97.5968	-68.3273	-71.9234	-43.1810782
+16	14.94458504	17.52897215	13.51588294	13.76998	13.76998	11.27972	11.3902	10.55958	11.11535	8.356028025
-17	-124.1747031	-110.9635622	-112.4364917	-91.7482	-96.663	-89.8586	-104.4	-74.8039	-78.7409	-46.17772323
+17	11.26697719	12.02269564	10.12155036	9.519554	9.519554	7.620254	7.620254	7.32128	7.706611	6.389613309
-18	-135.8907571	-119.8219613	-122.9708786	-98.6552	-104.101	-96.8745	-112.904	-82.8996	-87.2628	-49.92353322
+18	6.809965232	5.338032288	6.114711631	4.246038	4.246038	3.398312	3.398312	3.257022	3.428445	3.931596463
-19	-145.3756113	-127.020692	-131.4991799	-104.181	-110.052	-102.487	-119.708	-89.8465	-94.6092	-52.92017839
+19	3.356357097	2.616005037	3.010038525	2.120822	2.120822	1.697482	1.697482	1.627343	1.712993	1.965181581
-20	-158.2974968	-136.1590903	-142.2855679	-111.088	-117.49	-109.503	-128.212	-99.2168	-104.529	-56.66598243
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 45' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	81.35698756	88.09388	76.96858	64.32393433	66.34040064	89.22527	98.48207	102.8748	106.3889
-1	-1.496911487	-1.49985	-1.29595	-1.024732463	-1.869930686	-1.44571	-1.44637	-1.42673	-1.40916
+1	75.8228522	80.1582	69.05658	57.94160529	61.8655653	83.23637	91.65874	95.27865	97.97093
-2	-3.719072505	-3.73228	-3.0016	-2.363292649	-4.207345175	-3.5915	-3.59451	-3.55672	-3.5229
+2	70.50711474	72.10122	61.80757	51.8237525	57.61572216	77.49607	85.06497	87.88421	89.7223
-3	-6.712895355	-6.78615	-5.3608	-4.180565946	-6.077275553	-6.48291	-6.48726	-6.45066	-6.4179
+3	66.25452544	66.54498	56.62161	47.37640758	54.2158512	72.90383	79.78996	81.96866	83.12339
-4	-10.45517246	-10.5358	-8.34569	-6.572210867	-8.414688201	-10.4159	-10.4234	-10.38	-10.3412
+4	60.93878907	59.59966	50.65184	42.29269118	49.96600484	67.16353	73.19618	74.57421	74.53528
-5	-13.44899543	-13.5355	-10.7336	-8.499366485	-10.28461911	-13.9877	-13.9968	-13.9548	-13.9173
+5	56.68619964	54.04342	46.73484	38.86077709	46.56613049	62.57129	67.92117	68.28364	68.61756
-6	-17.19127533	-17.2851	-13.7185	-10.94455527	-12.62203255	-18.4523	-18.9437	-18.896	-18.8533
+6	50.97866974	47.09811	42.0443	34.81119704	42.31629038	56.70292	60.66803	60.98136	61.06025
-7	-20.18509818	-20.2848	-16.1064	-12.92971086	-15.54942496	-22.0241	-23.1978	-23.1518	-23.1107
+7	46.58630155	42.29368	38.29187	31.60052396	38.7396801	51.66472	55.39301	55.20621	55.71589
-8	-24.12754087	-24.0344	-19.0913	-15.44739741	-19.79926683	-26.7419	-28.5153	-28.4716	-28.4324
+8	41.27056211	36.94622	33.60132	27.62344237	34.24159233	45.92442	48.79925	48.66293	48.62344
-9	-27.45788209	-27.0341	-21.4792	-17.49055302	-23.19914121	-31.0087	-32.7694	-32.7274	-33.081
+9	37.01797251	33.77905	29.84889	24.47076909	30.84171746	41.33218	43.52423	43.4283	43.38688
-10	-32.77362184	-30.7837	-26.1012	-21.3458054	-27.44898313	-36.749	-38.259	-38.2028	-38.4027
+10	31.70223333	30.02943	25.15835	20.56617757	26.59187242	35.59187	37.01554	36.97571	37.33128
-11	-37.02621149	-33.7834	-29.8536	-24.47268996	-30.84885788	-41.3412	-43.534	-43.4375	-43.3956
+11	27.44964384	27.02974	21.4762	17.48933199	23.19199802	30.99963	32.7615	32.71992	33.07391
-12	-42.34194636	-38.0219	-34.5441	-28.41755861	-35.09869898	-47.0815	-50.1278	-49.9807	-49.9412
+12	23.37329089	23.28013	18.49131	14.93941525	18.94215333	25.8419	27.44395	27.40017	27.36101
-13	-46.59453575	-42.2999	-38.2966	-31.60245393	-38.49857333	-51.6738	-55.4028	-55.2154	-55.5087
+13	20.17929653	20.28043	16.1034	12.92848185	15.54227888	22.01704	23.1899	23.14438	23.10365
-14	-52.05030733	-48.4952	-42.9871	-35.6198128	-43.17340019	-57.86	-61.9965	-62.2992	-62.3781
+14	16.43702183	16.53081	13.11852	10.45107169	12.15062265	17.55236	17.87234	17.82464	17.78195
-15	-56.69443492	-54.0514	-46.7396	-38.8627081	-46.57327446	-62.5803	-67.8104	-68.1869	-68.5766
+15	13.44319841	13.53113	10.7306	8.498138002	10.28069115	13.98062	13.99014	13.94859	13.91142
-16	-62.01017339	-60.9968	-51.8518	-43.30865731	-50.82311875	-68.3206	-74.5247	-76.0634	-76.1802
+16	9.700918078	9.78151	7.745715	6.093227989	7.943276662	9.515942	9.523385	9.480005	9.44119
-17	-66.26276325	-66.553	-56.6276	-47.37885768	-54.22299398	-72.9129	-79.7997	-81.979	-83.1343
+17	6.707095039	6.781818	5.357797	4.179336949	6.073345793	6.477216	6.481901	6.445594	6.413106
-18	-71.57850296	-73.4983	-63.2647	-53.04708603	-58.47283228	-78.6532	-86.3935	-89.3734	-91.383
+18	2.990922882	3.017031	2.65876	2.091658861	3.735930991	2.888565	2.890071	2.871173	2.854264
-19	-75.83109254	-79.9722	-69.0639	-57.94457428	-61.87270671	-83.2454	-91.6685	-95.289	-97.9819
+19	1.4940113	1.507434	1.294236	1.024030175	1.866003561	1.44286	1.443699	1.4242	1.406758
-20	-81.14682405	-88.0623	-76.3129	-64.10268925	-66.12255187	-88.9857	-98.2623	-102.683	-106.231
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 45' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	132.8128148	136.2654613	97.20822	118.9552	119.8773
-1	-1.529047553	-1.726111089	-1.72299	-1.78279	-1.52871
+1	118.1849302	124.5370723	88.02051	107.488	108.1974
-2	-3.678863496	-3.914387464	-4.27928	-4.4621	-3.82791
+2	106.3733499	112.8086648	79.42354	96.81248	96.73203
-3	-6.840203949	-6.458733168	-7.76369	-8.13014	-6.88535
+3	97.19906528	103.4259397	72.54596	88.55939	87.56691
-4	-11.22347021	-10.84488864	-12.0622	-12.7152	-11.4991
+4	86.64080298	91.69755194	65.9328	78.24301	79.0665
-5	-15.81061232	-14.73016444	-15.501	-16.3832	-16.0852
+5	78.99556541	82.88059512	61.72984	70.62517	73.716
-6	-21.54454773	-20.05689521	-19.7995	-21.8398	-21.8179
+6	69.43902159	72.62065395	56.47613	62.60133	67.02788
-7	-26.13168971	-24.31827594	-23.9178	-26.4249	-26.5113
+7	61.79376987	64.50141543	52.27317	57.36758	61.67738
-8	-31.8656141	-29.64500181	-29.1627	-32.1562	-32.2747
+8	53.81593742	55.73870158	47.01946	51.63626	54.98926
-9	-36.4527562	-34.62104771	-33.3657	-36.7412	-37.6073
+9	47.69975958	48.72853161	42.81649	47.05122	49.63876
-10	-42.18668299	-41.97289675	-38.6194	-42.4726	-44.2954
+10	41.03402203	40.50131623	37.56279	41.3199	42.95064
-11	-47.70759126	-48.7299885	-42.8224	-47.0576	-49.6459
+11	36.44687558	34.61983723	33.35983	36.73485	37.60013
-12	-55.35283159	-57.49268782	-48.0761	-52.7889	-56.334
+12	30.71294971	28.57878636	28.10612	31.00353	31.122
-13	-61.80358281	-64.50285806	-52.279	-57.374	-61.6845
+13	26.12580752	24.31740145	23.90316	26.41849	26.39791
-14	-71.36012496	-74.67433596	-57.5327	-64.2151	-68.3726
+14	20.39187274	18.99066169	18.93495	20.68716	20.66523
-15	-79.00536904	-82.88228406	-61.7357	-70.6341	-73.7231
+15	15.80473011	14.72929263	15.49617	16.37811	16.07909
-16	-88.56191216	-94.04516345	-66.9894	-80.3178	-80.4113
+16	10.07080432	9.966933716	11.19768	11.79307	10.34641
-17	-97.21083168	-103.427889	-72.5556	-88.5709	-87.6027
+17	6.836281278	6.458009436	7.758886	8.12502	6.91396
-18	-108.6787001	-115.1562792	-81.1525	-98.8873	-99.0374
+18	3.056136791	3.476370008	3.439991	3.614255	3.066625
-19	-118.1986566	-124.5389861	-88.0301	-107.307	-108.21
+19	1.527086382	1.752053376	1.720597	1.780231	1.52667
-20	-131.5778145	-136.2674113	-97.2029	-118.949	-119.675
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.76E-13	*-1.12E-13*	*-1.32E-13*	-9.99E-14	-1.08E-13	-9.55E-14	-1.19E-13	-7.87E-14	-8.38E-14	-6.33E-14
End Shear	1.32E-13	*1.03E-13*	*9.50E-14*	9.10E-14	9.50E-14	6.96E-14	7.68E-14	6.41E-14	6.75E-14	4.26E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	331.0701601	*288.4274496*	*298.2416934*	234.3809202	247.5889721	230.571381	269.3120078	202.8154248	213.5661188	119.0661731
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	623.2105448	*548.2126472*	*561.4827782*	443.8968187	468.4002283	435.8854412	508.0090808	373.7432974	393.4139972	224.6474458
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	863.7824713	*771.694885*	*778.3621652*	619.5385351	653.0659837	607.4398402	707.5410378	507.3426423	534.0448867	311.686978
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	1073.756934	*970.0551928*	*967.6177093*	775.9011678	816.3008719	758.1129559	878.2509757	615.292911	647.6767484	388.612837
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	1227.231313	*1129.043139*	*1104.196089*	896.5005904	942.2184898	875.2697119	1012.462514	687.0281443	723.1875195	444.1990026
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	1351.639339	*1265.527604*	*1216.593086*	996.0129315	1043.701811	966.6824857	1141.415882	755.868647	797.4264352	491.8961588
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	1430.307897	*1362.90155*	*1287.366931*	1062.835689	1111.778291	1049.986575	1232.100638	797.2177078	839.8410236	517.2602823
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	1505.098979	*1434.629936*	*1356.276937*	1110.796317	1172.468799	1109.222053	1295.921955	822.5900917	867.7197646	534.4974561
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	1528.864412	*1470.389863*	*1376.701892*	1144.642808	1203.265458	1133.656305	1318.958461	841.6549142	892.0878232	530.9560194
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	1516.648279	*1476.343761*	*1365.353321*	1153.790393	1209.3632	1138.278306	1311.380052	850.4892879	901.0611528	516.4588371
-11	-2.67E-13	*-2.09E-13*	*-2.40E-13*	-1.71E-13	-1.71E-13	-1.37E-13	-1.37E-13	-1.30E-13	-1.37E-13	-1.58E-13
+11	1529.466978	*1470.506229*	*1376.761278*	1144.577594	1203.218029	1133.654036	1318.928324	841.6668263	892.1016743	530.9662906
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	1507.98512	*1434.862816*	*1356.42412*	1110.804246	1172.492544	1109.119641	1295.86175	822.5180834	867.7087294	534.5312608
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	1430.305383	*1362.959744*	*1287.375445*	1062.817904	1111.77434	1050.009986	1232.160985	797.2274398	839.8493727	517.26214
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	1350.765198	*1265.7022*	*1216.519504*	996.1670503	1043.867787	966.7562908	1141.446009	755.8547299	797.4097451	491.9214981
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	1226.50078	*1129.04319*	*1104.097154*	896.5302848	942.2580696	875.3187579	1012.462575	687.0281877	723.187566	444.1924207
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	1073.208848	*970.1716644*	*967.4933614*	776.0040194	816.4116376	758.2124964	878.3716362	615.2719433	647.6546772	388.6297492
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	864.6903124	*771.6367313*	*778.4386744*	619.5168543	653.0502356	607.4391404	707.5561018	507.3531396	534.0559364	311.6996769
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	622.9881763	*548.2707907*	*561.5337085*	443.9481732	468.4555388	435.9351208	508.0693114	373.3957674	393.0481762	224.655871
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	331.3726436	*288.456521*	*298.2671039*	234.4065477	247.6165772	230.596184	269.3420825	202.7862604	213.5355641	119.0703673
-20	-1.20E-13	*-5.55E-14*	*-6.29E-14*	-6.75E-14	-7.57E-14	-5.82E-14	-6.85E-14	-6.01E-14	-6.33E-14	-3.94E-14
+20	2.87E-13	*1.72E-13*	*2.07E-13*	1.37E-13	1.54E-13	1.45E-13	1.68E-13	1.17E-13	1.23E-13	8.90E-14

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.18E-14	-6.80E-14	-5.87E-14	-4.78E-14	-6.40E-14	-7.75E-14	-7.18E-14	-7.50E-14	-8.22E-14
End Shear	5.31E-14	5.94E-14	4.80E-14	3.76E-14	5.15E-14	5.98E-14	6.36E-14	6.07E-14	6.93E-14
-1	0	0	0	0	0	0	0	0	0
+1	170.6014175	180.5511973	156.5527448	131.0573619	139.1975219	187.28183	206.2321592	214.5139856	220.641177
-2	0	0	0	0	0	0	0	0	0
+2	322.0661838	333.6690673	286.7390099	241.0474521	263.0956114	353.8985793	388.7267526	402.193699	411.3842593
-3	0	0	0	0	0	0	0	0	0
+3	447.4120027	453.9283922	386.1377742	327.2543612	365.9569956	492.7739409	539.920445	576.0165958	592.8567489
-4	0	0	0	0	0	0	0	0	0
+4	558.0174295	553.8326085	470.1962754	399.2874991	457.3437895	614.8043088	670.6344969	729.7547837	746.1074769
-5	0	0	0	0	0	0	0	0	0
+5	641.4884708	621.2366361	532.7891283	454.5477586	524.1421952	708.9987306	770.8434321	848.9899265	888.4949059
-6	0	0	0	0	0	0	0	0	0
+6	707.7884448	675.8514787	584.1985899	499.7250159	582.7444799	782.7171439	857.5529117	945.0666338	1004.300447
-7	0	0	0	0	0	0	0	0	0
+7	749.7781859	710.1111522	624.574638	535.4190937	615.7580164	844.9222279	925.9558472	1007.022791	1082.241786
-8	0	0	0	0	0	0	0	0	0
+8	788.5102338	719.9170952	653.0537624	560.7443895	638.5022892	891.6917577	971.6705266	1061.013234	1131.972473
-9	0	0	0	0	0	0	0	0	0
+9	804.0543233	714.1678599	660.4640105	567.8952593	638.2531819	910.5879887	985.481632	1086.700146	1158.844964
-10	0	0	0	0	0	0	0	0	0
+10	802.0401361	701.2156239	652.4453535	563.1378472	624.6170439	912.6438029	978.4266127	1087.936011	1169.00174
-11	-1.21E-13	-1.21E-13	-9.59E-14	-7.25E-14	-1.51E-13	-1.16E-13	-1.16E-13	-7.88E-14	-7.88E-14
+11	804.0254058	714.1467329	660.4582149	567.8928917	638.2210215	910.5789401	985.4383859	1086.685226	1158.8029
-12	0	0	0	0	0	0	0	0	0
+12	788.3975964	719.8665416	653.0711275	560.751469	638.4541146	891.5983763	971.6053479	1060.918096	1131.959834
-13	0	0	0	0	0	0	0	0	0
+13	749.7774338	710.0913455	624.5814198	535.4218854	615.7379329	844.9365872	925.9289478	1007.018264	1082.231476
-14	0	0	0	0	0	0	0	0	0
+14	707.7691472	675.8623279	584.1947342	499.7234546	582.8409055	782.7751324	857.5642496	945.0957305	1004.346458
-15	0	0	0	0	0	0	0	0	0
+15	641.515964	621.2294762	532.7746962	454.555697	524.1341702	709.0364607	770.8931564	848.9958603	888.5163442
-16	0	0	0	0	0	0	0	0	0
+16	558.0916596	553.8074202	470.182845	399.2820063	457.408133	614.8857502	670.7224921	729.7944007	746.1155588
-17	0	0	0	0	0	0	0	0	0
+17	447.4023982	453.8850459	386.1445282	327.2571109	366.0052702	492.7709703	539.9261081	576.0329353	592.854434
-18	0	0	0	0	0	0	0	0	0
+18	322.1032228	333.3312986	286.7042427	241.0608421	263.1277211	353.9392244	388.7706618	402.186699	411.3827175
-19	0	0	0	0	0	0	0	0	0
+19	170.6199169	180.5226488	156.535299	131.0640045	139.2135638	187.3021255	206.2540854	214.5104778	220.6404171
-20	-3.83E-14	-5.16E-14	-4.66E-14	-3.83E-14	-3.77E-14	-4.28E-14	-4.34E-14	-5.74E-14	-5.56E-14
+20	1.01E-13	1.01E-13	9.02E-14	7.47E-14	9.66E-14	1.20E-13	1.17E-13	1.15E-13	1.19E-13

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.21E-14	-9.86E-14	-8.38E-14	-9.14E-14	-8.37E-14
End Shear	7.07E-14	8.61E-14	6.90E-14	6.42E-14	6.49E-14
-1	0	0	0	0	0
+1	268.4191707	282.2555381	198.289265	243.1929606	243.651043
-2	0	0	0	0	0
+2	492.7944205	522.2243848	365.1971563	448.8627635	445.6589269
-3	0	0	0	0	0
+3	668.9509849	710.7075272	492.0247823	608.9168212	598.0914441
-4	0	0	0	0	0
+4	827.9057763	870.4263054	602.8518971	740.7727687	732.9580649
-5	0	0	0	0	0
+5	950.950015	1018.965969	698.6901117	853.0669726	837.8982396
-6	0	0	0	0	0
+6	1041.982754	1125.927334	777.7618469	928.5258472	932.6184757
-7	0	0	0	0	0
+7	1102.599939	1211.954253	832.0248398	966.7920167	1013.365353
-8	0	0	0	0	0
+8	1136.52939	1281.635407	867.8043473	997.8559005	1070.89485
-9	0	0	0	0	0
+9	1191.061264	1314.49786	894.4495396	1013.604645	1096.874662
-10	0	0	0	0	0
+10	1210.836735	1337.656467	904.9994442	1027.049986	1100.892401
-11	-1.23E-13	-1.14E-13	-1.38E-13	-1.23E-13	-1.23E-13
+11	1191.039213	1314.496421	894.4603457	1013.590247	1096.881539
-12	0	0	0	0	0
+12	1136.529438	1281.632016	867.8019902	997.8251908	1070.931662
-13	0	0	0	0	0
+13	1102.621986	1211.954655	832.0092557	966.7891782	1013.386075
-14	0	0	0	0	0
+14	1042.026832	1125.920985	777.7330346	928.4892917	932.6230683
-15	0	0	0	0	0
+15	950.9500113	1018.963396	698.7021551	853.0525495	837.8868123
-16	0	0	0	0	0
+16	827.9234714	870.4275209	602.9047317	740.7804733	732.9765378
-17	0	0	0	0	0
+17	668.9421815	710.7044114	492.0355037	608.8985114	598.1051013
-18	0	0	0	0	0
+18	492.7591385	522.2168855	365.186316	448.8185551	445.6680112
-19	0	0	0	0	0
+19	268.4059139	282.2517744	198.2567661	243.17077	243.6325285
-20	-6.28E-14	-7.43E-14	-6.38E-14	-6.76E-14	-6.91E-14
+20	1.71E-13	1.82E-13	1.17E-13	1.36E-13	1.33E-13

1-Span: Shear (Max and Min) Raw Data Results - 45' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**57.06667**	***42.18667***	***45.68***	***39.91111***	***34.48333***	***34.4***	***46.26667***	***51.06667***	***53.34445***	***55.16667***
-1	**-1.42222**	***-0.77621***	***-0.77773***	***-0.672***	***-0.53412***	***-0.96963***	***-0.74965***	***-0.75***	***-0.73981***	***-0.7307***
+1	**52.94**	***39.31701***	***41.56505***	***35.80844***	***31.05255***	***32.07963***	***43.1612***	***47.52851***	***49.40557***	***50.80162***
-2	**-3.2**	***-1.92848***	***-1.93533***	***-1.55644***	***-1.23786***	***-2.18167***	***-1.86233***	***-1.86389***	***-1.84429***	***-1.82676***
+2	**48.96222**	***36.5606***	***37.3872***	***32.04956***	***27.7658***	***29.87593***	***40.18464***	***44.1094***	***45.57128***	***46.5244***
-3	**-4.62222**	***-3.48089***	***-3.51888***	***-2.77978***	***-2.19287***	***-3.1513***	***-3.36163***	***-3.36389***	***-3.34491***	***-3.32793***
+3	**45.78**	***34.35547***	***34.50608***	***29.36044***	***25.37312***	***28.11296***	***37.80339***	***41.3741***	***42.50384***	***43.10261***
-4	**-6.4**	***-5.4214***	***-5.46319***	***-4.32756***	***-3.45508***	***-4.36333***	***-5.40104***	***-5.4049***	***-5.38241***	***-5.36228***
+4	**41.80223**	***31.59906***	***30.90467***	***26.26489***	***22.63502***	***25.90926***	***34.82682***	***37.95498***	***38.66954***	***38.64936***
-5	**-7.82222**	***-6.97381***	***-7.01865***	***-5.56578***	***-4.47699***	***-5.33296***	***-7.25312***	***-7.25784***	***-7.23611***	***-7.21667***
+5	**38.62**	***29.39393***	***28.02355***	***24.23378***	***20.7788***	***24.1463***	***32.44557***	***35.21969***	***35.40765***	***35.58079***
-6	**-9.6**	***-8.91432***	***-8.96296***	***-7.11356***	***-5.77938***	***-6.545***	***-9.56823***	***-9.82304***	***-9.7983***	***-9.77617***
+6	**34.64222**	***26.43436***	***24.42215***	***21.80155***	***18.58934***	***21.94259***	***29.40261***	***31.45866***	***31.62114***	***31.66204***
-7	**-11.9664**	***-10.4667***	***-10.5184***	***-8.35178***	***-6.84128***	***-8.06296***	***-11.4203***	***-12.0289***	***-12.0051***	***-11.9838***
+7	**31.46667**	***24.15675***	***21.93087***	***19.85578***	***16.85777***	***20.08799***	***26.7901***	***28.72337***	***28.6265***	***28.89079***
-8	**-15.5022**	***-12.511***	***-12.4627***	***-9.89956***	***-8.19367***	***-10.2667***	***-13.8667***	***-14.7863***	***-14.7636***	***-14.7433***
+8	**27.63655**	***21.40034***	***19.15801***	***17.42355***	***14.71831***	***17.75556***	***23.81354***	***25.30425***	***25.23356***	***25.21309***
-9	**-18.3309**	***-14.2379***	***-14.0182***	***-11.1378***	***-9.29558***	***-12.0296***	***-16.0792***	***-16.9922***	***-16.9704***	***-17.1537***
+9	**24.8079**	***19.19522***	***17.51571***	***15.47778***	***13.02674***	***15.99259***	***21.43229***	***22.56896***	***22.51921***	***22.49773***
-10	**-21.8667**	***-16.9944***	***-15.9625***	***-13.5344***	***-11.3539***	***-14.2333***	***-19.0557***	***-19.8387***	***-19.8096***	***-19.9132***
+10	**21.2721**	***16.4388***	***15.57139***	***13.04555***	***10.93727***	***13.78889***	***18.45573***	***19.19396***	***19.1733***	***19.35767***
-11	**-24.6953**	***-19.1995***	***-17.518***	***-15.4802***	***-13.0277***	***-15.9963***	***-21.437***	***-22.574***	***-22.524***	***-22.5022***
+11	**18.44346**	***14.23368***	***14.01594***	***11.13622***	***9.294944***	***12.02593***	***16.07448***	***16.98807***	***16.96651***	***17.15007***
-12	**-28.2311**	***-21.9559***	***-19.7158***	***-17.9124***	***-15.145***	***-18.2***	***-24.4135***	***-25.9931***	***-25.9169***	***-25.8964***
+12	**14.90766**	***12.11993***	***12.07162***	***9.588442***	***7.920335***	***9.822221***	***13.4***	***14.23072***	***14.20802***	***14.18772***
-13	**-31.2089**	***-24.161***	***-21.9341***	***-19.8582***	***-16.8588***	***-19.963***	***-26.7948***	***-28.7284***	***-28.6313***	***-28.7834***
+13	**12.07902**	***10.46373***	***10.51617***	***8.350221***	***6.840647***	***8.059258***	***11.41667***	***12.02484***	***12.00123***	***11.98011***
-14	**-35.1867**	***-26.99***	***-25.1466***	***-22.2904***	***-19.026***	***-22.387***	***-30.0026***	***-32.1475***	***-32.3045***	***-32.3454***
+14	**9.194076**	***8.523216***	***8.571851***	***6.802446***	***5.516042***	***6.300556***	***9.101563***	***9.267482***	***9.242746***	***9.220613***
-15	**-38.3689**	***-29.3982***	***-28.0277***	***-24.2362***	***-20.7798***	***-24.15***	***-32.4503***	***-35.1622***	***-35.3575***	***-35.5596***
+15	**7.779753**	***6.970806***	***7.0164***	***5.564221***	***4.476355***	***5.330926***	***7.249479***	***7.254414***	***7.23287***	***7.213594***
-16	**-42.3467**	***-32.1546***	***-31.6291***	***-26.8871***	***-23.1817***	***-26.3537***	***-35.4268***	***-38.6439***	***-39.4418***	***-39.5023***
+16	**6.011852**	***5.030292***	***5.072082***	***4.016446***	***3.201749***	***4.118889***	***4.934375***	***4.938235***	***4.91574***	***4.895613***
-17	**-45.5289**	***-34.3597***	***-34.5102***	***-29.3636***	***-25.3744***	***-28.1167***	***-37.8081***	***-41.3792***	***-42.5092***	***-43.1083***
+17	**4.597532**	***3.477882***	***3.516628***	***2.77822***	***2.192232***	***3.149259***	***3.358681***	***3.36111***	***3.342284***	***3.325437***
-18	**-49.5067**	***-37.1162***	***-38.1116***	***-32.8051***	***-28.4225***	***-30.3204***	***-40.7846***	***-44.7983***	***-46.3435***	***-47.3855***
+18	**2.829631**	***1.550906***	***1.564444***	***1.378668***	***1.094529***	***1.937221***	***1.49783***	***1.498611***	***1.488811***	***1.480044***
-19	**-52.6889**	***-39.3213***	***-41.4686***	***-35.8122***	***-31.0541***	***-32.0833***	***-43.1659***	***-47.5336***	***-49.4109***	***-50.8073***
+19	**1.41531**	***0.774701***	***0.781661***	***0.67111***	***0.533755***	***0.967593***	***0.748177***	***0.748612***	***0.738502***	***0.729457***
-20	**-57.0644**	***-42.0777***	***-45.6636***	***-39.5711***	***-34.3686***	***-34.287***	***-46.1424***	***-50.9527***	***-53.2452***	***-55.0845***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 45' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**57.06667**	***57.77778***	***61.11111***	***56.93333***	***66.66667***	***51.46667***	***54.22222***	***29.4713***
-1	**-1.42222**	***-1.102***	***-1.102***	***-0.88194***	***-0.88194***	***-0.83959***	***-0.88378***	***-1.01966***
+1	**52.94**	***54.01571***	***57.05965***	***53.13776***	***62.06597***	***46.69251***	***49.16757***	***27.44013***
-2	**-3.2**	***-2.7368***	***-2.7368***	***-2.19097***	***-2.19097***	***-2.08927***	***-2.19923***	***-2.29424***
+2	**48.96222**	***50.4342***	***53.20264***	***49.49974***	***57.65625***	***42.14215***	***44.36016***	***25.49779***
-3	**-4.62222**	***-4.9408***	***-4.9408***	***-3.95486***	***-3.95486***	***-3.79879***	***-3.99872***	***-3.3139***
+3	**45.78**	***47.56899***	***50.11703***	***46.58932***	***54.12847***	***38.78378***	***40.82503***	***23.94392***
-4	**-6.4**	***-7.69581***	***-7.69581***	***-6.44896***	***-6.57292***	***-5.89776***	***-6.20817***	***-4.58847***
+4	**41.80223**	***43.98748***	***46.26002***	***42.9513***	***49.71875***	***34.58582***	***36.40613***	***22.00158***
-5	**-7.82222**	***-9.89982***	***-9.89982***	***-8.83021***	***-9.21875***	***-7.57695***	***-7.97573***	***-5.60813***
+5	**38.62**	***41.12227***	***43.17441***	***40.04089***	***46.19097***	***31.22746***	***32.87101***	***20.4477***
-6	**-9.6**	***-12.6548***	***-12.6548***	***-11.8068***	***-12.526***	***-9.67593***	***-10.1852***	***-6.88271***
+6	**34.64222**	***37.54076***	***39.3174***	***36.32474***	***41.70313***	***27.60335***	***29.24234***	***18.50536***
-7	**-11.9664**	***-14.9832***	***-15.0246***	***-14.188***	***-15.1719***	***-11.3551***	***-11.9527***	***-7.90237***
+7	**31.46667**	***34.36818***	***35.92442***	***33.12865***	***37.8125***	***25.52647***	***27.03289***	***16.95149***
-8	**-15.5022**	***-18.5647***	***-18.8816***	***-17.3333***	***-18.6667***	***-14.1066***	***-14.8841***	***-9.17694***
+8	**27.63655**	***30.73588***	***31.98907***	***29.49063***	***33.40278***	***22.93036***	***24.27107***	***15.00915***
-9	**-18.3309**	***-21.4299***	***-21.9672***	***-20.0375***	***-21.9444***	***-16.1835***	***-17.0935***	***-10.1966***
+9	**24.8079**	***27.87067***	***28.90346***	***26.58021***	***29.875***	***20.85348***	***22.06162***	***13.45527***
-10	**-21.8667**	***-25.0114***	***-25.8242***	***-23.6755***	***-26.3542***	***-18.7796***	***-19.8554***	***-11.9024***
+10	**21.2721**	***24.28916***	***25.04645***	***22.94219***	***25.46528***	***18.25738***	***19.29981***	***11.51293***
-11	**-24.6953**	***-27.8766***	***-28.9098***	***-26.5859***	***-29.8819***	***-20.8565***	***-22.0648***	***-13.4562***
+11	**18.44346**	***21.42395***	***21.96084***	***20.03177***	***21.9375***	***16.18049***	***17.09036***	***10.19596***
-12	**-28.2311**	***-31.4581***	***-32.7668***	***-30.224***	***-34.2917***	***-23.4526***	***-24.8266***	***-15.3986***
+12	**14.90766**	***17.84244***	***18.10383***	***16.73333***	***18***	***13.58439***	***14.32854***	***8.921387***
-13	**-31.2089**	***-34.3233***	***-35.8525***	***-33.1344***	***-37.8194***	***-25.5295***	***-27.0361***	***-16.9525***
+13	**12.07902**	***14.97723***	***15.01821***	***14.18333***	***15.16667***	***11.35268***	***11.95019***	***7.901727***
-14	**-35.1867**	***-38.263***	***-40.0952***	***-37.0581***	***-42.592***	***-28.1256***	***-29.7979***	***-18.8948***
+14	**9.194076**	***12.09927***	***12.09927***	***11.20677***	***11.85938***	***9.253703***	***9.74074***	***6.627153***
-15	**-38.3689**	***-41.1282***	***-43.1808***	***-40.0466***	***-46.1979***	***-31.2323***	***-32.8761***	***-20.4487***
+15	**7.779753**	***9.895266***	***9.895266***	***8.825521***	***9.213542***	***7.574523***	***7.973182***	***5.607492***
-16	**-42.3467**	***-44.7097***	***-47.0378***	***-43.6846***	***-50.6076***	***-35.4303***	***-37.295***	***-22.391***
+16	**6.011852**	***7.140253***	***7.140253***	***5.848958***	***5.90625***	***5.475543***	***5.76373***	***4.332916***
-17	**-45.5289**	***-47.5749***	***-50.1234***	***-46.5951***	***-54.1354***	***-38.7886***	***-40.8301***	***-23.9449***
+17	**4.597532**	***4.936248***	***4.936248***	***3.951389***	***3.951389***	***3.79636***	***3.996168***	***3.313256***
-18	**-49.5067**	***-51.1564***	***-53.9804***	***-50.2331***	***-58.5451***	***-42.9866***	***-45.249***	***-25.8872***
+18	**2.829631**	***2.201731***	***2.201731***	***1.762153***	***1.762153***	***1.688889***	***1.777778***	***2.038681***
-19	**-52.6889**	***-54.0216***	***-57.066***	***-53.1435***	***-62.0729***	***-46.5888***	***-49.0584***	***-27.4411***
+19	**1.41531**	***1.099726***	***1.099726***	***0.880208***	***0.880208***	***0.843839***	***0.888251***	***1.019021***
-20	**-57.0644**	***-57.6031***	***-60.923***	***-56.7815***	***-66.4826***	***-51.4477***	***-54.2021***	***-29.3834***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 45' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	57.06667	76.81481	78.81172	56.22222	68.8	69.33333
-1	-1.42222	-0.88435	-0.99833	-0.99653	-1.03111	-0.88416
+1	52.94	68.3545	72.02838	50.90833	62.16772	62.57801
-2	-3.2	-2.12774	-2.26396	-2.475	-2.58074	-2.21395
+2	48.96222	61.52305	65.24503	45.93611	55.99334	55.94681
-3	-4.62222	-3.95616	-3.73553	-4.49028	-4.70222	-3.98227
+3	45.78	56.21693	59.81836	41.95834	51.22001	50.64598
-4	-6.4	-6.49131	-6.27235	-6.97639	-7.35407	-6.65071
+4	41.80223	50.11035	53.03502	38.13349	45.25333	45.72961
-5	-7.82222	-9.14437	-8.51947	-8.96528	-9.47556	-9.30319
+5	38.62	45.68859	47.93557	35.70262	40.84741	42.63505
-6	-9.6	-12.4607	-11.6003	-11.4514	-12.6315	-12.6188
+6	34.64222	40.16138	42.00153	32.66404	36.20667	38.76685
-7	-11.9664	-15.1138	-14.0649	-13.8333	-15.2833	-15.3333
+7	31.46667	35.7396	37.30562	30.23318	33.17963	35.67228
-8	-15.5022	-18.4301	-17.1458	-16.8668	-18.5981	-18.6667
+8	27.63655	31.12547	32.23754	27.1946	29.86481	31.80408
-9	-18.3309	-21.0831	-20.0237	-19.2977	-21.25	-21.7509
+9	24.8079	27.58806	28.18307	24.76373	27.21296	28.70952
-10	-21.8667	-24.3995	-24.2758	-22.3363	-24.5648	-25.6191
+10	21.2721	23.73281	23.42471	21.72515	23.89815	24.84132
-11	-24.6953	-27.5926	-28.1839	-24.7671	-27.2167	-28.7136
+11	18.44346	21.07974	20.02304	19.29429	21.2463	21.74675
-12	-28.2311	-32.0144	-33.252	-27.8057	-30.5315	-32.5819
+12	14.90766	17.76342	16.52908	16.25571	17.93148	18
-13	-31.2089	-35.7453	-37.3065	-30.2366	-33.1833	-35.6764
+13	12.07902	15.11036	14.06443	13.82485	15.27963	15.26773
-14	-35.1867	-41.2725	-43.1893	-33.2752	-37.14	-39.5446
+14	9.194076	11.79403	10.98361	10.95139	11.96481	11.95213
-15	-38.3689	-45.6943	-47.9365	-35.706	-40.8526	-42.6392
+15	7.779753	9.140966	8.518966	8.962502	9.472591	9.299647
-16	-42.3467	-51.2215	-54.3928	-38.7446	-46.4533	-46.5074
+16	6.011852	5.824641	5.764565	6.476391	6.820744	5.984045
-17	-45.5289	-56.2237	-59.8195	-41.9639	-51.2267	-50.6667
+17	4.597532	3.953893	3.735112	4.487499	4.69926	3.99882
-18	-49.5067	-62.8564	-66.6028	-46.9361	-57.1933	-57.2801
+18	2.829631	1.767575	2.010625	1.989584	2.090373	1.773641
-19	-52.6889	-68.3624	-72.0295	-50.9139	-62.0633	-62.5851
+19	1.41531	0.883219	1.013333	0.99514	1.029631	0.882979
-20	-57.0644	-76.1005	-78.8128	-56.2191	-68.7963	-69.2163
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-7.11E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.39E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	119.115	88.4633	93.6226	81.1785	70.3432	72.1792	97.1127	106.9392	111.2336	114.4108
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	223.91	167.0035	173.0200	148.6850	129.5142	136.4250	183.5098	201.5695	208.5526	213.3183
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	309.015	232.0000	235.3790	200.2270	176.0983	189.7625	255.5219	279.9691	298.6863	307.4186
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	383.38	289.3531	287.1831	243.8145	215.0847	237.1500	318.7992	347.7493	378.4054	386.8849
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	435.9361	332.6360	322.1346	276.2713	245.1194	271.7875	367.6426	399.7114	440.2333	460.7181
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	478.41	367.0150	350.4545	302.9290	269.6776	302.1750	405.8684	444.6735	490.0527	520.7677
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	503.6983	388.7883	368.2194	323.8655	289.0640	319.2938	438.1240	480.1430	522.1793	561.1832
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	529.7267	408.8723	373.3042	338.6330	302.8258	331.0875	462.3758	503.8478	550.1754	586.9704
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	536.2984	416.9325	370.3230	342.4755	306.9090	330.9584	472.1742	511.0094	563.4950	600.9048
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	529.8167	415.8881	363.6068	338.3175	304.5693	323.8875	473.2402	507.3511	564.1359	606.1715
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	536.5572	416.9175	370.3120	342.4725	306.9078	330.9417	472.1695	510.9870	563.4873	600.8830
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	530.9668	408.8139	373.2780	338.6420	302.8294	331.0625	462.3274	503.8140	550.1261	586.9639
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	503.6973	388.7879	368.2091	323.8690	289.0655	319.2833	438.1315	480.1291	522.1770	561.1778
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	478.0345	367.0050	350.4601	302.9270	269.6768	302.2250	405.8984	444.6794	490.0678	520.7915
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	435.6222	332.6502	322.1309	276.2638	245.1235	271.7833	367.6622	399.7372	440.2364	460.7292
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	383.1445	289.3916	287.1700	243.8075	215.0819	237.1834	318.8415	347.7949	378.4259	386.8891
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	309.4051	231.9950	235.3565	200.2305	176.0998	189.7875	255.5203	279.9721	298.6948	307.4174
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	223.8145	167.0227	172.8449	148.6670	129.5211	136.4416	183.5308	201.5923	208.5490	213.3175
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	119.245	88.4729	93.6078	81.1695	70.3467	72.1875	97.1232	106.9505	111.2318	114.4104
-20	-5.01E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.15E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-7.11E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.39E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	119.115	121.5353	128.3842	119.5600	139.6484	105.1674	110.7421	61.7403
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	223.91	230.1772	242.8832	226.0230	263.4219	193.8000	204.0000	116.4882
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	309.015	321.2541	338.6393	314.9805	366.8867	263.0763	276.9224	161.6215
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	383.38	402.3340	423.2828	393.1102	455.4063	319.0526	335.8448	201.5104
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	435.9361	464.8694	488.5758	453.8604	525.0000	356.2500	375.0000	230.3339
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	478.41	516.4703	541.1988	501.2613	591.8672	391.9464	413.4957	255.0667
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	503.6983	551.1204	576.4990	544.4576	638.8907	413.3875	435.4893	268.2190
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	529.7267	575.9898	607.9693	575.1735	671.9844	426.5440	449.9454	277.1571
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	536.2984	593.5405	623.9385	587.8436	683.9297	436.4298	462.5812	275.3207
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	529.8167	598.2838	627.1004	590.2402	680.0000	441.0108	467.2342	267.8034
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	536.5572	593.5067	623.9139	587.8424	683.9141	436.4360	462.5884	275.3261
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	530.9668	575.9939	607.9816	575.1204	671.9532	426.5067	449.9397	277.1746
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	503.6973	551.1112	576.4969	544.4698	638.9220	413.3925	435.4936	268.2199
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	478.0345	516.5502	541.2848	501.2996	591.8828	391.9392	413.4870	255.0799
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	435.6222	464.8848	488.5964	453.8858	525.0000	356.2500	375.0000	230.3305
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	383.1445	402.3874	423.3402	393.1618	455.4688	319.0417	335.8334	201.5192
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	309.4051	321.2429	338.6312	314.9801	366.8945	263.0817	276.9281	161.6280
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	223.8145	230.2039	242.9119	226.0488	263.4531	193.6198	203.8103	116.4925
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	119.245	121.5486	128.3985	119.5728	139.6640	105.1523	110.7262	61.7425
-20	-5.01E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.15E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 45' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-7.11E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	5.39E-14	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	119.115	155.2453	163.2479	114.6844	140.6553	140.9202
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	223.91	285.0170	302.0384	211.2187	259.6083	257.7553
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	309.015	386.9005	411.0512	284.5719	352.1786	345.9176
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	383.38	478.8350	503.4276	348.6708	428.4400	423.9202
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	435.9361	550.0000	589.3383	404.1007	493.3875	484.6144
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	478.41	602.6505	651.2015	449.8333	537.0306	539.3976
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	503.6983	637.7096	700.9568	481.2174	559.1625	586.0991
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	529.7267	657.3334	741.2582	501.9111	577.1289	619.3724
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	536.2984	688.8729	760.2648	517.3219	586.2375	634.3983
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	529.8167	700.3104	773.6590	523.4236	594.0139	636.7220
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	536.5572	688.8602	760.2640	517.3281	586.2292	634.4023
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	530.9668	657.3334	741.2562	501.9098	577.1112	619.3937
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	503.6973	637.7224	700.9570	481.2084	559.1609	586.1111
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	478.0345	602.6760	651.1978	449.8167	537.0094	539.4003
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	435.6222	550.0000	589.3368	404.1077	493.3791	484.6078
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	383.1445	478.8453	503.4283	348.7014	428.4445	423.9309
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	309.4051	386.8954	411.0494	284.5781	352.1680	345.9254
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	223.8145	284.9966	302.0341	211.2124	259.5827	257.7606
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	119.245	155.2377	163.2457	114.6656	140.6424	140.9095
-20	-5.01E-14	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.15E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 50’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	164.5784015	140.0000003	148.1205608	112.8173	119.567	111.5444	131.138	105.7204	111.4673	57.91124805
-1	-3.035201577	-2.362342051	-2.718872681	-1.91389	-1.91389	-1.53162	-1.53162	-1.4577	-1.53442	-1.770085932
+1	153.1599306	130.9981984	137.9369407	106.26	112.5053	104.9267	123.1166	97.48416	102.7466	54.38029453
-2	-7.756001742	-7.184704676	-6.941975672	-5.71245	-5.71245	-4.5725	-4.5725	-4.35715	-4.58648	-4.425212291
+2	140.0500492	120.9711754	126.1480642	98.79581	104.467	97.34523	113.9268	87.40342	92.07473	50.3341122
-3	-11.01519889	-12.07738591	-9.858174693	-9.54023	-9.54023	-7.63574	-7.63574	-7.27254	-7.65531	-6.195294925
+3	131.4221243	114.3984935	118.3896061	93.8197	99.1081	92.29088	107.8004	80.47988	84.71566	47.63665841
-4	-16.07199907	-19.58440903	-14.38367752	-15.2819	-15.2819	-13.2714	-13.7175	-11.7153	-12.3319	-8.850421216
+4	118.6482429	104.7074695	106.9031238	86.35553	91.06976	84.70936	98.61064	71.73371	75.50917	43.59047815
-5	-19.55520067	-24.70109268	-17.59541027	-19.1097	-19.1097	-17.4068	-18.3124	-14.6307	-15.4007	-10.62050601
+5	110.2443298	98.35879165	98.59696466	81.37942	85.71087	79.65502	92.48415	65.90293	69.3715	40.89302274
-6	-26.20240052	-32.54411447	-23.54620552	-25.0705	-25.0705	-23.6099	-25.2047	-19.0536	-20.0564	-13.2756323
+6	97.80644786	89.00376524	87.41288186	73.91524	77.67253	72.07349	83.29443	57.15676	60.16501	36.84683987
-7	-32.85743824	-37.88479505	-29.52980963	-29.7617	-30.1226	-27.7452	-29.7995	-22.2555	-23.4627	-15.0457136
+7	89.62652177	82.87908307	80.05762229	68.93912	72.31363	66.38735	76.46936	50.77237	53.66628	34.14938793
-8	-43.00799993	-46.06381704	-38.65641653	-37.2259	-38.1609	-34.8069	-38.1228	-28.1151	-29.6963	-17.70084074
+8	76.7440809	73.8600611	69.17595107	60.85294	63.60544	58.80583	67.21241	45.23805	47.91222	30.10320512
-9	-49.88704112	-51.62849922	-44.84162102	-42.202	-43.5198	-39.8613	-44.2493	-31.7209	-33.5323	-19.98932172
+9	69.69760148	67.95937974	62.72784117	55.87683	58.24655	53.75148	61.08593	41.63218	44.07619	27.40575152
-10	-60.37360267	-60.14352566	-54.27062778	-49.6662	-51.5582	-47.4428	-53.439	-37.1298	-39.2864	-24.03550202
+10	58.87447677	58.69977425	53.09639993	48.41265	50.2082	46.16997	51.89621	36.22337	38.32213	23.35956863
-11	-67.47663936	-66.24420431	-61.08438691	-54.6423	-56.917	-52.4971	-59.5655	-40.7356	-43.1224	-26.73295729
+11	51.8834426	53.02309018	46.38344286	43.43654	44.84931	41.11562	45.76973	32.61749	34.48609	20.66211268
-12	-78.98520137	-75.35981341	-70.99618005	-62.1065	-64.9554	-60.0786	-68.7552	-46.1444	-48.8765	-30.77913759
+12	41.56488098	44.67606376	37.10563614	35.97237	36.81097	33.5341	36.58001	27.20867	28.73203	17.25729124
-13	-87.05312085	-81.37249218	-78.25063367	-67.1565	-70.4361	-65.133	-74.8817	-49.7503	-52.7125	-33.47659286
+13	34.797837	39.22338895	31.02122891	30.99625	31.45208	29.04321	31.2417	23.15207	24.41649	15.48720692
-14	-99.32299633	-90.55951857	-89.28351064	-75.1688	-79.0225	-73.3463	-84.8372	-58.6224	-61.7078	-37.52277201
+14	24.29391798	31.2123622	22.04582216	24.10625	24.10625	22.56848	24.04756	18.32075	19.285	12.83207979
-15	-107.6149199	-96.79620311	-96.73956771	-80.1449	-84.3814	-78.4007	-90.9637	-64.4532	-67.8455	-40.22022814
+15	20.36356063	25.98367866	18.37891871	20.05932	20.05932	18.4331	19.45269	15.35558	16.16376	11.06199543
-16	-120.2208028	-106.3192201	-108.8241518	-87.6091	-92.4197	-85.9822	-100.153	-73.1994	-77.052	-44.26641058
+16	15.16227991	18.30866144	13.60828404	14.31765	14.31765	12.23004	12.5604	10.98249	11.56052	8.406868331
-17	-128.7367148	-112.7799044	-116.4818098	-92.5852	-97.7786	-91.0365	-106.28	-79.0301	-83.1896	-46.96386639
+17	11.80675814	13.30397772	10.59128571	10.48987	10.48987	8.395961	8.4854	7.997415	8.418331	6.636783989
-18	-141.6785964	-122.6389299	-128.119492	-100.049	-105.817	-98.618	-115.47	-89.0429	-93.8107	-51.01004384
+18	6.941477322	5.964951479	6.216987402	4.748199	4.748199	3.801101	3.801101	3.624331	3.815085	3.981656862
-19	-151.0559683	-129.3236052	-135.9787391	-105.025	-111.176	-103.672	-121.596	-95.8627	-101.03	-53.70749887
+19	3.784475025	2.961633655	3.401578222	2.38871	2.38871	1.911733	1.911733	1.820127	1.915923	2.211572057
-20	-164.5298938	-139.5186328	-147.9188231	-112.49	-119.214	-111.254	-130.786	-105.645	-111.387	-57.753681
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 50’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	82.8637887	93.40111	82.38552	69.11164118	67.42036099	90.71664	100.5906	105.9904	110.6959
-1	-1.347967101	-1.35029	-1.16959	-0.925794356	-1.684026334	-1.30188	-1.3024	-1.28583	-1.27091
+1	77.8600194	86.30828	75.22914	63.28701647	63.37644559	85.30217	94.41975	99.11911	103.08
-2	-4.024504249	-4.0361	-3.22574	-2.498946221	-4.21006457	-3.88663	-3.88923	-3.8575	-3.82891
+2	72.1158414	77.60752	67.39833	56.59667152	58.78364859	79.0991	87.29487	91.12948	94.1678
-3	-6.720436849	-6.73667	-5.37537	-4.187100381	-5.894088647	-6.49038	-6.49403	-6.46323	-6.43548
+3	68.28639257	71.56638	62.17778	52.1654391	55.72178449	74.96373	82.54495	85.80306	88.22634
-4	-10.76433622	-10.8521	-8.59982	-6.762832179	-8.420127	-10.9908	-10.9972	-10.9609	-10.9282
+4	62.54221833	63.67237	54.34697	45.56208676	51.12898761	68.76067	75.42007	77.81344	79.26651
-5	-13.4602697	-13.5527	-10.7495	-8.530949718	-10.10415341	-14.2072	-14.2149	-14.1797	-14.348
+5	58.71276989	58.67017	49.90443	41.73504051	48.06712274	64.62529	70.67015	72.43689	72.94416
-6	-17.50416964	-17.6035	-13.9739	-11.19368304	-13.24434395	-19.0318	-19.9354	-19.8956	-19.8597
+6	52.96859557	51.16688	43.7641	36.45361735	43.47432573	58.42223	62.98398	63.84624	64.22339
-7	-20.20010115	-20.3041	-16.1235	-12.99783907	-16.30620762	-22.2482	-23.766	-23.7276	-23.6929
+7	48.66046292	46.16468	40.3861	33.52322618	40.41246057	53.76993	58.2016	58.50518	58.52863
-8	-24.73328772	-24.3549	-19.348	-15.74756624	-20.89900463	-27.9314	-29.5119	-29.4755	-29.4427
+8	42.91628489	39.045	35.31911	29.17115496	35.43693307	47.56687	51.07671	50.89975	50.86704
-9	-28.56273918	-27.0555	-22.6556	-18.52101903	-23.96087013	-32.0668	-33.633	-33.633	-33.633
+9	39.08683714	35.19362	31.94111	26.29876562	32.3750641	43.43149	46.3268	46.18645	46.15222
-10	-34.30691351	-31.1064	-27.7226	-22.74259998	-28.55366704	-38.2698	-40.3976	-40.3025	-40.266
+10	33.34265887	30.42754	26.8741	22.03368462	27.78226948	37.22843	39.20191	39.11649	39.07998
-11	-38.13636496	-34.236	-31.1006	-25.585979	-31.61553071	-42.4052	-45.1475	-45.0158	-44.9808
+11	29.51320939	27.72697	23.49612	19.2193036	24.72040461	33.09306	34.45199	34.40319	34.58836
-12	-43.88053979	-40.0131	-36.1676	-29.89456051	-36.20832771	-48.6083	-52.2724	-52.0858	-52.0531
+12	23.76903883	23.67611	18.80802	15.28458163	20.12760477	26.89	28.54761	28.51124	28.47847
-13	-47.70998869	-44.921	-39.5456	-32.79594147	-39.48978516	-52.7436	-57.0223	-57.1823	-57.256
+13	20.86923645	20.97554	16.65838	13.45143057	17.06574646	23.25771	24.71702	24.67929	24.64527
-14	-53.93284465	-52.4243	-44.6126	-37.19152244	-44.24572015	-59.4636	-64.1794	-65.1866	-65.5637
+14	16.82533489	16.92469	13.43393	10.74519695	12.47294661	18.22181	18.97115	18.93136	18.89549
-15	-57.76229507	-57.4265	-48.8348	-40.8206086	-47.30758419	-63.599	-69.4909	-70.9136	-71.2776
+15	14.1294029	14.22411	11.2843	8.97003972	10.52189725	15.00541	15.14057	15.0994	15.0623
-16	-63.5064726	-64.9297	-55.6583	-46.66162158	-51.90038451	-69.8021	-76.6157	-79.1537	-80.7611
+16	10.08550174	10.17326	8.059846	6.328844171	7.995860641	10.1808	10.18723	10.15092	10.1182
-17	-67.33592124	-70.1701	-60.8789	-51.0638619	-54.96224907	-73.9374	-81.3657	-84.4802	-86.7502
+17	7.38956961	7.408131	5.910213	4.611692966	6.31183218	7.136567	7.140734	7.21259	7.083075
-18	-73.08009192	-79.0194	-68.7097	-57.71069892	-59.55504285	-80.1405	-88.4905	-92.4698	-95.6624
+18	3.345673581	3.357275	2.703573	2.129968042	3.785795474	3.230936	3.233537	3.201812	3.173217
-19	-76.90954876	-84.912	-73.9302	-62.17095418	-62.61690718	-84.2759	-93.2405	-97.7962	-101.604
+19	1.682531995	1.686012	1.475213	1.163238628	2.10176988	1.624973	1.625748	1.60942	1.594703
-20	-82.65371994	-93.3359	-81.8294	-68.90477682	-67.20970755	-90.4789	-100.365	-105.786	-110.516
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 50' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	143.7375343	145.1609021	104.7774	127.8077	129.3292
-1	-1.376486128	-1.554589495	-1.54791	-1.60742	-1.38058
+1	130.6197374	133.2057773	96.11875	117.4173	118.2636
-2	-4.000760338	-3.918020929	-4.62735	-4.84848	-4.11467
+2	116.0533988	120.5386155	85.45855	104.2151	105.6943
-3	-6.753730549	-6.60504833	-7.72317	-8.15069	-6.90377
+3	106.417998	112.0938595	79.26692	96.46292	97.43701
-4	-12.19308186	-11.34227715	-12.4263	-13.104	-12.4409
+4	93.71291377	99.42669496	69.97946	85.31796	85.05108
-5	-16.32253969	-15.17564872	-15.5221	-16.5902	-16.5696
+5	85.4540155	90.98191977	63.78781	77.88799	77.1134
-6	-22.51672937	-20.92873658	-20.1658	-22.7819	-22.7626
+6	74.56635425	78.31477274	57.48447	66.74304	68.79455
-7	-26.64618499	-24.76412695	-24.279	-26.9096	-26.8912
+7	67.68391166	70.90671995	53.70069	60.7021	63.9778
-8	-32.84036681	-31.16475212	-30.0571	-33.1013	-33.8792
+8	57.36027537	59.82555714	48.02502	52.70265	56.75267
-9	-36.96982466	-36.45828695	-33.8409	-37.229	-38.696
+9	51.20583032	53.3243941	44.24124	48.57489	51.93593
-10	-44.33010578	-45.43887774	-39.5165	-43.4206	-45.9211
+10	42.94690013	43.86030267	38.56557	42.38325	44.7108
-11	-49.83604151	-51.74827418	-43.3003	-47.5484	-50.7379
+11	37.99715717	37.78063013	34.78179	38.25549	39.89405
-12	-59.08926949	-61.67385922	-48.976	-53.74	-57.963
+12	31.80296763	29.84033973	29.10612	32.06385	32.66893
-13	-65.97170015	-69.06130873	-52.7597	-59.265	-62.7797
+13	27.673511	25.72222498	25.32234	27.93609	28.0098
-14	-76.29534209	-80.42760796	-58.4354	-68.6104	-70.0049
+14	21.47932879	19.9691349	19.38778	21.74445	21.72514
-15	-83.3993505	-88.87238585	-62.2192	-76.0403	-74.8216
+15	17.34987236	16.13374254	16.29196	17.61669	17.5965
-16	-95.78771385	-101.5395337	-71.5356	-87.1853	-87.1259
+16	11.15569068	10.55211944	11.64823	12.27408	11.40354
-17	-104.0466277	-109.9843073	-77.7272	-94.6152	-95.3832
+17	7.546611905	7.393973265	8.552406	8.971877	7.6076
-18	-118.4739783	-122.6514708	-87.0147	-106.29	-107.769
+18	3.309163539	3.523808238	3.849303	4.018557	3.42307
-19	-128.1093787	-131.0962464	-94.3056	-115.273	-116.026
+19	1.718927206	1.948187236	1.932837	2.018017	1.722887
-20	-143.3429729	-145.162878	-104.727	-127.748	-129.312
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.71E-13	-2.61E-13	-1.89E-13	-2.16E-13	-2.21E-13	-1.61E-13	-1.85E-13	-1.59E-13	-1.67E-13	-1.14E-13
End Shear	2.67E-13	1.68E-13	2.49E-13	1.50E-13	1.57E-13	1.14E-13	1.35E-13	1.16E-13	1.23E-13	1.11E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	385.5598264	330.155496	347.2363517	265.6499618	281.2633239	262.3168729	307.791391	243.7104051	256.866523	135.9507363
-2	0	0	0	0	0	0	0	0	0	0
+2	722.4451336	624.4817291	650.7073774	500.1991941	529.033556	493.04408	577.2922805	446.6130219	470.5251086	255.0423797
-3	0	0	0	0	0	0	0	0	0	0
+3	1010.655932	882.9787005	910.4130446	703.6477344	743.310734	692.1816192	808.5026601	608.3098212	640.5567781	357.2749381
-4	0	0	0	0	0	0	0	0	0	0
+4	1250.192335	1105.646434	1126.35335	875.9955846	924.0948586	859.7295043	1001.422546	732.6209152	771.1799108	442.6484232
-5	0	0	0	0	0	0	0	0	0	0
+5	1441.05412	1292.484894	1298.101412	1017.242688	1071.385874	995.6876875	1157.099976	843.5425797	889.0948781	511.1627843
-6	0	0	0	0	0	0	0	0	0	0
+6	1583.241411	1443.494055	1425.443737	1127.389048	1185.183781	1100.309868	1303.372522	927.8645866	979.5444597	562.8181058
-7	0	0	0	0	0	0	0	0	0	0
+7	1687.009929	1558.673952	1519.459665	1206.434604	1265.488517	1196.225855	1411.354567	984.5062074	1037.979765	597.6142888
-8	0	0	0	0	0	0	0	0	0	0
+8	1770.087942	1638.0247	1594.591153	1261.213456	1334.445319	1261.988044	1481.046069	1019.370967	1076.066241	615.5513759
-9	0	0	0	0	0	0	0	0	0	0
+9	1804.491312	1681.546041	1625.957429	1301.751294	1373.371506	1295.531739	1511.818254	1013.029936	1070.525833	616.6294092
-10	0	0	0	0	0	0	0	0	0	0
+10	1792.645673	1688.312433	1613.718245	1310.549054	1378.165253	1297.415799	1504.229965	983.7288301	1040.564551	600.8875716
-11	-2.67E-13	-2.09E-13	-2.40E-13	-1.71E-13	-1.71E-13	-1.37E-13	-1.37E-13	-1.30E-13	-1.37E-13	-1.58E-13
+11	1807.169242	1681.784085	1626.28306	1301.599631	1373.236296	1295.459729	1511.790276	1012.984083	1070.47605	616.6647247
-12	0	0	0	0	0	0	0	0	0	0
+12	1773.464081	1638.236259	1594.868759	1261.220792	1334.467273	1261.962883	1481.060035	1019.302983	1075.993027	615.5827994
-13	0	0	0	0	0	0	0	0	0	0
+13	1690.192479	1558.859172	1519.689203	1206.50954	1265.57624	1196.247508	1411.410466	984.5153707	1037.987621	597.6417212
-14	0	0	0	0	0	0	0	0	0	0
+14	1582.805296	1443.652776	1425.304858	1127.531572	1185.337278	1100.308483	1303.400432	927.9508369	979.6333222	562.841603
-15	0	0	0	0	0	0	0	0	0	0
+15	1440.870298	1292.617196	1297.914511	1017.361451	1071.513768	995.8029551	1157.100044	843.6067989	889.1604093	511.1824607
-16	0	0	0	0	0	0	0	0	0	0
+16	1250.260807	1105.752289	1126.545454	876.0906189	924.197198	859.8217643	1001.534364	732.6011301	771.1590843	442.6641389
-17	0	0	0	0	0	0	0	0	0	0
+17	1010.976829	883.0579702	910.5571478	703.7189286	743.3874089	692.2507409	808.5864483	608.2771283	640.5227792	357.2867006
-18	0	0	0	0	0	0	0	0	0	0
+18	723.0184634	624.5345888	650.8034092	500.2466536	529.0846762	493.0901698	577.3481661	446.5580731	470.4675438	255.0501427
-19	0	0	0	0	0	0	0	0	0	0
+19	386.2875808	330.1819647	347.2845038	265.6736679	281.2888447	262.3399052	307.8192945	243.7325867	256.8900098	135.954635
-20	-2.77E-13	-1.68E-13	-1.86E-13	-1.36E-13	-1.40E-13	-1.34E-13	-1.58E-13	-1.62E-13	-1.70E-13	-7.75E-14
+20	2.63E-13	1.60E-13	1.92E-13	1.52E-13	1.61E-13	1.02E-13	1.32E-13	1.29E-13	1.36E-13	7.55E-14

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-1.42E-13	-1.47E-13	-1.17E-13	-1.06E-13	-1.09E-13	-1.37E-13	-1.39E-13	-1.43E-13	-1.47E-13
End Shear	1.03E-13	9.59E-14	1.04E-13	8.16E-14	1.36E-13	9.82E-14	9.30E-14	9.44E-14	9.59E-14
-1	0	0	0	0	0	0	0	0	0
+1	194.6500485	215.7707087	189.1577863	158.9062912	158.441114	213.2554138	236.0493829	247.7977656	257.6998996
-2	0	0	0	0	0	0	0	0	0
+2	365.3660255	396.3954596	345.9122383	291.4767625	297.7455651	400.664738	442.411767	462.5288081	478.6459665
-3	0	0	0	0	0	0	0	0	0
+3	512.1479442	541.5055583	470.03835	398.2444654	417.9133837	562.2279705	619.0871149	662.5838427	689.7501123
-4	0	0	0	0	0	0	0	0	0
+4	634.9958407	654.5134125	561.5360524	479.1021424	518.9445239	697.9451232	766.0755005	836.8929378	865.6822226
-5	0	0	0	0	0	0	0	0	0
+5	733.9096236	739.763432	642.1192543	549.9703447	600.8390342	807.8161551	883.3768501	977.9119298	1030.190633
-6	0	0	0	0	0	0	0	0	0
+6	808.8894025	807.8471863	694.1415213	597.0851506	663.596869	891.841075	983.0806112	1085.640771	1161.158648
-7	0	0	0	0	0	0	0	0	0
+7	859.5107418	854.9065307	733.1963492	632.6751461	707.2180599	964.2734208	1064.196163	1159.813434	1254.992543
-8	0	0	0	0	0	0	0	0	0
+8	904.3370535	870.9152128	754.8314606	653.6449587	731.1314573	1016.689135	1115.231754	1221.888827	1311.338336
-9	0	0	0	0	0	0	0	0	0
+9	925.4496504	855.6601936	766.9823799	665.6164895	735.6634326	1042.724253	1136.411887	1255.368263	1344.722087
-10	0	0	0	0	0	0	0	0	0
+10	922.6281452	822.3277734	759.2090481	659.9228427	721.0587232	1042.853808	1127.904998	1255.504329	1355.849305
-11	-1.21E-13	-1.21E-13	-9.59E-14	-7.25E-14	-1.51E-13	-1.16E-13	-1.16E-13	-7.88E-14	-7.88E-14
+11	925.3621344	855.6295088	766.9447118	665.6276063	735.6337755	1042.656449	1136.371559	1255.301098	1344.632044
-12	0	0	0	0	0	0	0	0	0
+12	904.2324088	870.8674508	754.8479855	653.651898	731.0869896	1016.661884	1115.170972	1221.853101	1311.326407
-13	0	0	0	0	0	0	0	0	0
+13	859.5100868	854.8416854	733.1578867	632.6859258	707.3218862	964.2866895	1064.22718	1159.809201	1255.058749
-14	0	0	0	0	0	0	0	0	0
+14	808.9926697	807.8574465	694.1066449	597.090533	663.6857505	891.9543145	983.0912277	1085.721238	1161.201812
-15	0	0	0	0	0	0	0	0	0
+15	733.9957802	739.7566776	642.0688375	549.9760779	600.9131198	807.9104737	883.4792665	977.9706441	1030.210761
-16	0	0	0	0	0	0	0	0	0
+16	635.0647517	654.4896296	561.5342884	479.1014194	519.0038311	698.0206104	766.1574669	836.9299223	865.6792662
-17	0	0	0	0	0	0	0	0	0
+17	512.199591	541.470917	470.0209243	398.2371568	417.957871	562.2845231	619.1485085	662.5989894	689.7716724
-18	0	0	0	0	0	0	0	0	0
+18	365.4003872	396.3416632	345.879219	291.4897257	297.7751699	400.7024491	442.4527604	462.5222187	478.644487
-19	0	0	0	0	0	0	0	0	0
+19	194.6672681	215.7898148	189.1091901	158.9128118	158.4559871	213.2742505	236.0698656	247.8195161	257.7229143
-20	-9.02E-14	-1.36E-13	-8.58E-14	-7.50E-14	-1.01E-13	-1.10E-13	-1.21E-13	-1.30E-13	-1.29E-13
+20	9.56E-14	1.07E-13	8.81E-14	7.43E-14	9.68E-14	8.66E-14	9.42E-14	9.50E-14	1.10E-13

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.59E-13	-1.33E-13	-1.70E-13	-1.73E-13	-1.52E-13
End Shear	1.22E-13	1.40E-13	1.17E-13	1.41E-13	1.07E-13
-1	0	0	0	0	0
+1	328.7316993	334.5251367	240.2968675	293.543243	295.6590014
-2	0	0	0	0	0
+2	597.3681074	617.3220448	437.2379765	535.1710267	539.1860235
-3	0	0	0	0	0
+3	812.6656723	847.3390925	594.8601617	729.6639295	731.2578573
-4	0	0	0	0	0
+4	1009.036584	1039.451451	715.8060217	890.3804339	898.8966281
-5	0	0	0	0	0
+5	1147.679694	1219.327655	829.8176124	1030.72747	1028.514862
-6	0	0	0	0	0
+6	1251.986247	1347.782123	900.7692095	1124.697198	1118.64336
-7	0	0	0	0	0
+7	1321.423955	1456.287818	948.6889183	1172.229702	1189.758305
-8	0	0	0	0	0
+8	1375.232034	1535.182366	981.9172959	1193.963681	1223.88316
-9	0	0	0	0	0
+9	1406.57446	1578.250218	1013.108127	1185.099789	1249.218851
-10	0	0	0	0	0
+10	1427.005549	1601.756375	1023.897886	1156.814693	1252.247901
-11	-1.23E-13	-1.14E-13	-1.38E-13	-1.23E-13	-1.23E-13
+11	1406.511521	1578.256591	1013.118342	1185.047916	1249.269116
-12	0	0	0	0	0
+12	1375.215323	1535.179127	981.9150057	1193.978249	1223.856931
-13	0	0	0	0	0
+13	1321.461721	1456.280436	948.6644399	1172.219663	1189.708067
-14	0	0	0	0	0
+14	1251.969481	1347.776113	900.7578106	1124.662575	1118.63898
-15	0	0	0	0	0
+15	1147.72167	1219.332922	829.8859771	1030.668368	1028.558597
-16	0	0	0	0	0
+16	1009.070134	1039.452589	715.5558553	890.7809481	898.9142252
-17	0	0	0	0	0
+17	812.6698156	847.3361564	594.8191561	729.6465901	731.2491084
-18	0	0	0	0	0
+18	597.3429426	617.3148508	437.1810108	535.1345445	539.151035
-19	0	0	0	0	0
+19	328.6770955	334.5138746	240.3196312	293.5705829	295.4450808
-20	-1.80E-13	-1.40E-13	-1.60E-13	-1.89E-13	-1.84E-13
+20	1.41E-13	1.63E-13	1.31E-13	1.50E-13	1.31E-13

1-Span: Shear (Max and Min) Raw Data Results - 50' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0	0	0
End Shear	58.56	42.968	48.432	42.72	37.09	34.96	47.04	52.16	54.96	57.4
-1	-1.28	-0.69897	-0.70017	-0.60648	-0.48254	-0.87323	-0.67507	-0.67534	-0.66675	-0.65901
+1	54.83305	40.37336	44.7541	39.00915	33.94813	32.86308	44.23239	48.9602	51.397	53.45085
-2	-3.2	-2.08686	-2.09287	-1.67267	-1.30944	-2.18308	-2.01536	-2.01671	-2.00026	-1.98543
+2	50.53579	37.39478	40.24243	34.94858	30.34123	30.48154	41.01587	45.26568	47.25408	48.82955
-3	-4.48	-3.4848	-3.49322	-2.78733	-2.19722	-3.05631	-3.36551	-3.3674	-3.35143	-3.33704
+3	47.67095	35.40907	37.10987	32.24152	27.95663	28.89385	38.87152	42.80267	44.49212	45.74869
-4	-6.4	-5.58171	-5.62722	-4.45933	-3.55889	-4.36615	-5.69913	-5.70247	-5.68364	-5.66667
+4	43.37368	32.4305	33.01653	28.18095	24.40972	26.51231	35.655	39.10815	40.3492	41.10268
-5	-7.68	-6.97966	-7.02756	-5.574	-4.49806	-5.23938	-7.36696	-7.37096	-7.35273	-7.44
+5	40.50884	30.44479	30.4227	25.87733	22.34834	24.92462	33.51065	36.64514	37.56126	37.8243
-6	-10.1389	-9.07657	-9.12809	-7.246	-5.91972	-6.86769	-9.8687	-10.3373	-10.3166	-10.298
+6	36.21158	27.46621	26.53196	22.69334	19.50179	22.54308	30.29413	32.65957	33.10669	33.30225
-7	-12.6855	-10.4745	-10.5284	-8.36066	-6.8875	-8.45538	-11.5365	-12.3236	-12.3036	-12.2857
+7	33.34673	25.23229	23.93813	20.94171	17.91528	20.95539	27.88174	30.17972	30.33714	30.3493
-8	-16.5053	-12.8251	-12.629	-10.0327	-8.36917	-10.8369	-14.4835	-15.303	-15.2842	-15.2672
+8	28.71411	22.25371	20.24631	18.31429	15.56552	18.37539	24.66522	26.4852	26.39344	26.37648
-9	-19.0518	-14.8109	-14.0293	-11.7478	-9.84949	-12.4246	-16.6278	-17.44	-17.44	-17.44
+9	26.24	20.268	18.24922	16.56267	14.01901	16.78769	22.52087	24.02219	23.94942	23.93167
-10	-22.8716	-17.7894	-16.1298	-14.3752	-12.1092	-14.8062	-19.8443	-20.9477	-20.8984	-20.8794
+10	22.34779	17.28943	15.77783	13.93524	11.72924	14.40615	19.30435	20.32767	20.28338	20.26444
-11	-25.4181	-19.7751	-17.7527	-16.1269	-13.6358	-16.3938	-21.9887	-23.4107	-23.3424	-23.3243
+11	19.80126	15.30371	14.37748	12.18362	10.22274	12.81846	17.16	17.86466	17.83935	17.93537
-12	-29.5326	-22.7537	-20.7483	-18.7543	-15.9555	-18.7754	-25.2052	-27.1052	-27.0084	-26.9915
+12	15.98147	12.32514	12.27696	9.752667	8.119166	10.43692	13.94348	14.80301	14.78415	14.76716
-13	-32.3975	-24.7394	-23.2932	-20.5059	-17.522	-20.4769	-27.3496	-29.5682	-29.6512	-29.6894
+13	13.43495	10.82149	10.87661	8.638	7.13139	8.849233	12.06	12.81671	12.79714	12.7795
-14	-36.6947	-27.9662	-27.184	-23.1333	-19.9018	-22.9431	-30.8341	-33.2794	-33.8017	-33.9973
+14	9.391157	8.724571	8.776088	6.966	5.679722	6.467693	9.448695	9.837259	9.816625	9.798024
-15	-39.5596	-29.9519	-29.7778	-25.3227	-21.8556	-24.5308	-32.9785	-36.0336	-36.7714	-36.9601
+15	7.967158	7.326628	7.375739	5.851334	4.731943	5.456001	7.780869	7.850957	7.82961	7.810369
-16	-43.8568	-32.9305	-33.6685	-28.861	-24.9997	-26.9123	-36.195	-39.7282	-41.0442	-41.8777
+16	6.057263	5.229713	5.275217	4.179334	3.328887	4.146155	5.27913	5.282463	5.263637	5.246667
-17	-46.7217	-34.9162	-36.3858	-31.568	-27.3643	-28.5	-38.3393	-42.1912	-43.8062	-44.9833
+17	4.783999	3.831771	3.841396	3.064668	2.421111	3.272923	3.700579	3.70274	3.74	3.672842
-18	-51.0189	-37.8948	-40.9746	-35.6286	-30.9412	-30.8815	-41.5559	-45.8857	-47.9491	-49.6046
+18	2.874104	1.734858	1.740874	1.401904	1.115634	1.963078	1.675362	1.676711	1.66026	1.645433
-19	-54.1577	-39.8805	-44.0301	-38.3356	-33.3458	-32.4692	-43.7002	-48.3487	-50.711	-52.6854
+19	1.589893	0.872456	0.874261	0.764954	0.606905	1.089847	0.84261	0.843012	0.834545	0.826913
-20	-58.5392	-42.8591	-48.3982	-42.4316	-36.9827	-34.8508	-46.9167	-52.0432	-54.8539	-57.3067
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 50' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**58.56**	***58.5***	***62***	***57.84***	***68***	***54.82***	***57.8***	***30.02917***
-1	**-1.28**	***-0.99242***	***-0.99242***	***-0.7942***	***-0.7942***	***-0.75587***	***-0.79565***	***-0.91786***
+1	**54.83305**	***55.09981***	***58.33826***	***54.40848***	***63.84058***	***50.54922***	***53.27799***	***28.19823***
-2	**-3.2**	***-2.96212***	***-2.96212***	***-2.37101***	***-2.37101***	***-2.25935***	***-2.37826***	***-2.29464***
+2	**50.53579**	***51.22935***	***54.17007***	***50.47717***	***59.07536***	***45.32197***	***47.74422***	***26.10014***
-3	**-4.48**	***-4.94697***	***-4.94697***	***-3.95942***	***-3.95942***	***-3.77109***	***-3.96956***	***-3.21249***
+3	**47.67095**	***48.64905***	***51.39129***	***47.8563***	***55.89855***	***41.73185***	***43.92827***	***24.7014***
-4	**-6.4**	***-7.92424***	***-7.92424***	***-6.88174***	***-7.11304***	***-6.07484***	***-6.39456***	***-4.58928***
+4	**43.37368**	***44.7786***	***47.22311***	***43.925***	***51.13333***	***37.19663***	***39.15435***	***22.60331***
-5	**-7.68**	***-9.90909***	***-9.90909***	***-9.02609***	***-9.49565***	***-7.58657***	***-7.98587***	***-5.50713***
+5	**40.50884**	***42.1983***	***44.44432***	***41.30413***	***47.95652***	***34.17315***	***35.97174***	***21.20457***
-6	**-10.1389**	***-13***	***-13***	***-12.2426***	***-13.0696***	***-9.88***	***-10.4***	***-6.88392***
+6	**36.21158**	***38.32784***	***40.27614***	***37.37282***	***43.1913***	***29.63794***	***31.19783***	***19.10648***
-7	**-12.6855**	***-15.4326***	***-15.6197***	***-14.387***	***-15.4522***	***-11.5403***	***-12.1663***	***-7.80177***
+7	**33.34673**	***35.74753***	***37.49734***	***34.42435***	***39.65225***	***26.32739***	***27.82799***	***17.70775***
-8	**-16.5053**	***-19.303***	***-19.7879***	***-18.0487***	***-19.7681***	***-14.5787***	***-15.3986***	***-9.17855***
+8	**28.71411**	***31.55455***	***32.98182***	***30.49304***	***34.85217***	***23.45764***	***24.84429***	***15.60965***
-9	**-19.0518**	***-21.8833***	***-22.5667***	***-20.6696***	***-22.9449***	***-16.4485***	***-17.3878***	***-10.3652***
+9	**26.24**	***28.97424***	***30.20303***	***27.87217***	***31.67536***	***21.58786***	***22.85517***	***14.21092***
-10	**-22.8716**	***-25.7538***	***-26.7348***	***-24.6009***	***-27.7101***	***-19.2532***	***-20.3715***	***-12.4633***
+10	**22.34779**	***25.10379***	***26.03485***	***23.94087***	***26.91014***	***18.78318***	***19.87147***	***12.11282***
-11	**-25.4181**	***-28.3341***	***-29.5136***	***-27.2217***	***-30.887***	***-21.123***	***-22.3606***	***-13.862***
+11	**19.80126**	***22.52348***	***23.25606***	***21.32***	***23.73333***	***16.9134***	***17.88234***	***10.71408***
-12	**-29.5326**	***-32.2045***	***-33.6818***	***-31.153***	***-35.6522***	***-23.9276***	***-25.3443***	***-15.9601***
+12	**15.98147**	***18.65303***	***19.08788***	***17.38869***	***18.96812***	***14.10872***	***14.89864***	***8.948557***
-13	**-32.3975**	***-34.8232***	***-36.5238***	***-33.7739***	***-38.829***	***-25.7974***	***-27.3334***	***-17.3589***
+13	**13.43495**	***16.07273***	***16.30909***	***15.06***	***16.2***	***12.00522***	***12.66087***	***8.030701***
-14	**-36.6947**	***-38.9778***	***-40.9761***	***-38.0328***	***-43.9913***	***-30.3979***	***-31.9978***	***-19.457***
+14	**9.391157**	***12.5***	***12.5***	***11.70261***	***12.46956***	***9.5***	***10***	***6.653917***
-15	**-39.5596**	***-41.5581***	***-43.7549***	***-40.6537***	***-47.1681***	***-33.4214***	***-35.1804***	***-20.8557***
+15	**7.967158**	***10.40152***	***10.40152***	***9.55826***	***10.08696***	***7.962446***	***8.381522***	***5.736062***
-16	**-43.8568**	***-45.4286***	***-47.9231***	***-44.585***	***-51.9333***	***-37.9566***	***-39.9543***	***-22.9538***
+16	**6.057263**	***7.42424***	***7.42424***	***6.341739***	***6.513043***	***5.694837***	***5.994565***	***4.359278***
-17	**-46.7217**	***-48.0089***	***-50.7019***	***-47.2059***	***-55.1101***	***-40.9801***	***-43.137***	***-24.3525***
+17	**4.783999**	***5.439392***	***5.439392***	***4.353623***	***4.4***	***4.146961***	***4.365222***	***3.441423***
-18	**-51.0189**	***-51.8794***	***-54.8701***	***-51.1372***	***-59.8754***	***-46.1721***	***-48.6444***	***-26.4506***
+18	**2.874104**	***2.46212***	***2.46212***	***1.971014***	***1.971014***	***1.879352***	***1.978265***	***2.064639***
-19	**-54.1577**	***-54.4597***	***-57.6489***	***-53.758***	***-63.0522***	***-49.7085***	***-52.3878***	***-27.8494***
+19	**1.589893**	***1.238636***	***1.238636***	***0.991306***	***0.991306***	***0.943804***	***0.993478***	***1.146784***
-20	**-58.5392**	***-58.3301***	***-61.817***	***-57.6893***	***-67.8174***	***-54.7807***	***-57.7584***	***-29.9475***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 50' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	58.56	83.13333	83.95657	60.6	73.92	74.8
-1	-1.28	-0.79612	-0.89913	-0.89526	-0.92968	-0.79849
+1	54.83305	75.54641	77.04209	55.5921	67.91052	68.4
-2	-3.2	-2.31392	-2.26606	-2.67632	-2.80421	-2.3798
+2	50.53579	67.12169	69.7158	49.42658	60.27478	61.1303
-3	-4.48	-3.90615	-3.82016	-4.46684	-4.71411	-3.99293
+3	47.67095	61.54887	64.83161	45.84553	55.79116	56.35454
-4	-6.4	-7.0521	-6.56002	-7.18697	-7.57895	-7.19545
+4	43.37368	54.20064	57.50532	40.47395	49.34526	49.19091
-5	-7.68	-9.44045	-8.77712	-8.9775	-9.59526	-9.58333
+5	40.50884	49.42395	52.62112	36.89289	45.048	44.6
-6	-10.1389	-13.023	-12.1045	-11.6633	-13.1763	-13.1652
+6	36.21158	43.12687	45.29484	33.24724	38.6021	39.78863
-7	-12.6855	-15.4113	-14.3228	-14.0422	-15.5637	-15.553
+7	33.34673	39.14628	41.01025	31.05881	35.10821	37.00277
-8	-16.5053	-18.9939	-18.0247	-17.3841	-19.1447	-19.5947
+8	28.71411	33.17541	34.60125	27.77618	30.48158	32.82399
-9	-19.0518	-21.3822	-21.0863	-19.5725	-21.5321	-22.3806
+9	26.24	29.61586	30.84118	25.58776	28.09421	30.03813
-10	-22.8716	-25.6392	-26.2804	-22.8551	-25.1132	-26.5593
+10	22.34779	24.83916	25.36744	22.30513	24.51316	25.85934
-11	-25.4181	-28.8236	-29.9296	-25.0436	-27.5005	-29.3452
+11	19.80126	21.97638	21.85115	20.11671	22.12579	23.07348
-12	-29.5326	-34.1754	-35.6702	-28.3262	-31.0816	-33.524
+12	15.98147	18.39385	17.25873	16.83408	18.54473	18.8947
-13	-32.3975	-38.156	-39.9429	-30.5146	-34.2771	-36.3099
+13	13.43495	16.0055	14.87694	14.64566	16.15737	16.2
-14	-36.6947	-44.1269	-46.5168	-33.7972	-39.6821	-40.4886
+14	9.391157	12.42298	11.54953	11.21329	12.57631	12.56515
-15	-39.5596	-48.2356	-51.401	-35.9857	-43.9794	-43.2745
+15	7.967158	10.03463	9.331257	9.422764	10.18895	10.17727
-16	-43.8568	-55.4006	-58.7273	-41.3739	-50.4253	-50.3909
+16	6.057263	6.452106	6.103019	6.736974	7.098948	6.595454
-17	-46.7217	-60.1773	-63.6115	-44.955	-54.7225	-55.1667
+17	4.783999	4.364726	4.276445	4.946447	5.189055	4.4
-18	-51.0189	-68.5217	-70.9378	-50.3266	-61.4748	-62.3303
+18	2.874104	1.913918	2.038061	2.226318	2.324209	1.979797
-19	-54.1577	-74.0945	-75.822	-54.5434	-66.6705	-67.1061
+19	1.589893	0.994174	1.126771	1.117893	1.167158	0.996465
-20	-58.5392	-82.9051	-83.9577	-60.5711	-73.8853	-74.7902
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	137.0826	100.9334	111.8853	98.0854	85.3453	82.1577	110.5810	122.4005	128.4925	133.6271
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	256.26	189.4561	205.5460	179.3685	156.7244	154.3923	207.7598	229.4072	239.8386	248.1960
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	357.5321	265.5680	280.7911	243.7326	214.4136	216.7039	291.5364	321.0200	343.5747	357.6615
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	440.899	329.2693	339.3899	291.1776	258.3573	269.0923	361.9109	397.2390	433.9606	448.8889
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	506.3605	380.5598	383.5952	332.9631	296.8110	311.5577	418.8832	458.0642	507.0842	534.1927
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	553.9168	419.4397	418.8992	359.9386	322.6375	344.1000	462.4532	509.7644	562.9457	602.1046
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	587.9742	445.6887	443.3013	380.1900	342.1778	366.7192	500.0121	551.8259	601.4070	650.7610
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	616.1495	468.9329	451.6024	391.4086	353.8268	379.1192	527.1917	578.2897	633.5955	679.9784
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	626.4195	479.8806	443.6921	397.7093	360.4997	381.4692	540.6919	589.2724	650.9558	697.2891
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	619.8263	478.4175	426.4080	393.6785	357.7024	373.8961	540.7590	584.8613	651.0264	703.0590
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	627.57	479.8352	443.6762	397.6898	360.5055	381.4539	540.6567	589.2515	650.9210	697.2424
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	617.6	468.8786	451.5776	391.4172	353.8304	379.0962	527.1775	578.2582	633.5769	679.9722
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	589.3416	445.6884	443.2677	380.1700	342.1834	366.7731	500.0190	551.8419	601.4048	650.7953
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	553.7295	419.4932	418.9046	359.9205	322.6403	344.1461	462.5120	509.7699	562.9874	602.1269
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	506.2815	380.6045	383.5917	332.9369	296.8140	311.5961	418.9321	458.1173	507.1147	534.2031
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	440.9284	329.3050	339.3776	291.1767	258.3570	269.1231	361.9500	397.2815	433.9797	448.8874
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	357.67	265.5948	280.7731	243.7236	214.4098	216.7269	291.5657	321.0519	343.5826	357.6726
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	256.5063	189.4739	205.5181	179.3514	156.7311	154.4077	207.7793	229.4284	239.8352	248.1952
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	137.3953	100.9423	111.8952	98.0602	85.3487	82.1654	110.5907	122.4111	128.5038	133.6391
-20	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.07E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	137.0826	137.7495	145.8456	136.0212	159.6014	126.3730	133.1950	70.4956
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	256.26	259.3722	274.3239	255.6620	299.3478	231.5857	243.9850	132.2491
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	357.5321	364.8679	385.4347	358.9223	419.2391	315.4316	332.1529	185.2605
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	440.899	454.2368	479.1780	445.8022	519.2754	379.8916	399.8859	229.5299
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	506.3605	527.4787	555.5540	516.3016	600.0000	437.4086	461.0292	265.0572
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	553.9168	584.5938	614.5625	570.5522	675.8478	481.1328	507.9308	291.8424
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	587.9742	625.5819	656.2035	620.2882	731.8406	510.5036	538.2317	309.8856
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	616.1495	653.9868	691.9602	654.3884	767.9783	528.5823	557.9809	319.1866
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	626.4195	675.0072	712.1449	671.7821	783.9348	525.2942	555.1080	319.7456
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	619.8263	679.5691	714.6307	672.7590	780.0000	510.1005	539.5720	311.5829
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	627.57	674.9285	712.0748	671.7447	783.9203	525.2705	555.0822	319.7639
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	617.6	653.9906	691.9716	654.3754	767.9855	528.5470	557.9430	319.2029
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	589.3416	625.6207	656.2490	620.2995	731.8696	510.5084	538.2357	309.8998
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	553.7295	584.6677	614.6421	570.5515	675.8623	481.1775	507.9768	291.8546
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	506.2815	527.5403	555.6203	516.3614	600.0000	437.4419	461.0632	265.0674
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	440.9284	454.2860	479.2311	445.8500	519.3333	379.8813	399.8751	229.5381
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	357.67	364.9048	385.4744	358.9581	419.2826	315.4146	332.1352	185.2666
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	256.5063	259.3968	274.3504	255.6859	299.3768	231.5572	243.9552	132.2531
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	137.3953	137.7618	145.8589	136.0331	159.6159	126.3845	133.2072	70.4976
-20	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.07E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 50' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	137.0826	190.1282	193.4790	138.9803	169.7763	171.0000
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	256.26	345.4992	357.0399	252.8849	309.5263	311.8485
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	357.5321	470.0206	490.0747	344.0487	422.0150	422.9369
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	440.899	583.5955	601.1865	414.0000	514.9684	519.8939
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	506.3605	663.7824	705.2213	479.9408	596.1408	594.8611
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	553.9168	724.1100	779.5154	520.9770	650.4900	646.9886
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	587.9742	764.2707	842.2717	548.6923	677.9813	688.1193
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	616.1495	795.3916	887.9019	567.9105	690.5516	707.8561
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	626.4195	813.5191	912.8110	585.9503	685.4250	722.5095
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	619.8263	825.3358	926.4062	592.1908	669.0658	724.2614
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	627.57	813.4827	912.8147	585.9562	685.3950	722.5385
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	617.6	795.3819	887.9000	567.9092	690.5600	707.8409
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	589.3416	764.2925	842.2675	548.6781	677.9755	688.0903
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	553.7295	724.1003	779.5119	520.9704	650.4700	646.9861
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	506.2815	663.8066	705.2244	479.9803	596.1066	594.8864
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	440.9284	583.6149	601.1872	413.8553	515.2001	519.9041
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	357.67	470.0230	490.0730	344.0250	422.0050	422.9318
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	256.5063	345.4846	357.0358	252.8519	309.5052	311.8282
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	137.3953	190.0966	193.4725	138.9934	169.7921	170.8763
-20	-1.11E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.07E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 55' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**170.2221816**	***143.2231817***	***153.1999629***	**113.9568**	**120.9695**	**112.975**	**133.2418**	**111.0115**	**117.1125**	**58.79149191**
-1	**-3.461819385**	***-2.699210324***	***-3.115637445***	**-2.17605**	**-2.17605**	**-1.74134**	**-1.74134**	**-1.65694**	**-1.74415**	**-2.01176785**
+1	**157.5121693**	***133.1906766***	***141.7822394***	**106.8425**	**113.308**	**105.7862**	**124.528**	**102.005**	**107.5762**	**54.96398264**
-2	**-7.784001748**	***-7.644702743***	***-7.005601567***	**-6.06823**	**-6.06823**	**-4.85679**	**-4.85679**	**-4.62569**	**-4.86915**	**-4.425887985**
+2	**145.3167789**	***123.7954827***	***130.8176543***	**100.0533**	**105.9965**	**98.89047**	**116.1696**	**93.10981**	**98.15785**	**51.28507397**
-3	**-11.52581669**	***-13.2467561***	***-10.35382804***	**-10.4203**	**-10.4203**	**-8.33946**	**-8.41527**	**-7.93956**	**-8.35744**	**-6.437652485**
+3	**135.2939601**	***116.106155***	***121.8065009***	**94.39557**	**99.90358**	**93.14406**	**109.2043**	**85.22503**	**89.81218**	**48.21931691**
-4	**-16.18399906**	***-20.13722374***	***-14.52290427***	**-15.6428**	**-15.6428**	**-13.9549**	**-14.5704**	**-11.9162**	**-12.5434**	**-8.851772684**
+4	**123.4345744**	***107.0469611***	***111.14432***	**87.60631**	**92.59207**	**86.24837**	**100.8459**	**76.06079**	**80.10594**	**44.54040878**
-5	**-20.20581843**	***-26.01927923***	***-18.12313473***	**-19.9949**	**-19.9949**	**-18.6565**	**-19.7944**	**-15.3074**	**-16.113**	**-10.86353938**
+5	**113.6917518**	***99.63763438***	***102.3851734***	**81.9486**	**86.49915**	**80.50197**	**93.88052**	**69.22737**	**72.87091**	**41.47465196**
-6	**-28.36201553**	***-33.2457439***	***-25.55613142***	**-25.9452**	**-26.1878**	**-24.2984**	**-26.0632**	**-19.4324**	**-20.4788**	**-13.27765842**
+6	**102.1683619**	***90.91444356***	***91.59835826***	**75.15933**	**79.18764**	**73.60628**	**85.52211**	**61.27407**	**64.49902**	**37.79574017**
-7	**-36.01543396**	***-39.40779981***	***-32.43585808***	**-31.603**	**-32.2808**	**-29.3667**	**-31.8984**	**-23.5311**	**-24.8392**	**-15.28942644**
+7	**92.70554122**	***83.78511132***	***82.83704053***	**69.50162**	**73.09471**	**67.46879**	**78.16569**	**54.17415**	**57.02542**	**34.72998279**
-8	**-45.3675298**	***-46.97026505***	***-40.8427345***	**-38.3922**	**-39.5923**	**-36.2624**	**-40.2568**	**-28.765**	**-30.4082**	**-18.17622827**
+8	**80.95957363**	***75.39791644***	***72.77965554***	**62.14659**	**65.17391**	**60.38953**	**69.50181**	**46.18133**	**48.81662**	**31.05107675**
-9	**-53.30095354**	***-53.41232057***	***-47.97446585***	**-44.0499**	**-45.6852**	**-42.0088**	**-47.2222**	**-32.9582**	**-34.868**	**-21.24198578**
+9	**71.57740667**	***68.54859346***	***64.52451366***	**56.48887**	**59.08099**	**54.64312**	**62.53647**	**41.97122**	**44.45626**	**27.98531755**
-10	**-62.98905298**	***-61.31078818***	***-56.68374558***	**-50.8392**	**-52.9967**	**-48.9045**	**-55.5806**	**-37.8767**	**-40.1004**	**-24.92089445**
+10	**61.62232472**	***59.97282809***	***55.51573395***	**49.69961**	**51.76948**	**47.74743**	**54.17806**	**37.05273**	**39.22383**	**24.30641137**
-11	**-71.82878386**	***-68.55741161***	***-64.62931458***	**-56.4969**	**-59.0896**	**-54.6509**	**-62.5459**	**-41.9755**	**-44.4608**	**-27.98665298**
+11	**53.56163473**	***53.40350644***	***48.26945357***	**44.0419**	**45.67656**	**42.00103**	**47.21271**	**32.95399**	**34.86347**	**21.24065437**
-12	**-82.86343894**	***-76.79187347***	***-74.54923785***	**-63.2862**	**-66.4011**	**-61.5466**	**-70.9044**	**-47.5138**	**-50.0145**	**-31.66555819**
+12	**44.05680611**	***45.68830861***	***39.33697752***	**37.25264**	**38.36505**	**35.10534**	**38.8543**	**27.94129**	**29.53186**	**17.56174475**
-13	**-92.19898557**	***-83.79393107***	***-82.94184654***	**-69.5097**	**-73.1034**	**-67.293**	**-77.9147**	**-54.1415**	**-56.9911**	**-34.73131992**
+13	**36.08973418**	***39.39898623***	***32.34269767***	**31.59493**	**32.27212**	**29.35893**	**31.88896**	**23.52688**	**24.83463**	**15.2885501**
-14	**-103.5696473**	***-92.36439307***	***-93.16417588***	**-76.2989**	**-80.4149**	**-74.7634**	**-86.9246**	**-62.6065**	**-65.9016**	**-38.41022513**
+14	**26.62316716**	***32.01978762***	***24.10077308***	**24.80567**	**24.96061**	**23.35167**	**25.01127**	**18.6178**	**19.6022**	**12.87442875**
-15	**-113.1852093**	***-99.64645225***	***-101.8087879***	**-81.9566**	**-86.5078**	**-80.5098**	**-93.89**	**-69.2857**	**-72.9324**	**-41.47598264**
+15	**20.20581846**	***26.01045781***	***18.18523658***	**19.98874**	**19.98874**	**18.65007**	**19.78727**	**15.30392**	**16.10939**	**10.86266333**
-16	**-125.5621805**	***-108.5529135***	***-112.5876665***	**-88.7459**	**-93.8193**	**-87.4055**	**-102.248**	**-77.551**	**-81.6838**	**-45.15489299**
+16	**15.35936302**	***18.96726769***	***13.85541791***	**14.76623**	**14.76623**	**13.00814**	**13.51846**	**11.25**	**11.84211**	**8.448545096**
-17	**-134.7874172**	***-116.1149713***	***-121.9113068***	**-94.4036**	**-99.9122**	**-93.1519**	**-109.214**	**-85.0437**	**-89.6214**	**-48.22064864**
+17	**11.50719515**	***13.23793718***	***10.30725444***	**10.41414**	**10.41414**	**8.334719**	**8.334719**	**7.936128**	**8.353819**	**6.436779061**
-18	**-147.4016121**	***-125.3574421***	***-132.7384367***	**-101.193**	**-107.224**	**-100.048**	**-117.572**	**-94.6**	**-99.7357**	**-51.89955976**
+18	**7.013663886**	***6.530747652***	***6.34581835***	**5.191637**	**5.191637**	**4.155514**	**4.155514**	**3.959479**	**4.167873**	**4.022655277**
-19	**-157.763541**	***-133.1994917***	***-141.8870354***	**-106.851**	**-113.317**	**-105.794**	**-124.538**	**-102.013**	**-107.584**	**-54.96531591**
+19	**3.441506374**	***2.694799592***	***3.092343881***	**2.172959**	**2.172959**	**1.738966**	**1.738966**	**1.65522**	**1.742337**	**2.010889251**
-20	**-170.1422035**	***-142.7779633***	***-153.0165654***	**-113.64**	**-120.628**	**-112.69**	**-132.896**	**-110.908**	**-117.003**	**-58.64422199**
+20	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 55' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**84.09662498**	**97.74339**	**87.23833**	**73.47624554**	**68.30396379**	**91.93686**	**102.3157**	**108.5395**	**114.2198**
-1	**-1.532515238**	**-1.53485**	**-1.34517**	**-1.061111107**	**-1.914725755**	**-1.48014**	**-1.48065**	**-1.46658**	**-1.45382**
+1	**78.65883888**	**89.98719**	**79.13672**	**66.76250756**	**63.91850489**	**86.05505**	**95.60224**	**101.0541**	**105.9135**
-2	**-4.274584103**	**-4.28485**	**-3.43624**	**-2.664177225**	**-4.212395884**	**-4.12827**	**-4.13054**	**-4.10351**	**-4.079**
+2	**73.43435744**	**82.32691**	**71.97513**	**60.6088185**	**59.74092047**	**80.41312**	**89.12221**	**93.78793**	**97.80856**
-3	**-7.339612999**	**-7.35454**	**-5.87618**	**-4.582108221**	**-6.127119309**	**-7.08854**	**-7.09184**	**-7.15298**	**-7.04208**
+3	**69.08062231**	**75.50596**	**66.0414**	**55.51699988**	**56.25960501**	**75.71151**	**83.72219**	**87.73277**	**91.05448**
-4	**-11.01764817**	**-11.0382**	**-8.80815**	**-6.939651258**	**-8.424789636**	**-11.4615**	**-11.4672**	**-11.4363**	**-11.4083**
+4	**63.85614079**	**67.64469**	**58.92094**	**49.45031847**	**52.08202283**	**70.06958**	**77.24216**	**80.46658**	**82.94958**
-5	**-14.08267894**	**-14.1794**	**-11.2514**	**-8.964719979**	**-10.33951576**	**-15.1183**	**-15.5217**	**-15.4864**	**-15.4543**
+5	**59.50241012**	**61.32112**	**52.98721**	**44.43100639**	**48.60070545**	**65.36798**	**71.84213**	**74.41142**	**75.97127**
-6	**-17.76071367**	**-17.8631**	**-14.1834**	**-11.40926019**	**-14.14066509**	**-19.5065**	**-20.7476**	**-20.7138**	**-20.6833**
+6	**54.27792165**	**54.49803**	**46.36113**	**38.7878341**	**44.42312113**	**59.72605**	**65.25705**	**66.72196**	**67.41519**
-7	**-20.98208022**	**-20.9328**	**-16.6267**	**-13.48263184**	**-17.62198256**	**-23.5301**	**-25.1024**	**-25.0701**	**-25.0407**
+7	**49.48881276**	**48.81212**	**41.47455**	**34.62791872**	**40.94180193**	**54.69203**	**59.42207**	**60.48456**	**60.66111**
-8	**-25.98448987**	**-24.6164**	**-20.6034**	**-16.84566691**	**-21.79956246**	**-29.172**	**-30.5755**	**-30.5755**	**-30.5755**
+8	**44.2643312**	**41.98902**	**36.72565**	**30.4849117**	**36.41609029**	**48.91235**	**52.94204**	**53.21836**	**53.18451**
-9	**-30.3382262**	**-27.6861**	**-24.4429**	**-20.04073857**	**-25.28088269**	**-33.8736**	**-35.6689**	**-35.5918**	**-35.5591**
+9	**39.91059779**	**36.3858**	**32.88619**	**27.18439518**	**32.93477308**	**44.21074**	**47.54202**	**47.37317**	**47.34411**
-10	**-35.56271018**	**-32.0125**	**-29.0502**	**-23.91831478**	**-29.45846443**	**-39.5155**	**-42.149**	**-42.0216**	**-41.9907**
+10	**34.68611581**	**31.13244**	**28.27882**	**23.26726467**	**28.75718868**	**38.56882**	**41.06199**	**40.94337**	**40.91249**
-11	**-39.91644191**	**-36.3903**	**-32.8897**	**-27.18588703**	**-32.93978339**	**-44.2171**	**-47.549**	**-47.3797**	**-47.3504**
+11	**30.33238087**	**27.68292**	**24.43935**	**20.03924698**	**25.27586947**	**33.86721**	**35.66197**	**35.58521**	**35.5528**
-12	**-45.14092348**	**-43.1321**	**-37.4971**	**-31.15046274**	**-37.11736416**	**-49.8591**	**-54.029**	**-54.4368**	**-54.403**
+12	**25.10789999**	**23.99929**	**19.832**	**16.20911732**	**21.09829163**	**28.22528**	**29.6989**	**29.6989**	**29.6989**
-13	**-49.49465888**	**-48.818**	**-41.479**	**-34.62981848**	**-40.94681537**	**-54.5607**	**-59.429**	**-60.492**	**-60.669**
+13	**20.82162759**	**20.92959**	**16.62447**	**13.48168246**	**17.61697234**	**23.52367**	**25.0968**	**25.06473**	**25.03564**
-14	**-55.15451927**	**-55.6411**	**-47.3429**	**-39.62568115**	**-45.12439319**	**-60.6728**	**-66.344**	**-67.9403**	**-68.7739**
+14	**17.14359257**	**17.24596**	**13.69251**	**10.99759117**	**13.43938813**	**18.77018**	**19.87097**	**19.83725**	**19.80668**
-15	**-59.50824772**	**-61.8102**	**-52.9926**	**-44.43331262**	**-48.60571342**	**-65.3744**	**-71.8491**	**-74.4188**	**-75.8895**
+15	**14.07856324**	**14.17626**	**11.24921**	**8.963770274**	**10.41390018**	**15.11338**	**15.51611**	**15.48102**	**15.4492**
-16	**-64.73273472**	**-68.928**	**-60.1131**	**-50.46045456**	**-52.78329617**	**-71.0163**	**-78.3291**	**-81.685**	**-84.3083**
+16	**10.40052847**	**10.42106**	**8.317255**	**6.542483273**	**8.039090004**	**10.72521**	**10.73082**	**10.69997**	**10.67198**
-17	**-69.0864706**	**-75.3375**	**-66.0468**	**-55.51932619**	**-56.26461576**	**-75.7179**	**-83.7292**	**-87.7402**	**-91.0624**
+17	**7.335503429**	**7.351361**	**5.873957**	**4.581156456**	**6.124364513**	**7.084511**	**7.088022**	**7.062118**	**7.038615**
-18	**-74.31095186**	**-83.6102**	**-73.1673**	**-61.63345543**	**-60.44219423**	**-81.3598**	**-90.2092**	**-95.0064**	**-99.1673**
+18	**3.65746434**	**3.667728**	**2.945346**	**2.281509135**	**3.826696608**	**3.532187**	**3.534461**	**3.507429**	**3.482917**
-19	**-78.664687**	**-89.9938**	**-79.101**	**-66.76482778**	**-63.92351299**	**-86.0614**	**-95.6092**	**-101.062**	**-105.921**
+19	**1.530455006**	**1.533256**	**1.343894**	**1.060565022**	**1.911968203**	**1.478121**	**1.47874**	**1.46476**	**1.452085**
-20	**-83.88916783**	**-97.6541**	**-87.2351**	**-73.24716775**	**-68.10109717**	**-91.7034**	**-102.089**	**-108.328**	**-114.026**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 55' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	154.5621216	155.1200516	110.9704	135.0506	138.0056
-1	-1.569636198	-1.772277513	-1.75945	-1.83903	-1.56426
+1	139.1015517	141.1975198	101.4962	123.6816	125.7307
-2	-4.264284085	-4.017783895	-4.91232	-5.16436	-4.36784
+2	125.2608051	127.3632438	92.01513	112.3346	113.0304
-3	-7.393366114	-7.442388971	-8.43123	-8.91787	-7.54473
+3	114.309014	117.2668331	83.5107	102.099	103.6448
-4	-12.98496936	-12.05335395	-12.7229	-13.4221	-13.1035
+4	101.1668701	105.7508337	74.97573	91.85705	92.38211
-5	-17.67859424	-16.41190404	-16.2418	-17.8346	-17.9029
+5	90.85981625	96.15417601	67.87779	82.66475	82.91343
-6	-23.31094131	-21.64216477	-20.8961	-23.5513	-23.5342
+6	79.59510773	84.63817657	58.94624	72.53029	71.09303
-7	-28.00456552	-26.0007156	-25.3354	-28.2432	-28.227
+7	70.94137598	75.04151958	54.00866	64.08491	64.76533
-8	-33.63690553	-33.14888434	-30.7882	-33.8735	-35.2061
+8	61.55414076	64.46707629	48.84759	55.20665	58.19544
-9	-39.06259093	-39.87789657	-35.0891	-38.5653	-40.681
+9	53.73143616	56.07195186	44.5467	48.88276	52.72053
-10	-46.57239372	-48.48189816	-40.2501	-44.1956	-47.2509
+10	45.31492385	47.0468197	39.38564	43.25251	46.15062
-11	-53.73871283	-56.07321991	-44.551	-48.8875	-52.7258
+11	39.05675809	39.87681201	35.08475	38.56063	40.67571
-12	-63.12596055	-66.14736089	-49.7121	-56.527	-59.2957
+12	32.69381612	31.94485459	29.92369	32.93038	34.10581
-13	-70.94866847	-75.04296876	-54.013	-64.0934	-64.7706
+13	28.00019155	26.00005298	25.52545	28.29273	28.22245
-14	-81.48130368	-86.55896855	-60.3609	-74.2279	-72.8628
+14	22.36784351	20.76979814	20.03164	22.60824	22.59111
-15	-90.86855166	-96.15562553	-67.8849	-82.6732	-82.7563
+15	17.6742197	16.41125109	16.26832	17.91637	17.89833
-16	-103.3674164	-107.6716247	-76.3904	-93.5546	-94.2683
+16	12.04187174	11.18098316	12.01557	12.66759	12.16044
-17	-114.3192042	-117.2682812	-83.5186	-102.108	-103.654
+17	7.390454521	7.441846386	8.427691	8.914097	7.540194
-18	-127.4613667	-129.6707075	-93.5869	-114.221	-114.917
+18	3.635551532	3.562547443	4.205001	4.409894	3.739112
-19	-139.4726668	-141.1992623	-101.504	-123.691	-125.741
+19	1.568179848	1.772003483	1.757686	1.837139	1.562752
-20	-154.5330133	-155.0335539	-110.888	-134.952	-137.942
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.15E-13	*-2.12E-13*	*-1.45E-13*	-1.65E-13	-1.70E-13	-1.47E-13	-1.59E-13	-1.37E-13	-1.45E-13	-7.88E-14
End Shear	3.41E-13	*2.17E-13*	*2.44E-13*	2.00E-13	2.16E-13	1.44E-13	2.01E-13	1.63E-13	1.72E-13	1.09E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	437.1484655	*370.2643605*	*393.4921583*	293.8169911	311.5970484	290.911948	342.452089	280.5136158	295.8346285	151.1509523
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	824.2114114	*703.2774135*	*741.9589572*	556.5165298	589.6829941	550.2186335	646.5947683	520.2578334	548.501659	285.4402282
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	1148.54317	*991.5408809*	*1034.034831*	779.4416421	825.2418185	769.7262405	904.1863428	709.9307029	748.2095651	397.8093645
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	1431.126573	*1245.729118*	*1288.578435*	976.1163794	1031.917251	961.3742119	1124.732481	860.4221593	906.32046	496.6891663
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	1646.400496	*1452.246257*	*1481.853198*	1131.444665	1195.211632	1113.746232	1301.737504	994.2529552	1048.503823	570.9646432
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	1820.745375	*1627.355082*	*1639.858507*	1258.799513	1326.702744	1233.957231	1465.334258	1099.825765	1161.625491	633.7467699
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	1938.955048	*1755.010956*	*1745.085935*	1347.847413	1418.690073	1339.50122	1582.959707	1170.117717	1234.681087	671.0300226
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	2041.791792	*1848.155315*	*1838.249023*	1411.631463	1496.424345	1414.685073	1666.106756	1216.097194	1284.366095	696.6130322
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	2082.292722	*1896.950027*	*1874.380799*	1454.96926	1537.435544	1448.680403	1700.845772	1211.721911	1280.79365	698.2210594
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	2075.640979	*1907.281256*	*1868.262389*	1467.298197	1546.959175	1456.548475	1697.079994	1170.846785	1238.800316	685.3597238
-11	-2.67E-13	*-2.09E-13*	*-2.40E-13*	-1.71E-13	-1.71E-13	-1.37E-13	-1.37E-13	-1.30E-13	-1.37E-13	-1.58E-13
+11	2082.928176	*1897.04693*	*1875.053236*	1454.913197	1537.394766	1448.678439	1700.819696	1211.678452	1280.780028	698.2299827
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	2044.761534	*1848.349201*	*1839.914253*	1411.638318	1496.444805	1414.726717	1666.184833	1216.079831	1284.346247	696.6423591
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	1939.18558	*1755.059423*	*1745.182099*	1347.917064	1418.77162	1339.521409	1583.011814	1170.126377	1234.688502	671.0316561
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	1820.703354	*1627.500482*	*1639.025927*	1258.93189	1326.845306	1233.955924	1465.360287	1099.907826	1161.710039	633.7687146
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	1645.626585	*1452.246256*	*1481.372882*	1131.470106	1195.245554	1113.788582	1301.73754	994.2666363	1048.516259	570.9589343
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	1432.928136	*1245.826144*	*1289.517883*	976.2047342	1032.012387	961.4601527	1124.73239	860.4122729	906.3105764	496.7038266
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	1150.011842	*991.4924384*	*1034.8995*	779.4229984	825.228263	769.7255784	904.1993026	709.899656	748.1772761	397.8204226
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	825.5005907	*703.3258332*	*742.5352418*	556.5606325	589.7304955	550.2615372	646.6467869	520.3000054	548.5463137	285.44749
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	437.8397073	*370.2886041*	*393.7803218*	293.8390643	311.6208227	290.9334558	342.4781682	280.5347562	295.8570132	151.1546047
-20	-2.79E-13	*-2.19E-13*	*-1.91E-13*	-1.67E-13	-1.67E-13	-1.33E-13	-1.50E-13	-1.26E-13	-1.33E-13	-9.08E-14
+20	3.56E-13	*2.06E-13*	*2.57E-13*	2.13E-13	2.29E-13	1.41E-13	1.67E-13	1.50E-13	1.59E-13	1.07E-13

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.30E-13	-1.17E-13	-1.07E-13	-9.21E-14	-8.31E-14	-1.19E-13	-1.36E-13	-1.40E-13	-1.44E-13
End Shear	1.55E-13	1.39E-13	1.32E-13	1.10E-13	1.28E-13	1.13E-13	1.09E-13	1.09E-13	1.11E-13
-1	0	0	0	0	0	0	0	0	0
+1	216.3118069	247.4647678	219.0065947	184.6300208	175.7758885	236.6513846	262.9061673	278.1999435	291.6393759
-2	0	0	0	0	0	0	0	0	0
+2	408.6780651	459.819889	405.0709012	342.560036	332.4045184	447.4439181	496.1121896	522.8613262	545.9070562
-3	0	0	0	0	0	0	0	0	0
+3	570.3956637	628.4488203	551.8880507	469.5982651	464.1417413	625.5636996	692.3413932	746.8327157	783.4285948
-4	0	0	0	0	0	0	0	0	0
+4	711.9957761	764.5013544	666.4536706	569.9693011	580.5611663	781.1089758	861.5438193	944.0416175	985.2560729
-5	0	0	0	0	0	0	0	0	0
+5	822.182883	863.5537291	764.3259241	655.3545504	668.8038092	904.1244671	994.8247909	1100.275771	1168.656633
-6	0	0	0	0	0	0	0	0	0
+6	909.9531301	946.9353836	831.9435625	715.9342789	744.4698841	1001.110402	1108.610601	1226.234194	1318.025381
-7	0	0	0	0	0	0	0	0	0
+7	969.1473942	996.2587713	860.743467	745.4395695	791.1912044	1081.808016	1197.911518	1311.956541	1422.21723
-8	0	0	0	0	0	0	0	0	0
+8	1020.091649	1021.901829	875.4636464	761.7277988	823.7519477	1141.627063	1258.782683	1382.709812	1490.702476
-9	0	0	0	0	0	0	0	0	0
+9	1042.756354	1008.50863	911.2425407	792.2284261	829.2412173	1168.346537	1281.494758	1418.449323	1528.799809
-10	0	0	0	0	0	0	0	0	0
+10	1043.20859	966.3370567	923.1598306	801.6927185	817.4980431	1173.058971	1277.380916	1423.069074	1542.694184
-11	-1.21E-13	-1.21E-13	-9.59E-14	-7.25E-14	-1.51E-13	-1.16E-13	-1.16E-13	-7.88E-14	-7.88E-14
+11	1042.73133	1008.479521	911.2596835	792.2258251	829.213674	1168.338718	1281.45698	1418.436275	1528.762725
-12	0	0	0	0	0	0	0	0	0
+12	1020.050521	1021.856507	875.4390864	761.74346	823.710581	1141.656995	1258.725806	1382.726314	1490.691281
-13	0	0	0	0	0	0	0	0	0
+13	969.1467342	996.2409123	860.7250835	745.4448131	791.2119439	1081.820395	1197.940581	1311.952548	1422.231916
-14	0	0	0	0	0	0	0	0	0
+14	910.0495211	946.8695236	831.9101525	715.946197	744.5524877	1001.10519	1108.620488	1226.309786	1318.065981
-15	0	0	0	0	0	0	0	0	0
+15	822.2066418	863.5134498	764.3084107	655.3601881	668.7969198	904.1570375	994.8680561	1100.280926	1168.675532
-16	0	0	0	0	0	0	0	0	0
+16	712.0601979	764.4866893	666.4519598	569.9685693	580.6163495	781.1792973	861.6204911	944.0763397	985.2532773
-17	0	0	0	0	0	0	0	0	0
+17	570.3873312	628.4159312	551.8714685	469.6042845	464.1830693	625.561085	692.3463891	746.8469797	783.4264896
-18	0	0	0	0	0	0	0	0	0
+18	408.7101801	459.8562065	405.0393288	342.5727412	332.4319749	447.479019	496.150468	522.855113	545.9056337
-19	0	0	0	0	0	0	0	0	0
+19	216.3279119	247.4829727	218.9907342	184.6363535	175.7896476	236.6689778	262.9253931	278.1968379	291.6386945
-20	-1.38E-13	-1.16E-13	-1.17E-13	-9.96E-14	-9.71E-14	-1.13E-13	-1.28E-13	-1.25E-13	-1.23E-13
+20	1.44E-13	1.15E-13	1.17E-13	9.12E-14	1.36E-13	1.15E-13	1.70E-13	1.67E-13	1.90E-13

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-1.44E-13**	**-1.82E-13**	**-1.36E-13**	**-1.51E-13**	**-1.52E-13**
End Shear	**1.68E-13**	**2.28E-13**	**1.50E-13**	**1.66E-13**	**1.47E-13**
-1	**0**	**0**	**0**	**0**	**0**
+1	**383.5298215**	**390.7889752**	**279.1146125**	**340.1245365**	**345.7594858**
-2	**0**	**0**	**0**	**0**	**0**
+2	**706.4045595**	**718.0975047**	**515.2203593**	**628.6384322**	**635.3056424**
-3	**0**	**0**	**0**	**0**	**0**
+3	**966.5330045**	**980.1087016**	**698.1540031**	**856.507699**	**862.7003327**
-4	**0**	**0**	**0**	**0**	**0**
+4	**1202.567503**	**1222.331819**	**853.7153802**	**1056.591948**	**1064.839575**
-5	**0**	**0**	**0**	**0**	**0**
+5	**1372.093571**	**1415.129884**	**988.698944**	**1208.571009**	**1218.945021**
-6	**0**	**0**	**0**	**0**	**0**
+6	**1492.811429**	**1582.097986**	**1082.337803**	**1320.858347**	**1354.578021**
-7	**0**	**0**	**0**	**0**	**0**
+7	**1594.330117**	**1705.494877**	**1141.350673**	**1383.715676**	**1425.513734**
-8	**0**	**0**	**0**	**0**	**0**
+8	**1665.715449**	**1789.29267**	**1171.97026**	**1418.015143**	**1452.322614**
-9	**0**	**0**	**0**	**0**	**0**
+9	**1695.146397**	**1842.155306**	**1149.806597**	**1413.494241**	**1445.848177**
-10	**0**	**0**	**0**	**0**	**0**
+10	**1697.081584**	**1865.856881**	**1142.793363**	**1363.467771**	**1430.342281**
-11	**-1.23E-13**	**-1.14E-13**	**-1.38E-13**	**-1.23E-13**	**-1.23E-13**
+11	**1695.158497**	**1842.154204**	**1149.763425**	**1413.488252**	**1445.846097**
-12	**0**	**0**	**0**	**0**	**0**
+12	**1665.699416**	**1789.29434**	**1171.905369**	**1418.028987**	**1452.247848**
-13	**0**	**0**	**0**	**0**	**0**
+13	**1594.326117**	**1705.492037**	**1141.337089**	**1383.706097**	**1425.494968**
-14	**0**	**0**	**0**	**0**	**0**
+14	**1492.819466**	**1582.090486**	**1082.327046**	**1320.825468**	**1354.615449**
-15	**0**	**0**	**0**	**0**	**0**
+15	**1372.07352**	**1415.12751**	**988.7151919**	**1208.571108**	**1218.945079**
-16	**0**	**0**	**0**	**0**	**0**
+16	**1202.59961**	**1222.327945**	**853.7587092**	**1056.52279**	**1065.064073**
-17	**0**	**0**	**0**	**0**	**0**
+17	**966.5370378**	**980.105695**	**698.1215692**	**856.4990056**	**862.69196**
-18	**0**	**0**	**0**	**0**	**0**
+18	**706.3804365**	**718.0921743**	**515.2147423**	**628.6468738**	**635.2764816**
-19	**0**	**0**	**0**	**0**	**0**
+19	**383.549744**	**390.7863362**	**279.136306**	**340.1505919**	**345.7865689**
-20	**-1.48E-13**	**-1.49E-13**	**-1.55E-13**	**-1.64E-13**	**-1.38E-13**
+20	**2.06E-13**	**2.14E-13**	**1.72E-13**	**1.93E-13**	**1.78E-13**

1-Span: Shear (Max and Min) Raw Data Results - 55’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	59.78182	43.60727	50.68364	45.23636	39.47727	35.41818	47.67273	53.05455	56.28182	59.22727
-1	-1.45455	-0.79467	-0.79588	-0.69752	-0.55361	-0.99286	-0.76751	-0.76777	-0.76048	-0.75386
+1	55.73182	40.78758	46.66175	41.03537	35.85046	33.14416	44.62279	49.57337	52.40038	54.92012
-2	-3.2	-2.21653	-2.22186	-1.78182	-1.39636	-2.18429	-2.14066	-2.14184	-2.12783	-2.11512
+2	51.82418	38.07848	42.68961	37.32182	32.52217	30.97792	41.69724	46.21323	48.63258	50.71743
-3	-4.65454	-3.80587	-3.81361	-3.04702	-2.40667	-3.17714	-3.67568	-3.67739	-3.70909	-3.65159
+3	48.56782	35.82091	39.15269	34.24496	29.7736	29.17273	39.25928	43.41311	45.49275	47.21518
-4	-6.4	-5.71307	-5.72371	-4.56736	-3.65554	-4.36857	-5.94324	-5.94615	-5.93016	-5.91564
+4	44.66018	33.11182	35.07632	30.55273	26.50531	27.00649	36.33372	40.05297	41.72496	43.01249
-5	-7.85455	-7.3024	-7.35258	-5.8343	-4.73381	-5.36143	-7.83943	-8.0486	-8.03027	-8.01364
+5	41.40382	30.85424	31.79732	27.47587	23.80675	25.2013	33.89576	37.25286	38.58513	39.39397
-6	-10.9585	-9.2096	-9.26268	-7.35463	-6.04267	-7.33247	-10.1149	-10.7584	-10.7409	-10.7251
+6	37.49618	28.14515	28.25929	24.04	20.77296	23.03506	30.97021	33.83824	34.59785	34.95732
-7	-13.8531	-10.88	-10.8544	-8.62157	-7.1584	-9.13766	-12.2012	-13.0166	-12.9998	-12.9846
+7	34.23982	25.66182	25.31092	21.50612	18.53242	21.22987	28.35988	30.81259	31.36352	31.45508
-8	-17.3265	-13.4739	-12.7645	-10.6836	-8.95842	-11.3039	-15.1268	-15.8545	-15.8545	-15.8545
+8	30.09219	22.95273	21.77289	19.04363	16.29141	18.88312	25.3629	27.45244	27.59573	27.57817
-9	-20.2211	-15.7315	-14.3563	-12.6745	-10.6682	-13.1091	-17.5647	-18.4957	-18.4557	-18.4387
+9	26.75018	20.69515	18.86741	17.05273	14.50892	17.07792	22.92494	24.65233	24.56477	24.54971
-10	-23.6945	-18.4406	-16.5997	-15.0636	-12.7499	-15.2753	-20.4903	-21.8558	-21.7898	-21.7738
+10	23.22764	17.98606	16.14334	14.66364	12.39992	14.91169	19.99939	21.29219	21.23068	21.21467
-11	-26.8582	-20.6982	-18.8698	-17.0545	-14.5097	-17.0805	-22.9283	-24.6559	-24.5682	-24.553
+11	20.33309	15.72848	14.35464	12.67272	10.66742	13.10649	17.56143	18.49208	18.45227	18.43547
-12	-30.7658	-23.4073	-22.3656	-19.4436	-16.6514	-19.2468	-25.8538	-28.0161	-28.2276	-28.21
+12	16.85964	13.01939	12.44454	10.28364	8.618422	10.94026	14.63587	15.4	15.4	15.4
-13	-34.0222	-25.6648	-25.314	-21.5084	-18.5334	-21.2325	-28.2918	-30.8162	-31.3674	-31.4592
+13	13.88501	10.7968	10.85278	8.620412	7.157904	9.135065	12.19791	13.01364	12.99701	12.98192
-14	-37.9298	-28.5997	-28.852	-24.5491	-21.2248	-23.3987	-31.4611	-34.4019	-35.2296	-35.6619
+14	10.28364	8.889599	8.942681	7.100082	5.821764	6.96883	9.733048	10.30385	10.28636	10.27051
-15	-41.1862	-30.8573	-32.0509	-27.4787	-23.8079	-25.2039	-33.8991	-37.2565	-38.589	-39.3516
+15	7.854546	7.300266	7.350928	5.83314	4.733316	5.4	7.836856	8.045687	8.027494	8.010994
-16	-45.3818	-33.5664	-35.7418	-31.1709	-27.049	-27.3701	-36.8246	-40.6166	-42.3568	-43.717
+16	6.093819	5.393066	5.403711	4.31281	3.44463	4.168571	5.561427	5.564337	5.548339	5.533826
-17	-48.3502	-35.8239	-39.0654	-34.2478	-29.7748	-29.1753	-39.2626	-43.4167	-45.4966	-47.2193
+17	4.646544	3.803735	3.811958	3.045868	2.406179	3.175714	3.673586	3.675407	3.661974	3.649787
-18	-52.5034	-38.533	-43.3551	-37.94	-33.0758	-31.3416	-42.1881	-46.7769	-49.2644	-51.422
+18	2.893089	1.896533	1.901856	1.527273	1.195455	1.984287	1.831572	1.832751	1.818734	1.806024
-19	-55.8398	-40.7906	-46.6652	-41.0169	-35.8517	-33.1468	-44.6261	-49.577	-52.4042	-54.9242
+19	1.445819	0.793599	0.795051	0.696859	0.553326	0.991428	0.766462	0.766782	0.759533	0.752961
-20	-59.7475	-43.4997	-50.6373	-45.2347	-39.3585	-35.313	-47.5517	-52.9371	-56.172	-59.1269
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 55' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**59.78182**	***59.09091***	***62.72727***	***58.58182***	***69.09091***	***57.56364***	***60.72727***	***30.48561***
-1	**-1.45455**	***-1.12836***	***-1.12836***	***-0.90295***	***-0.90295***	***-0.85918***	***-0.90441***	***-1.04318***
+1	**55.73182**	***55.40189***	***58.75448***	***54.85412***	***64.57248***	***52.89342***	***55.78233***	***28.5009***
-2	**-3.2**	***-3.14661***	***-3.14661***	***-2.51843***	***-2.51843***	***-2.39859***	***-2.52484***	***-2.29499***
+2	**51.82418**	***51.8814***	***54.96319***	***51.27844***	***60.23833***	***48.28095***	***50.89855***	***26.59325***
-3	**-4.65454**	***-5.40333***	***-5.40333***	***-4.32432***	***-4.36364***	***-4.11696***	***-4.33365***	***-3.33817***
+3	**48.56782**	***48.94766***	***51.80378***	***48.29871***	***56.62654***	***44.1924***	***46.571***	***25.00353***
-4	**-6.4**	***-8.1114***	***-8.1114***	***-7.23612***	***-7.55528***	***-6.17901***	***-6.50422***	***-4.58998***
+4	**44.66018**	***45.42718***	***48.01248***	***44.72303***	***52.29238***	***39.44039***	***41.53795***	***23.09588***
-5	**-7.85455**	***-10.3681***	***-10.3681***	***-9.67408***	***-10.2641***	***-7.93744***	***-8.3552***	***-5.63315***
+5	**41.40382**	***42.49344***	***44.85307***	***41.74331***	***48.68059***	***35.897***	***37.78632***	***21.50617***
-6	**-10.9585**	***-13.4536***	***-13.5794***	***-12.5996***	***-13.5147***	***-10.0764***	***-10.619***	***-6.88497***
+6	**37.49618**	***38.97295***	***41.06178***	***38.16763***	***44.34644***	***31.77292***	***33.44517***	***19.59852***
-7	**-13.8531**	***-16.3873***	***-16.7388***	***-15.2278***	***-16.5405***	***-12.2018***	***-12.88***	***-7.92814***
+7	**34.23982**	***36.03921***	***37.90237***	***34.98511***	***40.53186***	***28.09134***	***29.56983***	***18.00881***
-8	**-17.3265**	***-19.9078***	***-20.5301***	***-18.8034***	***-20.8747***	***-14.9157***	***-15.7678***	***-9.42506***
+8	**30.09219**	***32.22535***	***33.79513***	***31.31425***	***36.03931***	***23.94676***	***25.31326***	***16.10115***
-9	**-20.2211**	***-22.8415***	***-23.6895***	***-21.7832***	***-24.4865***	***-17.0901***	***-18.0804***	***-11.0148***
+9	**26.75018**	***29.29161***	***30.63572***	***28.33452***	***32.42752***	***21.76366***	***23.05225***	***14.51144***
-10	**-23.6945**	***-26.362***	***-27.4808***	***-25.3588***	***-28.8206***	***-19.6405***	***-20.7936***	***-12.9224***
+10	**23.22764**	***25.77112***	***26.84443***	***24.75885***	***28.09337***	***19.21324***	***20.33903***	***12.60379***
-11	**-26.8582**	***-29.2958***	***-30.6402***	***-28.3386***	***-32.4324***	***-21.7659***	***-23.0546***	***-14.5121***
+11	**20.33309**	***22.83739***	***23.68502***	***21.77912***	***24.48157***	***17.08789***	***18.07802***	***11.01408***
-12	**-30.7658**	***-32.8163***	***-34.4315***	***-31.9143***	***-36.7666***	***-24.6377***	***-25.9344***	***-16.4198***
+12	**16.85964**	***19.3169***	***19.89373***	***18.20344***	***20.14742***	***14.48861***	***15.31338***	***9.106427***
-13	**-34.0222**	***-36.0434***	***-37.9069***	***-34.894***	***-40.4017***	***-28.0744***	***-29.552***	***-18.0095***
+13	**13.88501**	***16.38316***	***16.73431***	***15.22371***	***16.53563***	***12.19958***	***12.87769***	***7.92769***
-14	**-37.9298**	***-39.5639***	***-41.6981***	***-38.7676***	***-45.0737***	***-32.4638***	***-34.1724***	***-19.9172***
+14	**10.28364**	***12.86267***	***12.94302***	***12.10872***	***12.96929***	***9.65403***	***10.16448***	***6.675877***
-15	**-41.1862**	***-42.4976***	***-44.8576***	***-41.7474***	***-48.6855***	***-35.9273***	***-37.8182***	***-21.5069***
+15	**7.854546**	***10.36491***	***10.36491***	***9.670763***	***10.26044***	***7.935661***	***8.353327***	***5.632701***
-16	**-45.3818**	***-46.0181***	***-48.6488***	***-45.323***	***-53.0197***	***-40.2131***	***-42.3561***	***-23.4145***
+16	**6.093819**	***7.65685***	***7.65685***	***6.745211***	***7.009831***	***5.833552***	***6.140581***	***4.380889***
-17	**-48.3502**	***-48.9518***	***-51.8083***	***-48.3028***	***-56.6314***	***-44.0984***	***-46.4721***	***-25.0042***
+17	**4.646544**	***5.400127***	***5.400127***	***4.321866***	***4.321866***	***4.115182***	***4.33177***	***3.337713***
-18	**-52.5034**	***-52.4723***	***-55.5996***	***-51.8784***	***-60.9656***	***-49.0537***	***-51.7167***	***-26.9119***
+18	**2.893089**	***2.69206***	***2.69206***	***2.154791***	***2.154791***	***2.053139***	***2.161199***	***2.085899***
-19	**-55.8398**	***-55.406***	***-58.759***	***-54.8582***	***-64.5774***	***-52.8974***	***-55.7866***	***-28.5016***
+19	**1.445819**	***1.126761***	***1.126761***	***0.90172***	***0.90172***	***0.858294***	***0.903467***	***1.042722***
-20	**-59.7475**	***-58.9265***	***-62.5503***	***-58.4338***	***-68.9115***	***-57.5099***	***-60.6703***	***-30.4092***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 55’ Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	59.78182	89.39394	89.71663	64.18182	78.10909	79.81818
-1	-1.45455	-0.90783	-1.02503	-1.01761	-1.06364	-0.90472
+1	55.73182	80.45203	81.66427	58.70227	71.53363	72.71875
-2	-3.2	-2.46633	-2.32376	-2.84114	-2.98691	-2.52622
+2	51.82418	72.44697	73.66295	53.2187	64.97086	65.37325
-3	-4.65454	-4.27609	-4.30445	-4.87636	-5.15782	-4.36364
+3	48.56782	66.11279	67.8235	48.3	59.05091	59.94494
-4	-6.4	-7.5101	-6.97129	-7.35852	-7.76291	-7.57867
+4	44.66018	58.51178	61.163	43.36364	53.12727	53.43095
-5	-7.85455	-10.2248	-9.49214	-9.39375	-10.315	-10.3545
+5	41.40382	52.5505	55.61259	39.25841	47.81073	47.95456
-6	-10.9585	-13.4823	-12.5172	-12.0857	-13.6214	-13.6114
+6	37.49618	46.03534	48.9521	34.09268	41.94927	41.11801
-7	-13.8531	-16.197	-15.038	-14.6532	-16.335	-16.3256
+7	34.23982	41.03029	43.40169	31.23693	37.06473	37.45826
-8	-17.3265	-19.4545	-19.1723	-17.8069	-19.5914	-20.3621
+8	30.09219	35.60101	37.28576	28.25193	31.92982	33.65844
-9	-20.2211	-22.5926	-23.0641	-20.2944	-22.305	-23.5286
+9	26.75018	31.0766	32.43028	25.76443	28.27227	30.49192
-10	-23.6945	-26.936	-28.0404	-23.2794	-25.5614	-27.3285
+10	23.22764	26.20875	27.21042	22.77943	25.01591	26.69209
-11	-26.8582	-31.0808	-32.431	-25.7669	-28.275	-30.495
+11	20.33309	22.58922	23.06351	20.29193	22.30227	23.52557
-12	-30.7658	-36.5101	-38.2576	-28.7519	-32.6935	-34.2948
+12	16.85964	18.90909	18.47591	17.30693	19.04591	19.72574
-13	-34.0222	-41.0345	-43.4025	-31.2394	-37.0696	-37.4613
+13	13.88501	16.19444	15.03762	14.76313	16.36364	16.32299
-14	-37.9298	-47.1263	-50.063	-34.9109	-42.9311	-42.1416
+14	10.28364	12.93687	12.01261	11.58568	13.07591	13.066
-15	-41.1862	-52.5556	-55.6134	-39.2625	-47.8156	-47.8637
+15	7.854546	10.22222	9.491759	9.409091	10.36227	10.35184
-16	-45.3818	-59.7845	-62.2739	-44.1818	-54.1091	-54.5219
+16	6.093819	6.964645	6.466734	6.949433	7.326542	7.033223
-17	-48.3502	-66.1187	-67.8243	-48.3045	-59.0564	-59.9502
+17	4.646544	4.27441	4.304133	4.874315	5.155637	4.361014
-18	-52.5034	-73.7197	-74.9975	-54.1278	-66.0618	-66.4642
+18	2.893089	2.10269	2.060467	2.432042	2.550546	2.162587
-19	-55.8398	-80.6667	-81.6653	-58.7068	-71.5391	-72.7244
+19	1.445819	0.906987	1.024872	1.016591	1.062544	0.903847
-20	-59.7475	-89.3771	-89.6666	-64.1341	-78.0518	-79.7813
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**			**Moment Z (kips-ft)**						
-0	**-8.70E-14**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**1.40E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**153.2625**	**112.1658**	**128.3198**	**113.5632**	**99.3013**	**91.1464**	**122.7127**	**136.3268**	**144.2572**	**151.2260**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**288.615**	**211.9150**	**238.4340**	**210.0445**	**184.3854**	**172.3643**	**232.0166**	**257.2529**	**271.1233**	**283.0734**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**400.6845**	**295.7717**	**325.8744**	**286.1748**	**253.0726**	**240.6750**	**324.3784**	**359.0051**	**387.2609**	**406.2373**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**498.426**	**369.1967**	**396.4228**	**345.5814**	**307.5596**	**301.0429**	**405.0345**	**446.7430**	**489.5212**	**510.8924**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**570.9175**	**426.3328**	**447.7852**	**396.3318**	**353.8976**	**346.8000**	**468.8226**	**515.8542**	**570.5345**	**605.9925**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**629.433**	**471.8450**	**491.0217**	**431.3941**	**387.0008**	**386.0357**	**519.1135**	**574.8564**	**635.8487**	**683.4459**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**667.4995**	**502.5395**	**516.5978**	**446.3280**	**403.6123**	**410.2625**	**560.9583**	**621.1623**	**680.2990**	**737.4733**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**702.5701**	**528.9560**	**529.8946**	**453.9609**	**412.9981**	**427.1465**	**591.9767**	**652.7263**	**716.9872**	**772.9855**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**714.5275**	**540.7085**	**522.9498**	**472.5136**	**429.3752**	**429.9929**	**605.8318**	**664.5034**	**735.5195**	**792.7404**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**709.835**	**540.9430**	**501.0822**	**478.6932**	**434.4720**	**423.9036**	**608.2753**	**662.3702**	**737.9150**	**799.9451**
-11	**-1.14E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**714.8005**	**540.6955**	**522.9347**	**472.5225**	**429.3739**	**429.9786**	**605.8277**	**664.4838**	**735.5127**	**792.7211**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**703.846**	**528.9347**	**529.8711**	**453.9482**	**413.0063**	**427.1250**	**591.9922**	**652.6968**	**716.9958**	**772.9797**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**667.5985**	**502.5391**	**516.5885**	**446.3184**	**403.6150**	**410.2732**	**560.9647**	**621.1774**	**680.2969**	**737.4809**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**629.415**	**471.8950**	**490.9876**	**431.3768**	**387.0070**	**386.0786**	**519.1108**	**574.8615**	**635.8879**	**683.4669**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**570.585**	**426.3452**	**447.7643**	**396.3227**	**353.9005**	**346.7964**	**468.8395**	**515.8766**	**570.5372**	**606.0024**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**499.2001**	**369.2301**	**396.4152**	**345.5805**	**307.5592**	**301.0715**	**405.0709**	**446.7827**	**489.5392**	**510.8910**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**401.3155**	**295.7673**	**325.8574**	**286.1662**	**253.0757**	**240.6964**	**324.3770**	**359.0077**	**387.2683**	**406.2362**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**289.1689**	**211.9316**	**238.4528**	**210.0282**	**184.3920**	**172.3785**	**232.0348**	**257.2727**	**271.1201**	**283.0727**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**153.5595**	**112.1742**	**128.3293**	**113.5550**	**99.3045**	**91.1536**	**122.7218**	**136.3367**	**144.2556**	**151.2257**
-20	**-1.14E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**1.43E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-8.70E-14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	153.2625	152.3552	161.5748	150.8488	177.5743	145.4569	153.4014	78.3775
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	288.615	288.5748	305.7729	285.3091	335.2838	269.7733	284.4188	148.0115
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	400.6845	404.1699	427.9190	399.1321	468.8547	368.1259	387.9749	206.2792
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	498.426	506.1532	535.0880	498.5088	583.2162	446.1613	469.9613	257.5521
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	570.9175	586.6967	619.7623	577.5194	675.0000	515.5577	543.6888	296.0667
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	629.433	652.7350	687.9454	639.8534	759.8311	570.3011	602.3466	328.6216
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	667.4995	698.9097	735.6443	694.5819	820.8243	606.7502	640.2287	347.9544
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	702.5701	731.9842	775.9525	733.5676	863.9392	630.5923	665.9923	361.2201
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	714.5275	754.4564	797.2183	751.1954	881.9527	628.3235	664.1398	362.0540
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	709.835	760.8495	802.1567	755.2753	880.0000	607.1282	642.3647	355.3849
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	714.8005	754.4274	797.1972	751.1944	881.9392	628.3010	664.1328	362.0586
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	703.846	731.9877	775.9631	733.5892	863.9797	630.5833	665.9820	361.2353
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	667.5985	698.9458	735.6866	694.5924	820.8513	606.7547	640.2326	347.9552
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	629.415	652.8037	688.0193	639.8527	759.8446	570.3437	602.3905	328.6330
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	570.585	586.7099	619.7799	577.5414	675.0000	515.5648	543.6952	296.0637
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	499.2001	506.1990	535.1374	498.5534	583.2162	446.1562	469.9562	257.5597
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	401.3155	404.1602	427.9120	399.1317	468.8614	368.1098	387.9581	206.2849
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	289.1689	288.5977	305.7975	285.3314	335.3108	269.7952	284.4420	148.0153
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	153.5595	152.3666	161.5872	150.8600	177.5878	145.4679	153.4130	78.3794
-20	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.43E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 55' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-8.70E-14	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	153.2625	221.8218	226.0202	161.4312	196.7175	199.9766
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	288.615	408.5625	415.3253	297.9875	363.5850	367.4411
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	400.6845	559.0127	566.8645	403.7906	495.3775	498.9591
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	498.426	695.5278	706.9588	493.7625	611.1000	615.8702
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	570.9175	793.5764	818.4673	571.8328	699.0000	705.0000
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	629.433	863.3959	915.0364	625.9906	763.9435	783.4459
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	667.4995	922.1111	986.4054	660.1218	800.2983	824.4730
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	702.5701	963.3982	1034.8714	677.8313	820.1360	839.9784
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	714.5275	980.4201	1065.4455	665.0125	817.5212	836.2338
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	709.835	981.5394	1079.1538	660.9563	788.5875	827.2656
-11	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	714.8005	980.4271	1065.4449	664.9875	817.5178	836.2326
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	703.846	963.3889	1034.8724	677.7937	820.1440	839.9351
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	667.5985	922.1088	986.4037	660.1140	800.2927	824.4621
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	629.415	863.4005	915.0321	625.9844	763.9245	783.4676
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	570.585	793.5648	818.4659	571.8422	699.0001	705.0000
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	499.2001	695.5463	706.9566	493.7876	611.0600	616.0000
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	401.3155	559.0151	566.8628	403.7719	495.3725	498.9543
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	289.1689	408.5485	415.3223	297.9842	363.5899	367.4242
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	153.5595	221.8333	226.0187	161.4438	196.7326	199.9922
-20	-1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.43E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 60' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	175.3919986	*146.3758328*	*157.8527981*	114.9065	122.1383	114.1672	134.995	115.4207	121.8169	59.52502777
-1	-3.173334812	*-2.475830428*	*-2.856001329*	-1.99564	-1.99564	-1.59691	-1.59691	-1.51925	-1.59921	-1.844367856
+1	163.4403765	*136.8903555*	*147.0544967*	108.3674	115.0962	107.5581	126.984	107.1342	113.0429	56.01286185
-2	-7.812001754	*-8.03281619*	*-7.030801572*	-6.3649	-6.3649	-5.09385	-5.09385	-4.84961	-5.10485	-4.426481026
+2	150.0854292	*126.5280341*	*135.0491831*	101.1032	107.2733	100.1804	118.0413	97.61892	102.9679	52.07794688
-3	-11.26533212	*-13.19447075*	*-10.13879889*	-10.3562	-10.3562	-8.48845	-8.5745	-7.8881	-8.30326	-6.270845598
+3	140.6861831	*119.2663763*	*126.5999685*	95.91459	101.6856	94.91058	111.6536	90.8223	95.77153	49.26729488
-4	-16.29599908	*-20.61679317*	*-14.65572553*	-15.944	-15.944	-14.5248	-15.2815	-12.142	-12.781	-8.852958833
+4	127.7232324	*109.296057*	*114.9474568*	88.65047	93.86266	87.53285	102.7109	80.62737	84.97689	45.33237833
-5	-20.47857713	*-26.05845402*	*-18.52807325*	-19.9352	-19.9352	-18.8364	-20.0723	-15.2628	-16.0661	-10.69732598
+5	118.6039822	*102.3143952*	*106.7502288*	83.46181	88.27487	82.26303	96.32328	73.83074	77.78046	42.52172279
-6	-30.20453393	*-33.87277643*	*-27.26885998*	-26.9123	-27.3754	-25.0705	-26.999	-20.0841	-21.1883	-13.27943851
+6	106.033033	*92.7360747*	*95.45051833*	76.19769	80.45196	74.8853	87.38058	64.70638	68.11198	38.58680927
-7	-37.29164128	*-39.59443215*	*-33.63828128*	-32.101	-32.9632	-30.0986	-33.0937	-23.8423	-25.1863	-15.12380232
+7	97.19377215	*86.034412*	*87.50529042*	71.00903	74.86418	69.61549	80.99293	58.53965	61.62069	35.77615373
-8	-47.40959807	*-47.80075269*	*-42.73187012*	-39.3651	-40.7861	-37.4764	-42.0364	-29.21	-30.8997	-18.91338042
+8	84.83753077	*76.84809147*	*75.93395216*	63.22604	66.4825	61.71078	71.41146	49.64565	52.25857	31.84123633
-9	-54.77670548	*-53.80241541*	*-49.35329147*	-44.5537	-46.3739	-42.7462	-48.4241	-33.2376	-35.1813	-21.72403343
+9	75.7606519	*70.42643404*	*68.24073968*	58.03738	60.89472	56.44097	65.02381	43.56866	45.86175	29.03058337
-10	-65.8629954	*-62.40073594*	*-59.32359072*	-51.8179	-54.1968	-50.1239	-57.3668	-38.499	-40.7786	-25.65894838
+10	64.02838096	*61.15095101*	*57.64662652*	50.77326	53.07181	49.06324	56.08111	37.74365	39.97501	25.09567047
-11	-74.28224851	*-69.16356319*	*-66.89081645*	-57.0065	-59.7846	-55.3937	-63.7544	-42.3593	-44.7766	-28.46960299
+11	56.52127147	*55.00928993*	*50.88942174*	45.5846	47.48402	43.79343	49.69346	33.98552	35.977	22.28501488
-12	-86.26519988	*-78.153882*	*-77.66132887*	-64.2707	-67.6075	-62.7715	-72.6971	-50.867	-53.5442	-32.40452011
+12	46.20731693	*46.60696309*	*41.2636272*	38.32047	39.66112	36.4157	40.75075	28.45465	30.09611	18.35009905
-13	-94.96444823	*-84.71554276*	*-85.48054561*	-69.9782	-73.754	-68.2022	-79.3575	-56.971	-59.9695	-35.21517183
+13	38.52801327	*40.74531018*	*34.7682209*	33.13182	34.07333	31.14589	34.36311	24.59018	25.98196	15.53944769
-14	-107.3393954	*-94.09786171*	*-96.60385416*	-77.2423	-81.5769	-75.946	-88.6662	-65.9278	-69.3976	-39.15008783
+14	28.6060473	*32.73498963*	*25.85103232*	25.86769	26.25043	24.20267	26.03475	19.3288	20.38475	12.90980979
-15	-116.3186441	*-100.9395237*	*-104.6750807*	-82.431	-87.1647	-81.2158	-95.0539	-72.4781	-76.3483	-41.96074244
+15	21.65892941	*27.15332999*	*19.60761016*	20.7282	20.7282	19.69328	21.02431	15.8675	16.70264	11.06544321
-16	-129.0855953	*-110.7138423*	*-116.151193*	-89.6951	-94.9876	-88.5935	-103.997	-81.9934	-86.4233	-45.89565913
+16	15.54116706	*19.53500237*	*13.99988253*	15.14041	15.14041	13.65695	14.31728	11.5313	12.13821	8.483329314
-17	-138.3448422	*-117.8355036*	*-125.0988346*	-94.8837	-100.575	-93.8633	-110.384	-89.3799	-94.2449	-48.70631027
+17	11.96261335	*14.23335*	*10.70539998*	11.14914	11.14914	9.34529	9.526545	8.492804	8.939794	6.638962754
-18	-152.1987186	*-128.0018231*	*-136.9277465*	-102.148	-108.398	-101.241	-119.327	-98.985	-104.414	-52.64122712
+18	7.099866007	*7.007029638*	*6.383716868*	5.561353	5.561353	4.451015	4.451015	4.238919	4.46202	4.056854472
-19	-161.7379679	*-135.4034834*	*-145.5029734*	-107.337	-113.986	-106.511	-125.715	-105.782	-111.611	-55.45188179
+19	3.80131622	*2.981267945*	*3.414894209*	2.392123	2.392123	1.914262	1.914262	1.821596	1.91747	2.212487446
-20	-175.2889168	*-145.9618043*	*-157.6846837*	-114.601	-121.809	-113.889	-134.657	-115.297	-121.686	-59.38679398
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 60’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	85.12399025	101.362	92.82513	78.39135042	69.04029945	92.9537	103.7533	110.6638	117.1564
-1	-1.405395058	-1.4073	-1.23536	-0.975348401	-1.756007254	-1.35738	-1.35779	-1.34561	-1.3345
+1	80.12445407	94.2258	85.10834	71.54925453	65.0097334	87.54627	97.57987	103.7793	109.5158
-2	-4.483120725	-4.49227	-3.57639	-2.783975271	-4.214416197	-4.32977	-4.33177	-4.30846	-4.2872
+2	74.53481755	86.03147	76.30432	64.20998708	60.53989928	81.50994	90.64715	96.00575	100.8453
-3	-7.293907098	-7.30687	-5.84489	-4.55779679	-5.970421293	-7.15925	-7.16275	-7.13489	-7.10949
+3	70.54222286	80.17838	70.35084	59.32825049	57.34716347	77.19828	85.6952	90.45323	94.65202
-4	-11.22901121	-11.2473	-8.98108	-7.091898203	-8.428830269	-11.8542	-11.8591	-11.8326	-11.9567
+4	64.95258612	71.39874	62.73439	52.76800803	52.87732823	71.16196	78.76248	82.67971	85.9815
-5	-14.03980133	-14.1382	-11.2212	-8.938222065	-10.41818616	-15.2077	-15.834	-15.8035	-15.7757
+5	60.95998452	65.54564	57.29405	48.1183624	49.68458746	66.85029	73.81053	77.12718	79.78827
-6	-17.97490544	-18.0786	-14.3574	-11.599685	-14.88802189	-20.0564	-21.4249	-21.396	-21.3696
+6	55.37035106	57.35132	49.6776	41.65961933	45.21475515	60.81396	66.87781	69.13202	70.56665
-7	-21.4382867	-20.8932	-16.7805	-13.70626969	-18.08075768	-24.1703	-25.4184	-25.3906	-25.3652
+7	51.27158124	52.06228	44.30352	37.10009897	42.02201445	56.5023	61.43067	63.24588	64.3052
-8	-27.02792323	-24.8337	-21.7088	-17.78992703	-22.5505934	-30.2067	-31.725	-31.6629	-31.6334
+8	45.3888558	44.76351	38.03113	31.75277375	37.23290314	50.03481	54.49794	55.47236	55.63467
-9	-31.02052282	-27.7504	-25.229	-20.74308084	-25.7433321	-34.5183	-36.6769	-36.5762	-36.548
+9	41.39625948	39.5501	34.37845	28.56131529	34.04016593	45.72315	49.546	49.91984	49.88965
-10	-36.61016241	-33.37	-30.1573	-24.92823818	-30.21316538	-40.5546	-43.6097	-43.455	-43.4285
+10	35.80662033	32.56329	29.45014	24.3254085	29.57033215	39.68682	42.61327	42.46663	42.44016
-11	-40.60275948	-38.5126	-33.6775	-27.9538899	-33.40590488	-44.8663	-48.5616	-48.8158	-48.785
+11	31.81402219	28.54928	25.92994	21.33600529	26.37759273	35.37516	37.66132	37.55324	37.52553
-12	-46.19239268	-45.8113	-38.9311	-32.51473889	-37.87574306	-50.9026	-55.4943	-56.5893	-56.8801
+12	26.22438953	24.26796	21.00165	17.20159862	21.90776051	29.33883	30.7286	30.67451	30.64505
-13	-50.18498984	-51.0247	-43.4114	-36.33426351	-41.3877569	-55.3343	-60.4463	-62.1418	-63.0734
+13	22.23179177	21.45336	17.48143	14.28469592	18.71502085	25.02717	26.21231	26.18493	26.15996
-14	-56.17388583	-58.5277	-50.7704	-42.58071984	-45.8575869	-61.6818	-67.8742	-70.2489	-71.8122
+14	17.40921278	17.51292	13.90742	11.21869661	14.24518771	19.38142	20.6214	20.59247	20.56608
-15	-60.16648531	-64.3808	-56.2107	-47.19412757	-49.05032755	-65.9934	-72.8261	-76.0231	-78.4293
+15	14.59842881	14.69832	11.66729	9.33612782	11.05244879	15.87412	16.6279	16.59785	16.57044
-16	-65.7561235	-72.5751	-63.8272	-53.70360544	-53.52016031	-72.0298	-79.7589	-83.7966	-87.227
+16	10.66332269	10.68162	8.531096	6.72541102	8.075270924	11.1792	11.18414	11.1576	11.28172
-17	-69.7487216	-78.9304	-69.2675	-58.38951433	-56.7128993	-76.3414	-84.7108	-89.3491	-93.4202
+17	7.852534297	7.867018	6.290961	4.915342065	6.319267383	7.825681	7.829595	7.802117	7.777048
-18	-75.33835424	-87.2079	-77.3971	-65.16009981	-61.1827323	-82.3778	-91.6435	-97.1227	-102.091
+18	3.917428142	3.926578	3.126401	2.431986842	3.860856439	3.783363	3.785364	3.762052	3.740799
-19	-79.33095186	-93.0609	-83.6577	-70.45211054	-64.37547197	-86.6894	-96.5955	-102.675	-108.284
+19	1.684706348	1.687374	1.490256	1.174479819	2.104852514	1.627123	1.627707	1.615672	1.604699
-20	-84.92059151	-101.255	-92.7944	-78.17450617	-68.84530934	-92.7258	-103.528	-110.449	-116.954
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 60' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	164.735279	167.1723824	116.1312	141.0864	145.236
-1	-1.434458681	-1.625354853	-1.61322	-1.68783	-1.43422
+1	150.8777737	151.6005571	107.4141	130.626	133.9417
-2	-4.48401049	-4.215884579	-5.14995	-5.42741	-4.57894
+2	134.1235125	135.7808145	97.37632	118.5806	120.8108
-3	-7.475332199	-7.482087449	-8.37639	-8.86894	-7.71308
+3	122.896272	125.2126327	89.92836	109.7296	110.6953
-4	-13.5000561	-12.6476511	-12.8934	-13.7332	-13.7368
+4	108.8385723	111.021219	79.45167	97.07101	98.553
-5	-17.94709528	-16.6431179	-16.1955	-18.0351	-18.1525
+5	98.79737093	102.2240008	72.57786	88.46718	89.88817
-6	-23.97181754	-22.23677085	-21.5384	-24.1916	-24.206
+6	85.03890497	89.90788357	63.45123	77.35547	77.13879
-7	-28.27519331	-27.08196705	-25.4818	-28.4935	-28.7816
+7	76.4321573	81.11066486	56.56917	69.61201	68.53344
-8	-34.67138005	-35.24334096	-31.397	-34.5162	-36.2322
+8	65.05085298	68.79454706	49.53293	58.77119	59.39769
-9	-40.40921312	-41.81606846	-35.3404	-38.8181	-41.3311
+9	57.87856723	60.63936133	45.58951	51.82966	54.37791
-10	-49.27820373	-51.40554033	-40.8612	-44.8408	-48.3588
+10	47.83736377	49.86529036	40.06872	43.97629	47.35021
-11	-56.45049604	-59.10131796	-44.8046	-50.6309	-53.3786
+11	41.55167765	43.12966264	36.1253	39.67438	42.33043
-12	-66.49169814	-70.55525706	-50.3254	-60.3273	-60.4063
+12	33.51871552	33.92786217	30.6045	33.65169	35.22332
-13	-74.71847505	-79.50421161	-55.2848	-68.0707	-66.8203
+13	29.13203118	28.18407271	26.38298	29.34978	29.78097
-14	-86.7679171	-91.6685934	-64.748	-78.9116	-78.8678
+14	23.10730922	21.4371027	20.74595	23.32709	23.3415
-15	-96.79807076	-100.4658134	-71.2935	-86.7546	-88.175
+15	18.803937	17.44163376	16.83768	18.89139	19.00909
-16	-110.8557703	-112.7819162	-80.8925	-98.8	-100.282
+16	12.63554938	11.84798607	12.24503	12.9955	12.87233
-17	-120.8969721	-123.1005241	-88.1311	-107.688	-108.927
+17	8.332177039	8.139609105	9.018592	9.55396	8.569652
-18	-136.428602	-137.8959743	-98.8171	-120.31	-122.684
+18	3.907673496	3.682771925	4.501574	4.735818	4.002613
-19	-148.592841	-149.0438498	-105.987	-128.913	-132.086
+19	1.720073965	1.953392893	1.934321	2.03034	1.719749
-20	-164.6587869	-166.9536217	-116.025	-140.959	-145.137
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.32E-13	*-2.15E-13*	*-2.00E-13*	-1.67E-13	-1.67E-13	-1.66E-13	-2.05E-13	-1.92E-13	-2.02E-13	-1.04E-13
End Shear	2.65E-13	*1.64E-13*	*1.86E-13*	1.48E-13	1.56E-13	1.17E-13	1.63E-13	1.29E-13	1.35E-13	9.04E-14
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	494.3111294	*414.6610666*	*444.75449*	325.1021173	345.2887225	322.6743533	380.9519734	321.4025966	339.1288436	168.0385855
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	928.5076881	*784.5981817*	*835.4785605*	612.8458901	650.3453813	607.4060835	715.9128909	593.8695066	626.4434305	315.840467
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	1302.589648	*1109.811387*	*1172.172316*	863.2313275	915.1699871	854.1952096	1004.882766	817.4007418	861.9437737	443.405654
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	1616.55701	*1390.300649*	*1454.835599*	1076.258431	1139.76254	1063.041715	1248.203339	991.5921909	1045.204492	550.7341127
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	1870.409732	*1626.065927*	*1683.468429*	1251.92716	1324.122999	1233.945494	1446.374979	1150.648617	1214.275528	637.8258418
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	2064.147762	*1817.107298*	*1858.070933*	1390.23758	1468.25143	1367.604302	1627.300032	1271.802498	1343.72255	704.680941
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	2208.424554	*1963.42465*	*1987.21402*	1491.189606	1572.463359	1485.748385	1762.233956	1357.409058	1432.822268	751.2992283
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	2320.211012	*2065.018262*	*2087.95488*	1562.050194	1658.405407	1567.387249	1851.177016	1412.776643	1492.616549	777.6808768
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	2371.88274	*2121.887715*	*2134.66521*	1612.160217	1707.628103	1610.655994	1893.701529	1418.804219	1500.170969	783.8257511
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	2366.000095	*2133.249997*	*2129.106524*	1624.039658	1715.746492	1615.677174	1889.930057	1375.76144	1455.769377	769.8662689
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2374.482769	*2122.088886*	*2137.178961*	1612.028445	1707.510616	1610.593125	1893.677071	1418.762788	1500.125988	783.8568377
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	2323.216895	*2065.197348*	*2091.007721*	1562.05651	1658.42441	1567.426355	1851.250329	1412.804974	1492.644876	777.7085385
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	2211.569778	*1963.581138*	*1989.738359*	1491.333864	1572.460123	1485.767266	1762.28269	1357.417378	1432.829407	751.3233262
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	2064.462567	*1817.241509*	*1858.038908*	1390.361349	1468.384722	1367.603055	1627.32449	1271.880593	1343.803012	704.7015395
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	1871.129915	*1626.177743*	*1684.188752*	1252.030327	1324.234102	1234.046246	1446.37504	1150.70656	1214.334653	637.8431291
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	1617.683093	*1390.390264*	*1456.308568*	1076.341067	1139.851527	1063.122333	1248.178995	991.5827942	1045.195099	550.7479549
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	1304.121384	*1109.878491*	*1173.757415*	863.2932956	915.2367265	854.2556225	1004.95598	817.4609878	862.0075632	443.4159636
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	929.824345	*784.6428167*	*836.5353097*	612.8869905	650.3896387	607.4463074	715.9616694	593.9097833	626.4860777	315.8473076
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	494.9692941	*414.6834114*	*445.2827012*	325.1227238	345.3109152	322.6944395	380.976305	321.4226574	339.1500862	168.0420786
-20	-3.47E-13	*-2.06E-13*	*-2.05E-13*	-1.88E-13	-1.98E-13	-1.51E-13	-1.97E-13	-1.73E-13	-1.82E-13	-1.12E-13
+20	2.92E-13	*1.67E-13*	*1.92E-13*	1.62E-13	1.77E-13	1.12E-13	1.55E-13	1.30E-13	1.37E-13	8.83E-14

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.19E-13	-1.65E-13	-1.39E-13	-1.17E-13	-1.09E-13	-1.35E-13	-1.50E-13	-1.59E-13	-1.64E-13
End Shear	1.08E-13	1.15E-13	1.08E-13	8.37E-14	1.01E-13	1.01E-13	9.22E-14	9.41E-14	1.09E-13
-1	0	0	0	0	0	0	0	0	0
+1	240.3733622	282.6773961	255.325014	215.6808886	195.0292002	262.638807	292.7396213	311.3378325	328.547334
-2	0	0	0	0	0	0	0	0	0
+2	452.0000278	523.2125296	464.2444598	394.2971585	367.0706936	494.2336509	549.8252262	583.1916896	613.1676251
-3	0	0	0	0	0	0	0	0	0
+3	634.8800057	721.6054141	637.3789204	544.0671467	516.1244713	694.7845467	771.2568236	833.4095256	880.2076138
-4	0	0	0	0	0	0	0	0	0
+4	789.0132445	877.4817104	771.3706708	661.9962343	642.1905002	864.2914749	957.0344205	1051.199052	1104.829198
-5	0	0	0	0	0	0	0	0	0
+5	914.3997678	996.2562825	888.3237862	764.2804859	745.2688119	1002.754357	1107.278473	1229.010412	1310.36178
-6	0	0	0	0	0	0	0	0	0
+6	1011.039702	1095.318947	969.7361903	836.7091186	825.3594547	1110.464463	1234.142428	1366.843677	1474.899184
-7	0	0	0	0	0	0	0	0	0
+7	1078.879713	1152.239275	1011.978246	877.2509422	882.4623034	1201.164043	1336.134747	1464.698755	1594.845352
-8	0	0	0	0	0	0	0	0	0
+8	1135.787724	1172.87863	1027.149347	895.2661388	916.3653788	1266.568694	1402.325081	1543.532713	1670.065186
-9	0	0	0	0	0	0	0	0	0
+9	1164.238117	1172.150407	1076.692881	936.0555108	926.6442468	1300.566016	1432.416889	1587.188493	1714.672587
-10	0	0	0	0	0	0	0	0	0
+10	1163.78283	1129.260135	1087.108035	945.4977983	913.9354567	1303.260172	1426.854746	1590.630844	1729.536698
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	1164.161668	1172.126437	1076.720573	936.0383633	926.6185286	1300.506821	1432.381432	1587.129029	1714.637442
-12	0	0	0	0	0	0	0	0	0
+12	1135.802154	1172.835456	1027.162808	895.2719861	916.3268299	1266.596797	1402.271712	1543.548246	1670.054663
-13	0	0	0	0	0	0	0	0	0
+13	1078.879113	1152.193964	1011.960677	877.243348	882.5522888	1201.175614	1336.161995	1464.741981	1594.904125
-14	0	0	0	0	0	0	0	0	0
+14	1011.129945	1095.256392	969.7042505	836.7207567	825.4366263	1110.459556	1234.151731	1366.914869	1474.937598
-15	0	0	0	0	0	0	0	0	0
+15	914.4750814	996.1763512	888.2775104	764.2858901	745.3330671	1002.83679	1107.269784	1229.062348	1310.379661
-16	0	0	0	0	0	0	0	0	0
+16	789.073522	877.4677681	771.3691319	661.9955801	642.2419617	864.3574276	957.1065005	1051.231837	1104.826655
-17	0	0	0	0	0	0	0	0	0
+17	634.9252578	721.6573079	637.3630058	544.0603015	516.1630285	694.8339877	771.3107916	833.4229164	880.2266948
-18	0	0	0	0	0	0	0	0	0
+18	452.0300103	523.2472023	464.3827373	395.2670536	367.0964032	494.2665684	549.8611604	583.1857813	613.1662112
-19	0	0	0	0	0	0	0	0	0
+19	240.388405	282.6946761	255.31241	215.6881048	195.0419933	262.6552336	292.7575839	311.3570267	328.5678288
-20	-1.37E-13	-1.46E-13	-1.38E-13	-1.21E-13	-1.11E-13	-1.21E-13	-1.29E-13	-1.24E-13	-1.46E-13
+20	1.02E-13	1.14E-13	1.08E-13	8.50E-14	9.72E-14	8.91E-14	8.66E-14	8.53E-14	8.71E-14

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.40E-13	-2.23E-13	-1.72E-13	-2.08E-13	-1.83E-13
End Shear	1.47E-13	1.58E-13	1.33E-13	1.46E-13	1.26E-13
-1	0	0	0	0	0
+1	452.633321	454.8016712	322.2423904	391.8778691	401.8249538
-2	0	0	0	0	0
+2	822.3741251	832.3319005	592.8617926	721.8081495	736.5282742
-3	0	0	0	0	0
+3	1136.840474	1157.042486	811.7191646	989.6672444	1003.6736
-4	0	0	0	0	0
+4	1397.970529	1446.973793	991.9314317	1222.740616	1244.685671
-5	0	0	0	0	0
+5	1601.237627	1683.322356	1153.706137	1407.179578	1430.643418
-6	0	0	0	0	0
+6	1750.217265	1867.916235	1263.857874	1529.62984	1590.519453
-7	0	0	0	0	0
+7	1872.042256	2018.373498	1339.084734	1603.11637	1683.154678
-8	0	0	0	0	0
+8	1965.182001	2111.63175	1379.525909	1642.475959	1722.080152
-9	0	0	0	0	0
+9	2031.21801	2157.128731	1368.112398	1647.419552	1724.426685
-10	0	0	0	0	0
+10	2017.166783	2173.074235	1305.395025	1596.916777	1659.840048
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2031.26403	2157.121945	1368.071244	1647.372678	1724.381041
-12	0	0	0	0	0
+12	1965.197347	2111.637941	1379.464226	1643.241648	1722.048412
-13	0	0	0	0	0
+13	1872.076695	2018.378827	1339.095134	1603.046442	1683.136942
-14	0	0	0	0	0
+14	1750.247841	1867.922713	1263.893902	1529.613417	1590.555137
-15	0	0	0	0	0
+15	1601.218503	1683.316623	1153.767864	1407.138443	1430.653321
-16	0	0	0	0	0
+16	1397.939987	1446.970266	991.9726382	1222.715998	1244.63031
-17	0	0	0	0	0
+17	1136.855794	1157.033876	811.688284	989.6588963	1003.671558
-18	0	0	0	0	0
+18	822.3585598	832.3267388	592.9029119	721.8574736	736.5401916
-19	0	0	0	0	0
+19	452.6639582	454.807062	322.2629512	391.9025462	401.8507366
-20	-2.30E-13	-2.57E-13	-1.45E-13	-1.99E-13	-1.72E-13
+20	1.71E-13	2.24E-13	1.49E-13	1.62E-13	1.68E-13

1-Span: Shear (Max and Min) Raw Data Results - 60' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0	0	0
End Shear	60.8	44.14	52.56	48.13333	42.15	35.8	48.2	53.8	57.38333	60.75
-1	-1.33333	-0.72875	-0.72974	-0.64058	-0.50886	-0.91056	-0.70385	-0.70407	-0.69775	-0.69199
+1	57.07857	41.54755	48.85963	44.13188	38.45634	33.71	45.39604	50.59885	53.81347	56.78806
-2	-3.2	-2.32467	-2.32941	-1.85449	-1.45972	-2.18533	-2.24515	-2.24619	-2.2341	-2.22308
+2	52.89857	38.64911	44.61056	39.56667	34.49	31.39222	42.26598	47.00397	49.7826	52.29207
-3	-4.53333	-3.78217	-3.78889	-3.0308	-2.39502	-3.09589	-3.71234	-3.71416	-3.69971	-3.68654
+3	49.91286	36.5788	41.57551	36.47956	31.85008	29.73667	40.03022	44.4362	46.90341	49.08064
-4	-6.4	-5.82267	-5.83216	-4.65703	-3.73945	-4.37067	-6.14683	-6.1494	-6.13563	-6.2
+4	45.73286	33.68037	37.02294	32.53015	28.30506	27.41889	36.90016	40.84132	42.87255	44.58465
-5	-7.92635	-7.28017	-7.33118	-5.81863	-4.72475	-5.40222	-7.88576	-8.21054	-8.19473	-8.18031
+5	42.74715	31.61005	33.98789	29.70913	25.7979	25.76333	34.6644	38.27355	39.99335	41.37323
-6	-11.6419	-9.32067	-9.37445	-7.44486	-6.15258	-7.72	-10.4	-11.1096	-11.0946	-11.081
+6	38.56715	28.71162	29.73882	25.75971	22.32287	23.44556	31.53433	34.67867	35.84756	36.59147
-7	-14.2959	-11.1166	-10.8339	-8.7013	-7.28524	-9.37555	-12.5332	-13.1804	-13.166	-13.1528
+7	35.58143	26.58625	26.99625	22.97304	19.87485	21.79	29.29857	31.85412	32.79538	33.34467
-8	-18.0114	-14.015	-12.8772	-11.2568	-9.46791	-11.6933	-15.6633	-16.4506	-16.4184	-16.4031
+8	31.32526	23.53583	23.21157	19.72058	16.99351	19.30666	25.94494	28.25924	28.76451	28.84868
-9	-20.6654	-16.0853	-14.3896	-13.0822	-11.052	-13.3489	-17.8991	-19.0184	-18.9662	-18.9515
+9	28.11714	21.46552	20.50822	17.82652	15.26728	17.65111	23.70918	25.69147	25.88532	25.86967
-10	-24.6286	-18.9838	-17.3036	-15.6377	-13.3046	-15.6667	-21.0291	-22.6133	-22.533	-22.5193
+10	23.96064	18.56708	16.8853	15.27101	12.97962	15.33333	20.57911	22.09659	22.02055	22.00682
-11	-27.6143	-21.0541	-19.9702	-17.463	-14.9387	-17.3222	-23.2649	-25.181	-25.3128	-25.2969
+11	21.30667	16.49677	14.80388	13.44565	11.37057	13.67778	18.34336	19.52882	19.47277	19.4584
-12	-31.7943	-23.9525	-23.7549	-20.1872	-17.4035	-19.64	-26.3949	-28.7759	-29.3437	-29.4945
+12	17.59111	13.59834	12.58385	10.89015	9.152911	11.36	15.21329	15.93394	15.90589	15.89061
-13	-34.78	-26.0228	-26.4583	-22.5104	-19.4616	-21.4611	-28.6929	-31.3437	-32.2229	-32.7059
+13	14.74286	11.52802	11.12438	9.064779	7.593864	9.704444	12.97753	13.59207	13.57788	13.56493
-14	-38.96	-29.1283	-30.3488	-26.3264	-22.8179	-23.7789	-31.9843	-35.1953	-36.4267	-37.2374
+14	11.0273	9.027334	9.081109	7.21152	5.947581	7.386667	10.05	10.69298	10.67797	10.66429
-15	-41.9457	-31.1986	-33.3839	-29.1474	-25.3	-25.4344	-34.2201	-37.7631	-39.4208	-40.6686
+15	8.373332	7.569836	7.621634	6.049928	4.937281	5.731112	8.231328	8.622193	8.60661	8.5924
-16	-46.1257	-34.097	-37.6329	-33.0968	-28.8101	-27.7522	-37.3502	-41.358	-43.4517	-45.2305
+16	6.12381	5.529335	5.538824	4.423695	3.544447	4.187333	5.796835	5.799398	5.785635	5.85
-17	-49.1114	-36.1673	-40.9284	-35.9178	-31.3422	-29.4078	-39.5859	-43.9258	-46.3309	-48.4419
+17	4.796826	4.071835	4.079346	3.262101	2.584147	3.276779	4.057911	4.05994	4.045692	4.032693
-18	-53.59	-39.0658	-45.2206	-40.1333	-35.005	-31.7256	-42.716	-47.5206	-50.3618	-52.9379
+18	2.918095	2.031334	2.036079	1.621157	1.274724	2.002	1.961816	1.962854	1.950766	1.939746
-19	-56.5757	-41.1361	-48.2556	-43.3797	-37.8639	-33.3811	-44.9517	-50.0884	-53.241	-56.1493
+19	1.591113	0.873584	0.874967	0.772754	0.613354	1.091445	0.843725	0.844027	0.837787	0.832097
-20	-60.7557	-44.0345	-52.5047	-48.1174	-42.0376	-35.6989	-48.0818	-53.6833	-57.2718	-60.6453
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 60' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	60.8	59.58333	63.33333	59.2	70	59.85	63.16667	30.86597
-1	-1.33333	-1.03481	-1.03481	-0.82806	-0.82806	-0.78779	-0.82925	-0.95637
+1	57.07857	56.19257	59.68174	55.77294	65.84599	55.55312	58.61703	29.04478
-2	-3.2	-3.30044	-3.30044	-2.64135	-2.64135	-2.51471	-2.64706	-2.2953
+2	52.89857	52.42585	55.62527	51.94731	61.20886	50.61909	53.39277	27.00438
-3	-4.53333	-5.37007	-5.37007	-4.40158	-4.4462	-4.09028	-4.30555	-3.25167
+3	49.91286	49.73533	52.7278	49.21472	57.89662	47.09479	49.66115	25.54695
-4	-6.4	-8.26754	-8.26754	-7.53164	-7.92405	-6.29608	-6.62745	-4.59059
+4	45.73286	45.96861	48.67133	45.38908	53.25949	41.80833	44.06373	23.50655
-5	-7.92635	-10.3372	-10.3372	-9.76741	-10.4082	-7.91434	-8.33088	-5.54697
+5	42.74715	43.2781	45.77385	42.65649	49.94726	38.28402	40.3321	22.04912
-6	-11.6419	-13.955	-14.1952	-13	-14	-10.4144	-10.9869	-6.88589
+6	38.56715	39.51137	41.71738	38.83085	45.31012	33.5527	35.31863	20.00872
-7	-14.2959	-16.6456	-17.0927	-15.6073	-17.1603	-12.3631	-13.06	-7.84226
+7	35.58143	36.82086	38.8199	36.09826	41.99789	30.35502	31.95265	18.55129
-8	-18.0114	-20.4123	-21.1491	-19.4329	-21.7975	-15.1465	-16.0226	-9.8073
+8	31.32526	32.78509	34.47368	31.99937	37.02953	25.74314	27.09804	16.51088
-9	-20.6654	-23.1028	-24.0466	-22.1655	-25.1097	-17.2349	-18.2429	-11.2647
+9	28.11714	30.09457	31.57621	29.26677	33.7173	22.59199	23.78105	15.05345
-10	-24.6286	-26.8695	-28.1031	-25.9911	-29.7468	-19.9632	-21.1452	-13.3051
+10	23.96064	26.32785	27.51974	25.44114	29.08017	19.57151	20.72855	13.01305
-11	-27.6143	-29.56	-31.0006	-28.7237	-33.0591	-21.9649	-23.2183	-14.7626
+11	21.30667	23.63733	24.62226	22.70855	25.76793	17.62277	18.65543	11.55562
-12	-31.7943	-33.3268	-35.057	-32.5494	-37.6962	-26.3765	-27.7647	-16.803
+12	17.59111	19.87061	20.56579	18.88291	21.1308	14.75481	15.60597	9.515219
-13	-34.78	-36.2863	-38.2442	-35.3654	-41.1498	-29.5416	-31.0964	-18.2604
+13	14.74286	17.1801	17.66831	16.15032	17.81857	12.75094	13.47263	8.05779
-14	-38.96	-40.053	-42.3007	-39.3809	-45.9768	-34.186	-35.9853	-20.3008
+14	11.0273	13.41337	13.61184	12.55	13.5	10.02271	10.57026	6.694223
-15	-41.9457	-42.7436	-45.1982	-42.1134	-49.289	-37.5826	-39.5895	-21.7582
+15	8.373332	10.74835	10.74835	10.21171	10.9019	8.2279	8.660947	5.73785
-16	-46.1257	-46.5103	-49.2547	-45.9391	-53.9262	-42.5167	-44.8137	-23.7986
+16	6.12381	7.850876	7.850876	7.081644	7.424049	5.979412	6.294118	4.398926
-17	-49.1114	-49.2008	-52.1521	-48.6717	-57.2384	-46.3469	-48.8695	-25.2561
+17	4.796826	5.78125	5.78125	4.845886	4.939873	4.403839	4.63562	3.442553
-18	-53.59	-52.9675	-56.2086	-52.4973	-61.8755	-51.3274	-54.1428	-27.2965
+18	2.918095	2.883771	2.883771	2.308019	2.308019	2.19804	2.313726	2.103632
-19	-56.5757	-55.658	-59.1061	-55.2299	-65.1878	-54.8517	-57.8744	-28.7539
+19	1.591113	1.240406	1.240406	0.992617	0.992617	0.944566	0.994281	1.147258
-20	-60.7557	-59.4248	-63.1626	-59.0555	-69.8249	-59.7858	-63.0987	-30.7943
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 60' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**60.8**	***95.27778***	***96.68732***	***67.16667***	***81.6***	***84***
-1	**-1.33333**	***-0.82965***	***-0.94005***	***-0.93304***	***-0.97619***	***-0.82951***
+1	**57.07857**	***87.26303***	***87.68106***	***62.125***	***75.55***	***77.4677***
-2	**-3.2**	***-2.59341***	***-2.43834***	***-2.97857***	***-3.13905***	***-2.64832***
+2	**52.89857**	***77.57288***	***78.53141***	***56.31945***	***68.58334***	***69.87322***
-3	**-4.53333**	***-4.3235***	***-4.32741***	***-4.84464***	***-5.12952***	***-4.46101***
+3	**49.91286**	***71.07939***	***72.41911***	***52.01178***	***63.46417***	***64.02273***
-4	**-6.4**	***-7.80801***	***-7.31501***	***-7.45714***	***-7.94286***	***-7.94495***
+4	**45.73286**	***62.94886***	***64.21123***	***45.95239***	***56.14286***	***57***
-5	**-7.92635**	***-10.38***	***-9.62586***	***-9.36696***	***-10.431***	***-10.4989***
+5	**42.74715**	***57.14134***	***59.12319***	***41.97679***	***51.16667***	***51.98853***
-6	**-11.6419**	***-13.8646***	***-12.8611***	***-12.4571***	***-13.9917***	***-14***
+6	**38.56715**	***49.18387***	***51.99993***	***36.69823***	***44.74001***	***44.61469***
-7	**-14.2959**	***-16.3535***	***-15.6634***	***-14.7379***	***-16.4798***	***-16.6464***
+7	**35.58143**	***44.20599***	***46.91189***	***32.71786***	***40.26143***	***39.63762***
-8	**-18.0114**	***-20.0529***	***-20.3837***	***-18.159***	***-19.9631***	***-20.9556***
+8	**31.32526**	***37.6234***	***39.78863***	***28.64831***	***33.99143***	***34.35378***
-9	**-20.6654**	***-23.3714***	***-24.1851***	***-20.4398***	***-22.4512***	***-23.9046***
+9	**28.11714**	***33.47517***	***35.07193***	***26.36756***	***29.97667***	***31.4505***
-10	**-24.6286**	***-28.501***	***-29.7314***	***-23.6328***	***-25.9345***	***-27.9692***
+10	**23.96064**	***27.66765***	***28.84054***	***23.17451***	***25.43452***	***27.3859***
-11	**-27.6143**	***-32.6492***	***-34.1824***	***-25.9136***	***-29.2833***	***-30.8725***
+11	**21.30667**	***24.0322***	***24.94486***	***20.89375***	***22.94643***	***24.48261***
-12	**-31.7943**	***-38.4567***	***-40.807***	***-29.1066***	***-34.8914***	***-34.9371***
+12	**17.59111**	***19.38619***	***19.62282***	***17.7007***	***19.4631***	***20.37208***
-13	**-34.78**	***-43.2148***	***-45.9828***	***-31.975***	***-39.37***	***-38.6468***
+13	**14.74286**	***16.84906***	***16.30079***	***15.2591***	***16.975***	***17.22439***
-14	**-38.96**	***-50.1839***	***-53.0183***	***-37.4482***	***-45.64***	***-45.6147***
+14	**11.0273**	***13.36455***	***12.39856***	***11.99881***	***13.49167***	***13.5***
-15	**-41.9457**	***-55.985***	***-58.1063***	***-41.2339***	***-50.1762***	***-50.9977***
+15	**8.373332**	***10.87561***	***10.0877***	***9.738393***	***10.92619***	***10.99427***
-16	**-46.1257**	***-64.1155***	***-65.2296***	***-46.7857***	***-57.1429***	***-58***
+16	**6.12381**	***7.30801***	***6.852508***	***7.082148***	***7.516193***	***7.444954***
-17	**-49.1114**	***-69.9231***	***-71.1975***	***-50.9723***	***-62.2834***	***-63***
+17	**4.796826**	***4.819073***	***4.707698***	***5.216074***	***5.525714***	***4.956421***
-18	**-53.59**	***-78.9061***	***-79.7548***	***-57.1528***	***-69.5833***	***-70.9567***
+18	**2.918095**	***2.260077***	***2.130001***	***2.603571***	***2.73905***	***2.314987***
-19	**-56.5757**	***-85.9415***	***-86.2023***	***-61.2996***	***-74.5595***	***-76.3943***
+19	**1.591113**	***0.994837***	***1.129782***	***1.118752***	***1.174286***	***0.994649***
-20	**-60.7557**	***-95.2335***	***-96.5608***	***-67.1052***	***-81.5262***	***-83.9428***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	171.2357	124.6427	146.5789	132.3957	116.0815	101.1300	136.1881	151.7965	161.4404	170.3642
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	320.9743	234.3791	271.3054	240.7283	212.4970	190.3400	256.2788	285.1051	302.4069	317.9505
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	449.2157	329.2092	374.1796	330.5050	293.5081	267.6300	360.2720	399.9258	432.1543	456.4209
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	555.96	409.1331	455.0074	399.9848	357.5617	333.0000	448.1677	496.2584	545.0864	572.8956
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	641.2072	474.1508	516.5965	460.6294	413.0564	386.4500	519.9660	574.1657	637.2883	679.4720
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	704.9572	524.2622	567.9642	502.8448	452.6231	427.9800	575.8177	639.9494	708.7600	764.7909
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	751.7871	559.4398	597.4795	524.7489	475.2088	457.5900	622.8489	692.8363	759.5016	826.9875
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	788.9886	588.9488	608.1818	532.6157	485.6669	475.1700	656.7636	727.1585	800.3799	865.9918
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	804.6929	603.7014	607.8042	558.3059	507.4876	480.5000	674.3925	742.7622	823.0171	889.1224
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	800	603.4653	585.5640	563.7065	512.6071	473.9100	675.7896	739.8780	824.8021	896.8300
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	805.81	603.6617	607.7918	558.3202	507.4787	480.4867	674.3618	742.7438	822.9863	889.1042
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	790.2801	588.9563	608.1594	532.6227	485.6699	475.1500	656.7782	727.1308	800.3880	865.9863
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	753.1385	559.4395	597.4560	524.7398	475.2048	457.6367	622.8549	692.8504	759.5240	827.0180
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	705.0924	524.3090	567.9318	502.8282	452.6292	428.0200	575.8152	639.9542	708.7969	764.8108
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	641.5166	474.1898	516.5550	460.6054	413.0592	386.4833	520.0087	574.1612	637.3152	679.4813
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	556.4439	409.1644	455.0001	399.9840	357.5614	333.0267	448.2019	496.2958	545.1034	572.8943
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	449.8739	329.2327	374.2065	330.4968	293.5045	267.6500	360.2976	399.9537	432.1612	456.4307
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	321.54	234.3946	271.3234	240.8000	213.0000	190.3533	256.2959	285.1238	302.4038	317.9498
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	171.5185	124.6505	146.5879	132.3891	116.0853	101.1366	136.1966	151.8059	161.4504	170.3748
-20	-1.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.19E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	171.2357	168.5777	179.0452	167.3188	197.5380	166.6594	175.8511	87.1343
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	320.9743	317.7837	337.2286	314.9630	371.2278	307.9437	324.8346	163.7752
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	449.2157	447.6180	474.5502	442.9324	521.0696	423.8531	446.9504	229.9226
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	555.96	558.0806	591.0099	551.2272	647.2405	514.1780	541.9780	285.5764
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	641.2072	649.1715	686.6077	639.8473	750.0000	596.6547	629.6477	330.7368
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	704.9572	720.8906	761.3438	709.1544	843.8165	659.4776	696.7708	365.4037
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	751.7871	773.2381	815.3816	770.4166	913.7848	703.8678	742.9724	389.5770
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	788.9886	809.9820	859.9458	812.7494	959.9051	732.5780	773.9780	403.2569
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	804.6929	835.9659	885.4696	835.1859	981.9557	735.7035	777.8952	406.4432
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	800	842.1258	889.6793	837.7896	980.0000	713.3842	754.8713	399.2047
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	805.81	835.8976	885.4087	835.1533	981.9430	735.6820	777.8719	406.4593
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	790.2801	809.9852	859.9556	812.7697	959.9431	732.5927	773.9927	403.2712
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	753.1385	773.3129	815.3799	770.4264	913.8101	703.8721	742.9761	389.5895
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	705.0924	720.9548	761.4129	709.1538	843.8291	659.5181	696.8126	365.4143
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	641.5166	649.2250	686.6653	639.8995	750.0000	596.6848	629.6783	330.7457
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	556.4439	558.1234	591.0560	551.2690	647.2279	514.1731	541.9731	285.5836
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	449.8739	447.6501	474.5848	442.9638	521.1076	423.8844	446.9834	229.9279
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	321.54	317.8050	337.2516	314.9838	371.2531	307.9646	324.8567	163.7787
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	171.5185	168.5884	179.0567	167.3292	197.5506	166.6698	175.8621	87.1362
-20	-1.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.19E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 60' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	171.2357	261.7891	263.0432	186.3750	226.6500	232.4031
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	320.9743	475.6357	481.3950	342.8929	417.4715	425.9851
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	449.2157	657.5133	669.1975	469.4732	572.3929	580.4937
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	555.96	808.5428	836.8848	573.7024	707.1953	719.8876
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	641.2072	926.1062	973.5815	667.2679	813.8690	827.4398
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	704.9572	1012.2714	1080.3448	730.9762	884.6905	919.9071
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	751.7871	1082.7312	1167.3647	774.4851	927.1928	973.4845
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	788.9886	1136.6003	1221.3023	797.8750	949.9572	995.9978
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	804.6929	1174.7935	1247.6164	791.2738	952.8164	997.3549
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	800	1166.6667	1256.8388	755.0000	923.6072	960.0000
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	805.81	1174.8201	1247.6125	791.2500	952.7893	997.3285
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	790.2801	1136.6092	1221.3059	797.8393	950.4000	995.9794
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	753.1385	1082.7511	1167.3677	774.4911	927.1524	973.4742
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	705.0924	1012.2891	1080.3486	730.9971	884.6810	919.9278
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	641.5166	926.0951	973.5782	667.3036	813.8453	827.4455
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	556.4439	808.5252	836.8827	573.7262	707.1810	719.8556
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	449.8739	657.5221	669.1925	469.4553	572.3880	580.4925
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	321.54	475.6267	481.3920	342.9167	417.5000	425.9920
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	171.5185	261.8068	263.0463	186.3869	226.6643	232.4180
-20	-1.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.19E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	180.1972316	149.4742303	162.1775077	115.71	123.1273	115.176	136.4785	119.1516	125.7975	60.14571253
-1	-3.527999838	-2.756855715	-3.175199852	-2.21146	-2.21146	-1.76956	-1.76956	-1.68324	-1.77184	-2.043232927
+1	167.071686	139.0298583	150.2698117	108.7013	115.5795	108.0863	127.885	110.2219	116.3425	56.38181078
-2	-7.84000186	-8.36560833	-7.056001667	-6.61606	-6.61606	-5.29455	-5.29455	-5.0392	-5.30442	-4.427004982
+2	154.4707105	129.1898109	138.943746	101.9932	108.3554	101.2735	119.627	101.4366	107.0404	52.7491529
-3	-11.70400167	-14.12485871	-10.53360149	-11.039	-11.039	-9.43323	-9.69019	-8.40568	-8.84809	-6.47023739
+3	143.837861	120.9234855	129.3868833	96.24346	102.1633	95.43399	112.5488	93.90627	99.06716	49.63544536
-4	-16.40799921	-21.03997995	-14.76719926	-16.199	-16.199	-15.0073	-15.8836	-12.3332	-12.9824	-8.854006801
+4	131.6288797	111.4754356	118.4136089	89.53537	94.93925	88.6212	104.2909	84.69292	89.3145	46.00278285
-5	-22.73302344	-27.1352306	-20.6031543	-21.023	-21.1567	-19.7851	-21.1923	-15.7774	-16.6203	-10.89723924
+5	121.3320299	103.5451097	109.1591459	83.78559	88.74717	82.78165	97.21264	76.96309	81.12732	42.88907662
-6	-31.80302851	-34.44235589	-28.752991	-27.7311	-28.3808	-25.852	-28.207	-20.6352	-21.7882	-13.281011
+6	109.5150535	94.48906366	98.53867534	77.07751	81.52308	75.96886	88.95471	68.17775	71.82519	39.25641436
-7	-39.74531772	-40.87360792	-35.88976472	-33.4809	-34.5729	-31.6915	-35.2852	-24.799	-26.2178	-15.90460107
+7	99.55421341	86.89473811	89.58661226	71.32772	75.331	70.12932	81.87648	60.87863	64.08277	36.1427088
-8	-49.20731725	-48.57272868	-44.39239647	-40.189	-41.797	-38.5043	-43.5431	-29.6568	-31.3856	-19.53725877
+8	88.12922326	78.23068687	79.3189384	64.14048	67.5909	62.82989	73.02869	52.57831	55.34559	32.51004876
-9	-57.73430297	-55.33998098	-52.06721713	-45.9388	-47.9891	-44.3438	-50.6214	-34.1675	-36.1843	-22.65096831
+9	77.86277669	70.97235755	70.0928827	58.3907	61.39883	56.99035	65.95046	45.84533	48.25824	29.39633887
-10	-68.58636512	-63.43110321	-61.819261	-52.6469	-55.2132	-51.1566	-58.8793	-39.1176	-41.3522	-26.28362885
+10	66.82978754	62.25591276	60.17800976	51.68261	54.17473	50.17755	57.69252	38.32811	40.61045	25.76367954
-11	-78.05613842	-70.97875677	-70.32935501	-58.3966	-61.4052	-56.9962	-65.9575	-45.8506	-48.2638	-29.39733856
+11	57.73821229	55.33358364	51.94980383	45.93282	47.98266	44.33801	50.61429	34.16429	36.18087	22.64996988
-12	-89.30019258	-79.46187862	-80.43419503	-65.1047	-68.6293	-63.809	-74.2155	-53.7057	-56.5324	-33.02999727
+12	48.09528278	47.45353869	43.28433817	39.22473	40.75856	37.52522	42.35636	28.95952	30.64388	19.0173107
-13	-99.10595552	-86.90113077	-89.24668877	-71.3337	-75.3374	-70.1351	-81.8835	-60.7983	-63.9983	-36.14370282
+13	39.57342993	40.86720955	35.67956511	33.47495	34.56649	31.68568	35.27813	24.79571	26.21429	15.90360104
-14	-110.7420209	-95.77625256	-99.70433056	-78.0418	-82.5615	-76.9479	-90.1415	-69.4387	-73.1603	-39.77636639
+14	30.32251751	33.37916369	27.36689905	26.76687	27.3424	24.87288	27.02019	19.93793	21.04644	12.93981627
-15	-120.8837847	-103.5515047	-108.8192249	-83.7915	-88.7536	-82.7875	-97.2197	-76.969	-81.1336	-42.89007197
+15	22.56114529	27.12883366	20.39296238	21.01708	21.15031	19.78037	21.18701	15.78271	16.61685	10.89658513
-16	-132.9118506	-112.8186274	-119.629667	-90.4996	-95.9777	-89.6003	-105.478	-85.9539	-90.6496	-46.52273127
+16	15.71135838	20.03278862	14.13763005	15.4573	15.4573	14.20626	14.99355	11.76954	12.38899	8.512814516
-17	-144.0312208	-120.9298804	-129.6233451	-96.2494	-102.17	-95.4398	-112.556	-93.9122	-99.0734	-49.6364414
+17	11.65191496	14.11845912	10.4679113	11.03439	11.03439	9.428457	9.684884	8.403046	8.845312	6.469578839
-18	-156.4512868	-130.5890026	-140.7865871	-102.957	-109.394	-102.253	-120.814	-102.698	-108.376	-53.26910087
+18	7.177218869	7.414413387	6.447270259	5.874325	5.874325	4.701162	4.701162	4.47548	4.711032	4.08580789
-19	-167.2650499	-139.0362554	-150.506281	-108.707	-115.586	-108.092	-127.892	-110.228	-116.349	-56.38281057
+19	3.509772769	2.753657346	3.152210058	2.209166	2.209166	1.76779	1.76779	1.681925	1.770448	2.042577253
-20	-180.0771079	-149.0873767	-162.0223246	-115.415	-122.81	-114.905	-136.15	-119.013	-125.651	-60.01547018
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**85.99329908**	**104.4238**	**97.55243**	**82.66182399**	**69.66335429**	**93.81411**	**104.9697**	**112.4612**	**119.6412**
-1	**-1.557320305**	**-1.55922**	**-1.37863**	**-1.086932954**	**-1.94593048**	**-1.50412**	**-1.50453**	**-1.49394**	**-1.48423**
+1	**80.62883829**	**96.73376**	**89.22279**	**75.24663961**	**65.34462503**	**88.01351**	**98.34077**	**105.0621**	**111.4227**
-2	**-4.659676064**	**-4.66789**	**-3.71583**	**-2.895317087**	**-4.216183973**	**-4.50036**	**-4.50214**	**-4.48183**	**-4.46321**
+2	**75.46726909**	**89.16803**	**80.66885**	**68.09445188**	**61.21689512**	**82.4394**	**91.93913**	**97.88425**	**103.4169**
-3	**-7.774317029**	**-7.78632**	**-6.19766**	**-4.870320076**	**-6.16211467**	**-7.85122**	**-7.85443**	**-7.83026**	**-7.80811**
+3	**71.04306317**	**82.68312**	**73.26817**	**62.00750601**	**57.67884101**	**77.6616**	**86.45201**	**91.73184**	**96.5547**
-4	**-11.40806242**	**-11.4245**	**-9.12687**	**-7.225239519**	**-8.432365828**	**-12.1866**	**-12.4108**	**-12.3834**	**-12.3582**
+4	**65.88149012**	**74.72092**	**65.96261**	**55.64678226**	**53.55110848**	**72.08749**	**80.05037**	**84.55402**	**88.54884**
-5	**-14.52270353**	**-14.543**	**-11.6087**	**-9.287242837**	**-11.39298394**	**-15.9027**	**-16.8359**	**-16.8096**	**-16.7854**
+5	**61.45728403**	**68.09205**	**59.9353**	**50.44594174**	**50.01305193**	**67.30968**	**74.56324**	**78.40161**	**81.68667**
-6	**-18.32563759**	**-18.2604**	**-14.5042**	**-11.77077142**	**-15.52071625**	**-20.7308**	**-21.9986**	**-21.9735**	**-21.9504**
+6	**56.29571212**	**60.52631**	**52.90345**	**44.42903776**	**45.88531954**	**61.73557**	**68.1616**	**71.18178**	**73.31922**
-7	**-22.7498435**	**-21.3788**	**-18.0945**	**-14.80570598**	**-19.05877263**	**-25.5087**	**-26.5562**	**-26.5211**	**-26.494**
+7	**51.87150618**	**54.04139**	**46.87614**	**39.31519729**	**42.34726765**	**56.95777**	**62.21722**	**64.55868**	**66.24679**
-8	**-27.91141313**	**-25.017**	**-22.6445**	**-18.60667353**	**-23.18650276**	**-31.0828**	**-32.9578**	**-32.8727**	**-32.8471**
+8	**46.34124474**	**47.1123**	**40.08017**	**33.54722068**	**37.9246976**	**50.98551**	**55.81558**	**57.38086**	**58.24093**
-9	**-32.33561925**	**-29.3309**	**-26.5446**	**-21.90815686**	**-26.72455704**	**-35.8606**	**-38.4449**	**-38.3169**	**-38.2925**
+9	**41.9170437**	**41.33611**	**35.1165**	**29.3194757**	**34.38664109**	**46.20771**	**50.32846**	**51.22844**	**51.37876**
-10	**-37.49719373**	**-35.5645**	**-31.0946**	**-25.81062783**	**-30.85229087**	**-41.4347**	**-44.8466**	**-45.0816**	**-45.0539**
+10	**36.75546934**	**34.59723**	**30.44187**	**25.24859286**	**30.25890723**	**40.6336**	**43.92682**	**44.05063**	**44.02284**
-11	**-41.92140007**	**-41.3406**	**-35.12**	**-29.32099741**	**-34.39034781**	**-46.2125**	**-50.3337**	**-51.234**	**-51.3848**
+11	**32.33126332**	**29.32744**	**26.54185**	**21.90696317**	**26.72085477**	**35.85579**	**38.43969**	**38.31197**	**38.2878**
-12	**-47.08297407**	**-48.0795**	**-40.9109**	**-34.25726416**	**-38.51807651**	**-51.7866**	**-56.7353**	**-58.4119**	**-59.3906**
+12	**27.16968942**	**24.4948**	**21.99182**	**18.05914004**	**22.59312148**	**30.28169**	**32.03805**	**31.96038**	**31.93475**
-13	**-51.77616347**	**-54.0465**	**-46.8804**	**-39.31704255**	**-42.35096865**	**-56.9625**	**-62.2224**	**-64.5643**	**-66.2528**
+13	**22.74548329**	**21.37637**	**18.0918**	**14.80451025**	**19.05506494**	**25.50388**	**26.55092**	**26.51616**	**26.48929**
-14	**-57.03743521**	**-61.6122**	**-53.9122**	**-45.28709083**	**-46.47870288**	**-62.5366**	**-69.0814**	**-72.2129**	**-74.4689**
+14	**17.63428009**	**17.73821**	**14.0888**	**11.41574421**	**14.92733599**	**19.92977**	**21.25683**	**21.23172**	**21.2087**
-15	**-61.4616412**	**-68.0971**	**-59.9395**	**-50.44780032**	**-50.01675941**	**-67.3145**	**-74.5685**	**-78.4072**	**-81.6927**
+15	**14.51963855**	**14.61978**	**11.60697**	**9.286483353**	**11.3892787**	**15.899**	**16.83173**	**16.80552**	**16.7815**
-16	**-66.62321546**	**-75.8068**	**-66.9714**	**-56.51933491**	**-54.14448881**	**-72.8886**	**-80.9701**	**-85.585**	**-89.6985**
+16	**10.88588665**	**10.90231**	**8.711504**	**6.88471489**	**8.106007849**	**11.56358**	**11.6691**	**11.64163**	**11.61643**
-17	**-71.04742198**	**-82.6882**	**-73.2731**	**-62.0096639**	**-57.68254528**	**-77.6664**	**-86.4572**	**-91.7374**	**-96.5607**
+17	**7.771245396**	**7.783874**	**6.229674**	**4.869558789**	**6.160074304**	**7.847511**	**7.850886**	**7.826871**	**7.804862**
-18	**-76.20899592**	**-90.2539**	**-81.8556**	**-69.11501443**	**-61.81027889**	**-83.2405**	**-92.8589**	**-98.9153**	**-104.567**
+18	**4.137501061**	**4.145708**	**3.300454**	**2.569290071**	**3.889820675**	**3.995988**	**3.997758**	**3.977456**	**3.958831**
-19	**-80.63320232**	**-96.7388**	**-89.2277**	**-75.24880638**	**-65.34833098**	**-88.0183**	**-98.346**	**-105.068**	**-111.429**
+19	**1.555786841**	**1.557994**	**1.377642**	**1.086498404**	**1.943891952**	**1.502622**	**1.503099**	**1.492574**	**1.482919**
-20	**-85.79477081**	**-104.305**	**-97.5005**	**-82.45565645**	**-69.47606475**	**-93.5924**	**-104.748**	**-112.245**	**-119.435**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	173.343334	177.9470636	120.498	146.1936	151.354
-1	-1.589237147	-1.80401097	-1.78734	-1.87748	-1.589
+1	158.3887237	161.2030683	111.1003	134.9164	139.1714
-2	-4.670029173	-4.478595466	-5.35114	-5.64984	-4.75767
+2	143.4825052	144.6704867	101.8327	123.7952	127.1215
-3	-8.492088312	-8.12296506	-8.92581	-9.46283	-8.7115
+3	129.8895378	131.1971214	93.88893	114.2627	116.4138
-4	-14.05441758	-13.15056523	-13.0963	-14.2697	-14.273
+4	116.1533328	117.5393823	83.95928	102.3471	103.8823
-5	-18.96790237	-17.57643938	-16.9841	-19.0359	-19.04
+5	104.208134	105.832741	76.01554	92.81465	94.1325
-6	-24.53023246	-22.96602277	-22.0813	-24.7326	-24.7327
+6	91.22936601	94.36701403	67.02384	81.69344	82.63038
-7	-29.29795263	-29.07452907	-26.4504	-29.4988	-30.2943
+7	80.1118377	84.62211308	59.38752	72.86102	72.82101
-8	-36.25188973	-37.38879917	-31.9117	-35.0594	-37.0184
+8	68.98717984	73.2530687	51.0466	62.85192	61.69801
-9	-42.85380278	-44.66956381	-36.2807	-39.8256	-42.8076
+9	60.06490389	63.5081662	45.74369	54.27271	54.85346
-10	-52.12435483	-54.55958593	-41.378	-46.7519	-49.296
+10	50.7943559	53.13780712	40.64646	45.63472	48.36504
-11	-60.07053433	-63.50929241	-45.8185	-54.2792	-54.929
+11	42.84816815	44.66873148	36.27741	39.9	42.80354
-12	-70.58317985	-74.87833815	-52.2436	-64.2883	-63.294
+12	35.18789529	36.17450143	31.18019	34.2614	36.08771
-13	-80.11859511	-84.62323891	-59.393	-72.8676	-72.828
+13	29.29456792	29.07382323	26.44705	29.49517	30.29017
-14	-93.09134989	-95.99228437	-68.2208	-83.2894	-84.2264
+14	23.73223888	22.00180241	21.34983	23.93456	23.92075
-15	-104.2160151	-105.8340951	-76.0216	-92.8219	-94.1395
+15	18.96452447	17.57593178	16.98077	19.03231	19.07803
-16	-118.015331	-119.4918476	-85.2893	-103.943	-105.611
+16	13.25641853	12.4124074	12.49777	13.47169	13.47499
-17	-129.7914646	-131.1984746	-93.895	-114.27	-116.27
+17	8.488704612	8.122538187	8.92309	9.459924	8.707998
-18	-145.610502	-147.0339298	-103.163	-125.391	-128.85
+18	4.138027923	3.891416576	4.75263	5.011444	4.225664
-19	-158.3977333	-161.2047079	-111.106	-134.924	-139.179
+19	1.588109653	1.803798212	1.78598	1.876026	1.587834
-20	-173.2306274	-177.7372733	-120.374	-146.045	-151.229
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 65' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.96E-13	-2.17E-13	-1.96E-13	-1.96E-13	-2.11E-13	-1.80E-13	-2.00E-13	-1.61E-13	-1.71E-13	-7.91E-14
End Shear	3.26E-13	1.85E-13	2.25E-13	1.56E-13	1.58E-13	1.21E-13	1.21E-13	1.10E-13	1.16E-13	9.35E-14
-1	0	0	0	0	0	0	0	0	0	0
+1	548.5689792	457.4330392	493.4042878	353.2793144	375.6333966	351.2805671	415.6261729	358.2212205	378.1132688	183.240885
-2	0	0	0	0	0	0	0	0	0	0
+2	1035.332504	868.4429534	931.2661986	669.1850171	711.0182879	664.6041434	785.2438714	667.4954994	704.4003642	346.2426743
-3	0	0	0	0	0	0	0	0	0	0
+3	1447.639144	1225.647513	1303.03667	939.3253357	997.403544	932.0119195	1100.846342	918.8979175	969.4666341	483.9455922
-4	0	0	0	0	0	0	0	0	0	0
+4	1806.481289	1539.359087	1625.124676	1176.417776	1247.626451	1164.727896	1371.668616	1122.759207	1184.085509	604.7825906
-5	0	0	0	0	0	0	0	0	0	0
+5	2086.805051	1796.449391	1877.844338	1366.41148	1448.235091	1352.264512	1591.01249	1301.557865	1373.89295	696.4067693
-6	0	0	0	0	0	0	0	0	0	0
+6	2313.446256	2012.748325	2081.575357	1521.698051	1609.824246	1501.251198	1789.269201	1443.792458	1525.833237	775.6196862
-7	0	0	0	0	0	0	0	0	0	0
+7	2473.081846	2172.61298	2225.693978	1632.8629	1725.784343	1629.027843	1933.849366	1543.022325	1629.525128	824.8013136
-8	0	0	0	0	0	0	0	0	0	0
+8	2605.346202	2288.610662	2344.071701	1712.469415	1820.388039	1720.093522	2036.255024	1609.458626	1700.869532	858.753996
-9	0	0	0	0	0	0	0	0	0	0
+9	2663.428886	2351.24973	2396.736876	1765.276121	1871.591389	1763.703665	2082.72271	1617.487882	1710.429758	865.49306
-10	0	0	0	0	0	0	0	0	0	0
+10	2662.625938	2366.218816	2396.250568	1780.774844	1884.528443	1774.80258	2082.780067	1580.675002	1672.737223	854.3711763
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2664.091187	2351.332939	2397.569463	1765.227021	1871.55568	1763.701941	2082.699742	1617.448455	1710.386952	865.5009551
-12	0	0	0	0	0	0	0	0	0	0
+12	2608.384909	2288.777076	2347.508818	1712.475399	1820.405937	1720.130352	2036.324059	1609.485697	1700.896606	858.7800387
-13	0	0	0	0	0	0	0	0	0	0
+13	2473.291344	2172.654607	2225.950177	1632.923907	1725.7814	1629.045736	1933.895444	1543.030301	1629.531981	824.8027505
-14	0	0	0	0	0	0	0	0	0	0
+14	2314.085266	2012.872986	2082.343901	1521.814225	1609.94936	1501.250077	1789.29215	1443.866826	1525.909857	775.6391669
-15	0	0	0	0	0	0	0	0	0	0
+15	2085.953466	1796.449471	1877.230656	1366.433888	1448.264951	1352.301967	1591.012675	1301.570406	1373.904372	697.7189817
-16	0	0	0	0	0	0	0	0	0	0
+16	1808.064173	1539.442299	1627.131595	1176.495314	1247.709958	1164.803826	1371.645777	1122.750405	1184.076718	604.7955713
-17	0	0	0	0	0	0	0	0	0	0
+17	1449.524685	1225.606021	1304.525866	939.3090557	997.3917358	932.0114328	1100.857835	918.9125395	969.482381	483.955368
-18	0	0	0	0	0	0	0	0	0	0
+18	1036.589295	868.4844805	932.8031586	669.2236424	711.0598928	664.6419732	785.2897391	667.5337619	704.440878	346.2491154
-19	0	0	0	0	0	0	0	0	0	0
+19	549.1973319	457.453759	494.172749	353.2985851	375.6541607	351.2994422	415.6490709	358.2403	378.1334713	183.2440839
-20	-2.73E-13	-1.84E-13	-1.45E-13	-1.66E-13	-1.66E-13	-1.36E-13	-1.36E-13	-1.30E-13	-1.37E-13	-8.31E-14
+20	4.17E-13	2.99E-13	3.27E-13	2.36E-13	2.45E-13	2.51E-13	3.02E-13	2.16E-13	2.28E-13	1.44E-13

1-Span: Moment (Max and Min) Raw Data Results - 65’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.34E-13	-1.31E-13	-1.22E-13	-9.51E-14	-1.05E-13	-1.40E-13	-1.61E-13	-1.64E-13	-1.66E-13
End Shear	1.05E-13	1.02E-13	1.28E-13	9.58E-14	1.18E-13	1.03E-13	1.00E-13	1.00E-13	9.79E-14
-1	0	0	0	0	0	0	0	0	0
+1	262.0437244	314.3847282	289.9740656	246.2026745	212.3700314	286.0438914	319.6075068	341.8812542	362.6364689
-2	0	0	0	0	0	0	0	0	0
+2	495.3301301	586.6175023	533.7726469	454.5835266	401.742713	541.0320631	603.5487312	643.5202694	680.427784
-3	0	0	0	0	0	0	0	0	0
+3	693.3694934	808.4310286	724.4771909	621.1793391	562.3686998	758.3504933	844.7684667	917.6647633	973.9979741
-4	0	0	0	0	0	0	0	0	0
+4	866.0451868	990.4576135	882.1682482	759.6064913	703.8302071	947.4892612	1052.543522	1158.363794	1224.401657
-5	0	0	0	0	0	0	0	0	0
+5	1002.901429	1128.443538	1010.317067	872.38375	813.4593806	1099.282326	1218.853138	1351.5664	1448.833625
-6	0	0	0	0	0	0	0	0	0
+6	1112.145045	1243.687617	1107.520668	959.0066776	906.2624387	1219.817611	1359.675787	1507.466403	1631.779033
-7	0	0	0	0	0	0	0	0	0
+7	1188.468224	1309.558401	1159.176801	1008.778127	966.6395471	1318.701186	1469.857577	1616.776005	1762.201723
-8	0	0	0	0	0	0	0	0	0
+8	1251.485415	1342.165354	1194.103168	1042.033441	1008.973151	1391.513266	1545.860511	1704.357054	1849.426588
-9	0	0	0	0	0	0	0	0	0
+9	1281.446564	1344.431896	1235.81774	1078.729068	1020.212704	1426.101663	1577.488686	1750.193481	1898.724093
-10	0	0	0	0	0	0	0	0	0
+10	1284.352065	1305.721136	1251.054186	1091.114488	1010.371304	1433.458077	1576.326874	1758.18998	1916.377271
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	1281.424471	1344.409093	1235.84426	1078.726601	1020.188603	1426.094768	1577.455253	1750.181843	1898.712143
-12	0	0	0	0	0	0	0	0	0
+12	1251.499043	1342.193681	1194.055035	1042.040549	1008.937073	1391.53974	1545.810151	1704.37177	1849.416638
-13	0	0	0	0	0	0	0	0	0
+13	1188.490575	1309.554957	1159.159871	1008.783059	966.6576257	1318.712167	1469.883421	1616.816993	1762.214941
-14	0	0	0	0	0	0	0	0	0
+14	1112.229994	1243.627886	1107.490105	959.0179659	906.3347168	1219.813036	1359.684548	1507.533697	1631.815508
-15	0	0	0	0	0	0	0	0	0
+15	1002.922465	1128.407008	1010.300966	872.3890627	813.453375	1099.311141	1218.891563	1351.571088	1448.850629
-16	0	0	0	0	0	0	0	0	0
+16	866.1019334	990.4444585	882.1201748	759.6101137	703.87844	947.5513843	1052.611619	1158.394785	1224.399259
-17	0	0	0	0	0	0	0	0	0
+17	693.3621885	808.4408281	724.4691107	621.1758085	562.4048963	758.3482665	844.772851	917.6775604	973.9961931
-18	0	0	0	0	0	0	0	0	0
+18	495.358427	586.6504477	533.7484576	454.572912	401.7667862	541.0630178	603.5826589	643.5147725	680.4265606
-19	0	0	0	0	0	0	0	0	0
+19	262.057843	314.4011519	289.9900534	246.1973241	212.3820444	286.0593371	319.6244035	341.878471	362.6358296
-20	-1.29E-13	-1.19E-13	-1.11E-13	-8.54E-14	-7.54E-14	-1.16E-13	-1.13E-13	-1.16E-13	-1.12E-13
+20	1.79E-13	1.82E-13	2.20E-13	1.85E-13	1.69E-13	2.07E-13	2.00E-13	2.14E-13	2.18E-13

1-Span: Moment (Max and Min) Raw Data Results - 65' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.60E-13	-1.94E-13	-1.53E-13	-1.88E-13	-1.99E-13
End Shear	1.64E-13	1.60E-13	1.18E-13	1.37E-13	1.06E-13
-1	0	0	0	0	0
+1	514.763352	524.4296499	361.0760983	438.4783177	452.3069722
-2	0	0	0	0	0
+2	946.8863294	956.6837201	670.5179943	814.9955915	837.4786786
-3	0	0	0	0	0
+3	1311.778659	1339.452904	918.7105301	1121.004984	1146.756414
-4	0	0	0	0	0
+4	1619.379475	1671.614934	1130.156927	1388.677839	1424.669549
-5	0	0	0	0	0
+5	1837.062525	1967.370027	1312.819415	1597.596001	1640.270253
-6	0	0	0	0	0
+6	2040.635214	2180.979485	1445.24747	1747.523893	1826.466681
-7	0	0	0	0	0
+7	2184.584294	2365.387333	1534.669324	1838.697281	1936.90185
-8	0	0	0	0	0
+8	2297.140225	2460.973273	1587.074789	1891.533979	1991.79676
-9	0	0	0	0	0
+9	2371.593435	2510.798934	1577.810844	1875.792128	1999.124994
-10	0	0	0	0	0
+10	2362.966754	2557.127914	1521.21547	1830.362659	1940.584502
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2371.600698	2510.801055	1577.771489	1875.668314	1999.119249
-12	0	0	0	0	0
+12	2297.154889	2460.970001	1587.015861	1891.486849	1991.804408
-13	0	0	0	0	0
+13	2184.569687	2365.385636	1534.679216	1838.665922	1936.903712
-14	0	0	0	0	0
+14	2040.664645	2180.979286	1445.326013	1747.508112	1826.500763
-15	0	0	0	0	0
+15	1837.062611	1967.364593	1312.83428	1597.595998	1640.279736
-16	0	0	0	0	0
+16	1619.350335	1671.611619	1130.196425	1388.693772	1424.616595
-17	0	0	0	0	0
+17	1311.756813	1339.452375	918.7252324	1121.036394	1146.754476
-18	0	0	0	0	0
+18	946.9083558	956.6832469	670.5572109	815.0426487	837.5278629
-19	0	0	0	0	0
+19	514.7926646	524.4294549	361.0956564	438.5017918	452.3314894
-20	-1.34E-13	-1.29E-13	-1.38E-13	-1.42E-13	-1.22E-13
+20	3.68E-13	3.85E-13	2.86E-13	2.86E-13	3.29E-13

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	0	0	0	0	0	0	0	0	0	0
End Shear	61.66154	44.59077	54.14769	50.58462	44.48846	36.12308	48.64615	54.43077	58.31539	62.03846
-1	-1.47692	-0.80753	-0.80851	-0.71487	-0.56762	-1.00904	-0.77995	-0.78016	-0.77467	-0.76963
+1	57.66755	41.80909	50.16011	46.26538	40.47373	33.88365	45.63832	50.9934	54.47865	57.77689
-2	-3.2	-2.41622	-2.42048	-1.9268	-1.5187	-2.18625	-2.33361	-2.33453	-2.324	-2.31434
+2	53.80825	39.13263	46.23699	41.82984	36.60473	31.74327	42.74794	47.67391	50.75668	53.62555
-3	-4.67692	-4.03128	-4.0375	-3.21372	-2.56171	-3.19529	-4.07116	-4.07282	-4.06028	-4.0488
+3	50.50028	36.83851	42.87431	37.99231	33.31844	29.90865	40.27047	44.82863	47.56642	50.06726
-4	-6.4	-5.91551	-5.92403	-4.73263	-3.81355	-4.3725	-6.31923	-6.43549	-6.42124	-6.40817
+4	46.64098	34.16204	38.74561	34.2041	29.87721	27.76827	37.38008	41.50913	43.84445	45.91591
-5	-8.78993	-7.53057	-7.54108	-6.01955	-4.91656	-5.90769	-8.24615	-8.73007	-8.71639	-8.70385
+5	43.333	31.86792	35.30829	31.07871	27.06529	25.93365	34.90261	38.66385	40.65419	42.35762
-6	-12.2204	-9.50253	-9.4687	-7.52096	-6.25246	-8.04808	-10.7497	-11.4071	-11.3941	-11.3821
+6	39.47371	29.19145	31.38518	27.43244	23.81971	23.79327	32.01222	35.34436	36.91044	38.01878
-7	-15.1608	-11.7967	-11.0857	-9.38269	-7.87486	-9.88269	-13.2272	-13.7704	-13.7522	-13.7382
+7	36.16574	26.89733	28.0225	24.30705	21.06779	21.95866	29.53475	32.26198	33.47611	34.35146
-8	-18.5913	-14.4731	-12.9723	-11.7421	-9.91127	-12.0231	-16.1176	-17.0899	-17.0457	-17.0325
+8	32.30643	24.02968	24.4295	20.78308	17.96866	19.66539	26.43791	28.94248	29.75414	30.20012
-9	-21.6386	-16.7672	-15.2092	-13.7644	-11.6868	-13.8577	-18.5951	-19.9351	-19.8688	-19.8561
+9	28.7228	21.73557	21.43433	18.20923	15.6911	17.83077	23.96044	26.0972	26.56388	26.64183
-10	-25.4979	-19.4437	-18.4415	-16.1237	-13.7932	-15.9981	-21.4854	-23.2546	-23.3765	-23.3621
+10	24.8635	19.0591	17.93997	15.78526	13.48934	15.69038	21.07005	22.77771	22.84191	22.8275
-11	-28.8059	-21.7378	-21.4367	-18.211	-15.6919	-17.8327	-23.9629	-26.0999	-26.5668	-26.6449
+11	21.64028	16.76498	15.20739	13.76295	11.68615	13.85577	18.59258	19.93243	19.8662	19.85367
-12	-32.6652	-24.4143	-24.931	-21.2138	-18.3517	-19.9731	-26.8533	-29.4194	-30.2888	-30.7963
+12	18.20979	14.08851	12.70148	11.40359	9.617428	11.71539	15.7022	16.61294	16.57266	16.55937
-13	-35.9731	-26.8479	-28.0251	-24.3092	-21.0687	-21.9606	-29.5372	-32.2647	-33.479	-34.3546
+13	15.08699	11.79439	11.08446	9.381283	7.874239	9.88077	13.22472	13.76766	13.74963	13.7357
-14	-39.8324	-29.5761	-31.9483	-27.9555	-24.282	-24.101	-32.4276	-35.8213	-37.4451	-38.6149
+14	11.65651	9.144039	9.19793	7.305576	6.060923	7.740387	10.33434	11.02247	11.00945	10.99751
-15	-43.1404	-31.8702	-35.3109	-31.0809	-27.0663	-25.9356	-34.9051	-38.6666	-40.6571	-42.3607
+15	8.716083	7.52898	7.580906	6.018654	4.916167	5.905771	8.244232	8.727885	8.714299	8.701839
-16	-46.9997	-34.5467	-39.3087	-34.7272	-30.3495	-28.076	-37.7955	-41.9861	-44.3791	-46.5121
+16	6.148811	5.644743	5.653258	4.517244	3.632014	4.203271	5.996151	6.050871	6.036622	6.023558
-17	-50.5834	-36.8408	-42.8769	-37.9949	-33.3196	-29.9106	-40.2729	-44.8313	-47.5693	-50.0704
+17	4.654545	4.029684	4.036232	3.230321	2.561314	3.194231	4.06923	4.070981	4.058528	4.047116
-18	-54.4427	-39.5172	-46.8001	-42.4452	-37.1563	-32.051	-43.1633	-48.1508	-51.2913	-54.2217
+18	2.939299	2.14545	2.149706	1.71141	1.347161	2.017019	2.072071	2.072988	2.062461	2.052803
-19	-57.7506	-41.8114	-50.1627	-46.268	-40.4749	-33.8856	-45.6408	-50.9961	-54.4816	-57.78
+19	1.469092	0.806734	0.807879	0.714359	0.567399	1.007981	0.779166	0.779413	0.773956	0.76895
-20	-61.6099	-44.4878	-54.0859	-50.5577	-44.3816	-36.026	-48.5312	-54.3156	-58.2035	-61.9313
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**61.66154**	***60***	***63.84615***	***59.72308***	***70.76923***	***61.78462***	***65.23077***	***31.18782***
-1	**-1.47692**	***-1.14672***	***-1.14672***	***-0.91758***	***-0.91758***	***-0.87283***	***-0.91876***	***-1.05949***
+1	**57.66755**	***56.36574***	***59.93233***	***56.04684***	***66.31318***	***57.15422***	***60.328***	***29.2361***
-2	**-3.2**	***-3.43068***	***-3.43068***	***-2.74542***	***-2.74542***	***-2.61301***	***-2.75054***	***-2.29557***
+2	**53.80825**	***52.88735***	***56.18637***	***52.51415***	***62.03114***	***52.59869***	***55.50449***	***27.35243***
-3	**-4.67692**	***-5.72412***	***-5.72412***	***-4.89149***	***-5.02473***	***-4.35866***	***-4.58807***	***-3.35506***
+3	**50.50028**	***49.90587***	***52.97555***	***49.48613***	***58.36081***	***48.69394***	***51.37006***	***25.73785***
-4	**-6.4**	***-8.39981***	***-8.39981***	***-7.78187***	***-8.23626***	***-6.39526***	***-6.73185***	***-4.59114***
+4	**46.64098**	***46.42747***	***49.22958***	***45.95343***	***54.07875***	***43.91647***	***46.31294***	***23.85418***
-5	**-8.78993**	***-10.9012***	***-10.9706***	***-10.2593***	***-10.989***	***-8.18116***	***-8.61826***	***-5.65063***
+5	**43.333**	***43.44599***	***46.01876***	***42.92541***	***50.40842***	***39.90827***	***42.06758***	***22.2396***
-6	**-12.2204**	***-14.3796***	***-14.7165***	***-13.4052***	***-14.6264***	***-10.7001***	***-11.298***	***-6.88671***
+6	**39.47371**	***39.9676***	***42.27279***	***39.39272***	***46.12637***	***35.35273***	***37.24407***	***20.35593***
-7	**-15.1608**	***-17.3611***	***-17.9274***	***-16.4332***	***-18.2967***	***-12.8592***	***-13.5949***	***-8.24714***
+7	**36.16574**	***36.98611***	***39.06197***	***36.3647***	***42.45604***	***31.56787***	***33.22933***	***18.74136***
-8	**-18.5913**	***-20.8395***	***-21.6733***	***-19.9659***	***-22.5788***	***-15.3781***	***-16.2746***	***-10.1308***
+8	**32.30643**	***33.25926***	***35.04843***	***32.57967***	***37.86813***	***27.26384***	***28.69878***	***16.85769***
-9	**-21.6386**	***-23.821***	***-24.8841***	***-22.994***	***-26.2491***	***-17.7172***	***-18.7629***	***-11.7454***
+9	**28.7228**	***30.27778***	***31.83761***	***29.55165***	***34.1978***	***23.77253***	***25.02372***	***15.24311***
-10	**-25.4979**	***-27.2994***	***-28.6301***	***-26.5266***	***-30.5311***	***-20.284***	***-21.4427***	***-13.6291***
+10	**24.8635**	***26.79938***	***28.09164***	***26.01895***	***29.91575***	***19.87457***	***21.05805***	***13.35944***
-11	**-28.8059**	***-30.2809***	***-31.8409***	***-29.5547***	***-34.2015***	***-23.7753***	***-25.0266***	***-15.2436***
+11	**21.64028**	***23.8179***	***24.88082***	***22.99093***	***26.24542***	***17.71548***	***18.76114***	***11.74486***
-12	**-32.6652**	***-33.7593***	***-35.5869***	***-33.0874***	***-38.4835***	***-27.8485***	***-29.3142***	***-17.1273***
+12	**18.20979**	***20.3395***	***21.13485***	***19.45824***	***21.96337***	***15.01661***	***15.89001***	***9.861193***
-13	**-35.9731**	***-36.9892***	***-39.0653***	***-36.3677***	***-42.4597***	***-31.5262***	***-33.1855***	***-18.7419***
+13	**15.08699**	***17.35803***	***17.92403***	***16.43022***	***18.29304***	***12.85751***	***13.5931***	***8.246617***
-14	**-39.8324**	***-40.4676***	***-42.8113***	***-39.9004***	***-46.7418***	***-36.0066***	***-37.9364***	***-20.6255***
+14	**11.65651**	***13.87963***	***14.17806***	***12.89753***	***14.01099***	***10.33857***	***10.91337***	***6.709783***
-15	**-43.1404**	***-43.4491***	***-46.0221***	***-42.9284***	***-50.4121***	***-39.9113***	***-42.0708***	***-22.2401***
+15	**8.716083**	***10.89815***	***10.96724***	***10.25687***	***10.98626***	***8.183933***	***8.616461***	***5.65029***
-16	**-46.9997**	***-46.9275***	***-49.768***	***-46.4611***	***-54.6941***	***-44.5703***	***-47.0052***	***-24.1238***
+16	**6.148811**	***8.015196***	***8.015196***	***7.36648***	***7.774722***	***6.102949***	***6.424157***	***4.414215***
-17	**-50.5834**	***-49.909***	***-52.9789***	***-49.4891***	***-58.3645***	***-48.697***	***-51.3733***	***-25.7384***
+17	**4.654545**	***5.721747***	***5.721747***	***4.889011***	***5.021978***	***4.357296***	***4.586628***	***3.354721***
-18	**-54.4427**	***-53.3873***	***-56.7248***	***-53.0218***	***-62.6465***	***-53.2525***	***-56.1968***	***-27.622***
+18	**2.939299**	***3.046059***	***3.046059***	***2.43773***	***2.43773***	***2.320705***	***2.442848***	***2.118646***
-19	**-57.7506**	***-56.3688***	***-59.9357***	***-56.0499***	***-66.3169***	***-57.1573***	***-60.3312***	***-29.2366***
+19	**1.469092**	***1.145536***	***1.145536***	***0.916666***	***0.916666***	***0.872142***	***0.918044***	***1.059153***
-20	**-61.6099**	***-59.8472***	***-63.6816***	***-59.5826***	***-70.5989***	***-61.7128***	***-65.1547***	***-31.1203***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 65' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	61.66154	100.2564	102.9191	69.69231	84.55385	87.53846
-1	-1.47692	-0.91917	-1.04338	-1.03374	-1.08587	-0.91903
+1	57.66755	91.60713	93.23486	64.25699	78.03147	80.49241
-2	-3.2	-2.701	-2.59028	-3.09493	-3.26769	-2.75169
+2	53.80825	82.98583	83.67292	58.89686	71.5993	73.52311
-3	-4.67692	-4.91156	-4.69807	-5.16241	-5.47301	-5.03846
+3	50.50028	75.12408	75.88035	54.30245	66.08601	67.33016
-4	-6.4	-8.12864	-7.60588	-7.57448	-8.25315	-8.25506
+4	46.64098	67.17949	67.98113	48.55944	59.19441	60.08232
-5	-8.78993	-10.9704	-10.1657	-9.82308	-11.0098	-11.0121
+5	43.333	60.27075	61.21038	43.96503	53.68112	54.44332
-6	-12.2204	-14.1875	-13.2828	-12.7712	-14.3045	-14.3047
+6	39.47371	52.76424	54.57896	38.76451	47.24895	47.79085
-7	-15.1608	-16.945	-16.8158	-15.2981	-17.0612	-17.5213
+7	36.16574	46.3342	48.94281	34.3479	42.14056	42.11741
-8	-18.5913	-20.967	-21.6245	-18.4567	-20.2773	-21.4103
+8	32.30643	39.90005	42.3673	29.52377	36.3516	35.68421
-9	-21.6386	-24.7853	-25.8355	-20.9837	-23.0339	-24.7586
+9	28.7228	34.73968	36.73115	26.45673	31.38965	31.72554
-10	-25.4979	-30.1471	-31.5556	-23.9317	-27.0399	-28.5113
+10	24.8635	29.37788	30.73326	23.50865	26.39371	27.97284
-11	-28.8059	-34.7429	-36.7318	-26.5	-31.3934	-31.7692
+11	21.64028	24.78205	25.83501	20.98173	23.07692	24.75624
-12	-32.6652	-40.8231	-43.3073	-30.2161	-37.1824	-36.6073
+12	18.20979	20.35159	20.92221	18.03365	19.81573	20.87201
-13	-35.9731	-46.3381	-48.9435	-34.351	-42.1443	-42.1215
+13	15.08699	16.94307	16.8154	15.29615	17.05909	17.51889
-14	-39.8324	-53.8412	-55.519	-39.4568	-48.172	-48.7139
+14	11.65651	13.72599	12.72516	12.34808	13.84301	13.83502
-15	-43.1404	-60.2753	-61.2112	-43.9685	-53.6853	-54.4474
+15	8.716083	10.96849	10.16537	9.821153	11.0077	11.03414
-16	-46.9997	-68.2564	-69.1104	-49.3287	-60.1175	-61.0823
+16	6.148811	7.667102	7.178952	7.228323	7.79161	7.793518
-17	-50.5834	-75.0674	-75.8811	-54.3059	-66.0902	-67.2468
+17	4.654545	4.909604	4.697824	5.160838	5.471327	5.036436
-18	-54.4427	-84.2166	-85.0399	-59.6661	-72.5224	-74.5231
+18	2.939299	2.393307	2.250675	2.748774	2.898464	2.443993
-19	-57.7506	-91.6123	-93.2358	-64.2605	-78.0357	-80.4968
+19	1.469092	0.918513	1.043261	1.032955	1.085035	0.918354
-20	-61.6099	-100.191	-102.798	-69.6206	-84.4678	-87.4661
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 65’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.21E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.35E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	187.4195	135.8796	163.0203	150.3625	132.6433	110.1219	148.3245	165.7285	177.2783	188.0407
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	353.3373	256.8474	304.1833	276.7813	245.1535	208.3188	280.5455	312.9628	333.6895	352.8275
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	492.3777	359.5382	419.2020	375.6688	335.4693	291.6094	393.2333	438.0443	475.8438	505.0547
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	613.5	449.0771	513.5896	457.4375	410.6576	364.9625	491.3089	545.7835	600.6553	634.8984
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	706	520.0422	585.1405	523.8875	472.0181	421.8094	570.0194	632.0213	700.8382	751.2749
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	780.4882	576.6892	644.8989	574.2912	519.2956	469.9313	632.5214	705.0432	781.6782	846.1390
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	831.3005	616.2656	679.0554	601.0769	546.9370	501.2391	683.7963	762.1766	838.3593	913.7681
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	875.4055	648.9424	695.9634	619.1875	565.4930	523.1906	721.5521	801.5870	883.7734	958.9975
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	892.7514	664.4784	697.1387	640.8181	585.3058	529.0188	739.4875	817.9874	907.5413	984.5601
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	889.85	665.9850	677.0657	648.7188	591.9917	523.9156	743.3021	817.3849	911.6878	993.7139
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	893.036	664.4669	697.1268	640.8319	585.3045	529.0063	739.4839	817.9701	907.5353	984.5539
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	876.711	648.9495	695.9781	619.1626	565.4967	523.1719	721.5658	801.5609	883.7811	958.9923
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	831.3905	616.2772	679.0536	601.0681	546.9395	501.2484	683.8020	762.1900	838.3806	913.7749
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	780.7627	576.7332	644.8680	574.2754	519.3015	469.9687	632.5191	705.0477	781.7131	846.1579
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	705.6341	520.0531	585.1216	523.8792	472.0209	421.8063	570.0343	632.0413	700.8406	751.2837
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	614.1801	449.1065	513.5828	457.4126	410.6594	364.9875	491.3411	545.8188	600.6714	634.8972
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	493.1878	359.5345	419.2071	375.6646	335.4675	291.6282	393.2322	438.0466	475.8504	505.0538
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	353.8772	256.8620	304.2004	276.7687	245.1480	208.3312	280.5616	312.9804	333.6867	352.8268
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	187.6895	135.8869	163.0289	150.3708	132.6405	110.1281	148.3326	165.7373	177.2769	188.0404
-20	-1.13E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.61E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 65' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.21E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.35E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	187.4195	183.1887	194.7801	182.1522	215.5178	185.7512	196.0660	95.0173
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	353.3373	346.9977	368.6898	344.6223	407.1786	346.1216	365.2582	179.5399
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	492.3777	487.0756	517.1914	483.2833	570.8304	476.4832	502.7050	250.9440
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	613.5	610.0170	646.9414	603.9554	711.2619	582.1930	613.9930	313.6026
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	706	708.5359	750.9645	701.2002	825.0000	674.9069	712.4153	361.1132
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	780.4882	789.0578	834.7546	778.4554	927.8036	748.6609	791.2021	402.1881
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	831.3005	846.7010	894.8843	844.7124	1002.7738	800.1153	844.9703	427.6906
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	875.4055	887.9800	943.9399	891.9334	1055.8750	834.5650	881.9650	445.2963
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	892.7514	915.3623	970.4907	914.5469	1079.9703	838.7285	886.9224	448.7908
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	889.85	923.3989	977.1991	920.3021	1080.0000	819.6396	867.3774	443.0237
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	893.036	915.3368	970.4722	914.5460	1079.9584	838.7080	886.9002	448.7949
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	876.711	887.9831	943.9492	891.9525	1055.9108	834.5790	881.9791	445.3098
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	831.3905	846.7326	894.8828	844.7217	1002.7977	800.1194	844.9738	427.6913
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	780.7627	789.1181	834.8195	778.4548	927.8155	748.6994	791.2418	402.1982
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	705.6341	708.5475	750.9800	701.2196	825.0001	674.9134	712.4212	361.7936
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	614.1801	610.0572	646.9847	603.9947	711.2501	582.1884	613.9884	313.6093
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	493.1878	487.0672	517.1852	483.2831	570.8363	476.4908	502.7132	250.9491
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	353.8772	347.0177	368.7114	344.6419	407.2024	346.1414	365.2792	179.5432
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	187.6895	183.1986	194.7909	182.1620	215.5297	185.7611	196.0765	95.0190
-20	-1.13E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.61E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 65' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.21E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.35E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	187.4195	297.7232	303.3139	208.8352	253.6023	261.6003
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	353.3373	547.6497	553.3162	387.8068	471.3682	484.3717
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	492.3777	758.6921	774.6980	531.3537	648.3545	663.2484
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	613.5	936.5989	966.8103	653.6477	803.1682	823.9847
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	706	1062.5000	1137.8658	759.2941	924.0000	948.6815
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	780.4882	1180.2401	1261.4109	835.8863	1010.7136	1056.3717
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	831.3005	1263.4958	1368.0667	887.6052	1063.4455	1120.2440
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	875.4055	1328.5947	1423.3506	917.9149	1094.0046	1151.9935
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	892.7514	1371.6561	1452.1683	912.5569	1084.9000	1156.2319
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	889.85	1366.6667	1478.9635	879.8239	1058.6250	1122.3739
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	893.036	1371.6603	1452.1695	912.5341	1084.8284	1156.2286
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	876.711	1328.6032	1423.3488	917.8808	1093.9774	1151.9979
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	831.3905	1263.4874	1368.0657	887.6109	1063.4274	1120.2451
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	780.7627	1180.2572	1261.4108	835.9318	1010.7045	1056.3914
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	705.6341	1062.5001	1137.8627	759.3026	924.0000	948.6869
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	614.1801	936.5820	966.8083	653.6706	803.1774	823.9541
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	493.1878	758.6795	774.6977	531.3622	648.3727	663.2472
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	353.8772	547.6624	553.3159	387.8295	471.3954	484.4002
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	187.6895	297.7401	303.3137	208.8465	253.6158	261.6145
-20	-1.13E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.61E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	184.7160005	152.5299994	166.2443997	116.3987	123.975	116.0406	137.75	122.3496	129.2095	60.67772711
-1	-3.276002048	-2.561126516	-2.948401841	-2.05424	-2.05424	-1.64371	-1.64371	-1.56334	-1.64562	-1.897489026
+1	172.2329728	142.5455197	154.8666374	109.8787	116.9534	109.4442	129.7543	114.0358	120.4067	57.18018605
-2	-7.8680018	-8.654919256	-7.081201612	-6.83144	-6.83144	-5.46666	-5.46666	-5.20179	-5.47556	-4.427471876
+2	158.5546074	131.7958526	142.5735331	102.7573	109.2842	102.2118	120.9878	104.7106	110.533	53.32471192
-3	-11.47999938	-14.02916623	-10.33199943	-10.9399	-10.9399	-9.50382	-9.82513	-8.32846	-8.7668	-6.324957599
+3	148.4638307	123.9016051	133.5049022	97.41628	103.5323	96.78756	114.413	97.71674	103.1277	50.4331076
-4	-16.5199991	-21.41883261	-14.86799916	-16.4179	-16.4179	-15.4212	-16.4	-12.4974	-13.1551	-8.854940638
+4	135.233466	113.5999365	121.6149986	90.29493	95.86319	89.55522	105.6465	88.39156	93.25398	46.57763472
-5	-23.50271406	-27.12908507	-21.29400276	-21.312	-21.5739	-19.8592	-21.3311	-15.9508	-16.8166	-10.75242787
+5	125.4786997	106.0416884	112.8487695	84.95391	90.11132	84.13097	99.07166	80.81485	85.23158	43.68602588
-6	-33.20970565	-34.96675207	-30.05750184	-28.4334	-29.243	-26.7294	-29.494	-21.1071	-22.302	-13.32504159
+6	112.6963326	96.18802208	101.3620637	77.83255	82.44217	76.89863	90.30519	71.48967	75.35786	39.83055174
-7	-40.65794733	-41.01299856	-36.74930226	-33.7744	-34.9949	-32.1536	-36.0688	-24.9743	-26.416	-16.21664657
+7	103.2775544	88.96576647	92.89823181	72.49154	76.69031	71.47437	83.73033	64.49577	67.95256	36.93894665
-8	-51.07199721	-49.29866493	-45.96479737	-40.8957	-42.6641	-39.386	-44.8353	-30.1306	-31.9014	-20.07212073
+8	90.94318949	79.56010329	81.81472801	64.94975	68.60072	63.79001	74.41596	55.1706	58.07884	33.08347251
-9	-59.35933552	-55.68091739	-53.56970299	-46.2367	-48.4159	-44.8102	-51.4102	-34.3201	-36.3583	-22.96372697
+9	81.26451962	72.67385607	73.6533001	59.58408	62.78997	58.36576	67.8411	48.83975	51.41026	30.19187007
-10	-71.02170157	-64.41458372	-64.04840729	-53.3581	-56.0851	-52.0426	-60.1766	-41.5488	-43.7356	-26.81920113
+10	69.37815233	63.30333209	62.43777254	52.46273	55.12082	51.13342	59.07463	40.50194	42.63362	26.33639453
-11	-79.93647513	-71.54568367	-72.05863493	-58.6991	-61.8369	-57.4668	-66.7515	-47.8022	-50.3181	-29.71080559
+11	60.63138498	56.75308313	54.57875039	47.12171	49.36896	45.70916	52.49978	34.96172	37.04091	23.44478708
-12	-92.04683093	-80.72735494	-82.94053876	-65.8451	-69.565	-64.6992	-75.518	-56.3415	-59.3186	-33.56627975
+12	49.78399956	48.24341361	44.80559949	40.00035	41.69981	38.47683	43.7333	29.48317	31.21267	19.58931275
-13	-101.2976092	-87.7816039	-91.25317087	-71.6066	-75.7373	-70.5754	-82.6407	-63.3354	-66.7239	-36.45788674
+13	41.7606614	42.02916462	37.92599988	34.65934	35.94795	33.05257	37.15845	25.61596	27.09862	16.69770521
-14	-113.8559746	-97.41126706	-102.538275	-78.7279	-83.4064	-77.8078	-91.4072	-72.6605	-76.5976	-40.31336088
+14	31.8296617	33.96750116	28.6986258	27.53799	28.27879	25.82023	28.39197	20.45969	21.61322	12.96558785
-15	-123.4427499	-104.8015223	-111.1533044	-84.0689	-89.1583	-83.232	-97.982	-79.6544	-84.0029	-43.20496513
+15	24.54942389	28.08925198	22.15802824	22.19697	22.52693	20.74515	22.3155	16.59248	17.49917	11.06810415
-16	-136.4491154	-114.8791861	-122.8416169	-91.1903	-96.8274	-90.4644	-106.749	-89.5624	-94.4937	-47.0604399
+16	15.87600026	20.47558251	14.28840021	15.72912	15.72912	14.67734	15.57349	11.97392	12.60413	8.538121119
-17	-146.9677884	-122.6054357	-131.8672307	-96.5313	-102.579	-95.8886	-113.323	-96.5563	-101.899	-49.95204734
+17	12.04511074	14.93333313	10.88640039	11.62066	11.62066	10.23931	10.64235	8.847237	9.312881	6.640632638
-18	-160.4221538	-133.1311055	-144.3857652	-103.653	-110.248	-103.121	-122.09	-105.882	-111.773	-53.80752181
+18	7.24761062	7.767662978	6.509304399	6.142693	6.142693	4.915659	4.915659	4.678335	4.924563	4.110649277
-19	-170.68093	-141.1933549	-153.6056035	-108.994	-116	-108.545	-128.665	-112.875	-119.178	-56.69912569
+19	3.817491756	3.021375043	3.427998316	2.410625	2.410625	1.9285	1.9285	1.832075	1.9285	2.213163048
-20	-184.5832888	-152.1670259	-166.1003018	-116.115	-123.669	-115.778	-137.431	-122.201	-129.052	-60.55460014
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**86.73841973**	**107.0483**	**101.6044**	**86.42580071**	**70.19740041**	**94.5516**	**106.0124**	**114.0019**	**121.771**
-1	**-1.446559549**	**-1.44815**	**-1.28185**	**-1.011376419**	**-1.807605082**	**-1.39716**	**-1.3975**	**-1.38815**	**-1.37955**
+1	**81.74689417**	**99.88868**	**93.84852**	**79.46217326**	**66.17996195**	**89.15451**	**99.8435**	**107.1153**	**114.121**
-2	**-4.81108857**	**-4.8185**	**-3.8354**	**-2.991812285**	**-4.217743601**	**-4.64667**	**-4.64825**	**-4.63039**	**-4.61394**
+2	**76.26750595**	**91.85805**	**85.06779**	**71.79299447**	**61.79789117**	**83.23714**	**93.04783**	**99.49588**	**105.6228**
-3	**-7.704204303**	**-7.71479**	**-6.14034**	**-4.832058608**	**-6.02534674**	**-7.86939**	**-7.87219**	**-7.8509**	**-7.83129**
+3	**72.15796632**	**85.83509**	**77.99612**	**66.08461211**	**58.51133989**	**78.79911**	**87.95108**	**93.78131**	**99.24913**
-4	**-11.56169361**	**-11.5765**	**-9.2514**	**-7.34372224**	**-8.485399494**	**-12.4718**	**-12.8999**	**-12.8758**	**-12.8536**
+4	**66.67857651**	**77.80446**	**69.15271**	**58.53142604**	**54.12926924**	**72.88175**	**81.15541**	**86.16189**	**90.75091**
-5	**-14.45481231**	**-14.4728**	**-11.5563**	**-9.270970696**	**-11.68120049**	**-15.9236**	**-17.0102**	**-16.987**	**-16.9656**
+5	**62.5690341**	**71.27958**	**63.13314**	**53.30139468**	**50.84271633**	**68.44372**	**76.05866**	**80.44733**	**84.37725**
-6	**-19.08021224**	**-18.4157**	**-14.9956**	**-12.25667121**	**-16.06327168**	**-21.4788**	**-22.4906**	**-22.4686**	**-22.4483**
+6	**57.08964851**	**63.24895**	**55.66952**	**46.85363747**	**46.46064662**	**62.52635**	**69.263**	**72.82791**	**75.68799**
-7	**-23.18975291**	**-21.312**	**-18.6176**	**-15.26034216**	**-19.34982087**	**-25.9168**	**-27.2194**	**-27.1677**	**-27.1438**
+7	**52.98010466**	**57.22597**	**50.0718**	**42.06132358**	**43.17409228**	**58.08832**	**64.0782**	**66.75551**	**68.97422**
-8	**-28.66914105**	**-25.8674**	**-23.447**	**-19.32324389**	**-23.73189165**	**-31.8342**	**-34.0151**	**-33.9101**	**-33.8876**
+8	**47.15825228**	**49.19535**	**42.60817**	**35.72956617**	**38.66707627**	**51.80112**	**56.94585**	**59.01771**	**60.476**
-9	**-32.77868457**	**-30.354**	**-27.0691**	**-22.41391855**	**-27.01844627**	**-36.2722**	**-39.1118**	**-39.0217**	**-38.9959**
+9	**43.04871147**	**43.76174**	**37.22733**	**31.15935045**	**35.23158873**	**47.36309**	**51.8491**	**53.30314**	**54.10234**
-10	**-38.25807016**	**-37.5069**	**-31.8985**	**-26.59282025**	**-31.40051781**	**-42.1896**	**-45.9075**	**-46.6411**	**-46.6717**
+10	**37.5693247**	**36.60878**	**31.29239**	**26.06574442**	**30.84952089**	**41.44573**	**45.05343**	**45.68372**	**45.65949**
-11	**-42.36761182**	**-42.8716**	**-36.4621**	**-30.50381305**	**-34.68706985**	**-46.6276**	**-51.0042**	**-52.3556**	**-53.0453**
+11	**33.4597829**	**31.24406**	**27.67034**	**22.93157159**	**27.56296762**	**37.0077**	**39.95668**	**39.96916**	**39.94375**
-12	**-47.84700368**	**-50.2037**	**-43.5449**	**-36.51909206**	**-39.21839584**	**-52.545**	**-57.7999**	**-59.9751**	**-61.5436**
+12	**27.98039186**	**25.17588**	**22.84093**	**18.8106697**	**23.18089686**	**31.09033**	**33.16102**	**33.06291**	**33.04043**
-13	**-52.29900618**	**-56.2266**	**-49.1426**	**-41.26791521**	**-42.62957149**	**-57.3528**	**-62.8967**	**-65.6896**	**-67.9172**
+13	**23.87085531**	**21.79254**	**19.21888**	**15.76349687**	**19.8943438**	**26.6523**	**28.06427**	**28.00613**	**27.98263**
-14	**-57.77839177**	**-64.2573**	**-56.6062**	**-47.657651**	**-47.01164227**	**-63.2702**	**-70.117**	**-73.7853**	**-76.7557**
+14	**18.39145894**	**17.93082**	**14.38948**	**11.75859498**	**15.51227279**	**20.73493**	**21.80183**	**21.77983**	**21.75959**
-15	**-61.88793444**	**-70.2802**	**-62.2039**	**-52.4934743**	**-50.29819535**	**-67.7082**	**-75.2138**	**-79.4998**	**-83.3203**
+15	**14.9343056**	**14.95335**	**11.93896**	**9.595112555**	**12.22571946**	**16.61265**	**17.69155**	**17.66864**	**17.64756**
-16	**-67.36732573**	**-78.8128**	**-70.2547**	**-59.47392657**	**-54.68026666**	**-73.6256**	**-82.0095**	**-87.1193**	**-91.8185**
+16	**11.07681819**	**11.09163**	**8.8657**	**7.025447825**	**8.182350145**	**11.89324**	**12.21116**	**12.18703**	**12.16483**
-17	**-71.47686796**	**-84.8358**	**-76.8403**	**-65.13882131**	**-57.96681972**	**-78.0636**	**-87.1062**	**-92.8338**	**-98.1921**
+17	**8.183696831**	**8.195335**	**6.52296**	**5.141696919**	**6.324832618**	**8.441444**	**8.444516**	**8.423479**	**8.404119**
-18	**-76.95625376**	**-92.8664**	**-86.1698**	**-72.74998117**	**-62.34889078**	**-83.981**	**-93.9019**	**-100.453**	**-106.69**
+18	**4.326209036**	**4.333615**	**3.449701**	**2.688040789**	**3.914693405**	**4.17831**	**4.179897**	**4.162038**	**4.145594**
-19	**-81.06579589**	**-98.8894**	**-92.7553**	**-78.50187714**	**-65.63543975**	**-88.419**	**-98.9986**	**-106.168**	**-113.064**
+19	**1.697080025**	**1.69708**	**1.500483**	**1.18313382**	**2.107089074**	**1.639225**	**1.639225**	**1.639225**	**1.611404**
-20	**-86.54518213**	**-106.92**	**-101.536**	**-86.22906282**	**-70.01751194**	**-94.3364**	**-105.794**	**-113.787**	**-121.562**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	180.7216666	187.1825053	124.241	150.5712	156.598
-1	-1.47597652	-1.675716927	-1.66	-1.7449	-1.47577
+1	166.7972977	171.6274305	115.4913	140.0715	145.2549
-2	-4.829553797	-4.724055789	-5.52367	-5.84037	-4.91094
+2	151.0535501	154.0821906	105.6542	128.2671	132.4649
-3	-8.625922706	-8.108201876	-8.84367	-9.3817	-8.82973
+3	138.8943347	140.9232598	98.27646	119.4138	122.8724
-4	-14.52982487	-13.58166787	-13.338	-14.7298	-14.7328
+4	122.5180091	123.7383219	88.01677	107.2336	109.283
-5	-18.96372924	-17.69152149	-17.1359	-19.1565	-19.1601
+5	110.7102234	112.7736536	80.44682	98.01818	99.69045
-6	-25.00824735	-24.16466244	-22.5463	-25.1204	-25.5645
+6	96.79387545	98.27931647	70.60978	86.21374	87.36831
-7	-29.73538542	-30.21329317	-26.6041	-29.6223	-30.7297
+7	86.46205595	89.1401726	63.23199	77.36039	77.97313
-8	-37.6072549	-39.22781406	-32.3526	-35.5245	-37.6841
+8	72.93528623	77.0747348	54.05756	66.35107	66.16695
-9	-44.72507241	-46.70829499	-36.4104	-40.3272	-43.2123
+9	64.07942379	68.02565675	47.41754	58.38305	57.31231
-10	-54.56490934	-57.46939716	-41.8207	-49.0929	-50.0992
+10	53.32991979	55.96021619	41.14147	47.75906	49.23473
-11	-62.60947652	-66.51847942	-46.3157	-57.0609	-56.316
+11	45.95003348	48.02676648	37.08369	41.35553	44.06952
-12	-74.41728816	-78.5839175	-55.1691	-67.6849	-67.6489
+12	36.61925229	38.10024298	31.67332	34.7835	36.8193
-13	-84.74710631	-87.63299262	-62.0077	-75.8913	-76.5036
+13	30.71535809	31.33935424	27.27739	30.35684	31.58694
-14	-98.52287294	-100.092322	-71.8448	-87.6957	-88.8506
+14	24.26724696	23.2186454	21.86702	24.37942	24.7
-15	-109.5856644	-110.9630537	-79.2226	-96.5491	-98.0984
+15	19.83932107	18.37604071	17.80924	19.89102	20.007
-16	-124.4940242	-125.7439791	-89.2515	-108.715	-110.888
+16	13.78882936	12.89623861	12.78225	13.98878	13.99183
-17	-136.6531686	-138.7315585	-97.0522	-117.945	-121.208
+17	9.360897408	8.786386834	9.394589	9.969345	9.564504
-18	-153.0295516	-156.2767999	-106.889	-129.749	-134.07
+18	4.335551876	4.159653293	4.967915	5.247568	4.416942
-19	-164.8373519	-169.435733	-114.267	-138.602	-143.663
+19	1.720968456	1.956924315	1.945125	2.038713	1.729
-20	-180.5811024	-186.9809739	-124.104	-150.407	-156.453
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 70' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.68E-13	*-2.15E-13*	*-1.38E-13*	-1.95E-13	-2.03E-13	-1.37E-13	-1.68E-13	-1.62E-13	-1.71E-13	-8.33E-14
End Shear	4.81E-13	*2.16E-13*	*3.10E-13*	2.11E-13	2.26E-13	1.48E-13	1.70E-13	1.76E-13	1.87E-13	1.83E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	608.4014048	*504.495319*	*547.0606306*	384.5752769	409.33674	383.0545376	454.1400765	399.1253437	421.4235169	200.1306512
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	1144.684805	*954.8109212*	*1029.321781*	725.5322429	771.6999165	721.810988	854.5855011	741.1339335	782.3704709	376.646535
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	1608.850223	*1350.946853*	*1446.783472*	1022.870961	1087.089593	1016.269381	1201.336304	1026.0258	1082.840894	529.5476298
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	2000.897694	*1692.903044*	*1799.445737*	1276.591319	1355.505649	1266.429711	1495.12925	1253.800923	1322.834765	658.8339622
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	2320.827245	*1980.679547*	*2087.308465*	1486.693397	1576.948175	1472.509946	1735.649977	1457.799095	1539.501526	764.505453
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	2568.638729	*2214.276318*	*2310.371759*	1653.177158	1751.41713	1634.897772	1951.241125	1615.793966	1707.955821	846.5622857
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	2755.313806	*2393.693279*	*2479.165285*	1776.042677	1879.583939	1775.280337	2113.137552	1730.31569	1827.668025	905.004193
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	2897.198019	*2518.930845*	*2607.154372*	1862.889062	1982.371976	1872.803277	2221.339561	1806.142794	1909.124698	939.8314299
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	2966.964267	*2589.988464*	*2670.343877*	1922.46152	2041.781149	1925.757012	2275.575803	1824.566681	1929.803271	951.0439071
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	2966.616076	*2606.187495*	*2669.694621*	1937.504854	2053.30595	1933.925292	2275.630033	1785.587641	1889.704045	938.8746566
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2969.500038	*2590.162952*	*2672.169006*	1922.415232	2041.747474	1925.701155	2275.554027	1824.52906	1929.762423	951.0713873
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	2900.266536	*2519.086151*	*2609.844369*	1862.894667	1982.388792	1872.838039	2221.404717	1806.168691	1909.1506	939.8558971
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	2758.1859	*2393.829026*	*2482.7197*	1776.170122	1879.581096	1775.297125	2113.180856	1730.323258	1827.674519	905.025567
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	2569.573712	*2214.392611*	*2311.940764*	1653.286473	1751.534866	1634.896639	1951.262789	1615.865058	1708.029067	846.5806119
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	2322.294509	*1980.776586*	*2089.363166*	1486.784467	1577.046239	1472.490978	1735.650179	1457.851807	1539.555311	764.520749
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	2002.897574	*1692.980749*	*1801.986317*	1276.664336	1355.584275	1266.501418	1495.10773	1253.874401	1322.912564	658.846208
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	1610.653512	*1351.005072*	*1449.809429*	1022.925648	1087.148484	1016.322996	1201.401257	1026.080801	1082.899128	529.5568045
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	1145.88697	*954.8496359*	*1031.339059*	725.5686135	771.7390996	721.8466736	854.6287688	741.1705179	782.4092094	376.6526373
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	609.002569	*504.5147269*	*548.0693443*	384.593426	409.3562748	383.0724311	454.1617732	399.1436686	421.4429196	200.1336856
-20	-4.75E-13	*-3.02E-13*	*-2.66E-13*	-2.45E-13	-2.45E-13	-1.99E-13	-2.03E-13	-2.51E-13	-2.65E-13	-1.43E-13
+20	3.29E-13	*2.38E-13*	*2.66E-13*	2.07E-13	2.22E-13	1.85E-13	2.06E-13	2.09E-13	2.21E-13	1.20E-13

1-Span: Moment (Max and Min) Raw Data Results - 70’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-1.20E-13**	**-1.34E-13**	**-1.23E-13**	**-9.83E-14**	**-7.54E-14**	**-1.16E-13**	**-1.33E-13**	**-1.36E-13**	**-1.35E-13**
End Shear	**1.69E-13**	**1.44E-13**	**1.36E-13**	**1.04E-13**	**1.75E-13**	**1.29E-13**	**1.44E-13**	**1.41E-13**	**1.45E-13**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**286.1141296**	**349.6103967**	**328.4698238**	**279.5639814**	**231.6298668**	**312.0407763**	**349.452236**	**374.9035579**	**399.4235631**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**538.6670154**	**650.0331891**	**603.1576402**	**515.5250713**	**436.4195454**	**587.8376631**	**657.2809916**	**703.8473273**	**747.6875562**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**757.6586464**	**901.2684055**	**823.8204841**	**708.1739187**	**614.3690689**	**827.3906863**	**923.4863275**	**1004.248288**	**1070.685353**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**943.0890286**	**1103.316023**	**1005.74365**	**867.8306876**	**765.4784143**	**1030.699837**	**1148.068225**	**1265.534662**	**1343.973588**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**1094.958097**	**1261.135038**	**1149.061966**	**994.4952637**	**889.7475358**	**1197.765107**	**1331.497052**	**1480.151993**	**1590.545623**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**1213.265937**	**1392.043422**	**1245.297981**	**1082.826941**	**987.176543**	**1329.169855**	**1485.210434**	**1648.100469**	**1788.664101**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**1298.200318**	**1473.574692**	**1325.180327**	**1154.968266**	**1057.765261**	**1438.060456**	**1608.089777**	**1769.379827**	**1934.730923**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**1367.184454**	**1511.540897**	**1379.255558**	**1204.382683**	**1101.513935**	**1516.46034**	**1689.345895**	**1865.18267**	**2028.746357**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**1402.996301**	**1521.568141**	**1429.975045**	**1247.407788**	**1117.611124**	**1558.385893**	**1728.405434**	**1918.989392**	**2084.574532**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**1404.917071**	**1482.181855**	**1426.881728**	**1247.267781**	**1106.805857**	**1563.653291**	**1725.79755**	**1925.747073**	**2103.216011**
-11	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+11	**1402.928258**	**1521.546402**	**1429.944202**	**1247.421646**	**1117.588393**	**1558.333302**	**1728.373711**	**1918.935969**	**2084.583382**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**1367.19729**	**1511.567994**	**1379.240155**	**1204.389557**	**1101.542336**	**1516.485328**	**1689.342337**	**1865.196668**	**2028.777452**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**1298.199757**	**1473.533443**	**1325.195777**	**1154.975199**	**1057.844578**	**1438.070755**	**1608.114145**	**1769.460969**	**1934.783904**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**1213.346284**	**1391.986338**	**1245.268773**	**1082.837976**	**987.244482**	**1329.165486**	**1485.218714**	**1648.16435**	**1788.698644**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**1095.025051**	**1261.137967**	**1149.031209**	**994.5056156**	**889.8042332**	**1197.838184**	**1331.489256**	**1480.198668**	**1590.561699**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**943.1426532**	**1103.379298**	**1005.697463**	**867.8341828**	**765.5238337**	**1030.758506**	**1148.13268**	**1265.564138**	**1343.971312**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**757.6988931**	**901.3157744**	**823.8126968**	**708.1704341**	**614.4030256**	**827.434558**	**923.5345238**	**1004.260327**	**1070.70258**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**538.6937375**	**650.0646903**	**603.1884783**	**515.5146961**	**436.4421799**	**587.866863**	**657.3130669**	**703.8420496**	**747.6863097**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**286.1274715**	**349.6261759**	**328.48531**	**279.5709733**	**231.6412361**	**312.0554167**	**349.4683141**	**374.9208669**	**399.4420881**
-20	**-1.75E-13**	**-2.24E-13**	**-1.46E-13**	**-1.21E-13**	**-1.43E-13**	**-1.69E-13**	**-1.96E-13**	**-2.08E-13**	**-2.08E-13**
+20	**1.64E-13**	**1.76E-13**	**1.96E-13**	**1.54E-13**	**1.37E-13**	**1.52E-13**	**1.49E-13**	**1.50E-13**	**1.57E-13**

1-Span: Moment (Max and Min) Raw Data Results - 70' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.14E-13	-1.80E-13	-1.67E-13	-1.72E-13	-1.54E-13
End Shear	2.16E-13	2.14E-13	1.52E-13	1.62E-13	1.51E-13
-1	0	0	0	0	0
+1	583.790542	600.6960069	404.2195127	490.2504155	508.3922957
-2	0	0	0	0	0
+2	1071.150601	1094.944917	748.1871238	908.1985469	938.4456299
-3	0	0	0	0	0
+3	1489.456195	1537.316606	1031.902855	1253.84441	1290.160016
-4	0	0	0	0	0
+4	1840.780584	1907.808875	1268.390656	1554.619099	1604.457599
-5	0	0	0	0	0
+5	2096.41253	2259.429424	1477.646585	1796.412204	1852.050501
-6	0	0	0	0	0
+6	2331.057539	2503.585372	1626.650673	1965.414468	2062.419149
-7	0	0	0	0	0
+7	2500.97048	2717.337354	1732.40627	2075.397635	2194.448762
-8	0	0	0	0	0
+8	2629.099296	2829.668937	1794.617615	2140.584855	2261.514004
-9	0	0	0	0	0
+9	2715.865533	2892.465803	1796.111516	2133.469506	2280.795223
-10	0	0	0	0	0
+10	2708.766772	2941.181449	1737.353754	2063.805811	2221.556131
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2715.907715	2892.467665	1796.073964	2133.446977	2280.753583
-12	0	0	0	0	0
+12	2629.113394	2829.665878	1794.561165	2140.539714	2261.521297
-13	0	0	0	0	0
+13	2500.991502	2717.342251	1732.415712	2075.329978	2194.504965
-14	0	0	0	0	0
+14	2331.085608	2503.585219	1626.72594	1965.399396	2062.451762
-15	0	0	0	0	0
+15	2096.412531	2259.424144	1477.702973	1796.374512	1852.059437
-16	0	0	0	0	0
+16	1840.752587	1907.798373	1268.428519	1554.634386	1604.479583
-17	0	0	0	0	0
+17	1489.470259	1537.321263	1031.959417	1253.912202	1290.230757
-18	0	0	0	0	0
+18	1071.206671	1094.944422	748.2246844	908.2436181	938.4926536
-19	0	0	0	0	0
+19	583.8187603	600.7011517	404.2382438	490.2729071	508.4157192
-20	-2.33E-13	-2.99E-13	-2.21E-13	-2.93E-13	-2.52E-13
+20	2.36E-13	2.32E-13	1.73E-13	2.23E-13	2.13E-13

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**62.4**	***44.97714***	***55.50857***	***52.68571***	***46.56429***	***36.4***	***49.02857***	***54.97143***	***59.11429***	***63.14286***
-1	**-1.37143**	***-0.7501***	***-0.75092***	***-0.66469***	***-0.52816***	***-0.93731***	***-0.72448***	***-0.72465***	***-0.71981***	***-0.71535***
+1	**58.68484**	***42.38885***	***51.79605***	***48.664***	***42.78342***	***34.31681***	***46.22998***	***51.77262***	***55.54332***	***59.17605***
-2	**-3.2**	***-2.49473***	***-2.49857***	***-1.9888***	***-1.56998***	***-2.18706***	***-2.40947***	***-2.41029***	***-2.40103***	***-2.3925***
+2	**54.58845**	***39.54758***	***47.63187***	***44.11086***	***38.62305***	***32.04454***	***43.1616***	***48.24881***	***51.59237***	***54.76941***
-3	**-4.57143**	***-3.99492***	***-4.00041***	***-3.184***	***-2.54282***	***-3.12437***	***-4.08058***	***-4.08203***	***-4.07099***	***-4.06082***
+3	**51.51615**	***37.41663***	***44.50873***	***40.44393***	***35.53278***	***30.34034***	***40.86031***	***45.60595***	***48.62915***	***51.46442***
-4	**-6.4**	***-5.99517***	***-6.00286***	***-4.7972***	***-3.87995***	***-4.4***	***-6.46709***	***-6.68909***	***-6.67658***	***-6.66506***
+4	**47.41975**	***34.57536***	***40.34455***	***35.85829***	***31.45241***	***28.06807***	***37.79194***	***42.08214***	***44.67819***	***47.05777***
-5	**-9.07528**	***-7.49537***	***-7.50469***	***-5.9924***	***-4.9128***	***-6.05714***	***-8.25698***	***-8.82043***	***-8.8084***	***-8.79731***
+5	**44.34745**	***32.4444***	***36.96115***	***32.73692***	***28.62506***	***26.36387***	***35.49065***	***39.43929***	***41.71497***	***43.75279***
-6	**-12.7165**	***-9.89381***	***-9.54924***	***-7.77577***	***-6.51558***	***-8.32941***	***-11.1376***	***-11.6622***	***-11.6508***	***-11.6403***
+6	**40.25106**	***29.60314***	***32.79696***	***28.86674***	***25.13775***	***24.0916***	***32.42227***	***35.91548***	***37.76402***	***39.24708***
-7	**-15.4475**	***-12.0248***	***-11.0511***	***-9.65394***	***-8.12148***	***-10.0336***	***-13.4388***	***-14.1143***	***-14.0875***	***-14.0751***
+7	**37.17876**	***27.47218***	***29.67382***	***25.96412***	***22.55226***	***22.3874***	***30.12099***	***33.22696***	***34.61525***	***35.76574***
-8	**-19.2**	***-14.866***	***-13.4132***	***-12.1582***	***-10.3027***	***-12.3059***	***-16.5072***	***-17.6381***	***-17.5837***	***-17.572***
+8	**33.08236**	***24.45333***	***25.50964***	***22.09394***	***19.14495***	***20.05034***	***26.86083***	***29.52857***	***30.60291***	***31.35909***
-9	**-22.1471**	***-16.997***	***-15.7397***	***-14.0363***	***-11.9686***	***-14.0101***	***-18.8085***	***-20.281***	***-20.2342***	***-20.2208***
+9	**29.75404**	***22.32238***	***22.69211***	***19.30377***	***16.68952***	***18.26891***	***24.55955***	***26.88571***	***27.63969***	***28.0541***
-10	**-26.2435**	***-19.8383***	***-19.4488***	***-16.5406***	***-14.2298***	***-16.2824***	***-21.8769***	***-23.8048***	***-24.1852***	***-24.201***
+10	**25.65764**	***19.48111***	***18.98304***	***16.22629***	***13.94408***	***15.99664***	***21.49117***	***23.36191***	***23.68873***	***23.67617***
-11	**-29.3158**	***-21.9692***	***-22.2306***	***-18.907***	***-16.3359***	***-17.9866***	***-24.1782***	***-26.4476***	***-27.1484***	***-27.506***
+11	**22.58534**	***17.35016***	***16.20122***	***14.34812***	***12.24818***	***14.29244***	***19.18989***	***20.71905***	***20.72552***	***20.71234***
-12	**-33.4122**	***-24.8105***	***-26.0325***	***-22.5797***	***-19.5692***	***-20.3362***	***-27.2465***	***-29.9714***	***-31.0993***	***-31.9127***
+12	**18.74286**	***14.50889***	***13.05464***	***11.84389***	***10.02697***	***12.02017***	***16.12151***	***17.19524***	***17.14437***	***17.13271***
-13	**-36.4845**	***-27.119***	***-29.1556***	***-25.4823***	***-22.1247***	***-22.105***	***-29.7396***	***-32.6143***	***-34.0626***	***-35.2176***
+13	**15.83702**	***12.37794***	***11.30025***	***9.965715***	***8.391073***	***10.31597***	***13.82022***	***14.55238***	***14.52223***	***14.51005***
-14	**-40.5809**	***-29.9603***	***-33.3198***	***-29.3525***	***-25.572***	***-24.3773***	***-32.808***	***-36.3583***	***-38.2604***	***-39.8007***
+14	**12.19577**	***9.536665***	***9.297806***	***7.461486***	***6.249869***	***8.043699***	***10.75184***	***11.30507***	***11.29367***	***11.28317***
-15	**-43.6532**	***-32.0912***	***-36.443***	***-32.2551***	***-28.1875***	***-26.0815***	***-35.1093***	***-39.0012***	***-41.2237***	***-43.2047***
+15	**9.464844**	***7.744001***	***7.753876***	***6.190801***	***5.087082***	***6.339497***	***8.614286***	***9.173735***	***9.161855***	***9.150923***
-16	**-47.7496**	***-34.9325***	***-40.8674***	***-36.4297***	***-31.961***	***-28.3538***	***-38.1776***	***-42.525***	***-45.1746***	***-47.6113***
+16	**6.171429**	***5.743748***	***5.751429***	***4.5972***	***3.709952***	***4.242857***	***6.167095***	***6.331949***	***6.319437***	***6.307922***
-17	**-51.0779**	***-37.0635***	***-43.9905***	***-39.8446***	***-35.0213***	***-30.058***	***-40.4789***	***-45.1679***	***-48.1378***	***-50.9163***
+17	**4.778136**	***4.243556***	***4.24959***	***3.382401***	***2.707104***	***3.279664***	***4.377207***	***4.3788***	***4.367892***	***4.357853***
-18	**-55.1743**	***-39.9047***	***-48.1547***	***-44.6823***	***-39.1416***	***-32.3303***	***-43.5473***	***-48.6917***	***-52.0888***	***-55.323***
+18	**2.957513**	***2.243303***	***2.247143***	***1.7888***	***1.409978***	***2.029916***	***2.166611***	***2.167434***	***2.158174***	***2.149647***
-19	**-58.2466**	***-42.0357***	***-51.2779***	***-48.0971***	***-42.2619***	***-34.0345***	***-45.8486***	***-51.3345***	***-55.052***	***-58.628***
+19	**1.592048**	***0.88***	***0.88***	***0.778057***	***0.618462***	***1.092605***	***0.85***	***0.85***	***0.85***	***0.835574***
-20	**-62.343**	***-44.8769***	***-55.4421***	***-52.6503***	***-46.4623***	***-36.3067***	***-48.917***	***-54.8583***	***-59.003***	***-63.0346***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	62.4	60.35714	64.28571	60.17143	71.42857	63.44286	67	31.46369
-1	-1.37143	-1.0652	-1.0652	-0.85233	-0.85233	-0.81065	-0.85332	-0.98392
+1	58.68484	56.97623	60.64473	56.75092	67.2825	59.13187	62.43543	29.65008
-2	-3.2	-3.54236	-3.54236	-2.83467	-2.83467	-2.69732	-2.83929	-2.29581
+2	54.58845	53.28353	56.66798	53.00068	62.73676	54.29641	57.31553	27.65087
-3	-4.57143	-5.67276	-5.67276	-4.92809	-5.0947	-4.31862	-4.54592	-3.27973
+3	51.51615	50.51402	53.68543	50.188	59.32745	50.66982	53.4756	26.15147
-4	-6.4	-8.51329	-8.51329	-7.99647	-8.50401	-6.48036	-6.82143	-4.59162
+4	47.41975	46.82133	49.70868	46.43776	54.7817	45.83436	48.35571	24.15226
-5	-9.07528	-11.0511	-11.1869	-10.2978	-11.061	-8.27111	-8.72003	-5.57554
+5	44.34745	44.05181	46.72612	43.62508	51.37239	41.90555	44.19579	22.65285
-6	-12.7165	-14.7438	-15.1636	-13.8602	-15.2937	-10.9448	-11.5644	-6.90954
+6	40.25106	40.35911	42.74938	39.87484	46.82665	37.07009	39.07589	20.65364
-7	-15.4475	-17.5133	-18.1462	-16.6729	-18.7031	-12.9501	-13.6977	-8.40894
+7	37.17876	37.5896	39.76682	37.06216	43.41734	33.44349	35.23596	19.15424
-8	-19.2	-21.206	-22.1229	-20.4231	-23.2488	-15.6239	-16.5421	-10.4082
+8	33.08236	33.67889	35.57206	33.07753	38.58748	28.60804	30.11607	17.15503
-9	-22.1471	-23.9755	-25.1055	-23.2358	-26.6581	-17.7963	-18.8532	-11.9076
+9	29.75404	30.89659	32.55897	30.26485	35.17817	25.32525	26.65816	15.65562
-10	-26.2435	-27.6682	-29.0822	-26.986	-31.2039	-21.5446	-22.6786	-13.9068
+10	25.65764	27.2039	28.58223	26.51461	30.63242	21.00179	22.10714	13.65641
-11	-29.3158	-30.4377	-32.0648	-29.7987	-34.6132	-24.7872	-26.0918	-15.4062
+11	22.58534	24.43439	25.59967	23.70193	27.22311	18.12897	19.20711	12.15701
-12	-33.4122	-34.1432	-36.0721	-33.549	-39.1589	-29.2152	-30.7589	-17.4054
+12	18.74286	20.74169	21.62292	19.95169	22.67737	15.28814	16.18495	10.1578
-13	-36.4845	-37.1307	-39.2726	-36.596	-42.8523	-32.8418	-34.5989	-18.9048
+13	15.83702	17.97218	18.64037	17.139	19.26806	13.28284	14.05166	8.65839
-14	-40.5809	-40.8234	-43.2494	-40.3463	-47.3981	-37.6772	-39.7188	-20.904
+14	12.19577	14.27948	14.66362	13.38876	14.72231	10.60912	11.20727	6.723146
-15	-43.6532	-43.5929	-46.2319	-43.1589	-50.8074	-41.3038	-43.5587	-22.4034
+15	9.464844	11.50997	11.68106	10.75714	11.57143	8.603828	9.073981	5.73923
-16	-47.7496	-47.2856	-50.2087	-46.9092	-55.3531	-46.4415	-48.9986	-24.4026
+16	6.171429	8.156145	8.156145	7.610755	8.075442	6.208929	6.535714	4.427338
-17	-51.0779	-50.0551	-53.1912	-49.7219	-58.7624	-50.0681	-52.8385	-25.902
+17	4.778136	6.02575	6.02575	5.30947	5.518459	4.587626	4.82908	3.443419
-18	-55.1743	-53.7478	-57.168	-53.4721	-63.3082	-54.9036	-57.9584	-27.9012
+18	2.957513	3.185218	3.185218	2.548955	2.548955	2.425893	2.553571	2.131527
-19	-58.2466	-56.5173	-60.1505	-56.2848	-66.7175	-58.5301	-61.7983	-29.4006
+19	1.592048	1.25	1.25	1	1	0.95	1	1.147609
-20	-62.343	-60.21	-64.1273	-60.035	-71.2632	-63.3656	-66.9182	-31.3998
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 70' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	62.4	104.5238	108.2606	71.85714	87.08572	90.57143
-1	-1.37143	-0.85366	-0.96918	-0.96009	-1.00919	-0.85354
+1	58.68484	96.47039	99.26399	66.79658	81.01304	84.01096
-2	-3.2	-2.79326	-2.73225	-3.19472	-3.37789	-2.84034
+2	54.58845	87.36469	89.11636	61.10714	74.18571	76.6136
-3	-4.57143	-4.98897	-4.68953	-5.11491	-5.42609	-5.10684
+3	51.51615	80.33218	81.50564	56.84006	69.06521	71.06558
-4	-6.4	-8.4036	-7.85522	-7.71429	-8.51925	-8.52101
+4	47.41975	70.86062	71.56641	50.90617	62.0206	63.20589
-5	-9.07528	-10.968	-10.2322	-9.91087	-11.0795	-11.0816
+5	44.34745	64.03136	65.22479	46.52795	56.69068	57.65787
-6	-12.7165	-14.464	-13.9761	-13.0401	-14.5289	-14.7857
+6	40.25106	55.98258	56.84171	40.83851	49.86336	50.53112
-7	-15.4475	-17.198	-17.4744	-15.387	-17.1326	-17.7731
+7	37.17876	50.00697	51.55591	36.57142	44.74285	45.09724
-8	-19.2	-21.7509	-22.6882	-18.7117	-20.5463	-21.7953
+8	33.08236	42.18351	44.57764	31.26522	38.3754	38.26891
-9	-22.1471	-25.8676	-27.0146	-21.0586	-23.324	-24.9926
+9	29.75404	37.06155	39.34393	27.42484	33.76695	33.14766
-10	-26.2435	-31.5587	-33.2385	-24.1878	-28.3938	-28.9758
+10	25.65764	30.84437	32.36565	23.79495	27.62236	28.47584
-11	-29.3158	-36.2114	-38.4722	-26.7876	-33.0022	-32.5714
+11	22.58534	26.57607	27.77719	21.44806	23.91876	25.48844
-12	-33.4122	-43.0407	-45.4505	-31.9081	-39.1468	-39.126
+12	18.74286	21.17944	22.036	18.31887	20.1177	21.29514
-13	-36.4845	-49.0151	-50.6842	-35.8634	-43.8932	-44.2473
+13	15.83702	17.76481	18.12571	15.7764	17.55745	18.26891
-14	-40.5809	-56.9826	-57.8903	-41.5528	-50.7205	-51.3884
+14	12.19577	14.03542	13.42894	12.6472	14.1003	14.28571
-15	-43.6532	-63.381	-64.1776	-45.8199	-55.841	-56.7371
+15	9.464844	11.47445	10.62813	10.30031	11.50435	11.57143
-16	-47.7496	-72.0035	-72.7264	-51.6203	-62.8776	-64.1345
+16	6.171429	7.975031	7.458785	7.392857	8.090679	8.092438
-17	-51.0779	-79.036	-80.238	-56.132	-68.2155	-70.1028
+17	4.778136	5.414053	5.081774	5.433539	5.76596	5.531813
-18	-55.1743	-88.5075	-90.3857	-61.8214	-75.0429	-77.5422
+18	2.957513	2.507549	2.405815	2.873288	3.035031	2.554622
-19	-58.2466	-95.3368	-97.9964	-66.0885	-80.1634	-83.0902
+19	1.592048	0.995355	1.131824	1.125	1.179129	1
-20	-62.343	-104.443	-108.144	-71.778	-86.9907	-90.4875
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 70' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.08E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.99E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	205.397	148.3610	181.2862	170.3240	150.7395	120.1088	161.8049	181.2042	194.4016	207.1162
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	385.7035	279.3192	337.0667	312.7600	278.2613	226.3000	304.8160	340.8250	364.9714	387.7042
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	540.9195	392.8746	467.3417	427.1820	382.7162	318.5735	429.0333	478.8625	520.7406	555.1907
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	671.0452	489.0272	572.1110	521.5160	469.4556	396.9294	534.4567	595.3167	656.2275	696.9010
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	776.0805	567.7771	653.9461	595.8320	538.4794	461.3677	621.0864	690.4315	767.5146	824.7579
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	856.0252	629.1242	721.8270	645.7340	587.0182	511.8883	689.2247	770.1376	854.6023	927.4898
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	915.5978	673.1658	764.1041	687.1560	626.5538	548.4912	745.6886	833.8552	917.4902	1003.2310
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	961.8208	708.9367	783.7910	715.1960	653.6968	571.1765	786.3419	875.9896	967.1676	1051.9815
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	982.9535	727.5065	788.9905	741.4960	676.9188	579.5235	808.0819	896.2434	995.0684	1080.9305
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	979.8565	728.5025	768.5672	739.8920	677.1501	573.9206	810.8132	894.8911	998.5725	1090.5968
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	984.043	727.4712	788.9792	741.4800	676.9260	579.5117	808.0546	896.2270	995.0407	1080.9351
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	963.1392	708.9434	783.8050	715.1881	653.7004	571.1913	786.3548	875.9877	967.1748	1051.9976
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	916.8318	673.1655	764.0827	687.1640	626.5574	548.5323	745.6939	833.8678	917.5323	1003.2584
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	856.4269	629.1658	721.7974	645.7188	587.0239	511.9235	689.2224	770.1419	854.6354	927.5077
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	776.7109	567.8118	653.9476	595.8160	538.4847	461.3971	621.1243	690.4274	767.5388	824.7662
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	671.9044	489.0550	572.1438	521.4921	469.4574	396.9530	534.4872	595.3501	656.2427	696.8998
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	541.6943	392.8955	467.3662	427.1780	382.7144	318.5911	429.0560	478.8875	520.7469	555.1997
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	386.22	279.3330	337.0831	312.7760	278.2559	226.3117	304.8311	340.8416	364.9687	387.7036
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	205.6552	148.3679	181.2944	170.3320	150.7431	120.1147	161.8125	181.2125	194.4106	207.1258
-20	-1.95E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 70' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.08E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.99E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	205.397	199.4168	212.2565	198.6282	235.4888	206.9615	218.5240	103.7753
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	385.7035	376.2158	400.1555	374.2862	443.1348	384.3059	405.6886	195.3054
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	540.9195	530.3972	563.6970	526.9740	622.9382	532.0331	561.4939	274.5904
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	671.0452	661.9608	702.8808	656.6916	775.2809	650.1431	685.9397	341.6303
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	776.0805	770.9066	817.7071	763.5520	900.0000	755.9238	798.2896	396.4249
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	856.0252	857.2347	908.1759	847.7562	1011.7921	837.8501	885.6395	438.9745
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	915.5978	920.9451	974.6352	920.5498	1095.7415	897.2340	947.7148	469.2788
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	961.8208	965.9783	1027.9347	971.1191	1151.8484	936.5532	989.9532	487.3381
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	982.9535	996.8688	1058.7405	998.5777	1179.9719	946.1067	1000.6758	493.1521
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	979.8565	1004.6694	1064.7166	1002.8132	1180.0000	925.8946	979.8828	486.8419
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	984.043	996.8448	1058.7231	998.5487	1179.9606	946.0871	1000.6546	493.1664
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	963.1392	965.9812	1027.9434	971.1372	1151.8821	936.5666	989.9666	487.3507
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	916.8318	921.0112	974.6337	920.5585	1095.7640	897.2379	947.7182	469.2899
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	856.4269	857.2914	908.2369	847.7556	1011.8034	837.8870	885.6775	438.9840
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	776.7109	770.9538	817.7580	763.5421	900.0001	755.9512	798.3175	396.4328
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	671.9044	661.9986	702.9216	656.7288	775.2698	650.1812	685.9801	341.6366
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	541.6943	530.4255	563.7275	527.0018	622.9719	532.0616	561.5240	274.5952
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	386.22	376.2347	400.1758	374.3047	443.1573	384.3249	405.7087	195.3086
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	205.6552	199.4262	212.2667	198.6375	235.5000	206.9710	218.5341	103.7769
-20	-1.95E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 70' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.08E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.99E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	205.397	337.6464	347.4239	233.7880	283.5456	294.0383
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	385.7035	619.5203	633.2822	432.7282	525.2739	542.7679
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	540.9195	861.4553	889.1363	596.8206	725.1847	746.1886
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	671.0452	1064.6504	1103.4175	733.5978	899.1435	927.9685
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	776.0805	1212.5000	1306.7839	854.6250	1038.9891	1071.1686
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	856.0252	1348.2114	1447.9962	940.8043	1136.7348	1192.8393
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	915.5978	1446.4838	1571.6237	1001.9701	1200.3457	1269.2011
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	961.8208	1520.5895	1636.5928	1037.9512	1238.0479	1307.9896
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	982.9535	1570.7724	1672.9126	1038.8152	1233.9326	1319.1413
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	979.8565	1566.6667	1701.0882	1004.8316	1193.6413	1284.8792
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	984.043	1570.7968	1672.9136	1038.7935	1233.9196	1319.1172
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	963.1392	1520.5977	1636.5910	1037.9185	1238.0218	1307.9938
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	916.8318	1446.4960	1571.6265	1001.9755	1200.3065	1269.2336
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	856.4269	1348.2277	1447.9961	940.8479	1136.7261	1192.8582
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	776.7109	1212.5000	1306.7809	854.6576	1038.9673	1071.1738
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	671.9044	1064.6342	1103.4114	733.6197	899.1523	927.9813
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	541.6943	861.4634	889.1390	596.8533	725.2239	746.2295
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	386.22	619.5527	633.2819	432.7500	525.3000	542.7951
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	205.6552	337.6627	347.4269	233.7989	283.5587	294.0519
-20	-1.95E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 80' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	193.1089977	*158.5456233*	*177.9875977*	117.518	125.3525	117.4456	139.8162	127.5462	134.7539	61.54225219
-1	-3.356499117	*-2.628727679*	*-3.020849203*	-2.09831	-2.09831	-1.67891	-1.67891	-1.5965	-1.68052	-1.937366579
+1	180.0945367	*148.0517973*	*162.3131964*	111.0157	118.3501	110.8626	131.8368	119.2178	125.9356	58.05642034
-2	-7.924001778	*-9.135670597*	*-7.131601592*	-7.18166	-7.18166	-5.74654	-5.7855	-5.46619	-5.75389	-4.428267907
+2	166.0438637	*136.882211*	*149.237395*	104.0014	110.7962	103.7392	123.2024	110.0349	116.2126	54.26050771
-3	-11.67250088	*-14.68712634*	*-10.50525077*	-11.3783	-11.3783	-10.266	-10.7638	-8.65918	-9.11493	-6.365633662
+3	155.3115671	*128.3907553*	*139.593963*	98.54575	104.9209	98.19882	116.4868	102.8927	108.6503	51.3081271
-4	-18.48682974	*-22.07671122*	*-16.74539754*	-17.1054	-17.2159	-16.0942	-17.2396	-12.8465	-13.5331	-8.856532779
+4	141.7648969	*117.7251652*	*127.4220551*	91.5314	97.36696	91.07542	107.8523	93.70986	98.92725	47.51221426
-5	-25.85976217	*-28.02016991*	*-23.40449989*	-22.561	-23.0912	-21.0327	-22.9521	-16.7957	-17.7344	-10.79389856
+5	131.4245997	*109.6257113*	*118.1314218*	86.07579	91.49169	85.535	101.1367	86.49245	91.28576	44.55983425
-6	-35.59124688	*-35.91375477*	*-32.19300065*	-29.5754	-30.6451	-28.1561	-31.5865	-21.8733	-23.1361	-14.19320733
+6	118.3819286	*99.46412566*	*106.4131255*	79.06144	83.93778	78.4116	92.50225	76.87464	81.10173	40.76392011
-7	-43.35617805	*-42.24921161*	*-39.20489899*	-35.031	-36.5203	-33.6965	-38.3022	-25.8225	-27.3374	-17.14558348
+7	108.4336338	*91.75666967*	*97.47528856*	73.60583	78.0625	72.87118	85.7866	69.73242	73.53938	37.81154119
-8	-54.49287163	*-50.6468002*	*-49.26688818*	-42.0453	-44.0743	-40.8199	-46.9366	-30.905	-32.7391	-20.94149754
+8	95.89496066	*82.09908111*	*86.21059055*	66.59147	70.50858	65.35204	76.67249	60.54956	63.81635	34.01562717
-9	-63.46116743	*-57.37425809*	*-57.32272038*	-47.5009	-49.9495	-46.3603	-53.6522	-37.291	-39.2537	-23.89387605
+9	85.8170772	*74.78362523*	*77.62555117*	60.74618	64.21365	59.81162	69.95682	53.40734	56.254	31.06325033
-10	-75.24383923	*-66.27584464*	*-67.90702294*	-54.5153	-57.5035	-53.4837	-62.2867	-45.5015	-47.8964	-27.6897906
+10	73.78240319	*65.26850159*	*66.81445181*	53.73182	56.65973	52.68822	61.3224	44.5855	46.93211	27.26733538
-11	-84.60413735	*-73.75683005*	*-76.31565617*	-59.9709	-63.3787	-59.0242	-69.0023	-52.3912	-55.1781	-30.64217043
+11	64.61810415	*58.34504954*	*58.1139054*	48.27622	50.78446	47.1478	54.60674	38.19952	40.21002	24.31495433
-12	-96.89080458	*-83.16242022*	*-87.35355637*	-67.3749	-71.3523	-66.1475	-77.6367	-61.5741	-64.9011	-34.43808521
+12	53.08743041	*49.69546204*	*47.75640715*	41.26186	43.23054	40.0244	45.97231	30.33357	32.1364	20.51904332
-13	-106.6431029	*-90.67387773*	*-96.11499003*	-72.8305	-77.2276	-72.0837	-84.8321	-68.7163	-72.4635	-37.39046362
+13	44.35656091	*43.16400451*	*40.18184046*	35.80626	37.35527	34.48398	39.25665	26.38434	27.9351	17.56666255
-14	-119.4337777	*-100.5834647*	*-107.606496*	-79.8449	-84.7815	-79.2071	-93.4665	-77.8992	-82.1865	-41.18637753
+14	34.3730864	*35.01841624*	*30.96739582*	28.7919	29.80135	27.36059	30.62223	21.30676	22.53342	13.77075046
-15	-129.5780765	*-108.4869223*	*-116.72073*	-85.3005	-90.6568	-84.7475	-100.182	-85.1761	-89.8938	-44.13875501
+15	26.80415553	*28.8789651*	*24.22649566*	23.33629	23.92608	21.82017	23.90658	17.35754	18.33211	11.07021406
-16	-143.3943357	*-118.9005044*	*-128.6658283*	-92.3149	-98.2107	-91.8709	-108.817	-94.7344	-100.012	-47.93466974
+16	17.32466674	*21.23737114*	*15.78642204*	16.32194	16.37216	15.44334	16.51643	12.30644	12.95414	8.579317973
-17	-153.9306255	*-127.1959673*	*-138.1328542*	-97.7705	-104.086	-97.4113	-115.532	-101.877	-107.574	-50.88705048
+17	12.17545462	*15.48992019*	*10.99179673*	11.97465	11.97465	10.91027	11.47969	9.113445	9.5931	6.64195059
-18	-167.7293005	*-138.1135491*	*-150.9998799*	-104.785	-111.64	-104.535	-124.167	-111.059	-117.297	-54.68296171
+18	7.372710144	*8.352326364*	*6.619553333*	6.578991	6.578991	5.264414	5.303375	5.008168	5.271756	4.151048173
-19	-178.6575993	*-146.8010122*	*-160.8197139*	-110.24	-117.515	-110.075	-130.882	-118.202	-124.86	-57.63534238
+19	3.833244153	*3.016124889*	*3.440982781*	2.3965	2.3965	1.917542	1.917542	1.823629	1.91961	2.213684554
-20	-192.9602724	*-158.222594*	*-177.9875977*	-117.255	-125.069	-117.199	-139.517	-127.385	-134.583	-61.431254
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 80’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	87.94924176	111.313	108.1888	92.81413702	71.06522459	95.75002	107.7067	116.5055	125.232
-1	-1.477519945	-1.47886	-1.31638	-1.029746436	-1.846411488	-1.42708	-1.42736	-1.41996	-1.41309
+1	82.96677988	104.1408	100.4088	85.72477464	67.05978032	90.36392	101.5452	109.6219	117.5802
-2	-5.057299517	-5.06342	-4.02985	-3.151391997	-4.220370961	-4.88456	-4.88585	-4.91768	-4.8586
+2	77.56999522	96.23275	91.76267	78.02382133	62.74349269	84.53569	94.85219	102.1179	109.211
-3	-8.012339266	-8.02114	-6.38351	-5.046030664	-6.066782482	-8.40249	-8.40477	-8.38796	-8.37236
+3	73.37249558	90.08205	85.03792	72.08493806	59.3863813	80.00262	89.64652	96.2815	102.7017
-4	-11.81167604	-11.8239	-9.40965	-7.547244495	-9.272024257	-12.9356	-13.6952	-13.6761	-13.6585
+4	67.97570523	82.17398	75.91147	64.51448796	55.07009314	74.17438	82.95353	88.7775	94.33247
-5	-14.91031909	-14.7816	-11.8064	-9.543383818	-12.62913839	-16.8667	-17.8933	-17.875	-17.8581
+5	63.77820746	75.95362	69.18672	58.67710444	51.71298122	69.64131	77.74786	82.94106	87.8231
-6	-20.30710614	-18.667	-16.298	-13.31634865	-16.94542477	-22.6949	-23.8357	-23.7917	-23.772
+6	58.38142164	67.67589	60.54062	51.23715669	47.39669288	63.81308	71.05487	75.43706	79.45391
-7	-24.50460451	-22.0438	-19.9966	-16.46999956	-20.30253677	-27.228	-29.0414	-28.9564	-28.9375
+7	54.18391691	61.52518	54.45066	45.94868363	44.03957811	59.28001	65.8492	69.49245	72.56235
-8	-29.90139328	-28.1428	-24.7519	-20.53097716	-24.6188253	-33.0562	-35.7344	-35.8365	-35.8154
+8	48.48730876	53.61712	47.10147	39.61330841	39.72329252	53.12798	58.78438	61.67972	64.11041
-9	-34.098892	-33.6213	-28.5572	-23.84367317	-27.97594021	-37.5893	-40.94	-41.673	-41.7968
+9	44.28981086	47.46641	41.38544	34.73653888	36.1263872	48.59491	53.57872	55.84328	57.60105
-10	-39.49567891	-40.6651	-34.8559	-29.2188725	-32.29222546	-43.4175	-47.633	-49.177	-50.166
+10	38.89302289	39.87925	34.03624	28.5316637	31.81010101	42.76668	46.88572	48.33928	49.23185
-11	-43.69318142	-46.5914	-40.5719	-34.04489164	-35.64933751	-47.9506	-52.8387	-55.0134	-56.6753
+11	34.69552428	34.40075	29.22713	24.41283543	28.45298827	38.23361	41.68006	42.50284	42.72249
-12	-49.08997	-54.4994	-47.9211	-40.31501904	-40.20541809	-53.7789	-59.5317	-62.5174	-65.0445
+12	29.2987321	27.35696	24.22161	20.07522472	24.13669865	32.40537	34.98706	34.99883	34.97768
-13	-53.58728904	-60.6501	-53.6371	-45.24252913	-43.56253074	-58.6357	-65.1092	-68.5184	-71.5539
+13	25.10123325	22.64388	20.52299	16.91668231	20.77958581	27.8723	29.7814	29.6907	29.67211
-14	-58.98407569	-68.5582	-61.5049	-52.06184281	-47.87882004	-64.464	-71.8022	-76.2748	-80.388
+14	19.70444519	18.24274	15.76763	12.87509503	16.46329554	22.04406	23.08841	23.05047	23.03076
-15	-63.18157954	-74.8004	-68.2296	-57.8484667	-51.23593279	-68.997	-77.0078	-82.1112	-86.8974
+15	15.50694695	15.20243	12.14142	9.831596599	13.10618749	17.511	18.49008	18.47203	18.45529
-16	-68.57836286	-83.0563	-76.8757	-65.3536763	-55.55221894	-74.8253	-83.7008	-89.6152	-95.2666
+16	11.38740501	11.39965	9.072165	7.265129322	8.789897179	12.42933	13.09251	13.07347	13.05581
-17	-72.77586123	-89.207	-84.0808	-71.24179884	-58.90933473	-79.3583	-88.9065	-95.4516	-101.776
+17	8.432366459	8.441928	6.718502	5.319742873	6.329160217	8.903605	8.906092	8.889462	8.874028
-18	-78.17264893	-97.115	-92.7269	-78.87750888	-63.22561743	-85.1866	-95.5995	-102.956	-110.145
+18	4.6330276	4.639145	3.692366	2.883775665	3.955200521	4.474752	4.47604	4.507869	4.448795
-19	-82.3701572	-103.266	-99.4517	-84.86713137	-66.58273373	-89.7196	-100.805	-108.792	-116.654
+19	1.687534336	1.689256	1.507803	1.180974288	2.108790767	1.629911	1.630274	1.622948	1.616151
-20	-87.76693536	-111.174	-108.098	-92.63334014	-70.89901601	-95.5479	-107.498	-116.296	-125.024
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 80' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	192.7114565	202.1900959	130.3234	157.6848	165.1195
-1	-1.510979597	-1.713362884	-1.69518	-1.78744	-1.50701
+1	178.7462019	186.6492682	121.5552	147.163	153.7476
-2	-5.088959158	-5.122746863	-5.80425	-6.14971	-5.187
+2	163.2437045	169.3773521	111.8685	135.5389	141.1533
-3	-9.489458718	-8.88785448	-9.19461	-9.76608	-9.66782
+3	151.1862007	155.9436339	104.3344	126.498	131.3577
-4	-15.30289578	-14.28229262	-13.8294	-15.478	-15.4806
+4	135.0985541	138.6716845	94.64762	114.8739	118.6964
-5	-19.82445946	-18.66695376	-17.9732	-19.9985	-20.1336
+5	122.7649448	125.2379661	86.57536	105.3488	108.2682
-6	-26.03114596	-26.44015456	-23.3009	-25.8105	-26.9151
+6	107.2624588	108.2804293	76.88863	93.56311	95.67384
-7	-32.05989718	-33.34222686	-27.4446	-30.4671	-32.1896
+7	95.29025564	97.10161486	69.35451	84.52217	85.87827
-8	-41.30804149	-43.18459369	-32.9906	-37.114	-38.9712
+8	81.72558401	83.2851257	59.66779	72.89809	73.91475
-9	-48.84398061	-51.61265379	-37.2121	-44.1471	-44.6225
+9	71.1752573	74.04707929	52.17214	63.90332	64.39018
-10	-59.98091757	-63.4901442	-44.4267	-54.6087	-54.0614
+10	58.68416871	62.16960099	43.4541	53.44167	52.76466
-11	-69.67377525	-72.72818017	-51.2074	-62.7456	-63.1035
+11	49.91647032	52.93155309	37.80167	45.30482	45.37306
-12	-83.23845731	-84.60567891	-60.7484	-74.1948	-75.2115
+12	40.22741842	42.02939541	32.39621	36.2063	38.21475
-13	-93.78877464	-95.5172069	-68.2825	-83.2358	-84.4844
+13	32.91788768	34.32761776	28.03422	31.11033	32.94021
-14	-108.9914605	-110.0354073	-77.9693	-94.8599	-97.0787
+14	25.16664549	25.45353004	22.70653	25.16214	26.15866
-15	-121.0489639	-123.3200694	-85.5034	-103.901	-106.874
+15	20.46795362	19.4936935	18.56277	20.64167	20.88412
-16	-136.8275518	-140.5920022	-95.7282	-116.171	-120.101
+16	14.65452201	13.68253675	13.23506	14.82964	14.83221
-17	-149.4702078	-154.02572	-103.262	-125.212	-129.964
+17	10.13295368	9.486862362	9.677002	10.30917	10.31118
-18	-164.9727188	-171.297638	-112.949	-136.836	-142.558
+18	4.656709533	4.628889261	5.317974	5.631009	4.75475
-19	-177.0302084	-184.7313584	-120.483	-145.877	-152.354
+19	1.725477968	1.959443176	1.936373	2.044716	1.721461
-20	-192.5327172	-202.003272	-130.17	-157.501	-164.948
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.74E-13	-2.68E-13	-3.33E-13	-2.48E-13	-2.63E-13	-1.87E-13	-2.27E-13	-1.93E-13	-2.05E-13	-1.32E-13
End Shear	3.01E-13	2.28E-13	2.50E-13	1.97E-13	2.05E-13	2.09E-13	2.47E-13	1.95E-13	2.05E-13	1.10E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	727.8261467	599.6551889	655.9559855	444.0628566	473.400288	443.4505381	527.3473509	476.8711221	503.7425764	232.2256814
-2	0	0	0	0	0	0	0	0	0	0
+2	1370.96842	1135.114218	1233.635375	838.24588	893.083831	836.2458224	993.2943906	888.441947	938.3436614	437.4581921
-3	0	0	0	0	0	0	0	0	0	0
+3	1929.426804	1606.377062	1735.810489	1182.549041	1259.050602	1178.385808	1397.841067	1234.712573	1303.80336	615.6975252
-4	0	0	0	0	0	0	0	0	0	0
+4	2405.648016	2013.443712	2161.913056	1476.97236	1571.300618	1469.870504	1742.039392	1515.682838	1600.121498	766.9437041
-5	0	0	0	0	0	0	0	0	0	0
+5	2792.29199	2356.314222	2511.943089	1721.515816	1829.83386	1711.212603	2024.925006	1764.983085	1864.761718	891.196685
-6	0	0	0	0	0	0	0	0	0	0
+6	3096.69874	2634.988552	2785.900584	1916.1794	2034.929081	1902.190577	2275.191675	1959.825647	2072.23052	988.4565447
-7	0	0	0	0	0	0	0	0	0	0
+7	3327.679204	2849.466745	2995.558798	2061.076843	2186.703046	2064.818905	2464.058089	2103.225133	2222.516193	1058.723153
-8	0	0	0	0	0	0	0	0	0	0
+8	3501.05335	2999.748784	3151.463855	2163.729289	2306.342861	2178.231021	2591.524159	2199.516681	2325.640583	1101.996726
-9	0	0	0	0	0	0	0	0	0	0
+9	3589.743283	3085.834499	3231.29606	2232.688937	2375.86311	2240.841824	2657.443847	2230.32028	2359.425947	1118.277012
-10	0	0	0	0	0	0	0	0	0	0
+10	3595.592703	3107.124954	3235.482699	2250.952516	2390.850374	2252.164151	2661.330087	2195.410511	2323.635014	1107.878449
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	3592.225261	3085.98827	3232.107179	2232.710157	2375.895623	2240.791585	2657.424289	2230.28564	2359.388341	1118.301666
-12	0	0	0	0	0	0	0	0	0	0
+12	3504.174115	2999.88557	3152.659358	2163.734449	2306.358097	2178.262262	2591.582672	2199.540531	2325.664437	1102.018862
-13	0	0	0	0	0	0	0	0	0	0
+13	3330.321364	2849.586484	2997.138499	2061.077718	2186.700616	2064.834041	2464.097119	2103.232084	2222.522156	1058.742479
-14	0	0	0	0	0	0	0	0	0	0
+14	3098.154676	2635.091056	2787.010534	1916.277275	2034.908908	1902.189548	2275.211047	1959.890875	2072.297724	988.473072
-15	0	0	0	0	0	0	0	0	0	0
+15	2794.386775	2356.399735	2513.437484	1721.597459	1829.921781	1711.195468	2024.925044	1765.031488	1864.81111	891.2104701
-16	0	0	0	0	0	0	0	0	0	0
+16	2405.413454	2013.512068	2163.79163	1477.037733	1571.37102	1469.934908	1742.019903	1515.749919	1600.192524	766.9547951
-17	0	0	0	0	0	0	0	0	0	0
+17	1931.085813	1606.428365	1738.073424	1182.59811	1259.103455	1178.434067	1397.899551	1234.762779	1303.856521	615.7057581
-18	0	0	0	0	0	0	0	0	0	0
+18	1372.074451	1135.148439	1235.215079	838.2785693	893.1190208	836.2780026	993.3333958	888.4755387	938.3792293	437.4636456
-19	0	0	0	0	0	0	0	0	0	0
+19	728.3790606	599.6722965	655.9559935	444.0791804	473.4178676	443.4666769	527.3669434	476.8878785	503.760319	232.2284585
-20	-6.34E-13	-4.73E-13	-4.97E-13	-3.89E-13	-4.06E-13	-3.11E-13	-3.39E-13	-3.85E-13	-4.09E-13	-2.01E-13
+20	2.76E-13	1.61E-13	1.89E-13	1.71E-13	1.71E-13	1.36E-13	1.30E-13	1.30E-13	1.37E-13	7.88E-14

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.93E-13	-1.56E-13	-2.04E-13	-1.55E-13	-1.63E-13	-1.62E-13	-1.83E-13	-1.78E-13	-1.88E-13
End Shear	1.21E-13	1.72E-13	1.33E-13	1.05E-13	1.23E-13	1.71E-13	1.49E-13	1.70E-13	1.67E-13
-1	0	0	0	0	0	0	0	0	0
+1	331.8671195	416.563232	401.6351157	344.8275986	268.2391213	361.4556855	406.1807217	438.4877896	470.3208001
-2	0	0	0	0	0	0	0	0	0
+2	625.3571093	776.8913855	741.7868222	639.3569231	505.7846554	681.4661638	764.7668081	824.4977356	882.2062226
-3	0	0	0	0	0	0	0	0	0
+3	880.4699469	1080.984545	1020.455049	883.4725408	712.6365756	960.031398	1075.758291	1175.0965	1261.177923
-4	0	0	0	0	0	0	0	0	0
+4	1097.205628	1328.842566	1252.735785	1087.759578	888.7949061	1197.151395	1339.155096	1479.891474	1583.116078
-5	0	0	0	0	0	0	0	0	0
+5	1275.564149	1525.808468	1438.503887	1252.218063	1034.259624	1393.010104	1555.70972	1731.324666	1870.738665
-6	0	0	0	0	0	0	0	0	0
+6	1415.545566	1688.722709	1562.663552	1366.378403	1149.030785	1547.872532	1736.282864	1929.396125	2102.446692
-7	0	0	0	0	0	0	0	0	0
+7	1517.568458	1794.880272	1676.130774	1467.698235	1233.108187	1674.960937	1880.056519	2074.27973	2274.640547
-8	0	0	0	0	0	0	0	0	0
+8	1598.585704	1850.297812	1749.499566	1534.300152	1286.492221	1766.360397	1976.235511	2186.837011	2387.320152
-9	0	0	0	0	0	0	0	0	0
+9	1641.733364	1870.980749	1811.861502	1587.657035	1308.568471	1816.190497	2024.382276	2250.776287	2454.478044
-10	0	0	0	0	0	0	0	0	0
+10	1646.036949	1835.102489	1812.597146	1590.948606	1299.671965	1824.037158	2024.735407	2260.855951	2476.889508
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	1641.672007	1870.960703	1811.832856	1587.670263	1308.548128	1816.143192	2024.353672	2250.727951	2454.486133
-12	0	0	0	0	0	0	0	0	0
+12	1598.59731	1850.322754	1749.513809	1534.306787	1286.573479	1766.382861	1976.272069	2186.8497	2387.385304
-13	0	0	0	0	0	0	0	0	0
+13	1517.567987	1794.842435	1676.145118	1467.704927	1233.179318	1674.970202	1880.078542	2074.276703	2274.688896
-14	0	0	0	0	0	0	0	0	0
+14	1415.61781	1688.670359	1562.649273	1366.371774	1149.091615	1547.868574	1736.290293	1929.454021	2102.478159
-15	0	0	0	0	0	0	0	0	0
+15	1275.624387	1525.811145	1438.475274	1252.227994	1034.310383	1392.992984	1555.70267	1731.366905	1870.753268
-16	0	0	0	0	0	0	0	0	0
+16	1097.253813	1328.900341	1252.742935	1087.76291	888.8355211	1197.204088	1339.213061	1479.918024	1583.113908
-17	0	0	0	0	0	0	0	0	0
+17	880.5061669	1081.027794	1020.497976	883.4692504	712.6670803	960.0708847	1075.801769	1175.107471	1261.193641
-18	0	0	0	0	0	0	0	0	0
+18	625.381269	776.9203196	741.815266	639.3469922	505.8049577	681.4924899	764.7958053	824.4930305	882.2051044
-19	0	0	0	0	0	0	0	0	0
+19	331.879122	416.5776598	401.6494582	344.834312	268.2492627	361.4688854	406.1952328	438.5034691	470.3377289
-20	-2.90E-13	-3.37E-13	-3.18E-13	-2.46E-13	-2.10E-13	-2.70E-13	-2.97E-13	-2.94E-13	-2.95E-13
+20	1.19E-13	1.20E-13	1.02E-13	7.92E-14	7.54E-14	1.15E-13	1.14E-13	1.16E-13	1.14E-13

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.60E-13	-2.50E-13	-1.83E-13	-2.00E-13	-1.96E-13
End Shear	2.17E-13	2.48E-13	1.72E-13	2.11E-13	2.10E-13
-1	0	0	0	0	0
+1	714.9848078	746.5970726	486.2207337	588.6518853	614.9903726
-2	0	0	0	0	0
+2	1319.729602	1371.466951	903.5580993	1094.643722	1140.421306
-3	0	0	0	0	0
+3	1842.086981	1929.022097	1252.012205	1517.979016	1576.646953
-4	0	0	0	0	0
+4	2283.562721	2399.445681	1544.878819	1886.511964	1963.973166
-5	0	0	0	0	0
+5	2615.112547	2835.532685	1801.626602	2185.300427	2273.463279
-6	0	0	0	0	0
+6	2911.913429	3148.797168	1989.49119	2401.186781	2534.337059
-7	0	0	0	0	0
+7	3130.172583	3416.303354	2125.73201	2547.636534	2705.651299
-8	0	0	0	0	0
+8	3293.019295	3567.059652	2209.649018	2638.668357	2800.949842
-9	0	0	0	0	0
+9	3400.518377	3652.892223	2224.099237	2647.040212	2837.154128
-10	0	0	0	0	0
+10	3400.366763	3709.288954	2169.626989	2572.752063	2783.497387
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	3400.557326	3652.893978	2224.064512	2647.019432	2837.115561
-12	0	0	0	0	0
+12	3293.032329	3567.056603	2209.636148	2638.627111	2800.956614
-13	0	0	0	0	0
+13	3130.224509	3416.307842	2125.740726	2547.57435	2705.703303
-14	0	0	0	0	0
+14	2911.93947	3148.796949	1989.560282	2401.172883	2534.367186
-15	0	0	0	0	0
+15	2615.112506	2835.527552	1801.678543	2185.33498	2273.471659
-16	0	0	0	0	0
+16	2283.536682	2399.4358	1544.913464	1886.52569	1963.993214
-17	0	0	0	0	0
+17	1842.099953	1929.026353	1252.063912	1518.037683	1576.645247
-18	0	0	0	0	0
+18	1319.781642	1371.46659	903.5924903	1094.685037	1140.464773
-19	0	0	0	0	0
+19	715.0110735	746.6018243	486.2379372	588.6726218	615.0120533
-20	-5.53E-13	-4.52E-13	-3.93E-13	-4.30E-13	-4.57E-13
+20	1.44E-13	1.53E-13	1.37E-13	1.45E-13	1.27E-13

1-Span: Shear (Max and Min) Raw Data Results - 80’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	63.6	45.605	57.72	56.1	50.125	36.85	49.65	55.85	60.4125	64.9375
-1	-1.4	-0.76615	-0.76684	-0.68259	-0.5383	-0.95743	-0.73999	-0.74014	-0.7363	-0.73274
+1	59.8911	43.02141	54.00094	52.06574	46.25474	34.77303	46.8571	52.65501	56.84312	60.96977
-2	-3.2	-2.6224	-2.62557	-2.08963	-1.65521	-2.18842	-2.53283	-2.5335	-2.55	-2.51937
+2	55.8573	40.22297	49.90031	47.58241	42.05495	32.53487	43.83494	49.18444	52.95201	56.63003
-3	-4.6	-4.1547	-4.15926	-3.31009	-2.65936	-3.14586	-4.35701	-4.35819	-4.34947	-4.34139
+3	52.7199	38.04641	46.71094	44.09537	38.82344	30.79408	41.48437	46.4851	49.92559	53.25468
-4	-7.1488	-6.1248	-6.13115	-4.87926	-3.99541	-4.80789	-6.70758	-7.10146	-7.09159	-7.08243
+4	48.6861	35.24797	42.61031	39.36296	34.71365	28.55592	38.46221	43.01453	46.03448	48.91494
-5	-9.9376	-7.73156	-7.66484	-6.12208	-5.06956	-6.54868	-8.74602	-9.27834	-9.26887	-9.26008
+5	45.5487	33.07141	39.38482	35.87592	31.55214	26.81513	36.11165	40.3152	43.00807	45.53959
-6	-13.5232	-10.53	-9.67955	-8.45111	-7.0874	-8.78684	-11.7682	-12.3597	-12.3369	-12.3267
+6	41.5149	30.27297	35.0925	31.3926	27.53235	24.57697	33.08949	36.84463	39.11696	41.19985
-7	-16.312	-12.7066	-11.4305	-10.369	-8.77913	-10.5276	-14.1188	-15.059	-15.015	-15.0052
+7	38.3775	28.0964	31.90312	28.23472	24.67284	22.83618	30.73892	34.1453	36.03445	37.62632
-8	-20.2848	-15.505	-14.5931	-12.8348	-10.9686	-12.7658	-17.1409	-18.5296	-18.5826	-18.5716
+8	34.3437	25.1425	27.8025	24.42389	21.24814	20.59803	27.54886	30.48192	31.98326	33.24366
-9	-23.4222	-17.6816	-17.4339	-14.808	-12.7602	-14.5066	-19.4915	-21.2289	-21.609	-21.6732
+9	30.9822	22.96594	24.61312	21.45991	18.61948	18.73289	25.19829	27.78259	28.95685	29.86832
-10	-27.456	-20.48	-21.0864	-18.0741	-15.6535	-16.7447	-22.5136	-24.6995	-25.5001	-26.013
+10	26.9484	20.1675	20.67889	17.64907	15.28478	16.49474	22.17613	24.31201	25.06574	25.52857
-11	-30.5934	-22.6566	-24.1594	-21.0381	-18.2472	-18.4855	-24.8642	-27.3988	-28.5265	-29.3883
+11	23.811	17.99094	17.83808	15.15537	13.06651	14.75395	19.82557	21.61268	22.03932	22.15322
-12	-34.6272	-25.455	-28.26	-24.8489	-21.6269	-20.848	-27.8864	-30.8694	-32.4176	-33.728
+12	19.7772	15.1925	14.18561	12.55982	10.72239	12.51579	16.80341	18.14211	18.14822	18.13725
-13	-37.7646	-27.787	-31.4494	-27.8129	-24.2905	-22.5888	-30.4048	-33.7616	-35.5294	-37.1034
+13	16.6576	13.01594	11.7417	10.64195	9.019438	10.775	14.45284	15.44278	15.39575	15.38611
-14	-41.7984	-30.5855	-35.55	-31.8926	-27.9773	-24.827	-33.427	-37.2321	-39.5513	-41.6842
+14	13.072	10.2175	9.459548	8.17611	6.851147	8.53684	11.43068	11.97221	11.95254	11.94232
-15	-44.9358	-32.762	-38.7869	-35.3796	-31.1038	-26.5678	-35.7776	-39.9315	-42.5778	-45.0596
+15	10.2832	8.040937	7.883033	6.295786	5.225215	6.796053	9.080112	9.587806	9.578446	9.569763
-16	-49.1937	-35.5605	-43.0678	-39.863	-35.1686	-28.8059	-38.7997	-43.402	-46.4689	-49.3993
+16	6.697601	5.904799	5.911147	4.70426	3.844161	4.557893	6.445074	6.788958	6.779087	6.769932
-17	-52.3311	-37.737	-46.2572	-43.5991	-38.3652	-30.5467	-41.1503	-46.1014	-49.4953	-52.7747
+17	4.780002	4.3725	4.377458	3.483797	2.80501	3.281908	4.616855	4.618145	4.609521	4.601518
-18	-56.3649	-40.5355	-50.3578	-48.0824	-42.5199	-32.7849	-44.1724	-49.5719	-53.3864	-57.1144
+18	2.987201	2.4024	2.405572	1.914631	1.513955	2.050921	2.320328	2.320996	2.3375	2.306868
-19	-59.5023	-42.712	-53.5472	-51.5694	-45.7865	-34.5257	-46.523	-52.2713	-56.4128	-60.4898
+19	1.592801	0.87505	0.875943	0.781853	0.617962	1.093488	0.84517	0.845358	0.84156	0.838035
-20	-63.5361	-45.5105	-57.6478	-56.0528	-50.0312	-36.7638	-49.5452	-55.7418	-60.3039	-64.8295
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 80' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**63.6**	***60.9375***	***65***	***60.9***	***72.5***	***66.1375***	***69.875***	***31.91198***
-1	**-1.4**	***-1.08805***	***-1.08805***	***-0.87058***	***-0.87058***	***-0.82784***	***-0.87141***	***-1.0046***
+1	**59.8911**	***57.56584***	***61.36898***	***57.48646***	***68.36237***	***61.81892***	***65.30238***	***30.10444***
-2	**-3.2**	***-3.72396***	***-3.72396***	***-2.9798***	***-3***	***-2.83443***	***-2.98361***	***-2.29622***
+2	**55.8573**	***53.92863***	***57.45199***	***53.79271***	***63.8851***	***57.05726***	***60.26063***	***28.13612***
-3	**-4.6**	***-5.90007***	***-5.90007***	***-5.3233***	***-5.58144***	***-4.49011***	***-4.72643***	***-3.30082***
+3	**52.7199**	***51.09969***	***54.40544***	***50.91979***	***60.40278***	***53.35375***	***56.33927***	***26.6052***
-4	**-7.1488**	***-8.86979***	***-8.92708***	***-8.34545***	***-8.93939***	***-6.66137***	***-7.01742***	***-4.59245***
+4	**48.6861**	***47.46248***	***50.48844***	***47.22604***	***55.9255***	***48.5921***	***51.29751***	***24.63688***
-5	**-9.9376**	***-11.6987***	***-11.9736***	***-10.9063***	***-11.9015***	***-8.7092***	***-9.19595***	***-5.59704***
+5	**45.5487**	***44.63354***	***47.44189***	***44.35312***	***52.44318***	***44.8496***	***47.33511***	***23.10596***
-6	**-13.5232**	***-15.3359***	***-15.8906***	***-14.6***	***-16.3788***	***-11.3421***	***-11.9969***	***-7.35971***
+6	**41.5149**	***40.99634***	***43.5249***	***40.65937***	***47.96591***	***39.8624***	***42.0543***	***21.13763***
-7	**-16.312**	***-18.1649***	***-18.9372***	***-17.4729***	***-19.8611***	***-13.3899***	***-14.1755***	***-8.89063***
+7	**38.3775**	***38.1674***	***40.47835***	***37.78646***	***44.48359***	***36.15889***	***38.13294***	***19.60671***
-8	**-20.2848**	***-21.8021***	***-22.8542***	***-21.1667***	***-24.3384***	***-16.0254***	***-16.9764***	***-10.859***
+8	**34.3437**	***34.53019***	***36.56136***	***33.8875***	***39.75758***	***31.39723***	***33.09119***	***17.63839***
-9	**-23.4222**	***-24.631***	***-25.9007***	***-24.0396***	***-27.8207***	***-19.3368***	***-20.3545***	***-12.3899***
+9	**30.9822**	***31.49918***	***33.2972***	***31.01458***	***36.27525***	***27.69372***	***29.16982***	***16.10747***
-10	**-27.456**	***-28.2682***	***-29.8177***	***-27.7333***	***-32.298***	***-23.5943***	***-24.8361***	***-14.3582***
+10	**26.9484**	***27.86198***	***29.38021***	***27.32083***	***31.79798***	***23.11926***	***24.33607***	***14.13914***
-11	**-30.5934**	***-31.0972***	***-32.8643***	***-30.6063***	***-35.7803***	***-27.1668***	***-28.6119***	***-15.8891***
+11	**23.811**	***25.03304***	***26.33366***	***24.44792***	***28.31565***	***19.80789***	***20.85041***	***12.60822***
-12	**-34.6272**	***-34.9364***	***-36.9989***	***-34.3***	***-40.2576***	***-31.9285***	***-33.6537***	***-17.8574***
+12	**19.7772**	***21.39583***	***22.41667***	***20.75416***	***23.83838***	***15.7291***	***16.66393***	***10.6399***
-13	**-37.7646**	***-37.7654***	***-40.0454***	***-37.3781***	***-43.9886***	***-35.632***	***-37.575***	***-19.3884***
+13	**16.6576**	***18.56689***	***19.37012***	***17.88125***	***20.35606***	***13.68128***	***14.4854***	***9.108977***
-14	**-41.7984**	***-41.4026***	***-43.9624***	***-41.0719***	***-48.4659***	***-40.3936***	***-42.6168***	***-21.3567***
+14	**13.072**	***14.92969***	***15.45312***	***14.1875***	***15.87878***	***11.04836***	***11.68443***	***7.140654***
-15	**-44.9358**	***-44.2315***	***-47.009***	***-43.9448***	***-51.9482***	***-44.167***	***-46.6133***	***-22.8876***
+15	**10.2832**	***12.10075***	***12.40657***	***11.31458***	***12.39646***	***9.000537***	***9.505891***	***5.740324***
-16	**-49.1937**	***-47.8687***	***-50.9259***	***-47.6385***	***-56.4255***	***-49.1233***	***-51.86***	***-24.8559***
+16	**6.697601**	***8.463539***	***8.489581***	***8.007953***	***8.564392***	***6.381352***	***6.717213***	***4.4487***
-17	**-52.3311**	***-50.6977***	***-53.9725***	***-50.5115***	***-59.9078***	***-52.8269***	***-55.7814***	***-26.3869***
+17	**4.780002**	***6.209307***	***6.209307***	***5.657385***	***5.95265***	***4.725665***	***4.974384***	***3.444102***
-18	**-56.3649**	***-54.3349***	***-57.8895***	***-54.2052***	***-64.3851***	***-57.5885***	***-60.8231***	***-28.3552***
+18	**2.987201**	***3.411455***	***3.411455***	***2.729797***	***2.75***	***2.596924***	***2.733604***	***2.152475***
-19	**-59.5023**	***-57.1638***	***-60.936***	***-57.0781***	***-67.8674***	***-61.292***	***-64.7445***	***-29.8861***
+19	**1.592801**	***1.242676***	***1.242676***	***0.994318***	***0.994318***	***0.94562***	***0.99539***	***1.147879***
-20	**-63.5361**	***-60.801***	***-64.853***	***-60.7719***	***-72.3447***	***-66.0537***	***-69.7862***	***-31.8544***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 80' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	63.6	111.4583	116.9405	75.375	91.2	95.5
-1	-1.4	-0.8739	-0.99096	-0.98044	-1.0338	-0.87161
+1	59.8911	103.3813	107.9522	70.30375	85.1145	88.92284
-2	-3.2	-2.9433	-2.96284	-3.357	-3.5568	-3
+2	55.8573	94.4151	97.96261	64.70125	78.3915	81.63869
-3	-4.6	-5.48841	-5.14046	-5.31787	-5.6484	-5.59157
+3	52.7199	87.44141	90.19296	60.34375	73.1625	75.97323
-4	-7.1488	-8.85072	-8.26044	-7.9985	-8.952	-8.95349
+4	48.6861	78.13682	80.2034	54.74125	66.4395	68.65032
-5	-9.9376	-11.4659	-10.7964	-10.3951	-11.5665	-11.6446
+5	45.5487	71.00344	72.43376	50.0725	60.9305	62.61894
-6	-13.5232	-15.0556	-15.2922	-13.4765	-14.928	-15.5669
+6	41.5149	62.03728	62.62604	44.47	54.114	55.33478
-7	-16.312	-18.5425	-19.2841	-15.8731	-17.6212	-18.6175
+7	38.3775	55.11293	56.16056	40.1125	48.885	49.66933
-8	-20.2848	-23.8913	-24.9766	-19.0807	-21.4656	-22.5397
+8	34.3437	47.26754	48.16953	34.51	42.162	42.75
-9	-23.4222	-28.2498	-29.8512	-21.5223	-25.5333	-25.8083
+9	30.9822	41.16556	42.82654	30.17475	36.9597	37.24128
-10	-27.456	-34.6911	-36.7207	-25.695	-31.584	-31.2674
+10	26.9484	33.9411	35.95697	25.1325	30.90901	30.51744
-11	-30.5934	-40.2972	-42.0637	-29.6167	-36.2901	-36.4971
+11	23.811	28.87014	30.61397	21.86331	26.20291	26.24237
-12	-34.6272	-48.1425	-48.9333	-35.135	-42.912	-43.5
+12	19.7772	23.26629	24.3085	18.73696	20.9406	22.10223
-13	-37.7646	-54.2445	-55.2442	-39.4925	-48.141	-48.8631
+13	16.6576	19.03869	19.85403	16.21412	17.99325	19.0516
-14	-41.7984	-63.0373	-63.6411	-45.095	-54.864	-56.1473
+14	13.072	14.55561	14.72153	13.13275	14.553	15.12936
-15	-44.9358	-70.011	-71.3245	-49.4525	-60.093	-61.8127
+15	10.2832	11.83803	11.27455	10.73613	11.9385	12.07873
-16	-49.1937	-79.1368	-81.3141	-55.3663	-67.1895	-69.4628
+16	6.697601	8.475721	7.913555	7.654751	8.577003	8.578491
-17	-52.3311	-86.4489	-89.0837	-59.7237	-72.4185	-75.167
+17	4.780002	5.860586	5.486907	5.596878	5.962504	5.963665
-18	-56.3649	-95.4151	-99.0732	-65.3262	-79.1415	-82.4512
+18	2.987201	2.693296	2.677206	3.075751	3.256801	2.75
-19	-59.5023	-102.389	-106.843	-69.6837	-84.3705	-88.1166
+19	1.592801	0.997963	1.133281	1.119938	1.1826	0.99564
-20	-63.5361	-111.355	-116.832	-75.2863	-91.0935	-95.4008
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.48E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.20E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	239.5644	172.0856	216.0038	208.2630	186.3490	139.0921	187.4284	210.6200	227.3725	243.8791
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	450.444	324.2713	402.8475	384.6445	345.8224	262.2684	353.3659	396.5604	427.5332	457.4572
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	632.6388	456.5569	560.5313	529.1444	478.3605	369.5289	497.8125	557.8213	609.3319	653.9683
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	787.2	568.9425	689.0550	649.5908	589.4519	460.8737	620.7682	694.4024	767.3796	820.9054
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	910.974	661.4281	791.1892	745.9185	679.0967	536.3026	722.3283	806.6942	897.7572	970.0486
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1007.114	734.0138	875.6664	810.3000	741.8661	595.8158	802.6303	900.3282	1000.4647	1090.1979
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1079.407	786.9165	930.7131	869.1370	797.1832	639.4131	868.5304	974.8802	1075.5923	1179.4869
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1134.648	828.9270	959.4492	907.1815	833.7038	667.0947	915.9245	1024.7527	1133.9575	1237.9156
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1161.204	851.3007	970.1741	939.5185	862.5623	678.5421	941.7633	1049.7186	1167.1124	1272.7395
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1159.868	853.5323	951.5699	939.9000	864.6661	673.9289	945.8321	1049.9017	1172.3391	1284.3606
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1162.271	851.2689	970.1637	939.5037	862.5692	678.5316	941.7388	1049.7037	1167.0873	1272.7437
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1135.989	828.9330	959.4621	907.1889	833.7072	667.1369	915.9361	1024.7716	1133.9641	1237.9493
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1080.542	786.9162	930.6935	869.1445	797.1867	639.4500	868.5352	974.8916	1075.5907	1179.5120
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1007.74	734.0512	875.6393	810.2926	741.8627	595.8474	802.6282	900.3320	1000.4947	1090.2142
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	911.874	661.4594	791.1906	745.9037	679.1019	536.3290	722.3194	806.6905	897.7791	970.0561
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	787.0992	568.9675	689.0850	649.5945	589.4536	460.8947	620.7955	694.4325	767.3933	820.9043
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	633.3516	456.5757	560.5537	529.1667	478.3588	369.5448	497.8330	557.8438	609.3376	653.9765
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	450.9192	324.2838	402.8625	384.6592	345.8173	262.2790	353.3796	396.5755	427.5307	457.4566
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	239.802	172.0918	216.0112	208.2704	186.3525	139.0974	187.4353	210.6276	227.3806	243.8879
-20	-2.41E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.48E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.20E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	239.5644	230.2633	245.4759	229.9458	273.4495	247.2757	261.2095	120.4178
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	450.444	434.6621	463.0977	433.6250	515.0606	460.6907	486.5666	226.8386
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	632.6388	613.1963	652.8652	611.0375	724.8333	640.2450	676.0712	319.2624
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	787.2	765.8659	814.7786	762.1833	903.3131	785.9387	829.7234	397.6892
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	910.974	892.6709	948.8379	887.3283	1050.0000	915.2103	966.9493	462.1191
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1007.114	993.6113	1055.1875	986.3576	1179.7727	1016.2435	1074.5297	512.5520
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1079.407	1068.7461	1133.8880	1070.6865	1277.7071	1090.6016	1152.4585	548.9879
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1134.648	1121.9753	1195.9258	1129.4950	1343.8030	1140.5324	1205.9324	571.4269
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1161.204	1157.7334	1231.9746	1161.9610	1377.9849	1156.5052	1223.4514	579.8688
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1159.868	1167.2038	1239.7461	1167.8321	1380.0000	1138.4032	1204.8924	574.4768
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1162.271	1157.7444	1231.9915	1161.9350	1377.9747	1156.4872	1223.4319	579.8816
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1135.989	1121.9779	1195.9337	1129.5112	1343.8334	1140.5447	1205.9447	571.4384
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1080.542	1068.7465	1133.8868	1070.6943	1277.7273	1090.6052	1152.4616	548.9979
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1007.74	993.6621	1055.1770	986.3570	1179.7828	1016.2774	1074.5645	512.5606
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	911.874	892.7132	948.8835	887.3194	1050.0000	915.2354	966.9749	462.1262
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	787.0992	765.8998	814.8152	762.2167	903.3030	785.9735	829.7602	397.6950
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	633.3516	613.2217	652.8926	611.0625	724.8637	640.2711	676.0988	319.2667
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	450.9192	434.6791	463.1159	433.6417	515.0808	460.7081	486.5850	226.8414
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	239.802	230.2718	245.4850	229.9542	273.4597	247.2844	261.2187	120.4192
-20	-2.41E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 80' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.48E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.20E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	239.5644	413.5250	431.8086	281.2150	340.4580	355.6914
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	450.444	763.2907	793.2140	522.5900	633.1080	659.5843
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	632.6388	1065.4060	1115.6866	724.1250	877.9520	911.8837
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	787.2	1320.7419	1387.7650	893.5100	1091.1000	1135.9012
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	910.974	1512.5000	1639.9842	1042.0050	1263.9100	1314.9007
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1007.114	1684.1605	1821.1667	1150.6600	1388.7720	1465.7820
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1079.407	1810.3948	1975.8840	1229.4575	1473.4740	1564.8648
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1134.648	1904.5803	2063.0767	1277.9925	1526.1240	1619.9826
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1161.204	1966.7544	2112.7196	1286.3501	1530.9660	1640.9220
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1159.868	1966.6667	2145.3377	1254.8450	1488.0000	1609.8886
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1162.271	1966.7769	2112.7206	1286.3300	1530.9540	1640.8997
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1135.989	1904.5878	2063.0750	1277.9850	1526.1001	1619.9865
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1080.542	1810.4248	1975.8865	1229.4625	1473.4380	1564.8949
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1007.74	1684.1755	1821.1665	1150.7000	1388.7640	1465.7994
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	911.874	1512.5000	1639.9812	1042.0350	1263.9300	1314.9055
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	787.0992	1320.7268	1387.7593	893.5301	1091.1080	1135.9128
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	633.3516	1065.4135	1115.6890	724.1550	877.9859	911.8827
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	450.9192	763.3208	793.2138	522.6099	633.1319	659.6095
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	239.802	413.5402	431.8114	281.2249	340.4700	355.7039
-20	-2.41E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	1.14E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	200.8813333	164.468888	197.5512	118.3885	126.4239	118.5385	141.4233	131.588	139.0663	62.21466003
-1	-3.422222049	-2.698110981	-3.079999842	-2.14278	-2.14278	-1.71422	-1.71422	-1.62851	-1.71422	-1.968409069
+1	187.3346838	153.4584211	179.7095975	111.9024	119.4389	111.9684	133.4597	123.2521	130.2401	58.73841685
-2	-7.980001824	-9.522142185	-7.182001632	-7.45424	-7.45424	-6.252	-6.37526	-5.67203	-5.97056	-4.42892111
+2	172.8791702	141.8471751	160.1515983	104.9712	111.9745	104.9297	124.9279	114.1798	120.6341	54.98881359
-3	-11.85022384	-15.22714091	-10.66520143	-11.7196	-11.7196	-10.8592	-11.4943	-8.91672	-9.38602	-6.397329592
+3	161.5387515	132.782174	145.823999	99.42628	106.0031	99.29873	118.1024	106.922	112.9493	51.98913023
-4	-20.16787861	-22.63838828	-18.25039897	-17.9882	-18.3005	-16.7137	-17.9993	-13.4388	-14.178	-8.857838637
+4	147.6432361	121.7309209	132.6554621	92.4951	98.53872	92.26	109.5706	97.84968	103.3434	48.23952247
-5	-27.77180311	-28.79138696	-25.11599855	-23.5332	-24.272	-22.2279	-24.6832	-17.452	-18.4474	-11.11899524
+5	136.7508175	113.1139222	122.8701529	86.95016	92.56724	86.62902	102.7452	90.59184	95.65859	45.23984054
-6	-37.55671244	-36.76264009	-33.95000207	-30.4643	-31.7364	-29.2666	-33.215	-22.4684	-23.784	-14.86860151
+6	123.4152994	102.6226704	110.8905245	80.01898	85.1029	79.59028	94.21341	81.0659	85.57231	41.49023445
-7	-46.20555019	-43.3636388	-41.77740214	-36.0093	-37.7078	-34.8976	-40.0405	-26.4816	-28.0533	-17.86828487
+7	112.9708876	94.45366898	101.5084209	74.47404	79.13142	73.9593	87.38798	73.80806	77.88753	38.49055249
-8	-57.58106079	-51.89489004	-52.04639706	-42.9405	-45.1722	-41.9363	-48.5722	-33.9767	-35.7649	-21.61788805
+8	100.1953679	84.52242448	90.03278849	67.54286	71.66707	66.832	78.76762	64.73575	68.28157	34.74094807
-9	-66.90548085	-58.94388901	-60.46319658	-48.4854	-51.1437	-47.5673	-55.3977	-40.466	-42.5958	-24.61757289
+9	89.73517529	76.80142579	81.05389196	61.65136	65.32238	60.93766	71.60417	57.47791	60.59679	31.74126328
-10	-78.84099757	-68.03513666	-71.18816579	-55.4166	-58.608	-54.606	-63.9295	-49.3163	-51.9551	-28.36717591
+10	77.51966666	67.1086089	70.0822567	54.72017	57.85803	53.89892	63.07237	48.40559	50.9908	27.99165686
-11	-88.61341701	-75.85370331	-79.96547518	-60.9615	-64.5795	-60.237	-70.7549	-56.5741	-59.6398	-31.3668609
+11	67.97124083	59.83561009	61.50654735	49.17523	51.88655	48.26794	56.24694	41.52703	43.71267	24.99197484
-12	-101.1089309	-85.50495066	-91.18910052	-68.2393	-72.417	-67.5394	-79.625	-65.6464	-69.2458	-35.11646688
+12	56.31573281	51.02435785	50.68502878	42.24406	44.42221	41.22921	47.71514	33.1624	34.90779	21.24237241
-13	-111.3293427	-93.44994948	-100.3696036	-73.7842	-78.3885	-73.2587	-86.5387	-72.9043	-76.9306	-38.11614883
+13	47.2153069	44.19935901	42.55156575	36.69912	38.45074	35.59822	40.8897	26.98131	28.58498	18.24268456
-14	-124.3848656	-103.6612017	-112.0972389	-80.7154	-85.8529	-80.2974	-95.0705	-81.9766	-86.5366	-41.86575343
+14	36.46308098	35.94811141	33.03502107	29.76794	30.98639	28.55949	32.35791	21.96485	23.24832	14.49308206
-15	-135.3795368	-112.0541955	-121.6809354	-86.2603	-91.8243	-85.9284	-101.896	-89.688	-94.7016	-44.86543893
+15	28.63515861	29.57110742	25.93684063	24.22299	25.01491	22.92852	25.53248	17.95169	18.979	11.49340188
-16	-149.1325724	-122.825449	-133.9125693	-93.1915	-99.2887	-92.9671	-110.428	-98.7604	-104.308	-48.61504188
+16	19.13025022	21.87986509	17.23402226	17.29181	17.55056	16.13512	17.3565	12.93524	13.64235	8.611422723
-17	-160.2489845	-131.6664527	-144.2783969	-98.7364	-105.26	-98.5981	-117.253	-106.018	-111.992	-51.61472381
+17	12.34800045	15.95086092	11.11320038	12.25022	12.25022	11.43241	12.13127	9.320758	9.811324	6.643015174
-18	-174.4245066	-142.9977052	-162.0948004	-105.668	-112.725	-105.637	-125.785	-115.091	-121.598	-55.36433229
+18	7.482637598	8.819608047	6.734220405	6.918547	6.918547	5.673449	5.732424	5.264905	5.542005	4.182505407
-19	-185.9889194	-152.2866996	-177.7412008	-111.213	-118.696	-111.268	-132.61	-122.348	-129.283	-58.36401538
+19	3.848670277	3.33861376	3.453881824	2.653206	2.653206	2.123121	2.123121	2.02022	2.126547	2.214097692
-20	-200.7244426	-164.1779517	-197.5512	-118.144	-126.16	-118.307	-141.142	-131.421	-138.889	-62.11361778
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	88.89099293	114.63	113.3101	99.90500057	71.74020032	96.68213	109.0245	118.4528	127.9238
-1	-1.508515466	-1.50852	-1.343	-1.05318402	-1.876664994	-1.45709	-1.45709	-1.45709	-1.43903
+1	83.91755539	107.4514	105.5148	91.09739027	67.74544998	91.30666	102.8713	111.5746	120.2742
-2	-5.248950281	-5.25409	-4.18123	-3.278791968	-4.222497612	-5.23408	-5.2354	-5.22124	-5.20801
+2	78.58496421	99.63856	96.97325	83.13152014	63.48030285	85.5477	96.25808	104.1603	112.0052
-3	-8.252267412	-8.2597	-6.57286	-5.219795144	-6.099162606	-8.81743	-8.9809	-8.96469	-8.94955
+3	74.31888976	93.38827	90.14001	76.98508443	60.06818379	80.94053	90.96751	98.22882	105.3901
-4	-12.00641198	-12.0167	-9.5624	-7.718548114	-9.954732496	-13.3709	-14.3141	-14.2987	-14.2844
+4	68.98628949	85.57541	81.5519	69.37453714	55.80303515	75.18157	84.35429	90.81449	97.12113
-5	-15.92940921	-15.0223	-12.6137	-10.27746657	-13.36684985	-17.8826	-18.685	-18.685	-18.685
+5	64.72021703	79.32512	74.33814	63.3440921	52.39091617	70.5744	79.06371	84.88302	90.50596
-6	-21.26200599	-19.0679	-17.3116	-14.20408288	-17.63200006	-23.6415	-25.1689	-25.0995	-25.0835
+6	59.3876216	71.12161	65.79657	55.87854405	48.12576806	64.81544	72.45049	77.46868	82.23701
-7	-25.52808044	-23.6379	-21.0699	-17.45007981	-21.04411905	-28.2487	-30.4595	-30.3909	-30.3728
+7	55.12154493	64.87133	58.96332	49.96410868	44.71364883	60.20827	67.15991	71.53722	75.46247
-8	-30.86067621	-30.5969	-25.9929	-21.71212119	-25.30926554	-34.0077	-37.0727	-37.8052	-38.0015
+8	49.55744844	57.05847	50.86954	42.80665883	40.4485036	54.37402	60.21603	63.75218	66.93944
-9	-35.12675284	-36.1641	-30.9979	-25.98587136	-28.72138541	-38.6148	-42.3633	-43.7367	-44.6167
+9	45.2562471	50.80819	44.78996	37.72126854	36.82312687	49.5542	54.92546	57.8207	60.32429
-10	-40.45934681	-43.7796	-38.2582	-32.12678243	-32.98653224	-44.3738	-48.9765	-51.151	-52.8857
+10	39.92365229	42.99532	37.52964	31.50785687	32.55797981	43.79523	48.31224	50.40638	52.05533
-11	-44.72541973	-50.0299	-44.0664	-37.09749406	-36.39865182	-48.981	-54.2671	-57.0825	-59.5008
+11	35.65757554	37.07434	31.72138	26.5951368	29.14586074	39.18806	43.02166	44.47492	45.44016
-12	-50.09314227	-57.8427	-51.5981	-43.44006668	-40.87705475	-54.9528	-60.8803	-64.4968	-67.7698
+12	30.32498186	29.89837	25.39295	21.20413146	24.88071417	33.4291	36.40845	37.06058	37.17121
-13	-54.59071948	-64.093	-58.1121	-49.22983121	-44.28917386	-59.635	-66.5015	-70.766	-74.5114
+13	26.05890528	24.33117	21.53801	17.85283887	21.46859185	28.82193	31.11787	31.12912	31.11122
-14	-59.92331651	-71.9059	-66.6537	-56.6228878	-48.55432123	-65.394	-73.1148	-78.2133	-83.0673
+14	20.72631126	18.53001	16.84016	13.80701686	17.20344548	23.06297	24.50466	24.44058	24.42456
-15	-64.18939389	-78.5468	-73.4869	-62.59533297	-51.96643704	-70.0012	-78.4053	-84.1448	-89.6825
+15	16.46023448	15.39657	13.08188	10.66573271	13.7913293	18.45581	19.21407	19.19188	19.17512
-16	-69.52198844	-86.3597	-82.409	-70.13337033	-56.23159048	-75.7601	-85.0186	-91.5591	-97.9515
+16	11.62928429	11.63957	9.262414	7.464554544	9.526182829	12.92095	13.77844	13.76304	13.74867
-17	-73.788065	-92.61	-89.2888	-76.22181536	-59.64370626	-80.3673	-90.3091	-97.4906	-104.567
+17	8.625966153	8.633965	6.870778	5.465548625	6.364050253	9.263291	9.511844	9.495806	9.480815
-18	-79.12065891	-100.423	-97.8304	-83.90485252	-63.90885294	-86.1262	-96.9223	-104.905	-112.836
+18	4.871819854	4.876964	3.881234	3.039298058	3.986792525	4.784097	4.785409	4.771257	4.758026
-19	-83.38673585	-106.673	-104.664	-90.20762007	-67.32097577	-90.7334	-102.213	-110.836	-119.451
+19	1.868501729	1.871362	1.513243	1.188437743	2.110128698	1.804653	1.805242	1.793341	1.782225
-20	-88.71932983	-114.486	-113.205	-99.56394	-71.58612237	-96.4924	-108.826	-118.251	-127.72
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	202.0368522	213.8626665	135.0541	163.2176	171.7473
-1	-1.531515009	-1.742555875	-1.729	-1.82036	-1.53689
+1	188.046331	198.3341192	126.2757	152.6835	160.3584
-2	-5.566970286	-5.432652263	-6.02268	-6.39004	-5.72602
+2	172.731186	181.2747372	116.7057	141.1995	147.9161
-3	-10.16151476	-9.499242295	-9.46788	-10.3185	-10.3201
+3	160.4790611	167.6272138	109.0497	132.0124	137.9622
-4	-15.90469391	-14.8273018	-14.4126	-16.0605	-16.1373
+4	145.163918	150.5678031	99.47976	120.5284	125.5199
-5	-20.49923802	-20.27316272	-18.6234	-20.6541	-21.2649
+5	132.1460201	136.9202797	91.82378	111.3412	115.2548
-6	-27.74303803	-28.76400011	-23.8869	-26.3961	-27.9646
+6	116.830883	119.8608968	81.7753	99.28303	102.5017
-7	-34.82002483	-36.33839607	-28.0977	-31.3978	-33.3244
+7	104.578758	106.2133745	74.11931	90.09584	92.54781
-8	-44.39199743	-47.05663982	-33.3612	-40.2972	-40.0241
+8	89.26359657	90.54810485	64.54934	78.61187	80.1055
-9	-53.34060763	-56.44170233	-39.5109	-48.5657	-48.0803
+9	78.03921981	79.27373273	56.89336	69.4247	70.15166
-10	-65.9832188	-68.17303823	-48.2839	-59.0934	-59.5655
+10	64.63845173	66.99922734	47.32337	57.94072	58.41285
-11	-76.7038288	-77.86525965	-55.9399	-68.2806	-68.9119
+11	54.48522041	57.6141579	40.36895	49.59541	49.22467
-12	-90.8004849	-91.95823448	-65.5099	-79.7645	-81.3542
+12	43.43145052	45.8828138	32.83285	39.25983	39.35168
-13	-103.0526095	-104.5084349	-73.1659	-88.9517	-91.3081
+13	35.77387222	37.36405607	28.62207	32.19868	33.99192
-14	-118.3677608	-121.5678321	-82.7359	-100.436	-103.75
+14	26.9745946	27.88699965	23.35857	25.81974	27.29222
-15	-130.6198737	-135.2153407	-90.7985	-110.133	-113.766
+15	21.07155168	21.00810536	19.14779	21.22615	21.93246
-16	-146.7007853	-152.2747493	-100.44	-121.681	-126.769
+16	15.32836583	14.29418445	13.88429	15.48416	15.561
-17	-158.9529104	-165.9222476	-108.096	-130.868	-136.722
+17	10.73381872	10.03174179	9.94175	10.89057	10.89229
-18	-174.2680497	-182.9816538	-117.666	-142.352	-149.165
+18	4.990641411	4.993674938	5.590434	5.92898	5.149678
-19	-186.5201757	-196.6291784	-125.322	-151.539	-159.119
+19	1.843637621	1.961308726	2.145236	2.254102	1.907287
-20	-201.8353381	-213.688564	-134.892	-163.023	-171.561
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.49E-13	*-2.40E-13*	*-3.75E-13*	-2.17E-13	-2.33E-13	-2.19E-13	-2.64E-13	-2.55E-13	-2.70E-13	-1.52E-13
End Shear	3.31E-13	*2.38E-13*	*3.04E-13*	2.17E-13	2.33E-13	2.17E-13	2.64E-13	1.86E-13	1.96E-13	1.11E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	852.5820772	*700.1388951*	*817.3115887*	503.5607986	537.4749959	503.8579994	600.568515	554.6346673	586.0804477	264.3228758
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	1607.352451	*1325.504674*	*1493.553575*	950.9790624	1014.488799	950.7022786	1132.029488	1035.783659	1094.352533	498.2739718
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	2264.311145	*1876.097349*	*2043.808184*	1342.254813	1431.041431	1340.532908	1594.568719	1443.446913	1524.81619	701.8532581
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	2823.458173	*2351.916901*	*2556.89284*	1677.387988	1787.132829	1673.349811	1988.938167	1777.624451	1877.497064	875.0607678
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	3284.793394	*2752.963252*	*2958.653239*	1956.378533	2082.762938	1949.905937	2314.199983	2072.192872	2190.048238	1017.896412
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	3648.317189	*3079.236524*	*3283.526165*	2179.226594	2318.457285	2169.482898	2599.14918	2303.902278	2436.537367	1130.360306
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	3926.646519	*3330.736573*	*3534.884375*	2346.273775	2493.821085	2354.36203	2814.99065	2476.136675	2617.366151	1212.452403
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	4131.779122	*3507.463843*	*3719.965245*	2464.570828	2630.317217	2483.667544	2961.725039	2592.896845	2742.162751	1264.172751
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	4240.224703	*3609.417741*	*3817.196214*	2542.919965	2709.950683	2555.914676	3039.307153	2636.066944	2789.041099	1285.521163
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	4252.565535	*3636.062486*	*3826.577627*	2564.387602	2728.38402	2570.396366	3047.029986	2605.230949	2757.563275	1276.870971
-11	-5.33E-13	*-4.17E-13*	*-4.80E-13*	-3.43E-13	-3.43E-13	-2.74E-13	-2.74E-13	-2.60E-13	-2.74E-13	-3.15E-13
+11	4242.660625	*3609.555522*	*3816.993302*	2542.939236	2709.980184	2555.869062	3039.289371	2636.034763	2789.006165	1285.543749
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	4134.737856	*3507.586517*	*3719.666474*	2464.575376	2630.330857	2483.695871	2961.778125	2592.91886	2742.184772	1264.192897
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	3927.967915	*3330.843741*	*3534.489506*	2346.263504	2493.818768	2354.375749	2815.026018	2476.143116	2617.371682	1212.469912
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	3650.216976	*3079.328399*	*3283.248615*	2179.315234	2318.439082	2169.481989	2599.166807	2303.948802	2436.599468	1130.375373
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	3287.353789	*2753.039944*	*2958.653328*	1956.45249	2082.842572	1949.890525	2314.200255	2072.237516	2190.093788	1017.908942
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	2825.506649	*2351.978208*	*2556.893079*	1677.447058	1787.196435	1673.408324	1988.920635	1777.686819	1877.537478	875.0708005
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	2265.847045	*1876.143479*	*2043.80805*	1342.29922	1431.089245	1340.576759	1594.53339	1443.493442	1524.865454	701.8607769
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	1608.376429	*1325.535332*	*1493.553234*	951.008608	1014.520635	950.7313367	1132.064713	1035.814665	1094.385365	498.2789956
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	853.0940851	*700.1540981*	*817.3119075*	503.5755697	537.4909254	503.8725199	600.5861263	554.6501429	586.0968342	264.3253097
-20	-5.80E-13	*-4.58E-13*	*-4.92E-13*	-3.31E-13	-3.31E-13	-3.55E-13	-3.95E-13	-2.61E-13	-2.75E-13	-1.98E-13
+20	6.12E-13	*3.63E-13*	*5.80E-13*	3.09E-13	3.26E-13	2.64E-13	3.77E-13	2.76E-13	2.94E-13	1.96E-13

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.43E-13	-2.21E-13	-1.95E-13	-1.54E-13	-1.50E-13	-1.79E-13	-1.57E-13	-1.53E-13	-1.79E-13
End Shear	1.20E-13	1.55E-13	1.54E-13	1.27E-13	1.37E-13	1.77E-13	1.45E-13	1.69E-13	1.62E-13
-1	0	0	0	0	0	0	0	0	0
+1	377.6289992	483.5313671	474.8166216	412.8646191	304.8545249	410.8799723	462.9208439	502.0857448	541.2338528
-2	0	0	0	0	0	0	0	0	0
+2	712.0639935	903.7786001	880.446669	765.7885825	575.1613562	775.1123549	872.2746081	945.1442354	1016.723916
-3	0	0	0	0	0	0	0	0	0
+3	1003.305012	1260.741647	1216.890129	1062.465389	810.9204811	1092.697204	1228.061319	1345.951737	1451.68164
-4	0	0	0	0	0	0	0	0	0
+4	1251.351967	1554.42052	1499.545117	1312.329116	1012.131938	1363.634464	1530.430336	1694.26415	1822.257225
-5	0	0	0	0	0	0	0	0	0
+5	1456.204883	1790.483871	1727.922705	1515.379683	1178.795614	1588.312182	1779.918063	1982.52047	2150.938695
-6	0	0	0	0	0	0	0	0	0
+6	1617.965921	1985.14222	1886.718101	1661.18784	1310.911709	1766.573247	1987.358529	2210.720695	2416.242639
-7	0	0	0	0	0	0	0	0	0
+7	1736.936372	2116.162708	2027.086194	1787.024923	1408.479938	1911.864183	2152.031615	2379.206173	2614.568008
-8	0	0	0	0	0	0	0	0	0
+8	1829.990573	2189.061251	2119.747436	1871.176476	1471.500743	2016.266784	2263.137963	2508.494882	2745.915116
-9	0	0	0	0	0	0	0	0	0
+9	1880.454672	2220.389326	2193.741901	1935.080694	1499.51895	2073.983848	2320.350544	2582.552702	2824.382618
-10	0	0	0	0	0	0	0	0	0
+10	1887.146377	2188.022452	2198.310488	1941.876782	1492.535022	2084.414364	2323.669732	2595.959294	2850.558605
-11	-2.41E-13	-2.41E-13	-1.92E-13	-1.45E-13	-3.01E-13	-2.33E-13	-2.33E-13	-1.58E-13	-1.58E-13
+11	1880.398951	2220.370677	2193.7153	1935.093416	1499.500524	2073.940892	2320.324382	2582.508508	2824.390004
-12	0	0	0	0	0	0	0	0	0
+12	1830.001079	2189.084278	2119.76076	1871.182852	1471.574173	2016.287147	2263.171387	2508.506463	2745.975173
-13	0	0	0	0	0	0	0	0	0
+13	1736.935906	2116.127753	2027.099383	1787.031214	1408.544229	1911.872606	2152.0517	2379.203353	2614.61231
-14	0	0	0	0	0	0	0	0	0
+14	1617.954531	1985.158122	1886.704836	1661.181512	1310.966652	1766.569689	1987.365339	2210.773588	2416.271558
-15	0	0	0	0	0	0	0	0	0
+15	1456.259646	1790.486371	1727.89615	1515.389257	1178.841446	1588.296758	1779.911717	1982.559024	2150.952129
-16	0	0	0	0	0	0	0	0	0
+16	1251.395857	1554.474224	1499.551872	1312.332366	1012.16875	1363.682336	1530.410766	1694.288558	1822.255327
-17	0	0	0	0	0	0	0	0	0
+17	1003.337977	1260.781731	1216.929929	1062.462155	810.9479752	1092.733066	1228.101123	1345.961781	1451.696124
-18	0	0	0	0	0	0	0	0	0
+18	712.0859399	903.8052982	880.4734124	765.7790568	575.1796123	775.1361277	872.3010099	945.139821	1016.722833
-19	0	0	0	0	0	0	0	0	0
+19	377.6398858	483.544692	474.8298083	412.8497596	304.8636654	410.8918533	462.9340132	502.099992	541.2492624
-20	-2.45E-13	-2.25E-13	-2.84E-13	-2.50E-13	-2.00E-13	-2.75E-13	-2.68E-13	-2.91E-13	-3.09E-13
+20	2.24E-13	2.36E-13	2.58E-13	2.04E-13	2.57E-13	2.18E-13	2.39E-13	2.71E-13	2.68E-13

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.89E-13	-2.75E-13	-1.98E-13	-2.53E-13	-2.32E-13
End Shear	2.97E-13	3.54E-13	2.54E-13	2.49E-13	2.49E-13
-1	0	0	0	0	0
+1	846.2084896	892.5035363	568.2406647	687.0757974	721.6126363
-2	0	0	0	0	0
+2	1568.364212	1647.988546	1058.964487	1281.131383	1342.44257
-3	0	0	0	0	0
+3	2194.780055	2320.731726	1472.1715	1782.554183	1863.238509
-4	0	0	0	0	0
+4	2726.322705	2891.076069	1821.389486	2218.41593	2323.505546
-5	0	0	0	0	0
+5	3133.812527	3411.63304	2125.637419	2574.176796	2694.880486
-6	0	0	0	0	0
+6	3492.781688	3794.008894	2352.368589	2836.917734	3006.269297
-7	0	0	0	0	0
+7	3759.396327	4115.271074	2519.060883	3019.84255	3216.875182
-8	0	0	0	0	0
+8	3956.941622	4304.449261	2624.562104	3136.732752	3340.38779
-9	0	0	0	0	0
+9	4085.175639	4413.319046	2652.077847	3160.602352	3393.505236
-10	0	0	0	0	0
+10	4091.966716	4477.396234	2601.896894	3091.452069	3345.436244
-11	-2.46E-13	-2.27E-13	-2.76E-13	-2.46E-13	-2.46E-13
+11	4085.211935	4413.320676	2652.045818	3160.58308	3393.469501
-12	0	0	0	0	0
+12	3956.953436	4304.446605	2624.586261	3136.694477	3340.394106
-13	0	0	0	0	0
+13	3759.444492	4115.275279	2519.06892	3019.784931	3216.923412
-14	0	0	0	0	0
+14	3492.805611	3794.008768	2352.432658	2836.93685	3006.297222
-15	0	0	0	0	0
+15	3133.812574	3411.628204	2125.685258	2574.208649	2694.888067
-16	0	0	0	0	0
+16	2726.298679	2891.066486	1821.421603	2218.428978	2323.524437
-17	0	0	0	0	0
+17	2194.742082	2320.73569	1472.21941	1782.547793	1863.23697
-18	0	0	0	0	0
+18	1568.412414	1647.988134	1058.996363	1281.169637	1342.482822
-19	0	0	0	0	0
+19	846.232331	892.5081503	568.2565488	687.0948645	721.6327092
-20	-3.79E-13	-5.01E-13	-3.18E-13	-3.47E-13	-3.79E-13
+20	3.95E-13	4.79E-13	2.90E-13	3.02E-13	3.32E-13

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	64.53333	46.09333	59.44	58.75556	54.05	37.2	50.13333	56.53333	61.42222	66.33333
-1	-1.42222	-0.78222	-0.78222	-0.6964	-0.55108	-0.97312	-0.75556	-0.75556	-0.75556	-0.74619
+1	60.83037	43.51442	55.71761	54.71341	49.26458	35.12857	47.34595	53.34265	57.85564	62.3667
-2	-3.2	-2.72178	-2.72445	-2.16812	-1.72375	-2.18952	-2.71407	-2.71475	-2.70741	-2.70055
+2	56.84519	40.74927	51.66635	50.28429	44.90446	32.91693	44.35971	49.91345	54.01104	58.07894
-3	-4.62222	-4.27911	-4.28296	-3.40828	-2.75504	-3.16265	-4.57217	-4.65693	-4.64853	-4.64068
+3	53.65704	38.53715	48.42534	46.741	41.54362	31.14762	41.97072	47.17008	50.93535	54.64873
-4	-7.77481	-6.22578	-6.23111	-4.95847	-4.09416	-5.1619	-6.93333	-7.42242	-7.41443	-7.40698
+4	49.67185	35.77199	44.37408	42.28774	37.39256	28.93598	38.98448	43.74088	47.09074	50.36097
-5	-10.6087	-8.26	-7.78963	-6.54069	-5.46572	-6.93122	-9.27278	-9.68889	-9.68889	-9.68889
+5	46.4837	33.55987	41.13307	38.54713	34.11171	27.16667	36.59549	40.99752	44.01505	46.93076
-6	-14.1511	-11.0252	-9.8874	-8.97671	-7.57005	-9.14286	-12.259	-13.051	-13.015	-13.0067
+6	42.49852	30.79472	36.87924	34.118	30.06066	24.95503	33.60925	37.56831	40.17044	42.64299
-7	-17.2415	-13.2373	-12.2572	-10.9255	-9.31774	-10.9122	-14.648	-15.7944	-15.7588	-15.7494
+7	39.31037	28.5826	33.63823	30.57471	26.85982	23.18571	31.22026	34.82495	37.09475	39.13014
-8	-21.2267	-16.0024	-15.8657	-13.4783	-11.6208	-13.1238	-17.6342	-19.2236	-19.6034	-19.7052
+8	35.32519	25.69741	29.58697	26.37778	22.99333	20.97407	28.19498	31.22429	33.05791	34.71063
-9	-24.4148	-18.2145	-18.7525	-16.0736	-13.9213	-14.8931	-20.0232	-21.967	-22.6791	-23.1354
+9	31.93778	23.46707	26.34596	23.22529	20.24223	19.09418	25.69572	28.48092	29.98222	31.28042
-10	-28.4	-20.9797	-22.7014	-19.8383	-17.2234	-17.1048	-23.0095	-25.3962	-26.5237	-27.4232
+10	27.9526	20.70192	22.2947	19.46053	16.89008	16.88254	22.70948	25.05172	26.13761	26.99265
-11	-31.5881	-23.1918	-25.9424	-22.8501	-19.9051	-18.8741	-25.3985	-28.1395	-29.5994	-30.8534
+11	24.76444	18.4898	19.22444	16.44873	14.24836	15.11323	20.32049	22.30836	23.06192	23.56244
-12	-35.5733	-25.9752	-29.9936	-26.7556	-23.3367	-21.1963	-28.4951	-31.5687	-33.444	-35.1412
+12	20.77926	15.72465	15.50343	13.1672	11.34747	12.90159	17.33425	18.87915	19.21731	19.27467
-13	-38.7615	-28.3073	-33.2346	-30.1333	-26.4629	-22.9656	-30.923	-34.4836	-36.6948	-38.637
+13	17.59111	13.51253	12.61663	11.16827	9.535265	11.13227	14.94526	16.13579	16.14162	16.13234
-14	-42.7467	-31.0725	-37.2859	-34.5625	-30.464	-25.1772	-33.9093	-37.9128	-40.5565	-43.0735
+14	13.75342	10.74737	9.60851	8.732258	7.356715	8.920635	11.95902	12.70659	12.67336	12.66506
-15	-46.075	-33.2846	-40.7295	-38.1057	-33.7048	-26.9466	-36.2982	-40.6561	-43.6322	-46.5038
+15	10.91951	8.535253	7.983704	6.783446	5.673254	7.151324	9.570034	9.963221	9.951713	9.943022
-16	-50.1193	-36.0498	-44.7807	-42.7322	-37.8059	-29.1582	-39.2845	-44.0853	-47.4768	-50.7915
+16	7.377121	6.030223	6.035555	4.802911	3.957495	4.939685	6.7	7.144639	7.136657	7.129202
-17	-53.3074	-38.2619	-48.0218	-46.2996	-41.1267	-30.9275	-41.6735	-46.8287	-50.5525	-54.2217
+17	4.8	4.472889	4.477037	3.562758	2.886198	3.3	4.803366	4.93225	4.923934	4.91616
-18	-57.2926	-41.027	-52.073	-50.7287	-45.3278	-33.1392	-44.6597	-50.2579	-54.3971	-58.5095
+18	3.010371	2.526222	2.52889	2.012566	1.597081	2.067302	2.480735	2.481415	2.474077	2.467216
-19	-60.4807	-43.2392	-55.314	-54.272	-48.7796	-34.9085	-47.0487	-53.0013	-57.4728	-61.9397
+19	1.593414	0.968889	0.970372	0.784673	0.622453	1.094181	0.935781	0.936086	0.929915	0.924151
-20	-64.4659	-46.0043	-59.3653	-58.7012	-53.8731	-37.1201	-50.0349	-56.4305	-61.3174	-66.2275
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	64.53333	61.38889	65.55556	61.46667	73.33333	68.23333	72.11111	32.26065
-1	-1.42222	-1.11111	-1.11111	-0.88889	-0.88889	-0.84444	-0.88889	-1.02069
+1	60.83037	58.02562	61.93357	58.05986	69.20387	63.91089	67.5344	30.45808
-2	-3.2	-3.86531	-3.86531	-3.2419	-3.30581	-2.94116	-3.09596	-2.29656
+2	56.84519	54.43154	58.06302	54.41002	64.77982	59.20655	62.55335	28.51377
-3	-4.62222	-6.07704	-6.07704	-5.63089	-5.96025	-4.62365	-4.867	-3.31726
+3	53.65704	51.55628	54.96659	51.49014	61.24057	55.44309	58.5685	26.95833
-4	-7.77481	-9.32757	-9.48952	-8.66667	-9.33333	-6.96852	-7.35185	-4.59312
+4	49.67185	47.9622	51.09604	47.84029	56.81651	50.73875	53.58744	25.01401
-5	-10.6087	-12.2028	-12.586	-11.526	-12.7992	-9.0495	-9.56566	-5.76562
+5	46.4837	45.08694	47.99961	44.92041	53.27727	46.97528	49.60259	23.45856
-6	-14.1511	-15.7969	-16.4565	-15.1758	-17.2232	-11.6507	-12.3329	-7.70993
+6	42.49852	41.49286	44.12906	41.27056	48.85321	42.03573	44.37247	21.51425
-7	-17.2415	-18.6722	-19.5529	-18.0957	-20.7625	-13.7317	-14.5467	-9.26538
+7	39.31037	38.6176	41.03263	38.35069	45.31396	38.27226	40.38762	19.9588
-8	-21.2267	-22.2662	-23.4235	-21.7456	-25.1865	-17.6182	-18.5455	-11.2097
+8	35.32519	35.02352	37.16208	34.65491	40.84398	33.56793	35.40657	18.01449
-9	-24.4148	-25.1415	-26.5199	-24.6654	-28.7258	-20.9832	-22.0875	-12.7651
+9	31.93778	31.96855	33.87212	31.59847	37.12946	29.80446	31.42172	16.45904
-10	-28.4	-28.7356	-30.3905	-28.3153	-33.1498	-25.5723	-26.9407	-14.7095
+10	27.9526	28.37447	30.00157	27.94862	32.7054	25.10012	26.44066	14.51473
-11	-31.5881	-31.6108	-33.4869	-31.2352	-36.6891	-29.3358	-30.9255	-16.2649
+11	24.76444	25.49921	26.90514	25.02875	29.16616	21.53333	22.66667	12.95928
-12	-35.5733	-35.3846	-37.551	-35.0217	-41.2886	-34.0402	-35.9066	-18.2092
+12	20.77926	21.90514	23.03459	21.3789	24.7421	17.19596	18.10101	11.01497
-13	-38.7615	-38.2599	-40.6474	-37.9874	-44.8736	-37.8036	-39.8914	-19.7647
+13	17.59111	19.02988	19.93816	18.45902	21.20285	13.99083	14.82239	9.45952
-14	-42.7467	-41.854	-44.5179	-41.6372	-49.2977	-42.508	-44.8725	-21.709
+14	13.75342	15.4358	16.06761	14.80917	16.7788	11.3896	12.05513	7.51521
-15	-46.075	-44.7292	-47.6144	-44.5571	-52.8369	-46.5066	-49.1064	-23.2644
+15	10.91951	12.56054	12.97117	11.8893	13.23956	9.308627	9.841329	5.959762
-16	-50.1193	-48.3233	-51.4849	-48.207	-57.261	-51.211	-54.0874	-25.2087
+16	7.377121	8.966456	9.100628	8.366667	9	6.707409	7.074076	4.465348
-17	-53.3074	-51.1986	-54.5814	-51.1268	-60.8002	-54.9744	-58.0723	-26.7642
+17	4.8	6.3522	6.3522	5.928137	6.290522	4.833164	5.087542	3.444654
-18	-57.2926	-54.7926	-58.4519	-54.7767	-65.2243	-59.6788	-63.0533	-28.7085
+18	3.010371	3.587528	3.587528	2.941897	2.972478	2.730052	2.873739	2.168787
-19	-60.4807	-57.6679	-61.5483	-57.6966	-68.7635	-63.4422	-67.0382	-30.2639
+19	1.593414	1.375788	1.375788	1.100918	1.100918	1.04756	1.102695	1.148093
-20	-64.4659	-61.262	-65.4189	-61.3464	-73.1876	-68.1466	-72.0193	-32.2083
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 90' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**64.53333**	***116.8519***	***123.6915***	***78.11111***	***94.4***	***99.33333***
-1	**-1.42222**	***-0.88578***	***-1.00784***	***-1***	***-1.05284***	***-0.88889***
+1	**60.83037**	***108.7602***	***114.7103***	***73.03395***	***88.30741***	***92.74631***
-2	**-3.2**	***-3.21976***	***-3.14208***	***-3.48333***	***-3.6958***	***-3.31175***
+2	**56.84519**	***99.90236***	***104.8437***	***67.49897***	***81.66543***	***85.55006***
-3	**-4.62222**	***-5.87711***	***-5.49407***	***-5.47593***	***-5.9679***	***-5.96883***
+3	**53.65704**	***92.81611***	***96.95038***	***63.07099***	***76.35185***	***79.79307***
-4	**-7.77481**	***-9.19878***	***-8.57565***	***-8.3358***	***-9.28889***	***-9.33333***
+4	**49.67185**	***83.95831***	***87.08375***	***57.53601***	***69.70987***	***72.59683***
-5	**-10.6087**	***-11.8561***	***-11.7254***	***-10.7712***	***-11.9457***	***-12.299***
+5	**46.4837**	***76.42916***	***79.19045***	***53.10803***	***64.3963***	***66.65978***
-6	**-14.1511**	***-16.0457***	***-16.6362***	***-13.8154***	***-15.2667***	***-16.1739***
+6	**42.49852**	***67.57136***	***69.32383***	***47.2963***	***57.42223***	***59.28378***
-7	**-17.2415**	***-20.1388***	***-21.017***	***-16.2508***	***-18.1595***	***-19.2738***
+7	**39.31037**	***60.48511***	***61.43052***	***42.86831***	***52.10864***	***53.52678***
-8	**-21.2267**	***-25.675***	***-27.2161***	***-19.2951***	***-23.3067***	***-23.1487***
+8	**35.32519**	***51.6273***	***52.37022***	***37.33334***	***45.46667***	***46.33054***
-9	**-24.4148**	***-30.8506***	***-32.6441***	***-22.8519***	***-28.0889***	***-27.8082***
+9	**31.93778**	***45.13547***	***45.84947***	***32.90536***	***40.15309***	***40.57354***
-10	**-28.4**	***-38.1626***	***-39.4292***	***-27.9259***	***-34.1778***	***-34.4508***
+10	**27.9526**	***37.38488***	***38.75028***	***27.37037***	***33.51111***	***33.78418***
-11	**-31.5881**	***-44.3631***	***-45.0349***	***-32.3539***	***-39.4914***	***-39.8565***
+11	**24.76444**	***31.51256***	***33.32224***	***23.34815***	***28.68445***	***28.47002***
-12	**-35.5733**	***-52.5162***	***-53.1858***	***-37.8889***	***-46.1333***	***-47.0528***
+12	**20.77926**	***25.1194***	***26.5372***	***18.98951***	***22.70667***	***22.75979***
-13	**-38.7615**	***-59.6024***	***-60.4444***	***-42.3169***	***-51.4469***	***-52.8098***
+13	**17.59111**	***20.6905***	***21.61021***	***16.55412***	***18.62272***	***19.65987***
-14	**-42.7467**	***-68.4602***	***-70.3111***	***-47.8519***	***-58.0889***	***-60.006***
+14	**13.75342**	***15.60127***	***16.12898***	***13.50988***	***14.93333***	***15.78497***
-15	**-46.075**	***-75.5465***	***-78.2044***	***-52.515***	***-63.6976***	***-65.799***
+15	**10.91951**	***12.18713***	***12.15044***	***11.07449***	***12.27655***	***12.68506***
-16	**-50.1193**	***-84.8472***	***-88.071***	***-58.0916***	***-70.3765***	***-73.319***
+16	**7.377121**	***8.865452***	***8.267313***	***8.030246***	***8.955556***	***9***
-17	**-53.3074**	***-91.9334***	***-95.9643***	***-62.5195***	***-75.6901***	***-79.076***
+17	**4.8**	***6.208108***	***5.802048***	***5.75***	***6.298767***	***6.299764***
-18	**-57.2926**	***-100.791***	***-105.831***	***-68.0545***	***-82.3321***	***-86.2723***
+18	**3.010371**	***2.886432***	***2.888187***	***3.233334***	***3.429138***	***2.978414***
-19	**-60.4807**	***-107.877***	***-113.724***	***-72.4825***	***-87.6457***	***-92.0293***
+19	**1.593414**	***1.066303***	***1.13436***	***1.240738***	***1.303703***	***1.103116***
-20	**-64.4659**	***-116.735***	***-123.591***	***-78.0175***	***-94.2877***	***-99.2255***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**			**Moment Z (kips-ft)**						
-0	**-1.77E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**1.28E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**273.7367**	**195.8149**	**250.7293**	**246.2103**	**223.6323**	**158.0786**	**213.0568**	**240.0419**	**260.3504**	**280.6502**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**515.1933**	**369.2320**	**468.6433**	**456.5448**	**415.1782**	**298.2429**	**401.9250**	**452.3073**	**490.0929**	**527.2097**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**724.37**	**520.2515**	**653.7421**	**631.0034**	**576.5530**	**420.4929**	**566.6047**	**636.7961**	**697.9268**	**752.7517**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**901.2667**	**648.8732**	**806.0257**	**777.5707**	**712.6485**	**524.8286**	**707.0959**	**793.5859**	**878.5399**	**944.9091**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**1045.883**	**755.0972**	**928.4334**	**895.9931**	**823.4648**	**611.2500**	**823.5998**	**922.9547**	**1028.0117**	**1115.3429**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**1158.22**	**838.9764**	**1029.3711**	**978.3345**	**903.5938**	**679.7572**	**916.0349**	**1030.5204**	**1146.3421**	**1252.9130**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**1243.698**	**900.6670**	**1097.3102**	**1051.1207**	**972.3622**	**730.3500**	**991.3737**	**1115.9096**	**1233.7082**	**1355.7521**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**1307.471**	**948.9191**	**1135.1108**	**1099.1690**	**1018.5102**	**763.0286**	**1045.5104**	**1173.5224**	**1300.7492**	**1423.8606**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**1339.448**	**975.0867**	**1151.3556**	**1137.5379**	**1053.1543**	**777.5571**	**1075.4389**	**1203.1893**	**1339.1510**	**1464.5489**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**1339.878**	**978.5566**	**1134.5722**	**1139.9069**	**1057.1807**	**773.9357**	**1080.8475**	**1204.9104**	**1346.1028**	**1478.1222**
-11	**-2.27E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**1340.494**	**975.0578**	**1151.3460**	**1137.5241**	**1053.1609**	**777.5476**	**1075.4166**	**1203.1757**	**1339.1281**	**1464.5528**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**1308.742**	**948.9246**	**1135.1228**	**1099.1759**	**1018.5135**	**763.0667**	**1045.5209**	**1173.5397**	**1300.7552**	**1423.8917**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**1244.265**	**900.6668**	**1097.2921**	**1051.1275**	**972.3655**	**730.3833**	**991.3781**	**1115.9200**	**1233.7067**	**1355.7751**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**1159.036**	**838.9705**	**1029.3794**	**978.3276**	**903.5905**	**679.7857**	**916.0330**	**1030.5239**	**1146.3695**	**1252.9280**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**1046.983**	**755.1256**	**928.4347**	**895.9793**	**823.4698**	**611.2738**	**823.5918**	**922.9514**	**1028.0316**	**1115.3498**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**902.1468**	**648.8960**	**806.0535**	**777.5742**	**712.6502**	**524.8477**	**707.1207**	**793.5757**	**878.5525**	**944.9081**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**725.0299**	**520.2686**	**653.7629**	**631.0241**	**576.5513**	**420.5071**	**566.6233**	**636.8168**	**697.9320**	**752.7592**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**515.6333**	**369.2434**	**468.6571**	**456.5587**	**415.1733**	**298.2523**	**401.9373**	**452.3210**	**490.0907**	**527.2091**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**273.9566**	**195.8205**	**250.7362**	**246.2172**	**223.6246**	**158.0833**	**213.0629**	**240.0487**	**260.3578**	**280.6582**
-20	**-2.28E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**2.40E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.77E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	273.7367	261.1153	278.7011	261.2694	311.4174	287.5990	303.9048	137.0614
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	515.1933	493.1185	526.0507	492.9750	587.0000	537.0929	567.4631	258.3739
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	724.37	696.0098	742.0490	695.1169	826.8440	748.4817	790.6747	363.9374
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	901.2667	869.7889	926.6958	867.6950	1031.3395	921.7653	973.5531	453.7520
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1045.883	1014.4561	1079.9912	1011.0998	1200.0000	1074.5102	1135.6226	527.8177
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1158.22	1130.0112	1202.2076	1124.9587	1347.7569	1194.6602	1263.4365	586.1345
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1243.698	1216.6315	1293.1403	1220.8255	1459.6788	1283.9703	1357.2031	628.7023
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1307.471	1277.9729	1363.9187	1287.8753	1535.7662	1344.5148	1421.9148	655.5213
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1339.448	1318.5999	1405.2117	1325.3382	1575.9954	1366.9002	1446.2230	666.5912
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1339.878	1329.7317	1414.7700	1332.8475	1580.0000	1350.9105	1429.9006	662.1058
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1340.494	1318.6099	1405.2270	1325.3145	1575.9862	1366.8835	1446.2049	666.6029
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1308.742	1277.9753	1363.9258	1287.8900	1535.7937	1344.5262	1421.9262	655.5317
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1244.265	1216.6261	1293.1391	1220.8326	1459.6972	1283.9736	1357.2060	628.7114
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1159.036	1130.0572	1202.1981	1124.9583	1347.7660	1194.6844	1263.4687	586.1423
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1046.983	1014.4944	1080.0324	1011.0918	1200.0001	1074.5333	1135.6462	527.8242
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	902.1468	869.8196	926.7288	867.7253	1031.3304	921.7977	973.5740	453.7572
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	725.0299	696.0328	742.0738	695.1396	826.8257	748.5058	790.7003	363.9413
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	515.6333	493.1338	526.0672	492.9901	587.0183	537.1090	567.4801	258.3765
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	273.9566	261.1229	278.7093	261.2769	311.4266	287.6070	303.9133	137.0626
-20	-2.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 90' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.77E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	1.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	273.7367	489.4208	516.1964	328.6528	397.3833	417.3584
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	515.1933	907.0932	953.1455	612.4722	740.9667	776.4272
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	724.37	1269.3927	1342.2393	851.4584	1030.9741	1077.6394
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	901.2667	1576.8205	1672.1088	1053.4352	1283.0630	1343.8436
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1045.883	1812.5000	1973.1828	1229.4028	1488.8241	1558.6353
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1158.22	2020.1167	2194.3371	1360.5371	1640.7853	1738.7330
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1243.698	2174.3183	2380.1452	1456.9467	1746.5833	1860.5409
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1307.471	2288.5724	2489.5600	1517.9654	1814.1890	1931.9767
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1339.448	2362.7389	2552.5269	1533.8796	1827.9944	1962.6982
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1339.878	2366.6667	2589.5872	1504.8565	1788.0000	1934.8966
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1340.494	2362.7599	2552.5279	1533.8611	1827.9833	1962.6776
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1308.742	2288.5792	2489.5585	1517.9793	1814.1668	1931.9804
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1244.265	2174.3461	2380.1476	1456.9514	1746.5500	1860.5688
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1159.036	2020.1305	2194.3371	1360.5741	1640.7963	1738.7491
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1046.983	1812.5000	1973.1800	1229.4305	1488.8425	1558.6397
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	902.1468	1576.8066	1672.1032	1053.4538	1283.0705	1343.8545
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	725.0299	1269.3708	1342.2416	851.4861	1030.9704	1077.6385
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	515.6333	907.1211	953.1452	612.4907	740.9888	776.4504
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	273.9566	489.4345	516.1990	328.6620	397.3944	417.3700
-20	-2.28E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.40E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 100' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**208.2192003**	***170.3274975***	***215.5507196***	**119.0849**	**127.281**	**119.4127**	**142.709**	**134.8214**	**142.5161**	**62.75258722**
-1	**-3.47760122**	***-3.010438179***	***-3.129841096***	**-2.39192**	**-2.39192**	**-1.91392**	**-1.91392**	**-1.82046**	**-1.91628**	**-1.993260541**
+1	**194.1393867**	***158.7950722***	***196.3798176***	**112.6133**	**120.3116**	**112.8548**	**134.76**	**126.4825**	**133.6866**	**59.28434227**
-2	**-8.036001736**	***-9.842585084***	***-7.232401551***	**-7.67244**	**-7.67244**	**-6.66742**	**-6.89398**	**-5.83684**	**-6.14404**	**-4.429466953**
+2	**179.25627**	***146.7269263***	***176.0018364***	**105.7486**	**112.9189**	**105.8838**	**126.3103**	**117.4985**	**124.1742**	**55.5717749**
-3	**-12.31551938**	***-15.6845205***	***-11.15099833***	**-11.9929**	**-11.9929**	**-11.334**	**-12.0791**	**-9.12296**	**-9.60311**	**-6.422724428**
+3	**167.3311707**	***137.1049909***	***159.9670781***	**100.1321**	**106.8703**	**100.1802**	**119.3968**	**110.1479**	**116.3913**	**52.5342231**
-4	**-21.55806769**	***-23.1326673***	***-19.49471925***	**-18.6948**	**-19.1686**	**-17.481**	**-19.1554**	**-13.912**	**-14.6933**	**-8.858930417**
+4	**153.1250513**	***125.6528436***	***140.6462379***	**93.26739**	**99.47756**	**93.20915**	**110.9471**	**101.1639**	**106.8788**	**48.82165659**
-5	**-29.37215714**	***-29.47860338***	***-26.54820147***	**-24.3114**	**-25.2172**	**-23.1845**	**-26.0688**	**-17.9764**	**-19.0171**	**-11.69645628**
+5	**141.692401**	***116.5349048***	***127.2281447***	**87.65085**	**93.42897**	**87.50557**	**104.0337**	**93.8134**	**99.09587**	**45.78410224**
-6	**-39.58384519**	***-37.54274858***	***-35.78148203***	**-31.176**	**-32.6099**	**-30.1556**	**-34.5185**	**-22.944**	**-24.3018**	**-15.40902132**
+6	**127.9918384**	***105.6987596***	***114.9663672***	**80.78618**	**86.03625**	**80.53453**	**95.58392**	**84.63595**	**89.37977**	**42.07153615**
-7	**-48.73693799**	***-44.39268628***	***-44.04267046***	**-36.7926**	**-38.6585**	**-35.8592**	**-41.432**	**-28.4023**	**-29.8972**	**-18.44657518**
+7	**117.0747416**	***97.08482203***	***105.1608063***	**75.16963**	**79.98765**	**74.83094**	**88.67048**	**77.07051**	**81.36811**	**39.03398042**
-8	**-60.23205143**	***-53.07283359***	***-54.41687745***	**-43.6572**	**-46.0512**	**-42.8302**	**-49.8817**	**-36.4351**	**-38.3527**	**-22.15914144**
+8	**104.0396313**	***86.86468007***	***93.45343322***	**68.30496**	**72.59494**	**67.85991**	**80.22074**	**68.08651**	**71.85564**	**35.32141654**
-9	**-69.88915524**	***-60.42676678***	***-63.13166991***	**-49.2738**	**-52.0998**	**-48.5338**	**-56.7951**	**-43.5876**	**-45.9156**	**-25.1966946**
+9	**93.24126976**	***78.7547393***	***84.10147387***	**62.37638**	**66.21031**	**61.83946**	**72.92323**	**60.73597**	**64.07272**	**32.28386193**
-10	**-82.00027168**	***-69.72291198***	***-74.06028089***	**-56.1385**	**-59.4926**	**-55.5048**	**-65.2449**	**-52.5716**	**-55.4281**	**-28.90926326**
+10	**80.78991288**	***68.86104289***	***72.94850219***	**55.51171**	**58.81759**	**54.86842**	**64.47348**	**51.75198**	**54.56025**	**28.57129585**
-11	**-92.16136166**	***-77.87040343***	***-83.19023936***	**-61.755**	**-65.5411**	**-61.2084**	**-72.1583**	**-59.9221**	**-63.211**	**-31.94681372**
+11	**70.88080531**	***61.25510708***	***64.05013155***	**49.89516**	**52.769**	**49.16484**	**57.56005**	**44.40144**	**46.77733**	**25.53374053**
-12	**-104.8884849**	***-87.78254862***	***-94.62041686***	**-68.9317**	**-73.2699**	**-68.4963**	**-80.9921**	**-68.9061**	**-72.7235**	**-35.6593798**
+12	**59.07768995**	***52.26695852***	***53.45156188***	**43.03049**	**45.37628**	**42.1938**	**49.1103**	**35.70224**	**37.5813**	**21.8211759**
-13	**-115.5535812**	***-96.14448773***	***-104.1991779***	**-74.5483**	**-79.3185**	**-74.1999**	**-87.9056**	**-76.2567**	**-80.5064**	**-38.69693788**
+13	**49.6725948**	***45.16502428***	***44.82162287***	**37.41394**	**39.32769**	**36.49022**	**42.19688**	**29.12999**	**30.66315**	**18.78362234**
-14	**-128.8966968**	***-106.6726313***	***-116.1837479***	**-81.4129**	**-86.7112**	**-81.1709**	**-96.3553**	**-85.4556**	**-90.2476**	**-42.40950288**
+14	**38.48547921**	***36.79287906***	***34.8059315***	**30.54927**	**31.93496**	**29.51918**	**33.74714**	**22.49079**	**23.81969**	**15.07105647**
-15	**-140.4832957**	***-115.5385676***	***-126.2161178***	**-87.0295**	**-92.7598**	**-86.8745**	**-103.269**	**-92.9995**	**-98.2342**	**-45.44705792**
+15	**30.16963138**	***30.19493616***	***27.34123655***	**24.93273**	**25.88638**	**23.8156**	**26.8337**	**18.42638**	**19.49585**	**12.03350241**
-16	**-154.4424247**	***-126.6827112***	***-142.3900786***	**-93.8942**	**-100.153**	**-93.8455**	**-111.718**	**-101.984**	**-107.747**	**-49.15962335**
+16	**20.61908372**	***22.4387918***	***18.6085928***	**18.06805**	**18.49365**	**16.84456**	**18.38396**	**13.45876**	**14.21114**	**8.637156513**
-17	**-166.1155202**	***-136.0526548***	***-158.198038***	**-99.5107**	**-106.201**	**-99.5491**	**-118.632**	**-109.334**	**-115.53**	**-52.19717773**
+17	**13.05698898**	***16.34485755***	***11.84106369***	**12.47083**	**12.47083**	**11.85031**	**12.65274**	**9.486797**	**9.986102**	**6.643897265**
-18	**-180.6906353**	***-147.8127989***	***-177.7960782***	**-106.375**	**-113.594**	**-106.52**	**-127.082**	**-118.318**	**-125.042**	**-55.90974437**
+18	**7.581915598**	***9.204712918***	***6.804142021***	**7.190317**	**7.190317**	**6.146731**	**6.315434**	**5.470428**	**5.758345**	**4.207691304**
-19	**-192.8677298**	***-157.6867335***	***-194.4765901***	**-111.992**	**-119.642**	**-112.224**	**-133.995**	**-125.669**	**-132.825**	**-58.94729425**
+19	**3.863873676**	***3.614778305***	***3.466715938***	**2.869893**	**2.869893**	**2.296373**	**2.296373**	**2.1843**	**2.299263**	**2.214431586**
-20	**-208.0588466**	***-170.0628767***	***-215.5507196***	**-118.857**	**-127.035**	**-119.195**	**-142.445**	**-134.653**	**-142.337**	**-62.6598652**
+20	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 100' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	89.64439334	117.2837	117.4071	108.2975999	72.2801805	97.42782	110.0788	120.0106	130.0773
-1	-1.684352187	-1.68632	-1.36413	-1.072442238	-1.900914829	-1.62683	-1.62723	-1.61728	-1.60794
+1	84.6795108	110.1023	109.6023	98.75772203	68.2948916	92.06226	103.934	113.1388	122.4318
-2	-5.402372035	-5.40675	-4.30242	-3.383657943	-4.224254613	-5.52005	-5.52116	-5.50944	-5.49843
+2	79.39823321	102.3655	101.1442	88.70885118	64.07063855	86.35868	97.38451	105.7962	114.243
-3	-8.444387575	-8.45074	-6.72449	-5.365402503	-6.276847243	-9.1496	-9.52781	-9.51441	-9.50184
+3	75.07718889	96.03541	94.22402	81.1959965	60.6144312	81.69211	92.02587	99.78854	107.543
-4	-12.42403917	-12.1712	-9.6848	-7.867285026	-10.50110176	-14.0291	-14.8096	-14.7969	-14.785
+4	69.7959129	88.29861	85.76599	73.44843264	56.39017668	75.98853	85.47641	92.44586	99.35414
-5	-16.74508516	-15.2152	-13.471	-11.009058	-13.95731018	-18.6957	-19.6866	-19.6485	-19.6345
+5	65.47486523	81.9685	78.54093	67.24100088	52.93397034	71.32197	80.11777	86.43823	92.65416
-6	-22.02636335	-20.0621	-18.1229	-14.94058905	-18.18156416	-24.3993	-26.2361	-26.146	-26.1327
+6	60.1935852	74.05249	70.0033	59.73388794	48.70971729	65.61839	73.56832	79.09556	84.46531
-7	-26.34740875	-25.6699	-21.929	-18.2225433	-21.63777175	-29.0658	-31.5947	-32.0384	-32.0235
+7	55.8725404	67.54992	63.0831	53.6569566	45.25350888	60.95182	68.20967	73.08792	77.76534
-8	-31.62868366	-32.5611	-27.9097	-23.39844219	-25.86202303	-34.7694	-38.1442	-39.381	-40.1739
+8	50.59126606	59.81311	54.62507	46.30934546	41.02925636	55.24824	61.36252	65.41149	69.20425
-9	-35.94972931	-38.7152	-33.7919	-28.36972295	-29.31823144	-39.436	-43.5028	-45.3887	-46.8739
+9	46.03016444	53.483	47.70487	40.36291325	37.38103688	50.32243	56.00388	59.40385	62.50429
-10	-41.23100934	-46.452	-40.9812	-34.52547449	-33.54248449	-45.1395	-50.0523	-52.7313	-55.0627
+10	40.74888171	45.74619	40.32555	33.9612072	33.15678383	44.61885	49.45442	52.06118	54.31543
-11	-45.552056	-52.7821	-46.9384	-39.70704055	-36.99869251	-49.8061	-55.4109	-58.739	-61.7627
+11	36.42783814	39.41608	34.44338	28.92468413	29.70057351	39.95228	44.09578	46.05355	47.61545
-12	-51.07339044	-60.5189	-55.3965	-46.97490256	-41.41495672	-55.7689	-61.9604	-66.0816	-69.9516
+12	31.14656288	31.93243	27.25405	22.84868247	25.47632422	34.2487	37.54632	38.71088	39.4266
-13	-55.39443537	-66.849	-62.3167	-52.98658512	-44.871168	-60.4355	-67.6167	-72.423	-76.9355
+13	26.8255133	26.29413	22.35057	18.63709992	22.02011383	29.58214	32.18768	32.70324	32.72662
-14	-60.67571075	-74.7583	-70.7747	-60.41393005	-49.09541692	-66.1391	-74.1662	-79.7657	-85.2126
+14	21.54423716	19.57808	17.69866	14.57888677	17.79585835	23.87856	25.63823	25.55297	25.5397
-15	-64.99676198	-81.2676	-77.6949	-66.55612824	-52.55162724	-70.8056	-79.5248	-85.7734	-91.9126
+15	17.22319519	15.55218	13.89254	11.36218107	14.33965461	19.212	20.27959	20.23685	20.22296
-16	-70.27803722	-89.0044	-86.5374	-74.14297311	-56.7758826	-76.5092	-86.0742	-93.116	-100.101
+16	11.94191223	11.83176	9.414814	7.635792994	10.11539891	13.50842	14.3275	14.31478	14.30284
-17	-74.59907947	-95.3345	-93.4576	-80.41565476	-60.23208719	-81.1758	-91.4329	-99.1237	-106.801
+17	8.780975238	8.78777	6.992739	5.588798488	6.659195201	9.551181	10.00601	9.99274	9.980278
-18	-79.88036253	-103.071	-101.916	-89.62038143	-64.45634245	-86.8794	-97.9823	-106.466	-114.99
+18	5.062957026	5.067344	4.032432	3.166665272	4.012117742	5.115064	5.11617	5.104454	5.093448
-19	-84.20140455	-109.401	-108.836	-97.842183	-67.9125467	-91.5459	-103.341	-112.474	-121.69
+19	2.020938072	2.023352	1.610358	1.250170608	2.111202279	1.951917	1.952408	1.942548	1.933283
-20	-89.48267975	-117.138	-117.294	-107.9708032	-72.13680259	-97.2495	-109.89	-119.817	-129.879
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 100' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	209.4971639	223.2007245	138.8387	167.6438	177.0496
-1	-1.667976223	-1.765846179	-1.93305	-2.03331	-1.71856
+1	195.4911377	207.6828788	130.0551	157.1035	165.6508
-2	-6.046414211	-5.680448752	-6.19757	-6.58212	-6.18959
+2	180.3256632	190.7934636	120.5784	145.7314	153.33
-3	-10.69945825	-9.988394848	-9.68672	-10.8408	-10.8422
+3	167.917546	176.9748495	112.8247	136.427	143.2492
-4	-16.38651094	-15.60126024	-14.8783	-16.5269	-16.7411
+4	152.7520697	160.0854455	103.348	125.055	130.9284
-5	-21.53056807	-21.94554272	-19.1429	-21.1791	-22.1692
+5	140.1740577	146.2668324	95.59432	115.7506	120.8477
-6	-29.62692144	-30.86076656	-24.3551	-26.8651	-28.8035
+6	124.4891448	129.3774297	85.68685	103.8616	107.9668
-7	-37.38199387	-39.18782074	-28.6196	-33.4934	-34.2316
+7	112.0810159	115.5588206	77.93319	94.55722	97.88605
-8	-48.02551175	-50.80225583	-35.5757	-43.7282	-43.2923
+8	96.91554389	98.66939544	68.45647	83.18516	85.56518
-9	-58.20344175	-60.30498955	-42.6139	-52.1741	-52.5976
+9	84.5074351	85.30471973	60.7028	73.88076	75.48449
-10	-71.47324069	-72.62125413	-52.0906	-63.5461	-64.2875
+10	70.26294253	71.35216998	51.22609	62.50871	63.16362
-11	-83.13325589	-84.03697367	-59.8443	-72.8505	-74.3682
+11	59.40584906	61.36028582	43.47242	53.20431	53.628
-12	-98.29873273	-100.2056232	-69.321	-84.2226	-86.689
+12	46.98812883	49.74583717	34.79761	42.79454	42.2549
-13	-110.706852	-114.024232	-77.0746	-93.527	-96.7698
+13	38.24084896	40.24311066	29.09177	34.42057	34.83267
-14	-125.8723261	-130.9136373	-86.5514	-104.899	-109.091
+14	28.76242717	29.93661749	23.87957	26.34638	28.19836
-15	-138.5745659	-144.7322522	-94.7358	-114.72	-119.731
+15	22.21765795	22.73399871	19.61505	21.69417	22.77029
-16	-154.1352485	-161.6216537	-104.213	-126.092	-132.052
+16	15.86781984	14.9390541	14.40287	16.00815	16.13598
-17	-166.5433803	-175.4402659	-111.966	-135.397	-142.133
+17	11.21477961	10.46768182	10.13835	11.35595	11.35744
-18	-181.7088536	-192.3296947	-121.443	-146.769	-154.454
+18	5.52772662	5.285370566	5.808544	6.167161	5.670891
-19	-194.1169634	-206.1482988	-129.197	-156.073	-164.535
+19	2.011516446	1.962741013	2.319393	2.4454	2.062031
-20	-209.2824552	-223.0377094	-138.673	-167.445	-176.855
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 100' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.93E-13	-4.40E-13	-4.79E-13	-3.38E-13	-3.71E-13	-2.67E-13	-2.74E-13	-3.33E-13	-3.53E-13	-2.37E-13
End Shear	5.96E-13	4.61E-13	5.38E-13	3.89E-13	4.06E-13	4.08E-13	4.69E-13	2.75E-13	2.91E-13	2.33E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	982.6669335	805.9453608	992.6720878	563.0664092	601.5579604	564.2740439	673.8000828	632.4122827	668.4332171	296.4217114
-2	0	0	0	0	0	0	0	0	0	0
+2	1853.832805	1525.98031	1821.05276	1063.72674	1135.909374	1065.17498	1270.784279	1183.151909	1250.389503	559.0928186
-3	0	0	0	0	0	0	0	0	0	0
+3	2613.497558	2160.104862	2506.92747	1501.980971	1603.054216	1502.702809	1791.365812	1652.218858	1745.868838	788.0133465
-4	0	0	0	0	0	0	0	0	0	0
+4	3262.906998	2708.318967	3085.488028	1877.829074	2002.99246	1877.036611	2235.828373	2039.910259	2155.234559	983.1832487
-5	0	0	0	0	0	0	0	0	0	0
+5	3799.56002	3170.622614	3546.679475	2191.27114	2335.812458	2188.592249	2603.475027	2379.423088	2515.3556	1144.602556
-6	0	0	0	0	0	0	0	0	0	0
+6	4223.485515	3547.016052	3900.556792	2442.316437	2601.978785	2436.774818	2923.111747	2648.161883	2800.888217	1272.271282
-7	0	0	0	0	0	0	0	0	0	0
+7	4549.960925	3837.498762	4120.306973	2631.467309	2800.938408	2643.908877	3165.932588	2849.050024	3012.217674	1366.189315
-8	0	0	0	0	0	0	0	0	0	0
+8	4790.549258	4042.071405	4312.658642	2765.413016	2954.293802	2789.110271	3331.937676	2986.281677	3158.689581	1426.356913
-9	0	0	0	0	0	0	0	0	0	0
+9	4918.412081	4160.733254	4428.044379	2853.153886	3044.042661	2870.938272	3421.126569	3041.808099	3218.650268	1452.773787
-10	0	0	0	0	0	0	0	0	0	0
+10	4937.535164	4193.00008	4443.299512	2877.813456	3065.909752	2888.623672	3432.73011	3015.049356	3191.489281	1445.869351
-11	-5.33E-13	-4.17E-13	-4.80E-13	-3.43E-13	-3.43E-13	-2.74E-13	-2.74E-13	-2.60E-13	-2.74E-13	-3.15E-13
+11	4920.808536	4160.857845	4426.827284	2853.171529	3044.069639	2870.937026	3421.150789	3041.778493	3218.618125	1452.794431
-12	0	0	0	0	0	0	0	0	0	0
+12	4792.13216	4042.182104	4310.86564	2765.417232	2954.306331	2789.136255	3331.986345	2986.302091	3158.710001	1426.375336
-13	0	0	0	0	0	0	0	0	0	0
+13	4551.119041	3837.595738	4120.307033	2631.457991	2800.936363	2643.921412	3165.964914	2849.055961	3012.222763	1366.20547
-14	0	0	0	0	0	0	0	0	0	0
+14	4225.768087	3547.099046	3900.556709	2442.388162	2601.962241	2436.774027	2923.127982	2648.153546	2800.927317	1272.285086
-15	0	0	0	0	0	0	0	0	0	0
+15	3800.707662	3170.691627	3546.679406	2191.33852	2335.796803	2188.578039	2603.475103	2379.464635	2515.397991	1144.614147
-16	0	0	0	0	0	0	0	0	0	0
+16	3263.568744	2708.374241	3085.488188	1877.882943	2003.050455	1877.009088	2235.812228	2039.903571	2155.227876	983.1924795
-17	0	0	0	0	0	0	0	0	0	0
+17	2614.927783	2160.146462	2506.927432	1502.021424	1603.097778	1502.742989	1791.333452	1652.262029	1745.914549	788.0202755
-18	0	0	0	0	0	0	0	0	0	0
+18	1854.786084	1526.007941	1821.052476	1063.75372	1135.938432	1065.201684	1270.816669	1183.180867	1250.420165	559.0973446
-19	0	0	0	0	0	0	0	0	0	0
+19	983.1437495	805.9592063	992.6720448	563.0800009	601.5726049	564.2873896	673.8162387	632.4267095	668.4484953	296.4240087
-20	-8.10E-13	-5.00E-13	-8.18E-13	-4.32E-13	-4.65E-13	-3.46E-13	-4.10E-13	-4.09E-13	-4.33E-13	-2.58E-13
+20	6.22E-13	3.25E-13	4.72E-13	3.05E-13	3.22E-13	2.47E-13	3.10E-13	2.56E-13	2.71E-13	1.85E-13

1-Span: Moment (Max and Min) Raw Data Results - 100' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.82E-13	-2.99E-13	-3.10E-13	-2.33E-13	-2.12E-13	-2.27E-13	-2.31E-13	-2.31E-13	-2.30E-13
End Shear	2.85E-13	2.27E-13	2.89E-13	2.16E-13	2.74E-13	3.08E-13	3.27E-13	3.34E-13	3.40E-13
-1	0	0	0	0	0	0	0	0	0
+1	423.397554	550.5116203	548.0112637	497.8303862	341.474458	460.3112808	519.6698045	565.6942067	612.1591142
-2	0	0	0	0	0	0	0	0	0
+2	798.7834976	1030.688669	1019.131411	911.2641026	644.5466132	868.771839	979.7990973	1065.787799	1151.24089
-3	0	0	0	0	0	0	0	0	0
+3	1126.157833	1440.531133	1413.360365	1251.414684	909.216468	1225.381675	1380.388005	1516.81228	1642.193887
-4	0	0	0	0	0	0	0	0	0
+4	1405.520516	1780.039136	1746.359395	1541.539142	1135.484023	1530.140851	1721.793031	1908.648804	2061.397218
-5	0	0	0	0	0	0	0	0	0
+5	1636.871631	2055.160845	2017.127025	1783.979855	1323.349258	1783.607247	2004.123059	2233.73374	2431.144035
-6	0	0	0	0	0	0	0	0	0
+6	1820.483116	2281.535875	2210.763965	1975.174745	1472.812233	1985.272446	2238.436598	2492.067201	2730.048935
-7	0	0	0	0	0	0	0	0	0
+7	1956.304137	2437.42693	2378.045785	2113.145016	1583.872811	2148.769734	2424.013371	2684.131647	2954.509582
-8	0	0	0	0	0	0	0	0	0
+8	2061.397828	2527.829608	2489.998357	2215.011737	1656.531175	2266.177621	2550.049743	2830.155046	3104.526181
-9	0	0	0	0	0	0	0	0	0
+9	2119.164548	2569.794742	2575.617479	2289.679095	1690.46444	2331.734538	2616.312223	2914.289046	3194.288138
-10	0	0	0	0	0	0	0	0	0
+10	2128.24809	2540.941711	2584.022083	2300.052474	1685.395836	2344.786656	2622.601325	2931.058567	3224.224253
-11	-2.41E-13	-2.41E-13	-1.92E-13	-1.45E-13	-3.01E-13	-2.33E-13	-2.33E-13	-1.58E-13	-1.58E-13
+11	2119.113587	2569.777623	2575.5927	2289.691238	1690.447531	2331.72965	2616.288283	2914.280579	3194.29501
-12	0	0	0	0	0	0	0	0	0
+12	2061.40751	2527.850956	2490.010772	2215.017748	1656.598499	2266.196315	2550.080299	2830.165649	3104.58134
-13	0	0	0	0	0	0	0	0	0
+13	1956.303815	2437.394416	2378.058285	2113.139363	1583.931632	2148.777419	2424.031773	2684.129105	2954.550552
-14	0	0	0	0	0	0	0	0	0
+14	1820.472712	2281.550626	2210.751557	1975.161988	1472.862508	1985.269218	2238.442831	2492.116021	2730.075615
-15	0	0	0	0	0	0	0	0	0
+15	1636.921856	2055.163136	2017.145625	1783.98897	1323.391277	1783.593034	2004.117103	2233.769301	2431.15636
-16	0	0	0	0	0	0	0	0	0
+16	1405.560767	1780.088849	1746.365642	1541.542187	1135.517778	1530.184493	1721.774922	1908.671144	2061.395466
-17	0	0	0	0	0	0	0	0	0
+17	1126.188023	1440.568318	1413.397606	1251.418025	909.2415926	1225.414569	1380.42451	1516.821529	1642.207201
-18	0	0	0	0	0	0	0	0	0
+18	798.8035149	1030.713599	1019.156225	911.2593102	644.5632926	868.7936927	979.8233865	1065.783788	1151.239969
-19	0	0	0	0	0	0	0	0	0
+19	423.4076122	550.5240575	548.023786	497.8174314	341.4828384	460.3221924	519.6820596	565.7074602	612.1733473
-20	-3.28E-13	-3.60E-13	-4.15E-13	-3.29E-13	-3.33E-13	-3.07E-13	-2.94E-13	-3.02E-13	-3.52E-13
+20	2.02E-13	2.27E-13	1.98E-13	1.56E-13	1.95E-13	2.04E-13	2.09E-13	2.25E-13	2.45E-13

1-Span: Moment (Max and Min) Raw Data Results - 100’ Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.75E-13	-4.38E-13	-3.08E-13	-3.83E-13	-3.35E-13
End Shear	4.57E-13	3.93E-13	3.01E-13	3.93E-13	4.24E-13
-1	0	0	0	0	0
+1	977.4556887	1038.414394	650.2753991	785.5174797	828.2541031
-2	0	0	0	0	0
+2	1817.043477	1924.509814	1214.398936	1467.652719	1544.500305
-3	0	0	0	0	0
+3	2547.749299	2712.444554	1692.370483	2047.124078	2149.828732
-4	0	0	0	0	0
+4	3169.064941	3382.701032	2097.917936	2550.328646	2683.051134
-5	0	0	0	0	0
+5	3652.512551	3987.730791	2449.672452	2963.073698	3116.301271
-6	0	0	0	0	0
+6	4073.65974	4439.220334	2715.305113	3272.436596	3478.212712
-7	0	0	0	0	0
+7	4388.637117	4814.24003	2912.39238	3491.873514	3728.116368
-8	0	0	0	0	0
+8	4620.86561	5041.838268	3039.481491	3634.78135	3879.826725
-9	0	0	0	0	0
+9	4769.836428	5173.745557	3080.049483	3674.157836	3949.850455
-10	0	0	0	0	0
+10	4783.566647	5245.503899	3034.164103	3610.152059	3907.373182
-11	-2.46E-13	-2.27E-13	-2.76E-13	-2.46E-13	-2.46E-13
+11	4769.870165	5173.747172	3080.019612	3674.139872	3949.817063
-12	0	0	0	0	0
+12	4620.876952	5041.83556	3039.503966	3634.745667	3879.832678
-13	0	0	0	0	0
+13	4388.682026	4814.243773	2912.399761	3491.879415	3728.161289
-14	0	0	0	0	0
+14	4073.682176	4439.219942	2715.335275	3272.484411	3478.239056
-15	0	0	0	0	0
+15	3652.512478	3987.726605	2449.717197	2963.103373	3116.308396
-16	0	0	0	0	0
+16	3169.042142	3382.692403	2097.94791	2550.340786	2683.068801
-17	0	0	0	0	0
+17	2547.704117	2712.44843	1692.415386	2047.117974	2149.827127
-18	0	0	0	0	0
+18	1817.088619	1924.50937	1214.428934	1467.688712	1544.538053
-19	0	0	0	0	0
+19	977.4782883	1038.418614	650.2903208	785.5353823	828.2729678
-20	-5.50E-13	-5.54E-13	-4.12E-13	-5.34E-13	-5.69E-13
+20	2.65E-13	3.08E-13	2.76E-13	3.42E-13	4.00E-13

1-Span: Shear (Max and Min) Raw Data Results - 100’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	65.28	46.484	60.816	60.88	58.65	37.48	50.52	57.08	62.23	67.45
-1	-1.44	-0.8734	-0.87442	-0.70736	-0.56168	-0.9857	-0.84357	-0.84378	-0.83862	-0.83378
+1	61.58255	43.90952	57.09221	56.8329	53.46068	35.41348	47.73775	53.89368	58.66676	63.48552
-2	-3.2	-2.80133	-2.80361	-2.23097	-1.78061	-2.19044	-2.86235	-2.86293	-2.85685	-2.85115
+2	57.63621	41.17098	53.08039	52.4471	47.99749	33.22304	44.78023	50.49754	54.85931	59.23929
-3	-4.768	-4.37873	-4.38203	-3.4869	-2.83613	-3.25478	-4.74441	-4.94053	-4.93358	-4.92706
+3	54.40738	38.93035	49.79798	48.85871	43.9064	31.43087	42.36044	47.71888	51.74412	55.7651
-4	-8.27586	-6.44233	-6.31121	-5.02194	-4.18121	-5.44522	-7.27462	-7.67935	-7.67276	-7.66656
+4	50.48724	36.19181	45.78616	44.4729	39.66383	29.24043	39.40292	44.32274	47.93667	51.51887
-5	-11.1459	-8.68296	-7.88963	-6.98523	-5.86059	-7.23739	-9.69441	-10.2083	-10.1885	-10.1812
+5	47.25345	33.95119	42.50376	40.72644	36.27198	27.44826	36.98313	41.54409	44.82148	48.04468
-6	-14.8055	-11.4215	-10.403	-9.39742	-7.97429	-9.42783	-12.6519	-13.6044	-13.5577	-13.5508
+6	43.28586	31.21264	38.39901	36.29935	32.18138	25.25783	34.02561	38.14795	41.01403	43.79845
-7	-18.0343	-13.6621	-13.3108	-11.371	-9.74868	-11.22	-15.0717	-16.383	-16.6131	-16.6054
+7	40.05703	28.97202	35.02718	32.71097	28.87953	23.46565	31.60582	35.36929	37.89884	40.32426
-8	-21.9807	-16.4007	-16.8842	-14.4723	-12.5349	-13.4104	-18.0292	-19.7792	-20.4206	-20.8317
+8	36.11069	26.23348	31.01535	28.32516	24.89893	21.27522	28.6483	31.81878	33.91833	35.88502
-9	-25.2095	-18.6413	-20.0753	-17.5224	-15.2076	-15.2026	-20.449	-22.5578	-23.5357	-24.3059
+9	32.71634	23.86838	27.73295	24.73677	21.68708	19.38348	26.09408	29.04012	30.80314	32.41083
-10	-29.1559	-21.3798	-24.0871	-21.2503	-18.5293	-17.393	-23.4066	-25.954	-27.3432	-28.5521
+10	28.75614	21.12983	23.72113	20.91032	18.22426	17.19304	23.13656	25.64398	26.99569	28.1646
-11	-32.3847	-23.6205	-27.3695	-24.3394	-21.3333	-19.1852	-25.8263	-28.7326	-30.4584	-32.0263
+11	25.52731	18.88921	20.43873	17.86019	15.50657	15.40087	20.71676	22.86533	23.8805	24.69041
-12	-36.331	-26.4835	-31.3814	-28.7252	-25.2589	-21.4752	-28.9183	-32.1288	-34.2658	-36.2725
+12	21.58096	16.15067	16.55817	14.13226	12.23993	13.21044	17.75924	19.46918	20.07305	20.44418
-13	-39.5599	-28.7241	-34.6638	-32.3136	-28.5158	-23.2674	-31.3381	-35.0618	-37.5541	-39.8939
+13	18.35214	13.91004	13.6345	11.58961	9.972329	11.41826	15.33946	16.69053	16.95786	16.96999
-14	-43.5062	-31.4626	-38.765	-36.6994	-32.5514	-25.4578	-34.2956	-38.4579	-41.3615	-44.186
+14	14.40579	11.1715	10.15197	9.17742	7.779289	9.227824	12.38194	13.29439	13.25018	13.2433
-15	-46.9144	-33.7033	-42.1403	-40.2877	-35.8982	-27.25	-36.7154	-41.2366	-44.4767	-47.6601
+15	11.42841	8.930876	8.064394	7.203805	6.049896	7.435652	9.962145	10.51573	10.49357	10.48637
-16	-50.8608	-36.4418	-46.1522	-44.8729	-40.0438	-29.4404	-39.6729	-44.6327	-48.2842	-51.9064
+16	7.920552	6.192332	6.135212	4.881936	4.056214	5.245216	7.004624	7.429351	7.422755	7.416564
-17	-54.0896	-38.6824	-49.4346	-48.4613	-43.4807	-31.2326	-42.0927	-47.4114	-51.3994	-55.3806
+17	5.050479	4.553267	4.55679	3.625999	2.955691	3.453044	4.952648	5.188494	5.181613	5.175151
-18	-58.0359	-41.421	-53.4464	-52.8471	-48.4925	-33.423	-45.0502	-50.8075	-55.2068	-59.6268
+18	3.028965	2.625334	2.627609	2.090968	1.665607	2.080434	2.652354	2.652927	2.646852	2.641145
-19	-61.2648	-43.6616	-56.7288	-56.4355	-52.9624	-35.2152	-47.47	-53.5862	-58.322	-63.101
+19	1.593931	1.047933	1.049184	0.835031	0.655084	1.094738	1.012143	1.012397	1.007284	1.00248
-20	-65.2111	-46.4001	-60.7406	-60.8213	-58.4805	-37.4057	-50.4275	-56.9823	-62.1294	-67.3472
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 100' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	65.28	61.75	66	61.92	74	69.91	73.9	32.53958
-1	-1.44	-1.2403	-1.2403	-0.99244	-0.99244	-0.94398	-0.99366	-1.03358
+1	61.58255	58.39423	62.3861	58.51948	69.87815	65.58593	69.32157	30.74117
-2	-3.2	-3.97845	-3.97845	-3.45731	-3.57479	-3.02662	-3.18592	-2.29685
+2	57.63621	54.83465	58.55269	54.90473	65.49664	60.92739	64.389	28.81606
-3	-4.768	-6.21875	-6.21875	-5.8771	-6.26345	-4.7306	-4.97958	-3.33042
+3	54.40738	51.92225	55.41627	51.94721	61.91177	57.11585	60.35326	27.24098
-4	-8.27586	-9.69396	-9.93965	-9.06454	-9.93277	-7.21387	-7.61901	-4.59369
+4	50.48724	48.36266	51.58287	48.33246	57.53025	52.45732	55.42069	25.31587
-5	-11.1459	-12.6064	-13.0761	-12.0221	-13.5176	-9.32143	-9.86109	-6.06505
+5	47.25345	45.45027	48.44644	45.37494	53.94538	48.64578	51.38495	23.74078
-6	-14.8055	-16.1659	-16.9095	-15.6368	-17.8992	-11.8973	-12.6014	-7.99016
+6	43.28586	41.89068	44.61304	41.76019	49.56387	43.88693	46.34678	21.81568
-7	-18.0343	-19.0783	-20.0459	-18.5943	-21.484	-14.7277	-15.5028	-9.56525
+7	40.05703	38.97829	41.47662	38.80267	45.97899	39.96396	42.19243	20.24059
-8	-21.9807	-22.6379	-23.8793	-22.2091	-25.8655	-18.893	-19.8873	-11.4904
+8	36.11069	35.4187	37.64321	35.18792	41.59748	35.30542	37.25986	18.31549
-9	-25.2095	-25.5503	-27.0157	-25.1666	-29.4504	-22.6018	-23.809	-13.0654
+9	32.71634	32.34451	34.33254	32.06609	37.81345	31.49389	33.22412	16.7404
-10	-29.1559	-29.1099	-30.8491	-28.7813	-33.8319	-27.2604	-28.7415	-14.9905
+10	28.75614	28.78492	30.49914	28.45135	33.43193	26.83535	28.29155	14.81529
-11	-32.3847	-32.0223	-33.9856	-31.7389	-37.4168	-31.0719	-32.7773	-16.5656
+11	25.52731	25.87252	27.36271	25.49382	29.84706	23.02382	24.25581	13.24021
-12	-36.331	-35.7437	-37.9932	-35.5179	-41.9975	-35.7304	-37.7099	-18.4907
+12	21.58096	22.31293	23.52931	21.87908	25.46555	18.51296	19.48732	11.3151
-13	-39.5599	-38.6561	-41.1296	-38.4754	-45.5823	-39.542	-41.7456	-20.0658
+13	18.35214	19.40054	20.39289	18.92156	21.88068	15.105	15.9	9.740017
-14	-43.5062	-42.2157	-44.963	-42.0902	-49.9639	-44.3119	-46.7968	-21.9909
+14	14.40579	15.84095	16.55948	15.30681	17.49916	11.66232	12.35141	7.814911
-15	-46.9144	-45.1281	-48.0995	-45.0477	-53.5487	-48.2238	-50.9381	-23.566
+15	11.42841	12.92856	13.42306	12.34929	13.91429	9.554772	10.10933	6.239825
-16	-50.8608	-48.6877	-51.9329	-48.6625	-57.9302	-52.8823	-55.8707	-25.4911
+16	7.920552	9.368967	9.589657	8.73454	9.532776	6.978873	7.369014	4.478691
-17	-54.0896	-51.6001	-55.0693	-51.62	-61.5151	-56.6938	-59.9064	-27.0662
+17	5.050479	6.466595	6.466595	6.144833	6.560925	4.919262	5.178171	3.445111
-18	-58.0359	-55.1596	-58.9027	-55.2347	-65.8966	-61.3524	-64.839	-28.9913
+18	3.028965	3.728451	3.728451	3.187312	3.274791	2.836623	2.985919	2.181847
-19	-61.2648	-58.072	-62.0391	-58.1922	-69.4815	-65.1639	-68.8747	-30.5664
+19	1.593931	1.488148	1.488148	1.190756	1.190756	1.132642	1.192255	1.148266
-20	-65.2111	-61.6316	-65.8725	-61.807	-73.863	-69.8225	-73.8073	-32.4915
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 100' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**65.28**	***121.1667***	***129.0924***	***80.3***	***96.96***	***102.4***
-1	**-1.44**	***-0.96471***	***-1.02131***	***-1.11802***	***-1.176***	***-0.99396***
+1	**61.58255**	***113.066***	***120.1173***	***75.21983***	***90.86379***	***95.8073***
-2	**-3.2**	***-3.49706***	***-3.2854***	***-3.58448***	***-3.8069***	***-3.57987***
+2	**57.63621**	***104.2948***	***110.349***	***69.73879***	***84.28655***	***88.68129***
-3	**-4.768**	***-6.18823***	***-5.77698***	***-5.6025***	***-6.27***	***-6.27081***
+3	**54.40738**	***97.1183***	***102.3568***	***65.25431***	***78.90517***	***82.85092***
-4	**-8.27586**	***-9.47745***	***-9.02329***	***-8.60517***	***-9.55862***	***-9.68255***
+4	**50.48724**	***88.34706***	***92.58846***	***59.77327***	***72.32793***	***75.72492***
-5	**-11.1459**	***-12.4526***	***-12.6926***	***-11.0716***	***-12.2493***	***-12.822***
+5	**47.25345**	***81.07233***	***84.5962***	***55.28879***	***66.94655***	***69.89454***
-6	**-14.8055**	***-17.1353***	***-17.8489***	***-14.0862***	***-15.5379***	***-16.6591***
+6	**43.28586**	***72.00066***	***74.82789***	***49.55862***	***60.07034***	***62.44463***
-7	**-18.0343**	***-21.6206***	***-22.665***	***-16.5527***	***-19.3715***	***-19.7985***
+7	**40.05703**	***64.82419***	***66.83564***	***45.07414***	***54.68897***	***56.61426***
-8	**-21.9807**	***-27.7765***	***-29.3824***	***-20.5759***	***-25.291***	***-25.0389***
+8	**36.11069**	***56.05295***	***57.06732***	***39.5931***	***48.11172***	***49.48825***
-9	**-25.2095**	***-33.6631***	***-34.8785***	***-24.6466***	***-30.1759***	***-30.4208***
+9	**32.71634**	***48.87648***	***49.33761***	***35.10862***	***42.73034***	***43.65789***
-10	**-29.1559**	***-41.3379***	***-42.0019***	***-30.1276***	***-36.7531***	***-37.1819***
+10	**28.75614**	***40.63791***	***41.26788***	***29.62758***	***36.1531***	***36.53188***
-11	**-32.3847**	***-48.0817***	***-48.6044***	***-34.6121***	***-42.1345***	***-43.0123***
+11	**25.52731**	***34.3585***	***35.48889***	***25.1431***	***30.77172***	***31.01678***
-12	**-36.331**	***-56.8529***	***-57.9558***	***-40.0931***	***-48.7117***	***-50.1383***
+12	**21.58096**	***27.17648***	***28.77145***	***20.12586***	***24.75103***	***24.43892***
-13	**-39.5599**	***-64.0294***	***-65.9481***	***-44.5776***	***-54.0931***	***-55.9686***
+13	**18.35214**	***22.11732***	***23.27537***	***16.82578***	***19.90779***	***20.14614***
-14	**-43.5062**	***-72.8007***	***-75.7164***	***-50.0586***	***-60.6703***	***-63.0946***
+14	**14.40579**	***16.6353***	***17.31441***	***13.8112***	***15.23793***	***16.30906***
-15	**-46.9144**	***-80.1472***	***-83.7086***	***-54.7922***	***-66.3507***	***-69.2489***
+15	**11.42841**	***12.85***	***13.14864***	***11.34474***	***12.54724***	***13.16963***
-16	**-50.8608**	***-89.147***	***-93.477***	***-60.2733***	***-72.9279***	***-76.3749***
+16	**7.920552**	***9.177455***	***8.640286***	***8.330171***	***9.258618***	***9.33255***
-17	**-54.0896**	***-96.3235***	***-101.469***	***-64.7578***	***-78.3093***	***-82.2053***
+17	**5.050479**	***6.486281***	***6.054183***	***5.863706***	***6.567929***	***6.56879***
-18	**-58.0359**	***-105.095***	***-111.238***	***-70.2388***	***-84.8866***	***-89.3313***
+18	**3.028965**	***3.197066***	***3.056894***	***3.359482***	***3.566895***	***3.279868***
-19	**-61.2648**	***-112.271***	***-119.23***	***-74.7233***	***-90.2679***	***-95.1617***
+19	**1.593931**	***1.163399***	***1.135189***	***1.341465***	***1.414343***	***1.192615***
-20	**-65.2111**	***-121.042***	***-128.998***	***-80.2043***	***-96.8452***	***-102.288***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 100’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.33E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.36E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	307.9128	219.5476	285.4610	284.1645	269.9295	177.0674	238.6888	269.4684	293.3338	317.4276
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	579.9497	414.1994	534.4510	528.4581	494.8556	334.2217	450.4910	508.0628	552.6512	596.9618
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	816.1107	583.9553	746.9697	732.8807	680.5411	471.4630	635.4066	715.7833	786.5244	851.5395
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1016.931	728.8154	923.0174	905.5532	839.0454	588.7913	793.4358	892.8146	989.7064	1068.9122
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1181.336	848.7797	1065.6784	1045.9565	971.5834	686.2065	924.8676	1039.2134	1158.2752	1260.6399
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1309.339	943.9892	1183.0624	1146.3645	1076.3079	763.7087	1029.4387	1160.7138	1292.2309	1415.6334
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1407.502	1014.4175	1263.8978	1233.1064	1152.1928	821.2978	1114.2182	1256.9424	1391.8235	1532.0247
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1480.795	1068.9125	1310.7750	1291.1581	1208.1160	858.9739	1175.0986	1322.2970	1467.5422	1609.8139
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1517.685	1098.8668	1332.5355	1335.5548	1248.6948	876.5696	1209.0923	1356.6566	1511.1688	1656.3589
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1519.886	1103.5769	1317.5741	1339.9129	1254.6941	873.9413	1215.8603	1359.9177	1519.8644	1671.8819
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1518.715	1098.8403	1332.5266	1335.5420	1248.7011	876.5608	1209.0898	1356.6442	1511.1644	1656.3625
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1481.475	1068.9176	1310.7861	1291.1645	1208.1191	859.0088	1175.1083	1322.3128	1467.5477	1609.8425
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1408	1014.4173	1263.8810	1233.1129	1152.1898	821.3283	1114.2222	1256.9519	1391.8222	1532.0459
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1310.319	943.9838	1183.0701	1146.3581	1076.3013	763.7348	1029.4370	1160.7171	1292.2562	1415.6472
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1181.829	848.8057	1065.6796	1045.9661	971.5881	686.2283	924.8603	1039.2103	1158.2936	1260.6463
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1017.215	728.8363	923.0432	905.5565	839.0470	588.8088	793.4584	892.8052	989.7180	1068.9113
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	816.7252	583.9710	746.9890	732.9000	680.5428	471.4761	635.4237	715.8022	786.5292	851.5464
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	580.3592	414.2098	534.4639	528.4709	494.8532	334.2304	450.5023	508.0754	552.6491	596.9614
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	308.1176	219.5528	285.4675	284.1710	269.9228	177.0717	238.6944	269.4748	293.3407	317.4350
-20	-3.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 100' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.33E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.36E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	307.9128	291.9712	311.9305	292.5974	349.3908	327.9296	346.6078	153.7058
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	579.9497	551.5824	589.0119	552.3334	658.9496	613.5089	648.3741	289.9107
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	816.1107	778.8338	831.2441	779.2081	928.8908	856.7378	905.2989	408.6146
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1016.931	973.7252	1038.6272	973.3143	1159.3614	1057.7704	1117.5704	509.8176
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1181.336	1136.2567	1211.2069	1134.8676	1350.0000	1233.8206	1304.3068	593.5196
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1309.339	1266.4332	1349.2242	1263.5597	1515.7437	1373.1718	1452.3662	659.7207
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1407.502	1364.5151	1452.3922	1370.9665	1641.6555	1477.3399	1561.9485	708.4207
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1480.795	1433.9710	1531.9128	1446.2589	1727.7354	1548.4997	1637.8997	739.6199
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1517.685	1479.4679	1578.4510	1488.6898	1773.9832	1577.2922	1668.9916	753.3180
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1519.886	1492.2548	1589.7899	1497.8603	1780.0001	1563.4168	1654.9076	749.7378
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1518.715	1479.4771	1578.4649	1488.6892	1773.9957	1577.2769	1668.9749	753.3287
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1481.475	1433.9732	1531.9193	1446.2724	1727.7606	1548.5103	1637.9103	739.6294
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1408	1364.5102	1452.3912	1370.9730	1641.6722	1477.3430	1561.9511	708.4291
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1310.319	1266.4704	1349.2156	1263.5593	1515.7521	1373.1675	1452.3865	659.7278
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1181.829	1136.2917	1211.1988	1134.8603	1350.0001	1233.8422	1304.3287	593.5256
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1017.215	973.7531	1038.6572	973.3000	1159.3530	1057.7670	1117.5670	509.8224
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	816.7252	778.8548	831.2667	779.2289	928.8740	856.7602	905.3226	408.6182
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	580.3592	551.5964	589.0269	552.3473	658.9664	613.5239	648.3900	289.9131
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	308.1176	291.9782	311.9381	292.6043	349.3991	327.9371	346.6158	153.7070
-20	-3.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 100' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.33E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.36E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	307.9128	565.3301	600.5867	376.0991	454.3190	479.0365
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	579.9497	1050.9216	1113.0768	702.3707	848.8448	893.2911
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	816.1107	1473.5392	1568.7938	978.8146	1183.9931	1243.3943
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1016.931	1832.8889	1956.4494	1213.3707	1475.0310	1551.7936
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1181.336	2112.5000	2306.3799	1416.8146	1713.7500	1802.3720
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1309.339	2356.0785	2567.5074	1570.4483	1892.6759	2011.6904
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1407.502	2538.2517	2784.4072	1684.4375	2019.5914	2156.2269
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1480.795	2672.5654	2916.0430	1757.9419	2102.2449	2243.9715
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1517.685	2758.7255	2992.3340	1781.4051	2125.0190	2284.4711
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1519.886	2766.6667	3033.8368	1754.8665	2088.0000	2259.9035
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1518.715	2758.7450	2992.3350	1781.3879	2125.0086	2284.4517
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1481.475	2672.5720	2916.0414	1757.9549	2102.2242	2243.9749
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1408	2538.2776	2784.4094	1684.4417	2019.5948	2156.2529
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1310.319	2356.0915	2567.5072	1570.4657	1892.7035	2011.7056
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1181.829	2112.5000	2306.3774	1416.8405	1713.7671	1802.3762
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1017.215	1832.8757	1956.4444	1213.3880	1475.0380	1551.8038
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	816.7252	1473.5131	1568.7961	978.8406	1183.9896	1243.3934
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	580.3592	1050.9477	1113.0766	702.3880	848.8657	893.3129
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	308.1176	565.3431	600.5891	376.1078	454.3293	479.0474
-20	-3.09E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 110' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	215.2410898	*176.1390881*	*231.4986508*	119.6547	127.9823	120.128	143.7609	137.467	145.3388	63.19270845
-1	-3.525455753	*-3.290865216*	*-3.172910175*	-2.61238	-2.61238	-2.09023	-2.09023	-1.98767	-2.09228	-2.01360466
+1	200.6270852	*164.0806994*	*211.836351*	113.196	121.0268	113.5812	135.8254	129.1275	136.5087	59.73123579
-2	-8.092001748	*-10.11499472*	*-7.282801561*	-7.85106	-7.85106	-7.00743	-7.31851	-5.97178	-6.28608	-4.4299293
+2	185.2998444	*151.54457*	*190.7027138*	106.3857	113.6926	106.6655	127.4427	120.2157	127.0727	56.04896803
-3	-13.46174045	*-16.08176699*	*-12.17847019*	-12.4629	-12.545	-11.7227	-12.5577	-9.37087	-9.87203	-6.443531123
+3	172.8786796	*141.3777989*	*173.343357*	100.7105	107.5808	100.9024	120.4572	112.7892	119.2093	52.98041298
-4	-22.73662127	*-23.57789651*	*-20.54945299*	-19.2732	-19.8791	-18.2046	-20.2173	-14.2986	-15.1143	-9.100432337
+4	158.2103312	*129.5136695*	*153.5000738*	93.90019	100.2467	93.98675	112.0745	103.8773	109.7733	49.29814522
-5	-30.7456918	*-30.10466978*	*-27.77727331*	-24.9484	-25.9909	-23.9676	-27.2029	-18.405	-19.4828	-12.16899103
+5	146.2667096	*119.9068928*	*137.4064353*	88.22496	94.13491	88.22368	105.089	96.45082	101.9099	46.22958652
-6	-41.52091697	*-38.27279725*	*-37.51478362*	-31.7587	-33.3251	-30.8833	-35.5855	-23.8389	-25.0936	-15.85125879
+6	132.27036	*108.7147683*	*119.3105437*	81.41468	86.80076	81.30799	96.70632	87.53901	92.47385	42.54731642
-7	-50.93361463	*-45.35957482*	*-46.00832643*	-37.4339	-39.4368	-36.6464	-42.5711	-30.4791	-32.0832	-18.91981618
+7	120.8632604	*99.66799013*	*108.536285*	75.73945	80.68897	75.54491	89.72078	79.74116	84.21731	39.47876076
-8	-62.78108691	*-54.19969995*	*-56.50297803*	-44.2442	-46.771	-43.5621	-50.9537	-38.8978	-40.9714	-22.60208122
+8	107.5520261	*89.14786592*	*96.58203185*	68.92918	73.35483	68.62922	81.33812	70.82935	74.78127	35.79649521
-9	-72.53755651	*-61.8464732*	*-65.50052587*	-49.9194	-52.8828	-49.3252	-57.9393	-46.3243	-48.8348	-25.67063992
+9	96.61885791	*80.66109154*	*86.87214997*	62.97018	66.93745	62.57799	74.0033	63.40284	66.91791	32.72793473
-10	-84.84080318	*-71.35860268*	*-76.59998143*	-56.7297	-60.2169	-56.2409	-66.3219	-55.2361	-58.2708	-29.35290767
+10	83.72044078	*70.54962361*	*75.52269297*	56.15991	59.60331	55.6623	65.62064	54.49102	57.48187	29.04566754
-11	-95.37349944	*-79.8287138*	*-86.10152721*	-62.4049	-66.3287	-62.0039	-73.3075	-62.6626	-66.1342	-32.42146505
+11	73.46773689	*62.6228489*	*66.31681914*	50.48468	53.49153	49.89922	58.63509	47.06451	49.6185	25.97711119
-12	-108.3487379	*-90.01284526*	*-97.75774677*	-69.499	-73.9684	-69.2078	-82.0394	-71.5745	-75.5702	-36.10373281
+12	61.50049972	*53.44671916*	*55.57216522*	43.6744	46.15738	42.98354	50.25245	38.1527	40.18247	22.29484664
-13	-119.4414402	*-98.77961417*	*-107.7196286*	-75.1742	-80.0802	-74.9708	-89.0249	-79.001	-83.4336	-39.17229247
+13	51.80779653	*46.07994216*	*46.87028083*	37.99917	40.04559	37.22046	43.2669	31.14089	32.77989	19.22628594
-14	-133.3478542	*-109.6357439*	*-120.577416*	-81.9845	-87.4144	-81.8865	-97.4076	-88.2841	-93.2628	-42.8545589
+14	40.51255652	*37.57581873*	*36.64711486*	31.1889	32.71145	30.30477	34.88424	23.17268	24.3923	15.5440184
-15	-145.1210248	*-118.9625226*	*-135.8096753*	-87.6597	-93.5262	-87.6496	-104.393	-95.7106	-101.126	-45.92311525
+15	31.68072735	*30.76904325*	*28.51265454*	25.51366	26.59966	24.54169	27.89869	18.81429	19.91822	12.47546378
-16	-159.4402638	*-130.4906523*	*-155.1220318*	-94.47	-100.86	-94.5653	-112.776	-104.622	-110.562	-49.60538254
+16	21.87763914	*22.93691265*	*19.78182748*	18.70339	19.26552	17.626	19.51604	13.88658	14.67597	8.793196835
-17	-171.6529649	*-140.3774209*	*-171.6200146*	-100.145	-106.972	-100.328	-119.761	-112.049	-118.426	-52.67394285
+17	14.14857091	*16.6901441*	*12.85596039*	13.02816	13.15374	12.19236	13.07956	9.780158	10.30744	6.644640526
-18	-186.644204	*-152.5775513*	*-192.4512514*	-106.955	-114.306	-107.244	-128.144	-120.961	-127.862	-56.35620866
+18	7.673423159	*9.530012962*	*6.927708956*	7.412755	7.412755	6.53407	6.792563	5.638675	5.935447	4.228316491
-19	-199.4169055	*-163.0243281*	*-210.0626175*	-112.631	-120.418	-113.007	-135.13	-128.387	-135.725	-59.42476525
+19	3.8788996	*3.843236241*	*3.484068361*	3.047195	3.047195	2.438147	2.438147	2.318578	2.440608	2.214714001
-20	-215.0801457	*-175.8964494*	*-231.4986508*	-119.441	-127.752	-119.923	-143.512	-137.299	-145.161	-63.10703109
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 110’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**90.26081148**	**119.4548**	**120.7592**	**116.6901992**	**72.72198189**	**98.03793**	**110.9413**	**121.2851**	**131.8393**
-1	**-1.839492531**	**-1.84121**	**-1.46524**	**-1.13705819**	**-1.920786704**	**-1.77669**	**-1.77704**	**-1.76867**	**-1.76077**
+1	**85.30385916**	**112.273**	**112.9485**	**105.8201497**	**68.74506378**	**92.68145**	**104.8046**	**114.4202**	**124.1989**
-2	**-5.527971775**	**-5.53175**	**-4.40166**	**-3.472131986**	**-4.225730354**	**-5.75411**	**-5.75505**	**-5.74519**	**-5.73589**
+2	**80.0645433**	**104.5984**	**104.5587**	**95.64647093**	**64.55425748**	**87.02316**	**98.30733**	**107.1361**	**116.0755**
-3	**-8.601703129**	**-8.6072**	**-6.84867**	**-5.49052584**	**-6.757462522**	**-9.42152**	**-9.97547**	**-9.96422**	**-9.9536**
+3	**75.69844806**	**98.20283**	**97.56723**	**87.29159394**	**61.06192243**	**82.30791**	**92.8929**	**101.066**	**109.306**
-4	**-13.04663906**	**-12.2977**	**-10.3274**	**-8.411069041**	**-10.94826949**	**-14.646**	**-15.2877**	**-15.2877**	**-15.2877**
+4	**70.45912928**	**90.52818**	**89.17745**	**77.47729829**	**56.87111531**	**76.64962**	**86.39558**	**93.78191**	**101.1826**
-5	**-17.41273475**	**-15.6128**	**-14.1727**	**-11.62426007**	**-14.44060862**	**-19.3612**	**-20.6123**	**-20.5568**	**-20.545**
+5	**66.09303325**	**84.13264**	**82.18597**	**70.57782031**	**53.37877618**	**71.93437**	**80.98115**	**87.71184**	**94.41315**
-6	**-22.65205353**	**-21.6364**	**-18.7871**	**-15.56708978**	**-18.63141492**	**-25.0195**	**-27.1096**	**-27.3168**	**-27.3037**
+6	**60.8537163**	**76.458**	**73.44662**	**63.0175383**	**49.18797122**	**66.27608**	**74.48383**	**80.42775**	**86.28977**
-7	**-27.01814898**	**-27.333**	**-23.2393**	**-19.38660053**	**-22.12375121**	**-29.7348**	**-32.524**	**-33.3869**	**-33.8286**
+7	**56.48761796**	**69.74267**	**66.45515**	**56.78980397**	**45.69562942**	**61.56084**	**69.0694**	**74.35768**	**79.52028**
-8	**-32.25746633**	**-34.5693**	**-30.136**	**-25.29550249**	**-26.31455709**	**-35.3931**	**-39.0213**	**-40.671**	**-41.952**
+8	**51.24830537**	**62.06803**	**58.06539**	**49.40353023**	**41.50482794**	**55.90255**	**62.51055**	**66.82029**	**71.05842**
-9	**-36.62356325**	**-40.9649**	**-36.0788**	**-30.37339625**	**-29.80689622**	**-40.1083**	**-44.4358**	**-46.7411**	**-48.7215**
+9	**46.66390451**	**55.67249**	**51.07391**	**43.32079624**	**37.83787229**	**50.95154**	**56.88693**	**60.70002**	**64.28893**
-10	**-41.86287742**	**-48.6395**	**-43.3854**	**-36.70696707**	**-33.99770118**	**-45.7666**	**-50.9331**	**-54.0252**	**-56.8449**
+10	**41.4245834**	**47.99785**	**42.68414**	**36.1085137**	**33.64706516**	**45.29325**	**50.3896**	**53.41593**	**56.16555**
-11	**-46.22897579**	**-55.0351**	**-50.3769**	**-42.71720236**	**-37.49003905**	**-50.4818**	**-56.3475**	**-60.0952**	**-63.6144**
+11	**37.05848821**	**41.60231**	**36.67125**	**30.8839069**	**30.1547287**	**40.578**	**44.97517**	**47.34586**	**49.39606**
-12	**-51.68659942**	**-62.7097**	**-58.7667**	**-50.01647752**	**-41.85546375**	**-56.3759**	**-63.054**	**-67.4295**	**-71.7378**
+12	**31.81917378**	**33.92767**	**29.53995**	**24.79044211**	**25.96392032**	**34.91971**	**38.47786**	**40.06177**	**41.27267**
-13	**-56.05269437**	**-69.1052**	**-65.7581**	**-56.17170947**	**-45.34779916**	**-61.0912**	**-68.53**	**-73.7529**	**-78.8457**
+13	**27.45307249**	**27.90076**	**23.72725**	**19.80404339**	**22.47158423**	**30.20447**	**33.06342**	**33.9917**	**34.50318**
-14	**-61.29200802**	**-77.0997**	**-74.1479**	**-63.64500063**	**-49.53860725**	**-66.7494**	**-75.0273**	**-81.037**	**-86.9691**
+14	**22.21375743**	**21.06487**	**18.40139**	**15.23431205**	**18.28077965**	**24.54618**	**26.56611**	**26.70761**	**26.6945**
-15	**-65.6581099**	**-83.4952**	**-81.4482**	**-69.94523506**	**-53.0309437**	**-71.4647**	**-80.4417**	**-87.1071**	**-93.7386**
+15	**17.84766374**	**16.04996**	**14.55608**	**11.94862133**	**14.78843971**	**19.83093**	**21.15168**	**21.09197**	**21.08024**
-16	**-70.89742432**	**-91.1698**	**-89.8787**	**-78.21130487**	**-57.22174782**	**-77.123**	**-86.9391**	**-94.3911**	**-101.862**
+16	**12.60834906**	**11.98918**	**9.941711**	**8.092795383**	**10.59763554**	**14.17264**	**14.84945**	**14.84945**	**14.84945**
-17	**-75.26351905**	**-97.5654**	**-96.8702**	**-86.46115426**	**-60.71408817**	**-81.8382**	**-92.3535**	**-100.461**	**-108.631**
+17	**8.907890537**	**8.913729**	**7.092631**	**5.695621791**	**7.105294926**	**9.786835**	**10.41047**	**10.39932**	**10.38878**
-18	**-80.50283986**	**-105.24**	**-105.26**	**-96.48701024**	**-64.9048923**	**-87.4965**	**-98.8508**	**-107.745**	**-116.755**
+18	**5.219412686**	**5.223193**	**4.156206**	**3.273544934**	**4.032879642**	**5.38594**	**5.386883**	**5.377024**	**5.367721**
-19	**-84.86893443**	**-111.636**	**-112.251**	**-104.9143881**	**-68.3972329**	**-92.2118**	**-104.265**	**-113.815**	**-123.524**
+19	**2.145682273**	**2.147735**	**1.70919**	**1.32765059**	**2.112092432**	**2.072425**	**2.072839**	**2.064535**	**2.056694**
-20	**-90.10824821**	**-119.31**	**-120.641**	**-116.330066**	**-72.5880376**	**-97.8701**	**-110.763**	**-121.099**	**-131.648**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 110' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	215.601061	230.8409557	141.9352	171.2653	181.3878
-1	-1.824145016	-1.784854733	-2.11055	-2.22691	-1.8763
+1	201.5858421	215.3324933	133.1495	160.7225	169.9839
-2	-6.438828831	-6.029028054	-6.34077	-6.73915	-6.56901
+2	186.5426755	198.5821297	123.749	149.4419	157.7622
-3	-11.13981884	-10.38864679	-10.0885	-11.2684	-11.2696
+3	174.0067045	184.6234938	115.9153	140.0414	147.5775
-4	-16.78100635	-16.59199459	-15.2588	-16.9087	-17.4244
+4	158.9635301	167.8731221	106.5148	128.7608	135.3559
-5	-22.71341531	-23.53810363	-19.5674	-21.609	-22.9085
+5	146.4275517	153.9144848	98.68103	119.3603	125.1712
-6	-31.64401132	-33.09632924	-24.7376	-28.3408	-29.4894
+6	130.7575863	137.1641352	89.21762	108.0238	112.4599
-7	-39.91389152	-42.34805219	-29.534	-36.3838	-35.8375
+7	118.2216279	123.205499	81.05511	98.20922	102.2557
-8	-51.83495609	-53.86687724	-38.1952	-46.7773	-46.8936
+8	103.1784528	106.4551282	71.65462	86.92864	90.03405
-9	-62.80394017	-63.71769126	-45.8058	-55.9101	-56.4278
+9	90.64247412	92.49649118	63.82088	77.52815	79.84936
-10	-76.85676392	-77.55536686	-55.2063	-67.1907	-68.6494
+10	75.59931851	76.4016276	54.4204	66.24757	67.62774
-11	-89.39273133	-91.10134658	-63.04	-76.5911	-78.8341
+11	63.89746401	64.87023352	46.58666	56.84708	57.44305
-12	-104.435905	-107.8517177	-72.4405	-87.8717	-91.0557
+12	50.7346865	52.90647694	37.48786	45.92853	45.95048
-13	-116.9718878	-121.8103549	-80.2743	-97.2722	-101.24
+13	40.85120843	43.30745951	30.23671	37.22714	36.54923
-14	-132.0150447	-138.5607059	-90.0035	-108.967	-113.482
+14	30.85810283	32.25618418	24.30538	27.68063	28.93925
-15	-145.1778135	-152.5193453	-97.9002	-118.423	-124.156
+15	23.33828362	24.25491683	19.99682	22.07745	23.45519
-16	-160.2209859	-169.2697175	-107.301	-129.704	-136.378
+16	16.3094582	15.98997601	14.82656	16.43716	16.87431
-17	-172.7569659	-183.2283476	-115.134	-139.104	-146.562
+17	11.60848043	10.82438688	10.518	11.73692	11.73823
-18	-187.8001243	-199.9787202	-124.535	-150.385	-158.784
+18	5.967289575	5.592840997	5.9871	6.361903	6.097468
-19	-200.3361038	-213.9373626	-132.369	-159.785	-168.969
+19	2.136582436	2.009530091	2.461928	2.601708	2.188688
-20	-215.3792769	-230.68771	-141.769	-171.066	-181.19
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 110’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.24E-13	*-4.79E-13*	*-8.39E-13*	-4.28E-13	-4.59E-13	-3.97E-13	-4.79E-13	-4.04E-13	-4.26E-13	-2.35E-13
End Shear	9.98E-13	*5.44E-13*	*7.21E-13*	4.14E-13	4.21E-13	3.27E-13	3.72E-13	5.13E-13	5.40E-13	3.02E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	1118.078968	*917.0738464*	*1178.26693*	622.5778627	665.6472173	624.6966572	747.0396157	710.2011204	750.7978686	328.5217969
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	2110.406247	*1736.539726*	*2169.354547*	1176.485431	1257.341809	1179.660095	1409.554116	1330.54146	1406.449028	619.9140536
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	2978.16221	*2458.397678*	*3008.873742*	1661.722736	1775.083807	1664.890302	1988.148962	1861.021012	1966.953471	874.1768142
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	3719.115314	*3082.647617*	*3710.649622*	2078.289717	2218.87316	2080.746898	2482.712067	2302.2154	2432.967701	1091.30998
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	4334.184508	*3609.289545*	*4229.016711*	2426.18644	2588.982521	2427.273225	2892.749982	2686.669714	2840.679709	1271.313629
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	4823.36998	*4038.323745*	*4583.665769*	2705.593696	2885.495193	2704.066489	3247.078264	2992.4186	3165.398075	1414.187727
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	5198.754098	*4369.749608*	*4927.094335*	2916.658193	3108.055109	2933.458303	3516.881298	3221.964646	3407.070276	1519.932289
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	5475.00616	*4603.567893*	*5083.344165*	3066.255806	3278.272187	3094.557913	3702.159508	3379.670355	3575.22026	1588.547484
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	5625.340986	*4739.778013*	*5157.989498*	3163.389914	3378.137847	3185.923997	3802.912259	3447.514888	3648.223125	1620.032769
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	5650.502222	*4777.937573*	*5135.948896*	3191.232456	3403.429623	3206.847062	3818.430089	3424.866246	3625.413602	1614.865812
-11	-5.33E-13	*-4.17E-13*	*-4.80E-13*	-3.43E-13	-3.43E-13	-2.74E-13	-2.74E-13	-2.60E-13	-2.74E-13	-3.15E-13
+11	5626.670495	*4739.891812*	*5157.989278*	3163.406214	3378.16277	3185.960254	3802.97206	3447.517211	3648.224651	1620.051843
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	5476.426484	*4603.669367*	*5083.344293*	3066.259696	3278.283729	3094.581841	3702.204337	3379.689541	3575.239452	1588.564313
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	5199.769867	*4369.838198*	*4927.094571*	2916.64958	3108.053194	2933.469877	3516.91119	3221.97012	3407.074951	1519.94723
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	4824.814334	*4038.399729*	*4583.665685*	2705.572745	2885.47998	2704.065866	3247.093223	2992.410801	3165.388694	1414.200444
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	4335.107892	*3609.352773*	*4229.016505*	2426.248616	2588.953657	2427.260019	2892.75016	2686.708361	2840.719137	1271.324201
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	3719.589999	*3082.698346*	*3710.650038*	2078.339607	2218.926907	2080.721508	2482.697159	2302.208996	2432.961294	1091.318556
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	2978.320056	*2458.435689*	*3008.874232*	1661.759992	1775.123906	1664.927262	1988.119018	1861.061419	1966.996253	874.1832823
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	2111.297874	*1736.565012*	*2169.354286*	1176.510284	1257.368567	1179.684706	1409.583954	1330.568498	1406.477653	619.91811
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	1118.524824	*917.0866733*	*1178.266718*	622.5904366	665.6607493	624.709168	747.0547931	710.2145716	750.8121112	328.523864
-20	-1.06E-12	*-6.93E-13*	*-9.69E-13*	-6.05E-13	-6.39E-13	-4.94E-13	-6.16E-13	-5.92E-13	-6.25E-13	-3.22E-13
+20	5.58E-13	*3.40E-13*	*5.13E-13*	2.53E-13	2.53E-13	2.17E-13	2.64E-13	2.38E-13	2.51E-13	1.74E-13

1-Span: Moment (Max and Min) Raw Data Results - 110' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-3.53E-13**	**-3.38E-13**	**-4.31E-13**	**-3.68E-13**	**-4.05E-13**	**-3.56E-13**	**-3.41E-13**	**-3.37E-13**	**-4.25E-13**
End Shear	**2.91E-13**	**4.40E-13**	**3.94E-13**	**3.13E-13**	**3.28E-13**	**2.79E-13**	**2.95E-13**	**2.93E-13**	**2.94E-13**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**469.1712254**	**617.5015368**	**621.216605**	**587.2536719**	**378.0978508**	**509.7479657**	**576.4255638**	**629.3108633**	**683.0939792**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**885.512692**	**1157.617082**	**1157.836266**	**1079.305124**	**713.9383993**	**962.4414795**	**1087.336511**	**1186.429039**	**1285.757275**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**1249.024393**	**1620.346634**	**1609.859218**	**1489.373875**	**1007.52172**	**1358.080532**	**1532.732813**	**1687.67702**	**1832.712917**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**1559.706267**	**2005.691268**	**1993.177753**	**1823.701237**	**1258.847701**	**1696.769084**	**1913.147435**	**2123.042891**	**2300.536365**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**1817.558414**	**2319.839151**	**2306.319461**	**2081.382804**	**1467.916345**	**1978.896976**	**2228.325551**	**2484.960939**	**2711.353666**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**2022.996507**	**2577.936922**	**2534.802857**	**2318.63855**	**1634.727741**	**2203.970559**	**2489.516634**	**2773.431103**	**3043.863315**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**2175.67173**	**2758.648595**	**2729.008644**	**2485.253212**	**1759.281733**	**2385.676851**	**2696.000007**	**2989.056295**	**3294.4621**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**2292.807096**	**2866.601983**	**2860.25194**	**2593.396579**	**1841.578767**	**2516.091986**	**2836.968889**	**3151.81729**	**3463.150165**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**2357.832817**	**2919.173889**	**2957.48929**	**2688.381638**	**1881.40607**	**2589.452416**	**2912.268917**	**3245.993876**	**3564.194288**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**2369.343632**	**2893.860548**	**2969.732141**	**2708.828172**	**1878.254864**	**2605.155048**	**2921.530775**	**3266.15461**	**3597.887463**
-11	**-2.41E-13**	**-2.41E-13**	**-1.92E-13**	**-1.45E-13**	**-3.01E-13**	**-2.33E-13**	**-2.33E-13**	**-1.58E-13**	**-1.58E-13**
+11	**2357.81831**	**2919.181587**	**2957.465724**	**2688.366131**	**1881.390596**	**2589.479703**	**2912.246816**	**3246.015919**	**3564.200646**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**2292.816078**	**2866.622044**	**2860.26366**	**2593.381363**	**1841.640437**	**2516.10918**	**2836.997192**	**3151.827128**	**3463.201424**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**2175.671325**	**2758.646072**	**2729.020373**	**2485.244149**	**1759.335639**	**2385.683928**	**2696.017063**	**2989.053987**	**3294.500026**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**2022.986938**	**2577.950799**	**2534.791057**	**2318.626329**	**1634.774039**	**2203.967679**	**2489.522483**	**2773.476289**	**3043.88807**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**1817.604678**	**2319.841315**	**2306.337082**	**2081.385789**	**1467.954894**	**1978.883784**	**2228.319981**	**2484.993787**	**2711.365099**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**1559.743335**	**2005.736394**	**1993.183371**	**1823.691738**	**1258.878545**	**1696.74591**	**1913.130794**	**2123.06378**	**2300.534707**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**1249.052171**	**1620.381431**	**1609.894445**	**1489.377156**	**1007.544933**	**1358.11079**	**1532.766531**	**1687.685491**	**1832.725198**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**885.5313042**	**1157.640356**	**1157.859527**	**1079.300321**	**713.9536541**	**962.4616278**	**1087.359021**	**1186.425398**	**1285.756386**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**469.1805021**	**617.5131348**	**621.2284599**	**587.2425054**	**378.105525**	**509.7582179**	**576.4368274**	**629.323059**	**683.1071705**
-20	**-4.49E-13**	**-5.21E-13**	**-4.49E-13**	**-4.11E-13**	**-4.06E-13**	**-4.31E-13**	**-4.79E-13**	**-4.91E-13**	**-5.27E-13**
+20	**2.28E-13**	**2.13E-13**	**2.02E-13**	**1.86E-13**	**1.68E-13**	**1.72E-13**	**2.06E-13**	**2.12E-13**	**2.19E-13**

1-Span: Moment (Max and Min) Raw Data Results - 110' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.81E-13	-5.87E-13	-4.14E-13	-4.30E-13	-4.34E-13
End Shear	4.68E-13	5.27E-13	6.30E-13	6.16E-13	5.55E-13
-1	0	0	0	0	0
+1	1108.722131	1184.328713	732.3221399	883.9735669	934.9112212
-2	0	0	0	0	0
+2	2065.971105	2201.030801	1369.856024	1654.201225	1746.587682
-3	0	0	0	0	0
+3	2900.687472	3104.159982	1912.601713	2311.68974	2436.417897
-4	0	0	0	0	0
+4	3611.792639	3874.321999	2374.460762	2882.248519	3042.607735
-5	0	0	0	0	0
+5	4171.212584	4563.826597	2773.72724	3351.987247	3537.724981
-6	0	0	0	0	0
+6	4654.545796	5084.431842	3078.41484	3707.979976	3950.165628
-7	0	0	0	0	0
+7	5017.892064	5513.210269	3305.725906	3963.874692	4239.37138
-8	0	0	0	0	0
+8	5284.791099	5779.226747	3454.406183	4132.817591	4419.266952
-9	0	0	0	0	0
+9	5454.49993	5934.172483	3508.015495	4187.707665	4506.190539
-10	0	0	0	0	0
+10	5475.166676	6013.611381	3466.428928	4128.8522	4469.308817
-11	-2.46E-13	-2.27E-13	-2.76E-13	-2.46E-13	-2.46E-13
+11	5454.531674	5934.173935	3507.987604	4187.690782	4506.15932
-12	0	0	0	0	0
+12	5284.801666	5779.224351	3454.427086	4132.784357	4419.272509
-13	0	0	0	0	0
+13	5017.934367	5513.213829	3305.732847	3963.880174	4239.413535
-14	0	0	0	0	0
+14	4654.566944	5084.431228	3078.408007	3708.024687	3950.19028
-15	0	0	0	0	0
+15	4171.212329	4563.822301	2773.768912	3352.014865	3537.731576
-16	0	0	0	0	0
+16	3611.771365	3874.313789	2374.488619	2882.259607	3042.623926
-17	0	0	0	0	0
+17	2900.644871	3104.163761	1912.643589	2311.68422	2436.416536
-18	0	0	0	0	0
+18	2065.96027	2201.030343	1369.883775	1654.234501	1746.622789
-19	0	0	0	0	0
+19	1108.743341	1184.332882	732.3360617	883.9902567	934.9289434
-20	-7.47E-13	-7.20E-13	-6.03E-13	-7.14E-13	-7.26E-13
+20	3.23E-13	3.44E-13	3.24E-13	3.14E-13	3.45E-13

1-Span: Shear (Max and Min) Raw Data Results - 110' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	65.89091	46.80364	61.94182	62.61818	63.25	37.70909	50.83636	57.52727	62.89091	68.36364
-1	-1.45455	-0.95385	-0.95474	-0.75978	-0.59581	-0.996	-0.92128	-0.92146	-0.91712	-0.91302
+1	62.19853	44.23327	58.21779	58.56804	57.34674	35.64691	48.05883	54.34516	59.33117	64.40182
-2	-3.2	-2.86646	-2.86842	-2.28242	-1.82897	-2.1912	-2.98372	-2.98421	-2.9791	-2.97427
+2	58.28393	41.51649	54.2382	54.21763	51.79589	33.47382	45.12479	50.97606	55.55409	60.18954
-3	-5.20633	-4.46031	-4.46316	-3.55129	-2.90659	-3.504	-4.88541	-5.17266	-5.16682	-5.16132
+3	55.05249	39.2525	50.92187	50.59229	47.24647	31.66291	42.67976	48.16847	52.40653	56.6793
-4	-8.68598	-6.76517	-6.37684	-5.35515	-4.47311	-5.67709	-7.5945	-7.92727	-7.92727	-7.92727
+4	51.13226	36.53572	46.94227	46.24187	41.91174	29.48982	39.74572	44.79937	48.62946	52.46702
-5	-11.5857	-9.02916	-8.09583	-7.34909	-6.1951	-7.488	-10.0395	-10.6882	-10.6595	-10.6533
+5	47.8654	34.27173	43.62595	42.61653	38.14181	27.67891	37.30069	41.99178	45.4819	48.95678
-6	-15.4212	-11.7459	-11.2193	-9.74182	-8.32148	-9.66109	-12.9736	-14.0573	-14.1648	-14.158
+6	43.94516	31.55495	39.64636	38.08485	34.00566	25.50582	34.36665	38.62268	41.70482	44.7445
-7	-18.6834	-14.0099	-14.1732	-12.0505	-10.3827	-11.472	-15.4186	-16.8649	-17.3124	-17.5414
+7	40.66821	29.29096	36.16421	34.4595	30.60886	23.69491	31.92162	35.81509	38.55726	41.23427
-8	-22.6909	-16.7267	-17.9255	-15.6267	-13.5583	-13.6451	-18.3526	-20.234	-21.0894	-21.7537
+8	36.75361	26.57418	32.18461	30.10909	26.59271	21.52182	28.98758	32.41408	34.64884	36.84647
-9	-25.8602	-18.9907	-21.2418	-18.7082	-16.2969	-15.456	-20.7977	-23.0416	-24.237	-25.2639
+9	33.43968	24.19699	28.86829	26.48375	23.29591	19.62036	26.4203	29.49802	31.47525	33.33624
-10	-29.7748	-21.7075	-25.2214	-22.497	-19.7225	-17.6291	-23.7317	-26.4107	-28.0141	-29.4762
+10	29.41372	21.48021	24.88869	22.13334	19.39975	17.44727	23.48626	26.12891	27.69818	29.12396
-11	-33.0369	-23.9715	-28.5378	-26.1223	-22.9693	-19.44	-26.1767	-29.2183	-31.1616	-32.9865
+11	26.15155	19.21622	21.57237	19.01543	16.57274	15.63636	21.04122	23.32132	24.55061	25.61372
-12	-36.9516	-26.8015	-32.5173	-30.4727	-26.9254	-21.7036	-29.233	-32.6959	-34.9647	-37.1987
+12	22.23695	16.49944	17.59277	15.31758	13.28651	13.46327	18.10719	19.95222	20.77354	21.40143
-13	-40.2137	-29.0654	-35.8337	-34.0981	-30.2722	-23.5145	-31.6781	-35.5354	-38.2437	-40.8845
+13	18.97478	14.23545	14.4676	12.30347	10.60783	11.65236	15.66216	17.14463	17.62598	17.8912
-14	-44.2397	-31.7822	-39.9791	-38.4485	-34.3484	-25.6876	-34.6121	-38.9045	-42.0207	-45.0968
+14	15.06017	11.51867	10.92293	9.541815	8.141483	9.479274	12.72812	13.77553	13.84891	13.8421
-15	-47.5536	-34.0462	-43.2954	-42.2339	-37.7952	-27.4985	-37.0571	-41.7121	-45.1683	-48.607
+15	11.92727	9.254687	8.32251	7.547877	6.369495	7.668364	10.28309	10.96794	10.93698	10.9309
-16	-51.4682	-36.763	-47.275	-46.6055	-42.3122	-29.6716	-39.9912	-45.0812	-48.9454	-52.8193
+16	8.365044	6.537905	6.216841	5.155152	4.303111	5.495274	7.349048	7.7	7.7	7.7
-17	-54.7304	-39.027	-50.5913	-50.2309	-46.7948	-31.4825	-42.4362	-47.8888	-52.0929	-56.3295
+17	5.465337	4.619077	4.622105	3.677797	3.016665	3.684363	5.074843	5.398222	5.392438	5.386976
-18	-58.645	-41.7438	-54.5709	-54.5813	-52.2541	-33.6556	-45.3702	-51.2579	-55.87	-60.5418
+18	3.04422	2.706462	2.708423	2.15515	1.723509	2.0912	2.792813	2.793302	2.78819	2.783366
-19	-61.9072	-44.0077	-57.8873	-58.2066	-56.8535	-35.4665	-47.8153	-54.0655	-59.0176	-64.052
+19	1.594371	1.112617	1.113682	0.886279	0.695881	1.0952	1.07463	1.074845	1.070539	1.066474
-20	-65.8218	-46.7245	-61.8668	-62.557	-63.0633	-37.6396	-50.7493	-57.4346	-62.7946	-68.2643
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 110' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	65.89091	62.04545	66.36364	62.29091	74.54545	71.28182	75.36364	32.7678
-1	-1.45455	-1.35462	-1.35462	-1.08386	-1.08386	-1.03068	-1.08493	-1.04413
+1	62.19853	58.69638	62.75694	58.89614	70.43059	66.95747	70.78491	30.9729
-2	-3.2	-4.07107	-4.07107	-3.63362	-3.79493	-3.09659	-3.25957	-2.29709
+2	58.28393	55.165	58.95391	55.3101	66.08386	62.33636	65.89197	29.0635
-3	-5.20633	-6.46248	-6.50505	-6.07865	-6.51163	-4.85915	-5.11902	-3.34121
+3	55.05249	52.22218	55.78472	52.32172	62.46159	58.48543	61.81452	27.47234
-4	-8.68598	-9.99387	-10.3081	-9.43975	-10.4834	-7.41435	-7.83732	-4.71892
+4	51.13226	48.69079	51.98169	48.73568	58.11487	53.86431	56.92157	25.56295
-5	-11.5857	-12.9367	-13.4773	-12.4281	-14.1057	-9.54369	-10.1026	-6.31008
+5	47.8654	45.74797	48.8125	45.7473	54.4926	50.01339	52.84412	23.97178
-6	-15.4212	-16.4681	-17.2803	-16.0142	-18.4524	-12.3614	-13.012	-8.21948
+6	43.94516	42.21659	45.00947	42.16126	50.14588	45.39228	47.95118	22.06239
-7	-18.6834	-19.4109	-20.4495	-19.0025	-22.0747	-15.8045	-16.6364	-9.81064
+7	40.66821	39.27376	41.84028	39.17289	46.52361	41.3488	43.66985	20.47123
-8	-22.6909	-22.9423	-24.2525	-22.5886	-26.4214	-20.17	-21.2452	-11.72
+8	36.75361	35.74238	38.03725	35.58684	42.17689	36.72769	38.77691	18.56183
-9	-25.8602	-25.8851	-27.4217	-25.577	-30.0437	-24.0209	-25.3227	-13.3112
+9	33.43968	32.65242	34.70959	32.44905	38.3735	32.87676	34.69946	16.97067
-10	-29.7748	-29.4165	-31.2247	-29.163	-34.3904	-28.642	-30.2156	-15.2206
+10	29.41372	29.12103	30.90657	28.863	34.02678	28.25565	29.80652	15.06127
-11	-33.0369	-32.3593	-34.3939	-32.1514	-38.0127	-32.4929	-34.2931	-16.8118
+11	26.15155	26.17821	27.73738	25.87463	30.40451	24.40472	25.72907	13.47011
-12	-36.9516	-36.0378	-38.3554	-35.8868	-42.5405	-37.1141	-39.186	-18.7211
+12	22.23695	22.64682	23.93434	22.28859	26.05779	19.78361	20.83612	11.56072
-13	-40.2137	-38.9807	-41.5246	-38.8752	-46.1628	-40.965	-43.2635	-20.3123
+13	18.97478	19.704	20.76515	19.30021	22.43552	16.14773	16.99761	9.969555
-14	-44.2397	-42.512	-45.3277	-42.4613	-50.5095	-45.7786	-48.3603	-22.2217
+14	15.06017	16.17262	16.96212	15.71416	18.08879	12.01591	12.64833	8.06016
-15	-47.5536	-45.4549	-48.4968	-45.4496	-54.1318	-49.6296	-52.4377	-23.8129
+15	11.92727	13.2298	13.79293	12.72579	14.46652	9.75592	10.32835	6.468999
-16	-51.4682	-48.9862	-52.2999	-49.0357	-58.4785	-54.2507	-57.3307	-25.7223
+16	8.365044	9.698412	9.989898	9.139745	10.1198	7.200716	7.610046	4.559604
-17	-54.7304	-51.9291	-55.4691	-52.024	-62.1008	-58.1016	-61.4081	-27.3134
+17	5.465337	6.755593	6.820708	6.322201	6.782243	5.071381	5.344796	3.445497
-18	-58.645	-55.4605	-59.2721	-55.6101	-66.4475	-62.7227	-66.3011	-29.2228
+18	3.04422	3.843793	3.843793	3.388162	3.5222	2.923866	3.077753	2.192542
-19	-61.9072	-58.4033	-62.4413	-58.5985	-70.0698	-66.5736	-70.3785	-30.814
+19	1.594371	1.580086	1.580086	1.264271	1.264271	1.20227	1.265547	1.148413
-20	-65.8218	-61.9347	-66.2443	-62.1845	-74.4165	-71.1948	-75.2715	-32.7234
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 110' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**65.89091**	***124.697***	***133.5113***	***82.09091***	***99.05455***	***104.9091***
-1	**-1.45455**	***-1.05503***	***-1.0323***	***-1.22067***	***-1.28798***	***-1.08519***
+1	**62.19853**	***116.591***	***124.5416***	***77.00953***	***92.95689***	***98.31339***
-2	**-3.2**	***-3.72402***	***-3.487***	***-3.6673***	***-3.89771***	***-3.79931***
+2	**58.28393**	***107.8905***	***114.8537***	***71.57258***	***86.43255***	***91.24478***
-3	**-5.20633**	***-6.44293***	***-6.00847***	***-5.8349***	***-6.5173***	***-6.51801***
+3	**55.05249**	***100.6401***	***106.7805***	***67.04179***	***80.9956***	***85.35428***
-4	**-8.68598**	***-9.70561***	***-9.5963***	***-8.82522***	***-9.77947***	***-10.0778***
+4	**51.13226**	***91.93958***	***97.09261***	***61.60484***	***74.47126***	***78.28567***
-5	**-11.5857**	***-13.1367***	***-13.6137***	***-11.3172***	***-12.4979***	***-13.2496***
+5	**47.8654**	***84.68916***	***89.01937***	***57.07405***	***69.03431***	***72.39516***
-6	**-15.4212**	***-18.3019***	***-19.1419***	***-14.3075***	***-16.3914***	***-17.0557***
+6	**43.94516**	***75.62613***	***79.33148***	***51.60071***	***62.47762***	***65.04335***
-7	**-18.6834**	***-23.085***	***-24.4928***	***-17.0815***	***-21.0433***	***-20.7273***
+7	**40.66821**	***68.37572***	***71.25824***	***46.87976***	***56.80117***	***59.14152***
-8	**-22.6909**	***-29.9797***	***-31.1549***	***-22.0909***	***-27.0545***	***-27.1218***
+8	**36.75361**	***59.67522***	***61.57035***	***41.44281***	***50.27683***	***52.0729***
-9	**-25.8602**	***-36.3239***	***-36.8523***	***-26.4927***	***-32.3367***	***-32.6361***
+9	**33.43968**	***52.4248***	***53.4971***	***36.91202***	***44.83988***	***46.1824***
-10	**-29.7748**	***-44.4516***	***-44.8556***	***-31.9296***	***-38.861***	***-39.7047***
+10	**29.41372**	***43.7243***	***44.18833***	***31.47507***	***38.31554***	***39.11379***
-11	**-33.0369**	***-51.702***	***-52.6902***	***-36.4604***	***-44.2979***	***-45.5952***
+11	**26.15155**	***36.95631***	***37.51893***	***26.94428***	***32.87859***	***33.22328***
-12	**-36.9516**	***-60.4025***	***-62.3781***	***-41.8974***	***-50.8223***	***-52.6638***
+12	**22.23695**	***29.34337***	***30.59947***	***21.68182***	***26.56364***	***26.57634***
-13	**-40.2137**	***-67.6529***	***-70.4513***	***-46.4282***	***-56.2592***	***-58.5543***
+13	**18.97478**	***23.62707***	***25.04769***	***17.48797***	***21.53102***	***21.13894***
-14	**-44.2397**	***-76.3534***	***-80.1392***	***-52.0553***	***-63.0231***	***-65.6346***
+14	**15.06017**	***17.84737***	***18.65598***	***14.05748***	***16.00962***	***16.73756***
-15	**-47.5536**	***-83.9663***	***-88.2125***	***-56.6224***	***-68.4924***	***-71.808***
+15	**11.92727**	***13.49814***	***14.02829***	***11.56554***	***12.76891***	***13.56575***
-16	**-51.4682**	***-92.6669***	***-97.9004***	***-62.0594***	***-75.0167***	***-78.8766***
+16	**8.365044**	***9.432885***	***9.248106***	***8.575221***	***9.506744***	***9.759578***
-17	**-54.7304**	***-99.9173***	***-105.974***	***-66.5902***	***-80.4537***	***-84.7671***
+17	**5.465337**	***6.713985***	***6.26049***	***6.083285***	***6.788269***	***6.789027***
-18	**-58.645**	***-108.618***	***-115.661***	***-72.0271***	***-86.978***	***-91.8357***
+18	**3.04422**	***3.451295***	***3.234726***	***3.462753***	***3.679528***	***3.526586***
-19	**-61.9072**	***-115.868***	***-123.735***	***-76.5579***	***-92.415***	***-97.7262***
+19	**1.594371**	***1.235733***	***1.16225***	***1.423903***	***1.504747***	***1.265869***
-20	**-65.8218**	***-124.569***	***-133.423***	***-81.9949***	***-98.9393***	***-104.795***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 110' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	342.0919	243.2830	320.1978	322.1242	318.7739	196.0580	264.3235	298.8984	326.3214	354.2100
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	644.7116	459.1717	600.2681	600.3818	586.6807	370.2040	499.0622	563.8250	615.2082	666.7137
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	908.3662	647.6663	840.2109	834.7727	810.5753	522.4380	704.2160	794.7798	875.1242	950.3308
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1132.097	808.7665	1040.0266	1033.5379	993.6940	652.7600	879.8388	992.0391	1100.8778	1192.9149
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1316.298	942.4726	1202.9241	1195.9136	1135.5678	761.1700	1026.1327	1155.4709	1288.5460	1405.9392
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1460.971	1049.0000	1336.7575	1314.3909	1265.3489	847.6680	1142.8419	1290.9083	1438.1287	1578.3580
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1571.306	1128.1679	1430.4634	1415.0939	1356.9989	912.2539	1237.0634	1397.9777	1549.9384	1708.3029
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1653.605	1188.9070	1486.4413	1483.1485	1416.8281	954.9281	1304.6886	1471.0754	1634.3362	1795.7740
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1696.361	1222.6253	1513.7018	1533.5698	1468.3331	975.5800	1342.7288	1510.1213	1683.1703	1848.1692
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1699.894	1228.5941	1500.5759	1539.9181	1479.6860	973.9460	1350.8712	1514.9239	1693.6244	1865.6404
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1696.933	1222.6177	1513.7058	1533.5575	1468.3251	975.5720	1342.7429	1510.1098	1683.1817	1848.1725
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1654.215	1188.9116	1486.4517	1483.1546	1416.8202	954.9600	1304.6975	1471.0901	1634.3413	1795.8006
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1571.742	1128.1677	1430.4621	1415.1000	1356.9942	912.2819	1237.0671	1397.9866	1549.9372	1708.3225
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1461.592	1048.9950	1336.7647	1314.3848	1265.3426	847.6920	1142.8404	1290.9113	1438.1521	1578.3708
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1316.695	942.4966	1202.9252	1195.9228	1135.5693	761.1900	1026.1259	1155.4680	1288.5630	1405.9451
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1132.301	808.7858	1040.0500	1033.5408	993.6891	652.7760	879.8268	992.0305	1100.8887	1192.9140
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	908.434	647.6807	840.2289	834.7910	810.5770	522.4501	704.2317	794.7973	875.1286	950.3372
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	645.0947	459.1814	600.2802	600.3938	586.6782	370.2119	499.0727	563.8367	615.2063	666.7132
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	342.2835	243.2878	320.2039	322.1304	318.7681	196.0620	264.3289	298.9042	326.3277	354.2168
-20	-4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.24E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 110' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	342.0919	322.8301	345.1632	323.9288	387.3682	368.2661	389.3170	170.3509
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	644.7116	610.0521	651.9792	611.6983	730.9070	689.9359	729.2969	321.4488
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	908.3662	861.6659	920.4479	863.3084	1030.9302	965.0096	1019.9396	453.2937
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1132.097	1077.6716	1150.5694	1078.9458	1287.3799	1193.7855	1261.5855	565.8854
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1316.298	1258.0692	1342.4851	1258.6327	1500.0000	1393.1396	1472.9996	659.2241
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1460.971	1402.9524	1496.2381	1402.1605	1683.7326	1551.6819	1641.3783	733.3097
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1571.306	1512.3973	1611.6438	1521.1088	1823.6356	1670.7102	1766.6945	788.1422
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1653.605	1589.9693	1699.9078	1604.6450	1919.7094	1752.4866	1853.8866	823.7218
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1696.361	1640.3370	1751.6919	1652.0218	1971.9535	1787.6665	1891.7413	840.0481
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1699.894	1654.7744	1764.8066	1662.8712	1980.0000	1775.9223	1879.9137	837.3688
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1696.933	1640.3455	1751.7048	1652.0406	1971.9845	1787.6677	1891.7421	840.0580
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1654.215	1589.9713	1699.9138	1604.6574	1919.7326	1752.4965	1853.8965	823.7305
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1571.742	1512.3928	1611.6428	1521.1148	1823.6511	1670.7131	1766.6969	788.1500
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1461.592	1402.9415	1496.2302	1402.1602	1683.7403	1551.6779	1641.3734	733.3163
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1316.695	1258.1014	1342.4701	1258.6259	1500.0001	1393.1596	1473.0200	659.2296
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1132.301	1077.6975	1150.5973	1078.9326	1287.3721	1193.7822	1261.5822	565.8898
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	908.434	861.6852	920.4687	863.3276	1030.9147	965.0306	1019.9618	453.2970
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	645.0947	610.0650	651.9930	611.7110	730.9225	689.9500	729.3117	321.4509
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	342.2835	322.8366	345.1702	323.9353	387.3761	368.2730	389.3244	170.3520
-20	-4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.24E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 110' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	342.0919	641.2505	684.9790	423.5524	511.2629	540.7237
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	644.7116	1194.8936	1273.0080	792.2823	956.7387	1010.1722
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	908.3662	1677.6677	1795.3499	1106.1895	1337.0097	1409.1486
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1132.097	2088.9489	2240.7877	1373.3145	1667.0032	1759.7500
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1316.298	2412.5000	2639.5758	1604.2378	1938.6855	2046.1105
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1460.971	2692.0450	2940.6778	1780.4597	2144.5807	2284.6533
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1571.306	2902.1932	3188.6699	1911.9294	2292.5822	2451.9210
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1653.605	3056.5593	3342.5256	1997.9214	2390.2936	2555.9670
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1696.361	3154.7137	3432.1414	2028.9274	2422.0403	2606.2409
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1699.894	3166.6667	3478.0864	2004.8750	2388.0001	2584.9097
-11	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1696.933	3154.7320	3432.1422	2028.9113	2422.0305	2606.2229
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1654.215	3056.5655	3342.5242	1997.9335	2390.2744	2555.9702
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1571.742	2902.2177	3188.6720	1911.9334	2292.5854	2451.9454
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1461.592	2692.0572	2940.6774	1780.4558	2144.6065	2284.6676
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1316.695	2412.4999	2639.5733	1604.2620	1938.7015	2046.1143
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1132.301	2088.9366	2240.7830	1373.3306	1667.0096	1759.7594
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	908.434	1677.6431	1795.3521	1106.2138	1337.0065	1409.1478
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	645.0947	1194.8874	1273.0077	792.2983	956.7580	1010.1925
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	342.2835	641.2628	684.9814	423.5605	511.2726	540.7339
-20	-4.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	2.24E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 120' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	222.0259976	181.9154135	245.6285966	1.20E+02	1.29E+02	120.7241	144.6375	139.6716	147.691	63.55947615
-1	-3.567667834	-3.526935811	-3.210901047	-2.79615	-2.79615	-2.2372	-2.2372	-2.12705	-2.239	-2.030566904
+1	206.8768087	169.3279798	225.4748957	113.6823	121.6236	114.1874	136.7142	131.3332	138.862	60.10381251
-2	-8.148001727	-10.35136749	-7.333201541	-7.99997	-7.99997	-7.29084	-7.67238	-6.0843	-6.40453	-4.430326573
+2	191.0930684	156.3155469	203.9829707	106.9173	114.3382	107.3178	128.3875	122.4815	129.4896	56.4467883
-3	-14.43816852	-16.43388525	-13.05359672	-12.9903	-13.1861	-12.0467	-12.9567	-9.7259	-10.2578	-6.460890481
+3	178.1137783	145.6130311	186.0747007	101.1931	108.1737	101.5051	121.3417	114.9915	121.5591	53.3523832
-4	-23.75638561	-23.98631649	-21.46199775	-19.7553	-20.4714	-18.8077	-21.1025	-14.6204	-15.4647	-9.468410955
+4	163.0458074	133.3285981	165.2379738	94.42819	100.8884	94.6355	113.015	106.1398	112.1867	49.69535975
-5	-32.16791162	-30.68483425	-29.06347464	-25.4795	-26.6359	-24.6205	-28.1482	-18.7619	-19.8705	-12.56281835
+5	150.6039852	123.2420789	148.1633982	88.70398	94.72382	88.82277	105.9692	98.64988	104.2562	46.60095236
-6	-43.21965314	-38.96526545	-39.03480076	-32.2445	-33.9213	-31.49	-36.475	-25.5133	-26.8561	-16.21984394
+6	136.2640177	111.6856512	128.8895968	81.93902	87.43848	81.95319	97.64246	89.79816	94.88377	42.94392676
-7	-52.87912998	-46.27978545	-47.74927804	-37.9687	-40.0858	-37.3028	-43.5207	-32.264	-33.9653	-19.31425108
+7	124.4381966	102.21513	112.8581992	76.21482	81.27396	76.14046	90.59672	81.96778	86.59278	39.84952006
-8	-64.6588722	-55.28821433	-58.37580014	-44.7336	-47.3711	-44.1724	-51.8475	-41.1157	-43.3377	-22.97127214
+8	110.8154161	91.38669834	99.49159672	69.44986	73.98861	69.27087	82.26995	73.11604	77.22036	36.19249677
-9	-74.93434596	-63.21873555	-67.64467247	-50.4578	-53.5357	-49.9851	-58.8932	-48.6057	-51.2682	-26.06567815
+9	99.61594586	82.53218119	89.43515605	63.46547	67.54388	63.19393	74.90396	65.62612	69.28985	33.09809041
-10	-87.44209279	-72.95516326	-78.92639854	-57.2228	-60.821	-56.8547	-67.22	-57.4574	-60.6406	-29.72270374
+10	86.39613451	72.19027334	77.87785989	56.7005	60.25854	56.32434	66.57718	56.77439	59.91743	29.44106696
-11	-98.3335632	-81.74316111	-88.74967381	-62.947	-66.9855	-62.6674	-74.2657	-64.9473	-68.5711	-32.81710767
+11	75.81265396	63.95174845	68.37581776	50.97629	54.09401	50.51161	59.53145	49.28447	51.98692	26.34666167
-12	-111.5693047	-92.20759228	-100.6745944	-69.9722	-74.5511	-69.8012	-82.9128	-73.7991	-77.9435	-36.47413541
+12	63.6689147	54.57932008	57.47372358	44.21134	46.80867	43.64203	51.20468	40.43273	42.61449	22.68963954
-13	-123.0767858	-101.3701169	-111.6927005	-75.6964	-80.7156	-75.6139	-89.9585	-81.289	-85.8741	-39.5685428
+13	53.70143286	46.95680326	48.52608031	38.48713	40.64414	37.8293	44.15895	32.9428	34.68398	19.5952325
-14	-137.3885937	-112.5625448	-130.3596007	-82.4613	-88.001	-82.4835	-98.2853	-90.4812	-95.6069	-43.22556424
+14	42.28569149	38.31237205	38.24853778	31.72217	33.35879	30.95971	35.83218	24.90265	26.21332	15.93820497
-15	-149.5120642	-122.3410623	-146.6681988	-88.1855	-94.1655	-88.2962	-105.331	-97.9711	-103.537	-46.31997168
+15	32.93422327	31.30585062	29.57373531	25.99797	27.19428	25.14698	28.78645	19.13722	20.26984	12.84379937
-16	-164.2038151	-134.2614916	-166.8281962	-94.9505	-101.451	-95.1658	-113.658	-106.823	-112.91	-49.97699446
+16	22.96353103	23.38942011	20.78096749	19.23301	19.90893	18.2774	20.45968	14.24273	15.06294	9.1867767
-17	-176.9432843	-144.6560147	-184.4592715	-100.675	-107.615	-100.979	-120.704	-114.313	-120.84	-53.07139909
+17	15.07888162	16.99890474	13.55616241	13.5088	13.7444	12.4775	13.43534	10.10124	10.6571	6.64527401
-18	-192.3630247	-157.3044446	-205.6235981	-107.44	-114.901	-107.848	-129.03	-123.164	-130.213	-56.72842792
+18	7.759098043	9.81047411	6.999941267	7.598193	7.598193	6.856933	7.190258	5.778955	6.083111	4.245515427
-19	-205.7185057	-168.3149604	-223.8090754	-113.164	-121.065	-113.661	-136.076	-130.654	-138.143	-59.8228328
+19	3.893773485	4.03595123	3.492275632	3.194966	3.194966	2.556306	2.556306	2.430522	2.558445	2.214946526
-20	-221.8662449	-181.6913892	-245.6285966	-1.20E+02	-1.28E+02	-120.53	-144.403	-139.506	-147.516	-63.4798556
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 120' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	90.77449326	121.2641	123.5526	124.8417375	73.09014972	98.54635	111.6601	122.3473	1.33E+02
-1	-1.968814994	-1.97032	-1.56787	-1.217497979	-1.93736936	-1.90162	-1.90192	-1.89477	-1.888
+1	85.82482348	114.0832	115.7385	113.6990889	69.12065357	93.19815	105.5311	115.489	125.6728
-2	-5.632690015	-5.63598	-4.48441	-3.548307269	-4.226987113	-5.94922	-5.95003	-5.94162	-5.97835
+2	80.62045556	106.4603	107.4055	102.2593913	64.95771097	87.57757	99.07722	108.2537	117.6039
-3	-8.732890597	-8.73769	-6.95224	-5.600279771	-7.158065987	-9.64822	-10.3487	-10.3391	-10.33
+3	76.21676146	100.0102	100.3545	93.08326805	61.43522705	82.82171	93.61623	102.1315	110.7764
-4	-13.56562086	-12.4034	-10.8797	-8.882054426	-11.32100736	-15.1602	-15.9229	-15.8964	-15.8858
+4	71.012392	92.38728	92.02159	83.08317618	57.27228568	77.20113	87.16233	94.89621	102.7075
-5	-17.96931325	-16.3268	-14.7577	-12.15215301	-14.84349833	-19.9161	-21.3839	-21.3138	-21.3037
+5	66.60869742	85.93713	84.97063	74.7013189	53.74979594	72.44526	81.70134	88.77403	95.87998
-6	-23.17368271	-22.9741	-19.5138	-16.245654	-19.00643847	-25.5367	-27.8378	-28.389	-28.538
+6	61.40433168	78.31423	76.31718	65.87241812	49.58685212	66.8247	75.24744	81.53873	87.81111
-7	-27.57737669	-28.7672	-24.9088	-20.81922988	-22.52892744	-30.2925	-33.2988	-34.5111	-35.3655
+7	57.00063403	71.5709	69.2662	59.50265032	46.06436427	62.06883	69.78645	75.41654	80.9836
-8	-32.78174473	-36.3901	-31.9918	-26.91489796	-26.69186632	-35.9131	-39.7527	-41.7464	-43.4343
+8	51.79626963	63.94799	60.93326	52.06900386	41.90142448	56.44826	63.33255	68.05011	72.60438
-9	-37.18543931	-42.8402	-37.9851	-32.09193651	-30.21435719	-40.669	-45.2137	-47.8686	-50.2619
+9	47.19240757	57.49784	53.88229	45.85874295	38.21882601	51.47621	57.62333	61.78078	65.77687
-10	-42.38980505	-50.4631	-46.1922	-39.16821914	-34.37729855	-46.2895	-51.6676	-55.1039	-58.3307
+10	41.98803646	49.87494	45.54934	38.61358824	34.05588219	45.85564	51.16943	54.54547	57.70799
-11	-46.79349862	-56.9133	-53.2431	-45.29872979	-37.89978704	-51.0454	-57.1286	-61.2261	-65.1582
+11	37.58434188	43.4248	38.5284	32.56541092	30.53339348	41.09977	45.70843	48.42329	50.88049
-12	-52.1980391	-64.5362	-61.5761	-52.63813451	-42.2228407	-56.8822	-63.8307	-68.6086	-73.2271
+12	32.37997759	35.80189	31.44539	26.4470921	26.37045093	35.4792	39.25453	41.18798	42.81161
-13	-56.60173363	-70.9863	-68.6271	-58.92814585	-45.74532941	-61.638	-69.2917	-74.8619	-80.365
+13	27.97627764	29.35174	25.45207	21.27820358	22.8479617	30.72333	33.79354	35.0658	35.9841
-14	-61.80609721	-78.9024	-76.96	-66.4560505	-49.90827196	-67.2586	-75.7456	-82.0972	-88.4338
+14	22.77191167	22.45024	19.06386	15.86466113	18.68502278	25.10276	27.33964	27.8305	27.91523
-15	-66.20979179	-85.3526	-84.3315	-73.9442242	-53.43076068	-72.0145	-81.2066	-88.2194	-95.2614
+15	18.36821949	16.72772	15.10925	12.45254691	15.16253522	20.34689	21.87864	21.80464	21.79462
-16	-71.41416314	-92.9755	-92.6644	-83.85005591	-57.59369896	-77.635	-87.6605	-95.4547	-103.33
+16	13.16385376	12.12051	10.52612	8.587879933	10.99959203	14.72632	15.42474	15.40217	15.39158
-17	-75.81785602	-99.4256	-99.7154	-92.31166171	-61.11618704	-82.3909	-93.1215	-101.577	-110.158
+17	9.013717814	9.018793	7.175949	5.790119786	7.477103564	9.983285	10.74763	10.7381	10.72909
-18	-81.02222166	-107.049	-108.048	-103.1371953	-65.27913054	-88.0115	-99.5754	-108.812	-118.227
+18	5.349844215	5.353137	4.259413	3.365058899	4.050208199	5.611731	5.612539	5.604125	5.640862
-19	-85.42592065	-113.499	-115.099	-112.8169292	-68.80161909	-92.7674	-105.036	-114.934	-125.054
+19	2.249644427	2.251431	1.791577	1.392836872	2.112836924	2.17286	2.173219	2.166115	2.159404
-20	-90.63028479	-121.122	-123.432	-124.461996	-72.96455722	-98.3879	-111.49	-122.17	-1.33E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 120’ Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**0**	**0**	**0**	**0**	**0**
End Shear	**220.6876365**	**237.2078076**	**144.5156**	**174.2832**	**185.003**
-1	**-1.959977685**	**-1.842285453**	**-2.25851**	**-2.38812**	**-2.00779**
+1	**206.6674163**	**221.7076757**	**135.7298**	**163.7402**	**173.5969**
-2	**-6.765948257**	**-6.326143631**	**-6.46017**	**-6.88457**	**-6.88531**
+2	**191.7260614**	**205.073175**	**126.3927**	**152.5358**	**161.4578**
-3	**-11.50695584**	**-10.72221626**	**-10.44**	**-11.6249**	**-11.626**
+3	**179.0833669**	**190.9978154**	**118.4922**	**143.0551**	**151.1864**
-4	**-17.37814257**	**-17.63350094**	**-15.5754**	**-17.2271**	**-17.9934**
+4	**164.1420017**	**174.3632992**	**109.1551**	**131.8507**	**139.0474**
-5	**-23.98709777**	**-24.95235131**	**-19.9207**	**-21.9675**	**-23.5242**
+5	**151.499319**	**160.287936**	**101.2546**	**122.37**	**128.7759**
-6	**-33.32544909**	**-35.30228659**	**-25.0561**	**-30.2606**	**-30.0606**
+6	**136.1084009**	**143.6534265**	**91.91753**	**111.1655**	**116.5857**
-7	**-42.63339817**	**-44.98157401**	**-31.6073**	**-38.7933**	**-38.6902**
+7	**123.3406151**	**129.5780814**	**83.65784**	**101.2539**	**105.8985**
-8	**-55.57646522**	**-56.42072689**	**-40.566**	**-49.5437**	**-50.141**
+8	**108.3992498**	**112.9435709**	**74.3208**	**90.04946**	**93.75947**
-9	**-67.02650953**	**-67.92525185**	**-48.4666**	**-59.0244**	**-60.1465**
+9	**95.75655346**	**98.86820774**	**66.42023**	**80.56878**	**83.48798**
-10	**-81.9678722**	**-83.5139022**	**-57.8036**	**-70.2288**	**-72.2855**
+10	**80.81520923**	**82.23369834**	**57.0832**	**69.36434**	**71.34896**
-11	**-94.61055492**	**-97.58924899**	**-65.7042**	**-79.7095**	**-82.557**
+11	**68.17251071**	**68.98181577**	**49.18262**	**59.88365**	**61.07748**
-12	**-109.5519207**	**-114.223763**	**-75.0412**	**-90.914**	**-94.696**
+12	**54.567891**	**55.54035745**	**39.84559**	**48.67921**	**49.2765**
-13	**-122.1945967**	**-128.299124**	**-82.9418**	**-100.395**	**-104.967**
+13	**43.50553086**	**45.86108334**	**32.25174**	**39.56659**	**39.5496**
-14	**-137.2610655**	**-144.9336348**	**-92.6379**	**-112.03**	**-117.522**
+14	**32.60502672**	**34.42193032**	**24.65986**	**29.4826**	**29.55626**
-15	**-150.3533216**	**-159.0089958**	**-100.539**	**-121.511**	**-127.845**
+15	**24.70335314**	**25.72173736**	**20.31455**	**22.3971**	**24.02547**
-16	**-165.2946861**	**-175.6434882**	**-109.876**	**-132.715**	**-139.984**
+16	**16.80180822**	**16.97576518**	**15.17918**	**16.79488**	**17.48908**
-17	**-177.9373669**	**-189.7188568**	**-117.776**	**-142.196**	**-150.255**
+17	**11.93670939**	**11.12166534**	**10.83386**	**12.05454**	**12.05568**
-18	**-192.8787289**	**-206.3533635**	**-127.113**	**-153.4**	**-162.394**
+18	**6.333697592**	**5.926311391**	**6.135986**	**6.524094**	**6.453054**
-19	**-205.5214091**	**-220.4287318**	**-135.014**	**-162.881**	**-172.666**
+19	**2.246480739**	**2.10858277**	**2.580728**	**2.731818**	**2.294253**
-20	**-220.4627712**	**-237.0632353**	**-144.351**	**-174.085**	**-184.805**
+20	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.69E-13	*-4.81E-13*	*-6.98E-13*	-4.36E-13	-4.80E-13	-3.47E-13	-4.08E-13	-4.79E-13	-5.04E-13	-2.97E-13
End Shear	8.53E-13	*4.88E-13*	*7.76E-13*	4.85E-13	5.35E-13	3.66E-13	4.07E-13	4.74E-13	5.03E-13	2.45E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	1258.816853	*1033.523879*	*1368.649774*	682.0938782	729.7413874	685.1244311	820.2854014	787.9991879	833.1722932	360.6228751
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	2377.070484	*1957.182051*	*2530.079996*	1289.252753	1378.78354	1294.154966	1548.335777	1477.948385	1562.526949	680.7371876
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	3355.988008	*2770.974557*	*3541.267803*	1821.476689	1947.126532	1827.091654	2184.921128	2069.847748	2188.064133	960.3428975
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	4193.253184	*3474.90133*	*4365.345646*	2278.765627	2434.770292	2284.448362	2729.590564	2564.516906	2710.697207	1199.440039
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	4889.819548	*4068.962358*	*4980.527951*	2661.119434	2842.144613	2665.950095	3182.025	2993.929684	3166.01743	1398.028571
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	5445.687304	*4553.157813*	*5455.522841*	2968.865492	3169.007628	2971.357895	3571.047967	3336.672849	3529.904977	1556.10858
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	5873.02638	*4927.487449*	*5838.928026*	3201.846992	3415.171346	3223.009947	3867.835688	3594.880399	3801.923842	1673.679842
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	6186.339886	*5191.951487*	*6045.278363*	3367.099065	3602.251985	3400.009416	4072.38858	3773.062185	3991.754092	1750.742809
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	6358.920763	*5346.549765*	*6044.409175*	3473.627708	3712.235724	3500.914758	4184.706255	3853.193692	4077.7664	1787.296882
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	6391.467148	*5390.875063*	*5970.384005*	3504.645621	3740.944473	3525.067362	4204.13006	3834.681677	4059.336305	1783.860569
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	6360.247274	*5346.654255*	*6044.409084*	3473.642847	3712.25886	3500.948252	4184.761509	3853.224234	4077.797689	1787.314595
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	6187.618019	*5192.044618*	*6045.278599*	3367.102675	3602.262672	3400.031552	4072.430045	3773.07988	3991.771782	1750.758658
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	5873.917219	*4927.568717*	*5838.927988*	3201.839003	3415.169528	3223.02072	3867.863433	3594.885718	3801.928425	1673.693687
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	5446.965164	*4553.22781*	*5455.522473*	2968.846059	3168.993505	2971.357279	3571.061767	3336.665469	3529.896114	1556.120229
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	4890.546062	*4069.020358*	*4980.527989*	2661.176925	2842.117922	2665.937973	3182.025234	2993.966083	3166.054573	1398.038404
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	4193.563691	*3474.947794*	*4365.34605*	2278.811728	2434.819944	2284.424757	2729.57664	2564.510902	2710.691201	1199.447946
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	3356.017972	*2771.009442*	*3541.268163*	1821.511321	1947.163847	1827.126034	2184.893482	2069.88568	2188.104296	960.3488669
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	2377.908341	*1957.205277*	*2530.08006*	1289.275653	1378.808185	1294.177756	1548.363398	1477.973495	1562.553537	680.7410992
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	1259.235603	*1033.535643*	*1368.649443*	682.1054671	729.7538464	685.1359737	820.2993859	788.0120942	833.1859604	360.6247442
-20	-9.99E-13	*-7.04E-13*	*-8.98E-13*	-5.51E-13	-5.67E-13	-4.98E-13	-5.39E-13	-5.28E-13	-5.57E-13	-2.91E-13
+20	8.31E-13	*5.95E-13*	*7.89E-13*	5.31E-13	5.78E-13	4.90E-13	6.04E-13	5.33E-13	5.66E-13	2.26E-13

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.31E-13	-4.11E-13	-3.68E-13	-3.26E-13	-3.58E-13	-3.00E-13	-3.13E-13	-3.19E-13	-3.22E-13
End Shear	2.85E-13	4.06E-13	3.57E-13	3.00E-13	2.77E-13	2.87E-13	3.37E-13	3.66E-13	3.57E-13
-1	0	0	0	0	0	0	0	0	0
+1	514.9489409	684.4994018	694.4308115	688.4012364	414.7239214	559.1888716	633.1867423	692.9340242	754.0594671
-2	0	0	0	0	0	0	0	0	0
+2	972.2495019	1284.560459	1296.558097	1259.301914	783.3352787	1056.119101	1194.884087	1307.06842	1420.273186
-3	0	0	0	0	0	0	0	0	0
+3	1371.901706	1800.183305	1806.596766	1738.032686	1105.834087	1490.790724	1685.092164	1858.545124	2023.23736
-4	0	0	0	0	0	0	0	0	0
+4	1713.90548	2231.594942	2239.999622	2127.071317	1382.220258	1863.438772	2104.495196	2337.44448	2539.674849
-5	0	0	0	0	0	0	0	0	0
+5	1998.32616	2584.518461	2595.521374	2452.198513	1612.493878	2174.182595	2452.526023	2736.198909	2991.566662
-6	0	0	0	0	0	0	0	0	0
+6	2225.506931	2874.343934	2858.739618	2708.240357	1796.654902	2422.667736	2740.598212	3054.808575	3357.68423
-7	0	0	0	0	0	0	0	0	0
+7	2395.039253	3079.73092	3079.974254	2916.547277	1934.703299	2622.585347	2967.990634	3293.98029	3634.423337
-8	0	0	0	0	0	0	0	0	0
+8	2524.217865	3205.377659	3230.507584	3055.641169	2026.639306	2766.009126	3123.893961	3473.481165	3821.784352
-9	0	0	0	0	0	0	0	0	0
+9	2596.468488	3268.53174	3339.35754	3120.54938	2072.344712	2847.174076	3208.221655	3577.701696	3934.100992
-10	0	0	0	0	0	0	0	0	0
+10	2610.434479	3246.778892	3355.441302	3142.41274	2071.112553	2865.520349	3220.458491	3601.247991	3971.548211
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	2596.485364	3268.561355	3339.335619	3120.539013	2072.33035	2847.199293	3208.201093	3577.722274	3934.106967
-12	0	0	0	0	0	0	0	0	0
+12	2524.226099	3205.396178	3230.518566	3055.633403	2026.696381	2766.02503	3123.92032	3473.490408	3821.832032
-13	0	0	0	0	0	0	0	0	0
+13	2395.038937	3079.754876	3079.985192	2916.538493	1934.753332	2622.59197	2968.00641	3293.978069	3634.458742
-14	0	0	0	0	0	0	0	0	0
+14	2225.49814	2874.356705	2858.76695	2708.230798	1796.697667	2422.665025	2740.60356	3054.850749	3357.707346
-15	0	0	0	0	0	0	0	0	0
+15	1998.30859	2584.520571	2595.537985	2452.188693	1612.529558	2174.170478	2452.520915	2736.22953	2991.577274
-16	0	0	0	0	0	0	0	0	0
+16	1713.939833	2231.586118	2240.005319	2127.062404	1382.248851	1863.417227	2104.47972	2337.463965	2539.673257
-17	0	0	0	0	0	0	0	0	0
+17	1371.927501	1800.215965	1806.591217	1738.019518	1105.855595	1490.818843	1685.123554	1858.553221	2023.24896
-18	0	0	0	0	0	0	0	0	0
+18	972.2666296	1284.582089	1296.580256	1259.299707	783.3495019	1056.137757	1194.904827	1307.064919	1420.272305
-19	0	0	0	0	0	0	0	0	0
+19	514.957693	684.5105151	694.4420133	688.3906161	414.7309902	559.1983313	633.197266	692.945633	754.0490395
-20	-3.59E-13	-4.70E-13	-3.78E-13	-4.32E-13	-3.39E-13	-3.97E-13	-4.41E-13	-4.84E-13	-4.76E-13
+20	4.23E-13	4.47E-13	4.49E-13	3.42E-13	2.69E-13	3.90E-13	3.97E-13	4.03E-13	4.27E-13

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.64E-13	-5.82E-13	-3.69E-13	-4.85E-13	-5.10E-13
End Shear	5.29E-13	6.41E-13	4.70E-13	5.68E-13	5.68E-13
-1	0	0	0	0	0
+1	1240.004498	1330.246054	814.3786376	982.4413626	1041.581195
-2	0	0	0	0	0
+2	2315.004408	2477.551578	1525.331679	1840.772008	1948.699409
-3	0	0	0	0	0
+3	3253.599948	3495.877676	2132.85907	2576.251949	2723.006237
-4	0	0	0	0	0
+4	4054.508382	4365.939309	2651.015425	3214.174313	3402.173287
-5	0	0	0	0	0
+5	4689.912517	5139.920955	3097.798124	3740.914142	3959.151066
-6	0	0	0	0	0
+6	5235.438633	5729.643179	3441.522128	4143.543453	4422.126042
-7	0	0	0	0	0
+7	5647.158762	6212.181357	3699.061202	4435.877778	4750.637903
-8	0	0	0	0	0
+8	5948.717905	6516.614407	3869.33504	4630.84372	4958.708167
-9	0	0	0	0	0
+9	6139.165939	6694.599331	3935.976842	4701.253148	5062.501119
-10	0	0	0	0	0
+10	6166.766806	6781.719228	3898.692049	4647.552143	5031.242943
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	6139.195791	6694.600476	3935.950648	4701.237488	5062.497354
-12	0	0	0	0	0
+12	5948.727952	6516.611837	3869.354725	4630.812129	4958.713138
-13	0	0	0	0	0
+13	5647.198681	6212.184716	3699.067847	4435.883136	4750.67747
-14	0	0	0	0	0
+14	5235.458651	5729.64259	3441.515574	4143.585141	4422.148905
-15	0	0	0	0	0
+15	4689.912687	5139.916695	3097.837507	3740.940314	3959.157504
-16	0	0	0	0	0
+16	4054.488312	4365.931278	2651.041587	3214.184768	3402.188384
-17	0	0	0	0	0
+17	3253.559681	3495.880891	2132.898532	2576.246885	2723.005273
-18	0	0	0	0	0
+18	2314.994504	2477.551101	1525.357674	1840.803174	1948.732281
-19	0	0	0	0	0
+19	1240.024294	1330.249525	814.391901	982.4572013	1041.597972
-20	-5.64E-13	-6.45E-13	-6.95E-13	-7.88E-13	-7.35E-13
+20	6.42E-13	4.89E-13	4.98E-13	5.69E-13	5.61E-13

1-Span: Shear (Max and Min) Raw Data Results - 120' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**66.4**	***47.07***	***62.88***	***64.06667***	***67.725***	***37.9***	***51.1***	***57.9***	***63.44167***	***69.125***
-1	**-1.46667**	***-1.0209***	***-1.02169***	***-0.813***	***-0.63814***	***-1.0046***	***-0.98606***	***-0.98622***	***-0.98251***	***-0.979***
+1	**62.71227**	***44.50341***	***59.15646***	***60.01476***	***61.6562***	***35.84167***	***48.32675***	***54.72187***	***59.88541***	***65.16606***
-2	**-3.2**	***-2.92076***	***-2.92247***	***-2.32533***	***-1.87095***	***-2.19185***	***-3.08489***	***-3.08532***	***-3.08095***	***-3.1***
+2	**58.82409**	***41.80475***	***55.2037***	***55.69381***	***55.42592***	***33.68302***	***45.41228***	***51.37528***	***56.13363***	***60.98205***
-3	**-5.57172**	***-4.52833***	***-4.53082***	***-3.605***	***-2.96909***	***-3.71173***	***-5.00297***	***-5.36617***	***-5.3612***	***-5.35648***
+3	**55.56339**	***39.52127***	***51.85905***	***52.03762***	***50.42893***	***31.85648***	***42.94618***	***48.54355***	***52.95904***	***57.44173***
-4	**-9.02788**	***-7.03429***	***-6.43161***	***-5.64152***	***-4.72726***	***-5.87037***	***-7.86115***	***-8.25664***	***-8.24286***	***-8.23736***
+4	**51.66995**	***36.8226***	***47.90629***	***47.71667***	***44.9774***	***29.69784***	***40.0317***	***45.19696***	***49.20727***	***53.25771***
-5	**-12.0464**	***-9.31777***	***-8.46608***	***-7.65243***	***-6.48434***	***-7.69691***	***-10.3272***	***-11.0884***	***-11.052***	***-11.0468***
+5	**48.3755**	***34.53912***	***44.56164***	***44.06048***	***40.41957***	***27.8713***	***37.5656***	***42.36522***	***46.03268***	***49.71739***
-6	**-15.9345**	***-12.0164***	***-11.913***	***-10.1187***	***-8.69568***	***-9.85556***	***-13.2417***	***-14.435***	***-14.7207***	***-14.798***
+6	**44.48207**	***31.84046***	***40.60888***	***39.57333***	***35.6076***	***25.71265***	***34.65113***	***39.01863***	***42.2809***	***45.53337***
-7	**-19.2245**	***-14.2999***	***-14.9169***	***-12.9161***	***-11.156***	***-11.6821***	***-15.7078***	***-17.2667***	***-17.8953***	***-18.3383***
+7	**41.18763**	***29.55698***	***37.11221***	***35.91714***	***32.1204***	***23.88611***	***32.18503***	***36.1869***	***39.10632***	***41.99305***
-8	**-23.1127**	***-16.9986***	***-18.8696***	***-16.589***	***-14.4377***	***-13.8407***	***-18.6223***	***-20.6133***	***-21.6471***	***-22.5223***
+8	**37.28955**	***26.85832***	***33.15944***	***31.59619***	***28.06418***	***21.72747***	***29.27055***	***32.84031***	***35.28655***	***37.64811***
-9	**-26.4027**	***-19.2821***	***-22.2143***	***-19.6967***	***-17.2382***	***-15.6673***	***-21.0884***	***-23.445***	***-24.8217***	***-26.0627***
+9	**33.99955**	***24.47104***	***29.8148***	***27.94***	***24.68699***	***19.8179***	***26.69236***	***29.87987***	***32.03567***	***34.10779***
-10	**-30.2909**	***-21.9807***	***-26.167***	***-23.9524***	***-21.0608***	***-17.8259***	***-24.0029***	***-26.7916***	***-28.5735***	***-30.2467***
+10	**29.96182**	***21.77238***	***25.86204***	***23.61905***	***20.76076***	***17.65926***	***23.77788***	***26.53328***	***28.28388***	***29.92377***
-11	**-33.5809**	***-24.2642***	***-29.5117***	***-27.6086***	***-24.383***	***-19.6525***	***-26.469***	***-29.6233***	***-31.7481***	***-33.787***
+11	**26.67182**	***19.4889***	***22.51739***	***19.97843***	***17.49491***	***15.83272***	***21.31178***	***23.70154***	***25.1093***	***26.38345***
-12	**-37.4691**	***-27.0667***	***-33.4644***	***-31.9295***	***-28.3742***	***-21.8941***	***-29.4955***	***-33.0986***	***-35.5761***	***-37.971***
+12	**22.78364**	***16.79024***	***18.56463***	***16.30562***	***14.18524***	***13.67407***	***18.3973***	***20.35495***	***21.35752***	***22.19944***
-13	**-40.7591**	***-29.3501***	***-36.8091***	***-35.5857***	***-31.8064***	***-23.7207***	***-31.9616***	***-35.9304***	***-38.8187***	***-41.6723***
+13	**19.49363**	***14.50676***	***15.21998***	***13.19786***	***11.40263***	***11.84753***	***15.9312***	***17.52322***	***18.18294***	***18.65912***
-14	**-44.7968**	***-32.0488***	***-40.9139***	***-39.9067***	***-35.9276***	***-25.8793***	***-34.8761***	***-39.277***	***-42.5705***	***-45.8563***
+14	**15.60545**	***11.8081***	***11.6413***	***9.885332***	***8.490673***	***9.688889***	***13.01673***	***14.17663***	***14.43116***	***14.4751***
-15	**-48.0868**	***-34.3323***	***-44.2585***	***-43.729***	***-40.0084***	***-27.7059***	***-37.3422***	***-42.1087***	***-45.7451***	***-49.3966***
+15	**12.31546**	***9.524615***	***8.673955***	***7.834714***	***6.646307***	***7.862346***	***10.55063***	***11.3449***	***11.30653***	***11.30133***
-16	**-51.975**	***-37.0309***	***-48.2113***	***-48.05***	***-45.3949***	***-29.8645***	***-40.2567***	***-45.4553***	***-49.4969***	***-53.5806***
+16	**8.735352**	***6.825955***	***6.284941***	***5.45819***	***4.569756***	***5.703703***	***7.636153***	***7.99831***	***7.986607***	***7.981114***
-17	**-55.265**	***-39.3144***	***-51.5559***	***-51.7062***	***-50.0077***	***-31.691***	***-42.7228***	***-48.287***	***-52.6714***	***-57.1209***
+17	**5.810905**	***4.673953***	***4.676585***	***3.721***	***3.071249***	***3.87716***	***5.17671***	***5.573049***	***5.568112***	***5.563439***
-18	**-59.1532**	***-42.0131***	***-55.5087***	***-56.0271***	***-55.9034***	***-33.8497***	***-45.6373***	***-51.6336***	***-56.4232***	***-61.305***
+18	**3.05697**	***2.774096***	***2.775804***	***2.208666***	***1.773444***	***2.100186***	***2.909894***	***2.910313***	***2.90595***	***2.925***
-19	**-62.4432**	***-44.2966***	***-58.8533***	***-59.6833***	***-61.1752***	***-35.6762***	***-48.1034***	***-54.4653***	***-59.5978***	***-64.8453***
+19	**1.594747**	***1.166526***	***1.167452***	***0.929***	***0.730302***	***1.095586***	***1.12671***	***1.126896***	***1.123212***	***1.119732***
-20	**-66.3314**	***-46.9952***	***-62.8061***	***-64.0043***	***-67.5281***	***-37.8349***	***-51.0178***	***-57.8119***	***-63.3496***	***-69.0293***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 120' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	66.4	62.29167	66.66667	62.6	75	72.425	76.58333	32.95799
-1	-1.46667	-1.44991	-1.44991	-1.16007	-1.16007	-1.10296	-1.16101	-1.05293
+1	62.71227	58.94857	63.06641	59.21048	70.89149	68.10122	72.00521	31.16609
-2	-3.2	-4.14828	-4.14828	-3.78058	-3.97842	-3.15494	-3.32099	-2.29729
+2	58.82409	55.44068	59.28868	55.64834	66.57374	63.51126	67.14526	29.26979
-3	-5.57172	-6.73598	-6.83747	-6.24667	-6.71852	-5.04325	-5.31906	-3.35022
+3	55.56339	52.47247	56.09214	52.63422	62.92027	59.62745	63.03299	27.66522
-4	-9.02788	-10.2439	-10.6152	-9.75252	-10.9424	-7.58122	-8.01903	-4.90973
+4	51.66995	48.96458	52.31442	49.07208	58.60252	55.0375	58.17303	25.76892
-5	-12.0464	-13.2121	-13.8117	-12.7666	-14.5959	-9.72874	-10.3036	-6.5143
+5	48.3755	45.99636	49.11788	46.05796	54.94904	51.15369	54.06077	24.16435
-6	-15.9345	-16.72	-17.5895	-16.3288	-18.9137	-13.2296	-13.9259	-8.4106
+6	44.48207	42.48847	45.34015	42.49582	50.6313	46.56373	49.20081	22.26805
-7	-19.2245	-19.6882	-20.786	-19.3429	-22.5671	-16.7301	-17.6123	-10.0152
+7	41.18763	39.52026	42.14361	39.4817	46.97782	42.50339	44.90162	20.66348
-8	-23.1127	-23.1961	-24.5637	-22.905	-26.8849	-21.3201	-22.4722	-11.9115
+8	37.28955	36.01237	38.36589	35.91956	42.66007	37.91343	40.04167	18.76717
-9	-26.4027	-26.1643	-27.7603	-25.9192	-30.5384	-25.2039	-26.5845	-13.516
+9	33.99955	32.90924	35.02405	32.76844	38.84053	34.02962	35.9294	17.16261
-10	-30.2909	-29.6722	-31.538	-29.4813	-34.8561	-29.7938	-31.4444	-15.4123
+10	29.96182	29.40135	31.24632	29.2063	34.52278	29.43966	31.06945	15.2663
-11	-33.5809	-32.6404	-34.7345	-32.4954	-38.5096	-33.6776	-35.5567	-17.0169
+11	26.67182	26.43313	28.04978	26.19217	30.8693	25.55585	26.95718	13.66174
-12	-37.4691	-36.2832	-38.6576	-36.1946	-42.9934	-38.2676	-40.4167	-18.9132
+12	22.78364	22.92525	24.27206	22.63004	26.55156	20.9659	22.09722	11.76543
-13	-40.7591	-39.2514	-41.8541	-39.2087	-46.6469	-42.1514	-44.5289	-20.5178
+13	19.49363	19.95703	21.07552	19.61592	22.89808	17.08209	17.98495	10.16087
-14	-44.7968	-42.7593	-45.6318	-42.7708	-50.9646	-46.9179	-49.5758	-22.4141
+14	15.60545	16.44914	17.29779	16.05378	18.58034	12.91297	13.59259	8.264561
-15	-48.0868	-45.7275	-48.8284	-45.7849	-54.6181	-50.8017	-53.6881	-24.0187
+15	12.31546	13.48093	14.10126	13.03966	14.92686	9.923369	10.51068	6.659994
-16	-51.975	-49.2354	-52.6061	-49.3471	-58.9359	-55.3917	-58.548	-25.915
+16	8.735352	9.97304	10.32353	9.47752	10.60912	7.385391	7.8107	4.76369
-17	-55.265	-52.2036	-55.8026	-52.3612	-62.5893	-59.2755	-62.6603	-27.5195
+17	5.810905	7.004825	7.126991	6.470056	6.966728	5.237874	5.526107	3.445825
-18	-59.1532	-55.7115	-59.5803	-55.9233	-66.9071	-63.8654	-67.5203	-29.4158
+18	3.05697	3.93995	3.93995	3.555578	3.72842	2.996606	3.154322	2.20146
-19	-62.4432	-58.6797	-62.7769	-58.9375	-70.5606	-67.7492	-71.6325	-31.0204
+19	1.594747	1.65671	1.65671	1.325541	1.325541	1.260318	1.32665	1.148533
-20	-66.3314	-62.1876	-66.5546	-62.4996	-74.8783	-72.3392	-76.4925	-32.9167
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 120' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	66.4	127.6389	137.1936	83.58333	100.8	107
-1	-1.46667	-1.13359	-1.06552	-1.30625	-1.38121	-1.16124
+1	62.71227	119.53	128.2288	78.50189	94.70227	100.403
-2	-3.2	-3.91321	-3.65885	-3.73636	-3.98182	-3.98225
+2	58.82409	110.8884	118.608	73.10164	88.22197	93.38221
-3	-5.57172	-6.65527	-6.2014	-6.03819	-6.72348	-6.72411
+3	55.56339	103.5763	110.4672	68.5322	82.73864	87.44151
-4	-9.02788	-10.051	-10.1987	-9.00833	-9.96364	-10.4068
+4	51.66995	94.93465	100.8463	63.13195	76.25834	80.42068
-5	-12.0464	-13.8734	-14.4317	-11.5215	-12.7053	-13.6056
+5	48.3755	87.62251	92.70557	58.5625	70.775	74.47996
-6	-15.9345	-19.2744	-20.4177	-14.4917	-17.5018	-17.3861
+6	44.48207	78.72088	83.08469	53.16225	64.2947	67.42953
-7	-19.2245	-24.6578	-26.0159	-18.2807	-22.4368	-22.3772
+7	41.18763	71.33639	74.94395	48.3851	58.56212	61.2484
-8	-23.1127	-32.1437	-32.632	-23.4621	-28.6545	-29
+8	37.28955	62.69477	65.32306	42.98485	52.08181	54.22757
-9	-26.4027	-38.7661	-39.2859	-28.0316	-34.1379	-34.7869
+9	33.99955	55.38262	57.18231	38.4154	46.59848	48.28686
-10	-30.2909	-47.4077	-48.3019	-33.4318	-40.6182	-41.8077
+10	29.96182	46.74101	47.56142	33.01515	40.11818	41.26603
-11	-33.5809	-54.7198	-56.4426	-38.0013	-46.1015	-47.7484
+11	26.67182	39.42887	39.89694	28.44571	34.63485	35.32532
-12	-37.4691	-63.3614	-66.0635	-43.4015	-52.5818	-54.7692
+12	22.78364	31.56038	32.12282	23.04545	28.15455	28.5
-13	-40.7591	-70.6736	-74.2042	-47.971	-58.0652	-60.7099
+13	19.49363	25.16225	26.52463	18.65341	22.88409	22.87426
-14	-44.7968	-79.3875	-83.8251	-53.5789	-64.7947	-67.9712
+14	15.60545	18.85774	19.90858	14.2625	17.05182	17.09443
-15	-48.0868	-86.9597	-91.9659	-58.1484	-70.278	-73.9415
+15	12.31546	14.28765	14.87666	11.74931	12.95379	13.89559
-16	-51.975	-95.6013	-101.587	-63.5486	-76.7583	-80.9623
+16	8.735352	9.717645	9.818256	8.779167	9.713638	10.11514
-17	-55.265	-102.913	-109.728	-68.1181	-82.2417	-86.903
+17	5.810905	6.903823	6.432426	6.265971	6.97197	6.972634
-18	-59.1532	-111.555	-119.348	-73.5183	-88.722	-93.9239
+18	3.05697	3.663214	3.427595	3.548864	3.773334	3.732246
-19	-62.4432	-118.867	-127.489	-78.0878	-94.2053	-99.8646
+19	1.594747	1.299295	1.219539	1.492613	1.579999	1.326925
-20	-66.3314	-127.509	-137.11	-83.488	-100.686	-106.885
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.42E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	376.2736	267.0205	354.9388	360.0886	373.9334	215.0500	289.9605	328.3312	359.3124	391.0083
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	709.4782	504.1480	666.0931	672.3143	685.1519	406.1889	547.6376	619.5925	677.7643	736.4652
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1000.141	711.3828	933.4630	936.7886	946.7904	573.4167	773.0312	873.7839	963.7258	1049.1249
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1247.267	888.7246	1157.1662	1161.5243	1160.1336	716.7333	966.2633	1091.2601	1212.0531	1316.9172
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1451.265	1036.2075	1340.1703	1345.8757	1338.5499	836.1389	1127.3957	1271.7273	1418.8224	1551.2402
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1612.136	1154.0093	1490.4558	1482.3643	1479.3564	931.6333	1256.2446	1421.1036	1584.0335	1741.0859
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1735.109	1241.9182	1596.9567	1597.0828	1593.6240	1003.2166	1359.9094	1539.0151	1708.0530	1884.5856
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1826.415	1308.9022	1662.1092	1675.1400	1670.2156	1050.8889	1434.2801	1619.8569	1801.1310	1981.7394
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1874.578	1346.3669	1694.8570	1731.5829	1706.5526	1074.5889	1476.3672	1663.5840	1855.1733	2039.9798
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1879.9	1353.6088	1683.5773	1739.9229	1718.7829	1073.9500	1485.8804	1669.9292	1867.3829	2059.3976
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1875.148	1346.3756	1694.8724	1731.5715	1706.5473	1074.5815	1476.3802	1663.5733	1855.1840	2039.9829
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1826.964	1308.9065	1662.1188	1675.1457	1670.2116	1050.9185	1434.2883	1619.8705	1801.1358	1981.7641
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1735.492	1241.9180	1596.9691	1597.0885	1593.6194	1003.2426	1359.9129	1539.0233	1708.0519	1884.6040
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1612.685	1154.0047	1490.4624	1482.3785	1479.3514	931.6555	1256.2432	1421.1063	1584.0554	1741.0979
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1451.577	1036.1984	1340.1714	1345.8844	1338.5448	836.1574	1127.3894	1271.7246	1418.8382	1551.2457
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1247.4	888.7425	1157.1616	1161.5273	1160.1290	716.7482	966.2521	1091.2521	1212.0632	1316.9164
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1000.154	711.3962	933.4799	936.7857	946.7836	573.4278	773.0458	873.8001	963.7300	1049.1309
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	709.8382	504.1569	666.1043	672.3258	685.1508	406.1963	547.6473	619.6032	677.7625	736.4648
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	376.4535	267.0250	354.9445	360.0944	373.9279	215.0537	289.9654	328.3367	359.3185	391.0029
-20	-3.89E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.23E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.42E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	376.2736	353.6914	378.3984	355.2629	425.3489	408.6073	432.0313	186.9966
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	709.4782	668.5262	714.9513	671.0682	802.8705	766.3720	810.2292	352.9879
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1000.141	944.5044	1009.6586	947.4159	1132.9640	1073.2941	1134.5938	497.9740
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1247.267	1181.6259	1262.5202	1184.5727	1415.3957	1329.7988	1405.5988	621.9549
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1451.265	1379.8908	1473.7592	1382.3957	1650.0000	1552.4655	1641.6995	724.9306
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1612.136	1539.4688	1643.2500	1540.7612	1851.7231	1730.1907	1830.3889	806.9010
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1735.109	1660.2785	1770.8952	1671.2522	2005.6187	1864.0811	1971.4409	867.8661
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1826.415	1745.9679	1867.9035	1763.0331	2111.6871	1956.4751	2069.8751	907.8262
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1874.578	1801.2070	1924.9343	1815.3564	2169.9281	1998.0263	2114.4757	926.7809
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1879.9	1817.2910	1939.8208	1827.8804	2180.0000	1988.4271	2104.9190	924.9990
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1875.148	1801.2149	1924.9463	1815.3737	2169.9567	1998.0421	2114.4919	926.7900
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1826.964	1745.9698	1867.9091	1763.0446	2111.7086	1956.4843	2069.8843	907.8344
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1735.492	1660.2743	1770.8942	1671.2578	2005.6331	1864.0839	1971.4433	867.8733
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1612.685	1539.4587	1643.2427	1540.7608	1851.7302	1730.1869	1830.3843	806.9070
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1451.577	1379.9206	1473.7454	1382.3894	1650.0001	1552.4844	1641.7187	724.9357
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1247.4	1181.6498	1262.5460	1184.5604	1415.3885	1329.7956	1405.5956	621.9590
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1000.154	944.5223	1009.6779	947.4338	1132.9497	1073.3138	1134.6146	497.9771
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	709.8382	668.5381	714.9641	671.0800	802.8848	766.3850	810.2430	352.9899
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	376.4535	353.6974	378.4049	355.2688	425.3562	408.6140	432.0384	186.9975
-20	-3.89E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.23E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 120' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.42E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.34E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	376.2736	717.1802	769.3731	471.0114	568.2136	602.4183
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	709.4782	1338.9268	1432.9390	882.2046	1064.6455	1127.0673
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1000.141	1881.7813	2021.9073	1233.5796	1490.0243	1574.9024
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1247.267	2345.0020	2525.1239	1533.2651	1858.9788	1967.7116
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1451.265	2712.5000	2972.7709	1791.6704	2163.6288	2289.8502
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1612.136	3028.0154	3313.8480	1990.4697	2396.4971	2557.6206
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1735.109	3266.1416	3592.9331	2139.4223	2565.5742	2747.6217
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1826.415	3440.5540	3769.0078	2237.9034	2678.3364	2867.9631
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	1874.578	3550.7033	3871.9487	2276.4470	2719.0591	2927.9937
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	1879.9	3566.6667	3922.3362	2254.8826	2688.0001	2909.9149
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	1875.148	3550.7205	3871.9494	2276.4318	2719.0500	2927.9915
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1826.964	3440.5598	3769.0063	2237.9148	2678.3182	2867.9660
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1735.492	3266.1647	3592.9351	2139.4262	2565.5773	2747.6446
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1612.685	3028.0270	3313.8477	1990.4659	2396.5212	2557.6338
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1451.577	2712.5001	2972.7685	1791.6932	2163.6439	2289.8540
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1247.4	2344.9903	2525.1193	1533.2803	1858.9848	1967.7203
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1000.154	1881.7581	2021.9091	1233.6024	1490.0213	1574.9018
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	709.8382	1338.9211	1432.9388	882.2196	1064.6635	1127.0863
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	376.4535	717.1916	769.3751	471.0190	568.2228	602.4280
-20	-3.89E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.23E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 130’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	**HL93 (Variable) + Lane Load**	***HL-93 Design Tandem (with Lane Load)***	***HL-93 Truck Train (with Lane Load)***	**SC SHV1A**	**SC SHV1B**	**SC SHV2A**	**SC SHV2B**	**SC SHV3A**	**SC SHV3B**	**SC School Bus**
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
End Shear	**228.6286146**	***187.6646139***	***258.3600926***	**1.21E+02**	**1.29E+02**	**121.2285**	**145.3792**	**141.5371**	**149.6813**	**63.8698183**
-1	**-3.605538293**	***-3.72887555***	***-3.244984461***	**-2.95168**	**-2.95168**	**-2.36159**	**-2.36159**	**-2.24503**	**-2.36319**	**-2.044924931**
+1	**212.943329**	***174.545706***	***237.7149875***	**114.0944**	**122.1291**	**114.701**	**137.4671**	**133.2007**	**140.8546**	**60.41919293**
-2	**-8.204001839**	***-10.56001631***	***-7.383601641***	**-8.12602**	**-8.12602**	**-7.53071**	**-7.97187**	**-6.17957**	**-6.50481**	**-4.430671816**
+2	**196.6935776**	***161.0505724***	***215.8481773***	**107.3678**	**114.8851**	**107.8704**	**129.1876**	**124.3998**	**131.5359**	**56.78352461**
-3	**-15.28395496**	***-16.75127716***	***-13.81154173***	**-13.4368**	**-13.7286**	**-12.4877**	**-13.5722**	**-10.026**	**-10.5839**	**-6.475595933**
+3	**183.1662801**	***149.8193125***	***197.4075897***	**101.6021**	**108.6759**	**102.0156**	**122.0909**	**116.8561**	**123.5485**	**53.66723824**
-4	**-24.65395551**	***-24.36641003***	***-22.26516798***	**-20.1634**	**-20.9727**	**-19.3183**	**-21.8517**	**-14.8924**	**-15.7609**	**-9.779806426**
+4	**167.689065**	***137.1081727***	***176.2463753***	**94.87543**	**101.4318**	**95.18499**	**113.8114**	**108.0552**	**114.2299**	**50.03156819**
-5	**-33.58121593**	***-31.22966998***	***-30.32916749***	**-25.9291**	**-27.1819**	**-25.173**	**-28.9484**	**-19.0636**	**-20.1984**	**-12.89609348**
+5	**154.7588812**	***126.5489128***	***158.4105916***	**89.10974**	**95.22261**	**89.33019**	**106.7146**	**100.5115**	**106.2425**	**46.91528017**
-6	**-44.73497908**	***-39.62881156***	***-40.39075607***	**-32.6557**	**-34.426**	**-32.0036**	**-37.2279**	**-26.9305**	**-28.3479**	**-16.5317635**
+6	**140.0656625**	***114.6217726***	***138.1483344***	**82.38311**	**87.97854**	**82.4996**	**98.43514**	**91.7106**	**96.92384**	**43.27961203**
-7	**-54.63134108**	***-47.16406985***	***-49.31737098***	**-38.4214**	**-40.6352**	**-37.8584**	**-44.3246**	**-34.192**	**-36.0218**	**-19.64804954**
+7	**127.8074786**	***104.7345141***	***121.6907966***	**76.61742**	**81.76934**	**76.6448**	**91.33841**	**84.00704**	**88.76811**	**40.16332328**
-8	**-66.56909435**	***-56.3472071***	***-60.0845505***	**-45.148**	**-47.8792**	**-44.689**	**-52.6041**	**-42.993**	**-45.3405**	**-23.28371893**
+8	**113.8982635**	***93.59137866***	***117.280799***	**69.89079**	**74.52527**	**69.81421**	**83.05891**	**75.05168**	**79.28498**	**36.52765409**
-9	**-77.1374566**	***-64.55446564***	***-69.61596534***	**-50.9137**	**-54.0884**	**-50.5438**	**-59.7009**	**-50.5366**	**-53.3279**	**-26.40000531**
+9	**102.3108514**	***84.376117***	***91.85487869***	**63.88487**	**68.06816**	**63.71547**	**75.66649**	**67.50802**	**71.29757**	**33.41137003**
-10	**-89.85921422**	***-74.52160753***	***-81.08875378***	**-57.6404**	**-61.3325**	**-57.3744**	**-67.9804**	**-59.3376**	**-62.6465**	**-30.03567364**
+10	**88.8757449**	***73.79401143***	***80.07941868***	**57.15823**	**60.81329**	**56.88487**	**67.38698**	**58.70709**	**61.97894**	**29.77570018**
-11	**-101.0995771**	***-83.6238316***	***-91.22496865***	**-63.406**	**-67.5417**	**-63.2292**	**-75.0771**	**-66.8812**	**-70.6339**	**-33.15196187**
+11	**77.97138269**	***65.25074625***	***70.28857714***	**51.39254**	**54.60408**	**51.03008**	**60.29026**	**51.16343**	**53.99153**	**26.65941214**
-12	**-114.6053374**	***-94.37496981***	***-104.1767962***	**-70.3729**	**-75.0445**	**-70.3038**	**-83.6523**	**-75.6822**	**-79.9525**	**-36.7876326**
+12	**65.64163182**	***55.67561488***	***59.21871839***	**44.66591**	**47.36001**	**44.19948**	**52.01076**	**42.36249**	**44.67289**	**23.02374202**
-13	**-126.5177008**	***-103.926235***	***-120.3319358***	**-76.1386**	**-81.2537**	**-76.1586**	**-90.749**	**-83.2258**	**-87.9399**	**-39.90392064**
+13	**55.4092693**	***47.80434964***	***50.03267679***	**38.90023**	**41.15082**	**38.34469**	**44.91403**	**34.81883**	**36.68549**	**19.90745794**
-14	**-141.1288052**	***-115.4613663***	***-139.5324002***	**-82.8652**	**-88.4978**	**-82.9891**	**-99.0285**	**-92.3411**	**-97.5914**	**-43.5395874**
+14	**43.86350844**	***39.0132182***	***39.6594692***	**32.17359**	**33.90675**	**31.5141**	**36.63453**	**26.3668**	**27.75453**	**16.27178789**
-15	**-153.7131673**	***-125.6846315***	***-156.9368767***	**-88.6309**	**-94.707**	**-88.8439**	**-106.125**	**-99.8847**	**-105.579**	**-46.65587408**
+15	**34.3031459**	***31.81395248***	***30.79892213***	**26.4079**	**27.69755**	**25.6593**	**29.53781**	**19.62188**	**20.65461**	**13.15549963**
-16	**-168.7869191**	***-138.0037709***	***-177.7452874***	**-95.3576**	**-101.951**	**-95.6745**	**-114.405**	**-108.686**	**-114.897**	**-50.29154599**
+16	**23.91665833**	***23.80681431***	***21.64216908***	**19.68127**	**20.45348**	**18.82871**	**21.2583**	**14.54379**	**15.39005**	**9.519833472**
-17	**-182.0432811**	***-148.8990291***	***-195.883471***	**-101.123**	**-108.16**	**-101.529**	**-121.501**	**-116.229**	**-122.885**	**-53.40783266**
+17	**15.88521631**	***17.27955548***	***14.27545132***	**13.91558**	**14.24428**	**12.97391**	**14.16157**	**10.37259**	**10.9526**	**6.64582047**
-18	**-197.9010432**	***-162.0021676***	***-217.3974912***	**-107.85**	**-115.404**	**-108.36**	**-129.781**	**-125.03**	**-132.203**	**-57.04349905**
+18	**7.840260292**	***10.05641681***	***7.072996812***	**7.755148**	**7.755148**	**7.130173**	**7.526825**	**5.897706**	**6.208111**	**4.260076356**
-19	**-211.8294054**	***-173.5694265***	***-236.140475***	**-113.616**	**-121.613**	**-114.215**	**-136.878**	**-132.574**	**-140.191**	**-60.15978894**
+19	**3.908539147**	***4.201157892***	***3.505718152***	**3.320008**	**3.320008**	**2.656287**	**2.656287**	**2.525245**	**2.658152**	**2.215148485**
-20	**-228.4711576**	***-187.4565645***	***-258.3600926***	**-1.20E+02**	**-1.29E+02**	**-121.045**	**-145.157**	**-141.375**	**-149.51**	**-63.79545466**
+20	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**

1-Span: Shear (Max and Min) Raw Data Results - 130' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	91.20914869	122.795	125.9162	134.0984549	73.40167715	98.97655	112.2684	123.246	1.35E+02
-1	-2.078270123	-2.07961	-1.65474	-1.28628015	-1.951416835	-2.00735	-2.00762	-2.00144	-1.99558
+1	86.26613076	115.616	118.1004	121.1742538	69.43878656	93.63587	106.1465	116.3942	126.9208
-2	-5.721337084	-5.72423	-4.55447	-3.61516493	-4.228070997	-6.11435	-6.2287	-6.22005	-6.21184
+2	81.09132343	108.0368	109.8154	109.0511138	65.2994208	88.0472	99.72932	109.2002	118.898
-3	-8.87703534	-8.84819	-7.03995	-5.698351521	-7.497109284	-10.0068	-10.6645	-10.6563	-10.6484
+3	76.65577409	101.5404	102.7141	99.2662663	61.75138839	83.25692	94.22887	103.0338	112.0214
-4	-14.00486608	-12.4928	-11.3471	-9.289580021	-11.63647617	-15.5955	-16.5366	-16.4979	-16.4888
+4	71.48096446	93.96121	94.42915	88.07555775	57.61201729	77.66824	87.81169	95.83978	103.9986
-5	-18.44041542	-17.3555	-15.2529	-12.61287416	-15.18450706	-20.3857	-22.0371	-22.1023	-22.0921
+5	67.04541505	87.46479	87.32777	79.53083763	54.06398753	72.87796	82.31125	89.67345	97.1219
-6	-23.61522368	-24.1064	-20.5029	-17.11591985	-19.32387742	-25.9744	-28.4542	-29.2964	-29.7896
+6	61.87060414	79.88563	78.86034	69.66350016	49.92461777	67.28929	75.89406	82.47939	89.09911
-7	-28.05077302	-30.352	-26.5203	-22.20269751	-22.87190944	-30.7647	-33.9547	-35.4627	-36.6663
+7	57.43505747	73.24109	71.64558	61.89242008	46.37658556	62.499	70.39362	76.31306	82.22243
-8	-33.22558317	-37.9311	-33.5625	-28.32072528	-27.01127685	-36.3534	-40.3719	-42.6568	-44.689
+8	52.26024846	65.53936	63.36065	54.40471109	42.2372184	56.91034	63.97644	69.09429	73.98402
-9	-37.66113267	-44.4276	-40.2828	-34.1233015	-30.55930906	-41.1437	-45.8723	-48.8231	-51.5657
+9	47.63988577	59.04294	56.25928	48.07367789	38.61603414	51.92045	58.24681	62.69574	67.03645
-10	-42.8359401	-52.0067	-48.5677	-41.3065058	-34.69867758	-46.7323	-52.2895	-56.0172	-59.5885
+10	42.46507466	51.46379	47.97435	40.78896672	34.40198517	46.33179	51.82963	55.50169	59.01366
-11	-47.2714933	-58.5031	-55.6691	-47.55055269	-38.24670796	-51.5226	-57.7899	-62.1835	-66.4652
+11	38.02952238	44.96736	40.87298	34.63193348	30.85395078	41.5415	46.32918	49.33535	52.137
-12	-52.63111326	-66.0823	-63.954	-54.93675566	-42.53390964	-57.3109	-64.4363	-69.61	-74.5589
+12	32.85471784	37.3882	33.05811	27.88444293	26.71458262	35.95283	39.912	42.14129	44.11421
-13	-57.06666551	-72.5787	-71.0554	-61.35478885	-46.08194501	-62.1012	-69.9367	-75.8008	-81.6512
+13	28.41916557	30.89178	27.02193	22.63031563	23.1665526	31.16255	34.41156	35.97496	37.23753
-14	-62.24146996	-80.4286	-79.4537	-70.36580314	-50.22131318	-67.6898	-76.3539	-82.9949	-89.674
+14	23.2443612	23.62276	20.08751	16.76088994	19.02718446	25.57388	27.99438	28.78091	29.21475
-15	-66.67702224	-86.925	-86.7376	-78.82352294	-53.76934303	-72.4801	-81.8544	-89.1612	-96.5506
+15	18.8088085	17.83633	15.57747	12.89298489	15.47914995	20.78359	22.49393	22.61457	22.60445
-16	-71.85183311	-94.5042	-95.0225	-88.7923683	-57.90871169	-78.0688	-88.2716	-96.3553	-104.573
+16	13.6339984	12.23173	11.02076	9.015803136	11.33978158	15.19493	16.07675	16.04178	16.0326
-17	-76.28737969	-101.001	-102.124	-98.45578334	-61.45674152	-82.8591	-93.772	-102.522	-111.45
+17	9.198451483	9.107766	7.246512	5.875284323	7.791751646	10.40463	11.03298	11.02477	11.01696
-18	-81.46219026	-108.58	-110.409	-109.8714233	-65.59611486	-88.4477	-100.189	-109.716	-119.473
+18	5.460245432	5.463138	4.346787	3.444898204	4.064888412	5.802823	5.857833	5.849187	5.84097
-19	-85.8977372	-115.076	-117.51	-120.2467726	-69.14414483	-93.238	-105.69	-115.882	-126.35
+19	2.337620343	2.339174	1.861302	1.448711412	2.113471859	2.257844	2.25816	2.252026	2.2462
-20	-91.07254158	-122.655	-125.795	-133.7901366	-73.28351768	-98.8267	-112.107	-123.076	-1.34E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 130' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	224.9916667	242.5951514	146.699	176.8368	188.062
-1	-2.074945079	-1.946579316	-2.38374	-2.52442	-2.11908
+1	210.9692491	227.1024431	137.9143	166.2952	176.6557
-2	-7.042824835	-6.577562953	-6.56127	-7.15236	-7.15302
+2	196.113946	210.5659407	128.631	155.1551	164.5865
-3	-11.81774236	-11.00448903	-10.7371	-11.9267	-11.9756
+3	183.3808366	196.3918101	120.6738	145.6065	154.2415
-4	-18.16758187	-18.70571663	-15.843	-17.4967	-18.4744
+4	168.5255327	179.8553145	111.3903	134.4664	142.1723
-5	-25.46404796	-26.58762059	-20.2194	-22.8803	-24.0448
+5	155.792407	165.6811652	103.4331	124.9178	131.8272
-6	-35.38527064	-37.4627045	-26.2006	-32.2387	-31.7461
+6	140.8901497	149.1446694	94.14975	113.7777	119.758
-7	-45.74473155	-47.20992401	-33.478	-40.9716	-41.2954
+7	127.6734469	134.9705203	85.861	103.8312	108.982
-8	-59.0076641	-59.28827812	-42.7614	-52.1117	-52.9489
+8	112.8181484	118.4340276	76.5776	92.69112	96.9128
-9	-71.43844075	-72.36860903	-50.7186	-61.6603	-63.2939
+9	100.0850388	104.2598967	68.6204	83.14249	86.56777
-10	-86.29373995	-88.9051137	-60.002	-72.8004	-75.3631
+10	85.22974119	87.72340012	59.337	72.0024	74.49857
-11	-99.02686775	-103.0792461	-67.9592	-82.349	-85.7081
+11	72.49663111	73.549251	51.3798	62.45376	64.15356
-12	-113.8821661	-119.6157383	-77.2426	-93.4891	-97.7773
+12	58.0766674	58.79993499	42.09641	51.31369	52.08437
-13	-126.6152756	-133.7898865	-85.1998	-103.038	-108.122
+13	46.67063974	48.0218176	34.13921	41.76505	42.08892
-14	-141.9536396	-150.3263859	-94.8148	-114.576	-120.623
+14	34.58725357	36.65006945	25.60211	31.52054	30.94814
-15	-154.7342393	-164.5005341	-102.772	-124.124	-130.968
+15	26.12541663	27.29787132	20.58308	23.43567	24.50766
-16	-169.5895364	-181.0370272	-112.055	-135.264	-143.037
+16	17.6355761	18.09857285	15.47721	17.09773	18.00887
-17	-182.3226624	-195.2111619	-120.013	-144.813	-153.382
+17	12.21456355	11.49657063	11.10075	12.3234	12.43847
-18	-197.1779605	-211.7476515	-129.296	-155.953	-165.451
+18	6.643820579	6.208478885	6.262022	6.753363	6.75402
-19	-209.9110712	-225.9218006	-137.253	-165.502	-175.796
+19	2.33948782	2.245506646	2.681277	2.841794	2.383601
-20	-224.7663858	-242.4583138	-146.537	-176.642	-187.865
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 130' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.54E-13	*-6.90E-13*	*-8.72E-13*	-5.64E-13	-5.81E-13	-4.08E-13	-4.72E-13	-4.87E-13	-5.14E-13	-2.93E-13
End Shear	6.60E-13	*4.62E-13*	*6.56E-13*	3.91E-13	4.08E-13	3.14E-13	3.83E-13	3.21E-13	3.38E-13	1.95E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	1404.879638	*1155.295089*	*1563.820618*	741.6134987	793.8394427	745.5563081	893.536162	865.8047695	915.5546735	392.724754
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	2653.823554	*2187.90661*	*2899.877363*	1402.026927	1500.232653	1408.657588	1687.126834	1625.369635	1718.620037	741.5617956
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	3748.100461	*3097.834594*	*4086.513855*	1981.240307	2119.179654	1989.303939	2381.684575	2278.694629	2409.196125	1046.511146
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	4685.319149	*3885.078948*	*5049.576064*	2479.253509	2650.680312	2488.142981	2976.465074	2826.815531	2988.423834	1307.572727
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	5466.463642	*4549.639668*	*5773.981481*	2896.066687	3095.3003	2904.623593	3471.299943	3301.200634	3491.366364	1524.746606
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	6091.534182	*5091.516884*	*6353.575222*	3232.133034	3452.51699	3238.64914	3895.019964	3680.925166	3894.409556	1698.032807
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	6572.777594	*5510.710393*	*6811.818306*	3487.034258	3722.287324	3512.56313	4218.794183	3967.797027	4196.778157	1827.431209
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	6924.551353	*5807.220515*	*7031.405067*	3667.942792	3926.233006	3705.464061	4442.623467	4166.456588	4408.290498	1912.942019
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	7120.215946	*5981.046836*	*7061.351822*	3783.866807	4046.335562	3815.909487	4566.506737	4258.875761	4507.313017	1954.597716
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	7160.430578	*6031.812468*	*6863.534968*	3818.054346	4078.455515	3843.285361	4589.83017	4244.496172	4493.257965	1952.853958
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	7121.5398	*5981.143838*	*7061.351951*	3783.880804	4046.357009	3815.940777	4566.558387	4258.904232	4507.342179	1954.589935
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	6925.703338	*5807.306851*	*7031.405174*	3667.946092	3926.24291	3705.484886	4442.662476	4166.473607	4408.307526	1912.957023
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	6573.557485	*5510.785694*	*6811.81822*	3487.026786	3722.285655	3512.573178	4218.82011	3967.802029	4196.78246	1827.444115
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	6092.611401	*5091.581218*	*6353.57505*	3232.114799	3452.503728	3238.648455	3895.032853	3680.918089	3894.401075	1698.04394
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	5467.015426	*4549.693501*	*5773.981517*	2896.120188	3095.27549	2904.61232	3471.300347	3301.235044	3491.401474	1524.755806
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	4685.484374	*3885.122228*	*5049.576684*	2479.296629	2650.726736	2488.121133	2976.452322	2826.810061	2988.418369	1307.580262
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	3748.016469	*3097.867113*	*4086.513661*	1981.272679	2119.214503	1989.336156	2381.65875	2278.730415	2409.234016	1046.516721
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	2654.613365	*2187.928176*	*2899.877053*	1402.048344	1500.255732	1408.678906	1687.152682	1625.393366	1718.645168	741.5655015
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	1405.274634	*1155.305706*	*1563.820222*	741.624222	793.8510229	745.566839	893.5489317	865.8165451	915.5671404	392.7266636
-20	-5.56E-13	*-2.15E-13*	*-5.23E-13*	-2.09E-13	-2.25E-13	-1.36E-13	-1.85E-13	-1.88E-13	-1.98E-13	-1.49E-13
+20	1.49E-12	*9.38E-13*	*1.37E-12*	8.04E-13	8.72E-13	6.59E-13	7.90E-13	7.74E-13	8.22E-13	4.27E-13

1-Span: Moment (Max and Min) Raw Data Results - 130' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-3.58E-13**	**-4.22E-13**	**-3.85E-13**	**-4.52E-13**	**-2.93E-13**	**-3.47E-13**	**-3.45E-13**	**-3.47E-13**	**-3.41E-13**
End Shear	**3.05E-13**	**2.78E-13**	**3.28E-13**	**2.89E-13**	**2.56E-13**	**2.73E-13**	**2.72E-13**	**2.71E-13**	**2.87E-13**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**560.72985**	**751.5037374**	**767.6524398**	**795.2900226**	**451.3521126**	**608.633134**	**689.9522293**	**756.6356777**	**825.0989181**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**1058.992366**	**1411.516171**	**1435.293915**	**1453.36302**	**852.7361488**	**1149.803063**	**1302.439879**	**1427.706292**	**1554.788717**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**1494.787595**	**1980.037329**	**2003.331037**	**2013.033917**	**1204.152074**	**1623.509865**	**1837.485807**	**2029.415903**	**2213.766262**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**1868.115466**	**2457.494313**	**2486.824272**	**2453.810781**	**1505.59989**	**2030.102221**	**2295.837692**	**2551.852232**	**2778.812836**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**2179.155836**	**2849.198567**	**2884.731068**	**2834.815103**	**1757.079595**	**2369.464838**	**2676.724948**	**2987.445974**	**3271.782409**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**2428.014954**	**3170.755732**	**3182.62712**	**3161.055461**	**1958.591269**	**2641.364218**	**2991.68083**	**3336.197171**	**3671.510256**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**2614.406696**	**3400.821392**	**3430.942199**	**3383.323151**	**2110.134643**	**2859.494753**	**3239.984372**	**3598.90375**	**3974.391496**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**2755.629928**	**3544.156009**	**3600.765062**	**3548.782054**	**2211.710242**	**3015.928534**	**3410.823753**	**3795.146323**	**4180.426762**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**2835.106322**	**3617.89275**	**3721.223101**	**3631.37485**	**2263.280956**	**3104.898718**	**3504.171308**	**3909.411886**	**4304.008252**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**2851.52154**	**3599.696986**	**3741.149331**	**3652.502054**	**2263.969231**	**3125.88336**	**3519.384864**	**3936.339117**	**4345.207431**
-11	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+11	**2835.121987**	**3617.920376**	**3721.202171**	**3631.365802**	**2263.267517**	**3104.922248**	**3504.151969**	**3909.43096**	**4304.013751**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**2755.637627**	**3544.173803**	**3600.775515**	**3548.773385**	**2211.763583**	**3015.943506**	**3410.848431**	**3795.155026**	**4180.471979**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**2614.406368**	**3400.843841**	**3430.952533**	**3383.315208**	**2110.18136**	**2859.500913**	**3239.999047**	**3598.901617**	**3974.424815**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**2428.00658**	**3170.767966**	**3182.653242**	**3161.046208**	**1958.631175**	**2641.361591**	**2991.685788**	**3336.236514**	**3671.531943**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**2179.139415**	**2849.20054**	**2884.746573**	**2834.805559**	**1757.11292**	**2369.453548**	**2676.720321**	**2987.474735**	**3271.792541**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**1868.147745**	**2457.486145**	**2486.829606**	**2453.806582**	**1505.626673**	**2030.082285**	**2295.823388**	**2551.870489**	**2778.811495**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**1494.811878**	**1980.068167**	**2003.32587**	**2013.021176**	**1204.171995**	**1623.536202**	**1837.492436**	**2029.4235**	**2213.777258**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**1059.00846**	**1411.536606**	**1435.31479**	**1453.360785**	**852.749441**	**1149.820504**	**1302.459312**	**1427.702921**	**1554.787815**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**560.7379011**	**751.5138728**	**767.6627197**	**795.2808277**	**451.3587189**	**608.6417548**	**689.9618221**	**756.6217839**	**825.0865909**
-20	**-1.36E-13**	**-1.62E-13**	**-2.04E-13**	**-1.61E-13**	**-1.50E-13**	**-1.18E-13**	**-1.46E-13**	**-1.40E-13**	**-1.43E-13**
+20	**5.57E-13**	**6.77E-13**	**7.10E-13**	**5.93E-13**	**4.90E-13**	**5.21E-13**	**5.71E-13**	**6.16E-13**	**6.72E-13**

1-Span: Moment (Max and Min) Raw Data Results - 130' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.25E-13	-5.45E-13	-4.17E-13	-5.30E-13	-4.75E-13
End Shear	4.88E-13	4.10E-13	3.69E-13	4.12E-13	3.95E-13
-1	0	0	0	0	0
+1	1371.300119	1476.16588	896.4432722	1080.918926	1148.261878
-2	0	0	0	0	0
+2	2564.031373	2753.756764	1680.82261	2027.361131	2150.831292
-3	0	0	0	0	0
+3	3606.490962	3887.597339	2353.138168	2840.811212	3009.593748
-4	0	0	0	0	0
+4	4497.214153	4857.553525	2927.579924	3546.105006	3761.746296
-5	0	0	0	0	0
+5	5208.612508	5716.013616	3421.882369	4129.852345	4380.579098
-6	0	0	0	0	0
+6	5816.337113	6374.854728	3804.627446	4579.123301	4894.09278
-7	0	0	0	0	0
+7	6276.435298	6911.15341	4092.397792	4907.882407	5261.913677
-8	0	0	0	0	0
+8	6612.645614	7254.001964	4284.267721	5128.861374	5498.150268
-9	0	0	0	0	0
+9	6823.834016	7455.026413	4363.934236	5214.794872	5618.786966
-10	0	0	0	0	0
+10	6858.366564	7549.826834	4330.953665	5166.252292	5593.176257
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	6823.862271	7455.027624	4363.909346	5214.779812	5618.807098
-12	0	0	0	0	0
+12	6612.654833	7253.999834	4284.286367	5128.831959	5498.155216
-13	0	0	0	0	0
+13	6276.473309	6911.15647	4092.404021	4907.887457	5261.951072
-14	0	0	0	0	0
+14	5816.355911	6374.854537	3804.621162	4579.162712	4894.114333
-15	0	0	0	0	0
+15	5208.61271	5716.009771	3421.919272	4129.876959	4380.585048
-16	0	0	0	0	0
+16	4497.195339	4857.546187	2927.604883	3546.11522	3761.761183
-17	0	0	0	0	0
+17	3606.452998	3887.600464	2353.175073	2840.806185	3009.592435
-18	0	0	0	0	0
+18	2564.021687	2754.071783	1680.84718	2027.390625	2150.862476
-19	0	0	0	0	0
+19	1371.319026	1476.169295	896.4555677	1080.933658	1148.277422
-20	-2.09E-13	-2.54E-13	-2.03E-13	-2.05E-13	-1.84E-13
+20	1.12E-12	1.29E-12	7.52E-13	9.28E-13	9.72E-13

1-Span: Shear (Max and Min) Raw Data Results - 130' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	66.83077	47.29538	63.67385	65.29231	72.77308	38.06154	51.32308	58.21538	63.90769	69.76923
-1	-1.47692	-1.07766	-1.07835	-0.85805	-0.67443	-1.01188	-1.04089	-1.04103	-1.03782	-1.03478
+1	63.1473	44.73224	59.95124	61.2395	65.75628	36.00663	48.55373	55.04096	60.3548	65.81323
-2	-3.2	-2.96673	-2.96823	-2.36166	-1.9081	-2.19241	-3.17052	-3.22981	-3.22533	-3.22107
+2	59.28145	42.04891	56.02116	56.94345	59.14866	33.86021	45.6558	51.71341	56.62441	61.65311
-3	-5.88097	-4.60308	-4.58812	-3.65048	-3.02552	-3.88753	-5.1889	-5.52997	-5.52567	-5.5216
+3	55.99582	39.74891	52.65252	53.26112	53.81432	32.02042	43.17185	48.86123	53.42693	58.0873
-4	-9.31727	-7.26205	-6.478	-5.88391	-4.9485	-6.03395	-8.08683	-8.57486	-8.5548	-8.55005
+4	52.12506	37.06558	48.72243	48.96507	47.72494	29.874	40.27391	45.53367	49.69654	53.92718
-5	-12.5032	-9.56205	-8.9995	-7.90919	-6.73875	-7.87374	-10.5708	-11.427	-11.4609	-11.4556
+5	48.80725	34.76558	45.35379	45.28274	43.06342	28.03422	37.78997	42.68149	46.49907	50.36137
-6	-16.3691	-12.2454	-12.5001	-10.6315	-9.16927	-10.0202	-13.4687	-14.7546	-15.1913	-15.447
+6	44.93648	32.08224	41.42371	40.89206	37.69499	25.8878	34.89204	39.35393	42.76868	46.20125
-7	-19.6826	-14.5454	-15.7387	-13.7518	-11.9037	-11.8599	-15.9527	-17.6068	-18.3888	-19.0128
+7	41.61868	29.78224	37.97827	37.15094	33.46442	24.04801	32.40809	36.50175	39.5712	42.63543
-8	-23.5485	-17.2287	-19.6687	-17.4034	-15.2064	-14.0064	-18.8506	-20.9343	-22.1192	-23.173
+8	37.74791	27.09891	33.98463	32.85489	29.36465	21.90159	29.51016	33.1742	35.828	38.3635
-9	-26.8621	-19.5287	-23.0374	-20.8881	-18.3418	-15.8462	-21.3345	-23.7865	-25.3166	-26.7388
+9	34.42958	24.70308	30.61599	29.17256	25.91057	20.02387	26.92271	30.20317	32.51011	34.76093
-10	-30.7279	-22.2121	-26.9674	-25.1842	-22.2316	-17.9926	-24.2325	-27.1141	-29.047	-30.8989
+10	30.42567	22.01974	26.68591	24.87651	21.95081	17.83873	24.02478	26.87562	28.77972	30.60081
-11	-34.0415	-24.5121	-30.3361	-28.8665	-25.6257	-19.8324	-26.7164	-29.9663	-32.2445	-34.4647
+11	27.11209	19.71974	23.31727	21.19418	18.61672	15.99894	21.54083	24.02343	25.58224	27.035
-12	-37.9073	-27.2912	-34.2662	-33.1626	-29.6554	-22.0554	-29.7179	-33.4127	-36.0954	-38.6616
+12	23.24624	17.03641	19.38719	17.14187	14.97026	13.85252	18.6429	20.69588	21.85185	22.87488
-13	-41.2209	-29.5912	-37.6348	-36.8449	-33.1695	-23.8952	-32.2018	-36.2648	-39.3056	-42.3392
+13	19.93266	14.73641	16.01855	14.01189	12.13415	12.01273	16.15896	17.84369	18.65438	19.30906
-14	-45.2248	-32.2746	-41.7053	-41.1998	-38.0765	-26.0416	-35.0997	-39.5924	-43.036	-46.4993
+14	16.06681	12.05308	12.24929	10.41613	8.977733	9.866313	13.26102	14.51614	14.92399	15.14895
-15	-48.5384	-34.5746	-45.0739	-44.9767	-42.678	-27.8814	-37.5837	-42.4446	-46.2335	-50.0651
+15	12.75323	9.753077	9.24881	8.077506	6.890198	8.026523	10.77708	11.66395	11.72651	11.72126
-16	-52.4043	-37.2579	-49.004	-49.2728	-48.1165	-30.0279	-40.4816	-45.7721	-49.9638	-54.2253
+16	9.048618	7.069742	6.342613	5.714679	4.801575	5.880105	7.879143	8.336403	8.318266	8.313509
-17	-55.7178	-39.5579	-52.3726	-52.9551	-53.373	-31.8676	-42.9656	-48.6243	-53.1613	-57.7911
+17	6.103208	4.769744	4.72272	3.75759	3.120993	4.040317	5.395195	5.721018	5.716757	5.712708
-18	-59.5837	-42.2412	-56.3027	-57.2511	-59.5963	-34.0141	-45.8635	-51.9519	-56.8917	-61.9512
+18	3.067781	2.831343	2.832843	2.253973	1.817325	2.107798	3.008983	3.037508	3.033024	3.028763
-19	-62.8973	-44.5412	-59.6713	-60.9335	-65.2518	-35.8538	-48.3474	-54.8041	-60.0892	-65.517
+19	1.595076	1.212144	1.21295	0.965156	0.759896	1.095915	1.170777	1.170941	1.16776	1.164739
-20	-66.7631	-47.2245	-63.6014	-65.2295	-72.6132	-38.0003	-51.2454	-58.1316	-63.8196	-69.6771
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 130' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	66.83077	62.5	66.92308	62.86154	75.38462	73.39231	77.61539	33.11891
-1	-1.47692	-1.53056	-1.53056	-1.22457	-1.22457	-1.16413	-1.2254	-1.06037
+1	63.1473	59.16224	63.32857	59.47678	71.28188	69.06961	73.03841	31.32963
-2	-3.2	-4.21365	-4.21365	-3.90496	-4.13371	-3.20434	-3.37299	-2.29747
+2	59.28145	55.67423	59.57225	55.93486	66.98864	64.50599	68.20634	29.4444
-3	-5.88097	-6.96747	-7.11881	-6.47532	-7.03769	-5.19886	-5.48815	-3.35784
+3	55.99582	52.6845	56.35254	52.89893	63.30873	60.59431	64.06457	27.82849
-4	-9.31727	-10.4555	-10.8751	-10.0172	-11.3309	-7.72227	-8.17263	-5.0712
+4	52.12506	49.19649	52.59622	49.35701	59.01549	56.0307	59.2325	25.94326
-5	-12.5032	-13.4452	-14.0948	-13.0532	-15.0108	-9.8852	-10.4736	-6.68711
+5	48.80725	46.20676	49.37651	46.32108	55.33557	52.11902	55.09073	24.32734
-6	-16.3691	-16.9332	-17.8512	-16.5951	-19.3041	-13.9645	-14.6995	-8.57234
+6	44.93648	42.71875	45.62019	42.77915	51.04233	47.55541	50.25867	22.44211
-7	-19.6826	-19.9229	-21.0709	-19.631	-22.984	-17.7299	-18.6787	-10.1883
+7	41.61868	39.72902	42.40049	39.74322	47.36241	43.56082	46.02961	20.8262
-8	-23.5485	-23.411	-24.8272	-23.1729	-27.2772	-22.2935	-23.5107	-12.0735
+8	37.74791	36.24101	38.64416	36.2013	43.06918	38.91713	41.11225	18.94097
-9	-26.8621	-26.4007	-28.0469	-26.2089	-30.9572	-26.2051	-27.6525	-13.6894
+9	34.42958	33.12671	35.29591	33.03887	39.23593	35.00545	36.97048	17.32506
-10	-30.7279	-29.8887	-31.8032	-29.7508	-35.2504	-30.7688	-32.4846	-15.5746
+10	30.42567	29.6387	31.53398	29.49695	34.94269	30.44184	32.13842	15.43982
-11	-34.0415	-32.8784	-35.0229	-32.7867	-38.9303	-34.6804	-36.6263	-17.1905
+11	27.11209	26.64897	28.31428	26.46102	31.26277	26.53017	27.99665	13.82391
-12	-37.9073	-36.491	-38.9134	-36.4552	-43.3769	-39.2441	-41.4584	-19.0758
+12	23.24624	23.16096	24.55795	22.9191	26.96954	21.96655	23.16458	11.93868
-13	-41.2209	-39.4807	-42.1331	-39.4911	-47.0568	-43.1557	-45.6002	-20.6917
+13	19.93266	20.17123	21.33825	19.88317	23.28962	18.05488	19.02281	10.32277
-14	-45.2248	-42.9687	-45.8894	-43.033	-51.35	-47.8823	-50.6048	-22.5769
+14	16.06681	16.68322	17.58193	16.34125	18.99639	13.67218	14.39177	8.437536
-15	-48.5384	-45.9585	-49.1091	-46.0689	-55.0299	-51.794	-54.7466	-24.1928
+15	12.75323	13.69349	14.36222	13.30532	15.31647	10.17469	10.7102	6.821623
-16	-52.4043	-49.4465	-52.8655	-49.6109	-59.3232	-56.3576	-59.5787	-26.0781
+16	9.048618	10.20548	10.6059	9.763397	11.02323	7.541503	7.980323	4.936393
-17	-55.7178	-52.4362	-56.0852	-52.6468	-63.0031	-60.2693	-63.7204	-27.694
+17	6.103208	7.215752	7.386194	6.727461	7.343309	5.378578	5.679338	3.446109
-18	-59.5837	-55.9242	-59.8415	-56.1887	-67.2963	-64.8329	-68.5525	-29.5792
+18	3.067781	4.021337	4.021337	3.697264	3.902942	3.058183	3.21914	2.20901
-19	-62.8973	-58.914	-63.0612	-59.2246	-70.9763	-68.7446	-72.6943	-31.1951
+19	1.595076	1.721549	1.721549	1.377385	1.377385	1.309435	1.378352	1.148638
-20	-66.7631	-62.402	-66.8175	-62.7666	-75.2695	-73.3082	-77.5263	-33.0803
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 130' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**66.83077**	***130.1282***	***140.3095***	***84.84615***	***102.2769***	***108.7692***
-1	**-1.47692**	***-1.20008***	***-1.12584***	***-1.37868***	***-1.46004***	***-1.22561***
+1	**63.1473**	***122.0181***	***131.349***	***79.76538***	***96.18***	***102.1722***
-2	**-3.2**	***-4.07335***	***-3.80426***	***-3.79484***	***-4.1367***	***-4.13709***
+2	**59.28145**	***113.4262***	***121.7848***	***74.39615***	***89.73692***	***95.19172***
-3	**-5.88097**	***-6.83502***	***-6.36466***	***-6.21***	***-6.89802***	***-6.9263***
+3	**55.99582**	***106.0618***	***113.5869***	***69.79396***	***84.21429***	***89.20848***
-4	**-9.31727**	***-10.5076***	***-10.8188***	***-9.16308***	***-10.1196***	***-10.685***
+4	**52.12506**	***97.46994***	***104.0227***	***64.42472***	***77.77121***	***82.22803***
-5	**-12.5032**	***-14.7276***	***-15.3775***	***-11.6943***	***-13.2332***	***-13.9067***
+5	**48.80725**	***90.1055***	***95.82485***	***59.82253***	***72.24857***	***76.24479***
-6	**-16.3691**	***-20.4657***	***-21.6673***	***-15.1536***	***-18.6459***	***-18.361***
+6	**44.93648**	***81.48649***	***86.26065***	***54.4533***	***65.80549***	***69.26434***
-7	**-19.6826**	***-26.4573***	***-27.3048***	***-19.3626***	***-23.6967***	***-23.884***
+7	**41.61868**	***73.84236***	***78.06276***	***49.65934***	***60.05275***	***63.0318***
-8	**-23.5485**	***-34.1282***	***-34.2905***	***-24.7319***	***-30.1398***	***-30.624***
+8	**37.74791**	***65.25052***	***68.49857***	***44.29011***	***53.60967***	***56.05136***
-9	**-26.8621**	***-41.3178***	***-41.8558***	***-29.3341***	***-35.6624***	***-36.6072***
+9	**34.42958**	***57.88608***	***60.30069***	***39.68791***	***48.08704***	***50.06811***
-10	**-30.7279**	***-49.9096***	***-51.42***	***-34.7033***	***-42.1055***	***-43.5877***
+10	**30.42567**	***49.29424***	***50.7365***	***34.31868***	***41.64396***	***43.08767***
-11	**-34.0415**	***-57.2741***	***-59.6178***	***-39.3055***	***-47.6281***	***-49.5709***
+11	**27.11209**	***41.9298***	***42.53861***	***29.71648***	***36.12132***	***37.10443***
-12	**-37.9073**	***-65.8659***	***-69.182***	***-44.6747***	***-54.0712***	***-56.5514***
+12	**23.24624**	***33.58974***	***34.00806***	***24.34726***	***29.67825***	***30.12398***
-13	**-41.2209**	***-73.2304***	***-77.3799***	***-49.2769***	***-59.5938***	***-62.5346***
+13	**19.93266**	***26.99285***	***27.77433***	***19.74506***	***24.15561***	***24.34293***
-14	**-45.2248**	***-82.1016***	***-86.9441***	***-54.8379***	***-66.267***	***-69.7643***
+14	**16.06681**	***20.0042***	***21.19726***	***14.80747***	***18.2305***	***17.89945***
-15	**-48.5384**	***-89.4935***	***-95.142***	***-59.4401***	***-71.7897***	***-75.7476***
+15	**12.75323**	***15.11013***	***15.78824***	***11.90462***	***13.55446***	***14.17447***
-16	**-52.4043**	***-98.0853***	***-104.706***	***-64.8093***	***-78.2327***	***-82.728***
+16	**9.048618**	***10.19987***	***10.46765***	***8.95154***	***9.888794***	***10.41577***
-17	**-55.7178**	***-105.45***	***-112.904***	***-69.4115***	***-83.7554***	***-88.7113***
+17	**6.103208**	***7.064525***	***6.64926***	***6.420332***	***7.127472***	***7.194027***
-18	**-59.5837**	***-114.042***	***-122.468***	***-74.7808***	***-90.1985***	***-95.6917***
+18	**3.067781**	***3.84258***	***3.590792***	***3.621759***	***3.905936***	***3.906316***
-19	**-62.8973**	***-121.406***	***-130.666***	***-79.383***	***-95.7211***	***-101.675***
+19	**1.595076**	***1.353087***	***1.298731***	***1.550768***	***1.643605***	***1.378601***
-20	**-66.7631**	***-129.998***	***-140.23***	***-84.7522***	***-102.164***	***-108.655***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 130’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-3.32E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**2.54E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**410.4574**	**290.7596**	**389.6830**	**398.0567**	**432.3057**	**234.0431**	**315.5992**	**357.7663**	**392.3441**	**427.8449**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**774.2486**	**549.1275**	**731.9244**	**744.2540**	**791.3627**	**442.1759**	**596.2163**	**675.3642**	**740.3196**	**806.2166**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1091.919**	**775.1038**	**1026.7240**	**1038.8027**	**1097.2977**	**624.3983**	**841.8511**	**952.8057**	**1052.3287**	**1147.9213**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**1362.44**	**968.6883**	**1274.3035**	**1289.5122**	**1339.4852**	**780.7103**	**1052.6846**	**1190.4785**	**1323.2316**	**1440.9193**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**1586.236**	**1129.9745**	**1477.4169**	**1495.8419**	**1548.5817**	**911.1121**	**1228.6569**	**1387.9829**	**1549.1034**	**1696.5426**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**1763.306**	**1259.0173**	**1644.1565**	**1650.3122**	**1727.1844**	**1015.6035**	**1369.6470**	**1551.2994**	**1729.9441**	**1903.8166**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**1898.912**	**1355.6685**	**1763.4542**	**1779.0730**	**1849.7767**	**1094.1844**	**1482.7559**	**1680.0541**	**1866.1674**	**2060.8719**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**1999.223**	**1428.8981**	**1837.7786**	**1867.1325**	**1940.8150**	**1146.8552**	**1563.8727**	**1768.6408**	**1967.9265**	**2167.7090**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**2052.793**	**1470.1096**	**1876.0139**	**1929.5946**	**1986.7874**	**1173.5966**	**1610.0071**	**1817.0450**	**2027.1775**	**2231.7906**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**2059.906**	**1478.6215**	**1866.5787**	**1939.9271**	**1998.7909**	**1173.9535**	**1620.8884**	**1824.9338**	**2041.1403**	**2253.1540**
-11	**0.00E+00**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**2053.362**	**1470.1177**	**1876.0282**	**1929.5837**	**1986.7827**	**1173.5896**	**1610.0193**	**1817.0350**	**2027.1874**	**2231.7935**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**1999.718**	**1428.9021**	**1837.7878**	**1867.1379**	**1940.8105**	**1146.8829**	**1563.8805**	**1768.6536**	**1967.9310**	**2167.7324**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**1899.247**	**1355.6683**	**1763.4658**	**1779.0783**	**1849.7726**	**1094.2086**	**1482.7591**	**1680.0617**	**1866.1663**	**2060.8892**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**1763.769**	**1259.0130**	**1644.1628**	**1650.3258**	**1727.1796**	**1015.6242**	**1369.6456**	**1551.3019**	**1729.9645**	**1903.8278**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**1586.473**	**1129.9660**	**1477.4180**	**1495.8499**	**1548.5767**	**911.1293**	**1228.6510**	**1387.9805**	**1549.1183**	**1696.5479**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**1362.511**	**968.7051**	**1274.2993**	**1289.5150**	**1339.4830**	**780.7242**	**1052.6742**	**1190.4710**	**1323.2411**	**1440.9186**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1091.882**	**775.1163**	**1026.7400**	**1038.8000**	**1097.2911**	**624.4086**	**841.8648**	**952.8091**	**1052.3326**	**1147.9270**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**774.5879**	**549.1358**	**731.9350**	**744.2649**	**791.3615**	**442.1828**	**596.2253**	**675.3743**	**740.3178**	**806.2161**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**410.6271**	**290.7638**	**389.6883**	**398.0621**	**432.3010**	**234.0465**	**315.6037**	**357.7712**	**392.3369**	**427.8385**
-20	**-2.27E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**5.39E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 130' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.32E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.54E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	410.4574	384.5546	411.6357	386.5991	463.3322	448.9524	474.7496	203.6426
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	774.2486	727.0039	777.9272	730.4421	874.8389	842.8155	891.1693	384.5278
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1091.919	1027.3478	1098.8746	1031.5291	1234.9933	1181.5891	1249.2591	542.6555
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1362.44	1285.5865	1374.4777	1290.1960	1543.4094	1465.8105	1549.6105	678.0258
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1586.236	1501.7198	1605.0300	1506.1569	1800.0000	1711.7971	1810.4052	790.6386
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1763.306	1675.9829	1790.2603	1679.3618	2019.7148	1908.6986	2019.3983	880.4941
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1898.912	1808.1588	1930.1464	1821.3965	2187.6039	2057.4524	2176.1878	947.5920
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1999.223	1901.9667	2035.8999	1921.4229	2303.6679	2160.4649	2285.8649	991.9326
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2052.793	1962.0777	2098.1776	1978.6930	2367.9060	2208.3877	2337.2118	1013.5327
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2059.906	1979.8052	2114.8330	1992.8884	2380.0001	2200.9314	2329.9238	1012.6284
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2053.362	1962.0849	2098.1888	1978.7092	2367.9328	2208.4025	2337.2270	1013.5286
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1999.718	1901.9684	2035.9051	1921.4337	2303.6881	2160.4737	2285.8737	991.9404
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1899.247	1808.1549	1930.1455	1821.4017	2187.6174	2057.4550	2176.1900	947.5987
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1763.769	1675.9735	1790.2534	1679.3614	2019.7215	1908.6949	2019.3939	880.4998
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1586.473	1501.7476	1605.0171	1506.1511	1800.0002	1711.8149	1810.4234	790.6434
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1362.511	1285.6088	1374.5018	1290.1847	1543.4028	1465.8077	1549.6077	678.0297
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1091.882	1027.3646	1098.8927	1031.5458	1234.9799	1181.6077	1249.2787	542.6584
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	774.5879	727.0150	777.9392	730.4532	874.8523	842.8278	891.1824	384.5297
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	410.6271	384.5601	411.6417	386.6045	463.3388	448.9585	474.7561	203.6436
-20	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.39E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 130' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.32E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.54E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	410.4574	793.1175	853.7686	518.4750	625.1700	664.1191
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	774.2486	1482.9563	1592.6875	972.1357	1172.5628	1243.9741
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1091.919	2085.8826	2248.4658	1360.9822	1643.0371	1740.6557
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1362.44	2601.0492	2809.4584	1693.2215	2050.9572	2175.6774
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1586.236	3012.5000	3305.9651	1979.1107	2388.5786	2533.5911
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1763.306	3363.9891	3687.0184	2200.4786	2648.4230	2830.5915
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	1898.912	3630.0956	3997.1969	2366.9160	2838.5670	3043.3277
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	1999.223	3824.5492	4195.4899	2477.8876	2966.3744	3179.9597
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2052.793	3946.6941	4311.7562	2523.9643	3016.0757	3249.7322
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2059.906	3966.6666	4366.5858	2504.8893	2988.0002	3234.9198
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2053.362	3946.7104	4311.7569	2523.9499	3016.0670	3249.7438
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	1999.718	3824.5546	4195.4886	2477.8984	2966.3574	3179.9625
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	1899.247	3630.1176	3997.1987	2366.9196	2838.5700	3043.3494
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1763.769	3363.9999	3687.0182	2200.4749	2648.4458	2830.6040
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1586.473	3012.5001	3305.9629	1979.1320	2388.5928	2533.5946
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1362.511	2601.0384	2809.4541	1693.2359	2050.9631	2175.6861
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1091.882	2085.8606	2248.4676	1361.0035	1643.0342	1740.6550
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	774.5879	1482.9507	1592.8697	972.1499	1172.5799	1243.9922
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	410.6271	793.1284	853.7706	518.4821	625.1785	664.1281
-20	-2.27E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.39E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 140' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	235.0879967	193.3924984	269.9927976	1.21E+02	1.29E+02	121.6608	146.015	143.136	151.3872	64.13582652
-1	-3.639999262	-3.903992714	-3.275999332	-3.08503	-3.08503	-2.46824	-2.46824	-2.34618	-2.46966	-2.057237063
+1	218.8657902	179.7401829	248.8562965	114.448	122.563	115.1417	138.113	134.8024	142.5634	60.68961243
-2	-8.260001784	-10.74687404	-7.434001591	-8.2341	-8.2341	-7.73635	-8.22862	-6.26127	-6.59081	-4.430973791
+2	202.1425504	165.7573066	226.6015476	107.7542	115.3543	108.3445	129.874	126.045	133.2908	57.07224601
-3	-16.02704981	-17.0413667	-14.47740019	-13.8195	-14.1938	-12.9588	-14.255	-10.283	-10.8631	-6.488210215
+3	188.0752681	154.0028141	207.6416988	101.9529	109.1067	102.4536	122.7335	118.4552	125.2546	53.93719491
-4	-25.53600084	-24.72424233	-22.9824007	-20.5133	-21.4025	-19.7559	-22.494	-15.1253	-16.0146	-10.04673431
+4	172.1812458	140.8599348	186.1429478	95.25915	101.898	95.6564	114.4945	109.6977	115.982	50.31982835
-5	-34.84288796	-31.74673367	-31.45904907	-26.3146	-27.65	-25.6468	-29.6344	-20.3153	-21.3846	-13.18178553
+5	158.7704283	129.833442	167.8382968	89.45786	95.65049	89.7655	107.354	102.108	107.9458	47.18477876
-6	-46.10612429	-40.26961485	-41.61780015	-33.0083	-34.8587	-32.444	-37.8735	-28.2552	-29.7487	-16.79915237
+6	143.7164095	117.5305662	147.0955499	82.76408	88.44179	82.96832	99.11503	93.35052	98.67318	43.56741315
-7	-56.23159521	-48.02010587	-50.7496485	-38.8096	-41.1062	-38.3349	-45.0139	-35.845	-37.7849	-19.93420239
+7	131.0335908	107.2320692	129.5657983	76.96279	82.19426	77.07743	91.97455	85.76074	90.63694	40.43236205
-8	-68.33483092	-57.38298438	-61.66439852	-45.5034	-48.3149	-45.1321	-53.2529	-44.6024	-47.0575	-23.55156741
+8	116.8195734	95.76919249	110.4767996	70.269	74.98556	70.28024	83.73554	76.71138	81.05527	36.81499452
-9	-79.18830484	-65.86147969	-71.45145088	-51.3047	-54.5625	-51.023	-60.3934	-52.1922	-55.0938	-26.68662055
+9	104.8647518	86.19870151	94.73939926	64.39047	68.66078	64.16278	76.32044	69.12161	73.01904	33.67994371
-10	-92.13153339	-76.0643523	-83.12219784	-57.9985	-61.7712	-57.8202	-68.6324	-60.9496	-64.3663	-30.30398421
+10	91.2012814	75.36872822	82.18505168	57.5508	61.28904	57.3656	68.08142	60.36417	63.74646	30.06258035
-11	-103.7130124	-85.47794056	-93.74400127	-63.7998	-68.0187	-63.7111	-75.7729	-68.5394	-72.4026	-33.43903524
+11	79.98380341	66.52622893	72.10887415	51.74951	55.0415	51.47471	60.94095	52.77439	55.71022	26.92752839
-12	-117.4962459	-96.52082318	-111.7367998	-70.7167	-75.4677	-70.7348	-84.2865	-77.2968	-81.6752	-37.05640306
+12	67.46056895	56.74335369	60.86051697	45.05573	47.8328	44.67753	52.70194	44.01695	46.43764	23.31016469
-13	-129.805715	-106.4553158	-128.2805988	-76.518	-81.7152	-76.6257	-91.427	-85.1282	-89.9675	-40.1914519
+13	56.97110071	48.62886143	51.43954054	39.25445	41.58527	38.78664	45.56147	36.42718	38.40141	20.17511262
-14	-144.7273952	-118.3381906	-148.4657982	-83.2118	-88.9239	-83.4229	-99.666	-93.936	-99.2931	-43.80881969
+14	45.2878652	39.68598511	40.9073599	32.56066	34.37657	31.98945	37.32246	27.66973	29.12882	16.55774443
-15	-157.7648657	-129.0006844	-166.4428491	-89.013	-95.1715	-89.3138	-106.806	-101.526	-107.329	-46.94387029
+15	35.52638884	32.29949347	31.91356916	26.75937	28.12903	26.09856	30.18198	20.83589	21.93252	13.42269334
-16	-173.2280985	-141.723566	-187.5635966	-95.7068	-102.38	-96.111	-115.046	-110.283	-116.602	-50.56123577
+16	24.89199978	24.19661123	22.40279975	20.06558	20.92034	19.30138	21.94298	14.80161	15.6702	9.805328892
-17	-186.9935773	-153.1140583	-206.1958504	-101.508	-108.628	-102.002	-122.186	-117.873	-124.638	-53.69628583
+17	16.59416519	17.53811938	14.91867562	14.2643	14.67281	13.41048	14.80249	10.60492	11.20562	6.670281463
-18	-203.2968114	-166.6769336	-228.0725963	-108.202	-115.836	-108.799	-130.425	-126.63	-133.911	-57.31365387
+18	7.938000131	10.27524354	7.144200104	7.889717	7.889717	7.36443	7.815366	5.999539	6.315305	4.272561849
-19	-217.7902889	-178.7954324	-247.3600489	-114.003	-122.084	-114.69	-137.565	-134.22	-141.947	-60.44870678
+19	3.923219784	4.344750923	3.520874096	3.427198	3.427198	2.74201	2.74201	2.606459	2.743641	2.215319175
-20	-234.9335135	-193.1983071	-269.9927976	-1.21E+02	-1.29E+02	-121.487	-145.804	-142.978	-151.22	-64.06606754
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 140' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	91.58170986	124.1072	127.9422	142.8598012	73.66869917	99.3453	112.7897	124.0163	1.36E+02
-1	-2.172110204	-2.1733	-1.72922	-1.348862128	-1.963470437	-2.098	-2.09824	-2.09285	-2.08772
+1	86.64477145	116.9305	120.1258	129.5599926	69.71172068	94.01145	106.6745	117.1708	127.9913
-2	-5.797348137	-5.79991	-4.61456	-3.677013404	-4.242701012	-6.25593	-6.47222	-6.46468	-6.4575
+2	81.49528966	109.3888	111.882	116.100985	65.59255063	88.45012	100.2887	110.012	120.008
-3	-9.231963119	-8.94297	-7.21379	-5.863412719	-7.787762815	-10.4073	-10.9354	-10.9282	-10.9213
+3	77.03240649	102.8527	104.7373	105.0797496	62.02260393	83.6303	94.75444	103.8078	113.0892
-4	-14.38144398	-12.9669	-11.7479	-9.647238822	-11.90693278	-15.9686	-17.0627	-17.0136	-17.0056
+4	71.88292205	95.31097	96.49352	93.69453313	57.90343426	78.06897	88.36872	96.64908	105.1058
-5	-18.84432607	-18.3596	-15.6774	-13.02080589	-15.47687894	-20.7884	-22.597	-22.9157	-22.9068
+5	67.42003772	88.77483	89.34889	83.92158504	54.33348699	73.24915	82.83442	90.44486	98.18698
-6	-23.99381044	-25.1746	-21.8289	-18.24322364	-19.59604917	-26.3498	-28.9828	-30.0744	-30.8626
+6	62.27055786	81.23313	81.10508	73.857351	50.21431891	67.68782	76.4487	83.28614	90.20367
-7	-28.45669623	-31.7107	-27.9019	-23.41407561	-23.16599427	-31.1696	-34.5171	-36.2786	-37.7815
+7	57.80766832	74.69699	73.68566	65.34544516	46.6443716	62.86799	70.9144	77.08191	83.2848
-8	-33.60617921	-39.2524	-35.216	-29.80653868	-27.28516431	-36.7309	-40.9028	-43.4374	-45.7648
+8	52.65818648	66.9039	65.44185	56.481318	42.52520263	57.30666	64.52867	69.9232	75.18873
-9	-38.06906501	-45.7885	-42.3606	-35.97028185	-30.85511093	-41.5507	-46.4371	-49.6416	-52.6837
+9	48.02365375	60.36776	58.29722	50.03482225	38.95525449	52.30147	58.78151	63.48034	68.11652
-10	-43.21854487	-53.3302	-50.6044	-43.19104455	-34.97427957	-47.1121	-52.8228	-56.8003	-60.667
+10	42.87417098	52.82607	50.05341	42.70530695	34.69878027	46.74014	52.39579	56.32163	60.13321
-11	-47.68142719	-59.8664	-57.749	-49.54329616	-38.54422844	-51.9319	-58.3571	-63.0045	-67.5859
+11	38.41128884	46.28992	42.90878	36.44730431	31.1288318	41.92031	46.86149	50.11739	53.21434
-12	-53.00256162	-67.4081	-65.9928	-56.98156177	-42.80070209	-57.6786	-64.9557	-70.4019	-75.7225
+12	33.26180697	38.74823	34.66497	29.33529005	27.00966249	36.35899	40.47577	42.95868	45.23104
-13	-57.4654485	-74.149	-73.1375	-64.69530004	-46.3706505	-62.4984	-70.49	-76.6061	-82.7541
+13	28.79891985	32.21209	28.36781	23.8148365	23.43971852	31.53917	34.94147	36.75445	38.31217
-14	-62.61493033	-81.7373	-81.6561	-74.51673839	-50.48981946	-68.0597	-76.8757	-83.7648	-90.7375
+14	23.64943711	24.67039	21.36058	17.84845703	19.32054856	25.97783	28.55575	29.59573	30.32887
-15	-67.07781279	-88.2734	-88.8007	-83.17459437	-54.05976436	-72.8796	-82.41	-89.969	-97.6563
+15	19.18655071	18.80619	15.97893	13.28353276	15.7506011	21.15801	23.02145	23.3915	23.40999
-16	-72.22729496	-95.8151	-97.0445	-94.45106043	-58.17893321	-78.4409	-88.7957	-97.1278	-105.64
+16	14.03707344	12.62119	11.44484	9.390955992	11.63143119	15.59668	16.63572	16.59003	16.58201
-17	-76.69018164	-102.351	-104.189	-104.318258	-61.74888164	-83.2607	-94.33	-103.332	-112.558
+17	9.574186892	9.18408	7.515286	6.111643001	8.061487728	10.77686	11.27763	11.27046	11.26364
-18	-81.83966392	-109.893	-112.433	-116.995986	-65.86805127	-88.822	-100.716	-110.491	-120.542
+18	5.554908154	5.557468	4.421708	3.517875034	4.091175072	5.966656	6.127851	6.120306	6.113117
-19	-86.30255091	-116.429	-119.578	-128.6604589	-69.43799927	-93.6419	-106.25	-116.695	-127.461
+19	2.413035671	2.414404	1.921085	1.499584737	2.114016089	2.330709	2.330973	2.32562	2.320525
-20	-91.45203245	-123.971	-127.821	-142.8575816	-73.55716419	-99.2032	-112.636	-123.854	-1.35E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 140' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	228.6808328	247.2128713	148.5705	179.0256	190.684
-1	-2.173514647	-2.085803746	-2.49111	-2.64116	-2.2145
+1	214.6581397	231.7268405	139.7878	168.4864	179.2788
-2	-7.280209632	-6.793073146	-6.669	-7.38196	-7.38256
+2	199.8765391	215.2743435	130.5503	157.4014	167.2694
-3	-12.08423054	-11.62242668	-10.9914	-12.1854	-12.4198
+3	187.0658134	201.0155028	122.5445	147.7945	156.8613
-4	-18.84441529	-19.62475125	-16.072	-17.7279	-18.8864
+4	172.2842056	184.5630051	113.3071	136.7095	144.8519
-5	-26.73028388	-28.00048729	-20.4752	-23.9581	-24.4907
+5	159.4734776	170.3041646	105.3013	127.1025	134.4437
-6	-37.31470686	-39.31447132	-27.6613	-33.9346	-33.9213
+6	144.6918801	153.8516713	96.06381	116.0176	122.4343
-7	-48.52408451	-49.11992867	-35.4061	-43.2283	-43.5748
+7	131.3884322	139.5928285	87.9001	106.2702	111.6259
-8	-62.41016246	-62.89816827	-44.6436	-54.3133	-55.5841
+8	116.6068122	123.1403325	78.51262	94.95614	99.61647
-9	-75.2208925	-77.07379679	-52.6494	-63.9203	-65.9923
+9	103.7960877	108.8815091	70.50682	85.34918	89.20833
-10	-90.00249779	-93.52629968	-61.8868	-75.0052	-78.0017
+10	89.01448441	92.42901185	61.26935	74.26423	77.19893
-11	-102.8132106	-107.7851223	-69.8927	-84.6122	-88.4098
+11	76.20377173	78.17017246	53.26354	64.65725	66.79079
-12	-117.5948316	-124.2376378	-79.1301	-95.6971	-100.419
+12	61.42215462	61.89536042	44.02608	53.5723	54.7814
-13	-130.4055573	-138.4964597	-87.1359	-105.346	-110.827
+13	49.3841179	50.0720966	36.02027	43.96532	44.37326
-14	-145.679878	-154.948954	-96.6813	-116.759	-123.237
+14	36.55941055	38.55988925	27.10558	33.2677	33.18033
-15	-158.4906077	-169.2077944	-104.687	-126.366	-133.645
+15	27.34458955	28.75443043	20.81301	24.62143	24.9207
-16	-173.2722085	-185.6602929	-113.925	-137.45	-145.655
+16	18.35041429	19.06097685	15.7324	17.35743	18.4541
-17	-186.0829373	-199.9191341	-121.93	-147.057	-156.063
+17	12.45280323	12.09503856	11.3292	12.55394	12.84972
-18	-200.8645389	-216.3716292	-131.168	-158.142	-168.072
+18	6.909706134	6.450355735	6.391125	7.011459	7.012059
-19	-213.6752798	-230.6304713	-139.174	-167.749	-178.48
+19	2.419228916	2.367765104	2.767489	2.935959	2.460201
-20	-228.456866	-247.0829674	-148.411	-178.834	-190.49
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 140' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-9.38E-13**	***-6.46E-13***	***-9.33E-13***	**-4.93E-13**	**-5.03E-13**	**-4.62E-13**	**-5.09E-13**	**-5.10E-13**	**-5.37E-13**	**-2.99E-13**
End Shear	**9.40E-13**	***4.98E-13***	***9.00E-13***	**4.41E-13**	**4.75E-13**	**4.36E-13**	**5.28E-13**	**4.36E-13**	**4.58E-13**	**3.59E-13**
-1	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**1556.266532**	***1282.38728***	***1763.779475***	**801.1360624**	**857.9406629**	**805.9915663**	**966.7910211**	**943.6166921**	**997.9437682**	**424.827287**
-2	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**2940.664066**	***2428.71296***	***3278.74678***	**1514.806617**	**1621.687706**	**1523.166619**	**1825.925661**	**1772.802857**	**1874.725802**	**802.3876599**
-3	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**4154.498629**	***3438.977095***	***4644.611967***	**2141.011673**	**2291.241127**	**2151.552875**	**2578.440915**	**2487.558613**	**2630.346225**	**1132.681093**
-4	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**5195.311769**	***4313.179577***	***5749.93438***	**2679.751241**	**2866.684354**	**2691.831805**	**3223.336125**	**3089.111567**	**3266.147867**	**1415.707629**
-5	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**6064.114982**	***5051.320461***	***6594.713899***	**3131.108299**	**3348.450865**	**3143.294291**	**3760.574962**	**3608.48081**	**3816.724704**	**1651.467257**
-6	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**6760.908542**	***5653.399771***	***7272.795675***	**3495.396965**	**3736.023696**	**3505.940247**	**4218.994135**	**4025.175838**	**4258.912161**	**1839.959947**
-7	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**7298.008168**	***6119.417376***	***7807.640269***	**3772.220131**	**4029.402917**	**3802.11785**	**4569.75654**	**4340.714446**	**4591.633151**	**1981.18574**
-8	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**7689.640593**	***6449.373685***	***8081.942561***	**3968.786776**	**4250.214892**	**4010.921243**	**4812.863172**	**4559.853074**	**4824.82898**	**2075.144533**
-9	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**7909.227578**	***6643.268172***	***8103.242518***	**4094.107015**	**4380.437126**	**4130.907554**	**4948.312775**	**4664.560797**	**4936.862683**	**2121.903146**
-10	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**7957.392583**	***6700.749949***	***7915.949923***	**4131.459778**	**4415.96373**	**4161.501362**	**4975.5301**	**4654.309664**	**4927.178511**	**2121.846239**
-11	**0.00E+00**	***0.00E+00***	***0.00E+00***	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+11	**7910.549031**	***6643.358376***	***8103.242648***	**4094.120069**	**4380.457133**	**4130.936747**	**4948.36097**	**4664.58785**	**4936.890391**	**2121.895858**
-12	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**7690.679878**	***6449.45453***	***8081.942625***	**3968.789867**	**4250.224162**	**4010.940615**	**4812.899464**	**4559.869001**	**4824.84491**	**2075.158724**
-13	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**7298.68934**	***6119.487679***	***7807.640141***	**3772.21315**	**4029.401371**	**3802.127236**	**4569.780716**	**4340.719005**	**4591.637039**	**1981.197924**
-14	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**6761.806904**	***5653.460085***	***7272.795662***	**3495.379867**	**3736.011215**	**3505.939645**	**4219.006325**	**4025.169268**	**4258.904264**	**1839.970452**
-15	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**6064.51089**	***5051.370545***	***6594.713503***	**3131.081305**	**3348.427732**	**3143.283722**	**3760.575209**	**3608.513049**	**3816.757594**	**1651.475971**
-16	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**5195.346986**	***4313.219961***	***5749.934618***	**2679.791557**	**2866.650388**	**2691.811333**	**3223.324135**	**3089.106359**	**3266.142661**	**1415.714564**
-17	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**4154.313607**	***3439.007445***	***4644.61175***	**2141.042079**	**2291.273881**	**2151.555333**	**2578.416882**	**2487.59254**	**2630.382147**	**1132.686308**
-18	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**2941.411316**	***2428.732976***	***3278.746927***	**1514.826668**	**1621.709327**	**1523.186432**	**1825.9497**	**1772.825535**	**1874.749813**	**802.3910791**
-19	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**1556.640443**	***1282.397538***	***1763.77943***	**801.146225**	**857.9515951**	**806.0017481**	**966.803378**	**943.628041**	**997.9557873**	**424.8291288**
-20	**-1.29E-12**	***-7.73E-13***	***-1.30E-12***	**-5.87E-13**	**-6.19E-13**	**-5.97E-13**	**-7.20E-13**	**-7.70E-13**	**-8.11E-13**	**-3.78E-13**
+20	**8.25E-13**	***5.12E-13***	***9.48E-13***	**4.25E-13**	**4.58E-13**	**3.48E-13**	**4.01E-13**	**4.91E-13**	**5.17E-13**	**2.40E-13**

1-Span: Moment (Max and Min) Raw Data Results - 140’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-3.25E-13	-4.48E-13	-4.09E-13	-3.65E-13	-3.87E-13	-4.03E-13	-3.70E-13	-3.69E-13	-4.23E-13
End Shear	3.42E-13	3.78E-13	4.37E-13	3.25E-13	4.03E-13	3.64E-13	3.22E-13	3.30E-13	3.66E-13
-1	0	0	0	0	0	0	0	0	0
+1	606.5134002	818.5135347	840.8804151	915.6498969	487.9820448	658.0801637	746.7212641	820.3413326	896.1329397
-2	0	0	0	0	0	0	0	0	0
+2	1145.740256	1538.48219	1574.041732	1671.799801	922.1402728	1243.492271	1410.002384	1548.34298	1689.303954
-3	0	0	0	0	0	0	0	0	0
+3	1617.680536	2159.906075	2200.062479	2302.285639	1302.474682	1756.236325	1989.989031	2200.28888	2404.298731
-4	0	0	0	0	0	0	0	0	0
+4	2022.334193	2683.389923	2733.651306	2821.953865	1628.985324	2196.760385	2487.175815	2766.264826	3017.950267
-5	0	0	0	0	0	0	0	0	0
+5	2359.981386	3113.879375	3173.94755	3279.291631	1901.672045	2564.744285	2900.922473	3238.700086	3552.000404
-6	0	0	0	0	0	0	0	0	0
+6	2630.521008	3467.171725	3506.524902	3623.576641	2120.535093	2860.06012	3242.764575	3617.594963	3985.340827
-7	0	0	0	0	0	0	0	0	0
+7	2833.774036	3721.918678	3781.912104	3906.766733	2285.574209	3096.405127	3511.98077	3903.826816	4314.365771
-8	0	0	0	0	0	0	0	0	0
+8	2987.042924	3882.936562	3971.024021	4073.458274	2396.789749	3265.84976	3697.757251	4116.812475	4539.075912
-9	0	0	0	0	0	0	0	0	0
+9	3073.745893	3967.256639	4103.066725	4200.818113	2454.181033	3362.625878	3800.093196	4241.123863	4673.915838
-10	0	0	0	0	0	0	0	0	0
+10	3092.605482	3952.614714	4126.856494	4193.371056	2456.825035	3386.24436	3818.310232	4271.428695	4718.865071
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	3073.760617	3967.282887	4103.066674	4200.809579	2454.202797	3362.647842	3800.100168	4241.141869	4673.921046
-12	0	0	0	0	0	0	0	0	0
+12	2987.050095	3882.953227	3971.033701	4073.456213	2396.839493	3265.863674	3697.780396	4116.820602	4539.118445
-13	0	0	0	0	0	0	0	0	0
+13	2833.773739	3721.939953	3781.922266	3906.759078	2285.617696	3096.410899	3511.994663	3903.824788	4314.396894
-14	0	0	0	0	0	0	0	0	0
+14	2630.513098	3467.183339	3506.549489	3623.56083	2120.572566	2860.057715	3242.769325	3617.632048	3985.361344
-15	0	0	0	0	0	0	0	0	0
+15	2359.966101	3113.881131	3173.962368	3279.282404	1901.70305	2564.733699	2900.918066	3238.727098	3552.009848
-16	0	0	0	0	0	0	0	0	0
+16	2022.364319	2683.382154	2733.656339	2821.941477	1629.010211	2196.741704	2487.162291	2766.282033	3017.948978
-17	0	0	0	0	0	0	0	0	0
+17	1617.703276	2159.935303	2200.057597	2302.278113	1302.493371	1756.260988	1989.966367	2200.296044	2404.309106
-18	0	0	0	0	0	0	0	0	0
+18	1145.755295	1538.501696	1574.061188	1671.800774	922.1526815	1243.508488	1410.020673	1548.339807	1689.303098
-19	0	0	0	0	0	0	0	0	0
+19	606.5209506	818.5233122	840.8901862	915.6410577	487.9884071	658.0885031	746.7305775	820.3283332	896.1212314
-20	-5.64E-13	-6.61E-13	-6.30E-13	-5.37E-13	-5.36E-13	-5.17E-13	-5.45E-13	-5.96E-13	-6.34E-13
+20	3.35E-13	4.22E-13	3.83E-13	3.52E-13	2.73E-13	3.07E-13	3.49E-13	3.41E-13	3.38E-13

1-Span: Moment (Max and Min) Raw Data Results - 140' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.96E-13	-6.00E-13	-5.68E-13	-5.58E-13	-6.07E-13
End Shear	5.69E-13	5.82E-13	4.29E-13	5.34E-13	4.90E-13
-1	0	0	0	0	0
+1	1502.606978	1622.087884	978.5147043	1179.404647	1254.951523
-2	0	0	0	0	0
+2	2813.053133	3030.277151	1836.326513	2213.96581	2352.980279
-3	0	0	0	0	0
+3	3959.363767	4279.318556	2573.435515	3105.368147	3296.180719
-4	0	0	0	0	0
+4	4939.911356	5349.165062	3204.152452	3878.039601	4121.325415
-5	0	0	0	0	0
+5	5727.312509	6292.105202	3745.977842	4518.799831	4802.008718
-6	0	0	0	0	0
+6	6397.240383	7020.065898	4167.731131	5014.716974	5366.06487
-7	0	0	0	0	0
+7	6905.719775	7610.126121	4485.735545	5379.888429	5773.197697
-8	0	0	0	0	0
+8	7276.57437	7991.389302	4699.203173	5626.848584	6037.592802
-9	0	0	0	0	0
+9	7508.503405	8215.453179	4791.88834	5728.333485	6175.074732
-10	0	0	0	0	0
+10	7549.96697	8317.935048	4763.214003	5684.952179	6155.108625
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	7508.530194	8215.454212	4791.864958	5728.319379	6175.094217
-12	0	0	0	0	0
+12	7276.583384	7991.387128	4699.22069	5626.843934	6037.597347
-13	0	0	0	0	0
+13	6905.755464	7610.128982	4485.741263	5379.892998	5773.232995
-14	0	0	0	0	0
+14	6397.2584	7020.065417	4167.725391	5014.754517	5366.085637
-15	0	0	0	0	0
+15	5727.312925	6292.101779	3746.012635	4518.822892	4802.014177
-16	0	0	0	0	0
+16	4939.893738	5349.15793	3204.175838	3878.048975	4121.339184
-17	0	0	0	0	0
+17	3959.327721	4279.321451	2573.470599	3105.363553	3296.179612
-18	0	0	0	0	0
+18	2813.044149	3030.591942	1836.349959	2213.993912	2353.010268
-19	0	0	0	0	0
+19	1502.624807	1622.091274	978.526129	1179.41838	1254.966147
-20	-8.26E-13	-8.30E-13	-7.49E-13	-8.80E-13	-7.96E-13
+20	5.63E-13	6.91E-13	4.51E-13	5.03E-13	4.85E-13

1-Span: Shear (Max and Min) Raw Data Results - 140' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**67.2**	***47.48857***	***64.35428***	***66.34286***	***77.56429***	***38.2***	***51.51429***	***58.48571***	***64.30714***	***70.32143***
-1	**-1.48571**	***-1.12632***	***-1.12694***	***-0.89667***	***-0.7075***	***-1.01813***	***-1.08789***	***-1.08801***	***-1.08522***	***-1.08256***
+1	**63.52043**	***44.92858***	***60.63288***	***62.28975***	***70.32853***	***36.14816***	***48.74848***	***55.31473***	***60.75746***	***66.36833***
-2	**-3.2**	***-3.00614***	***-3.00747***	***-2.39282***	***-1.94265***	***-2.2***	***-3.24394***	***-3.35609***	***-3.35218***	***-3.34846***
+2	**59.67371**	***42.25838***	***56.72222***	***58.01502***	***63.00526***	***34.01221***	***45.86472***	***52.0035***	***57.04539***	***62.22868***
-3	**-6.1461**	***-4.78712***	***-4.63727***	***-3.74062***	***-3.1167***	***-4.03825***	***-5.39656***	***-5.6704***	***-5.66666***	***-5.6631***
+3	**56.3666**	***39.94421***	***53.33299***	***54.31026***	***57.0081***	***32.16106***	***43.36547***	***49.13375***	***53.82827***	***58.64099***
-4	**-9.6**	***-7.45732***	***-6.72385***	***-6.09172***	***-5.14389***	***-6.17419***	***-8.28032***	***-8.84768***	***-8.8222***	***-8.81805***
+4	**52.51525**	***37.27401***	***49.42233***	***50.03553***	***50.79738***	***30.02511***	***40.48171***	***45.82251***	***50.1162***	***54.50134***
-5	**-12.8949**	***-9.77149***	***-9.52015***	***-8.12934***	***-6.96578***	***-8.02535***	***-10.7796***	***-11.7174***	***-11.8826***	***-11.878***
+5	**49.17741**	***34.95983***	***46.0331***	***46.33077***	***45.47976***	***28.17396***	***37.98245***	***42.95277***	***46.89907***	***50.91365***
-6	**-16.7416**	***-12.4417***	***-13.054***	***-11.3191***	***-9.77615***	***-10.1613***	***-13.6633***	***-15.0287***	***-15.5947***	***-16.0034***
+6	**45.32606**	***32.28963***	***42.12244***	***42.05604***	***39.99124***	***26.03802***	***35.09869***	***39.64153***	***43.18701***	***46.774***
-7	**-20.0754**	***-14.7559***	***-16.4432***	***-14.4682***	***-12.5623***	***-12.0124***	***-16.1626***	***-17.8984***	***-18.8118***	***-19.5911***
+7	**41.98822**	***29.97546***	***38.73321***	***38.20879***	***35.35977***	***24.18687***	***32.59943***	***36.77179***	***39.96988***	***43.18631***
-8	**-23.9222**	***-17.4261***	***-20.3538***	***-18.2608***	***-16.0166***	***-14.1484***	***-19.0464***	***-21.2096***	***-22.5239***	***-23.7308***
+8	**38.13687**	***27.30526***	***34.6922***	***33.93407***	***30.53078***	***22.05092***	***29.71567***	***33.46055***	***36.25782***	***38.98819***
-9	**-27.256**	***-19.7402***	***-23.7431***	***-21.9656***	***-19.3498***	***-15.9995***	***-21.5456***	***-24.0794***	***-25.741***	***-27.3185***
+9	**34.79903**	***24.90208***	***31.30296***	***30.22931***	***27.00256***	***20.19977***	***27.12028***	***30.48043***	***32.91695***	***35.32098***
-10	**-31.1027**	***-22.4104***	***-27.6537***	***-26.2403***	***-23.2708***	***-18.1355***	***-24.4294***	***-27.3906***	***-29.4531***	***-31.4581***
+10	**30.82332**	***22.23188***	***27.39231***	***25.95458***	***23.00653***	***17.99263***	***24.23652***	***27.16919***	***29.20489***	***31.18134***
-11	**-34.4365**	***-24.7246***	***-31.043***	***-29.9451***	***-26.734***	***-19.9866***	***-26.9286***	***-30.2604***	***-32.6702***	***-35.0458***
+11	**27.4895**	***19.9177***	***24.00307***	***22.24982***	***19.60831***	***16.14147***	***21.73726***	***24.29945***	***25.98776***	***27.59364***
-12	**-38.2832**	***-27.4838***	***-34.9536***	***-34.2198***	***-30.8051***	***-22.1938***	***-29.9085***	***-33.682***	***-36.506***	***-39.265***
+12	**23.64278**	***17.2475***	***20.09242***	***17.97509***	***15.76228***	***14.00553***	***18.85351***	***20.98821***	***22.2757***	***23.454***
-13	**-41.6171**	***-29.798***	***-38.449***	***-37.9245***	***-35.0065***	***-24.0449***	***-32.4078***	***-36.5517***	***-39.7232***	***-42.9111***
+13	**20.30896**	***14.93333***	***16.70318***	***14.70978***	***12.77876***	***12.15438***	***16.35425***	***18.11847***	***19.05857***	***19.86631***
-14	**-45.592**	***-32.4682***	***-42.3839***	***-42.3418***	***-40.3505***	***-26.1809***	***-35.2915***	***-39.863***	***-43.4352***	***-47.0508***
+14	**16.46224**	***12.26313***	***12.79253***	***11.07627***	***9.564008***	***10.01843***	***13.47049***	***14.80723***	***15.3465***	***15.72666***
-15	**-48.9258**	***-34.7824***	***-45.7731***	***-46.0465***	***-45.0738***	***-28.032***	***-37.7908***	***-42.7327***	***-46.6523***	***-50.6385***
+15	**13.12842**	***9.94895***	***9.75172***	***8.28568***	***7.10822***	***8.167281***	***10.97123***	***11.93749***	***12.12938***	***12.13896***
-16	**-52.7725**	***-37.4526***	***-49.6838***	***-50.3212***	***-51.2095***	***-30.168***	***-40.6746***	***-46.0439***	***-50.3644***	***-54.7781***
+16	**9.371428**	***7.278752***	***6.544562***	***5.934579***	***5.006031***	***6.031336***	***8.087469***	***8.626248***	***8.602555***	***8.598399***
-17	**-56.1064**	***-39.7668***	***-53.073***	***-54.026***	***-56.5921***	***-32.0191***	***-43.1738***	***-48.9137***	***-53.5815***	***-58.3658***
+17	**6.353669**	***4.964577***	***4.762292***	***3.896959***	***3.249136***	***4.180185***	***5.588207***	***5.847876***	***5.844159***	***5.840622***
-18	**-59.9531**	***-42.437***	***-56.9837***	***-58.3007***	***-63.4917***	***-34.1551***	***-46.0576***	***-52.2249***	***-57.2936***	***-62.5055***
+18	**3.085714**	***2.880429***	***2.881757***	***2.292822***	***1.857647***	***2.121429***	***3.093936***	***3.177522***	***3.173609***	***3.169882***
-19	**-63.2869**	***-44.7511***	***-60.3729***	***-62.0055***	***-69.8385***	***-36.0062***	***-48.5568***	***-55.0947***	***-60.5107***	***-66.0932***
+19	**1.595368**	***1.25125***	***1.25196***	***0.996155***	***0.786896***	***1.096197***	***1.20856***	***1.208698***	***1.205922***	***1.20328***
-20	**-67.1336**	***-47.4213***	***-64.2835***	***-66.2802***	***-77.5631***	***-38.1422***	***-51.4406***	***-58.4059***	***-64.2228***	***-70.2328***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 140' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	67.2	62.67857	67.14286	63.08571	75.71429	74.22143	78.5	33.25685
-1	-1.48571	-1.5997	-1.5997	-1.27987	-1.27987	-1.21658	-1.28061	-1.06676
+1	63.52043	59.34561	63.55351	59.70529	71.6168	69.90012	73.9245	31.46985
-2	-3.2	-4.26969	-4.26969	-4.01159	-4.26685	-3.2467	-3.41758	-2.29763
+2	59.67371	55.87463	59.81553	56.1807	67.34457	65.35906	69.11632	29.59411
-3	-6.1461	-7.16592	-7.36001	-6.71961	-7.39173	-5.33211	-5.63295	-3.36438
+3	56.3666	52.86644	56.57595	53.12605	63.64196	61.42348	64.94923	27.96847
-4	-9.6	-10.6369	-11.098	-10.2442	-11.664	-7.84305	-8.30416	-5.20961
+4	52.51525	49.39546	52.83797	49.60145	59.36972	56.88241	60.14104	26.09273
-5	-12.8949	-13.6451	-14.3376	-13.2989	-15.3666	-10.5343	-11.0887	-6.83525
+5	49.17741	46.38728	49.59839	46.5468	55.66712	52.94683	55.97395	24.46709
-6	-16.7416	-17.1161	-18.0755	-16.8235	-19.6388	-14.6514	-15.4258	-8.71099
+6	45.32606	42.9163	45.86041	43.02221	51.39488	48.40576	51.16577	22.59135
-7	-20.0754	-20.1243	-21.3151	-19.8781	-23.3414	-18.587	-19.5929	-10.3366
+7	41.98822	39.90811	42.62082	39.96755	47.69227	44.47018	46.99867	20.9657
-8	-23.9222	-23.5952	-25.0531	-23.4027	-27.6137	-23.128	-24.4011	-12.2124
+8	38.13687	36.43713	38.88284	36.44296	43.42004	39.77774	42.03022	19.08996
-9	-27.256	-26.6034	-28.2927	-26.4573	-31.3163	-27.0636	-28.5682	-13.838
+9	34.79903	33.38889	35.6032	33.27082	39.57503	35.84216	37.86313	17.46432
-10	-31.1027	-30.0744	-32.0307	-29.9819	-35.5885	-31.6047	-33.3764	-15.7138
+10	30.82332	29.84226	31.78068	29.74623	35.30279	31.3011	33.05495	15.58858
-11	-34.4365	-33.0826	-35.2703	-33.0366	-39.2911	-35.5403	-37.5435	-17.3394
+11	27.4895	26.83408	28.54109	26.69158	31.60018	27.36551	28.88785	13.96294
-12	-38.2832	-36.6693	-39.1328	-36.6787	-43.7057	-40.0813	-42.3516	-19.2151
+12	23.64278	23.36309	24.80311	23.16698	27.32795	22.82445	24.07967	12.0872
-13	-41.6171	-39.6775	-42.3724	-39.7333	-47.4084	-44.1422	-46.6515	-20.8408
+13	20.30896	20.35491	21.56353	20.11233	23.62534	18.88887	19.91258	10.46156
-14	-45.592	-43.1484	-46.1104	-43.2579	-51.6806	-48.7093	-51.4872	-22.7165
+14	16.46224	16.88393	17.82555	16.58774	19.3531	14.3478	15.10439	8.585815
-15	-48.9258	-46.1566	-49.35	-46.3126	-55.3832	-52.6449	-55.6543	-24.3422
+15	13.12842	13.87574	14.58596	13.53309	15.6505	10.8042	11.37284	6.960173
-16	-52.7725	-49.6276	-53.088	-49.8372	-59.6554	-57.186	-60.4625	-26.2179
+16	9.371428	10.40476	10.84798	10.00849	11.37826	7.675196	8.125588	5.084433
-17	-56.1064	-52.6358	-56.3276	-52.8918	-63.358	-61.1216	-64.6296	-27.8435
+17	6.353669	7.396578	7.608403	6.95384	7.675651	5.499049	5.810538	3.458793
-18	-59.9531	-56.1068	-60.0655	-56.4164	-67.6303	-65.6626	-69.4377	-29.7193
+18	3.085714	4.091116	4.091116	3.818735	4.052562	3.110988	3.274724	2.215484
-19	-63.2869	-59.115	-63.3051	-59.4711	-71.3329	-69.5982	-73.6048	-31.3449
+19	1.595368	1.777131	1.777131	1.421836	1.421836	1.351547	1.422682	1.148727
-20	-67.1336	-62.5859	-67.0431	-62.9957	-75.6051	-74.1393	-78.413	-33.2207
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 140 Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	67.2	132.2619	142.9803	85.92857	103.5429	110.2857
-1	-1.48571	-1.25709	-1.20636	-1.44078	-1.52757	-1.2808
+1	63.52043	124.1516	134.0236	80.84894	97.4473	103.6893
-2	-3.2	-4.21065	-3.9289	-3.85714	-4.2695	-4.26984
+2	59.67371	115.6024	124.508	75.50627	91.0361	96.74343
-3	-6.1461	-6.98914	-6.72205	-6.3571	-7.04768	-7.1832
+3	56.3666	108.1931	116.2611	70.87597	85.47973	90.72368
-4	-9.6	-10.899	-11.3503	-9.29556	-10.2533	-10.9233
+4	52.51525	99.64384	106.7455	65.5333	79.06853	83.77782
-5	-12.8949	-15.46	-16.1946	-11.8422	-13.8566	-14.1647
+5	49.17741	92.23452	98.49865	60.90299	73.51216	77.75808
-6	-16.7416	-21.5817	-22.7383	-15.9985	-19.6267	-19.619
+6	45.32606	83.6853	88.98304	55.56033	67.10097	70.81222
-7	-20.0754	-28.0648	-28.4094	-20.4778	-25.0019	-25.2023
+7	41.98822	75.991	80.73616	50.8387	61.46342	64.56094
-8	-23.9222	-36.0961	-36.3784	-25.8205	-31.4131	-32.1481
+8	38.13687	67.44177	71.22055	45.40927	54.91969	57.61508
-9	-27.256	-43.5054	-44.5771	-30.4508	-36.9695	-38.1679
+9	34.79903	60.03244	62.97369	40.77896	49.36332	51.59533
-10	-31.1027	-52.0547	-54.0927	-35.7934	-43.3807	-45.1138
+10	30.82332	51.48322	53.45808	35.4363	42.95213	44.64947
-11	-34.4365	-59.464	-62.3396	-40.4237	-48.9371	-51.1335
+11	27.4895	44.0739	45.2112	30.80598	37.39575	38.62972
-12	-38.2832	-68.0132	-71.8552	-45.7664	-55.3483	-58.0794
+12	23.64278	35.52467	35.79836	25.46332	30.98456	31.68386
-13	-41.6171	-75.4225	-80.1021	-50.3967	-60.9291	-64.0991
+13	20.30896	28.56224	28.96015	20.83301	25.42818	25.66412
-14	-45.592	-84.2567	-89.6177	-55.9175	-67.5295	-71.2765
+14	16.46224	21.14483	22.30184	15.67703	19.24101	19.19047
-15	-48.9258	-91.6661	-97.8645	-60.5478	-73.0859	-77.2963
+15	13.12842	15.81526	16.63067	12.0376	14.24027	14.41336
-16	-52.7725	-100.215	-107.38	-65.8904	-79.4971	-84.2421
+16	9.371428	10.61331	11.02428	9.099133	10.039	10.67328
-17	-56.1064	-107.625	-115.627	-70.5208	-85.0535	-90.2619
+17	6.353669	7.202315	6.995395	6.552461	7.260812	7.431877
-18	-59.9531	-116.174	-125.143	-75.8634	-91.4647	-97.2077
+18	3.085714	3.99636	3.730686	3.696429	4.055211	4.055557
-19	-63.2869	-123.583	-133.39	-80.4937	-97.021	-103.227
+19	1.595368	1.399207	1.369442	1.60063	1.698068	1.422904
-20	-67.1336	-132.132	-142.905	-85.8364	-103.432	-110.173
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 140' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.62E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	444.643	314.5001	424.4301	436.0282	497.8990	253.0371	341.2394	387.2031	425.3779	464.6787
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	839.0222	594.1095	797.7611	816.2000	910.6597	478.1645	644.7977	731.1394	802.8742	875.9678
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1183.699	838.8284	1119.9928	1140.8154	1255.8272	675.3823	910.6748	1031.8844	1140.9328	1246.7196
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1477.616	1048.6566	1391.4389	1417.5013	1541.1001	844.6903	1139.1031	1289.6945	1434.4127	1564.9211
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1721.209	1223.7394	1614.6639	1645.8115	1791.6206	986.0887	1329.9167	1504.2377	1679.3882	1841.8462
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1914.478	1364.0244	1797.8593	1818.2654	1981.0875	1099.5774	1483.0491	1681.4958	1875.8595	2066.5496
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2062.715	1469.4187	1929.9552	1961.0641	2136.4428	1185.1564	1605.6029	1821.0945	2024.2815	2237.1614
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2172.03	1548.8944	2013.4491	2059.1258	2228.9576	1242.8259	1693.4663	1917.4266	2134.7226	2353.6821
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2231.007	1593.8532	2057.1722	2127.5949	2298.6458	1272.5854	1743.6484	1970.4917	2199.1827	2423.6017
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2239.911	1603.6326	2049.5798	2139.9308	2296.0000	1273.9565	1755.8954	1979.9379	2214.8969	2446.9096
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2231.574	1593.8608	2057.1858	2127.5949	2298.6414	1272.5967	1743.6598	1970.4953	2199.1921	2423.6044
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2172.477	1548.8982	2013.4577	2059.1308	2228.9565	1242.8517	1693.4735	1917.4386	2134.7268	2353.7041
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2063.007	1469.4186	1929.9663	1961.0694	2136.4388	1185.1790	1605.6059	1821.1017	2024.2804	2237.1775
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1914.864	1364.0203	1797.8654	1818.2782	1981.0793	1099.5969	1483.0478	1681.4982	1875.8787	2066.5602
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1721.38	1223.7315	1614.6648	1645.8192	1791.6158	986.1048	1329.9112	1504.2355	1679.4022	1841.8511
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1477.631	1048.6722	1391.4349	1417.5039	1541.0936	844.7032	1139.0934	1289.6875	1434.4216	1564.9204
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1183.619	838.8402	1120.0079	1140.8129	1255.8233	675.3919	910.6876	1031.8726	1140.9365	1246.7250
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	839.3432	594.1173	797.7712	816.2101	910.6602	478.1710	644.8061	731.1489	802.8726	875.9674
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	444.8036	314.5040	424.4352	436.0333	497.8944	253.0404	341.2437	387.2080	425.3712	464.6727
-20	-4.90E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.12E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 140' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.62E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	444.643	415.4193	444.8746	417.9370	501.3176	489.3009	517.4715	220.2890
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	839.0222	785.4844	840.9063	789.8194	946.8113	919.2652	972.1160	416.0683
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1183.699	1110.1953	1188.0950	1115.6613	1337.0189	1289.8930	1363.9337	587.3379
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1477.616	1389.5521	1486.4840	1395.8163	1671.4214	1601.8209	1693.6209	734.0978
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1721.209	1623.5978	1736.2981	1629.9167	1950.0000	1871.1334	1979.1157	856.3481
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1914.478	1812.4952	1937.2692	1817.9623	2187.7076	2087.2055	2208.4066	954.0886
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2062.715	1956.0384	2089.3974	1971.5415	2369.5912	2250.8242	2380.9350	1027.3195
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2172.03	2057.9657	2203.8968	2079.8140	2495.6511	2364.4558	2501.8558	1076.0407
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2231.007	2122.9489	2271.4219	2142.0314	2565.8868	2418.7507	2559.9495	1100.2868
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2239.911	2142.3177	2289.8438	2157.8954	2580.0001	2413.4351	2554.9279	1100.2573
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2231.574	2122.9557	2271.4323	2142.0465	2565.9118	2418.7648	2559.9639	1100.2830
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2172.477	2057.9673	2203.9016	2079.8240	2495.6699	2364.4641	2501.8641	1076.0481
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2063.007	1956.0348	2089.3966	1971.5464	2369.6037	2250.8266	2380.9370	1027.3259
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1914.864	1812.4863	1937.2628	1817.9620	2187.7139	2087.2021	2208.4025	954.0941
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1721.38	1623.5838	1736.2861	1629.9112	1950.0001	1871.1501	1979.1328	856.3526
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1477.631	1389.5730	1486.4664	1395.8057	1671.4152	1601.8182	1693.6182	734.1014
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1183.619	1110.2111	1188.1119	1115.6626	1337.0064	1289.9106	1363.9524	587.3406
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	839.3432	785.4948	840.9175	789.8296	946.8238	919.2769	972.1285	416.0700
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	444.8036	415.4245	444.8803	417.9423	501.3240	489.3067	517.4777	220.2899
-20	-4.90E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.12E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 140' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.62E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	444.643	869.0613	938.1653	565.9426	682.1311	725.8251
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	839.0222	1626.9827	1752.6184	1062.0743	1280.4892	1360.8908
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1183.699	2289.9733	2475.0252	1488.3953	1796.0487	1906.4087
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1477.616	2857.0916	3093.7912	1853.1824	2242.9379	2383.6469
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1721.209	3312.5000	3639.1586	2166.5575	2613.5337	2777.3330
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	1914.478	3699.9655	4060.1885	2410.4865	2900.3568	3103.5656
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2062.715	3994.0542	4401.4610	2594.4104	3111.5607	3339.0386
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2172.03	4208.5450	4621.9718	2717.8734	3254.3948	3491.9565
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2231.007	4342.6856	4751.5634	2771.4797	3313.0905	3571.4718
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2239.911	4366.6668	4810.8358	2754.8953	3288.0001	3559.9240
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2231.574	4342.7011	4751.5640	2771.4661	3313.0823	3571.4831
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2172.477	4208.5503	4621.9706	2717.8836	3254.3921	3491.9591
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2063.007	3994.0749	4401.4627	2594.4137	3111.5633	3339.0590
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	1914.864	3699.9759	4060.1882	2410.4832	2900.3786	3103.5776
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1721.38	3312.5002	3639.1566	2166.5776	2613.5471	2777.3361
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1477.631	2857.0814	3093.7871	1853.1960	2242.9433	2383.6548
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1183.619	2289.9524	2475.0269	1488.4156	1796.0460	1906.4081
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	839.3432	1626.9775	1752.8004	1062.0879	1280.5054	1360.9082
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	444.8036	869.0716	938.1673	565.9492	682.1390	725.8335
-20	-4.90E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	3.12E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 150' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	241.4328003	199.1033329	280.7464771	1.21E+02	1.30E+02	122.0355	146.566	144.5218	152.8658	64.36636648
-1	-3.671734434	-4.057647627	-3.304560987	-3.20061	-3.20061	-2.56068	-2.56068	-2.43386	-2.56196	-2.067912607
+1	224.6729092	184.9160298	259.1185765	114.7548	122.9393	115.5239	138.6732	136.1912	144.0451	60.92404651
-2	-8.774339575	-10.91629342	-7.931281084	-8.35683	-8.35683	-7.91461	-8.45117	-6.35119	-6.68547	-4.43124062
+2	207.4702277	170.4413838	236.4654563	108.0895	115.7612	108.7557	130.4693	127.4714	134.8124	57.3225399
-3	-16.68797844	-17.30960587	-15.06959908	-14.1512	-14.597	-13.3671	-14.8468	-10.5055	-11.1049	-6.676580748
+3	192.8694016	158.1680714	216.9967805	102.2573	109.4804	102.8335	123.2909	119.8416	126.7338	54.17122306
-4	-26.41886137	-25.06425209	-23.85432001	-20.8166	-21.775	-20.1354	-23.0507	-15.327	-16.2342	-10.27808735
+4	176.5525312	144.5894239	195.1500586	95.59198	102.3024	96.06526	115.0869	111.1219	117.5011	50.56971784
-5	-35.98320779	-32.24156866	-32.48027824	-26.6487	-28.0558	-26.0576	-30.2291	-21.4022	-22.5286	-13.42940656
+5	162.6672747	133.1001131	176.3869798	89.75982	96.02158	90.14305	107.9085	103.4921	109.4225	47.41840035
-6	-47.36188936	-40.89221216	-42.74171945	-33.3141	-35.2338	-32.8258	-38.4331	-29.648	-31.2347	-17.03091316
+6	147.2464026	120.417467	155.3466597	83.09449	88.84354	83.37482	99.70459	94.77231	100.1898	43.81689375
-7	-57.71023893	-48.8535283	-52.07328158	-39.1462	-41.5146	-38.748	-45.6115	-37.2778	-39.3133	-20.182229
+7	134.1451428	109.7121497	137.2891767	77.26232	82.56274	77.45261	92.52616	87.14251	92.11124	40.66557626
-8	-69.98492039	-58.40016918	-63.14111777	-45.8116	-48.6927	-45.5162	-53.8154	-45.9975	-48.546	-23.78373322
+8	119.6202792	97.92550676	117.3345606	70.597	75.3847	70.68437	84.32224	78.15025	82.59002	37.06407253
-9	-81.11726699	-67.14548954	-73.17827997	-51.6437	-54.9735	-51.4385	-60.9938	-53.6273	-56.6246	-26.93505071
+9	107.303017	88.00419275	100.7647206	64.76483	69.1039	64.55066	76.88743	70.52046	74.51142	33.9127532
-10	-94.28795536	-77.58813272	-85.05252114	-58.309	-62.1515	-58.2067	-69.1978	-62.3471	-65.8573	-30.53655731
+10	93.51938016	76.92021471	84.1745879	57.89121	61.70155	57.78242	68.68351	61.80069	65.27872	30.31124673
-11	-106.2042969	-87.31078023	-99.59375562	-64.1412	-68.4389	-64.1289	-76.3762	-69.9769	-73.9359	-33.68787692
+11	81.87917771	67.78290128	73.81946832	52.05904	55.42075	51.86022	61.50508	54.1709	57.20012	27.1599298
-12	-120.2709784	-98.64942165	-118.5307178	-71.0148	-75.8347	-71.1086	-84.8365	-78.6967	-83.1686	-37.28938272
+12	69.15649236	57.7882547	62.38825259	45.39371	48.2427	45.09198	53.30116	45.45113	47.96742	23.55842452
-13	-133.1544522	-108.962736	-136.0119621	-76.847	-82.1155	-77.0309	-92.0149	-86.5989	-91.5357	-40.44070021
+13	58.41614609	49.43494031	52.73873325	39.56155	41.96191	39.16978	46.12273	37.82134	39.88882	20.40710746
-14	-148.2125932	-121.197383	-156.6490754	-83.5123	-89.2935	-83.7991	-100.219	-95.3187	-100.768	-44.04220431
+14	46.5894659	40.33629292	42.049346	32.89622	34.78387	32.40154	37.9188	29.10157	30.65612	16.80560112
-15	-161.6969397	-132.2946959	-175.0593595	-89.3445	-95.5743	-89.7213	-107.397	-102.949	-108.847	-47.19352119
+15	36.63311442	32.76698026	32.91987873	27.06406	28.50308	26.47933	30.74037	21.88821	23.04022	13.65428535
-16	-177.5556286	-145.4253432	-196.5028767	-96.0098	-102.752	-96.4895	-115.601	-111.668	-118.08	-50.79502823
+16	25.70242588	24.56433861	23.10145236	20.39873	21.32503	19.71109	22.53644	15.02489	15.91281	10.05277614
-17	-191.8239711	-157.3066558	-215.6187577	-101.842	-109.033	-102.412	-122.78	-119.298	-126.158	-53.94634506
+17	17.22523612	17.77902589	15.49031578	14.56657	15.04424	13.7889	15.35802	10.80607	11.4247	6.901459652
-18	-208.5786518	-171.3332984	-237.8686794	-108.507	-116.211	-109.18	-130.984	-128.018	-135.391	-57.54785442
+18	8.18106787	10.47237737	7.367638796	8.035417	8.035417	7.567484	8.065471	6.106917	6.428333	4.283389183
-19	-223.6310041	-183.9986107	-257.6901584	-114.339	-122.492	-115.102	-138.162	-135.648	-143.47	-60.69917086
+19	3.937817237	4.471064848	3.535505129	3.520095	3.520095	2.816296	2.828467	2.676868	2.817755	2.215478387
-20	-241.2816936	-198.9212604	-280.7464771	-1.21E+02	-1.30E+02	-121.87	-146.366	-144.367	-152.702	-64.30067373
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 150’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	91.90459691	125.2445	129.6981	151.5719806	73.90012102	99.66488	113.2415	124.684	1.37E+02
-1	-2.253455832	-2.25452	-1.79379	-1.397430148	-1.973927541	-2.17658	-2.17679	-2.17205	-2.16752
+1	86.97321323	118.0704	121.8818	137.7923218	69.94844803	94.33726	107.1324	117.8442	128.9197
-2	-5.86324537	-5.86553	-4.66666	-3.732403854	-4.450745323	-6.37866	-6.68331	-6.67668	-6.67034
+2	81.84567219	110.5611	113.6736	123.4599956	65.84678107	88.79961	100.774	110.7161	120.9706
-3	-9.5803326	-9.02516	-7.58079	-6.17071119	-8.039702205	-10.7544	-11.211	-11.211	-11.211
+3	77.35907572	103.9905	106.4915	111.7114043	62.25782419	83.95417	95.21029	104.479	114.0151
-4	-14.70787486	-13.3925	-12.0953	-9.964999181	-12.14136917	-16.2921	-17.5188	-17.4606	-17.4535
+4	72.23153345	96.48128	98.28326	98.82944408	58.15615723	78.41652	88.85181	97.35089	106.066
-5	-19.1944734	-19.2299	-16.3401	-13.61051406	-15.73032553	-21.1375	-23.0825	-23.6207	-23.8437
+5	67.74493527	89.91068	91.10108	88.8671391	54.56720048	73.57108	83.28814	91.11379	99.1105
-6	-24.32201408	-26.3179	-22.9946	-19.24613244	-19.83199249	-26.6751	-29.4409	-30.7488	-31.7928
+6	62.61739546	82.40142	82.89289	77.63632703	50.46553391	68.03343	76.92967	83.98568	91.16138
-7	-28.80861314	-32.8885	-29.0995	-24.4877698	-23.42095012	-31.5206	-35.0046	-36.9859	-38.7483
+7	58.13079281	75.83082	75.45421	68.93985031	46.87657352	63.18799	71.366	77.74858	84.20591
-8	-33.93615282	-40.3977	-36.9795	-31.33896025	-27.52261731	-37.0582	-41.3631	-44.1141	-46.6974
+8	53.00325336	68.0869	67.24601	59.1731446	42.77491093	57.65034	65.00752	70.62047	76.23537
-9	-38.42275302	-46.9683	-44.1617	-37.61008487	-31.11157378	-41.9037	-46.9268	-50.3512	-53.6529
+9	48.35641875	61.5163	60.06384	51.79292709	39.18595169	52.63185	59.24516	64.16061	69.05291
-10	-43.55029528	-54.4776	-52.3699	-44.87260995	-35.21324176	-47.4413	-53.2852	-57.4793	-61.602
+10	43.22887791	54.00704	51.85565	44.41439794	34.95610858	47.0942	52.88668	57.0325	61.10379
-11	-48.03689101	-61.0482	-59.5521	-51.32881463	-38.86628287	-52.2868	-58.8489	-63.7164	-68.5575
+11	38.74228077	47.43644	44.67347	38.05969367	31.36714819	42.24876	47.32301	50.7954	54.14832
-12	-53.32466962	-68.5575	-67.7603	-59.78084624	-43.03204287	-57.9975	-65.4061	-71.0672	-76.7338
+12	33.61474077	39.92718	36.46526	30.89586672	27.26548549	36.71111	40.96454	43.66728	46.1992
-13	-57.81126651	-75.3627	-74.9424	-68.32671843	-46.62100326	-62.8429	-70.9697	-77.3043	-83.7105
+13	29.12813812	33.35659	29.53446	24.8652246	23.6765251	31.86567	35.40087	37.43019	39.24373
-14	-62.9388068	-82.872	-83.4072	-78.3356784	-50.72266596	-68.3806	-77.3282	-84.4324	-91.6596
+14	24.00059729	25.84732	22.55749	18.87477909	19.57485669	26.32802	29.04239	30.30207	31.29461
-15	-67.42540856	-89.4426	-90.5893	-88.16263465	-54.31162635	-73.226	-82.8919	-90.6696	-98.6151
+15	19.51400584	19.64689	16.69836	13.91581624	15.985902	21.48258	23.47872	24.06497	24.33915
-16	-72.55294963	-96.9518	-98.7975	-99.60113274	-58.41329072	-78.7636	-89.2504	-97.7977	-106.564
+16	14.38646476	13.06981	11.81246	9.723861113	11.88423386	15.94493	17.12025	17.0652	17.05816
-17	-77.0395457	-103.522	-105.98	-110.8770817	-62.00224945	-83.6091	-94.814	-104.035	-113.52
+17	9.899863515	9.250267	7.862263	6.403861364	8.295274753	11.09949	11.55659	11.54604	11.53865
-18	-82.16708728	-111.032	-114.188	-124.3040389	-66.10391396	-89.1467	-101.173	-111.163	-121.469
+18	5.636969652	5.639255	4.486661	3.582904426	4.193610093	6.10867	6.361896	6.355256	6.348919
-19	-86.65368837	-117.602	-121.37	-136.8160033	-69.69287313	-93.9922	-106.736	-117.4	-128.424
+19	2.478402511	2.479625	1.972901	1.539204311	2.114492069	2.393851	2.394092	2.404197	2.384874
-20	-91.78123102	-125.112	-129.578	-151.5566318	-73.79453772	-99.5298	-113.095	-124.528	-1.36E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 150' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	231.8781125	251.2148975	150.1925	180.9226	192.9564
-1	-2.258961474	-2.210503088	-2.58419	-2.74228	-2.29722
+1	217.8564604	235.7348761	141.4123	170.3863	181.5532
-2	-7.485994077	-6.979856207	-6.78522	-7.581	-7.58154
+2	203.1386618	219.3551578	132.2146	159.3491	169.5956
-3	-12.31526645	-12.17252613	-11.2116	-12.4098	-12.8044
+3	190.2605979	205.0229075	124.1666	149.6915	159.1327
-4	-19.77911688	-20.58205795	-16.2703	-17.9284	-19.2432
+4	175.5428066	188.6432076	114.9689	138.6543	147.1751
-5	-27.92216563	-29.65539429	-20.6967	-25.4711	-25.021
+5	162.6647423	174.3109559	106.9209	128.9967	136.7121
-6	-39.66498341	-40.91933072	-29.0295	-35.527	-35.8068
+6	147.946938	157.9312386	97.72323	117.9595	124.7545
-7	-51.13998002	-51.38789735	-37.0774	-45.1845	-45.9109
+7	134.6089434	143.5989859	89.67525	108.3019	114.0742
-8	-65.62156162	-66.81949768	-46.2751	-56.2218	-57.8685
+8	119.8911421	127.2192876	80.19014	96.91977	101.9603
-9	-78.49963098	-81.15175537	-54.3231	-65.8793	-68.3314
+9	107.0130761	112.8870321	72.14216	87.26219	91.49741
-10	-93.21742029	-97.53147136	-63.5208	-76.9166	-80.289
+10	92.29528642	96.5073328	62.94447	76.22496	79.5398
-11	-106.0954862	-111.8637087	-71.5688	-86.5741	-90.7519
+11	79.41720397	82.17506543	54.89649	66.56739	69.07688
-12	-120.8132895	-128.2434252	-80.7665	-97.6114	-102.71
+12	64.69943271	65.79535054	45.69881	55.53017	57.11926
-13	-133.6913575	-142.5756741	-89.052	-107.57	-113.172
+13	51.82136399	52.65612593	37.65082	45.87259	46.65636
-14	-148.869087	-158.9553912	-98.2996	-118.651	-125.504
+14	38.85811237	40.21505654	28.45313	34.83536	35.1152
-15	-161.7471521	-173.2876282	-106.348	-128.309	-135.967
+15	28.61035744	30.35910157	21.16563	26.09035	25.70447
-16	-176.4649428	-189.6673428	-115.545	-139.346	-147.924
+16	19.20277508	19.9659538	15.95335	17.5826	18.83973
-17	-189.3430084	-203.9996013	-123.593	-149.003	-158.387
+17	12.65936018	12.61364413	11.52696	12.75381	13.20585
-18	-204.0607972	-220.3792982	-132.791	-160.041	-170.345
+18	7.140194455	6.659995041	6.468232	7.235206	7.235734
-19	-216.9388629	-234.7115661	-140.839	-169.698	-180.808
+19	2.488360696	2.473676207	2.842213	3.01751	2.535867
-20	-231.6566674	-251.0912829	-150.037	-180.735	-192.765
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 150’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.03E-13	*-4.84E-13*	*-7.96E-13*	-4.15E-13	-4.49E-13	-3.58E-13	-4.03E-13	-3.86E-13	-4.10E-13	-2.40E-13
End Shear	6.72E-13	*4.87E-13*	*7.24E-13*	3.40E-13	3.40E-13	4.17E-13	5.10E-13	3.88E-13	4.09E-13	2.40E-13
-1	0	*0*	*0*	0	0	0	0	0	0	0
+1	1712.976819	*1414.800223*	*1968.526323*	860.6610291	922.0444749	866.4295414	1040.049169	1021.433976	1080.338539	456.9303488
-2	0	*0*	*0*	0	0	0	0	0	0	0
+2	3237.590875	*2679.600751*	*3681.770345*	1627.590823	1743.147619	1637.68077	1964.810564	1920.246247	2030.842332	863.2145242
-3	0	*0*	*0*	0	0	0	0	0	0	0
+3	4575.181532	*3794.401604*	*5215.562107*	2300.789461	2463.309514	2313.891042	2775.191394	2696.508627	2851.624936	1218.852519
-4	0	*0*	*0*	0	0	0	0	0	0	0
+4	5723.230079	*4759.202751*	*6466.420745*	2880.256861	3082.724637	2895.516077	3470.204526	3351.405564	3543.869864	1523.844387
-5	0	*0*	*0*	0	0	0	0	0	0	0
+5	6682.77279	*5574.004231*	*7434.346452*	3366.18004	3601.597171	3381.962816	4049.850017	3915.768856	4142.091078	1778.190013
-6	0	*0*	*0*	0	0	0	0	0	0	0
+6	7453.809409	*6238.805982*	*8213.184056*	3758.658139	4019.528441	3773.231174	4542.969914	4369.424999	4623.412966	1981.889459
-7	0	*0*	*0*	0	0	0	0	0	0	0
+7	8048.718099	*6753.60784*	*8826.394194*	4057.40492	4336.518278	4091.673705	4920.721756	4713.632629	4986.488819	2134.942754
-8	0	*0*	*0*	0	0	0	0	0	0	0
+8	8481.608008	*7118.41049*	*9156.67216*	4269.630817	4574.197292	4316.380162	5183.106231	4953.251464	5241.369374	2237.349983
-9	0	*0*	*0*	0	0	0	0	0	0	0
+9	8725.956038	*7333.21298*	*9204.016229*	4404.348088	4714.53997	4445.908238	5330.123097	5070.248194	5366.414756	2289.207176
-10	0	*0*	*0*	0	0	0	0	0	0	0
+10	8782.352869	*7397.687284*	*8993.564851*	4444.862049	4753.469249	4479.715679	5361.23006	5064.122245	5361.098059	2290.837868
-11	0.00E+00	*0.00E+00*	*0.00E+00*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	8727.27557	*7333.297044*	*9204.016447*	4404.360254	4714.558634	4445.935707	5330.168464	5070.273893	5366.441085	2289.200513
-12	0	*0*	*0*	0	0	0	0	0	0	0
+12	8482.54615	*7118.485527*	*9156.672356*	4269.633727	4574.205974	4316.398501	5183.140555	4953.266633	5241.384551	2237.363266
-13	0	*0*	*0*	0	0	0	0	0	0	0
+13	8049.310381	*6753.673569*	*8826.394064*	4057.398448	4336.516879	4091.68252	4920.744485	4713.636912	4986.492472	2134.954065
-14	0	*0*	*0*	0	0	0	0	0	0	0
+14	7454.547009	*6238.862265*	*8213.184107*	3758.642256	4019.516936	3773.230424	4542.98133	4369.418627	4623.405337	1981.899194
-15	0	*0*	*0*	0	0	0	0	0	0	0
+15	6683.02929	*5574.051373*	*7434.346612*	3366.154743	3601.575465	3381.952981	4049.850266	3915.799646	4142.122501	1778.198049
-16	0	*0*	*0*	0	0	0	0	0	0	0
+16	5723.148683	*4759.240289*	*6466.420842*	2880.294621	3082.692646	2895.496711	3470.19311	3351.400565	3543.864862	1523.85105
-17	0	*0*	*0*	0	0	0	0	0	0	0
+17	4574.905798	*3794.429803*	*5215.562339*	2300.817783	2463.340016	2313.862357	2775.168768	2696.492765	2851.608435	1218.857378
-18	0	*0*	*0*	0	0	0	0	0	0	0
+18	3238.299467	*2679.619272*	*3681.769782*	1627.609617	1743.167885	1637.699437	1964.776453	1920.267538	2030.864876	863.2176156
-19	0	*0*	*0*	0	0	0	0	0	0	0
+19	1713.331405	*1414.809741*	*1968.526267*	860.6706262	922.0548348	866.4389326	1040.060498	1021.444543	1080.349729	456.9319688
-20	-1.17E-12	*-7.24E-13*	*-1.33E-12*	-5.81E-13	-6.10E-13	-4.27E-13	-4.69E-13	-5.68E-13	-6.01E-13	-3.63E-13
+20	1.65E-12	*1.19E-12*	*1.82E-12*	9.30E-13	9.62E-13	9.04E-13	1.03E-12	7.09E-13	7.46E-13	4.41E-13

1-Span: Moment (Max and Min) Raw Data Results - 150' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.70E-13	-3.40E-13	-3.55E-13	-3.47E-13	-2.74E-13	-2.99E-13	-3.50E-13	-3.43E-13	-3.39E-13
End Shear	3.18E-13	3.35E-13	3.39E-13	2.87E-13	2.67E-13	3.42E-13	3.31E-13	3.77E-13	3.78E-13
-1	0	0	0	0	0	0	0	0	0
+1	652.2990992	885.5279489	914.1136809	1041.288539	524.6133603	707.5294162	803.4932266	884.0423137	967.1623818
-2	0	0	0	0	0	0	0	0	0
+2	1232.492135	1665.456969	1712.799581	1904.165728	991.5470365	1337.185664	1517.57036	1668.97867	1823.818943
-3	0	0	0	0	0	0	0	0	0
+3	1740.579204	2339.78705	2396.791531	2628.889349	1400.801044	1888.968794	2142.485741	2371.163648	2594.834237
-4	0	0	0	0	0	0	0	0	0
+4	2176.560183	2909.282467	2980.480266	3222.558896	1752.375359	2363.414399	2678.510398	2980.681542	3257.087327
-5	0	0	0	0	0	0	0	0	0
+5	2540.803613	3378.560834	3463.169696	3759.556927	2046.270018	2760.021565	3125.118973	3489.960414	3832.220388
-6	0	0	0	0	0	0	0	0	0
+6	2833.025478	3763.591062	3830.431412	4149.434933	2282.485033	3078.755513	3493.849041	3899.000192	4299.175006
-7	0	0	0	0	0	0	0	0	0
+7	3053.141274	4043.022029	4132.88361	4486.331477	2461.02011	3333.316193	3783.979322	4208.749566	4654.344886
-8	0	0	0	0	0	0	0	0	0
+8	3218.456705	4221.719109	4341.284077	4684.722422	2581.875837	3515.772229	3984.693833	4438.479295	4897.730811
-9	0	0	0	0	0	0	0	0	0
+9	3312.386991	4316.622815	4484.891407	4777.437837	2645.051739	3620.355037	4095.992083	4572.837628	5043.823871
-10	0	0	0	0	0	0	0	0	0
+10	3333.686973	4305.532099	4512.563119	4775.799723	2649.680106	3646.603697	4117.234527	4606.516623	5092.521346
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	3312.400774	4316.647741	4484.910132	4777.429301	2645.104452	3620.375729	4096.022297	4572.854582	5043.82874
-12	0	0	0	0	0	0	0	0	0
+12	3218.463582	4221.734957	4341.293429	4684.72005	2581.922762	3515.785419	3984.715563	4438.486986	4897.770902
-13	0	0	0	0	0	0	0	0	0
+13	3053.140944	4043.042069	4132.89294	4486.32614	2461.061115	3333.321599	3783.992373	4208.747797	4654.374585
-14	0	0	0	0	0	0	0	0	0
+14	2833.018093	3763.60182	3830.454846	4149.429816	2282.520124	3078.753094	3493.853303	3899.03506	4299.194206
-15	0	0	0	0	0	0	0	0	0
+15	2540.789245	3378.562717	3463.183593	3759.547993	2046.299298	2760.01171	3125.115023	3489.986184	3832.229619
-16	0	0	0	0	0	0	0	0	0
+16	2176.588516	2909.275051	2980.485024	3222.543736	1752.398661	2363.396745	2678.497545	2980.69755	3257.085996
-17	0	0	0	0	0	0	0	0	0
+17	1740.600489	2339.814378	2396.786654	2628.881887	1400.818619	1888.991963	2142.464124	2371.170174	2594.843865
-18	0	0	0	0	0	0	0	0	0
+18	1232.506132	1665.475287	1712.818452	1904.15073	991.558592	1337.200905	1517.587523	1668.976013	1823.818336
-19	0	0	0	0	0	0	0	0	0
+19	652.3061766	885.5370639	914.1229274	1041.280887	524.619286	707.5371121	803.5019713	884.0297238	967.1513468
-20	-4.08E-13	-4.73E-13	-5.27E-13	-4.46E-13	-3.24E-13	-3.68E-13	-4.08E-13	-3.99E-13	-3.95E-13
+20	6.63E-13	6.48E-13	6.43E-13	6.60E-13	5.55E-13	7.29E-13	7.95E-13	8.23E-13	8.62E-13

1-Span: Moment (Max and Min) Raw Data Results - 150' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.61E-13	-5.66E-13	-4.77E-13	-5.48E-13	-5.44E-13
End Shear	5.78E-13	5.01E-13	4.44E-13	5.30E-13	5.05E-13
-1	0	0	0	0	0
+1	1633.923453	1768.011571	1060.591903	1277.897277	1361.648866
-2	0	0	0	0	0
+2	3062.070364	3306.797404	1991.841269	2400.583533	2555.275191
-3	0	0	0	0	0
+3	4312.221187	4671.041055	2793.748225	3369.922941	3582.76712
-4	0	0	0	0	0
+4	5382.601298	5840.774712	3480.732054	4209.977601	4480.909881
-5	0	0	0	0	0
+5	6246.012425	6868.19575	4070.082679	4907.755471	5223.439801
-6	0	0	0	0	0
+6	6978.147572	7665.277299	4530.833385	5450.322359	5838.041341
-7	0	0	0	0	0
+7	7535.011781	8308.035286	4879.07439	5851.895634	6284.488606
-8	0	0	0	0	0
+8	7940.503521	8728.775974	5114.141138	6124.765372	6577.035744
-9	0	0	0	0	0
+9	8193.174483	8975.879892	5219.839922	6241.869673	6731.36487
-10	0	0	0	0	0
+10	8241.566788	9086.043222	5195.473048	6203.652205	6717.039936
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	8193.199993	8975.880908	5219.81763	6241.856423	6731.383093
-12	0	0	0	0	0
+12	7940.512015	8728.774056	5114.157835	6124.783335	6577.040349
-13	0	0	0	0	0
+13	7535.045924	8309.101985	4879.0798	5851.899928	6284.522252
-14	0	0	0	0	0
+14	6978.164365	7665.277025	4530.827747	5450.357589	5838.060611
-15	0	0	0	0	0
+15	6246.01261	6868.191962	4070.11574	4907.777597	5223.445313
-16	0	0	0	0	0
+16	5382.583907	5840.768467	3480.754069	4209.986617	4480.922987
-17	0	0	0	0	0
+17	4312.18706	4671.044079	2793.781089	3369.918379	3582.76602
-18	0	0	0	0	0
+18	3062.061826	3307.112244	1991.863274	2400.610059	2555.259816
-19	0	0	0	0	0
+19	1633.94071	1768.014716	1060.603234	1277.910726	1361.663043
-20	-5.56E-13	-6.85E-13	-5.24E-13	-6.24E-13	-6.05E-13
+20	1.14E-12	1.19E-12	8.43E-13	9.27E-13	9.28E-13

1-Span: Shear (Max and Min) Raw Data Results - 150' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	67.52	47.656	64.944	67.25333	82.33	38.32	51.68	58.72	64.65333	70.8
-1	-1.49333	-1.1685	-1.16906	-0.93015	-0.7333	-1.02356	-1.12864	-1.12875	-1.12629	-1.12394
+1	63.844	45.09889	61.22395	63.20032	74.82123	36.27091	48.91743	55.55221	61.10667	66.84971
-2	-3.39692	-3.04031	-3.0415	-2.41984	-1.97385	-2.30788	-3.30757	-3.46555	-3.46211	-3.45882
+2	60.01385	42.44007	57.33012	58.94406	67.02216	34.14404	46.04595	52.2551	57.41048	62.7278
-3	-6.37593	-4.96776	-4.67989	-3.93093	-3.28163	-4.16889	-5.57657	-5.81333	-5.81333	-5.81333
+3	56.68804	40.1136	53.92302	55.21984	60.62613	32.28303	43.5334	49.37012	54.17631	59.12112
-4	-9.88308	-7.62659	-6.94452	-6.27187	-5.31858	-6.29576	-8.44805	-9.08416	-9.05395	-9.05029
+4	52.8535	37.45477	50.02918	50.96358	53.61883	30.15616	40.66192	46.07302	50.48011	54.99921
-5	-13.2345	-9.95306	-9.97145	-8.47298	-7.28708	-8.15677	-10.9606	-11.9691	-12.2482	-12.3639
+5	49.49829	35.1283	46.62208	47.23935	48.18378	28.29515	38.14938	43.18804	47.24594	51.39253
-6	-17.0646	-12.6119	-13.6468	-11.9236	-10.3185	-10.2836	-13.8321	-15.2662	-15.9444	-16.4858
+6	45.66376	32.46948	42.72825	42.98309	42.07236	26.16828	35.2779	39.89093	43.54974	47.27061
-7	-20.416	-14.9384	-17.0539	-15.0892	-13.1494	-12.1446	-16.3446	-18.1512	-19.1786	-20.0924
+7	42.30855	30.14301	39.32114	39.12585	37.32844	24.30727	32.76535	37.00596	40.31557	43.66394
-8	-24.2462	-17.5972	-20.9477	-19.1753	-16.8509	-14.2715	-19.2161	-21.4483	-22.8748	-24.2144
+8	38.47402	27.48419	35.30563	34.86959	32.01591	22.1804	29.89388	33.70885	36.61938	39.53092
-9	-27.5975	-19.9236	-24.3549	-22.8995	-20.2503	-16.1325	-21.7286	-24.3333	-26.109	-27.821
+9	35.1188	25.07463	31.89852	31.14537	27.98926	20.31939	27.2916	30.72085	33.2697	35.80654
-10	-31.4277	-22.5825	-28.2487	-27.1558	-24.2048	-18.2594	-24.6001	-27.6304	-29.8052	-31.943
+10	31.21778	22.4158	28.00469	26.88911	23.95479	18.12606	24.42012	27.42374	29.5735	31.68462
-11	-34.7791	-24.9089	-31.6558	-30.88	-27.7349	-20.1536	-27.1127	-30.5154	-33.0393	-35.5496
+11	27.81662	20.08933	24.59759	23.16488	20.49464	16.26505	21.90758	24.53877	26.33933	28.07795
-12	-38.6092	-27.6509	-35.5496	-35.1363	-32.3459	-22.3137	-30.0739	-33.9155	-36.851	-39.7894
+12	23.98646	17.43051	20.70375	18.90861	16.6112	14.13818	19.0361	21.24166	22.64313	23.95603
-13	-42.0393	-29.9773	-39.0784	-38.8605	-36.9944	-24.1747	-32.5864	-36.8005	-40.0852	-43.407
+13	20.63508	15.10404	17.29665	15.31473	13.35382	12.27717	16.52355	18.35668	19.40896	20.34936
-14	-45.9105	-32.6361	-42.9722	-43.2498	-42.4524	-26.3016	-35.4579	-40.0976	-43.7814	-47.5289
+14	16.80493	12.44522	13.40281	11.69691	10.11853	10.1503	13.65207	15.05958	15.71277	16.22744
-15	-49.2618	-34.9626	-46.3793	-46.974	-47.7999	-28.1626	-37.9704	-42.9826	-47.0156	-51.1356
+15	13.45354	10.11875	10.18765	8.658732	7.45159	8.289293	11.13953	12.1746	12.4786	12.62077
-16	-53.092	-37.6214	-50.2732	-51.2302	-54.0388	-30.2895	-40.8419	-46.2797	-50.7118	-55.2575
+16	9.623384	7.459925	6.777188	6.125205	5.18858	6.162424	8.268046	8.877497	8.848951	8.845298
-17	-56.4434	-39.9479	-53.6803	-54.9545	-60.1724	-32.1505	-43.3545	-49.1647	-53.946	-58.8642
+17	6.570671	5.133453	4.796612	4.07688	3.406245	4.301413	5.755506	5.992527	5.987059	5.983224
-18	-60.2735	-42.6067	-57.5741	-59.2107	-67.4822	-34.2774	-46.2259	-52.4618	-57.6421	-62.9861
+18	3.166087	2.922981	2.924167	2.326503	1.893849	2.174545	3.167576	3.298883	3.29544	3.292154
-19	-63.6249	-44.9332	-60.9812	-62.935	-74.2914	-36.1384	-48.7385	-55.3467	-60.8763	-66.5928
+19	1.595625	1.285145	1.285779	1.023024	0.80806	1.096444	1.241302	1.241427	1.246667	1.236647
-20	-67.4551	-47.592	-64.8751	-67.1912	-82.322	-38.2653	-51.61	-58.6438	-64.5725	-70.7147
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 150' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	67.52	62.83333	67.33333	63.28	76	74.94	79.26667	33.37639
-1	-1.49333	-1.65964	-1.65964	-1.32781	-1.32781	-1.26205	-1.32847	-1.07229
+1	63.844	59.50469	63.74865	59.90352	71.9073	70.62027	74.69284	31.59142
-2	-3.39692	-4.33333	-4.33333	-4.10402	-4.38225	-3.29333	-3.46667	-2.29777
+2	60.01385	56.04847	60.02656	56.39393	67.65325	66.09875	69.90534	29.7239
-3	-6.37593	-7.33795	-7.56908	-6.93136	-7.69862	-5.4475	-5.75833	-3.46206
+3	56.68804	53.02427	56.76973	53.32305	63.93097	62.14241	65.71628	28.08982
-4	-9.88308	-10.7942	-11.2912	-10.4409	-11.9527	-7.94764	-8.41806	-5.32958
+4	52.8535	49.56805	53.04764	49.81346	59.67692	57.62088	60.92878	26.22231
-5	-13.2345	-13.8184	-14.548	-13.5118	-15.675	-11.0978	-11.6819	-6.96365
+5	49.49829	46.54385	49.79081	46.74257	55.95463	53.66454	56.73971	24.58823
-6	-17.0646	-17.2746	-18.2701	-17.0214	-19.929	-15.3736	-16.1964	-8.83117
+6	45.66376	43.08763	46.06873	43.23299	51.70059	49.14302	51.95221	22.72071
-7	-20.416	-20.2988	-21.5269	-20.0923	-23.6513	-19.3299	-20.3854	-10.4652
+7	42.30855	40.06343	42.8119	40.1621	47.9783	45.18668	47.76315	21.08664
-8	-24.2462	-23.755	-25.249	-23.6019	-27.9053	-23.8515	-25.1729	-12.3328
+8	38.47402	36.60721	39.08981	36.65251	43.72426	40.52385	42.82604	19.21912
-9	-27.5975	-26.7792	-28.5058	-26.6728	-31.6276	-27.8078	-29.362	-13.9668
+9	35.1188	33.58301	35.83298	33.47195	39.86903	36.56752	38.63698	17.58504
-10	-31.4277	-30.2354	-32.2279	-30.1824	-35.8817	-32.3293	-34.1495	-15.8344
+10	31.21778	30.01878	31.99458	29.96237	35.61499	32.04599	33.84948	15.71752
-11	-34.7791	-33.2596	-35.4881	-33.2533	-39.6039	-36.2857	-38.3385	-17.4684
+11	27.81662	26.99458	28.73775	26.89148	31.8927	28.08966	29.66042	14.08345
-12	-38.6092	-36.8239	-39.3231	-36.8725	-43.9909	-40.8072	-43.126	-19.336
+12	23.98646	23.53835	25.01566	23.38189	27.63866	23.56813	24.87292	12.21593
-13	-42.0393	-39.8481	-42.58	-39.9434	-47.7132	-44.9048	-47.4647	-20.97
+13	20.63508	20.51416	21.75884	20.31101	23.91637	19.61179	20.68386	10.58186
-14	-45.9105	-43.3043	-46.3021	-43.453	-51.9673	-49.4263	-52.2522	-22.8375
+14	16.80493	17.05793	18.03675	16.80142	19.66233	15.09026	15.89635	8.714338
-15	-49.2618	-46.3285	-49.5589	-46.5239	-55.6895	-53.3827	-56.4413	-24.4716
+15	13.45354	14.03374	14.77992	13.73053	15.94004	11.34986	11.94722	7.080262
-16	-53.092	-49.7847	-53.281	-50.0335	-59.9436	-57.9042	-61.2288	-26.3391
+16	9.623384	10.57751	11.05783	10.22095	11.68599	7.790974	8.251391	5.212744
-17	-56.4434	-52.8089	-56.5378	-53.1043	-63.6659	-61.8605	-65.4178	-27.9732
+17	6.570671	7.553314	7.801005	7.150063	7.963713	5.603354	5.924135	3.578667
-18	-60.2735	-56.2651	-60.2599	-56.6139	-67.9199	-66.3821	-70.2053	-29.8407
+18	3.166087	4.166667	4.166667	3.924026	4.182251	3.166667	3.333333	2.221099
-19	-63.6249	-59.2893	-63.5167	-59.6848	-71.6422	-70.3384	-74.3944	-31.4748
+19	1.595625	1.825302	1.825302	1.460356	1.466667	1.388057	1.461112	1.148809
-20	-67.4551	-62.7456	-67.2388	-63.1944	-75.8962	-74.8599	-79.1819	-33.3423
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 150' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**67.52**	***134.1111***	***145.2949***	***86.86667***	***104.64***	***111.6***
-1	**-1.49333**	***-1.30651***	***-1.27849***	***-1.49462***	***-1.58605***	***-1.32864***
+1	**63.844**	***126.0014***	***136.3417***	***81.78846***	***98.54616***	***105.0047***
-2	**-3.39692**	***-4.32967***	***-4.03693***	***-3.92436***	***-4.38462***	***-4.38493***
+2	**60.01385**	***117.4891***	***126.8682***	***76.4688***	***92.16256***	***98.08882***
-3	**-6.37593**	***-7.12277***	***-7.04021***	***-6.48444***	***-7.17743***	***-7.40569***
+3	**56.68804**	***110.0408***	***118.5789***	***71.81411***	***86.57693***	***92.0374***
-4	**-9.88308**	***-11.4396***	***-11.904***	***-9.41026***	***-10.3692***	***-11.1296***
+4	**52.8535**	***101.5285***	***109.1054***	***66.49444***	***80.19333***	***85.12149***
-5	**-13.2345**	***-16.1493***	***-17.1518***	***-11.9703***	***-14.7317***	***-14.4714***
+5	**49.49829**	***94.08024***	***100.8161***	***61.83975***	***74.60769***	***79.07006***
-6	**-17.0646**	***-22.941***	***-23.6665***	***-16.7897***	***-20.5477***	***-20.7095***
+6	**45.66376**	***85.56792***	***91.34253***	***56.52009***	***68.22411***	***72.15415***
-7	**-20.416**	***-29.5778***	***-29.7212***	***-21.4444***	***-26.1333***	***-26.5534***
+7	**42.30855**	***77.85364***	***83.0532***	***51.86538***	***62.63846***	***65.97699***
-8	**-24.2462**	***-37.9535***	***-38.6463***	***-26.7641***	***-32.5169***	***-33.4693***
+8	**38.47402**	***69.34132***	***73.57969***	***46.37949***	***56.05539***	***58.97069***
-9	**-27.5975**	***-45.4018***	***-46.9357***	***-31.4188***	***-38.1026***	***-39.5208***
+9	**35.1188**	***61.89305***	***65.29036***	***41.72479***	***50.46975***	***52.91926***
-10	**-31.4277**	***-53.9141***	***-56.4092***	***-36.7385***	***-44.4862***	***-46.4367***
+10	**31.21778**	***53.38073***	***55.81685***	***36.40513***	***44.08615***	***46.00335***
-11	**-34.7791**	***-61.3623***	***-64.6985***	***-41.3932***	***-50.0718***	***-52.4881***
+11	**27.81662**	***45.93245***	***47.52751***	***31.75043***	***38.50052***	***39.95193***
-12	**-38.6092**	***-69.8747***	***-74.172***	***-46.7128***	***-56.4554***	***-59.404***
+12	**23.98646**	***37.42015***	***38.05399***	***26.43077***	***32.11693***	***33.03601***
-13	**-42.0393**	***-77.3229***	***-82.4613***	***-51.5049***	***-62.2149***	***-65.4554***
+13	**20.63508**	***29.97187***	***30.45467***	***21.77607***	***26.53128***	***26.98459***
-14	**-45.9105**	***-86.1013***	***-91.9349***	***-56.8534***	***-68.6241***	***-72.5875***
+14	**16.80493**	***22.47433***	***23.25914***	***16.45641***	***20.14769***	***20.30955***
-15	**-49.2618**	***-93.5495***	***-100.224***	***-61.5081***	***-74.2097***	***-78.6389***
+15	**13.45354**	***16.54734***	***17.55876***	***12.24154***	***15.08985***	***14.86667***
-16	**-53.092**	***-102.062***	***-109.698***	***-66.8278***	***-80.5933***	***-85.5548***
+16	**9.623384**	***11.10629***	***11.54769***	***9.226926***	***10.16923***	***10.89631***
-17	**-56.4434**	***-109.51***	***-117.987***	***-71.4825***	***-86.179***	***-91.6062***
+17	**6.570671**	***7.321781***	***7.295341***	***6.666839***	***7.37641***	***7.637857***
-18	**-60.2735**	***-118.022***	***-127.461***	***-76.8021***	***-92.5626***	***-98.5221***
+18	**3.166087**	***4.129667***	***3.851935***	***3.741025***	***4.184619***	***4.184924***
-19	**-63.6249**	***-125.471***	***-135.75***	***-81.4568***	***-98.1482***	***-104.574***
+19	**1.595625**	***1.439191***	***1.430698***	***1.643848***	***1.745234***	***1.466667***
-20	**-67.4551**	***-133.983***	***-145.223***	***-86.7765***	***-104.532***	***-111.489***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 150' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-2.56E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**2.56E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**478.83**	**338.2417**	**459.1796**	**474.0024**	**566.4652**	**272.0318**	**366.8807**	**416.6415**	**458.4093**	**501.5102**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**903.7985**	**639.0937**	**863.6023**	**888.1512**	**1037.6261**	**514.1545**	**693.3812**	**786.9175**	**865.4284**	**945.7189**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1275.481**	**902.5560**	**1213.2679**	**1242.8268**	**1434.3578**	**726.3682**	**979.5016**	**1110.9597**	**1229.5378**	**1345.5194**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**1592.795**	**1128.6286**	**1508.5727**	**1545.4915**	**1760.3417**	**908.6727**	**1225.5195**	**1388.9087**	**1545.5958**	**1688.9226**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**1856.186**	**1317.5025**	**1751.9112**	**1795.7841**	**2054.1478**	**1061.0682**	**1431.1753**	**1620.4921**	**1809.6761**	**1987.1508**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**2065.654**	**1469.0306**	**1951.5639**	**1986.2232**	**2268.8754**	**1183.5546**	**1596.4509**	**1811.6925**	**2021.7787**	**2229.2844**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**2226.517**	**1583.1689**	**2096.4594**	**2143.0561**	**2453.3387**	**1276.1318**	**1728.4502**	**1962.1360**	**2182.3954**	**2413.4534**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**2344.837**	**1668.8912**	**2189.1206**	**2251.1196**	**2563.1903**	**1338.8000**	**1823.0605**	**2066.2141**	**2301.5189**	**2539.6582**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**2409.219**	**1717.5976**	**2238.3318**	**2325.5854**	**2615.4537**	**1371.5591**	**1877.2907**	**2123.9264**	**2371.1888**	**2615.4129**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**2419.915**	**1728.6425**	**2232.5808**	**2339.9342**	**2616.0000**	**1373.9591**	**1890.9016**	**2134.9414**	**2388.6526**	**2640.6644**
-11	**0.00E+00**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**2409.785**	**1717.6048**	**2238.3447**	**2325.5951**	**2615.4493**	**1371.5864**	**1877.3014**	**2123.9421**	**2371.1976**	**2615.4155**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**2345.24**	**1668.8948**	**2189.1288**	**2251.1244**	**2563.1890**	**1338.8244**	**1823.0674**	**2066.2253**	**2301.5229**	**2539.6790**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**2226.771**	**1583.1688**	**2096.4698**	**2143.0609**	**2453.3359**	**1276.1530**	**1728.4530**	**1962.1428**	**2182.3945**	**2413.4688**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**2065.971**	**1469.0268**	**1951.5695**	**1986.2353**	**2268.8727**	**1183.5728**	**1596.4496**	**1811.6947**	**2021.7968**	**2229.2944**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**1856.296**	**1317.4951**	**1751.9122**	**1795.7913**	**2054.1432**	**1061.0834**	**1431.1702**	**1620.4900**	**1809.6895**	**1987.1556**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**1592.76**	**1128.6433**	**1508.5689**	**1545.4939**	**1760.3338**	**908.6848**	**1225.5104**	**1388.9020**	**1545.6041**	**1688.9220**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1275.362**	**902.5670**	**1213.2820**	**1242.8243**	**1434.3539**	**726.3773**	**979.5136**	**1110.9485**	**1229.5412**	**1345.5244**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**904.1029**	**639.1009**	**863.6118**	**888.1610**	**1037.6183**	**514.1605**	**693.3891**	**786.9264**	**865.4270**	**945.7186**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**478.9823**	**338.2454**	**459.1844**	**474.0072**	**566.4613**	**272.0349**	**366.8847**	**416.6461**	**458.4028**	**501.5045**
-20	**-4.54E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**6.17E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 150' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	478.83	446.2852	478.1148	449.2764	539.3047	529.6520	560.1963	236.9356
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	903.7985	843.9672	903.8878	849.1993	1018.8284	995.7201	1053.0684	447.6093
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1275.481	1193.0461	1277.3189	1199.8398	1439.0414	1398.2414	1478.6751	632.0210
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1592.795	1493.5218	1598.5090	1501.4343	1799.4320	1737.8302	1837.6302	790.1708
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1856.186	1745.4913	1867.5640	1753.6753	2100.0000	2030.4739	2147.8305	922.0586
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2065.654	1949.0060	2084.2771	1956.5627	2355.7013	2265.7117	2397.4140	1027.6844
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2226.517	2103.9175	2248.6483	2121.6872	2551.5799	2444.1963	2585.6826	1107.0484
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2344.837	2213.9646	2371.8939	2238.2059	2687.6361	2568.4477	2717.8477	1160.1504
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2409.219	2283.8206	2444.6668	2305.3711	2763.8699	2629.1150	2782.6885	1187.0403
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2419.915	2304.8286	2464.8531	2322.9016	2780.0000	2625.9384	2779.9316	1187.8859
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2409.785	2283.8269	2444.6765	2305.3854	2763.8934	2629.1283	2782.7021	1187.0368
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2345.24	2213.9662	2371.8984	2238.2155	2687.6539	2568.4556	2717.8556	1160.1573
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2226.771	2103.9142	2248.6476	2121.6917	2551.5916	2444.1986	2585.6845	1107.0542
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2065.971	1948.9978	2084.2712	1956.5623	2355.7072	2265.7084	2397.4101	1027.6895
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1856.296	1745.4782	1867.5527	1753.6702	2100.0001	2030.4898	2147.8468	922.0628
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1592.76	1493.5414	1598.4924	1501.4243	1799.4260	1737.8276	1837.6276	790.1743
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1275.362	1193.0608	1277.3347	1199.8249	1439.0297	1398.2332	1478.6665	632.0235
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	904.1029	843.9770	903.8983	849.2089	1018.8107	995.7312	1053.0800	447.6109
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	478.9823	446.2902	478.1202	449.2813	539.3106	529.6575	560.2021	236.9365
-20	-4.54E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	6.17E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 150' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	478.83	945.0107	1022.5631	613.4135	739.0962	787.5355
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	903.7985	1771.0066	1912.5491	1152.0192	1388.4231	1477.8920
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1275.481	2494.0551	2701.5853	1615.8174	1949.0590	2072.1614
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1592.795	3113.1297	3378.1230	2013.1475	2434.9205	2591.6194
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1856.186	3612.5000	3972.3515	2354.0096	2838.4936	3021.0757
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2065.654	4035.9442	4433.3588	2620.4936	3152.2975	3376.5421
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2226.517	4358.0172	4805.1101	2821.9054	3384.5550	3634.7534
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2344.837	4592.5411	5048.4534	2957.8607	3542.3744	3803.9536
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2409.219	4738.6781	5191.3707	3018.9936	3610.1039	3893.2128
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2419.915	4766.6667	5255.0857	3004.9005	3588.0001	3884.9277
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2409.785	4738.6929	5191.3713	3018.9807	3610.0963	3893.2233
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2345.24	4592.5460	5048.4523	2957.8704	3542.3848	3803.9562
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2226.771	4358.0370	4805.7270	2821.9085	3384.5575	3634.7728
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2065.971	4035.9539	4433.3586	2620.4903	3152.3179	3376.5533
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1856.296	3612.5001	3972.3493	2354.0288	2838.5064	3021.0788
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1592.76	3113.1197	3378.1194	2013.1602	2434.9257	2591.6269
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1275.362	2494.0353	2701.5871	1615.8364	1949.0563	2072.1608
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	904.1029	1771.0016	1912.7312	1152.0320	1388.4384	1477.8831
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	478.9823	945.0207	1022.5649	613.4200	739.1039	787.5437
-20	-4.54E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	6.17E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 160’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	247.6844995	*204.8003119*	*291.414373*	1.21E+02	1.30E+02	122.3633	147.0481	145.7343	154.1595	64.56808813
-1	-3.701249995	*-4.193861594*	*-3.331124992*	-3.30177	-3.30177	-2.64159	-2.64159	-2.5106	-2.64274	-2.077254972
+1	230.3862555	*190.0767238*	*268.6666481*	115.0235	123.2688	115.8587	139.1638	137.407	145.3423	61.12923269
-2	-9.266669076	*-11.07154794*	*-8.372700781*	-8.58237	-8.6399	-8.07061	-8.64593	-6.46185	-6.80763	-4.431478013
+2	212.7648523	*175.1070383*	*245.6066794*	108.3831	116.1176	109.1158	130.9905	128.7202	136.1445	57.54160435
-3	-17.28213785	*-17.56009493*	*-15.60195074*	-14.4416	-14.9498	-13.7245	-15.3647	-10.7001	-11.3164	-6.892905018
+3	197.5701834	*162.3184901*	*225.6376484*	102.5239	109.8077	103.1662	123.7789	121.0553	128.0287	54.376048
-4	-27.29875307	*-25.38978191*	*-24.64244946*	-21.082	-22.101	-20.4674	-23.5379	-15.5034	-16.4263	-10.4805336
+4	180.8255605	*148.3008032*	*203.4344794*	95.88342	102.6564	96.42327	115.6056	112.3685	118.8309	50.7884164
-5	-37.02490747	*-32.71832889*	*-33.41323064*	-26.9412	-28.411	-26.417	-30.7496	-22.3534	-23.5298	-13.64608916
+5	166.4708938	*136.3522563*	*184.2214484*	90.02422	96.3465	90.47364	108.394	104.7036	110.7152	47.62286166
-6	-48.52388011	*-41.50001688*	*-43.78184889*	-33.5816	-35.5622	-33.16	-38.9228	-30.8669	-32.5351	-17.23371974
+6	150.6782653	*123.2865666*	*162.8750776*	83.38378	89.19527	83.73072	100.2207	96.0168	101.5174	44.0352336
-7	-59.09003461	*-49.668564*	*-53.30863004*	-39.4409	-41.8721	-39.1096	-46.1345	-38.5317	-40.6508	-20.39927448
+7	137.163598	*112.1780196*	*144.4180466*	77.52458	82.88535	77.78109	93.00905	88.35195	93.40165	40.8696756
-8	-71.54100659	*-59.40225113*	*-64.53404825*	-46.0813	-49.0233	-45.8525	-54.3077	-47.2185	-49.8486	-23.98690375
+8	122.3229736	*100.0643353*	*123.9284796*	70.88415	75.73412	71.03817	84.83582	79.40963	83.93331	37.28204719
-9	-82.94715707	*-68.41079823*	*-74.81682936*	-51.9405	-55.3333	-51.8021	-61.5194	-54.8834	-57.9643	-27.15246013
+9	109.6483088	*89.79578819*	*106.6464005*	65.02494	69.4242	64.9267	77.4623	71.74478	75.81759	34.11649245
-10	-96.35013461	*-79.09648712*	*-88.99380152*	-58.5809	-62.4845	-58.5451	-69.6926	-63.5702	-67.1622	-30.74009
+10	95.61456782	*78.45281471*	*87.90389896*	58.1892	62.06264	58.1473	69.21052	63.05795	66.61977	30.52886174
-11	-108.5962849	*-89.12631962*	*-105.5313014*	-64.567	-68.9363	-64.4947	-76.9043	-71.2351	-75.2779	-33.90564529
+11	83.67942304	*69.0242677*	*75.44170142*	52.33	55.75272	52.19767	61.99885	55.3931	58.50405	27.36330698
-12	-122.9512605	*-100.7640068*	*-125.1211471*	-71.2759	-76.156	-71.4359	-85.3179	-79.9219	-84.4757	-37.4932747
+12	70.7524462	*58.81457961*	*63.82397705*	45.68956	48.60149	45.45476	53.82562	46.70628	49.30623	23.77567737
-13	-136.2986142	*-111.4525538*	*-143.2001782*	-77.1351	-82.4659	-77.3856	-92.5296	-87.8422	-92.8619	-40.65883056
+13	59.76628771	*50.2260325*	*53.95104084*	39.83036	42.29158	39.50513	46.61395	39.04143	41.19052	20.61012254
-14	-151.6055917	*-124.0422423*	*-164.1181475*	-83.7755	-89.6171	-84.1285	-100.703	-96.5291	-102.06	-44.24645906
+14	47.79131917	*40.96834485*	*43.10529168*	33.18993	35.14034	32.76221	38.44071	30.35461	31.9927	17.02249603
-15	-165.531742	*-135.5707893*	*-182.9531785*	-89.6347	-95.927	-90.0781	-107.915	-104.194	-110.175	-47.41201493
+15	37.64516908	*33.2197978*	*34.00154536*	27.33072	28.83043	26.81258	31.22904	22.8091	24.00958	13.85693798
-16	-181.7907183	*-149.1124769*	*-204.7279468*	-96.2751	-103.078	-96.821	-116.088	-112.881	-119.373	-50.99964393
+16	26.62218532	*24.91411056*	*23.93445035*	20.69028	21.67919	20.06966	23.05581	15.22012	16.12494	10.26930283
-17	-196.5568685	*-161.4810238*	*-224.3189778*	-102.134	-109.388	-102.771	-123.299	-120.546	-127.489	-54.16519979
+17	17.793031	*18.00555798*	*16.00402377*	14.83108	15.36928	14.12003	15.84414	10.9819	11.6162	7.103751365
-18	-213.7678526	*-175.9747114*	*-246.9505485*	-108.775	-116.539	-109.514	-131.473	-129.232	-136.687	-57.75283326
+18	8.708836471	*10.65186971*	*7.842964659*	8.190645	8.218038	7.745176	8.284335	6.1786	6.506302	4.292865377
-19	-229.3740029	*-189.1832528*	*-267.2975794*	-114.634	-122.849	-115.463	-138.684	-136.897	-144.803	-60.91838479
+19	3.952347117	*4.583328482*	*3.549760829*	3.60139	3.60139	2.881303	2.881303	2.738475	2.882605	2.215613467
-20	-247.5369721	*-204.6289411*	*-291.414373*	-1.21E+02	-1.30E+02	-122.206	-146.858	-145.584	-154	-64.50601742
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 160' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	92.18712274	126.2396	131.2344	159.3763887	74.10261333	99.94451	113.6369	125.2681	1.37E+02
-1	-2.324646952	-2.32561	-1.8503	-1.443336891	-1.983083412	-2.24535	-2.24554	-2.24133	-2.23731
+1	87.26082407	119.0683	123.419	145.5319065	70.15573043	94.62257	107.5335	118.4339	129.7324
-2	-5.920924041	-5.92298	-4.71227	-3.782552295	-4.654572969	-6.48606	-6.86804	-6.86216	-6.85653
+2	82.15247508	111.5874	115.2419	130.6222195	66.06937768	89.10564	101.1988	111.3325	121.8132
-3	-9.885203387	-9.09713	-7.90197	-6.443711629	-8.260179403	-11.0582	-11.5833	-11.5677	-11.5611
+3	77.64510782	104.9866	108.0268	118.126086	62.46377171	84.23776	95.60942	105.0666	114.8257
-4	-14.99355238	-14.1122	-12.3994	-10.25033361	-12.34653215	-16.5751	-17.9179	-17.9719	-17.9646
+4	72.53676168	97.50571	99.84977	104.7393642	58.37741758	78.72083	89.27478	97.9653	106.9065
-5	-19.50091848	-19.9916	-17.0643	-14.24592759	-15.95213812	-21.443	-23.5073	-24.2377	-24.6876
+5	68.02939443	90.90493	92.63471	93.38356657	54.77181069	73.85295	83.68539	91.69941	99.91893
-6	-24.60926791	-27.3184	-24.0148	-20.14009551	-20.03849282	-26.9599	-29.842	-31.3391	-32.6069
+6	62.92104482	83.42404	84.45765	81.99776739	50.68545669	68.33602	77.35075	84.59806	91.99971
-7	-29.11663302	-33.9192	-30.3458	-25.60222963	-23.64409796	-31.8278	-35.4313	-37.605	-39.5944
+7	58.41367518	76.82325	77.00209	72.16192189	47.07984969	63.46814	71.76136	78.33217	85.01218
-8	-34.22498273	-41.4001	-38.5229	-32.66341859	-27.7304519	-37.3448	-41.766	-44.7063	-47.5136
+8	53.3053281	69.12233	68.82503	62.33660536	42.99349587	57.95121	65.42672	71.23082	77.09296
-9	-38.73235007	-48.0009	-45.738	-39.08153972	-31.3360589	-42.2126	-47.3554	-50.9722	-54.5011
+9	48.64771784	62.52155	61.60997	53.79466745	39.38789175	52.94576	59.65101	64.75606	69.87251
-10	-43.84069913	-55.4818	-53.915	-46.38922654	-35.42241406	-47.7296	-53.69	-58.0736	-62.4204
+10	43.5393703	55.04065	53.4329	45.95514229	35.18135122	47.40413	53.31637	57.65472	61.9533
-11	-48.34806356	-62.0826	-61.1301	-53.29146507	-39.14820506	-52.5974	-59.2794	-64.3395	-69.4079
+11	39.03200071	48.43987	46.21784	39.50718175	31.57574243	42.53625	47.72698	51.38883	54.96575
-12	-53.60666011	-69.5635	-69.3071	-62.91174163	-43.23455804	-58.2766	-65.8004	-71.6497	-77.56
+12	33.92365247	40.95898	38.04079	32.24383654	27.4893915	37.01932	41.39234	44.28749	47.04655
-13	-58.11402521	-76.3843	-76.5222	-71.58114412	-46.84016319	-63.1445	-71.3898	-77.9156	-84.5476
+13	29.41628769	34.35819	30.82573	26.01336488	23.88378267	32.15144	35.80295	38.0216	40.05901
-14	-63.22237397	-83.8652	-84.9398	-82.65972981	-50.92651809	-68.6614	-77.7244	-85.0169	-92.4668
+14	24.30793989	26.87731	23.60495	19.78924545	19.79743185	26.63451	29.46831	30.92025	32.1398
-15	-67.72974356	-90.466	-92.1548	-92.66216136	-54.53212688	-73.5293	-83.3138	-91.2828	-99.4543
+15	19.80057027	20.3826	17.47216	14.58851023	16.19182692	21.76663	23.87892	24.65435	25.15226
-16	-72.838091	-97.9469	-100.332	-105.5242916	-58.61847764	-79.0463	-89.6484	-98.3841	-107.374
+16	14.69221853	13.7193	12.13419	10.02246355	12.10546917	16.2497	17.54428	17.55301	17.54574
-17	-77.34546057	-104.548	-107.547	-117.3361124	-62.22408273	-83.9141	-95.2378	-104.65	-114.361
+17	10.18485812	9.308213	8.165908	6.663679055	8.499867754	11.38182	11.95489	11.93637	11.92979
-18	-82.45380352	-112.029	-115.724	-131.4765036	-66.31044082	-89.4311	-101.572	-111.751	-122.28
+18	5.708786552	5.710845	4.543526	3.641494147	4.413509393	6.232947	6.566713	6.560828	6.555191
-19	-86.96117313	-118.629	-122.939	-144.6733755	-69.91604224	-94.2989	-107.162	-118.017	-129.268
+19	2.535598521	2.536693	2.018256	1.576719167	2.114908553	2.449108	2.44932	2.445143	2.441135
-20	-92.06952634	-126.11	-131.116	-159.3503903	-74.00240075	-99.8159	-113.496	-125.119	-1.37E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 160' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	234.6757298	254.7166675	151.6117	182.5824	194.9448
-1	-2.333744657	-2.319581363	-2.66565	-2.83071	-2.36962
+1	220.6560121	239.2420967	142.8342	172.0495	183.5441
-2	-7.666096208	-7.143298802	-6.95738	-7.7552	-7.75568
+2	205.9940117	222.9260696	133.6713	161.054	171.6318
-3	-12.61363378	-12.73520366	-11.4041	-12.6061	-13.1408
+3	193.0569562	208.5295623	125.5864	151.3521	161.1209
-4	-20.70284727	-21.6062874	-16.4437	-18.6024	-19.5552
+4	178.3949528	192.2135308	116.4235	140.3566	149.2085
-5	-29.41684399	-31.10342339	-21.789	-26.7951	-26.4608
+5	165.4578856	177.8170401	108.3386	130.6547	138.6976
-6	-41.72176571	-42.32356338	-30.4552	-37.1946	-37.6057
+6	150.7958939	161.5009949	99.17568	119.6592	126.7853
-7	-53.76997597	-54.16261008	-38.5401	-46.8965	-47.9553
+7	137.5749508	147.1045036	91.09076	109.9573	116.2744
-8	-68.43197382	-70.32355768	-47.703	-57.892	-59.8677
+8	122.7656004	130.7884746	81.65835	98.6384	104.0117
-9	-81.36903586	-84.7200643	-55.7879	-67.5939	-70.3786
+9	109.8285323	116.3919831	73.57343	88.9365	93.50082
-10	-96.03104083	-101.0360937	-64.9508	-78.5894	-82.2909
+10	95.16654101	100.0759236	64.41052	77.941	81.58848
-11	-108.9680952	-115.4325838	-73.0358	-88.2913	-92.8018
+11	82.22946129	85.67943415	56.3256	68.23909	71.07759
-12	-123.6301003	-131.7486162	-82.1987	-99.2868	-104.714
+12	67.56747046	69.36340207	47.16269	57.24361	59.16526
-13	-136.5671551	-146.1451263	-90.5531	-109.312	-115.451
+13	54.63041347	55.03938677	39.07777	47.54171	48.65437
-14	-151.6603949	-162.4611536	-99.716	-120.308	-127.488
+14	40.96533558	41.6632883	29.91485	36.5462	36.95737
-15	-164.5974494	-176.857657	-107.801	-130.009	-137.999
+15	30.06216608	31.76316895	22.27286	27.37581	27.1061
-16	-179.2594541	-193.1736864	-116.964	-141.005	-149.911
+16	20.16253077	21.0286849	16.14652	18.14849	19.17695
-17	-192.1965065	-207.57018	-125.049	-150.707	-160.422
+17	13.04385426	13.22812114	11.6998	12.92876	13.51725
-18	-206.8585246	-223.8862104	-134.212	-161.702	-172.334
+18	7.341901604	6.843418954	6.660206	7.431005	7.4315
-19	-219.7955788	-238.2827317	-142.297	-171.404	-182.845
+19	2.548851035	2.566310736	2.907604	3.088796	2.584708
-20	-234.45757	-254.5987625	-151.459	-182.4	-194.757
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.48E-13	-5.22E-13	-9.29E-13	-4.35E-13	-4.61E-13	-4.42E-13	-5.35E-13	-4.47E-13	-4.75E-13	-2.88E-13
End Shear	6.88E-13	5.06E-13	8.90E-13	4.43E-13	4.77E-13	4.32E-13	5.23E-13	5.04E-13	5.34E-13	2.40E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	1875.010044	1552.533789	2178.061183	920.1879475	986.1503851	926.869821	1113.310116	1099.255806	1162.738124	489.0338615
-2	0	0	0	0	0	0	0	0	0	0
+2	3546.983968	2940.56971	4093.865934	1740.378804	1864.611596	1752.19932	2103.724198	2067.698204	2186.967934	924.0422354
-3	0	0	0	0	0	0	0	0	0	0
+3	5010.148394	4164.107755	5799.36415	2460.572587	2635.383654	2476.223126	2971.937052	2905.563815	3072.976472	1305.025152
-4	0	0	0	0	0	0	0	0	0	0
+4	6269.073183	5223.147928	7199.035113	3080.769244	3298.759489	3099.196501	3717.07066	3613.697787	3821.590088	1631.982571
-5	0	0	0	0	0	0	0	0	0	0
+5	7322.435735	6117.690238	8292.878878	3601.24779	3854.740076	3620.62948	4339.125064	4223.063356	4467.46404	1904.914466
-6	0	0	0	0	0	0	0	0	0	0
+6	8170.235812	6847.734682	9174.740519	4021.916944	4303.031429	4040.52211	4866.946987	4713.673195	4987.912583	2123.820935
-7	0	0	0	0	0	0	0	0	0	0
+7	8824.907314	7413.281071	9868.0803	4342.588866	4643.633463	4381.230446	5271.689317	5086.55128	5381.344873	2288.701834
-8	0	0	0	0	0	0	0	0	0	0
+8	9300.454055	7814.329872	10255.59358	4570.475272	4898.180583	4621.840988	5553.352783	5346.651321	5657.91123	2399.557515
-9	0	0	0	0	0	0	0	0	0	0
+9	9570.401635	8050.880715	10337.27945	4714.589882	5048.643969	4760.911	5711.936882	5475.937655	5795.968948	2456.51049
-10	0	0	0	0	0	0	0	0	0	0
+10	9635.312408	8122.624757	10113.13812	4758.261816	5090.972615	4797.928765	5746.930213	5473.934442	5795.017161	2459.828527
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	9571.719293	8050.959573	10337.27937	4714.601365	5048.661578	4760.937037	5711.979891	5475.961925	5795.993805	2456.504207
-12	0	0	0	0	0	0	0	0	0	0
+12	9301.300917	7814.400637	10255.59362	4570.47808	4898.188835	4621.858281	5553.38515	5346.665752	5657.925666	2399.569755
-13	0	0	0	0	0	0	0	0	0	0
+13	8825.42006	7413.342817	9868.080519	4342.582676	4643.632044	4381.238829	5271.710895	5086.555499	5381.348499	2288.712666
-14	0	0	0	0	0	0	0	0	0	0
+14	8170.828284	6847.787561	9174.740351	4021.901891	4303.020481	4040.521467	4866.957599	4713.667251	4987.905447	2123.830074
-15	0	0	0	0	0	0	0	0	0	0
+15	7322.566632	6117.73446	8292.878868	3601.223898	3854.719606	3620.620097	4339.125272	4223.092555	4467.493834	1904.922021
-16	0	0	0	0	0	0	0	0	0	0
+16	6268.886865	5223.183227	7199.035154	3080.804678	3298.729547	3099.178209	3717.059872	3613.692977	3821.585276	1631.988687
-17	0	0	0	0	0	0	0	0	0	0
+17	5009.790536	4164.134218	5799.3641	2460.599066	2635.412203	2476.195975	2971.9156	2905.548934	3072.960996	1305.02976
-18	0	0	0	0	0	0	0	0	0	0
+18	3545.277517	2940.587277	4093.865413	1740.396403	1864.630545	1752.217096	2103.692178	2067.718283	2186.989195	924.0453167
-19	0	0	0	0	0	0	0	0	0	0
+19	1875.347325	1552.542602	2178.061654	920.1967921	986.1598859	926.8786757	1113.320825	1099.26604	1162.748963	489.0354372
-20	-1.82E-12	-1.10E-12	-2.07E-12	-8.71E-13	-9.37E-13	-7.59E-13	-9.49E-13	-8.73E-13	-9.26E-13	-5.69E-13
+20	1.20E-12	6.30E-13	1.02E-12	4.67E-13	4.67E-13	4.29E-13	4.81E-13	3.90E-13	4.11E-13	2.72E-13

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-3.40E-13**	**-3.94E-13**	**-4.18E-13**	**-3.70E-13**	**-2.97E-13**	**-3.61E-13**	**-4.09E-13**	**-3.99E-13**	**-4.20E-13**
End Shear	**3.37E-13**	**4.39E-13**	**4.35E-13**	**3.86E-13**	**2.69E-13**	**3.56E-13**	**3.06E-13**	**3.57E-13**	**4.01E-13**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**698.0865925**	**952.5462771**	**987.3516347**	**1172.520252**	**561.2458435**	**756.9805536**	**860.2676142**	**947.7394209**	**1038.188033**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**1319.247464**	**1792.439126**	**1851.566345**	**2153.019499**	**1060.956017**	**1430.882661**	**1625.142983**	**1789.61346**	**1958.333683**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**1863.482588**	**2519.67866**	**2593.518544**	**2964.431664**	**1499.130521**	**2021.754318**	**2294.97716**	**2542.039999**	**2785.372252**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**2330.792052**	**3135.172393**	**3227.311091**	**3664.84171**	**1875.769346**	**2530.064902**	**2869.841978**	**3195.101823**	**3496.224081**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**2721.622995**	**3643.24279**	**3752.396736**	**4254.031678**	**2190.872428**	**2955.29698**	**3349.314511**	**3741.225701**	**4112.441859**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**3035.528716**	**4060.013365**	**4154.345754**	**4729.832817**	**2444.439912**	**3297.450592**	**3744.934178**	**4180.454378**	**4613.012111**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**3272.508622**	**4364.130173**	**4483.856661**	**5094.457457**	**2636.471583**	**3570.227798**	**4055.979652**	**4513.672031**	**4994.328223**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**3449.871275**	**4560.503187**	**4711.545458**	**5348.015974**	**2766.967804**	**3765.69607**	**4271.633084**	**4760.14702**	**5256.390517**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**3551.029177**	**4665.991**	**4866.71772**	**5432.436503**	**2835.928206**	**3878.08573**	**4391.894087**	**4904.55254**	**5413.731985**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**3574.766412**	**4658.449486**	**4898.268931**	**5365.478573**	**2842.534593**	**3906.961786**	**4416.158181**	**4941.603496**	**5466.177026**
-11	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+11	**3551.042308**	**4666.014552**	**4866.735731**	**5432.427071**	**2835.977741**	**3878.105344**	**4391.922853**	**4904.568565**	**5413.736628**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**3449.877839**	**4560.518268**	**4711.554482**	**5348.013561**	**2767.011899**	**3765.708508**	**4271.653799**	**4760.154312**	**5256.428576**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**3272.508368**	**4364.149315**	**4483.865599**	**5094.462119**	**2636.510142**	**3570.232945**	**4055.992238**	**4513.670304**	**4994.356443**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**3035.521791**	**4060.023733**	**4154.368208**	**4729.82801**	**2444.47284**	**3297.448358**	**3744.938212**	**4180.444763**	**4613.030333**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**2721.609332**	**3643.24441**	**3752.410018**	**4254.036213**	**2190.900042**	**2955.287591**	**3349.310627**	**3741.249941**	**4112.450493**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**2330.818804**	**3135.165291**	**3227.315618**	**3664.827281**	**1875.791274**	**2530.048225**	**2869.829814**	**3195.117145**	**3496.222775**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**1863.502744**	**2519.704866**	**2593.514106**	**2964.426866**	**1499.147015**	**2021.730376**	**2294.956587**	**2542.046131**	**2785.3814**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**1319.260763**	**1792.456418**	**1851.584012**	**2153.00502**	**1060.966973**	**1430.897194**	**1625.159283**	**1789.610853**	**1958.332947**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**698.093372**	**952.5550918**	**987.3605668**	**1172.529968**	**561.2513627**	**756.9878**	**860.2757492**	**947.7278963**	**1038.17755**
-20	**-6.60E-13**	**-7.52E-13**	**-7.96E-13**	**-8.18E-13**	**-6.53E-13**	**-6.33E-13**	**-6.39E-13**	**-6.94E-13**	**-7.96E-13**
+20	**3.61E-13**	**3.51E-13**	**4.04E-13**	**3.78E-13**	**3.99E-13**	**3.73E-13**	**3.23E-13**	**3.69E-13**	**4.18E-13**

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.53E-13	-7.75E-13	-4.14E-13	-5.26E-13	-5.73E-13
End Shear	5.73E-13	5.27E-13	4.79E-13	5.83E-13	6.04E-13
-1	0	0	0	0	0
+1	1765.248096	1913.936774	1142.673946	1376.395732	1468.35274
-2	0	0	0	0	0
+2	3311.083726	3583.317542	2147.365248	2587.32622	2757.630899
-3	0	0	0	0	0
+3	4665.0653	5062.764719	3014.089754	3634.47607	3869.353112
-4	0	0	0	0	0
+4	5825.285167	6332.382428	3757.317283	4541.918485	4840.498853
-5	0	0	0	0	0
+5	6764.712436	7444.285654	4394.195613	5296.717652	5644.872166
-6	0	0	0	0	0
+6	7559.058229	8310.488604	4893.93456	5885.937745	6310.021866
-7	0	0	0	0	0
+7	8164.309534	9007.022266	5272.414106	6323.90391	6795.785384
-8	0	0	0	0	0
+8	8604.433428	9466.162606	5529.081193	6622.685741	7116.479175
-9	0	0	0	0	0
+9	8877.846734	9736.306993	5647.765401	6755.403412	7287.656138
-10	0	0	0	0	0
+10	8933.166796	9854.150934	5627.731425	6722.352145	7278.970989
-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+11	8877.871031	9736.30775	5647.767965	6755.39051	7287.673366
-12	0	0	0	0	0
+12	8604.441642	9466.160671	5529.096888	6622.702872	7116.483464
-13	0	0	0	0	0
+13	8164.342122	9008.075592	5272.419519	6323.908156	6795.817403
-14	0	0	0	0	0
+14	7559.074354	8310.487927	4893.929247	5885.971525	6310.040458
-15	0	0	0	0	0
+15	6764.712635	7444.282137	4394.227316	5296.738784	5644.877511
-16	0	0	0	0	0
+16	5825.268959	6332.3765	3757.338366	4541.926925	4840.511002
-17	0	0	0	0	0
+17	4665.032738	5062.767488	3014.105533	3634.471992	3869.352255
-18	0	0	0	0	0
+18	3311.075769	3583.632511	2147.386288	2587.309105	2757.616337
-19	0	0	0	0	0
+19	1765.264522	1913.939679	1142.684463	1376.408294	1468.365825
-20	-1.22E-12	-1.20E-12	-7.94E-13	-1.02E-12	-9.55E-13
+20	5.39E-13	5.86E-13	4.07E-13	4.90E-13	4.91E-13

1-Span: Shear (Max and Min) Raw Data Results - 160' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**67.8**	***47.8025***	***65.46***	***68.05***	***86.625***	***38.425***	***51.825***	***58.925***	***64.95625***	***71.21875***
-1	**-1.5**	***-1.20542***	***-1.20592***	***-0.95945***	***-0.75773***	***-1.0283***	***-1.1643***	***-1.1644***	***-1.16222***	***-1.16013***
+1	**64.12729**	***45.24803***	***61.7414***	***63.99738***	***79.05843***	***36.37839***	***49.06537***	***55.76015***	***61.41244***	***67.27116***
-2	**-3.58439**	***-3.07022***	***-3.07129***	***-2.44349***	***-2.00234***	***-2.41357***	***-3.36327***	***-3.56134***	***-3.55829***	***-3.55537***
+2	**60.33979**	***42.59916***	***57.86227***	***59.75727***	***70.93702***	***34.25946***	***46.20464***	***52.4754***	***57.73012***	***63.16475***
-3	**-6.57707**	***-5.12585***	***-4.7172***	***-4.09747***	***-3.42877***	***-4.28321***	***-5.7341***	***-6.00637***	***-5.9983***	***-5.99487***
+3	**56.96936**	***40.26192***	***54.43952***	***56.01599***	***64.13165***	***32.38982***	***43.68046***	***49.57709***	***54.48102***	***59.54144***
-4	**-10.1649**	***-7.77472***	***-7.31772***	***-6.42953***	***-5.47646***	***-6.40214***	***-8.59483***	***-9.29112***	***-9.31908***	***-9.31532***
+4	**53.14954**	***37.61305***	***50.56039***	***51.77587***	***56.84214***	***30.27089***	***40.81972***	***46.29234***	***50.7987***	***55.43503***
-5	**-13.5316**	***-10.112***	***-10.3664***	***-8.84846***	***-7.63207***	***-8.27179***	***-11.119***	***-12.1894***	***-12.5682***	***-12.8015***
+5	**49.77912**	***35.27581***	***47.13764***	***48.03459***	***50.66529***	***28.40125***	***38.29554***	***43.39403***	***47.5496***	***51.81173***
-6	**-17.3473**	***-12.7608***	***-14.1656***	***-12.4526***	***-10.8044***	***-10.3907***	***-13.9797***	***-15.4742***	***-16.2505***	***-16.9079***
+6	**45.9593**	***32.62694***	***43.25851***	***43.79448***	***44.45551***	***26.28232***	***35.4348***	***40.10928***	***43.86729***	***47.70532***
-7	**-20.7141**	***-15.0981***	***-17.5884***	***-15.7355***	***-13.7577***	***-12.2604***	***-16.5039***	***-18.3725***	***-19.4996***	***-20.5312***
+7	**42.58887**	***30.28969***	***39.83576***	***39.92849***	***39.10404***	***24.41268***	***32.91062***	***37.21097***	***40.61818***	***44.08202***
-8	**-24.5298**	***-17.7469***	***-21.4675***	***-19.9756***	***-17.5774***	***-14.3793***	***-19.3647***	***-21.6572***	***-23.1819***	***-24.6376***
+8	**38.76905**	***27.64082***	***35.84254***	***35.68837***	***33.74561***	***22.29375***	***30.04989***	***33.92622***	***36.93587***	***39.97561***
-9	**-27.8965**	***-20.0842***	***-24.8903***	***-23.7169***	***-21.0636***	***-16.2489***	***-21.8888***	***-24.5556***	***-26.431***	***-28.2609***
+9	**35.39863**	***25.22568***	***32.41978***	***31.94709***	***29.10229***	***20.42411***	***27.45437***	***30.9313***	***33.57846***	***36.23153***
-10	**-31.7122**	***-22.7331***	***-28.7694***	***-27.957***	***-25.0532***	***-18.3679***	***-24.7496***	***-27.8403***	***-30.1133***	***-32.3673***
+10	**31.51646**	***22.57681***	***28.54066***	***27.70697***	***24.81575***	***18.24286***	***24.58083***	***27.64655***	***29.89615***	***32.12512***
-11	**-35.079**	***-25.0703***	***-32.1922***	***-31.6983***	***-28.8277***	***-20.2998***	***-27.2738***	***-30.7386***	***-33.3624***	***-35.9906***
+11	**28.10287**	***20.23956***	***25.1179***	***23.9657***	***21.29546***	***16.37321***	***22.05665***	***24.74824***	***26.64705***	***28.50182***
-12	**-38.8946**	***-27.7971***	***-36.0713***	***-35.9384***	***-34.0587***	***-22.4187***	***-30.2186***	***-34.12***	***-37.1531***	***-40.2178***
+12	**24.2872**	***17.59069***	***21.23877***	***19.72558***	***17.34987***	***14.25429***	***19.19591***	***21.46349***	***22.96473***	***24.39541***
-13	**-42.3736**	***-30.1343***	***-39.6081***	***-39.6796***	***-38.7868***	***-24.2884***	***-32.7428***	***-37.0183***	***-40.4022***	***-43.8411***
+13	**20.92042**	***15.25345***	***17.81602***	***15.9843***	***13.97957***	***12.38464***	***16.67174***	***18.56518***	***19.71563***	***20.77211***
-14	**-46.1893**	***-32.7832***	***-43.4873***	***-44.0445***	***-44.8161***	***-26.4073***	***-35.6036***	***-40.303***	***-44.0845***	***-47.9475***
+14	**17.10476**	***12.60458***	***13.9369***	***12.24006***	***10.61504***	***10.26572***	***13.811***	***15.28043***	***16.03331***	***16.6657***
-15	**-49.5561**	***-35.1204***	***-46.91***	***-47.7858***	***-50.2726***	***-28.277***	***-38.1277***	***-43.2013***	***-47.3336***	***-51.5708***
+15	**13.73799**	***10.26734***	***10.56915***	***9.059975***	***7.815915***	***8.396073***	***11.28682***	***12.38212***	***12.78421***	***13.0424***
-16	**-53.3717**	***-37.7693***	***-50.7891***	***-52.0259***	***-57.269***	***-30.3959***	***-40.9885***	***-46.4861***	***-51.0159***	***-55.6772***
+16	**9.922314**	***7.61847***	***7.113973***	***6.292035***	***5.353341***	***6.277142***	***8.426082***	***9.09737***	***9.101899***	***9.098128***
-17	**-56.7385**	***-40.1065***	***-54.2119***	***-55.7671***	***-63.7009***	***-32.2655***	***-43.5126***	***-49.3844***	***-54.265***	***-59.3005***
+17	**6.760486**	***5.281233***	***4.82666***	***4.234332***	***3.546553***	***4.407502***	***5.901903***	***6.199061***	***6.18946***	***6.186046***
-18	**-60.5542**	***-42.7554***	***-58.091***	***-60.0073***	***-71.4023***	***-34.3845***	***-46.3734***	***-52.6692***	***-57.9473***	***-63.4069***
+18	**3.36878**	***2.960221***	***2.961289***	***2.35599***	***1.926711***	***2.288571***	***3.232018***	***3.405089***	***3.402037***	***3.399114***
-19	**-63.9209**	***-45.0926***	***-61.5138***	***-63.7485***	***-78.5897***	***-36.2541***	***-48.8976***	***-55.5675***	***-61.1964***	***-67.0302***
+19	**1.595853**	***1.314803***	***1.315371***	***1.046542***	***0.828133***	***1.09666***	***1.269955***	***1.270065***	***1.267899***	***1.265821***
-20	**-67.7366**	***-47.7415***	***-65.3929***	***-67.9887***	***-86.6115***	***-38.373***	***-51.7583***	***-58.8522***	***-64.8787***	***-71.1367***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 160' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	67.8	62.96875	67.5	63.45	76.25	75.56875	79.9375	33.48099
-1	-1.5	-1.71209	-1.71209	-1.36976	-1.36976	-1.30184	-1.37036	-1.07714
+1	64.12729	59.64402	63.91952	60.07712	72.16166	71.2507	75.36545	31.69781
-2	-3.58439	-4.45028	-4.48011	-4.18492	-4.48324	-3.35071	-3.53001	-2.29789
+2	60.33979	56.20071	60.21134	56.58067	67.92353	66.74625	70.59603	29.83749
-3	-6.57707	-7.4885	-7.75204	-7.11667	-7.96718	-5.54838	-5.86796	-3.57423
+3	56.96936	53.16249	56.93941	53.49556	64.18401	62.77174	66.38773	28.19603
-4	-10.1649	-10.9318	-11.4602	-10.6131	-12.2053	-8.03908	-8.51764	-5.43455
+4	53.14954	49.71917	53.23122	49.9991	59.94588	58.26729	61.61831	26.33571
-5	-13.5316	-13.97	-14.7322	-13.6982	-15.9448	-11.5911	-12.2011	-7.07601
+5	49.77912	46.68095	49.9593	46.91399	56.20636	54.29278	57.41	24.69425
-6	-17.3473	-17.4134	-18.4403	-17.1947	-20.183	-16.0056	-16.8707	-8.93633
+6	45.9593	43.23764	46.25111	43.41754	51.96823	49.78833	52.64059	22.83393
-7	-20.7141	-20.4516	-21.7123	-20.2798	-23.9225	-19.9801	-21.079	-10.5778
+7	42.58887	40.19942	42.97918	40.33243	48.2287	45.81382	48.43228	21.19247
-8	-24.5298	-23.8949	-25.4205	-23.7763	-28.1606	-24.4846	-25.8484	-12.4381
+8	38.76905	36.7561	39.271	36.83597	43.99057	41.17689	43.52259	19.33215
-9	-27.8965	-26.9331	-28.6924	-26.8614	-31.9001	-28.4591	-30.0567	-14.0796
+9	35.39863	33.71789	35.99907	33.66694	40.16713	37.20238	39.31428	17.69069
-10	-31.7122	-30.3764	-32.4006	-30.3578	-36.1383	-32.9636	-34.8261	-15.9399
+10	31.51646	30.1733	32.18182	30.15157	35.88827	32.69793	34.54486	15.83037
-11	-35.079	-33.4804	-35.7461	-33.4429	-39.8778	-36.9381	-39.0344	-17.5814
+11	28.10287	27.13508	28.90989	27.06646	32.14874	28.72341	30.33655	14.18891
-12	-38.8946	-36.9592	-39.4897	-37.0422	-44.2406	-41.4425	-43.8038	-19.4417
+12	24.2872	23.69176	25.20171	23.57001	27.91061	24.21897	25.56714	12.32859
-13	-42.3736	-39.9974	-42.7617	-40.1273	-47.9801	-45.5495	-48.1524	-21.0831
+13	20.92042	20.65354	21.92978	20.4849	24.17109	20.24446	21.35884	10.68713
-14	-46.1893	-43.4408	-46.4699	-43.6238	-52.2182	-50.054	-52.9218	-22.9435
+14	17.10476	17.21023	18.22159	16.98844	19.93296	15.74001	16.58942	8.826806
-15	-49.5561	-46.479	-49.7418	-46.7089	-55.9578	-54.0285	-57.1301	-24.5849
+15	13.73799	14.17201	14.94966	13.90333	16.19344	11.82738	12.44987	7.185345
-16	-53.3717	-49.9223	-53.45	-50.2053	-60.1959	-58.5329	-61.8996	-26.4452
+16	9.922314	10.72869	11.24148	10.40688	11.95531	7.892206	8.361389	5.325021
-17	-56.7385	-52.9605	-56.7219	-53.2905	-63.9354	-62.5074	-66.1079	-28.0867
+17	6.760486	7.690477	7.969552	7.32177	8.215782	5.694531	6.023438	3.683563
-18	-60.5542	-56.4038	-60.4301	-56.7869	-68.1735	-67.0119	-70.8773	-29.947
+18	3.36878	4.247158	4.261363	4.016166	4.29574	3.203837	3.373763	2.226013
-19	-63.9209	-59.4421	-63.702	-59.872	-71.9131	-70.9864	-75.0856	-31.5885
+19	1.595853	1.867456	1.867456	1.494064	1.494064	1.420003	1.49474	1.148879
-20	-67.7366	-62.8854	-67.4102	-63.3685	-76.1512	-75.4908	-79.855	-33.4488
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 160' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	67.8	135.7292	147.3202	87.6875	105.6	112.75
-1	-1.5	-1.34977	-1.34157	-1.54173	-1.6372	-1.37051
+1	64.12729	127.6206	138.3702	82.6109	99.50808	106.1562
-2	-3.58439	-4.43383	-4.13146	-4.02393	-4.48537	-4.48565
+2	60.33979	119.1406	128.9335	77.31136	93.14863	99.26649
-3	-6.57707	-7.29533	-7.36565	-6.59577	-7.29101	-7.60025
+3	56.96936	111.6582	120.607	72.63529	87.53735	93.18731
-4	-10.1649	-11.9739	-12.4964	-9.51052	-10.759	-11.3101
+4	53.14954	103.1781	111.1703	67.33575	81.1779	86.29759
-5	-13.5316	-17.0138	-17.9893	-12.6021	-15.4975	-15.3041
+5	49.77912	95.69571	102.8439	62.65968	75.56662	80.21842
-6	-17.3473	-24.1306	-24.4786	-17.6143	-21.5122	-21.75
+6	45.9593	87.21567	93.40717	57.36014	69.20716	73.32869
-7	-20.7141	-31.0989	-31.326	-22.2904	-27.1235	-27.7359
+7	42.58887	79.56909	85.08068	52.68407	63.59589	67.24952
-8	-24.5298	-39.5789	-40.673	-27.5899	-33.4829	-34.6256
+8	38.76905	71.00382	75.644	47.22866	57.04939	60.15714
-9	-27.8965	-47.0613	-48.9995	-32.266	-39.0942	-40.7048
+9	35.39863	63.52142	67.31751	42.55259	51.43811	54.07797
-10	-31.7122	-55.5414	-58.4361	-37.5655	-45.4537	-47.5945
+10	31.51646	55.04138	57.88081	37.25305	45.07866	47.18824
-11	-35.079	-63.0238	-66.7626	-42.2416	-51.0649	-53.6737
+11	28.10287	47.55897	49.55433	32.57698	39.46737	41.10907
-12	-38.8946	-71.5038	-76.1993	-47.5412	-57.4244	-60.5634
+12	24.2872	39.07893	40.11764	27.27744	33.10793	34.21935
-13	-42.3736	-78.9862	-84.5258	-52.3731	-63.2227	-66.7735
+13	20.92042	31.59654	31.83308	22.60137	27.49665	28.14018
-14	-46.1893	-87.7157	-93.9625	-57.6726	-69.5822	-73.7349
+14	17.10476	23.69308	24.09675	17.30182	21.13719	21.375
-15	-49.5561	-95.1981	-102.289	-62.3487	-75.1934	-79.8141
+15	13.73799	17.38702	18.37083	12.88193	15.83332	15.67733
-16	-53.3717	-103.678	-111.726	-67.6482	-81.5529	-86.7038
+16	9.922314	11.66138	12.16234	9.338645	10.49652	11.09136
-17	-56.7385	-111.161	-120.052	-72.3243	-87.1642	-92.783
+17	6.760486	7.544161	7.650735	6.766804	7.477593	7.817956
-18	-60.5542	-119.641	-129.489	-77.6239	-93.5236	-99.6727
+18	3.36878	4.246328	3.958021	3.852057	4.297863	4.298149
-19	-63.9209	-127.123	-137.815	-82.2999	-99.1349	-105.752
+19	1.595853	1.474176	1.484275	1.681668	1.786464	1.494915
-20	-67.7366	-135.603	-147.252	-87.5995	-105.494	-112.642
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-3.60E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**2.56E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**513.0183**	**361.9842**	**493.9312**	**511.9791**	**638.1674**	**291.0271**	**392.5230**	**446.0812**	**491.4386**	**538.3397**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**969.6**	**684.0796**	**929.4473**	**960.1070**	**1173.5887**	**550.1457**	**741.9666**	**842.6979**	**927.9821**	**1015.4699**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1367.265**	**966.2860**	**1306.5484**	**1344.8372**	**1618.1561**	**777.3557**	**1048.3559**	**1190.0322**	**1318.1436**	**1444.3206**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**1707.976**	**1208.6036**	**1625.7052**	**1673.4825**	**2001.9888**	**972.6572**	**1311.9341**	**1488.1213**	**1656.7808**	**1812.9241**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**1991.165**	**1411.2642**	**1889.1588**	**1945.7593**	**2324.9736**	**1136.0500**	**1532.4330**	**1736.7459**	**1939.9667**	**2132.4562**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**2216.832**	**1574.0362**	**2105.2701**	**2154.1850**	**2585.9862**	**1267.5343**	**1709.8525**	**1941.8896**	**2167.7233**	**2392.0208**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**2390.319**	**1696.9192**	**2262.9661**	**2325.0488**	**2786.1736**	**1367.1100**	**1851.2978**	**2103.1785**	**2340.5092**	**2589.7476**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**2517.643**	**1788.8884**	**2364.7929**	**2443.1141**	**2925.5931**	**1434.7772**	**1952.6555**	**2215.0029**	**2468.3158**	**2725.6368**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**2587.429**	**1841.3426**	**2419.4924**	**2523.5767**	**2974.1323**	**1470.5358**	**2010.9337**	**2277.3628**	**2543.1955**	**2807.2243**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**2599.919**	**1853.6512**	**2415.5818**	**2539.9372**	**2941.0000**	**1473.9614**	**2025.9071**	**2289.9446**	**2562.4078**	**2834.4190**
-11	**0.00E+00**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**2587.995**	**1841.3494**	**2419.5046**	**2523.5861**	**2974.1274**	**1470.5614**	**2010.9439**	**2277.3777**	**2543.2038**	**2807.2267**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**2518.007**	**1788.8918**	**2364.8008**	**2443.1187**	**2925.5919**	**1434.8001**	**1952.6619**	**2215.0136**	**2468.3196**	**2725.6565**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**2390.539**	**1696.9190**	**2262.9761**	**2325.0535**	**2786.1761**	**1367.1300**	**1851.3005**	**2103.1850**	**2340.5083**	**2589.7622**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**2217.086**	**1574.0326**	**2105.2755**	**2154.1966**	**2585.9837**	**1267.5514**	**1709.8514**	**1941.8917**	**2167.7183**	**2392.0302**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**1991.221**	**1411.2571**	**1889.1597**	**1945.7661**	**2324.9760**	**1136.0643**	**1532.4281**	**1736.7439**	**1939.9792**	**2132.4607**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**1707.896**	**1208.6175**	**1625.7015**	**1673.4849**	**2001.9813**	**972.6685**	**1311.9254**	**1488.1150**	**1656.7888**	**1812.9234**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1367.111**	**966.2965**	**1306.5620**	**1344.8349**	**1618.1536**	**777.3643**	**1048.3435**	**1190.0216**	**1318.1468**	**1444.3253**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**968.8668**	**684.0865**	**929.4563**	**960.1162**	**1173.5812**	**550.1514**	**741.9742**	**842.7064**	**927.9807**	**1015.4695**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**513.1632**	**361.9877**	**493.9357**	**511.9837**	**638.1724**	**291.0300**	**392.5267**	**446.0854**	**491.4327**	**538.3342**
-20	**-6.63E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**4.81E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.60E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	513.0183	477.1522	511.3562	480.6170	577.2933	570.0056	602.9236	253.5825
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	969.6	902.4521	966.8715	908.5814	1090.8604	1072.1795	1134.0254	479.1508
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1367.265	1275.8997	1366.5458	1284.0151	1541.0615	1506.6444	1593.4542	676.7048
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1707.976	1597.4951	1710.5312	1607.0503	1927.4414	1873.8386	1981.6386	846.2445
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1991.165	1867.3828	1998.8281	1877.4330	2250.0000	2189.8177	2316.5486	987.7700
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2216.832	2085.5157	2231.2841	2095.1631	2523.6956	2444.2174	2586.4208	1101.2813
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2390.319	2251.7961	2407.8991	2271.8333	2733.5698	2637.5687	2790.4303	1186.7782
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2517.643	2369.9638	2539.8914	2396.5989	2879.6229	2772.4404	2933.8404	1244.2611
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2587.429	2444.6927	2617.9124	2468.7120	2961.8547	2839.4802	3005.4285	1273.7934
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2599.919	2467.3383	2639.8614	2487.9071	2980.0001	2838.4415	3004.9350	1275.5139
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2587.995	2444.6987	2617.9215	2468.7255	2961.8771	2839.4928	3005.4414	1273.7901
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2518.007	2369.9653	2539.8957	2396.6079	2879.6397	2772.4479	2933.8479	1244.2674
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2390.539	2251.7929	2407.8984	2271.8376	2733.5810	2637.5709	2790.4322	1186.7839
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2217.086	2085.5079	2231.2784	2095.1628	2523.7011	2444.2143	2586.4171	1101.2860
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1991.221	1867.3704	1998.8175	1877.4281	2250.0001	2189.8328	2316.5641	987.7739
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1707.896	1597.5134	1710.5157	1607.0408	1927.4358	1873.8361	1981.6361	846.2477
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1367.111	1275.9134	1366.5606	1284.0010	1541.0503	1506.6367	1593.4462	676.7072
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	968.8668	902.4612	966.8813	908.5907	1090.8438	1072.1899	1134.0364	479.1524
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	513.1632	477.1567	511.3611	480.6216	577.2988	570.0109	602.9292	253.5833
-20	-6.63E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.81E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 160' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.60E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	513.0183	1020.9648	1106.9617	660.8872	796.0646	849.2497
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	969.6	1915.0282	2072.4798	1241.9695	1496.4293	1594.9282
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1367.265	2698.1291	2928.1462	1743.2561	2102.0683	2237.9139
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1707.976	3369.1644	3662.4537	2173.1158	2626.9048	2799.5945
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	1991.165	3912.5000	4305.5440	2541.4665	3063.4573	3264.8191
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2216.832	4371.9249	4806.5290	2830.5000	3404.2439	3649.5210
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2390.319	4721.9835	5209.3825	3049.4009	3657.5500	3930.4716
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2517.643	4976.5376	5474.9350	3197.8492	3830.3561	4115.9509
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2587.429	5134.6713	5631.1781	3266.4924	3907.1159	4214.9544
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2599.919	5166.6667	5699.3354	3254.9054	3888.0001	4209.9312
-11	0.00E+00	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2587.995	5134.6854	5631.1786	3266.4939	3907.1085	4214.9644
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2518.007	4976.5423	5474.9339	3197.8582	3830.3660	4115.9534
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2390.539	4722.0024	5209.9917	3049.4040	3657.5524	3930.4901
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2217.086	4371.9343	4806.5286	2830.4970	3404.2635	3649.5318
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	1991.221	3912.5001	4305.5420	2541.4849	3063.4695	3264.8222
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1707.896	3369.1550	3662.4503	2173.1280	2626.9097	2799.6015
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1367.111	2698.1103	2928.1478	1743.2652	2102.0659	2237.9134
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	968.8668	1915.0236	2072.6619	1241.9817	1496.4194	1594.9198
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	513.1632	1020.9743	1106.9634	660.8933	796.0719	849.2573
-20	-6.63E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.81E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 170' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	253.8595279	210.4858804	301.8144696	1.22E+02	1.30E+02	122.6526	147.4735	146.8042	155.301	64.74607857
-1	-3.728941016	-4.315705576	-3.35604691	-3.39104	-3.39104	-2.71298	-2.72259	-2.57833	-2.71403	-2.085501072
+1	236.0223321	195.2249263	278.3658644	115.2608	123.5598	116.1544	139.5969	138.4802	146.4873	61.31032233
-2	-9.707714343	-11.21513567	-8.768121225	-8.81472	-8.92557	-8.20828	-8.8178	-6.61627	-6.97583	-4.431690726
+2	217.910004	179.7575044	254.1527455	108.6423	116.4322	109.4338	131.4507	129.8224	137.3202	57.73493578
-3	-17.82129445	-17.79595841	-16.08501492	-14.6978	-15.2612	-14.0399	-15.8217	-10.8716	-11.5028	-7.083786394
+3	202.1940756	166.4566818	233.6903466	102.7592	110.0966	103.4599	124.2097	122.1266	129.1717	54.5568135
-4	-28.10158209	-25.70338177	-25.36157506	-21.3163	-22.3888	-20.7605	-23.9679	-16.3118	-17.1703	-10.65917315
+4	185.0176527	151.9972515	211.1237438	96.14075	102.969	96.73935	116.0635	113.4688	120.0046	50.98142524
-5	-37.98535964	-33.18020444	-34.2734804	-27.1994	-28.7244	-26.7343	-31.2089	-23.2847	-24.5156	-13.83729393
+5	170.1977243	139.5924289	191.4677448	90.25767	96.63336	90.7655	108.8225	105.773	111.8561	47.80330295
-6	-49.60861307	-42.09563352	-44.75297848	-33.8178	-35.852	-33.4549	-39.3551	-31.9425	-33.6827	-17.41268268
+6	154.0292993	126.1410013	169.808342	83.63919	89.50577	84.04492	100.6763	97.11522	102.6891	44.22791663
-7	-60.38839068	-50.46845625	-54.47128385	-39.7009	-42.1876	-39.4287	-46.5961	-39.6383	-41.8312	-20.59080497
+7	140.1053727	114.6321784	150.958743	77.75611	83.17015	78.07107	93.43531	89.41941	94.54058	41.04979279
-8	-73.01963685	-60.39188361	-65.85797285	-46.3194	-49.3152	-46.1493	-54.7423	-48.2961	-50.9982	-24.16619241
+8	124.944956	102.1887528	130.206548	71.13764	76.04256	71.3505	85.28916	80.52114	85.11888	37.47440766
-9	-84.69541886	-69.66070658	-76.38267814	-52.2025	-55.6508	-52.1232	-61.9833	-55.9919	-59.1467	-27.34431322
+9	111.9170274	91.57593013	112.1633465	65.25456	69.70694	65.32545	77.99693	72.82533	76.97038	34.29628689
-10	-98.33466484	-80.59212987	-94.09828509	-58.8209	-62.7784	-58.8437	-70.1295	-64.6497	-68.3138	-30.91969922
+10	97.62801485	79.96985056	93.05766825	58.45224	62.38136	58.46938	69.67569	64.16755	67.80331	30.72089649
-11	-110.9064471	-90.92760754	-111.0482494	-64.8879	-69.312	-64.8176	-77.3705	-72.3455	-76.4623	-34.09782324
+11	85.49608425	70.25302778	77.20093952	52.56916	56.04573	52.49553	62.43466	56.47173	59.6548	27.5427757
-12	-125.5536928	-102.8670306	-131.3468438	-71.5063	-76.4396	-71.7249	-85.7429	-81.0033	-85.6294	-37.67321124
+12	72.26608463	59.82560473	65.18436621	45.95069	48.91816	45.77496	54.28851	47.81396	50.48775	23.96738943
-13	-139.2673424	-113.9278534	-149.7932428	-77.3894	-82.7752	-77.6987	-92.984	-88.9396	-94.0325	-40.85133098
+13	61.03830312	51.00478188	54.97260732	40.0676	42.58252	39.8011	47.04747	40.11815	42.33924	20.78926857
-14	-154.9225876	-126.8752816	-170.9990461	-84.0079	-89.9028	-84.4193	-101.13	-97.5973	-103.2	-44.42672028
+14	48.91105794	41.58535352	44.09037348	33.44913	35.45494	33.08053	38.90132	31.46037	33.17218	17.21387926
-15	-169.286369	-138.8321044	-190.251845	-89.891	-96.2384	-90.3931	-108.371	-105.293	-111.348	-47.60484211
+15	38.57927596	33.66052495	34.82046923	27.56606	29.11932	27.10668	31.66029	23.76457	25.02368	14.03575539
-16	-185.9496147	-152.7875338	-212.3648403	-96.5094	-103.366	-97.1137	-116.517	-113.951	-120.515	-51.18023191
+16	27.46003058	25.24910711	24.69253004	20.94758	21.99173	20.3861	23.51413	15.8807	16.71652	10.46037
-17	-201.209397	-165.6403565	-232.4240402	-102.393	-109.702	-103.088	-123.758	-121.647	-128.664	-54.35834966
+17	18.30877044	18.2202842	16.54990038	15.06451	15.65611	14.41225	16.2731	11.13693	11.78504	7.282246054
-18	-218.8806421	-180.6037853	-255.4442439	-109.011	-116.829	-109.808	-131.904	-130.305	-137.831	-57.9337396
+18	9.180996245	10.81685507	8.268010738	8.44603	8.528519	7.901983	8.477471	6.349686	6.69223	4.301230916
-19	-235.0364239	-194.3526083	-276.999879	-114.894	-123.165	-115.782	-139.146	-138	-145.979	-61.11186358
+19	3.966828039	4.684031682	3.563737519	3.673112	3.673112	3.014298	3.04671	2.792848	2.939839	2.215732656
-20	-253.7156696	-210.324026	-301.8144696	-1.22E+02	-1.30E+02	-122.503	-147.292	-146.658	-155.146	-64.68724644
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 170' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	92.43640762	127.1176	132.59	166.4332193	74.28128252	100.1912	113.9857	125.7836	1.38E+02
-1	-2.387470792	-2.38834	-1.90016	-1.484274854	-1.991168418	-2.30604	-2.30621	-2.3142	-2.29885
+1	87.51477735	119.9492	124.7757	152.4381418	70.33874072	94.8745	107.8875	118.9545	130.4499
-2	-5.971831686	-5.97369	-4.75253	-3.820594968	-4.83443553	-6.58085	-7.03106	-7.02581	-7.02077
+2	82.4233594	112.4933	116.6261	137.7098963	66.26589853	89.37585	101.5739	111.8767	122.5571
-3	-10.15423995	-9.16065	-8.18541	-6.688463568	-8.454741745	-11.3263	-11.9565	-11.9337	-11.9278
+3	77.89765424	105.8658	109.382	124.5495832	62.64559231	84.48815	95.96182	105.5854	115.5412
-4	-15.2456579	-14.7606	-12.6677	-10.50896278	-12.52758394	-16.8249	-18.2701	-18.4909	-18.4844
+4	72.80623369	98.40997	101.2324	110.4422116	58.57274465	78.9895	89.6482	98.50768	107.6484
-5	-19.77136306	-20.7455	-17.9878	-15.02805673	-16.14789015	-21.7126	-23.8822	-24.7823	-25.4324
+5	68.28052846	91.78252	93.98829	98.58692868	54.95243844	74.1018	84.03609	92.21636	100.6325
-6	-24.86278227	-28.2014	-24.915	-20.94433097	-20.22073608	-27.2113	-30.1959	-31.86	-33.3253
+6	63.18910946	84.32664	85.83867	85.93005673	50.87959318	68.60314	77.72247	85.13862	92.73969
-7	-29.38848744	-34.8289	-31.7353	-26.81998083	-23.8410423	-32.099	-35.808	-38.1513	-40.3411
+7	58.66340196	77.69919	78.44461	75.93768467	47.25928676	63.71545	72.11036	78.8473	85.72384
-8	-34.47990792	-42.2847	-39.8849	-33.91464272	-27.91388704	-37.5976	-42.1216	-45.2291	-48.2339
+8	53.57198694	70.03621	70.21858	65.18957226	43.18644324	58.2168	65.79675	71.76957	77.831
-9	-39.00561109	-48.9122	-47.129	-40.41437545	-31.53419346	-42.4853	-47.7337	-51.5204	-55.2498
+9	48.91214149	63.40876	62.97447	56.5164739	39.566136	53.28558	60.00927	65.28164	70.5959
-10	-44.09703161	-56.3681	-55.2786	-47.79539796	-35.60703923	-47.984	-54.0473	-58.5981	-63.1426
+10	43.81343295	55.95288	54.82486	47.35721775	35.38015679	47.6777	53.69565	58.2039	62.70305
-11	-48.62274	-62.9955	-62.5227	-55.97876709	-39.34047908	-52.8717	-59.6594	-64.8894	-70.1585
+11	39.2877255	49.32543	47.58076	40.81884876	31.75985048	42.79001	48.08354	51.91259	55.6872
-12	-53.855585	-70.4514	-70.6723	-65.73599421	-43.41332455	-58.5231	-66.1484	-72.1638	-78.2706
+12	34.19630516	41.86956	39.43115	33.51631955	27.68700501	37.29136	41.76992	44.83484	47.79436
-13	-58.38129248	-77.286	-77.9164	-75.3176389	-47.03363086	-63.4108	-71.7605	-78.4551	-85.2864
+13	29.67059758	35.24211	32.18705	27.20996069	24.06669869	32.40366	36.15782	38.54353	40.7785
-14	-63.47270849	-84.7418	-86.2924	-86.55905101	-51.10647633	-68.9094	-78.0741	-85.5328	-93.1793
+14	24.57918591	27.78623	24.52932	20.61156008	19.99385654	26.90501	29.8442	31.46579	32.88567
-15	-67.99841594	-91.3693	-93.5365	-97.85061691	-54.72678265	-73.7971	-83.6862	-91.8242	-100.195
+15	20.05347392	21.15879	18.37183	15.35264619	16.3735501	22.01731	24.23209	25.17447	25.86981
-16	-73.08983708	-98.8252	-101.686	-111.1878103	-58.7996286	-79.2958	-89.9999	-98.9019	-108.088
+16	14.96206209	14.39083	12.41813	10.29278289	12.30070443	16.51865	17.91847	18.09674	18.09024
-17	-77.61554016	-105.453	-108.93	-123.7478658	-62.41993526	-84.1835	-95.612	-105.193	-115.104
+17	10.43635024	9.359367	8.433877	6.896791273	8.680398167	11.63096	12.30636	12.28077	12.27488
-18	-82.70696117	-112.908	-117.08	-138.5216394	-66.49278099	-89.6821	-101.926	-112.271	-122.997
+18	5.772173039	5.774025	4.593711	3.686983574	4.607552211	6.342618	6.74746	6.742207	6.737161
-19	-87.23266444	-119.536	-124.324	-151.6219478	-70.11308741	-94.5698	-107.538	-118.562	-130.013
+19	2.586077768	2.587059	2.05828	1.610254247	2.115279849	2.541085	2.541318	2.536709	2.532274
-20	-92.32408477	-126.992	-132.474	-166.3985305	-74.1859261	-100.068	-113.851	-125.64	-1.38E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 170' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	237.1442157	257.8064674	152.8639	184.047	196.6992
-1	-2.399741531	-2.415801926	-2.73754	-2.90869	-2.44094
+1	223.1270462	242.3368825	144.0894	173.5176	185.3014
-2	-7.825045929	-7.287519317	-7.10912	-7.90894	-7.90938
+2	208.5142345	226.0770355	134.9572	162.5589	173.429
-3	-13.09140371	-13.37899808	-11.5738	-12.7795	-13.4375
+3	195.5250699	211.6238346	126.8397	152.8178	162.8758
-4	-21.51801384	-22.50999366	-16.5965	-19.2159	-19.8303
+4	180.9122571	195.3639824	117.7074	141.8591	151.0033
-5	-30.75059731	-32.38107272	-22.7944	-27.9635	-27.9538
+5	167.9230941	180.9107845	109.5899	132.1181	140.4501
-6	-43.5368083	-43.85321227	-31.7133	-38.6662	-39.2062
+6	153.3102858	164.6509303	100.4576	121.1594	128.5776
-7	-56.29930145	-57.15557788	-39.8309	-48.4073	-49.7595
+7	140.2826026	150.1977315	92.34007	111.4183	118.0244
-8	-70.91210756	-73.41542917	-48.9631	-59.366	-61.6319
+8	125.3024088	133.9378822	82.95416	100.1552	105.8222
-9	-83.90127413	-87.86862863	-57.0807	-69.107	-72.1852
+9	112.3132324	119.4846831	74.83661	90.41416	95.26892
-10	-98.51408214	-104.1284805	-66.2129	-80.0657	-84.0576
+10	97.70043597	103.2248198	65.70436	79.45547	83.3965
-11	-111.5032479	-118.5816819	-74.3304	-89.8068	-94.6109
+11	84.71126086	88.7716324	57.58682	69.71442	72.84324
-12	-126.116058	-134.8415293	-83.4627	-100.765	-106.483
+12	70.09846316	72.51176589	48.45457	58.75572	60.97081
-13	-139.3174776	-149.2947319	-91.8339	-110.811	-117.366
+13	57.10928627	58.05858018	40.33704	49.01468	50.41755
-14	-154.1239338	-165.554579	-100.966	-121.77	-129.239
+14	42.82486757	43.4798271	31.20478	38.05597	38.54513
-15	-167.1130988	-180.0077816	-109.084	-131.511	-139.792
+15	31.45933559	33.00203122	23.24997	28.5102	28.56124
-16	-181.7259052	-196.2676324	-118.216	-142.469	-151.664
+16	21.00948467	21.96637501	16.31682	18.78872	19.47436
-17	-194.7150824	-210.720845	-126.333	-152.21	-162.218
+17	13.49639396	13.84294356	11.85216	13.08317	13.79183
-18	-209.3278786	-226.9806822	-135.466	-163.169	-174.09
+18	7.51992543	7.00528117	6.829434	7.603815	7.604253
-19	-222.3170539	-241.4338971	-143.583	-172.91	-184.643
+19	2.648983875	2.648032951	2.965316	3.151651	2.733516
-20	-236.9298522	-257.6937379	-152.716	-183.869	-196.516
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 170’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.46E-13	-6.08E-13	-9.95E-13	-4.35E-13	-4.56E-13	-3.87E-13	-4.71E-13	-4.41E-13	-4.65E-13	-2.40E-13
End Shear	8.75E-13	6.44E-13	1.17E-12	4.41E-13	4.75E-13	4.28E-13	5.18E-13	4.94E-13	5.20E-13	2.40E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	2042.365823	1695.587873	2398.668247	979.7165514	1050.258115	987.3120075	1186.573373	1177.081519	1245.14182	521.1377398
-2	0	0	0	0	0	0	0	0	0	0
+2	3862.778161	3211.619663	4515.033516	1853.169901	1986.078933	1866.721413	2242.631236	2215.15752	2343.101328	984.8706572
-3	0	0	0	0	0	0	0	0	0	0
+3	5459.398928	4548.095386	6396.018301	2620.360111	2807.462518	2638.550037	3168.678605	3114.613828	3294.322626	1391.198744
-4	0	0	0	0	0	0	0	0	0	0
+4	6832.840654	5705.01493	7947.777664	3281.287064	3514.789793	3302.873678	3963.934915	3875.988524	4099.308828	1740.122023
-5	0	0	0	0	0	0	0	0	0	0
+5	7983.103285	6682.378231	9170.311403	3836.312012	4107.87993	3859.294593	4628.399999	4530.363446	4792.842703	2031.640375
-6	0	0	0	0	0	0	0	0	0	0
+6	8910.187119	7480.185496	10157.46482	4285.17367	4586.53291	4307.812908	5190.925089	5057.9202	5352.410793	2265.754103
-7	0	0	0	0	0	0	0	0	0	0
+7	9626.576157	8098.436613	10932.69838	4627.772019	4950.748483	4670.787946	5622.658922	5459.470367	5776.201297	2442.462671
-8	0	0	0	0	0	0	0	0	0	0
+8	10146.17886	8537.131942	11378.70756	4871.319949	5222.164375	4927.30347	5923.602307	5740.05268	6074.454592	2561.766845
-9	0	0	0	0	0	0	0	0	0	0
+9	10442.5648	8796.27064	11495.49022	5024.832096	5382.748654	5075.915742	6093.753962	5881.628694	6225.524752	2623.812903
-10	0	0	0	0	0	0	0	0	0	0
+10	10516.27132	8875.562443	11283.04833	5071.660195	5428.474815	5116.140884	6132.629942	5883.746143	6228.935711	2628.818614
-11	-1.07E-12	-8.35E-13	-9.60E-13	-6.85E-13	-6.85E-13	-5.48E-13	-5.48E-13	-5.21E-13	-5.48E-13	-6.30E-13
+11	10443.83714	8796.345242	11495.49012	5024.843008	5382.765394	5075.940293	6093.794506	5881.651833	6225.548451	2623.806855
-12	0	0	0	0	0	0	0	0	0	0
+12	10146.94361	8537.198631	11378.70788	4871.322533	5222.172136	4927.319998	5923.633249	5740.066476	6074.468399	2561.778531
-13	0	0	0	0	0	0	0	0	0	0
+13	9627.016238	8098.494655	10932.69853	4627.766159	4950.747167	4670.795799	5622.679177	5459.474359	5776.20472	2442.472966
-14	0	0	0	0	0	0	0	0	0	0
+14	8910.647941	7480.235275	10157.46472	4285.159393	4586.522527	4307.81235	5190.93521	5057.914471	5352.403928	2265.762776
-15	0	0	0	0	0	0	0	0	0	0
+15	7983.119383	6682.41986	9170.310966	3836.289326	4107.860456	3859.28576	4628.400439	4530.391362	4792.871187	2031.647559
-16	0	0	0	0	0	0	0	0	0	0
+16	6832.559507	5705.048398	7947.778667	3281.321023	3514.761311	3302.856612	3963.925034	3875.984171	4099.304487	1740.127971
-17	0	0	0	0	0	0	0	0	0	0
+17	5458.9674	4548.120557	6396.018632	2620.385558	2807.489902	2638.524223	3168.658164	3114.599476	3294.3077	1391.203207
-18	0	0	0	0	0	0	0	0	0	0
+18	3862.342716	3211.636318	4515.033167	1853.186767	1986.097116	1866.738111	2242.600142	2215.176755	2343.121699	984.8735572
-19	0	0	0	0	0	0	0	0	0	0
+19	2042.687299	1695.596007	2398.667578	979.7248998	1050.267148	987.320273	1186.583399	1177.090992	1245.151849	521.1392502
-20	-1.54E-12	-9.91E-13	-1.47E-12	-7.59E-13	-7.95E-13	-6.27E-13	-6.85E-13	-8.29E-13	-8.76E-13	-4.25E-13
+20	1.28E-12	7.56E-13	1.46E-12	5.68E-13	5.93E-13	4.89E-13	6.39E-13	6.41E-13	6.82E-13	3.62E-13

1-Span: Moment (Max and Min) Raw Data Results - 170' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.32E-13	-3.90E-13	-4.22E-13	-4.30E-13	-2.72E-13	-3.22E-13	-3.86E-13	-4.00E-13	-4.13E-13
End Shear	3.38E-13	4.24E-13	4.60E-13	4.71E-13	3.20E-13	3.51E-13	3.67E-13	3.72E-13	4.29E-13
-1	0	0	0	0	0	0	0	0	0
+1	743.8756075	1019.56795	1060.593573	1305.091206	597.8792961	806.4332516	917.0440724	1011.433214	1109.210405
-2	0	0	0	0	0	0	0	0	0
+2	1406.005652	1919.427621	1990.340556	2404.369032	1130.366817	1524.582556	1732.719527	1910.247493	2092.848222
-3	0	0	0	0	0	0	0	0	0
+3	1986.390183	2699.57913	2790.243809	3320.53645	1597.462604	2154.56999	2447.464163	2712.917721	2975.912594
-4	0	0	0	0	0	0	0	0	0
+4	2485.103674	3361.060094	3474.143553	4111.674466	1999.166539	2696.712438	3061.171081	3409.525083	3735.360668
-5	0	0	0	0	0	0	0	0	0
+5	2902.439943	3907.925256	4041.628184	4777.655244	2335.478634	3150.570837	3573.509289	3992.495414	4392.664731
-6	0	0	0	0	0	0	0	0	0
+6	3238.030693	4356.43814	4478.266346	5316.319435	2606.399098	3516.14529	3996.019915	4461.934007	4926.851878
-7	0	0	0	0	0	0	0	0	0
+7	3491.87581	4685.24249	4834.830841	5729.784306	2811.927562	3807.139859	4327.981385	4818.594111	5334.314837
-8	0	0	0	0	0	0	0	0	0
+8	3681.28641	4899.288815	5081.807776	6018.269207	2952.06459	4015.621125	4558.574728	5081.815581	5615.0547
-9	0	0	0	0	0	0	0	0	0
+9	3789.672357	5015.36073	5248.545635	6123.643401	3026.809404	4135.817887	4687.798973	5236.268599	5783.640293
-10	0	0	0	0	0	0	0	0	0
+10	3815.844027	5011.36676	5283.974365	6023.155088	3035.388652	4167.318883	4715.081348	5276.689605	5839.831843
-11	-4.82E-13	-4.82E-13	-3.84E-13	-2.90E-13	-6.03E-13	-4.66E-13	-4.66E-13	-3.15E-13	-3.15E-13
+11	3789.684691	5015.383188	5248.562577	6123.634017	3026.856099	4135.836339	4687.826106	5236.283799	5783.644692
-12	0	0	0	0	0	0	0	0	0
+12	3681.292479	4899.303231	5081.816327	6018.267111	2952.10644	4015.633012	4558.59439	5081.822538	5615.090923
-13	0	0	0	0	0	0	0	0	0
+13	3491.875547	4685.260613	4834.839327	5729.788852	2811.963972	3807.144674	4327.993076	4818.592329	5334.341526
-14	0	0	0	0	0	0	0	0	0
+14	3238.024096	4356.44798	4478.28792	5316.314768	2606.430237	3516.143211	3996.023825	4461.92383	4926.869265
-15	0	0	0	0	0	0	0	0	0
+15	2902.426998	3907.92681	4041.640671	4777.650247	2335.50475	3150.561983	3573.505641	3992.518175	4392.672878
-16	0	0	0	0	0	0	0	0	0
+16	2485.0845	3361.053525	3474.147983	4111.67936	1999.187589	2696.69685	3061.159758	3409.539637	3735.359729
-17	0	0	0	0	0	0	0	0	0
+17	1986.409371	2699.604165	2790.239496	3320.531917	1597.478347	2154.547207	2447.444896	2712.923886	2975.921604
-18	0	0	0	0	0	0	0	0	0
+18	1406.018303	1919.444183	1990.357627	2404.3714	1130.37722	1524.596216	1732.734933	1910.244692	2092.847364
-19	0	0	0	0	0	0	0	0	0
+19	743.8819418	1019.576103	1060.601869	1305.100175	597.884405	806.4400203	917.0516601	1011.422051	1109.20048
-20	-5.70E-13	-6.96E-13	-5.74E-13	-6.21E-13	-5.58E-13	-5.45E-13	-6.77E-13	-6.75E-13	-6.78E-13
+20	4.24E-13	5.71E-13	4.37E-13	6.38E-13	4.05E-13	3.86E-13	4.26E-13	4.22E-13	4.34E-13

1-Span: Moment (Max and Min) Raw Data Results - 170' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.85E-13	-6.56E-13	-5.50E-13	-5.37E-13	-5.33E-13
End Shear	8.30E-13	8.06E-13	5.29E-13	6.23E-13	6.49E-13
-1	0	0	0	0	0
+1	1896.579893	2059.863501	1224.760278	1474.899334	1575.062239
-2	0	0	0	0	0
+2	3560.093659	3859.837569	2302.897267	2774.120143	2959.980886
-3	0	0	0	0	0
+3	5017.833274	5454.489557	3234.592066	3899.027678	4155.938662
-4	0	0	0	0	0
+4	6267.963741	6823.988467	4033.907921	4873.862174	5200.091976
-5	0	0	0	0	0
+5	7283.412618	8020.374548	4718.315412	5685.685894	6066.305576
-6	0	0	0	0	0
+6	8139.971793	8955.699836	5257.034571	6321.561877	6782.00548
-7	0	0	0	0	0
+7	8793.612578	9706.008088	5665.754386	6795.912667	7307.086862
-8	0	0	0	0	0
+8	9268.363964	10203.54883	5944.023374	7120.609431	7655.923513
-9	0	0	0	0	0
+9	9562.520086	10496.73409	6075.668343	7268.935074	7843.948363
-10	0	0	0	0	0
+10	9624.766689	10622.25837	6059.989215	7241.052329	7840.901584
-11	-4.91E-13	-4.55E-13	-5.53E-13	-4.91E-13	-4.91E-13
+11	9562.543275	10496.73515	6075.693111	7268.922618	7843.964826
-12	0	0	0	0	0
+12	9268.371378	10203.54688	5944.038597	7120.62571	7655.927656
-13	0	0	0	0	0
+13	8793.643634	9707.049188	5665.759539	6795.916705	7307.117567
-14	0	0	0	0	0
+14	8139.986971	8955.699769	5257.029519	6321.593858	6782.023069
-15	0	0	0	0	0
+15	7283.412847	8020.371323	4718.345687	5685.705948	6066.310561
-16	0	0	0	0	0
+16	6267.948448	6823.983095	4033.928336	4873.870587	5200.10436
-17	0	0	0	0	0
+17	5017.841148	5454.492201	3234.57675	3899.023502	4155.937492
-18	0	0	0	0	0
+18	3560.085622	3860.152538	2302.917074	2774.103861	2959.966705
-19	0	0	0	0	0
+19	1896.595174	2059.866155	1224.770208	1474.911222	1575.074886
-20	-9.18E-13	-9.52E-13	-6.97E-13	-8.14E-13	-8.12E-13
+20	7.06E-13	8.11E-13	6.19E-13	6.62E-13	6.80E-13

1-Span: Shear (Max and Min) Raw Data Results - 170’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**68.04706**	***47.93176***	***65.91529***	***68.75294***	***90.53235***	***38.51765***	***51.95294***	***59.10588***	***65.22353***	***71.58824***
-1	**-1.50588**	***-1.23799***	***-1.23845***	***-0.98531***	***-0.77958***	***-1.0325***	***-1.19577***	***-1.19585***	***-1.2***	***-1.19204***
+1	**64.37737**	***45.37971***	***62.19817***	***64.70091***	***82.8635***	***36.47329***	***49.19601***	***55.94376***	***61.68238***	***67.64321***
-2	**-3.74982**	***-3.09662***	***-3.09758***	***-2.46437***	***-2.02454***	***-2.50684***	***-3.41242***	***-3.64587***	***-3.64315***	***-3.64053***
+2	**60.60151**	***42.73962***	***58.33202***	***60.47503***	***74.81323***	***34.36137***	***46.34475***	***52.66991***	***58.01231***	***63.55047***
-3	**-6.75458**	***-5.26536***	***-4.75015***	***-4.24445***	***-3.56127***	***-4.3841***	***-5.87311***	***-6.19991***	***-6.18808***	***-6.18501***
+3	**57.21765**	***40.39287***	***54.89544***	***56.71869***	***67.64174***	***32.4841***	***43.8103***	***49.75982***	***54.75002***	***59.91249***
-4	**-10.4136**	***-7.90545***	***-7.65395***	***-6.56868***	***-5.6205***	***-6.49602***	***-8.72437***	***-9.47376***	***-9.58825***	***-9.58488***
+4	**53.41081**	***37.75278***	***51.02928***	***52.49281***	***59.95808***	***30.37218***	***40.95903***	***46.48597***	***51.07995***	***55.81975***
-5	**-13.7939**	***-10.2522***	***-10.7573***	***-9.32737***	***-8.05314***	***-8.37329***	***-11.2588***	***-12.3838***	***-12.8505***	***-13.1877***
+5	**50.02695**	***35.40603***	***47.5927***	***48.73647***	***53.503***	***28.49491***	***38.42458***	***43.57588***	***47.81766***	***52.18177***
-6	**-17.5968**	***-12.8923***	***-14.6235***	***-12.9194***	***-11.2438***	***-10.4852***	***-14.1101***	***-15.6577***	***-16.5206***	***-17.2804***
+6	**46.22011**	***32.76594***	***43.72654***	***44.51059***	***46.61613***	***26.38299***	***35.57332***	***40.30203***	***44.14759***	***48.08903***
-7	**-20.9772**	***-15.239***	***-18.0601***	***-16.4559***	***-14.4195***	***-12.3625***	***-16.6445***	***-18.5678***	***-19.7829***	***-20.9184***
+7	**42.83625**	***30.41919***	***40.28996***	***40.67649***	***41.16674***	***24.50572***	***33.03886***	***37.39194***	***40.8853***	***44.45104***
-8	**-24.7801**	***-17.8791***	***-21.9262***	***-20.6818***	***-18.2659***	***-14.4744***	***-19.4958***	***-21.8416***	***-23.453***	***-25.0111***
+8	**39.02941**	***27.7791***	***36.31642***	***36.41098***	***35.31431***	***22.3938***	***30.18761***	***34.1181***	***37.21523***	***40.35831***
-9	**-28.1604**	***-20.2259***	***-25.3628***	***-24.4382***	***-21.8049***	***-16.3517***	***-22.0303***	***-24.7517***	***-26.7153***	***-28.6491***
+9	**35.64555**	***25.36279***	***32.87984***	***32.65464***	***30.58871***	***20.51653***	***27.63058***	***31.11707***	***33.85099***	***36.60663***
-10	**-31.9633**	***-22.866***	***-29.229***	***-28.6641***	***-25.8444***	***-18.4636***	***-24.8815***	***-28.0256***	***-30.3853***	***-32.7418***
+10	**31.78003**	***22.71892***	***29.01368***	***28.42876***	***25.60481***	***18.34595***	***24.72269***	***27.84322***	***30.18092***	***32.5139***
-11	**-35.3437**	***-25.2127***	***-32.6656***	***-32.4204***	***-30.2962***	***-20.3995***	***-27.416***	***-30.9357***	***-33.6476***	***-36.3798***
+11	**28.39617**	***20.37217***	***25.57709***	***24.67242***	***22.02585***	***16.46868***	***22.18823***	***24.93313***	***26.91863***	***28.87591***
-12	**-39.1466**	***-27.9262***	***-36.5317***	***-36.6463***	***-35.6125***	***-22.5114***	***-30.3464***	***-34.3005***	***-37.4196***	***-40.5863***
+12	**24.55256**	***17.73207***	***21.71095***	***20.44654***	***18.0494***	***14.35676***	***19.33697***	***21.65928***	***23.24856***	***24.78318***
-13	**-42.6326**	***-30.2729***	***-40.0757***	***-40.4026***	***-40.8291***	***-24.3887***	***-32.8809***	***-37.2105***	***-40.6819***	***-44.2242***
+13	**21.1722**	***15.38532***	***18.27436***	***16.6902***	***14.63044***	***12.47949***	***16.80252***	***18.74919***	***19.98627***	***21.14519***
-14	**-46.4355**	***-32.913***	***-43.9418***	***-44.7459***	***-46.9597***	***-26.5006***	***-35.7321***	***-40.4844***	***-44.352***	***-48.317***
+14	**17.36931**	***12.74524***	***14.40821***	***12.71938***	***11.06377***	***10.36757***	***13.95126***	***15.47534***	***16.3162***	***17.05246***
-15	**-49.8158**	***-35.2597***	***-47.3784***	***-48.5022***	***-53.1026***	***-28.3779***	***-38.2666***	***-43.3945***	***-47.6143***	***-51.955***
+15	**13.98895**	***10.39848***	***10.97163***	***9.526486***	***8.227656***	***8.490303***	***11.41681***	***12.56525***	***13.05391***	***13.41447***
-16	**-53.6187**	***-37.8998***	***-51.2446***	***-52.7281***	***-60.3645***	***-30.4898***	***-41.1179***	***-46.6683***	***-51.2844***	***-56.0477***
+16	**10.18605**	***7.758394***	***7.462188***	***6.439271***	***5.503437***	***6.378379***	***8.565545***	***9.291403***	***9.383841***	***9.380473***
-17	**-56.9991**	***-40.2466***	***-54.6812***	***-56.4844***	***-67.2049***	***-32.3671***	***-43.6523***	***-49.5784***	***-54.5466***	***-59.6857***
+17	**6.927936**	***5.411641***	***4.853185***	***4.373283***	***3.673013***	***4.501114***	***6.031092***	***6.381313***	***6.368043***	***6.364991***
-18	**-60.802**	***-42.8867***	***-58.5473***	***-60.7103***	***-75.2565***	***-34.479***	***-46.5036***	***-52.8523***	***-58.2167***	***-63.7784***
+18	**3.547582**	***2.993089***	***2.99405***	***2.382013***	***1.95278***	***2.38919***	***3.288887***	***3.498813***	***3.496089***	***3.493472***
-19	**-64.1824**	***-45.2334***	***-61.9839***	***-64.4667***	***-82.4167***	***-36.3563***	***-49.038***	***-55.7624***	***-61.479***	***-67.4164***
+19	**1.596059**	***1.340979***	***1.341488***	***1.067296***	***0.846143***	***1.096852***	***1.317649***	***1.317769***	***1.315379***	***1.313079***
-20	**-67.9853**	***-47.8735***	***-65.85***	***-68.6925***	***-90.5144***	***-38.4682***	***-51.8893***	***-59.0362***	***-65.1491***	***-71.5091***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 170' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	68.04706	63.08823	67.64706	63.6	76.47059	76.12353	80.52941	33.57328
-1	-1.50588	-1.75838	-1.75838	-1.40678	-1.41176	-1.33696	-1.40733	-1.08141
+1	64.37737	59.76706	64.07041	60.23041	72.38624	71.8072	75.95918	31.79171
-2	-3.74982	-4.57076	-4.62824	-4.2563	-4.57236	-3.43079	-3.61723	-2.298
+2	60.60151	56.33513	60.37449	56.74554	68.16216	67.31781	71.20571	29.93774
-3	-6.75458	-7.62136	-7.91351	-7.28021	-8.20417	-5.63733	-5.96462	-3.67321
+3	57.21765	53.28453	57.08922	53.64788	64.40741	63.32725	66.98041	28.28977
-4	-10.4136	-11.0533	-11.6094	-10.7651	-12.4283	-8.45827	-8.90344	-5.52718
+4	53.41081	49.8526	53.3933	50.163	60.18332	58.83786	62.22694	26.43579
-5	-13.7939	-14.1039	-14.8947	-13.8627	-16.183	-12.074	-12.7123	-7.17516
+5	50.02695	46.802	50.10804	47.06534	56.42857	54.84729	58.00163	24.78782
-6	-17.5968	-17.5358	-18.5906	-17.3476	-20.4071	-16.5634	-17.4657	-9.02913
+6	46.22011	43.37008	46.41212	43.58046	52.20448	50.3579	53.24816	22.93384
-7	-20.9772	-20.5864	-21.8759	-20.4453	-24.1618	-20.554	-21.691	-10.6771
+7	42.83625	40.31948	43.12686	40.4828	48.44973	46.36734	49.02285	21.28587
-8	-24.7801	-24.0183	-25.5718	-23.9302	-28.3859	-25.0433	-26.4445	-12.5311
+8	39.02941	36.88755	39.43094	36.99792	44.22565	41.75325	44.13735	19.43189
-9	-28.1604	-27.0689	-28.8571	-27.0278	-32.1407	-29.0339	-30.6698	-14.1791
+9	35.64555	33.83695	36.14568	33.87371	40.44435	37.76268	39.91204	17.78392
-10	-31.9633	-30.5009	-32.553	-30.5127	-36.3648	-33.5233	-35.4233	-16.033
+10	31.78003	30.30969	32.34709	30.31858	36.12947	33.27329	35.15857	15.92994
-11	-35.3437	-33.6468	-35.9409	-33.6104	-40.1195	-37.5139	-39.6486	-17.681
+11	28.39617	27.25909	29.06183	27.22091	32.37473	29.28272	30.93327	14.28197
-12	-39.1466	-37.0787	-39.6368	-37.192	-44.4609	-42.0032	-44.4021	-19.535
+12	24.55256	23.82717	25.36591	23.73604	28.15064	24.79334	26.1798	12.428
-13	-42.6326	-40.1293	-42.9221	-40.2897	-48.2157	-46.1185	-48.7594	-21.183
+13	21.1722	20.77656	22.08064	20.63837	24.39589	20.80277	21.95449	10.78002
-14	-46.4355	-43.5613	-46.618	-43.7746	-52.4398	-50.6079	-53.5129	-23.0369
+14	17.36931	17.34464	18.38472	17.1535	20.1718	16.31339	17.20103	8.926046
-15	-49.8158	-46.6119	-49.9033	-46.8722	-56.1945	-54.5985	-57.7382	-24.6849
+15	13.98895	14.29404	15.09947	14.05584	16.41706	12.32282	12.97572	7.278069
-16	-53.6187	-50.0438	-53.5992	-50.3571	-60.4186	-59.0879	-62.4916	-26.5389
+16	10.18605	10.86211	11.40354	10.57096	12.19296	8.234741	8.668148	5.424096
-17	-56.9991	-53.0944	-56.8844	-53.4548	-64.1734	-63.0784	-66.7169	-28.1869
+17	6.927936	7.811515	8.118283	7.473295	8.438218	5.774919	6.11099	3.776119
-18	-60.802	-56.5263	-60.5804	-56.9397	-68.3974	-67.5678	-71.4704	-30.0408
+18	3.547582	4.379585	4.422359	4.097476	4.395888	3.292551	3.470174	2.23035
-19	-64.1824	-59.5769	-63.8656	-60.0373	-72.1522	-71.5584	-75.6957	-31.6888
+19	1.596059	1.904647	1.904647	1.563027	1.579834	1.448197	1.524418	1.148941
-20	-67.9853	-63.0088	-67.5616	-63.5222	-76.3763	-76.0478	-80.4492	-33.5428
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 170' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***	***Force Y (kips)***
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**68.04706**	***137.1569***	***149.1073***	***88.41177***	***106.4471***	***113.7647***
-1	**-1.50588**	***-1.38794***	***-1.39722***	***-1.58331***	***-1.6823***	***-1.41176***
+1	**64.37737**	***129.0498***	***140.1601***	***83.33687***	***100.3572***	***107.1726***
-2	**-3.74982**	***-4.52576***	***-4.21488***	***-4.1117***	***-4.57428***	***-4.57454***
+2	**60.60151**	***120.5982***	***130.7559***	***78.05506***	***94.01901***	***100.306***
-3	**-6.75458**	***-7.57166***	***-7.738***	***-6.69391***	***-7.39125***	***-7.77182***
+3	**57.21765**	***113.0856***	***122.3967***	***73.36012***	***88.38509***	***94.20229***
-4	**-10.4136**	***-12.4454***	***-13.0191***	***-9.5989***	***-11.1139***	***-11.4692***
+4	**53.41081**	***104.634***	***112.9925***	***68.07832***	***82.04693***	***87.33565***
-5	**-13.7939**	***-17.7852***	***-18.7282***	***-13.1836***	***-16.1732***	***-16.1676***
+5	**50.02695**	***97.12151***	***104.6332***	***63.38338***	***76.413***	***81.23197***
-6	**-17.5968**	***-25.1803***	***-25.3633***	***-18.342***	***-22.3633***	***-22.6757***
+6	**46.22011**	***88.66992***	***95.22899***	***58.10157***	***70.07483***	***74.36533***
-7	**-20.9772**	***-32.5618***	***-33.057***	***-23.0369***	***-27.9973***	***-28.7793***
+7	**42.83625**	***81.13511***	***86.86971***	***53.40663***	***64.4409***	***68.26165***
-8	**-24.7801**	***-41.0134***	***-42.4612***	***-28.3187***	***-34.3354***	***-35.646***
+8	**39.02941**	***72.47103***	***77.46552***	***47.97811***	***57.92668***	***61.20427***
-9	**-28.1604**	***-48.5259***	***-50.8205***	***-33.0137***	***-39.9694***	***-41.7497***
+9	**35.64555**	***64.95849***	***69.10624***	***43.28317***	***52.29275***	***55.10059***
-10	**-31.9633**	***-56.9775***	***-60.2247***	***-38.2955***	***-46.3075***	***-48.6163***
+10	**31.78003**	***56.5069***	***59.70204***	***38.00137***	***45.95458***	***48.23395***
-11	**-35.3437**	***-64.49***	***-68.584***	***-42.9904***	***-51.9415***	***-54.72***
+11	**28.39617**	***48.99437***	***51.34276***	***33.30643***	***40.32066***	***42.13027***
-12	**-39.1466**	***-72.9416***	***-77.9882***	***-48.2722***	***-58.2796***	***-61.5866***
+12	**24.55256**	***40.54278***	***41.93856***	***28.02462***	***33.98249***	***35.26363***
-13	**-42.6326**	***-80.5769***	***-86.3474***	***-53.1139***	***-64.0896***	***-67.881***
+13	**21.1722**	***33.03024***	***33.57928***	***23.32969***	***28.34857***	***29.15995***
-14	**-46.4355**	***-89.1405***	***-95.7516***	***-58.3957***	***-70.4278***	***-74.7477***
+14	**17.36931**	***24.76858***	***25.14738***	***18.04788***	***22.0104***	***22.29331***
-15	**-49.8158**	***-96.653***	***-104.111***	***-63.0906***	***-76.0617***	***-80.8514***
+15	**13.98895**	***18.1951***	***19.08735***	***13.44706***	***16.48942***	***16.51894***
-16	**-53.6187**	***-105.105***	***-113.515***	***-68.3724***	***-82.3999***	***-87.718***
+16	**10.18605**	***12.15123***	***12.70467***	***9.437142***	***10.86681***	***11.26336***
-17	**-56.9991**	***-112.617***	***-121.874***	***-73.0674***	***-88.0338***	***-93.8217***
+17	**6.927936**	***7.805896***	***8.006329***	***6.854925***	***7.566898***	***7.976767***
-18	**-60.802**	***-121.069***	***-131.279***	***-78.3492***	***-94.372***	***-100.688***
+18	**3.547582**	***4.349292***	***4.051637***	***3.949933***	***4.397811***	***4.398064***
-19	**-64.1824**	***-128.581***	***-139.638***	***-83.0441***	***-100.006***	***-106.792***
+19	**1.596059**	***1.53209***	***1.53154***	***1.715047***	***1.822817***	***1.580981***
-20	**-67.9853**	***-137.033***	***-149.042***	***-88.3259***	***-106.344***	***-113.659***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 170' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**			**Moment Z (kips-ft)**						
-0	**-3.10E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**3.13E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**547.2077**	**385.7276**	**528.6844**	**549.9578**	**710.7997**	**310.0230**	**418.1661**	**475.5219**	**524.4663**	**575.1674**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**1033.821**	**729.0670**	**995.2956**	**1032.0667**	**1311.2921**	**586.1378**	**790.5536**	**898.4804**	**990.5354**	**1085.2208**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1459.05**	**1030.0182**	**1399.8336**	**1446.8467**	**1813.2495**	**828.3446**	**1117.2258**	**1269.1025**	**1406.7502**	**1543.1229**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**1823.158**	**1288.6200**	**1742.8364**	**1801.4745**	**2246.7891**	**1036.6433**	**1398.3471**	**1587.3327**	**1767.9674**	**1936.9254**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**2126.145**	**1505.0246**	**2026.4067**	**2095.7367**	**2611.8447**	**1211.0338**	**1633.6898**	**1852.9994**	**2070.2595**	**2277.7624**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**2368.012**	**1679.0411**	**2258.9775**	**2322.1500**	**2907.2964**	**1351.5163**	**1823.2540**	**2072.0871**	**2313.6811**	**2554.7586**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**2554.121**	**1810.6693**	**2429.4750**	**2507.0422**	**3134.2422**	**1458.0905**	**1974.1456**	**2244.2216**	**2498.6228**	**2766.0435**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**2690.449**	**1908.8859**	**2540.4661**	**2635.1090**	**3292.7959**	**1530.7569**	**2082.2510**	**2363.7930**	**2635.1131**	**2911.6177**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**2765.639**	**1965.0881**	**2600.6537**	**2721.5689**	**3352.8144**	**1569.5149**	**2144.5776**	**2430.8006**	**2715.2028**	**2999.0357**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**2779.923**	**1978.6591**	**2598.5827**	**2739.9400**	**3302.5000**	**1573.9635**	**2160.9120**	**2444.9475**	**2736.1626**	**3028.1731**
-11	**-4.55E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**2766.186**	**1965.0945**	**2600.6654**	**2721.5777**	**3352.8095**	**1569.5391**	**2144.5872**	**2430.8147**	**2715.2107**	**2999.0380**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**2690.777**	**1908.8890**	**2540.4735**	**2635.1135**	**3292.7948**	**1530.7786**	**2082.2572**	**2363.8032**	**2635.1167**	**2911.6365**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**2554.31**	**1810.6692**	**2429.4844**	**2507.0466**	**3134.2446**	**1458.1094**	**1974.1481**	**2244.2277**	**2498.6219**	**2766.0573**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**2368.21**	**1679.0376**	**2258.9826**	**2322.1612**	**2907.2940**	**1351.5324**	**1823.2529**	**2072.0891**	**2313.6758**	**2554.7676**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**2126.152**	**1505.0179**	**2026.4075**	**2095.7432**	**2611.8421**	**1211.0473**	**1633.6852**	**1852.9975**	**2070.2713**	**2277.7666**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**1823.037**	**1288.6101**	**1742.8330**	**1801.4768**	**2246.7917**	**1036.6542**	**1398.3390**	**1587.3268**	**1767.9749**	**1936.9249**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1458.865**	**1030.0282**	**1399.8466**	**1446.8444**	**1813.2472**	**828.3528**	**1117.2140**	**1269.0925**	**1406.7534**	**1543.1276**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**1033.634**	**729.0735**	**995.3042**	**1032.0755**	**1311.2934**	**586.1432**	**790.5607**	**898.4884**	**990.5339**	**1085.2203**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**547.3458**	**385.7308**	**528.6887**	**549.9621**	**710.8044**	**310.0256**	**418.1696**	**475.5259**	**524.4605**	**575.1623**
-20	**-5.85E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**4.73E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 170' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.10E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.13E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	547.2077	508.0200	544.5985	511.9585	615.2831	610.3612	645.6530	270.2296
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1033.821	960.9385	1029.8568	967.9655	1162.8889	1148.6427	1214.9864	510.6926
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1459.05	1358.7556	1455.7752	1368.1877	1643.0794	1615.0448	1708.2306	721.3890
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1823.158	1701.4711	1822.5511	1712.6646	2055.4498	2009.8463	2125.6463	902.3189
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2126.145	1989.2725	2130.0907	2001.1898	2400.0000	2349.1643	2485.2697	1053.4822
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2368.012	2222.0242	2378.2903	2233.7635	2691.6905	2622.7224	2775.4269	1174.8790
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2554.121	2399.6744	2567.1498	2421.9797	2915.5608	2830.9413	2995.1783	1266.5090
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2690.449	2525.9632	2707.8892	2554.9927	3071.6113	2976.4338	3149.8339	1328.3727
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2765.639	2605.5650	2791.1582	2632.0538	3159.8413	3049.8464	3228.1694	1360.5460
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2779.923	2629.8471	2814.8690	2652.9120	3180.0000	3050.9443	3229.9381	1363.1416
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2766.186	2605.5707	2791.1669	2632.0665	3159.8623	3049.8584	3228.1817	1360.5428
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2690.777	2525.9645	2707.8933	2555.0013	3071.6273	2976.4410	3149.8410	1328.3788
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2554.31	2399.6713	2567.1492	2421.9838	2915.5713	2830.9434	2995.1800	1266.5144
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2368.21	2222.0168	2378.2850	2233.7632	2691.6957	2622.7195	2775.4233	1174.8835
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2126.152	1989.2607	2130.0806	2001.1853	2400.0002	2349.1788	2485.2845	1053.4859
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1823.037	1701.4887	1822.5363	1712.6557	2055.4447	2009.8440	2125.6440	902.3220
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1458.865	1358.7688	1455.7894	1368.1743	1643.0688	1615.0373	1708.2228	721.3913
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1033.634	960.9472	1029.8663	967.9741	1162.8728	1148.6527	1214.9970	510.6941
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	547.3458	508.0243	544.6031	511.9628	615.2883	610.3661	645.6582	270.2304
-20	-5.85E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.73E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 170' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.10E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.13E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	547.2077	1096.9230	1191.3612	708.3634	853.0361	910.9672
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1033.821	2059.0478	2232.4104	1331.9244	1604.4651	1711.9612
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1459.05	2902.1592	3154.7077	1870.7878	2255.0767	2403.6661
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1823.158	3625.1959	3946.7834	2333.0873	2818.8908	3007.5720
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2126.145	4212.5001	4638.7360	2728.9274	3288.4245	3508.5631
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2368.012	4707.9073	5179.6992	3040.5058	3656.1954	3922.5017
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2554.121	5085.9529	5613.6542	3276.8967	3930.5452	4226.1925
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2690.449	5360.5344	5901.4163	3437.8389	4118.3398	4427.9488
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2765.639	5530.6652	6070.9856	3513.9782	4204.1267	4536.6966
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2779.923	5566.6667	6143.5849	3504.9099	4188.0002	4534.9344
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2766.186	5530.6786	6070.9862	3513.9925	4204.1195	4536.7061
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2690.777	5360.5387	5901.4152	3437.8477	4118.3492	4427.9512
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2554.31	5085.9709	5614.2563	3276.8997	3930.5475	4226.2103
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2368.21	4707.9161	5179.6991	3040.5029	3656.2139	3922.5119
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2126.152	4212.5002	4638.7341	2728.9449	3288.4361	3508.5660
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1823.037	3625.1871	3946.7803	2333.0991	2818.8957	3007.5792
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1458.865	2902.1638	3154.7092	1870.7789	2255.0743	2403.6654
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1033.634	2059.0432	2232.5926	1331.9358	1604.4557	1711.9530
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	547.3458	1096.9319	1191.3627	708.3691	853.0429	910.9745
-20	-5.85E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.73E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 180' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	259.9706627	216.1619423	311.6189944	1.22E+02	1.31E+02	122.9097	147.8517	147.7552	156.3156	64.90429274
-1	-3.755109238	-4.425575104	-3.37959831	-3.4704	-3.4704	-2.84825	-2.87902	-2.63853	-2.7774	-2.092831962
+1	241.5939824	200.3627128	287.6789952	115.4718	123.8186	116.4173	139.9821	139.4345	147.5055	61.47132694
-2	-10.10600971	-11.34899404	-9.125201481	-9.02126	-9.17951	-8.35684	-8.99967	-6.75342	-7.12522	-4.431882128
+2	222.9875916	184.3953009	262.9010948	108.8729	116.712	109.7166	131.86	130.8025	138.3657	57.90682122
-3	-18.31459738	-18.01962589	-16.52699806	-14.9256	-15.538	-14.3202	-16.228	-11.024	-11.6684	-7.253464351
+3	206.7538657	170.5846676	241.252897	102.9686	110.3535	103.7212	124.5928	123.0792	130.1881	54.71752689
-4	-28.84018551	-26.00703791	-26.02320051	-21.5245	-22.6446	-21.021	-24.3501	-17.0333	-17.9298	-10.81796984
+4	189.142281	155.6812499	218.3170463	96.36962	103.247	97.02047	116.4707	114.4472	121.0483	51.15301942
-5	-38.87810226	-33.62967433	-35.07315062	-27.4289	-29.0031	-27.0164	-31.6173	-24.2668	-25.5631	-14.00726686
+5	173.8605522	142.8226213	198.2238953	90.4653	96.88847	91.02508	109.2036	106.7239	112.8706	47.96372318
-6	-50.62894379	-42.68108599	-45.66659992	-34.0278	-36.1096	-33.7171	-39.7394	-32.8987	-34.7029	-17.57177232
+6	157.3129729	128.9832057	176.2456484	83.86635	89.78191	84.32435	101.0815	98.09187	103.7309	44.39921697
-7	-61.61886078	-51.25571913	-55.57334999	-39.9321	-42.4681	-39.7125	-47.0065	-40.6221	-42.8805	-20.76106644
+7	142.9832419	117.0765689	157.0092975	77.96202	83.42341	78.32896	93.81436	90.36852	95.55323	41.20992275
-8	-74.43370142	-61.37113111	-67.12439824	-46.5311	-49.5747	-46.4132	-55.1286	-49.2541	-52.0203	-24.32557302
+8	127.4996627	104.3011595	135.9886486	71.36308	76.31685	71.62823	85.69227	81.50939	86.17297	37.64541749
-9	-86.37561531	-70.89776615	-80.07579754	-52.4354	-55.9332	-52.4086	-62.3957	-56.9774	-60.1979	-27.51487031
+9	114.1219328	93.34652814	117.609099	65.45875	69.95835	65.63284	78.42513	73.78603	77.9953	34.45612148
-10	-100.2544612	-82.07718358	-98.77559849	-59.0343	-63.0398	-59.1093	-70.5178	-65.6094	-69.3377	-31.07937593
+10	99.57333346	81.4739172	97.77879857	58.68615	62.66477	58.75578	70.08929	65.15406	68.85556	30.89161477
-11	-113.1483814	-92.71700968	-116.5405476	-65.1123	-69.5853	-65.1357	-77.8534	-73.3327	-77.5153	-34.2686703
+11	87.14759941	71.47128434	81.04739815	52.78182	56.30627	52.76038	62.82215	57.43071	60.6779	27.70232082
-12	-128.0912194	-104.960419	-137.0823984	-71.7113	-76.6918	-71.9818	-86.1208	-81.9647	-86.6551	-37.83317578
+12	73.71110277	60.82386854	66.48226774	46.18288	49.19971	46.05966	54.70006	48.79873	51.53816	24.13781461
-13	-142.1693725	-116.3910533	-155.89035	-77.6156	-83.0503	-77.9772	-93.388	-89.9152	-95.0733	-41.02247317
+13	62.24518923	51.77323412	56.03794312	40.27855	42.84121	40.06426	47.43292	41.07537	43.36048	20.94852076
-14	-158.1762168	-129.6984682	-177.3897967	-84.2145	-90.1569	-84.6779	-101.51	-98.5472	-104.213	-44.58697952
+14	49.9623512	42.18981984	45.01640064	33.6796	35.73465	33.36353	39.31082	32.4434	34.22075	17.38401502
-15	-172.9741232	-142.0810969	-197.0545472	-90.1189	-96.5154	-90.6733	-108.777	-106.271	-112.391	-47.77627338
+15	39.44843831	34.09119031	35.58341342	27.77528	29.37614	27.36815	32.04368	24.72004	26.04307	14.19471355
-16	-190.044976	-156.4525183	-219.5115949	-96.7178	-103.622	-97.374	-116.899	-114.903	-121.53	-51.34077975
+16	28.22958496	25.57177956	25.38831781	21.17633	22.26958	20.66741	23.92158	16.62623	17.50129	10.63020714
-17	-205.7948902	-169.7871472	-240.0331474	-102.622	-109.98	-103.369	-124.166	-122.626	-129.708	-54.53007365
+17	18.7811165	18.42514155	16.96313575	15.272	15.91108	14.67203	16.65445	11.27463	11.93501	7.440913731
-18	-223.9297282	-185.2225576	-264.1925945	-109.221	-117.087	-110.07	-132.289	-131.258	-138.848	-58.0945796
+18	9.606814787	10.96973048	8.651224696	8.673061	8.804525	8.067559	8.67825	6.501646	6.857376	4.308670531
-19	-240.6316556	-199.5091962	-286.362296	-115.125	-123.446	-116.066	-139.556	-138.981	-147.025	-61.28387928
+19	3.981268144	4.775091318	3.577498728	3.736881	3.736881	3.136076	3.198826	2.841185	2.990721	2.215838601
-20	-259.8304936	-216.0086083	-311.6189944	-1.22E+02	-1.31E+02	-122.766	-147.678	-147.613	-156.165	-64.84838559
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 180' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	92.65799732	127.8981	133.795	172.8670691	74.44009913	100.4106	114.2958	126.2418	1.39E+02
-1	-2.443322277	-2.44412	-1.9445	-1.521072342	-1.998358929	-2.40101	-2.4012	-2.39704	-2.39303
+1	87.74065631	120.7325	125.9821	158.7230123	70.50151007	95.09859	108.2025	119.4175	131.088
-2	-6.01709283	-6.01877	-4.78833	-3.861769779	-4.99432133	-6.68547	-7.17599	-7.17127	-7.16673
+2	82.66428299	113.2988	117.8569	143.979952	66.44067164	89.61618	101.9075	112.3607	123.2186
-3	-10.39341035	-9.28791	-8.43739	-6.909668878	-8.627701435	-11.5646	-12.2883	-12.259	-12.2537
+3	78.12226265	106.6477	110.5869	130.5911291	62.80729022	84.71086	96.27523	106.0468	116.1775
-4	-15.46978367	-15.3371	-13.025	-10.8363169	-12.68854109	-17.047	-18.5833	-18.9524	-19.0535
+4	73.0458863	99.21402	102.4617	116.1235478	58.74645077	79.22844	89.98029	98.99	108.3081
-5	-20.0118052	-21.5527	-18.8089	-15.73341731	-16.32192248	-21.9524	-24.2156	-25.2663	-26.0945
+5	68.50386791	92.56285	95.19176	103.6119066	55.11306851	74.32312	84.34798	92.67606	101.2671
-6	-25.08817841	-28.9864	-25.799	-21.7200336	-20.38276114	-27.4348	-30.5105	-32.3231	-33.9639
+6	63.42749259	85.12919	87.06653	90.33442698	51.05223099	68.84071	78.05304	85.61931	93.39768
-7	-29.63019671	-35.6376	-32.9705	-27.92226588	-24.0161423	-32.3401	-36.1428	-38.637	-41.005
+7	58.88547508	78.47803	79.79658	79.38477223	47.41884956	63.93539	72.42073	79.30536	86.35662
-8	-34.70657064	-43.0712	-41.0957	-35.05273663	-28.07698098	-37.8225	-42.4378	-45.6938	-48.8744
+8	53.80910164	70.84875	71.45753	68.21200091	43.35800924	58.45297	66.12579	72.2486	78.48722
-9	-39.24859113	-49.7224	-48.3657	-41.63169502	-31.71036229	-42.7278	-48.0701	-52.0077	-55.9154
+9	49.22461432	64.19758	64.18759	59.00146751	39.7246282	53.54766	60.32782	65.74896	71.23907
-10	-44.3249671	-57.156	-56.4909	-49.83007999	-35.77120048	-48.2102	-54.365	-59.0645	-63.7848
+10	44.05711864	56.76392	56.06235	49.32366513	35.55692538	47.92096	54.03288	58.6922	63.36967
-11	-48.86698697	-63.8072	-63.7609	-58.48915626	-39.51144949	-53.1363	-59.9973	-65.3784	-70.8259
+11	39.51509864	50.11276	48.79242	42.01736094	31.92354466	43.01564	48.40057	52.37825	56.32862
-12	-54.07694867	-71.2409	-71.8861	-68.79719593	-43.57228654	-58.7422	-66.4579	-72.6209	-78.9024
+12	34.43872401	42.6791	40.66718	34.67332037	27.86270709	37.53323	42.10564	45.3215	48.4592
-13	-58.61896545	-78.0877	-79.2838	-78.79387835	-47.20566779	-63.6476	-72.0902	-78.9349	-85.9434
+13	29.89670329	36.02792	33.39725	28.29343491	24.22932584	32.62791	36.47332	39.00755	41.41815
-14	-63.69533976	-85.5213	-87.4951	-91.03054784	-51.26650501	-69.13	-78.3852	-85.9916	-93.8128
+14	24.82033381	28.59428	25.43477	21.40332941	20.16848516	27.14549	30.17838	31.9508	33.54875
-15	-68.23736441	-92.1725	-94.765	-102.9103852	-54.89988608	-74.0353	-84.0175	-92.3055	-100.854
+15	20.2783092	21.9431	19.17161	16.0420139	16.53510101	22.24018	24.54607	25.63686	26.5077
-16	-73.31373482	-99.6061	-102.89	-116.882382	-58.96072742	-79.5177	-90.3124	-99.3623	-108.723
+16	15.20193881	14.98781	12.725	10.58232543	12.47426626	16.75776	18.25114	18.58009	18.63829
-17	-77.85575134	-106.257	-110.16	-129.8270472	-62.59410552	-84.423	-95.9447	-105.676	-115.764
+17	10.65991482	9.55562	8.672092	7.107648512	8.840882497	11.85244	12.61882	12.5869	12.5816
-18	-82.93212949	-113.691	-118.285	-144.7532644	-66.65494642	-89.9054	-102.24	-112.733	-123.634
+18	5.828527827	5.830214	4.638338	3.734776569	4.78004766	6.460475	6.908132	6.903424	6.898879
-19	-87.47414574	-120.342	-125.555	-157.9444304	-70.28833063	-94.8108	-107.872	-119.047	-130.675
+19	2.630942452	2.631834	2.093857	1.640465983	2.115609888	2.624878	2.625084	2.620944	2.616954
-20	-92.55052512	-127.776	-133.681	-172.825244	-74.34916521	-100.293	-114.167	-126.104	-1.39E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 180' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	239.3384263	260.5529538	153.9771	185.3488	198.2587
-1	-2.502939048	-2.501308709	-2.80146	-2.97798	-2.5828
+1	225.3242119	245.0879246	145.2056	174.823	186.8641
-2	-7.966359167	-7.41571842	-7.24387	-8.04562	-8.06867
+2	210.7550968	228.8779954	136.1006	163.897	175.0271
-3	-13.51614426	-13.95125784	-11.7245	-12.9336	-13.701
+3	197.7195767	214.3743905	127.954	154.1211	164.4362
-4	-22.2426999	-23.54296842	-16.7322	-20.2039	-20.0748
+4	183.1504626	198.164474	118.849	143.1951	152.5992
-5	-32.40239761	-33.51675236	-23.7268	-29.0485	-29.281
+5	170.114943	183.6608703	110.7024	133.4192	142.0082
-6	-45.51232484	-45.80825067	-32.8318	-39.9745	-40.7724
+6	155.5458279	167.4509548	101.5974	122.4932	130.1713
-7	-58.54785259	-59.95390395	-40.9784	-49.7504	-51.3634
+7	142.5103091	152.947333	93.45085	112.7174	119.5803
-8	-73.11696092	-76.16382399	-50.0834	-60.6764	-63.2004
+8	127.5577961	136.7374314	84.10625	101.5038	107.4318
-9	-86.1524786	-90.66742824	-58.2299	-70.4523	-73.7913
+9	114.5222744	122.2338024	75.95967	91.72794	96.84088
-10	-100.7215948	-106.8773442	-67.3349	-81.3783	-85.6283
+10	99.95316172	106.0238864	66.85467	80.80194	85.00391
-11	-113.757128	-121.3809681	-75.4815	-91.1542	-96.2192
+11	86.91763224	91.52027956	58.70809	71.02604	74.41296
-12	-128.3262273	-137.5908805	-84.5865	-102.08	-108.056
+12	72.34853944	75.31036395	49.60308	60.10004	62.57599
-13	-141.7451476	-152.0944875	-92.9727	-112.144	-118.959
+13	59.31300745	60.80675686	41.45651	50.32414	51.98502
-14	-156.3142633	-168.304404	-102.078	-123.07	-130.796
+14	44.74389375	45.2944797	32.35152	39.39815	40.14808
-15	-169.3497797	-182.8080193	-110.224	-132.845	-141.387
+15	33.07189721	34.10324286	24.20494	29.62226	29.85482
-16	-183.9188957	-199.0179348	-119.329	-143.771	-153.224
+16	21.76241991	22.9560761	16.46808	19.68524	19.73858
-17	-196.9544268	-213.5215401	-127.476	-153.547	-163.815
+17	13.89872158	14.38943895	11.98747	13.22045	14.03575
-18	-211.5235393	-229.7314566	-136.581	-164.473	-175.651
+18	7.678194923	7.14915841	6.979721	7.757451	7.7805
-19	-224.5590481	-244.2350656	-144.727	-174.249	-186.242
+19	2.789870449	2.720641391	3.016628	3.207486	2.869707
-20	-239.1281628	-260.4449803	-153.832	-185.175	-198.079
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 180’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.25E-13	-6.33E-13	-1.13E-12	-4.47E-13	-5.41E-13	-3.79E-13	-5.39E-13	-4.48E-13	-4.71E-13	-2.40E-13
End Shear	8.47E-13	6.46E-13	9.42E-13	4.58E-13	4.78E-13	4.48E-13	5.43E-13	5.48E-13	5.80E-13	2.22E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	2215.043842	1843.962415	2625.739157	1039.246574	1114.367367	1047.755872	1259.838664	1254.910649	1327.549134	553.2419425
-2	0	0	0	0	0	0	0	0	0	0
+2	4189.97733	3492.750393	4945.273147	1965.963658	2107.549134	1981.246625	2381.532694	2362.62325	2499.241511	1045.699672
-3	0	0	0	0	0	0	0	0	0	0
+3	5922.932374	4946.364026	7005.524317	2780.151393	2979.545437	2800.872486	3365.416648	3323.659467	3515.66423	1477.373226
-4	0	0	0	0	0	0	0	0	0	0
+4	7414.531503	6204.803168	8712.647952	3481.80963	3730.816126	3506.547986	4210.797419	4138.277833	4377.026135	1848.262506
-5	0	0	0	0	0	0	0	0	0	0
+5	8664.774834	7268.067945	10066.64379	4071.373413	4361.017391	4097.95827	4917.674966	4837.668655	5118.226585	2158.367543
-6	0	0	0	0	0	0	0	0	0	0
+6	9673.662583	8136.158224	11161.3573	4548.428864	4870.03329	4575.103723	5514.904462	5402.166458	5716.908087	2407.688483
-7	0	0	0	0	0	0	0	0	0	0
+7	10453.72489	8809.073819	12020.24854	4912.954471	5257.863253	4960.346199	5973.6304	5832.390065	6171.058281	2596.225133
-8	0	0	0	0	0	0	0	0	0	0
+8	11018.78225	9286.815915	12526.01298	5172.164659	5546.148516	5232.76701	6293.853942	6133.455018	6490.998928	2723.977798
-9	0	0	0	0	0	0	0	0	0	0
+9	11342.44619	9569.382745	12678.6489	5335.074992	5716.854332	5390.922082	6475.57365	6287.321552	6655.082429	2791.114564
-10	0	0	0	0	0	0	0	0	0	0
+10	11425.22945	9656.499916	12478.1583	5385.056338	5765.975062	5434.351931	6518.330129	6293.557116	6662.853459	2797.808216
-11	-1.07E-12	-8.35E-13	-9.60E-13	-6.85E-13	-6.85E-13	-5.48E-13	-5.48E-13	-5.21E-13	-5.48E-13	-6.30E-13
+11	11343.63584	9569.453328	12678.6491	5335.08548	5716.870409	5390.945406	6475.612174	6287.343644	6655.105057	2791.108884
-12	0	0	0	0	0	0	0	0	0	0
+12	11019.47132	9286.878708	12526.01319	5172.16703	5546.155773	5232.78254	6293.883023	6133.46798	6491.01189	2723.988746
-13	0	0	0	0	0	0	0	0	0	0
+13	10454.09864	8809.128688	12020.24838	4912.948824	5257.861893	4960.353678	5973.649661	5832.393862	6171.061542	2596.2351
-14	0	0	0	0	0	0	0	0	0	0
+14	9674.004072	8136.205266	11161.35742	4548.415239	4870.023372	4575.10331	5514.914225	5402.161222	5716.901783	2407.696801
-15	0	0	0	0	0	0	0	0	0	0
+15	8664.686731	7268.107344	10066.6433	4071.351825	4360.998919	4097.949667	4917.675209	4837.694958	5118.25342	2158.374642
-16	0	0	0	0	0	0	0	0	0	0
+16	7414.163322	6204.834708	8712.648434	3481.841614	3730.789007	3506.531669	4210.787908	4138.273686	4377.021997	1848.268093
-17	0	0	0	0	0	0	0	0	0	0
+17	5922.432505	4946.387802	7005.524034	2780.175408	2979.571279	2800.84833	3365.397583	3323.64593	3515.650157	1477.377459
-18	0	0	0	0	0	0	0	0	0	0
+18	4189.494948	3492.765752	4945.273376	1965.979361	2107.566069	1981.26231	2381.503517	2362.64148	2499.260811	1045.702419
-19	0	0	0	0	0	0	0	0	0	0
+19	2215.351379	1843.970327	2625.738841	1039.254623	1114.37603	1047.763916	1259.848432	1254.92011	1327.55915	553.2433412
-20	-9.00E-13	-6.40E-13	-1.11E-12	-4.49E-13	-4.67E-13	-4.00E-13	-4.91E-13	-5.50E-13	-5.82E-13	-2.24E-13
+20	1.77E-12	1.31E-12	2.09E-12	8.55E-13	9.24E-13	7.78E-13	9.05E-13	9.07E-13	9.55E-13	5.51E-13

1-Span: Moment (Max and Min) Raw Data Results - 180' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.58E-13	-4.27E-13	-4.29E-13	-4.97E-13	-2.87E-13	-3.28E-13	-4.44E-13	-4.44E-13	-4.49E-13
End Shear	3.41E-13	4.72E-13	4.65E-13	4.35E-13	2.74E-13	3.66E-13	3.51E-13	3.43E-13	3.96E-13
-1	0	0	0	0	0	0	0	0	0
+1	789.6659068	1086.592564	1133.839007	1439.044986	634.5135906	855.8873226	973.8223113	1075.124191	1180.230022
-2	0	0	0	0	0	0	0	0	0
+2	1492.766256	2046.421634	2129.121458	2658.304374	1199.779203	1618.285003	1840.299349	2030.880969	2227.362643
-3	0	0	0	0	0	0	0	0	0
+3	2109.301092	2879.570914	2986.967499	3680.336479	1695.796836	2287.381735	2599.947226	2883.796485	3166.45468
-4	0	0	0	0	0	0	0	0	0
+4	2639.412591	3586.94574	3720.977172	4563.119854	2122.566495	2863.357371	3252.497934	3623.950719	3974.496876
-5	0	0	0	0	0	0	0	0	0
+5	3083.254929	4172.608	4330.863276	5306.748566	2480.088083	3345.843278	3797.703327	4243.768591	4672.888721
-6	0	0	0	0	0	0	0	0	0
+6	3440.5318	4652.865242	4802.19285	5908.84962	2768.36191	3734.83978	4247.106198	4743.412292	5240.693979
-7	0	0	0	0	0	0	0	0	0
+7	3711.242917	5006.358635	5185.806151	6371.709506	2987.387522	4044.052399	4599.98449	5123.516071	5674.304684
-8	0	0	0	0	0	0	0	0	0
+8	3912.70198	5238.075489	5452.070728	6695.481982	3137.165214	4265.546909	4845.518209	5403.484447	5973.721939
-9	0	0	0	0	0	0	0	0	0
+9	4028.316474	5364.732205	5630.374676	6822.026853	3217.694885	4393.551273	4983.705965	5567.985651	6153.548839
-10	0	0	0	0	0	0	0	0	0
+10	4056.920143	5364.283666	5669.679244	6728.580198	3228.242241	4427.67493	5014.003835	5611.774586	6213.485669
-11	-4.82E-13	-4.82E-13	-3.84E-13	-2.90E-13	-6.03E-13	-4.66E-13	-4.66E-13	-3.15E-13	-3.15E-13
+11	4028.328309	5364.753643	5630.391223	6822.017936	3217.739022	4393.568818	4983.731875	5568.000076	6153.553074
-12	0	0	0	0	0	0	0	0	0
+12	3912.707686	5238.089058	5452.078852	6695.479792	3137.204856	4265.558061	4845.536891	5403.491017	5973.756566
-13	0	0	0	0	0	0	0	0	0
+13	3711.242581	5006.37611	5185.814483	6371.71403	2987.421941	4044.057004	4599.995667	5123.514449	5674.330086
-14	0	0	0	0	0	0	0	0	0
+14	3440.525507	4652.87474	4802.213326	5908.862941	2768.391429	3734.837907	4247.110003	4743.402713	5240.710525
-15	0	0	0	0	0	0	0	0	0
+15	3083.242634	4172.609333	4330.875736	5306.743933	2480.112574	3345.834695	3797.699619	4243.790514	4672.896509
-16	0	0	0	0	0	0	0	0	0
+16	2639.394297	3586.939488	3720.981214	4563.124466	2122.586219	2863.342482	3252.487166	3623.964517	3974.495931
-17	0	0	0	0	0	0	0	0	0
+17	2109.319378	2879.556579	2986.963476	3680.332051	1695.811538	2287.360412	2599.929186	2883.802288	3166.463343
-18	0	0	0	0	0	0	0	0	0
+18	1492.778166	2046.43731	2129.137728	2658.306583	1199.788922	1618.297842	1840.313908	2030.878355	2227.361946
-19	0	0	0	0	0	0	0	0	0
+19	789.6719286	1086.600698	1133.847203	1439.053878	634.5186477	855.8939144	973.8297637	1075.113806	1180.220551
-20	-3.19E-13	-4.91E-13	-3.69E-13	-4.10E-13	-3.58E-13	-3.30E-13	-3.15E-13	-3.21E-13	-3.22E-13
+20	6.02E-13	7.76E-13	7.16E-13	9.19E-13	6.64E-13	6.35E-13	7.39E-13	7.44E-13	7.99E-13

1-Span: Moment (Max and Min) Raw Data Results - 180' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.68E-13	-6.27E-13	-5.49E-13	-5.54E-13	-6.05E-13
End Shear	5.73E-13	5.56E-13	5.42E-13	6.01E-13	6.63E-13
-1	0	0	0	0	0
+1	2027.917907	2205.791322	1306.850273	1573.407326	1681.776689
-2	0	0	0	0	0
+2	3809.100743	4136.357539	2458.436326	2960.90864	3162.325918
-3	0	0	0	0	0
+3	5370.522644	5846.215177	3455.089565	4163.578048	4442.523976
-4	0	0	0	0	0
+4	6710.637362	7315.593063	4310.502717	5205.807765	5559.688253
-5	0	0	0	0	0
+5	7802.112461	8596.462985	5042.441127	6074.65897	6487.739784
-6	0	0	0	0	0
+6	8720.88812	9600.910969	5620.133864	6757.19361	7253.992272
-7	0	0	0	0	0
+7	9422.920183	10404.99344	6059.095453	7267.922438	7818.392867
-8	0	0	0	0	0
+8	9932.294778	10940.93492	6358.96693	7618.53527	8195.367822
-9	0	0	0	0	0
+9	10247.19449	11257.16103	6503.573368	7782.465153	8400.241947
-10	0	0	0	0	0
+10	10316.36667	11390.36661	6492.246178	7759.752013	8402.831638
-11	-4.91E-13	-4.55E-13	-5.53E-13	-4.91E-13	-4.91E-13
+11	10247.2167	11257.16175	6503.597236	7782.453539	8400.258062
-12	0	0	0	0	0
+12	9932.302145	10940.93311	6358.981265	7618.550563	8195.371539
-13	0	0	0	0	0
+13	9422.949333	10406.02384	6059.100203	7267.926395	7818.421862
-14	0	0	0	0	0
+14	8720.902983	9600.910209	5620.129205	6757.224427	7254.009758
-15	0	0	0	0	0
+15	7802.112647	8596.460648	5042.469577	6074.677823	6487.744199
-16	0	0	0	0	0
+16	6710.622877	7315.5875	4310.522072	5205.81549	5559.699792
-17	0	0	0	0	0
+17	5370.529861	5846.217581	3455.075107	4163.574263	4442.523054
-18	0	0	0	0	0
+18	3809.092938	4136.67274	2458.455303	2960.893451	3162.312803
-19	0	0	0	0	0
+19	2027.932898	2205.794371	1306.860149	1573.419131	1681.789147
-20	-4.94E-13	-5.33E-13	-6.56E-13	-6.29E-13	-7.81E-13
+20	1.05E-12	1.30E-12	1.04E-12	1.16E-12	1.27E-12

1-Span: Shear (Max and Min) Raw Data Results - 180’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**68.26667**	***48.04667***	***66.32***	***69.37778***	***94.11667***	***38.6***	***52.06667***	***59.26667***	***65.46111***	***71.91667***
-1	**-1.51111**	***-1.26695***	***-1.26737***	***-1.0083***	***-0.79928***	***-1.03622***	***-1.24502***	***-1.24511***	***-1.24295***	***-1.24088***
+1	**64.59978**	***45.49684***	***62.60436***	***65.32648***	***86.34637***	***36.55769***	***49.31221***	***56.10707***	***61.92246***	***67.97407***
-2	**-3.89689**	***-3.12009***	***-3.12096***	***-2.48293***	***-2.04838***	***-2.58974***	***-3.46667***	***-3.72102***	***-3.71857***	***-3.71622***
+2	**60.8342**	***42.86455***	***58.74973***	***61.11324***	***78.26547***	***34.45199***	***46.46937***	***52.8429***	***58.26326***	***63.89349***
-3	**-6.91239**	***-5.38938***	***-4.81613***	***-4.37511***	***-3.68155***	***-4.47379***	***-5.99669***	***-6.37196***	***-6.35677***	***-6.35401***
+3	**57.4384**	***40.50934***	***55.30085***	***57.3435***	***70.95378***	***32.56795***	***43.92578***	***49.92234***	***54.98925***	***60.24244***
-4	**-10.6347**	***-8.02167***	***-7.95285***	***-6.75395***	***-5.80017***	***-6.57949***	***-8.83953***	***-9.63613***	***-9.82754***	***-9.87994***
+4	**53.64309**	***37.87705***	***51.44621***	***53.13026***	***63.06286***	***30.46225***	***41.08293***	***46.65817***	***51.33005***	***56.16185***
-5	**-14.0271**	***-10.3769***	***-11.1759***	***-9.75312***	***-8.4344***	***-8.46353***	***-11.3831***	***-12.5567***	***-13.1016***	***-13.531***
+5	**50.24728**	***35.52184***	***47.99733***	***49.36052***	***56.2482***	***28.57821***	***38.53934***	***43.73761***	***48.05603***	***52.5108***
-6	**-17.8187**	***-13.0092***	***-15.0305***	***-13.3778***	***-11.6683***	***-10.5692***	***-14.226***	***-15.8209***	***-16.7607***	***-17.6116***
+6	**46.45198**	***32.88955***	***44.1427***	***45.14728***	***49.02155***	***26.47251***	***35.6965***	***40.47345***	***44.39684***	***48.43022***
-7	**-21.2111**	***-15.3644***	***-18.4794***	***-17.0965***	***-15.0215***	***-12.4533***	***-16.7696***	***-18.7414***	***-20.0348***	***-21.2626***
+7	**43.05617**	***30.53434***	***40.69382***	***41.37754***	***43.05902***	***24.58846***	***33.15291***	***37.55288***	***41.12282***	***44.77917***
-8	**-25.0027**	***-17.9967***	***-22.3341***	***-21.3097***	***-18.8957***	***-14.559***	***-19.6124***	***-22.0056***	***-23.694***	***-25.3432***
+8	**39.26087**	***27.90205***	***36.73775***	***37.05343***	***36.97087***	***22.48276***	***30.31007***	***34.28872***	***37.46362***	***40.69858***
-9	**-28.3951**	***-20.3519***	***-25.7829***	***-25.0794***	***-22.4864***	***-16.443***	***-22.156***	***-24.9262***	***-26.968***	***-28.9943***
+9	**35.86506**	***25.52482***	***33.28887***	***33.28369***	***31.95233***	***20.59872***	***27.76648***	***31.28225***	***34.09332***	***36.94015***
-10	**-32.1867**	***-22.9842***	***-29.6376***	***-29.2927***	***-26.9615***	***-18.5487***	***-24.9988***	***-28.1903***	***-30.6272***	***-33.0748***
+10	**32.01432**	***22.84528***	***29.43424***	***29.07045***	***26.68652***	***18.43761***	***24.84883***	***28.01809***	***30.43412***	***32.85956***
-11	**-35.5791**	***-25.3394***	***-33.0864***	***-33.0624***	***-31.673***	***-20.4882***	***-27.5532***	***-31.1109***	***-33.9012***	***-36.7259***
+11	**28.61852**	***20.49007***	***25.98536***	***25.30071***	***22.69757***	***16.55356***	***22.30523***	***25.09752***	***27.1601***	***29.20851***
-12	**-39.3707**	***-28.0409***	***-36.9411***	***-37.2757***	***-37.2892***	***-22.5939***	***-30.4601***	***-34.4609***	***-37.6567***	***-40.9139***
+12	**24.78844**	***17.85778***	***22.13072***	***21.08747***	***18.68905***	***14.44786***	***19.4624***	***21.83336***	***23.50091***	***25.12793***
-13	**-42.8629**	***-30.3961***	***-40.4914***	***-41.1116***	***-42.7365***	***-24.4779***	***-33.0037***	***-37.3815***	***-40.9307***	***-44.5649***
+13	**21.396**	***15.50257***	***18.68184***	***17.31773***	***15.22266***	***12.56382***	***16.9188***	***18.91279***	***20.22689***	***21.47688***
-14	**-46.6544**	***-33.0284***	***-44.346***	***-45.3695***	***-49.3999***	***-26.5836***	***-35.8465***	***-40.6457***	***-44.5899***	***-48.6455***
+14	**17.60445**	***12.87028***	***14.82721***	***13.18889***	***11.49667***	***10.45812***	***14.07596***	***15.64863***	***16.56769***	***17.39629***
-15	**-50.0469**	***-35.3836***	***-47.7949***	***-49.1392***	***-55.8658***	***-28.4677***	***-38.3901***	***-43.5662***	***-47.8639***	***-52.2965***
+15	**14.212**	***10.51507***	***11.37833***	***9.941203***	***8.600626***	***8.574074***	***11.53237***	***12.72806***	***13.29368***	***13.74524***
-16	**-53.8384**	***-38.0159***	***-51.6495***	***-53.3525***	***-63.4762***	***-30.5734***	***-41.2329***	***-46.8304***	***-51.5231***	***-56.3771***
+16	**10.42044**	***7.882779***	***7.771746***	***6.598391***	***5.6635***	***6.468378***	***8.68953***	***9.463903***	***9.634479***	***9.664657***
-17	**-57.2309**	***-40.3711***	***-55.0984***	***-57.1222***	***-70.5365***	***-32.4574***	***-43.7765***	***-49.751***	***-54.7971***	***-60.0282***
+17	**7.076742**	***5.527568***	***4.954949***	***4.496807***	***3.787934***	***4.584331***	***6.145939***	***6.543336***	***6.526784***	***6.524036***
-18	**-61.0224**	***-43.0034***	***-58.9531***	***-61.3355***	***-78.6888***	***-34.5631***	***-46.6194***	***-53.0151***	***-58.4563***	***-64.1088***
+18	**3.706473**	***3.022312***	***3.023186***	***2.405153***	***1.980044***	***2.478635***	***3.35***	***3.582127***	***3.579686***	***3.577329***
-19	**-64.4149**	***-45.3586***	***-62.4019***	***-65.1052***	***-85.9191***	***-36.4472***	***-49.163***	***-55.9357***	***-61.7303***	***-67.7598***
+19	**1.596248**	***1.364243***	***1.364705***	***1.085744***	***0.862429***	***1.097024***	***1.361098***	***1.361205***	***1.359058***	***1.35699***
-20	**-68.2064**	***-47.9909***	***-66.2566***	***-69.3184***	***-94.095***	***-38.5528***	***-52.0058***	***-59.1999***	***-65.3895***	***-71.8404***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 180' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**68.26667**	***63.19444***	***67.77778***	***63.73333***	***76.66667***	***76.61667***	***81.05555***	***33.65532***
-1	**-1.51111**	***-1.79953***	***-1.79953***	***-1.47693***	***-1.49288***	***-1.36818***	***-1.44019***	***-1.08521***
+1	**64.59978**	***59.87651***	***64.20461***	***60.36677***	***72.58599***	***72.30206***	***76.48715***	***31.8752***
-2	**-3.89689**	***-4.67786***	***-4.75992***	***-4.33333***	***-4.66667***	***-3.5019***	***-3.69469***	***-2.2981***
+2	**60.8342**	***56.4547***	***60.51959***	***56.89219***	***68.37437***	***67.82605***	***71.74784***	***30.02687***
-3	**-6.91239**	***-7.73948***	***-8.05704***	***-7.42559***	***-8.41485***	***-5.71635***	***-6.05049***	***-3.76119***
+3	**57.4384**	***53.39309***	***57.22247***	***53.78336***	***64.60609***	***63.8212***	***67.50742***	***28.3731***
-4	**-10.6347**	***-11.1613***	***-11.7421***	***-10.9002***	***-12.6265***	***-8.83243***	***-9.2973***	***-5.60953***
+4	**53.64309**	***49.97128***	***53.53745***	***50.30877***	***60.39447***	***59.34519***	***62.76811***	***26.52477***
-5	**-14.0271**	***-14.2229***	***-15.0392***	***-14.009***	***-16.3948***	***-12.5832***	***-13.2554***	***-7.2633***
+5	**50.24728**	***46.90967***	***50.24033***	***47.19994***	***56.62619***	***55.34034***	***58.52768***	***24.871***
-6	**-17.8187**	***-17.6447***	***-18.7242***	***-17.4836***	***-20.6064***	***-17.0592***	***-17.9947***	***-9.11163***
+6	**46.45198**	***43.48786***	***46.55531***	***43.72536***	***52.41457***	***50.86434***	***53.78838***	***23.02267***
-7	**-21.2111**	***-20.7063***	***-22.0213***	***-20.5924***	***-24.3747***	***-21.0641***	***-22.2352***	***-10.7654***
+7	**43.05617**	***40.42625***	***43.25818***	***40.61652***	***48.64629***	***46.85949***	***49.54796***	***21.3689***
-8	**-25.0027**	***-24.1281***	***-25.7063***	***-24.067***	***-28.5863***	***-25.5401***	***-26.9745***	***-12.6137***
+8	**39.26087**	***37.00445***	***39.57317***	***37.14194***	***44.43467***	***42.26569***	***44.68393***	***19.52057***
-9	**-28.3951**	***-27.1897***	***-29.0035***	***-27.1758***	***-32.3545***	***-29.5449***	***-31.2149***	***-14.2675***
+9	**35.86506**	***33.94283***	***36.27604***	***34.0331***	***40.66639***	***38.26084***	***40.44351***	***17.8668***
-10	**-32.1867**	***-30.6115***	***-32.6885***	***-30.6504***	***-36.5662***	***-34.0209***	***-35.9542***	***-16.1158***
+10	**32.01432**	***30.43098***	***32.49405***	***30.46709***	***36.34394***	***33.78484***	***35.70421***	***16.01847***
-11	**-35.5791**	***-33.7632***	***-36.0826***	***-33.7753***	***-40.3699***	***-38.0258***	***-40.1946***	***-17.7696***
+11	**28.61852**	***27.36937***	***29.19692***	***27.35825***	***32.57566***	***29.77999***	***31.46378***	***14.3647***
-12	**-39.3707**	***-37.185***	***-39.7676***	***-37.3253***	***-44.6569***	***-42.5018***	***-44.9339***	***-19.6179***
+12	**24.78844**	***23.94756***	***25.51191***	***23.88367***	***28.36404***	***25.30398***	***26.72448***	***12.51637***
-13	**-42.8629**	***-40.2466***	***-43.0647***	***-40.4341***	***-48.4252***	***-46.6244***	***-49.2991***	***-21.2717***
+13	**21.396**	***20.88595***	***22.21478***	***20.77483***	***24.59576***	***21.29913***	***22.48404***	***10.8626***
-14	**-46.6544**	***-43.6684***	***-46.7498***	***-43.9087***	***-52.6368***	***-51.1004***	***-54.0384***	***-23.12***
+14	**17.60445**	***17.46414***	***18.52976***	***17.30025***	***20.38414***	***16.82313***	***17.74475***	***9.014268***
-15	**-50.0469**	***-46.73***	***-50.0469***	***-47.0175***	***-56.4051***	***-55.1053***	***-58.2788***	***-24.7738***
+15	**14.212**	***14.40253***	***15.23264***	***14.19142***	***16.61586***	***12.81827***	***13.50432***	***7.360494***
-16	**-53.8384**	***-50.1518***	***-53.7319***	***-50.4921***	***-60.6167***	***-59.5813***	***-63.0181***	***-26.6221***
+16	**10.42044**	***10.98072***	***11.54762***	***10.71683***	***12.40424***	***8.621326***	***9.07508***	***5.512163***
-17	**-57.2309**	***-53.2135***	***-57.029***	***-53.6009***	***-64.385***	***-63.5861***	***-67.2585***	***-28.2759***
+17	**7.076742**	***7.919109***	***8.250494***	***7.608***	***8.635959***	***5.846318***	***6.188755***	***3.858394***
-18	**-61.0224**	***-56.6353***	***-60.714***	***-57.0755***	***-68.5966***	***-68.0622***	***-71.9978***	***-30.1242***
+18	**3.706473**	***4.497309***	***4.565478***	***4.183333***	***4.5***	***3.371349***	***3.555808***	***2.234208***
-19	**-64.4149**	***-59.6969***	***-64.0112***	***-60.1844***	***-72.3649***	***-72.067***	***-76.2383***	***-31.778***
+19	**1.596248**	***1.937714***	***1.937714***	***1.626174***	***1.658712***	***1.473262***	***1.550802***	***1.148996***
-20	**-68.2064**	***-63.1187***	***-67.6962***	***-63.6589***	***-76.5765***	***-76.543***	***-80.9776***	***-33.6263***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 180' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0
End Shear	68.26667	138.4259	150.6958	89.05555	107.2	114.6667
-1	-1.51111	-1.44762	-1.44668	-1.62028	-1.72237	-1.49381
+1	64.59978	130.3205	141.7513	83.98241	101.1122	108.0764
-2	-3.89689	-4.6075	-4.28902	-4.18963	-4.65333	-4.66667
+2	60.8342	121.8942	132.3759	78.71636	94.79296	101.2303
-3	-6.91239	-7.81732	-8.06898	-6.78108	-7.48037	-7.92425
+3	57.4384	114.3549	123.9875	74.00463	89.13889	95.10477
-4	-10.6347	-12.8645	-13.6165	-9.67741	-11.6853	-11.6106
+4	53.64309	105.9285	114.6122	68.73858	82.81963	88.25864
-5	-14.0271	-18.7405	-19.3851	-13.7228	-16.8007	-16.9352
+5	50.24728	98.38921	106.2238	64.02685	77.16556	82.13315
-6	-17.8187	-26.3229	-26.4941	-18.9889	-23.12	-23.5815
+6	46.45198	89.96288	96.84844	58.7608	70.8463	75.28703
-7	-21.2111	-33.8623	-34.6755	-23.7006	-28.7741	-29.707
+7	43.05617	82.42354	88.46	54.04907	65.19222	69.16153
-8	-25.0027	-42.2886	-44.0508	-28.9667	-35.0933	-36.5531
+8	39.26087	73.77547	79.08469	48.64445	58.70667	62.13525
-9	-28.3951	-49.8279	-52.4392	-33.6784	-40.7474	-42.6786
+9	35.86506	66.23613	70.69624	43.93272	53.05259	56.00976
-10	-32.1867	-58.2542	-61.8145	-38.9444	-47.0667	-49.5247
+10	32.01432	57.80981	61.32093	38.66667	46.73333	49.16363
-11	-35.5791	-65.7936	-70.203	-43.6562	-52.7207	-55.6502
+11	28.61852	50.27046	52.93249	33.95494	41.07926	43.03815
-12	-39.3707	-74.2199	-79.5783	-48.9222	-59.04	-62.4964
+12	24.78844	41.84415	43.55718	28.68889	34.76	36.19201
-13	-42.8629	-81.981	-87.9667	-53.7725	-64.8604	-68.802
+13	21.396	34.3048	35.16874	23.97716	29.10592	30.06653
-14	-46.6544	-90.4073	-97.342	-59.0386	-71.1796	-75.6481
+14	17.60445	25.87848	26.19692	18.71111	22.78667	23.2204
-15	-50.0469	-97.9467	-105.73	-63.7503	-76.8337	-81.7736
+15	14.212	19.12776	19.72426	13.99939	17.1326	17.2671
-16	-53.8384	-106.373	-115.106	-69.0164	-83.153	-88.6198
+16	10.42044	12.58671	13.27708	9.524629	11.38533	11.41618
-17	-57.2309	-113.912	-123.494	-73.7281	-88.807	-94.7452
+17	7.076742	8.03859	8.322405	6.933179	7.646296	8.117842
-18	-61.0224	-122.339	-132.87	-78.9941	-95.1263	-101.591
+18	3.706473	4.44083	4.134852	4.036854	4.486669	4.5
-19	-64.4149	-129.878	-141.258	-83.7059	-100.78	-107.717
+19	1.596248	1.613575	1.573535	1.744724	1.855111	1.659749
-20	-68.2064	-138.304	-150.633	-88.9719	-107.1	-114.563
+20	0.00E+00	0	0	0	0	0

1-Span: Moment (Max and Min) Raw Data Results - 180' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.98E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.04E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	581.398	409.4716	563.4392	587.9383	784.3848	329.0192	443.8099	504.9636	557.4925	611.9938
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1098.611	774.0556	1061.1468	1104.0298	1450.7830	622.1308	839.1418	954.2646	1053.0884	1154.9716
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1550.837	1093.7522	1493.1661	1548.8553	2010.8918	879.3346	1186.0937	1348.1707	1495.3573	1641.9262
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1938.342	1368.6350	1859.9667	1929.4670	2494.7753	1100.6308	1484.7588	1686.5429	1879.1552	2060.9266
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2261.128	1598.7840	2163.6547	2245.7160	2902.4824	1286.0192	1734.9460	1969.2524	2200.5541	2423.0691
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2519.193	1784.0455	2412.6862	2490.1181	3232.7825	1435.5001	1936.6553	2202.2848	2459.6382	2717.4975
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2717.923	1924.4195	2595.9858	2689.0361	3486.8612	1549.0731	2096.9937	2385.2655	2656.7364	2942.3410
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2863.253	2028.8836	2716.1397	2827.1043	3664.7983	1626.7385	2211.8470	2512.5840	2801.9105	3097.6002
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2943.848	2088.8341	2781.8160	2919.5617	3736.4459	1668.4962	2278.2221	2584.2395	2887.2106	3190.8472
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2959.927	2103.6661	2781.5834	2939.9426	3690.0000	1673.9654	2295.9165	2599.9501	2909.9168	3221.9267
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2944.359	2088.8402	2781.8271	2919.5702	3736.4413	1668.5191	2278.2312	2584.2530	2887.2181	3190.8494
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2863.549	2028.8865	2716.1468	2827.1086	3664.7972	1626.7591	2211.8528	2512.5937	2801.9139	3097.6181
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2718.083	1924.4193	2595.9949	2689.0404	3486.8636	1549.0910	2096.9961	2385.2713	2656.7355	2942.3542
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2519.34	1784.0423	2412.6911	2490.1288	3232.7894	1435.5154	1936.6543	2202.2868	2459.6332	2717.5061
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2261.09	1598.7776	2163.6553	2245.7224	2902.4800	1286.0319	1734.9415	1969.2505	2200.5655	2423.0731
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1938.184	1368.6255	1859.9634	1929.4691	2494.7777	1100.6410	1484.7511	1686.5373	1879.1623	2060.9261
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1550.622	1093.7617	1493.1587	1548.8532	2010.8895	879.3423	1186.0827	1348.1614	1495.3603	1641.9307
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1098.404	774.0618	1061.1549	1104.0382	1450.7841	622.1358	839.1485	954.2722	1053.0870	1154.9712
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	581.5301	409.4747	563.4435	587.9425	784.3894	329.0219	443.8133	504.9675	557.4871	611.9889
-20	-3.37E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	6.19E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 180' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	**-2.98E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**3.04E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**581.398**	**538.8886**	**577.8415**	**543.3009**	**653.2739**	**650.7185**	**688.3843**	**286.8768**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**1098.611**	**1019.4263**	**1092.8437**	**1027.3511**	**1234.9145**	**1225.1093**	**1295.9510**	**542.2347**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1550.837**	**1441.6134**	**1545.0067**	**1452.3580**	**1745.0955**	**1723.4428**	**1823.0045**	**766.0737**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**1938.342**	**1805.4496**	**1934.5689**	**1818.2774**	**2183.4573**	**2145.8532**	**2269.6532**	**958.3938**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**2261.128**	**2111.1607**	**2261.3520**	**2124.9460**	**2550.0000**	**2508.5137**	**2653.9936**	**1119.1950**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**2519.193**	**2358.5319**	**2525.2960**	**2372.3639**	**2859.6860**	**2801.2271**	**2964.4325**	**1248.4773**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**2717.923**	**2547.5522**	**2726.4004**	**2572.1266**	**3097.5527**	**3024.3143**	**3199.9265**	**1346.2407**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**2863.253**	**2681.9625**	**2875.8872**	**2713.3871**	**3263.6007**	**3180.4278**	**3365.8278**	**1412.4852**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**2943.848**	**2766.4376**	**2964.4046**	**2795.3965**	**3357.8292**	**3260.2134**	**3450.9113**	**1447.2982**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**2959.927**	**2792.3549**	**2989.8756**	**2817.9165**	**3380.0001**	**3263.4468**	**3454.9409**	**1450.7691**
-11	**-4.55E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**2944.359**	**2766.4431**	**2964.4130**	**2795.4086**	**3357.8492**	**3260.2249**	**3450.9230**	**1447.2952**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**2863.549**	**2681.9637**	**2875.8910**	**2713.3951**	**3263.6158**	**3180.4345**	**3365.8345**	**1412.4909**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**2718.083**	**2547.5493**	**2726.3997**	**2572.1305**	**3097.5627**	**3024.3162**	**3199.9282**	**1346.2458**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**2519.34**	**2358.5249**	**2525.2908**	**2372.3637**	**2859.6911**	**2801.2244**	**2964.4292**	**1248.4816**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**2261.09**	**2111.1495**	**2261.3425**	**2124.9415**	**2550.0001**	**2508.5273**	**2654.0075**	**1119.1987**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**1938.184**	**1805.4662**	**1934.5548**	**1818.2689**	**2183.4524**	**2145.8510**	**2269.6510**	**958.3967**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1550.622**	**1441.6258**	**1545.0201**	**1452.3455**	**1745.0856**	**1723.4358**	**1822.9972**	**766.0759**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**1098.404**	**1019.4345**	**1092.8525**	**1027.3592**	**1234.8994**	**1225.1187**	**1295.9610**	**542.2362**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**581.5301**	**538.8927**	**577.8460**	**543.3051**	**653.2789**	**650.7234**	**688.3895**	**286.8775**
-20	**-3.37E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**6.19E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 180' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.98E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	3.04E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	581.398	1172.8849	1275.7613	755.8417	910.0100	972.6875
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1098.611	2203.0658	2392.3410	1421.8834	1712.4978	1828.9913
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1550.837	3106.1438	3381.2696	1998.3167	2408.0845	2569.4181
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	1938.342	3881.2246	4231.1122	2493.0611	3010.8778	3215.5513
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2261.128	4512.5000	4971.9277	2916.3916	3513.3944	3752.3076
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2519.193	5043.8913	5552.8693	3250.5112	3908.1513	4195.4843
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2717.923	5449.9249	6017.9256	3504.3930	4203.5410	4521.9161
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	2863.253	5744.5314	6327.8976	3677.8293	4406.3246	4739.9467
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	2943.848	5926.6596	6510.7930	3761.4652	4501.1366	4858.4395
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	2959.927	5966.6667	6587.8349	3754.9139	4488.0000	4859.9373
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	2944.359	5926.6725	6510.7934	3761.4790	4501.1299	4858.4489
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	2863.549	5744.5357	6327.8965	3677.8376	4406.3335	4739.9488
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2718.083	5449.9418	6018.5216	3504.3957	4203.5433	4521.9328
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2519.34	5043.8999	5552.8688	3250.5085	3908.1691	4195.4944
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2261.09	4512.5001	4971.9263	2916.4081	3513.4053	3752.3101
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	1938.184	3881.2162	4231.1090	2493.0723	3010.8823	3215.5580
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1550.622	3106.1480	3381.2710	1998.3083	2408.0823	2569.4176
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1098.404	2203.0613	2392.5233	1421.8943	1712.4890	1828.9837
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	581.5301	1172.8935	1275.7631	755.8474	910.0168	972.6947
-20	-3.37E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	6.19E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0	0
End Shear	266.0279971	221.8299961	320.9219924	1.22E+02	1.31E+02	123.1398	148.19	148.6061	157.2235	65.04585226
-1	-3.779998993	-4.525365666	-3.401999089	-3.54141	-3.54141	-2.9723	-3.03189	-2.69242	-2.83413	-2.099393893
+1	247.1113381	205.4917181	296.4905953	115.6608	124.0503	116.6527	140.3269	140.2887	148.4168	61.61541277
-2	-10.46831018	-11.47466028	-9.450002842	-9.20608	-9.40674	-8.55645	-9.30109	-6.87603	-7.25878	-4.43205565
+2	228.008281	189.0224228	271.2905963	109.0793	116.9626	109.9698	132.2263	131.6798	139.3015	58.06064141
-3	-18.8160011	-18.23302434	-16.93440094	-15.1294	-15.7857	-14.5711	-16.5916	-11.1602	-11.8164	-7.405288357
+3	211.2596651	174.7040593	249.0642003	103.156	110.5836	103.9551	124.9358	123.9318	131.0977	54.86134898
-4	-29.52468974	-26.30231926	-26.63639755	-21.7109	-22.8735	-21.2541	-24.6922	-17.679	-18.6095	-10.96005822
+4	193.2100867	159.3547633	225.0926949	96.57451	103.4958	97.27212	116.8352	115.3229	121.9824	51.30657463
-5	-39.7138019	-34.0686841	-35.82180035	-27.6342	-29.2524	-27.2688	-31.9827	-25.1455	-26.5005	-14.15935296
+5	177.4694724	146.0443974	204.5672972	90.65117	97.11684	91.25745	109.5447	107.5749	113.7786	48.10728032
-6	-51.59503402	-43.25797903	-46.53180095	-34.2157	-36.3402	-33.9517	-40.0833	-33.7544	-35.6158	-17.71412514
+6	160.5399019	131.8151061	182.2653013	84.06968	90.02908	84.57448	101.4442	98.96595	104.6633	44.55251044
-7	-62.7921429	-52.03234152	-56.62439872	-40.1391	-42.7192	-39.9664	-47.3738	-41.5024	-43.8196	-20.91341916
+7	145.8072756	119.5127379	162.6470942	78.14634	83.6501	78.5598	94.15363	91.21794	96.45951	41.35321686
-8	-75.79338057	-62.34163639	-68.34239725	-46.7205	-49.8069	-46.6494	-55.4744	-50.1113	-52.9349	-24.46819027
+8	129.9977047	106.4034431	141.3530985	71.56486	76.56235	71.87683	86.05306	82.39381	87.11631	37.79844534
-9	-87.99849391	-72.12400704	-84.19320248	-52.6439	-56.1859	-52.6641	-62.7649	-57.8594	-61.1387	-27.6674854
+9	116.2730904	95.10908065	122.6421004	65.64152	70.18337	65.86215	78.76255	74.64579	78.91254	34.59915029
-10	-102.1197246	-83.55329839	-103.3577959	-59.2254	-63.2737	-59.347	-70.8655	-66.4683	-70.254	-31.2222581
+10	101.4612737	82.96705528	102.3560995	58.8955	62.91842	59.0121	70.45946	66.03688	69.79722	31.04437876
-11	-115.3328331	-94.49639481	-121.6151968	-65.3133	-69.8298	-65.4829	-78.3126	-74.2163	-78.4578	-34.42155064
+11	88.74465632	72.68068467	85.12559935	52.97216	56.53944	52.99742	63.16894	58.28886	61.59343	27.84508509
-12	-130.5740658	-107.0456896	-142.4051983	-71.8947	-76.9176	-72.2118	-86.4591	-82.8252	-87.5731	-37.97632192
+12	75.17508844	61.81139261	67.72771819	46.39068	49.45169	46.31445	55.06836	49.67997	52.47813	24.29031466
-13	-145.0152133	-118.8440553	-161.5697981	-77.8181	-83.2966	-78.2264	-93.7496	-90.7884	-96.0047	-41.1756157
+13	63.39723288	52.53302733	57.05612853	40.46733	43.0727	40.29977	47.77784	41.93195	44.27435	21.09102064
-14	-161.3764446	-132.5133469	-183.3677985	-84.3996	-90.3843	-84.9094	-101.85	-99.3973	-105.12	-44.73038707
+14	50.95600716	42.78373242	45.89268586	33.88585	35.98495	33.6168	39.67727	33.32304	35.15903	17.53624448
-15	-176.6055544	-145.3197174	-203.4396003	-90.3229	-96.7633	-90.9241	-109.141	-107.145	-113.324	-47.92968074
+15	40.26289818	34.51336524	36.29919305	27.9625	29.60597	27.60212	32.38675	25.57503	26.95526	14.33695204
-16	-194.0867937	-160.1090058	-226.2455967	-96.9044	-103.851	-97.6071	-117.241	-115.754	-122.439	-51.48445454
+16	28.94165973	25.88407569	26.03173537	21.38102	22.51821	20.91915	24.28618	17.29333	18.2035	10.78217824
-17	-210.3239022	-173.9233746	-247.8419935	-102.828	-110.23	-103.622	-124.532	-123.502	-130.643	-54.68374756
+17	19.25654973	18.62170679	17.3448201	15.45769	16.13924	14.90447	16.99566	11.39773	12.0691	7.582884898
-18	-228.9251285	-189.832673	-272.5379985	-109.409	-117.318	-110.305	-132.632	-132.111	-139.758	-58.23852169
+18	9.993621023	11.11241747	8.999265367	8.876192	9.051476	8.221499	8.89509	6.637508	7.00503	4.315330439
-19	-246.1702383	-204.6550323	-295.2179962	-115.333	-123.697	-116.319	-139.923	-139.859	-147.962	-61.437815
+19	3.995655935	4.858048737	3.591089251	3.79393	3.79393	3.245036	3.334929	2.88444	3.036253	2.215933394
-20	-265.8914769	-221.6843294	-320.9219924	-1.22E+02	-1.31E+02	-123.002	-148.023	-148.468	-157.077	-64.99258847
+20	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	92.8562584	128.5964	134.8732	178.7763005	74.58219983	100.6068	114.5732	126.6517	1.39E+02
-1	-2.493304007	-2.49403	-1.98418	-1.554384734	-2.004797668	-2.48772	-2.48789	-2.48413	-2.4805
+1	87.94287563	121.4336	127.0618	164.4845501	70.64721794	95.29921	108.4844	119.8319	131.6591
-2	-6.073760703	-6.05913	-4.82038	-3.900145589	-5.137387058	-6.85679	-7.30567	-7.30141	-7.2973
+2	82.87995787	114.0199	118.9584	149.6405602	66.59712078	89.83133	102.2062	112.7939	123.8107
-3	-10.60742575	-9.56303	-8.66288	-7.111046716	-8.782473526	-11.7779	-12.5852	-12.5501	-12.5453
+3	78.32333241	107.3475	111.6653	136.273041	62.95203354	84.91023	96.55579	106.4597	116.7471
-4	-15.67034382	-15.8529	-13.4757	-11.23173019	-12.83257055	-17.2458	-18.8635	-19.3653	-19.6234
+4	73.26041733	99.93367	103.5619	121.5534381	58.90193466	79.44234	90.27757	99.42173	108.8986
-5	-20.22696819	-22.275	-19.5436	-16.37412642	-16.47765804	-22.1669	-24.5139	-25.6995	-26.687
+5	68.70378955	93.26125	96.26881	108.5853409	55.25684672	74.52124	84.62716	93.08753	101.835
-6	-25.28988428	-29.6888	-26.7827	-22.60639493	-20.52775693	-27.6348	-30.7921	-32.7375	-34.5354
+6	63.64087563	85.84747	88.16538	94.84224182	51.20675246	69.05335	78.34893	86.04953	93.98658
-7	-29.84650872	-36.3612	-34.0758	-28.92731467	-24.17284483	-32.5559	-36.4425	-39.0717	-41.599
+7	59.08425118	79.17506	80.8723	82.95606225	47.56166111	64.13225	72.69853	79.71534	86.92297
-8	-34.90942552	-43.775	-42.1793	-36.09555979	-28.22294127	-38.0237	-42.7207	-46.1097	-49.4475
+8	54.02133086	71.57593	72.56629	71.29607206	43.51156535	58.66437	66.4203	72.67734	79.07451
-9	-39.46604997	-50.4474	-49.4723	-42.77028665	-31.8680314	-42.9448	-48.3711	-52.4439	-56.5111
+9	49.46470754	64.90352	65.27319	61.31269308	39.866478	53.74327	60.61294	66.16719	71.81469
-10	-44.52896822	-57.8612	-57.5758	-52.02329934	-35.91812775	-48.4127	-54.6494	-59.4819	-64.3596
+10	44.27522009	57.48973	57.16977	51.53972398	35.71512817	48.13868	54.33471	59.1292	63.96625
-11	-49.09097541	-64.5336	-64.8689	-60.78165785	-39.66446725	-53.4315	-60.2998	-65.8161	-71.4232
+11	39.71859475	50.81732	49.87669	43.19223174	32.07003913	43.21758	48.68431	52.79501	56.90264
-12	-54.27508144	-71.9474	-72.9723	-71.85506247	-43.71456505	-58.9384	-66.735	-73.0301	-79.4678
+12	34.65567601	43.40354	41.77325	35.73305536	28.01994303	37.74969	42.40608	45.75701	49.05419
-13	-58.83170589	-78.8052	-80.468	-82.31727383	-47.35965469	-63.8595	-72.3854	-79.3643	-86.5314
+13	30.09905576	36.73113	34.48017	29.28163092	24.37485029	32.82859	36.75568	39.42281	41.99058
-14	-63.89462434	-86.219	-88.5714	-95.50708367	-51.40975107	-69.3274	-78.6636	-86.4022	-94.3799
+14	25.03613568	29.31734	26.37674	22.25838623	20.3247561	27.36071	30.47745	32.38482	34.14212
-15	-68.45124581	-92.8914	-95.8645	-107.8694497	-55.05483674	-74.2485	-84.314	-92.7364	-101.443
+15	20.47950893	22.64494	19.88729	16.66840352	16.67966514	22.43961	24.82705	26.05062	27.07851
-16	-73.51416434	-100.305	-103.968	-122.2784394	-59.10493701	-79.7164	-90.5922	-99.7744	-109.292
+16	15.41659679	15.52199	13.19151	10.98957278	12.62957142	16.97172	18.54881	19.01262	19.23006
-17	-78.07079255	-106.978	-111.261	-135.4808539	-62.75002188	-84.6375	-96.2426	-106.109	-116.356
+17	10.85996913	9.816699	8.885266	7.29976466	8.984479867	12.05062	12.89841	12.8608	12.85601
-18	-83.13370418	-114.391	-119.364	-150.3800613	-66.80012247	-90.1054	-102.521	-113.147	-124.204
+18	5.895119968	5.880493	4.678281	3.779071425	4.934385534	6.582736	7.051915	7.047656	7.043551
-19	-87.6903319	-121.064	-126.657	-163.7396587	-70.4452078	-95.0265	-108.171	-119.481	-131.268
+19	2.671095431	2.671902	2.125698	1.667885613	2.115905187	2.69985	2.700039	2.696299	2.692695
-20	-92.75325041	-128.478	-134.761	-178.728648	-74.49530783	-100.494	-114.449	-126.519	-1.39E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	241.3016678	263.0103358	154.973	186.5136	199.654
-1	-2.644055771	-2.577800023	-2.85866	-3.03994	-2.71972
+1	227.2906607	247.5494789	146.2046	175.9915	188.2627
-2	-8.092821566	-7.530425508	-7.36432	-8.16793	-8.2157
+2	212.7606247	231.3842447	137.1239	165.0947	176.4574
-3	-13.89622463	-14.46327805	-11.8592	-13.0715	-13.9367
+3	199.6835831	216.8355248	128.9514	155.2876	165.8327
-4	-23.14995095	-24.52807667	-17.1328	-21.1053	-20.748
+4	185.1535447	200.6702772	119.8707	144.3909	154.0275
-5	-33.88046154	-34.53287999	-24.752	-30.2484	-30.4686
+5	172.0765056	186.1215564	111.6981	134.5838	143.4027
-6	-47.48290254	-47.90899282	-33.8326	-41.1452	-42.1739
+6	157.546464	169.9563113	102.6175	123.687	131.5975
-7	-60.55993657	-62.45771481	-42.0052	-50.9523	-52.7987
+7	144.4694238	155.4075899	94.44493	113.8799	120.9727
-8	-75.08997799	-78.62295151	-51.0859	-61.849	-64.6039
+8	129.5761277	139.2423558	85.13728	102.7107	108.8724
-9	-88.16701967	-93.17167339	-59.2584	-71.6561	-75.2286
+9	116.4990993	124.6936396	76.9647	92.90364	98.24763
-10	-102.6970592	-109.3369183	-68.3391	-82.5529	-87.0339
+10	101.9690499	108.5283916	67.88406	82.00687	86.44238
-11	-115.7740986	-123.885638	-76.5116	-92.36	-97.6586
+11	88.89201805	93.97966816	59.71148	72.19978	75.81766
-12	-130.304139	-140.0508866	-85.5923	-103.257	-109.464
+12	74.36198877	77.81442306	50.63086	61.30303	64.01241
-13	-143.7444229	-154.5996078	-93.9919	-113.336	-120.384
+13	61.28493817	63.26570228	42.45828	51.49594	53.38768
-14	-158.2744726	-170.7648367	-103.073	-124.233	-132.189
+14	46.75490626	47.10045505	33.37764	40.59916	41.58243
-15	-171.3515037	-185.3135582	-111.245	-134.04	-142.814
+15	34.51483256	35.08850457	25.20506	30.79208	31.122
-16	-185.8815325	-201.4788054	-120.326	-144.937	-154.619
+16	22.60395249	23.97205438	16.72328	20.61393	20.293
-17	-198.9585828	-216.0275271	-128.498	-154.744	-165.244
+17	14.26302528	14.87840809	12.10842	13.34331	14.25388
-18	-213.4886134	-232.1927754	-137.579	-165.641	-177.049
+18	7.819820892	7.277898179	7.114066	7.894922	7.897202
-19	-226.5656648	-246.7414939	-145.752	-175.448	-187.674
+19	2.915935178	2.785594157	3.062533	3.257411	2.991578
-20	-241.0956939	-262.9067405	-154.832	-186.345	-199.479
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 190’ Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.10E-13	-5.55E-13	-1.14E-12	-4.29E-13	-4.56E-13	-4.42E-13	-5.37E-13	-4.49E-13	-4.76E-13	-2.40E-13
End Shear	7.65E-13	5.83E-13	1.16E-12	4.45E-13	4.80E-13	4.50E-13	5.45E-13	4.50E-13	4.78E-13	2.40E-13
-1	0	0	0	0	0	0	0	0	0	0
+1	2393.043711	1997.657321	2857.598053	1098.777796	1178.477915	1108.201111	1333.10562	1332.74267	1409.95951	585.3464213
-2	0	0	0	0	0	0	0	0	0	0
+2	4527.258385	3783.961864	5384.58469	2078.759734	2229.021828	2095.774534	2520.429548	2510.094543	2655.387587	1106.529231
-3	0	0	0	0	0	0	0	0	0	0
+3	6400.748447	5358.913681	7627.882525	2939.945915	3151.631854	2963.191255	3562.151759	3532.701171	3737.001742	1563.548446
-4	0	0	0	0	0	0	0	0	0	0
+4	8014.145553	6722.512666	9493.646334	3682.386565	3946.839148	3710.219935	4457.658554	4400.566038	4654.742339	1956.403973
-5	0	0	0	0	0	0	0	0	0	0
+5	9367.449922	7874.758859	10981.87632	4306.432361	4614.152743	4336.62094	5206.950011	5144.977911	5443.614602	2285.095815
-6	0	0	0	0	0	0	0	0	0	0
+6	10460.66143	8815.652603	12186.41765	4811.682419	5153.532453	4842.394336	5838.884595	5746.411771	6081.404277	2549.624284
-7	0	0	0	0	0	0	0	0	0	0
+7	11306.35275	9545.193038	13130.73033	5198.136508	5564.978039	5249.905053	6324.603315	6205.30983	6565.915267	2749.988921
-8	0	0	0	0	0	0	0	0	0	0
+8	11918.26481	10063.38123	13697.51065	5473.00945	5870.132992	5538.231439	6664.107317	6526.858397	6907.54431	2886.190033
-9	0	0	0	0	0	0	0	0	0	0
+9	12270.04584	10370.21634	13886.7563	5645.318221	6050.960572	5705.929602	6857.395351	6693.015649	7084.641366	2958.415512
-10	0	0	0	0	0	0	0	0	0	0
+10	12362.1864	10465.43757	13698.46834	5698.451414	6103.474448	5752.562156	6904.030106	6703.367945	7096.771043	2966.797376
-11	-1.07E-12	-8.35E-13	-9.60E-13	-6.85E-13	-6.85E-13	-5.48E-13	-5.48E-13	-5.21E-13	-5.48E-13	-6.30E-13
+11	12271.16059	10370.28278	13886.75597	5645.328325	6050.976001	5705.951797	6857.431973	6693.036772	7084.663004	2958.410188
-12	0	0	0	0	0	0	0	0	0	0
+12	11918.88529	10063.44065	13697.51069	5473.011905	5870.140157	5538.246273	6664.13505	6526.870683	6907.556589	2886.200581
-13	0	0	0	0	0	0	0	0	0	0
+13	11306.66591	9545.244951	13130.73001	5198.131101	5564.976731	5249.91212	6324.621573	6205.313418	6565.918331	2749.998293
-14	0	0	0	0	0	0	0	0	0	0
+14	10460.89289	8815.697081	12186.41797	4811.669565	5153.523143	4842.393983	5838.893695	5746.406728	6081.398198	2549.632
-15	0	0	0	0	0	0	0	0	0	0
+15	9367.266548	7874.795792	10981.87668	4306.411573	4614.134919	4336.612757	5206.950259	5145.002993	5443.640184	2285.102574
-16	0	0	0	0	0	0	0	0	0	0
+16	8013.698225	6722.542216	9493.646444	3682.366746	3946.813514	3710.204292	4457.649299	4400.561934	4654.738239	1956.409326
-17	0	0	0	0	0	0	0	0	0	0
+17	6400.187119	5358.935846	7627.882696	2939.96884	3151.656572	2963.168048	3562.133425	3532.688225	3736.98828	1563.552469
-18	0	0	0	0	0	0	0	0	0	0
+18	4526.73298	3783.976655	5384.584084	2078.774899	2229.038162	2095.789695	2520.401861	2510.111975	2655.406045	1106.531915
-19	0	0	0	0	0	0	0	0	0	0
+19	2393.337918	1997.664949	2857.597763	1098.785647	1178.486359	1108.208899	1333.115044	1332.751759	1409.969135	585.3477445
-20	-1.25E-12	-9.79E-13	-1.47E-12	-7.24E-13	-7.52E-13	-5.37E-13	-6.54E-13	-9.52E-13	-1.01E-12	-4.27E-13
+20	1.53E-12	1.03E-12	1.52E-12	7.20E-13	7.49E-13	6.12E-13	7.29E-13	7.02E-13	7.42E-13	5.57E-13

1-Span: Moment (Max and Min) Raw Data Results - 190’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.31E-13	-3.88E-13	-4.00E-13	-4.92E-13	-2.77E-13	-3.62E-13	-3.62E-13	-3.81E-13	-4.17E-13
End Shear	3.43E-13	3.90E-13	4.84E-13	5.00E-13	2.74E-13	3.68E-13	3.61E-13	3.61E-13	3.67E-13
-1	0	0	0	0	0	0	0	0	0
+1	835.4573185	1153.619671	1207.087488	1574.380851	671.1485704	905.3425182	1030.602059	1138.812742	1251.247179
-2	0	0	0	0	0	0	0	0	0
+2	1579.528978	2173.420444	2267.908147	2914.850712	1269.192866	1711.989656	1947.882112	2151.513907	2361.876916
-3	0	0	0	0	0	0	0	0	0
+3	2232.214974	3059.600741	3183.68981	4043.778119	1794.132956	2420.190237	2752.426973	3054.67617	3356.998344
-4	0	0	0	0	0	0	0	0	0
+4	2793.718767	3812.829729	3967.812064	5019.206907	2245.968735	3030.000147	3443.822964	3838.378559	4213.632893
-5	0	0	0	0	0	0	0	0	0
+5	3264.068186	4437.291176	4620.101546	5841.277749	2624.700219	3541.114694	4021.89692	4495.045034	4953.113767
-6	0	0	0	0	0	0	0	0	0
+6	3643.032046	4949.294146	5126.124362	6507.444643	2930.327613	3953.533913	4498.19294	5024.889199	5554.53796
-7	0	0	0	0	0	0	0	0	0
+7	3930.610106	5327.47787	5536.782391	7020.232803	3162.850464	4280.965294	4871.988834	5428.437884	6014.297385
-8	0	0	0	0	0	0	0	0	0
+8	4144.118023	5576.863262	5822.334352	7379.646558	3322.269487	4515.473352	5132.463199	5725.153683	6332.392595
-9	0	0	0	0	0	0	0	0	0
+9	4266.961237	5714.104902	6012.205	7527.586975	3408.583869	4651.28556	5279.615139	5899.703386	6523.457527
-10	0	0	0	0	0	0	0	0	0
+10	4297.99494	5717.200661	6055.383887	7441.254988	3421.095485	4688.030135	5312.925931	5946.859027	6587.138981
-11	-4.82E-13	-4.82E-13	-3.84E-13	-2.90E-13	-6.03E-13	-4.66E-13	-4.66E-13	-3.15E-13	-3.15E-13
+11	4266.972406	5714.125384	6012.220564	7527.57799	3408.62615	4651.302279	5279.639918	5899.717498	6523.461699
-12	0	0	0	0	0	0	0	0	0
+12	4144.12369	5576.876121	5822.342505	7379.65221	3322.307355	4515.484045	5132.48099	5725.160028	6332.425044
-13	0	0	0	0	0	0	0	0	0
+13	3930.6098	5327.494486	5536.790158	7020.237111	3162.883339	4280.969605	4871.999456	5428.436234	6014.321371
-14	0	0	0	0	0	0	0	0	0
+14	3643.026186	4949.303266	5126.143823	6507.457714	2930.35571	3953.53216	4498.196589	5024.880067	5554.553776
-15	0	0	0	0	0	0	0	0	0
+15	3264.05636	4437.292437	4620.113418	5841.273044	2624.72368	3541.106546	4021.89338	4495.065624	4953.120873
-16	0	0	0	0	0	0	0	0	0
+16	2793.701391	3812.823606	3967.816232	5019.21157	2245.98762	3029.985868	3443.812627	3838.391779	4213.631908
-17	0	0	0	0	0	0	0	0	0
+17	2232.232169	3059.587034	3183.685758	4043.78892	1794.147105	2420.169751	2752.409733	3054.681638	3357.00623
-18	0	0	0	0	0	0	0	0	0
+18	1579.540328	2173.435454	2267.923962	2914.852907	1269.202097	1712.00206	1947.896019	2151.511496	2361.87624
-19	0	0	0	0	0	0	0	0	0
+19	835.4632714	1153.6275	1207.095214	1574.389797	671.1533136	905.3488905	1030.609243	1138.802925	1251.238294
-20	-4.73E-13	-8.10E-13	-4.58E-13	-6.97E-13	-4.21E-13	-4.56E-13	-5.17E-13	-5.16E-13	-5.65E-13
+20	5.34E-13	5.77E-13	6.96E-13	8.65E-13	5.42E-13	5.21E-13	5.53E-13	5.43E-13	6.35E-13

1-Span: Moment (Max and Min) Raw Data Results - 190' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.14E-13	-6.16E-13	-4.43E-13	-5.29E-13	-5.58E-13
End Shear	7.63E-13	7.21E-13	5.30E-13	5.80E-13	7.11E-13
-1	0	0	0	0	0
+1	2159.261277	2351.720049	1388.943412	1671.919093	1788.49542
-2	0	0	0	0	0
+2	4058.105304	4412.877402	2613.981293	3147.692322	3364.666535
-3	0	0	0	0	0
+3	5723.214117	6237.941483	3675.582754	4428.127223	4729.108898
-4	0	0	0	0	0
+4	7153.307045	7807.196472	4587.10142	5537.755261	5919.287625
-5	0	0	0	0	0
+5	8320.812496	9172.550724	5366.572188	6463.636523	6909.174838
-6	0	0	0	0	0
+6	9301.806592	10246.12226	5983.232162	7192.83158	7725.981691
-7	0	0	0	0	0
+7	10052.23166	11103.97814	6452.437076	7739.932693	8329.703007
-8	0	0	0	0	0
+8	10596.22625	11678.32066	6773.911729	8116.463321	8734.812392
-9	0	0	0	0	0
+9	10931.86948	12017.58807	6931.480418	8295.993908	8956.536767
-10	0	0	0	0	0
+10	11007.96675	12158.47468	6924.502616	8278.452074	8964.761098
-11	-4.91E-13	-4.55E-13	-5.53E-13	-4.91E-13	-4.91E-13
+11	10931.8909	12016.13458	6931.503348	8295.982844	8956.552074
-12	0	0	0	0	0
+12	10596.23328	11678.31906	6773.925755	8116.47789	8734.816011
-13	0	0	0	0	0
+13	10052.2601	11104.99885	6452.441831	7739.936402	8329.731051
-14	0	0	0	0	0
+14	9301.820766	10246.1222	5983.227727	7192.861018	7725.998108
-15	0	0	0	0	0
+15	8320.81291	9172.548245	5366.599568	6463.654834	6909.178899
-16	0	0	0	0	0
+16	7153.293126	7807.191442	4587.119918	5537.762754	5919.298567
-17	0	0	0	0	0
+17	5723.2213	6237.943891	3675.56896	4428.1237	4729.108027
-18	0	0	0	0	0
+18	4058.097936	4413.192343	2613.99951	3147.677372	3364.653756
-19	0	0	0	0	0
+19	2159.275618	2351.72289	1388.953063	1671.930615	1788.507478
-20	-9.21E-13	-8.85E-13	-9.58E-13	-1.07E-12	-9.66E-13
+20	9.84E-13	9.86E-13	7.52E-13	9.08E-13	7.65E-13

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0	0	0
End Shear	68.46316	48.14947	66.6821	69.93684	97.42895	38.67368	52.16842	59.41053	65.67368	72.21053
-1	-1.51579	-1.29287	-1.29325	-1.02887	-0.81717	-1.03956	-1.28998	-1.29007	-1.28812	-1.28623
+1	64.79886	45.6017	62.96793	65.88636	89.55787	36.63325	49.41624	56.25327	62.13737	68.27024
-2	-4.02849	-3.14947	-3.14189	-2.49955	-2.07076	-2.66393	-3.5555	-3.78826	-3.78605	-3.78393
+2	61.04244	42.97638	59.1236	61.68443	81.40168	34.53312	46.58093	52.99777	58.4879	64.20052
-3	-7.07368	-5.50035	-4.95879	-4.49203	-3.79156	-4.55404	-6.10728	-6.52592	-6.50771	-6.50522
+3	57.63595	40.6136	55.6637	57.90269	74.07933	32.643	44.02916	50.06782	55.20338	60.53777
-4	-10.8325	-8.12566	-8.22032	-6.98767	-6.01513	-6.65417	-8.94258	-9.78142	-10.0417	-10.1755
+4	53.85095	37.98829	51.81938	53.70075	66.03726	30.54288	41.19385	46.81232	51.55392	56.46805
-5	-14.2358	-10.4884	-11.5504	-10.1341	-8.78214	-8.54429	-11.4944	-12.7114	-13.3262	-13.8382
+5	50.44446	35.62551	48.35948	49.91901	58.96669	28.65276	38.64207	43.88238	48.26939	52.80531
-6	-18.0172	-13.1138	-15.3948	-13.8879	-12.1503	-10.6444	-14.3297	-15.9669	-16.9756	-17.9079
+6	46.65946	33.00019	44.51515	45.71708	51.4806	26.55263	35.80677	40.62688	44.61993	48.73559
-7	-21.4205	-15.4765	-18.8547	-17.6696	-15.5731	-12.5345	-16.8814	-18.8968	-20.2602	-21.5707
+7	43.25297	30.63741	41.05526	41.93534	45.0157	24.66252	33.25499	37.69693	41.33541	45.07284
-8	-25.2019	-18.1019	-22.699	-21.8715	-19.4762	-14.6347	-19.7167	-22.1523	-23.9096	-25.6404
+8	39.46797	28.0121	37.11482	37.62836	38.6594	22.56239	30.41969	34.44143	37.68594	41.00312
-9	-28.6052	-20.4646	-26.1589	-25.6533	-23.1271	-16.5248	-22.2685	-25.0823	-27.1941	-29.3031
+9	36.06148	25.64932	33.65492	33.84661	33.22584	20.67227	27.86791	31.4301	34.31019	37.23863
-10	-32.3866	-23.0899	-30.0032	-29.8552	-28.1608	-18.6249	-25.1038	-28.3378	-30.8436	-33.3729
+10	32.22396	22.95837	29.81059	29.64468	27.89766	18.51964	24.96172	28.1746	30.66072	33.16891
-11	-35.7898	-25.4555	-33.4631	-33.6369	-32.9368	-20.5675	-27.7063	-31.2677	-34.1281	-37.0356
+11	28.81747	20.59559	26.3507	25.86294	23.35703	16.62953	22.40995	25.24465	27.3762	29.50616
-12	-39.5712	-28.1437	-37.3074	-37.8389	-38.9641	-22.6677	-30.5618	-34.6046	-37.8688	-41.2071
+12	25.03248	17.97028	22.50637	21.66101	19.27826	14.5294	19.57464	21.98915	23.72674	25.43645
-13	-43.0691	-30.5065	-40.8635	-41.7257	-44.6683	-24.5578	-33.1136	-37.5345	-41.1534	-44.8698
+13	21.59623	15.6075	19.04648	17.87927	15.76547	12.63928	17.02286	19.05921	20.44222	21.7737
-14	-46.8505	-33.1318	-44.7078	-45.9276	-51.8427	-26.6579	-35.9489	-40.79	-44.8028	-48.9395
+14	17.81483	12.98218	15.20214	13.67733	11.96238	10.53915	14.18756	15.80371	16.79275	17.70398
-15	-50.2537	-35.4946	-48.1677	-49.7093	-58.5769	-28.548	-38.5006	-43.72	-48.0873	-52.6023
+15	14.41156	10.6194	11.74225	10.31231	8.94094	8.649036	11.63578	12.87376	13.50823	14.04123
-16	-54.0351	-38.1199	-52.012	-53.9113	-66.4331	-30.6481	-41.336	-46.9755	-51.7368	-56.672
+16	10.63014	7.994087	8.04874	6.840298	5.884598	6.548909	8.800478	9.61826	9.858763	9.971513
-17	-57.4384	-40.4827	-55.4719	-57.693	-73.6475	-32.5383	-43.8877	-49.9054	-55.0213	-60.3347
+17	7.226874	5.631304	5.090329	4.607346	3.893136	4.658792	6.248702	6.688314	6.66881	6.666325
-18	-61.2198	-43.108	-59.3162	-61.895	-81.8075	-34.6384	-46.723	-53.1609	-58.6708	-64.4045
+18	3.848602	3.056842	3.049258	2.425865	2.005493	2.558665	3.413397	3.656684	3.654475	3.652347
-19	-64.6231	-45.4707	-62.7761	-65.6767	-89.148	-36.5285	-49.2748	-56.0909	-61.9553	-68.0672
+19	1.596415	1.385064	1.385482	1.102254	0.877268	1.097177	1.399974	1.400072	1.398133	1.396264
-20	-68.4045	-48.0961	-66.6205	-69.8786	-97.4042	-38.6286	-52.1101	-59.3464	-65.6048	-72.1369
+20	0.00E+00	0	0	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	68.46316	63.28947	67.89474	63.85263	76.84211	77.05789	81.52631	33.72873
-1	-1.51579	-1.83636	-1.83636	-1.54125	-1.57215	-1.39612	-1.4696	-1.08861
+1	64.79886	59.9745	64.32476	60.48885	72.7648	72.74498	76.9597	31.94992
-2	-4.02849	-4.7737	-4.87775	-4.43684	-4.82297	-3.56548	-3.76395	-2.29819
+2	61.04244	56.56175	60.64949	57.02348	68.56434	68.28094	72.23307	30.10663
-3	-7.07368	-7.84517	-8.18549	-7.55568	-8.60337	-5.787	-6.12727	-3.83992
+3	57.63595	53.49028	57.34175	53.90464	64.78393	64.2633	67.9791	28.44768
-4	-10.8325	-11.2579	-11.8608	-11.0211	-12.8038	-9.16724	-9.64973	-5.6832
+4	53.85095	50.07753	53.66648	50.43927	60.58348	59.79926	63.25247	26.60439
-5	-14.2358	-14.3294	-15.1685	-14.1399	-16.5842	-13.0389	-13.7415	-7.34216
+5	50.44446	47.00605	50.35874	47.32043	56.80307	55.78162	58.99849	24.94544
-6	-18.0172	-17.7421	-18.8438	-17.6053	-20.7847	-17.5029	-18.4681	-9.18544
+6	46.65946	43.5933	46.68348	43.85506	52.60262	51.31758	54.27186	23.10216
-7	-21.4205	-20.8136	-22.1515	-20.7241	-24.5651	-21.5206	-22.7221	-10.8444
+7	43.25297	40.52183	43.37573	40.73622	48.82221	47.29994	50.0179	21.4432
-8	-25.2019	-24.2264	-25.8268	-24.1895	-28.7656	-25.9846	-27.4487	-12.6877
+8	39.46797	37.10908	39.70047	37.27085	44.62176	42.7243	45.17309	19.59992
-9	-28.6052	-27.2978	-29.1345	-27.3083	-32.546	-30.0023	-31.7027	-14.3466
+9	36.06148	34.0376	36.39272	34.15201	40.84135	38.70666	40.91913	17.94096
-10	-32.3866	-30.7106	-32.8098	-30.7737	-36.7464	-34.4663	-36.4293	-16.1899
+10	32.22396	30.53954	32.62558	30.6	36.53589	34.24262	36.19249	16.09768
-11	-35.7898	-33.8674	-36.2094	-33.9553	-40.608	-38.4839	-40.6833	-17.8489
+11	28.81747	27.46806	29.31783	27.48116	32.75548	30.22498	31.93852	14.43873
-12	-39.5712	-37.2801	-39.8847	-37.4445	-44.8323	-42.948	-45.4099	-19.6922
+12	25.03248	24.05532	25.64257	24.01579	28.55502	25.76094	27.21189	12.59544
-13	-43.0691	-40.3516	-43.1924	-40.5634	-48.6127	-47.0772	-49.7821	-21.3511
+13	21.59623	20.98384	22.33482	20.89695	24.77461	21.7433	22.95792	10.93649
-14	-46.8505	-43.7644	-46.8677	-44.0287	-52.8131	-51.5413	-54.5087	-23.1944
+14	17.81483	17.57109	18.65955	17.43158	20.57416	17.27925	18.23128	9.093204
-15	-50.2537	-46.8358	-50.1754	-47.1476	-56.5936	-55.5589	-58.7627	-24.8533
+15	14.41156	14.49961	15.35181	14.31274	16.79375	13.26162	13.97732	7.43425
-16	-54.0351	-50.2486	-53.8507	-50.6129	-60.794	-60.0229	-63.4893	-26.6966
+16	10.63014	11.08687	11.67654	10.84737	12.5933	8.967242	9.439203	5.590966
-17	-57.4384	-53.3201	-57.1584	-53.7318	-64.5744	-64.0406	-67.7433	-28.3556
+17	7.226874	8.015393	8.368804	7.728531	8.812892	5.910153	6.258281	3.932012
-18	-61.2198	-56.7328	-60.8337	-57.1972	-68.7749	-68.5046	-72.4699	-30.1989
+18	3.848602	4.602641	4.693532	4.263157	4.61244	3.441798	3.632372	2.237662
-19	-64.6231	-59.8043	-64.1414	-60.316	-72.5553	-72.5223	-76.7239	-31.8578
+19	1.596415	1.967296	1.967296	1.682674	1.729287	1.495691	1.574412	1.149045
-20	-68.4045	-63.217	-67.8167	-63.7814	-76.7557	-76.9863	-81.4505	-33.7011
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 190' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**68.46316**	***139.5614***	***152.117***	***89.63158***	***107.8737***	***115.4737***
-1	**-1.51579**	***-1.52924***	***-1.49092***	***-1.65336***	***-1.75821***	***-1.573***
+1	**64.79886**	***131.4579***	***143.1749***	***84.56019***	***101.788***	***108.8853***
-2	**-4.02849**	***-4.68064***	***-4.35536***	***-4.25929***	***-4.72408***	***-4.75171***
+2	**61.04244**	***123.0541***	***133.8255***	***79.30823***	***95.48567***	***102.0575***
-3	**-7.07368**	***-8.03715***	***-8.36511***	***-6.85901***	***-7.56013***	***-8.06056***
+3	**57.63595**	***115.4908***	***125.4109***	***74.58147***	***89.81355***	***95.91249***
-4	**-10.8325**	***-13.3892***	***-14.1863***	***-9.90907***	***-12.2067***	***-12***
+4	**53.85095**	***107.0871***	***116.0615***	***69.32951***	***83.5112***	***89.0847***
-5	**-14.2358**	***-19.5954***	***-19.9727***	***-14.3158***	***-17.4947***	***-17.6221***
+5	**50.44446**	***99.52372***	***107.6469***	***64.60274***	***77.83908***	***82.93969***
-6	**-18.0172**	***-27.4626***	***-27.7091***	***-19.5677***	***-23.7971***	***-24.3921***
+6	**46.65946**	***91.11999***	***98.29746***	***59.35079***	***71.53673***	***76.1119***
-7	**-21.4205**	***-35.026***	***-36.1236***	***-24.2945***	***-29.4692***	***-30.5371***
+7	**43.25297**	***83.55664***	***89.88293***	***54.62402***	***65.86461***	***69.96689***
-8	**-25.2019**	***-43.4297***	***-45.4731***	***-29.5465***	***-35.7716***	***-37.3649***
+8	**39.46797**	***74.94282***	***80.53346***	***49.24076***	***59.4047***	***62.9684***
-9	**-28.6052**	***-50.9931***	***-53.8876***	***-34.2732***	***-41.4437***	***-43.5099***
+9	**36.06148**	***67.37947***	***72.11894***	***44.514***	***53.73259***	***56.82339***
-10	**-32.3866**	***-59.3968***	***-63.2371***	***-39.5252***	***-47.746***	***-50.3377***
+10	**32.22396**	***58.97574***	***62.76946***	***39.26204***	***47.43023***	***49.9956***
-11	**-35.7898**	***-66.9601***	***-71.6516***	***-44.252***	***-53.4181***	***-56.4827***
+11	**28.81747**	***51.41239***	***54.35493***	***34.53527***	***41.75812***	***43.85058***
-12	**-39.5712**	***-75.3639***	***-81.0011***	***-49.5039***	***-59.7205***	***-63.3105***
+12	**25.03248**	***43.00867***	***45.00545***	***29.28332***	***35.45577***	***37.02279***
-13	**-43.0691**	***-83.1373***	***-89.4156***	***-54.362***	***-65.5502***	***-69.6262***
+13	**21.59623**	***35.44531***	***36.59092***	***24.55655***	***29.78365***	***30.87778***
-14	**-46.8505**	***-91.541***	***-98.7651***	***-59.6139***	***-71.8525***	***-76.454***
+14	**17.81483**	***27.04159***	***27.24144***	***19.30459***	***23.4813***	***24.04999***
-15	**-50.2537**	***-99.1044***	***-107.18***	***-64.3407***	***-77.5246***	***-82.599***
+15	**14.41156**	***19.96231***	***20.2941***	***14.57783***	***17.80918***	***18***
-16	**-54.0351**	***-107.508***	***-116.529***	***-69.5927***	***-83.827***	***-89.4268***
+16	**10.63014**	***13.07343***	***13.86469***	***9.672226***	***11.92246***	***11.73684***
-17	**-57.4384**	***-115.071***	***-124.944***	***-74.3194***	***-89.4991***	***-95.5718***
+17	**7.226874**	***8.249292***	***8.60521***	***7.003135***	***7.717356***	***8.244***
-18	**-61.2198**	***-123.475***	***-134.293***	***-79.5714***	***-95.8015***	***-102.4***
+18	**3.848602**	***4.522742***	***4.209311***	***4.114555***	***4.566178***	***4.567497***
-19	**-64.6231**	***-131.039***	***-142.708***	***-84.2982***	***-101.474***	***-108.545***
+19	**1.596415**	***1.686487***	***1.611101***	***1.771274***	***1.883986***	***1.730236***
-20	**-68.4045**	***-139.442***	***-152.057***	***-89.5501***	***-107.776***	***-115.372***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 190’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.87E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	615.5891	433.2161	598.1953	625.9204	858.9223	348.0159	469.4542	534.4060	590.5174	648.8189
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1163.402	819.0454	1127.0005	1175.9959	1592.0743	658.1244	887.7312	1010.0504	1115.6411	1224.7223
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1642.624	1157.4877	1586.5184	1650.8633	2211.0551	930.3256	1254.9599	1427.2372	1583.9648	1740.7303
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	2053.528	1448.6486	1977.0960	2057.4602	2745.9624	1164.6195	1571.1694	1785.7521	1990.3441	2184.9276
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2396.112	1692.5425	2300.9029	2395.6969	3196.8693	1361.0061	1836.2016	2085.5053	2330.8504	2568.3763
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2670.377	1889.0495	2566.3957	2658.0889	3562.4555	1519.4854	2050.0565	2332.4827	2605.5946	2880.2375
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2881.724	2038.1696	2762.4982	2871.0305	3844.0305	1640.0573	2219.8420	2526.3100	2814.8498	3118.6401
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	3036.058	2148.8815	2891.8140	3019.1000	4041.5966	1722.7221	2341.4433	2661.3758	2968.7082	3283.5844
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	3122.056	2212.5804	2962.9789	3117.5551	4125.0271	1767.4793	2411.8670	2737.6796	3059.2188	3382.6588
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	3139.93	2228.6725	2964.5842	3139.9450	4082.5000	1773.9671	2430.9205	2754.9525	3083.6707	3415.6801
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	3122.535	2212.5862	2962.9896	3117.5632	4125.0224	1767.5012	2411.8757	2737.6925	3059.2261	3382.6610
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	3036.325	2148.8845	2891.8206	3019.1042	4041.5995	1722.7417	2341.4488	2661.3850	2968.7114	3283.6013
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2881.859	2038.1695	2762.5069	2871.0346	3844.0328	1640.0743	2219.8442	2526.3155	2814.8490	3118.6525
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2670.476	1889.0465	2566.4004	2658.0989	3562.4623	1519.5000	2050.0556	2332.4846	2605.5899	2880.2457
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2396.033	1692.5364	2300.9035	2395.7031	3196.8669	1361.0182	1836.1973	2085.5034	2330.8611	2568.3800
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	2053.335	1448.6396	1977.0929	2057.4624	2745.9648	1164.6293	1571.1620	1785.7468	1990.3509	2184.9271
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1642.383	1157.4966	1586.5113	1650.8612	2211.0607	930.3330	1254.9493	1427.2283	1583.9677	1740.7344
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1163.176	819.0512	1127.0083	1176.0041	1592.0755	658.1292	887.7377	1010.0576	1115.6399	1224.7219
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	615.7155	433.2192	598.1994	625.9244	858.9269	348.0183	469.4576	534.4098	590.5123	648.8143
-20	-4.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 190' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.87E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	615.5891	569.7577	611.0853	574.6441	691.2656	691.0774	731.1172	303.5242
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1163.402	1077.9153	1155.8319	1086.7382	1306.9378	1301.5787	1376.9186	573.7771
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1642.624	1524.4729	1634.2400	1536.5264	1847.1101	1831.8388	1937.7764	810.7589
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	2053.528	1909.4563	2046.5850	1923.8890	2311.4641	2281.8595	2413.6595	1014.4693
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2396.112	2233.0476	2392.6123	2248.7016	2700.0000	2667.8651	2822.7195	1184.9084
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2670.377	2495.0388	2672.3010	2510.9641	3027.6819	2979.7313	3153.4375	1322.0764
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2881.724	2695.4299	2885.6510	2722.2738	3279.5454	3217.6872	3404.6748	1425.9730
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	3036.058	2837.9619	3043.8854	2871.7819	3455.5910	3384.4223	3581.8223	1496.5984
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	3122.056	2927.3105	3137.6513	2958.7397	3555.8182	3470.5811	3673.6538	1534.0500
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	3139.93	2954.8620	3164.8817	2982.9205	3580.0001	3475.9492	3679.9435	1538.3964
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	3122.535	2927.3157	3137.6593	2958.7513	3555.8372	3470.5921	3673.6650	1534.0473
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	3036.325	2837.9631	3043.8891	2871.7896	3455.6054	3384.4287	3581.8287	1496.6039
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2881.859	2695.4271	2885.6504	2722.2775	3279.5549	3217.6891	3404.6763	1425.9779
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2670.476	2495.0322	2672.2962	2510.9640	3027.6866	2979.7287	3153.4344	1322.0804
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2396.033	2233.0369	2392.6030	2248.6973	2700.0001	2667.8781	2822.7328	1184.9119
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	2053.335	1909.4461	2046.5717	1923.8809	2311.4593	2281.8574	2413.6574	1014.4720
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1642.383	1524.4847	1634.2528	1536.5144	1847.1006	1831.8321	1937.7694	810.7609
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1163.176	1077.9232	1155.8404	1086.7460	1306.9234	1301.5877	1376.9282	573.7785
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	615.7155	569.7618	611.0896	574.6481	691.2704	691.0821	731.1222	303.5249
-20	-4.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 190' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.87E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	2.56E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	615.5891	1248.8498	1360.1620	803.3218	966.9862	1034.4103
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1163.402	2347.0823	2552.2715	1511.8457	1820.5277	1946.0188
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1642.624	3310.1296	3607.8320	2125.8431	2561.0915	2735.1700
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	2053.528	4137.2510	4515.4404	2653.0373	3202.8660	3423.5325
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2396.112	4812.5000	5305.1190	3103.8590	3738.3670	3996.0525
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2670.377	5379.8766	5926.0395	3460.5160	4160.1108	4468.4683
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	2881.724	5813.8992	6422.1967	3731.8896	4476.5371	4817.6420
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	3036.058	6128.5288	6754.3786	3917.8205	4694.3108	5051.9447
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	3122.056	6322.6544	6950.6004	4008.9534	4798.1457	5180.1832
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	3139.93	6366.6667	7032.0848	4004.9176	4788.0000	5184.9399
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	3122.535	6322.6668	6949.7597	4008.9667	4798.1393	5180.1921
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	3036.325	6128.5328	6754.3777	3917.8287	4694.3192	5051.9468
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	2881.859	5813.9156	6422.7871	3731.8923	4476.5393	4817.6582
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2670.476	5379.8848	5926.0394	3460.5134	4160.1278	4468.4778
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2396.033	4812.5002	5305.1176	3103.8748	3738.3776	3996.0549
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	2053.335	4137.2430	4515.4375	2653.0480	3202.8703	3423.5388
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1642.383	3310.1338	3607.8334	2125.8351	2561.0895	2735.1695
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1163.176	2347.0780	2552.4536	1511.8563	1820.5190	1946.0114
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	615.7155	1248.8581	1360.1636	803.3274	966.9928	1034.4173
-20	-4.53E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	5.66E-13	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	*0*	*0*	0	0	0	0	0	0	0
End Shear	272.0395983	*227.4912486*	*329.7986987*	1.22E+02	1.31E+02	123.3469	148.4945	149.372	158.0406	65.17325542
-1	-3.803801039	*-4.616579475*	*-3.423420931*	-3.60533	-3.60533	-3.08395	-3.16948	-2.74092	-2.88518	-2.105301667
+1	252.5825283	*210.6132523*	*304.8758956*	115.831	124.259	116.8648	140.6374	141.0577	149.2373	61.74511508
-2	-10.80000031	*-11.59336624*	*-9.747359582*	-9.37242	-9.61125	-8.7649	-9.60728	-6.98631	-7.3789	-4.432213535
+2	232.9805815	*193.6404657*	*279.2493836*	109.2652	117.1881	110.1978	132.5562	132.4696	140.1439	58.1991032
-3	-19.32520258	*-18.4376946*	*-17.43808233*	-15.3129	-16.0087	-14.7969	-16.9188	-11.2828	-11.9496	-7.541932138
+3	215.7195599	*178.8161386*	*256.5422956*	103.3248	110.7907	104.1657	125.2446	124.6993	131.9166	54.99080949
-4	-30.16320038	*-26.59048142*	*-27.20843873*	-21.8787	-23.0795	-21.4639	-25.0001	-18.2602	-19.2212	-11.08794381
+4	197.2295882	*163.0193509*	*231.9741906*	96.759	103.7199	97.49872	117.1634	116.1112	122.8233	51.44479782
-5	-40.50100579	*-34.49881324*	*-36.52708581*	-27.8191	-29.4769	-27.496	-32.3116	-25.9365	-27.3442	-14.29623877
+5	181.0325605	*149.2590227*	*210.5598593*	90.81854	97.32246	91.46668	109.8519	108.341	114.596	48.23650018
-6	-52.5150035	*-43.82759762*	*-47.35584211*	-34.3849	-36.5478	-34.163	-40.3928	-34.5246	-36.4375	-17.84225044
+6	163.7185852	*134.6382372*	*187.9299422*	84.25277	90.25162	84.79968	101.7706	99.75281	105.5026	44.69048997
-7	-63.91680326	*-52.79992934*	*-57.63208409*	-40.3253	-42.9452	-40.195	-47.7044	-42.2948	-44.6648	-21.05054808
+7	148.5855572	*121.9419054*	*167.9340556*	78.3123	83.8542	78.76763	94.45907	91.98258	97.27534	41.48219569
-8	-77.10679972	*-63.30471149*	*-71.19503476*	-46.8911	-50.016	-46.862	-55.7856	-50.883	-53.7581	-24.59655581
+8	132.4475869	*108.4971234*	*146.3625434*	71.74653	76.78337	72.10064	86.37787	83.28093	88.06254	37.93618537
-9	-89.57260192	*-73.34104331*	*-88.00091847*	-52.8316	-56.4134	-52.8941	-63.0972	-58.6532	-61.9854	-27.80485061
+9	118.3785612	*96.86479169*	*127.3242588*	65.80607	70.38595	66.06859	79.0663	75.41972	79.7382	34.72788902
-10	-103.9386028	*-85.02182891*	*-107.7753612*	-59.3974	-63.4843	-59.5611	-71.1784	-67.2414	-71.0788	-31.35086418
+10	103.3004476	*84.45088996*	*106.8111445*	59.08397	63.14677	59.24286	70.79268	66.83158	70.64487	31.18187933
-11	-117.4684098	*-96.26727229*	*-126.334849*	-65.4941	-70.05	-65.7518	-78.6824	-75.0116	-79.3061	-34.55915942
+11	90.29542372	*73.88255993*	*88.89803757*	53.14351	56.74935	53.21082	63.48111	59.06134	62.41756	27.97358299
-12	-133.0104002	*-109.1240605*	*-147.3771545*	-72.0599	-77.1209	-72.4188	-86.7636	-83.6907	-88.4964	-38.1051687
+12	76.50944701	*62.78977607*	*70.32311893*	46.57774	49.67852	46.54382	55.39991	50.47319	53.32423	24.42757393
-13	-147.8132466	*-121.2883862*	*-166.8942413*	-78.0004	-83.5183	-78.4509	-94.0751	-91.5745	-96.8432	-41.31346524
+13	64.50268575	*53.28544544*	*58.03423619*	40.63728	43.2811	40.51177	48.08833	42.70296	45.09692	21.219274
-14	-164.5312452	*-135.3211744*	*-188.9949567*	-84.5662	-90.5891	-85.1179	-102.156	-100.163	-105.937	-44.8594743
+14	51.9006874	*43.36865718*	*46.72671661*	34.07151	36.21027	33.84477	40.00712	34.11481	36.00359	17.67326482
-15	-180.1890595	*-148.5494999*	*-209.4696455*	-90.5066	-96.9865	-91.1499	-109.468	-107.933	-114.164	-48.06777323
+15	41.03088736	*34.92833122*	*36.97490744*	28.13105	29.81285	27.81274	32.69556	26.34457	27.77628	14.46496636
-16	-198.0830442	*-163.758289*	*-233.1314959*	-97.0724	-104.057	-97.8169	-117.549	-116.521	-123.257	-51.61378226
+16	29.60488777	*26.18754182*	*26.72578669*	21.56527	22.74202	21.14574	24.61435	17.89377	18.83555	10.91895695
-17	-214.8048579	*-178.0506234*	*-255.3597849*	-103.013	-110.455	-103.849	-124.861	-124.291	-131.485	-54.82208052
+17	19.79908807	*18.81121622*	*17.81457649*	15.62481	16.3446	15.11369	17.30278	11.50846	12.1897	7.710664196
-18	-233.8748439	*-194.4354034*	*-280.4570956*	-109.579	-117.526	-110.516	-132.942	-132.879	-140.578	-58.36809022
+18	10.34727848	*11.2464271*	*9.317409037*	9.05904	9.273764	8.446693	9.22157	6.759716	7.137845	4.321321031
-19	-251.6606565	*-209.7917378*	*-303.6429876*	-115.519	-123.923	-116.548	-140.253	-140.65	-148.805	-61.57638311
+19	4.010016311	*4.934101524*	*3.604550032*	3.845281	3.845281	3.343108	3.457431	2.923375	3.077237	2.216022091
-20	-271.9066437	*-227.3525189*	*-329.7986987*	-1.22E+02	-1.31E+02	-123.215	-148.335	-149.238	-157.898	-65.1223975
+20	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0	0	0	0	0
End Shear	93.03469683	129.2249	135.8435	184.2396099	74.71009025	100.7834	114.8229	127.0207	1.40E+02
-1	-2.538291208	-2.53896	-2.0199	-1.584731307	-2.010596451	-2.56576	-2.56592	-2.5625	-2.55921
+1	88.12496635	122.0649	128.0339	169.8012194	70.77841652	95.47987	108.7383	120.2051	132.1734
-2	-6.230282606	-6.09546	-4.84923	-3.936141802	-5.266150124	-7.03453	-7.42239	-7.41852	-7.41479
+2	83.0741578	114.669	119.9501	154.8529659	66.73798375	90.02505	102.4751	113.184	124.3438
-3	-10.80005982	-9.81067	-8.86584	-7.295568476	-8.921777507	-11.9698	-12.8525	-12.8121	-12.8077
+3	78.50438058	107.9774	112.6361	141.4660987	63.08235711	85.08975	96.80842	106.8315	117.2599
-4	-15.85086838	-16.3171	-13.9881	-11.67509665	-12.96220954	-17.4247	-19.1157	-19.737	-20.1363
+4	73.45357294	100.5815	104.5523	126.533493	59.04192641	79.63493	90.54523	99.81042	109.4303
-5	-20.42064592	-22.9252	-20.2049	-16.9598726	-16.61784019	-22.36	-24.7824	-26.0894	-27.2203
+5	68.88379572	93.89	97.23837	113.4221265	55.38629723	74.69962	84.87853	93.45798	102.3463
-6	-25.47145153	-30.3211	-27.7568	-23.46620648	-20.65827296	-27.8148	-31.0456	-33.1106	-35.0499
+6	63.83298979	86.49408	89.15456	99.08287266	51.34586299	69.24481	78.61534	86.43686	94.51673
-7	-30.04123261	-37.0126	-35.0707	-29.84969861	-24.31390006	-32.7501	-36.7123	-39.463	-42.1338
+7	59.26321055	79.80254	81.84063	86.95798601	47.69023382	64.3095	72.94864	80.08443	87.4328
-8	-35.09203823	-44.4085	-43.1545	-37.05738814	-28.35432883	-38.2049	-42.9755	-46.4841	-49.9634
+8	54.21240493	72.30149	73.56434	74.15220273	43.64980505	58.85468	66.68544	73.06331	79.60321
-9	-39.66181747	-51.1001	-50.4685	-44.39837805	-32.00996095	-43.1402	-48.6422	-52.8366	-57.0473
+9	49.64262654	65.53899	66.25041	64.03345741	39.99417691	53.91937	60.90869	66.5437	72.33286
-10	-44.71262341	-58.496	-58.5523	-54.03360292	-36.05039225	-48.595	-54.9053	-59.8577	-64.8769
+10	44.47156098	58.14308	58.16659	53.57058199	35.85754243	48.33468	54.60643	59.52259	64.50327
-11	-49.36381749	-65.1875	-65.8662	-63.50665211	-39.80222268	-53.6602	-60.572	-66.2101	-71.9608
+11	39.90177907	51.45154	50.85266	44.85299339	32.20191326	43.39937	48.93973	53.17015	57.41934
-12	-54.45346715	-72.6544	-73.95	-74.73096977	-43.84265169	-59.115	-66.9844	-73.3984	-79.9769
+12	34.85097329	44.05563	42.76884	36.71010479	28.16148028	37.94456	42.67654	46.14904	49.58974
-13	-59.02324175	-79.4511	-81.4564	-86.33016274	-47.49828277	-64.0503	-72.6511	-79.7508	-87.0608
+13	30.28119474	37.36409	35.45491	30.18887626	24.50585214	33.00925	37.00984	39.7966	42.50581
-14	-64.07404753	-86.847	-89.5402	-99.76293929	-51.53870986	-69.5052	-78.9142	-86.7719	-94.8904
+14	25.23038859	29.96818	27.37109	23.13342816	20.46542507	27.55443	30.74664	32.77549	34.67622
-15	-68.64382575	-93.5385	-96.8542	-112.7365397	-55.19434493	-74.4405	-84.581	-93.1244	-101.974
+15	20.66061055	23.27663	20.53146	17.24127681	16.8097909	22.61913	25.07994	26.42304	27.59229
-16	-73.69464005	-100.934	-104.938	-127.2280427	-59.23477161	-79.8953	-90.8441	-100.145	-109.804
+16	15.60980354	16.00281	13.66021	11.40021658	12.76936318	17.16431	18.81675	19.40193	19.76269
-17	-78.26441762	-107.626	-112.252	-140.7660128	-62.89040016	-84.8306	-96.5108	-106.498	-116.888
+17	11.04002575	10.05169	9.077149	7.475951354	9.113735183	12.229	13.15005	13.10731	13.10295
-18	-83.31522454	-115.022	-120.336	-155.5620159	-66.93083356	-90.2854	-102.774	-113.519	-124.717
+18	5.989218971	5.925755	4.714237	3.820393045	5.073301414	6.774183	7.181326	7.177457	7.173727
-19	-87.88500239	-121.713	-127.65	-169.0866328	-70.58646169	-95.2207	-108.441	-119.871	-131.801
+19	2.707227925	2.707969	2.154362	1.692925775	2.116170952	2.767332	2.767505	2.764106	2.760819
-20	-92.93580892	-129.109	-135.733	-184.1871365	-74.62689552	-100.676	-114.704	-126.893	-1.40E+02
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	0	0	0	0	0
End Shear	243.0685844	265.2219829	155.8694	187.5619	200.9098
-1	-2.771069111	-2.646623181	-2.91014	-3.09569	-2.84295
+1	229.0609501	249.7649949	147.1039	177.0434	189.5218
-2	-8.206656568	-7.808495845	-7.47263	-8.27803	-8.41134
+2	214.566053	233.6399478	138.0452	166.173	177.7451
-3	-14.41556482	-14.9783804	-11.9804	-13.1956	-14.1487
+3	201.4516238	219.0506274	129.8492	156.3378	167.0899
-4	-24.0663576	-25.41465287	-17.8316	-21.9167	-21.7021
+4	186.956728	202.9255818	120.7905	145.4673	155.3132
-5	-35.21083329	-35.44738163	-25.6748	-31.3284	-31.6587
+5	173.842301	188.3362608	112.5945	135.6321	144.6581
-6	-49.25656373	-50.12183892	-34.7335	-42.1989	-43.4354
+6	159.347404	172.2112124	103.5358	124.7616	132.8813
-7	-62.37099879	-64.71116706	-42.9295	-52.0341	-54.0905
+7	146.2329752	157.6218928	95.33979	114.9265	122.2262
-8	-76.86589323	-80.83620057	-51.9882	-62.9046	-65.8673
+8	131.3929551	141.4968598	86.06539	103.7972	110.1691
-9	-89.98032251	-95.42553333	-60.1842	-72.7397	-76.5224
+9	118.2785373	126.9075383	77.8694	93.96198	99.51392
-10	-104.4752214	-111.5505706	-69.2429	-83.6102	-88.2991
+10	103.7836189	110.78249	68.81067	83.0915	87.7372
-11	-117.5896483	-126.1398932	-77.4389	-93.4454	-98.9543
+11	90.6692011	96.19316728	60.61468	73.25632	77.08206
-12	-132.0845434	-142.2649385	-86.4976	-104.316	-110.731
+12	76.17430496	80.06812112	51.55595	62.38584	65.30533
-13	-145.5440964	-156.8542664	-94.9093	-114.41	-121.667
+13	63.05986392	65.4788003	43.35997	52.55066	54.6502
-14	-160.0389936	-172.9792921	-103.968	-125.28	-133.443
+14	48.56496858	49.35375463	34.30124	41.68019	42.87347
-15	-173.1534111	-187.5686365	-112.164	-135.116	-144.098
+15	35.81360384	36.3270061	26.10526	31.84501	32.21833
-16	-187.6483059	-203.6936614	-121.223	-145.986	-155.875
+16	23.54766832	24.88646669	17.44261	21.44983	21.18337
-17	-200.7627453	-218.2829846	-129.419	-155.821	-166.53
+17	14.84610963	15.44016322	12.21719	13.45392	14.45008
-18	-215.2576419	-234.4080311	-138.477	-166.692	-178.307
+18	7.94730824	7.477399454	7.23489	8.018678	8.108766
-19	-228.372083	-248.9973511	-146.673	-176.527	-188.962
+19	3.029393417	2.844039569	3.10386	3.302318	3.101262
-20	-242.8669796	-265.1223982	-155.732	-187.397	-200.739
+20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1-Span: Moment (Max and Min) Raw Data Results - 200' Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-1.81E-12**	***-1.12E-12***	***-1.56E-12***	**-1.02E-12**	**-1.11E-12**	**-7.30E-13**	**-8.90E-13**	**-7.84E-13**	**-8.35E-13**	**-5.85E-13**
End Shear	**1.81E-12**	***1.03E-12***	***1.65E-12***	**9.37E-13**	**1.03E-12**	**7.23E-13**	**9.08E-13**	**8.73E-13**	**9.30E-13**	**4.77E-13**
-1	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**2576.365282**	***2156.672522***	***3094.244954***	**1158.310053**	**1242.589576**	**1168.647559**	**1406.374045**	**1410.57727**	**1492.372615**	**617.4511508**
-2	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**4874.621159**	***4085.253882***	***5832.968259***	**2191.557746**	**2350.49661**	**2210.304715**	**2659.322248**	**2657.570742**	**2811.538856**	**1167.359214**
-3	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**6892.846786**	***5785.744148***	***8263.092432***	**3099.743136**	**3323.749593**	**3125.50674**	**3758.884253**	**3741.739604**	**3958.335852**	**1649.724285**
-4	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**8631.682512**	***7258.143122***	***10290.77273***	**3882.98122**	**4162.859257**	**3913.889869**	**4704.51849**	**4662.853235**	**4932.457538**	**2064.546214**
-5	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**10091.128**	***8502.451113***	***11916.00894***	**4541.489284**	**4867.286365**	**4575.282637**	**5496.225046**	**5452.291281**	**5769.006819**	**2411.825009**
-6	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**11271.18368**	***9518.667926***	***13232.6458***	**5074.934948**	**5437.030899**	**5109.685056**	**6162.865267**	**6090.656532**	**6445.899785**	**2691.561053**
-7	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**12184.46075**	***10306.79334***	***14264.14492***	**5483.317957**	**5872.092621**	**5539.464508**	**6675.577636**	**6578.230344**	**6960.772981**	**2903.753698**
-8	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**12844.62635**	***10866.82804***	***14893.20021***	**5773.854383**	**6194.11785**	**5843.696636**	**7034.362138**	**6920.262601**	**7324.090504**	**3048.403537**
-9	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**13225.36351**	***11198.77119***	***15119.81092***	**5955.562163**	**6385.067743**	**6020.938469**	**7239.219102**	**7098.710999**	**7514.201595**	**3125.715915**
-10	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**13327.14318**	***11302.37464***	***14943.97788***	**6011.844656**	**6440.972168**	**6070.771478**	**7289.72983**	**7113.177939**	**7530.687721**	**3135.786203**
-11	**-1.07E-12**	***-8.35E-13***	***-9.60E-13***	**-6.85E-13**	**-6.85E-13**	**-5.48E-13**	**-5.48E-13**	**-5.21E-13**	**-5.48E-13**	**-6.30E-13**
+11	**13226.40867**	***11198.8344***	***15119.81059***	**5955.571556**	**6385.082168**	**6020.959622**	**7239.254071**	**7098.731153**	**7514.222234**	**3125.710633**
-12	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**12845.18336**	***10866.88481***	***14893.20023***	**5773.856842**	**6194.124817**	**5843.710684**	**7034.38845**	**6920.274405**	**7324.102306**	**3048.41376**
-13	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**12184.71846**	***10306.84276***	***14264.14533***	**5483.312991**	**5872.091568**	**5539.471203**	**6675.595093**	**6578.233697**	**6960.775834**	**2903.7625**
-14	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**11271.31468**	***9518.71043***	***13232.64573***	**5074.922492**	**5437.02182**	**5109.684668**	**6162.87403**	**6090.651512**	**6445.893769**	**2691.568597**
-15	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**10090.85764**	***8502.486666***	***11916.00887***	**4541.469802**	**4867.269698**	**4575.275119**	**5496.225367**	**5452.315938**	**5769.03199**	**2411.831309**
-16	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**8631.162526**	***7258.171368***	***10290.77261***	**3882.954378**	**4162.834705**	**3913.874696**	**4704.509375**	**4662.849295**	**4932.453603**	**2064.551422**
-17	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**6892.228105**	***5785.765472***	***8263.092094***	**3099.764918**	**3323.744588**	**3125.484298**	**3758.866407**	**3741.72729**	**3958.32304**	**1649.728194**
-18	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**4874.056261**	***4085.267735***	***5832.967407***	**2191.572054**	**2350.512018**	**2210.319107**	**2659.295595**	**2657.587272**	**2811.55636**	**1167.361675**
-19	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**2576.647377**	***2156.679682***	***3094.244779***	**1158.31731**	**1242.597389**	**1168.655104**	**1406.383246**	**1410.585852**	**1492.381701**	**617.4525552**
-20	**-2.29E-12**	***-1.56E-12***	***-2.44E-12***	**-1.25E-12**	**-1.35E-12**	**-9.23E-13**	**-1.02E-12**	**-1.12E-12**	**-1.18E-12**	**-6.98E-13**
+20	**1.14E-12**	***9.14E-13***	***1.09E-12***	**6.70E-13**	**6.70E-13**	**5.30E-13**	**5.46E-13**	**6.28E-13**	**6.61E-13**	**3.50E-13**

1-Span: Moment (Max and Min) Raw Data Results - 200’ Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-7.18E-13**	**-6.36E-13**	**-7.60E-13**	**-6.57E-13**	**-5.53E-13**	**-5.69E-13**	**-6.50E-13**	**-7.00E-13**	**-6.96E-13**
End Shear	**5.59E-13**	**7.38E-13**	**6.60E-13**	**6.71E-13**	**5.73E-13**	**5.84E-13**	**6.99E-13**	**6.98E-13**	**7.35E-13**
-1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+1	**881.2496635**	**1220.648997**	**1280.338744**	**1711.098444**	**707.7841652**	**954.7987018**	**1087.383088**	**1202.499181**	**1322.262273**
-2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+2	**1666.293447**	**2300.423476**	**2406.69999**	**3174.008139**	**1338.607705**	**1805.696164**	**2055.467284**	**2272.14636**	**2496.391058**
-3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+3	**2355.131417**	**3239.627092**	**3380.410891**	**4410.866192**	**1892.470713**	**2552.99585**	**2904.90388**	**3225.55672**	**3547.543449**
-4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+4	**2948.022572**	**4038.712213**	**4214.647975**	**5479.935356**	**2369.373118**	**3196.641093**	**3635.146434**	**4052.808293**	**4452.768786**
-5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+5	**3444.880043**	**4701.974545**	**4909.342812**	**6381.200491**	**2769.314862**	**3736.385144**	**4246.089997**	**4746.324304**	**5233.339705**
-6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+6	**3845.53168**	**5245.724604**	**5450.06023**	**7112.132897**	**3092.296017**	**4172.227963**	**4749.279895**	**5306.365089**	**5868.383556**
-7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+7	**4149.977212**	**5648.600105**	**5887.759685**	**7675.354225**	**3338.316367**	**4517.878608**	**5143.994165**	**5733.359521**	**6354.292101**
-8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+8	**4375.534228**	**5915.651909**	**6192.598875**	**8070.749195**	**3507.376418**	**4765.40031**	**5419.409556**	**6046.823281**	**6691.065512**
-9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+9	**4505.606863**	**6063.478769**	**6394.036277**	**8240.324114**	**3599.475921**	**4909.020863**	**5575.526068**	**6231.422061**	**6893.366459**
-10	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+10	**4539.068479**	**6070.11718**	**6441.087872**	**8161.180022**	**3613.948465**	**4948.384514**	**5611.847282**	**6281.942418**	**6960.791552**
-11	**-4.82E-13**	**-4.82E-13**	**-3.84E-13**	**-2.90E-13**	**-6.03E-13**	**-4.66E-13**	**-4.66E-13**	**-3.15E-13**	**-3.15E-13**
+11	**4505.617433**	**6063.498334**	**6394.051224**	**8240.315516**	**3599.515963**	**4909.036771**	**5575.549591**	**6231.435436**	**6893.370362**
-12	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+12	**4375.539471**	**5915.664254**	**6192.606342**	**8070.762073**	**3507.412181**	**4765.410409**	**5419.426455**	**6046.829284**	**6691.096876**
-13	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+13	**4149.977038**	**5648.616046**	**5887.767076**	**7675.35856**	**3338.347779**	**4517.882665**	**5144.004282**	**5733.358133**	**6354.315358**
-14	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+14	**3845.526048**	**5245.733022**	**5450.078814**	**7112.145985**	**3092.322592**	**4172.226212**	**4749.28335**	**5306.356167**	**5868.398695**
-15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15	**3444.868893**	**4701.975971**	**4909.354264**	**6381.213195**	**2769.337079**	**3736.377652**	**4246.086819**	**4746.344394**	**5233.346832**
-16	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+16	**2948.005796**	**4038.706385**	**4214.651757**	**5479.939708**	**2369.391198**	**3196.627273**	**3635.136383**	**4052.820672**	**4452.767766**
-17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+17	**2355.147828**	**3239.614025**	**3380.40693**	**4410.87701**	**1892.483983**	**2552.97607**	**2904.887299**	**3225.56193**	**3547.551002**
-18	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+18	**1666.304332**	**2300.437706**	**2406.714904**	**3174.01013**	**1338.616378**	**1805.707916**	**2055.48061**	**2272.143955**	**2496.390405**
-19	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+19	**881.2552432**	**1220.656382**	**1280.346308**	**1711.10687**	**707.78858**	**954.8048497**	**1087.38971**	**1202.489735**	**1322.253907**
-20	**-9.11E-13**	**-9.57E-13**	**-1.03E-12**	**-1.06E-12**	**-7.81E-13**	**-8.06E-13**	**-7.40E-13**	**-7.36E-13**	**-7.96E-13**
+20	**4.65E-13**	**5.23E-13**	**3.96E-13**	**4.39E-13**	**2.94E-13**	**4.51E-13**	**4.45E-13**	**4.52E-13**	**4.58E-13**

1-Span: Moment (Max and Min) Raw Data Results - 200' Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.86E-13	-1.03E-12	-8.79E-13	-8.30E-13	-9.37E-13
End Shear	1.07E-12	1.11E-12	8.62E-13	9.43E-13	8.97E-13
-1	0	0	0	0	0
+1	2290.609501	2497.649949	1471.039368	1770.434252	1895.217896
-2	0	0	0	0	0
+2	4307.107525	4689.397159	2769.531549	3334.47179	3567.003412
-3	0	0	0	0	0
+3	6075.907627	6629.673766	3896.072178	4692.675369	5015.693619
-4	0	0	0	0	0
+4	7595.973146	8298.798669	4863.703396	5869.704493	6278.88952
-5	0	0	0	0	0
+5	8839.512489	9748.637829	5690.707985	6852.618095	7330.610699
-6	0	0	0	0	0
+6	9882.727228	10891.33343	6346.329897	7628.475108	8197.972805
-7	0	0	0	0	0
+7	10681.54661	11802.96196	6845.779278	8211.943805	8841.016231
-8	0	0	0	0	0
+8	11260.15811	12415.70645	7188.857917	8614.393306	9274.257179
-9	0	0	0	0	0
+9	11616.54497	12778.01495	7359.389274	8809.521325	9512.832487
-10	0	0	0	0	0
+10	11699.56639	12926.58241	7356.758189	8797.15215	9526.690025
-11	-4.91E-13	-4.55E-13	-5.53E-13	-4.91E-13	-4.91E-13
+11	11616.5651	12776.56142	7359.411278	8809.510597	9512.847299
-12	0	0	0	0	0
+12	11260.16522	12415.70491	7188.871201	8614.407315	9274.260663
-13	0	0	0	0	0
+13	10681.57419	11803.97355	6845.783454	8211.947245	8841.042867
-14	0	0	0	0	0
+14	9882.740995	10891.33339	6346.325384	7628.503264	8197.988228
-15	0	0	0	0	0
+15	8839.512502	9748.6359	5690.734687	6852.636269	7330.615257
-16	0	0	0	0	0
+16	7595.959323	8298.794644	4863.720886	5869.711563	6278.899798
-17	0	0	0	0	0
+17	6075.91471	6629.670581	3896.058825	4692.671748	5015.692831
-18	0	0	0	0	0
+18	4307.100664	4689.712106	2769.549229	3334.457761	3566.991167
-19	0	0	0	0	0
+19	2290.623143	2497.652325	1471.048267	1770.445129	1895.229264
-20	-1.41E-12	-1.55E-12	-1.19E-12	-1.24E-12	-1.26E-12
+20	4.86E-13	7.45E-13	7.90E-13	7.96E-13	7.14E-13

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
End Shear	**68.64**	***48.242***	***67.008***	***70.44***	***100.51***	***38.74***	***52.26***	***59.54***	***65.865***	***72.475***
-1	**-1.52**	***-1.3162***	***-1.31655***	***-1.04739***	***-0.83353***	***-1.04257***	***-1.33044***	***-1.33053***	***-1.32876***	***-1.32705***
+1	**64.9781**	***45.69612***	***63.29526***	***66.39039***	***92.53869***	***36.70128***	***49.50991***	***56.38492***	***62.33087***	***68.53688***
-2	**-4.14694**	***-3.23064***	***-3.16073***	***-2.51451***	***-2.0919***	***-2.7307***	***-3.64767***	***-3.84879***	***-3.84678***	***-3.84485***
+2	**61.2299**	***43.07708***	***59.46019***	***62.19863***	***84.30549***	***34.60616***	***46.68139***	***53.13721***	***58.69016***	***64.47694***
-3	**-7.23833**	***-5.60024***	***-5.0872***	***-4.59727***	***-3.89282***	***-4.62628***	***-6.20681***	***-6.6645***	***-6.64356***	***-6.64129***
+3	**57.81378**	***40.70748***	***55.99038***	***58.40608***	***76.95139***	***32.71058***	***44.12224***	***50.19882***	***55.39618***	***60.80366***
-4	**-11.0106**	***-8.21927***	***-8.46106***	***-7.25333***	***-6.25496***	***-6.72139***	***-9.03534***	***-9.9122***	***-10.2344***	***-10.4415***
+4	**54.03806**	***38.08845***	***52.15532***	***54.21431***	***68.7784***	***30.61547***	***41.29372***	***46.95111***	***51.75547***	***56.74372***
-5	**-14.4236**	***-10.5889***	***-11.8876***	***-10.477***	***-9.10138***	***-8.61698***	***-11.5945***	***-12.8506***	***-13.5284***	***-14.1147***
+5	**50.62194**	***35.71885***	***48.68551***	***50.42177***	***61.61431***	***28.71988***	***38.73457***	***44.01272***	***48.46149***	***53.07043***
-6	**-18.1959**	***-13.2079***	***-15.7226***	***-14.3929***	***-12.6185***	***-10.7121***	***-14.423***	***-16.0983***	***-17.1691***	***-18.1747***
+6	**46.84622**	***33.09981***	***44.85044***	***46.23***	***53.8011***	***26.62477***	***35.90604***	***40.76502***	***44.82078***	***49.01049***
-7	**-21.6089**	***-15.5775***	***-19.1924***	***-18.1855***	***-16.0817***	***-12.6077***	***-16.9822***	***-19.0367***	***-20.4631***	***-21.848***
+7	**43.4301**	***30.73021***	***41.38063***	***42.43745***	***47.19568***	***24.72919***	***33.3469***	***37.82662***	***41.5268***	***45.33721***
-8	**-25.3812**	***-18.1965***	***-23.0275***	***-22.3773***	***-20.0146***	***-14.7028***	***-19.8107***	***-22.2844***	***-24.1038***	***-25.9079***
+8	**39.65439**	***28.11118***	***37.49105***	***38.14588***	***40.22974***	***22.63407***	***30.51837***	***34.57892***	***37.88608***	***41.27727***
-9	**-28.7942**	***-20.5661***	***-26.4973***	***-26.1698***	***-24.0215***	***-16.5984***	***-22.3698***	***-25.2228***	***-27.3977***	***-29.5812***
+9	**36.23827**	***25.74157***	***33.98444***	***34.35334***	***34.71171***	***20.73849***	***27.95923***	***31.58345***	***34.50542***	***37.50732***
-10	**-32.5665**	***-23.1852***	***-30.3324***	***-30.3616***	***-29.2653***	***-18.6935***	***-25.1984***	***-28.4705***	***-31.0385***	***-33.6411***
+10	**32.41265**	***23.06018***	***30.14938***	***30.16157***	***29.01277***	***18.59349***	***25.06336***	***28.31549***	***30.86471***	***33.44738***
-11	**-35.9796**	***-25.597***	***-33.8022***	***-34.1541***	***-34.4249***	***-20.639***	***-27.8248***	***-31.4089***	***-34.3324***	***-37.3144***
+11	**28.99653**	***20.69058***	***26.67956***	***26.36902***	***24.26844***	***16.69791***	***22.50421***	***25.3771***	***27.57073***	***29.77409***
-12	**-39.7518**	***-28.2362***	***-37.6741***	***-38.3459***	***-40.5447***	***-22.7341***	***-30.6534***	***-34.7339***	***-38.0598***	***-41.471***
+12	**25.22082**	***18.07154***	***22.84451***	***22.17726***	***19.8246***	***14.60279***	***19.67569***	***22.1294***	***23.93002***	***25.71415***
-13	**-43.2547**	***-30.6058***	***-41.1984***	***-42.2382***	***-46.854***	***-24.6297***	***-33.2125***	***-37.6723***	***-41.3538***	***-45.1443***
+13	**21.77645**	***15.70194***	***19.37469***	***18.38471***	***16.26631***	***12.70721***	***17.11654***	***19.191***	***20.63604***	***22.04087***
-14	**-47.027**	***-33.2248***	***-45.0334***	***-46.43***	***-54.1711***	***-26.7248***	***-36.041***	***-40.92***	***-44.9945***	***-49.2042***
+14	**18.00416**	***13.08291***	***15.53963***	***14.19294***	***12.43845***	***10.61209***	***14.28801***	***15.94329***	***16.99533***	***17.98093***
-15	**-50.44**	***-35.5944***	***-48.5033***	***-50.2226***	***-61.2402***	***-28.6203***	***-38.6002***	***-43.8584***	***-48.2885***	***-52.8775***
+15	**14.59114**	***10.71331***	***12.06981***	***10.64634***	***9.253504***	***8.716511***	***11.72887***	***13.0049***	***13.70135***	***14.30764***
-16	**-54.2123**	***-38.2135***	***-52.3383***	***-54.4143***	***-69.1584***	***-30.7155***	***-41.4287***	***-47.1061***	***-51.9292***	***-56.9375***
+16	**10.81886**	***8.094272***	***8.298059***	***7.083334***	***6.107457***	***6.621397***	***8.900343***	***9.757196***	***10.06063***	***10.2477***
-17	**-57.6253**	***-40.5831***	***-55.8081***	***-58.2069***	***-76.5673***	***-32.611***	***-43.9879***	***-50.0445***	***-55.2232***	***-60.6108***
+17	**7.405838**	***5.72467***	***5.212182***	***4.706844***	***3.990078***	***4.725815***	***6.341197***	***6.818799***	***6.796633***	***6.794372***
-18	**-61.3976**	***-43.2021***	***-59.6432***	***-62.3986***	***-84.6955***	***-34.7062***	***-46.8164***	***-53.2922***	***-58.8639***	***-64.6707***
+18	**3.976489**	***3.105636***	***3.072727***	***2.44451***	***2.029401***	***2.630698***	***3.512669***	***3.723789***	***3.721782***	***3.719848***
-19	**-64.8106**	***-45.5717***	***-63.113***	***-66.1912***	***-92.1446***	***-36.6017***	***-49.3755***	***-56.2306***	***-62.1579***	***-68.344***
+19	**1.59657**	***1.4038***	***1.404184***	***1.117118***	***0.890872***	***1.097314***	***1.434966***	***1.435056***	***1.433293***	***1.431589***
-20	**-68.5829**	***-48.1907***	***-66.9481***	***-70.3829***	***-100.483***	***-38.6969***	***-52.2041***	***-59.4783***	***-65.7986***	***-72.4039***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	0	0	0	0	0	0	0	0
End Shear	68.64	63.375	68	63.96	77	77.455	81.95	33.79479
-1	-1.52	-1.8695	-1.8695	-1.59914	-1.64349	-1.42127	-1.49607	-1.09168
+1	64.9781	60.06275	64.43296	60.59878	72.9258	73.14375	77.38515	32.01717
-2	-4.14694	-4.85995	-4.9838	-4.54493	-4.98174	-3.62266	-3.82624	-2.29827
+2	61.2299	56.65815	60.76646	57.1417	68.73539	68.69047	72.66991	30.17843
-3	-7.23833	-7.94031	-8.3011	-7.67277	-8.77306	-5.85055	-6.19633	-3.91078
+3	57.81378	53.57779	57.44916	54.01385	64.94406	64.66131	68.40374	28.51481
-4	-11.0106	-11.3449	-11.9676	-11.1299	-12.9635	-9.46859	-9.96694	-5.74952
+4	54.03806	50.17319	53.78267	50.55676	60.75365	60.20804	63.68851	26.67607
-5	-14.4236	-14.4253	-15.2849	-14.2577	-16.7548	-13.449	-14.179	-7.41314
+5	50.62194	47.09284	50.46536	47.42892	56.96233	56.17888	59.42234	25.01245
-6	-18.1959	-17.8299	-18.9514	-17.7148	-20.9452	-17.9023	-18.8942	-9.25188
+6	46.84622	43.68824	46.79887	43.97183	52.77192	51.7256	54.7071	23.1737
-7	-21.6089	-20.9102	-22.2687	-20.8426	-24.7365	-21.9315	-23.1604	-10.9155
+7	43.4301	40.60788	43.48157	40.84399	48.98059	47.69644	50.44094	21.51008
-8	-25.3812	-24.3148	-25.9352	-24.2997	-28.9269	-26.3848	-27.8756	-12.7542
+8	39.65439	37.20328	39.81507	37.3869	44.79018	43.18431	45.66375	19.67134
-9	-28.7942	-27.3952	-29.2525	-27.4276	-32.7183	-30.4139	-32.1418	-14.4179
+9	36.23827	34.12293	36.49777	34.25906	40.99886	39.10797	41.34726	18.00772
-10	-32.5665	-30.7998	-32.919	-30.8847	-36.9087	-34.8672	-36.857	-16.2566
+10	32.41265	30.63727	32.74398	30.71966	36.70868	34.65469	36.63203	16.16898
-11	-35.9796	-33.9612	-36.3236	-34.0948	-40.7998	-38.8963	-41.1232	-17.9202
+11	28.99653	27.55691	29.42668	27.59182	32.91735	30.62553	32.36586	14.50536
-12	-39.7518	-37.3658	-39.9901	-37.5519	-44.9902	-43.3968	-45.8887	-19.759
+12	25.22082	24.15232	25.76019	24.13473	28.72694	26.17225	27.65062	12.66662
-13	-43.2547	-40.4461	-43.3074	-40.6797	-48.7815	-47.4848	-50.2169	-21.4226
+13	21.77645	21.07196	22.44288	21.00688	24.93561	22.14309	23.38445	11.00299
-14	-47.027	-43.8507	-46.9739	-44.1368	-52.9719	-51.9381	-54.9321	-23.2613
+14	18.00416	17.66736	18.77639	17.54979	20.7452	17.68982	18.66922	9.164255
-15	-50.44	-46.9311	-50.2912	-47.2647	-56.7632	-55.9673	-59.1983	-24.925
+15	14.59114	14.58701	15.45909	14.42195	16.95388	13.66066	14.40305	7.500631
-16	-54.2123	-50.3357	-53.9577	-50.7218	-60.9537	-60.4205	-63.9135	-26.7637
+16	10.81886	11.18241	11.79259	10.96486	12.76347	9.278596	9.766943	5.661891
-17	-57.6253	-53.416	-57.275	-53.8496	-64.745	-64.4497	-68.1797	-28.4273
+17	7.405838	8.102054	8.475289	7.837018	8.972144	5.967569	6.320818	3.99827
-18	-61.3976	-56.8206	-60.9415	-57.3067	-68.9354	-68.903	-72.8949	-30.2661
+18	3.976489	4.697454	4.808797	4.379929	4.781732	3.505168	3.701242	2.240768
-19	-64.8106	-59.901	-64.2588	-60.4345	-72.7267	-72.9321	-77.1611	-31.9297
+19	1.59657	1.993923	1.993923	1.733528	1.792809	1.51588	1.595663	1.149091
-20	-68.5829	-63.3056	-67.9253	-63.8916	-76.9171	-77.3854	-81.8763	-33.7684
+20	0.00E+00	0	0	0	0	0	0	0

1-Span: Shear (Max and Min) Raw Data Results - 200' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*	*Force Y (kips)*
-0	**0**	***0***	***0***	***0***	***0***	***0***
End Shear	**68.64**	***140.5833***	***153.3962***	***90.15***	***108.48***	***116.2***
-1	**-1.52**	***-1.6027***	***-1.53072***	***-1.68314***	***-1.79045***	***-1.64428***
+1	**64.9781**	***132.4818***	***144.4563***	***85.08036***	***102.3964***	***109.6135***
-2	**-4.14694**	***-4.74648***	***-4.51619***	***-4.32194***	***-4.78776***	***-4.86486***
+2	**61.2299**	***124.0984***	***135.1301***	***79.84107***	***96.10929***	***102.8022***
-3	**-7.23833**	***-8.33752***	***-8.66303***	***-6.92911***	***-7.63194***	***-8.18318***
+3	**57.81378**	***116.5134***	***126.6921***	***75.10076***	***90.42092***	***96.63963***
-4	**-11.0106**	***-13.9192***	***-14.699***	***-10.3133***	***-12.6759***	***-12.5518***
+4	**54.03806**	***108.13***	***117.3659***	***69.86148***	***84.13377***	***89.82834***
-5	**-14.4236**	***-20.3649***	***-20.5017***	***-14.8495***	***-18.1194***	***-18.3104***
+5	**50.62194**	***100.545***	***108.9279***	***65.12117***	***78.44541***	***83.66574***
-6	**-18.1959**	***-28.4885***	***-28.9889***	***-20.0888***	***-24.4065***	***-25.1217***
+6	**46.84622**	***92.1616***	***99.60163***	***59.88189***	***72.15827***	***76.85444***
-7	**-21.6089**	***-36.0735***	***-37.4269***	***-24.8291***	***-30.0949***	***-31.2843***
+7	**43.4301**	***84.57662***	***91.16362***	***55.14158***	***66.4699***	***70.69184***
-8	**-25.3812**	***-44.4568***	***-46.7532***	***-30.0684***	***-36.382***	***-38.0956***
+8	**39.65439**	***75.99361***	***81.8374***	***49.77755***	***60.03306***	***63.71837***
-9	**-28.7942**	***-52.0418***	***-55.1912***	***-34.8087***	***-42.0704***	***-44.2582***
+9	**36.23827**	***68.40864***	***73.39939***	***45.03724***	***54.34469***	***57.55577***
-10	**-32.5665**	***-60.4252***	***-64.5174***	***-40.048***	***-48.3576***	***-51.0695***
+10	**32.41265**	***60.02523***	***64.07316***	***39.79796***	***48.05755***	***50.74448***
-11	**-35.9796**	***-68.0102***	***-72.9554***	***-44.7883***	***-54.0459***	***-57.2321***
+11	**28.99653**	***52.44026***	***55.63515***	***35.05765***	***42.36918***	***44.58187***
-12	**-39.7518**	***-76.3936***	***-82.2816***	***-50.0276***	***-60.3331***	***-64.0434***
+12	**25.22082**	***44.05686***	***46.30892***	***29.81837***	***36.08204***	***37.77058***
-13	**-43.2547**	***-84.1782***	***-90.7196***	***-54.8926***	***-66.1711***	***-70.3681***
+13	**21.77645**	***36.47187***	***37.87091***	***25.07806***	***30.39368***	***31.60798***
-14	**-47.027**	***-92.5616***	***-100.046***	***-60.1319***	***-72.4583***	***-77.1794***
+14	**18.00416**	***28.08847***	***28.54468***	***19.83877***	***24.10653***	***24.79669***
-15	**-50.44**	***-100.147***	***-108.484***	***-64.8722***	***-78.1466***	***-83.342***
+15	**14.59114**	***20.71348***	***21.01041***	***15.09847***	***18.41817***	***18.63408***
-16	**-54.2123**	***-108.53***	***-117.81***	***-70.1115***	***-84.4338***	***-90.1533***
+16	**10.81886**	***13.61924***	***14.39356***	***10.08826***	***12.40592***	***12.25181***
-17	**-57.6253**	***-116.115***	***-126.248***	***-74.8518***	***-90.1221***	***-96.3159***
+17	**7.405838**	***8.58653***	***8.930112***	***7.066045***	***7.781328***	***8.357478***
-18	**-61.3976**	***-124.498***	***-135.574***	***-80.0911***	***-96.4093***	***-103.127***
+18	**3.976489**	***4.596477***	***4.324696***	***4.184436***	***4.637755***	***4.689859***
-19	**-64.8106**	***-132.083***	***-144.012***	***-84.8314***	***-102.098***	***-109.29***
+19	**1.59657**	***1.752107***	***1.644904***	***1.795176***	***1.909958***	***1.793674***
-20	**-68.5829**	***-140.467***	***-153.339***	***-90.0707***	***-108.385***	***-116.101***
+20	**0.00E+00**	***0***	***0***	***0***	***0***	***0***

1-Span: Moment (Max and Min) Raw Data Results - 200’ Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-6.96E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	6.83E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+1	649.781	456.9612	632.9526	663.9039	934.4119	367.0128	495.0991	563.8492	623.5412	685.6429
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1228.194	864.0360	1192.8564	1247.9647	1735.1663	694.1186	936.3216	1065.8373	1178.1936	1294.4729
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1734.413	1221.2245	1679.8689	1752.8706	2413.7419	981.3175	1323.8247	1506.3022	1672.5728	1839.5351
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+4	2168.714	1528.6609	2094.2246	2185.4540	3000.3502	1228.6093	1657.5790	1884.9606	2101.5340	2308.9286
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2531.097	1786.3003	2438.1512	2545.6794	3494.9834	1435.9942	1937.4566	2201.7578	2461.1482	2713.6841
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2821.561	1994.0532	2720.1061	2826.0618	3896.3303	1603.4721	2163.4576	2462.6808	2751.5505	3042.9783
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+7	3045.526	2151.9197	2929.0122	3053.0255	4205.7502	1731.0430	2342.6905	2667.3550	2972.9632	3294.9402
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+8	3208.862	2268.8796	3067.4887	3211.0961	4423.1834	1818.7070	2471.0398	2810.1683	3135.5060	3469.5699
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+9	3300.264	2336.3271	3144.1425	3315.5490	4518.5580	1866.4641	2545.5125	2891.1206	3231.2274	3574.4706
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+10	3319.933	2353.6782	3147.5847	3339.9470	4480.0000	1873.9686	2565.9240	2909.9545	3257.4241	3609.4330
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+11	3300.713	2336.3326	3144.1526	3315.5568	4518.5536	1866.4848	2545.5208	2891.1328	3231.2343	3574.4726
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+12	3209.101	2268.8823	3067.4951	3211.1000	4423.1901	1818.7255	2471.0451	2810.1771	3135.5091	3469.5861
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+13	3045.636	2151.9196	2929.0205	3053.0293	4205.7524	1731.0593	2342.6926	2667.3603	2972.9625	3294.9522
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2821.618	1994.0503	2720.1105	2826.0715	3896.3370	1603.4859	2163.4567	2462.6826	2751.5458	3042.9861
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2530.981	1786.2945	2438.1519	2545.6854	3494.9900	1436.0057	1937.4528	2201.7562	2461.1586	2713.6878
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+16	2168.491	1528.6522	2094.2216	2185.4559	3000.3525	1228.6187	1657.5718	1884.9553	2101.5404	2308.9281
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1734.147	1221.2330	1679.8621	1752.8685	2413.7475	981.3243	1323.8144	1506.2936	1672.5755	1839.5390
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1227.951	864.0417	1192.8637	1247.9725	1735.1673	694.1231	936.3277	1065.8442	1178.1924	1294.4726
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+19	649.9022	456.9641	632.9564	663.9079	934.4163	367.0151	495.1023	563.8526	623.5363	685.6385
-20	-8.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.45E-13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1-Span: Moment (Max and Min) Raw Data Results - 200' Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	**-6.96E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
End Shear	**6.83E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
-1	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+1	**649.781**	**600.6275**	**644.3296**	**605.9878**	**729.2580**	**731.4375**	**773.8515**	**320.1717**
-2	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+2	**1228.194**	**1136.4054**	**1218.8212**	**1146.1264**	**1378.9589**	**1378.0507**	**1457.8890**	**605.3198**
-3	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+3	**1734.413**	**1607.3337**	**1723.4895**	**1620.6931**	**1949.1233**	**1940.2331**	**2052.5465**	**855.4443**
-4	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+4	**2168.714**	**2013.4722**	**2158.5996**	**2029.4995**	**2439.4703**	**2417.8653**	**2557.6653**	**1070.5451**
-5	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+5	**2531.097**	**2354.9335**	**2523.8716**	**2372.4566**	**2850.0000**	**2827.2187**	**2991.4477**	**1250.6223**
-6	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+6	**2821.561**	**2631.5452**	**2819.3056**	**2649.5645**	**3195.6781**	**3158.2352**	**3342.4422**	**1395.6759**
-7	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+7	**3045.526**	**2843.3072**	**3044.9015**	**2872.4213**	**3461.5388**	**3411.0606**	**3609.4234**	**1505.7058**
-8	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+8	**3208.862**	**2993.9613**	**3211.8838**	**3030.1772**	**3647.5821**	**3588.4172**	**3797.8172**	**1580.7122**
-9	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+9	**3300.264**	**3088.1836**	**3310.8985**	**3122.0837**	**3753.8082**	**3680.9494**	**3896.3970**	**1620.8016**
-10	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+10	**3319.933**	**3117.3682**	**3339.8870**	**3147.9240**	**3779.9999**	**3688.4511**	**3904.9457**	**1626.0234**
-11	**-4.55E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+11	**3300.713**	**3088.1885**	**3310.9060**	**3122.0947**	**3753.8263**	**3680.9599**	**3896.4077**	**1620.7989**
-12	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+12	**3209.101**	**2993.9626**	**3211.8874**	**3030.1844**	**3647.5958**	**3588.4233**	**3797.8233**	**1580.7175**
-13	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+13	**3045.636**	**2843.3046**	**3044.9010**	**2872.4248**	**3461.5479**	**3411.0623**	**3609.4249**	**1505.7104**
-14	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+14	**2821.618**	**2631.5388**	**2819.3009**	**2649.5643**	**3195.6827**	**3158.2326**	**3342.4391**	**1395.6799**
-15	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+15	**2530.981**	**2354.9234**	**2523.8629**	**2372.4527**	**2850.0002**	**2827.2315**	**2991.4607**	**1250.6255**
-16	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+16	**2168.491**	**2013.4583**	**2158.5868**	**2029.4917**	**2439.4656**	**2417.8633**	**2557.6633**	**1070.5478**
-17	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+17	**1734.147**	**1607.3450**	**1723.4870**	**1620.6815**	**1949.1140**	**1940.2268**	**2052.5398**	**855.4463**
-18	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+18	**1227.951**	**1136.4128**	**1218.8292**	**1146.1338**	**1378.9451**	**1378.0593**	**1457.8980**	**605.3211**
-19	**0**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+19	**649.9022**	**600.6312**	**644.3336**	**605.9918**	**729.2628**	**731.4420**	**773.8562**	**320.1724**
-20	**-8.00E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
+20	**4.45E-13**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1-Span: Moment (Max and Min) Raw Data Results - 200' Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-6.96E-13	0.0000	0.0000	0.0000	0.0000	0.0000
End Shear	6.83E-13	0.0000	0.0000	0.0000	0.0000	0.0000
-1	0	0.0000	0.0000	0.0000	0.0000	0.0000
+1	649.781	1324.8175	1444.5633	850.8036	1023.9643	1096.1353
-2	0	0.0000	0.0000	0.0000	0.0000	0.0000
+2	1228.194	2491.0975	2712.2019	1601.8112	1928.5551	2063.0442
-3	0	0.0000	0.0000	0.0000	0.0000	0.0000
+3	1734.413	3514.1166	3834.3978	2253.3674	2714.0980	2900.9217
-4	0	0.0000	0.0000	0.0000	0.0000	0.0000
+4	2168.714	4393.2754	4799.7679	2813.0153	3394.8551	3631.5150
-5	0	0.0000	0.0000	0.0000	0.0000	0.0000
+5	2531.097	5112.5000	5638.3099	3291.3291	3963.3419	4239.7980
-6	0	0.0000	0.0000	0.0000	0.0000	0.0000
+6	2821.561	5715.8631	6299.2096	3670.5205	4412.0735	4741.4533
-7	0	0.0000	0.0000	0.0000	0.0000	0.0000
+7	3045.526	6177.8754	6826.4673	3959.3865	4749.5337	5113.3697
-8	0	0.0000	0.0000	0.0000	0.0000	0.0000
+8	3208.862	6512.5264	7180.8597	4157.8126	4982.2980	5363.9428
-9	0	0.0000	0.0000	0.0000	0.0000	0.0000
+9	3300.264	6718.6495	7390.4077	4256.4426	5095.1540	5501.9274
-10	0	0.0000	0.0000	0.0000	0.0000	0.0000
+10	3319.933	6766.6665	7476.3345	4254.9209	5088.0001	5509.9422
-11	-4.55E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+11	3300.713	6718.6611	7389.5670	4256.4553	5095.1478	5501.9360
-12	0	0.0000	0.0000	0.0000	0.0000	0.0000
+12	3209.101	6512.5305	7180.8588	4157.8202	4982.3061	5363.9449
-13	0	0.0000	0.0000	0.0000	0.0000	0.0000
+13	3045.636	6177.8914	6827.0524	3959.3889	4749.5357	5113.3851
-14	0	0.0000	0.0000	0.0000	0.0000	0.0000
+14	2821.618	5715.8710	6299.2096	3670.5179	4412.0898	4741.4622
-15	0	0.0000	0.0000	0.0000	0.0000	0.0000
+15	2530.981	5112.5000	5638.3088	3291.3445	3963.3524	4239.8006
-16	0	0.0000	0.0000	0.0000	0.0000	0.0000
+16	2168.491	4393.2674	4799.7656	2813.0254	3394.8592	3631.5210
-17	0	0.0000	0.0000	0.0000	0.0000	0.0000
+17	1734.147	3514.1207	3834.3959	2253.3596	2714.0959	2900.9212
-18	0	0.0000	0.0000	0.0000	0.0000	0.0000
+18	1227.951	2491.0935	2712.3841	1601.8214	1928.5470	2063.0371
-19	0	0.0000	0.0000	0.0000	0.0000	0.0000
+19	649.9022	1324.8254	1444.5647	850.8087	1023.9706	1096.1419
-20	-8.00E-13	0.0000	0.0000	0.0000	0.0000	0.0000
+20	4.45E-13	0.0000	0.0000	0.0000	0.0000	0.0000

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-5.645728054	-6.388584111	-5.076704358	-4.948386308	-4.948386308	-3.95488203	-3.963297293	-3.75953015	-3.957400158	-3.112517163
End Shear	79.94395258	96.21009406	71.94955722	75.18966008	75.18966008	63.86887217	65.46193394	57.14414166	60.15172806	44.3555
-0.05	-5.645728054	-6.388584111	-5.076704358	-4.948386308	-4.948386308	-3.95488203	-3.963297293	-3.75953015	-3.957400158	-3.112517163
+0.05	75.74765114	89.0169127	67.52228085	69.70671547	69.70671547	58.54177339	59.65381989	53.21025109	56.01079062	42.02059145
-0.1	-11.35877058	-6.472067428	-10.74380807	-7.171725726	-7.918016827	-5.428333844	-7.345637763	-5.337061149	-5.710245387	-4.428533716
+0.1	66.8862582	75.50428556	59.67651687	59.30462242	59.30462242	48.14786008	48.63725913	44.9756534	47.34279305	37.15489374
-0.15	-11.35877058	-6.472067428	-10.74380807	-7.171725726	-7.918016827	-5.428333844	-7.345637763	-5.337061149	-5.710245387	-4.428533716
+0.15	66.8862582	75.50428556	59.67651687	59.30462242	59.30462242	48.14786008	48.63725913	44.9756534	47.34279305	37.15489374
-0.2	-18.43786489	-12.62445215	-17.12390387	-11.1319872	-11.83799004	-8.208674357	-11.99456863	-8.452927985	-8.968571591	-9.243755887
+0.2	57.61411463	61.18558206	51.38873295	48.85938107	48.85938107	39.11646873	39.11646873	36.31366113	38.22490645	32.18374324
-0.25	-18.43786489	-12.62445215	-17.12390387	-11.1319872	-11.83799004	-8.208674357	-11.99456863	-8.452927985	-8.968571591	-9.243755887
+0.25	57.61411463	61.18558206	51.38873295	48.85938107	48.85938107	39.11646873	39.11646873	36.31366113	38.22490645	32.18374324
-0.3	-25.95968331	-19.47232992	-23.90098968	-16.49732311	-17.15355214	-13.44830561	-16.02449344	-12.56002263	-13.28969042	-14.30042848
+0.3	48.18512674	47.57873551	42.97720222	38.38453361	38.38453361	30.64299446	30.68113527	29.21742543	30.75518467	27.05528551
-0.35	-25.95968331	-19.47232992	-23.90098968	-16.49732311	-17.15355214	-13.44830561	-16.02449344	-12.56002263	-13.28969042	-14.30042848
+0.35	48.18512674	47.57873551	42.97720222	38.38453361	38.38453361	30.64299446	30.68113527	29.21742543	30.75518467	27.05528551
-0.4	-34.88123986	-27.12401746	-31.07810034	-22.85379898	-23.39328533	-18.49472328	-19.79685438	-16.61866436	-17.55166024	-19.4533059
+0.4	38.84949756	35.49056519	34.66030552	28.7963603	28.7963603	22.9701035	23.00505176	21.88639958	23.03831534	21.91475488
-0.45	-34.88123986	-27.12401746	-31.07810034	-22.85379898	-23.39328533	-18.49472328	-19.79685438	-16.61866436	-17.55166024	-19.4533059
+0.45	38.84949756	35.49056519	34.66030552	28.7963603	28.7963603	22.9701035	23.00505176	21.88639958	23.03831534	21.91475488
-0.5	-43.49274625	-39.00204601	-38.7508846	-30.90848438	-31.09569261	-25.09544194	-25.94640515	-24.70762878	-25.29284907	-24.55714909
+0.5	29.85372017	24.61285643	26.72735355	20.02441527	20.02441527	16.00935997	16.00935997	15.2185556	16.01953221	16.90738794
-0.55	-43.49274625	-39.00204601	-38.7508846	-30.90848438	-31.09569261	-25.09544194	-25.94640515	-24.70762878	-25.29284907	-24.55714909
+0.55	29.85372017	24.61285643	26.72735355	20.02441527	20.02441527	16.00935997	16.00935997	15.2185556	16.01953221	16.90738794
-0.6	-52.47785554	-52.25114746	-46.78073722	-42.03607697	-42.26397547	-33.7156421	-33.74279795	-32.0261186	-33.71170379	-29.46671308
+0.6	21.44056427	16.66940312	19.29650783	13.49397818	13.49397818	10.8086878	10.8086878	10.19000453	10.72632056	12.17844346
-0.65	-52.47785554	-52.25114746	-46.78073722	-42.03607697	-42.26397547	-33.7156421	-33.74279795	-32.0261186	-33.71170379	-29.46671308
+0.65	21.44056427	16.66940312	19.29650783	13.49397818	13.49397818	10.8086878	10.8086878	10.19000453	10.72632056	12.17844346
-0.7	-61.00076942	-65.53095179	-54.41774004	-52.9781042	-53.06815208	-43.06756302	-43.5682326	-39.94174336	-42.04394038	-34.03675234
+0.7	13.8490941	10.80388516	12.41094783	8.699742629	8.699742629	6.931852418	6.948341333	6.631336426	6.980354133	7.873147332
-0.75	-61.00076942	-65.53095179	-54.41774004	-52.9781042	-53.06815208	-43.06756302	-43.5682326	-39.94174336	-42.04394038	-34.03675234
+0.75	13.8490941	10.80388516	12.41094783	8.699742629	8.699742629	6.931852418	6.948341333	6.631336426	6.980354133	7.873147332
-0.8	-68.80311716	-78.46737229	-61.43615774	-62.64891364	-62.65258537	-51.63357799	-52.38880202	-47.53809328	-50.04009819	-38.12202784
+0.8	7.314663348	5.233510867	6.494997209	4.649183166	4.649183166	3.693158464	3.706821686	3.533834963	3.719826277	4.136759904
-0.85	-68.80311716	-78.46737229	-61.43615774	-62.64891364	-62.65258537	-51.63357799	-52.38880202	-47.53809328	-50.04009819	-38.12202784
+0.85	7.314663348	5.233510867	6.494997209	4.649183166	4.649183166	3.693158464	3.706821686	3.533834963	3.719826277	4.136759904
-0.9	-75.62281614	-90.6826075	-67.60692063	-72.1090155	-72.1090155	-59.24736526	-61.36413495	-54.5781385	-57.4506721	-41.57729225
+0.9	2.068909762	0.914200092	1.833743079	1.328831571	1.328831571	1.059658828	1.069400769	1.009911994	1.063065257	1.114514596
-0.95	-75.62281614	-90.6826075	-67.60692063	-72.1090155	-72.1090155	-59.24736526	-61.36413495	-54.5781385	-57.4506721	-41.57729225
+0.95	2.068909762	0.914200092	1.833743079	1.328831571	1.328831571	1.059658828	1.069400769	1.009911994	1.063065257	1.114514596
-1	-81.19407266	-101.7951612	-72.74020644	-80.0104902	-80.0104902	-68.74808039	-72.31627779	-60.82486089	-64.02616936	-44.25730638
+1	8.84E-02	6.64E-02	7.79E-02	5.52E-02	5.52E-02	4.51E-02	4.51E-02	4.30E-02	4.52E-02	5.18E-02
(Span 2) -2	-8.84E-02	-6.78E-02	-7.87E-02	-5.60E-02	-5.60E-02	-4.48E-02	-4.48E-02	-4.29E-02	-4.52E-02	-5.20E-02
+2	7.86E+01	9.63E+01	70.39067473	76.26696816	76.26696816	64.0268127	67.00295498	57.78927402	60.83081476	43.01751086
-2.05	-8.84E-02	-6.78E-02	-7.87E-02	-5.60E-02	-5.60E-02	-4.48E-02	-4.48E-02	-4.29E-02	-4.52E-02	-5.20E-02
+2.05	7.86E+01	9.63E+01	70.39067473	76.26696816	76.26696816	64.0268127	67.00295498	57.78927402	60.83081476	43.01751086
-2.1	-4.516369719	-3.33184089	-4.031483748	-2.891385113	-2.891385113	-2.309097751	-2.309097751	-2.197452686	-2.31310809	-2.533063623
+2.1	72.35232441	84.5737253	64.61400435	67.56475157	67.56475157	55.51571088	56.33347413	51.11322684	53.80339667	39.93021343
-2.15	-4.516369719	-3.33184089	-4.031483748	-2.891385113	-2.891385113	-2.309097751	-2.309097751	-2.197452686	-2.31310809	-2.533063623
+2.15	72.35232441	84.5737253	64.61400435	67.56475157	67.56475157	55.51571088	56.33347413	51.11322684	53.80339667	39.93021343
-2.2	-10.43518659	-7.835431356	-9.293846517	-6.617234662	-6.617234662	-5.264742836	-5.279893557	-5.029603818	-5.294319809	-5.932045004
+2.2	65.00830521	71.94234141	57.98589845	57.79148623	57.83073525	47.40367289	48.05251383	43.7633434	46.06667727	36.14057938
-2.25	-10.43518659	-7.835431356	-9.293846517	-6.617234662	-6.617234662	-5.264742836	-5.279893557	-5.029603818	-5.294319809	-5.932045004

+2.25	65.00830521	71.94234141	57.98589845	57.79148623	57.83073525	47.40367289	48.05251383	43.7633434	46.06667727	36.14057938
-2.3	-17.5273196	-13.70008538	-15.71754329	-10.99155418	-10.99155418	-8.763295128	-8.78097236	-8.374511275	-8.815275026	-9.9722505
+2.3	56.8131502	58.78299963	50.62625185	47.95908235	48.11452968	38.41251593	38.70946138	35.97666056	37.87016901	31.79383972
-2.35	-17.5273196	-13.70008538	-15.71754329	-10.99155418	-10.99155418	-8.763295128	-8.78097236	-8.374511275	-8.815275026	-9.9722505
+2.35	56.8131502	58.78299963	50.62625185	47.95908235	48.11452968	38.41251593	38.70946138	35.97666056	37.87016901	31.79383972
-2.4	-25.5592839	-19.91832892	-23.0033555	-16.03858952	-16.03858952	-12.84501711	-12.84501711	-12.12086024	-12.75880026	-14.50843735
+2.4	48.02707509	45.4716111	42.76243847	36.96475476	37.27225623	29.46727063	29.7994311	28.52611814	30.06025934	27.03526609
-2.45	-25.5592839	-19.91832892	-23.0033555	-16.03858952	-16.03858952	-12.84501711	-12.84501711	-12.12086024	-12.75880026	-14.50843735
+2.45	48.02707509	45.4716111	42.76243847	36.96475476	37.27225623	29.46727063	29.7994311	28.52611814	30.06025934	27.03526609
-2.5	-34.29386919	-29.98112628	-30.64314483	-24.30020389	-24.30020389	-19.42918917	-19.42918917	-18.46815495	-19.44016311	-19.39537007
+2.5	39.02974791	32.38045792	34.64547899	25.69489854	26.15927642	20.98118238	21.99653274	20.04087194	21.09565468	22.0100856
-2.55	-34.29386919	-29.98112628	-30.64314483	-24.30020389	-24.30020389	-19.42918917	-19.42918917	-18.46815495	-19.44016311	-19.39537007
+2.55	39.02974791	32.38045792	34.64547899	25.69489854	26.15927642	20.98118238	21.99653274	20.04087194	21.09565468	22.0100856
-2.6	-43.4901507	-41.52106448	-38.8331504	-33.56521102	-33.56521102	-26.78182635	-26.81851917	-25.51078456	-26.85345744	-24.4877988
+2.6	30.79988524	23.47976322	27.40491213	20.22020991	20.82021817	15.9885853	17.91041621	14.58274619	15.41458269	16.86353886
-2.65	-43.4901507	-41.52106448	-38.8331504	-33.56521102	-33.56521102	-26.78182635	-26.81851917	-25.51078456	-26.85345744	-24.4877988
+2.65	30.79988524	23.47976322	27.40491213	20.22020991	20.82021817	15.9885853	17.91041621	14.58274619	15.41458269	16.86353886
-2.7	-52.90350036	-54.08698444	-47.22456489	-43.48574836	-43.48574836	-34.72203545	-34.76132506	-32.43057248	-34.13744471	-29.64047703
+2.7	23.01636444	15.93857604	20.4294567	13.78625617	14.46058603	10.74257738	14.02274895	10.49191664	11.11503306	11.74087777
-2.75	-52.90350036	-54.08698444	-47.22456489	-43.48574836	-43.48574836	-34.72203545	-34.76132506	-32.43057248	-34.13744471	-29.64047703
+2.75	23.01636444	15.93857604	20.4294567	13.78625617	14.46058603	10.74257738	14.02274895	10.49191664	11.11503306	11.74087777
-2.8	-62.28557347	-68.00457645	-55.60071635	-54.14160448	-54.14160448	-43.34264098	-43.34264098	-40.31750412	-42.43947802	-34.70816652
+2.8	15.39160333	9.291424845	13.85293364	9.067369309	10.31682676	6.844585467	9.815254186	6.384073852	6.78777384	6.787320445
-2.85	-62.28557347	-68.00457645	-55.60071635	-54.14160448	-54.14160448	-43.34264098	-43.34264098	-40.31750412	-42.43947802	-34.70816652
+2.85	15.39160333	9.291424845	13.85293364	9.067369309	10.31682676	6.844585467	9.815254186	6.384073852	6.78777384	6.787320445
-2.9	-71.42489412	-82.4035831	-63.74151857	-64.60380253	-64.60380253	-53.23549413	-54.12572469	-49.00326133	-51.58238035	-39.54563377
+2.9	8.071584212	6.414717306	7.670645459	5.566233026	5.827773343	4.145270417	5.065595989	4.383169166	4.654425224	3.112594437
-2.95	-71.42489412	-82.4035831	-63.74151857	-64.60380253	-64.60380253	-53.23549413	-54.12572469	-49.00326133	-51.58238035	-39.54563377
+2.95	8.071584212	6.414717306	7.670645459	5.566233026	5.827773343	4.145270417	5.065595989	4.383169166	4.654425224	3.112594437
-3	-79.94395258	-95.8057005	-71.29835376	-74.86747159	-74.86747159	-63.76833274	-65.35230047	-57.12834451	-60.13509949	-44.17749865
+3	5.645728054	6.387376696	5.077001091	4.950299922	4.950299922	3.956294772	3.964066954	3.760374558	3.958289008	3.112594437

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-3.479285706	-3.479291364	-2.768871112	-2.18708907	-2.976064153	-3.361649726	-3.359371514	-3.362978502	-3.36716068
End Shear	52.9335207	52.9335207	42.10620964	32.99443072	42.427	53.2530512	53.2530512	53.14305428	53.20236774
-0.05	-3.479285706	-3.479291364	-2.768871112	-2.18708907	-2.976064153	-3.361649726	-3.359371514	-3.362978502	-3.36716068
+0.05	49.31469229	48.11285242	38.43585901	30.40711534	40.18415491	49.03767715	48.28434888	49.05121524	49.1070796
-0.1	-4.32550542	-4.370356009	-3.376507588	-2.920842918	-5.35384509	-4.63935178	-4.299725675	-4.20479845	-4.357158502
+0.1	41.8802685	40.73453098	32.56043437	25.72028519	35.78068197	40.72087575	39.37697347	40.72523985	40.73925251
-0.15	-4.32550542	-4.370356009	-3.376507588	-2.920842918	-5.35384509	-4.63935178	-4.299725675	-4.20479845	-4.357158502
+0.15	41.8802685	40.73453098	32.56043437	25.72028519	35.78068197	40.72087575	39.37697347	40.72523985	40.73925251
-0.2	-7.083859416	-7.043024331	-6.656822466	-5.180938887	-9.337730652	-7.129333519	-7.781296097	-7.866414214	-7.407887883
+0.2	34.11273367	33.35666505	26.6806691	21.05228752	31.08607871	33.24899842	32.03262256	33.16412272	33.19685151
-0.25	-7.083859416	-7.043024331	-6.656822466	-5.180938887	-9.337730652	-7.129333519	-7.781296097	-7.866414214	-7.407887883
+0.25	34.11273367	33.35666505	26.6806691	21.05228752	31.08607871	33.24899842	32.03262256	33.16412272	33.19685151
-0.3	-10.87993591	-10.89533805	-10.10877026	-7.63891194	-14.27646916	-11.13593737	-11.91594711	-12.01924758	-11.99995169
+0.3	26.9487685	26.19880595	20.97193459	16.537979	25.93176203	26.04654529	25.98521126	26.22131447	26.08659722
-0.35	-10.87993591	-10.89533805	-10.10877026	-7.63891194	-14.27646916	-11.13593737	-11.91594711	-12.01924758	-11.99995169
+0.35	26.9487685	26.19880595	20.97193459	16.537979	25.93176203	26.04654529	25.98521126	26.22131447	26.08659722
-0.4	-14.95695246	-14.9496793	-13.57933359	-10.37613613	-18.96158663	-15.25662117	-15.8124241	-16.02565793	-15.99727142
+0.4	20.19599856	19.48050725	15.6096697	12.31119011	20.98788431	19.52458797	19.46102145	19.06374008	19.08364126
-0.45	-14.95695246	-14.9496793	-13.57933359	-10.37613613	-18.96158663	-15.25662117	-15.8124241	-16.02565793	-15.99727142
+0.45	20.19599856	19.48050725	15.6096697	12.31119011	20.98788431	19.52458797	19.46102145	19.06374008	19.08364126
-0.5	-22.24952049	-21.97471675	-17.52095909	-13.7583755	-23.48062756	-21.33197835	-22.44964627	-22.44111282	-21.67765811
+0.5	14.07099967	13.4213234	11.70054012	8.9467604	16.24473891	13.60795598	13.54600552	13.19319621	13.20656725
-0.55	-22.24952049	-21.97471675	-17.52095909	-13.7583755	-23.48062756	-21.33197835	-22.44964627	-22.44111282	-21.67765811
+0.55	14.07099967	13.4213234	11.70054012	8.9467604	16.24473891	13.60795598	13.54600552	13.19319621	13.20656725
-0.6	-29.6248392	-29.37986139	-23.4202307	-18.38496818	-28.11499067	-28.65829578	-29.5327514	-29.70401038	-29.05215244
+0.6	9.367211118	9.125107532	8.423896786	6.382866274	11.88955658	9.18738463	9.18257839	9.147808841	9.163069598
-0.65	-29.6248392	-29.37986139	-23.4202307	-18.38496818	-28.11499067	-28.65829578	-29.5327514	-29.70401038	-29.05215244
+0.65	9.367211118	9.125107532	8.423896786	6.382866274	11.88955658	9.18738463	9.18257839	9.147808841	9.163069598
-0.7	-36.92540993	-36.71741491	-29.26418533	-22.99770309	-32.44793819	-36.31230618	-37.02231637	-37.2082438	-37.2035335
+0.7	6.09265194	5.865800723	5.441869855	4.074891094	7.667191281	5.892074556	5.908148772	5.96763021	5.823263598
-0.75	-36.92540993	-36.71741491	-29.26418533	-22.99770309	-32.44793819	-36.31230618	-37.02231637	-37.2082438	-37.2035335
+0.75	6.09265194	5.865800723	5.441869855	4.074891094	7.667191281	5.892074556	5.908148772	5.96763021	5.823263598
-0.8	-43.9346446	-43.76782719	-34.87742747	-27.46063511	-36.32973199	-43.42464767	-43.92220831	-44.29648294	-44.24665806
+0.8	3.243062459	3.04401297	2.854685775	2.095801104	4.101981649	3.139184694	3.135404066	3.061588514	3.174025912
-0.85	-43.9346446	-43.76782719	-34.87742747	-27.46063511	-36.32973199	-43.42464767	-43.92220831	-44.29648294	-44.24665806
+0.85	3.243062459	3.04401297	2.854685775	2.095801104	4.101981649	3.139184694	3.135404066	3.061588514	3.174025912
-0.9	-50.43600172	-50.31154405	-40.08456668	-31.63686021	-39.6257761	-49.82732057	-50.09408454	-51.73920214	-51.91161372
+0.9	0.926727495	0.797298943	0.762572836	0.523664613	1.090023084	0.900710004	0.895725669	0.838719492	0.837164904
-0.95	-50.43600172	-50.31154405	-40.08456668	-31.63686021	-39.6257761	-49.82732057	-50.09408454	-51.73920214	-51.91161372
+0.95	0.926727495	0.797298943	0.762572836	0.523664613	1.090023084	0.900710004	0.895725669	0.838719492	0.837164904
-1	-56.21293288	-56.12901191	-44.71020037	-35.38851276	-42.20147544	-56.96861132	-57.05335977	-58.7355108	-58.87258814
+1	3.97E-02	3.93E-02	3.52E-02	2.39E-02	4.85E-02	3.83E-02	3.77E-02	3.84E-02	3.83E-02
(Span 2) -2	-3.97E-02	-3.96E-02	-3.63E-02	-2.74E-02	-4.92E-02	-3.81E-02	-3.82E-02	-3.79E-02	-3.85E-02
+2	5.34E+01	53.30049571	42.46507435	33.56875973	40.99244268	53.36883717	53.45791278	55.28597912	55.45611378
-2.05	-3.97E-02	-3.96E-02	-3.63E-02	-2.74E-02	-4.92E-02	-3.81E-02	-3.82E-02	-3.79E-02	-3.85E-02
+2.05	53.39092879	53.30049571	42.46507435	33.56875973	40.99244268	53.36883717	53.45791278	55.28597912	55.45611378
-2.1	-2.025224781	-1.840366747	-1.747150382	-1.254496033	-2.451111279	-1.962733088	-1.956876134	-1.889843388	-1.888011316
+2.1	47.22035457	47.08964542	37.52492228	29.58686771	38.03462159	46.68200192	47.06888022	47.9346167	48.11440592
-2.15	-2.025224781	-1.840366747	-1.747150382	-1.254496033	-2.451111279	-1.962733088	-1.956876134	-1.889843388	-1.888011316
+2.15	47.22035457	47.08964542	37.52492228	29.58686771	38.03462159	46.68200192	47.06888022	47.9346167	48.11440592
-2.2	-4.625307431	-4.404543872	-4.101064143	-3.042670355	-5.83503096	-4.475031411	-4.470838358	-4.388975466	-4.51367597
+2.2	40.43503371	40.26322918	32.09151987	25.24973018	34.42475863	39.90008571	40.5149079	40.90833885	40.85596381
-2.25	-4.625307431	-4.404543872	-4.101064143	-3.042670355	-5.83503096	-4.475031411	-4.470838358	-4.388975466	-4.51367597
+2.25	40.43503371	40.26322918	32.09151987	25.24973018	34.42475863	39.90008571	40.5149079	40.90833885	40.85596381

-2.3	**-7.703795234**	**-7.460672356**	**-6.899599804**	**-5.19576419**	**-9.684808516**	**-7.448800859**	**-7.447638621**	**-7.529776046**	**-7.38133539**
+2.3	**33.25150822**	**33.04080309**	**26.34034958**	**20.69460758**	**30.29745165**	**32.48945141**	**33.28911133**	**33.4822673**	**33.48372265**
-2.35	**-7.703795234**	**-7.460672356**	**-6.899599804**	**-5.19576419**	**-9.684808516**	**-7.448800859**	**-7.447638621**	**-7.529776046**	**-7.38133539**
+2.35	**33.25150822**	**33.04080309**	**26.34034958**	**20.69460758**	**30.29745165**	**32.48945141**	**33.28911133**	**33.4822673**	**33.48372265**
-2.4	**-11.15242026**	**-10.89897517**	**-10.0425143**	**-7.641265311**	**-14.12951883**	**-10.91826455**	**-10.91323322**	**-10.87683866**	**-10.89281081**
+2.4	**25.88635916**	**25.64194323**	**20.44676032**	**16.05798316**	**25.78728695**	**25.04718004**	**25.96278708**	**26.13540503**	**26.09582446**
-2.45	**-11.15242026**	**-10.89897517**	**-10.0425143**	**-7.641265311**	**-14.12951883**	**-10.91826455**	**-10.91323322**	**-10.87683866**	**-10.89281081**
+2.45	**25.88635916**	**25.64194323**	**20.44676032**	**16.05798316**	**25.78728695**	**25.04718004**	**25.96278708**	**26.13540503**	**26.09582446**
-2.5	**-17.07913021**	**-16.37907912**	**-13.42959171**	**-10.3527996**	**-18.62657505**	**-16.5148108**	**-16.44807399**	**-16.067906**	**-16.08230261**
+2.5	**18.55611889**	**18.2861465**	**15.3415331**	**11.78554901**	**21.1730346**	**17.84740198**	**18.84617923**	**18.83714724**	**18.96593823**
-2.55	**-17.07913021**	**-16.37907912**	**-13.42959171**	**-10.3527996**	**-18.62657505**	**-16.5148108**	**-16.44807399**	**-16.067906**	**-16.08230261**
+2.55	**18.55611889**	**18.2861465**	**15.3415331**	**11.78554901**	**21.1730346**	**17.84740198**	**18.84617923**	**18.83714724**	**18.96593823**
-2.6	**-23.54944062**	**-22.79807763**	**-18.25435115**	**-14.38659066**	**-23.44937531**	**-22.7645524**	**-22.69781805**	**-22.31061146**	**-22.30149626**
+2.6	**13.0786271**	**12.96781035**	**11.86203933**	**8.961434163**	**16.72028951**	**13.19726125**	**13.87451051**	**14.09534618**	**14.06594769**
-2.65	**-23.54944062**	**-22.79807763**	**-18.25435115**	**-14.38659066**	**-23.44937531**	**-22.7645524**	**-22.69781805**	**-22.31061146**	**-22.30149626**
+2.65	**13.0786271**	**12.96781035**	**11.86203933**	**8.961434163**	**16.72028951**	**13.19726125**	**13.87451051**	**14.09534618**	**14.06594769**
-2.7	**-30.53782262**	**-29.76550454**	**-23.81302673**	**-18.7742437**	**-28.40383009**	**-29.51373013**	**-28.59249399**	**-29.69370647**	**-29.55962942**
+2.7	**8.922353567**	**8.937511661**	**8.484148763**	**6.382602205**	**12.11373699**	**9.149606297**	**9.842941287**	**9.949600753**	**9.929677416**
-2.75	**-30.53782262**	**-29.76550454**	**-23.81302673**	**-18.7742437**	**-28.40383009**	**-29.51373013**	**-28.59249399**	**-29.69370647**	**-29.55962942**
+2.75	**8.922353567**	**8.937511661**	**8.484148763**	**6.382602205**	**12.11373699**	**9.149606297**	**9.842941287**	**9.949600753**	**9.929677416**
-2.8	**-37.82773627**	**-37.0618092**	**-29.62985768**	**-23.38240816**	**-33.49576272**	**-36.84124483**	**-35.60901309**	**-36.75527008**	**-36.78841845**
+2.8	**5.466332336**	**5.164307174**	**5.151826772**	**4.021625535**	**7.291445328**	**5.9503798**	**6.009277093**	**6.093341425**	**5.640501797**
-2.85	**-37.82773627**	**-37.0618092**	**-29.62985768**	**-23.38240816**	**-33.49576272**	**-36.84124483**	**-35.60901309**	**-36.75527008**	**-36.78841845**
+2.85	**5.466332336**	**5.164307174**	**5.151826772**	**4.021625535**	**7.291445328**	**5.9503798**	**6.009277093**	**6.093341425**	**5.640501797**
-2.9	**-45.61059921**	**-44.46743962**	**-35.52943809**	**-28.07677829**	**-38.05972693**	**-44.79733807**	**-43.48188322**	**-44.82859337**	**-44.84012682**
+2.9	**3.480498209**	**3.529353715**	**2.768684329**	**2.194102579**	**3.694729596**	**3.502234464**	**3.35910761**	**3.369456911**	**3.381733023**
-2.95	**-45.61059921**	**-44.46743962**	**-35.52943809**	**-28.07677829**	**-38.05972693**	**-44.79733807**	**-43.48188322**	**-44.82859337**	**-44.84012682**
+2.95	**3.480498209**	**3.529353715**	**2.768684329**	**2.194102579**	**3.694729596**	**3.502234464**	**3.35910761**	**3.369456911**	**3.381733023**
-3	**-52.91084416**	**-51.76284129**	**-41.33639469**	**-32.722091**	**-42.26424791**	**-53.1735038**	**-52.37565835**	**-53.1870562**	**-53.24289084**
+3	3.480498209	**3.479007386**	**2.768684329**	**2.187023314**	**2.976327057**	**3.362850556**	**3.35910761**	**3.369456911**	**3.368079172**

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-3.504843572	-3.241027005	-3.9897	-4.25568	-3.5479
End Shear	57.31379722	54.04484239	60.67028	64.56991	58.69001
-0.05	-3.504843572	-3.241027005	-3.9897	-4.25568	-3.5479
+0.05	50.90092599	49.96716688	55.3546	60.1652	52.42979
-0.1	-5.665471237	-6.303153804	-5.20638	-5.76134	-4.8142
+0.1	42.45644461	41.69660507	46.89723	51.15763	42.61909
-0.15	-5.665471237	-6.303153804	-5.20638	-5.76134	-4.8142
+0.15	42.45644461	41.69660507	46.89723	51.15763	42.61909
-0.2	-9.843872319	-10.87957082	-8.79241	-9.51836	-7.95417
+0.2	34.43584166	33.63775036	38.43411	41.87067	35.06994
-0.25	-9.843872319	-10.87957082	-8.79241	-9.51836	-7.95417
+0.25	34.43584166	33.63775036	38.43411	41.87067	35.06994
-0.3	-13.74240673	-15.22573067	-13.3529	-14.4039	-12.4348
+0.3	27.09993317	26.02206359	30.21717	32.4861	27.00958
-0.35	-13.74240673	-15.22573067	-13.3529	-14.4039	-12.4348
+0.35	27.09993317	26.02206359	30.21717	32.4861	27.00958
-0.4	-17.92708678	-19.51460706	-17.8138	-19.1571	-17.1237
+0.4	20.23559848	19.52153205	22.49835	24.23136	20.55211
-0.45	-17.92708678	-19.51460706	-17.8138	-19.1571	-17.1237
+0.45	20.23559848	19.52153205	22.49835	24.23136	20.55211
-0.5	-21.84092022	-23.6940556	-25.5434	-27.3786	-22.8644
+0.5	14.03291556	15.09013782	15.54594	16.76849	14.28499
-0.55	-21.84092022	-23.6940556	-25.5434	-27.3786	-22.8644
+0.55	14.03291556	15.09013782	15.54594	16.76849	14.28499
-0.6	-29.45109929	-29.26413228	-33.8415	-36.1168	-30.2045
+0.6	9.67262494	10.83958319	10.90187	11.62866	9.690548
-0.65	-29.45109929	-29.26413228	-33.8415	-36.1168	-30.2045
+0.65	9.67262494	10.83958319	10.90187	11.62866	9.690548
-0.7	-38.65072043	-36.85653845	-42.2516	-45.0684	-38.7891
+0.7	6.289768158	7.001058683	6.799773	7.363095	6.262334
-0.75	-38.65072043	-36.85653845	-42.2516	-45.0684	-38.7891
+0.75	6.289768158	7.001058683	6.799773	7.363095	6.262334
-0.8	-46.92808673	-44.5594959	-50.3273	-54.1337	-46.7701
+0.8	3.32385796	3.671158353	3.694601	3.879243	3.336314
-0.85	-46.92808673	-44.5594959	-50.3273	-54.1337	-46.7701
+0.85	3.32385796	3.671158353	3.694601	3.879243	3.336314
-0.9	-53.77441244	-51.86167701	-57.8165	-61.9127	-54.8509
+0.9	0.948195619	1.13283819	1.028928	1.057937	0.927192
-0.95	-53.77441244	-51.86167701	-57.8165	-61.9127	-54.8509
+0.95	0.948195619	1.13283819	1.028928	1.057937	0.927192
-1	-62.63970267	-59.03702266	-64.4675	-68.7653	-64.4842
+1	4.05E-02	4.66E-02	4.51E-02	4.78E-02	4.03E-02
(Span 2) -2	-4.07E-02	-4.66E-02	-4.55E-02	-4.74E-02	-4.06E-02
+2	57.86884024	55.29550966	61.23602	65.5378	59.70883
-2.05	-4.07E-02	-4.66E-02	-4.55E-02	-4.74E-02	-4.06E-02
+2.05	57.86884024	55.29550966	61.23602	65.5378	59.70883
-2.1	-2.068066574	-2.363817266	-2.28212	-2.38772	-2.04337
+2.1	50.45871552	48.27061874	54.13134	58.07044	50.36034
-2.15	-2.068066574	-2.363817266	-2.28212	-2.38772	-2.04337
+2.15	50.45871552	48.27061874	54.13134	58.07044	50.36034
-2.2	-4.734269037	-5.266144024	-5.28452	-5.55979	-4.74808
+2.2	43.09728793	40.73362401	46.3153	49.40299	42.8698
-2.25	-4.734269037	-5.266144024	-5.28452	-5.55979	-4.74808
+2.25	43.09728793	40.73362401	46.3153	49.40299	42.8698

-2.3	**-7.937150002**	**-8.866935739**	**-8.63323**	**-9.32668**	**-7.90773**
+2.3	**34.3616256**	**33.05646879**	**38.03984**	**40.57582**	**34.4194**
-2.35	**-7.937150002**	**-8.866935739**	**-8.63323**	**-9.32668**	**-7.90773**
+2.35	**34.3616256**	**33.05646879**	**38.03984**	**40.57582**	**34.4194**
-2.4	**-11.53777327**	**-12.91114391**	**-12.9558**	**-13.8195**	**-11.5162**
+2.4	**25.5614639**	**25.6494084**	**29.62203**	**31.71296**	**26.47986**
-2.45	**-11.53777327**	**-12.91114391**	**-12.9558**	**-13.8195**	**-11.5162**
+2.45	**25.5614639**	**25.6494084**	**29.62203**	**31.71296**	**26.47986**
-2.5	**-17.05853604**	**-17.26854483**	**-18.9314**	**-20.4125**	**-17.3458**
+2.5	**19.84799772**	**21.64609331**	**21.4292**	**23.00379**	**19.30738**
-2.55	**-17.05853604**	**-17.26854483**	**-18.9314**	**-20.4125**	**-17.3458**
+2.55	**19.84799772**	**21.64609331**	**21.4292**	**23.00379**	**19.30738**
-2.6	**-23.62255811**	**-22.46569127**	**-26.3094**	**-28.3081**	**-23.5273**
+2.6	**15.87830978**	**17.36081374**	**15.58282**	**16.78273**	**15.02849**
-2.65	**-23.62255811**	**-22.46569127**	**-26.3094**	**-28.3081**	**-23.5273**
+2.65	**15.87830978**	**17.36081374**	**15.58282**	**16.78273**	**15.02849**
-2.7	**-30.73515848**	**-29.76228254**	**-34.3108**	**-36.8602**	**-30.6528**
+2.7	**11.8798667**	**13.07065582**	**11.06304**	**11.95446**	**9.985911**
-2.75	**-30.73515848**	**-29.76228254**	**-34.3108**	**-36.8602**	**-30.6528**
+2.75	**11.8798667**	**13.07065582**	**11.06304**	**11.95446**	**9.985911**
-2.8	**-38.19754002**	**-37.63244128**	**-42.6834**	**-46.4177**	**-38.8589**
+2.8	**7.921124367**	**8.625887354**	**6.478837**	**7.317212**	**5.921621**
-2.85	**-38.19754002**	**-37.63244128**	**-42.6834**	**-46.4177**	**-38.8589**
+2.85	**7.921124367**	**8.625887354**	**6.478837**	**7.317212**	**5.921621**
-2.9	**-46.05239134**	**-45.8165297**	**-51.1752**	**-55.7183**	**-47.4912**
+2.9	**4.011089583**	**3.884769773**	**3.989392**	**4.255351**	**3.634795**
-2.95	**-46.05239134**	**-45.8165297**	**-51.1752**	**-55.7183**	**-47.4912**
+2.95	**4.011089583**	**3.884769773**	**3.989392**	**4.255351**	**3.634795**
-3	**-55.91369081**	**-54.0493022**	**-59.5344**	**-64.604**	**-57.5235**
+3	**3.505520598**	**3.241127591**	**3.989392**	**4.255351**	**3.553991**

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.21E-16	*-3.98E-16*	*-4.41E-16*	-3.35E-16	-3.35E-16	-2.67E-16	-2.67E-16	-2.54E-16	-2.68E-16	-2.94E-16
End Shear	4.17E-15	*3.23E-15*	*3.72E-15*	2.61E-15	2.61E-15	2.05E-15	2.14E-15	2.00E-15	2.10E-15	2.30E-15
-0.05	-2.822864027	*-3.194292055*	*-2.538352179*	-2.47419315	-2.47419315	-1.97744102	-1.98164865	-1.87976508	-1.97870008	-1.556258581
+0.05	37.87382557	*44.50845635*	*33.76114043*	34.85335774	34.85335774	29.27088669	29.82690995	26.60512554	28.00539531	21.01029572
-0.1	-5.645728054	*-6.388584111*	*-5.076704358*	-4.94838631	-4.94838631	-3.95488203	-3.96329729	-3.75953015	-3.95740016	-3.112517163
+0.1	71.63697371	*82.52832663*	*63.85963594*	64.53020669	64.53020669	53.4166279	54.10815694	49.18092219	51.76939178	39.74887306
-0.15	-8.468592081	*-9.582876166*	*-7.615056538*	-7.42257946	-7.42257946	-5.93232305	-5.94494594	-5.63929523	-5.93610024	-4.668775744
+0.15	101.0441623	*113.9712034*	*90.07881274*	88.95693363	88.95693363	72.46912048	72.97814374	67.66893447	71.23045734	56.07076005
-0.2	-11.29145611	*-12.77716822*	*-10.15340872*	-9.89677262	-9.89677262	-7.90976406	-7.92659459	-7.5190603	-7.91480032	-6.225034326
+0.2	125.9118342	*135.7152736*	*112.255849*	108.136507	108.136507	86.50746857	86.60198688	82.14440522	86.46779497	69.8672595
-0.25	-14.11432013	*-15.97146028*	*-12.6917609*	-12.3709658	-12.3709658	-9.88720508	-9.90824323	-9.39882538	-9.8935004	-7.781292907
+0.25	146.1181344	*153.5694894*	*130.2817489*	122.1484527	122.1484527	97.79117184	97.79117184	92.66777785	97.54502932	81.06598192
-0.3	-16.93718416	*-19.16575233*	*-15.23011308*	-14.8451589	-14.8451589	-11.8646461	-11.8898919	-11.2785905	-11.8722005	-9.337551489
+0.3	161.6029344	*165.8069887*	*144.1013931*	130.9836684	130.9836684	104.5301945	104.5301945	99.35885861	104.5882722	89.63085611
-0.35	-19.76004819	*-22.36004439*	*-17.76846525*	-17.3193521	-17.3193521	-13.8420871	-13.8715405	-13.1583555	-13.8509006	-10.89381007
+0.35	172.3677988	*171.9690086*	*153.713457*	134.8789671	134.8789671	107.7193918	107.7193918	102.3965885	107.7858827	95.56209523
-0.4	-22.58291221	*-25.55433644*	*-20.30681743*	-19.7935452	-19.7935452	-15.8195281	-15.8531892	-15.0381206	-15.8296006	-12.45006865
+0.4	178.4760595	*172.4055629*	*159.1705059*	134.3114068	134.3114068	107.326851	107.567738	102.0192264	107.3886593	98.89627645
-0.45	-25.40577624	*-28.7486285*	*-22.84516961*	-22.2677384	-22.2677384	-17.7969691	-17.8348378	-16.9178857	-17.8083007	-14.00632723
+0.45	180.0963555	*167.5572893*	*160.578895*	129.8126746	129.8607458	109.5288289	114.5330382	98.52424262	103.7097291	99.70621042
-0.5	-28.22864027	*-31.94292055*	*-25.38352179*	-24.7419315	-24.7419315	-19.7744102	-19.8164865	-18.7976508	-19.7870008	-15.56258581
+0.5	177.4075073	*169.2948712*	*158.0989088*	130.9728522	130.9728522	112.9267289	116.3843741	99.56022396	104.8002357	98.10111305
-0.55	-31.0515043	*-35.13721261*	*-27.92187397*	-27.2161247	-27.2161247	-21.7518512	-21.7981351	-20.6774158	-21.7657009	-17.1188444
+0.55	170.6179265	*173.5517764*	*151.9446016*	134.1624283	134.1624283	111.6462193	113.512638	101.9227872	107.2871445	94.22642738
-0.6	-33.87436832	*-38.33150466*	*-30.46022615*	-29.6903179	-29.6903179	-23.7292922	-23.7797838	-22.5571809	-23.7444009	-18.67510298
+0.6	159.7687732	*170.4735686*	*142.3838929*	132.0617122	132.0617122	105.6133344	105.7114285	100.2365808	105.5121903	88.26396234
-0.65	-36.69723235	*-41.52579672*	*-32.99857833*	-32.164511	-32.164511	-25.7067332	-25.7614324	-24.436946	-25.723101	-20.23136156
+0.65	145.7033602	*160.6119619*	*131.133024*	124.9033406	124.9033406	99.97704677	99.97704677	94.68052585	99.66371142	80.43178063
-0.7	-39.52009638	*-44.72008878*	*-35.53693051*	-34.6387042	-34.6387042	-27.6841742	-27.7430811	-26.3167111	-27.7018011	-21.78762014
+0.7	128.6571284	*142.1746305*	*114.384099*	112.8343647	112.8343647	89.9122305	90.00229647	85.49296512	89.99259486	70.98430915
-0.75	-42.3429604	*-47.91438083*	*-38.07528269*	-37.1128973	-37.1128973	-29.6616152	-29.7247297	-28.1964761	-29.6805012	-23.34387872
+0.75	109.1253924	*120.7894605*	*96.95822798*	96.24809538	96.24809538	76.70621093	76.78244552	72.97135281	76.81195032	60.21228926
-0.8	-45.16582443	*-51.10867289*	*-40.61363487*	-39.5870905	-39.5870905	-31.6390562	-31.7063783	-30.0762412	-31.6592013	-24.9001373
+0.8	87.66515574	*94.55398706*	*77.89246593*	75.77281647	75.77281647	60.50978905	60.85547839	57.47245492	60.49732097	48.44273506
-0.85	-47.98868846	*-54.30296494*	*-43.15198705*	-42.0612836	-42.0612836	-33.6164973	-33.688027	-31.9560063	-33.6379013	-26.45639588
+0.85	64.89513289	*64.12261034*	*58.37954154*	52.22151092	52.31231223	42.3169073	44.9591617	39.65303648	41.74003839	36.03897746
-0.9	-50.82067225	*-57.50637677*	*-45.69854702*	-44.5354768	-44.5354768	-35.5939383	-35.6696756	-33.8357714	-35.6166014	-28.01265447
+0.9	41.50489732	*32.41713205*	*37.21040193*	25.9942515	25.9942515	21.73662269	24.51869091	19.75553715	20.79530227	23.40066416
-0.95	-55.19363056	*-62.25076311*	*-49.63198403*	-47.0096699	-47.0096699	-44.3934229	-47.6318843	-35.7155364	-37.5953015	-29.56891305
+0.95	19.76851376	*14.94360066*	*17.52304317*	12.62389993	12.62389993	9.385531077	11.95212928	9.594163943	10.09911994	10.96380259
-1	-60.63093779	*-80.85460939*	*-54.52630251*	-59.8413953	-59.8413953	-59.5390699	-65.2679927	-45.5176284	-47.9132931	-31.12594242
+1	1.729778981	*0.684632165*	*0.793104735*	0.559808842	0.559808842	0.450612253	0.450612253	0.42970739	0.452323569	0.520181443
(Span 2) -2	-60.63093779	*-80.85460939*	*-54.52630251*	-59.8413953	-59.8413953	-59.5390699	-65.2679927	-45.5176284	-47.9132931	-31.12594242
+2	1.729778981	*0.684632165*	*0.793104735*	0.559808842	0.559808842	0.450612253	0.450612253	0.42970739	0.452323569	0.520181443
-2.05	-55.19362749	*-62.23929284*	*-49.63480036*	-47.0278497	-47.0278497	-44.4153889	-47.6281829	-35.7235586	-37.6037459	-29.5696452
+2.05	19.76851516	*14.72003199*	*17.70214621*	12.33446339	12.33446339	9.2938248	11.8551115	9.494825205	9.994552847	10.92957612
-2.1	-50.82066913	*-57.49551016*	*-45.70121495*	-44.5526997	-44.5526997	-35.6066533	-35.6766029	-33.8433713	-35.6246014	-28.01334798
+2.1	41.50491668	*32.22113418*	*37.09524428*	26.0224653	26.0224653	21.64871778	24.55256881	19.77707362	20.81797224	23.37068234
-2.15	-47.98868507	*-54.29270178*	*-43.15450637*	-42.0775497	-42.0775497	-33.6285059	-33.6945694	-31.9631841	-33.6454569	-26.45705077
+2.15	64.89513646	*65.6872987*	*58.27509604*	52.29475945	52.29475945	42.2089846	45.07693855	39.74198083	41.83366403	36.01179063
-2.2	-45.16582104	*-51.09901343*	*-40.61600583*	-39.6023998	-39.6023998	-31.6503585	-31.7125359	-30.0829968	-31.6663124	-24.90075355
+2.2	87.66514913	*96.4602314*	*78.8739553*	75.92281581	75.92281581	60.61613252	60.72024013	57.42009944	60.44220993	48.41702178

-2.25	-42.34295702	-47.90532508	-38.07750528	-37.1272498	-37.1272498	-29.6722111	-29.7305024	-28.2028095	-29.6871679	-23.34445633
+2.25	109.1253915	121.1053768	97.1863486	96.13646763	96.13646763	76.7274224	77.16365046	72.91061187	76.7480125	60.18691189
-2.3	-39.52009299	-44.71163673	-35.53900473	-34.6520998	-34.6520998	-27.6940638	-27.748469	-26.3226222	-27.7080234	-21.78815911
+2.3	128.657153	144.3480079	114.5364351	112.6717892	112.6717892	89.82508693	89.91465346	85.42124436	89.91709933	70.95814519
-2.35	-36.69722896	-41.51794838	-33.00050419	-32.1769499	-32.1769499	-25.7159164	-25.7664355	-24.4424349	-25.7288789	-20.23186189
+2.35	145.7033636	160.2770425	129.6755496	124.8749775	124.8749775	99.47896914	99.58571494	94.59552808	99.57424008	80.40382004
-2.4	-33.87436494	-38.32426004	-30.46200364	-29.7017999	-29.7017999	-23.737769	-23.784402	-22.5622477	-23.7497344	-18.67556467
+2.4	159.7687644	170.2234176	143.7918878	132.1670979	132.1670979	105.7758582	105.7758582	100.1363806	105.4067164	88.2334084
-2.45	-31.05150091	-35.13057169	-27.9235031	-27.22665	-27.22665	-21.7596216	-21.8023685	-20.6820604	-21.7705899	-17.11926746
+2.45	170.5403298	173.6749482	152.0236985	134.2333063	134.2333063	111.5100393	113.4013376	101.8059183	107.1641245	94.19248702
-2.5	-28.22863688	-31.93688334	-25.38500255	-24.7515	-24.7515	-19.7814742	-19.8203351	-18.8018731	-19.7914454	-15.56297024
+2.5	177.2844239	169.3524975	157.9532204	131.0060102	131.0060102	112.8861992	116.4104883	99.42552016	104.6584423	98.06319023
-2.55	-25.40577286	-28.74319499	-22.84650201	-22.27635	-22.27635	-17.8033268	-17.8383016	-16.9216858	-17.8123009	-14.00667302
+2.55	180.0526812	167.4936743	160.4157004	129.773491	129.820699	109.5811345	114.609935	98.50809945	103.6927363	99.66372353
-2.6	-22.58290883	-25.54950664	-20.30800146	-19.8012001	-19.8012001	-15.8251794	-15.8562681	-15.0414985	-15.8331564	-12.4503758
+2.6	178.4760644	172.3024859	158.9882967	134.2520957	134.2520957	107.2830639	107.5001253	101.9930541	107.3611095	98.84875699
-2.65	-19.7600448	-22.3558183	-17.76950091	-17.3260501	-17.3260501	-13.847032	-13.8742346	-13.1613113	-13.8540119	-10.89407858
+2.65	172.3677992	171.8185724	153.5109049	134.7924004	134.7924004	107.6554833	108.007032	102.3583882	107.7456718	95.50935101
-2.7	-16.93718077	-19.16212995	-15.23100037	-14.8509002	-14.8509002	-11.8688847	-11.8922011	-11.281124	-11.8748674	-9.337781364
+2.7	161.6029191	165.6027472	143.8778862	130.8661758	130.8661758	104.4434311	104.4434311	99.30702557	104.5337111	89.57257689
-2.75	-14.11431675	-15.9684416	-12.69249982	-12.3757502	-12.3757502	-9.89073728	-9.91016767	-9.40093671	-9.89572285	-7.781484146
+2.75	146.1181381	153.6855045	130.0749326	122.1632998	122.1632998	97.39991089	97.48376563	92.60101392	97.47475149	81.00221831
-2.8	-11.29145272	-12.77475325	-10.15399928	-9.90060024	-9.90060024	-7.91258989	-7.9281342	-7.52074943	-7.91657835	-6.225186928
+2.8	125.9749617	135.9703257	112.1167994	108.2832301	108.2832301	86.68529891	86.68529891	82.06177137	86.38081197	69.79790293
-2.85	-8.468588694	-9.581064905	-7.615498732	-7.42545028	-7.42545028	-5.93444251	-5.94610072	-5.64056215	-5.93743384	-4.668889709
+2.85	101.1514004	114.16349	90.00173883	89.0675824	89.0675824	72.31962952	72.87518932	67.56990777	71.1262187	55.99592612
-2.9	-5.645724667	-6.387376557	-5.076998186	-4.95030032	-4.95030032	-3.95629512	-3.96406724	-3.76037487	-3.95828934	-3.112592491
+2.9	71.67753788	82.65622425	63.83133389	64.60378722	64.60378722	53.35907231	54.12571102	49.06532332	51.64770876	39.66894852
-2.95	-2.822860641	-3.193688209	-2.538497641	-2.47515036	-2.47515036	-1.97814773	-1.98203376	-1.88018759	-1.97914484	-1.556295273
+2.95	37.87999325	44.57179553	33.76103124	34.889801	34.889801	29.30417498	29.86293363	26.54719681	27.9444177	20.92550474
-3	-1.68E-14	-1.32E-14	-1.39E-14	-1.07E-14	-1.07E-14	-8.56E-15	-8.56E-15	-8.14E-15	-8.56E-15	-9.53E-15
+3	1.79E-14	1.28E-14	1.56E-14	1.31E-14	1.31E-14	1.01E-14	1.04E-14	9.99E-15	1.05E-14	9.77E-15

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-2.36E-16	-2.15E-16	-2.08E-16	-1.37E-16	-2.75E-16	-2.27E-16	-2.22E-16	-2.26E-16	-2.24E-16
End Shear	1.80E-15	1.64E-15	1.60E-15	1.08E-15	2.31E-15	1.74E-15	1.76E-15	1.82E-15	1.82E-15
-0.05	-1.739642853	-1.739645682	-1.384435556	-1.093544535	-1.488032077	-1.680824863	-1.67968576	-1.68148925	-1.68358034
+0.05	24.65734615	24.05642621	19.21792951	15.20355767	20.09207745	24.51883858	24.14217444	24.52560762	24.5535398
-0.1	-3.479285706	-3.479291364	-2.768871112	-2.18708907	-2.976064153	-3.361649726	-3.35937151	-3.3629785	-3.36716068
+0.1	45.5278484	44.53988023	35.57707549	28.15905689	38.02722264	44.95463984	44.48213013	44.95911642	44.8908198
-0.15	-5.218928559	-5.218937046	-4.153306668	-3.280633605	-4.46409623	-5.042474588	-5.03905727	-5.04446775	-5.05074102
+0.15	62.82040274	61.81130146	49.30721184	38.93048837	53.67102296	61.29154443	60.78094861	61.26219751	61.14097731
-0.2	-6.958571412	-6.958582728	-5.537742223	-4.37417814	-5.952128307	-6.723299451	-6.71874303	-6.725957	-6.73432136
+0.2	75.98638515	75.3643444	60.07558049	47.40059966	66.92271988	73.52353131	73.15044992	73.54974374	73.5064047
-0.25	-8.698214265	-8.698228411	-6.922177779	-5.467722675	-7.440160384	-8.404124314	-8.39842878	-8.40744625	-8.4179017
+0.25	85.72052209	85.25178359	67.92483673	53.60265433	77.71519679	83.12249606	82.5623206	82.92537582	82.99212877
-0.3	-10.43785712	-10.43787409	-8.306613335	-6.56126721	-8.92819246	-10.08494918	-10.0781145	-10.0889355	-10.101482
+0.3	91.91880538	91.58129454	72.9414948	57.60318235	86.0149922	88.85066532	88.60706169	88.9703266	89.05779789
-0.35	-12.17749997	-12.17751977	-9.691048891	-7.654811745	-10.41622454	-11.76577404	-11.7578003	-11.7704248	-11.7850624
+0.35	94.74456142	94.51545087	75.25592207	59.50193165	91.67058072	91.56148302	91.38711371	91.60311115	91.78520793
-0.4	-13.91714282	-13.91716546	-11.07548445	-8.74835628	-11.90425661	-13.4465989	-13.4374861	-13.451914	-13.4686427
+0.4	94.41535873	94.2717142	75.0423461	59.43191834	94.7173469	91.22782334	91.11181638	91.43257734	91.38987641
-0.45	-15.65678568	-15.65681114	-12.45992	-9.841900815	-13.39228869	-15.12742376	-15.1171718	-15.1334033	-15.1522231
+0.45	91.20283878	91.12240802	72.51880866	57.55936694	95.37547226	91.25299114	91.37700846	92.4722459	92.43618405
-0.5	-17.39642853	-17.39645682	-13.84435556	-10.93544535	-14.88032077	-16.80824863	-16.7968576	-16.8148925	-16.8358034
+0.5	92.19096479	91.75794391	73.06215834	58.02075063	93.74691416	93.74025014	93.27409336	93.74474904	93.67768526
-0.55	-19.13607138	-19.1361025	-15.22879111	-12.02898989	-16.36835284	-18.48907349	-18.4765433	-18.4963818	-18.5193837
+0.55	94.57507875	93.47422192	74.50627341	59.16283337	90.17433462	93.7728572	93.15505368	93.63534094	93.51436296
-0.6	-20.87571424	-20.87574819	-16.61322667	-13.12253442	-17.85638492	-20.16989835	-20.1562291	-20.177871	-20.2029641
+0.6	92.72309883	91.96897261	73.31070489	58.10686467	84.22456213	89.74788335	89.36169535	89.77280613	89.78298451
-0.65	-22.61535709	-22.61539387	-17.99766223	-14.21607896	-19.344417	-21.85072322	-21.8359148	-21.8593603	-21.8865444
+0.65	87.552449	86.95575263	69.31054542	54.84824521	77.28211777	84.98048976	84.26739565	84.82115151	84.88259368
-0.7	-24.35499994	-24.35503955	-19.38209778	-15.30962349	-20.83244907	-23.53154808	-23.5156006	-23.5408495	-23.5701248
+0.7	79.02899274	78.56196608	62.62079783	49.49900006	67.58054051	76.42539592	76.08831226	76.67740443	76.74387226
-0.75	-26.0946428	-26.09468523	-20.76653334	-16.40316803	-22.32048115	-25.21237294	-25.1952864	-25.2223388	-25.2537051
+0.75	67.42433151	67.05998067	53.45953875	42.22536417	57.22424367	65.20027929	64.92298257	65.56544098	65.55606543
-0.8	-27.83428565	-27.83433091	-22.15096889	-17.49671256	-23.80851323	-26.8931978	-26.8749721	-26.903828	-26.9372854
+0.8	53.08872149	52.77703042	42.08869381	33.22683778	46.482158	51.39903109	51.08563471	51.72715663	51.64175477
-0.85	-29.5739285	-29.5739766	-23.53540445	-18.5902571	-25.2965453	-28.57402267	-28.5546579	-28.5853173	-28.6208658
+0.85	36.48297456	36.09518578	28.81397643	22.73610702	34.86684402	35.46935731	35.60151621	36.76865463	36.73022535
-0.9	-31.31357135	-31.31362228	-24.91984001	-19.686163	-26.78457738	-30.25484753	-30.2343436	-30.2668065	-30.3044461
+0.9	18.10323335	17.4900473	16.25596602	12.11775008	22.82319447	17.80567279	17.92723448	19.02441051	18.99356308
-0.95	-33.05321421	-33.05326796	-26.30427556	-21.18107125	-28.27260946	-35.76257275	-37.8419906	-37.8435783	-37.8449169
+0.95	8.803911198	7.888129769	7.585307301	5.303698621	10.90527094	9.143481086	7.813096555	8.926857745	8.900854534
-1	-42.08501008	-42.06996002	-33.49739236	-27.34610539	-29.76326874	-47.15171295	-49.4296625	-53.1705192	-53.3466809
+1	0.730676007	0.396433177	0.614384205	0.367210867	0.492433528	0.383020415	0.381542824	0.383534514	0.384880664
(Span 2) -2	-42.08501008	-42.06996002	-33.49739236	-27.34610539	-29.76326874	-47.15171295	-49.4296625	-53.1705192	-53.3466809
+2	0.730676007	0.396433177	0.614384205	0.367210867	0.492433528	0.383020415	0.381542824	0.383534514	0.384880664
-2.05	-33.0647333	-33.05056995	-26.30250102	-21.18044667	-28.27510521	-35.77376696	-37.842331	-37.843889	-37.8452026
+2.05	8.866854674	7.835524003	7.545804707	5.289810425	10.78884825	9.113152624	7.741555433	8.861428726	8.840565166
-2.1	-31.32448419	-31.31106626	-24.91815885	-19.68557129	-26.78694168	-30.2656553	-30.2319688	-30.3251124	-30.3127128
+2.1	18.22702256	17.44393529	16.22134189	12.1055778	22.72115578	17.73453056	17.86028892	18.95958628	18.9338529
-2.15	-29.58423509	-29.57156257	-23.53381669	-18.5896982	-25.29877815	-28.58423002	-28.552415	-28.640384	-28.6286732
+2.15	36.61073312	36.05170463	28.78541733	22.72598132	34.84490372	35.38581779	35.52571039	36.69930638	36.66635975
-2.2	-27.84398598	-27.83205887	-22.14947453	-17.49618654	-23.81061462	-26.90280474	-26.8728612	-26.9556555	-26.9446336
+2.2	53.21247677	52.72851094	42.05683055	33.21563427	46.68023891	51.49997284	51.01809984	51.61903498	51.58480786
-2.25	-26.10373688	-26.09255518	-20.76513236	-16.40267488	-22.3224511	-25.22137947	-25.1933074	-25.2709271	-25.260594

+2.25	67.4721598	67.00368892	53.42249958	42.21236817	57.1378433	65.21830904	64.84462338	65.58910289	65.48999492
-2.3	-24.36348777	-24.35305149	-19.3807902	-15.30916323	-20.83428757	-23.53995419	-23.5137536	-23.5861986	-23.5765545
+2.3	79.0060263	78.49546697	62.57704948	49.48364044	67.49148943	76.35132389	75.99571148	76.76160682	76.7436559
-2.35	-22.62323867	-22.61354779	-17.99644803	-14.21565157	-19.34612404	-21.85852891	-21.8341998	-21.9014702	-21.8925149
+2.35	87.48442831	86.87693357	69.25870412	54.83003265	76.56922832	84.55712377	84.15769294	84.89196337	84.94785678
-2.4	-20.88298957	-20.8740441	-16.61210587	-13.12213991	-17.85796051	-20.17710363	-20.154646	-20.2167417	-20.2084753
+2.4	92.63191381	91.87610098	73.2496379	58.08539078	84.7771256	89.90947949	89.41435129	89.78595339	89.83358004
-2.45	-19.14274046	-19.13454041	-15.2277637	-12.02862825	-16.36979698	-18.49567835	-18.4750922	-18.5320133	-18.5244357
+2.45	94.22709584	93.50319497	74.52533054	59.16953131	90.05498101	93.63956931	93.03626232	93.52664441	93.5472895
-2.5	-17.40249136	-17.39503671	-13.84342154	-10.9351166	-14.88163345	-16.81425308	-16.7955384	-16.8472848	-16.8403961
+2.5	92.28659251	91.77149678	73.07107218	58.02387833	93.61779425	93.68910972	93.13336645	93.70231423	93.62516391
-2.55	-15.66224225	-15.65553302	-12.45907937	-9.84160494	-13.39346993	-15.1328278	-15.1159846	-15.1625563	-15.1563565
+2.55	91.17965227	91.10744571	72.50898205	57.55588495	95.23092821	91.17459722	91.30587167	92.40716772	92.37625079
-2.6	-13.92199315	-13.91602933	-11.07473721	-8.748093283	-11.9053064	-13.45140252	-13.4364308	-13.4778279	-13.4723169
+2.6	94.37777794	94.24745884	75.02641812	59.42631974	94.55590085	91.19060435	91.0780533	91.23178777	91.36140812
-2.65	-12.18174404	-12.17652563	-9.690395044	-7.654581626	-10.41714287	-11.76997724	-11.756877	-11.7930994	-11.7882774
+2.65	94.68971124	94.48004947	75.2326277	59.49375666	91.49117845	91.50716081	91.33783584	91.80597718	91.74365641
-2.7	-10.44149494	-10.43702194	-8.306052879	-6.561069969	-8.928979341	-10.08855196	-10.0773232	-10.108371	-10.1042378
+2.7	91.84431707	91.53323534	72.90987742	57.59208126	85.96892657	88.77691646	88.54013935	89.08113007	89.08066372
-2.75	-8.701245836	-8.697518248	-6.921710715	-5.467558312	-7.440815813	-8.407126686	-8.39776935	-8.42364252	-8.42019819
+2.75	85.62460621	85.18987342	67.88411765	53.5883511	77.80265026	82.78992425	82.47614918	83.00461244	83.0790452
-2.8	-6.960996732	-6.958014555	-5.53736855	-4.374046655	-5.952652284	-6.725701408	-6.71821555	-6.73891407	-6.7361586
+2.8	75.86772293	75.28775329	60.02522075	47.38289592	66.99153142	73.68250407	73.05373148	73.51055445	73.57685125
-2.85	-5.220747627	-5.218510862	-4.153026385	-3.280534998	-4.464488756	-5.04427613	-5.03866174	-5.05418561	-5.05211901
+2.85	62.46492794	61.71960344	49.24687782	38.90926232	53.72138486	61.15969429	60.66191986	61.15328388	61.16822048
-2.9	-3.480498523	-3.479007168	-2.768684221	-2.187023341	-2.976325228	-3.362850852	-3.35910794	-3.36945716	-3.36807943
+2.9	45.61058759	44.46743539	35.52943371	28.14219398	38.05971834	44.90237962	44.33961702	44.9157509	44.84011624
-2.95	-1.740249419	-1.739503475	-1.384342056	-1.093511684	-1.488161699	-1.681425574	-1.67955413	-1.6847287	-1.68403984
+2.95	24.57411433	24.07131971	19.22773176	15.20703131	20.107664	24.54535561	24.13176121	24.54761987	24.46736879
-3	-7.54E-15	-7.54E-15	-6.78E-15	-4.57E-15	-9.22E-15	-7.28E-15	-7.28E-15	-7.28E-15	-7.17E-15
+3	8.84E-15	7.41E-15	7.05E-15	5.18E-15	9.55E-15	8.63E-15	8.29E-15	8.79E-15	8.70E-15

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.34E-16	-2.72E-16	-2.67E-16	-2.85E-16	-2.36E-16
End Shear	1.92E-15	2.18E-15	2.15E-15	2.24E-15	1.92E-15
-0.05	-1.752421786	-1.620513503	-1.99485096	-2.12784102	-1.77395212
+0.05	25.45046299	24.98358344	27.67730094	30.0825988	26.2148935
-0.1	-3.504843572	-3.241027005	-3.98970192	-4.25568205	-3.54790424
+0.1	46.08069393	45.81201531	52.20304071	55.68324343	48.3728927
-0.15	-5.257265358	-4.861540508	-5.98455288	-6.38352307	-5.32185636
+0.15	63.68466692	63.06905269	71.3502893	76.73645016	64.67772503
-0.2	-7.009687144	-6.482054011	-7.97940384	-8.5113641	-7.09580848
+0.2	76.46175519	76.41933958	86.80481803	93.24392715	77.47256243
-0.25	-8.762108929	-8.102567513	-9.9742548	-10.6392051	-8.8697606
+0.25	86.20779751	85.85595684	98.05916507	105.1556684	87.67484372
-0.3	-10.51453072	-9.723081016	-11.9691058	-12.7670461	-10.6437127
+0.3	92.4212312	91.57637246	105.2387036	112.6888353	93.74717147
-0.35	-12.2669525	-11.34359452	-13.9639567	-14.8948872	-12.4176648
+0.35	95.33545504	93.84296505	108.5319495	115.7674128	96.62334177
-0.4	-14.01937429	-12.96410802	-15.9588077	-17.0227282	-14.191617
+0.4	94.90097732	93.11336346	108.1902407	115.4029235	96.44004101
-0.45	-15.77179607	-14.58462152	-17.9536586	-19.1505692	-15.9655691
+0.45	99.02900246	91.71905235	104.5279232	111.4964514	102.0747772
-0.5	-17.52421786	-16.20513503	-19.9485096	-21.2784102	-17.7395212
+0.5	100.8469249	93.04856795	105.2639226	112.2815174	103.7448496
-0.55	-19.27663964	-17.82564853	-21.9433606	-23.4062513	-19.5134733
+0.55	98.38335155	90.63161003	107.628766	115.5824772	101.0242614
-0.6	-21.02906143	-19.44616203	-23.9382115	-25.5340923	-21.2874254
+0.6	93.73242905	87.7989386	105.926671	113.7876791	94.53616957
-0.65	-22.78148322	-21.06667553	-25.9330625	-27.6619333	-23.0613776
+0.65	88.74773129	85.80767457	100.106909	107.492588	89.63459366
-0.7	-24.533905	-22.68718904	-27.9279135	-29.7897743	-24.8353297
+0.7	80.33189805	79.91599661	90.42080961	97.04970774	80.65309369
-0.75	-26.28632679	-24.30770254	-29.9227644	-31.9176154	-26.6092818
+0.75	68.76471444	70.25787498	77.18290667	82.8369741	68.8463623
-0.8	-28.03874857	-25.92821604	-31.9176154	-34.0454564	-28.3832339
+0.8	54.36361307	57.161652	60.77048381	65.26006114	54.56008407
-0.85	-29.79117036	-27.54872954	-33.9124663	-36.1732974	-30.157186
+0.85	37.94420539	41.02066989	41.62381745	44.79160209	40.29858859
-0.9	-31.54359215	-29.16924305	-35.9073173	-38.3011384	-31.9311381
+0.9	20.66435466	23.05289643	20.9343966	22.08814959	21.84996199
-0.95	-42.82786993	-39.36940931	-37.9021683	-42.6842215	-42.7037287
+0.95	9.714116898	10.51849542	10.0568072	10.668753	10.34032366
-1	-58.44523236	-54.38889087	-48.2799684	-58.3637547	-58.4598083
+1	0.649248034	0.596812091	0.454546281	0.478319054	0.405697672
(Span 2) -2	-58.44523236	-54.38889087	-48.2799684	-58.3637547	-58.4598083
+2	0.649248034	0.596812091	0.454546281	0.478319054	0.405697672
-2.05	-42.83673075	-39.36914495	-37.8992193	-42.6822284	-42.7018507
+2.05	9.670813389	10.51054171	10.18618193	10.86526073	10.2928689
-2.1	-31.54968559	-29.17014853	-35.9045236	-38.2981585	-31.9859198
+2.1	20.61957453	23.04460212	20.88404653	22.0344422	21.79843527
-2.15	-29.79692529	-27.54958474	-33.9098278	-36.170483	-30.2089243
+2.15	37.88642674	41.03388828	41.57631575	44.74096083	40.23749226
-2.2	-28.044165	-25.92902094	-31.9151321	-34.0428075	-28.4319288
+2.2	54.32163507	57.17401632	60.71747449	65.20351676	54.1827678
-2.25	-26.2914047	-24.30845715	-29.9204363	-31.915132	-26.6549332

+2.25	**68.80999273**	**70.2690597**	**77.12143789**	**82.77137471**	**69.18120386**
-2.3	**-24.5386444**	**-22.68789335**	**-27.9257405**	**-29.7874566**	**-24.8779377**
+2.3	**80.38825257**	**79.92552442**	**90.34819523**	**96.97225255**	**80.59226392**
-2.35	**-22.7858841**	**-21.06732956**	**-25.9310448**	**-27.6597811**	**-23.1009422**
+2.35	**88.79439624**	**85.81525371**	**100.0208087**	**107.4007937**	**89.23796181**
-2.4	**-21.0331238**	**-19.44676576**	**-23.936349**	**-25.5321056**	**-21.3239466**
+2.4	**93.76777901**	**87.80405776**	**105.8252194**	**113.7190762**	**94.83352806**
-2.45	**-19.2803635**	**-17.82620196**	**-21.9416532**	**-23.4044301**	**-19.5469511**
+2.45	**98.44202447**	**90.6240854**	**107.5104962**	**114.6778627**	**100.9698395**
-2.5	**-17.5276032**	**-16.20563817**	**-19.9469575**	**-21.2767546**	**-17.7699556**
+2.5	**100.8944729**	**93.0559362**	**105.2787287**	**112.2973106**	**103.676765**
-2.55	**-15.7748429**	**-14.58507437**	**-17.9522617**	**-19.1490792**	**-15.99296**
+2.55	**99.06309285**	**91.7244702**	**104.5115781**	**111.4790166**	**101.9908338**
-2.6	**-14.02208261**	**-12.96451058**	**-15.957566**	**-17.0214037**	**-14.2159645**
+2.6	**94.87999289**	**93.10723654**	**108.1637415**	**115.3746576**	**96.251388**
-2.65	**-12.26932231**	**-11.34394678**	**-13.9628702**	**-14.8937282**	**-12.438969**
+2.65	**95.30219925**	**93.83577944**	**108.4932916**	**115.7261777**	**96.83389074**
-2.7	**-10.51656201**	**-9.723382985**	**-11.9681744**	**-12.7660527**	**-10.6619734**
+2.7	**92.37770237**	**91.56758711**	**105.1862247**	**112.6328578**	**93.70320924**
-2.75	**-8.763801709**	**-8.10281919**	**-9.97347866**	**-10.6383772**	**-8.88497791**
+2.75	**86.1528163**	**85.84540859**	**97.99153577**	**105.0835661**	**87.36327337**
-2.8	**-7.011041411**	**-6.482255394**	**-7.9787829**	**-8.51070176**	**-7.10798238**
+2.8	**76.48393676**	**76.40670273**	**86.72115243**	**93.19448221**	**77.71785419**
-2.85	**-5.258281112**	**-4.861691598**	**-5.98408713**	**-6.38302628**	**-5.33098685**
+2.85	**63.73361347**	**63.05427315**	**71.25007558**	**76.78919576**	**64.60595536**
-2.9	**-3.505520813**	**-3.241127802**	**-3.98939137**	**-4.2553508**	**-3.55399132**
+2.9	**46.05239215**	**45.81653379**	**51.51615915**	**55.71828472**	**47.61000689**
-2.95	**-1.752760514**	**-1.620564007**	**-1.99469561**	**-2.12767532**	**-1.77699579**
+2.95	**25.46771823**	**24.98581525**	**27.69357275**	**30.09996463**	**26.23314769**
-3	**-7.72E-15**	**-8.73E-15**	**-8.64E-15**	**-9.05E-15**	**-7.68E-15**
+3	**8.57E-15**	**8.54E-15**	**1.08E-14**	**1.08E-14**	**9.32E-15**

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-2.246342421	-1.8041409	-1.804143824	-1.435764123	-1.152580509	-1.543201531	-1.743142196	-1.74196	-1.743831217	-1.745999834
End Shear	32	27.4480273	27.44802732	21.8336581	17.35094943	22	27.61371595	27.61372	27.55667839	27.58743466
-0.05	-2.246342421	-1.8041409	-1.804143824	-1.435764123	-1.152580509	-1.543201531	-1.743142196	-1.74196	-1.743831217	-1.745999834
+0.05	30.43767929	25.5715283	24.94832897	19.93044284	15.98451677	20.83700021	25.42788548	25.03726	25.43490549	25.46387327
-0.1	-4.665057442	-2.2429377	-2.266194456	-1.750846558	-1.536758471	-2.776170646	-2.405678911	-2.22957	-2.180346617	-2.259351051
+0.1	27.07575607	21.7164991	21.12239097	16.88381352	13.50829338	18.55363338	21.11531022	20.41845	21.11757316	21.12483926
-0.15	-4.665057442	-2.2429377	-2.266194456	-1.750846558	-1.536758471	-2.776170646	-2.405678911	-2.22957	-2.180346617	-2.259351051
+0.15	27.07575607	21.7164991	21.12239097	16.88381352	13.50829338	18.55363338	21.11531022	20.41845	21.11757316	21.12483926
-0.2	-7.619178497	-3.6732483	-3.652073804	-3.451813568	-2.717714579	-4.841965596	-3.696828374	-4.0349	-4.079032519	-3.84126932
+0.2	23.48584366	17.6887393	17.29668916	13.83493342	11.04714753	16.11930449	17.24085996	16.61012	17.1968487	17.21381981
-0.25	-7.619178497	-3.6732483	-3.652073804	-3.451813568	-2.717714579	-4.841965596	-3.696828374	-4.0349	-4.079032519	-3.84126932
+0.25	23.48584366	17.6887393	17.29668916	13.83493342	11.04714753	16.11930449	17.24085996	16.61012	17.1968487	17.21381981
-0.3	-10.70897229	-5.6416572	-5.649643788	-5.241778717	-4.006902034	-7.402887822	-5.774403616	-6.17887	-6.232433282	-6.222427631
+0.3	19.77400208	13.9739531	13.5850692	10.87473922	8.671319906	13.44659685	13.5061163	13.47431	13.59674071	13.52688474
-0.35	-10.70897229	-5.6416572	-5.649643788	-5.241778717	-4.006902034	-7.402887822	-5.774403616	-6.17887	-6.232433282	-6.222427631
+0.35	19.77400208	13.9739531	13.5850692	10.87473922	8.671319906	13.44659685	13.5061163	13.47431	13.59674071	13.52688474
-0.4	-14.34418085	-7.7557441	-7.751972675	-7.041396726	-5.446664311	-9.832297968	-7.911133614	-8.19934	-8.309908181	-8.295188708
+0.4	16.04629517	10.4723871	10.10137788	8.094202594	6.45035463	10.88300975	10.1242354	10.09127	9.885268387	9.895587899
-0.45	-14.34418085	-7.7557441	-7.751972675	-7.041396726	-5.446664311	-9.832297968	-7.911133614	-8.19934	-8.309908181	-8.295188708
+0.45	16.04629517	10.4723871	10.10137788	8.094202594	6.45035463	10.88300975	10.1242354	10.09127	9.885268387	9.895587899
-0.5	-17.7903614	-11.537216	-11.3947196	-9.085278242	-7.226647354	-12.17559116	-11.0614355	-11.641	-11.63656356	-11.24068349
+0.5	12.40878773	7.29634414	6.959462484	6.067171441	4.682311186	8.423509936	7.056238516	7.024115	6.841169929	6.848103321
-0.55	-17.7903614	-11.537216	-11.3947196	-9.085278242	-7.226647354	-12.17559116	-11.0614355	-11.641	-11.63656356	-11.24068349
+0.55	12.40878773	7.29634414	6.959462484	6.067171441	4.682311186	8.423509936	7.056238516	7.024115	6.841169929	6.848103321
-0.6	-21.34299755	-15.361597	-15.23456645	-12.14427312	-9.657449594	-14.57868326	-14.86040746	-15.3138	-15.40264992	-15.06463699
+0.6	8.967539787	4.85725233	4.731712487	4.368108264	3.334950704	6.165183604	4.764005512	4.761513	4.743483972	4.751397251
-0.65	-21.34299755	-15.361597	-15.23456645	-12.14427312	-9.657449594	-14.57868326	-14.86040746	-15.3138	-15.40264992	-15.06463699
+0.65	8.967539787	4.85725233	4.731712487	4.368108264	3.334950704	6.165183604	4.764005512	4.761513	4.743483972	4.751397251
-0.7	-24.64634228	-19.147218	-19.03936474	-15.17458404	-12.08629565	-16.82548001	-18.82930058	-19.1975	-19.29387804	-19.29143557
+0.7	5.828614235	3.15926987	3.041638954	2.821814807	2.125523444	3.975727914	3.055262927	3.063598	3.094441384	3.01958185
-0.75	-24.64634228	-19.147218	-19.03936474	-15.17458404	-12.08629565	-16.82548001	-18.82930058	-19.1975	-19.29387804	-19.29143557
+0.75	5.828614235	3.15926987	3.041638954	2.821814807	2.125523444	3.975727914	3.055262927	3.063598	3.094441384	3.01958185
-0.8	-27.5943327	-22.781771	-22.69526948	-18.08526185	-14.4421829	-18.83833652	-22.51731795	-22.7753	-22.96939743	-22.94356135
+0.8	3.098074675	1.68165022	1.578435556	1.480262263	1.09135521	2.127032227	1.627785685	1.625825	1.587549139	1.645852171
-0.85	-27.5943327	-22.781771	-22.69526948	-18.08526185	-14.4421829	-18.83833652	-22.51731795	-22.7753	-22.96939743	-22.94356135
+0.85	3.098074675	1.68165022	1.578435556	1.480262263	1.09135521	2.127032227	1.627785685	1.625825	1.587549139	1.645852171
-0.9	-30.08090603	-26.15297	-26.08843352	-20.78535996	-16.65344703	-20.54745974	-25.83734538	-25.9757	-26.8287281	-26.91813001
+0.9	0.881983101	0.48054317	0.413429579	0.395422783	0.27225294	0.565218089	0.467052115	0.464468	0.434907696	0.434101583
-0.95	-30.08090603	-26.15297	-26.08843352	-20.78535996	-16.65344703	-20.54745974	-25.83734538	-25.9757	-26.8287281	-26.91813001
+0.95	0.881983101	0.48054317	0.413429579	0.395422783	0.27225294	0.565218089	0.467052115	0.464468	0.434907696	0.434101583
-1	-32	-29.148526	-29.10501006	-23.18392552	-18.6477606	-21.88305701	-29.54037403	-29.5843	-30.45657807	-30.52765784
+1	3.77E-02	0.02059411	0.02038944	0.018243065	1.24E-02	0.025164455	0.019861054	0.019552	0.019887712	0.019870125
(Span 2) -2	-3.77E-02	-0.0205661	-0.020556556	-0.018839711	-1.42E-02	-0.025534537	-0.019760562	-0.01978	-0.019628656	-0.019957515
+2	31.1180172	27.6852107	27.63831772	22.01974299	17.67933797	21.25612791	27.67375534	27.71994	28.66786576	28.756087
-2.05	-3.77E-02	-0.0205661	-0.020556556	-0.018839711	-1.42E-02	-0.025534537	-0.019760562	-0.01978	-0.019628656	-0.019957515
+2.05	31.1180172	27.6852107	27.63831772	22.01974299	17.67933797	21.25612791	27.67375534	27.71994	28.66786576	28.756087
-2.1	-1.919094086	-1.0501554	-0.954299584	-0.905963382	-0.652704621	-1.270993663	-1.017751148	-1.01471	-0.979955088	-0.97900509
+2.1	28.90192604	24.4855352	24.41775754	19.45808778	15.56712458	19.7223861	24.20637901	24.40699	24.85590703	24.94913452
-2.15	-1.919094086	-1.0501554	-0.954299584	-0.905963382	-0.652704621	-1.270993663	-1.017751148	-1.01471	-0.979955088	-0.97900509
+2.15	28.90192604	24.4855352	24.41775754	19.45808778	15.56712458	19.7223861	24.20637901	24.40699	24.85590703	24.94913452
-2.2	-4.405668259	-2.3983964	-2.283922153	-2.126556465	-1.585758684	-3.025683671	-2.320472601	-2.3183	-2.275849347	-2.340511262
+2.2	26.17138481	20.9670903	20.87800321	16.64066366	13.27434931	17.85053597	20.68969961	21.00851	21.2125169	21.18535847
-2.25	-4.405668259	-2.3983964	-2.283922153	-2.126556465	-1.585758684	-3.025683671	-2.320472601	-2.3183	-2.275849347	-2.340511262
+2.25	26.17138481	20.9670903	20.87800321	16.64066366	13.27434931	17.85053597	20.68969961	21.00851	21.2125169	21.18535847

-2.3	**-7.353656769**	**-3.9947084**	**-3.86864006**	**-3.577702776**	**-2.712440277**	**-5.021938561**	**-3.862484241**	**-3.86188**	**-3.90447293**	**-3.82750085**
+2.3	**23.03246117**	**17.2421614**	**17.13290282**	**13.65846491**	**10.87294357**	**15.71037161**	**16.84700618**	**17.26166**	**17.36181867**	**17.36257332**
-2.35	**-7.353656769**	**-3.9947084**	**-3.86864006**	**-3.577702776**	**-2.712440277**	**-5.021938561**	**-3.862484241**	**-3.86188**	**-3.90447293**	**-3.82750085**
+2.35	**23.03246117**	**17.2421614**	**17.13290282**	**13.65846491**	**10.87294357**	**15.71037161**	**16.84700618**	**17.26166**	**17.36181867**	**17.36257332**
-2.4	**-10.6570015**	**-5.7829506**	**-5.651529774**	**-5.207422504**	**-3.995741258**	**-7.326688528**	**-5.661532044**	**-5.65892**	**-5.640051161**	**-5.648333319**
+2.4	**19.59121323**	**13.4230538**	**13.29631487**	**10.60241655**	**8.434271229**	**13.37168107**	**12.98790772**	**13.46268**	**13.55219343**	**13.53166941**
-2.45	**-10.6570015**	**-5.7829506**	**-5.651529774**	**-5.207422504**	**-3.995741258**	**-7.326688528**	**-5.661532044**	**-5.65892**	**-5.640051161**	**-5.648333319**
+2.45	**19.59121323**	**13.4230538**	**13.29631487**	**10.60241655**	**8.434271229**	**13.37168107**	**12.98790772**	**13.46268**	**13.55219343**	**13.53166941**
-2.5	**-14.2096386**	**-8.8561733**	**-8.493170403**	**-6.963749915**	**-5.422413365**	**-9.658581825**	**-8.563552396**	**-8.52895**	**-8.331815402**	**-8.339280585**
+2.5	**16.00661617**	**9.62204765**	**9.482056779**	**7.955163649**	**6.18986818**	**10.97901717**	**9.254551196**	**9.772455**	**9.767771449**	**9.834554437**
-2.55	**-14.2096386**	**-8.8561733**	**-8.493170403**	**-6.963749915**	**-5.422413365**	**-9.658581825**	**-8.563552396**	**-8.52895**	**-8.331815402**	**-8.339280585**
+2.55	**16.00661617**	**9.62204765**	**9.482056779**	**7.955163649**	**6.18986818**	**10.97901717**	**9.254551196**	**9.772455**	**9.767771449**	**9.834554437**
-2.6	**-17.90550327**	**-12.211273**	**-11.82166327**	**-9.465569691**	**-7.540411603**	**-12.15938569**	**-11.80427918**	**-11.7697**	**-11.56889368**	**-11.56416711**
+2.6	**12.69661868**	**6.78176152**	**6.724298859**	**6.150914874**	**4.702159442**	**8.670100861**	**6.843277809**	**7.194457**	**7.308968723**	**7.293724496**
-2.65	**-17.90550327**	**-12.211273**	**-11.82166327**	**-9.465569691**	**-7.540411603**	**-12.15938569**	**-11.80427918**	**-11.7697**	**-11.56889368**	**-11.56416711**
+2.65	**12.69661868**	**6.78176152**	**6.724298859**	**6.150914874**	**4.702159442**	**8.670100861**	**6.843277809**	**7.194457**	**7.308968723**	**7.293724496**
-2.7	**-21.63853455**	**-15.835013**	**-15.43453696**	**-12.34795267**	**-9.847685509**	**-14.7284574**	**-15.30398244**	**-14.8263**	**-15.39730696**	**-15.32778295**
+2.7	**9.52229421**	**4.62657691**	**4.634436952**	**4.399351186**	**3.347424013**	**6.281429601**	**4.744416021**	**5.103936**	**5.159243325**	**5.148912324**
-2.75	**-21.63853455**	**-15.835013**	**-15.43453696**	**-12.34795267**	**-9.847685509**	**-14.7284574**	**-15.30398244**	**-14.8263**	**-15.39730696**	**-15.32778295**
+2.75	**9.52229421**	**4.62657691**	**4.634436952**	**4.399351186**	**3.347424013**	**6.281429601**	**4.744416021**	**5.103936**	**5.159243325**	**5.148912324**
-2.8	**-25.30266953**	**-19.615108**	**-19.21794618**	**-15.36419895**	**-12.27502206**	**-17.36881655**	**-19.10357523**	**-18.4646**	**-19.05899408**	**-19.07618276**
+2.8	**6.360721672**	**2.83449953**	**2.677888086**	**2.671416527**	**2.111373923**	**3.780889462**	**3.085496396**	**3.116037**	**3.159627392**	**2.924812962**
-2.85	**-25.30266953**	**-19.615108**	**-19.21794618**	**-15.36419895**	**-12.27502206**	**-17.36881655**	**-19.10357523**	**-18.4646**	**-19.05899408**	**-19.07618276**
+2.85	**6.360721672**	**2.83449953**	**2.677888086**	**2.671416527**	**2.111373923**	**3.780889462**	**3.085496396**	**3.116037**	**3.159627392**	**2.924812962**
-2.9	**-28.80928075**	**-23.650816**	**-23.05804491**	**-18.42335395**	**-14.75254845**	**-19.73540416**	**-23.22910971**	**-22.547**	**-23.24531676**	**-23.25129729**
+2.9	**3.276853935**	**1.80476962**	**1.830103041**	**1.43566727**	**1.157428664**	**1.915856674**	**1.816040686**	**1.741824**	**1.747190516**	**1.753556144**
-2.95	**-28.80928075**	**-23.650816**	**-23.05804491**	**-18.42335395**	**-14.75254845**	**-19.73540416**	**-23.22910971**	**-22.547**	**-23.24531676**	**-23.25129729**
+2.95	**3.276853935**	**1.80476962**	**1.830103041**	**1.43566727**	**1.157428664**	**1.915856674**	**1.816040686**	**1.741824**	**1.747190516**	**1.753556144**
-3	**-32**	**-27.436269**	**-26.84098589**	**-21.43448001**	**-17.20973101**	**-21.9156069**	**-27.57246762**	**-27.1588**	**-27.57949505**	**-27.60844742**
+3	**2.246342421**	**1.80476962**	**1.803996571**	**1.43566727**	**1.152546412**	**1.543337857**	**1.743764872**	**1.741824**	**1.747190516**	**1.746476107**

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-2.246342421	-2.565925	-2.565924972	-2.050755525	-2.05512	-1.949458206	-2.052061269	-1.613957564
End Shear	32	38.98868	38.98867518	33.11841959	33.94448	29.63139313	31.19094014	23
-0.05	-2.246342421	-2.565925	-2.565924972	-2.050755525	-2.05512	-1.949458206	-2.052061269	-1.613957564
+0.05	30.43767929	36.14556	36.14556156	30.35611791	30.93276	27.59152247	29.04370787	21.78926183
-0.1	-4.665057442	-3.71881	-4.105790421	-2.814795874	-3.80899	-2.767467539	-2.960977644	-2.296361792
+0.1	27.07575607	30.75168	30.75168391	24.96648176	25.22025	23.32157293	24.54902414	19.26621402
-0.15	-4.665057442	-3.71881	-4.105790421	-2.814795874	-3.80899	-2.767467539	-2.960977644	-2.296361792
+0.15	27.07575607	30.75168	30.75168391	24.96648176	25.22025	23.32157293	24.54902414	19.26621402
-0.2	-7.619178497	-5.772355	-6.138444406	-4.256507315	-6.21964	-4.383162035	-4.650542697	-4.793236136
+0.2	23.48584366	25.33543	25.33543224	20.28336465	20.28336	18.83000318	19.82105598	16.68848496
-0.25	-7.619178497	-5.772355	-6.138444406	-4.256507315	-6.21964	-4.383162035	-4.650542697	-4.793236136
+0.25	23.48584366	25.33543	25.33543224	20.28336465	20.28336	18.83000318	19.82105598	16.68848496
-0.3	-10.70897229	-8.554484	-8.894763878	-6.973453778	-8.3093	-6.512845544	-6.89120582	-7.415311632
+0.3	19.77400208	19.90383	19.90382868	15.88954859	15.90933	15.15033727	15.94772345	14.02918616
-0.35	-10.70897229	-8.554484	-8.894763878	-6.973453778	-8.3093	-6.512845544	-6.89120582	-7.415311632
+0.35	19.77400208	19.90383	19.90382868	15.88954859	15.90933	15.15033727	15.94772345	14.02918616
-0.4	-14.34418085	-11.85056	-12.13030092	-9.59021171	-10.2654	-8.617404385	-9.101197949	-10.08727296
+0.4	16.04629517	14.932	14.93199912	11.91086518	11.92899	11.34892381	11.94623559	11.36362711
-0.45	-14.34418085	-11.85056	-12.13030092	-9.59021171	-10.2654	-8.617404385	-9.101197949	-10.08727296
+0.45	16.04629517	14.932	14.93199912	11.91086518	11.92899	11.34892381	11.94623559	11.36362711
-0.5	-17.7903614	-16.02722	-16.12428966	-13.01293333	-13.4542	-12.81183758	-13.11529638	-12.73380819
+0.5	12.40878773	10.38341	10.38341471	8.301457078	8.301457	7.89139518	8.306731768	8.767118455
-0.55	-17.7903614	-16.02722	-16.12428966	-13.01293333	-13.4542	-12.81183758	-13.11529638	-12.73380819
+0.55	12.40878773	10.38341	10.38341471	8.301457078	8.301457	7.89139518	8.306731768	8.767118455
-0.6	-21.34299755	-21.79729	-21.91546563	-17.4828323	-17.4969	-16.60675064	-17.48079014	-15.27960232
+0.6	8.967539787	6.997137	6.997136726	5.604712367	5.604712	5.283901754	5.562001846	6.314982349
-0.65	-21.34299755	-21.79729	-21.91546563	-17.4828323	-17.4969	-16.60675064	-17.48079014	-15.27960232
+0.65	8.967539787	6.997137	6.997136726	5.604712367	5.604712	5.283901754	5.562001846	6.314982349
-0.7	-24.64634228	-27.47115	-27.51783878	-22.33215609	-22.5918	-20.71130068	-21.80136914	-17.64934008
+0.7	5.828614235	4.511145	4.511144739	3.594426973	3.602977	3.438598095	3.619576942	4.082523895
-0.75	-24.64634228	-27.47115	-27.51783878	-22.33215609	-22.5918	-20.71130068	-21.80136914	-17.64934008
+0.75	5.828614235	4.511145	4.511144739	3.594426973	3.602977	3.438598095	3.619576942	4.082523895
-0.8	-27.5943327	-32.48583	-32.487729	-26.77395799	-27.1656	-24.65029467	-25.9476786	-19.76770954
+0.8	3.098074675	2.410777	2.410776856	1.915041983	1.922127	1.832426737	1.92887025	2.145066064
-0.85	-27.5943327	-32.48583	-32.487729	-26.77395799	-27.1656	-24.65029467	-25.9476786	-19.76770954
+0.85	3.098074675	2.410777	2.410776856	1.915041983	1.922127	1.832426737	1.92887025	2.145066064
-0.9	-30.08090603	-37.39124	-37.39124475	-30.72199391	-31.8196	-28.3008237	-29.79034073	-21.55939448
+0.9	0.881983101	0.689049	0.689049298	0.549473077	0.554525	0.523677466	0.551239438	0.577917861
-0.95	-30.08090603	-37.39124	-37.39124475	-30.72199391	-31.8196	-28.3008237	-29.79034073	-21.55939448
+0.95	0.881983101	0.689049	0.689049298	0.549473077	0.554525	0.523677466	0.551239438	0.577917861
-1	-32	-41.48846	-41.48845745	-35.64847311	-37.4987	-31.53998491	-33.19998411	-22.94908291
+1	3.77E-02	0.028619	0.028619328	0.023365946	0.023366	0.02228195	0.023454684	0.026864514
(Span 2) -2	-3.77E-02	-0.029028	-0.029028201	-0.02324772	-0.02325	-0.022262427	-0.023434134	-0.026973371
+2	31.1180172	39.5473	39.54730006	33.20031771	34.74356	29.9659186	31.54307221	22.30620216
-2.05	-3.77E-02	-0.029028	-0.029028201	-0.02324772	-0.02325	-0.022262427	-0.023434134	-0.026973371
+2.05	31.1180172	39.5473	39.54730006	33.20031771	34.74356	29.9659186	31.54307221	22.30620216
-2.1	-1.919094086	-1.499292	-1.499292254	-1.197354291	-1.19735	-1.139462113	-1.199433804	-1.313489045
+2.1	28.90192604	35.03487	35.03487247	28.78699035	29.21103	26.50413629	27.89909083	20.70532197
-2.15	-1.919094086	-1.499292	-1.499292254	-1.197354291	-1.19735	-1.139462113	-1.199433804	-1.313489045
+2.15	28.90192604	35.03487	35.03487247	28.78699035	29.21103	26.50413629	27.89909083	20.70532197
-2.2	-4.405668259	-3.431286	-3.431285798	-2.729967766	-2.73782	-2.608039315	-2.745304542	-3.075989113
+2.2	26.17138481	29.96707	29.98741781	24.58059263	24.91704	22.69294447	23.88730996	18.74025376
-2.25	-4.405668259	-3.431286	-3.431285798	-2.729967766	-2.73782	-2.608039315	-2.745304542	-3.075989113
+2.25	26.17138481	29.96707	29.98741781	24.58059263	24.91704	22.69294447	23.88730996	18.74025376

-2.3	-7.353656769	-5.699535	-5.699535485	-4.544099107	-4.55327	-4.342500013	-4.571052645	-5.170988074
+2.3	23.03246117	24.86859	24.94919869	19.91833857	20.07232	18.65525567	19.63711123	16.48630527
-2.35	-7.353656769	-5.699535	-5.699535485	-4.544099107	-4.55327	-4.342500013	-4.571052645	-5.170988074
+2.35	23.03246117	24.86859	24.94919869	19.91833857	20.07232	18.65525567	19.63711123	16.48630527
-2.4	-10.6570015	-8.316614	-8.316613699	-6.660625935	-6.66063	-6.28512328	-6.615919242	-7.523172075
+2.4	19.59121323	19.16762	19.3270709	15.27989143	15.45213	14.79186837	15.58737845	14.01880534
-2.45	-10.6570015	-8.316614	-8.316613699	-6.660625935	-6.66063	-6.28512328	-6.615919242	-7.523172075
+2.45	19.59121323	19.16762	19.3270709	15.27989143	15.45213	14.79186837	15.58737845	14.01880534
-2.5	-14.2096386	-12.60057	-12.60057241	-10.07476753	-10.0748	-9.57643503	-10.08045793	-10.05723105
+2.5	16.00661617	13.32377	13.56457165	10.87953455	11.40603	10.39194812	10.93889276	11.41305968
-2.55	-14.2096386	-12.60057	-12.60057241	-10.07476753	-10.0748	-9.57643503	-10.08045793	-10.05723105
+2.55	16.00661617	13.32377	13.56457165	10.87953455	11.40603	10.39194812	10.93889276	11.41305968
-2.6	-17.90550327	-17.40483	-17.40482812	-13.88738727	-13.9064	-13.22830416	-13.92453069	-12.69784745
+2.6	12.69661868	10.48494	10.79606853	8.290684626	9.287226	7.561704011	7.99304262	8.744381055
-2.65	-17.90550327	-17.40483	-17.40482812	-13.88738727	-13.9064	-13.22830416	-13.92453069	-12.69784745
+2.65	12.69661868	10.48494	10.79606853	8.290684626	9.287226	7.561704011	7.99304262	8.744381055
-2.7	-21.63853455	-22.549	-22.54900096	-18.00468522	-18.0251	-16.81647523	-17.70155287	-15.36970548
+2.7	9.52229421	7.148694	7.498359364	5.570431619	7.271324	5.440454569	5.76356394	6.08808803
-2.75	-21.63853455	-22.549	-22.54900096	-18.00468522	-18.0251	-16.81647523	-17.70155287	-15.36970548
+2.75	9.52229421	7.148694	7.498359364	5.570431619	7.271324	5.440454569	5.76356394	6.08808803
-2.8	-25.30266953	-28.07446	-28.07446434	-22.47479439	-22.4748	-20.90614681	-22.00647032	-17.99749366
+2.8	6.360721672	4.701773	5.349663861	3.549175767	5.08958	3.310383123	3.519716795	3.519481693
-2.85	-25.30266953	-28.07446	-28.07446434	-22.47479439	-22.4748	-20.90614681	-22.00647032	-17.99749366
+2.85	6.360721672	4.701773	5.349663861	3.549175767	5.08958	3.310383123	3.519716795	3.519481693
-2.9	-28.80928075	-33.49951	-33.4995087	-27.60461194	-28.0662	-25.41003958	-26.74741008	-20.50590291
+2.9	3.276853935	2.886302	3.021920323	2.149479086	2.626703	2.272838562	2.413495061	1.613997634
-2.95	-28.80928075	-33.49951	-33.4995087	-27.60461194	-28.0662	-25.41003958	-26.74741008	-20.50590291
+2.95	3.276853935	2.886302	3.021920323	2.149479086	2.626703	2.272838562	2.413495061	1.613997634
-3	-32	-38.82161	-38.82160829	-33.0662861	-33.8876	-29.62320172	-31.1823176	-22.90769958
+3	2.246342421	2.566917	2.566917253	2.051488085	2.055518	1.949896063	2.052522172	1.613997634

2-Span: Shear (Max and Min) Raw Data Results - 10' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-2.246342421	-2.02709287	-1.874509546	-2.30752	-2.46135	-2.052
End Shear	32	33.14852355	31.25786142	35.08981	37.34524	33.94448
-0.05	-2.246342421	-2.02709287	-1.874509546	-2.30752	-2.46135	-2.052
+0.05	30.43767929	29.43951763	28.89946031	32.01539	34.79769	30.32376
-0.1	-4.665057442	-3.27673293	-3.645548759	-3.01121	-3.33218	-2.78438
+0.1	27.07575607	24.55549139	24.11602375	27.1239	29.58799	24.64956
-0.15	-4.665057442	-3.27673293	-3.645548759	-3.01121	-3.33218	-2.78438
+0.15	27.07575607	24.55549139	24.11602375	27.1239	29.58799	24.64956
-0.2	-7.619178497	-5.693390583	-6.292406491	-5.08526	-5.50512	-4.60044
+0.2	23.48584366	19.91662329	19.45503202	22.2291	24.2167	20.28336
-0.25	-7.619178497	-5.693390583	-6.292406491	-5.08526	-5.50512	-4.60044
+0.25	23.48584366	19.91662329	19.45503202	22.2291	24.2167	20.28336
-0.3	-10.70897229	-7.94818203	-8.806090612	-7.72292	-8.33076	-7.19188
+0.3	19.77400208	15.67376123	15.05035488	17.47668	18.78896	15.62151
-0.35	-10.70897229	-7.94818203	-8.806090612	-7.72292	-8.33076	-7.19188
+0.35	19.77400208	15.67376123	15.05035488	17.47668	18.78896	15.62151
-0.4	-14.34418085	-10.36847124	-11.28664376	-10.3029	-11.0799	-9.90382
+0.4	16.04629517	11.70364285	11.29064896	13.01235	14.01467	11.8867
-0.45	-14.34418085	-10.36847124	-11.28664376	-10.3029	-11.0799	-9.90382
+0.45	16.04629517	11.70364285	11.29064896	13.01235	14.01467	11.8867
-0.5	-17.7903614	-12.63211117	-13.70390723	-14.7735	-15.8349	-13.224
+0.5	12.40878773	8.116203333	8.72766791	8.991291	9.698376	8.261997
-0.55	-17.7903614	-12.63211117	-13.70390723	-14.7735	-15.8349	-13.224
+0.55	12.40878773	8.116203333	8.72766791	8.991291	9.698376	8.261997
-0.6	-21.34299755	-17.03360283	-16.92546691	-19.5729	-20.8889	-17.4693
+0.6	8.967539787	5.594346408	6.269278886	6.305301	6.725655	5.604712
-0.65	-21.34299755	-17.03360283	-16.92546691	-19.5729	-20.8889	-17.4693
+0.65	8.967539787	5.594346408	6.269278886	6.305301	6.725655	5.604712
-0.7	-24.64634228	-22.3543785	-21.31667927	-24.437	-26.0661	-22.4344
+0.7	5.828614235	3.637806916	4.049195305	3.932778	4.258586	3.62194
-0.75	-24.64634228	-22.3543785	-21.31667927	-24.437	-26.0661	-22.4344
+0.75	5.828614235	3.637806916	4.049195305	3.932778	4.258586	3.62194
-0.8	-27.5943327	-27.14175057	-25.77183106	-29.1077	-31.3093	-27.0504
+0.8	3.098074675	1.922416403	2.123284183	2.136843	2.243634	1.929621
-0.85	-27.5943327	-27.14175057	-25.77183106	-29.1077	-31.3093	-27.0504
+0.85	3.098074675	1.922416403	2.123284183	2.136843	2.243634	1.929621
-0.9	-30.08090603	-31.10145312	-29.99518624	-33.4393	-35.8084	-31.7241
+0.9	0.881983101	0.548406951	0.65519849	0.5951	0.611878	0.536259
-0.95	-30.08090603	-31.10145312	-29.99518624	-33.4393	-35.8084	-31.7241
+0.95	0.881983101	0.548406951	0.65519849	0.5951	0.611878	0.536259
-1	-32	-36.22886216	-34.14518372	-37.286	-39.7717	-37.2957
+1	3.77E-02	0.023415246	0.026956931	0.026086	0.027664	0.023294
(Span 2) -2	-3.77E-02	-0.023516911	-0.026937749	-0.02629	-0.0274	-0.02346
+2	31.1180172	33.46954323	31.9812086	35.41701	37.90503	34.53373
-2.05	-3.77E-02	-0.023516911	-0.026937749	-0.02629	-0.0274	-0.02346
+2.05	31.1180172	33.46954323	31.9812086	35.41701	37.90503	34.53373
-2.1	-1.919094086	-1.196105595	-1.367158627	-1.31991	-1.38098	-1.18182
+2.1	28.90192604	29.18375681	27.91822946	31.30789	33.58614	29.12686
-2.15	-1.919094086	-1.196105595	-1.367158627	-1.31991	-1.38098	-1.18182
+2.15	28.90192604	29.18375681	27.91822946	31.30789	33.58614	29.12686
-2.2	-4.405668259	-2.738154446	-3.04577445	-3.0564	-3.21561	-2.74614
+2.2	26.17138481	24.9261353	23.55906536	26.78734	28.57316	24.79456
-2.25	-4.405668259	-2.738154446	-3.04577445	-3.0564	-3.21561	-2.74614
+2.25	26.17138481	24.9261353	23.55906536	26.78734	28.57316	24.79456

-2.3	**-7.353656769**	**-4.590601505**	**-5.128360751**	**-4.99319**	**-5.39426**	**-4.57359**
+2.3	**23.03246117**	**19.87369902**	**19.11883678**	**22.00106**	**23.4678**	**19.90711**
-2.35	**-7.353656769**	**-4.590601505**	**-5.128360751**	**-4.99319**	**-5.39426**	**-4.57359**
+2.35	**23.03246117**	**19.87369902**	**19.11883678**	**22.00106**	**23.4678**	**19.90711**
-2.4	**-10.6570015**	**-6.673090382**	**-7.467405386**	**-7.4932**	**-7.99275**	**-6.66063**
+2.4	**19.59121323**	**14.7839583**	**14.83482267**	**17.13246**	**18.34179**	**15.31513**
-2.45	**-10.6570015**	**-6.673090382**	**-7.467405386**	**-7.4932**	**-7.99275**	**-6.66063**
+2.45	**19.59121323**	**14.7839583**	**14.83482267**	**17.13246**	**18.34179**	**15.31513**
-2.5	**-14.2096386**	**-9.866128419**	**-9.987590995**	**-10.9494**	**-11.8059**	**-10.0323**
+2.5	**16.00661617**	**11.47946658**	**12.51942933**	**12.39399**	**13.30468**	**11.16679**
-2.55	**-14.2096386**	**-9.866128419**	**-9.987590995**	**-10.9494**	**-11.8059**	**-10.0323**
+2.55	**16.00661617**	**11.47946658**	**12.51942933**	**12.39399**	**13.30468**	**11.16679**
-2.6	**-17.90550327**	**-13.6625553**	**-12.99345938**	**-15.2165**	**-16.3725**	**-13.6074**
+2.6	**12.69661868**	**9.18352214**	**10.04095647**	**9.012623**	**9.706608**	**8.69201**
-2.65	**-17.90550327**	**-13.6625553**	**-12.99345938**	**-15.2165**	**-16.3725**	**-13.6074**
+2.65	**12.69661868**	**9.18352214**	**10.04095647**	**9.012623**	**9.706608**	**8.69201**
-2.7	**-21.63853455**	**-17.77626286**	**-17.21358158**	**-19.8443**	**-21.3188**	**-17.7287**
+2.7	**9.52229421**	**6.870946615**	**7.559662131**	**6.398522**	**6.914089**	**5.775542**
-2.75	**-21.63853455**	**-17.77626286**	**-17.21358158**	**-19.8443**	**-21.3188**	**-17.7287**
+2.75	**9.52229421**	**6.870946615**	**7.559662131**	**6.398522**	**6.914089**	**5.775542**
-2.8	**-25.30266953**	**-22.092273**	**-21.76543741**	**-24.6868**	**-26.8466**	**-22.4748**
+2.8	**6.360721672**	**4.581332775**	**4.988945838**	**3.747158**	**4.232049**	**3.424882**
-2.85	**-25.30266953**	**-22.092273**	**-21.76543741**	**-24.6868**	**-26.8466**	**-22.4748**
+2.85	**6.360721672**	**4.581332775**	**4.988945838**	**3.747158**	**4.232049**	**3.424882**
-2.9	**-28.80928075**	**-26.6352755**	**-26.49886044**	**-29.5982**	**-32.2257**	**-27.4674**
+2.9	**3.276853935**	**2.319889868**	**2.246830406**	**2.30734**	**2.461163**	**2.102253**
-2.95	**-28.80928075**	**-26.6352755**	**-26.49886044**	**-29.5982**	**-32.2257**	**-27.4674**
+2.95	**3.276853935**	**2.319889868**	**2.246830406**	**2.30734**	**2.461163**	**2.102253**
-3	**-32**	**-32.33874541**	**-31.26044083**	**-34.4328**	**-37.365**	**-33.2698**
+3	**2.246342421**	**2.02748444**	**1.874567722**	**2.30734**	**2.461163**	**2.055518**

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.22E-16	-1.22125E-16	-1.11291E-16	-1.07692E-16	-7.10E-17	-1.42842E-16	-1.17583E-16	-1.14875E-16	-1.17334E-16	-1.15938E-16
End Shear	1.78E-15	9.312E-16	8.50932E-16	8.31929E-16	5.59E-16	1.19944E-15	9.0437E-16	9.13513E-16	9.4369E-16	9.4369E-16
-0.05	-1.12317121	-0.902070445	-0.902071912	-0.717882062	-0.576290254	-0.771600766	-0.871571098	-0.870980429	-0.871915608	-0.872999917
+0.05	15.21883965	12.78576414	12.47416448	9.965221419	7.992258384	10.41850011	12.71394274	12.51862818	12.71745275	12.73193664
-0.1	-2.246342421	-1.80414089	-1.804143824	-1.435764123	-1.152580509	-1.543201531	-1.743142196	-1.741960857	-1.743831217	-1.745999834
+0.1	28.7918458	23.60790687	23.09560811	18.44805574	14.80640764	19.71854946	23.31067661	23.0656625	23.31299788	23.27758351
-0.15	-3.369513631	-2.706211335	-2.706215736	-2.153646185	-1.728870763	-2.314802297	-2.614713294	-2.612941286	-2.615746825	-2.618999751
+0.15	40.61363411	32.57474864	32.05149155	25.56764938	20.47562937	27.83045007	31.78197793	31.51721473	31.76676044	31.70390319
-0.2	-4.492684841	-3.60828178	-3.608287648	-2.871528247	-2.305161018	-3.086403063	-3.486284393	-3.483921715	-3.487662434	-3.491999668
+0.2	50.60534	39.40180718	39.07925559	31.15145475	24.93912376	34.70195482	38.12472456	37.93126778	38.13831669	38.11584376
-0.25	-5.615856051	-4.510352225	-4.51035956	-3.589410308	-2.881451272	-3.858003829	-4.357855491	-4.354902144	-4.359578042	-4.364999585
+0.25	58.71460915	44.44932439	44.2062658	35.22159022	28.21413921	40.29826123	43.10214989	42.81167778	42.99993561	43.03454953
-0.3	-6.739027262	-5.412422669	-5.412431471	-4.30729237	-3.457741527	-4.629604594	-5.229426589	-5.225882572	-5.231493651	-5.237999502
+0.3	64.91560745	47.6633681	47.488356	37.82291667	30.33517403	44.60201825	46.07242174	45.94610407	46.13447063	46.17982779
-0.35	-7.862198472	-6.314493114	-6.314503383	-5.025174431	-4.034031781	-5.40120536	-6.100997687	-6.096863001	-6.103409259	-6.110999419
+0.35	69.20900726	49.12862921	49.00982674	39.02303452	31.35395127	47.53465425	47.47808298	47.38766591	47.49966873	47.59409278
-0.4	-8.985369682	-7.216563559	-7.216575295	-5.743056493	-4.610322036	-6.172806126	-6.972568785	-6.96784343	-6.975324867	-6.983999336
+0.4	71.62201881	48.95792519	48.88344008	38.91228732	31.33944482	49.11451745	47.30506784	47.24491386	47.41124052	47.38909848
-0.45	-10.10854089	-8.118634004	-8.118647207	-6.460938555	-5.18661229	-6.944406892	-7.844139883	-7.838823858	-7.847240476	-7.856999253
+0.45	72.22709708	47.29211241	47.25040603	37.60373796	30.37784836	49.45578028	47.3181183	47.38242596	47.95034789	47.93164846
-0.5	-11.2317121	-9.020704449	-9.020719119	-7.178820616	-5.762902545	-7.716007657	-8.715710981	-8.709804287	-8.719156084	-8.72999917
+0.5	71.10107153	47.80449302	47.57995536	37.88548527	30.61407927	48.61131146	48.60785592	48.36613604	48.61018877	48.57541367
-0.55	-12.35488331	-9.922774894	-9.922791031	-7.896702678	-6.339192799	-8.487608423	-9.58728208	-9.580784716	-9.591071693	-9.602999087
+0.55	68.3334852	49.04074605	48.46991025	38.63431341	31.1908723	46.7587942	48.62476391	48.30440948	48.55345654	48.49072489
-0.6	-13.47805452	-10.82484534	-10.82486294	-8.61458474	-6.915483054	-9.259209189	-10.45885318	-10.45176514	-10.4629873	-10.475999
+0.6	63.94202232	48.08042459	47.6893817	38.01436603	30.61548674	43.67361272	46.53766313	46.33741009	46.55058653	46.55586441
-0.65	-14.60122573	-11.72691578	-11.72693485	-9.332466801	-7.491773308	-10.03080995	-11.33042428	-11.32274557	-11.33490291	-11.34899892
+0.65	58.28900862	45.3992476	45.08983802	35.94013245	28.88553764	40.07369342	44.06558971	43.69582352	43.98296682	44.0148269
-0.7	-15.72439694	-12.62898623	-12.62900677	-10.05034886	-8.068063562	-10.80241072	-12.20199537	-12.193726	-12.20681852	-12.22199884
+0.7	51.47560024	40.97951399	40.73734306	32.47124596	26.05911423	35.04305963	39.62945083	39.45466023	39.76012674	39.79459282
-0.75	-16.84756815	-13.53105667	-13.53107868	-10.76823092	-8.644353817	-11.57401149	-13.07356647	-13.06470643	-13.07873413	-13.09499876
+0.75	43.71460676	34.96205938	34.77312972	27.72078753	22.22241562	29.67292905	33.8088044	33.66501559	33.99815452	33.99329294
-0.8	-17.97073936	-14.43312712	-14.43315059	-11.48611299	-9.220644071	-12.34561225	-13.94513757	-13.93568686	-13.95064973	-13.96799867
+0.8	35.24534225	27.52850479	27.36688122	21.82457548	17.4788902	24.1027524	26.65233658	26.48982873	26.82248205	26.77819796
-0.85	-19.09391057	-15.33519756	-15.3352225	-12.20399505	-9.796934326	-13.11721302	-14.81670867	-14.80666729	-14.82256534	-14.84099859
+0.85	26.33363473	18.91779858	18.71671547	14.94113375	11.94919451	18.07977393	18.3921998	18.46072917	19.06593447	19.04600744
-0.9	-20.21708179	-16.23726801	-16.23729441	-12.92187711	-10.37485311	-13.88881378	-15.68827977	-15.67764772	-15.69448095	-15.71399851
+0.9	17.27183807	9.387209411	9.069249311	8.429331615	6.341317886	11.8346873	9.232913035	9.295947359	9.864874519	9.848878961
-0.95	-21.340253	-17.13933845	-17.13936633	-13.63975917	-11.22794593	-14.66041455	-18.54424307	-19.62249966	-19.62332292	-19.62401709
+0.95	8.378839463	4.565160072	4.090292854	3.933267981	2.761987416	5.65479437	4.741239868	4.051385302	4.628912494	4.615428848
-1	-22.46342278	-21.82266532	-21.8148613	-17.36966158	-14.54983366	-15.43337762	-24.4499419	-25.63114468	-27.57091999	-27.66226649
+1	0.73752575	0.378883073	0.205565557	0.318581387	0.190997001	0.255345361	0.198610534	0.197844347	0.198877114	0.199575144
(Span 2) -2	-22.46342278	-21.82266532	-21.8148613	-17.36966158	-14.54983366	-15.43337762	-24.4499419	-25.63114468	-27.57091999	-27.66226649
+2	0.73752575	0.378883073	0.205565557	0.318581387	0.190997001	0.255345361	0.198610534	0.197844347	0.198877114	0.199575144
-2.05	-21.34025156	-17.14531154	-17.13796731	-13.638839	-11.22762207	-14.66170869	-18.55004769	-19.62267617	-19.62348408	-19.62416521
+2.05	8.37883997	4.597798638	4.06301478	3.912784396	2.754785872	5.594424811	4.725513416	4.014288531	4.59498508	4.584166537
-2.1	-20.21708035	-16.24292673	-16.23596902	-12.92100537	-10.3745463	-13.89003976	-15.693884	-15.67641629	-15.72471477	-15.7182851
+2.1	17.27184629	9.451398787	9.045338497	8.411377697	6.33500611	11.7817764	9.196023108	9.261233559	9.831260711	9.817916982
-2.15	-19.09390914	-15.34054192	-15.33397074	-12.20317173	-9.796644514	-13.11837083	-14.82200157	-14.80550428	-14.85111952	-14.84504704
+2.15	26.33363628	18.98404621	18.69416885	14.92632477	11.94394395	18.06839706	18.34888141	18.421421	19.02997479	19.01289072
-2.2	-17.97073793	-14.43815711	-14.43197245	-11.4853381	-9.220371308	-12.34670191	-13.95011913	-13.93459228	-13.97752426	-13.97180899
+2.2	35.24533939	27.59267657	27.34172203	21.80805317	17.47308076	24.20546482	26.70467868	26.45480935	26.76641689	26.74866884
-2.25	-16.84756672	-13.5357723	-13.52997417	-10.76750447	-8.644098102	-11.57503298	-13.0782367	-13.06368027	-13.103929	-13.09857093

+2.25	43.71460629	34.98686015	34.74394033	27.70158132	22.21567671	29.6281272	33.81815351	33.6243834	34.01042411	33.95903289
-2.3	-15.72439551	-12.63338749	-12.62797588	-10.04967083	-8.067824895	-10.80336405	-12.20635426	-12.19276826	-12.23033374	-12.22533288
+2.3	51.47561073	40.96760503	40.70286076	32.44856079	26.05114969	34.99688329	39.59104169	39.40664324	39.80378886	39.79448063
-2.35	-14.6012243	-11.73100268	-11.7259776	-9.331837196	-7.491551689	-10.03169512	-11.33447182	-11.32185626	-11.35673848	-11.35209483
+2.35	58.28901005	45.36397631	45.04896737	35.91325078	28.87609374	39.70403335	43.84605848	43.63893852	44.01968544	44.04866828
-2.4	-13.47805309	-10.82861787	-10.82397931	-8.614003561	-6.915278483	-9.260026192	-10.46258939	-10.45094425	-10.48314323	-10.47885677
+2.4	63.94201851	48.03314172	47.64122426	37.98270049	30.60435172	43.96013772	46.62145682	46.36471418	46.55740388	46.5821001
-2.45	-12.35488188	-9.926233063	-9.921981025	-7.896169926	-6.339005277	-8.488357263	-9.590706951	-9.580032243	-9.609547967	-9.605618721
+2.45	68.300146	48.86030378	48.48493387	38.64419525	31.19434545	46.69690485	48.55564911	48.24281168	48.49709329	48.50779855
-2.5	-11.23171067	-9.023848254	-9.01998274	-7.178336291	-5.762732071	-7.716688335	-8.718824515	-8.709120237	-8.735952709	-8.732380667
+2.5	71.04818916	47.8540796	47.58698303	37.89010743	30.61570111	48.54435792	48.58133768	48.29316383	48.58818472	48.54817937
-2.55	-10.10853946	-8.121463445	-8.117984455	-6.460502657	-5.186458865	-6.945019407	-7.846942078	-7.83820823	-7.862357451	-7.859142614
+2.55	72.20833254	47.28008933	47.2426475	37.59864249	30.37604283	49.38082873	47.27746809	47.34553885	47.91660239	47.9005708
-2.6	-8.985368252	-7.219078636	-7.215986169	-5.742669022	-4.610185659	-6.173350478	-6.975059642	-6.967296223	-6.988762192	-6.98590456
+2.6	71.62202072	48.93843813	48.87086277	38.90402806	31.33654176	49.03080158	47.28576839	47.22740643	47.30712355	47.37433659
-2.65	-7.862197042	-6.316693826	-6.313987884	-5.024835387	-4.033912453	-5.40168155	-6.103177206	-6.096384216	-6.115166934	-6.112666507
+2.65	69.20900726	49.10018732	48.99146978	39.01095551	31.34971226	47.44162741	47.44991486	47.36211348	47.60486242	47.57254675
-2.7	-6.739025831	-5.414309017	-5.411989599	-4.307001752	-3.457639247	-4.630012622	-5.23129477	-5.225472209	-5.241571676	-5.239428453
+2.7	64.91560078	47.6247431	47.46343549	37.80652187	30.3294177	44.57813148	46.03418017	45.91140231	46.19192641	46.19168458
-2.75	-5.615854621	-4.511924208	-4.509991313	-3.589168117	-2.881366041	-3.858343693	-4.359412334	-4.354560203	-4.367976418	-4.3661904
+2.75	58.71461058	44.39958839	44.17416304	35.20047583	28.20672246	40.34360916	42.92969886	42.76699465	43.04102278	43.07961898
-2.8	-4.492683411	-3.609539399	-3.607993028	-2.871334483	-2.305092835	-3.086674765	-3.487529898	-3.483648196	-3.49438116	-3.492952346
+2.8	50.63246228	39.34027635	39.03954021	31.12534133	24.92994372	34.73763621	38.20715793	37.88111562	38.11799557	38.15237296
-2.85	-3.3695122	-2.70715459	-2.705994743	-2.153500848	-1.728819629	-2.315005837	-2.615647462	-2.612736189	-2.620785901	-2.619714293
+2.85	40.65970825	32.39042154	32.00394267	25.53636392	20.46462289	27.85656462	31.71360865	31.45549384	31.71028462	31.71802981
-2.9	-2.24634099	-1.804769781	-1.803996457	-1.435667213	-1.152546423	-1.543336908	-1.743765026	-1.741824182	-1.747190643	-1.746476239
+2.9	28.80927376	23.65081026	23.05804272	18.42335168	14.79766362	19.73539971	23.28357771	22.99176407	23.29051122	23.2512918
-2.95	-1.12316978	-0.902384972	-0.901998172	-0.717833578	-0.576273217	-0.77166798	-0.87188259	-0.870912175	-0.873595385	-0.873238186
+2.95	15.22148929	12.7426053	12.48188733	9.970304257	7.994059624	10.42658232	12.72769282	12.51322852	12.72886693	12.68725372
-3	-7.11E-15	-3.90799E-15	-3.90799E-15	-3.51718E-15	-2.38E-15	-4.78031E-15	-3.77476E-15	-3.77476E-15	-3.77476E-15	-3.71929E-15
+3	7.52E-15	4.58273E-15	3.84495E-15	3.65727E-15	2.70E-15	4.95138E-15	4.47345E-15	4.29875E-15	4.56034E-15	4.51301E-15

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.22E-16	-1.73472E-16	-1.73472E-16	-1.38333E-16	-1.38333E-16	-1.31839E-16	-1.38778E-16	-1.52545E-16
End Shear	1.78E-15	1.35405E-15	1.35405E-15	1.06396E-15	1.11022E-15	1.03558E-15	1.09008E-15	1.19472E-15
-0.05	-1.12317121	-1.282962486	-1.282962486	-1.025377763	-1.027559578	-0.974729103	-1.026030635	-0.806978782
+0.05	15.21883965	18.07278078	18.07278078	15.17805895	15.46637799	13.79576124	14.52185393	10.89463092
-0.1	-2.246342421	-2.565924972	-2.565924972	-2.050755525	-2.055119156	-1.949458206	-2.052061269	-1.613957564
+0.1	28.7918458	33.46134648	33.46134648	27.69853664	28.05712053	25.50216344	26.84438257	20.61129015
-0.15	-3.369513631	-3.848887458	-3.848887458	-3.076133288	-3.082678735	-2.924187309	-3.078091904	-2.420936347
+0.15	40.61363411	46.12752587	46.12752587	37.57797277	37.84192053	35.08889524	36.9356792	29.07480428
-0.2	-4.492684841	-5.131849944	-5.131849944	-4.10151105	-4.110238313	-3.898916412	-4.104122539	-3.227915129
+0.2	50.60534	56.07285816	56.07285816	44.85738583	44.90639714	42.59497289	44.83681357	36.2288097
-0.25	-5.615856051	-6.41481243	-6.41481243	-5.126888813	-5.137797891	-4.873645515	-5.130153174	-4.034893911
+0.25	58.71460915	63.33858059	63.33858059	50.70841163	50.70841163	48.05173858	50.58077745	42.03576973
-0.3	-6.739027262	-7.697774916	-7.697774916	-6.152266575	-6.165357469	-5.848374618	-6.156183808	-4.841872693
+0.3	64.91560745	67.91997323	67.91997323	54.2028491	54.2028491	51.52131636	54.23296459	46.47698009
-0.35	-7.862198472	-8.980737402	-8.980737402	-7.177644338	-7.192917047	-6.823103721	-7.182214443	-5.648851475
+0.35	69.20900726	69.93983256	69.93983256	55.85656821	55.85656821	53.09649393	55.89104624	49.55255132
-0.4	-8.985369682	-10.26369989	-10.26369989	-8.2030221	-8.220476626	-7.797832824	-8.208245078	-6.455830257
+0.4	71.62201881	69.64553114	69.64553114	55.65302099	55.77793002	52.90081741	55.68507095	51.28145006
-0.45	-10.10854089	-11.54666237	-11.54666237	-9.228399863	-9.248036204	-8.772561927	-9.234275713	-7.26280904
+0.45	72.22709708	67.31276876	67.33769553	56.79482963	59.38970092	51.08853649	53.77740683	51.70143138
-0.5	-11.2317121	-12.82962486	-12.82962486	-10.25377763	-10.27559578	-9.74729103	-10.26030635	-8.069787822
+0.5	71.10107153	67.91436465	67.91436465	58.55676892	60.34968839	51.6257319	54.34287568	50.86912785
-0.55	-12.35488331	-14.11258735	-14.11258735	-11.27915539	-11.30315536	-10.72202013	-11.28633698	-8.876766604
+0.55	68.3334852	69.56828015	69.56828015	57.89277643	58.86058489	52.85081008	55.63243166	48.85995716
-0.6	-13.47805452	-15.39554983	-15.39554983	-12.30453315	-12.33071494	-11.69674924	-12.31236762	-9.683745386
+0.6	63.94202232	68.47897963	68.47897963	54.76449802	54.81536348	51.97644842	54.71205096	45.76819411
-0.65	-14.60122573	-16.67851232	-16.67851232	-13.32991091	-13.35827452	-12.67147834	-13.33839825	-10.49072417
+0.65	58.28900862	64.76709393	64.76709393	51.84187025	51.84187025	49.09542434	51.67939405	41.70691243
-0.7	-15.72439694	-17.9614748	-17.9614748	-14.35528868	-14.38583409	-13.64620744	-14.36442889	-11.29770295
+0.7	51.47560024	58.5088746	58.5088746	46.62288333	46.66958593	44.33132752	46.66455528	36.80804208
-0.75	-16.84756815	-19.24443729	-19.24443729	-15.38066644	-15.41339367	-14.62093655	-15.39045952	-12.10468173
+0.75	43.71460676	49.90826828	49.90826828	39.775064	39.81459452	37.83839917	39.82989387	31.22234341
-0.8	-17.97073936	-20.52739978	-20.52739978	-16.4060442	-16.44095325	-15.59566565	-16.41649016	-12.91166051
+0.8	35.24534225	39.29106377	39.29106377	31.37660827	31.55586123	29.80163594	31.3701431	25.11938557
-0.85	-19.09391057	-21.81036226	-21.81036226	-17.43142196	-17.46851283	-16.57039475	-17.44252079	-13.7186393
+0.85	26.33363473	27.0788234	27.1259073	21.94291278	23.31302136	20.56159527	21.64378449	18.68756933
-0.9	-20.21708179	-23.09332475	-23.09332475	-18.45679973	-18.49607241	-17.54512385	-18.46855143	-14.52561808
+0.9	17.27183807	13.479	13.479	11.27125885	12.71386617	10.24399126	10.7831487	12.13412712
-0.95	-21.340253	-24.37628723	-24.37628723	-23.01966446	-24.69892886	-18.51985296	-19.49458206	-15.33259686
+0.95	8.378839463	6.54596833	6.54596833	4.866751919	6.197629908	4.974935931	5.236774664	5.685145237
-1	-22.46342278	-31.03002089	-31.03002089	-30.87325379	-33.84391635	-23.60260742	-24.84484991	-16.13997533
+1	0.73752575	0.290282003	0.290282003	0.233659452	0.233659452	0.222819492	0.234546834	0.269733701
(Span 2) -2	-22.46342278	-31.03002089	-31.03002089	-30.87325379	-33.84391635	-23.60260742	-24.84484991	-16.13997533
+2	0.73752575	0.290282003	0.290282003	0.233659452	0.233659452	0.222819492	0.234546834	0.269733701
-2.05	-21.34025156	-24.38571411	-24.38571411	-23.03105467	-24.69700952	-18.52401276	-19.4989608	-15.33297651
+2.05	8.37883997	6.395884568	6.395884568	4.819198756	6.147322532	4.923425048	5.182552682	5.667397524
-2.1	-20.21708035	-23.10225548	-23.10225548	-18.46339295	-18.49966444	-17.54906473	-18.47269972	-14.52597769
+2.1	17.27184629	13.49362992	13.49362992	11.22567684	12.73143314	10.25515874	10.79490393	12.11858042
-2.15	-19.09390914	-21.81879685	-21.81879685	-17.4376489	-17.47190531	-16.5741167	-17.44643863	-13.71897888
+2.15	26.33363628	27.11680552	27.11680552	21.88695079	23.3740931	20.60771627	21.69233292	18.67347194
-2.2	-17.97073793	-20.53533823	-20.53533823	-16.41190486	-16.44414619	-15.59916867	-16.42017755	-12.91198006
+2.2	35.24533939	39.36884408	39.36884408	31.43175137	31.4857351	29.77448765	31.34156595	25.10605226
-2.25	-16.84756672	-19.2518796	-19.2518796	-15.38616082	-15.41638706	-14.62422064	-15.39391646	-12.10498124

+2.25	43.71460629	49.85038508	49.85038508	39.78606295	40.01226366	37.80690271	39.79673969	31.20918428
-2.3	-15.72439551	-17.96842097	-17.96842097	-14.36041678	-14.38862793	-13.64927261	-14.36765537	-11.29798243
+2.3	51.47561073	58.4245731	58.4245731	46.5776961	46.62413973	44.2941376	46.625408	36.79447508
-2.35	-14.6012243	-16.68496235	-16.68496235	-13.33467273	-13.3608688	-12.67432457	-13.34139429	-10.49098361
+2.35	58.28901005	64.75238658	64.75238658	51.58359821	51.63894993	49.05134979	51.63299978	41.69241382
-2.4	-13.47805309	-15.40150372	-15.40150372	-12.30892869	-12.33310968	-11.69937654	-12.3151332	-9.683984794
+2.4	63.94201851	68.5336261	68.5336261	54.84877273	54.84877273	51.92449083	54.65735877	45.75235074
-2.45	-12.35488188	-14.1180451	-14.1180451	-11.28318465	-11.30535055	-10.72442851	-11.28887212	-8.876985977
+2.45	68.300146	69.60503307	69.60503307	57.82216193	58.80287143	52.79020912	55.56864118	48.8423578
-2.5	-11.23171067	-12.83458647	-12.83458647	-10.25744061	-10.27759142	-9.74948048	-10.26261103	-8.06998716
+2.5	71.04818916	67.93155829	67.93155829	58.53575277	60.3632296	51.5558829	54.26935042	50.84946343
-2.55	-10.10853946	-11.55112784	-11.55112784	-9.231696563	-9.249832295	-8.774532448	-9.236349945	-7.262988343
+2.55	72.20833254	67.2924506	67.31692976	56.82195204	59.42957479	51.08016565	53.76859542	51.67940033
-2.6	-8.985368252	-10.26766922	-10.26766922	-8.20595252	-8.222073168	-7.799584417	-8.21008886	-6.455989526
+2.6	71.62202072	69.61477611	69.61477611	55.63031576	55.74287028	52.88724608	55.67078535	51.25680943
-2.65	-7.862197042	-8.98421059	-8.98421059	-7.180208478	-7.19431404	-6.824636385	-7.183827774	-5.648990709
+2.65	69.20900726	69.89494446	69.89494446	55.82342925	56.0057205	53.07668561	55.87019538	49.52520146
-2.7	-6.739025831	-7.700751964	-7.700751964	-6.154464435	-6.166554913	-5.849688353	-6.157566688	-4.841991892
+2.7	64.91560078	67.85904892	67.85904892	54.15785903	54.15785903	51.49443898	54.20467261	46.44676012
-2.75	-5.615854621	-6.417293337	-6.417293337	-5.128720393	-5.138795786	-4.874740322	-5.131305602	-4.034993075
+2.75	58.71461058	63.34627939	63.34627939	50.50552807	50.54900992	48.01711896	50.54433575	42.00270589
-2.8	-4.492683411	-5.133834711	-5.133834711	-4.10297635	-4.111036658	-3.89979229	-4.105044516	-3.227994259
+2.8	50.63246228	56.14893965	56.14893965	44.94959757	44.94959757	42.55212412	44.7917096	36.1928457
-2.85	-3.3695122	-3.850376085	-3.850376085	-3.077232308	-3.083277531	-2.924844259	-3.07878343	-2.420995442
+2.85	40.65970825	46.18490143	46.18490143	37.50045606	37.78853478	35.03754616	36.88162754	29.03600006
-2.9	-2.24634099	-2.566917458	-2.566917458	-2.051488265	-2.055518404	-1.949896227	-2.052522344	-1.613996625
+2.9	28.80927376	33.49950076	33.49950076	27.66869189	28.06622298	25.44222106	26.78128533	20.56984626
-2.95	-1.12316978	-1.283458832	-1.283458832	-1.025744223	-1.027759276	-0.974948195	-1.026261258	-0.806997808
+2.95	15.22148929	18.09167799	18.09167799	15.19532018	15.48505762	13.765723	14.49023474	10.85066359
-3	-7.11E-15	-5.55112E-15	-5.55112E-15	-4.44089E-15	-4.44089E-15	-4.21885E-15	-4.44089E-15	-4.94295E-15
+3	7.52E-15	6.80877E-15	6.80877E-15	5.26288E-15	5.39329E-15	5.17787E-15	5.45039E-15	5.066E-15

2-Span: Moment (Max and Min) Raw Data Results - 10' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.22E-16	-1.35451E-16	-1.57309E-16	-1.54623E-16	-1.64931E-16	-1.36263E-16
End Shear	1.78E-15	1.10895E-15	1.2612E-15	1.2418E-15	1.29384E-15	1.11022E-15
-0.05	-1.12317121	-1.013546435	-0.937254773	-1.153759954	-1.230677284	-1.025998912
+0.05	15.21883965	14.71975882	14.44973016	16.00769285	17.39884257	15.16188172
-0.1	-2.246342421	-2.02709287	-1.874509546	-2.307519908	-2.461354569	-2.051997825
+0.1	28.7918458	26.65164484	26.49624946	30.19262042	32.20546178	27.97738155
-0.15	-3.369513631	-3.040639305	-2.811764319	-3.461279863	-3.692031853	-3.077996737
+0.15	40.61363411	36.83323708	36.4771849	41.26679543	44.3819839	37.40759111
-0.2	-4.492684841	-4.054185739	-3.749019092	-4.615039817	-4.922709138	-4.103995649
+0.2	50.60534	44.22310884	44.19857697	50.20521575	53.92939685	44.80772841
-0.25	-5.615856051	-5.067732174	-4.686273865	-5.768799771	-6.153386422	-5.129994561
+0.25	58.71460915	49.85991759	49.65642385	56.71438119	60.81877874	50.70841163
-0.3	-6.739027262	-6.081278609	-5.623528638	-6.922559725	-7.384063707	-6.155993474
+0.3	64.91560745	53.45357502	52.96493491	60.86680371	65.1757289	54.22045776
-0.35	-7.862198472	-7.094825044	-6.560783411	-8.076319679	-8.614740991	-7.181992386
+0.35	69.20900726	55.13907174	54.2758618	62.77151506	66.95628273	55.8839455
-0.4	-8.985369682	-8.108371479	-7.498038185	-9.230079633	-9.845418276	-8.207991298
+0.4	71.62201881	54.8877833	53.85388286	62.57388129	66.74547337	55.77793002
-0.45	-10.10854089	-9.121917914	-8.435292958	-10.38383959	-11.07609556	-9.233990211
+0.45	72.22709708	57.27530507	53.04745654	60.45571033	64.48609101	59.03688676
-0.5	-11.2317121	-10.13546435	-9.372547731	-11.53759954	-12.30677284	-10.25998912
+0.5	71.10107153	58.32673507	53.81640714	60.88138959	64.9401489	60.00280487
-0.55	-12.35488331	-11.14901078	-10.3098025	-12.6913595	-13.53745013	-11.28598804
+0.55	68.3334852	56.90188059	52.41851361	62.2491417	66.84932172	58.42930098
-0.6	-13.47805452	-12.16255722	-11.24705728	-13.84511945	-14.76812741	-12.31198695
+0.6	63.94202232	54.2119312	50.78018427	61.2647027	65.81126612	54.6767898
-0.65	-14.60122573	-13.17610365	-12.18431205	-14.9988794	-15.9988047	-13.33798586
+0.65	58.28900862	51.32893655	49.62849889	57.89873276	62.17038054	51.84187025
-0.7	-15.72439694	-14.18965009	-13.12156682	-16.15263936	-17.22948198	-14.36398477
+0.7	51.47560024	46.4614795	46.220935	52.29659318	56.13054236	46.6472491
-0.75	-16.84756815	-15.20319652	-14.0588216	-17.30639931	-18.46015927	-15.38998368
+0.75	43.71460676	39.77137909	40.63497685	44.6402005	47.91033782	39.81860168
-0.8	-17.97073936	-16.21674296	-14.99607637	-18.46015927	-19.69083655	-16.4159826
+0.8	35.24534225	31.4422285	33.06052747	35.14776392	37.74439626	31.55586123
-0.85	-19.09391057	-17.23028939	-15.93333114	-19.61391922	-20.92151384	-17.44198151
+0.85	26.33363473	21.94575211	23.7250838	24.07392565	25.90607408	23.30745436
-0.9	-20.21708179	-18.24383583	-16.87058592	-20.76767918	-22.15219112	-18.46798042
+0.9	17.27183807	11.95162213	13.33308064	12.10780601	12.77510098	12.63734065
-0.95	-21.340253	-24.77031228	-22.77004587	-21.92143913	-24.68723048	-24.69851286
+0.95	8.378839463	5.61834407	6.08357167	5.816545515	6.170475998	5.980522646
-1	-22.46342278	-33.80291056	-31.45684839	-27.92363702	-33.75578643	-33.81134085
+1	0.73752575	0.375504936	0.345177612	0.262895478	0.276644913	0.234642957
(Span 2) -2	-22.46342278	-33.80291056	-31.45684839	-27.92363702	-33.75578643	-33.81134085
+2	0.73752575	0.375504936	0.345177612	0.262895478	0.276644913	0.234642957
-2.05	-21.34025156	-24.7754371	-22.76989297	-21.91973357	-24.68607771	-24.69742666
+2.05	8.37883997	5.593298664	6.078971493	5.891371854	6.284129977	5.953076288
-2.1	-20.21708035	-18.24736009	-16.87110962	-20.76606338	-22.1504676	-18.49966444
+2.1	17.27184629	11.92572269	13.32828347	12.0786851	12.74403829	12.60753919
-2.15	-19.09390914	-17.23361787	-15.93382576	-19.61239319	-20.91988607	-17.47190531
+2.15	26.33363628	21.91233472	23.73272891	24.04645214	25.87678475	23.27211814
-2.2	-17.97073793	-16.21987565	-14.9965419	-18.45872299	-19.68930453	-16.44414619
+2.2	35.24533939	31.41794972	33.06767861	35.11710497	37.71169275	31.3376332
-2.25	-16.84756672	-15.20613343	-14.05925804	-17.3050528	-18.45872299	-15.41638706

+2.25	43.71460629	39.79756665	40.64144575	44.60464887	47.87239717	40.01226366
-2.3	-15.72439551	-14.19239121	-13.12197418	-16.15138261	-17.22814145	-14.38862793
+2.3	51.47561073	46.49407321	46.22644559	52.25459527	56.08574468	46.61206704
-2.35	-14.6012243	-13.17864899	-12.18469032	-14.99771242	-15.99755991	-13.3608688
+2.35	58.28901005	51.3559261	49.63288242	57.84893505	62.11728958	51.61247068
-2.4	-13.47805309	-12.16490677	-11.24740645	-13.84404222	-14.76697837	-12.33310968
+2.4	63.94201851	54.23237652	50.78314503	61.20602627	65.7715883	54.84877273
-2.45	-12.35488188	-11.15116455	-10.31012259	-12.69037203	-13.53639683	-11.30535055
+2.45	68.300146	56.93581519	52.4141616	62.18073814	66.32612068	58.39782503
-2.5	-11.23171067	-10.13742233	-9.372838732	-11.53670184	-12.30581529	-10.27759142
+2.5	71.04818916	58.35423535	53.82066871	60.88995295	64.94928315	59.96342686
-2.55	-10.10853946	-9.123680107	-8.435554871	-10.38303164	-11.07523375	-9.249832295
+2.55	72.20833254	57.29502189	53.05059005	60.44625685	64.4760073	58.98833648
-2.6	-8.985368252	-8.109937887	-7.49827101	-9.229361452	-9.844652215	-8.222073168
+2.6	71.62202072	54.87564655	53.85033924	62.55855495	66.72912528	55.66881897
-2.65	-7.862197042	-7.096195666	-6.560987149	-8.075691259	-8.614070676	-7.19431404
+2.65	69.20900726	55.11983762	54.27170587	62.74915652	66.93243362	56.0057205
-2.7	-6.739025831	-6.082453446	-5.623703288	-6.922021067	-7.383489138	-6.166554913
+2.7	64.91560078	53.42839929	52.95985373	60.83645154	65.14335325	54.19503137
-2.75	-5.615854621	-5.068711226	-4.686419427	-5.768350874	-6.152907599	-5.138795786
+2.75	58.71461058	49.82811816	49.65032307	56.6752665	60.77707701	50.528209
-2.8	-4.492683411	-4.054969006	-3.749135566	-4.614680681	-4.92232606	-4.111036658
+2.8	50.63246228	44.23593798	44.19126821	50.15682616	53.90079943	44.94959757
-2.85	-3.3695122	-3.041226785	-2.811851705	-3.461010488	-3.691744521	-3.083277531
+2.85	40.65970825	36.86154625	36.46863687	41.20883492	44.41249032	37.36608176
-2.9	-2.24634099	-2.027484565	-1.874567844	-2.307340296	-2.461162982	-2.055518404
+2.9	28.80927376	26.63527597	26.4988628	29.79534942	32.22572858	27.53615205
-2.95	-1.12316978	-1.013742345	-0.937283983	-1.153670103	-1.230581443	-1.027759276
+2.95	15.22148929	14.72973871	14.45102096	16.01710396	17.40888643	15.17243938
-3	-7.11E-15	-4.46402E-15	-5.05037E-15	-4.996E-15	-5.23682E-15	-4.44089E-15
+3	7.52E-15	4.95481E-15	4.94189E-15	6.22339E-15	6.2433E-15	5.38821E-15

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-6.770691424	-9.183331648	-6.091752815	-6.941451272	-6.941451272	-6.465177449	-6.948541556	-5.274865386	-5.55249	-3.549973742
End Shear	85.13230906	106.5736934	76.619078	81.78025875	81.78025875	75.99098019	80.51959728	62.15299665	65.42421	44.3555
-0.05	-8.747215869	-9.203638621	-6.11002909	-6.941451272	-6.941451272	-6.465177449	-6.948541556	-5.274865386	-5.55249	-4.272797825
+0.05	75.80170425	96.21650836	68.21087465	73.98094154	73.98094154	67.83545823	71.68781282	56.54019253	59.51599	40.83224026
-0.1	-14.37025299	-9.3066345	-9.342476803	-6.941451272	-6.941451272	-6.465177449	-7.039282896	-7.108901403	-7.48305	-6.513487927
+0.1	69.15941276	86.43194784	61.6926558	66.69073935	66.69073935	60.21294969	63.29643403	50.97867978	53.66177	37.44438869
-0.15	-17.27441656	-9.540952033	-12.80575326	-7.868484601	-8.326862351	-7.053461734	-9.108699335	-8.131225207	-8.55918	-8.109679834
+0.15	65.82258015	81.56426152	59.24032204	63.04022805	63.04022805	56.44017641	59.15700667	48.1927075	50.72917	35.74419371
-0.2	-23.23411131	-14.19193079	-19.59677117	-12.00308277	-12.61820627	-9.914361245	-12.9541749	-10.22528849	-10.7635	-11.31243196
+0.2	59.15366983	71.93155339	52.74513844	55.77224536	55.77224536	49.01906439	51.04342292	42.53357788	44.77219	32.31054585
-0.25	-26.27591797	-16.57067516	-22.87667492	-14.02370539	-14.69520161	-11.36815964	-14.73725941	-11.30378576	-11.8987	-12.91506648
+0.25	55.83588112	67.1877672	49.78108389	52.17231747	52.17231747	45.38971225	47.09035535	39.785475	41.87945	30.58536724
-0.3	-32.44873711	-23.24752894	-29.20489613	-17.96280988	-18.70743709	-15.13814719	-18.04171161	-15.03967117	-15.8312	-16.11300249
+0.3	49.26897522	57.27519302	43.91792027	45.08446378	45.08446378	38.34088736	39.28372128	34.37415312	36.18332	27.13893647
-0.35	-35.56570785	-27.80997625	-32.2531874	-21.53646083	-21.6099071	-18.12905593	-19.57011153	-17.39277865	-18.3082	-17.70437803
+0.35	46.03383106	52.34710841	41.03106898	41.61407912	41.61407912	34.94040198	35.61707189	31.72445033	33.39416	25.42594541
-0.4	-41.82527097	-37.06334024	-38.11770859	-29.31446502	-29.77284277	-24.06993727	-25.29154635	-22.57064697	-23.7586	-20.46857225
+0.4	39.69471339	43.6334251	35.37712279	34.86425215	34.86425215	28.23862335	28.44432002	26.33124641	27.7171	22.04108229
-0.45	-44.95350562	-41.73295239	-40.93364678	-33.22312583	-33.76750217	-27.01007451	-28.24346658	-25.39370638	-26.7887	-22.03376403
+0.45	36.60439469	39.44700071	32.62199573	31.60235943	31.60235943	25.24387011	25.24387011	23.84711531	25.10223	20.37746371
-0.5	-51.00123736	-51.10439738	-46.33165333	-40.88544391	-41.55694013	-32.80508346	-34.01555798	-31.16884065	-32.8808	-25.29574527
+0.5	30.61600068	31.46613015	27.28502202	25.06248825	25.06248825	20.23999066	20.23999066	19.08714397	20.09173	17.1285234
-0.55	-53.89393375	-55.78461168	-48.91314386	-44.62679077	-45.34116238	-35.65012132	-37.7536686	-33.99648776	-35.8616	-26.91191766
+0.55	27.7312664	27.69196084	24.71485992	21.65986194	21.65986194	17.56595923	17.76020293	16.82481859	17.71034	15.55145608
-0.6	-59.88499142	-65.07959462	-53.83926454	-51.89919759	-52.66233763	-42.19691377	-44.95412791	-39.50621166	-41.666	-30.04357773
+0.6	22.21369201	20.62647515	19.80005767	16.12401933	16.12401933	12.94119918	13.289871	12.56924649	13.23079	12.51279575
-0.65	-62.72706778	-69.67242801	-56.18299306	-55.41797636	-56.18876395	-45.98463319	-49.29417624	-42.17798873	-44.4791	-31.55080549
+0.65	19.59387693	17.35512693	17.46681978	13.55143585	13.55143585	10.87951832	11.21930519	10.58947934	11.14682	11.05945742
-0.7	-67.64467546	-78.69355558	-60.62924683	-62.52448762	-63.27350847	-53.44938568	-57.7490796	-47.32960055	-49.9	-34.42739351
+0.7	14.66437196	11.44319617	13.07683509	9.206569435	9.206569435	7.339217346	7.339217346	6.99699277	7.365256	8.305433102
-0.75	-69.9675761	-83.09960411	-62.73061575	-66.23919937	-66.96468356	-57.10742469	-61.84985393	-49.79914668	-52.4973	-35.78849656
+0.75	12.36739223	9.653784792	11.03120312	7.781566371	7.781566371	6.21734625	6.21734625	5.903532674	6.214245	7.013002935
-0.8	-74.33795071	-91.64665808	-66.68651138	-73.07586137	-73.73433805	-64.22736579	-69.91641413	-54.49994716	-57.4389	-38.33565585
+0.8	8.140363686	6.36566509	7.266109558	4.996246435	4.996246435	4.127707015	4.127707015	3.919731876	4.126034	4.617975568
-0.85	-76.3838113	-95.76509336	-68.53959965	-75.92286236	-76.53960874	-67.67027944	-74.05298647	-56.72090273	-59.7725	-39.51345266
+0.85	6.222710151	4.875818644	5.557483183	3.816868623	3.816868623	3.067229451	3.142779762	2.997026725	3.154765	3.523630924
-0.9	-80.19246267	-103.634982	-71.9920822	-81.23133221	-81.75266722	-74.2745245	-81.96401147	-60.87819878	-64.1388	-41.65682907
+0.9	2.809721102	1.66323831	2.528748991	1.701111764	1.701111764	1.43908767	1.43908767	1.340902247	1.411476	1.561944826
-0.95	-82.03081195	-107.363556	-73.82773058	-83.68053103	-84.14993924	-77.41687327	-85.724263	-62.80422344	-66.1608	-42.61414443
+0.95	1.326465152	0.568265114	1.191307737	0.773501218	0.773501218	0.627877888	0.657444175	0.628584534	0.661668	0.702865086
-1	-89.41167429	-114.3503723	-81.04295691	-88.13812915	-88.49962827	-83.33453018	-92.22692294	-66.32529817	-69.8558	-44.27937859
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	8.54E+01	1.11E+02	7.70E+01	85.95959744	86.37602424	8.04E+01	8.91E+01	6.46E+01	68.05517	4.35E+01
-2.05	-1.33E+00	-9.72E-01	-1.188796587	-0.852241307	-0.852241307	-0.634832386	-0.664401268	-0.647703393	-0.68179	-0.705402767
+2.05	8.19E+01	1.07E+02	7.36E+01	83.65366846	84.12364848	7.74E+01	8.59E+01	6.28E+01	66.14689	4.26E+01
-2.1	-4.44E+00	-3.37E+00	-3.99942523	-2.728294629	-2.728294629	-2.268255553	-2.268255553	-2.126125222	-2.23803	-2.506659119
+2.1	78.28754269	99.71522319	70.29740623	78.6135229	79.1847694	70.98818015	78.42867945	58.83404106	61.99218	40.61830597
-2.15	-6.222710144	-4.740429454	-5.57070311	-3.82905997	-3.82905997	-3.076386875	-3.151937259	-3.002952229	-3.161	-3.526963378
+2.15	76.42779163	95.71330931	68.52776451	75.8915774	76.50878277	67.63500672	74.45929864	56.70557051	59.7564	39.50964248
-2.2	-10.19064665	-7.981830155	-9.107543145	-6.264670949	-6.264670949	-5.15073338	-5.15073338	-4.89150984	-5.14896	-5.786273448
+2.2	72.24910668	87.36572441	64.7364294	70.07466374	70.77005169	60.66633645	66.02230086	52.1744041	54.99464	37.08840825
-2.25	-12.3673911	-9.677062529	-11.04710678	-7.590735975	-7.590735975	-6.228372398	-6.228372398	-5.91066189	-6.22175	-7.017019063

+2.25	69.9048918	*83.04273864*	*62.71626944*	66.72929722	67.45511577	57.06982725	61.80797071	49.78202791	52.47933	35.78408843
-2.3	-17.07531143	*-14.31148171*	*-15.24132989*	-11.53911113	-11.53911113	-8.950434315	-9.031355744	-8.769724462	-9.23129	-9.660028444
+2.3	65.16095367	*74.15464942*	*58.43049741*	59.19613255	59.96105586	49.69998881	53.5178199	44.7693691	47.20643	33.00870947
-2.35	-19.59387915	*-17.39796983*	*-17.48494758*	-13.57844984	-13.57844984	-10.89980619	-11.03317567	-10.60260033	-11.1606	-11.06403436
+2.35	62.65343618	*69.61189724*	*56.16614881*	55.37971784	56.15047258	45.94564696	49.24971044	42.15940336	44.4595	31.54592452
-2.4	-24.92831873	*-24.12303531*	*-22.23729095*	-18.85978208	-18.85978208	-15.13195526	-15.4984484	-14.66453406	-15.4364	-14.01638334
+2.4	57.3703987	*60.38446892*	*51.39731044*	48.26005127	49.0044028	39.12077729	40.50257171	36.75797274	38.77137	28.49077054
-2.45	-27.73126642	*-27.74174958*	*-24.73472372*	-21.69124431	-21.69124431	-17.40066839	-17.78377944	-16.84007418	-17.7264	-15.55646951
+2.45	54.59594616	*55.72182835*	*48.89380606*	44.58597289	45.29993277	35.6557408	36.81556011	33.97678596	35.8408	26.90667522
-2.5	-33.57592558	*-35.44148704*	*-29.94341786*	-28.17441969	-28.17441969	-22.72890007	-22.72890007	-21.44658491	-22.5754	-18.74380298
+2.5	48.78356355	*46.35339253*	*43.65069465*	37.03997544	37.6543851	29.89351776	31.12284025	28.27924016	29.8333	23.64609787
-2.55	-36.60439692	*-39.50233158*	*-32.64310193*	-31.61107798	-31.61107798	-25.27006669	-25.27006669	-23.86406032	-25.1201	-20.38279424
+2.55	45.49770618	*41.66932148*	*40.91178456*	33.18036868	33.7238657	26.97985406	28.21319677	25.3732056	26.76705	22.02869521
-2.6	-42.84012551	*-47.995118*	*-38.2038167*	-38.24114382	-38.24114382	-31.4718658	-31.90486191	-28.89368612	-30.4144	-23.73075446
+2.6	38.99453467	*32.35535849*	*35.20064664*	25.31859411	25.67360368	21.07730605	22.26934844	19.95405678	21.00427	19.28292593
-2.65	-46.0338333	*-52.40656546*	*-41.05295358*	-41.65156743	-41.65156743	-34.97448325	-35.65369123	-31.61561813	-33.2796	-25.4314705
+2.65	35.887457	*27.74689056*	*32.22883051*	21.49667938	21.56438911	18.09825706	19.7180002	17.37486963	18.28934	17.69922002
-2.7	-52.53864606	*-61.94513679*	*-46.85874797*	-48.64554639	-48.64554639	-41.86312062	-43.09407059	-37.08224275	-39.0339	-28.86570327
+2.7	29.71107964	*18.94560748*	*26.05334393*	15.98918042	16.7031403	12.79322182	16.41486194	12.48893802	13.14625	14.51072805
-2.75	-55.83588337	*-67.2499496*	*-49.80326458*	-52.21153046	-52.21153046	-45.42646868	-46.96072803	-39.80453063	-41.8995	-30.59095935
+2.75	26.65565997	*16.79706014*	*22.84981182*	14.00163761	14.67257589	11.59125364	14.71928381	11.37552064	11.97423	12.90987626
-2.8	-62.48494451	*-76.79048465*	*-55.7446911*	-59.43768285	-59.43768285	-52.74375966	-55.11066052	-45.32033029	-47.7056	-34.03711411
+2.8	20.64461058	*11.81506541*	*16.21110188*	9.927995192	10.47149221	8.43281615	11.0592594	9.161630929	9.643822	9.704807462
-2.85	-65.82258244	*-81.6277783*	*-58.72917388*	-63.08027482	-63.08027482	-56.47871139	-59.19917502	-48.14844051	-50.6826	-35.74973791
+2.85	18.0545522	*9.509362455*	*12.84919617*	7.845396041	8.302718535	7.038533629	9.087787388	8.124066171	8.551649	8.104516936
-2.9	-72.48821329	*-91.38322473*	*-64.69422602*	-70.38068815	-70.38068815	-64.05376013	-67.52001122	-53.78289641	-56.6136	-39.13345105
+2.9	11.97877896	*9.24455001*	*6.146744141*	6.941400221	6.941400221	6.465034725	6.948093313	6.091549021	6.412157	5.030828753
-2.95	-75.80170321	*-96.27993175*	*-67.95295811*	-74.02093526	-74.02093526	-67.87486928	-71.73123489	-56.55961485	-59.5364	-40.79626527
+2.95	9.210330638	*9.203557642*	*6.109851011*	6.941400221	6.941400221	6.465034725	6.948093313	5.274840587	5.552464	4.270305208
-3	-85.13230906	*-106.057309*	*-76.611131*	-81.2376769	-81.2376769	-75.53678644	-80.20261229	-62.15299665	-65.4242	-44.21201602
+3	6.770691424	*9.183250667*	*6.091574734*	6.941400221	6.941400221	6.465034725	6.948093313	5.274840587	5.552464	3.549928797

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-4.885923327	-4.885743284	-3.886515218	-3.124011294	-3.396230553	-5.214766075	-5.216826226	-5.241386668	-5.24098695
End Shear	57.57330216	57.57330216	45.7969449	36.38635208	43.7221789	61.64873206	63.70902564	63.33293201	63.53331073
-0.05	-4.885923327	-4.885743284	-4.044046643	-3.378837183	-3.396230553	-5.214766075	-5.216826226	-5.640105677	-6.005714246
+0.05	52.19547044	51.38034211	40.99983718	32.77261024	39.06485217	55.27608052	56.65903313	56.55480253	56.74870761
-0.1	-6.668042699	-6.160269464	-6.78686593	-5.458794434	-4.644479942	-5.214766075	-7.000042071	-7.456606121	-7.656526309
+0.1	47.0590314	46.22525802	36.89525382	29.42267695	35.89062652	49.29468037	49.99041976	49.88428985	50.06977447
-0.15	-8.089672211	-7.15652441	-8.082239448	-6.449945303	-6.586678576	-6.457870934	-8.00252953	-8.446367857	-8.51526178
+0.15	44.48660293	43.64656395	34.8415815	27.75394519	34.2778602	46.32467129	46.71800632	46.61144619	46.79204397
-0.2	-10.70570169	-9.193476014	-10.53160403	-8.342979902	-10.6082874	-8.993412744	-9.805904674	-10.07960301	-10.05575419
+0.2	39.36426463	38.51814829	30.75642016	24.44810098	31.02030074	40.4629587	40.58504808	40.49224662	40.44278429
-0.25	-11.90728041	-10.23858595	-11.68987127	-9.248158556	-12.54732889	-10.13855853	-10.68150672	-10.77304844	-10.75113988
+0.25	36.82675822	35.98090882	28.73490796	22.81859931	29.38321438	37.58602239	37.7039557	37.71745127	37.51803139
-0.3	-14.11551977	-13.58306678	-13.88426128	-10.9840222	-16.27838715	-13.1096186	-13.07890114	-13.07951116	-13.14158278
+0.3	31.83000582	30.99164213	24.75896403	19.62543914	26.11174047	31.9769122	31.62273172	31.9927692	31.90063935
-0.35	-16.67155752	-15.97926571	-14.92466415	-11.81793446	-18.06900807	-15.6672162	-15.45379072	-15.45954579	-15.52314228
+0.35	29.38314472	28.55213587	22.81450963	18.06930999	24.48505323	29.25950625	28.70064227	29.27112818	29.17978671
-0.4	-21.81215272	-20.82779699	-18.41080062	-14.19436541	-21.49689954	-20.73430872	-20.20719173	-20.22445794	-20.29078482
+0.4	24.50152438	23.81455746	19.0375788	15.0566938	21.26909243	23.86912701	23.08381906	23.89065891	23.95089865
-0.45	-24.34952243	-23.27297345	-20.37148278	-15.74402955	-23.13278043	-23.23607655	-22.67891275	-22.60138771	-22.66889697
+0.45	22.20434457	21.52900606	17.21507922	13.60767633	19.68752414	21.4572896	21.41989216	21.10903663	21.46267193
-0.5	-29.3404926	-28.18717162	-24.22087124	-18.80619639	-26.28856214	-28.15667771	-28.23932915	-27.45779815	-27.53438445
+0.5	17.80072748	17.15565212	13.72695639	10.84275929	16.5964957	17.20399206	17.16584516	16.77016171	17.2092056
-0.55	-31.81261374	-30.68266612	-26.10530273	-20.31533502	-28.20778996	-30.56778522	-31.08024482	-31.1872543	-30.09547658
+0.55	15.62200677	15.08033452	12.07130993	9.53423674	14.99998864	14.93106534	15.16630878	15.16630878	15.16630878
-0.6	-37.2275129	-35.70250456	-29.78294853	-23.2809253	-31.17102718	-35.59018123	-36.14218318	-36.6276959	-35.94236372
+0.6	11.40420813	11.18369173	8.961790779	7.083397191	12.10858813	11.0000193	11.10504708	10.98666256	11.0673621
-0.65	-39.8670487	-38.16177145	-31.57188742	-24.73393159	-32.44974034	-38.30890323	-38.51318354	-39.8652218	-38.91612394
+0.65	9.588698172	9.374881417	7.736865608	5.94837626	10.72439493	9.247590572	9.301267494	9.23253886	9.307868331
-0.7	-44.48260865	-42.94774843	-35.0393061	-27.57153925	-34.83382183	-44.08644015	-44.13316917	-46.03826572	-45.19080669
+0.7	6.453978796	6.21112148	5.77212197	4.375511946	8.098316553	6.238334744	6.221815834	6.104026661	6.240712187
-0.75	-46.62127955	-45.26195318	-36.71351108	-28.95257	-35.93779066	-46.90815246	-46.95626571	-48.82169765	-48.24797952
+0.75	5.483390921	5.232495839	4.875592247	3.676752416	6.646264081	5.284744313	5.268300464	5.15548634	5.285166444
-0.8	-50.71243838	-49.70154125	-39.93222	-31.63005282	-37.96606098	-52.38054857	-52.43077799	-54.64097372	-54.72958942
+0.8	3.549761187	3.420734432	3.213889019	2.391607593	4.378805498	3.508550963	3.508550963	3.508550963	3.508550963
-0.85	-52.65775001	-51.81442329	-41.47244858	-33.008216	-38.88896776	-55.01646396	-55.49489958	-57.56215506	-58.12161218
+0.85	2.704843613	2.593842682	2.454413461	1.809123308	3.342392024	2.607145034	2.689022756	2.593797493	2.625168725
-0.9	-56.32990765	-55.79510719	-44.42683642	-35.65163656	-40.5488042	-60.05080897	-61.66306999	-62.70580176	-64.49642637
+0.9	1.211414723	1.113672706	1.092471655	0.773965311	1.582996437	1.223224519	1.182236949	1.152643	1.178376869
-0.95	-58.04957624	-57.65041112	-45.90205004	-36.89632457	-41.28433487	-62.43447453	-64.62550864	-65.46437039	-67.50934045
+0.95	0.556478319	0.466956447	0.495706593	0.327144171	0.668728156	0.533696204	0.548087923	0.521064211	0.543896418
-1	-61.23813261	-61.05967109	-48.61180965	-39.21144844	-44.29061043	-66.89785243	-70.26305722	-71.27175904	-73.14216471
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	5.97E+01	5.94E+01	4.73E+01	3.81E+01	4.22E+01	6.47E+01	67.46802458	68.4036329	7.04E+01
-2.05	-0.59997788	-0.511344784	-0.498910717	-0.328203682	-0.677057577	-0.539607528	-0.55355489	-0.52614431	-0.548649327
+2.05	5.80E+01	5.76E+01	4.59E+01	3.69E+01	4.13E+01	6.24E+01	64.59751924	65.43741846	6.75E+01
-2.1	-1.935867006	-1.828851335	-1.750220492	-1.270736006	-2.495081109	-1.92801722	-1.883136939	-1.850736995	-1.878913197
+2.1	54.51255084	53.83357527	42.9549884	34.35067208	39.74050844	57.54950007	58.58702688	60.11705386	61.33366672
-2.15	-2.712742485	-2.599328382	-2.458630979	-1.810717114	-3.353357633	-2.614928844	-2.635050565	-2.600487181	-2.631424873
+2.15	52.63813537	51.79973159	41.46340103	33.00450015	38.87865915	54.98947752	55.46466249	57.42549946	58.07990811
-2.2	-4.450087693	-4.307579574	-4.026707301	-3.016612786	-5.4938805	-4.378123373	-4.378123373	-4.378123373	-4.378123373
+2.2	48.67810357	47.49959685	38.33559691	30.30239638	36.97041413	49.6469262	49.698367	51.75187019	51.84350737
-2.25	-5.476260118	-5.239103371	-4.88067261	-3.678666029	-6.659465017	-5.294116538	-5.27696505	-5.163539624	-5.296456651
+2.25	46.5996801	45.24580818	36.70365648	28.9488503	35.92542341	46.87916545	46.92947798	48.79708299	48.505694

-2.3	**-7.889536912**	**-7.678798376**	**-6.714204838**	**-5.111208837**	**-9.400827819**	**-7.607869168**	**-7.655808067**	**-7.589190967**	**-7.658083093**
+2.3	**42.2639433**	**40.56206605**	**33.31439818**	**26.16083095**	**33.65720608**	**41.18764015**	**41.23506139**	**43.16981402**	**42.32443835**
-2.35	**-9.6061978**	**-9.387028643**	**-7.824174935**	**-6.051437011**	**-10.73943209**	**-9.264835258**	**-9.317210095**	**-9.247366235**	**-9.321728835**
+2.35	**40.01380569**	**38.14459526**	**31.56134875**	**24.72994593**	**32.4353871**	**38.49854503**	**38.49061893**	**40.12709206**	**39.15660716**
-2.4	**-13.33288886**	**-13.10111626**	**-10.49035378**	**-8.283318199**	**-13.5511175**	**-12.86216197**	**-12.98445638**	**-12.84811537**	**-12.93295396**
+2.4	**34.8571974**	**33.18974859**	**27.94910675**	**21.80333567**	**29.81982376**	**33.50539823**	**33.69170809**	**33.60366791**	**32.89786606**
-2.45	**-15.33053557**	**-15.0944585**	**-12.0808174**	**-9.537808989**	**-15.01646238**	**-14.79056813**	**-15.16167898**	**-14.77869397**	**-14.86850313**
+2.45	**32.369892**	**30.66485498**	**26.09418948**	**20.31112682**	**28.42748744**	**30.56833903**	**31.21096435**	**30.27485665**	**30.07447761**
-2.5	**-19.99058622**	**-19.32250564**	**-15.45345105**	**-12.2056679**	**-18.14591646**	**-19.31956506**	**-19.28004967**	**-18.87025502**	**-19.32495646**
+2.5	**26.83493079**	**25.71011435**	**22.29745189**	**17.27758157**	**24.76917025**	**25.68608766**	**25.63458875**	**24.94841351**	**25.01836231**
-2.55	**-22.22693642**	**-21.54471073**	**-17.22564504**	**-13.61166711**	**-19.70504099**	**-21.47955668**	**-21.4404775**	**-21.01921486**	**-21.48056405**
+2.55	**24.32399332**	**23.25585003**	**20.359909**	**15.73968648**	**23.1146672**	**23.21037806**	**23.14728088**	**22.58038267**	**22.64926235**
-2.6	**-26.87781629**	**-26.17420654**	**-20.91683303**	**-16.54934275**	**-22.88754056**	**-26.46963846**	**-25.4458412**	**-26.49134517**	**-26.54871656**
+2.6	**19.22563612**	**18.37844621**	**16.41716204**	**12.63012372**	**19.78944891**	**18.18391968**	**17.80854446**	**17.82143688**	**17.88783007**
-2.65	**-29.27994463**	**-28.56900479**	**-22.82585759**	**-18.07358789**	**-24.50321017**	**-29.28682558**	**-28.30873884**	**-29.29459737**	**-29.20172399**
+2.65	**16.64539511**	**15.96248209**	**14.91857897**	**11.81564064**	**18.04913206**	**15.64089799**	**15.43116327**	**15.4384787**	**15.50344119**
-2.7	**-34.33836293**	**-33.48742816**	**-26.74581762**	**-21.21420981**	**-27.76410566**	**-34.78353505**	**-34.43180813**	**-34.79974293**	**-34.70555936**
+2.7	**13.03152087**	**11.29691426**	**12.80017518**	**10.12550302**	**14.4165804**	**11.19644233**	**11.73553128**	**11.44612822**	**11.48011848**
-2.75	**-36.85216015**	**-35.99855066**	**-28.74677576**	**-22.82307286**	**-29.40161265**	**-37.6152298**	**-37.57658791**	**-37.63584438**	**-37.54148463**
+2.75	**11.89545389**	**10.3080883**	**11.68309111**	**9.245597491**	**12.52575623**	**10.12710762**	**10.89275003**	**10.7669181**	**10.74540682**
-2.8	**-41.94544013**	**-41.09338422**	**-32.80570745**	**-26.09901775**	**-32.67147031**	**-43.40838252**	**-43.53209137**	**-43.43804476**	**-43.3922007**
+2.8	**9.421099264**	**8.159785687**	**9.322468766**	**7.408037772**	**8.598502457**	**7.754669973**	**8.92745988**	**9.331768507**	**9.306156013**
-2.85	**-44.51253517**	**-43.66459117**	**-34.85370201**	**-27.75852612**	**-34.2961008**	**-46.35506947**	**-46.7486694**	**-46.63996342**	**-46.81871306**
+2.85	**8.075642968**	**7.149547906**	**8.074653974**	**6.447095038**	**6.563482703**	**6.443835681**	**7.993295044**	**8.536269386**	**8.508175269**
-2.9	**-49.65669592**	**-48.82331215**	**-38.96180714**	**-31.1014306**	**-37.50549331**	**-52.31174622**	**-53.33862809**	**-53.2310614**	**-53.41907628**
+2.9	**5.150213588**	**5.211183222**	**5.433328246**	**4.432570715**	**3.39656218**	**5.214947914**	**6.033774031**	**6.569337498**	**6.727044561**
-2.95	**-52.22137574**	**-51.39833409**	**-41.01194046**	**-32.77717241**	**-39.08253472**	**-55.30696743**	**-56.69097396**	**-56.58449605**	**-56.77645078**
+2.95	**4.885890256**	**4.885720299**	**4.035541056**	**3.375633142**	**3.39656218**	**5.214947914**	**5.216735906**	**5.633208974**	**5.996045683**
-3	**-57.30495264**	**-56.50842498**	**-45.07942513**	**-36.11793942**	**-43.33983334**	**-61.29425436**	**-63.466339**	**-63.36302578**	**-63.56143532**
+3	**4.885890256**	**4.885720299**	**3.886499754**	**3.124005454**	**3.39656218**	**5.214947914**	**5.216735906**	**5.241508983**	**5.240810863**

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-6.111375837	-5.688466594	-5.60026	-6.22343	-6.22852
End Shear	71.12124632	66.18598039	65.98821	72.18998	72.18998
-0.05	-6.111375837	-6.072527484	-5.60026	-6.22343	-6.22852
+0.05	62.23201674	58.90736197	60.01732	64.0255	64.5031
-0.1	-9.222665542	-9.092009117	-5.60026	-7.32603	-6.71827
+0.1	54.73855356	51.90971762	54.11092	57.71831	56.76508
-0.15	-10.73185731	-10.79431596	-6.30364	-8.22351	-7.68379
+0.15	51.05081035	48.46093034	51.15224	54.56239	52.81864
-0.2	-13.49927099	-13.9907587	-9.29088	-10.7112	-9.66161
+0.2	43.84121612	41.70836866	45.20591	48.21964	45.00419
-0.25	-14.770272	-15.53091093	-10.9432	-11.9879	-10.6803
+0.25	40.33851763	38.4225911	42.28697	45.1061	41.46264
-0.3	-17.15062358	-18.49480298	-14.5703	-15.4682	-14.0335
+0.3	33.58523091	32.62991632	35.83539	38.76757	35.05755
-0.35	-19.6380912	-19.87670457	-17.5018	-19.1262	-16.4483
+0.35	30.35379607	29.89553367	33.03301	35.489	31.76288
-0.4	-24.52364945	-24.25305082	-23.4663	-25.1116	-21.7201
+0.4	24.96904161	24.62342449	27.58806	29.47931	25.49747
-0.45	-26.92174035	-26.59580682	-26.6349	-28.4995	-24.361
+0.45	22.36674726	22.10051651	25.35261	26.67447	22.57238
-0.5	-31.62858032	-33.03587675	-32.862	-35.1857	-29.5738
+0.5	17.88525044	17.31804344	20.29541	21.30368	18.07328
-0.55	-33.93731263	-36.11863915	-35.9093	-38.4527	-32.1362
+0.55	15.75646291	15.07329706	17.89167	18.75301	15.93465
-0.6	-40.1810694	-41.99965606	-41.8435	-44.8053	-39.5955
+0.6	11.75471168	11.15996337	13.36973	13.95942	11.9111
-0.65	-43.67721651	-44.79787961	-44.7194	-47.8797	-43.4419
+0.65	9.894528375	9.864118818	11.31602	12.07042	10.05869
-0.7	-50.71578077	-50.10971951	-50.2604	-53.7955	-50.9896
+0.7	6.588019033	7.408435996	7.415405	7.74707	6.595288
-0.75	-54.20810096	-52.62330269	-52.9146	-56.6257	-54.6749
+0.75	5.577776993	6.255994608	6.279397	6.543037	5.584993
-0.8	-61.02465765	-57.39367959	-57.9621	-62.0015	-61.8285
+0.8	3.649979547	4.120378586	4.1358	4.311466	3.700703
-0.85	-64.3361224	-60.42025399	-60.3444	-64.5358	-65.2809
+0.85	2.788510031	3.144605038	3.17335	3.291577	2.819092
-0.9	-70.73354251	-66.24944886	-64.798	-71.2155	-71.8969
+0.9	1.256473976	1.395596803	1.451494	1.54826	1.290217
-0.95	-73.80670031	-69.04144286	-66.8582	-74.4286	-75.0446
+0.95	0.58456861	0.696670862	0.686524	0.661385	0.608362
-1	-79.67002399	-74.35375779	-71.3814	-80.5089	-80.9795
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	7.68E+01	7.17E+01	6.88E+01	77.50893	7.81E+01
-2.05	-0.61126273	-0.695673878	-0.67965	-0.66628	-0.60643
+2.05	7.38E+01	6.90E+01	6.68E+01	74.40717	7.50E+01
-2.1	-1.996660619	-2.235928246	-2.28781	-2.44033	-2.03361
+2.1	67.55502834	63.3710963	62.60976	67.87697	68.61848
-2.15	-2.793353228	-3.145486679	-3.17939	-3.29801	-2.82418
+2.15	64.31614542	60.41734126	60.32858	64.51895	65.25907
-2.2	-4.567381311	-5.159750255	-5.1659	-5.4039	-4.6179
+2.2	57.62573355	55.03962253	55.46659	59.34469	58.2676
-2.25	-5.583607219	-6.257063951	-6.24671	-6.55079	-5.55128
+2.25	54.18697849	52.62088654	52.89692	56.60683	54.65152

-2.3	**-8.14672797**	**-8.613555752**	**-9.28891**	**-9.64049**	**-8.26309**
+2.3	**47.15431857**	**47.49865538**	**47.50813**	**50.85832**	**47.21849**
-2.35	**-9.905265665**	**-9.865338736**	**-11.2793**	**-11.746**	**-10.0502**
+2.35	**43.65595296**	**44.79521163**	**44.70015**	**47.85913**	**43.41748**
-2.4	**-13.72275635**	**-12.93807016**	**-15.5956**	**-16.3182**	**-13.891**
+2.4	**36.65571496**	**39.10370807**	**38.88496**	**41.63965**	**35.68644**
-2.45	**-15.76893376**	**-15.07537819**	**-17.9072**	**-18.7696**	**-15.9478**
+2.45	**33.92336133**	**36.11567869**	**35.88889**	**38.43081**	**32.11988**
-2.5	**-20.10423647**	**-19.6651993**	**-22.8015**	**-23.9646**	**-20.3021**
+2.5	**29.27577776**	**29.85518943**	**29.74766**	**31.84358**	**26.9638**
-2.55	**-22.38062449**	**-22.10289494**	**-25.3699**	**-26.6929**	**-22.5869**
+2.55	**26.90730342**	**26.59268175**	**26.61368**	**28.64035**	**24.34418**
-2.6	**-27.25064223**	**-27.22676593**	**-30.2997**	**-32.373**	**-28.5926**
+2.6	**22.08099449**	**21.58348787**	**20.4297**	**22.11117**	**19.04576**
-2.65	**-30.37317882**	**-29.89812422**	**-33.0516**	**-35.3094**	**-31.7832**
+2.65	**19.62317035**	**19.87538629**	**17.48211**	**19.10649**	**16.43292**
-2.7	**-36.9372355**	**-35.42267452**	**-38.7007**	**-41.8352**	**-38.469**
+2.7	**15.96766646**	**17.04652307**	**12.56239**	**13.54921**	**11.75802**
-2.75	**-40.35959638**	**-38.42573222**	**-41.7117**	**-45.1268**	**-41.4848**
+2.75	**14.76290735**	**15.52939506**	**10.93215**	**11.97925**	**10.67382**
-2.8	**-47.43714184**	**-45.06073434**	**-48.165**	**-51.376**	**-48.6366**
+2.8	**12.14703408**	**12.42444105**	**7.606986**	**9.447565**	**8.657591**
-2.85	**-51.07311111**	**-48.46423856**	**-51.1721**	**-54.5835**	**-52.7909**
+2.85	**10.7231262**	**10.79269996**	**6.295091**	**8.217481**	**7.677637**
-2.9	**-58.49159624**	**-55.39826099**	**-57.0882**	**-60.8941**	**-60.5535**
+2.9	**7.611466143**	**7.345331461**	**5.600232**	**6.43302**	**6.228814**
-2.95	**-62.2550108**	**-58.9107687**	**-60.0371**	**-64.051**	**-64.5092**
+2.95	**6.111154611**	**6.071402518**	**5.600232**	**6.223739**	**6.228814**
-3	**-69.84205238**	**-65.98183719**	**-66.4535**	**-70.7175**	**-72.1535**
+3	**6.111154611**	**5.688508775**	**5.600232**	**6.223739**	**6.228814**

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts) / Span 1	HL93 (Variable) + Lane Load / Moment Z (kips-ft)	*HL-93 Design Tandem (with Lane Load)* / *Moment Z (kips-ft)*	*HL-93 Truck Train (with Lane Load)* / *Moment Z (kips-ft)*	SC SHV1A / Moment Z (kips-ft)	SC SHV1B / Moment Z (kips-ft)	SC SHV2A / Moment Z (kips-ft)	SC SHV2B / Moment Z (kips-ft)	SC SHV3A / Moment Z (kips-ft)	SC SHV3B / Moment Z (kips-ft)	SC School Bus / Moment Z (kips-ft)
-0	-3.38E-14	*-2.33E-14*	*-2.88E-14*	-2.07E-14	-2.07E-14	-1.68E-14	-1.70E-14	-1.63E-14	-1.71E-14	-1.91E-14
End Shear	1.68E-14	*1.22E-14*	*1.51E-14*	1.01E-14	1.01E-14	8.14E-15	8.50E-15	7.85E-15	8.27E-15	9.69E-15
-0.05	-5.078018568	*-6.887498736*	*-4.568814611*	-5.20608845	-5.20608845	-4.84888309	-5.21140617	-3.95614904	-4.16436741	-2.662480306
+0.05	57.11604796	*71.60651423*	*51.39644878*	55.48570616	55.48570616	50.87659368	53.76585961	42.32140547	44.54884786	30.76768533
-0.1	-10.15603714	*-13.77499747*	*-9.137629222*	-10.4121769	-10.4121769	-9.69776617	-10.4228123	-7.91229808	-8.32873482	-5.324960612
+0.1	109.4803709	*136.0813983*	*98.40627703*	105.5108536	105.5108536	96.02181131	101.2153276	80.64513972	84.88962076	58.97560422
-0.15	-15.2340557	*-20.66249621*	*-13.70644383*	-15.6182654	-15.6182654	-14.5466493	-15.6342185	-11.8684471	-12.4931022	-7.987440918
+0.15	150.4359765	*185.6222011*	*135.3923786*	142.1894459	142.1894459	127.1973527	133.3625105	108.2093041	113.9045307	81.00698642
-0.2	-20.31207427	*-27.54999494*	*-18.27525844*	-20.8243538	-20.8243538	-19.3955323	-20.8456247	-15.8245962	-16.6574696	-10.64992122
+0.2	190.7206877	*230.9131137*	*170.8852853*	178.1037314	178.1037314	158.1171536	164.6781834	135.9029334	143.0557194	102.685479
-0.25	-25.39009284	*-34.43749368*	*-22.84407306*	-26.0304423	-26.0304423	-24.2444154	-26.0570308	-19.7807452	-20.8218371	-13.31240153
+0.25	215.0266786	*259.2848759*	*193.2000533*	198.095057	198.095057	174.7201467	181.6619508	150.6268043	158.5545309	115.6897085
-0.3	-30.46811141	*-41.32499241*	*-27.41288767*	-31.2365307	-31.2365307	-29.0932985	-31.268437	-23.7368942	-24.9862045	-15.97488184
+0.3	243.1010099	*285.7176234*	*217.5933067*	218.5998785	218.5998785	188.222208	193.9287492	166.7853862	175.5635644	130.7601193
-0.35	-35.54612997	*-48.21249115*	*-31.98170228*	-36.4426192	-36.4426192	-33.9421816	-36.4798432	-27.6930433	-29.1505719	-18.63736214
+0.35	250.9774122	*294.9867642*	*225.6557926*	225.2105978	225.2105978	199.5774489	210.5235886	171.3994015	180.4204226	134.8645648
-0.4	-40.62414854	*-55.09998989*	*-36.55051689*	-41.6487076	-41.6487076	-38.7910647	-41.6912493	-31.6491923	-33.3149393	-21.29984245
+0.4	267.1361152	*301.6081521*	*238.9714738*	229.0909694	229.0909694	211.7155513	226.0826333	174.6636354	183.8564583	143.4992094
-0.45	-45.70216711	*-61.98748862*	*-41.1193315*	-46.8547961	-46.8547961	-43.6399478	-46.9026555	-35.6053414	-37.4793067	-23.96232276
+0.45	259.8513376	*295.2216099*	*233.8209346*	223.42659	223.42659	212.4051933	227.4762511	170.0048098	178.9524314	139.4109384
-0.5	-50.78018568	*-68.87498736*	*-45.68814611*	-52.0608845	-52.0608845	-48.4888309	-52.1140617	-39.5614904	-41.6436741	-26.62480306
+0.5	264.4755089	*299.2335052*	*236.4567658*	227.4463644	227.4463644	214.4452934	228.3289014	173.0083583	182.1140614	141.8716077
-0.55	-55.85820425	*-75.76248609*	*-50.25696072*	-57.266973	-57.266973	-53.337714	-57.3254678	-43.5176394	-45.8080415	-29.28728337
+0.55	246.3606103	*290.8852897*	*221.3517539*	221.6727177	221.6727177	202.2284282	214.860232	168.6857085	177.5639037	131.8363093
-0.6	-60.93622281	*-82.64998483*	*-54.82577533*	-62.4730615	-62.4730615	-58.186597	-62.536874	-47.4737885	-49.9724089	-31.94976367
+0.6	237.9034719	*281.7013465*	*212.4810246*	214.1548037	214.1548037	191.2799441	199.7654495	162.9923309	171.5708746	127.5154095
-0.65	-66.01424138	*-89.53748356*	*-59.39458995*	-67.6791499	-67.6791499	-63.0354801	-67.7482802	-51.4299375	-54.1367763	-34.61224398
+0.65	210.2617608	*252.4391826*	*188.7655875*	192.3447422	192.3447422	167.9224188	175.1615299	146.4307302	154.1376107	112.4180741
-0.7	-71.09225995	*-96.4249823*	*-63.96340456*	-72.8852384	-72.8852384	-67.8843632	-72.9596863	-55.3860866	-58.3011437	-37.27472429
+0.7	191.3388784	*225.3994415*	*170.4713647*	173.6831907	173.6831907	151.9011573	159.5876681	132.0505935	139.0006247	102.7378954
-0.75	-76.17027852	*-103.312481*	*-68.53221917*	-78.0913268	-78.0913268	-72.7332463	-78.1710925	-59.3422356	-62.4655112	-39.93720459
+0.75	155.8993859	*182.1536225*	*139.9766781*	138.9042765	138.9042765	124.8151064	130.8995073	105.5763135	111.1329615	83.74679648
-0.8	-81.24829709	*-110.1999798*	*-73.10103378*	-83.2974153	-83.2974153	-77.5821294	-83.3824987	-63.2983846	-66.6298786	-42.5996849
+0.8	129.8355286	*142.9895453*	*115.6767307*	110.7827722	110.7827722	96.08102326	102.3427271	83.98153897	88.40161997	70.51560939
-0.85	-86.32631565	*-117.0874785*	*-77.66984839*	-88.5035037	-88.5035037	-82.4310125	-88.5939048	-67.2545337	-70.794246	-45.2621652
+0.85	88.7525839	*86.99631206*	*79.71311363*	67.26422924	67.26422924	57.31830716	58.90761616	51.14737269	53.83933967	49.08214407
-0.9	-108.5604323	*-125.3041686*	*-97.70145585*	-100.106588	-102.259829	-90.3390351	-102.418029	-75.0248287	-79.1979528	-47.92464551
+0.9	60.91091162	*47.89870573*	*54.44887632*	37.93584665	37.93584665	30.42025461	30.45013212	29.03496257	30.56311849	34.49420611
-0.95	-148.4684782	*-136.7548884*	*-133.5987754*	-118.377342	-124.864562	-104.347699	-124.243208	-86.7803914	-92.0269359	-50.58712582
+0.95	21.3278244	*16.57756015*	*19.19504196*	13.43232639	13.43232639	10.86450159	10.86450159	10.30896026	10.85153712	12.35307041
-1	-192.4133012	*-149.8492488*	*-173.0997452*	-136.783599	-147.834894	-118.906473	-146.986095	-98.6361357	-104.985228	-53.24960438
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-192.4133012	*-149.8492488*	*-173.0997452*	-136.783599	-147.834894	-118.906473	-146.986095	-98.6361357	-104.985228	-53.24960438
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-148.48895	*-136.7537297*	*-133.5951368*	-118.370188	-124.855267	-104.33433	-124.242732	-86.7775734	-92.0238257	-50.58648362
+2.05	21.32782044	*16.60231652*	*19.19080326*	13.44793259	13.44793259	10.77364013	10.82637542	10.28905964	10.83058909	12.35734247
-2.1	-108.5614152	*-125.3030706*	*-97.70168543*	-100.099521	-102.253035	-90.3321627	-102.411303	-75.0253306	-79.1985301	-47.92403703
+2.1	60.91094426	*47.74424524*	*54.8198498*	37.83846311	37.83846311	30.62146462	30.62146462	29.07854295	30.60899258	34.46753513
-2.15	-86.32631181	*-117.0864408*	*-77.66757503*	-88.5028478	-88.5028478	-82.429195	-88.5881914	-67.2542142	-70.7939097	-45.26159043
+2.15	88.75260124	*87.00775962*	*79.75176666*	67.27144537	67.27144537	57.32282299	58.9117469	51.15088209	53.84303378	49.09189644
-2.2	-81.24829325	*-110.1990028*	*-73.09889398*	-83.2967977	-83.2967977	-77.580419	-83.3771214	-63.2980838	-66.6295619	-42.59914383
+2.2	129.8355225	*142.8020313*	*116.0835033*	110.6645534	110.6645534	96.16985655	102.2880302	83.92413821	88.34119811	70.49210893

-2.25	-76.17027468	-103.3115648	-68.53021293	-78.0907475	-78.0907475	-72.7316429	-78.1660514	-59.3419534	-62.4652141	-39.93669723
+2.25	155.8993675	182.1527049	140.0225303	138.9171974	138.9171974	124.7975113	130.9644384	105.5760332	111.1326665	83.75837406
-2.3	-71.09225611	-96.42412683	-63.96153188	-72.8846974	-72.8846974	-67.8828669	-72.9549814	-55.3858229	-58.3008662	-37.27425064
+2.3	191.3388897	226.8065574	170.6482635	173.7976659	173.7976659	151.9613057	159.6367719	131.9833001	138.9297895	102.7142179
-2.35	-66.01423754	-89.53668883	-59.39285083	-67.6786472	-67.6786472	-63.0340909	-67.7439114	-51.4296925	-54.1365184	-34.61180404
+2.35	210.2617561	252.3955792	188.8064611	192.4407686	192.4407686	167.959937	175.1842048	146.417366	154.1235431	112.4283887
-2.4	-60.93621897	-82.64925083	-54.82416978	-62.472597	-62.472597	-58.1853148	-62.5328414	-47.473562	-49.9721706	-31.94935744
+2.4	237.9034406	281.4231449	212.3756827	214.2362103	214.2362103	191.3987981	199.9090306	163.0318989	171.6125252	127.4888118
-2.45	-55.85820041	-75.76181283	-50.25548873	-57.2665469	-57.2665469	-53.3365388	-57.3217715	-43.5174316	-45.8078227	-29.28691084
+2.45	246.3605919	290.9765829	221.3774321	221.7302622	221.7302622	202.2364798	214.8941226	168.7136765	177.5933437	131.8427905
-2.5	-50.78018184	-68.87437483	-45.68680768	-52.0604967	-52.0604967	-48.4877627	-52.1107015	-39.5613012	-41.6434749	-26.62446425
+2.5	264.4755045	299.2888323	236.3311002	227.4812516	227.4812516	214.5293708	228.4377853	173.0252893	182.1318834	141.8398197
-2.55	-45.70216327	-61.98693683	-41.11812663	-46.8544465	-46.8544465	-43.6389867	-46.8996315	-35.6051707	-37.4791271	-23.96201765
+2.55	259.8513246	295.1991512	233.8235137	223.5375972	223.5375972	212.4651932	227.4656459	169.9979229	178.945182	139.4115861
-2.6	-40.6241447	-55.09949883	-36.54944558	-41.6483964	-41.6483964	-38.7902106	-41.6885615	-31.6490403	-33.3147792	-21.29957105
+2.6	267.1361378	301.5493631	238.8188684	229.2816317	229.2816317	211.6127886	226.394316	174.645627	183.8375021	143.4606448
-2.65	-35.54612613	-48.21206083	-31.98076453	-36.4423462	-36.4423462	-33.9414346	-36.4774915	-27.6929098	-29.1504314	-18.63712445
+2.65	250.9774131	294.9564524	225.6294627	225.2799538	225.2799538	199.5460565	210.5531623	171.4330973	180.4558918	134.8579089
-2.7	-30.46810757	-41.32462283	-27.41208348	-31.236296	-31.236296	-29.0926586	-31.2664215	-23.7367794	-24.9860836	-15.97467786
+2.7	243.1009882	285.5818948	217.4090031	218.7741609	218.7741609	188.3840412	193.9233163	166.8700903	175.6527266	130.7135136
-2.75	-25.390089	-34.43718483	-22.84340243	-26.0302459	-26.0302459	-24.2438825	-26.0553515	-19.780649	-20.8217357	-13.31223126
+2.75	215.0266988	259.3125423	193.1411857	198.1124965	198.1124965	174.7621839	181.7163923	150.6352652	158.5634371	115.6748514
-2.8	-20.31207043	-27.54974683	-18.27472138	-20.8241957	-20.8241957	-19.3951065	-20.8442816	-15.8245185	-16.6573879	-10.64978466
+2.8	190.7206918	230.6881072	170.6672638	178.2233191	178.2233191	158.2312911	164.802739	135.9609977	143.1168397	102.6303815
-2.85	-15.23405186	-20.66230883	-13.70604033	-15.6181455	-15.6181455	-14.5463304	-15.6332116	-11.8683881	-12.4930401	-7.987338063
+2.85	150.4359599	185.557592	135.0671129	142.1486904	142.1486904	127.1865294	133.360161	108.2258022	113.921897	80.98348539
-2.9	-10.1560333	-13.77487083	-9.137359278	-10.4120954	-10.4120954	-9.69755438	-10.4221416	-7.91225763	-8.32869224	-5.324891466
+2.9	109.4803424	137.8228624	98.15425207	105.571013	105.571013	96.08062135	101.2799955	80.67432548	84.92034261	58.91196741
-2.95	-5.078014728	-6.887432827	-4.568678227	-5.2060452	-5.2060452	-4.84877834	-5.2110716	-3.95612719	-4.16434441	-2.662444868
+2.95	57.1160509	71.6540893	51.34505984	55.51572008	55.51572008	50.90615997	53.79843201	42.33598909	44.56419905	30.73580023
-3	-3.58E-14	-4.02E-14	-3.13E-14	-3.17E-14	-3.17E-14	-2.67E-14	-2.93E-14	-2.44E-14	-2.57E-14	-2.00E-14
+3	8.59E-15	6.46E-15	7.32E-15	5.34E-15	5.34E-15	5.33E-15	6.03E-15	4.01E-15	4.22E-15	4.56E-15

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.49E-14	-1.41E-14	-1.32E-14	-8.98E-15	-1.73E-14	-1.43E-14	-1.45E-14	-1.44E-14	-1.42E-14
End Shear	7.16E-15	7.27E-15	6.74E-15	4.52E-15	8.90E-15	6.91E-15	7.10E-15	6.93E-15	7.22E-15
-0.05	-3.664442495	-3.664307463	-2.914886414	-2.34300847	-2.547172915	-3.911074556	-3.91261967	-3.93104	-3.93074021
+0.05	39.14660283	38.87604782	30.9794955	24.7386972	29.29863913	41.45706039	42.49427485	42.4161019	42.56153071
-0.1	-7.32888499	-7.328614926	-5.829772827	-4.686016941	-5.09434583	-7.822149112	-7.82523934	-7.86208	-7.86148042
+0.1	74.44608545	73.77767109	58.80838878	46.9918713	56.23136599	78.42141614	79.96053495	79.80252042	80.08740855
-0.15	-10.99332748	-10.99292239	-8.744659241	-7.029025411	-7.641518745	-11.73322367	-11.737859	-11.79312	-11.7922206
+0.15	100.1311917	100.235987	79.76214487	63.56445097	77.2116353	104.2305104	105.1155142	105.0308091	105.1766344
-0.2	-14.65776998	-14.65722985	-11.65954565	-9.372033881	-10.18869166	-15.64429822	-15.6504787	-15.72416	-15.7229608
+0.2	125.758843	125.2913943	99.77229749	79.65515515	97.9594031	130.1349112	130.5128855	130.2172526	129.9603448
-0.25	-18.32221247	-18.32153731	-14.57443207	-11.71504235	-12.73586458	-19.55537278	-19.5630983	-19.6552	-19.6537011
+0.25	139.5124527	139.1396814	110.7308314	88.48043395	110.3825825	143.9999521	144.1137704	144.0213131	143.9409793
-0.3	-21.98665497	-21.98584478	-17.48931848	-14.05805082	-15.28303749	-23.46644734	-23.475718	-23.58624	-23.5844413
+0.3	154.4097138	154.0376774	122.6095697	98.03782562	124.8558579	156.3969625	156.831694	161.8312657	161.8484127
-0.35	-25.65109746	-25.65015224	-20.40420489	-16.40105929	-17.83021041	-27.37752189	-27.3883377	-27.51728	-27.5151815
+0.35	158.7494114	158.3419062	126.0115604	100.9479349	128.8304896	163.1728834	163.177809	169.5155099	169.4669764
-0.4	-29.31553996	-29.3144597	-23.31909131	-18.74406776	-20.37738332	-31.28859645	-31.3009574	-31.44832	-31.4459217
+0.4	161.7900104	161.4685337	128.4814506	103.0238299	137.2173338	172.0449902	172.1453448	176.7782349	176.4063518
-0.45	-32.97998245	-32.97876717	-26.23397772	-21.08707623	-22.92455624	-35.199671	-35.213577	-35.37936	-35.3766619
+0.45	157.4739367	157.3540135	125.1842267	100.5783963	133.3720913	170.9489083	171.0986852	173.0309584	172.8958214
-0.5	-36.64442495	-36.64307463	-29.14886414	-23.4300847	-25.47172915	-39.11074556	-39.1261967	-39.3104	-39.3074021
+0.5	160.2293052	159.4837652	126.9651643	102.0284933	135.9652717	173.2541541	173.4817904	173.3087616	173.4928857
-0.55	-40.30886744	-40.30738209	-32.06375055	-25.77309317	-28.01890207	-43.02182012	-43.0388164	-43.24144	-43.2381423
+0.55	156.2277664	155.7892363	123.9879431	99.4710608	126.3732691	164.3713046	164.6086763	167.5962304	167.4804196
-0.6	-43.97330994	-43.97168956	-34.97863696	-28.11610164	-30.56607498	-46.93289467	-46.951436	-47.17248	-47.1688825
+0.6	150.958221	149.6171745	119.186434	95.7068764	122.2983049	157.072374	157.1784701	162.4338137	162.2385201
-0.65	-47.63775243	-47.63599702	-37.89352338	-30.45911011	-33.1132479	-50.84396923	-50.8640557	-51.10352	-51.0996228
+0.65	135.638374	135.3999976	107.7346275	86.24142538	107.8349884	138.7483346	138.8055828	145.0884706	144.9768
-0.7	-51.30219493	-51.30030448	-40.80840979	-32.80211858	-35.66042081	-54.75504378	-54.7766754	-55.03456	-55.030363
+0.7	122.2794272	121.1060664	96.49347709	77.36477846	98.55671158	124.893463	124.7988612	129.3298509	129.114355
-0.75	-54.96663742	-54.96461194	-43.7232962	-35.14512705	-38.20759373	-58.66611834	-58.689295	-58.9656	-58.9611032
+0.75	97.7966084	97.79196892	77.78978899	62.10235516	80.52877731	102.2789084	102.2965698	102.4910674	102.4334127
-0.8	-58.63107992	-58.62891941	-46.63818262	-37.48813553	-40.75476664	-62.57719289	-62.6019147	-62.89664	-62.8918434
+0.8	77.9696256	76.75660878	61.21162539	48.94969572	67.85450458	78.93984759	79.06479375	80.6065501	80.84868351
-0.85	-62.29552241	-62.29322687	-49.55306903	-39.831144	-43.30193956	-66.48826745	-66.5145344	-66.82768	-66.8225836
+0.85	47.34366306	47.31538685	37.65459929	29.76490256	47.07454709	47.74112397	48.45396327	48.45144434	48.46504378
-0.9	-68.84426482	-65.95753433	-54.08264348	-43.74043158	-53.23837419	-72.7766928	-70.4271541	-71.7381323	-72.3442017
+0.9	26.80491636	25.76384494	24.14286567	17.98733021	33.26733792	25.85721642	26.06715728	25.75466689	25.98674251
-0.95	-79.7706411	-69.6653997	-63.51547824	-52.12359109	-69.63849407	-85.37849542	-79.4049351	-84.1969392	-84.8599089
+0.95	9.47734341	9.329051615	8.602393658	6.460968541	11.95095175	9.234826353	9.172641016	9.127741801	9.166784596
-1	-91.40413342	-79.83875262	-74.12765208	-61.87357506	-87.11774675	-98.38877617	-96.2909146	-105.667062	-109.47439
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-91.40413342	-79.83875262	-74.12765208	-61.87357506	-87.11774675	-98.38877617	-96.2909146	-105.667062	-109.47439
+2	0	0	0	0	0	0	0	0	0
-2.05	-79.77138207	-69.66293032	-63.516302	-52.12390214	-69.64709891	-85.37643748	-79.4093329	-84.1790906	-84.8599367
+2.05	9.48745653	9.336077625	8.607791863	6.462997816	11.81403302	9.157594114	9.181846783	9.136308765	9.174785195
-2.1	-68.84457213	-65.95722141	-54.0818119	-43.74011694	-53.23934312	-72.76996975	-70.4259366	-71.7428291	-72.352901
+2.1	26.74182224	25.72000312	24.10918178	17.97463629	33.68361109	26.02824493	26.01062935	25.70213911	25.93762243
-2.15	-62.29509799	-62.29293118	-49.55286967	-39.83106766	-43.30616563	-66.49058723	-66.5133846	-66.829241	-66.82034
+2.15	47.34833847	47.31863523	37.65678716	29.76572752	46.99829155	47.74521468	48.45350817	48.45102183	48.4646432
-2.2	-58.6306803	-58.62864096	-46.63799485	-37.48806357	-40.758744	-62.57937629	-62.6008327	-62.8981092	-62.8897319
+2.2	78.01351748	76.70339655	61.17586039	48.93623575	67.77725918	79.01778024	79.12734978	80.84867026	80.84867026
-2.25	-54.96626261	-54.96435073	-43.72312003	-35.14505948	-38.21132236	-58.66816536	-58.6882808	-58.9669775	-58.9591237

+2.25	**97.79623489**	**97.79170812**	**77.78961334**	**62.10228868**	**80.48364624**	**102.268733**	**102.2871668**	**102.4823227**	**102.5129365**
-2.3	**-51.30184491**	**-51.30006051**	**-40.80824522**	**-32.80205539**	**-35.66390073**	**-54.75695442**	**-54.7757288**	**-55.0358457**	**-55.0285156**
+2.3	**122.210158**	**121.0437631**	**96.45152426**	**77.34893869**	**98.70868456**	**124.951775**	**124.8527701**	**129.2686811**	**129.1846762**
-2.35	**-47.63742722**	**-47.63577029**	**-37.8933704**	**-30.4590513**	**-33.11647909**	**-50.84574349**	**-50.8631769**	**-51.104714**	**-51.0979074**
+2.35	**135.6205679**	**135.387626**	**107.7263071**	**86.23827831**	**107.8688929**	**138.7104072**	**138.770519**	**145.1171296**	**144.9728428**
-2.4	**-43.97300953**	**-43.97148006**	**-34.97849559**	**-28.11604721**	**-30.56905746**	**-46.93453255**	**-46.950625**	**-47.1735823**	**-47.1672993**
+2.4	**151.0109525**	**149.5381968**	**119.1333499**	**95.68680428**	**122.2109281**	**157.1573272**	**157.1076343**	**162.4848699**	**162.2862345**
-2.45	**-40.30859184**	**-40.30718984**	**-32.06362077**	**-25.77304312**	**-28.02163582**	**-43.02332162**	**-43.0380731**	**-43.2424505**	**-43.2366911**
+2.45	**156.2650498**	**155.7579541**	**123.9668728**	**99.46310498**	**126.337106**	**164.440441**	**164.5994848**	**167.6292284**	**167.5112788**
-2.5	**-36.64417415**	**-36.64289961**	**-29.14874595**	**-23.43003903**	**-25.47421419**	**-39.11211068**	**-39.1255211**	**-39.3113188**	**-39.306083**
+2.5	**160.2519005**	**159.4994596**	**126.9757218**	**102.0324621**	**136.094371**	**173.3094957**	**173.5329319**	**173.5585236**	**173.4053737**
-2.55	**-32.97975645**	**-32.97860939**	**-26.23387114**	**-21.08703494**	**-22.92679255**	**-35.20089975**	**-35.2129692**	**-35.3801871**	**-35.3754748**
+2.55	**157.46476**	**157.347638**	**125.1799326**	**100.5767726**	**133.3742304**	**170.9846737**	**171.1317376**	**173.00854**	**172.9376326**
-2.6	**-29.31533876**	**-29.31431916**	**-23.31899632**	**-18.74403085**	**-20.37937092**	**-31.28968881**	**-31.3004173**	**-31.4490553**	**-31.4448667**
+2.6	**161.7660106**	**161.4518604**	**128.4702388**	**103.0195936**	**137.3252662**	**171.9785143**	**172.0838891**	**176.8085584**	**176.5001565**
-2.65	**-25.65092107**	**-25.65002894**	**-20.40412151**	**-16.40102676**	**-17.83194928**	**-27.37847788**	**-27.3878653**	**-27.5179236**	**-27.5142585**
+2.65	**158.7943142**	**158.3154973**	**125.9938098**	**100.941223**	**128.8086391**	**163.1694475**	**163.1746325**	**169.5290754**	**169.4796623**
-2.7	**-21.98650338**	**-21.98573871**	**-17.48924669**	**-14.05802267**	**-15.28452765**	**-23.46726694**	**-23.4753134**	**-23.5867918**	**-23.5836504**
+2.7	**154.5226313**	**153.9991811**	**122.5836396**	**98.02803332**	**124.9384723**	**156.5259062**	**156.7985689**	**161.8969218**	**161.7770151**
-2.75	**-18.32208569**	**-18.32144849**	**-14.57437187**	**-11.71501858**	**-12.73710601**	**-19.55605601**	**-19.5627615**	**-19.6556601**	**-19.6530422**
+2.75	**139.5237464**	**139.1475321**	**110.7361119**	**88.48241775**	**110.3337222**	**144.0276208**	**144.1393381**	**144.1521339**	**143.9632075**
-2.8	**-14.65766799**	**-14.65715827**	**-11.65949706**	**-9.372014488**	**-10.18968438**	**-15.64484507**	**-15.6502095**	**-15.7245284**	**-15.7224341**
+2.8	**125.8363264**	**125.2275266**	**99.72937178**	**79.6390137**	**98.01441234**	**130.2251563**	**130.5962838**	**130.2947807**	**130.0328797**
-2.85	**-10.9932503**	**-10.99286804**	**-8.744622243**	**-7.029010398**	**-7.642262745**	**-11.73363413**	**-11.7376576**	**-11.7933966**	**-11.7918259**
+2.85	**100.1531892**	**100.2176368**	**79.7497953**	**63.55980835**	**77.16621608**	**104.2988898**	**105.1844895**	**105.0241474**	**105.1704027**
-2.9	**-7.328832609**	**-7.328577816**	**-5.829747427**	**-4.686006308**	**-5.09484111**	**-7.822423199**	**-7.82510569**	**-7.86226489**	**-7.8612178**
+2.9	**74.48502866**	**73.68664333**	**58.74715777**	**46.96875216**	**56.25822625**	**78.4676039**	**80.00793065**	**79.84658147**	**80.12860227**
-2.95	**-3.664414917**	**-3.664287592**	**-2.914872611**	**-2.343002218**	**-2.547419475**	**-3.911212264**	**-3.91255376**	**-3.93113316**	**-3.93060965**
+2.95	**39.16604646**	**38.83057762**	**30.94888923**	**24.7271338**	**29.31190019**	**41.48023465**	**42.51824363**	**42.43838434**	**42.58235193**
-3	**-2.26E-14**	**-2.16E-14**	**-1.73E-14**	**-1.37E-14**	**-1.88E-14**	**-2.20E-14**	**-2.21E-14**	**-2.35E-14**	**-2.33E-14**
+3	**3.77E-15**	**3.17E-15**	**3.30E-15**	**2.18E-15**	**4.67E-15**	**4.15E-15**	**4.50E-15**	**4.55E-15**	**4.71E-15**

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.74E-14	-1.75E-14	-1.73E-14	-1.84E-14	-1.53E-14
End Shear	8.30E-15	8.14E-15	8.55E-15	9.12E-15	7.59E-15
-0.05	-4.583531877	-4.266349946	-4.2001933	-4.66757133	-4.671389
+0.05	47.13115455	44.18052148	45.0129884	48.01385429	48.37732685
-0.1	-9.167063755	-8.532699891	-8.4003866	-9.33514266	-9.34277801
+0.1	88.49327426	83.09231727	85.60251801	91.30935254	91.04019604
-0.15	-13.75059563	-12.79904984	-12.6005799	-14.002714	-14.014167
+0.15	117.8835981	109.3492343	115.092548	122.7653845	119.607102
-0.2	-18.33412751	-17.06539978	-16.8007732	-18.6702853	-18.685556
+0.2	145.33716	135.1723953	144.5984361	154.2383319	148.2313784
-0.25	-22.91765939	-21.33174973	-21.0009665	-23.3378567	-23.356945
+0.25	159.9834835	148.823417	159.9339888	170.5962547	163.0348931
-0.3	-27.50119126	-25.59809967	-25.2011598	-28.005428	-28.028334
+0.3	171.1163778	162.1182097	177.1958968	189.0089565	174.1922162
-0.35	-32.08472314	-29.86444962	-29.4013531	-32.6729993	-32.699723
+0.35	185.1290892	171.7623055	181.9278343	194.0563565	188.9784812
-0.4	-36.66825502	-34.13079956	-33.6015464	-37.3405707	-37.371112
+0.4	199.1513654	184.3856304	185.350073	201.764632	203.0347351
-0.45	-41.2517869	-38.39714951	-37.8017397	-42.008142	-42.042501
+0.45	200.2630075	186.3023343	180.4605386	204.0323404	204.1329043
-0.5	-45.83531877	-42.66349946	-42.001933	-46.6757133	-46.71389
+0.5	201.3846638	186.3054143	183.709227	204.2581583	205.0397857
-0.55	-50.41885065	-46.9298494	-46.2021263	-51.3432846	-51.385279
+0.55	189.1645811	175.5980232	179.0827996	192.0479516	192.5946721
-0.6	-55.00238253	-51.19619935	-50.4023196	-56.010856	-56.056668
+0.6	176.0582266	163.2965845	172.8091364	184.5843457	179.2408951
-0.65	-59.58591441	-55.46254929	-54.6025129	-60.6784273	-60.728057
+0.65	153.5950539	143.8367576	155.3986433	165.7585528	157.1545145
-0.7	-64.16944628	-59.72889924	-58.8027062	-65.3459986	-65.399446
+0.7	139.5177731	130.6865149	139.8605051	149.3855559	143.0240838
-0.75	-68.75297816	-63.99524918	-63.0028995	-70.01357	-70.070835
+0.75	115.7592896	107.7068788	112.0896248	119.5622664	117.6158927
-0.8	-73.33651004	-68.26159913	-67.2030928	-74.6811413	-74.742224
+0.8	89.31458171	84.03435007	88.88216737	94.97925801	91.50706723
-0.85	-77.92004192	-72.52794908	-71.4032861	-79.3487126	-79.413613
+0.85	52.34886777	51.02494799	54.28927476	57.90855975	52.74983777
-0.9	-84.0086944	-80.09041608	-78.8864	-84.5866046	-87.861015
+0.9	27.36658696	30.62693841	30.72873347	32.44306812	27.3011391
-0.95	-101.1705524	-111.4738386	-91.5857759	-99.2624414	-99.9778829
+0.95	9.689394255	10.99010238	10.95816109	11.68870516	9.740587634
-1	-135.5483184	-146.0874186	-104.500531	-114.200123	-112.261064
+1	0	0	0	0	0
(Span 2) -2	-135.5483184	-146.0874186	-104.500531	-114.200123	-112.261064
+2	0	0	0	0	0
-2.05	-101.1716739	-111.4737931	-91.5856268	-99.2623109	-99.9798521
+2.05	9.695597097	10.99122932	10.95623151	11.56715463	9.73569743
-2.1	-84.00718224	-80.09087267	-78.8892909	-84.5901195	-87.8574631
+2.1	27.32788226	30.61985335	30.88544277	32.94447229	27.4537269
-2.15	-77.9172228	-72.52848817	-71.4029605	-79.3526752	-79.4173783
+2.15	52.35126029	51.0265598	54.29284909	57.91237236	52.75213444
-2.2	-73.33385684	-68.26210659	-67.2027862	-74.6848709	-74.7457679
+2.2	89.2609734	84.02643359	88.82363568	94.91682374	91.45073243
-2.25	-68.75049088	-63.99572501	-63.0026118	-70.0170666	-70.0741575

+2.25	115.7460939	107.7048961	112.0893387	119.5619613	117.6020118
-2.3	-64.16712492	-59.72934343	-58.8024375	-65.3492622	-65.4025471
+2.3	139.5430779	130.6753558	139.7919603	149.3124419	142.9451322
-2.35	-59.58375896	-55.46296185	-54.6022631	-60.6814579	-60.7309367
+2.35	153.6062532	143.8349668	155.3850307	165.7440328	157.114682
-2.4	-55.00039301	-51.19658026	-50.4020888	-56.0136536	-56.0593263
+2.4	176.1345725	163.2931364	172.72229	184.4917623	179.2167749
-2.45	-50.41702705	-46.93019868	-46.2019144	-51.3458493	-51.3877159
+2.45	189.182475	175.6006745	179.0483739	192.0143542	192.5628038
-2.5	-45.83366109	-42.6638171	-42.0017401	-46.6780449	-46.7161055
+2.5	201.4420589	186.2988854	183.5978185	204.2099824	204.9940353
-2.55	-41.25029513	-38.39743552	-37.8015658	-42.0102406	-42.0444951
+2.55	200.3068277	186.3014968	180.4535234	204.0261334	204.1270195
-2.6	-36.66692918	-34.13105394	-33.6013914	-37.3424363	-37.3728847
+2.6	199.1823035	184.3902768	185.3317299	201.685662	202.9596985
-2.65	-32.08356322	-29.86467236	-29.4012171	-32.674632	-32.7012743
+2.65	185.1442091	171.7645956	181.8987942	194.0253805	188.9411486
-2.7	-27.50019726	-25.59829078	-25.2010427	-28.0068276	-28.0296639
+2.7	171.1049763	162.1115413	177.1535292	188.9637644	174.182589
-2.75	-22.9168313	-21.3319092	-21.0008684	-23.3390233	-23.3580536
+2.75	159.9601741	148.8276758	159.8782792	170.5368311	163.0120168
-2.8	-18.33346534	-17.06552762	-16.800694	-18.671219	-18.6864432
+2.8	145.2988781	135.182214	144.5929271	154.2324556	148.1923205
-2.85	-13.75009939	-12.79914603	-12.6005197	-14.0034147	-14.0148328
+2.85	117.8815766	109.3490392	115.1371311	122.8129398	119.6057859
-2.9	-9.166733428	-8.532764453	-8.40034533	-9.33561033	-9.34322237
+2.9	88.42323375	83.0973757	85.63227832	91.34109687	90.99428465
-2.95	-4.58336747	-4.266382872	-4.20017098	-4.66780601	-4.67161198
+2.95	47.09628426	44.18308084	45.02785333	48.02971022	48.38187531
-3	-2.48E-14	-2.41E-14	-2.58E-14	-2.75E-14	-2.69E-14
+3	6.33E-15	6.05E-15	4.30E-15	5.74E-15	5.75E-15

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-2.562437296	-2.53354	-2.533442201	-2.0153	-1.655656716	-1.76107366	-2.70405	-2.70512	-2.717856712	-2.71765
End Shear	33.19395399	29.85393	29.85392904	23.74744	19.21654364	22.67159912	31.96719	33.03553	32.84051439	32.94442
-0.05	-3.402917413	-2.53354	-2.533442201	-2.09699	-1.788693297	-1.76107366	-2.70405	-2.70512	-2.924607559	-3.11419
+0.05	29.65757942	27.06532	26.64264564	21.25996	17.29395785	20.25659952	28.66273	29.37985	29.32579856	29.42635
-0.1	-5.774578527	-3.45763	-3.194332105	-3.51925	-2.871793055	-2.408338056	-2.70405	-3.62979	-3.866531564	-3.9702
+0.1	27.24069977	24.40188	23.96954007	19.13158	15.51183047	18.61064377	25.56115	25.92192	25.8668861	25.96307
-0.15	-6.986555246	-4.1948	-3.710927877	-4.19095	-3.389432416	-3.415441315	-3.34865	-4.14961	-4.379760361	-4.41548
+0.15	26.0118618	23.06798	22.63238991	18.06667	14.62540832	17.7743636	24.02109	24.22505	24.1697932	24.26344
-0.2	-9.447752896	-5.55131	-4.767164124	-5.46103	-4.381288628	-5.5007972	-4.66342	-5.08473	-5.226654402	-5.21429
+0.2	23.52843857	20.41186	19.97311293	15.94836	12.87182569	16.08519613	20.98157	21.04488	20.99675739	20.97111
-0.25	-10.69095562	-6.17437	-5.309093051	-6.06164	-4.857226552	-6.50626336	-5.25723	-5.53876	-5.586232017	-5.57487
+0.25	22.27987099	19.09606	18.65745855	14.90013	12.00862421	15.2363051	19.48977	19.55092	19.55792132	19.45451
-0.3	-13.18752058	-7.31943	-7.04333253	-7.19951	-5.773379385	-8.440957819	-6.79783	-6.7819	-6.782219944	-6.81441
+0.3	19.78407288	16.50506	16.07033556	12.83846	10.3192682	13.53992246	16.58124	16.39758	16.58945771	16.54168
-0.35	-14.43486409	-8.64483	-8.285852068	-7.739	-6.215266283	-9.369462312	-8.12404	-8.01337	-8.016357682	-8.04933
+0.35	18.54286003	15.23627	14.80535954	11.83018	9.497016435	12.69642377	15.17216	14.88237	15.17818418	15.13082
-0.4	-16.91262576	-11.3104	-10.79999844	-9.54669	-7.469359905	-11.14695335	-10.7515	-10.4782	-10.48714438	-10.5215
+0.4	16.08885765	12.70496	12.34874642	9.871703	7.907061758	11.02882677	12.37704	11.96983	12.38820789	12.41944
-0.45	-18.13702519	-12.6261	-12.06791467	-10.5634	-8.285256338	-11.99521931	-12.0488	-11.7599	-11.71967213	-11.7547
+0.45	14.88208485	11.51379	11.16360179	8.926668	7.143216622	10.20872395	11.12641	11.10702	10.9458318	11.12921
-0.5	-20.46905202	-15.2142	-14.61611181	-12.5594	-9.900573131	-13.63161117	-14.6003	-14.6432	-14.23790415	-14.2776
+0.5	12.5240469	9.230349	8.895852797	7.117945	5.687346547	8.605909101	8.920919	8.901138	8.695961477	8.923622
-0.55	-21.56545039	-16.496	-15.91011984	-13.5366	-10.69821963	-14.62680319	-15.8505	-16.1163	-16.17176785	-15.6056
+0.55	11.37879944	8.1006	7.819722331	6.25943	4.999117397	7.778059963	7.742321	7.864303	7.864303231	7.864303
-0.6	-23.82097695	-19.3039	-18.51309544	-15.4436	-12.26883585	-16.16335348	-18.4549	-18.7411	-18.99284205	-18.6375
+0.6	9.17089653	5.913512	5.799166052	4.647027	3.71148637	6.278759727	5.703925	5.758386	5.696998995	5.738845
-0.65	-24.870415	-20.6726	-19.7883181	-16.3712	-13.03997557	-16.82641449	-19.8646	-19.9705	-20.67162136	-20.1795
+0.65	8.114258766	4.972102	4.861229669	4.011857	3.115824307	5.561003332	4.795225	4.823058	4.787419684	4.826481
-0.7	-26.61638184	-23.0659	-22.27002771	-18.1692	-14.54921476	-18.06265068	-22.8605	-22.8847	-23.8725775	-23.4331
+0.7	6.110660553	3.346631	3.220700793	2.993063	2.288443347	4.19928263	3.234812	3.226246	3.16516809	3.236045
-0.75	-27.41974906	-24.1749	-23.47003017	-19.0373	-15.28540527	-18.63510016	-24.3236	-24.3486	-25.31589196	-25.0184
+0.75	5.169718266	2.843345	2.713246481	2.528179	1.921372111	3.446338647	2.740339	2.731813	2.673314151	2.740558
-0.8	-28.88725862	-26.2963	-25.77212406	-20.7064	-16.71608325	-19.68683484	-27.1613	-27.1873	-28.33340613	-28.3794
+0.8	3.424594879	1.840685	1.773779845	1.666523	1.247654104	2.270575835	1.819316	1.819316	1.81931603	1.819316
-0.85	-29.55140084	-27.305	-26.8677331	-21.505	-17.45286953	-20.16539682	-28.5281	-28.7762	-29.84814885	-30.1382
+0.85	2.626432419	1.402563	1.34500528	1.272706	0.942958681	1.733156351	1.351903	1.39436	1.344981847	1.361249
-0.9	-30.74046503	-29.2092	-28.93186787	-23.037	-18.86971123	-21.02608462	-31.1386	-31.9746	-32.5153237	-33.4438
+0.9	1.193953991	0.628164	0.57748131	0.566488	0.40269457	0.820843369	0.634288	0.613034	0.597688878	0.611033
-0.95	-31.2986792	-30.1009	-29.89391295	-23.8019	-19.53901519	-21.40748502	-32.3746	-33.5108	-33.9457456	-35.0061
+0.95	0.565656781	0.288555	0.242134533	0.257043	0.17007519	0.346760776	0.276742	0.284204	0.27019145	0.282031
-1	-33.9928839	-31.7543	-31.66174285	-25.2071	-20.78867971	-22.96635231	-34.6891	-36.434	-36.95709569	-37.927
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	32.49953993	30.94134	30.79864731	24.52192	20.17778673	21.90227699	33.54733	34.98472	35.46986409	36.48921
-2.05	-5.66E-01	-0.31111	-0.26515156	-0.2587	-1.71E-01	-0.351079895	-0.27981	-0.28704	-0.272825673	-0.2845
+2.05	31.24785477	30.09192	29.88724343	23.79746	19.53732023	21.4032444	32.36202	33.49625	33.93177001	34.99324
-2.1	-1.881881714	-1.00382	-0.948328408	-0.90756	-0.661748082	-1.293793678	-0.99975	-0.97648	-0.959676948	-0.97429
+2.1	30.18669819	28.26681	27.91473957	22.27378	18.1717592	20.60695278	29.84159	30.37958	31.17296026	31.80382
-2.15	-2.626432419	-1.40666	-1.347849822	-1.27489	-0.943785129	-1.738842433	-1.35594	-1.36637	-1.348450703	-1.36449
+2.15	29.57029683	27.29486	26.8601149	21.50034	17.45094271	20.16005141	28.51412	28.76052	29.77728777	30.11662
-2.2	-4.273359299	-2.30754	-2.233642507	-2.088	-1.575056334	-2.848784288	-2.27022	-2.27022	-2.270222127	-2.27022
+2.2	28.19826711	25.24143	24.63033282	19.87845	16.00614472	19.17055439	25.7438	25.77048	26.83529696	26.88281
-2.25	-5.169717789	-2.83965	-2.716672736	-2.53081	-1.92236439	-3.45318383	-2.7452	-2.73631	-2.677490082	-2.74641
+2.25	27.39281708	24.16369	23.46165837	19.03223	15.28347647	18.62868728	24.30862	24.3347	25.30312833	25.15203

-2.3	**-7.093177795**	**-4.09102**	**-3.98174663**	**-3.48157**	**-2.675429816**	**-4.874683857**	**-3.94497**	**-3.96983**	**-3.935281808**	**-3.971**
+2.3	**25.73653122**	**21.91545**	**21.0329614**	**17.27477**	**13.79839714**	**17.45253103**	**21.35735**	**21.38193**	**22.38517709**	**21.94682**
-2.35	**-8.11425972**	**-4.98118**	**-4.867528464**	**-4.05713**	**-3.169265195**	**-5.568800668**	**-4.80417**	**-4.83132**	**-4.795108237**	**-4.83367**
+2.35	**24.83877954**	**20.74867**	**19.7794116**	**16.36575**	**13.03790885**	**16.81897179**	**19.96295**	**19.95884**	**20.80741097**	**20.30418**
-2.4	**-10.26008034**	**-6.91361**	**-6.793423003**	**-5.43964**	**-4.341646097**	**-7.02676562**	**-6.66952**	**-6.73293**	**-6.662232496**	**-6.70622**
+2.4	**22.90405147**	**18.07477**	**17.21013668**	**14.49267**	**11.48579328**	**15.46270353**	**17.37381**	**17.47042**	**17.42476947**	**17.05878**
-2.45	**-11.37879944**	**-7.94946**	**-7.827046148**	**-6.26436**	**-5.000969744**	**-7.786602219**	**-7.66947**	**-7.8619**	**-7.663310327**	**-7.70988**
+2.45	**21.86706692**	**16.78501**	**15.9008841**	**13.53082**	**10.69603751**	**14.74072463**	**15.85084**	**16.18406**	**15.69865525**	**15.59475**
-2.5	**-13.69281197**	**-10.3659**	**-10.01944809**	**-8.0132**	**-6.404683152**	**-9.409342214**	**-10.0179**	**-9.99743**	**-9.784939082**	**-10.0207**
+2.5	**19.65388641**	**13.91492**	**13.33166417**	**11.56207**	**9.093733727**	**12.84374915**	**13.31921**	**13.2925**	**12.93669355**	**12.97296**
-2.55	**-14.8820858**	**-11.5255**	**-11.17174526**	**-8.93215**	**-7.14528599**	**-10.2178071**	**-11.138**	**-11.1177**	**-10.89925582**	**-11.1385**
+2.55	**18.37083855**	**12.61291**	**12.05903554**	**10.55738**	**8.283004289**	**11.98582691**	**12.03546**	**12.00274**	**11.70878023**	**11.7445**
-2.6	**-17.31011868**	**-13.9372**	**-13.57231348**	**-10.8462**	**-8.694478393**	**-11.86805318**	**-13.7255**	**-13.1946**	**-13.73676182**	**-13.7665**
+2.6	**15.80686278**	**9.969218**	**9.529917659**	**8.512918**	**6.646851393**	**10.26157579**	**9.429048**	**9.234402**	**9.24108731**	**9.275515**
-2.65	**-18.54286098**	**-15.1828**	**-14.81410671**	**-11.8361**	**-9.499234688**	**-12.70583882**	**-15.1863**	**-14.6791**	**-15.19035383**	**-15.1422**
+2.65	**14.5731022**	**8.631265**	**8.277149126**	**7.735846**	**6.214076853**	**9.35915585**	**8.110396**	**8.00164**	**8.005433602**	**8.039119**
-2.7	**-21.03074646**	**-17.8057**	**-17.36449477**	**-13.8687**	**-11.15941246**	**-14.39673615**	**-18.0366**	**-17.8542**	**-18.04497948**	**-17.9961**
+2.7	**12.09377386**	**6.757335**	**5.857876206**	**6.637374**	**5.319699503**	**7.475540782**	**5.805778**	**6.085316**	**5.935249273**	**5.952875**
-2.75	**-22.27987194**	**-19.1092**	**-18.66660651**	**-14.9063**	**-12.01094392**	**-15.24584529**	**-19.5049**	**-19.4849**	**-19.51560507**	**-19.4667**
+2.75	**10.85411009**	**6.168242**	**5.34513264**	**6.058123**	**4.855898541**	**6.495077122**	**5.251287**	**5.648302**	**5.583053201**	**5.571899**
-2.8	**-24.77343941**	**-21.7503**	**-21.30846991**	**-17.011**	**-13.74709704**	**-16.94138984**	**-22.5089**	**-22.573**	**-22.52426485**	**-22.5005**
+2.8	**8.389520502**	**4.885195**	**4.231156696**	**4.834052**	**3.890882562**	**4.45864789**	**4.021089**	**4.629225**	**4.838873999**	**4.825593**
-2.85	**-26.01186275**	**-23.0814**	**-22.64173771**	**-18.073**	**-14.6277837**	**-17.78382204**	**-24.0369**	**-24.2409**	**-24.18458046**	**-24.2773**
+2.85	**7.321737051**	**4.187526**	**3.707310296**	**4.187013**	**3.387954447**	**3.40341338**	**3.341372**	**4.144825**	**4.426377696**	**4.41181**
-2.9	**-28.45694208**	**-25.7489**	**-25.31672914**	**-20.2032**	**-16.4043924**	**-19.44801312**	**-27.1256**	**-27.6581**	**-27.6023134**	**-27.6998**
+2.9	**4.773731902**	**2.67058**	**2.702195085**	**2.817386**	**2.336910142**	**1.761245621**	**2.704147**	**3.128739**	**3.406449312**	**3.488226**
-2.95	**-29.65757895**	**-27.0788**	**-26.65197516**	**-21.2662**	**-17.29632352**	**-20.26576859**	**-28.6787**	**-29.3964**	**-29.34119577**	**-29.4407**
+2.95	**3.601892608**	**2.533518**	**2.533430282**	**2.09258**	**1.787031882**	**1.761245621**	**2.704147**	**2.705074**	**2.921031358**	**3.109176**
-3	**-33.19395399**	**-29.7148**	**-29.30175006**	**-23.3754**	**-19.07736155**	**-22.47333852**	**-31.7834**	**-32.9097**	**-32.85611915**	**-32.959**
+3	**2.562437296**	**2.533518**	**2.533430282**	**2.015297**	**1.655653687**	**1.761245621**	**2.704147**	**2.705074**	**2.717920136**	**2.717558**

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-2.562437296	-3.5994	-3.599404341	-3.35244	-3.60308	-2.73521669	-2.87918	-1.8408
End Shear	33.19395399	42.40615	42.40614921	39.40419	41.75245	32.2286734	33.92492	23
-0.05	-3.402917413	-3.5994	-3.599404341	-3.35244	-3.60308	-2.73521669	-2.87918	-2.21561
+0.05	29.65757942	38.36191	38.36190902	35.17524	37.17284	29.31822273	30.86129	21.17306
-0.1	-5.774578527	-3.5994	-3.599404341	-3.35244	-3.65013	-3.686233551	-3.88025	-3.37749
+0.1	27.24069977	34.58166	34.58166417	31.22269	32.82159	26.43436857	27.82565	19.41633
-0.15	-6.986555246	-4.08011	-4.317792248	-3.65749	-4.7232	-4.216347009	-4.43826	-4.20517
+0.15	26.0118618	32.68874	32.68873635	29.26636	30.67514	24.98973684	26.30499	18.53471
-0.2	-9.447752896	-6.22405	-6.543015958	-5.14097	-6.71723	-5.302197816	-5.58126	-5.86592
+0.2	23.52843857	28.92001	28.92001315	25.41823	26.46794	22.05526465	23.21607	16.75424
-0.25	-10.69095562	-7.27182	-7.620016389	-5.89482	-7.64182	-5.861439334	-6.16994	-6.69695
+0.25	22.27987099	27.05331	27.05331473	23.53628	24.41813	20.63026964	21.71607	15.85967
-0.3	-13.18752058	-9.31439	-9.700511843	-7.8497	-9.35531	-7.798636854	-8.20909	-8.3552
+0.3	19.78407288	23.378	23.37799522	19.8812	20.37009	17.82429511	18.76242	14.07256
-0.35	-14.43486409	-11.1675	-11.20555204	-9.4006	-10.1478	-9.018811851	-9.49349	-9.18039
+0.35	18.54286003	21.57847	21.57846986	18.11792	18.4688	16.45032426	17.31613	13.18431
-0.4	-16.91262576	-15.2007	-15.43834211	-12.4812	-13.1146	-11.7037319	-12.3197	-10.6137
+0.4	16.08885765	18.07843	18.07842994	14.64279	14.74945	13.65374457	14.37236	11.42913
-0.45	-18.13702519	-17.2274	-17.50972371	-14.0057	-14.6453	-13.1675947	-13.8909	-11.4253
+0.45	14.88208485	16.38702	16.38701552	13.0899	13.0899	12.36562889	13.01645	10.56648
-0.5	-20.46905202	-21.2006	-21.54884114	-17.0107	-17.6384	-16.16221968	-17.0499	-13.1168
+0.5	12.5240469	12.99585	12.9958456	10.4952	10.4952	9.897404186	10.41832	8.881786
-0.55	-21.56545039	-23.1407	-23.51110313	-18.4859	-19.5767	-17.62846137	-18.5956	-13.9548
+0.55	11.37879944	11.23146	11.23145551	9.108613	9.209335	8.724303134	9.183477	8.064017
-0.6	-23.82097695	-26.9117	-27.30740868	-21.8807	-23.3104	-20.48546106	-21.6054	-15.5787
+0.6	9.17089653	8.360912	8.360912277	6.7105	6.891299	6.517628461	6.860662	6.488357
-0.65	-24.870415	-28.7363	-29.13599375	-23.8448	-25.5609	-21.87087826	-23.0641	-16.3603
+0.65	8.114258766	7.026931	7.026930699	5.641441	5.817633	5.491044511	5.780047	5.734746
-0.7	-26.61638184	-32.4213	-32.80970105	-27.7155	-29.9451	-24.54218333	-25.8751	-17.8519
+0.7	6.110660553	4.773954	4.773953557	3.805661	3.805661	3.628204703	3.819163	4.30668
-0.75	-27.41974906	-34.3475	-34.72371458	-29.6124	-32.0715	-25.82273616	-27.2218	-18.5577
+0.75	5.169718266	4.035036	4.035035712	3.223929	3.223929	3.061204394	3.22232	3.636507
-0.8	-28.88725862	-37.8926	-38.23403581	-33.3043	-36.2543	-28.26027854	-29.7842	-19.8785
+0.8	3.424594879	2.590742	2.590742253	2.140372	2.140372	2.032528844	2.139504	2.394595
-0.85	-29.55140084	-39.3689	-39.68867448	-35.0896	-38.3993	-29.41192778	-30.9943	-20.4892
+0.85	2.626432419	1.97919	1.979190367	1.590474	1.62965	1.554071416	1.635865	1.827136
-0.9	-30.74046503	-42.1215	-42.39184196	-38.5141	-42.5014	-31.56764261	-33.2584	-21.6006
+0.9	1.193953991	0.882091	0.882090622	0.746221	0.746221	0.695308399	0.731904	0.809927
-0.95	-31.2986792	-43.3915	-43.63491793	-40.1436	-44.4513	-32.56635906	-34.3069	-22.097
+0.95	0.565656781	0.40109	0.401089561	0.325578	0.34091	0.325944794	0.3431	0.364462
-1	-33.9928839	-45.7029	-45.89039578	-43.2121	-47.8231	-34.39216913	-36.2229	-22.9605
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	32.49953993	44.57329	44.78922698	41.69522	46.2092	33.50230529	35.28917	22.54959
-2.05	-5.66E-01	-0.44192	-0.441919267	-0.32918	-0.34452	-0.335858643	-0.35354	-0.36578
+2.05	31.24785477	43.37758	43.62128519	40.12693	44.53571	32.55950041	34.29966	22.09544
-2.1	-1.881881714	-1.41472	-1.414723687	-1.17618	-1.17618	-1.102476133	-1.1605	-1.2998
+2.1	30.18669819	40.76408	41.06029007	36.81005	40.66823	30.50766972	32.14529	21.06212
-2.15	-2.626432419	-1.98551	-1.98551204	-1.59522	-1.6344	-1.557144013	-1.6391	-1.82886
+2.15	29.57029683	39.35265	39.67269005	35.0713	38.60996	29.40397745	30.98595	20.48724
-2.2	-4.273359299	-3.24847	-3.248468213	-2.67085	-2.67085	-2.536432377	-2.66993	-3.0004
+2.2	28.19826711	36.33636	36.6969415	31.45778	34.23505	27.05439673	28.5168	19.23174
-2.25	-5.169717789	-3.93608	-3.936082953	-3.22965	-3.22965	-3.064901162	-3.22621	-3.63859
+2.25	27.39281708	34.60166	34.97802218	29.59286	32.04976	25.81385943	27.21251	18.5554

-2.3	-7.093177795	-5.98346	-5.98346442	-4.64114	-4.6831	-4.547432959	-4.78677	-5.00909
+2.3	25.73653122	30.69543	31.09206941	25.77132	27.75101	23.21460674	24.47831	17.11626
-2.35	-8.11425972	-7.04094	-7.040938473	-5.65196	-5.72112	-5.49784824	-5.78721	-5.73712
+2.35	24.83877954	28.71647	29.11613823	23.82455	25.53783	21.86124105	23.05393	16.35775
-2.4	-10.26008034	-9.77951	-9.779508468	-7.84649	-8.03653	-7.604114109	-8.00433	-7.26802
+2.4	22.90405147	25.02466	25.41063147	20.2856	21.00211	19.06039551	20.10442	14.77354
-2.45	-11.37879944	-11.2477	-11.24772845	-9.0229	-9.22156	-8.732213729	-9.1918	-8.06662
+2.45	21.86706692	23.11951	23.48972402	18.48885	19.09026	17.61824525	18.58481	13.95213
-2.5	-13.69281197	-14.6095	-14.60949945	-11.7858	-11.7858	-11.12086332	-11.7062	-9.71937
+2.5	19.65388641	19.20662	19.52521914	15.50092	16.13837	14.66385282	15.46969	12.26139
-2.55	-14.8820858	-16.3915	-16.39153642	-13.1035	-13.1035	-12.37441551	-13.0257	-10.5692
+2.55	18.37083855	17.20527	17.48709655	13.99007	14.62961	13.15696427	13.87973	11.42271
-2.6	-17.31011868	-19.8295	-19.82947567	-16.3193	-16.5439	-14.98246623	-15.771	-12.3053
+2.6	15.80686278	13.12865	13.31273201	10.92938	11.5475	10.34693118	10.89151	9.998925
-2.65	-18.54286098	-21.5979	-21.59790896	-18.1356	-18.4878	-16.39389065	-17.2567	-13.1872
+2.65	14.5731022	11.14684	11.18194924	9.384629	10.22453	9.009525348	9.483711	9.177713
-2.7	-21.03074646	-25.2246	-25.22455089	-21.7076	-22.3459	-19.22854174	-20.2406	-14.968
+2.7	12.09377386	8.290993	8.661208348	6.633768	8.511725	6.475985494	6.816827	7.52436
-2.75	-22.27987194	-27.0736	-27.07364815	-23.5553	-24.3509	-20.6401507	-21.7265	-15.8626
+2.75	10.85411009	7.260377	7.608284102	6.010502	7.632504	5.898636578	6.209091	6.694258
-2.8	-24.77343941	-30.8207	-30.82068076	-27.3496	-28.577	-23.5003009	-24.7372	-17.6495
+2.8	8.389520502	5.14804	5.429863734	4.372733	5.734643	4.750651247	5.000686	5.032309
-2.85	-26.01186275	-32.7095	-32.70950211	-29.2863	-30.697	-24.96678274	-26.2808	-18.5376
+2.85	7.321737051	4.068134	4.305272769	3.649745	4.712361	4.212634779	4.434352	4.202498
-2.9	-28.45694208	-36.495	-36.49504182	-33.2143	-35.0117	-27.88846067	-29.3563	-20.2922
+2.9	4.773731902	3.599378	3.599377869	3.352364	3.602848	3.158697963	3.324945	2.608674
-2.95	-29.65757895	-38.3826	-38.38264727	-35.1957	-37.1954	-29.32829393	-30.8719	-21.1544
+2.95	3.601892608	3.599378	3.599377869	3.352364	3.602848	2.73520383	2.879162	2.214314
-3	-33.19395399	-42.1248	-42.12480005	-39.1687	-41.5881	-32.2286734	-33.9249	-22.9256
+3	2.562437296	3.599378	3.599377869	3.352364	3.602848	2.73520383	2.879162	1.840772

2-Span: Shear (Max and Min) Raw Data Results - 15' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-2.562437296	-3.53463	-3.29003	-3.23902	-3.59944	-3.60238
End Shear	33.19395399	41.13432	38.27992	38.16553	41.75245	41.75245
-0.05	-3.402917413	-3.53463	-3.51216	-3.23902	-3.59944	-3.60238
+0.05	29.65757942	35.99307	34.07019	34.71216	37.03036	37.30659
-0.1	-5.774578527	-5.3341	-5.25854	-3.23902	-4.23715	-3.88564
+0.1	27.24069977	31.65908	30.02297	31.29608	33.38248	32.83116
-0.15	-6.986555246	-6.20697	-6.2431	-3.64583	-4.75622	-4.44406
+0.15	26.0118618	29.52621	28.0283	29.58487	31.5572	30.54866
-0.2	-9.447752896	-7.80756	-8.09182	-5.37356	-6.19505	-5.58798
+0.2	23.52843857	25.3564	24.12283	26.1457	27.88874	26.02903
-0.25	-10.69095562	-8.54267	-8.9826	-6.32921	-6.93342	-6.17716
+0.25	22.27987099	23.33055	22.22244	24.45747	26.08797	23.98071
-0.3	-13.18752058	-9.91939	-10.6968	-8.42701	-8.94631	-8.11656
+0.3	19.78407288	19.42466	18.87213	20.72608	22.42196	20.2762
-0.35	-14.43486409	-11.3581	-11.4961	-10.1225	-11.062	-9.5132
+0.35	18.54286003	17.55569	17.29065	19.10527	20.52574	18.37067
-0.4	-16.91262576	-14.1837	-14.0272	-13.5722	-14.5238	-12.5623
+0.4	16.08885765	14.44132	14.24143	15.95608	17.04992	14.74695
-0.45	-18.13702519	-15.5707	-15.3822	-15.4048	-16.4832	-14.0896
+0.45	14.88208485	12.93623	12.78225	14.66316	15.42769	13.05516
-0.5	-20.46905202	-18.293	-19.1069	-19.0063	-20.3503	-17.1045
+0.5	12.5240469	10.34427	10.01622	11.73824	12.32139	10.45303
-0.55	-21.56545039	-19.6283	-20.8899	-20.7688	-22.2398	-18.5866
+0.55	11.37879944	9.11305	8.717928	10.34799	10.84616	9.216108
-0.6	-23.82097695	-23.2395	-24.2913	-24.201	-25.914	-22.9008
+0.6	9.17089653	6.798561	6.454577	7.732638	8.073693	6.889012
-0.65	-24.870415	-25.2615	-25.9097	-25.8643	-27.6921	-25.1255
+0.65	8.114258766	5.722688	5.705101	6.544837	6.98116	5.817633
-0.7	-26.61638184	-29.3324	-28.9819	-29.0691	-31.1137	-29.4908
+0.7	6.110660553	3.810306	4.28481	4.28884	4.480665	3.81451
-0.75	-27.41974906	-31.3523	-30.4357	-30.6042	-32.7505	-31.6223
+0.75	5.169718266	3.226013	3.618273	3.631809	3.78429	3.230187
-0.8	-28.88725862	-35.2948	-33.1947	-33.5235	-35.8597	-35.7597
+0.8	3.424594879	2.111035	2.383099	2.392018	2.493618	2.140372
-0.85	-29.55140084	-37.21	-34.9452	-34.9013	-37.3255	-37.7564
+0.85	2.626432419	1.612788	1.818742	1.835367	1.903746	1.630475
-0.9	-30.74046503	-40.9101	-38.3166	-37.4771	-41.1888	-41.583
+0.9	1.193953991	0.726706	0.80717	0.839499	0.895465	0.746221
-0.95	-31.2986792	-42.6875	-39.9314	-38.6687	-43.0472	-43.4035
+0.95	0.565656781	0.338096	0.402933	0.397064	0.382525	0.351858
-1	-33.9928839	-46.0787	-43.0039	-41.2848	-46.5639	-46.8361
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	32.49953993	44.40124	41.49338	39.8202	44.82876	45.14504
-2.05	-5.66E-01	-0.35354	-0.40236	-0.39309	-0.38535	-0.35074
+2.05	31.24785477	42.67681	39.92988	38.66083	43.0348	43.39202
-2.1	-1.881881714	-1.15481	-1.29319	-1.3232	-1.41141	-1.17618
+2.1	30.18669819	39.07173	36.65188	36.21155	39.25794	39.6868
-2.15	-2.626432419	-1.61559	-1.81925	-1.83886	-1.90747	-1.63342
+2.15	29.57029683	37.19846	34.94352	34.89218	37.31576	37.74382
-2.2	-4.273359299	-2.64163	-2.98424	-2.9878	-3.12545	-2.67085
+2.2	28.19826711	33.32894	31.83321	32.08015	34.32313	33.70018
-2.25	-5.169717789	-3.22939	-3.61889	-3.6129	-3.78877	-3.21069
+2.25	27.39281708	31.34007	30.43429	30.59394	32.73963	31.60875

-2.3	-7.093177795	-4.71181	-4.98181	-5.37242	-5.57576	-4.77912
+2.3	25.73653122	27.2726	27.47175	27.47723	29.41488	27.30971
-2.35	-8.11425972	-5.7289	-5.70581	-6.52358	-6.79355	-5.81274
+2.35	24.83877954	25.24925	25.90816	25.85318	27.68024	25.11133
-2.4	-10.26008034	-7.93682	-7.48298	-9.02	-9.43796	-8.03412
+2.4	22.90405147	21.20053	22.61637	22.48985	24.08308	20.63993
-2.45	-11.37879944	-9.12026	-8.71913	-10.357	-10.8557	-9.22369
+2.45	21.86706692	19.62022	20.88819	20.75702	22.22719	18.57714
-2.5	-13.69281197	-11.6277	-11.3737	-13.1877	-13.8604	-11.7421
+2.5	19.65388641	16.9322	17.26732	17.20512	18.41734	15.59503
-2.55	-14.8820858	-12.9443	-12.7836	-14.6732	-15.4383	-13.0636
+2.55	18.37083855	15.56235	15.38038	15.39253	16.56469	14.07992
-2.6	-17.31011868	-15.7609	-15.7471	-17.5244	-18.7235	-16.5371
+2.6	15.80686278	12.77096	12.48322	11.81591	12.78841	11.01548
-2.65	-18.54286098	-17.5669	-17.2921	-19.116	-20.4219	-18.3824
+2.65	14.5731022	11.34943	11.49531	10.11111	11.0506	9.504292
-2.7	-21.03074646	-21.3634	-20.4874	-22.3833	-24.1962	-22.2493
+2.7	12.09377386	9.235203	9.85918	7.265696	7.836446	6.800477
-2.75	-22.27987194	-23.3427	-22.2243	-24.1248	-26.1	-23.9935
+2.75	10.85411009	8.538408	8.981721	6.322817	6.928424	6.173404
-2.8	-24.77343941	-27.4362	-26.0617	-27.8571	-29.7143	-28.1299
+2.8	8.389520502	7.025468	7.185912	4.399645	5.464178	5.007282
-2.85	-26.01186275	-29.5391	-28.0302	-29.5963	-31.5694	-30.5326
+2.85	7.321737051	6.201924	6.242163	3.640886	4.752736	4.440507
-2.9	-28.45694208	-33.8297	-32.0406	-33.018	-35.2192	-35.0223
+2.9	4.773731902	4.402236	4.248312	3.239001	3.720659	3.602553
-2.95	-29.65757895	-36.0064	-34.0722	-34.7236	-37.0451	-37.3101
+2.95	3.601892608	3.534502	3.511511	3.239001	3.599618	3.602553
-3	-33.19395399	-40.3945	-38.1618	-38.4347	-40.9008	-41.7314
+3	2.562437296	3.534502	3.290057	3.239001	3.599618	3.602553

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	-1.42E-14	-7.7E-15	-7.32747E-15	-6.8E-15	-4.69E-15	-8.95581E-15	-7.4E-15	-7.5E-15	-7.44191E-15	-7.4E-15
End Shear	7.11E-15	3.71E-15	3.77229E-15	3.5E-15	2.35E-15	4.61359E-15	3.58E-15	3.68E-15	3.59118E-15	3.75E-15
-0.05	-1.921827972	-1.90015	-1.90008165	-1.51148	-1.241742537	-1.320805245	-2.02804	-2.02884	-2.038392534	-2.03824
+0.05	22.24318457	20.29899	20.15869734	16.06404	13.0647713	15.19244964	21.49705	22.03488	21.99434892	22.06976
-0.1	-3.843655944	-3.8003	-3.800163301	-3.02296	-2.483485074	-2.64161049	-4.05608	-4.05768	-4.076785067	-4.07647
+0.1	42.68541312	38.6031	38.25650562	30.49437	24.81589307	29.15808452	40.66446	41.46255	41.38061728	41.52834
-0.15	-5.765483916	-5.70046	-5.700244951	-4.53444	-3.725227611	-3.962415735	-6.08412	-6.08652	-6.115177601	-6.11471
+0.15	58.52668905	51.9218	51.97614051	41.35968	33.59039731	40.0371456	54.04745	54.50636	54.46243666	54.53805
-0.2	-7.687311888	-7.60061	-7.600326602	-6.04591	-4.966970147	-5.28322098	-8.11216	-8.11536	-8.153570135	-8.15295
+0.2	74.32031965	65.2107	64.9683144	51.7357	42.09021889	50.79564589	67.47986	67.67585	67.52255775	67.38934
-0.25	-9.60913986	-9.50076	-9.500408252	-7.55739	-6.208712684	-6.604026225	-10.1402	-10.1442	-10.19196267	-10.1912
+0.25	83.5495162	72.34247	72.14917367	57.41811	46.7916283	57.23753307	74.66941	74.72843	74.68048383	74.63883
-0.3	-11.53096783	-11.4009	-11.4004899	-9.06887	-7.450455221	-7.92483147	-12.1682	-12.173	-12.2303552	-12.2294
+0.3	94.63836479	80.06726	79.87434659	63.57769	51.84785382	64.74247234	81.09772	81.32315	83.91561611	83.92451
-0.35	-13.4527958	-13.3011	-13.30057155	-10.5803	-8.692197758	-9.245636715	-14.1963	-14.2019	-14.26874774	-14.2677
+0.35	97.35001516	82.31756	82.1062516	65.34175	53.42619761	66.80346879	84.6113	84.61385	87.90018661	87.87502
-0.4	-15.37462378	-15.2012	-15.2006532	-12.0918	-9.933940295	-10.56644196	-16.2243	-16.2307	-16.30714027	-16.3059
+0.4	103.8607206	83.89422	83.72752593	66.62248	54.54715784	71.1523639	89.21182	89.26386	91.66618351	91.47335
-0.45	-17.29645175	-17.1014	-17.10073485	-13.6033	-11.17568283	-11.88724721	-18.2524	-18.2596	-18.3455328	-18.3441
+0.45	100.599791	81.65618	81.59399197	64.91274	53.29262356	69.15846059	88.64346	88.72112	89.7230793	89.65301
-0.5	-19.21827972	-19.0015	-19.0008165	-15.1148	-12.41742537	-13.20805245	-20.2804	-20.2884	-20.38392534	-20.3824
+0.5	102.6960897	83.08494	82.69834855	65.83623	54.03325682	70.50312248	89.83881	89.95685	89.86713072	89.96261
-0.55	-21.14010769	-20.9017	-20.90089816	-16.6263	-13.65916791	-14.5288577	-22.3084	-22.3172	-22.42231787	-22.4206
+0.55	95.32340026	81.00999	80.78259595	64.29243	52.66481981	65.52930731	85.23272	85.35581	86.90496779	86.84492
-0.6	-23.06193566	-22.8018	-22.80097981	-18.1377	-14.90091044	-15.84966294	-24.3365	-24.3461	-24.4607104	-24.4588
+0.6	92.3407259	78.27753	77.58214906	61.80266	50.6458244	63.41628461	81.44795	81.50297	84.22805998	84.12679
-0.65	-24.98376364	-24.702	-24.70106146	-19.6492	-16.14265298	-17.17046819	-26.3645	-26.3749	-26.49910294	-26.4971
+0.65	81.41623735	70.33361	70.21000655	55.86447	45.63949212	55.91650939	71.94625	71.97593	75.23384526	75.17594
-0.7	-26.90559161	-26.6021	-26.60114311	-21.1607	-17.38439552	-18.49127343	-28.3926	-28.4038	-28.53749547	-28.5353
+0.7	74.47835612	63.4065	62.798064	50.03551	40.91366496	51.10537287	64.76197	64.71292	67.0624065	66.95066
-0.75	-28.82741958	-28.5023	-28.50122476	-22.6722	-18.62613805	-19.81207868	-30.4206	-30.4326	-30.57588801	-30.5736
+0.75	60.74493885	50.71123	50.70882495	40.33694	32.84555682	41.75720887	53.03547	53.04463	53.14548481	53.11559
-0.8	-30.74924755	-30.4024	-30.40130641	-24.1837	-19.86788059	-21.13288392	-32.4486	-32.4615	-32.61428054	-32.6118
+0.8	51.28032303	40.43019	39.80119719	31.74054	25.84662878	35.18512034	40.93329	40.99808	41.797537	41.92309
-0.85	-32.67107552	-32.3026	-32.30138806	-25.6951	-21.10962313	-22.45368917	-34.4767	-34.4903	-34.65267307	-34.65
+0.85	35.66357517	24.54948	24.53481299	19.52533	15.68879682	24.40992849	24.75557	25.12521	25.12390165	25.13095
-0.9	-41.39286343	-35.6983	-34.20146971	-28.0439	-23.22243322	-27.60610536	-37.7375	-36.5191	-37.19892784	-37.5132
+0.9	25.40540135	13.89936	13.3595255	12.51899	9.405968981	17.25036968	13.40794	13.5168	13.35476634	13.47511
-0.95	-56.31868982	-41.3641	-36.12413777	-32.9352	-27.79840546	-36.11018619	-44.272	-41.1745	-43.6592892	-44.0031
+0.95	9.013846278	4.91436	4.837465188	4.460666	3.365679131	6.197019316	4.788606	4.75636	4.733078455	4.753324
-1	-72.27271431	-47.3965	-41.39940504	-38.438	-33.1559531	-45.17383809	-51.0183	-49.9305	-54.79235793	-56.7666
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-72.27271431	-47.3965	-41.39940504	-38.438	-33.1559531	-45.17383809	-51.0183	-49.9305	-54.79235793	-56.7666
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-56.32748519	-41.3645	-36.12285731	-32.9356	-27.79856678	-36.11464812	-44.2709	-41.1767	-43.65003404	-44.0031
+2.05	9.01384449	4.919604	4.841108439	4.463465	3.366731395	6.126021787	4.748558	4.761134	4.737520749	4.757472
-2.1	-41.39328552	-35.6985	-34.20130744	-28.0435	-23.22227008	-27.60660779	-37.734	-36.5185	-37.20136327	-37.5177
+2.1	25.4054153	13.86664	13.33679187	12.50152	9.399386716	17.46622302	13.49663	13.48749	13.3275287	13.44964
-2.15	-32.67107385	-32.3024	-32.30123473	-25.695	-21.10958355	-22.45588055	-34.4779	-34.4897	-34.65348248	-34.6489
+2.15	35.6635828	24.5519	24.5364974	19.52646	15.68922457	24.37038711	24.75769	25.12497	25.12368256	25.13075
-2.2	-30.74924588	-30.4022	-30.40116202	-24.1836	-19.86784328	-21.13494633	-32.4498	-32.4609	-32.61504237	-32.6107
+2.2	51.28032064	40.45295	39.77360464	31.72199	25.83964925	35.14506569	40.9737	41.03052	41.92308544	41.92309
-2.25	-28.82741791	-28.5021	-28.50108931	-22.6721	-18.62610301	-19.81401211	-30.4217	-30.4321	-30.57660227	-30.5725

+2.25	60.74493122	50.71104	50.70868972	40.33685	32.84552232	41.73380671	53.0302	53.03975	53.1409503	53.15682
-2.3	-26.90558994	-26.6019	-26.6010166	-21.1606	-17.38436275	-18.4930779	-28.3935	-28.4033	-28.53816217	-28.5344
+2.3	74.47836113	63.37058	62.76575736	50.01375	40.90545143	51.18417659	64.79221	64.74087	67.03068761	66.98713
-2.35	-24.98376197	-24.7018	-24.70094389	-19.6491	-16.14262248	-17.17214368	-26.3654	-26.3745	-26.49972207	-26.4962
+2.35	81.41623545	70.32438	70.20359138	55.86015	45.63786024	55.93409019	71.92658	71.95775	75.24870604	75.17389
-2.4	-23.06193399	-22.8017	-22.80087117	-18.1377	-14.90088222	-15.85120947	-24.3373	-24.3457	-24.46128196	-24.458
+2.4	92.34071255	78.30488	77.54119618	61.77514	50.63541623	63.37097647	81.492	81.46624	84.25453454	84.15153
-2.45	-21.14010602	-20.9015	-20.90079846	-16.6262	-13.65914195	-14.53027525	-22.3092	-22.3169	-22.42284186	-22.4199
+2.45	95.32339239	81.02932	80.76637493	64.2815	52.66069441	65.51055533	85.26857	85.35104	86.92207848	86.86092
-2.5	-19.21827805	-19.0014	-19.00072575	-15.1147	-12.41740169	-13.20934104	-20.2811	-20.2881	-20.38440176	-20.3817
+2.5	102.6960878	83.09666	82.70648671	65.8417	54.03531477	70.57006536	89.86751	89.98337	89.99664174	89.91723
-2.55	-17.29645008	-17.1012	-17.10065304	-13.6033	-11.17566142	-11.88840682	-18.253	-18.2593	-18.34596166	-18.3435
+2.55	100.5997853	81.65142	81.59068603	64.91052	53.29178159	69.15956982	88.662	88.73826	89.71145449	89.67469
-2.6	-15.37462211	-15.2011	-15.20058033	-12.0918	-9.933921156	-10.56747261	-16.2249	-16.2304	-16.30752155	-16.3053
+2.6	103.8607302	83.88178	83.71888016	66.61667	54.54496116	71.20833091	89.17735	89.23199	91.68190739	91.52199
-2.65	-13.45279413	-13.301	-13.30050762	-10.5803	-8.69218089	-9.246538389	-14.1968	-14.2016	-14.26908145	-14.2672
+2.65	97.3500154	82.34084	82.09255758	65.33254	53.42271729	66.79213851	84.60951	84.6122	87.90722085	87.8816
-2.7	-11.53096616	-11.4008	-11.4004349	-9.06883	-7.450440625	-7.925604174	-12.1687	-12.1728	-12.23064135	-12.229
+2.7	94.63835526	80.12581	79.8543848	63.56424	51.84277617	64.785311	81.16459	81.30597	83.94966129	83.88749
-2.75	-9.609138191	-9.50069	-9.500362193	-7.55736	-6.208700359	-6.604669958	-10.1406	-10.144	-10.19220125	-10.1908
+2.75	83.54952455	72.34833	72.15324457	57.42085	46.79265701	57.21219715	74.68375	74.74168	74.74831937	74.65035
-2.8	-7.687310219	-7.60055	-7.600289482	-6.04589	-4.966960093	-5.283735743	-8.11244	-8.11522	-8.153761145	-8.15268
+2.8	74.32032108	65.25088	64.93519657	51.71344	42.08184897	50.82417025	67.52666	67.7191	67.56275896	67.42695
-2.85	-5.765482247	-5.70041	-5.70021677	-4.53442	-3.725219828	-3.962801527	-6.08433	-6.08642	-6.115321043	-6.11451
+2.85	58.52668166	51.93321	51.96662524	41.35328	33.58798996	40.01359403	54.08291	54.54213	54.45898234	54.53482
-2.9	-3.843654275	-3.80028	-3.800144058	-3.02294	-2.483479562	-2.641867311	-4.05622	-4.05761	-4.076880941	-4.07634
+2.9	42.68540072	38.6233	38.2093043	30.46262	24.80390494	29.17201257	40.68841	41.48713	41.4034646	41.5497
-2.95	-1.921826303	-1.90014	-1.900071347	-1.51147	-1.241739297	-1.320933096	-2.02811	-2.02881	-2.038440838	-2.03817
+2.95	22.24318564	20.30907	20.13511932	16.04817	13.05877525	15.199326	21.50907	22.04731	22.00590321	22.08056
-3	-1.46E-14	-1.2E-14	-1.12083E-14	-9E-15	-7.18E-15	-9.76996E-15	-1.1E-14	-1.1E-14	-1.21662E-14	-1.2E-14
+3	3.56E-15	1.95E-15	1.64188E-15	1.71E-15	1.14E-15	2.42214E-15	2.15E-15	2.33E-15	2.35922E-15	2.44E-15

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.42E-14	-1.1E-14	-1.1E-14	-8.7E-15	-8.8E-15	-8.4E-15	-8.9E-15	-9.91657E-15
End Shear	7.11E-15	5.25E-15	5.25E-15	4.22E-15	4.41E-15	4.07E-15	4.29E-15	5.0244E-15
-0.05	-1.921827972	-2.69955	-2.69955	-2.51433	-2.70231	-2.05141	-2.15938	-1.380596477
+0.05	22.24318457	28.77143	28.77143	26.38143	27.87963	21.94525	23.10026	15.95420551
-0.1	-3.843655944	-5.39911	-5.39911	-5.02866	-5.40462	-4.10283	-4.31876	-2.761192954
+0.1	42.68541312	54.71136	54.71136	49.79093	52.48397	41.81755	44.01847	30.58107556
-0.15	-5.765483916	-8.09866	-8.09866	-7.54299	-8.10693	-6.15424	-6.47814	-4.141789431
+0.15	58.52668905	73.73059	73.73059	65.95663	69.15349	56.11061	59.0638	42.00517833
-0.2	-7.687311888	-10.7982	-10.7982	-10.0573	-10.8092	-8.20565	-8.63753	-5.522385909
+0.2	74.32031965	92.3535	92.3535	81.98971	85.39185	70.4708	74.17979	53.24629452
-0.25	-9.60913986	-13.4978	-13.4978	-12.5716	-13.5116	-10.2571	-10.7969	-6.902982386
+0.25	83.5495162	102.7198	102.7198	90.59899	94.19857	78.10568	82.21651	59.98947809
-0.3	-11.53096783	-16.1973	-16.1973	-15.086	-16.2139	-12.3085	-12.9563	-8.283578863
+0.3	94.63836479	113.3523	113.3523	97.60032	100.5594	86.48451	91.03633	67.80405461
-0.35	-13.4527958	-18.8969	-18.8969	-17.6003	-18.9162	-14.3599	-15.1157	-9.66417534
+0.35	97.35001516	116.7802	116.7802	103.4884	109.1644	88.87706	93.5548	69.93236443
-0.4	-15.37462378	-21.5964	-21.5964	-20.1146	-21.6185	-16.4113	-17.2751	-11.04477182
+0.4	103.8607206	118.7923	118.7923	109.7825	117.2324	90.56968	95.33651	74.40975338
-0.45	-17.29645175	-24.296	-24.296	-22.629	-24.3208	-18.4627	-19.4344	-12.42536829
+0.45	100.599791	115.8551	115.8551	110.1401	117.955	88.15391	92.79359	72.28983065
-0.5	-19.21827972	-26.9955	-26.9955	-25.1433	-27.0231	-20.5141	-21.5938	-13.80596477
+0.5	102.6960897	117.9395	117.9395	111.198	118.3971	89.71136	94.43301	73.5657805
-0.55	-21.14010769	-29.6951	-29.6951	-27.6576	-29.7254	-22.5655	-23.7532	-15.18656125
+0.55	95.32340026	114.9457	114.9457	104.8631	111.4131	87.4699	92.07358	68.36209971
-0.6	-23.06193566	-32.3946	-32.3946	-30.1719	-32.4277	-24.617	-25.9126	-16.56715773
+0.6	92.3407259	111.0473	111.0473	99.18587	103.5859	84.51767	88.96597	66.12155019
-0.65	-24.98376364	-35.0942	-35.0942	-32.6863	-35.13	-26.6684	-28.072	-17.9477542
+0.65	81.41623735	99.738	99.738	87.07411	90.82786	75.92986	79.92617	58.29301223
-0.7	-26.90559161	-37.7937	-37.7937	-35.2006	-37.8323	-28.7198	-30.2313	-19.32835068
+0.7	74.47835612	90.06129	90.06129	78.76648	82.75223	68.47321	72.07707	53.2734744
-0.75	-28.82741958	-40.4933	-40.4933	-37.7149	-40.5347	-30.7712	-32.3907	-20.70894716
+0.75	60.74493885	72.02711	72.02711	64.72134	67.87633	54.7453	57.62663	43.42587321
-0.8	-30.74924755	-43.1929	-43.1929	-40.2293	-43.237	-32.8226	-34.5501	-22.08954363
+0.8	51.28032303	57.44505	57.44505	49.82164	53.06856	43.5476	45.83957	36.56500357
-0.85	-32.67107552	-45.8924	-45.8924	-42.7436	-45.9393	-34.874	-36.7095	-23.47014011
+0.85	35.66357517	34.87904	34.87904	29.7217	30.54582	26.52184	27.91773	25.45094326
-0.9	-41.39286343	-51.909	-53.0256	-46.8442	-53.1076	-38.9032	-41.0671	-24.85073659
+0.9	25.40540135	19.67117	19.67117	15.77405	15.78954	15.05572	15.84813	17.88654712
-0.95	-56.31868982	-61.3831	-64.747	-54.1082	-64.4248	-44.9989	-47.7194	-26.23133307
+0.95	9.013846278	6.965168	6.965168	5.633654	5.633654	5.345585	5.626931	6.405533012
-1	-72.27271431	-70.9275	-76.658	-61.6575	-76.2178	-51.1466	-54.4388	-27.61192864
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-72.27271431	-70.9275	-76.658	-61.6575	-76.2178	-51.1466	-54.4388	-27.61192864
+2	0	0	0	0	0	0	0	0
-2.05	-56.32748519	-61.3794	-64.7422	-54.1013	-64.4245	-44.9974	-47.7178	-26.23100006
+2.05	9.01384449	6.97326	6.97326	5.586539	5.613884	5.335266	5.616069	6.407748234
-2.1	-41.39328552	-51.9054	-53.0221	-46.8406	-53.1041	-38.9035	-41.0674	-24.85042107
+2.1	25.4054153	19.62067	19.62067	15.87838	15.87838	15.07832	15.87192	17.87271721
-2.15	-32.67107385	-45.8921	-45.8921	-42.7426	-45.9363	-34.8738	-36.7093	-23.46984207
+2.15	35.6635828	34.88278	34.88278	29.72405	30.54796	26.52366	27.91964	25.45600023
-2.2	-30.74924588	-43.1925	-43.1925	-40.2284	-43.2342	-32.8224	-34.5499	-22.08926307
+2.2	51.28032064	57.38375	57.38375	49.8677	53.0402	43.51783	45.80824	36.5528177
-2.25	-28.82741791	-40.493	-40.493	-37.7141	-40.532	-30.771	-32.3906	-20.70868407

+2.25	60.74493122	72.03381	72.03381	64.71222	67.91	54.74516	57.62648	43.43187662
-2.3	-26.90558994	-37.7935	-37.7935	-35.1998	-37.8299	-28.7196	-30.2312	-19.32810507
+2.3	74.47836113	90.12065	90.12065	78.79767	82.77769	68.43832	72.04034	53.26119673
-2.35	-24.98376197	-35.0939	-35.0939	-32.6856	-35.1278	-26.6682	-28.0718	-17.94752608
+2.35	81.41623545	99.7878	99.7878	87.09356	90.83962	75.92293	79.91887	58.29836073
-2.4	-23.06193399	-32.3944	-32.3944	-30.1713	-32.4256	-24.6168	-25.9125	-16.56694708
+2.4	92.34071255	111.0896	111.0896	99.2475	103.6604	84.53819	88.98757	66.10775824
-2.45	-21.14010602	-29.6949	-29.6949	-27.657	-29.7235	-22.5654	-23.7531	-15.18636808
+2.45	95.32339239	114.9755	114.9755	104.8672	111.4307	87.48441	92.08885	68.36546046
-2.5	-19.21827805	-26.9953	-26.9953	-25.1427	-27.0214	-20.514	-21.5937	-13.80578908
+2.5	102.6960878	117.9576	117.9576	111.2416	118.4536	89.72014	94.44225	73.5492972
-2.55	-17.29645008	-24.2958	-24.2958	-22.6285	-24.3192	-18.4626	-19.4343	-12.42521008
+2.55	100.5997853	115.9127	115.9127	110.1712	117.9495	88.15034	92.78983	72.29016649
-2.6	-15.37462211	-21.5963	-21.5963	-20.1142	-21.6171	-16.4112	-17.275	-11.04463109
+2.6	103.8607302	118.8912	118.8912	109.7292	117.394	90.56035	95.32668	74.38975621
-2.65	-13.45279413	-18.8967	-18.8967	-17.5999	-18.915	-14.3598	-15.1156	-9.664052089
+2.65	97.3500154	116.8162	116.8162	103.4722	109.1798	88.89453	93.57319	69.92891307
-2.7	-11.53096616	-16.1972	-16.1972	-15.0856	-16.2128	-12.3084	-12.9562	-8.283473091
+2.7	94.63835526	113.4427	113.4427	97.68423	100.5566	86.52844	91.08256	67.77988777
-2.75	-9.609138191	-13.4977	-13.4977	-12.5714	-13.5107	-10.257	-10.7969	-6.902894093
+2.75	83.54952455	102.7288	102.7288	90.62079	94.2268	78.11007	82.22112	59.98177414
-2.8	-7.687310219	-10.7981	-10.7981	-10.0571	-10.8085	-8.20561	-8.63748	-5.522315095
+2.8	74.32032108	92.41551	92.41551	82.04889	85.45644	70.50091	74.21148	53.2177244
-2.85	-5.765482247	-8.0986	-8.0986	-7.54282	-8.10641	-6.15421	-6.47811	-4.141736097
+2.85	58.52668166	73.70946	73.70946	65.95101	69.15227	56.11916	59.0728	41.99299217
-2.9	-3.843654275	-5.39906	-5.39906	-5.02855	-5.40427	-4.1028	-4.31874	-2.761157099
+2.9	42.68540072	54.74255	54.74255	49.82143	52.5175	41.83268	44.0344	30.54807747
-2.95	-1.921826303	-2.69953	-2.69953	-2.51427	-2.70214	-2.0514	-2.15937	-1.380578101
+2.95	22.24318564	28.787	28.787	26.39676	27.89652	21.95281	23.10822	15.93767189
-3	-1.46E-14	-1.6E-14	-1.6E-14	-1.4E-14	-1.5E-14	-1.3E-14	-1.3E-14	-1.03531E-14
+3	3.56E-15	2.77E-15	2.77E-15	2.76E-15	3.13E-15	2.08E-15	2.19E-15	2.36345E-15

2-Span: Moment (Max and Min) Raw Data Results - 15' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.42E-14	-1E-14	-1E-14	-1E-14	-1.1E-14	-8.8E-15
End Shear	7.11E-15	4.8E-15	4.71E-15	4.95E-15	5.28E-15	4.39E-15
-0.05	-1.921827972	-2.65097	-2.46752	-2.42926	-2.69958	-2.70179
+0.05	22.24318457	27.2592	25.55264	26.03412	27.76972	27.97995
-0.1	-3.843655944	-5.30195	-4.93505	-4.85852	-5.39916	-5.40357
+0.1	42.68541312	51.18177	48.05802	49.50984	52.8105	52.65483
-0.15	-5.765483916	-7.95292	-7.40257	-7.28778	-8.09874	-8.10536
+0.15	58.52668905	68.18022	63.24421	66.56596	71.00369	69.17704
-0.2	-7.687311888	-10.6039	-9.8701	-9.71705	-10.7983	-10.8071
+0.2	74.32031965	84.05851	78.17952	83.63125	89.20667	85.73243
-0.25	-9.60913986	-13.2549	-12.3376	-12.1463	-13.4979	-13.5089
+0.25	83.5495162	92.52949	86.07485	92.50086	98.66759	94.29433
-0.3	-11.53096783	-15.9058	-14.8051	-14.5756	-16.1975	-16.2107
+0.3	94.63836479	98.96841	93.76415	102.4846	109.3169	100.7474
-0.35	-13.4527958	-18.5568	-17.2727	-17.0048	-18.897	-18.9125
+0.35	97.35001516	107.0729	99.34199	105.2214	112.2362	109.2993
-0.4	-15.37462378	-21.2078	-19.7402	-19.4341	-21.5966	-21.6143
+0.4	103.8607206	115.183	106.6429	107.2007	116.6944	117.429
-0.45	-17.29645175	-23.8588	-22.2077	-21.8634	-24.2962	-24.3161
+0.45	100.599791	115.8259	107.7515	104.3728	118.006	118.0641
-0.5	-19.21827972	-26.5097	-24.6752	-24.2926	-26.9958	-27.0179
+0.5	102.6960897	116.4746	107.7533	106.2517	118.1366	118.5887
-0.55	-21.14010769	-29.1607	-27.1428	-26.7219	-29.6954	-29.7197
+0.55	95.32340026	109.4069	101.5605	103.5759	111.0746	111.3908
-0.6	-23.06193566	-31.8117	-29.6103	-29.1511	-32.3949	-32.4214
+0.6	92.3407259	101.8266	94.44568	99.94745	106.7579	103.6674
-0.65	-24.98376364	-34.4626	-32.0778	-31.5804	-35.0945	-35.1232
+0.65	81.41623735	88.83462	83.19072	89.87776	95.86961	90.8933
-0.7	-26.90559161	-37.1136	-34.5453	-34.0097	-37.7941	-37.825
+0.7	74.47835612	80.69275	75.58503	80.89098	86.39997	82.7207
-0.75	-28.82741958	-39.7646	-37.0129	-36.4389	-40.4937	-40.5268
+0.75	60.74493885	66.95158	62.29432	64.82916	69.15111	68.02539
-0.8	-30.74924755	-42.4156	-39.4804	-38.8682	-43.1933	-43.2286
+0.8	51.28032303	51.65679	48.60286	51.40669	54.93306	52.92485
-0.85	-32.67107552	-45.0665	-41.9479	-41.2974	-45.8928	-45.9304
+0.85	35.66357517	30.27696	29.51125	31.39923	33.49252	30.50887
-0.9	-41.39286343	-48.588	-46.3218	-45.6254	-48.9223	-50.8161
+0.9	25.40540135	15.82799	17.71367	17.77255	18.76406	15.79013
-0.95	-56.31868982	-58.5139	-64.473	-52.9704	-57.4103	-57.8241
+0.95	9.013846278	5.604045	6.356335	6.337861	6.760385	5.633654
-1	-72.27271431	-78.3969	-84.4924	-60.4399	-66.0498	-64.9283
+1	0	0	0	0	0	0
(Span 2) -2	-72.27271431	-78.3969	-84.4924	-60.4399	-66.0498	-64.9283
+2	0	0	0	0	0	0
-2.05	-56.32748519	-58.5146	-64.473	-52.9703	-57.4102	-57.8252
+2.05	9.01384449	5.607633	6.356986	6.336745	6.690084	5.630826
-2.1	-41.39328552	-48.5871	-46.3221	-45.6271	-48.9243	-50.814
+2.1	25.4054153	15.8056	17.70957	17.86318	19.05406	15.87838
-2.15	-32.67107385	-45.0649	-41.9482	-41.2973	-45.8951	-45.9325
+2.15	35.6635828	30.27835	29.51218	31.4013	33.49472	30.5102
-2.2	-30.74924588	-42.414	-39.4807	-38.868	-43.1954	-43.2306
+2.2	51.28032064	51.62578	48.59828	51.37284	54.89695	52.89227
-2.25	-28.82741791	-39.7632	-37.0131	-36.4388	-40.4957	-40.5287

+2.25	60.74493122	66.94395	62.29317	64.829	69.15093	68.01736
-2.3	-26.90558994	-37.1123	-34.5456	-34.0095	-37.796	-37.8268
+2.3	74.47836113	80.70739	75.57857	80.85134	86.35769	82.67503
-2.35	-24.98376197	-34.4614	-32.0781	-31.5803	-35.0963	-35.1249
+2.35	81.41623545	88.84109	83.18969	89.86988	95.86121	90.87026
-2.4	-23.06193399	-31.8105	-29.6105	-29.151	-32.3966	-32.423
+2.4	92.34071255	101.8708	94.44369	99.89722	106.7043	103.6534
-2.45	-21.14010602	-29.1596	-27.143	-26.7218	-29.6968	-29.7211
+2.45	95.32339239	109.4173	101.562	103.556	111.0551	111.3724
-2.5	-19.21827805	-26.5088	-24.6754	-24.2925	-26.9971	-27.0191
+2.5	102.6960878	116.5078	107.7495	106.1873	118.1087	118.5622
-2.55	-17.29645008	-23.8579	-22.2079	-21.8633	-24.2974	-24.3172
+2.55	100.5997853	115.8513	107.751	104.3687	118.0024	118.0607
-2.6	-15.37462211	-21.207	-19.7403	-19.434	-21.5977	-21.6153
+2.6	103.8607302	115.2009	106.6456	107.1901	116.6487	117.3856
-2.65	-13.45279413	-18.5561	-17.2728	-17.0048	-18.898	-18.9134
+2.65	97.3500154	107.0817	99.34332	105.2046	112.2183	109.2777
-2.7	-11.53096616	-15.9053	-14.8053	-14.5755	-16.1983	-16.2115
+2.7	94.63835526	98.96181	93.76029	102.4601	109.2908	100.7418
-2.75	-9.609138191	-13.2544	-12.3377	-12.1463	-13.4986	-13.5096
+2.75	83.54952455	92.51601	86.07731	92.46864	98.63322	94.2811
-2.8	-7.687310219	-10.6035	-9.87017	-9.717	-10.7989	-10.8077
+2.8	74.32032108	84.03637	78.1852	83.62807	89.20327	85.70984
-2.85	-5.765482247	-7.95263	-7.40263	-7.28775	-8.09914	-8.10574
+2.85	58.52668166	68.17905	63.24409	66.59175	71.0312	69.17628
-2.9	-3.843654275	-5.30175	-4.93509	-4.8585	-5.39943	-5.40383
+2.9	42.68540072	51.14126	48.06095	49.52706	52.82886	52.62827
-2.95	-1.921826303	-2.65088	-2.46754	-2.42925	-2.69971	-2.70192
+2.95	22.24318564	27.23903	25.55412	26.04271	27.7789	27.98258
-3	-1.46E-14	-1.4E-14	-1.4E-14	-1.5E-14	-1.6E-14	-1.6E-14
+3	3.56E-15	3.66E-15	3.5E-15	2.49E-15	3.32E-15	3.33E-15

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-7.579107597	-10.65619458	-6.820582329	-7.839889937	-7.839889937	-7.84361374	-8.592240043	-5.95883185	-6.27245	-3.800510711
End Shear	100.968239	113.0347386	90.87141488	90.14298451	91.81160852	83.80997769	90.85949431	67.54361187	71.27277	44.3555
-0.05	-9.723557459	-10.67225002	-7.086621152	-7.839889937	-7.839889937	-7.84361374	-8.592240043	-6.973584879	-7.34062	-3.800510711
+0.05	91.98947446	104.6698198	82.92960764	82.59654954	83.82457378	76.47725741	82.29839147	62.57337193	65.99909	41.5682084
-0.1	-16.37147573	-10.8179842	-9.502127353	-7.839889937	-7.839889937	-7.84361374	-8.592240043	-9.865894213	-10.3852	-6.351574244
+0.1	79.43240853	93.0036854	71.63594444	72.58469973	73.27995327	66.97543381	71.73221814	55.19230782	58.1729	37.63697402
-0.15	-18.64396376	-10.89940245	-11.49151734	-7.839889937	-7.839889937	-7.84361374	-8.592240043	-10.78015138	-11.3475	-7.804769168
+0.15	75.38165883	89.15064537	67.99217825	69.30078644	69.83528265	64.02262376	68.47319808	52.7637228	55.59939	36.3304668
-0.2	-25.5967588	-15.40705156	-17.55126801	-11.2878875	-11.2878875	-9.493722495	-10.08672302	-14.53762635	-15.3028	-12.0712186
+0.2	63.70388502	77.75226985	57.3500258	59.66659543	59.77373497	55.28477017	58.84862223	45.61516491	48.02905	32.40030681
-0.25	-27.95118968	-18.60779356	-19.59626403	-13.87275875	-13.87275875	-11.10739584	-11.53972936	-16.62807947	-17.5032	-13.45997409
+0.25	59.98590325	74.0190505	54.00741516	56.73114515	56.73114515	52.42370444	55.70389122	43.28894389	45.56731	31.09162623
-0.3	-35.08970699	-29.26693727	-26.48666532	-22.27413742	-22.27413742	-17.83164846	-17.83164846	-22.74578932	-23.9429	-17.51623014
+0.3	50.33689368	63.07081243	45.06740067	48.58781441	48.58781441	44.04287378	46.51312793	36.94397509	38.88839	27.19041257
-0.35	-37.48576497	-32.85938126	-29.59454599	-25.07984775	-25.07984775	-20.07724575	-20.07724575	-24.72726512	-26.0287	-18.82929435
+0.35	47.82060462	59.51761176	42.75392502	45.92636216	45.92636216	41.32809996	43.31279894	34.91534986	36.753	25.90321362
-0.4	-44.68724216	-43.70068451	-37.79096217	-33.46858044	-33.46858044	-27.14686438	-27.73986491	-30.49849892	-32.1037	-22.64158006
+0.4	40.46829725	48.44074562	36.1857158	38.14512469	38.14512469	33.46799306	34.75228838	28.98471902	30.51023	22.1019055
-0.45	-47.08339392	-47.3227442	-40.39201383	-36.24484688	-36.24484688	-29.67571869	-30.28419771	-32.36448146	-34.0679	-23.86769285
+0.45	38.09095165	45.14002012	34.06240599	35.62959403	35.62959403	30.95405847	32.02346927	27.06766119	28.49227	20.85982677
-0.5	-54.22145604	-58.15852099	-47.80754963	-44.47488151	-44.65616247	-38.59271489	-39.8771946	-37.78923986	-39.7781	-27.40222604
+0.5	31.21187607	35.67096252	27.91949605	28.24172025	28.24172025	23.77833549	24.26415032	21.53512281	22.66855	17.22937538
-0.55	-56.574982	-61.74703672	-50.15139312	-47.47173647	-47.75149154	-41.5375263	-43.15925123	-39.53974809	-41.6208	-28.5301274
+0.55	29.01082474	32.67089759	25.95425553	25.99681044	25.99681044	21.51980919	21.83270653	19.75757593	20.79745	16.0560734
-0.6	-63.51963731	-72.38600072	-56.80358235	-56.12226922	-56.64273839	-50.24168959	-53.81469708	-44.61801764	-46.9663	-31.75313772
+0.6	22.71522042	24.18905121	20.44369835	19.33245705	19.33245705	15.11260993	15.39560021	14.6247916	15.39452	12.66742113
-0.65	-65.78660258	-75.87659116	-59.11010988	-58.88508338	-59.46860549	-53.08828105	-57.32639448	-46.25303136	-48.6874	-32.77156641
+0.65	20.72660777	21.54622141	18.55808366	17.04871363	17.04871363	13.46895352	13.74230181	13.05055196	13.73742	11.58654637
-0.7	-72.40424798	-86.12382537	-65.16382304	-66.78049724	-67.50603585	-61.41593043	-67.44637593	-50.98482678	-53.6682	-35.64926628
+0.7	15.12109946	14.21951788	13.55310851	11.13849137	11.13849137	8.88650429	9.128309343	8.658130945	9.113822	8.510651883
-0.75	-74.48783741	-89.45092925	-66.86717097	-69.27394903	-70.03216361	-64.10974236	-70.6729194	-52.82885646	-55.6093	-36.5469631
+0.75	13.37986241	11.98929712	11.99815995	9.384218767	9.384218767	7.483613481	7.714025678	7.312140674	7.69699	7.54585323
-0.8	-83.15593289	-99.10791187	-74.57055017	-76.77691477	-77.59865475	-71.89721532	-79.87686573	-58.49925917	-61.6362	-39.04557913
+0.8	8.567464147	6.702413182	7.699322796	5.389355428	5.389355428	4.2073875	4.280984384	4.06858743	4.282724	4.853661541
-0.85	-87.25787609	-102.2047518	-78.26209239	-79.35613397	-80.18239159	-74.383681	-82.77785175	-60.47383612	-63.744	-39.62071918
+0.85	7.107338803	5.561526923	6.394431772	4.384801712	4.384801712	3.494523715	3.564702675	3.386485047	3.564721	4.028589558
-0.9	-99.25176723	-111.0693467	-89.05885618	-87.28898225	-88.88406339	-82.16717352	-91.41813086	-66.13953806	-69.7969	-41.73300825
+0.9	3.18744937	2.288280387	2.843076099	1.965324698	1.965324698	1.560248313	1.619382778	1.534485685	1.615248	1.79105356
-0.95	-103.1297197	-113.8679426	-92.55078643	-90.00906609	-91.88671229	-84.14731664	-94.23221573	-68.05503557	-71.8431	-42.41333311
+0.95	2.040967156	1.208260612	1.819780602	1.249075361	1.249075361	0.987803816	1.042991142	0.985954366	1.037847	1.129358347
-1	-114.3356989	-121.7344031	-103.7787212	-97.69107247	-100.4178069	-92.3620645	-101.8306385	-73.44606889	-77.6075	-44.29284442
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.12E+02	1.19E+02	100.5006355	9.52E+01	9.76E+01	89.67591727	99.37713172	7.17E+01	7.57E+01	4.37E+01
-2.05	-9.78E-01	-7.28E-01	-8.77E-01	-0.58617949	-0.58617949	-4.58E-01	-4.92E-01	-4.77E-01	-0.50183	-5.14E-01
+2.05	1.08E+02	1.17E+02	96.68488104	92.62859739	94.78670009	86.93564794	97.09059622	69.90453839	73.81962	43.08273907
-2.1	-4.42E+00	-3.39E+00	-3.95E+00	-2.734655196	-2.734655196	-2.17E+00	-2.24E+00	-2.12E+00	-2.23349	-2.50E+00
+2.1	9.64E+01	1.08E+02	85.48786078	84.47044513	85.78118825	79.87314417	88.81234764	64.28416944	67.81393	41.06278329
-2.15	-5.722621429	-4.491733331	-5.113229876	-3.542071562	-3.542071562	-2.900933806	-2.900933806	-2.739758163	-2.88396	-3.244188192
+2.15	92.38468772	105.2054799	81.88707614	81.61841138	82.63813656	76.78921559	85.80693588	62.39473491	65.79538	40.35835678
-2.2	-10.10096506	-7.914665601	-9.078969845	-6.33418236	-6.33418236	-4.958601131	-5.03548411	-4.785435943	-5.0373	-5.71823769
+2.2	80.13560356	95.91660185	71.26302462	74.52723131	75.3386555	69.331711	76.8647772	56.47205819	59.47293	38.24356902
-2.25	-11.7057869	-9.892344173	-10.51290764	-7.727335992	-7.727335992	-6.158156636	-6.245596447	-6.036733118	-6.35446	-6.616221906

+2.25	77.49593302	92.69541614	69.01542675	71.78820294	72.58332873	66.73431386	73.79523657	54.4234753	57.31252	37.41037436
-2.3	-16.92738928	-16.58300753	-15.17698139	-12.98923663	-12.98923663	-10.36600593	-10.61876442	-10.07344523	-10.6036	-9.50940133
+2.3	70.23873609	82.71620339	63.21486234	64.19295778	64.87830378	58.65514639	64.11616936	49.42677677	52.02819	34.71773777
-2.35	-18.79660863	-19.0274291	-16.91694775	-14.90074343	-14.90074343	-12.19104368	-12.19104368	-11.53875485	-12.1461	-10.53527582
+2.35	68.0045279	79.29846758	61.01652816	61.55980004	62.19784297	55.87780974	60.74136616	47.84933015	50.36772	33.75818719
-2.4	-24.76026587	-26.95531856	-22.28423926	-21.48698716	-21.48698716	-16.82475731	-17.11693758	-16.26003492	-17.1158	-13.7766327
+2.4	61.02008854	68.82923575	54.63539075	53.27187375	53.72021809	47.34065078	50.207133	42.94376308	45.20396	30.70338163
-2.45	-26.85954008	-29.78463766	-24.04598871	-23.68631188	-23.68631188	-18.86242469	-19.11825512	-17.93418288	-18.8781	-14.90674119
+2.45	58.60367865	65.28111898	52.41752268	50.38708895	50.75521935	44.43792827	46.56750733	41.250822	43.42192	29.6287341
-2.5	-33.46043588	-38.78364469	-29.94039928	-30.63324948	-30.63324948	-26.12571491	-26.79707995	-23.35436722	-24.5835	-18.42533396
+2.5	51.56904652	54.51857484	45.38394658	41.72384701	41.72384701	35.60647895	36.55247506	35.99878155	37.89345	26.24553133
-2.55	-35.75121832	-41.94187792	-31.98890135	-33.07295045	-33.07295045	-28.51933062	-29.44077533	-25.19584871	-26.5219	-19.63602398
+2.55	49.19788886	50.90507842	42.91165246	38.98103632	38.98103632	32.63291004	33.24528872	34.19035111	35.98984	25.06705573
-2.6	-42.88080735	-51.84225293	-38.35726601	-40.72489215	-40.72489215	-36.05922138	-37.56986661	-30.94527645	-32.574	-23.36089589
+2.6	42.04287605	40.04233372	35.10632721	30.65503966	30.65503966	24.67872889	25.12802901	28.59183461	30.09667	21.38924213
-2.65	-45.33233761	-55.27221124	-40.54749079	-43.32003814	-43.32003814	-38.68084529	-40.42516395	-32.92312267	-34.6559	-24.62852017
+2.65	39.65277403	36.4271688	32.3737255	27.8576822	27.8576822	22.30154221	22.49431169	26.66791173	28.07149	20.11818582
-2.7	-52.87873274	-66.71099782	-47.36114551	-51.30210116	-51.30210116	-46.82291904	-49.55815567	-39.00703053	-41.06	-28.48872729
+2.7	32.50343012	25.6537189	24.4053319	19.44371885	19.44371885	15.56729642	15.56729642	20.7229063	21.81359	16.1795261
-2.75	-56.19130339	-70.36200607	-50.77116383	-54.01783128	-54.01783128	-49.61800735	-52.62339355	-41.07703256	-43.239	-29.78963129
+2.75	30.13580531	22.09947438	22.11316392	16.64226233	16.64226233	13.32508633	13.32508633	18.68350772	19.66685	14.82716491
-2.8	-67.32732808	-81.55866499	-60.79611899	-62.86625955	-63.1075947	-58.19859784	-62.05478404	-47.98662154	-50.5396	-33.71421794
+2.8	23.11458629	13.55205821	15.50371839	9.859528316	9.859528316	8.136003245	8.59215409	13.43924371	14.14657	10.66144556
-2.85	-71.21776968	-85.35954507	-64.29738083	-66.07940509	-66.46338456	-61.11257969	-65.26449372	-50.37064249	-53.0643	-35.0247673
+2.85	20.80965269	11.5821399	13.48325293	8.343938395	8.343938395	7.843633924	8.59215409	12.30047339	12.94787	9.239017564
-2.9	-83.35528721	-96.91508079	-75.36691483	-75.92791356	-76.79409059	-69.96801382	-75.03837534	-57.65379092	-60.7821	-38.94277263
+2.9	14.03540104	10.7528138	7.964147957	7.839739249	7.839739249	7.843633924	8.59215409	8.921600305	9.391158	4.880030053
-2.95	-87.53994238	-100.8050901	-79.13328424	-79.26679487	-80.31074292	-73.20058993	-78.49525926	-60.11523661	-63.392	-40.2393067
+2.95	11.8321693	10.70426751	7.530598597	7.839739249	7.839739249	7.843633924	8.59215409	7.957744252	8.376573	3.800522
-3	-100.4401984	-112.5353141	-90.74063893	-89.39413854	-91.01809665	-83.19271671	-90.13716891	-67.55888843	-71.289	-44.23536601
+3	7.579107597	10.65596822	6.821196815	7.839739249	7.839739249	7.843633924	8.59215409	5.958714489	6.272331	3.800522

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-5.519710524	-5.516553263	-4.387748377	-3.602208907	-3.635459643	-6.20470458	-6.635853308	-7.026349267	-7.029082347
End Shear	60.71004264	59.9365272	47.676783	38.42016307	49.97977507	67.44230888	70.94548383	70.48588329	70.72863093
-0.05	-5.519710524	-6.025277923	-4.387748377	-3.606366119	-3.635459643	-6.20470458	-6.635853308	-7.026349267	-7.029082347
+0.05	55.64857464	55.48490054	43.86487617	35.76748275	45.55235933	61.55478522	65.12155714	65.06161226	65.30059784
-0.1	-5.519710524	-8.366328493	-5.083937716	-4.274941328	-4.875147344	-6.20470458	-6.635853308	-7.026349267	-7.029082347
+0.1	49.72190306	49.16409009	39.13579995	31.67321683	39.76968354	54.00475604	57.07245596	57.00979254	57.24109383
-0.15	-5.519710524	-9.234697326	-5.84226872	-4.6843246	-6.111717314	-6.20470458	-6.635853308	-7.026349267	-7.806531265
+0.15	47.74817192	47.18715005	37.56185633	30.30831249	37.88825668	51.69273622	54.42445542	54.36107536	54.58928602
-0.2	-9.107353316	-12.65101373	-8.806772707	-7.184496559	-9.841926145	-8.203089239	-9.159562595	-10.0549783	-10.93350447
+0.2	41.86356281	41.29700635	32.87224579	26.40588762	32.41767665	44.83721028	46.62987406	46.56495665	46.78235086
-0.25	-10.29064133	-14.5910139	-10.08486697	-8.217272421	-11.08753893	-9.441286464	-10.16893024	-11.01276925	-11.97195816
+0.25	39.92164112	39.35464571	31.32574147	25.13471067	30.66045211	42.5877147	44.09201328	44.02680969	44.24010343
-0.3	-15.74140208	-20.2971787	-14.34719215	-11.2032308	-14.81159385	-15.15690119	-16.15771019	-16.14012199	-16.18138316
+0.3	34.18582852	33.62197036	26.76131266	21.40182988	26.08431132	35.98337584	36.703749	36.63841044	36.58043539
-0.35	-18.00870274	-22.154129	-16.06859528	-12.50245042	-16.04406548	-17.06565889	-18.18004768	-18.15831726	-18.20007969
+0.35	32.31129694	31.75001175	25.27081703	20.18886953	24.86038692	33.83883063	34.32662956	34.26150889	34.20373637
-0.4	-24.63193907	-27.58511837	-21.07108845	-16.46626998	-20.71125582	-23.20825984	-24.12726429	-24.85976082	-24.14012707
+0.4	26.83102291	26.28227559	20.91725719	16.66254868	21.24489826	27.61300215	27.68296734	27.70320019	27.57209043
-0.45	-26.77582149	-29.34769614	-22.6846801	-17.75523335	-22.19994258	-25.2909553	-26.06510899	-26.30081106	-26.35393876
+0.45	25.05945949	24.51654221	19.51133869	15.52900752	20.06311755	25.61583268	25.68320524	25.62481368	25.57299615
-0.5	-32.99786682	-34.48763398	-27.5044383	-21.62072925	-26.40552182	-31.96889585	-31.99381614	-33.29270804	-33.34720012
+0.5	19.94146525	19.42122147	15.4543648	12.27237822	16.60734401	19.89580553	19.50301239	19.89857334	19.84836325
-0.55	-34.99772197	-36.15056493	-29.07473525	-22.89395167	-27.71971369	-34.25277615	-34.27877292	-35.5738564	-35.6286664
+0.55	18.23448966	17.79753784	14.16159292	11.23914804	15.48989375	18.08845454	17.27779107	18.08935154	18.03991518
-0.6	-40.75672727	-40.98356192	-33.57040113	-26.57477926	-31.39575608	-40.98984589	-41.01874878	-42.24178053	-43.22381911
+0.6	13.29520702	13.18210262	10.48692262	8.314411511	12.26038344	12.84571844	12.87364233	12.88233674	13.13740887
-0.65	-42.59192382	-42.54153491	-34.99467484	-27.75331832	-32.53141458	-43.18850027	-43.57281735	-44.50007913	-44.8124748
+0.65	11.8487161	11.73629035	9.335866381	7.402072629	11.22944939	11.44861049	11.474841	11.48259615	11.72840259
-0.7	-48.2387053	-47.05172837	-39.03387717	-31.13434462	-36.15369072	-49.60622891	-51.3269405	-51.69789072	-52.873464
+0.7	7.816086489	7.708210011	6.129195417	4.870508456	8.062453629	7.553528646	7.574775501	7.579910274	7.625026881
-0.75	-50.14728715	-48.58490246	-40.2998644	-32.20760047	-37.08350248	-51.67722221	-53.84828702	-54.04733626	-55.46189685
+0.75	6.793412692	6.476100491	5.385061658	4.099328442	7.147968952	6.361071458	6.380695726	6.385041981	6.427548004
-0.8	-54.85836612	-52.99727411	-43.84587288	-35.25667101	-40.32738054	-57.64831637	-61.17796696	-61.0706687	-63.47448245
+0.8	3.700093469	3.639676828	3.386257292	2.555834953	4.596018749	3.576279375	3.585733727	3.587172177	3.661007171
-0.85	-56.27511411	-54.38813299	-44.94134003	-36.21379206	-42.17188837	-59.54920833	-63.53253122	-63.55665154	-66.20509496
+0.85	3.072799433	3.013833417	2.813250188	2.110918839	3.813828801	2.970345157	2.979044937	2.980139122	3.050298997
-0.9	-60.18810163	-58.30290666	-47.95743676	-38.89775373	-47.51151609	-65.47830417	-70.28596109	-70.79140024	-73.5628956
+0.9	1.370795189	1.421418319	1.258570861	0.976060842	1.692051282	1.326211066	1.382757691	1.382757691	1.382757691
-0.95	-61.37571695	-59.59827083	-48.8701394	-39.72754439	-49.21834863	-67.09017258	-72.42314873	-73.05965795	-75.73261685
+0.95	0.919856196	0.913305097	0.798528811	0.622761251	1.06434717	0.839633243	0.84548062	0.845466542	0.860884753
-1	-64.57036067	-63.19606232	-51.31956184	-42.0123425	-54.08446276	-73.78474357	-78.44853246	-79.3971886	-81.72044481
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	6.36E+01	6.20E+01	5.05E+01	4.13E+01	5.25E+01	7.16E+01	76.49168666	77.34952872	7.98E+01
-2.05	-4.01E-01	-4.42E-01	-4.02E-01	-3.03E-01	-4.84E-01	-3.89E-01	-0.394153024	-0.393734196	-4.08E-01
+2.05	62.49338359	60.8486459	49.73071286	40.52193514	50.86931355	69.3609522	74.48162965	75.23552413	77.80161494
-2.1	-1.91E+00	-1.97E+00	-1.75E+00	-1.29E+00	-2.37E+00	-1.85E+00	-1.908890406	-1.908890406	-1.91E+00
+2.1	58.93032472	57.0342667	46.99261623	38.03295302	45.75023953	63.73472021	68.07179786	68.43172502	71.29206853
-2.15	-2.479551036	-2.537881245	-2.269713036	-1.690038	-3.074734068	-2.465793735	-2.465793735	-2.465793735	-2.465793735
+2.15	57.62508806	55.72864669	45.98675899	37.13797324	43.96920228	61.3852519	65.81916233	66.01874829	68.95417128
-2.2	-4.361056506	-4.297944806	-3.98813901	-3.024299108	-5.420923319	-4.214810961	-4.224687449	-4.226190127	-4.303329199
+2.2	53.37475167	51.55660023	42.7004179	34.26699343	38.79601402	55.68399146	58.75749208	58.64819559	61.07555872
-2.25	-5.41505645	-5.309926384	-4.611636772	-3.513195459	-6.272345111	-5.23443314	-5.251874613	-5.254956456	-5.294363897
+2.25	51.8507224	50.08514436	41.51793338	33.25032457	37.95881997	53.69238429	56.31287578	56.44580579	58.4047011

-2.3	-9.117870059	-9.005111933	-7.160708196	-5.681047372	-9.01527549	-8.811105044	-8.833314353	-8.838686558	-8.885851721
+2.3	46.55006438	45.56674133	37.7200811	30.03093548	35.16835476	47.48111104	48.75117147	49.57816247	50.21875292
-2.35	-10.46327971	-10.34888649	-8.230426265	-6.525412186	-10.21912086	-10.36238713	-10.13447486	-10.14069509	-10.19037634
+2.35	44.54472071	44.0630608	36.37321129	28.90361878	34.14607837	45.34071864	46.16519865	47.05828186	47.53074895
-2.4	-14.80177031	-14.68499027	-11.6824437	-9.261399272	-13.32470482	-14.30104371	-14.32986948	-14.33885203	-14.60222462
+2.4	38.86246048	39.38898542	32.10057739	25.36847095	30.20402589	38.74673265	38.77594814	40.03370707	41.03060204
-2.45	-16.34128157	-16.22448218	-12.90811862	-10.23681164	-14.40187637	-15.93370864	-15.9784248	-15.98972451	-16.29784392
+2.45	36.94200888	37.77770908	30.60157299	24.14122831	28.97818047	36.49998536	36.52825063	37.81018549	37.86618101
-2.5	-21.62649918	-21.09406442	-16.78516824	-13.33541941	-17.75338282	-21.77047039	-21.36640714	-21.77332478	-21.72168835
+2.5	30.9427736	32.7887938	25.89089755	20.32204865	25.03463719	29.65060963	29.85059437	30.96808298	31.02314341
-2.55	-23.33353996	-22.79346334	-18.13823715	-14.42145772	-18.90592594	-23.67845577	-23.35251037	-23.68333152	-23.63112276
+2.55	28.86801961	31.07521857	24.26295358	19.02460956	23.63229006	27.3399274	27.96312969	28.63663007	28.69124746
-2.6	-28.6468145	-28.08900265	-22.3546119	-17.82093379	-22.4502614	-29.66841877	-29.73982156	-29.76048583	-29.62667427
+2.6	22.43680385	25.78733747	19.42173272	15.15764629	19.16528277	21.07801208	22.15042398	22.89459855	22.16688396
-2.65	-30.47454246	-29.91248151	-23.80650922	-18.99686031	-23.65599392	-31.74491137	-32.01582778	-31.94998466	-32.06141147
+2.65	20.22836608	23.97675269	17.75409152	13.83629855	17.59047202	18.95631088	20.16738048	20.14318692	20.18624746
-2.7	-36.09648924	-35.52655997	-28.27649687	-22.63453056	-27.32660835	-38.17674188	-39.14516765	-39.07861627	-39.01954027
+2.7	13.70259214	18.40577031	12.66455761	10.2372616	13.56236672	13.23220196	14.10133712	14.08962414	14.13121295
-2.75	-38.00932078	-37.43829705	-29.79864375	-23.87929898	-28.95604494	-40.37931879	-41.6093179	-41.54277134	-41.57756778
+2.75	11.72915143	16.50348382	11.39550546	9.242027354	12.32053181	11.32632338	12.0449793	12.03890016	12.98750189
-2.8	-43.833206	-43.26338361	-34.43655289	-27.69153381	-34.22623146	-47.1257206	-49.22056898	-49.15484545	-49.3750252
+2.8	7.889470772	11.63532019	7.741409828	6.353918405	8.585075624	7.016695286	8.126880277	9.030431132	10.14842587
-2.85	-45.79554604	-45.22758458	-36.00038554	-28.98378436	-36.05088694	-49.41193799	-51.82005593	-52.03860488	-51.97858045
+2.85	6.65751871	10.58792103	6.894116795	5.513819165	7.341241976	6.204831759	7.087604126	7.952518566	8.88315207
-2.9	-51.71464753	-51.15623669	-40.72048598	-32.99071494	-41.69338109	-56.34560973	-59.76141727	-59.69830395	-59.93131407
+2.9	5.519611467	7.560794423	4.490676484	3.911398843	3.635276255	6.204831759	6.635841303	7.026236802	7.028976146
-2.95	-53.69093163	-53.13701702	-42.29743501	-34.36529758	-43.62198955	-58.92729687	-62.44564178	-62.38342502	-62.61898941
+2.95	5.519611467	6.803616051	4.387850842	3.614755497	3.635276255	6.204831759	6.635841303	7.026236802	7.028976146
-3	-60.30340834	-59.63524007	-47.01404379	-38.41520946	-49.51579527	-66.94645547	-70.56531127	-70.50631717	-70.74791104
+3	5.519611467	5.516702465	4.387850842	3.602249433	3.635276255	6.204831759	6.635841303	7.026236802	7.028976146

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-7.631847591	-7.079989549	-6.38567	-7.70108	-7.70304
End Shear	78.6136227	73.02708369	72.23588	79.4468	79.48705
-0.05	-7.631847591	-7.079989549	-7.41384	-8.0337	-8.31175
+0.05	71.6112702	67.30105611	66.95413	72.42952	73.80653
-0.1	-10.92629058	-10.42056407	-10.3908	-12.0254	-11.3178
+0.1	62.76458193	59.06194472	59.09539	63.41655	64.51777
-0.15	-12.16714518	-11.89291814	-11.4752	-13.2667	-12.3567
+0.15	59.8493249	56.3445545	56.50539	60.49336	61.53262
-0.2	-15.53738482	-15.9544111	-14.2636	-16.711	-15.437
+0.2	51.25247347	48.32428717	48.86813	51.86772	52.80736
-0.25	-16.55098486	-17.19603638	-16.2114	-18.4795	-17.3615
+0.25	48.44792072	45.70557669	46.37707	49.0519	49.97934
-0.3	-21.25347565	-20.61081634	-22.1191	-25.0248	-22.6642
+0.3	40.26549365	38.05854462	39.33601	41.95841	41.61769
-0.35	-23.42029944	-22.7377819	-24.0683	-27.1508	-24.3758
+0.35	37.62652451	35.58994722	37.16466	39.6423	38.81101
-0.4	-29.89673797	-29.92207174	-29.8559	-33.3709	-29.4281
+0.4	30.02313879	28.47048922	30.72104	32.76911	31.11624
-0.45	-32.37258547	-32.45797537	-31.7652	-35.3939	-31.917
+0.45	27.60460952	26.2034756	28.5885	30.35256	28.66388
-0.5	-41.16726696	-39.64836302	-37.4328	-41.3216	-39.6358
+0.5	20.74485459	20.34644634	22.71688	23.96787	21.69246
-0.55	-44.00543761	-41.90796982	-39.6167	-44.2908	-42.4794
+0.55	18.60164679	18.5311782	20.84413	21.97681	19.50862
-0.6	-52.28659113	-49.75861068	-45.4058	-50.6629	-50.136
+0.6	13.72635266	13.40797948	15.51518	16.31443	13.84539
-0.65	-55.05078482	-52.35841067	-47.4247	-53.164	-52.6982
+0.65	12.24355998	11.8166044	13.84387	14.5397	12.35755
-0.7	-62.9934634	-59.77206305	-53.611	-60.4976	-60.4273
+0.7	8.108214932	7.596194516	9.180857	9.592025	8.148163
-0.75	-65.52058444	-62.11279119	-55.6258	-63.0107	-63.0458
+0.75	6.795335822	6.736096542	7.752061	8.077441	6.878391
-0.8	-72.72454684	-68.7353839	-62.3633	-70.3261	-70.5968
+0.8	3.863132236	4.335908062	4.346544	4.53441	3.856519
-0.85	-74.99626473	-70.8078396	-64.5996	-72.6692	-73.1606
+0.85	3.217873143	3.600282598	3.620954	3.765179	3.211713
-0.9	-81.40664278	-77.74947945	-70.983	-79.3835	-80.43
+0.9	1.432559959	1.605234883	1.634761	1.678428	1.437253
-0.95	-83.40468914	-79.97403927	-72.9918	-81.6306	-82.703
+0.95	0.915577399	1.015229761	1.051888	1.061055	0.920073
-1	-88.9836819	-87.68428933	-78.6172	-87.9913	-90.1622
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	8.72E+01	8.50E+01	7.68E+01	8.59E+01	8.76E+01
-2.05	-4.35E-01	-5.13E-01	-5.00E-01	-0.48825	-4.40E-01
+2.05	85.32116747	82.15968702	74.92437	83.81409	84.99318
-2.1	-1.99E+00	-2.23E+00	-2.26E+00	-2.33973	-1.99E+00
+2.1	79.3270202	75.43459966	68.90005	77.18678	78.06645
-2.15	-2.568471596	-2.899662107	-2.91525	-3.036	-2.60084
+2.15	77.18948552	73.03431786	66.77088	74.94766	75.64194
-2.2	-4.54069947	-5.105295716	-5.10883	-5.34296	-4.53379
+2.2	70.37438488	66.59312159	60.06409	67.9196	68.01071
-2.25	-5.535082939	-5.905823489	-6.39795	-6.6429	-5.67477
+2.25	67.97234608	64.38533991	57.73253	65.48017	65.54386

-2.3	-9.43939524	-8.825498243	-10.683	-11.1852	-9.48282
+2.3	60.39118109	57.363598	51.52934	58.06757	57.90804
-2.35	-10.81889104	-10.2890933	-12.2385	-12.8357	-10.9299
+2.35	57.74293105	54.89212113	49.40754	55.62264	55.21783
-2.4	-15.02693265	-15.0607384	-17.2509	-18.1583	-15.39
+2.4	49.52698429	47.09310587	43.4638	48.17793	47.53195
-2.45	-16.5972557	-16.7693847	-19.0284	-20.047	-17.412
+2.45	46.78194787	44.3671452	41.38979	45.95991	44.91657
-2.5	-22.97425533	-22.21266818	-24.6449	-26.0183	-23.9613
+2.5	38.26667478	37.31848989	35.54243	39.35695	37.06171
-2.55	-25.26236849	-24.1240433	-26.7686	-28.5532	-26.3952
+2.55	35.33485234	34.92181297	33.65316	37.38115	34.48869
-2.6	-32.51552741	-30.79473072	-32.8039	-34.9908	-33.6414
+2.6	27.78455549	27.31335465	27.92533	31.31095	27.78291
-2.65	-35.05140563	-33.16900159	-35.0193	-37.354	-36.2078
+2.65	25.62581305	24.63582964	25.99605	29.23767	26.05184
-2.7	-42.96567309	-40.57165802	-41.5276	-44.2961	-44.3479
+2.7	19.22948124	19.52136912	20.14821	22.85861	20.91539
-2.75	-45.69452849	-43.12176667	-43.9329	-46.9766	-47.2012
+2.75	17.50846425	18.3837012	18.17893	20.67689	19.14803
-2.8	-54.10530578	-50.97480403	-51.4035	-54.7324	-55.6824
+2.8	14.46455287	14.65678329	13.35748	15.60084	14.54645
-2.85	-56.97223087	-53.64930645	-53.9505	-57.609	-58.6381
+2.85	13.34159895	13.30354801	12.41543	14.45317	13.42567
-2.9	-65.71491332	-61.79833061	-61.7177	-66.3754	-67.4831
+2.9	9.615763827	8.88443498	9.38874	10.72611	10.22148
-2.95	-68.66499573	-64.54579763	-64.3384	-69.3319	-70.611
+2.95	8.2472136	7.520868004	8.137034	9.382237	9.077856
-3	-77.57498112	-72.93521794	-72.2515	-78.585	-80.3201
+3	7.631841992	7.079982487	6.385728	7.701027	7.703285

2-Span: Moment (Max and Min) Raw Data Results - 20' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-3.61E-14	-2.01E-14	-2.82E-14	-2.12E-14	-2.12E-14	-1.71E-14	-1.71E-14	-1.63E-14	-1.71E-14	-1.86E-14
End Shear	3.64E-14	2.52E-14	3.06E-14	2.14E-14	2.14E-14	1.74E-14	1.76E-14	1.63E-14	1.71E-14	1.91E-14
-0.05	-7.579107597	-10.65619458	-6.820582329	-7.83988994	-7.83988994	-7.84361374	-8.59224004	-5.95883185	-6.27245458	-3.800510711
+0.05	92.25341902	104.9337644	83.16715774	82.59654954	83.82457378	76.47725741	82.29839147	62.57337193	65.99908591	41.68837147
-0.1	-15.15821519	-21.31238917	-13.64116466	-15.6797799	-15.6797799	-15.6872275	-17.1844801	-11.9176637	-12.5449092	-7.601021422
+0.1	168.5942279	193.5511982	152.0238762	152.1129243	153.928627	139.8852837	149.5021433	115.2775281	121.5322725	78.21083822
-0.15	-22.73732279	-31.96858375	-20.46174699	-23.5196698	-23.5196698	-23.5308412	-25.7767201	-17.8764956	-18.8173637	-11.40153213
+0.15	229.6153529	268.9258928	207.0998734	208.5764909	210.2970022	192.1931618	204.6516896	156.4849834	164.8847739	109.4950062
-0.2	-30.31643039	-42.62477833	-27.28232932	-31.3595597	-31.3595597	-31.374455	-34.3689602	-23.8353274	-25.0898183	-15.20204284
+0.2	276.0670967	330.2816011	248.6441149	251.3505442	252.31104	232.6955735	247.393386	190.0260822	200.1516681	135.515747
-0.25	-37.89553799	-53.28097292	-34.10291165	-39.1994497	-39.1994497	-39.2180687	-42.9612002	-29.7941593	-31.3622729	-19.00255356
+0.25	307.4960165	377.35106	278.0718527	283.2213758	283.2213758	262.1185222	278.1971375	215.9969707	227.3652323	156.2952214
-0.3	-45.47464558	-63.9371675	-40.92349397	-47.0393396	-47.0393396	-47.0616824	-51.5534403	-35.7529911	-37.6347275	-22.80306427
+0.3	329.2941691	410.4884543	296.3220441	307.427735	307.427735	281.3252375	297.2499427	234.2406104	246.5690636	171.9029307
-0.35	-53.05375318	-74.59336208	-47.7440763	-54.8792296	-54.8792296	-54.9052962	-60.1456803	-41.711823	-43.9071821	-26.60357498
+0.35	349.7900805	430.1688151	314.5953186	321.3982218	321.3982218	303.7379499	325.9372641	244.6974379	257.5762504	182.4555655
-0.4	-60.63286078	-85.24955666	-54.56465863	-62.7191195	-62.7191195	-62.7489099	-68.7379203	-47.6706548	-50.1796366	-30.40408569
+0.4	360.9366551	436.9883004	324.3833639	325.6310982	325.6310982	316.5144445	342.2991996	247.7518149	260.7913841	188.1172848
-0.45	-68.21196838	-95.90575125	-61.38524096	-70.5590094	-70.5590094	-70.5925237	-77.3301604	-53.6294867	-56.4520912	-34.2045964
+0.45	363.0922509	431.6638577	326.1237331	320.7254353	320.7254353	319.5762068	346.8868323	243.8652599	256.7002736	189.0994119
-0.5	-75.79107597	-106.5619458	-68.20582329	-78.3988994	-78.3988994	-78.4361374	-85.9224004	-59.5883185	-62.7245458	-38.00510711
+0.5	356.6953645	431.4160762	320.2038207	321.4399069	321.4399069	315.4294914	340.3725515	244.4396449	257.3048893	185.6606102
-0.55	-83.37018357	-117.2181404	-75.02640562	-86.2387893	-86.2387893	-86.2797511	-94.5146405	-65.5471504	-68.9970004	-41.80561782
+0.55	342.2645507	419.5069769	307.0810048	313.3158422	313.3158422	301.7182503	323.5499392	238.3406631	250.8849085	178.1068575
-0.6	-90.94929117	-127.874335	-81.84698795	-94.0786792	-94.0786792	-94.1233649	-103.106881	-71.5059822	-75.2694549	-45.60612853
+0.6	320.3984855	395.4865623	287.2835715	296.3795032	296.3795032	279.2292447	297.3339266	225.248124	237.1032884	166.7914623
-0.65	-98.52839876	-138.5305296	-88.66757028	-101.918569	-101.918569	-101.966979	-111.699121	-77.4648141	-81.5419095	-49.40663924
+0.65	291.775808	360.2148272	261.4101731	270.7113712	270.7113712	248.8581947	262.7605351	205.7045409	216.5310957	152.114917
-0.7	-106.1075064	-149.1867242	-95.48815261	-109.758459	-109.758459	-109.810592	-120.291361	-83.4236459	-87.8143641	-53.20714996
+0.7	257.1553302	315.6763509	231.4397966	237.330808	237.330808	217.3936661	230.7031655	180.3297464	189.8207856	134.525123
-0.75	-113.686614	-159.8429187	-102.3087349	-117.598349	-117.598349	-117.654206	-128.883601	-89.3824778	-94.0868187	-57.00766067
+0.75	224.5770451	260.5632001	204.2515961	197.1021681	197.1021681	178.8026553	189.9471551	149.7976477	157.6817345	114.5173079
-0.8	-121.2657216	-170.4991133	-109.1293173	-125.438239	-125.438239	-125.49782	-137.475841	-95.3413096	-100.359273	-60.80817138
+0.8	181.2415219	197.385135	165.3934616	152.8506793	153.5962926	134.2675731	140.1080291	116.0425497	122.2294015	92.63386556
-0.85	-128.8448292	-181.1553079	-115.9498996	-133.278129	-133.278129	-133.341434	-146.068081	-101.300141	-106.631728	-64.60868209
+0.85	126.5900586	128.0506084	115.2266925	100.590673	100.8641442	81.99154759	83.02983855	76.59327709	80.65335232	69.46458828
-0.9	-174.2734402	-196.1630403	-146.3760147	-141.954075	-143.530318	-144.24237	-159.683396	-117.529072	-123.714813	-77.64137416
+0.9	81.02571184	63.85689316	72.75804486	50.3203726	50.3203726	40.42354057	40.42354057	38.26132056	40.27507428	45.64653667
-0.95	-234.4306119	-215.2250101	-206.3460898	-172.320847	-180.683873	-169.187272	-197.290606	-142.088052	-149.56637	-91.87028747
+0.95	39.00665914	30.41019588	34.7812863	24.41196792	24.41196792	19.33699516	19.8168317	18.73313296	19.71908732	21.86413438
-1	-303.1568335	-237.0628735	-271.4944529	-202.778217	-218.590883	-194.511646	-235.228133	-173.397164	-182.52333	-106.8169334
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-303.1568335	-237.0628735	-271.4944529	-202.778217	-218.590883	-194.511646	-235.228133	-173.397164	-182.52333	-106.8169334
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-234.4306309	-215.2207177	-206.2847868	-172.313684	-180.68166	-169.185608	-197.283272	-142.087365	-149.565647	-91.87033324
+2.05	39.00665811	30.27215904	34.91116815	24.32006018	24.32006018	19.26720782	19.82562217	18.79284499	19.78194209	21.8384772
-2.1	-174.2631059	-196.158974	-146.3719561	-141.95409	-143.523502	-144.234723	-159.670854	-117.527362	-123.713013	-77.64141729
+2.1	81.02574562	63.88750237	72.66370577	50.23680107	50.23680107	40.01088073	40.2818991	38.21792427	40.22939397	45.62318717
-2.15	-128.8448317	-181.1514684	-115.9603481	-133.275574	-133.275574	-133.341779	-146.06662	-101.298152	-106.629633	-64.60887505
+2.15	127.5355762	128.1869011	115.1987728	100.4765037	100.7497845	81.90029896	83.08981454	76.53398875	80.59092982	69.44284112
-2.2	-121.2657241	-170.4955002	-109.1391513	-125.435835	-125.435835	-125.498145	-137.474466	-95.3394373	-100.357302	-60.80835305
+2.2	183.3523481	197.4463986	165.5315761	152.7275794	153.4699668	134.1721689	140.0756744	115.9797257	122.1630392	92.61298586

-2.25	-113.6866165	-159.839532	-102.3179545	-117.596096	-117.596096	-117.654512	-128.882312	-89.3807228	-94.0849714	-57.00783105
+2.25	226.8527417	260.3871206	204.3751131	196.876556	196.876556	178.8560419	189.8375555	149.7063508	157.5856324	114.4966626
-2.3	-106.1075089	-149.1835638	-95.49675766	-109.756357	-109.756357	-109.810878	-120.290158	-83.4220083	-87.8126403	-53.20730905
+2.3	257.1553859	315.4890267	230.2219931	237.2060442	237.2060442	217.4369102	230.7375738	180.3951629	189.8896452	134.504235
-2.35	-98.52840126	-138.5275955	-88.67556085	-101.916617	-101.916617	-101.967244	-111.698004	-77.4632938	-81.5403093	-49.40678705
+2.35	291.7758056	360.3262783	261.3221459	270.7855825	270.7855825	248.9677533	262.8928975	205.7430595	216.5716415	152.0931038
-2.4	-90.94929367	-127.8716273	-81.85436403	-94.0768781	-94.0768781	-94.1236098	-103.10585	-71.5045793	-75.2679782	-45.60626505
+2.4	320.3984764	395.578583	288.358628	296.440737	296.440737	279.3295635	297.457304	225.2799567	237.1367965	166.7683223
-2.45	-83.37018607	-117.2156591	-75.03316722	-86.2371389	-86.2371389	-86.2799758	-94.5136958	-65.5458648	-68.9956472	-41.80574305
+2.45	342.2645307	419.5753232	306.9802214	313.3613455	313.3613455	301.8060791	323.6606014	238.3642786	250.9097669	178.0818952
-2.5	-75.79107847	-106.5596909	-68.2119704	-78.3973996	-78.3973996	-78.4363419	-85.9215417	-59.5871503	-62.7233161	-38.00522105
+2.5	356.6953552	431.4569949	320.0941235	321.4671347	321.4671347	315.5018882	340.467116	244.4537924	257.3197814	185.6334967
-2.55	-68.21197087	-95.90372265	-61.39077359	-70.5576604	-70.5576604	-70.592708	-77.3293876	-53.6284359	-56.4509851	-34.20469905
+2.55	362.4892458	431.647004	326.0039003	320.7142211	320.7142211	319.6306904	346.9624221	243.8594302	256.6941371	189.0697233
-2.6	-60.63286328	-85.24775443	-54.56957677	-62.7179211	-62.7179211	-62.7490741	-68.7372335	-47.6697214	-50.1786541	-30.40417705
+2.6	360.1891218	436.9460865	324.2520256	325.6030083	325.6030083	316.432976	342.3532021	247.7372448	260.7760471	188.0847384
-2.65	-53.05375568	-74.5917862	-47.74837996	-54.8781819	-54.8781819	-54.9054401	-60.1450794	-41.7110069	-43.906323	-26.60365505
+2.65	348.946992	430.0977793	314.4514811	321.3509294	321.3509294	303.7969091	325.9675175	244.6728784	257.5503983	182.4199739
-2.7	-45.47464808	-63.93581798	-40.92718314	-47.0384426	-47.0384426	-47.0618062	-51.5529253	-35.7522924	-37.633992	-22.80313305
+2.7	328.4083049	410.385785	296.3051346	307.3593427	307.3593427	281.3052828	297.2546594	234.2050676	246.5316502	171.8639664
-2.75	-37.89554049	-53.27984975	-34.10598633	-39.1987034	-39.1987034	-39.2181723	-42.9607712	-29.7935779	-31.3616609	-19.00261105
+2.75	307.9734616	377.2145264	278.1777734	283.1304627	283.1304627	262.2395792	278.1681548	215.9497824	227.3155604	156.2529278
-2.8	-30.31643289	-42.62388153	-27.28478951	-31.3589641	-31.3589641	-31.3745384	-34.3686171	-23.8348634	-25.0893299	-15.20208905
+2.8	275.326591	330.1092167	248.600031	251.4650421	252.4303803	232.7944083	247.3397815	189.9728712	200.0960297	135.4698491
-2.85	-22.73732529	-31.9679133	-20.46359269	-23.5192249	-23.5192249	-23.5309044	-25.7764631	-17.8761489	-18.8169989	-11.40156705
+2.85	229.0380334	268.7164212	206.9878708	208.4501707	210.1750676	192.1431762	204.7346767	156.5293007	164.9317216	109.4454401
-2.9	-15.15821769	-21.31194508	-13.64239588	-15.6794856	-15.6794856	-15.6872705	-17.184309	-11.9174344	-12.5446678	-7.601045053
+2.9	168.196834	193.6271001	152.0714624	151.9579986	153.7769316	139.935994	149.5581525	115.3075524	121.5640989	78.15772378
-2.95	-7.579110096	-10.65597686	-6.821199065	-7.83974636	-7.83974636	-7.8436366	-8.59215487	-5.95871994	-6.27233678	-3.800523053
+2.95	92.04959388	104.9716971	83.19156106	82.62684665	83.85655501	76.50556298	82.33126153	62.58855173	66.01518574	41.63164608
-3	-4.21E-14	-5.16E-14	-3.56E-14	-4.08E-14	-4.08E-14	-3.25E-14	-3.36E-14	-3.26E-14	-3.43E-14	-1.97E-14
+3	3.78E-14	2.67E-14	3.14E-14	2.14E-14	2.14E-14	1.82E-14	1.92E-14	1.63E-14	1.71E-14	1.88E-14

2-Span: Moment (Max and Min) Raw Data Results - 20' Max Span Length (AASHTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.49E-14	-1.38E-14	-1.29E-14	-1.03E-14	-1.70E-14	-1.45E-14	-1.43E-14	-1.42E-14	-1.44E-14
End Shear	1.50E-14	1.49E-14	1.34E-14	1.05E-14	1.81E-14	1.47E-14	1.44E-14	1.47E-14	1.46E-14
-0.05	-5.519710524	-5.516553263	-4.387748377	-3.602208907	-3.635459643	-6.20470458	-6.63585331	-7.02634927	-7.02908235
+0.05	55.64857464	55.74359545	43.89583598	35.83582554	45.55235933	61.55478522	65.12155714	65.06161226	65.30059784
-0.1	-11.03942105	-11.03310653	-8.775496754	-7.204417813	-7.270919286	-12.40940916	-13.2717066	-14.0526985	-14.0581647
+0.1	103.3960715	103.6211188	82.05690967	66.59959694	83.39307423	112.6515325	119.4801511	119.3564497	119.8247184
-0.15	-16.55913157	-16.54965979	-13.16324513	-10.80662672	-10.90637893	-18.61411374	-19.9075599	-21.0790478	-21.087247
+0.15	143.2445158	143.5783636	113.912184	92.31865601	113.7626557	155.0782087	163.2733663	163.0832261	162.9145157
-0.2	-22.07884209	-22.06621305	-17.55099351	-14.40883563	-14.54183857	-24.81881832	-26.5434132	-28.1053971	-28.1163294
+0.2	175.2671132	175.6848546	139.5161459	113.0491843	136.9594919	188.4252806	196.8000083	197.664385	197.0874919
-0.25	-27.59855262	-27.58276631	-21.93874188	-18.01104453	-18.17729822	-31.0235229	-33.1792665	-35.1317463	-35.1454117
+0.25	199.6082056	200.0814044	158.9804353	128.8764624	153.4044554	212.9385735	220.4600664	231.6305727	231.4666043
-0.3	-33.11826314	-33.09931958	-26.32649026	-21.61325344	-21.81275786	-37.22822748	-39.8151198	-42.1580956	-42.1744941
+0.3	216.4932926	216.980776	172.4738222	139.9289631	163.8918528	228.948885	234.8541655	254.8740776	254.6443445
-0.35	-38.63797367	-38.61587284	-30.71423864	-25.21546235	-25.4482175	-43.43293206	-46.4509732	-49.1844449	-49.2035764
+0.35	226.3131799	226.6671003	180.2221864	146.3782993	174.0227085	245.1372762	251.4593847	267.5114986	267.218212
-0.4	-44.15768419	-44.1324261	-35.10198702	-28.81767125	-29.08367714	-49.63763664	-53.0868265	-56.2107941	-56.2326588
+0.4	229.2759779	229.496418	182.5086154	148.4392962	179.5143494	253.4422635	263.8280181	270.3279513	270.9295291
-0.45	-49.67739471	-49.64897937	-39.48973539	-32.41988016	-32.71913679	-55.84234122	-59.7226798	-63.2371434	-63.2617411
+0.45	225.804392	225.8962407	179.6732799	146.3699895	180.568058	253.8878692	266.7959263	274.4080977	274.4335088
-0.5	-55.19710524	-55.16553263	-43.87748377	-36.02208907	-36.35459643	-62.0470458	-66.3585331	-70.2634927	-70.2908235
+0.5	226.3826403	225.7465428	179.5913659	146.3505217	177.4295646	251.9020787	260.9655156	273.9629485	273.8473266
-0.55	-60.71681576	-60.68208589	-48.26523215	-39.62429797	-39.99005607	-68.25175038	-72.9943864	-77.2898419	-77.3199058
+0.55	220.7185376	219.7816781	174.7433223	142.5066674	170.3888313	242.269915	248.3032109	263.5494237	263.3832777
-0.6	-66.23652628	-66.19863916	-52.65298052	-43.22650688	-43.62551572	-74.45645496	-79.6302397	-84.3161912	-84.3489882
+0.6	208.5914868	207.6245328	164.9143303	134.5110031	159.7803399	225.5768148	229.7470448	244.105996	244.4003069
-0.65	-71.75623681	-71.71519242	-57.0407289	-46.82871578	-47.26097536	-80.66115954	-86.266093	-91.3425405	-91.3780705
+0.65	190.5015557	189.4646533	150.5057825	122.6427347	145.982842	202.4929442	205.7804052	223.677014	224.695405
-0.7	-77.27594733	-77.23174568	-61.42847728	-50.43092469	-50.896435	-86.86586413	-92.9019463	-98.3688897	-98.4071529
+0.7	167.0200872	165.8728647	131.7692476	107.2461101	129.2363634	176.5809529	182.6835442	194.6394701	195.9336652
-0.75	-82.79565786	-82.74829894	-65.81622565	-54.0331336	-54.53189465	-93.07056871	-99.5377996	-105.395239	-105.436235
+0.75	138.7406746	137.4918542	109.2163076	88.70866069	112.3495382	145.5546445	151.4880953	157.2929877	158.7851098
-0.8	-88.31536838	-88.26485221	-70.20397403	-57.6353425	-58.16735429	-99.27527329	-106.173653	-112.421588	-112.465318
+0.8	106.2038071	105.0356037	83.41569123	67.46106414	91.79956099	110.3311408	113.023008	113.2869291	114.3602039
-0.85	-93.8350789	-93.78140547	-74.59172241	-61.23755141	-61.80281393	-105.4799779	-112.809506	-119.447938	-119.4944
+0.85	70.42103869	69.29005049	54.99326614	43.97718356	67.60510432	69.13095033	69.49820954	69.25812375	69.67046264
-0.9	-111.4205486	-107.0231645	-92.73883097	-76.25725335	-74.76396862	-116.1221109	-122.503848	-132.47538	-136.06975
+0.9	35.22935303	34.42701661	32.03919061	24.19977693	43.8103795	34.36000949	34.36000949	34.36000949	34.36000949
-0.95	-134.6395434	-125.8478554	-115.0505296	-95.48660698	-102.6398416	-138.8748898	-143.625009	-150.760749	-153.74005
+0.95	17.47726772	17.35279684	15.489605	11.99972225	20.9611132	16.43644588	16.50636699	16.48959447	16.70891918
-1	-158.4061144	-149.2758119	-138.2127062	-116.0641316	-131.4670147	-162.0000273	-165.169472	-178.882192	-184.319415
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-158.4061144	-149.2758119	-138.2127062	-116.0641316	-131.4670147	-162.0000273	-165.169472	-178.882192	-184.319415
+2	0	0	0	0	0	0	0	0	0
-2.05	-134.6363932	-125.8475744	-115.0502566	-95.48649529	-102.6426832	-138.873006	-143.623735	-150.757402	-153.738382
+2.05	16.91850598	17.40810904	15.45491523	11.9859217	20.87874751	16.37712665	16.45081365	16.43732618	16.65956233
-2.1	-111.4199788	-107.023269	-92.73894215	-76.25729918	-74.76732381	-116.1163346	-122.498969	-132.469185	-136.065236
+2.1	35.1744163	34.3868404	32.00760716	24.18726776	43.7354521	34.00924862	34.36002439	34.36002439	34.36002439
-2.15	-93.83339998	-93.78394671	-74.59346811	-61.23824338	-61.79969761	-105.482145	-112.809302	-119.44603	-119.492599
+2.15	70.34636596	69.23538161	54.95568211	43.96225651	67.53584708	69.05476944	69.42725531	69.19099997	69.66193953
-2.2	-88.31378851	-88.26724424	-70.20561726	-57.63599395	-58.16442136	-99.27731324	-106.173461	-112.419793	-112.463623
+2.2	106.1292613	104.9810866	83.37820043	67.44616084	91.85735922	110.2526427	114.3308708	113.3313707	114.4021913
-2.25	-82.79417704	-82.75054178	-65.81776642	-54.03374452	-54.5291451	-93.07248148	-99.5376196	-105.393556	-105.434646

+2.25	138.6636504	137.4354586	109.177562	88.69325259	112.452038	145.6042235	151.5276757	157.3545248	158.8432148
-2.3	-77.27456558	-77.23383931	-61.42991558	-50.43149509	-50.89386885	-86.86764972	-92.9017783	-98.3673195	-98.4056704
+2.3	167.0753031	165.8128609	131.7280409	107.229819	129.1189641	176.6234343	183.6180583	194.6926182	195.9838523
-2.35	-71.75495411	-71.71713685	-57.04206474	-46.82924565	-47.25859259	-80.66281796	-86.265937	-91.3410827	-91.3766942
+2.35	190.55034	189.3993162	150.4609724	122.6250014	146.0128387	202.5712466	205.7961747	223.718618	224.7346743
-2.4	-66.23534264	-66.20043438	-52.65421389	-43.22699622	-43.62331634	-74.4579862	-79.6300957	-84.3148459	-84.3477181
+2.4	208.6317566	207.5525244	164.8649008	134.4914305	159.8964726	225.6470976	229.7239541	244.151263	244.1553573
-2.45	-60.71573118	-60.68373192	-48.26636305	-39.62474679	-39.98804008	-68.25315444	-72.9942544	-77.2886091	-77.3187419
+2.45	220.7484357	219.7016234	174.7583529	142.4847891	170.4996805	242.3297278	248.2685172	263.5998522	263.4308462
-2.5	-55.19611971	-55.16702945	-43.87851221	-36.02249736	-36.35276383	-62.04832268	-66.3584131	-70.2623723	-70.2897658
+2.5	226.4005443	225.7596575	179.6003623	146.3540944	177.5338229	251.9492069	261.0292841	273.9992691	273.8816056
-2.55	-49.67650824	-49.65032699	-39.49066137	-32.42024792	-32.71748757	-55.84349092	-59.7225718	-63.2361355	-63.2607896
+2.55	225.7970203	225.8908406	179.6695757	146.3685231	180.6646012	253.9204612	266.8461653	274.4279442	274.5071775
-2.6	-44.15689678	-44.13362452	-35.10281053	-28.81799849	-29.08221132	-49.63865917	-53.0867305	-56.2098987	-56.2318135
+2.6	229.2575142	229.4829215	182.4993532	148.4356357	179.6021004	253.3897701	263.8625537	270.4205071	270.3791892
-2.65	-38.63728531	-38.61692206	-30.71495968	-25.21574906	-25.44693506	-43.43382741	-46.4508892	-49.1836619	-49.2028373
+2.65	226.28806	226.6443505	180.2065741	146.3720746	174.1008271	245.068384	251.4764145	267.6005001	267.302165
-2.7	-33.11767384	-33.10021959	-26.32710884	-21.61349963	-21.81165881	-37.22899565	-39.8150479	-42.1574251	-42.1738612
+2.7	216.5789166	216.9478521	172.4511981	139.9199673	163.9596336	229.0604436	234.8709962	254.9462481	254.7124578
-2.75	-27.59806238	-27.58351713	-21.939258	-18.01125019	-18.17638256	-31.02416389	-33.1792066	-35.1311883	-35.144885
+2.75	199.689284	200.0376932	158.9503769	128.864522	153.381448	213.0338497	220.5602498	231.683982	231.5170376
-2.8	-22.07845091	-22.06681466	-17.55140716	-14.40900076	-14.5411063	-24.81933213	-26.5433653	-28.1049515	-28.1159089
+2.8	175.332833	175.6296229	139.4782332	113.0341143	136.9049216	188.5028948	196.8822868	197.218296	197.1187029
-2.85	-16.55883944	-16.5501122	-13.16355631	-10.80675133	-10.90583005	-18.61450037	-19.907524	-21.0787147	-21.0869327
+2.85	143.2941461	143.511301	113.8661065	92.30032183	113.7159704	155.1372244	163.3363798	163.1425123	162.9704685
-2.9	-11.03922798	-11.03340973	-8.775705471	-7.204501896	-7.270553791	-12.40966861	-13.2716827	-14.0524779	-14.0579566
+2.9	103.4292683	103.5418327	82.00253072	66.57806338	83.38673726	112.6911919	119.5228155	119.3965895	119.8626073
-2.95	-5.519616512	-5.51670727	-4.387854628	-3.602252463	-3.635277536	-6.204836852	-6.63584139	-7.02624113	-7.02898046
+2.95	55.66516918	55.6522564	43.87322396	35.82506573	45.57025865	61.577485	65.14315895	65.08192711	65.31977648
-3	-3.00E-14	-2.80E-14	-2.26E-14	-1.79E-14	-2.05E-14	-2.76E-14	-2.80E-14	-2.82E-14	-2.89E-14
+3	1.51E-14	1.51E-14	1.41E-14	1.07E-14	2.00E-14	1.57E-14	1.46E-14	1.46E-14	1.48E-14

2-Span: Moment (Max and Min) Raw Data Results - 20’ Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.53E-14	-1.76E-14	-1.73E-14	-1.84E-14	-1.54E-14
End Shear	2.07E-14	2.08E-14	1.73E-14	1.84E-14	1.54E-14
-0.05	-7.631847591	-7.079989549	-6.38567147	-7.70108079	-7.70304366
+0.05	71.6112702	67.30105611	66.95412609	73.02504857	73.80653097
-0.1	-15.26369518	-14.1599791	-12.7713429	-15.4021616	-15.4060873
+0.1	132.44065	123.5919322	122.1006241	134.4662477	134.6830146
-0.15	-22.89554277	-21.23996865	-19.1570144	-23.1032424	-23.109131
+0.15	181.823143	169.0336635	167.5879503	184.2368909	184.3881935
-0.2	-30.52739037	-28.3199582	-25.5426859	-30.8043232	-30.8121746
+0.2	219.8021919	203.8900395	203.9792724	222.5715497	222.6647644
-0.25	-38.15923796	-35.39994775	-31.9283573	-38.505404	-38.5152183
+0.25	246.7646898	228.5278834	230.6481488	249.8504287	249.8967122
-0.3	-45.79108555	-42.4799373	-38.3140288	-46.2064848	-46.218262
+0.3	263.2073195	244.0414156	248.8174668	266.5633084	266.577463
-0.35	-53.42293314	-49.55992685	-44.6997003	-53.9075655	-53.9213056
+0.35	288.7227164	267.4963643	259.9541485	291.8881678	292.550454
-0.4	-61.05478073	-56.6399164	-51.0853717	-61.6086463	-61.6243493
+0.4	303.5618179	280.837105	263.2464043	306.8231014	307.4466878
-0.45	-68.68662832	-63.71990595	-57.4710432	-69.3097271	-69.3273929
+0.45	307.8271317	284.4684665	261.5709883	311.1361577	311.7369325
-0.5	-76.31847591	-70.79989549	-63.8567147	-77.0108079	-77.0304366
+0.5	302.1250336	279.5499463	259.6005757	305.4266807	306.0243099
-0.55	-83.9503235	-77.87988504	-70.2423862	-84.7118887	-84.7334803
+0.55	287.1716352	265.9636421	253.1753408	290.4035329	290.8803133
-0.6	-91.5821711	-84.95987459	-76.6280576	-92.4129695	-92.4365239
+0.6	263.6551993	244.4719948	239.3167571	266.8852686	267.2243122
-0.65	-99.21401869	-92.03986414	-83.0137291	-100.11405	-100.139568
+0.65	232.6039763	215.9401694	218.4325629	235.7998536	236.0361209
-0.7	-106.8458663	-99.11985369	-89.3994006	-107.815131	-107.842611
+0.7	203.5559257	189.7780324	191.5266006	205.9700467	207.1511485
-0.75	-114.4777139	-106.1998432	-95.785072	-115.516212	-115.545655
+0.75	167.1418442	156.1069753	161.0182167	172.0620898	170.2734108
-0.8	-122.1095615	-113.2798328	-102.170743	-123.217293	-123.248699
+0.8	123.1093184	117.3948948	123.9401282	132.5326192	125.6524381
-0.85	-129.7414091	-120.3598223	-108.556415	-130.918373	-130.951742
+0.85	72.2878453	74.00259895	80.96367613	86.42261731	74.37712705
-0.9	-161.0012423	-155.5929195	-114.942086	-144.022535	-143.020882
+0.9	36.19669979	40.62823246	40.69422054	42.94489151	36.24179499
-0.95	-199.360217	-200.5870229	-131.049689	-161.430082	-161.12828
+0.95	17.67697272	19.52860095	19.98588118	20.66344754	17.75415998
-1	-240.4746016	-252.984331	-151.661555	-188.322507	-182.257962
+1	0	0	0	0	0
(Span 2) -2	-240.4746016	-252.984331	-151.661555	-188.322507	-182.257962
+2	0	0	0	0	0
-2.05	-199.3618244	-200.5876109	-131.046496	-161.430242	-161.126965
+2.05	17.63725154	19.5213415	20.01954102	20.6113868	17.71263598
-2.1	-161.0024696	-155.593175	-114.943115	-144.024261	-143.0238
+2.1	36.16056227	40.62164722	40.65633538	42.89755884	36.23238169
-2.15	-129.7413149	-120.3597028	-108.557387	-130.917464	-130.955845
+2.15	72.23473166	74.01068089	80.90352031	86.3584765	74.35278125
-2.2	-122.1094729	-113.2797203	-102.171658	-123.216436	-123.25256
+2.2	123.0527391	117.4024275	123.8767062	132.4645426	125.593279
-2.25	-114.4776309	-106.1997378	-95.78593	-115.515409	-115.549275

+2.25	167.079495	156.0977357	160.949219	171.9875933	170.2082989
-2.3	-106.8457889	-99.11975534	-89.4002017	-107.814382	-107.84599
+2.3	203.5758668	189.767691	191.2281302	205.9724284	207.1246945
-2.35	-99.21394693	-92.03977285	-83.0144734	-100.113354	-100.142705
+2.35	232.5885773	215.9381988	218.3604874	235.7853287	236.0222502
-2.4	-91.58210493	-84.95979037	-76.6287451	-92.4123272	-92.4394202
+2.4	263.6341834	244.4691038	239.2932522	266.864311	267.2042511
-2.45	-83.95026294	-77.87980788	-70.2430168	-84.7112999	-84.7361353
+2.45	287.1889633	265.959592	253.199503	290.3738939	290.8519785
-2.5	-76.31842095	-70.79982539	-63.8572885	-77.0102726	-77.0328504
+2.5	302.1791014	279.544483	259.6657778	305.3863619	306.0331487
-2.55	-68.68657896	-63.71984291	-57.4715602	-69.3092452	-69.3295654
+2.55	307.8703285	284.461264	261.5875047	311.0834104	311.7818531
-2.6	-61.05473697	-56.63986042	-51.0858319	-61.6082179	-61.6262805
+2.6	303.5925947	280.8416419	263.2878997	306.7564245	307.478844
-2.65	-53.42289497	-49.55987793	-44.7001037	-53.9071906	-53.9229956
+2.65	288.739841	267.4988575	260.0422173	291.8062351	292.568412
-2.7	-45.79105298	-42.47989545	-38.3143754	-46.2061633	-46.2197107
+2.7	263.2025802	244.0408904	249.1654518	266.5594234	266.6215946
-2.75	-38.15921099	-35.39991296	-31.9286471	-38.505136	-38.5164257
+2.75	246.7473238	228.539096	230.6075432	249.8324241	249.9756211
-2.8	-30.527369	-28.31993047	-25.5429188	-30.8041087	-30.8131408
+2.8	219.771076	203.8992254	203.9252751	222.5382283	222.7294688
-2.85	-22.89552701	-21.23994798	-19.1571905	-23.1030814	-23.1098559
+2.85	181.7789501	169.0405832	167.6335107	184.1872323	184.4374633
-2.9	-15.26368501	-14.1599655	-12.7714622	-15.402054	-15.406571
+2.9	132.3795546	123.5966317	122.1314173	134.3996407	134.966181
-2.95	-7.631843021	-7.079983011	-6.38573389	-7.70102672	-7.70328604
+2.95	71.62735112	67.30344797	66.96970019	73.04264804	73.82470723
-3	-3.15E-14	-2.74E-14	-3.49E-14	-3.74E-14	-3.10E-14
+3	2.19E-14	2.72E-14	1.73E-14	1.84E-14	1.59E-14

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-2.742066145	-2.86218	-2.860540971	-2.27521	-1.920914647	-1.885122968	-3.21737	-3.44094	-3.643427154	-3.64484
End Shear	38.96248674	31.48045	31.07935038	24.72221	20.37791708	25.91639879	34.97138	36.78791	36.54958947	36.67546
-0.05	-3.65652132	-2.86218	-3.124333899	-2.27521	-1.92378169	-1.885122968	-3.21737	-3.44094	-3.643427154	-3.64484
+0.05	35.57910544	28.85589	28.77101402	22.74559	18.95348958	23.62061671	31.91848	33.76798	33.73690032	33.86082
-0.1	-6.450155735	-2.86218	-4.338256932	-2.63621	-2.27692023	-2.527947806	-3.21737	-3.44094	-3.643427154	-3.64484
+0.1	30.8432085	25.78268	25.49343536	20.29339	16.76247923	20.62208117	28.0035	29.59422	29.56172805	29.68167
-0.15	-7.391539097	-2.86218	-4.78853893	-3.02944	-2.492808314	-3.169155983	-3.21737	-3.44094	-3.643427154	-4.04798
+0.15	29.30844246	24.75923	24.46831737	19.47724	16.03352022	19.64649037	26.80463	28.22113	28.18826827	28.3066
-0.2	-10.23115778	-4.72251	-6.560027863	-4.56664	-3.804464972	-5.103409979	-4.25361	-4.74958	-5.21388556	-5.66943
+0.2	24.86532478	21.70784	21.41405567	17.0455	13.9507528	16.80978826	23.24978	24.17935	24.14568662	24.25841
-0.25	-11.17926836	-5.33609	-7.565991131	-5.22938	-4.346542544	-5.749307195	-4.89566	-5.27297	-5.710536296	-6.20791
+0.25	23.44505182	20.70088	20.4068684	16.24358	13.2733319	15.89860104	22.08334	22.86337	22.82956168	22.94016
-0.3	-14.01326418	-8.16251	-10.52485284	-7.43956	-5.918906474	-7.68037016	-7.85943	-8.37838	-8.369262115	-8.39066
+0.3	19.78816605	17.72664	17.43425997	13.87675	11.28728818	13.52569942	18.65874	19.03228	18.99839795	18.96834
-0.35	-14.95090151	-9.33819	-11.48775162	-8.33217	-6.602069626	-8.31945319	-8.84919	-9.42704	-9.415772495	-9.43743
+0.35	18.85583687	16.75463	16.46357882	13.10387	10.6429792	12.89104844	17.54671	17.79965	17.76588483	17.73593
-0.4	-17.72766924	-12.7726	-14.30392448	-10.9262	-8.69018269	-10.73956745	-12.0344	-12.5109	-12.89072378	-12.5176
+0.4	16.10144043	13.9129	13.62835135	10.84639	8.772735824	11.01628118	14.31838	14.35466	14.36515436	14.29717
-0.45	-18.63762712	-13.8843	-15.21788755	-11.7629	-9.37088618	-11.51150769	-13.1143	-13.5157	-13.6379627	-13.6655
+0.45	15.20108795	12.99428	12.71275199	10.11737	8.172467301	10.4034833	13.28278	13.31771	13.28743255	13.26056
-0.5	-21.30556154	-17.1106	-17.88313922	-14.2621	-11.41642841	-13.69225917	-16.5771	-16.59	-17.26352504	-17.2918
+0.5	12.56842613	10.3404	10.07063597	8.013671	6.450482854	8.611534359	10.31673	10.11305	10.31816092	10.29213
-0.55	-22.17064142	-18.1476	-18.74543165	-15.0763	-12.09170904	-14.37371724	-17.7614	-17.7748	-18.44638652	-18.4748
+0.55	11.71725368	9.455271	9.228694757	7.34332	5.904968771	8.032094245	9.379546	8.959186	9.380011169	9.354377
-0.6	-24.6781354	-21.1339	-21.25152291	-17.4075	-14.0494699	-16.27988389	-21.2548	-21.2698	-21.90395672	-22.4132
+0.6	9.257933617	6.894066	6.835417485	5.437865	4.363059352	6.357471319	6.66099	6.675469	6.679977567	6.812242
-0.65	-25.48113394	-22.0855	-22.05939067	-18.1461	-14.67822051	-16.86876566	-22.3949	-22.5941	-23.07496973	-23.237
+0.65	8.473143578	6.144006	6.085709283	4.840999	3.882798846	5.822893122	5.936536	5.950138	5.954159271	6.081619
-0.7	-27.77658081	-25.0136	-24.39809612	-20.2405	-16.48790155	-18.74705249	-25.7227	-26.615	-26.80730657	-27.4169
+0.7	6.238771439	4.052936	3.996997672	3.178219	2.55214259	4.180686352	3.91679	3.927807	3.930469419	3.953864
-0.75	-28.47809227	-26.0033	-25.19310472	-20.897	-17.06439983	-19.22919496	-26.7966	-27.9224	-28.02558271	-28.7591
+0.75	5.537564754	3.522641	3.358102406	2.792358	2.147419268	3.706491549	3.298456	3.308631	3.310885134	3.332926
-0.8	-31.59030451	-28.4461	-27.48108587	-22.7357	-18.70857005	-20.91126811	-29.8928	-31.7231	-31.66744553	-32.9139
+0.8	3.579747438	1.918638	1.887309737	1.755902	1.335735702	2.3832091	1.854436	1.859338	1.860084095	1.89837
-0.85	-33.13900002	-29.1808	-28.20229867	-23.3038	-19.2269098	-21.867715	-30.8785	-32.944	-32.95652141	-34.3298
+0.85	2.979326487	1.593362	1.56278632	1.458776	1.102254263	1.977614105	1.540236	1.544747	1.545314557	1.581695
-0.9	-37.62482362	-31.2098	-30.2322565	-24.8677	-20.68746032	-24.6365134	-33.953	-36.4459	-36.70801153	-38.1451
+0.9	1.349669695	0.710809	0.73705902	0.652616	0.508166626	0.87739242	0.68769	0.717012	0.717012025	0.717012
-0.95	-39.060515	-31.8256	-30.90395169	-25.341	-21.14150361	-25.52157046	-34.7888	-37.5541	-37.88418872	-39.2702
+0.95	0.867236614	0.47698	0.473583146	0.414067	0.323920959	0.551904159	0.435382	0.438414	0.438406296	0.446401
-1	-43.16296537	-33.4822	-32.7695423	-26.6111	-22.39969795	-28.0448342	-38.2602	-40.6785	-41.17043744	-42.3751
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	42.24410706	32.95785	32.17475799	26.21089	21.99714806	27.21939061	37.12425	39.66383	40.10864854	41.37862
-2.05	-4.17E-01	-0.20784	-0.228993654	-0.20849	-1.58E-01	-0.250844568	-0.20181	-0.20438	-0.204166034	-0.21138
+2.05	40.8868713	32.40518	31.55231833	25.78725	21.57756477	26.37765805	35.96627	38.62153	39.01245742	40.34307
-2.1	-1.863212585	-0.99123	-1.019169547	-0.90796	-0.673220506	-1.22719772	-0.95862	-0.98983	-0.989831686	-0.98983
+2.1	36.61081722	30.5576	29.57441882	24.36744	20.21566118	23.72322506	33.04886	35.2978	35.48443092	36.96763
-2.15	-2.40678978	-1.28574	-1.315987164	-1.17693	-0.881701574	-1.594365604	-1.27861	-1.27861	-1.27860707	-1.27861
+2.15	35.12351126	29.88078	28.89740559	23.84587	19.72863454	22.79969006	31.83057	34.12972	34.23321146	35.75534
-2.2	-4.206977844	-2.26137	-2.228646516	-2.068	-1.58191403	-2.810953238	-2.18554	-2.19066	-2.191439008	-2.23144
+2.2	30.50160358	27.67682	26.73404212	22.14178	18.17383485	20.1171968	28.87425	30.46798	30.41130184	31.66998
-2.25	-4.859941483	-2.80791	-2.75339714	-2.39131	-1.839193512	-3.252447556	-2.71425	-2.7233	-2.724893158	-2.74533
+2.25	29.57154148	26.88656	25.97103675	21.52861	17.62560995	19.6830801	27.84153	29.20035	29.26927964	30.28504

-2.3	-6.962486267	-4.72796	-4.669490242	-3.7131	-2.977836141	-4.67476043	-4.56889	-4.58041	-4.583192408	-4.60765
+2.3	27.03443027	24.13796	23.62807432	19.55928	15.8963288	18.23611862	24.62075	25.27932	25.70814751	26.04032
-2.35	-7.70763588	-5.42561	-5.366288041	-4.26779	-3.421647465	-5.298999667	-5.37329	-5.25511	-5.258332946	-5.28409
+2.35	26.25716203	23.09812	22.84835924	18.86088	15.29293685	17.70602975	23.51087	23.9384	24.40149435	24.64649
-2.4	-10.06093216	-7.67528	-7.614721425	-6.05779	-4.861909236	-6.909362106	-7.41563	-7.43058	-7.43523569	-7.5718
+2.4	23.76917081	20.15165	20.42467484	16.64536	13.4069425	15.66192683	20.09164	20.10679	20.75898733	21.27591
-2.45	-10.88106346	-8.47357	-8.413006057	-6.69335	-5.376134262	-7.467916187	-8.26223	-8.28542	-8.291275348	-8.45105
+2.45	22.88976007	19.15583	19.58916727	15.86807	12.75419578	15.02627973	18.92662	18.94128	19.60600751	19.63504
-2.5	-13.43350601	-11.2142	-10.93806815	-8.70374	-7.012125829	-9.205798716	-11.2888	-11.0793	-11.29029026	-11.2635
+2.5	20.30556333	16.045	17.0022265	13.42541	10.72861751	12.98140378	15.37496	15.47866	16.05811925	16.08667
-2.55	-14.31012583	-12.0993	-11.81927059	-9.40536	-7.586374391	-9.803435799	-12.2782	-12.1092	-12.28070082	-12.2536
+2.55	19.41980286	14.96916	16.1136731	12.58126	10.0421311	12.25423389	14.17678	14.49994	14.84917297	14.87749
-2.6	-17.01005938	-14.8545	-14.5652075	-11.5917	-9.38659243	-11.64130744	-15.3842	-15.4212	-15.43193458	-15.3625
+2.6	16.70422539	11.63433	13.37170727	10.0709	7.99999014	9.9379221	10.92974	11.48583	11.87171302	11.49437
-2.65	-17.92853723	-15.8022	-15.51075007	-12.3446	-10.0102571	-12.26652524	-16.4609	-16.6014	-16.56727232	-16.6251
+2.65	15.78311901	10.48917	12.43285076	9.206166	7.303911863	9.121323321	9.829562	10.45755	10.44500229	10.46733
-2.7	-20.72442273	-18.7174	-18.42186153	-14.6624	-11.94256027	-14.16987729	-19.7961	-20.2982	-20.26373672	-20.2331
+2.7	12.98685024	7.105311	9.544086239	6.567051	5.409273267	7.032598766	6.861396	7.312075	7.306001627	7.327567
-2.75	-21.98473914	-19.7093	-19.41316933	-15.4517	-12.60482024	-15.01480163	-20.9382	-21.576	-21.54149408	-21.5595
+2.75	12.04729749	6.082007	8.557678931	5.908999	4.885195326	6.388660518	5.873126	6.245776	6.242623886	6.73451
-2.8	-26.23785091	-22.7292	-22.43369646	-17.8567	-14.6364117	-17.74759215	-24.4365	-25.5227	-25.48864167	-25.6028
+2.8	9.221034936	4.090988	6.033352447	4.014213	3.367969679	4.451685571	3.638421	4.214094	4.682619202	5.262342
-2.85	-27.71796367	-23.7467	-23.45220875	-18.6676	-15.32623029	-18.69374485	-25.622	-26.8707	-26.98397972	-26.9529
+2.85	8.279933853	3.452175	5.490236469	3.57486	2.927272434	3.806710903	3.217439	3.67519	4.123680874	4.606249
-2.9	-32.31595723	-26.816	-26.52643852	-21.1151	-17.46758625	-21.61959092	-29.2173	-30.9885	-30.95582263	-31.0766
+2.9	5.474374576	2.862127	3.920557129	2.328585	2.085532249	1.885027874	3.217439	3.440934	3.643368837	3.644789
-2.95	-33.89413186	-27.8408	-27.55354784	-21.9328	-18.20302028	-22.61964716	-30.556	-32.3804	-32.3481592	-32.4703
+2.95	4.548623577	2.862127	3.527931579	2.275266	1.929560534	1.885027874	3.217439	3.440934	3.643368837	3.644789
-3	-38.73561646	-31.2696	-30.92312163	-24.3786	-20.37534845	-25.67580776	-34.7143	-36.5908	-36.56018521	-36.6855
+3	2.742066145	2.862127	2.860618338	2.275266	1.920935662	1.885027874	3.217439	3.440934	3.643368837	3.644789

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-2.742066145	-4.06528	-4.065278681	-4.06721	-4.4554	-3.089879103	-3.2525	-1.97071
End Shear	38.96248674	46.74254	47.60778248	43.45864	47.11408	35.02391074	36.95762	23
-0.05	-3.65652132	-4.06528	-4.065278681	-4.06721	-4.4554	-3.616066829	-3.80639	-1.97071
+0.05	35.57910544	42.82943	43.46620367	39.65634	42.67482	32.44665384	34.22302	21.55468
-0.1	-6.450155735	-4.06528	-4.065278681	-4.06721	-4.4554	-5.115838327	-5.38509	-3.29353
+0.1	30.8432085	37.6379	37.99842015	34.72929	37.19586	28.61929366	30.16484	19.51619
-0.15	-7.391539097	-4.06528	-4.065278681	-4.06721	-4.4554	-5.589915158	-5.88412	-4.04707
+0.15	29.30844246	35.93507	36.21222849	33.19815	35.50594	27.35998071	28.83038	18.83872
-0.2	-10.23115778	-5.8532	-5.853195488	-4.92285	-5.23035	-7.538307674	-7.93506	-6.25938
+0.2	24.86532478	30.93938	30.99493646	28.66724	30.51523	23.65318377	24.90487	16.80078
-0.25	-11.17926836	-7.19355	-7.193548741	-5.7596	-5.98378	-8.622286476	-9.07609	-6.9795
+0.25	23.44505182	29.41724	29.41723886	27.18367	28.88457	22.44695042	23.62837	16.12218
-0.3	-14.01326418	-11.55	-11.54998051	-9.24638	-9.24638	-11.79454982	-12.4153	-9.08283
+0.3	19.78816605	25.19461	25.19461468	22.83789	24.11881	19.15684475	20.1651	14.09925
-0.35	-14.95090151	-13.0048	-13.00484716	-10.4108	-10.4108	-12.82201976	-13.4969	-9.7637
+0.35	18.85583687	23.81455	23.81455129	21.43018	22.45932	18.10492604	19.05782	13.43179
-0.4	-17.72766924	-17.3547	-17.35472151	-14.0767	-14.3842	-15.8146222	-16.647	-11.7405
+0.4	16.10144043	19.77969	19.77968612	17.35442	18.02037	15.02967022	15.82071	11.46067
-0.45	-18.63762712	-18.7943	-18.79432039	-15.388	-15.7035	-16.78220454	-17.6655	-12.3763
+0.45	15.20108795	18.47529	18.47528858	16.05085	16.60538	14.03560342	14.77432	10.81661
-0.5	-21.30556154	-23.0619	-23.15590483	-20.0118	-20.6778	-19.59514641	-20.6265	-14.2091
+0.5	12.56842613	14.6444	14.64439733	12.32996	12.58188	11.16677356	11.7545	8.934081
-0.55	-22.17064142	-24.6159	-24.76094972	-21.5388	-22.3797	-20.50285097	-21.5819	-14.7939
+0.55	11.71725368	13.48033	13.48032691	11.15883	11.32108	10.24504845	10.78426	8.32568
-0.6	-24.6781354	-29.1015	-29.37139662	-26.0522	-27.905	-23.1361253	-24.3538	-16.4652
+0.6	9.257933617	10.02461	10.02460827	7.836458	7.983199	7.583506144	7.982638	6.568536
-0.65	-25.48113394	-30.5341	-30.83671532	-27.5283	-29.7259	-23.98394159	-25.2463	-16.9933
+0.65	8.473143578	8.840401	8.840401156	6.98416	7.125902	6.767203504	7.123372	6.008061
-0.7	-27.77658081	-34.6282	-35.00442616	-31.8465	-34.9735	-26.43755602	-27.829	-18.4855
+0.7	6.238771439	5.775728	5.77572796	4.607988	4.733373	4.489567511	4.725861	4.413094
-0.75	-28.47809227	-35.9212	-36.3143187	-33.2433	-36.6466	-27.39375497	-28.8355	-18.951
+0.75	5.537564754	4.866071	4.866071438	3.880536	4.000013	3.79162078	3.99118	3.91281
-0.8	-31.59030451	-39.8117	-40.23782979	-37.2814	-41.4192	-30.33407268	-31.9607	-20.2466
+0.8	3.579747438	2.794584	2.794584095	2.181689	2.219852	2.109716064	2.220754	2.516807
-0.85	-33.13900002	-41.1491	-41.57759481	-38.5707	-42.9234	-31.35796532	-33.0537	-20.5448
+0.85	2.979326487	2.273685	2.273685098	1.812042	1.848433	1.756020247	1.848442	2.088976
-0.9	-37.62482362	-45.2626	-46.08973989	-42.6068	-47.4037	-34.29584551	-36.1923	-21.6401
+0.9	1.349669695	1.019095	1.019094995	0.809048	0.839711	0.795688714	0.837567	0.928729
-0.95	-39.060515	-46.6731	-47.64672662	-43.6336	-48.863	-35.28910323	-37.2533	-21.9929
+0.95	0.867236614	0.647693	0.647692694	0.512214	0.54083	0.511254533	0.538163	0.585615
-1	-43.16296537	-50.6565	-52.07042099	-47.8932	-52.803	-38.08455737	-40.2424	-22.9675
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	42.24410706	49.36033	50.62620038	46.50035	51.53079	37.18067999	39.27538	22.66521
-2.05	-4.17E-01	-0.30396	-0.303956178	-0.23743	-0.2551	-0.247209059	-0.26022	-0.26641
+2.05	40.8868713	48.03142	49.1504797	45.07941	50.34514	36.24814021	38.27826	22.34003
-2.1	-1.863212585	-1.41802	-1.41802188	-1.12779	-1.16043	-1.100239851	-1.15815	-1.29517
+2.1	36.61081722	43.80111	44.48078208	41.41724	46.05255	33.33376689	35.16408	21.2926
-2.15	-2.40678978	-1.8367	-1.836697725	-1.50424	-1.50424	-1.420667961	-1.49544	-1.68223
+2.15	35.12351126	42.32223	42.85099122	39.81811	44.49413	32.3540238	34.11739	20.92733
-2.2	-4.206977844	-3.28451	-3.284512502	-2.57122	-2.61109	-2.48142906	-2.61203	-2.96512
+2.2	30.50160358	38.64518	39.06593492	35.95111	39.85729	29.2828925	30.83896	19.83073
-2.25	-4.859941483	-4.00692	-4.006915215	-3.19324	-3.23858	-3.130273849	-3.29503	-3.43076
+2.25	29.57154148	37.22489	37.63719405	34.60426	38.26561	28.22062499	29.7187	19.39869

-2.3	**-6.962486267**	**-6.73541**	**-6.735409192**	**-5.37517**	**-5.50623**	**-5.22346136**	**-5.49838**	**-4.93098**
+2.3	**27.03443027**	**33.28647**	**33.64184796**	**30.41491**	**33.24665**	**25.62964831**	**26.97858**	**18.00246**
-2.35	**-7.70763588**	**-7.7266**	**-7.726597581**	**-6.32152**	**-6.32152**	**-5.983279674**	**-6.29819**	**-5.46294**
+2.35	**26.25716203**	**31.92108**	**32.25192791**	**28.97475**	**31.49669**	**24.81168273**	**26.11756**	**17.50489**
-2.4	**-10.06093216**	**-11.1418**	**-11.14181341**	**-8.72427**	**-8.87578**	**-8.431441491**	**-8.8752**	**-7.1437**
+2.4	**23.76917081**	**27.62348**	**27.8559596**	**24.54791**	**26.03429**	**22.26796115**	**23.43996**	**15.92086**
-2.45	**-10.88106346**	**-12.2822**	**-12.28224624**	**-9.78088**	**-9.91354**	**-9.299550368**	**-9.789**	**-7.72971**
+2.45	**22.88976007**	**26.12761**	**26.31849591**	**23.04274**	**24.14701**	**21.39010734**	**22.5159**	**15.36362**
-2.5	**-13.43350601**	**-15.8845**	**-15.88449545**	**-13.5472**	**-13.8953**	**-12.11012042**	**-12.7475**	**-9.55423**
+2.5	**20.30556333**	**21.63539**	**21.63538865**	**18.4633**	**18.95384**	**18.66672624**	**19.64919**	**13.6093**
-2.55	**-14.31012583**	**-17.1496**	**-17.14957244**	**-14.7883**	**-15.2662**	**-13.06499804**	**-13.7526**	**-10.182**
+2.55	**19.41980286**	**20.21314**	**20.21313784**	**16.92139**	**17.23894**	**17.72898683**	**18.66209**	**12.99821**
-2.6	**-17.01005938**	**-21.1174**	**-21.11739287**	**-18.6981**	**-19.4814**	**-16.0462932**	**-16.8908**	**-12.1135**
+2.6	**16.70422539**	**15.89579**	**15.89579448**	**12.79685**	**13.02983**	**14.82594483**	**15.60626**	**11.09113**
-2.65	**-17.92853723**	**-22.4631**	**-22.46307396**	**-20.0575**	**-20.962**	**-17.07188108**	**-17.9704**	**-12.7708**
+2.65	**15.78311901**	**14.44526**	**14.44525911**	**11.56419**	**11.66415**	**13.82831824**	**14.55612**	**10.43204**
-2.7	**-20.72442273**	**-26.6021**	**-26.60207475**	**-24.2794**	**-25.6978**	**-20.22661682**	**-21.2912**	**-14.7725**
+2.7	**12.98685024**	**10.0823**	**10.08230171**	**8.07223**	**8.07223**	**10.74560866**	**11.31117**	**8.389695**
-2.75	**-21.98473914**	**-28.0103**	**-28.01028327**	**-25.7288**	**-27.2872**	**-21.29999095**	**-22.421**	**-15.447**
+2.75	**12.04729749**	**8.629641**	**8.629640826**	**6.90956**	**6.90956**	**9.688103564**	**10.198**	**7.688444**
-2.8	**-26.23785091**	**-32.5985**	**-32.7236685**	**-30.1782**	**-32.1777**	**-24.8828735**	**-26.2067**	**-17.4821**
+2.8	**9.221034936**	**5.112537**	**5.112537369**	**4.218825**	**4.455356**	**6.968754843**	**7.335531**	**5.528362**
-2.85	**-27.71796367**	**-34.2647**	**-34.46377214**	**-31.6892**	**-33.8421**	**-26.11907829**	**-27.5158**	**-18.1617**
+2.85	**8.279933853**	**4.326647**	**4.326646822**	**4.06722**	**4.455356**	**6.378259473**	**6.713957**	**4.790779**
-2.9	**-32.31595723**	**-39.3715**	**-39.82063292**	**-36.2811**	**-38.9102**	**-29.8956655**	**-31.5178**	**-20.1933**
+2.9	**5.474374576**	**4.065201**	**4.065200544**	**4.06722**	**4.455356**	**4.626186313**	**4.86967**	**2.53048**
-2.95	**-33.89413186**	**-41.1028**	**-41.64414982**	**-37.9573**	**-40.7028**	**-31.17201794**	**-32.8711**	**-20.8656**
+2.95	**4.548623577**	**4.065201**	**4.065200544**	**4.06722**	**4.455356**	**4.12639059**	**4.343569**	**1.970714**
-3	**-38.73561646**	**-46.3542**	**-47.19631664**	**-43.1386**	**-46.7395**	**-35.03183222**	**-36.966**	**-22.9377**
+3	**2.742066145**	**4.065201**	**4.065200544**	**4.06722**	**4.455356**	**3.089818247**	**3.25244**	**1.970714**

2-Span: Shear (Max and Min) Raw Data Results - 20' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-2.742066145	-4.41402	-4.09485	-3.69327	-4.45407	-4.4552
End Shear	38.96248674	45.46768	42.2366	41.77899	45.94957	45.97285
-0.05	-3.65652132	-4.41402	-4.09485	-4.28794	-4.64644	-4.80726
+0.05	35.57910544	41.41774	38.92484	38.72419	41.89099	42.68741
-0.1	-6.450155735	-6.31943	-6.02693	-6.00969	-6.9551	-6.54586
+0.1	30.8432085	36.30109	34.1596	34.17894	36.67817	37.31508
-0.15	-7.391539097	-7.0371	-6.8785	-6.6369	-7.67308	-7.14671
+0.15	29.30844246	34.61499	32.58794	32.68097	34.98748	35.58856
-0.2	-10.23115778	-8.98634	-9.22754	-8.24961	-9.66514	-8.92827
+0.2	24.86532478	29.64284	27.94927	28.26381	29.99868	30.54214
-0.25	-11.17926836	-9.57258	-9.94565	-9.37617	-10.688	-10.0413
+0.25	23.44505182	28.02078	26.43469	26.82306	28.3701	28.9065
-0.3	-14.01326418	-12.2924	-11.9207	-12.793	-14.4736	-13.1083
+0.3	19.78816605	23.28831	22.01188	22.75073	24.26744	24.07038
-0.35	-14.95090151	-13.5456	-13.1508	-13.9204	-15.7032	-14.0982
+0.35	18.85583687	21.76202	20.58412	21.49488	22.92788	22.44708
-0.4	-17.72766924	-17.2913	-17.306	-17.2678	-19.3007	-17.0203
+0.4	16.10144043	17.36445	16.46645	17.7681	18.95264	17.99667
-0.45	-18.63762712	-18.7233	-18.7727	-18.372	-20.4707	-18.4598
+0.45	15.20108795	15.96565	15.15528	16.5347	17.55498	16.5783
-0.5	-21.30556154	-23.8099	-22.9314	-21.65	-23.8991	-22.9241
+0.5	12.56842613	11.99818	11.76775	13.13874	13.86227	12.54624
-0.55	-22.17064142	-25.4514	-24.2383	-22.9131	-25.6164	-24.5688
+0.55	11.71725368	10.75862	10.71786	12.0556	12.71071	11.28318
-0.6	-24.6781354	-30.2409	-28.7788	-26.2613	-29.3019	-28.9971
+0.6	9.257933617	7.938897	7.75476	8.973501	9.43576	8.007744
-0.65	-25.48113394	-31.8397	-30.2825	-27.4289	-30.7484	-30.479
+0.65	8.473143578	7.081296	6.834358	8.006863	8.40931	7.147222
-0.7	-27.77658081	-36.4335	-34.5703	-31.0069	-34.9899	-34.9493
+0.7	6.238771439	4.68954	4.393403	5.309923	5.54773	4.712645
-0.75	-28.47809227	-37.8951	-35.9241	-32.1722	-36.4434	-36.4638
+0.75	5.537564754	3.930212	3.895949	4.483552	4.671742	3.978248
-0.8	-31.59030451	-42.0616	-39.7544	-36.069	-40.6745	-40.831
+0.8	3.579747438	2.234316	2.507755	2.513907	2.622562	2.230491
-0.85	-33.13900002	-43.3755	-40.9531	-37.3624	-42.0296	-42.3138
+0.85	2.979326487	1.861118	2.082292	2.094248	2.177663	1.857555
-0.9	-37.62482362	-47.0831	-44.9679	-41.0544	-45.913	-46.5182
+0.9	1.349669695	0.828548	0.928418	0.945495	0.970751	0.831263
-0.95	-39.060515	-48.2387	-46.2545	-42.2162	-47.2126	-47.8329
+0.95	0.867236614	0.529542	0.587177	0.60838	0.613681	0.532142
-1	-43.16296537	-51.4654	-50.7139	-45.4697	-50.8915	-52.147
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	42.24410706	50.41985	49.1401	44.41929	49.70268	50.67004
-2.05	-4.17E-01	-0.25186	-0.29666	-0.28931	-0.28239	-0.25439
+2.05	40.8868713	49.34712	47.51862	43.33393	48.47547	49.15742
-2.1	-1.863212585	-1.14855	-1.29218	-1.30635	-1.35323	-1.15144
+2.1	36.61081722	45.88029	43.62903	39.84966	44.64244	45.15122
-2.15	-2.40678978	-1.48552	-1.67707	-1.68609	-1.75593	-1.50424
+2.15	35.12351126	44.64401	42.24079	38.61821	43.3474	43.74895
-2.2	-4.206977844	-2.6262	-2.95274	-2.95479	-3.0902	-2.6222
+2.2	30.50160358	40.70236	38.5154	34.73921	39.28259	39.33528
-2.25	-4.859941483	-3.20132	-3.41575	-3.70038	-3.84205	-3.28211
+2.25	29.57154148	39.3131	37.23848	33.39071	37.8717	37.90854

-2.3	-6.962486267	-5.45945	-5.10439	-6.1787	-6.46916	-5.48457
+2.3	27.03443027	34.92839	33.17733	29.80298	33.58448	33.49221
-2.35	-7.70763588	-6.25731	-5.95089	-7.07838	-7.42378	-6.32152
+2.35	26.25716203	33.39672	31.7479	28.57579	32.17041	31.93628
-2.4	-10.06093216	-8.69111	-8.71066	-9.97741	-10.5022	-8.90112
+2.4	23.76917081	28.64487	27.23719	25.13811	27.86462	27.49101
-2.45	-10.88106346	-9.59934	-9.69889	-11.0054	-11.5945	-10.0705
+2.45	22.88976007	27.05723	25.66058	23.93857	26.58179	25.97835
-2.5	-13.43350601	-13.2876	-12.8471	-14.2539	-15.0482	-13.8585
+2.5	20.30556333	22.13226	21.58386	20.55664	22.76284	21.43534
-2.55	-14.31012583	-14.611	-13.9526	-15.4821	-16.5143	-15.2662
+2.55	19.41980286	20.43658	20.19769	19.46394	21.6201	19.94719
-2.6	-17.01005938	-18.806	-17.8107	-18.9727	-20.2376	-19.4571
+2.6	16.70422539	16.06973	15.7972	16.15114	18.10929	16.06877
-2.65	-17.92853723	-20.2726	-19.1839	-20.2541	-21.6044	-20.9414
+2.65	15.78311901	14.82118	14.2486	15.03531	16.91016	15.06757
-2.7	-20.72442273	-24.85	-23.4654	-24.0183	-25.6195	-25.6495
+2.7	12.98685024	11.12174	11.29055	11.6531	13.22071	12.09681
-2.75	-21.98473914	-26.4283	-24.9403	-25.4094	-27.1698	-27.2997
+2.75	12.04729749	10.12635	10.63256	10.51413	11.95887	11.07463
-2.8	-26.23785091	-31.2928	-29.4822	-29.7302	-31.6555	-32.205
+2.8	9.221034936	8.365849	8.477029	7.725554	9.023045	8.413216
-2.85	-27.71796367	-32.951	-31.0291	-31.2033	-33.3192	-33.9145
+2.85	8.279933853	7.716367	7.69436	7.180702	8.359265	7.764992
-2.9	-32.31595723	-38.0075	-35.7422	-35.6956	-38.3895	-39.0301
+2.9	5.474374576	5.56146	5.138482	5.430156	6.203652	5.911788
-2.95	-33.89413186	-39.7137	-37.3313	-37.2113	-40.0994	-40.8392
+2.95	4.548623577	4.769933	4.349837	4.706208	5.426395	5.25035
-3	-38.73561646	-44.867	-42.1835	-41.788	-45.4511	-46.4546
+3	2.742066145	4.414021	4.094842	3.693307	4.454035	4.455341

2-Span: Moment (Max and Min) Raw Data Results - 20' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	-1.54E-14	-7.8E-15	-7.17261E-15	-6.7E-15	-5.37E-15	-8.79298E-15	-7.5E-15	-7.4E-15	-7.38052E-15	-7.5E-15
End Shear	1.52E-14	7.78E-15	7.70875E-15	6.94E-15	5.49E-15	9.37029E-15	7.63E-15	7.47E-15	7.63206E-15	7.55E-15
-0.05	-2.742066145	-2.86218	-2.860540971	-2.27521	-1.920914647	-1.885122968	-3.21737	-3.44094	-3.643427154	-3.64484
+0.05	35.57910544	28.85589	28.90515709	22.76165	19.00062254	23.62061671	31.91848	33.76798	33.73690032	33.86082
-0.1	-5.48413229	-5.72436	-5.721081942	-4.55043	-3.841829294	-3.770245935	-6.43475	-6.88188	-7.286854309	-7.28969
+0.1	64.80263183	53.61476	53.73145904	42.5496	35.32156961	43.24245488	58.41407	61.95497	61.89082173	62.13364
-0.15	-8.226198435	-8.58653	-8.581622914	-6.82564	-5.762743942	-5.655368903	-9.65212	-10.3228	-10.93028146	-10.9345
+0.15	87.92532738	74.27769	74.45079782	59.06776	48.97701896	58.9902285	80.4139	84.6634	84.56480482	84.47732
-0.2	-10.96826458	-11.4487	-11.44216388	-9.10085	-7.683658589	-7.540491871	-12.8695	-13.7638	-14.57370862	-14.5794
+0.2	105.2695562	90.88261	91.0992246	72.34438	59.99610285	71.01866313	97.70562	102.0482	102.4964402	102.1973
-0.25	-13.71033072	-14.3109	-14.30270486	-11.3761	-9.604573236	-9.425614838	-16.0869	-17.2047	-18.21713577	-18.2242
+0.25	117.2252591	103.5044	103.749756	82.43735	68.4230425	79.5459971	110.4167	114.3169	120.1091899	120.0242
-0.3	-16.45239687	-17.1731	-17.16324583	-13.6513	-11.52548788	-11.31073781	-19.3042	-20.6456	-21.86056293	-21.8691
+0.3	124.3548279	112.2599	112.5127177	89.43418	74.32445589	84.98410828	118.7186	121.7807	132.161824	132.0427
-0.35	-19.19446301	-20.0352	-20.0237868	-15.9265	-13.44640253	-13.19586077	-22.5216	-24.0866	-25.50399008	-25.5139
+0.35	131.9908581	117.3519	117.5354422	93.452	77.78933078	90.2373391	127.1129	130.3912	138.7148035	138.5627
-0.4	-21.93652916	-22.8974	-22.88432777	-18.2017	-15.36731718	-15.08098374	-25.739	-27.5275	-29.14741724	-29.1588
+0.4	136.0911903	118.8882	119.0025502	94.6376	78.92906214	93.08496209	131.4194	136.8048	140.1752405	140.4872
-0.45	-24.6785953	-25.7596	-25.74486874	-20.4769	-17.28823183	-16.96610671	-28.9564	-30.9685	-32.79084439	-32.8036
+0.45	136.8097916	117.0881	117.1357224	93.16737	77.87745119	93.63134973	131.6504	138.3438	142.2909503	142.3041
-0.5	-27.42066145	-28.6218	-28.60540971	-22.7521	-19.20914647	-18.85122968	-32.1737	-34.4094	-36.43427154	-36.4484
+0.5	134.3350601	117.3879	117.0580984	93.1249	77.83913502	92.00392256	130.6207	135.3205	142.0601236	142.0002
-0.55	-30.16272759	-31.484	-31.46595068	-25.0273	-21.13006112	-20.73635264	-35.3911	-37.8503	-40.0776987	-40.0933
+0.55	128.8897905	114.4509	113.965091	90.611	75.76810604	88.35303669	125.6261	128.7546	136.6603182	136.5742
-0.6	-32.90479374	-34.3461	-34.32649165	-27.3026	-23.05097577	-22.62147561	-38.6085	-41.2913	-43.72112585	-43.7381
+0.6	120.7312012	108.1626	107.6611526	85.5143	71.49458295	82.85213375	116.9701	119.1325	126.5781675	126.7308
-0.65	-35.64685988	-37.2083	-37.18703263	-29.5778	-24.97189041	-24.50659858	-41.8259	-44.7322	-47.36455301	-47.383
+0.65	110.1508665	98.78224	98.24457001	78.04293	65.16334452	75.69761059	105.0002	106.7049	115.9849697	116.513
-0.7	-38.38892603	-40.0705	-40.0475736	-31.853	-26.89280506	-26.39172155	-45.0432	-48.1732	-51.00798016	-51.0278
+0.7	97.47480679	86.60622	86.01133766	68.32733	56.95289614	67.01392967	91.56389	94.72831	100.9279078	101.599
-0.75	-41.13099217	-42.9327	-42.90811457	-34.1282	-28.81371971	-28.27684451	-48.2606	-51.6141	-54.65140732	-54.6727
+0.75	86.15736887	71.94227	71.29471312	56.63278	47.06418764	58.25747378	75.47557	78.55229	81.56234778	82.33607
-0.8	-43.87305832	-45.7949	-45.76865554	-36.4034	-30.73463436	-30.16196748	-51.478	-55.055	-58.29483447	-58.3175
+0.8	70.69933469	55.07068	54.46492285	43.25418	35.72054151	47.60153538	57.21086	58.60669	58.74354635	59.30008
-0.85	-46.61512446	-48.657	-48.62919651	-38.6786	-32.655549	-32.04709045	-54.6953	-58.496	-61.93826162	-61.9624
+0.85	50.86066031	36.51597	35.92950505	28.51608	23.16767369	35.0557969	35.84701	36.03744	35.91294983	36.12676
-0.9	-63.74944223	-57.7758	-55.49554808	-48.0886	-40.68966895	-38.7679381	-60.2137	-63.5229	-68.69348192	-70.5573
+0.9	33.53780913	18.26775	17.85170682	16.61353	12.67993282	22.71733446	17.81696	17.81696	17.8169611	17.81696
-0.95	-85.46993541	-69.8157	-65.25686044	-59.658	-51.08628399	-53.22262983	-72.0119	-74.475	-78.1751354	-79.72
+0.95	16.47749567	9.062623	8.998079774	8.031945	6.251342631	10.86912792	8.522917	8.559174	8.550476779	8.664205
-1	-109.6794359	-82.1395	-77.40513969	-71.6685	-62.30496825	-68.17060656	-84.0031	-85.6466	-92.75716469	-95.5766
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-109.6794359	-82.1395	-77.40513969	-71.6685	-62.30496825	-68.17060656	-84.0031	-85.6466	-92.75716469	-95.5766
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-85.46994351	-69.814	-65.25671473	-59.6579	-51.08622608	-53.22410331	-72.0109	-74.4743	-78.17340002	-79.7192
+2.05	16.47749519	8.772884	9.026761235	8.013957	6.24418653	10.8264182	8.492158	8.530367	8.5233737	8.638612
-2.1	-63.74500219	-57.7755	-55.49560226	-48.0886	-40.6896927	-38.76967789	-60.2107	-63.5203	-68.69026975	-70.555
+2.1	33.53782368	18.23926	17.83087394	16.59715	12.67344634	22.67848177	17.63508	17.81697	17.81696883	17.81697
-2.15	-46.61512542	-48.6562	-48.63051424	-38.6795	-32.65590783	-32.04547452	-54.6965	-58.4959	-61.93727247	-61.9614
+2.15	51.26689759	36.47724	35.90115718	28.49659	23.15993346	35.01988441	35.8075	36.00065	35.87814362	36.12234
-2.2	-43.87305927	-45.794	-45.7698959	-36.4043	-30.73497217	-30.16044665	-51.479	-55.0549	-58.29390363	-58.3166
+2.2	71.60624172	55.03203	54.43665366	43.23474	35.71281359	47.63150595	57.17015	59.28487	58.76659098	59.32185
-2.25	-41.13099313	-42.9319	-42.90927756	-34.129	-28.81403651	-28.27541877	-48.2616	-51.614	-54.65053479	-54.6718

+2.25	87.13511182	71.90233	71.26546984	56.61268	47.05619795	58.31062379	75.50128	78.57282	81.59425707	82.3662
-2.3	-38.38892698	-40.0698	-40.04865922	-31.8537	-26.89310085	-26.3903909	-45.0442	-48.1731	-51.00716596	-51.0271
+2.3	97.47483063	86.63485	85.98022345	68.30596	56.94444864	66.95305374	91.58591	95.21289	100.9554671	101.625
-2.35	-35.64686084	-37.2077	-37.18804089	-29.5785	-24.97216518	-24.50536302	-41.8267	-44.7321	-47.36379712	-47.3823
+2.35	110.1508656	98.80754	98.21069027	78.01969	65.15414912	75.71316499	105.0408	106.7131	116.0065429	116.5334
-2.4	-32.90479469	-34.3455	-34.32742255	-27.3032	-23.05122952	-22.62033515	-38.6093	-41.2912	-43.72042828	-43.7375
+2.4	120.7311974	108.1834	107.6238135	85.48867	71.48443383	82.91235289	117.0065	119.1205	126.6016401	126.6038
-2.45	-30.16272855	-31.4834	-31.46680421	-25.0279	-21.13029386	-20.73530728	-35.3918	-37.8503	-40.07705945	-40.0927
+2.45	128.889782	114.4664	113.9235797	90.6188	75.75676133	88.41051619	125.6571	128.7366	136.6864673	136.5988
-2.5	-27.4206624	-28.6213	-28.60618587	-22.7527	-19.2093582	-18.8502794	-32.1744	-34.4093	-36.43369061	-36.4479
+2.5	134.3350563	117.3972	117.0648989	93.12956	77.84098757	92.05798441	130.6452	135.3535	142.0789573	142.0179
-2.55	-24.67859626	-25.7591	-25.74556753	-20.4774	-17.28842254	-16.96525153	-28.957	-30.9684	-32.79032177	-32.8031
+2.55	136.5507136	117.0843	117.1329223	93.16545	77.87669077	93.68141107	131.6673	138.3698	142.3012415	142.3423
-2.6	-21.93653011	-22.897	-22.8849492	-18.2021	-15.36748688	-15.08022366	-25.7395	-27.5275	-29.14695294	-29.1583
+2.6	135.7700163	118.8787	118.9955517	94.6328	78.92716401	93.13046432	131.3922	136.8227	140.2232342	140.2018
-2.65	-19.19446397	-20.0349	-20.02433086	-15.9269	-13.44655121	-13.19519578	-22.5221	-24.0865	-25.5035841	-25.5135
+2.65	131.6286292	117.3389	117.5236456	93.44391	77.78610303	90.27784654	127.0772	130.4	138.7609542	138.6063
-2.7	-16.45239782	-17.1728	-17.16371252	-13.6516	-11.52561555	-11.31016791	-19.3046	-20.6456	-21.86021526	-21.8687
+2.7	123.9742208	112.3043	112.4956454	89.42245	74.3197912	85.01925517	118.7765	121.7895	132.1992471	132.078
-2.75	-13.71033168	-14.3106	-14.30309418	-11.3763	-9.604679891	-9.425140034	-16.0872	-17.2047	-18.21684643	-18.2239
+2.75	116.8456312	103.5464	103.7270901	82.42177	68.41685092	79.5340669	110.4661	114.3688	120.1368846	120.0503
-2.8	-10.96826553	-11.4485	-11.44247584	-9.10107	-7.68374423	-7.54011216	-12.8698	-13.7637	-14.57347759	-14.5792
+2.8	104.9514017	90.91669	91.07058487	72.32473	59.98828847	70.99036638	97.74586	102.0909	102.2651263	102.2135
-2.85	-8.226199389	-8.58638	-8.581857505	-6.8258	-5.762808568	-5.655084286	-9.65232	-10.3228	-10.93010875	-10.9344
+2.85	87.67728519	74.30342	74.41602334	59.04387	48.96751194	58.96602045	80.4445	84.69607	84.59554694	84.50634
-2.9	-5.484133244	-5.72426	-5.721239167	-4.55053	-3.841872907	-3.770056412	-6.43488	-6.88187	-7.286739915	-7.28958
+2.9	64.63189391	53.63198	53.69034622	42.52141	35.31040358	43.23916892	58.43463	61.97709	61.91163572	62.15328
-2.95	-2.742067099	-2.86213	-2.860620829	-2.27527	-1.920937245	-1.885028538	-3.21744	-3.44093	-3.643371079	-3.64479
+2.95	35.49153341	28.86449	28.85779435	22.74992	18.99504312	23.62989818	31.93025	33.77919	33.74743433	33.87077
-3	-1.75E-14	-1.6E-14	-1.45E-14	-1.2E-14	-9.33E-15	-1.06102E-14	-1.4E-14	-1.5E-14	-1.46342E-14	-1.5E-14
+3	1.59E-14	7.82E-15	7.81597E-15	7.29E-15	5.59E-15	1.03947E-14	8.13E-15	7.57E-15	7.57644E-15	7.69E-15

2-Span: Moment (Max and Min) Raw Data Results - 20’ Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.54E-14	-1.1E-14	-1.1E-14	-8.8E-15	-8.8E-15	-8.4E-15	-8.9E-15	-9.63277E-15
End Shear	1.52E-14	1.11E-14	1.11E-14	9.04E-15	9.12E-15	8.44E-15	8.88E-15	9.88191E-15
-0.05	-2.742066145	-4.06528	-4.06528	-4.06721	-4.4554	-3.08988	-3.2525	-1.970708173
+0.05	35.57910544	42.82943	43.4662	39.65634	42.67482	32.44665	34.22302	21.61699325
-0.1	-5.48413229	-8.13056	-8.13056	-8.13442	-8.9108	-6.17976	-6.50501	-3.941416345
+0.1	64.80263183	78.87629	79.8178	72.5358	77.5225	59.77575	63.01907	40.55527001
-0.15	-8.226198435	-12.1958	-12.1958	-12.2016	-13.3662	-9.26964	-9.75751	-5.912124518
+0.15	87.92532738	108.1548	109.0469	99.6594	106.1196	81.14337	85.49898	56.77729128
-0.2	-10.96826458	-16.2611	-16.2611	-16.2688	-17.8216	-12.3595	-13.01	-7.882832691
+0.2	105.2695562	130.3347	130.8328	120.6614	128.2828	98.53569	103.7862	70.27002699
-0.25	-13.71033072	-20.3264	-20.3264	-20.336	-22.277	-15.4494	-16.2625	-9.853540864
+0.25	117.2252591	146.861	146.861	135.9183	144.2557	112.0026	117.8974	81.04496829
-0.3	-16.45239687	-24.3917	-24.3917	-24.4033	-26.7324	-18.5393	-19.515	-11.82424904
+0.3	124.3548279	159.4129	159.4129	145.8777	154.1353	121.4626	127.8554	89.13815435
-0.35	-19.19446301	-28.457	-28.457	-28.4705	-31.1878	-21.6292	-22.7675	-13.79495721
+0.35	131.9908581	166.6571	166.6571	157.4996	169.0108	126.8849	133.563	94.61009359
-0.4	-21.93652916	-32.5222	-32.5222	-32.5377	-35.6432	-24.719	-26.02	-15.76566538
+0.4	136.0911903	168.852	168.852	164.1247	177.495	128.4687	135.2302	97.54590865
-0.45	-24.6785953	-36.5875	-36.5875	-36.6049	-40.0986	-27.8089	-29.2725	-17.73637355
+0.45	136.8097916	166.3082	166.3082	165.7123	179.8739	126.4533	133.1088	98.05517856
-0.5	-27.42066145	-40.6528	-40.6528	-40.6721	-44.554	-30.8988	-32.525	-19.70708173
+0.5	134.3350601	166.6787	166.6787	163.5621	176.496	126.7512	133.4223	96.27203016
-0.55	-30.16272759	-44.7181	-44.7181	-44.7393	-49.0094	-33.9887	-35.7775	-21.6777899
+0.55	128.8897905	162.4661	162.4661	156.4523	167.7728	123.5886	130.0933	92.35512444
-0.6	-32.90479374	-48.7833	-48.7833	-48.8065	-53.4648	-37.0785	-39.0301	-23.64849807
+0.6	120.7312012	153.684	153.684	144.7909	154.1789	116.7996	122.947	86.4876652
-0.65	-35.64685988	-52.8486	-52.8486	-52.8737	-57.9202	-40.1684	-42.2826	-25.61920625
+0.65	110.1508665	140.3741	140.3741	129.0424	136.2512	106.6656	112.2795	78.87732281
-0.7	-38.38892603	-56.9139	-56.9139	-56.9409	-62.3756	-43.2583	-45.5351	-27.58991442
+0.7	97.47480679	123.065	123.065	112.7268	119.6283	93.50778	98.42924	69.75635104
-0.75	-41.13099217	-60.9792	-60.9792	-61.0081	-66.831	-46.3482	-48.7876	-29.56062259
+0.75	86.15736887	102.2049	102.2049	92.71592	98.49477	77.67573	81.76393	59.38154413
-0.8	-43.87305832	-65.0445	-65.0445	-65.0754	-71.2864	-49.4381	-52.0401	-31.53133076
+0.8	70.69933469	79.25884	79.64547	69.6228	72.6513	60.17244	63.38056	48.03415378
-0.85	-46.61512446	-69.1097	-69.1097	-69.1426	-75.7418	-52.5279	-55.2926	-33.50203894
+0.85	50.86066031	52.16006	52.30186	42.51571	43.0541	39.7165	41.82181	36.02000948
-0.9	-63.74944223	-73.6085	-74.4259	-74.7951	-82.8019	-60.9433	-64.1508	-40.25998141
+0.9	33.53780913	26.09301	26.09301	20.96113	20.96113	19.83994	20.88415	23.66945121
-0.95	-85.46993541	-89.3549	-93.6914	-87.73	-102.303	-73.678	-77.5558	-47.63820973
+0.95	16.47749567	12.65853	12.65853	10.02696	10.27577	9.713836	10.22509	11.33737847
-1	-109.6794359	-105.148	-113.348	-100.862	-121.975	-89.913	-94.6452	-55.38860948
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-109.6794359	-105.148	-113.348	-100.862	-121.975	-89.913	-94.6452	-55.38860948
+2	0	0	0	0	0	0	0	0
-2.05	-85.46994351	-89.3511	-93.6903	-87.7291	-102.299	-73.6777	-77.5554	-47.63823347
+2.05	16.47749519	12.61087	12.61087	9.990774	10.28033	9.744799	10.25768	11.32407425
-2.1	-63.74500219	-73.6086	-74.4224	-74.7911	-82.7954	-60.9424	-64.1499	-40.26000378
+2.1	33.53782368	26.04968	26.04968	20.74715	20.88768	19.81744	20.86046	23.65734362
-2.15	-46.61512542	-69.1084	-69.1084	-69.1427	-75.7411	-52.5269	-55.2915	-33.502139
+2.15	51.26689759	52.10086	52.24256	42.46839	43.0852	39.68576	41.78944	36.00873276
-2.2	-43.87305927	-65.0432	-65.0432	-65.0755	-71.2857	-49.4371	-52.039	-31.53142497
+2.2	71.60624172	79.19501	79.57997	69.57333	72.63452	60.13986	63.34614	48.02332686
-2.25	-41.13099313	-60.978	-60.978	-61.0083	-66.8303	-46.3473	-48.7866	-29.56071094

+2.25	**87.13511182**	**102.0879**	**102.0879**	**92.7436**	**98.43793**	**77.62839**	**81.7141**	**59.37083881**
-2.3	**-38.38892698**	**-56.9128**	**-56.9128**	**-56.9411**	**-62.375**	**-43.2575**	**-45.5342**	**-27.58999692**
+2.3	**97.47483063**	**123.0003**	**123.0003**	**112.7492**	**119.6461**	**93.5417**	**98.46494**	**69.74551981**
-2.35	**-35.64686084**	**-52.8476**	**-52.8476**	**-52.8739**	**-57.9196**	**-40.1676**	**-42.2817**	**-25.61928289**
+2.35	**110.1508656**	**140.4125**	**140.4125**	**129.0992**	**136.3199**	**106.6855**	**112.3006**	**78.86601181**
-2.4	**-32.90479469**	**-48.7824**	**-48.7824**	**-48.8066**	**-53.4643**	**-37.0778**	**-39.0293**	**-23.64856886**
+2.4	**120.7311974**	**153.7157**	**153.7157**	**144.8429**	**154.2428**	**116.8162**	**122.9644**	**86.47566621**
-2.45	**-30.16272855**	**-44.7172**	**-44.7172**	**-44.7394**	**-49.0089**	**-33.988**	**-35.7768**	**-21.67785484**
+2.45	**128.889782**	**162.4897**	**162.4897**	**156.4978**	**167.8302**	**123.6009**	**130.1062**	**92.34218058**
-2.5	**-27.4206624**	**-40.652**	**-40.652**	**-40.6722**	**-44.5536**	**-30.8982**	**-32.5244**	**-19.70714081**
+2.5	**134.3350563**	**166.6928**	**166.6928**	**163.5996**	**176.545**	**126.7585**	**133.43**	**96.25797078**
-2.55	**-24.67859626**	**-36.5868**	**-36.5868**	**-36.605**	**-40.0982**	**-27.8084**	**-29.272**	**-17.73642678**
+2.55	**136.5507136**	**166.3024**	**166.3024**	**165.7406**	**179.9131**	**126.4503**	**133.1056**	**98.03978395**
-2.6	**-21.93653011**	**-32.5216**	**-32.5216**	**-32.5378**	**-35.6428**	**-24.7185**	**-26.0195**	**-15.76571276**
+2.6	**135.7700163**	**168.8374**	**168.8374**	**164.0824**	**177.5231**	**128.4611**	**135.2222**	**97.5290321**
-2.65	**-19.19446397**	**-28.4564**	**-28.4564**	**-28.4705**	**-31.1875**	**-21.6287**	**-22.7671**	**-13.79499873**
+2.65	**131.6286292**	**166.6326**	**166.6326**	**157.5302**	**169.0265**	**126.8721**	**133.5496**	**94.59163803**
-2.7	**-16.45239782**	**-24.3912**	**-24.3912**	**-24.4033**	**-26.7321**	**-18.5389**	**-19.5146**	**-11.82428471**
+2.7	**123.9742208**	**159.3774**	**159.3774**	**145.8674**	**154.1378**	**121.4442**	**127.836**	**89.11794989**
-2.75	**-13.71033168**	**-20.326**	**-20.326**	**-20.3361**	**-22.2768**	**-15.4491**	**-16.2622**	**-9.853570679**
+2.75	**116.8456312**	**146.8138**	**146.8138**	**135.9811**	**144.2407**	**111.9781**	**117.8717**	**81.02303751**
-2.8	**-10.96826553**	**-16.2608**	**-16.2608**	**-16.2689**	**-17.8214**	**-12.3593**	**-13.0098**	**-7.882856652**
+2.8	**104.9514017**	**130.3941**	**130.8947**	**120.7127**	**128.255**	**98.5081**	**103.7573**	**70.24622716**
-2.85	**-8.226199389**	**-12.1956**	**-12.1956**	**-12.2017**	**-13.3661**	**-9.26946**	**-9.75732**	**-5.912142626**
+2.85	**87.67728519**	**108.0893**	**108.9837**	**99.63349**	**106.1627**	**81.16635**	**85.52332**	**56.75158939**
-2.9	**-5.484133244**	**-8.1304**	**-8.1304**	**-8.13444**	**-8.91071**	**-6.17964**	**-6.50488**	**-3.941428599**
+2.9	**64.63189391**	**78.79595**	**79.73914**	**72.56209**	**77.55154**	**59.79132**	**63.03557**	**40.52772817**
-2.95	**-2.742067099**	**-4.0652**	**-4.0652**	**-4.06722**	**-4.45536**	**-3.08982**	**-3.25244**	**-1.970714573**
+2.95	**35.49153341**	**42.84514**	**43.48279**	**39.67102**	**42.69186**	**32.45453**	**34.23136**	**21.58757899**
-3	**-1.75E-14**	**-2.1E-14**	**-2.1E-14**	**-1.7E-14**	**-1.7E-14**	**-1.7E-14**	**-1.8E-14**	**-1.02141E-14**
+3	**1.59E-14**	**1.11E-14**	**1.11E-14**	**9.46E-15**	**9.94E-15**	**8.44E-15**	**8.88E-15**	**9.77119E-15**

2-Span: Moment (Max and Min) Raw Data Results - 20' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.54E-14	-8.84595E-15	-1.01566E-14	-1E-14	-1.1E-14	-8.9E-15
End Shear	1.52E-14	1.19845E-14	1.2022E-14	9.98E-15	1.06E-14	8.88E-15
-0.05	-2.742066145	-4.414024055	-4.094846472	-3.69327	-4.45407	-4.4552
+0.05	35.57910544	41.41773869	38.92484448	38.72419	42.23542	42.68741
-0.1	-5.48413229	-8.82804811	-8.189692943	-7.38655	-8.90813	-8.9104
+0.1	64.80263183	76.59956621	71.48174217	70.61922	77.77111	77.89648
-0.15	-8.226198435	-13.24207217	-12.28453941	-11.0798	-13.3622	-13.3656
+0.15	87.92532738	105.1608693	97.76383082	96.92768	106.5569	106.6444
-0.2	-10.96826458	-17.65609622	-16.37938589	-14.7731	-17.8163	-17.8208
+0.2	105.2695562	127.1267738	117.9236781	117.9753	128.7285	128.7824
-0.25	-13.71033072	-22.07012028	-20.47423236	-18.4664	-22.2703	-22.276
+0.25	117.2252591	142.7210467	132.1734433	133.3997	144.5057	144.5325
-0.3	-16.45239687	-26.48414433	-24.56907883	-22.1596	-26.7244	-26.7312
+0.3	124.3548279	152.230954	141.1459893	143.9083	154.172	154.1801
-0.35	-19.19446301	-30.89816839	-28.6639253	-25.8529	-31.1785	-31.1864
+0.35	131.9908581	166.9882686	154.7116046	150.3494	168.8191	169.2021
-0.4	-21.93652916	-35.31219244	-32.75877177	-29.5462	-35.6325	-35.6416
+0.4	136.0911903	175.5707449	162.4274754	152.2536	177.457	177.8176
-0.45	-24.6785953	-39.7262165	-36.85361824	-33.2395	-40.0866	-40.0968
+0.45	136.8097916	178.0376702	164.5277423	151.2846	179.9515	180.299
-0.5	-27.42066145	-44.14024055	-40.94846472	-36.9327	-44.5407	-44.552
+0.5	134.3350601	174.7397534	161.6830227	150.1449	176.6493	176.995
-0.55	-30.16272759	-48.55426461	-45.04331119	-40.626	-48.9947	-49.0072
+0.55	128.8897905	166.0911713	153.8251256	146.4288	167.9604	168.2362
-0.6	-32.90479374	-52.96828866	-49.13815766	-44.3193	-53.4488	-53.4624
+0.6	120.7312012	152.4899938	141.395023	138.4134	154.3582	154.5543
-0.65	-35.64685988	-57.38231272	-53.23300413	-48.0126	-57.9029	-57.9176
+0.65	110.1508665	134.530929	124.8930997	126.3346	136.3793	136.516
-0.7	-38.38892603	-61.79633677	-57.3278506	-51.7058	-62.3569	-62.3728
+0.7	97.47480679	117.7304371	109.7617307	110.773	119.1267	119.8098
-0.75	-41.13099217	-66.21036083	-61.42269707	-55.3991	-66.811	-66.828
+0.75	86.15736887	96.66966118	90.28743511	93.12794	99.51538	98.48086
-0.8	-43.87305832	-70.62438488	-65.51754355	-59.0924	-71.2651	-71.2832
+0.8	70.69933469	71.20261328	67.89756785	71.68313	76.65276	72.67347
-0.85	-46.61512446	-75.03840894	-69.61239002	-62.7857	-75.7191	-75.7384
+0.85	50.86066031	41.80904875	42.80080911	46.82688	49.98416	43.01742
-0.9	-63.74944223	-93.1181274	-89.99012118	-66.4789	-83.2982	-82.7188
+0.9	33.53780913	20.93504904	23.49811016	23.53628	24.83799	20.96113
-0.95	-85.46993541	-115.3037692	-116.0133157	-75.7951	-93.3662	-93.1916
+0.95	16.47749567	10.22381303	11.29473739	11.55921	11.9511	10.26846
-1	-109.6794359	-139.0830547	-146.3182944	-87.7163	-108.92	-105.412
+1	0	0	0	0	0	0
(Span 2) -2	-109.6794359	-139.0830547	-146.3182944	-87.7163	-108.92	-105.412
+2	0	0	0	0	0	0
-2.05	-85.46994351	-115.3046989	-116.0136558	-75.7932	-93.3662	-93.1908
+2.05	16.47749519	10.20083952	11.29053875	11.57868	11.92099	10.24444
-2.1	-63.74500219	-93.11883725	-89.99026895	-66.4795	-83.2992	-82.7205
+2.1	33.53782368	20.91414822	23.49430146	23.51436	24.81062	20.95569
-2.15	-46.61512542	-75.03835448	-69.61232088	-62.7862	-75.7186	-75.7408
+2.15	51.26689759	41.77832947	42.80548345	46.79209	49.94707	43.00334
-2.2	-43.87305927	-70.62433366	-65.51747849	-59.0929	-71.2646	-71.2855
+2.2	71.60624172	71.16988958	67.90192454	71.64645	76.61338	72.63926
-2.25	-41.13099313	-66.21031285	-61.42263611	-55.3996	-66.8105	-66.8301

+2.25	**87.13511182**	**96.63360034**	**90.2820912**	**93.08804**	**99.47229**	**98.4432**
-2.3	**-38.38892698**	**-61.79629203**	**-57.32779372**	**-51.7063**	**-62.3565**	**-62.3748**
+2.3	**97.47483063**	**117.7419704**	**109.7557496**	**110.6004**	**119.1281**	**119.7945**
-2.35	**-35.64686084**	**-57.38227121**	**-53.23295133**	**-48.013**	**-57.9025**	**-57.9194**
+2.35	**110.1508656**	**134.5220228**	**124.89196**	**126.2929**	**136.3709**	**136.508**
-2.4	**-32.90479469**	**-52.9682504**	**-49.13810895**	**-44.3197**	**-53.4484**	**-53.4641**
+2.4	**120.7311974**	**152.4778389**	**141.3933509**	**138.3998**	**154.346**	**154.5427**
-2.45	**-30.16272855**	**-48.55422958**	**-45.04326656**	**-40.6264**	**-48.9944**	**-49.0088**
+2.45	**128.889782**	**166.1011933**	**153.8227831**	**146.4427**	**167.9433**	**168.2198**
-2.5	**-27.4206624**	**-44.14020876**	**-40.94842417**	**-36.9331**	**-44.5404**	**-44.5534**
+2.5	**134.3350563**	**174.7710245**	**161.6798629**	**150.1826**	**176.626**	**177.0001**
-2.55	**-24.67859626**	**-39.72618795**	**-36.85358179**	**-33.2398**	**-40.0863**	**-40.0981**
+2.55	**136.5507136**	**178.0626538**	**164.5235766**	**151.2941**	**179.921**	**180.325**
-2.6	**-21.93653011**	**-35.31216713**	**-32.7587394**	**-29.5465**	**-35.6323**	**-35.6427**
+2.6	**135.7700163**	**175.5885453**	**162.4300994**	**152.2776**	**177.4184**	**177.8362**
-2.65	**-19.19446397**	**-30.89814631**	**-28.66389701**	**-25.8532**	**-31.1782**	**-31.1874**
+2.65	**131.6286292**	**166.9981729**	**154.7130465**	**150.4004**	**168.7717**	**169.2125**
-2.7	**-16.45239782**	**-26.4841255**	**-24.56905462**	**-22.1598**	**-26.7242**	**-26.732**
+2.7	**123.9742208**	**152.228213**	**141.1456856**	**144.1096**	**154.1697**	**154.2057**
-2.75	**-13.71033168**	**-22.07010468**	**-20.47421224**	**-18.4665**	**-22.2702**	**-22.2767**
+2.75	**116.8456312**	**142.7110028**	**132.1799283**	**133.3763**	**144.4953**	**144.5781**
-2.8	**-10.96826553**	**-17.65608386**	**-16.37936985**	**-14.7732**	**-17.8161**	**-17.8214**
+2.8	**104.9514017**	**127.1087773**	**117.928991**	**117.9441**	**128.7092**	**128.8198**
-2.85	**-8.226199389**	**-13.24206305**	**-12.28452746**	**-11.0799**	**-13.3621**	**-13.366**
+2.85	**87.67728519**	**105.1353095**	**97.76783296**	**96.95403**	**106.5282**	**106.6729**
-2.9	**-5.484133244**	**-8.828042229**	**-8.189685077**	**-7.38662**	**-8.90807**	**-8.91068**
+2.9	**64.63189391**	**76.56423056**	**71.4844602**	**70.63703**	**77.73259**	**78.06026**
-2.95	**-2.742067099**	**-4.414021412**	**-4.09484269**	**-3.69331**	**-4.45404**	**-4.45534**
+2.95	**35.49153341**	**41.4270394**	**38.92622786**	**38.7332**	**42.2456**	**42.69792**
-3	**-1.75E-14**	**-1.82411E-14**	**-1.58195E-14**	**-2E-14**	**-2.2E-14**	**-1.8E-14**
+3	**1.59E-14**	**1.26736E-14**	**1.57258E-14**	**9.99E-15**	**1.07E-14**	**9.2E-15**

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.22834235	-11.60467475	-9.20581842	-8.906727403	-9.185650043	-8.702293026	-9.876861789	-6.650636866	-7.02486	-3.945804144
End Shear	113.3861375	117.9790832	102.0475235	96.22726577	99.22631508	91.06617752	101.2749765	71.5144504	75.59233	46.7899945
-0.05	-11.19242256	-11.64436718	-9.241541606	-8.906727403	-9.185650043	-8.702293026	-9.876861789	-6.650636866	-7.02486	-3.945804144
+0.05	101.6552038	107.6139297	91.57168763	87.55785229	89.99251216	81.88920971	90.39551486	65.29703948	68.98865	42.00045742
-0.1	-16.9814408	-11.80385975	-10.16076779	-8.906727403	-9.185650043	-8.702293026	-9.876861789	-9.807898217	-10.3768	-5.258117638
+0.1	90.5735371	97.84643403	81.60558549	78.52996445	80.39614042	73.52859755	80.54532863	59.1359132	62.44779	37.65340059
-0.15	-21.23579083	-11.9771835	-13.61980295	-8.906727403	-9.185650043	-8.702293026	-9.876861789	-11.96099934	-12.6337	-7.378400128
+0.15	83.39206302	91.42158456	75.1465766	73.00061058	74.53858691	68.05869061	74.13548777	55.0782065	58.14174	35.38565713
-0.2	-26.95131526	-18.69684527	-18.84685555	-13.61096978	-13.61096978	-10.89482874	-10.89482874	-15.35803984	-16.1975	-10.5847198
+0.2	72.97498783	81.94982738	65.77662595	64.86438396	65.94429581	60.04822688	64.80299243	49.09386308	51.79386	32.47340284
-0.25	-30.81640572	-24.50439013	-22.34815096	-18.17524308	-18.17524308	-14.54746822	-14.54746822	-18.7728416	-19.8173	-13.40208163
+0.25	66.2934187	75.76601324	59.5840864	59.56761733	60.36668247	54.8600394	58.79680841	45.18858171	47.65324	30.36655469
-0.3	-36.67235457	-33.30640923	-27.60907606	-25.0139223	-25.0139223	-20.02020207	-20.02020207	-25.09688545	-26.4619	-17.02422913
+0.3	56.71055927	66.72075315	50.97181911	51.85153974	52.26905195	47.79944303	51.17159376	39.43489215	41.55621	27.23711801
-0.35	-40.60106555	-39.21375996	-31.11285032	-29.55083852	-29.55083852	-24.20940149	-24.44876228	-29.1423914	-30.7114	-19.34989297
+0.35	50.64086924	60.86405299	45.51707376	46.88237472	47.07370184	43.35134899	46.28247074	35.35327712	37.23574	25.19366014
-0.4	-46.50658727	-48.09710021	-36.34650768	-36.2936692	-36.2936692	-31.51616597	-32.57446207	-34.46997432	-36.3073	-22.69822606
+0.4	41.81111047	51.75716163	37.80447336	40.20489499	40.20489499	36.89406049	38.96003786	30.51088625	32.11672	22.16311055
-0.45	-50.43726078	-54.01255807	-40.11752635	-40.73014438	-40.73014438	-36.34856766	-37.95637414	-37.77188174	-39.7751	-24.83320905
+0.45	37.38512182	46.32844276	33.64660958	36.14636883	36.14636883	32.75087189	34.4320771	27.42111596	28.86433	20.18830553
-0.5	-56.29823968	-62.83806402	-47.46350783	-47.26749684	-47.26749684	-43.50739752	-45.941287	-42.45495934	-44.6932	-27.88332146
+0.5	31.79222043	38.54417509	28.48632748	30.1219833	30.1219833	26.81020475	27.95650134	22.95366502	24.16175	17.30810731
-0.55	-60.16705273	-68.66777841	-51.82300914	-51.53043783	-51.53043783	-48.20166847	-51.18544381	-45.53601925	-47.9327	-29.81136236
+0.55	28.22866909	33.6126891	25.40580214	26.37786508	26.37786508	23.05093684	23.87084239	20.09987649	21.15776	15.4506146
-0.6	-65.88611997	-77.29302192	-57.98506094	-58.22064617	-58.22064617	-55.09404158	-58.89787846	-49.87689018	-52.502	-32.53886968
+0.6	23.15072604	26.63432812	20.76061549	21.03605421	21.03605421	17.74540477	18.12455768	16.02831367	16.87191	12.77199809
-0.65	-70.45206872	-82.94096856	-62.89335097	-62.97073616	-63.3713118	-59.57116913	-64.14319702	-52.60741187	-55.4132	-34.24369738
+0.65	19.95499406	22.27965336	17.90344577	17.67481269	17.67481269	14.30949226	14.42944228	13.42434671	14.13089	11.06597725
-0.7	-81.08203321	-91.22028158	-72.79105027	-70.820413	-71.90504778	-66.07856287	-72.38780406	-57.65166615	-60.7951	-36.62419739
+0.7	15.4646843	16.22492534	13.88836913	12.77986752	12.77986752	10.15386394	10.32638251	9.836183885	10.35388	8.640199118
-0.75	-88.27779174	-96.58824305	-79.26564773	-75.89208752	-77.43507365	-70.6591256	-77.60603806	-61.11319749	-64.4993	-37.91052438
+0.75	12.68413506	12.52444292	11.40158961	9.368911383	9.368911383	7.843644985	8.00438293	7.574844085	7.97352	7.11981483
-0.8	-98.81851086	-104.3726892	-88.75144717	-83.2194285	-85.45048641	-78.30002461	-86.09675868	-66.05292714	-69.7715	-39.93865464
+0.8	8.850873208	7.507817758	7.901583087	5.879137554	5.879137554	4.6873605	4.744072059	4.584312742	4.825592	4.998109867
-0.85	-105.6506561	-109.3603075	-94.90091376	-87.89538229	-90.58381352	-83.2045224	-92.23206198	-68.82600703	-72.7388	-41.1613792
+0.85	6.530698954	5.115975749	5.829972308	4.107435212	4.107435212	3.219746846	3.266540829	3.115948443	3.279946	3.697522326
-0.9	-115.5606962	-116.4976905	-103.8225262	-94.55786798	-97.92742066	-90.23847672	-101.0903872	-72.69857463	-76.887	-43.50274816
+0.9	3.42064409	2.682576201	3.052517408	1.929255423	1.929255423	1.690135942	1.731082542	1.630148962	1.715946	1.931129124
-0.95	-121.9149965	-121.0024108	-109.544366	-98.74306847	-102.5617058	-94.69005667	-106.7388781	-75.08583244	-79.4472	-45.7229446
+0.95	1.603863722	0.949347361	1.429424161	0.814401513	0.814401513	0.783077069	0.819868292	0.764495553	0.804732	0.884503741
-1	-131.0213399	-127.337296	-118.3925481	-104.5981785	-109.080024	-100.9722053	-114.7791918	-78.61260143	-83.2293	-48.85480216
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.29E+02	1.25E+02	116.1415346	1.03E+02	1.07E+02	98.91827692	112.1404494	7.74E+01	8.20E+01	4.78E+01
-2.05	-1.60E+00	-1.22E+00	-1.438792705	-9.93E-01	-9.93E-01	-0.786141937	-0.810671558	-7.80E-01	-8.21E-01	-8.86E-01
+2.05	1.23E+02	1.21E+02	1.10E+02	98.72743846	102.5443686	9.47E+01	1.07E+02	7.51E+01	79.44028	4.57E+01
-2.1	-4.41E+00	-3.46E+00	-3.944287979	-2.738125149	-2.738125149	-2.1816334	-2.224584044	-2.098263991	-2.2087	-2.495737069
+2.1	1.13E+02	1.14E+02	1.01E+02	92.3695874	95.5112203	8.79E+01	9.82E+01	7.14E+01	75.53744	4.24E+01
-2.15	-6.53E+00	-5.12E+00	-5.841886431	-4.041189636	-4.041189636	-3.223644272	-3.270440109	-3.118720524	-3.28286	-3.698959046
+2.15	106.5852399	109.342434	94.86780364	87.8778027	90.5644902	83.18686509	92.20992765	68.81853928	72.7308	41.16001307
-2.2	-10.08243419	-9.120860555	-9.014414914	-7.150978789	-7.150978789	-5.704102805	-5.763408539	-5.556233993	-5.84867	-5.684852624
+2.2	96.324513	101.7969562	85.58753632	80.79830856	82.79838044	75.77048965	82.94415949	64.60169681	68.21963	39.28660574
-2.25	-12.68413282	-12.53965952	-11.41571953	-9.836293476	-9.836293476	-7.851679434	-8.01242159	-7.53019865	-7.92652	-7.121518751

+2.25	89.28951977	96.56810876	79.2297839	75.87293678	77.41417188	70.64010426	77.58738101	61.30394633	64.69991	37.90885769
-2.3	-16.91977091	-18.19434666	-15.20484916	-14.31619668	-14.31619668	-11.37617554	-11.55432181	-11.00356493	-11.5827	-9.431960633
+2.3	78.49050348	88.46753958	69.47739048	68.21431925	69.06858339	63.92352438	69.6741563	55.99700577	59.02911	35.85286189
-2.35	-19.95499401	-22.29753444	-17.91946243	-17.68716135	-17.68716135	-14.0678821	-14.33472699	-13.43106788	-14.138	-11.06791288
+2.35	70.58101614	82.91899115	62.85535355	62.95037429	63.3492192	59.55497066	64.12250661	52.59794108	55.40314	34.24175433
-2.4	-24.80642286	-28.92177918	-22.25783632	-22.7914419	-22.7914419	-19.47992986	-20.00027886	-17.36337219	-18.2772	-13.65165661
+2.4	63.8049311	74.41355436	55.95921776	56.16160638	56.16160638	52.80181864	56.33117655	48.46733945	51.01825	31.64997044
-2.45	-28.22866907	-33.63282201	-25.31797192	-26.3917683	-26.3917683	-23.06419269	-23.88522125	-20.10744868	-21.1657	-15.4527295
+2.45	59.99046063	68.6443746	51.79945095	51.51428445	51.51428445	48.1846318	51.16640272	45.44918771	47.84125	29.8091585
-2.5	-33.62241754	-41.11021321	-30.14286578	-32.0592346	-32.0592346	-28.7659521	-30.08594437	-24.42704443	-25.7127	-18.25854194
+2.5	54.1938833	59.88104763	45.18208433	45.08936363	45.08936363	41.11779003	43.27429938	40.92104061	43.08233	26.88500925
-2.55	-37.38297126	-46.35041546	-33.50569882	-36.16153472	-36.16153472	-32.76562464	-34.44817664	-27.42938246	-28.873	-20.19056732
+2.55	50.29470715	53.98813577	40.52183574	40.71328423	40.71328423	36.33098348	37.93678267	37.76296752	39.76575	24.83075549
-2.6	-44.65886039	-54.56127315	-40.33885599	-42.28929516	-42.28929516	-39.03123539	-41.29898632	-32.09445287	-33.7836	-23.16719945
+2.6	44.41931032	45.11064052	34.58664986	34.03918616	34.03918616	29.06897491	29.85141232	32.75474288	34.50587	21.59865129
-2.65	-50.44392411	-60.88745311	-45.54718465	-46.90093709	-47.09306554	-43.36730546	-46.09061924	-35.4092819	-37.2729	-25.19603177
+2.65	40.49923773	39.18872531	31.09309187	29.53354246	29.53354246	24.19156344	24.42894681	29.23208801	30.80584	19.3472202
-2.7	-59.63414878	-69.72691206	-53.81918005	-54.40991186	-54.95005313	-50.07824678	-53.67888635	-41.32417758	-43.5579	-28.29223399
+2.7	34.63905233	30.33750003	25.83504847	22.71992983	22.71992983	18.18502961	18.18502961	23.18409654	24.45231	15.83154786
-2.75	-66.07702086	-75.79043169	-59.61717458	-59.58753977	-60.38762394	-54.87864111	-58.81826267	-45.19907283	-47.6644	-30.38370403
+2.75	30.82113356	24.47916005	22.32759332	18.15781057	18.15781057	14.53413816	14.53413816	18.86934573	19.91708	13.39920471
-2.8	-76.17099575	-85.10752644	-68.88930455	-67.57344199	-68.80241852	-62.70919746	-67.89551903	-51.08398158	-53.9045	-33.54823977
+2.8	25.00551586	15.79143387	17.07947501	11.31429988	11.31429988	9.057486287	9.876961987	14.41887462	15.21298	9.497742688
-2.85	-83.16054994	-91.446631	-75.18198431	-73.02151396	-74.56069822	-68.07842432	-74.15854272	-55.08919537	-58.1534	-35.69671242
+2.85	21.2262909	11.97730599	13.59869491	8.906598028	9.185509443	8.702370437	9.876961987	12.19539491	12.88138	7.375930218
-2.9	-94.45860684	-101.1118924	-84.92913296	-81.34182197	-83.37981438	-76.31685713	-83.82346249	-61.19223473	-64.6305	-39.64596197
+2.9	15.04639061	11.7374411	9.325125653	8.906598028	9.185509443	8.702370437	9.876961987	8.681008233	9.194332	4.1977976
-2.95	-101.8890089	-107.6391744	-91.6087305	-87.21421242	-89.65027111	-81.90971598	-90.41973463	-65.30831254	-69.0006	-42.34313978
+2.95	10.66500425	11.64448969	9.241469381	8.906598028	9.185509443	8.702370437	9.876961987	6.650622697	7.024707	3.945828897
-3	-113.290922	-117.5199156	-101.8589698	-96.18922901	-99.18573502	-90.41116601	-100.5566087	-71.52578095	-75.6044	-46.46460155
+3	10.22817657	11.60479724	9.205746178	8.906598028	9.185509443	8.702370437	9.876961987	6.650622697	7.024707	3.945828897

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-5.850318792	-5.850079011	-4.653158689	-3.899126215	-4.608137745	-6.82835594	-7.485957495	-8.224275074	-8.415456214
End Shear	66.06080278	61.41000297	52.87067873	42.94175282	54.64030051	73.43590175	77.26087414	76.65353127	76.61712054
-0.05	-5.850318792	-5.850079011	-5.497553733	-4.635331596	-4.608137745	-6.82835594	-7.485957495	-8.224275074	-8.415456214
+0.05	59.41907889	56.50268529	46.83922727	38.31566746	49.50167708	66.00671754	69.18161332	69.10966221	69.07163712
-0.1	-5.850318792	-8.371815694	-7.202278117	-5.949405655	-5.002313564	-6.82835594	-7.485957495	-8.224275074	-8.415456214
+0.1	53.37578055	51.6738732	41.76888396	34.11502921	44.0942937	59.24740607	61.82678685	61.78708495	62.02750906
-0.15	-5.850318792	-10.28575662	-8.422113944	-6.778333222	-7.01943335	-6.82835594	-7.485957495	-8.224275074	-8.415456214
+0.15	49.4380603	48.46578827	38.50409603	31.4075932	40.83335868	54.83033492	57.45431831	57.7607722	57.64962355
-0.2	-9.589124063	-13.49087556	-11.42825147	-8.978522377	-10.0463918	-9.260604432	-9.266807006	-9.191226161	-9.123108067
+0.2	43.6974683	43.44755235	34.23032381	27.93779747	36.06212235	48.37005147	51.00669517	50.9646265	51.19303761
-0.25	-12.80378264	-16.71672722	-13.80800889	-10.85004353	-12.05771619	-12.36534799	-12.37280003	-12.29822886	-12.23102023
+0.25	40.3611859	39.9146602	31.73226361	25.81848708	32.97504362	44.19184017	46.79942806	46.75670084	46.97926003
-0.3	-17.62028627	-22.46079168	-17.29748548	-13.62293846	-15.05186944	-17.01717176	-17.0264619	-16.953765	-16.88824915
+0.3	35.73030488	35.28624205	28.04852626	22.61406356	28.50842281	38.6039657	40.65455209	40.61119494	40.82699724
-0.35	-20.81561376	-26.15785627	-19.56898115	-15.44739482	-17.02525014	-20.42240675	-20.43533705	-20.53615439	-20.57187551
+0.35	32.70633074	32.26566209	25.64457144	20.62745031	25.65365137	35.10542897	36.68573827	36.64222072	36.60299594
-0.4	-25.56447652	-31.05937482	-23.44817209	-18.52348964	-19.93837908	-26.10084861	-26.1159377	-26.71216265	-26.74890973
+0.4	28.28589319	27.85304924	22.13294661	17.74275926	21.57933014	30.01706612	30.95347583	30.91011671	30.87104383
-0.45	-28.79123841	-34.1146683	-26.10570086	-20.67671373	-21.84166768	-29.8512083	-29.86765848	-30.73248847	-30.76978313
+0.45	25.42797278	25.00223492	19.86437584	15.89009897	19.41386099	26.74545771	27.29635651	27.25340704	27.21470068
-0.5	-34.08553052	-38.4729658	-29.86714255	-23.7609502	-25.24883601	-35.39925974	-35.719272	-36.59958235	-36.86438374
+0.5	21.29526681	20.88311708	16.5867934	13.22863189	16.66953375	22.04358125	22.0891349	22.05101988	22.01666188
-0.55	-37.46568218	-41.35402644	-32.22900789	-25.722712	-27.58841118	-39.03196422	-40.08004227	-40.39159356	-41.38342756
+0.55	18.61110833	18.2538637	14.49488604	11.53951736	14.92736729	19.06035771	19.10278711	19.06528285	19.03148354
-0.6	-42.29991283	-45.34128731	-35.56023298	-28.52822567	-30.8543936	-44.35744138	-46.50520491	-46.41707195	-47.9729382
+0.6	14.84624792	14.5059274	11.51326697	9.145239993	12.34391298	14.83714466	14.31416853	14.83866406	14.80608942
-0.65	-45.35842788	-47.888513	-37.79179043	-30.41092386	-33.79076366	-47.81103632	-50.69422447	-50.60929314	-52.22672012
+0.65	12.23131625	12.15001928	9.639313406	7.648700627	10.6895469	12.0851009	11.92361764	12.09686847	12.17179644
-0.7	-49.68780111	-51.46636244	-40.92994591	-33.11381662	-38.64437154	-52.82175475	-56.80682457	-56.72701655	-58.45977278
+0.7	8.930573094	9.111412441	7.015581335	5.564736281	8.374026793	8.630784353	8.810418541	8.810418541	8.810418541
-0.75	-52.44669951	-53.68782111	-42.87252184	-34.81620818	-41.79613315	-56.43437766	-60.75083498	-60.67465338	-62.667712
+0.75	6.897708865	7.016697679	5.400860469	4.289231141	6.573139625	6.667098237	6.649692117	6.683069431	6.713148933
-0.8	-56.77571532	-56.77129446	-45.70679098	-37.31916694	-46.37440362	-62.67515966	-66.44099349	-66.37052039	-68.68346696
+0.8	4.120463613	4.179857113	3.489915768	2.661287238	4.754700357	3.984256425	3.967911129	3.996462266	4.022193499
-0.85	-59.06146185	-58.65934403	-47.49492433	-38.92940218	-49.313376	-66.68486969	-70.06675767	-70.00024881	-72.78045349
+0.85	2.830851766	2.886352242	2.586316115	1.95358497	3.518889885	2.736784819	2.727430436	2.742811687	2.790553764
-0.9	-64.01175747	-61.23696618	-50.90541756	-42.16106923	-53.52864228	-72.44160346	-75.60229108	-75.88099743	-78.85585281
+0.9	1.484981609	1.510032722	1.358506727	1.059103552	1.839861665	1.43661555	1.427953334	1.440985595	1.452730662
-0.95	-67.36787219	-62.78395568	-53.9628193	-44.73148172	-56.19637697	-76.08910633	-79.92633524	-80.40024535	-82.25671544
+0.95	0.686930464	0.708164302	0.630527654	0.493229246	0.844470497	0.665615508	0.657547344	0.668999994	0.679322196
-1	-72.12131867	-65.02440987	-58.32918912	-48.43282061	-59.96095919	-81.24326923	-86.08868177	-86.7887752	-88.47633834
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	7.06E+01	6.43E+01	5.69E+01	4.72E+01	5.87E+01	7.96E+01	84.06607257	84.69961047	8.65E+01
-2.05	-6.90E-01	-7.10E-01	-6.32E-01	-4.94E-01	-8.48E-01	-6.68E-01	-0.66001118	-0.671334866	-6.82E-01
+2.05	6.74E+01	6.28E+01	5.40E+01	4.47E+01	5.62E+01	7.61E+01	79.91165214	80.38575047	8.22E+01
-2.1	-1.917386816	-1.943655065	-1.752014225	-1.363821645	-2.379564567	-1.85438839	-1.845304619	-1.858971915	-1.871290738
+2.1	6.23E+01	6.04E+01	4.93E+01	4.08E+01	5.21E+01	7.05E+01	73.53292779	73.71173448	7.70E+01
-2.15	-2.834234544	-2.888920064	-2.588361624	-1.954434425	-3.523441348	-2.740097631	-2.794789393	-2.794789393	-2.794789393
+2.15	59.05337986	58.6543038	47.49075612	38.92765369	49.30214732	66.67042922	70.05443745	69.98857987	72.97089043
-2.2	-5.014994644	-5.077102218	-4.082975622	-3.111423459	-5.410689018	-4.848487385	-4.831396593	-4.861252401	-4.888162437
+2.2	55.56461344	55.77123998	44.75804129	36.47782372	44.85800051	60.60834954	64.56331728	64.49157706	66.75306157
-2.25	-6.904682377	-6.975341907	-5.404547667	-4.290777058	-6.775640445	-6.673927519	-6.656154578	-6.689190239	-6.718967647
+2.25	52.68012451	53.68186248	42.86797595	34.81430925	41.78403216	56.41885185	60.73737693	60.66190723	62.65490966

-2.3	-10.00604983	-10.19277593	-7.868187745	-6.238896382	-9.134134828	-9.66974921	-9.855243215	-9.855243215	-9.855243215
+2.3	48.26965543	50.29984434	39.90882736	32.23062819	37.02962703	51.16362309	54.78000321	54.69918682	56.34592072
-2.35	-12.23951091	-12.15624515	-9.643653288	-7.650506942	-10.69566282	-11.89846354	-11.93229908	-11.9811286	-12.17961755
+2.35	45.34764608	47.88165775	37.7865187	30.4087315	33.77802472	47.79854747	50.67987834	50.59568989	52.21367934
-2.4	-16.08291844	-15.73445306	-12.48989208	-9.925928048	-13.18769895	-16.21971354	-15.69752251	-16.22127512	-16.18779597
+2.4	40.70926294	44.0121635	34.47226659	27.60882936	29.79001557	42.5874632	44.36614307	44.2772651	45.78956855
-2.45	-18.62033946	-18.26086851	-14.49978014	-11.5415507	-14.90554512	-19.07089523	-19.00055635	-19.07472219	-19.040457
+2.45	37.45372744	41.27281837	32.22345128	25.72038422	27.57957562	39.01878593	40.06505266	40.37936033	41.36951827
-2.5	-22.66066153	-22.24124993	-17.66667736	-14.10148822	-17.58018959	-23.59306431	-23.79615977	-23.75325683	-23.71459459
+2.5	32.33742026	37.04212099	28.63685754	22.74948615	24.02112601	33.54839045	33.5668657	34.65413923	34.69247832
-2.55	-25.43804999	-25.00988155	-19.86970556	-15.89231897	-19.42104222	-26.75712214	-27.30860829	-27.26501758	-27.2257382
+2.55	28.77820661	34.1064098	26.09943906	20.67410534	21.8343405	29.83756649	29.85474939	30.71946997	30.75740712
-2.6	-29.75308381	-29.31474635	-23.2953678	-18.69314232	-22.91849243	-31.70251197	-32.84579031	-32.80164421	-32.76186213
+2.6	23.97738843	29.47778846	22.06667147	17.4142224	18.96693793	24.20004436	24.21517048	24.65857652	24.69567941
-2.65	-32.71705334	-32.80017692	-25.65025512	-20.6298286	-25.6644248	-35.11799204	-36.69915402	-36.65492719	-36.61507526
+2.65	20.80413896	26.2410383	19.56357737	15.44513431	17.01763121	20.40852973	20.42220904	20.52250672	20.55889337
-2.7	-37.2733425	-36.82546414	-29.27274254	-23.62705133	-29.9852616	-40.39441954	-42.6927326	-42.6488174	-42.86742823
+2.7	16.00533081	20.71870099	16.13962015	12.70104666	14.04998983	15.45727517	15.46658316	15.39376395	15.32814324
-2.75	-40.37238068	-39.92317952	-31.73818676	-25.76751798	-32.98678698	-44.2068079	-46.81374591	-46.7702618	-46.99215986
+2.75	12.79221589	16.78486234	13.80235269	10.84768051	12.04993212	12.35401744	12.3620721	12.2880647	12.22136019
-2.8	-45.60053557	-45.04021119	-35.49557499	-28.99902879	-37.64716473	-50.51489582	-53.15387639	-53.11141998	-53.34183907
+2.8	7.972263005	12.51932484	10.21688355	8.033731231	9.030273884	7.698863344	7.70504969	8.224322263	8.415301528
-2.85	-49.45202931	-48.4745034	-38.51179143	-31.41081235	-40.84584496	-54.84625983	-57.46927273	-57.42772727	-57.66309604
+2.85	5.850206058	10.51009282	8.429398998	6.827258693	7.011610646	6.828394546	7.485994083	8.224322263	8.415301528
-2.9	-55.38784376	-53.2910668	-43.44120048	-35.50097366	-45.75810376	-61.50060777	-64.24821547	-64.19575344	-64.24779372
+2.9	5.850206058	7.368738787	6.649046858	5.520046928	4.608054893	6.828394546	7.485994083	8.224322263	8.415301528
-2.95	-59.43371601	-56.51148256	-46.82739669	-38.31906031	-49.51467577	-66.02330535	-69.19879386	-69.12587098	-69.08705549
+2.95	5.850206058	5.850121687	5.494697443	4.634142009	4.608054893	6.828394546	7.485994083	8.224322263	8.415301528
-3	-65.60621089	-61.33542533	-52.31675445	-42.66346778	-54.59742038	-72.90539221	-76.7777433	-76.67011081	-76.63286283
+3	5.850206058	5.850121687	4.653188346	3.899138659	4.608054893	6.828394546	7.485994083	8.224322263	8.415301528

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.420480816	-7.884995802	-7.17227	-8.46696	-8.60517
End Shear	84.85023195	83.1140141	76.24543	83.97071	87.20014
-0.05	-9.385077883	-9.393417225	-8.49627	-8.90661	-10.1353
+0.05	75.61506102	73.99548692	69.67274	76.57719	79.0127
-0.1	-12.17724408	-12.27620015	-11.5542	-12.2915	-12.4949
+0.1	67.86543295	65.65911451	63.15126	69.31726	70.9507
-0.15	-13.86053727	-14.05142423	-13.5067	-14.6697	-13.9273
+0.15	63.09208882	60.25158994	58.85141	64.25307	65.67038
-0.2	-16.37476691	-16.5117548	-17.3736	-17.9396	-18.3894
+0.2	56.04426835	52.5881397	52.50238	56.62543	57.92841
-0.25	-19.59606227	-18.89418702	-21.568	-22.5486	-21.6181
+0.25	51.43901126	48.29615759	48.35379	52.73224	52.90767
-0.3	-24.99644633	-23.80633863	-27.4117	-29.1177	-26.2709
+0.3	44.70278172	42.01447129	42.2861	45.18332	45.84126
-0.35	-28.69421156	-27.16701861	-30.8529	-33.2713	-30.5834
+0.35	40.34490112	37.9481977	38.36136	40.80946	41.44936
-0.4	-35.94924692	-33.90391356	-35.8012	-39.1695	-37.9845
+0.4	34.03920439	32.06075947	32.4403	34.99038	35.08615
-0.45	-41.09050496	-38.20968503	-39.0765	-42.8837	-42.6718
+0.45	30.00798729	28.29444434	29.15803	31.1019	30.92503
-0.5	-48.65816702	-45.43429049	-43.7692	-48.8642	-49.4058
+0.5	24.25175552	22.91263432	24.41197	26.03943	25.08404
-0.55	-53.42600211	-49.97719537	-46.7488	-53.2164	-53.6968
+0.55	20.62649169	19.52055606	21.28067	22.47791	21.41228
-0.6	-60.17238877	-56.36293352	-51.0735	-59.5955	-59.8357
+0.6	15.53864896	15.17862708	16.961	17.87995	16.2488
-0.65	-64.40590599	-60.5571627	-54.9518	-63.6926	-63.7299
+0.65	12.39862774	12.54110186	14.28664	15.23909	13.05441
-0.7	-70.61413062	-66.50428821	-60.4903	-69.5222	-69.2737
+0.7	9.012870584	8.873630013	10.43402	10.94594	9.264638
-0.75	-74.55331045	-70.18244294	-63.6934	-73.1941	-73.0951
+0.75	6.944582856	6.635468145	8.086295	8.454243	7.178039
-0.8	-80.0488092	-76.53675981	-68.2716	-78.3739	-79.5209
+0.8	4.170102131	4.465677939	4.800977	5.050421	4.325286
-0.85	-83.43697133	-81.96501578	-71.4297	-81.6047	-83.6705
+0.85	2.947851911	3.306365095	3.304192	3.465812	2.932622
-0.9	-88.26712665	-89.84435406	-75.8922	-86.1111	-89.5618
+0.9	1.559655122	1.731713421	1.751487	1.816923	1.552725
-0.95	-91.32553589	-94.80712774	-78.6702	-88.8851	-93.2571
+0.95	0.733205016	0.798608519	0.81557	0.839394	0.734034
-1	-96.81610598	-102.852797	-82.779	-92.9571	-98.6651
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	9.46E+01	1.00E+02	8.14E+01	9.16E+01	9.69E+01
-2.05	-7.35E-01	-7.99E-01	-8.18E-01	-8.42E-01	-7.36E-01
+2.05	9.13E+01	9.48E+01	7.87E+01	88.87788	9.32E+01
-2.1	-2.002475079	-2.2342667	-2.24951	-2.34564	-1.99521
+2.1	8.66E+01	8.73E+01	7.44E+01	84.6468	8.76E+01
-2.15	-2.946680355	-3.306792166	-3.30705	-3.46886	-2.93506
+2.15	83.42896399	81.96287839	71.42139	81.59633	83.66003
-2.2	-5.028275641	-5.076840523	-5.82984	-6.14464	-5.24247
+2.2	78.26325158	73.75763665	66.76804	76.68232	77.49436
-2.25	-6.949415217	-6.636302094	-8.09219	-8.46052	-7.18307
+2.25	74.54395527	70.18104119	63.68505	73.18448	73.25915

-2.3	**-10.10503904**	**-10.05691525**	**-11.6731**	**-12.2617**	**-10.3658**
+2.3	**68.55174979**	**64.57804496**	**58.8353**	**67.61129**	**67.4561**
-2.35	**-12.40603619**	**-12.54208159**	**-14.2503**	**-14.9992**	**-12.9315**
+2.35	**64.395817**	**60.55555255**	**55.14761**	**63.6819**	**63.72016**
-2.4	**-17.19396009**	**-16.55256477**	**-18.3771**	**-19.3854**	**-17.9305**
+2.4	**57.96608152**	**54.28857898**	**49.60209**	**57.47329**	**57.81868**
-2.45	**-20.63511427**	**-19.5218245**	**-21.2885**	**-22.4812**	**-21.4213**
+2.45	**53.41463671**	**49.97545708**	**46.84628**	**53.20498**	**53.68599**
-2.5	**-26.13891959**	**-24.67029334**	**-25.977**	**-27.7088**	**-26.9937**
+2.5	**46.17942647**	**43.07232847**	**42.22641**	**46.61851**	**47.18939**
-2.55	**-30.01763662**	**-28.29589208**	**-29.1665**	**-31.111**	**-30.9142**
+2.55	**41.07779555**	**38.20801209**	**39.06794**	**42.87404**	**42.65996**
-2.6	**-36.11836027**	**-33.99452183**	**-34.1981**	**-36.5662**	**-37.1858**
+2.6	**33.55430822**	**31.69398516**	**34.17114**	**37.237**	**35.63084**
-2.65	**-40.35541065**	**-37.94977046**	**-38.3715**	**-40.8209**	**-41.4603**
+2.65	**28.68217547**	**27.16521753**	**30.84383**	**33.26056**	**30.74581**
-2.7	**-46.93408878**	**-44.08716807**	**-44.2966**	**-47.423**	**-48.0887**
+2.7	**23.17449885**	**22.18613815**	**25.63819**	**26.96196**	**24.74415**
-2.75	**-51.45015322**	**-48.29781258**	**-48.3646**	**-51.9526**	**-52.7894**
+2.75	**19.58838077**	**18.89288802**	**21.71411**	**22.53658**	**21.62994**
-2.8	**-58.38791656**	**-54.98529843**	**-54.6145**	**-58.9824**	**-60.4958**
+2.8	**15.4076004**	**15.71684502**	**15.44993**	**16.88004**	**16.76179**
-2.85	**-63.1036689**	**-60.25365943**	**-58.8627**	**-64.2274**	**-65.6836**
+2.85	**13.85663684**	**14.05074152**	**13.50221**	**14.66363**	**14.29923**
-2.9	**-70.28155196**	**-68.41208959**	**-65.3285**	**-71.7418**	**-73.6346**
+2.9	**11.27880178**	**11.34472023**	**10.63993**	**11.03242**	**11.72618**
-2.95	**-75.46093911**	**-73.99768582**	**-69.6843**	**-76.59**	**-79.0265**
+2.95	**9.380316284**	**9.3926185**	**8.491047**	**8.901949**	**10.2187**
-3	**-84.45572593**	**-83.11651841**	**-76.257**	**-83.8997**	**-87.2141**
+3	**8.420469961**	**7.884994256**	**7.172386**	**8.467087**	**8.605267**

2-Span: Moment (Max and Min) Raw Data Results - 25' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.28E-14	*-2.42E-14*	*-4.56E-14*	-2.11E-14	-2.11E-14	-2.17E-14	-3.01E-14	-1.76E-14	-1.87E-14	-1.91E-14
End Shear	5.06E-14	*4.20E-14*	*3.95E-14*	3.76E-14	3.79E-14	3.63E-14	4.26E-14	3.25E-14	3.43E-14	2.12E-14
-0.05	-12.78542793	*-14.50584344*	*-11.50727302*	-11.1334093	-11.4820626	-10.8778663	-12.3460772	-8.31329608	-8.78108069	-4.93225518
+0.05	127.8593892	*134.7125843*	*115.1759555*	109.5385377	112.5818626	102.3615121	112.9943936	80.976841	85.55151926	52.92495203
-0.1	-25.57085587	*-29.01168688*	*-23.01454605*	-22.2668185	-22.9641251	-21.7557326	-24.6921545	-16.6265922	-17.5621614	-9.864510359
+0.1	238.0395396	*253.4680193*	*214.453216*	204.6373716	209.8364188	191.5332532	209.4991736	151.6741037	160.1894652	99.10709369
-0.15	-38.3562838	*-43.51753032*	*-34.52181907*	-33.4002278	-34.4461877	-32.6335988	-37.0382317	-24.9398882	-26.3432421	-14.79676554
+0.15	318.5378691	*349.7207463*	*286.8684794*	275.4409158	281.5101381	257.57166	282.1010791	206.5464009	218.0508595	134.4783791
-0.2	-51.14171173	*-58.02337376*	*-46.0290921*	-44.533637	-45.9282502	-43.5114651	-49.3843089	-33.2531843	-35.1243228	-19.72902072
+0.2	390.0607638	*433.6488584*	*352.9158759*	337.7644185	343.9036193	313.6861869	340.6990191	253.875244	267.9162985	168.4605822
-0.25	-63.92713966	*-72.5292172*	*-57.53636512*	-55.6670463	-57.4103128	-54.3893314	-61.7303862	-41.5664804	-43.9054034	-24.6612759
+0.25	430.1974296	*491.4414478*	*387.1669534*	378.8551835	384.7110468	350.7775597	382.9534687	284.8412974	300.4409806	191.094571
-0.3	-76.7125676	*-87.03506063*	*-69.04363815*	-66.8004555	-68.8923753	-65.2671977	-74.0764634	-49.8797765	-52.6864841	-29.59353108
+0.3	465.5961894	*540.5290102*	*420.4055327*	409.3383797	413.8562858	380.1483282	429.2071665	309.3119185	326.0572446	213.2390379
-0.35	-89.49799553	*-101.5409041*	*-80.55091117*	-77.9338648	-80.3744379	-76.145064	-86.4225407	-58.1930726	-61.4675648	-34.52578626
+0.35	472.5400521	*564.6078249*	*425.6132444*	422.0892776	425.6913956	407.0433081	453.1928586	319.4814466	336.6160936	222.0877602
-0.4	-102.2834235	*-116.0467475*	*-92.0581842*	-89.067274	-91.8565004	-87.0229303	-98.7686179	-66.5063687	-70.2486455	-39.45804144
+0.4	473.7991918	*578.392283*	*428.1842022*	433.461637	442.8310184	422.9611018	466.3526778	324.8224095	342.8911834	232.9866937
-0.45	-115.0688514	*-130.552591*	*-103.5654572*	-100.200683	-103.338563	-97.9007965	-111.114695	-74.8196647	-79.0297262	-44.39029662
+0.45	453.5685172	*572.6961818*	*408.2115617*	434.8399433	440.9060107	421.1293955	459.6194237	327.2810429	345.1306503	229.1234228
-0.5	-127.8542793	*-145.0584344*	*-115.0727302*	-111.334093	-114.820626	-108.778663	-123.460772	-83.1329608	-87.8108069	-49.3225518
+0.5	454.5005064	*569.4895347*	*408.8556071*	427.3810661	431.1498645	417.4126166	453.6226097	322.526385	339.88321	229.7239441
-0.55	-140.6397073	*-159.5642778*	*-126.5800033*	-122.467502	-126.302688	-119.656529	-135.80685	-91.4462569	-96.5918876	-54.25480698
+0.55	427.9727573	*548.1200331*	*384.8192453*	402.1017979	410.0159557	395.3343797	429.3194733	304.9197734	320.9681826	215.9476496
-0.6	-153.4251352	*-174.0701213*	*-138.0872763*	-133.600911	-137.784751	-130.534395	-148.152927	-99.759553	-105.372968	-59.18706216
+0.6	427.2288386	*517.4898448*	*385.1124651*	380.2153333	385.9704195	369.2660051	407.6377444	288.9636533	304.1722667	206.3252189
-0.65	-166.2105631	*-188.5759647*	*-149.5945493*	-144.73432	-149.266813	-141.412262	-160.499004	-108.072849	-114.154049	-64.11931734
+0.65	401.2213322	*465.7283305*	*360.9974458*	351.3942208	354.9893509	328.9223812	369.5500215	266.1105929	280.4707835	184.2412308
-0.7	-178.9959911	*-203.0818081*	*-161.1018223*	-155.86773	-160.748876	-152.290128	-172.845081	-116.386145	-122.93513	-69.05157252
+0.7	367.047884	*410.1128691*	*331.3414617*	315.2022472	318.2772662	285.2326808	321.032962	237.7039539	250.6435958	166.5188677
-0.75	-191.781419	*-217.5876516*	*-172.6090954*	-167.001139	-172.230938	-163.167994	-185.191159	-124.699441	-131.71621	-73.9838277
+0.75	303.833739	*333.8639918*	*273.5307167*	258.7999248	262.7491644	234.4193309	255.4306035	195.5388015	206.2611766	138.1254764
-0.8	-204.5668469	*-232.093495*	*-184.1163684*	-178.134548	-183.713001	-174.045861	-197.537236	-133.012737	-140.497291	-78.91608288
+0.8	235.860376	*257.953319*	*213.6089021*	200.5052462	202.6859256	177.637951	187.7584542	151.9076919	160.1334934	114.8875455
-0.85	-218.0482305	*-247.2952941*	*-196.2500015*	-189.267957	-195.195063	-184.923727	-209.883313	-146.916869	-155.22674	-83.84833805
+0.85	150.9930555	*164.1541483*	*135.670222*	127.1471077	127.1471077	105.3619289	108.1311105	96.62014496	101.7054157	82.5754827
-0.9	-248.4827582	*-269.6387728*	*-221.2225862*	-200.401367	-206.677126	-195.801593	-222.22939	-191.216586	-201.623482	-102.8149816
+0.9	101.5571085	*82.33433217*	*91.40139758*	65.02453063	65.02453063	51.76918576	51.98620235	49.52030966	52.12664175	56.8675935
-0.95	-326.6463051	*-297.4819639*	*-271.8623665*	-211.534776	-218.159189	-217.376168	-247.237031	-240.541419	-253.38037	-126.0766317
+0.95	40.53360317	*31.82312968*	*36.43679893*	25.51404497	25.51404497	20.39329991	20.47860196	19.42302497	20.44528944	23.42066017
-1	-416.3716	*-329.5860635*	*-361.4890047*	-250.578888	-267.268376	-252.539324	-299.786677	-296.086909	-311.670431	-150.0182662
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-416.3716	*-329.5860635*	*-361.4890047*	-250.578888	-267.268376	-252.539324	-299.786677	-296.086909	-311.670431	-150.0182662
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-326.5683368	*-297.4848834*	*-271.8588116*	-211.531705	-218.155855	-217.372581	-247.235513	-240.538106	-253.377377	-126.0765872
+2.05	40.53360773	*31.79120907*	*36.45852489*	25.52333732	25.52333732	20.40041563	20.4857143	19.4280858	20.45061663	23.42328301
-2.1	-248.4405793	*-269.6415399*	*-221.2228987*	-200.398458	-206.673968	-195.803335	-222.23165	-191.215079	-201.62238	-102.8151479
+2.1	101.5571644	*82.42489343*	*90.90943692*	64.91289148	64.91289148	51.68378506	52.03405103	49.53066708	52.13754429	56.84713815
-2.15	-218.0447053	*-247.2979071*	*-196.2484641*	-189.26521	-195.192082	-184.925372	-209.885448	-146.913665	-155.223834	-83.84886712
+2.15	150.9931084	*164.2479652*	*135.7199473*	127.1700292	127.1700292	105.4004972	108.1649738	96.60982863	101.6945564	82.58150466
-2.2	-204.5635288	*-232.0959548*	*-184.1149212*	-178.131963	-183.710195	-174.047409	-197.539245	-133.012456	-140.49414	-78.91658099
+2.2	238.8402347	*258.0559741*	*214.7839537*	200.3953357	202.5744741	177.5418429	187.6547579	151.8484091	160.0709742	114.8691098

-2.25	-191.7783081	-217.5899583	-172.6077385	-166.998715	-172.228308	-163.169446	-185.193043	-124.699178	-131.713256	-73.98429487
+2.25	303.8693061	333.836787	273.5462199	258.7700881	262.7156457	234.445209	255.4691296	195.5704364	206.2941984	138.1325884
-2.3	-178.9930874	-203.0839617	-161.1005558	-155.865468	-160.746421	-152.291483	-172.84684	-116.385899	-122.932372	-69.05200875
+2.3	369.7744416	410.5343734	331.5406486	315.0718192	318.3190313	286.2558691	320.995284	237.7319472	250.6726168	166.500493
-2.35	-166.2078667	-188.5779652	-149.5933731	-144.73222	-149.264534	-141.41352	-160.500638	-108.072621	-114.151489	-64.11972263
+2.35	401.8349148	465.6831415	360.9544347	351.4257538	355.012668	328.8975443	369.5656447	266.1305903	280.4912136	184.2475355
-2.4	-153.422646	-174.0719686	-138.0861903	-133.598973	-137.782648	-130.535557	-148.154435	-99.7593425	-105.370605	-59.18743651
+2.4	429.2348854	517.5596253	385.2448605	379.6563275	385.9509095	369.3514545	407.703946	288.8572973	304.0671639	206.3049237
-2.45	-140.6374253	-159.5659721	-126.5790076	-122.465725	-126.300761	-119.657594	-135.808233	-91.4460642	-96.5897212	-54.25515039
+2.45	427.9727031	548.1700942	385.1754316	402.0801868	409.9818323	395.3411219	429.6894627	304.9386067	320.9880071	215.9514607
-2.5	-127.8522046	-145.0599755	-115.0718249	-111.332478	-114.818874	-108.77963	-123.462031	-83.1327858	-87.8088375	-49.32286427
+2.5	453.6058911	569.5204995	408.6607403	427.4342021	431.2135901	417.4748395	453.704491	322.5516685	339.9106229	229.7004043
-2.55	-115.0669839	-130.553979	-103.5646422	-100.19923	-103.336987	-97.9016674	-111.115828	-74.8195074	-79.0279538	-44.39057814
+2.55	453.5674245	572.6858243	408.2088937	434.8758186	440.9524134	421.1461284	459.616488	327.2969668	345.1482069	229.1234458
-2.6	-102.2817631	-116.0479825	-92.05745945	-89.0659825	-91.8551003	-87.0237044	-98.7696255	-66.5062291	-70.2470701	-39.45829202
+2.6	475.3562747	578.3592873	428.471595	433.4805255	442.8605013	423.0098808	466.430972	324.82905	342.8989719	232.9587599
-2.65	-89.49654244	-101.5419859	-80.55027673	-77.932735	-80.3732135	-76.1457414	-86.4234231	-58.1929507	-61.4661864	-34.5260059
+2.65	472.6677459	564.552045	425.668883	422.0741719	425.6985861	407.0725314	453.1823584	319.4705339	336.6051949	222.0829026
-2.7	-76.71132172	-87.03598936	-69.04309401	-66.7994874	-68.8913267	-65.2677783	-74.0772206	-49.8796723	-52.6853027	-29.59371978
+2.7	467.3851317	540.446353	420.6453147	409.3033146	413.8285609	380.1578956	429.2422845	309.2902936	326.0350354	213.2056446
-2.75	-63.92610101	-72.52999282	-57.53591129	-55.6662399	-57.4094399	-54.3898153	-61.7310181	-41.5663939	-43.904419	-24.66143366
+2.75	430.2513772	491.4628446	387.163459	378.8898267	384.7523119	350.8230435	382.962466	284.8578763	300.4589312	191.0841107
-2.8	-51.1408803	-58.02399627	-46.02872856	-44.5329924	-45.9275531	-43.5118522	-49.3848156	-33.2531156	-35.1235353	-19.72914754
+2.8	391.8001247	433.5090301	353.0886623	337.8672034	344.0120863	313.6440752	340.6730542	253.8302177	267.869345	168.4214809
-2.85	-38.35565959	-43.51799973	-34.52154584	-33.3997448	-34.4456663	-32.6338892	-37.0386131	-24.9398372	-26.3426516	-14.79686141
+2.85	319.7577006	349.6826008	287.0012124	275.4285764	281.5024642	257.5764389	282.1186391	206.5380601	218.0424322	134.4618277
-2.9	-25.57043888	-29.01200318	-23.01436312	-22.2664973	-22.9637795	-21.7559261	-24.6924106	-16.6265588	-17.5617679	-9.864575293
+2.9	238.614856	253.5310352	214.544338	204.5083433	209.710749	191.4443966	209.5586277	151.7020223	160.2191009	99.11488186
-2.95	-12.78521817	-14.50600663	-11.5071804	-11.1332498	-11.4818927	-10.8779631	-12.3462081	-8.31328046	-8.78088422	-4.932289172
+2.95	128.1516221	134.611815	115.2222403	109.4742013	112.5192738	102.8638655	113.0246491	80.9908984	85.56644561	52.92893983
-3	-7.34E-14	-5.09E-14	-6.59E-14	-3.99E-14	-3.99E-14	-3.20E-14	-4.25E-14	-3.59E-14	-3.78E-14	-3.77E-14
+3	5.69E-14	5.52E-14	4.87E-14	4.28E-14	4.28E-14	4.56E-14	5.05E-14	3.66E-14	3.85E-14	2.49E-14

2-Span: Moment (Max and Min) Raw Data Results - 25' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.49E-14	-1.50E-14	-1.59E-14	-1.20E-14	-1.88E-14	-1.86E-14	-1.45E-14	-1.45E-14	-1.45E-14
End Shear	2.75E-14	3.01E-14	2.20E-14	1.87E-14	2.20E-14	2.94E-14	3.04E-14	3.19E-14	3.19E-14
-0.05	-7.31289849	-7.312598763	-5.816448362	-4.873907769	-5.760172181	-8.535444925	-9.35744687	-10.2803438	-10.2803438
+0.05	74.53138913	70.62835662	59.38471937	48.09923744	61.87709635	82.93684691	86.6537347	86.69788449	86.69788449
-0.1	-14.62579698	-14.62519753	-11.63289672	-9.747815537	-11.52034436	-17.07088985	-18.7148937	-20.5606877	-20.5606877
+0.1	138.6867606	133.2057331	110.1304489	89.3831997	115.274777	154.3111438	160.6792641	160.8308958	160.8308958
-0.15	-21.93869547	-21.93779629	-17.44934508	-14.62172331	-17.28051654	-25.60633478	-28.0723406	-30.8410315	-30.8410315
+0.15	186.2705348	181.746706	147.0415135	120.2045487	153.224984	207.1767606	216.6388097	216.638038	216.638038
-0.2	-29.25159396	-29.25039505	-23.26579345	-19.49563107	-23.04068872	-34.1417797	-37.4297875	-41.1213754	-41.1213754
+0.2	227.9345998	226.335226	179.7026138	147.4688448	189.2112054	252.4966461	265.6957171	278.1266552	278.1266552
-0.25	-36.56449245	-36.56299382	-29.08224181	-24.36953884	-28.8008609	-42.67722463	-46.7872343	-51.4017192	-51.4017192
+0.25	254.3995948	254.494675	202.1007897	166.3137417	207.5284218	282.1903177	298.3112397	320.8408729	320.8408729
-0.3	-43.87739094	-43.87559258	-34.89869017	-29.24344661	-34.56103308	-51.21266955	-56.1446812	-61.6820631	-61.6820631
+0.3	279.5685129	280.2808092	222.7052548	183.2521872	224.8040657	303.9069143	321.1407676	355.0327801	355.0327801
-0.35	-51.19028943	-51.18819134	-40.71513853	-34.11735438	-40.32120526	-59.74811448	-65.5021281	-71.9624069	-71.9624069
+0.35	291.2920554	291.6420391	231.8262746	191.0840581	227.828923	322.2401301	344.1027362	371.3873386	371.3873386
-0.4	-58.50318792	-58.50079011	-46.53158689	-38.99126215	-46.08137745	-68.2835594	-74.859575	-82.2427507	-82.2427507
+0.4	297.7100797	298.0128255	236.9632581	195.5012277	229.0816462	335.1185788	359.6443007	381.3075142	381.3075142
-0.45	-65.81608641	-65.81338887	-52.34803525	-43.86516992	-51.84154963	-76.81900433	-84.2170218	-92.5230946	-92.5230946
+0.45	293.9509611	294.048021	233.8736155	193.2654315	219.1622741	333.4279888	358.7692726	384.032746	384.032746
-0.5	-73.1289849	-73.12598763	-58.16448362	-48.73907769	-57.60172181	-85.35444925	-93.5744687	-102.803438	-102.803438
+0.5	292.9893119	292.5917714	232.6246643	192.3593133	219.292421	331.2642286	353.5341076	381.5087363	381.5087363
-0.55	-80.44188339	-80.4385864	-63.98093198	-53.61298546	-63.36189399	-93.88989418	-102.931916	-113.083782	-113.083782
+0.55	282.3888832	282.3655735	224.3893926	185.36877	206.7156826	314.4706877	336.0757443	361.5241588	361.5241588
-0.6	-87.75478188	-87.75118516	-69.79738034	-58.48689322	-69.12206617	-102.4253391	-112.289362	-123.364126	-123.364126
+0.6	267.3675022	266.842852	211.7423431	175.1262078	205.9888662	295.6349132	312.7699902	339.2921733	339.2921733
-0.65	-95.06768037	-95.06378392	-75.6138287	-63.36080099	-74.88223835	-110.960784	-121.646809	-133.64447	-133.64447
+0.65	240.8312702	240.82932	191.4500741	157.7309446	193.484933	262.6641059	277.838319	306.3482033	306.3482033
-0.7	-102.3805789	-102.3763827	-81.43027706	-68.23470876	-80.64241053	-119.496229	-131.004256	-143.924814	-143.924814
+0.7	213.5250258	212.5489847	168.6559144	139.0368891	177.7189139	230.121955	244.3573688	266.6741768	266.6741768
-0.75	-109.6934774	-109.6889814	-87.24672542	-73.10861653	-86.40258271	-128.0316739	-140.361703	-154.205158	-154.205158
+0.75	174.3565404	174.1621762	138.4713351	113.2902921	148.7872754	189.9559208	198.6020959	212.5411109	212.5411109
-0.8	-117.0063758	-117.0015802	-93.06317378	-77.9825243	-92.16275489	-136.5671188	-149.71915	-164.485501	-164.485501
+0.8	138.2414639	135.891029	107.7311416	87.80888372	117.711973	145.7731678	149.4651998	154.7904932	154.7904932
-0.85	-124.3192743	-127.8640157	-99.32596024	-83.68246211	-97.92292707	-145.1025637	-159.076597	-174.765845	-174.765845
+0.85	89.49021482	89.2895969	70.96294958	56.39242844	79.00066475	88.34114834	88.38337381	89.07141222	89.07141222
-0.9	-138.0117152	-166.5493449	-117.1612109	-99.29009393	-103.6830993	-153.6380087	-168.434044	-187.17796	-187.17796
+0.9	45.48764188	45.87144474	39.9552201	30.53643451	54.72838963	44.0038079	43.74721386	44.03774527	44.03774527
-0.95	-171.858021	-208.7965226	-153.3792406	-130.4293387	-120.0515631	-176.6554933	-199.391891	-217.897811	-217.897811
+0.95	17.94114454	17.85931145	16.32601902	12.42978811	22.39293591	17.33430492	17.31592934	17.3427818	17.3427818
-1	-206.4271814	-254.0700418	-192.4224028	-164.7659945	-159.2313589	-209.0708802	-231.174078	-249.134925	-249.134925
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-206.4271814	-254.0700418	-192.4224028	-164.7659945	-159.2313589	-209.0708802	-231.174078	-249.134925	-249.134925
+2	0	0	0	0	0	0	0	0	0
-2.05	-171.8579272	-208.7962482	-153.3785332	-130.4290443	-120.0518629	-176.6543368	-199.390982	-217.898302	-217.898302
+2.05	17.94731414	17.86399881	16.32975076	12.43134276	22.40123641	17.34035328	17.32164363	17.34819721	17.34819721
-2.1	-138.0108861	-166.5493932	-117.1608285	-99.28993394	-103.6812378	-153.6388776	-168.434871	-187.175309	-187.175309
+2.1	45.41355726	45.88103898	39.92608567	30.52430483	54.66355438	43.9312173	43.67859678	43.97272197	43.97272197
-2.15	-124.3168838	-127.8651295	-99.32571219	-83.68305481	-97.92116921	-145.1033844	-159.077378	-174.766843	-174.766843
+2.15	89.47762665	89.28002596	70.95627921	56.38966127	78.941838	88.32325283	89.11156632	89.11156632	89.11156632
-2.2	-117.0041262	-117.0024394	-93.06377142	-77.98277656	-92.1611006	-136.5678912	-149.719886	-164.486441	-164.486441
+2.2	138.1661837	135.8378835	107.7250443	87.79347645	117.8070044	145.6941634	149.390889	154.8439772	154.8439772
-2.25	-109.6913686	-109.6897873	-87.24728599	-73.10885323	-86.40103198	-128.032398	-140.362393	-154.206038	-154.206038

+2.25	174.3343113	174.1526935	138.4647252	113.287515	148.7962167	189.981077	198.6283961	212.5407557	212.5407557
-2.3	-102.378611	-102.3771352	-81.43080056	-68.23492991	-80.64096337	-119.4969048	-131.0049	-143.925635	-143.925635
+2.3	213.4503478	212.4921797	168.6163773	139.0204231	177.7997911	231.1738454	244.3783438	266.7185402	266.7185402
-2.35	-95.06585347	-95.06448305	-75.61431513	-63.36100658	-74.88089475	-110.9614116	-121.647408	-133.645232	-133.645232
+2.35	240.8685504	240.8135852	191.4390895	157.726347	193.4751202	262.6720893	277.8481469	306.3322077	306.3322077
-2.4	-87.7530959	-87.75183094	-69.79782969	-58.48708326	-69.12082613	-102.4259185	-112.289915	-123.364829	-123.364829
+2.4	267.3994947	266.77666	211.6961329	175.1068711	206.0479108	295.6940151	312.7506964	339.316423	339.316423
-2.45	-80.44033833	-80.43917883	-63.98134426	-53.61315994	-63.36075752	-93.89042528	-102.932423	-113.084427	-113.084427
+2.45	282.4118327	282.338218	224.3703506	185.3607901	206.8310971	314.4629897	336.0980601	361.5192477	361.5192477
-2.5	-73.12758076	-73.12652672	-58.16485883	-48.73923661	-57.6006889	-85.3549321	-93.57493	-102.804024	-102.804024
+2.5	293.0034979	292.5113292	232.6321723	192.3358502	219.3799624	331.30434	353.4934492	381.5434176	381.5434176
-2.55	-65.81482318	-65.81387462	-52.3483734	-43.86531329	-51.84062029	-76.81943892	-84.2174374	-92.5236209	-92.5236209
+2.55	293.9462141	294.0444135	233.8710962	193.2643749	219.1623482	333.4553311	358.7599699	384.052291	384.052291
-2.6	-58.50206561	-58.50122251	-46.53188797	-38.99138996	-46.08055167	-68.28394574	-74.8599448	-82.243218	-82.243218
+2.6	297.6949466	298.0013253	236.955254	195.4978759	229.1849375	335.0745337	359.6765911	381.2598128	381.2598128
-2.65	-51.18930804	-51.1885704	-40.71540253	-34.11746664	-40.32048305	-59.74845255	-65.5024522	-71.9628152	-71.9628152
+2.65	291.3262265	291.6225939	231.8127382	191.0783802	227.8435189	322.2411293	344.1192568	371.4178692	371.4178692
-2.7	-43.87655046	-43.87591829	-34.8989171	-29.24354332	-34.56041444	-51.21295937	-56.1449596	-61.6824124	-61.6824124
+2.7	279.5306198	280.2520043	222.6851723	183.2437834	224.8894536	303.8340043	321.1345564	355.1000867	355.1000867
-2.75	-36.56379289	-36.56326618	-29.08243167	-24.36961999	-28.80034582	-42.67746619	-46.787467	-51.4020095	-51.4020095
+2.75	254.4094082	254.4563518	202.081536	166.3092492	207.5213216	282.2258041	298.3454673	320.8381724	320.8381724
-2.8	-29.25103532	-29.25061407	-23.26594624	-19.49569667	-23.04027721	-34.14197301	-37.4299743	-41.1216067	-41.1216067
+2.8	228.002674	226.2865678	179.6762716	147.4814597	189.1099136	252.5744481	265.7693623	278.1582318	278.1582318
-2.85	-21.93827775	-21.93796196	-17.44946081	-14.62177335	-17.28020859	-25.60647982	-28.0724817	-30.8412039	-30.8412039
+2.85	186.2628357	181.77936	147.0386293	120.2033418	153.1906871	207.1776397	216.6390744	216.6449885	216.6449885
-2.9	-14.62552017	-14.62530985	-11.63297537	-9.747850021	-11.52013998	-17.07098664	-18.7149891	-20.5608011	-20.5608011
+2.9	138.601859	133.2276472	110.0865001	89.39157412	115.1439529	154.2335068	160.6205039	160.764551	160.764551
-2.95	-7.3127626	-7.312657741	-5.816489942	-4.873926697	-5.760071359	-8.535493459	-9.35749654	-10.2803982	-10.2803982
+2.95	74.48915927	70.63932458	59.36291012	48.10347439	61.89333321	82.89829291	86.61919274	86.66509121	86.66509121
-3	-2.82E-14	-3.27E-14	-2.69E-14	-2.08E-14	-3.25E-14	-2.72E-14	-2.93E-14	-2.92E-14	-2.92E-14
+3	3.16E-14	3.34E-14	2.50E-14	2.08E-14	2.13E-14	3.41E-14	3.80E-14	3.93E-14	3.93E-14

2-Span: Moment (Max and Min) Raw Data Results - 25' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.24E-14	-2.74E-14	-2.50E-14	-2.76E-14	-2.16E-14
End Shear	3.43E-14	3.51E-14	3.55E-14	3.81E-14	3.77E-14
-0.05	-10.52560102	-9.856244752	-8.9653354	-10.5836938	-10.7564587
+0.05	95.2741557	93.2702256	86.40904523	95.72148537	97.92071989
-0.1	-21.05120204	-19.7124895	-17.9306708	-21.1673875	-21.5129174
+0.1	177.3619279	171.0446808	161.938439	179.3226947	182.383133
-0.15	-31.57680306	-29.56873426	-26.8960062	-31.7510813	-32.269376
+0.15	240.1915895	229.0752667	220.8580524	242.2435475	247.4370278
-0.2	-42.10240408	-39.42497901	-35.8613416	-42.3347751	-43.0258347
+0.2	295.521879	277.4145637	271.7696659	298.6257472	301.6220837
-0.25	-52.6280051	-49.28122376	-44.826677	-52.9184688	-53.7822934
+0.25	331.9942843	307.7621549	304.9535448	335.3423147	337.3760974
-0.3	-63.15360612	-59.13746851	-53.7920124	-63.5021626	-64.5387521
+0.3	359.7145391	333.4900451	331.533445	363.4571048	373.8440618
-0.35	-73.67920714	-68.99371327	-62.7573478	-74.0858564	-75.2952108
+0.35	389.1564398	360.3422628	342.7054098	392.9996647	399.1678594
-0.4	-84.20480816	-78.84995802	-71.7226832	-84.6695501	-86.0516695
+0.4	408.1381004	377.4897676	348.9925639	411.8595212	413.8795031
-0.45	-94.73040918	-88.70620277	-80.6880186	-95.2532439	-96.8081281
+0.45	408.1594717	378.7354821	351.9798284	412.1375907	412.1309469
-0.5	-105.2560102	-98.56244752	-89.653354	-105.836938	-107.564587
+0.5	403.8918043	373.6502698	347.2492691	407.45806	407.552731
-0.55	-115.7816112	-108.4186923	-98.6186894	-116.420631	-118.321046
+0.55	381.3153483	353.3203074	328.2672649	384.9214848	385.1788915
-0.6	-126.3072122	-118.274937	-107.584025	-127.004325	-129.077504
+0.6	353.3487233	327.5513692	311.7576634	356.933087	362.2259974
-0.65	-136.8328133	-128.1311818	-116.54936	-137.588019	-139.833963
+0.65	312.1112072	289.6472961	286.116829	315.6916638	323.7761365
-0.7	-147.3584143	-137.9874265	-125.514696	-148.171713	-150.590422
+0.7	269.8049474	251.6246039	254.7842577	273.1112872	279.1374925
-0.75	-157.8840153	-147.8436713	-134.480031	-158.755407	-161.34688
+0.75	219.2053102	205.417348	208.8750667	224.0095938	223.7172815
-0.8	-168.4096163	-157.699916	-143.445366	-169.3391	-172.103339
+0.8	162.2270066	156.2002433	161.4905641	172.8820673	167.0183033
-0.85	-180.7809986	-168.5675148	-156.469403	-186.318824	-188.242064
+0.85	95.13990244	92.57452054	102.530138	109.3654806	97.03214449
-0.9	-231.3806347	-226.7739851	-189.277775	-236.060723	-234.851348
+0.9	45.49606135	50.6707511	52.52432484	55.40926451	46.63135794
-0.95	-303.7225231	-300.028514	-229.512352	-291.133069	-293.309998
+0.95	18.32913221	20.84578764	20.56435225	21.93530907	18.30083597
-1	-381.7679841	-380.1149953	-279.762343	-350.933946	-359.657617
+1	0	0	0	0	0
(Span 2) -2	-381.7679841	-380.1149953	-279.762343	-350.933946	-359.657617
+2	0	0	0	0	0
-2.05	-303.7215457	-300.0283414	-229.501768	-291.133934	-293.311083
+2.05	18.3334017	20.84657747	20.56956282	21.94086701	18.3052865
-2.1	-231.3797038	-226.7741776	-189.27596	-236.062775	-234.847942
+2.1	45.10844128	50.66467939	52.55938596	55.34253792	46.66132721
-2.15	-180.7823251	-168.567443	-156.472453	-186.318259	-188.243219
+2.15	95.12285362	92.57372487	102.5195092	109.3541431	97.01438105
-2.2	-168.4094025	-157.699885	-143.447724	-169.341742	-172.105334
+2.2	162.168588	156.2058682	161.8266232	173.2420565	167.1125398
-2.25	-157.8838151	-147.8436422	-134.482241	-158.757883	-161.348751

+2.25	219.1834741	205.4140525	208.8598668	223.992761	223.7098427
-2.3	-147.3582276	-137.9873994	-125.516759	-148.174024	-150.592167
+2.3	269.8187819	251.6289606	254.7138293	273.0351858	279.1209795
-2.35	-136.8326402	-128.1311566	-116.551276	-137.590166	-139.835583
+2.35	312.1004584	289.6456952	286.1382171	315.6799961	323.8076872
-2.4	-126.3070527	-118.2749137	-107.585793	-127.006307	-129.079
+2.4	353.3300449	327.5487531	311.7716252	356.9141148	362.2375105
-2.45	-115.7814653	-108.4186709	-98.6203106	-116.422448	-118.322416
+2.45	381.2909145	353.3227522	328.2514121	384.8960857	385.2388286
-2.5	-105.2558778	-98.5624281	-89.654828	-105.838589	-107.565833
+2.5	403.9273305	373.6453198	347.2758116	407.4222067	407.603881
-2.55	-94.73029038	-88.70618528	-80.6893454	-95.2547305	-96.8092493
+2.55	408.198511	378.735198	351.9965098	412.1356778	412.1291082
-2.6	-84.20470293	-78.84994246	-71.7238627	-84.6708718	-86.0526657
+2.6	408.1668326	377.4939746	348.9995053	412.1836752	413.9188353
-2.65	-73.67911548	-68.99369964	-62.7583801	-74.087013	-75.2960822
+2.65	389.1726449	360.3445951	342.6944709	392.9724075	399.151469
-2.7	-63.15352803	-59.13745682	-53.7928974	-63.5031543	-64.5394987
+2.7	359.7180289	333.4905164	331.5113398	363.3703635	373.8568545
-2.75	-52.62794058	-49.281214	-44.8274148	-52.9192955	-53.7829151
+2.75	331.9807693	307.7663416	304.9707065	335.4197958	337.3689068
-2.8	-42.10235313	-39.42497118	-35.8619322	-42.3354368	-43.0263316
+2.8	295.4951349	277.4093738	271.723333	298.5971585	301.6002153
-2.85	-31.57676568	-29.56872836	-26.8964495	-31.751578	-32.269748
+2.85	240.1933144	229.0754677	220.8494115	242.2001768	247.443416
-2.9	-21.05117822	-19.71248554	-17.9309669	-21.1677193	-21.5131645
+2.9	177.3073993	171.0353219	161.9670897	179.354571	182.4170099
-2.95	-10.52559077	-9.856242718	-8.96548426	-10.5838605	-10.7565809
+2.95	95.24927917	93.26564011	86.42345402	95.737525	97.93786987
-3	-4.27E-14	-4.91E-14	-3.56E-14	-3.82E-14	-3.40E-14
+3	5.10E-14	4.35E-14	3.87E-14	4.91E-14	4.88E-14

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-3.7163	-3.03361	-3.033486653	-2.41284	-2.09179	-2.389493256	-3.54076	-3.88175	-4.264596875	-4.36373
End Shear	43.25877	34.25502	31.84340315	27.41544	22.82968	28.33305705	38.07929	40.06268	39.74774761	39.72887
-0.05	-4.11346	-3.03361	-3.033486653	-2.85069	-2.4753	-2.389493256	-3.54076	-3.88175	-4.264596875	-4.36373
+0.05	38.92338	30.81103	29.29877381	24.28791	20.3582	25.66848695	34.22697	35.87328	35.83596692	35.81625
-0.1	-6.53216	-3.03361	-4.341102252	-3.73465	-3.16376	-2.593888288	-3.54076	-3.88175	-4.264596875	-4.36373
+0.1	34.81547	27.67736	26.79485258	21.65874	18.11264	22.86455468	30.72202	32.05952	32.03893438	32.1636
-0.15	-8.28556	-3.03361	-5.333552822	-4.36718	-3.60127	-3.639840991	-3.54076	-3.88175	-4.264596875	-4.36373
+0.15	32.13671	25.6355	25.13133952	19.96583	16.66679	21.17363686	28.4316	29.79223	29.95113933	29.8935
-0.2	-10.5863	-4.97232	-6.995527901	-5.92598	-4.75813	-5.209433135	-4.80197	-4.80519	-4.765997491	-4.73068
+0.2	28.22791	22.65879	22.52919489	17.74971	14.80912	18.69957083	25.0817	26.4489	26.42708141	26.54552
-0.25	-12.1148	-6.63924	-8.668253679	-7.15997	-5.74221	-6.252380707	-6.4119	-6.41576	-6.377095595	-6.34225
+0.25	25.70633	20.9288	20.69725704	16.45438	13.67417	17.09880405	22.91514	24.26727	24.24511322	24.36052
-0.3	-14.3898	-9.13678	-11.64676779	-8.9694	-7.20491	-7.804962118	-8.82405	-8.82886	-8.791166711	-8.75719
+0.3	22.06992	18.52751	18.29724763	14.54422	11.96297	14.78269267	20.01761	21.08092	21.05843658	21.17034
-0.35	-15.8888	-10.7937	-13.56383525	-10.1473	-8.17044	-8.82823445	-10.5898	-10.5965	-10.64877075	-10.6673
+0.35	19.75436	16.95947	16.73096297	13.29768	10.9027	13.30238599	18.20349	19.02294	19.00037372	18.98003
-0.4	-18.1009	-13.2561	-16.10545752	-12.1588	-9.79905	-10.3388017	-13.5343	-13.5421	-13.85126401	-13.8703
+0.4	16.3573	14.6673	14.44285675	11.47677	9.365976	11.18969673	15.56498	16.05054	16.02806155	16.0078
-0.45	-19.5455	-14.9293	-17.68974244	-13.5368	-10.9408	-11.32572864	-15.479	-15.4875	-15.93595461	-15.9553
+0.45	14.69275	13.18536	12.96460198	10.30043	8.380856	10.06681929	13.86853	14.15419	14.13191965	14.11185
-0.5	-21.6575	-17.6746	-19.94968411	-15.4872	-12.5819	-13.09247395	-18.3559	-18.5218	-18.97826411	-19.1156
+0.5	12.60538	11.0424	10.82868399	8.600878	6.968239	8.643782084	11.43043	11.45405	11.43428565	11.41647
-0.55	-23.0229	-19.4274	-21.44362273	-16.712	-13.6298	-14.30563193	-20.2395	-20.783	-20.94456498	-21.4589
+0.55	11.25877	9.650562	9.46531693	7.516145	6.073348	7.740403056	9.883514	9.905516	9.886068368	9.868542
-0.6	-24.9975	-21.9341	-23.51116791	-18.4393	-15.1343	-15.99916702	-23.001	-24.1147	-24.06900282	-24.8758
+0.6	9.31624	7.69834	7.521870571	5.970063	4.807158	6.400784536	7.693619	7.422436	7.694407082	7.677516
-0.65	-26.6134	-23.5201	-24.83200052	-19.5965	-16.1462	-17.52178567	-24.7918	-26.2869	-26.24282766	-27.0815
+0.65	8.078604	6.342399	6.30024334	4.998348	4.017184	5.542933318	6.266581	6.182846	6.272682638	6.311536
-0.7	-30.6275	-25.765	-26.68725042	-21.2237	-17.6048	-20.03856445	-27.3901	-29.4565	-29.41509803	-30.3136
+0.7	6.318149	4.630839	4.724611066	3.637844	2.919163	4.342248791	4.475387	4.568534	4.568534374	4.568534
-0.75	-33.3287	-27.1956	-27.83916055	-22.231	-18.5278	-21.67287174	-29.2634	-31.5016	-31.46209665	-32.4956
+0.75	5.214303	3.576722	3.638422442	2.80055	2.248402	3.408420858	3.457142	3.448116	3.46542361	3.481021
-0.8	-37.2415	-29.4404	-29.43805779	-23.7007	-19.8892	-24.04687769	-32.4994	-34.4522	-34.41561856	-35.615
+0.8	3.673149	2.136616	2.167413593	1.809653	1.393342	2.4654915	2.065987	2.057512	2.072316446	2.085659
-0.85	-39.7473	-30.6256	-30.41708272	-24.6279	-20.7685	-25.57084574	-34.5786	-36.3323	-36.29776967	-37.7394
+0.85	2.727914	1.467903	1.496682521	1.341102	1.021048	1.824677151	1.419126	1.414276	1.422251328	1.447007
-0.9	-43.3349	-33.1925	-31.75367704	-26.3964	-22.5134	-27.75662032	-37.5637	-39.2026	-39.34715968	-40.8897
+0.9	1.44329	0.770019	0.78300893	0.704437	0.551905	0.954037679	0.744939	0.740448	0.74720539	0.753296
-0.95	-45.6026	-34.9328	-32.55584946	-27.9818	-23.8939	-29.13994139	-39.4551	-41.4448	-41.6905602	-42.6532
+0.95	0.681484	0.356199	0.367209905	0.326952	0.256543	0.437889809	0.345147	0.340963	0.346901734	0.352254
-1	-48.8009	-37.3976	-33.71760948	-30.2459	-25.8868	-31.09201928	-42.1277	-44.6402	-45.00325393	-45.8783
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	48.10632	36.59057	33.32716928	29.50367	25.23217	30.45352973	41.25339	43.59143	43.91994321	44.84608
-2.05	-6.81E-01	-0.35758	-0.36825787	-0.32779	-2.57E-01	-0.4397457	-0.3465	-0.34224	-0.348112453	-0.35341
+2.05	45.96393	34.92663	32.55372445	27.97802	23.89234	29.13468566	39.4483	41.43721	41.68304406	42.64784
-2.1	-1.85307	-0.99424	-1.007858473	-0.90849	-0.71135	-1.233893994	-0.96157	-0.95686	-0.963947065	-0.97033
+2.1	42.54931	32.289	31.32342639	25.57898	21.80758	27.03658106	36.58037	38.1296	38.222315	39.95322
-2.15	-2.72791	-1.46966	-1.498014034	-1.34216	-1.02149	-1.827037256	-1.42084	-1.4492	-1.44920373	-1.4492
+2.15	40.14886	30.62141	30.41446917	24.62575	20.7676	25.56502324	34.57113	36.32587	36.29171889	37.83816
-2.2	-4.17092	-2.60046	-2.632669027	-2.11718	-1.62999	-2.805646367	-2.51412	-2.50526	-2.520742754	-2.5347
+2.2	36.37921	28.81235	28.91949182	23.20873	19.43139	23.26056547	31.42772	33.47852	33.44131556	34.61398
-2.25	-5.2143	-3.58034	-3.616977914	-2.80246	-2.2492	-3.513425172	-3.46068	-3.45147	-3.468597479	-3.48404
+2.25	33.76343	27.31663	27.83607077	22.22866	18.52685	21.66659692	29.2553	31.49462	31.45548729	32.48893

-2.3	-6.8915	-5.18851	-5.285338829	-4.07995	-3.27408	-4.736393481	-5.01413	-5.11032	-5.110315382	-5.11032
+2.3	29.70287	25.02964	26.08236678	20.69423	17.12738	19.20125851	26.53027	28.4055	28.36359182	29.21749
-2.35	-8.0786	-6.34665	-6.303471686	-5.0006	-4.01812	-5.546104653	-6.1698	-6.18735	-6.212667152	-6.31559
+2.35	26.66882	23.51447	24.82844581	19.59374	16.1451	17.51518004	24.78535	26.27943	26.23577386	27.07476
-2.4	-9.95277	-8.3396	-8.158907471	-6.47648	-5.21969	-6.838319394	-8.41053	-8.13976	-8.411343077	-8.39398
+2.4	24.26908	21.10929	22.82196707	17.87517	14.64049	15.44724686	22.08321	23.00552	22.95943225	23.74362
-2.45	-11.2588	-9.65535	-9.46894919	-7.51868	-6.0744	-7.729087434	-9.88898	-9.85251	-9.890963023	-9.8732
+2.45	22.94706	19.42117	21.40151328	16.70908	13.62858	14.30105036	20.23271	20.77524	20.93822159	21.45166
-2.5	-13.2918	-11.7504	-11.53292711	-9.16084	-7.43116	-9.115991491	-12.2339	-12.3392	-12.31695972	-12.2969
+2.5	20.89399	16.76817	19.20773709	14.84929	12.04295	12.45586	17.39611	17.40569	17.96947847	17.98936
-2.55	-14.6918	-13.1906	-12.96856705	-10.3032	-8.38201	-10.07054302	-13.8746	-14.1605	-14.13794015	-14.1176
+2.55	19.48428	14.92259	17.6854601	13.53354	10.9394	11.32192922	15.4719	15.48081	15.92920403	15.94888
-2.6	-17.4541	-15.4281	-15.20080184	-12.0795	-9.87185	-11.88410289	-16.4389	-17.0318	-17.00888992	-16.9883
+2.6	17.31801	12.43318	15.28534533	11.4424	9.212107	9.835072819	12.54864	12.55648	12.78640214	12.80564
-2.65	-19.6697	-16.965	-17.00812907	-13.3006	-10.9039	-13.30797241	-18.21	-19.0299	-19.0069625	-18.9863
+2.65	15.84505	10.78773	13.60696826	10.14445	8.169272	8.824283747	10.58259	10.58969	10.64169392	10.66056
-2.7	-23.1714	-19.3276	-19.09539235	-15.179	-12.5042	-15.54848929	-20.946	-22.1378	-22.11502069	-22.2284
+2.7	13.60221	8.299368	10.74342805	8.369002	6.718003	7.285449744	8.01518	8.020007	7.982247317	7.948221
-2.75	-25.6134	-20.9346	-20.70167463	-16.4574	-13.6477	-17.10489343	-22.9229	-24.2747	-24.25214508	-24.3672
+2.75	12.11682	6.633247	8.703584309	7.157041	5.740982	6.24834437	6.406024	6.410201	6.371825096	6.337236
-2.8	-29.4179	-23.6456	-23.35504858	-18.4058	-15.3783	-19.5214751	-26.1939	-27.5623	-27.54027481	-27.6598
+2.8	9.807664	4.133919	6.491742202	5.29784	4.262302	4.682537663	3.992151	3.995359	4.264621344	4.363651
-2.85	-32.0372	-25.6427	-25.13585865	-19.9698	-16.6685	-21.18011147	-28.4399	-29.8	-29.77844297	-29.9005
+2.85	8.281477	3.033553	5.449879605	4.370961	3.626641	3.635784623	3.54078	3.88177	4.264621344	4.363651
-2.9	-36.2727	-28.7207	-27.63342847	-22.5259	-18.8532	-23.72730296	-31.8904	-33.3151	-33.28791986	-33.3149
+2.9	5.729367	3.033553	3.820969036	3.447782	2.938175	2.389450294	3.54078	3.88177	4.264621344	4.363651
-2.95	-39.0238	-30.8186	-29.30333552	-24.2818	-20.36	-25.67522726	-34.2356	-35.8822	-35.84437178	-35.8242
+2.95	3.88686	3.033553	3.033508783	2.849208	2.474681	2.389450294	3.54078	3.88177	4.264621344	4.363651
-3	-43.2179	-34.0193	-31.80473183	-27.1282	-22.6854	-28.31082208	-37.8042	-39.8122	-39.75634473	-39.737
+3	3.716233	3.033553	3.033508783	2.412854	2.091796	2.389450294	3.54078	3.88177	4.264621344	4.363651

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-3.7163	-4.61847	-4.763106063	-4.51247	-5.12153	-3.448606101	-3.64266	-2.04605
End Shear	43.25877	49.89747	51.45258754	47.22125	52.5149	37.08294032	39.19747	24.26238
-0.05	-4.11346	-4.61847	-4.763106063	-4.51247	-5.12153	-3.448606101	-3.64266	-2.04605
+0.05	38.92338	45.40205	46.6645124	42.46264	46.87348	33.85897821	35.77322	21.77882
-0.1	-6.53216	-4.61847	-4.763106063	-4.51247	-5.12153	-5.085765215	-5.38077	-2.72653
+0.1	34.81547	40.72075	41.68843164	38.12735	41.76579	30.66420182	32.38154	19.52471
-0.15	-8.28556	-4.61847	-4.763106063	-4.51247	-5.12153	-6.202229368	-6.55103	-3.82598
+0.15	32.13671	37.85357	38.65106918	35.291	38.44205	28.56012782	30.14869	18.3488
-0.2	-10.5863	-7.0578	-7.057801288	-5.64938	-5.64938	-7.963723017	-8.39904	-5.48858
+0.2	28.22791	33.63463	34.19460503	31.13727	33.6028	25.45702001	26.85707	16.83868
-0.25	-12.1148	-9.42455	-9.424549174	-7.54341	-7.54341	-9.734426551	-10.276	-6.94948
+0.25	25.70633	30.88806	31.30240211	28.447	30.48836	23.43198429	24.71	15.7462
-0.3	-14.3898	-12.9707	-12.97066233	-10.3812	-10.3812	-13.01368185	-13.7215	-8.82771
+0.3	22.06992	26.88698	27.10347521	24.78581	26.5344	20.44847921	21.54846	14.12347
-0.35	-15.8888	-15.3232	-15.32322454	-12.5535	-12.6776	-15.1114293	-15.925	-10.0336
+0.35	19.75436	24.31028	24.40949019	22.47931	23.99921	18.33200784	19.30813	13.06386
-0.4	-18.1009	-18.8196	-18.81963661	-16.3423	-16.8911	-17.87398202	-18.8267	-11.7699
+0.4	16.3573	20.84775	20.84775473	19.13096	20.20225	15.8210455	16.65373	11.49241
-0.45	-19.5455	-21.1201	-21.12011635	-18.8481	-19.6818	-19.58614558	-20.6249	-12.877
+0.45	14.69275	18.74326	18.74325581	16.98256	17.85433	14.21888305	14.96725	10.4684
-0.5	-21.6575	-24.51	-24.50998021	-22.5602	-23.8223	-22.01449797	-23.1751	-14.4586
+0.5	12.60538	15.61938	15.61938465	13.9021	14.4965	11.90234121	12.52878	8.974907
-0.55	-23.0229	-26.7205	-26.72047593	-24.9944	-26.5416	-23.61214376	-24.8549	-15.4583
+0.55	11.25877	13.67792	13.67791811	11.95278	12.37793	10.4225442	10.9711	8.011727
-0.6	-24.9975	-30.1896	-30.18960133	-28.5683	-30.5408	-25.8630491	-27.2243	-16.8726
+0.6	9.31624	10.90799	10.90798766	9.201662	9.398267	8.311285282	8.748721	6.622763
-0.65	-26.6134	-32.6527	-32.86041576	-30.8899	-33.2607	-27.2789276	-28.7339	-17.7566
+0.65	8.078604	9.165057	9.16505714	7.420012	7.48221	6.961030182	7.3274	5.738127
-0.7	-30.6275	-36.7231	-37.28547979	-34.2642	-37.5358	-29.89456373	-31.5246	-18.991
+0.7	6.318149	6.626843	6.62684341	5.265161	5.354619	5.100432401	5.368876	4.480269
-0.75	-33.3287	-39.3529	-40.15300682	-36.6394	-40.2417	-31.68949831	-33.4453	-19.658
+0.75	5.214303	4.858134	4.858133981	4.067226	4.150575	3.927842409	4.134571	3.691893
-0.8	-37.2415	-43.1524	-44.30930071	-40.6015	-44.6444	-34.25093448	-36.1792	-20.7097
+0.8	3.673149	3.048555	3.048554604	2.430573	2.45998	2.377139093	2.502252	2.591709
-0.85	-39.7473	-45.5771	-46.97112446	-43.1447	-47.8258	-35.68888101	-37.7178	-21.3437
+0.85	2.727914	2.12986	2.129860104	1.66956	1.693825	1.615736813	1.700776	1.917305
-0.9	-43.3349	-49.0318	-50.77906179	-46.7921	-52.4192	-37.6969534	-39.8688	-22.5578
+0.9	1.44329	1.000392	1.000391715	0.876399	0.897632	0.845293732	0.889783	1.001363
-0.95	-45.6026	-51.202	-53.18211345	-49.1004	-55.3481	-38.93483663	-41.1963	-23.7091
+0.95	0.681484	0.422298	0.422297907	0.406055	0.425133	0.396419784	0.417284	0.458649
-1	-48.8009	-54.2381	-56.56210734	-52.3579	-59.5173	-40.7635994	-43.1576	-25.3331
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	48.10632	53.24896	55.45828191	51.29286	58.14905	40.149951	42.49957	24.80491
-2.05	-6.81E-01	-0.51475	-0.514750504	-0.40764	-0.42036	-0.404631257	-0.42593	-0.45923
+2.05	45.96393	51.1939	53.17312347	49.0921	55.33762	38.93151561	41.19278	23.70775
-2.1	-1.85307	-1.41982	-1.419821182	-1.13126	-1.15353	-1.088029033	-1.14529	-1.29413
+2.1	42.54931	47.89712	49.52617075	45.59109	50.90238	37.04396878	39.16901	21.96182
-2.15	-2.72791	-2.09551	-2.095509275	-1.67158	-1.69585	-1.617174241	-1.70229	-1.91805
+2.15	40.14886	45.56796	46.96110459	43.13553	47.81433	35.6850087	37.71367	21.34302
-2.2	-4.17092	-3.70805	-3.708052263	-2.95779	-2.98854	-2.881116927	-3.03275	-2.94781
+2.2	36.37921	41.89697	42.93408371	39.28986	43.00968	33.4984168	35.37445	20.37159
-2.25	-5.2143	-5.10049	-5.100489228	-4.07139	-4.15474	-3.904692066	-4.1102	-3.69278
+2.25	33.76343	39.34298	40.14216846	36.62956	40.23198	31.78840878	33.54934	19.65717

-2.3	-6.8915	-7.42349	-7.423488038	-5.89898	-5.99135	-5.705763508	-6.00607	-4.89083
+2.3	29.70287	35.3717	35.814666	33.14676	36.12868	29.0365599	30.60882	18.59106
-2.35	-8.0786	-9.17146	-9.171460383	-7.29473	-7.4331	-6.964515363	-7.33107	-5.73913
+2.35	26.66882	32.64214	32.84895992	30.8815	33.24994	27.27401663	28.72862	17.75564
-2.4	-9.95277	-11.8182	-11.8182224	-10.1011	-10.3709	-9.003563488	-9.47744	-7.0789
+2.4	24.26908	29.12191	29.12191153	27.37973	29.20984	25.13214387	26.45489	16.4117
-2.45	-11.2588	-13.6851	-13.68512746	-11.9597	-12.3854	-10.42647067	-10.9752	-8.01282
+2.45	22.94706	26.7121	26.71209979	24.98555	26.53171	23.56711834	24.80749	15.45717
-2.5	-13.2918	-16.6239	-16.62392253	-14.9162	-15.6007	-12.66634401	-13.333	-9.46774
+2.5	20.89399	23.38054	23.38053597	21.32113	22.43936	21.21910325	22.33981	13.94089
-2.55	-14.6918	-18.7511	-18.7511199	-16.9902	-17.8627	-14.22316954	-14.9718	-10.4696
+2.55	19.48428	21.11137	21.11137373	18.83899	19.67165	19.58152322	20.62004	12.87568
-2.6	-17.4541	-21.9286	-21.92859485	-20.2392	-21.4151	-16.64218453	-17.5181	-12.0131
+2.6	17.31801	17.6506	17.6506021	15.07336	15.47908	16.98456981	17.8926	11.19972
-2.65	-19.6697	-24.3199	-24.419531	-22.4876	-23.8997	-18.36104843	-19.3274	-13.0651
+2.65	15.84505	15.31426	15.31425588	12.54424	12.66733	15.15794037	15.97399	10.03226
-2.7	-23.1714	-28.2136	-28.49367546	-25.9675	-27.8345	-21.42814498	-22.5864	-14.6706
+2.7	13.60221	11.78114	11.78114069	9.429624	9.429624	12.02182865	12.67945	8.209255
-2.75	-25.6134	-30.8984	-31.31326105	-28.4566	-30.4995	-23.43742433	-24.7158	-15.7551
+2.75	12.11682	9.41551	9.41550976	7.536499	7.536499	9.78446758	10.32776	6.947993
-2.8	-29.4179	-35.0394	-35.67664948	-32.5171	-35.2064	-26.48897152	-27.9515	-17.396
+2.8	9.807664	5.866891	5.866891303	4.696648	5.121577	7.476730421	7.888504	4.924938
-2.85	-32.0372	-37.8644	-38.66253473	-35.3012	-38.454	-28.56582596	-30.1547	-18.5101
+2.85	8.281477	4.618407	4.763033157	4.512507	5.121577	6.323772316	6.679483	3.824698
-2.9	-36.2727	-42.1788	-43.23557914	-39.5732	-43.4656	-31.7304821	-33.5134	-20.5579
+2.9	5.729367	4.618407	4.763033157	4.512507	5.121577	4.501430248	4.767608	2.176716
-2.95	-39.0238	-45.2239	-46.4870475	-42.4733	-46.886	-33.86482372	-35.7794	-21.9565
+2.95	3.88686	4.618407	4.763033157	4.512507	5.121577	3.448598754	3.642576	2.046061
-3	-43.2179	-49.8777	-51.43154525	-46.8816	-52.1424	-37.08881563	-39.2037	-24.0936
+3	3.716233	4.618407	4.763033157	4.512507	5.121577	3.448598754	3.642576	2.046061

2-Span: Shear (Max and Min) Raw Data Results - 25' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	**-3.7163**	**-4.87015**	**-4.56044**	**-4.14822**	**-4.89702**	**-4.97696**
End Shear	**43.25877**	**49.07474**	**48.07057**	**44.09799**	**48.56605**	**50.43386**
-0.05	**-4.11346**	**-5.42804**	**-5.43286**	**-4.91398**	**-5.15131**	**-5.86196**
+0.05	**38.92338**	**43.73341**	**42.7967**	**40.29655**	**44.28987**	**45.69849**
-0.1	**-6.53216**	**-7.04294**	**-7.10017**	**-6.68257**	**-7.10903**	**-7.22664**
+0.1	**34.81547**	**39.25126**	**37.9752**	**36.52473**	**40.09096**	**41.03569**
-0.15	**-8.28556**	**-8.01651**	**-8.12691**	**-7.81186**	**-8.48451**	**-8.05514**
+0.15	**32.13671**	**36.49051**	**34.84765**	**34.03783**	**37.16199**	**37.98171**
-0.2	**-10.5863**	**-9.47066**	**-9.54989**	**-10.0483**	**-10.3757**	**-10.6359**
+0.2	**28.22791**	**32.41427**	**30.41535**	**30.36575**	**32.75039**	**33.504**
-0.25	**-12.1148**	**-11.3338**	**-10.9278**	**-12.4743**	**-13.0414**	**-12.5032**
+0.25	**25.70633**	**29.75073**	**27.933**	**27.96634**	**30.49869**	**30.60015**
-0.3	**-14.3898**	**-14.4572**	**-13.7688**	**-15.8541**	**-16.8408**	**-15.1943**
+0.3	**22.06992**	**25.8547**	**24.29987**	**24.45697**	**26.13263**	**26.51317**
-0.35	**-15.8888**	**-16.5958**	**-15.7126**	**-17.8443**	**-19.2431**	**-17.6885**
+0.35	**19.75436**	**23.33424**	**21.94806**	**22.18702**	**23.60293**	**23.97303**
-0.4	**-18.1009**	**-20.7919**	**-19.609**	**-20.7063**	**-22.6544**	**-21.9691**
+0.4	**16.3573**	**19.68722**	**18.54295**	**18.76246**	**20.23735**	**20.29274**
-0.45	**-19.5455**	**-23.7655**	**-22.0993**	**-22.6007**	**-24.8026**	**-24.68**
+0.45	**14.69275**	**17.35569**	**16.36463**	**16.8641**	**17.98838**	**17.88608**
-0.5	**-21.6575**	**-28.1424**	**-26.2778**	**-25.3147**	**-28.2615**	**-28.5748**
+0.5	**12.60538**	**14.02646**	**13.25196**	**14.11913**	**15.0604**	**14.50783**
-0.55	**-23.0229**	**-30.8999**	**-28.9053**	**-27.0381**	**-30.7787**	**-31.0566**
+0.55	**11.25877**	**11.92972**	**11.29008**	**12.30808**	**13.00053**	**12.3842**
-0.6	**-24.9975**	**-34.8018**	**-32.5986**	**-29.5393**	**-34.4682**	**-34.6071**
+0.6	**9.31624**	**8.987073**	**8.778847**	**9.809718**	**10.34121**	**9.397803**
-0.65	**-26.6134**	**-37.2504**	**-35.0244**	**-31.7824**	**-36.8378**	**-36.8594**
+0.65	**8.078604**	**7.170982**	**7.253385**	**8.262951**	**8.813814**	**7.550265**
-0.7	**-30.6275**	**-40.841**	**-38.464**	**-34.9857**	**-40.2095**	**-40.0658**
+0.7	**6.318149**	**5.212765**	**5.132233**	**6.034712**	**6.33079**	**5.358379**
-0.75	**-33.3287**	**-43.1193**	**-40.5913**	**-36.8383**	**-42.3332**	**-42.276**
+0.75	**5.214303**	**4.016531**	**3.837749**	**4.676862**	**4.889672**	**4.151555**
-0.8	**-37.2415**	**-46.2977**	**-44.2665**	**-39.4862**	**-45.329**	**-45.9924**
+0.8	**3.673149**	**2.411858**	**2.58281**	**2.776736**	**2.921007**	**2.501611**
-0.85	**-39.7473**	**-48.2574**	**-47.406**	**-41.3127**	**-47.1977**	**-48.3924**
+0.85	**2.727914**	**1.704946**	**1.912299**	**1.911042**	**2.004518**	**1.696138**
-0.9	**-43.3349**	**-51.051**	**-51.9632**	**-43.8937**	**-49.804**	**-51.7997**
+0.9	**1.44329**	**0.902056**	**1.001569**	**1.013006**	**1.050852**	**0.898048**
-0.95	**-45.6026**	**-52.8199**	**-54.8335**	**-45.5004**	**-51.4084**	**-53.937**
+0.95	**0.681484**	**0.424063**	**0.46189**	**0.4717**	**0.485479**	**0.424543**
-1	**-48.8009**	**-55.9954**	**-59.4869**	**-47.8768**	**-53.7635**	**-57.0649**
+1	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
+2	**48.10632**	**54.73279**	**57.96953**	**47.07918**	**52.97194**	**56.02302**
-2.05	**-6.81E-01**	**-0.42513**	**-0.46209**	**-0.473**	**-0.48687**	**-0.42565**
+2.05	**45.96393**	**52.81569**	**54.83225**	**45.49622**	**51.40421**	**53.93168**
-2.1	**-1.85307**	**-1.15817**	**-1.29223**	**-1.30105**	**-1.35664**	**-1.15397**
+2.1	**42.54931**	**50.1098**	**50.48295**	**43.05112**	**48.95709**	**50.6846**
-2.15	**-2.72791**	**-1.70427**	**-1.91255**	**-1.91269**	**-2.00628**	**-1.69755**
+2.15	**40.14886**	**48.25273**	**47.40479**	**41.30792**	**47.19279**	**48.38637**
-2.2	**-4.17092**	**-2.9082**	**-2.93629**	**-3.3718**	**-3.55387**	**-3.03208**
+2.2	**36.37921**	**45.26504**	**42.65913**	**38.61656**	**44.35068**	**44.82033**
-2.25	**-5.2143**	**-4.01933**	**-3.83823**	**-4.68027**	**-4.89331**	**-4.15447**
+2.25	**33.76343**	**43.11391**	**40.59054**	**36.83346**	**42.32763**	**42.37082**

-2.3	**-6.8915**	**-5.84444**	**-5.81661**	**-6.75139**	**-7.09178**	**-5.99524**
+2.3	**29.70287**	**39.64821**	**37.34994**	**34.02851**	**39.10428**	**39.01452**
-2.35	**-8.0786**	**-7.17527**	**-7.25395**	**-8.24194**	**-8.6751**	**-7.47915**
+2.35	**26.66882**	**37.24454**	**35.02345**	**31.89567**	**36.83164**	**36.85376**
-2.4	**-9.95277**	**-9.94445**	**-9.57349**	**-10.6287**	**-11.2119**	**-10.3704**
+2.4	**24.26908**	**33.52578**	**31.39883**	**28.68831**	**33.24077**	**33.44053**
-2.45	**-11.2588**	**-11.9347**	**-11.2908**	**-12.3126**	**-13.0025**	**-12.3894**
+2.45	**22.94706**	**30.89337**	**28.90426**	**27.09443**	**30.77211**	**31.05031**
-2.5	**-13.2918**	**-15.1179**	**-14.2685**	**-15.0243**	**-16.0259**	**-15.6123**
+2.5	**20.89399**	**26.70875**	**24.9117**	**24.42245**	**26.9627**	**27.29288**
-2.55	**-14.6918**	**-17.3613**	**-16.3655**	**-16.869**	**-17.9936**	**-17.8798**
+2.55	**19.48428**	**23.75812**	**22.09833**	**22.59569**	**24.79701**	**24.6732**
-2.6	**-17.4541**	**-20.8897**	**-19.6614**	**-19.7791**	**-21.1488**	**-21.5071**
+2.6	**17.31801**	**19.40677**	**18.33082**	**19.76353**	**21.53673**	**20.60777**
-2.65	**-19.6697**	**-23.3403**	**-21.949**	**-22.1929**	**-23.6095**	**-23.9793**
+2.65	**15.84505**	**16.58888**	**15.71152**	**17.83912**	**19.23688**	**17.78243**
-2.7	**-23.1714**	**-27.1452**	**-25.4987**	**-25.6198**	**-27.428**	**-27.813**
+2.7	**13.60221**	**13.40341**	**12.83177**	**14.82833**	**15.59396**	**14.31125**
-2.75	**-25.6134**	**-29.7572**	**-27.934**	**-27.9726**	**-30.0478**	**-30.5318**
+2.75	**12.11682**	**11.32931**	**10.92706**	**12.55877**	**13.03446**	**12.51009**
-2.8	**-29.4179**	**-33.7698**	**-31.8018**	**-31.5873**	**-34.1136**	**-34.9889**
+2.8	**9.807664**	**8.911278**	**9.090136**	**8.93576**	**9.762892**	**9.6945**
-2.85	**-32.0372**	**-36.4972**	**-34.8488**	**-34.0444**	**-37.1472**	**-37.9894**
+2.85	**8.281477**	**8.014249**	**8.126513**	**7.809257**	**8.480986**	**8.270231**
-2.9	**-36.2727**	**-40.6487**	**-39.5674**	**-37.784**	**-41.4933**	**-42.588**
+2.9	**5.729367**	**6.523309**	**6.561434**	**6.153807**	**6.380808**	**6.78206**
-2.95	**-39.0238**	**-43.6443**	**-42.798**	**-40.3032**	**-44.2973**	**-45.7065**
+2.95	**3.88686**	**5.425284**	**5.432399**	**4.910958**	**5.148612**	**5.910177**
-3	**-43.2179**	**-48.8466**	**-48.072**	**-44.1047**	**-48.525**	**-50.4419**
+3	**3.716233**	**4.870139**	**4.560436**	**4.148286**	**4.897101**	**4.97702**

2-Span: Moment (Max and Min) Raw Data Results - 25’ Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-1.78E-14**	**-7.7E-15**	**-7.79468E-15**	**-8.2E-15**	**-6.30E-15**	**-9.76996E-15**	**-9.6E-15**	**-7.5E-15**	**-7.51885E-15**	**-7.5E-15**
End Shear	**2.05E-14**	**1.42E-14**	**1.56319E-14**	**1.14E-14**	**9.83E-15**	**1.14225E-14**	**1.52E-14**	**1.58E-14**	**1.65193E-14**	**1.65E-14**
-0.05	**-4.64538**	**-3.79201**	**-3.791858316**	**-3.01605**	**-2.61474**	**-2.98686657**	**-4.42595**	**-4.85219**	**-5.330746094**	**-5.33075**
+0.05	**48.65422**	**38.64734**	**36.62346726**	**30.79322**	**25.58889**	**32.08560869**	**43.00588**	**44.93323**	**44.95612367**	**44.95612**
-0.1	**-9.29076**	**-7.58403**	**-7.583716633**	**-6.0321**	**-5.22947**	**-5.97373314**	**-8.8519**	**-9.70438**	**-10.66149219**	**-10.6615**
+0.1	**90.43444**	**71.91432**	**69.07219763**	**57.10679**	**47.56937**	**59.77432048**	**80.01615**	**83.31826**	**83.39688658**	**83.39689**
-0.15	**-13.9361**	**-11.376**	**-11.37557495**	**-9.04814**	**-7.84421**	**-8.960599711**	**-13.2779**	**-14.5566**	**-15.99223828**	**-15.9922**
+0.15	**120.2439**	**96.5883**	**94.2425232**	**76.24657**	**64.04396**	**79.4529344**	**107.429**	**112.3354**	**112.3349951**	**112.335**
-0.2	**-18.5815**	**-15.1681**	**-15.16743327**	**-12.0642**	**-10.4589**	**-11.94746628**	**-17.7038**	**-19.4088**	**-21.32298438**	**-21.323**
+0.2	**146.919**	**118.1927**	**117.3633529**	**93.18258**	**78.59964**	**98.11314774**	**130.929**	**137.7733**	**144.2191626**	**144.2192**
-0.25	**-23.2269**	**-18.9601**	**-18.95929158**	**-15.0802**	**-13.0737**	**-14.93433285**	**-22.1298**	**-24.2609**	**-26.65373047**	**-26.6537**
+0.25	**160.8911**	**131.9158**	**131.9650894**	**104.7969**	**88.7089**	**107.6113154**	**146.3263**	**154.6856**	**166.3680959**	**166.3681**
-0.3	**-27.8723**	**-22.7521**	**-22.7511499**	**-18.0963**	**-15.6884**	**-17.92119942**	**-26.5557**	**-29.1131**	**-31.98447656**	**-31.9845**
+0.3	**173.5493**	**144.9668**	**145.3361728**	**115.4811**	**97.75516**	**116.5693885**	**157.5872**	**166.5236**	**184.0978896**	**184.0979**
-0.35	**-32.5177**	**-26.5441**	**-26.54300822**	**-21.1123**	**-18.3032**	**-20.90806599**	**-30.9817**	**-33.9653**	**-37.31522266**	**-37.3152**
+0.35	**174.764**	**151.0459**	**151.2273991**	**120.2107**	**101.9987**	**118.1378911**	**167.0937**	**178.4302**	**192.5783452**	**192.5783**
-0.4	**-37.163**	**-30.3361**	**-30.33486653**	**-24.1284**	**-20.9179**	**-23.89493256**	**-35.4076**	**-38.8175**	**-42.64596875**	**-42.646**
+0.4	**174.2581**	**154.3739**	**154.5308922**	**122.8744**	**104.3971**	**118.7874754**	**173.7716**	**186.4891**	**197.7223304**	**197.7223**
-0.45	**-41.8084**	**-34.1281**	**-34.12672485**	**-27.1444**	**-23.5326**	**-26.88179913**	**-39.8336**	**-43.6697**	**-47.97671484**	**-47.9767**
+0.45	**165.3011**	**152.4247**	**152.4749914**	**121.2723**	**103.2651**	**113.6439067**	**172.895**	**186.0354**	**199.1354659**	**199.1355**
-0.5	**-46.4538**	**-37.9201**	**-37.91858316**	**-30.1605**	**-26.1474**	**-29.8686657**	**-44.2595**	**-48.5219**	**-53.30746094**	**-53.3075**
+0.5	**166.1584**	**151.926**	**151.7198711**	**120.6247**	**102.7481**	**113.7113928**	**171.773**	**183.3208**	**197.8266717**	**197.8267**
-0.55	**-51.0992**	**-41.7122**	**-41.71044148**	**-33.1765**	**-28.7621**	**-32.85553227**	**-48.6855**	**-53.3741**	**-58.63820703**	**-58.6382**
+0.55	**155.9996**	**146.4293**	**146.4172017**	**116.3544**	**98.99551**	**107.1898795**	**163.0649**	**174.268**	**187.4639143**	**187.4639**
-0.6	**-55.7446**	**-45.5042**	**-45.5022998**	**-36.1926**	**-31.3768**	**-35.84239884**	**-53.1114**	**-58.2263**	**-63.96895313**	**-63.969**
+0.6	**157.6406**	**138.6401**	**138.368085**	**109.7964**	**93.48217**	**106.8129978**	**153.2979**	**162.183**	**175.9357912**	**175.9358**
-0.65	**-60.3899**	**-49.2962**	**-49.29415811**	**-39.2086**	**-33.9916**	**-38.82926541**	**-57.5374**	**-63.0785**	**-69.29969922**	**-69.2997**
+0.65	**149.2092**	**124.8801**	**124.8790874**	**99.27409**	**84.17924**	**100.3292367**	**136.2012**	**144.0696**	**158.8530999**	**158.8531**
-0.7	**-65.0353**	**-53.0882**	**-53.08601643**	**-42.2247**	**-36.6063**	**-41.81613198**	**-61.9633**	**-67.9306**	**-74.63044531**	**-74.6304**
+0.7	**137.9911**	**110.7208**	**110.2146667**	**87.45445**	**74.12841**	**92.15396108**	**119.3269**	**126.7085**	**138.2806206**	**138.2806**
-0.75	**-69.6807**	**-56.8802**	**-56.87787475**	**-45.2407**	**-39.2211**	**-44.80299855**	**-66.3893**	**-72.7828**	**-79.96119141**	**-79.9612**
+0.75	**115.0777**	**90.41044**	**90.3096584**	**71.80261**	**60.33992**	**77.15181508**	**98.49931**	**102.9827**	**110.2105838**	**110.2106**
-0.8	**-74.3261**	**-60.6722**	**-60.66973306**	**-48.2568**	**-41.8358**	**-47.78986512**	**-70.8152**	**-77.635**	**-85.2919375**	**-85.2919**
+0.8	**90.84136**	**71.68341**	**70.46462485**	**55.86266**	**46.61452**	**61.03809854**	**75.58889**	**77.50334**	**80.26471**	**80.26471**
-0.85	**-78.9715**	**-64.4642**	**-66.30231564**	**-51.5043**	**-44.9097**	**-50.77673169**	**-75.2412**	**-82.4872**	**-90.6226836**	**-90.6227**
+0.85	**59.82956**	**46.40405**	**46.30002432**	**36.79697**	**29.76176**	**40.96482487**	**45.80822**	**45.83011**	**46.18688733**	**46.18689**
-0.9	**-87.8323**	**-71.5643**	**-86.36211817**	**-60.7525**	**-53.4375**	**-53.76359826**	**-79.6671**	**-87.3394**	**-97.05883348**	**-97.0588**
+0.9	**41.6941**	**23.58706**	**23.78607453**	**20.71829**	**16.0343**	**28.37873458**	**22.81763**	**22.68458**	**22.83523219**	**22.83523**
-0.95	**-114.837**	**-89.1149**	**-108.2688735**	**-79.5329**	**-70.2628**	**-62.25126427**	**-91.6025**	**-103.392**	**-112.9882349**	**-112.988**
+0.95	**16.99913**	**9.30316**	**9.260726707**	**8.465657**	**6.488209**	**11.61158201**	**8.988491**	**8.978963**	**8.992886597**	**8.992887**
-1	**-144.979**	**-107.04**	**-131.7449011**	**-99.7783**	**-88.9347**	**-82.56746637**	**-108.411**	**-119.872**	**-129.1858567**	**-129.186**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-144.979**	**-107.04**	**-131.7449011**	**-99.7783**	**-88.9347**	**-82.56746637**	**-108.411**	**-119.872**	**-129.1858567**	**-129.186**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-114.803**	**-89.1148**	**-108.2687312**	**-79.5326**	**-70.2626**	**-62.25141972**	**-91.6019**	**-103.392**	**-112.9884896**	**-112.988**
+2.05	**16.99913**	**9.306359**	**9.263157276**	**8.467592**	**6.489015**	**11.61588614**	**8.991627**	**8.981926**	**8.995694692**	**8.995695**
-2.1	**-87.8142**	**-71.5639**	**-86.36214323**	**-60.7523**	**-53.4374**	**-53.76263305**	**-79.6676**	**-87.3398**	**-97.05745868**	**-97.0575**
+2.1	**41.69413**	**23.54864**	**23.79104951**	**20.70318**	**16.02801**	**28.34511505**	**22.77999**	**22.649**	**22.80151515**	**22.80152**
-2.15	**-78.9699**	**-64.463**	**-66.3028932**	**-51.5041**	**-44.91**	**-50.77582018**	**-75.2416**	**-82.4876**	**-90.62320118**	**-90.6232**
+2.15	**59.82958**	**46.39752**	**46.29506142**	**36.79351**	**29.76032**	**40.93432098**	**45.79894**	**46.20771**	**46.20770875**	**46.20771**
-2.2	**-74.3247**	**-60.6711**	**-60.67017857**	**-48.2571**	**-41.8359**	**-47.78900731**	**-70.8156**	**-77.6354**	**-85.2924245**	**-85.2924**
+2.2	**92.12165**	**71.64438**	**70.43706688**	**55.8595**	**46.60653**	**61.08737588**	**75.54792**	**77.46481**	**80.29244344**	**80.29244**
-2.25	**-69.6794**	**-56.8791**	**-56.8782926**	**-45.241**	**-39.2212**	**-44.80219444**	**-66.3896**	**-72.7832**	**-79.96164782**	**-79.9616**

+2.25	115.093	90.39892	90.30474124	71.79918	60.33848	77.1564515	98.51236	102.9963	110.2103996	110.2104
-2.3	-65.0341	-53.0872	-53.08640662	-42.2249	-36.6064	-41.81538157	-61.9637	-67.931	-74.63087114	-74.6309
+2.3	139.1625	110.6821	110.1852112	87.43395	74.11987	92.19589894	119.8724	126.7194	138.3036247	138.3036
-2.35	-60.3888	-49.2952	-49.29452064	-39.2089	-33.9917	-38.82856871	-57.5377	-63.0788	-69.30009446	-69.3001
+2.35	149.4728	124.8994	124.8709283	99.26839	84.17686	100.3241484	136.2054	144.0747	158.8448056	158.8448
-2.4	-55.7435	-45.5033	-45.50263466	-36.1928	-31.3769	-35.84175584	-53.1117	-58.2266	-63.96931778	-63.9693
+2.4	158.5025	138.6567	138.333762	109.7724	93.47214	106.8436146	153.3285	162.173	175.9483656	175.9484
-2.45	-51.0982	-41.7113	-41.71074868	-33.1767	-28.7622	-32.85494297	-48.6857	-53.3743	-58.6385411	-58.6385
+2.45	155.9996	146.4412	146.4030169	116.3445	98.99137	107.2497263	163.0609	174.2795	187.4613678	187.4614
-2.5	-46.4529	-37.9194	-37.9188627	-30.1607	-26.1474	-29.8681301	-44.2598	-48.5221	-53.30776442	-53.3078
+2.5	165.774	151.9334	151.6781588	120.6286	102.736	113.7567863	171.7938	183.2997	197.8446552	197.8447
-2.55	-41.8076	-34.1275	-34.12697673	-27.1446	-23.5327	-26.88131723	-39.8338	-43.6699	-47.97698774	-47.977
+2.55	165.3006	152.4222	152.4731208	121.271	103.2645	113.6439451	172.9092	186.0306	199.1456007	199.1456
-2.6	-37.1623	-30.3355	-30.33509075	-24.1285	-20.918	-23.89450437	-35.4078	-38.8177	-42.64621106	-42.6462
+2.6	174.9271	154.3661	154.5249289	122.8702	104.3954	118.8410358	173.7488	186.5059	197.6975954	197.6976
-2.65	-32.517	-26.5436	-26.54320477	-21.1125	-18.3032	-20.9076915	-30.9818	-33.9655	-37.31543438	-37.3154
+2.65	174.8189	151.0636	151.217316	120.2036	101.9957	118.1454596	167.0942	178.4388	192.5941764	192.5942
-2.7	-27.8717	-22.7516	-22.75131879	-18.0964	-15.6885	-17.92087863	-26.5559	-29.1133	-31.9846577	-31.9847
+2.7	174.3179	144.9472	145.3212363	115.4707	97.7508	116.6136654	157.5494	166.5204	184.1327906	184.1328
-2.75	-23.2265	-18.9597	-18.95943281	-15.0803	-13.0737	-14.93406576	-22.1299	-24.2611	-26.65388102	-26.6539
+2.75	160.9142	131.9209	131.9452174	104.7869	88.70657	107.6076337	146.3447	154.7034	166.3666955	166.3667
-2.8	-18.5812	-15.1678	-15.16754683	-12.0643	-10.459	-11.94725289	-17.7039	-19.4089	-21.32310434	-21.3231
+2.8	147.6663	118.228	117.3381218	93.16892	78.60618	98.0606241	130.9694	137.8114	144.2355363	144.2355
-2.85	-13.9359	-11.3758	-11.37566086	-9.0482	-7.84424	-8.960440027	-13.2779	-14.5566	-15.99232766	-15.9923
+2.85	120.768	96.58431	94.25945556	76.24508	64.04333	79.43515019	107.4294	112.3355	112.3385991	112.3386
-2.9	-9.29058	-7.58388	-7.583774877	-6.03214	-5.22949	-5.973627159	-8.85195	-9.70443	-10.66155098	-10.6616
+2.9	90.68162	71.87029	69.08356089	57.084	47.57372	59.70648325	79.97589	83.28779	83.3624843	83.36248
-2.95	-4.64529	-3.79194	-3.791888899	-3.01607	-2.61475	-2.986814291	-4.42598	-4.85221	-5.330774296	-5.33077
+2.95	48.77978	38.62544	36.62915457	30.78191	25.59109	32.09402811	42.98589	44.91532	44.93911911	44.93912
-3	-3.00E-14	-1.5E-14	-1.69624E-14	-1.4E-14	-1.09E-14	-1.68345E-14	-1.4E-14	-1.5E-14	-1.51292E-14	-1.5E-14
+3	2.30E-14	1.64E-14	1.72973E-14	1.3E-14	1.09E-14	1.10613E-14	1.77E-14	1.97E-14	2.03531E-14	2.04E-14

2-Span: Moment (Max and Min) Raw Data Results - 25' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.78E-14	-1.1E-14	-1.1E-14	-1.1E-14	-1.6E-14	-9.2E-15	-9.7E-15	-9.9E-15
End Shear	2.05E-14	1.95E-14	1.96E-14	1.88E-14	2.21E-14	1.69E-14	1.78E-14	1.1E-14
-0.05	-4.64538	-5.77309	-5.95388	-5.64058	-6.40191	-4.31076	-4.55332	-2.55756
+0.05	48.65422	56.79986	58.37794	53.07831	58.59186	41.98955	44.36169	27.44358
-0.1	-9.29076	-11.5462	-11.9078	-11.2812	-12.8038	-8.62152	-9.10664	-5.11512
+0.1	90.43444	106.1122	108.8081	99.31722	108.6332	78.64874	83.06428	51.39077
-0.15	-13.9361	-17.3193	-17.8616	-16.9218	-19.2057	-12.9323	-13.66	-7.67268
+0.15	120.2439	142.8265	145.9736	133.5606	146.2801	107.1021	113.0676	69.73211
-0.2	-18.5815	-23.0924	-23.8155	-22.5623	-25.6076	-17.243	-18.2133	-10.2302
+0.2	146.919	175.1436	178.327	162.6581	176.6653	131.6439	138.9247	87.35317
-0.25	-23.2269	-28.8655	-29.7694	-28.2029	-32.0095	-21.5538	-22.7666	-12.7878
+0.25	160.8911	196.4507	199.4872	181.8914	198.5758	147.701	155.79	99.08974
-0.3	-27.8723	-34.6386	-35.7233	-33.8435	-38.4114	-25.8645	-27.3199	-15.3454
+0.3	173.5493	212.2574	214.6001	197.1212	222.5601	160.3899	169.073	110.5725
-0.35	-32.5177	-40.4116	-41.6772	-39.4841	-44.8133	-30.1753	-31.8733	-17.9029
+0.35	174.764	218.8692	220.737	211.0673	234.9976	165.6632	174.5481	115.1609
-0.4	-37.163	-46.1847	-47.6311	-45.1247	-51.2153	-34.4861	-36.4266	-20.4605
+0.4	174.2581	224.7662	229.6246	219.3213	241.8215	168.4327	177.802	120.8124
-0.45	-41.8084	-51.9578	-53.5849	-50.7653	-57.6172	-38.7968	-40.9799	-23.018
+0.45	165.3011	225.4809	228.6264	218.3715	238.33	169.7076	178.9633	118.8091
-0.5	-46.4538	-57.7309	-59.5388	-56.4058	-64.0191	-43.1076	-45.5332	-25.5756
+0.5	166.1584	221.6132	223.5675	216.4442	235.2204	167.2421	176.2423	119.1205
-0.55	-51.0992	-63.504	-65.4927	-62.0464	-70.421	-47.4183	-50.0865	-28.1332
+0.55	155.9996	208.505	212.6087	204.9958	222.6183	158.1124	166.4341	111.977
-0.6	-55.7446	-69.2771	-71.4466	-67.687	-76.8229	-51.7291	-54.6399	-30.6907
+0.6	157.6406	197.156	200.1402	191.4784	211.3755	149.8386	157.7248	106.9874
-0.65	-60.3899	-75.0502	-77.4005	-73.3276	-83.2248	-56.0398	-59.1932	-33.2483
+0.65	149.2092	182.2112	184.0754	170.5587	191.6256	137.9884	145.4347	95.53603
-0.7	-65.0353	-80.8233	-83.3544	-78.9682	-89.6267	-60.3506	-63.7465	-35.8058
+0.7	137.9911	163.4443	165.0388	147.9039	166.4677	123.2585	129.9682	86.34631
-0.75	-69.6807	-86.5964	-89.3082	-84.6088	-96.0286	-64.6614	-68.2998	-38.3634
+0.75	115.0777	134.1975	136.2454	121.5553	132.4504	101.3942	106.9542	71.62327
-0.8	-74.3261	-92.3695	-95.2621	-90.2493	-102.431	-68.9721	-72.8531	-40.921
+0.8	90.84136	103.9695	105.1003	92.11198	97.35984	78.76987	83.03526	59.57353
-0.85	-78.9715	-98.1426	-101.216	-95.8899	-108.832	-76.1819	-80.4909	-43.4785
+0.85	59.82956	65.93057	65.93057	54.63413	56.07006	50.10119	52.73809	42.8185
-0.9	-87.8323	-103.916	-107.17	-101.531	-115.234	-99.153	-104.549	-53.3134
+0.9	41.6941	33.71767	33.71767	26.84428	26.95681	25.67815	27.02963	29.48799
-0.95	-114.837	-109.689	-113.124	-112.718	-128.202	-124.73	-131.387	-65.3755
+0.95	16.99913	13.22999	13.22999	10.5747	10.61893	10.07157	10.60165	12.1445
-1	-144.979	-129.935	-138.589	-130.951	-155.451	-153.532	-161.613	-77.7901
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-144.979	-129.935	-138.589	-130.951	-155.451	-153.532	-161.613	-77.7901
+2	0	0	0	0	0	0	0	0
-2.05	-114.803	-109.687	-113.122	-112.716	-128.201	-124.728	-131.386	-65.3755
+2.05	16.99913	13.23481	13.23481	10.57839	10.62262	10.0742	10.60442	12.14586
-2.1	-87.8142	-103.914	-107.168	-101.531	-115.235	-99.1522	-104.549	-53.3135
+2.1	41.69413	33.65978	33.65978	26.79999	26.98162	25.68352	27.03528	29.47739
-2.15	-78.9699	-98.1412	-101.214	-95.8908	-108.834	-76.1803	-80.4894	-43.4788
+2.15	59.82958	65.94246	65.94246	54.65413	56.08762	50.09584	52.73246	42.82163
-2.2	-74.3247	-92.3681	-95.2607	-90.2501	-102.432	-68.972	-72.8515	-40.9212
+2.2	92.12165	103.9125	105.0425	92.06214	97.30607	78.73913	83.00284	59.56397
-2.25	-69.6794	-86.5951	-89.3069	-84.6095	-96.0296	-64.6612	-68.2983	-38.3636

+2.25	115.093	134.1821	136.228	121.5687	132.4704	101.4106	106.9713	71.62696
-2.3	-65.0341	-80.8221	-83.3531	-78.9689	-89.6276	-60.3505	-63.7451	-35.8061
+2.3	139.1625	163.3766	165.0604	148.4345	166.4482	123.273	129.9832	86.33679
-2.35	-60.3888	-75.0491	-77.3993	-73.3282	-83.2256	-56.0397	-59.1919	-33.2485
+2.35	149.4728	182.2275	184.0875	170.5458	191.6337	137.9988	145.4453	95.5393
-2.4	-55.7435	-69.2761	-71.4455	-67.6876	-76.8237	-51.729	-54.6386	-30.6909
+2.4	158.5025	196.8661	200.1301	191.5227	211.4099	149.7834	157.6703	106.9769
-2.45	-51.0982	-63.5031	-65.4917	-62.047	-70.4217	-47.4182	-50.0854	-28.1333
+2.45	155.9996	208.4937	212.591	204.9993	222.8102	158.1222	166.4444	111.979
-2.5	-46.4529	-57.7301	-59.5379	-56.4063	-64.0197	-43.1075	-45.5322	-25.5758
+2.5	165.774	221.6408	223.6005	216.4765	235.2629	167.2552	176.2565	119.1083
-2.55	-41.8076	-51.9571	-53.5841	-50.7657	-57.6177	-38.7967	-40.979	-23.0182
+2.55	165.3006	225.4995	228.6505	218.3802	238.3285	169.7158	178.9724	118.8092
-2.6	-37.1623	-46.1841	-47.6303	-45.1251	-51.2158	-34.486	-36.4258	-20.4606
+2.6	174.9271	224.776	229.6399	219.3466	241.8621	168.4361	177.8061	120.7979
-2.65	-32.517	-40.4111	-41.6765	-39.4844	-44.8138	-30.1752	-31.8725	-17.903
+2.65	174.8189	218.8614	220.7408	211.0825	234.9921	165.6575	174.5425	115.1584
-2.7	-27.8717	-34.6381	-35.7228	-33.8438	-38.4118	-25.8645	-27.3193	-15.3455
+2.7	174.3179	212.2392	214.5857	197.1262	222.5783	160.3787	169.0615	110.5552
-2.75	-23.2265	-28.865	-29.769	-28.2032	-32.0099	-21.5537	-22.7661	-12.7879
+2.75	160.9142	196.4687	199.5086	181.915	198.5805	147.7096	155.7993	99.08432
-2.8	-18.5812	-23.092	-23.8152	-22.5625	-25.6079	-17.243	-18.2129	-10.2303
+2.8	147.6663	175.1969	178.3832	162.6363	176.6518	131.6205	138.9004	87.33289
-2.85	-13.9359	-17.319	-17.8614	-16.9219	-19.2059	-12.9322	-13.6597	-7.67273
+2.85	120.768	142.8201	145.9696	133.5631	146.2892	107.0978	113.0632	69.72353
-2.9	-9.29058	-11.546	-11.9076	-11.2813	-12.8039	-8.6215	-9.10644	-5.11515
+2.9	90.68162	106.0453	108.7429	99.27114	108.6641	78.66322	83.07965	51.39481
-2.95	-4.64529	-5.77301	-5.95379	-5.64063	-6.40197	-4.31075	-4.55322	-2.55758
+2.95	48.77978	56.7665	58.34549	53.33879	58.60754	41.99684	44.36943	27.44565
-3	-3.00E-14	-2.1E-14	-2.1E-14	-1.7E-14	-2.2E-14	-1.9E-14	-2E-14	-2E-14
+3	2.30E-14	2.22E-14	2.22E-14	2.37E-14	2.62E-14	1.9E-14	2E-14	1.29E-14

2-Span: Moment (Max and Min) Raw Data Results - 25' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.78E-14	-1.3E-14	-1.6E-14	-1.4E-14	-1.6E-14	-1.2E-14
End Shear	2.05E-14	1.98E-14	2.03E-14	2.05E-14	2.2E-14	2.18E-14
-0.05	-4.64538	-6.08768	-5.70055	-5.18527	-6.12128	-6.2212
+0.05	48.65422	55.10362	53.94461	49.97631	55.36234	56.63431
-0.1	-9.29076	-12.1754	-11.4011	-10.3705	-12.2426	-12.4424
+0.1	90.43444	102.5806	98.92694	93.66017	103.7147	105.4848
-0.15	-13.9361	-18.263	-17.1016	-15.5558	-18.3638	-18.6636
+0.15	120.2439	138.9194	132.49	127.7375	140.1062	143.1099
-0.2	-18.5815	-24.3507	-22.8022	-20.7411	-24.4851	-24.8848
+0.2	146.919	170.9207	160.448	157.1831	172.7159	174.4489
-0.25	-23.2269	-30.4384	-28.5027	-25.9264	-30.6064	-31.106
+0.25	160.8911	192.0152	178.0001	176.3757	193.9516	195.1279
-0.3	-27.8723	-36.5261	-34.2033	-31.1116	-36.7277	-37.3272
+0.3	173.5493	208.0477	192.8803	191.7487	210.2123	216.2198
-0.35	-32.5177	-42.6138	-39.9038	-36.2969	-42.849	-43.5484
+0.35	174.764	225.076	208.4108	198.2102	227.2988	230.8663
-0.4	-37.163	-48.7015	-45.6044	-41.4822	-48.9702	-49.7696
+0.4	174.2581	236.0544	218.3284	201.8465	238.2068	239.3751
-0.45	-41.8084	-54.7891	-51.3049	-46.6674	-55.0915	-55.9908
+0.45	165.3011	236.0668	219.0489	203.5742	238.3676	238.3638
-0.5	-46.4538	-60.8768	-57.0055	-51.8527	-61.2128	-62.212
+0.5	166.1584	233.5985	216.1077	200.8382	235.6611	235.7159
-0.55	-51.0992	-66.9645	-62.706	-57.038	-67.3341	-68.4332
+0.55	155.9996	220.541	204.3495	189.8596	222.6267	222.7755
-0.6	-55.7446	-73.0522	-68.4066	-62.2233	-73.4554	-74.6544
+0.6	157.6406	204.3659	189.4456	180.311	206.439	209.5003
-0.65	-60.3899	-79.1399	-74.1071	-67.4085	-79.5766	-80.8756
+0.65	149.2092	180.5154	167.523	165.4811	182.5863	187.2621
-0.7	-65.0353	-85.2275	-79.8076	-72.5938	-85.6979	-87.0968
+0.7	137.9911	156.0468	145.5319	147.3593	157.9591	161.4445
-0.75	-69.6807	-91.3152	-85.5082	-77.7791	-91.8192	-93.318
+0.75	115.0777	126.7816	118.807	120.8069	129.5602	129.3911
-0.8	-74.3261	-97.4029	-91.2087	-82.9644	-97.9405	-99.5392
+0.8	90.84136	93.82707	90.34138	93.40114	99.98963	96.59821
-0.85	-78.9715	-104.558	-97.4942	-90.4971	-107.761	-108.873
+0.85	59.82956	55.02597	53.54223	59.30025	63.2536	56.12038
-0.9	-87.8323	-133.823	-131.159	-109.472	-136.53	-135.831
+0.9	41.6941	26.31351	29.30639	30.37844	32.047	26.97013
-0.95	-114.837	-175.664	-173.527	-132.743	-168.382	-169.641
+0.95	16.99913	10.601	12.05656	11.89378	12.6867	10.58464
-1	-144.979	-220.803	-219.847	-161.806	-202.969	-208.015
+1	0	0	0	0	0	0
(Span 2) -2	-144.979	-220.803	-219.847	-161.806	-202.969	-208.015
+2	0	0	0	0	0	0
-2.05	-114.803	-175.663	-173.527	-132.737	-168.383	-169.642
+2.05	16.99913	10.60347	12.05701	11.8968	12.68992	10.58721
-2.1	-87.8142	-133.823	-131.159	-109.471	-136.531	-135.829
+2.1	41.69413	26.08932	29.30288	30.39872	32.00841	26.98747
-2.15	-78.9699	-104.559	-97.4942	-90.4988	-107.761	-108.874
+2.15	59.82958	55.01611	53.54177	59.29411	63.24705	56.11011
-2.2	-74.3247	-97.4028	-91.2087	-82.9657	-97.942	-99.5404
+2.2	92.12165	93.79328	90.34463	93.5955	100.1978	96.65271
-2.25	-69.6794	-91.3151	-85.5082	-77.7804	-91.8206	-93.3191

+2.25	**115.093**	**126.7689**	**118.8051**	**120.7981**	**129.5505**	**129.3868**
-2.3	**-65.0341**	**-85.2274**	**-79.8076**	**-72.595**	**-85.6993**	**-87.0978**
+2.3	**139.1625**	**156.0548**	**145.5344**	**147.3186**	**157.9151**	**161.4349**
-2.35	**-60.3888**	**-79.1398**	**-74.1071**	**-67.4096**	**-79.5779**	**-80.8766**
+2.35	**149.4728**	**180.5092**	**167.5221**	**165.4935**	**182.5795**	**187.2803**
-2.4	**-55.7435**	**-73.0521**	**-68.4065**	**-62.2243**	**-73.4565**	**-74.6553**
+2.4	**158.5025**	**204.3551**	**189.444**	**180.319**	**206.4281**	**209.5069**
-2.45	**-51.0982**	**-66.9644**	**-62.706**	**-57.0389**	**-67.3351**	**-68.434**
+2.45	**155.9996**	**220.5268**	**204.3509**	**189.8504**	**222.612**	**222.8102**
-2.5	**-46.4529**	**-60.8767**	**-57.0055**	**-51.8536**	**-61.2138**	**-62.2127**
+2.5	**165.774**	**233.619**	**216.1049**	**200.8536**	**235.6404**	**235.7454**
-2.55	**-41.8076**	**-54.7891**	**-51.3049**	**-46.6682**	**-55.0924**	**-55.9915**
+2.55	**165.3006**	**236.0894**	**219.0487**	**203.5839**	**238.3665**	**238.3627**
-2.6	**-37.1623**	**-48.7014**	**-45.6044**	**-41.4829**	**-48.971**	**-49.7702**
+2.6	**174.9271**	**236.071**	**218.3308**	**201.8505**	**238.3943**	**239.3978**
-2.65	**-32.517**	**-42.6137**	**-39.9038**	**-36.2975**	**-42.8496**	**-43.5489**
+2.65	**174.8189**	**225.0854**	**208.4121**	**198.2039**	**227.2831**	**230.8568**
-2.7	**-27.8717**	**-36.526**	**-34.2033**	**-31.1121**	**-36.7283**	**-37.3276**
+2.7	**174.3179**	**208.0498**	**192.8806**	**191.7359**	**210.1622**	**216.2272**
-2.75	**-23.2265**	**-30.4384**	**-28.5027**	**-25.9268**	**-30.6069**	**-31.1064**
+2.75	**160.9142**	**192.0074**	**178.0025**	**176.3856**	**193.9964**	**195.1237**
-2.8	**-18.5812**	**-24.3507**	**-22.8022**	**-20.7414**	**-24.4855**	**-24.8851**
+2.8	**147.6663**	**170.9052**	**160.445**	**157.1564**	**172.6993**	**174.4362**
-2.85	**-13.9359**	**-18.263**	**-17.1016**	**-15.5561**	**-18.3641**	**-18.6638**
+2.85	**120.768**	**138.9204**	**132.4901**	**127.7325**	**140.0811**	**143.1136**
-2.9	**-9.29058**	**-12.1753**	**-11.4011**	**-10.3707**	**-12.2428**	**-12.4425**
+2.9	**90.68162**	**102.5491**	**98.92153**	**93.67674**	**103.7331**	**105.5043**
-2.95	**-4.64529**	**-6.08768**	**-5.70055**	**-5.18536**	**-6.12138**	**-6.22127**
+2.95	**48.77978**	**55.08923**	**53.94195**	**49.98465**	**55.37162**	**56.64423**
-3	**-3.00E-14**	**-2.5E-14**	**-2.8E-14**	**-2.1E-14**	**-2.2E-14**	**-2E-14**
+3	**2.30E-14**	**2.95E-14**	**2.51E-14**	**2.24E-14**	**2.84E-14**	**2.82E-14**

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-12.18423491	-12.31243705	-10.96583853	-9.730246818	-10.19020705	-9.604757156	-11.17248181	-7.18830788	-7.61206	-4.034898971
End Shear	123.7360333	122.1439381	111.3624297	100.6121955	104.5925855	96.41844293	109.0418807	74.37360408	78.70515	49.44696625
-0.05	-12.21784292	-12.34604506	-10.99608574	-9.730246818	-10.19020705	-9.604757156	-11.17248181	-7.18830788	-7.61206	-4.034898971
+0.05	112.6169488	113.1037883	101.7375615	93.19715905	96.66256989	89.04510002	100.2329508	69.06769624	73.06664	45.46503726
-0.1	-14.95922836	-12.54830923	-13.26354746	-9.730246818	-10.19020705	-9.604757156	-11.17248181	-8.456540752	-9.01511	-5.334221541
+0.1	99.48301026	101.7961812	89.34404868	83.57056885	86.39059874	78.81654208	88.0678356	62.05083035	65.61248	40.65124604
-0.15	-18.87037196	-12.71714807	-15.67065498	-9.730246818	-10.19020705	-9.604757156	-11.17248181	-9.151030928	-9.78688	-7.119028333
+0.15	93.08403033	96.23051039	83.59551022	78.41951398	80.93097781	74.0812734	82.45875917	58.58061823	61.92712	37.99949661
-0.2	-26.4535105	-21.32277456	-20.56514079	-15.34804748	-15.34804748	-12.2830839	-12.2830839	-13.72335128	-14.5377	-10.68097458
+0.2	80.67124867	85.31352295	72.44532017	68.89075145	70.78156666	64.80461137	71.51608352	51.74663886	54.67178	33.40837759
-0.25	-30.12771305	-26.26356228	-23.05227551	-19.19433476	-19.19433476	-15.36088116	-15.36088116	-17.09892466	-18.0899	-12.45218794
+0.25	74.67692208	79.97721771	67.06111797	64.3203921	65.93678139	60.28000689	66.20283386	48.39487523	51.11456	31.18134923
-0.3	-38.01340529	-36.23672791	-28.48094776	-26.85193067	-26.85193067	-22.50748227	-22.94421028	-24.06320668	-25.416	-15.96028533
+0.3	63.16047912	69.58594215	56.71754622	55.41571329	56.52058905	51.50016536	55.94331731	41.85180206	44.17294	27.31156113
-0.35	-41.42978976	-41.25310501	-31.57254212	-30.65053136	-30.65053136	-26.62511457	-27.52385678	-27.72489397	-29.2669	-17.69124496
+0.35	57.65736747	64.54552548	51.77519449	51.09789584	51.96695385	47.2617233	51.01740793	38.6276449	40.75411	25.59237329
-0.4	-48.15596459	-51.30489034	-37.72191282	-38.15559428	-38.15559428	-34.79300647	-36.61852597	-34.81701055	-36.7222	-21.28243585
+0.4	46.95236631	54.47527049	42.39144061	42.77261335	43.2130903	39.33700228	41.96957283	32.15672618	33.89458	22.22053068
-0.45	-51.52049925	-56.32384651	-40.7719986	-41.84935236	-41.84935236	-38.8295379	-41.11829605	-38.37661045	-40.4637	-23.22833847
+0.45	42.03472473	49.62403387	37.96664726	38.78165347	39.03063699	35.7994638	38.08791652	29.21469649	30.7776	20.57379848
-0.5	-58.26817014	-66.30619851	-48.31977384	-49.44241444	-49.44241444	-46.77343744	-49.98455585	-44.62893907	-47.0331	-26.92961499
+0.5	32.84134865	40.69895158	29.69227123	31.44008161	31.44008161	29.01392679	30.65655062	23.94810648	25.20853	17.3735215
-0.55	-62.34468468	-71.25269195	-53.97824937	-53.65513395	-54.00040901	-50.66707813	-54.3357936	-47.41379278	-49.958	-28.68216977
+0.55	29.32428225	36.45611653	26.31842848	28.27464806	28.27464806	25.77965056	27.12208807	21.53680024	22.67032	15.82590157
-0.6	-72.43554463	-81.01349497	-65.27188974	-62.82426427	-63.94023755	-58.69198696	-63.31632168	-53.40824202	-56.3327	-31.98405804
+0.6	23.55624583	28.4434391	21.15902846	22.23927372	22.23927372	19.66241803	20.45375366	16.93926235	17.8308	12.85198275
-0.65	-78.89579492	-85.81045011	-71.07644602	-67.29550697	-68.79770286	-62.76715587	-68.32834922	-56.6306272	-59.7654	-34.09221768
+0.65	20.8385329	24.68679844	18.72785144	19.38204547	19.38204547	16.79320018	17.33514653	14.77572396	15.55339	11.43008564
-0.7	-91.57644905	-95.19352413	-82.47038595	-75.97010608	-78.24332274	-71.74243969	-79.40934452	-62.67716006	-66.2115	-36.74588856
+0.7	15.75498485	17.70535534	14.17948635	14.02023969	14.02023969	11.3458391	11.44515629	10.62761659	11.18696	8.732787305
-0.75	-97.7770849	-99.76183634	-88.04206366	-80.15692994	-82.81367266	-76.09212905	-84.80286495	-65.49900754	-69.2223	-38.05484091
+0.75	13.39663508	14.49330672	11.96786303	11.52837652	11.52837652	8.762673495	9.192344208	8.651339427	9.106673	7.463311723
-0.8	-109.8488812	-108.6069337	-98.88990434	-88.18837498	-91.60502861	-84.47363909	-95.24508768	-71.08460683	-75.192	-41.45657202
+0.8	9.064922368	8.657867415	8.099485991	6.428294226	6.428294226	5.428743176	5.536015415	5.182989706	5.455779	5.097516494
-0.85	-115.6998196	-112.8654644	-104.1479443	-92.01647627	-95.80824376	-88.48868805	-100.2734602	-73.73047809	-78.0166	-43.52140606
+0.85	7.098591564	6.046778018	6.34331961	4.742955112	4.742955112	3.78268548	3.760132825	3.615242214	3.805518	4.007121555
-0.9	-126.9805638	-121.00828	-114.2864115	-99.25614251	-103.7852779	-96.12540444	-109.8938554	-78.06293357	-82.6547	-47.45221011
+0.9	3.581993345	2.80832517	3.201903065	2.054400102	2.054400102	1.776448475	1.806487826	1.696398957	1.785683	2.026150601
-0.95	-132.3896914	-124.8738575	-119.1482722	-102.6512021	-107.5413223	-99.73029977	-114.4655485	-80.01696518	-84.7495	-49.30914764
+0.95	2.038305688	1.465041092	1.822408188	1.108952649	1.108952649	1.009113674	1.036712113	0.965729484	1.016557	1.141495189
-1	-143.5044159	-132.1460183	-128.4816989	-108.9504778	-114.5439917	-106.471207	-123.0810677	-83.49489358	-88.4844	-52.7835196
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.41E+02	1.30E+02	126.793611	1.07E+02	1.13E+02	104.8367022	120.982883	8.27E+01	8.76E+01	5.19E+01
-2.05	-1.32E+00	-1.01E+00	-1.181689006	-8.22E-01	-8.22E-01	-0.651544482	-0.669103969	-6.25E-01	-6.58E-01	-7.28E-01
+2.05	1.36E+02	1.27E+02	1.22E+02	104.2781684	109.3453999	1.01E+02	1.17E+02	8.09E+01	85.73546	5.02E+01
-2.1	-4.41E+00	-3.46E+00	-3.939985099	-2.740633028	-2.740633028	-2.185986327	-2.217203754	-2.085803854	-2.19558	-2.496453605
+2.1	1.25E+02	1.19E+02	1.13E+02	97.48908409	101.8344689	9.43E+01	1.08E+02	7.70E+01	81.54536	4.65E+01
-2.15	-6.17E+00	-4.84E+00	-5.511051869	-3.865519336	-3.865519336	-3.044993077	-3.078505529	-2.903728808	-3.05656	-3.48738319
+2.15	119.3787872	114.9376053	107.4897423	93.86773025	97.84433491	90.43619048	102.7193978	74.86068752	79.2258	44.52775516
-2.2	-10.09861771	-10.05138979	-9.083245609	-7.893221609	-7.893221609	-6.301973924	-6.413028098	-6.013473144	-6.32997	-5.667564479
+2.2	107.7342572	106.4217131	96.17309157	86.21271725	89.43922849	82.40741603	92.66434401	69.83829304	73.86011	40.39907845
-2.25	-12.26491612	-12.97054189	-11.02102732	-10.17100081	-10.17100081	-8.12383125	-8.242189514	-7.74852334	-8.15634	-6.850895523

+2.25	101.7222317	101.9975083	90.46515981	82.19557302	85.04204115	78.2152527	87.44156913	66.89509939	70.72199	38.67961011
-2.3	-16.98070782	-19.39432427	-15.23826169	-15.32319855	-15.32319855	-12.63153043	-12.83491205	-11.61843642	-12.2299	-9.389214956
+2.3	88.48191443	92.86219099	79.3070953	73.82326604	75.90282739	69.51734289	76.65639408	61.20837712	64.64501	36.06190609
-2.35	-19.52295155	-22.88642783	-17.51136838	-18.00531083	-18.00531083	-15.41753312	-15.84237921	-13.7122248	-14.4339	-10.73828786
+2.35	81.65904044	88.16910489	73.6013589	69.48463067	71.17860037	65.02837529	71.11433277	58.18463747	61.42146	34.82375007
-2.4	-24.95741306	-30.39915854	-22.44758899	-23.71895103	-23.71895103	-21.15512094	-22.0786726	-18.06451877	-19.0153	-13.58143716
+2.4	68.72552797	78.5766363	62.08820855	60.54364587	61.46532798	56.81107008	61.20979389	51.73949931	54.55567	31.78417725
-2.45	-27.84192977	-34.40680442	-25.0287514	-26.73777341	-26.73777341	-24.2149905	-25.41424345	-20.36409504	-21.4359	-15.06959277
+2.45	63.74672658	73.69480299	56.45014836	55.95782758	56.49408563	52.57908813	56.4739248	48.74849843	51.35965	30.15881053
-2.5	-35.10415535	-42.89167893	-31.49175886	-33.06769063	-33.06769063	-30.68254622	-32.4820833	-25.18584819	-26.5114	-18.16424816
+2.5	56.49557094	63.80336771	45.74025177	47.64447371	47.64447371	44.7931516	47.77296577	43.17783652	45.50878	26.70396519
-2.55	-39.70416254	-47.35548249	-35.6210397	-36.84542881	-37.0052137	-34.07650675	-36.1991016	-27.78340637	-29.2616	-19.76482708
+2.55	53.15451453	58.81089621	42.73534509	43.66665263	43.66665263	40.82019344	43.33872611	40.18634802	42.36586	24.87730816
-2.6	-49.54115492	-56.87985529	-44.45220363	-44.82610467	-45.36882295	-41.15044594	-43.96117179	-33.66639292	-35.4944	-23.05767215
+2.6	46.45270997	48.7746424	36.65680638	36.28043399	36.28043399	32.74861644	34.34085957	33.15598883	34.97623	21.03258129
-2.65	-54.75979232	-62.08380813	-49.13766115	-48.99014336	-49.74728126	-45.19710054	-48.62496824	-36.72972231	-38.7415	-24.74400852
+2.65	43.10324648	43.74756949	33.59106825	32.52698523	32.52698523	28.66374174	29.79250396	29.49326471	31.12636	19.01732416
-2.7	-65.75101247	-72.16337369	-59.40352783	-57.62436418	-58.85307155	-53.67260296	-58.4751982	-43.47359377	-45.8932	-28.20652277
+2.7	36.26972502	33.71661525	26.73877588	24.93121701	24.93121701	20.43008709	20.63502192	22.1688905	23.42343	15.08668064
-2.75	-71.66531062	-77.36014878	-64.58025224	-62.07801758	-63.5626044	-58.06388224	-63.60664637	-46.74601435	-49.3649	-30.36135144
+2.75	32.5631084	28.72895638	24.29055093	21.10156938	21.10156938	16.88743594	17.04399909	18.74901465	19.82593	13.33224922
-2.8	-83.83327551	-88.03126195	-75.35330838	-71.21716037	-73.25052021	-67.11155272	-74.23136646	-53.44828996	-56.478	-34.82668113
+2.8	24.5789177	18.84932149	19.23962281	13.41055882	13.41055882	10.73310642	11.17247897	12.30462543	13.03687	9.790557708
-2.85	-90.04282	-93.49081356	-81.10188937	-75.88612005	-78.21110299	-71.75114444	-79.7042766	-56.86614423	-60.1066	-37.12815554
+2.85	20.78719632	13.97308504	16.27026891	9.730225534	10.19020468	9.604719548	11.17247897	10.00611055	10.6205	8.009210449
-2.9	-102.84157	-104.6204181	-92.60659383	-85.97997132	-88.95898702	-81.21995905	-90.92042732	-63.80522586	-67.4759	-41.8461488
+2.9	12.96399702	12.48082431	11.70192246	9.730225534	10.19020468	9.604719548	11.17247897	8.080956735	8.599313	4.440334771
-2.95	-109.4110975	-110.2752362	-98.51166193	-90.79440959	-94.09622534	-86.20883611	-96.93468495	-67.31445279	-71.2039	-44.25364197
+2.95	12.25013609	12.37970366	11.02498299	9.730225534	10.19020468	9.604719548	11.17247897	7.278180477	7.713658	4.034905006
-3	-123.5125188	-121.1468033	-110.9979035	-100.5033657	-104.4761224	-96.38334937	-108.9999039	-74.38232706	-78.7144	-49.1430374
+3	12.18286902	12.31243659	10.96444262	9.730225534	10.19020468	9.604719548	11.17247897	7.188220582	7.611986	4.034905006

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-6.465990233	-6.042910573	-5.151422679	-4.369944574	-5.371624765	-7.626288024	-8.095455784	-8.946522507	-9.511192251
End Shear	70.31055711	64.7448019	57.20377312	46.81968984	58.01403707	77.922161	83.1211735	82.39897886	82.927821
-0.05	-6.465990233	-6.325023485	-5.282296288	-4.59661352	-5.371624765	-7.626288024	-8.095455784	-8.946522507	-9.511192251
+0.05	64.62494776	59.56159123	52.52564782	42.64940727	53.52638797	71.930172	75.95529862	75.79132609	75.99573719
-0.1	-6.465990233	-7.760792602	-7.673740876	-6.282812928	-5.371624765	-7.626288024	-8.095455784	-8.946522507	-9.511192251
+0.1	57.37020506	53.03356132	46.42184444	37.58658336	47.7454445	63.62572812	67.26737587	67.150285	67.12245901
-0.15	-6.465990233	-8.378047559	-8.738382156	-7.159491609	-6.777879179	-7.626288024	-8.095455784	-8.946522507	-9.511192251
+0.15	53.89907248	50.10154951	43.23468699	35.12601684	44.9010689	59.78452719	63.01548813	62.91987266	62.89142489
-0.2	-10.81040813	-12.51793974	-12.92608277	-10.4546969	-10.16934888	-10.44062132	-10.44544358	-10.38924877	-10.33799307
+0.2	47.11993799	44.74808357	37.75093888	30.57232438	38.98886366	52.26619351	54.73528356	54.67843558	54.64903785
-0.25	-13.51908367	-15.58177667	-15.26994653	-12.13907287	-11.85593782	-13.05674899	-13.06236799	-13.00697606	-12.95645025
+0.25	43.82465206	42.10332462	34.33724099	28.07847802	36.27873597	48.6027973	50.72276061	50.68307486	50.74455964
-0.3	-18.91175963	-21.87013045	-19.42411948	-15.41696568	-15.19685509	-18.84748672	-18.85635109	-18.79015787	-18.72978285
+0.3	37.45442446	36.90018421	29.0482396	23.70053713	31.02371444	41.5018401	43.54181181	43.51148493	43.72307577
-0.35	-21.5868098	-25.15116254	-21.39071314	-17.01181494	-16.84559524	-22.04716495	-22.05697106	-21.99196497	-21.93266837
+0.35	34.39220207	34.20653672	26.94280864	21.96778732	28.48898163	38.07802011	40.13540948	40.10478904	40.31101987
-0.4	-26.8719489	-31.52688988	-25.45593531	-20.3232641	-20.08566939	-28.38746782	-28.39907131	-28.33673052	-28.62824174
+0.4	29.29459613	28.93674925	22.99987208	18.55044683	23.63048146	31.72528109	33.55262789	33.52174246	33.49356241
-0.45	-29.4730902	-34.7615165	-27.40112144	-21.93550808	-21.67141712	-31.51741442	-32.09896296	-32.02610688	-32.04531288
+0.45	26.88612128	26.53295122	21.08710438	16.96657273	21.31686844	28.94204995	30.38896018	30.35810157	30.32996508
-0.5	-34.57013178	-40.46705256	-31.58341219	-25.37820919	-26.01067055	-37.67019486	-39.48720648	-39.41783	-40.04147309
+0.5	22.23644201	21.8951298	17.396882	13.93201865	16.94631934	23.59413228	24.34889005	24.31845485	24.29070674
-0.55	-37.18962756	-43.02187369	-33.78243288	-27.21626473	-28.8936314	-40.68235136	-43.11837609	-43.05089057	-43.92426589
+0.55	19.93730837	19.67009446	15.62658879	12.48630907	15.24993686	21.0401186	21.48522217	21.45518283	21.42779089
-0.6	-42.7979308	-47.78725496	-37.84717099	-30.67122438	-34.56040245	-46.88237135	-50.22300464	-50.15957314	-51.43471539
+0.6	15.68489922	15.43024991	12.2535398	9.750354348	12.41038358	16.19868717	16.22856543	16.20240095	16.17854432
-0.65	-45.45261768	-49.99852962	-39.71595716	-32.28988193	-37.33405005	-50.21258232	-53.68374179	-53.62245267	-55.05257201
+0.65	13.67163046	13.68698641	10.65794552	8.464963135	11.01154586	13.92195503	13.8510999	13.924211	13.90084855
-0.7	-50.83595765	-54.08003876	-43.13404075	-35.31389591	-42.73648882	-57.55206288	-60.39024155	-60.33348065	-61.9889898
+0.7	9.671054493	9.844529054	7.666527517	6.071384877	8.43713419	9.579407056	9.4594029	9.588614643	9.660808871
-0.75	-54.11613271	-55.95098674	-44.68641812	-36.72089251	-45.35511193	-61.11165451	-64.05000223	-64.05000223	-65.29774976
+0.75	7.978413972	8.013872312	6.27786631	4.967937223	7.224660743	7.448272471	7.696530844	7.722034553	7.835243169
-0.8	-60.45192466	-59.44976592	-48.5619549	-41.10322145	-50.40178413	-67.9762069	-71.53895292	-71.40313982	-71.98384621
+0.8	4.773900128	4.801085201	3.880196009	2.959461649	4.698695699	4.6144317	4.601797155	4.62344185	4.643187791
-0.85	-63.49483233	-61.07842727	-51.31299381	-43.30541036	-52.81966977	-71.26744522	-75.4135457	-75.24186529	-75.80458283
+0.85	3.32550808	3.348855945	2.80250619	2.13836769	3.826121883	3.215282658	3.203162055	3.222862813	3.24083606
-0.9	-69.29885971	-63.98345787	-56.59100379	-47.55651029	-57.41913711	-77.53350782	-82.83453621	-82.7926504	-83.67537723
+0.9	1.561527484	1.571401139	1.425372225	1.106472369	1.940216171	1.509981203	1.503470565	1.51301403	1.521718819
-0.95	-72.04726905	-65.25849416	-59.10671246	-49.5983766	-59.59056364	-80.49460936	-86.36516339	-86.50821618	-87.51920833
+0.95	0.886363517	0.894570469	0.81001003	0.630559095	1.097543228	0.857746623	0.851575024	0.860173789	0.868016126
-1	-77.20509729	-69.43807448	-63.86341321	-53.49691393	-63.65139793	-86.03862391	-93.02722558	-94.35634882	-95.08857269
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	7.60E+01	6.82E+01	6.27E+01	5.25E+01	6.27E+01	8.47E+01	91.40416215	92.3590674	9.30E+01
-2.05	-5.72E-01	-5.79E-01	-5.23E-01	-4.10E-01	-7.05E-01	-5.54E-01	-0.547742271	-0.555785341	-5.63E-01
+2.05	7.34E+01	6.58E+01	6.03E+01	5.06E+01	6.06E+01	8.19E+01	88.07172259	88.29777045	8.94E+01
-2.1	-1.92184924	-1.932113044	-1.753169663	-1.361378733	-2.390161404	-1.858088378	-1.851320054	-1.861239287	-1.870286821
+2.1	6.79E+01	6.33E+01	5.53E+01	4.65E+01	5.63E+01	7.60E+01	81.01167173	80.86745883	8.17E+01
-2.15	-2.677703879	-2.689769843	-2.475093108	-1.906149589	-3.333684135	-2.588244115	-2.581207847	-2.592064131	-2.626693216
+2.15	64.97295044	61.84506177	52.65568583	44.38561505	53.99215051	72.86461104	77.29985491	77.11088933	77.76322305
-2.2	-5.542226584	-5.570375123	-4.341421365	-3.43720405	-5.408689046	-5.356677835	-5.343598248	-5.366008206	-5.386449684
+2.2	58.88817923	58.58732598	47.15471368	39.98199198	49.15714785	66.28322867	69.55202057	69.43478868	70.34300501
-2.25	-7.145355477	-7.177579515	-5.614707409	-4.441810458	-6.534583047	-6.905256563	-6.891800988	-6.916128958	-6.938310343
+2.25	55.71923328	56.83976907	45.42088881	37.71142993	46.63294693	62.84980605	65.53179534	65.4503804	66.97004615

-2.3	**-10.63916261**	**-10.7623411**	**-8.391473818**	**-6.648253878**	**-9.066776839**	**-10.60460281**	**-10.26615782**	**-10.61404433**	**-10.68535367**
+2.3	**49.23284821**	**53.09722538**	**42.31531562**	**34.58271151**	**41.39657622**	**55.73183623**	**58.73241064**	**58.67494931**	**60.28439084**
-2.35	**-12.70119737**	**-12.69595892**	**-9.887781322**	**-7.84540941**	**-10.35449731**	**-12.8287532**	**-12.36194059**	**-12.82969314**	**-12.80635133**
+2.35	**46.7334346**	**51.05623394**	**40.6062338**	**33.07071322**	**38.69454431**	**52.06101703**	**55.3781345**	**55.31841553**	**56.8152775**
-2.4	**-16.72711622**	**-16.46764075**	**-13.07835064**	**-10.4157039**	**-13.10995348**	**-17.38154422**	**-17.4120511**	**-17.38533726**	**-17.36096246**
+2.4	**41.42405431**	**46.63302817**	**36.86779455**	**29.83296098**	**33.14822604**	**45.43023909**	**48.45786367**	**48.39386599**	**49.5802736**
-2.45	**-18.85411606**	**-18.58831466**	**-14.76544931**	**-11.78404538**	**-14.53021388**	**-19.80322751**	**-20.10349795**	**-20.07333537**	**-20.04582743**
+2.45	**38.61927767**	**44.25009747**	**34.83537429**	**28.10549346**	**30.31407955**	**42.16058107**	**44.90456686**	**44.83855956**	**45.8241845**
-2.5	**-23.38371735**	**-23.03759008**	**-18.3053716**	**-14.67493778**	**-18.0124085**	**-24.91046518**	**-25.82993715**	**-25.79893983**	**-25.77066792**
+2.5	**33.30244941**	**39.13980575**	**30.43645403**	**24.42891956**	**24.54925014**	**36.13729966**	**37.64352852**	**37.57377454**	**38.05939135**
-2.55	**-25.70930931**	**-25.35720348**	**-20.1510486**	**-16.19258813**	**-20.19862053**	**-27.58534408**	**-28.85107871**	**-28.81985028**	**-28.79138314**
+2.55	**30.75324825**	**36.41172093**	**28.3472521**	**22.72711352**	**22.5961821**	**33.06011818**	**33.94851294**	**33.87700414**	**34.06048761**
-2.6	**-30.5254772**	**-30.16394052**	**-23.97586863**	**-19.35976566**	**-24.82513366**	**-33.15090724**	**-35.17737178**	**-35.14606245**	**-35.11750805**
+2.6	**25.55190555**	**30.02499776**	**24.45674688**	**19.50263796**	**19.278282**	**26.80136595**	**26.81302425**	**26.75043374**	**27.04315429**
-2.65	**-33.00711324**	**-32.64207812**	**-25.94786485**	**-21.10686715**	**-27.25526885**	**-36.41131528**	**-38.4698147**	**-38.43863338**	**-38.41017566**
+2.65	**22.90869503**	**26.73994285**	**22.42302739**	**17.84031376**	**17.65782747**	**23.63048504**	**23.6412475**	**23.57730869**	**23.51899571**
-2.7	**-39.02729884**	**-38.19511212**	**-30.34656955**	**-24.77110232**	**-32.32391447**	**-43.25783566**	**-45.28147004**	**-45.25084134**	**-45.46453794**
+2.7	**17.55960028**	**20.17720853**	**18.41628453**	**14.60671587**	**14.36094098**	**17.23236639**	**17.24125105**	**17.17493688**	**17.11447178**
-2.75	**-42.21344632**	**-40.79732542**	**-32.99194573**	**-26.96068503**	**-34.95226625**	**-46.80943202**	**-48.78794322**	**-48.75774142**	**-48.97623086**
+2.75	**14.86268736**	**17.08211252**	**16.36857838**	**12.96780845**	**12.69008326**	**14.35432055**	**14.36075693**	**14.48739922**	**14.25635123**
-2.8	**-48.80286871**	**-46.08587122**	**-39.16821738**	**-31.74529527**	**-40.37159854**	**-54.13497688**	**-56.78729469**	**-56.72068244**	**-56.69096275**
+2.8	**9.446424077**	**10.95451075**	**11.83098588**	**9.598753289**	**9.317555484**	**9.123140454**	**9.127965379**	**9.071755005**	**9.511151268**
-2.85	**-52.1934246**	**-48.7632138**	**-41.54971434**	**-33.91804063**	**-43.15243969**	**-57.89518126**	**-60.92862962**	**-60.84260287**	**-60.81334863**
+2.85	**6.736047355**	**8.910633412**	**9.361265715**	**7.867197339**	**7.621462101**	**7.626267714**	**8.095378261**	**8.946567334**	**9.511151268**
-2.9	**-59.13441768**	**-54.6532202**	**-47.9232308**	**-38.83819722**	**-49.18973832**	**-65.57618548**	**-69.43086999**	**-69.30186237**	**-69.27381629**
+2.9	**6.465938233**	**7.425970144**	**7.150097616**	**5.870571843**	**5.371656307**	**7.626267714**	**8.095378261**	**8.946567334**	**9.511151268**
-2.95	**-62.67214968**	**-57.91817182**	**-51.00528675**	**-41.37020702**	**-52.08093633**	**-69.61030739**	**-73.77597978**	**-73.62353721**	**-73.59622184**
+2.95	**6.465938233**	**6.70834774**	**5.847242548**	**5.027686869**	**5.371656307**	**7.626267714**	**8.095378261**	**8.946567334**	**9.511151268**
-3	**-70.30202517**	**-64.59124582**	**-57.16647781**	**-46.55661151**	**-57.9326326**	**-77.8936349**	**-82.61480237**	**-82.6293707**	**-82.94005859**
+3	**6.465938233**	**6.0429104**	**5.151448638**	**4.369955778**	**5.371656307**	**7.626267714**	**8.095378261**	**8.946567334**	**9.511151268**

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.298202577	-9.690773369	-7.69785	-8.90804	-9.39568
End Shear	92.90268544	93.79554522	79.09533	87.07551	92.22128
-0.05	-9.438710306	-10.16912779	-7.69785	-9.41045	-9.39568
+0.05	84.31684908	84.94155861	73.50061	80.73339	85.20374
-0.1	-12.82160666	-12.89916357	-10.2221	-11.2148	-11.9968
+0.1	74.44518663	73.92076569	66.09485	72.54823	75.96644
-0.15	-14.34794931	-14.49863333	-12.3581	-12.312	-13.8847
+0.15	69.57221582	68.57450752	62.42924	68.49421	71.41703
-0.2	-18.25266909	-19.23841417	-17.009	-16.237	-17.9931
+0.2	59.65013161	58.5438723	55.20402	60.4977	62.49677
-0.25	-21.3791458	-21.80567513	-20.8178	-20.0947	-21.4012
+0.25	55.46847863	54.05038323	51.65702	56.56893	58.14196
-0.3	-27.22820681	-27.80439463	-28.0445	-28.191	-28.1537
+0.3	47.82351224	45.39994337	44.72572	48.70712	49.5642
-0.35	-31.32226272	-31.14378234	-31.4699	-32.3473	-31.5036
+0.35	44.10451835	41.32949735	41.35402	44.50843	45.15918
-0.4	-40.69526597	-38.77917941	-38.6076	-40.1599	-41.3845
+0.4	36.90789856	34.62187168	34.69103	37.28961	37.82343
-0.45	-45.0007309	-42.72222219	-41.7108	-43.8396	-45.9198
+0.45	33.44402872	31.39190319	31.30627	33.81333	34.27293
-0.5	-52.86103962	-50.12908345	-47.3624	-52.9964	-54.5684
+0.5	26.81955206	25.21172247	25.45864	27.16138	27.59134
-0.55	-56.97847588	-53.59952073	-50.2107	-57.3399	-58.4519
+0.55	23.67270716	22.27442597	22.91818	24.42369	24.37231
-0.6	-65.30122514	-61.37996191	-56.8135	-64.9804	-65.7402
+0.6	17.74419268	16.73750217	17.96989	19.11534	18.37928
-0.65	-69.18553682	-65.06789016	-59.9357	-68.5246	-69.1473
+0.65	14.97627847	14.18900703	15.65932	16.51876	15.45769
-0.7	-76.35052855	-72.04569637	-66.0573	-75.1435	-76.877
+0.7	9.867520835	9.958129061	11.32365	11.91056	10.23517
-0.75	-79.63577725	-76.90808866	-69.1528	-78.2182	-80.8601
+0.75	8.02884935	8.006064589	9.195553	9.770358	8.271468
-0.8	-85.62326219	-88.05230746	-74.3198	-83.8978	-88.4816
+0.8	4.772232681	4.553781509	5.511471	5.84525	4.908673
-0.85	-88.85778698	-93.49537852	-76.667	-86.6314	-91.8111
+0.85	3.301722346	3.582085451	3.846125	4.071328	3.427421
-0.9	-97.55758491	-103.7668881	-80.976	-91.6194	-97.8202
+0.9	1.625501748	1.816582666	1.804778	1.909394	1.608353
-0.95	-101.6039322	-108.5870031	-82.9354	-93.8659	-100.577
+0.95	0.921383096	1.028065739	1.02862	1.082768	0.917988
-1	-110.3650458	-118.6147839	-86.4584	-97.8575	-105.588
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.08E+02	1.16E+02	8.56E+01	9.69E+01	1.04E+02
-2.05	-5.99E-01	-6.59E-01	-6.66E-01	-6.97E-01	-5.96E-01
+2.05	1.04E+02	1.11E+02	8.39E+01	94.92174	1.02E+02
-2.1	-1.993967437	-2.235196809	-2.21836	-2.34992	-1.97614
+2.1	9.54E+01	1.01E+02	7.99E+01	90.42812	9.64E+01
-2.15	-2.771185454	-3.118303584	-3.12054	-3.32857	-2.77381
+2.15	91.09800866	96.13896517	77.78731	87.93356	93.36782
-2.2	-5.551283391	-5.297691339	-6.39349	-6.78489	-5.69304
+2.2	84.19207757	85.25371008	73.09249	82.52994	86.7873
-2.25	-7.180394407	-7.073841324	-8.23645	-8.74842	-7.33217
+2.25	81.19819226	79.51306885	70.55489	79.68971	82.97617

-2.3	**-11.09469265**	**-10.97674218**	**-12.3753**	**-13.028**	**-11.4769**
+2.3	**74.6262498**	**70.20081102**	**64.64137**	**73.53968**	**74.9216**
-2.35	**-13.65025698**	**-13.09287054**	**-14.544**	**-15.333**	**-14.0601**
+2.35	**71.04360527**	**66.83052294**	**61.44432**	**70.22985**	**70.91023**
-2.4	**-19.18497726**	**-18.07847581**	**-19.1643**	**-20.3903**	**-19.8371**
+2.4	**63.27350636**	**59.45348797**	**55.19959**	**63.14062**	**63.96937**
-2.45	**-22.15037591**	**-20.84778432**	**-21.6513**	**-23.0947**	**-22.8347**
+2.45	**59.08146634**	**55.56680665**	**51.89777**	**59.36119**	**60.32498**
-2.5	**-28.44286164**	**-26.72086778**	**-26.7924**	**-28.7924**	**-29.2299**
+2.5	**50.94223439**	**48.33492525**	**45.98866**	**50.92046**	**52.55686**
-2.55	**-31.75621952**	**-29.81179949**	**-29.7828**	**-32.1195**	**-32.5718**
+2.55	**47.01205055**	**44.63186024**	**43.16273**	**46.34181**	**48.35133**
-2.6	**-38.68266586**	**-36.27021681**	**-36.3004**	**-39.0708**	**-39.6115**
+2.6	**38.55292593**	**36.79628977**	**37.04811**	**38.25963**	**39.11676**
-2.65	**-42.28202575**	**-39.62486111**	**-39.7023**	**-42.6813**	**-43.1726**
+2.65	**33.86661371**	**32.86872493**	**33.53075**	**34.3531**	**34.03882**
-2.7	**-49.71862795**	**-47.51923235**	**-46.4444**	**-50.6118**	**-51.6549**
+2.7	**25.8086589**	**26.21218479**	**26.27783**	**26.03941**	**26.61691**
-2.75	**-54.11097073**	**-51.84561499**	**-49.911**	**-54.5519**	**-56.0042**
+2.75	**22.88441029**	**23.04562112**	**22.66433**	**22.03821**	**23.14214**
-2.8	**-61.94953875**	**-60.83043229**	**-57.0037**	**-62.4902**	**-64.7122**
+2.8	**16.8204194**	**17.90988726**	**15.33659**	**15.05729**	**16.78576**
-2.85	**-66.91207173**	**-65.9489203**	**-60.6172**	**-66.4894**	**-69.1734**
+2.85	**15.06870796**	**15.26412308**	**13.37659**	**13.25513**	**14.81453**
-2.9	**-76.88553593**	**-76.63887217**	**-67.947**	**-74.5959**	**-78.2705**
+2.9	**12.01440399**	**12.2465534**	**9.103208**	**10.79866**	**10.99552**
-2.95	**-81.80164757**	**-82.15064131**	**-71.6507**	**-78.6894**	**-82.8903**
+2.95	**10.32328138**	**10.883458**	**7.774752**	**9.896929**	**9.43155**
-3	**-92.80705803**	**-93.7977692**	**-79.1043**	**-86.9226**	**-92.2321**
+3	**9.298171128**	**9.690775934**	**7.697834**	**8.908099**	**9.395664**

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.27E-14	-5.53E-14	-6.96E-14	-4.44E-14	-4.49E-14	-4.26E-14	-4.84E-14	-3.43E-14	-3.62E-14	-3.94E-14
End Shear	3.46E-14	5.00E-14	3.10E-14	4.22E-14	4.22E-14	3.41E-14	3.41E-14	3.10E-14	3.27E-14	1.84E-14
-0.05	-18.27635236	-18.46865558	-16.44875779	-14.5953702	-15.2853106	-14.4071357	-16.7587227	-10.7824618	-11.4180923	-6.052348457
+0.05	169.7150112	169.5751413	152.3209739	139.7957386	144.9938548	133.56765	150.3494262	103.6015444	109.5999675	68.19755589
-0.1	-36.55270472	-36.93731115	-32.89751558	-29.1907405	-30.5706211	-28.8142715	-33.5174454	-21.5649236	-22.8361847	-12.10469691
+0.1	310.9158989	316.1058423	279.5757353	256.0971301	264.9125734	243.6141929	272.707044	190.080159	201.0092459	125.5310814
-0.15	-54.82905708	-55.40596673	-49.34627337	-43.7861107	-45.8559317	-43.2214072	-50.2761681	-32.3473855	-34.254277	-18.15704537
+0.15	425.7292594	440.0820248	382.9306573	352.0179899	363.1502232	333.3657303	371.848066	262.0563513	277.0517814	172.3127448
-0.2	-73.10540944	-73.87462231	-65.79503116	-58.3814809	-61.1412423	-57.6285429	-67.0348908	-43.1298473	-45.6723693	-24.20939383
+0.2	514.5342428	541.05265	463.2450445	427.5204206	440.1463157	403.6447437	447.5829954	319.4216358	337.5558475	208.9460818
-0.25	-91.3817618	-92.34327788	-82.24378895	-72.9768511	-76.4265528	-72.0356787	-83.7936136	-53.9123091	-57.0904616	-30.26174228
+0.25	578.3962584	619.4428788	521.0681819	483.7877319	496.4172951	454.3057013	510.5617588	362.0490841	382.4255503	235.9260619
-0.3	-109.6581142	-110.8119335	-98.69254675	-87.5722214	-91.7118634	-86.4428144	-100.552336	-64.6947709	-68.508554	-36.31409074
+0.3	618.5888176	675.832591	557.5219471	520.8304017	532.4470825	495.3135691	566.8676063	390.5437561	412.3117571	254.7406283
-0.35	-127.9344665	-129.280589	-115.1413045	-102.167592	-106.997174	-100.84995	-117.311059	-75.4772327	-79.9266463	-42.3664392
+0.35	637.0154688	710.9562874	573.9071241	539.6891151	555.510793	529.7691307	600.2395883	405.632188	427.994566	270.0089571
-0.4	-146.2108189	-147.7492446	-131.5900623	-116.762962	-122.282485	-115.257086	-134.069782	-86.2596946	-91.3447386	-48.41878766
+0.4	634.7400468	725.7032862	571.703464	556.5866269	574.3913229	545.5521044	612.0365703	414.3426442	438.0114269	278.0714608
-0.45	-164.4871712	-166.2179002	-148.0388201	-131.358332	-137.567795	-129.664222	-150.828504	-97.0421564	-102.762831	-54.47113611
+0.45	613.6093427	721.1174811	552.5695584	559.4648858	574.3807085	543.8405855	604.4751395	417.7548908	441.2978012	279.2738501
-0.5	-182.7635236	-184.6865558	-164.4875779	-145.953702	-152.853106	-144.071357	-167.587227	-107.824618	-114.180923	-60.52348457
+0.5	590.8599421	713.6618256	531.501487	545.520542	557.8416458	525.9827303	583.8352434	408.711161	431.4012748	274.0219269
-0.55	-201.039876	-203.1552113	-180.9363357	-160.549072	-168.138416	-158.478493	-184.34595	-118.60708	-125.599016	-66.57583303
+0.55	595.917782	688.5642919	536.0540259	521.3908911	538.7903422	509.3721895	572.7742713	388.1960689	409.869797	262.781461
-0.6	-219.3162283	-221.6238669	-197.3850935	-175.144443	-183.423727	-172.885629	-201.104673	-129.389542	-137.017108	-72.62818148
+0.6	580.1188026	645.4370448	522.0178872	488.5128547	502.4332499	477.0635495	540.7786543	367.6822818	387.8865109	246.078242
-0.65	-237.5925807	-240.0925225	-213.8338513	-189.739813	-198.709037	-187.292765	-217.863395	-140.172004	-148.4352	-78.68052994
+0.65	540.3834346	585.6523283	486.4339658	450.3158484	459.9262257	429.5990732	489.7140707	338.3121806	357.1091403	224.49789
-0.7	-255.868933	-258.5611781	-230.2826091	-204.335183	-213.994348	-201.6999	-234.622118	-150.954465	-159.853293	-84.7328784
+0.7	478.176954	510.7371761	430.5406998	396.5703404	405.7332414	368.6179877	421.5687776	297.8737951	314.5010912	199.1476489
-0.75	-274.1452854	-277.0298337	-246.7313669	-218.930553	-229.279659	-216.107036	-251.380841	-161.736927	-171.271385	-90.78522685
+0.75	395.1644684	422.3735343	355.8177487	329.4770327	335.9105199	302.4268879	337.8371527	247.5293352	261.2915711	173.045712
-0.8	-292.4216378	-295.4984892	-263.1801247	-233.525924	-244.564969	-230.514172	-268.139563	-172.519389	-182.689477	-96.83757531
+0.8	293.210984	322.3976712	263.9238194	249.2338416	252.5597437	224.7225837	240.7812527	188.5624157	198.8389437	139.845163
-0.85	-312.6602678	-315.9294225	-281.3949323	-248.121294	-259.85028	-244.921307	-284.898286	-188.335541	-199.491501	-102.8899238
+0.85	191.217934	214.7629302	171.4499233	165.0625959	165.0625959	139.6335521	143.8155188	125.5374627	132.1446975	103.2199479
-0.9	-342.7343554	-346.1958133	-308.4616516	-262.716664	-275.13559	-259.328443	-301.657009	-255.018555	-269.757299	-118.276881
+0.9	122.4692267	109.4884955	109.4851691	85.97138295	85.97138295	68.53994157	68.64865706	65.18728745	68.61819732	68.13963343
-0.95	-429.2671776	-384.046583	-361.6859446	-277.312034	-290.420901	-273.735579	-318.415732	-328.705183	-347.203159	-149.6870733
+0.95	58.67156662	46.10017081	52.4605024	36.81204801	36.81204801	29.29629074	29.54629523	27.915945	29.38520526	32.95632721
-1	-541.9608661	-427.9576047	-445.6778973	-291.907402	-305.706208	-299.831375	-349.49365	-406.289748	-428.726718	-181.7946405
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-541.9608661	-427.9576047	-445.6778973	-291.907402	-305.706208	-299.831375	-349.49365	-406.289748	-428.726718	-181.7946405
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-429.2759314	-384.0465759	-361.607897	-277.311426	-290.42083	-273.734504	-318.415655	-328.701366	-347.199619	-149.6870734
+2.05	58.67156954	46.00194453	52.46050502	36.7423681	36.7423681	29.24267826	29.61179694	27.87651917	29.34370439	32.93645677
-2.1	-342.6974707	-346.1958066	-308.423957	-262.716087	-275.135523	-259.327425	-301.656937	-255.015345	-269.754357	-118.2767786
+2.1	122.4692858	109.557699	109.7920796	85.86799742	85.86799742	68.46049293	68.68641467	65.12884851	68.55668265	68.12141862
-2.15	-312.6254316	-315.9294162	-281.3593313	-248.120749	-259.850216	-244.920345	-284.898218	-188.333379	-199.48964	-102.8900788
+2.15	191.2179377	214.8400765	171.9345656	165.1173364	165.1173364	139.6631023	143.8397501	125.4816378	132.0859346	103.2028261
-2.2	-292.3888509	-295.4984841	-263.1466179	-233.525411	-244.564909	-230.513266	-268.1395	-172.517293	-182.687666	-96.83772128
+2.2	295.649149	322.4781652	266.2742232	249.1317862	252.4559457	224.7496414	240.7590196	188.5922032	198.870151	139.8278801

-2.25	-274.1145473	-277.0298292	-246.699954	-218.930072	-229.279602	-216.106187	-251.380781	-161.734962	-171.269687	-90.78536377
+2.25	397.901166	422.4533071	357.7860538	329.3692239	335.9536134	302.4473926	337.8111623	247.5568165	261.3202342	173.0271614
-2.3	-255.8402438	-258.5611743	-230.25329	-204.334734	-213.994295	-201.699107	-234.622063	-150.952631	-159.851708	-84.73300626
+2.3	480.8704292	510.8124324	432.2058452	396.608613	405.7664764	368.6024021	421.5351675	297.897287	314.525424	199.1274367
-2.35	-237.5659403	-240.0925195	-213.8066261	-189.739396	-198.708988	-187.292028	-217.863345	-140.1703	-148.433729	-78.68064875
+2.35	542.6973513	585.7194413	487.8675497	450.3429716	459.9465304	429.5759225	489.6692456	338.329988	357.1273496	224.4808619
-2.4	-219.2916367	-221.6238646	-197.3599622	-175.144057	-183.423681	-172.884949	-201.104626	-129.387969	-137.015749	-72.62829124
+2.4	581.9857789	645.4927574	523.2837359	488.5262511	502.4176049	477.0299301	540.8380164	367.6929776	387.8970869	246.0602352
-2.45	-201.0173332	-203.1552097	-180.9132983	-160.548719	-168.138374	-158.477869	-184.345908	-118.605638	-125.59777	-66.57593373
+2.45	597.2785893	688.6056933	537.1462109	521.3721623	538.7609344	509.3256275	572.8170186	388.227119	409.9548008	262.7622148
-2.5	-182.7430297	-184.6865548	-164.4666343	-145.953381	-152.853067	-144.07079	-167.587189	-107.823307	-114.179791	-60.52357622
+2.5	592.0576164	713.6862267	532.462736	545.5705192	557.7958807	526.0567085	583.8585376	408.735559	431.4278107	274.0011246
-2.55	-164.4687261	-166.2178999	-148.0199704	-131.358043	-137.56776	-129.663711	-150.828471	-97.0409764	-102.761812	-54.47121871
+2.55	615.6703661	721.1083196	554.1033277	559.5007606	574.4273335	543.9022753	604.4477903	417.7713982	441.3160223	279.251222
-2.6	-146.1944226	-147.749245	-131.5733065	-116.762704	-122.282453	-115.256631	-134.069752	-86.2586455	-91.3438323	-48.4188612
+2.6	636.7469781	725.6763128	573.2585442	556.6061669	574.4212066	545.5990895	612.1122676	414.3500206	438.0200039	278.0468165
-2.65	-127.9201191	-129.2805902	-115.1266425	-102.167366	-106.997146	-100.849552	-117.311034	-75.4763147	-79.9258531	-42.36650369
+2.65	639.4984143	710.9091849	575.831036	539.680077	555.5216756	529.7992943	600.2964712	405.6241723	427.9867649	269.9820387
-2.7	-109.6458156	-110.8119353	-98.6799786	-87.5720276	-91.7118391	-86.4424727	-100.552315	-64.6939838	-68.5078739	-36.31414618
+2.7	621.6365477	675.7634992	559.2480349	520.8040847	532.4283403	495.3251506	566.9033373	390.5261246	412.2937924	254.7112602
-2.75	-91.37151202	-92.3432804	-82.23331467	-72.9766893	-76.4265321	-72.0353933	-83.7935969	-53.9116529	-57.0898946	-30.26178867
+2.75	581.4157721	619.3502522	522.6544871	483.7423626	496.3787009	454.2914048	510.5744394	362.0209767	382.3964948	235.943057
-2.8	-73.09720849	-73.87462552	-65.78665074	-58.381351	-61.1412251	-57.628314	-67.0348785	-43.1293221	-45.6719154	-24.20943116
+2.8	517.0242458	540.9351916	464.7419867	427.4544163	440.0860845	403.6111931	447.5653001	319.382236	337.5148267	208.9601248
-2.85	-54.82290496	-55.40597064	-49.33998681	-43.7860127	-45.855918	-43.2212347	-50.27616	-32.3469912	-34.2539361	-18.15707366
+2.85	427.6447994	439.9386725	385.1500885	352.0882527	363.2249723	333.4329689	371.8061909	262.0049529	276.9980356	172.3235384
-2.9	-36.54860143	-36.93731576	-32.89332288	-29.1906744	-30.570611	-28.8141554	-33.5174416	-21.5646603	-22.8359569	-12.10471615
+2.9	312.2194529	315.9359913	281.1450491	256.1446519	264.9632363	243.6598537	272.7612697	190.1059345	201.0366244	125.538441
-2.95	-18.2742979	-18.46866087	-16.44665895	-14.5953361	-15.285304	-14.407076	-16.7587231	-10.7823294	-11.4179777	-6.052358637
+2.95	170.1153425	169.6021274	152.9582486	139.8197749	145.0195264	133.4993702	150.2856349	103.614559	109.6137952	68.20130012
-3	-9.25E-14	-8.93E-14	-6.74E-14	-7.16E-14	-7.16E-14	-5.77E-14	-5.77E-14	-6.43E-14	-6.77E-14	-4.02E-14
+3	1.02E-13	7.80E-14	9.22E-14	6.41E-14	6.41E-14	5.54E-14	5.78E-14	4.78E-14	5.03E-14	3.78E-14

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.21E-14	-3.01E-14	-3.06E-14	-2.64E-14	-4.06E-14	-3.39E-14	-3.37E-14	-3.49E-14	-3.46E-14
End Shear	3.01E-14	2.86E-14	2.25E-14	1.88E-14	1.85E-14	2.90E-14	3.02E-14	2.96E-14	2.99E-14
-0.05	-9.69898535	-9.064365859	-7.727134019	-6.554916861	-8.057437148	-11.43943204	-12.1431837	-13.4197838	-14.2667884
+0.05	97.2025904	89.34238685	78.78847173	64.17855781	80.28958195	107.895258	114.1889461	114.152751	114.3088895
-0.1	-19.3979707	-18.12873172	-15.45426804	-13.10983372	-16.1148743	-22.87886407	-24.2863674	-26.8395675	-28.5335768
+0.1	178.2369554	163.9358104	143.926148	117.462837	147.5403193	196.6914798	208.2534624	207.8684521	207.7859907
-0.15	-29.09695605	-27.19309758	-23.18140206	-19.66475058	-24.17231144	-34.31829611	-36.429551	-40.2593513	-42.8003651
+0.15	242.5458262	225.4569728	195.7293879	160.2055153	202.05481	269.0303724	283.5696966	290.6830514	290.6404927
-0.2	-38.7959414	-36.25746344	-30.90853607	-26.21966745	-32.22974859	-45.75772814	-48.5727347	-53.679135	-57.0671535
+0.2	292.7540826	276.4758453	234.8921175	193.2765114	242.1741977	325.3675377	341.2912391	364.709379	364.6176572
-0.25	-48.49492675	-45.3218293	-38.63567009	-32.77458431	-40.28718574	-57.19716018	-60.7159184	-67.0989188	-71.3339419
+0.25	329.1988554	315.7749347	262.1342456	216.8193233	272.0905197	366.0541002	382.0622788	418.6947631	418.5526705
-0.3	-58.1939121	-54.38619516	-46.36280411	-39.32950117	-48.34462289	-68.63659222	-72.8591021	-80.5187026	-85.6007303
+0.3	352.3283973	343.6988475	278.2603187	231.3284979	290.8370802	393.1821678	419.9203896	457.0753659	467.5472463
-0.35	-67.89289745	-63.45056101	-54.08993813	-45.88441803	-56.40206003	-80.07602425	-85.0022857	-93.9384863	-99.8675186
+0.35	362.8258913	360.5593669	288.3888599	240.6711749	299.1343072	420.7176365	446.100559	480.1392541	502.3194405
-0.4	-77.5918828	-72.51492687	-61.81707215	-52.43933489	-64.45949718	-91.51545629	-97.1454694	-107.35827	-114.134307
+0.4	373.3786075	366.8839863	294.7778449	246.2903618	297.8057881	433.1878034	456.4111077	493.9947713	518.4092727
-0.45	-87.29086815	-81.57929273	-69.54420617	-58.99425175	-72.51693433	-102.9548883	-109.288653	-120.778054	-128.401095
+0.45	372.2548469	363.4148039	291.3510635	243.8452251	287.7777239	431.5749415	458.6020513	497.7362845	517.2595595
-0.5	-96.9898535	-90.64365859	-77.27134019	-65.54916861	-80.57437148	-114.3943204	-121.431837	-134.197838	-142.667884
+0.5	360.1439628	360.1864661	286.1163899	240.0323108	275.2587301	417.0004517	448.6987031	490.4903644	509.2039354
-0.55	-106.6888388	-99.70802445	-84.99847421	-72.10408548	-88.63180862	-125.8337524	-133.57502	-147.617621	-156.934672
+0.55	348.1190355	348.0755205	276.2988562	231.7824213	279.5456542	403.5686494	428.7663794	468.259209	491.7906383
-0.6	-116.3878242	-108.7723903	-92.72560822	-78.65900234	-96.68924577	-137.2731844	-145.718204	-161.037405	-171.201461
+0.6	327.0089111	326.8453251	259.4759877	217.418816	272.3516217	378.8568135	397.6139889	435.4721486	457.9319631
-0.65	-126.0868095	-117.8367562	-100.4527422	-85.2139192	-104.7466829	-148.7126165	-157.861388	-174.457189	-185.468249
+0.65	300.5946402	297.2954951	236.0235947	197.4341876	254.3666589	341.6637826	361.0792846	394.5023006	409.1313614
-0.7	-135.7857949	-126.901122	-108.1798763	-91.76883606	-112.8041201	-160.1520485	-170.004571	-187.876973	-199.735037
+0.7	269.2724094	260.3172397	211.9371433	176.0005512	226.3839077	296.6036461	312.4608872	340.6756081	347.0627669
-0.75	-145.4847802	-135.9654879	-115.9070103	-98.32375292	-120.8615572	-171.5914805	-182.147755	-201.296756	-214.001826
+0.75	226.9641789	216.8923948	179.6895998	148.357588	189.2992882	245.695807	253.6863943	276.8381001	277.0241599
-0.8	-155.1837656	-145.0298537	-123.6341443	-104.8786698	-128.9189944	-183.0309126	-194.290939	-214.71654	-228.268614
+0.8	173.5209263	168.094045	137.6029174	112.602905	144.1115734	183.8548561	189.3795869	202.410087	202.6232187
-0.85	-164.8827509	-156.9063707	-131.3612783	-114.8299656	-136.9764315	-194.4703446	-206.434123	-228.136324	-242.535402
+0.85	116.2014011	115.0859236	91.22749852	73.31272402	99.32849867	116.2842829	116.4113895	120.4138847	120.2844376
-0.9	-174.5817363	-211.974392	-160.9859205	-137.9391932	-145.0338687	-205.9097766	-218.577306	-241.556108	-256.802191
+0.9	60.24906851	60.38401364	48.11392968	37.43535411	65.69382283	58.25895034	58.01293383	58.28071522	58.4817566
-0.95	-197.4187637	-278.495314	-217.3326852	-185.9840639	-153.0913058	-217.3492087	-242.529528	-272.822689	-295.319881
+0.95	25.7379897	25.85898063	23.40649224	18.12107511	31.95712214	24.90184713	24.74267624	24.92902532	25.09901258
-1	-241.9102769	-348.9005919	-276.2849781	-237.577486	-178.07869	-245.868515	-283.886068	-313.989942	-336.955135
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-241.9102769	-348.9005919	-276.2849781	-237.577486	-178.07869	-245.868515	-283.886068	-313.989942	-336.955135
+2	0	0	0	0	0	0	0	0	0
-2.05	-197.416346	-278.4925354	-217.3324211	-185.9839507	-153.0922016	-217.3486275	-242.528317	-272.82168	-295.315039
+2.05	25.69143595	25.82245986	23.37698625	18.13667281	31.89502174	24.85627652	24.69935659	24.88768247	25.05953669
-2.1	-174.5803301	-211.9728722	-160.9853968	-137.938965	-145.0347171	-205.9092259	-218.575216	-241.557319	-256.801083
+2.1	60.18008178	60.32988073	48.13213083	37.44321033	65.63689492	58.19141899	57.94866222	58.21937922	58.46637486
-2.15	-164.8814228	-156.9076602	-131.3619423	-114.8306631	-136.9772327	-194.4698243	-206.432149	-228.137468	-242.534356
+2.15	116.1355751	115.0342509	91.24779788	73.29701082	99.27497867	116.3128851	116.3438528	120.3697972	120.3277223
-2.2	-155.1825154	-145.0298525	-123.6347694	-104.8789404	-128.9197482	-183.0304228	-194.289082	-214.717617	-228.26763
+2.2	173.4532528	168.0432199	137.6218474	112.5864781	144.1911681	183.7813683	189.4007373	202.4513092	202.7513488
-2.25	-145.4836081	-135.9654869	-115.9075964	-98.32400673	-120.8622638	-171.5910212	-182.146014	-201.297766	-214.000903

+2.25	226.8904095	216.8409753	179.7043182	148.3392325	189.3746431	245.716697	253.6998227	276.8732229	277.0577438
-2.3	-135.7847007	-126.9011213	-108.1804235	-91.76907307	-112.8047793	-160.1516196	-170.002947	-187.877915	-199.734176
+2.3	269.2943522	260.2638343	211.9464092	175.9797197	226.4532413	296.616558	312.4434583	340.7123629	347.1139116
-2.35	-126.0857934	-117.8367557	-100.4532505	-85.2141394	-104.7472948	-148.7122181	-157.859879	-174.458064	-185.467449
+2.35	300.6069565	297.2387502	235.9835818	197.4169202	254.4282117	341.6489827	361.0533572	394.5319847	409.1766321
-2.4	-116.386886	-108.7723901	-92.72607754	-78.65920573	-96.68981039	-137.2728165	-145.716812	-161.038213	-171.200722
+2.4	327.0353098	326.7840559	259.4327086	217.4001655	272.4037839	378.8332747	396.8434822	435.4925439	457.9689256
-2.45	-106.6879787	-99.70802445	-84.99890458	-72.10427207	-88.63232593	-125.8334149	-133.573745	-147.618362	-156.933995
+2.45	348.1386612	348.0087089	276.2962851	231.7620953	279.5871968	403.5343678	428.7410214	468.3016364	491.8169787
-2.5	-96.98907132	-90.64365885	-77.27173162	-65.5493384	-80.57484146	-114.3940133	-121.430677	-134.198511	-142.667268
+2.5	360.1555212	360.1131008	286.1227998	240.0225307	275.2883574	417.054892	448.6632383	490.5221135	509.2175277
-2.55	-87.29016397	-81.57929325	-69.54455867	-58.99440473	-72.517357	-102.9546118	-109.28761	-120.77866	-128.400541
+2.55	372.2799565	363.411387	291.3103407	243.8525599	287.8800462	431.6196641	458.643521	497.7555648	517.2475024
-2.6	-77.59125662	-72.51492765	-61.81738571	-52.43947107	-64.45987254	-91.51521021	-97.1445425	-107.358809	-114.133814
+2.6	373.3937403	366.8739742	294.7316257	246.2954127	297.9016408	433.2208071	456.4405512	493.9540773	518.3838344
-2.65	-67.89234927	-63.45056205	-54.09021275	-45.8845374	-56.40238808	-80.07580864	-85.0014751	-93.9389579	-99.8670874
+2.65	362.8204	360.5418507	287.9937237	240.4969565	299.2220901	420.7371649	446.1304118	480.1223393	502.367665
-2.7	-58.19344192	-54.38619645	-46.36303979	-39.32960373	-48.34490362	-68.63640707	-72.8584077	-80.5191069	-85.6003605
+2.7	352.3120928	343.755985	278.2535235	231.3255629	290.9152041	393.1867531	419.9352724	457.1371578	467.579232
-2.75	-48.49453457	-45.32183085	-38.63586684	-32.77467007	-40.28741916	-57.1970055	-60.7153403	-67.0992559	-71.3336336
+2.75	329.1703028	315.823417	262.120688	216.8134777	272.15793	366.037593	382.0543723	418.7491338	420.1889505
-2.8	-38.79562722	-36.25746525	-30.90869388	-26.2197364	-32.2299347	-45.75760393	-48.5722729	-53.6794049	-57.0669067
+2.8	292.817225	276.5152514	235.0093271	194.1031558	242.2296047	325.3355123	341.2675824	364.7463174	364.6529773
-2.85	-29.09671988	-27.19309965	-23.18152092	-19.66480274	-24.17245024	-34.31820235	-36.4292055	-40.2595539	-42.8001798
+2.85	242.5944304	225.4867772	195.6994846	160.2178409	201.9915233	269.0848962	283.6269194	290.7010965	290.6577331
-2.9	-19.39781253	-18.12873405	-15.45434797	-13.10986907	-16.11496578	-22.87880078	-24.2861381	-26.8397029	-28.5334529
+2.9	178.1642189	163.9596007	143.9164125	117.4712639	147.5691643	196.7285387	208.2925746	207.9055528	207.8214153
-2.95	-9.698905176	-9.064368448	-7.727175008	-6.554935403	-8.057481322	-11.43939921	-12.1430708	-13.4198519	-14.266726
+2.95	97.11346612	89.35460497	78.79851078	64.1828861	80.30421922	107.8363463	114.1103756	114.0776062	114.2370885
-3	-5.11E-14	-5.96E-14	-4.80E-14	-3.87E-14	-3.77E-14	-4.90E-14	-5.26E-14	-5.49E-14	-5.69E-14
+3	4.50E-14	4.42E-14	3.49E-14	2.94E-14	4.93E-14	4.56E-14	4.69E-14	4.67E-14	4.61E-14

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.84E-14	-7.25E-14	-4.27E-14	-4.51E-14	-4.60E-14
End Shear	2.77E-14	2.52E-14	3.38E-14	3.61E-14	3.06E-14
-0.05	-13.94730387	-14.53616005	-11.5467704	-13.3620576	-14.0935179
+0.05	126.4752736	128.3671972	110.2509097	121.1000842	127.8056041
-0.1	-27.89460773	-29.07232011	-23.0935409	-26.7241153	-28.1870357
+0.1	230.6241757	232.7266385	202.4315745	223.7584996	233.1759002
-0.15	-41.8419116	-43.60848016	-34.6403113	-40.0861729	-42.2805536
+0.15	313.3810076	313.2199064	279.560024	308.2239458	320.3571695
-0.2	-55.78921546	-58.14464021	-46.1870817	-53.4482306	-56.3740715
+0.2	375.4993744	371.0294016	340.9654279	374.8844715	387.7365042
-0.25	-69.73651933	-72.68080027	-57.7338522	-66.8102882	-70.4675893
+0.25	420.8987849	409.7030658	386.7553263	424.2669655	436.0826767
-0.3	-83.68382319	-87.21696032	-69.2806226	-80.1723459	-84.5611072
+0.3	467.1224169	457.0130517	417.5455643	460.5338513	484.0670124
-0.35	-97.63112706	-101.7531204	-80.827393	-93.5344035	-98.654625
+0.35	495.0903341	484.1278827	434.0794388	497.1939241	516.873201
-0.4	-111.5784309	-116.2892804	-92.3741635	-106.896461	-112.748143
+0.4	513.1796725	491.3748311	443.6027917	517.2202487	531.8049968
-0.45	-125.5257348	-130.8254405	-103.920934	-120.258519	-126.841661
+0.45	517.2806968	487.9646997	447.7935799	521.2150785	530.7012211
-0.5	-139.4730387	-145.3616005	-115.467704	-133.620576	-140.935179
+0.5	506.462059	473.7985787	438.6997971	510.2871564	517.0504212
-0.55	-153.4203425	-159.8977606	-127.014475	-146.982634	-155.028696
+0.55	481.7100145	460.724289	417.3356287	485.5610101	500.0541449
-0.6	-167.3676464	-174.4339206	-138.561245	-160.344692	-169.122214
+0.6	444.4164269	437.0163174	394.2200095	448.2599364	467.3448508
-0.65	-181.3149502	-188.9700807	-150.108016	-173.706749	-183.215732
+0.65	400.8539499	398.2729839	361.9007195	399.7459625	420.3516951
-0.7	-195.2622541	-203.5062407	-161.654786	-187.068807	-197.30925
+0.7	349.4524686	340.4445021	318.0812318	341.8075357	360.5524232
-0.75	-209.209558	-218.0424008	-173.201557	-200.430865	-211.402768
+0.75	283.6471004	272.2870695	263.9551625	283.4668454	289.7036383
-0.8	-223.1568618	-232.5785609	-184.748327	-213.792922	-225.496286
+0.8	206.5481028	200.1740444	200.7099721	215.0309779	212.4442552
-0.85	-242.6340126	-251.9285596	-208.777901	-234.019561	-251.611221
+0.85	125.8036101	121.5803238	133.2587911	141.7863494	128.9506649
-0.9	-326.5676409	-330.0333718	-271.287455	-313.551899	-334.155241
+0.9	59.74439058	60.74368741	69.30602662	73.42730989	61.69317452
-0.95	-432.0134278	-430.7837849	-339.382444	-403.918267	-424.690821
+0.95	26.55271191	29.52531797	29.70696763	31.3512852	26.48214561
-1	-542.6495482	-535.7203932	-412.29166	-500.997139	-521.695229
+1	0	0	0	0	0
(Span 2) -2	-542.6495482	-535.7203932	-412.29166	-500.997139	-521.695229
+2	0	0	0	0	0
-2.05	-432.0116026	-430.7834587	-339.381384	-403.918745	-424.686986
+2.05	26.57790518	29.51911277	29.66637953	31.30792136	26.44737041
-2.1	-326.5657557	-330.0327786	-271.284296	-313.555157	-334.15416
+2.1	59.6945199	60.73801772	69.24577149	73.36308746	61.66064897
-2.15	-242.6335749	-251.9284148	-208.777542	-234.020537	-251.6075
+2.15	125.8197461	121.5857964	133.290742	141.7250453	128.8908104
-2.2	-223.1560963	-232.578629	-184.748018	-213.794383	-225.495922
+2.2	206.5620722	200.1784328	200.6508974	214.9676142	212.4202191
-2.25	-209.2088396	-218.0424651	-173.201267	-200.432234	-211.402427

+2.25	**283.630787**	**272.2897822**	**263.8934501**	**283.400416**	**289.6911319**
-2.3	**-195.2615829**	**-203.5063012**	**-161.654516**	**-187.070085**	**-197.308931**
+2.3	**349.4307687**	**340.4412681**	**318.1056399**	**341.8326756**	**360.5369806**
-2.35	**-181.3143262**	**-188.9701373**	**-150.107765**	**-173.707937**	**-183.215436**
+2.35	**400.8246246**	**398.2681752**	**361.919536**	**399.7334908**	**420.4078387**
-2.4	**-167.3670695**	**-174.4339734**	**-138.561014**	**-160.345788**	**-169.12194**
+2.4	**444.3992831**	**437.0096846**	**394.23173**	**448.2424641**	**467.394234**
-2.45	**-153.4198128**	**-159.8978095**	**-127.014263**	**-146.983639**	**-155.028445**
+2.45	**481.686795**	**460.7185791**	**417.3677657**	**485.5369046**	**500.0951817**
-2.5	**-139.4725561**	**-145.3616456**	**-115.467513**	**-133.62149**	**-140.934949**
+2.5	**506.4312207**	**473.8016835**	**438.724948**	**510.2547274**	**517.0813216**
-2.55	**-125.5252994**	**-130.8254817**	**-103.920762**	**-120.259341**	**-126.841454**
+2.55	**517.3173219**	**487.9717911**	**447.8103831**	**521.1730089**	**530.6720423**
-2.6	**-111.5780428**	**-116.2893178**	**-92.3740106**	**-106.897192**	**-112.747958**
+2.6	**513.2063542**	**491.3684272**	**443.6101305**	**517.2079852**	**531.765192**
-2.65	**-97.63078607**	**-101.7531539**	**-80.8272596**	**-93.5350436**	**-98.6544628**
+2.65	**495.0442615**	**484.1334536**	**434.0710824**	**497.2105618**	**516.8996566**
-2.7	**-83.68352937**	**-87.21698995**	**-69.2805086**	**-80.1728948**	**-84.5609674**
+2.7	**467.1402565**	**457.016364**	**417.527275**	**460.5378213**	**484.0805184**
-2.75	**-69.73627268**	**-72.68082605**	**-57.7337577**	**-66.810746**	**-70.4674719**
+2.75	**420.887179**	**409.700955**	**386.7262059**	**424.3367113**	**436.0783122**
-2.8	**-55.78901599**	**-58.14466215**	**-46.1870067**	**-53.4485971**	**-56.3739765**
+2.8	**375.4844288**	**371.0263861**	**340.9245771**	**374.9413511**	**387.7187486**
-2.85	**-41.8417593**	**-43.60849825**	**-34.6402558**	**-40.0864483**	**-42.280481**
+2.85	**313.3521073**	**313.214369**	**279.5067745**	**308.2672501**	**320.3249288**
-2.9	**-27.89450261**	**-29.07233435**	**-23.0935048**	**-26.7242995**	**-28.1869855**
+2.9	**230.6565829**	**232.7183311**	**202.4579276**	**223.7876512**	**233.1284032**
-2.95	**-13.94724591**	**-14.53617045**	**-11.5467538**	**-13.3621507**	**-14.0934901**
+2.95	**126.4938541**	**128.3560492**	**110.2642157**	**121.1148292**	**127.8216795**
-3	**-8.03E-14**	**-7.26E-14**	**-6.90E-14**	**-7.12E-14**	**-6.80E-14**
+3	**5.72E-14**	**6.18E-14**	**5.12E-14**	**5.46E-14**	**5.34E-14**

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-4.39588	-3.35286	-3.133477092	-2.67121	-2.3525	-2.785390078	-3.95452	-4.1978	-4.639109415	-4.93191
End Shear	46.66331	36.45868	33.57262219	29.66231	24.94802	30.08246672	40.40558	43.10146	42.72697893	43.0012
-0.05	-4.39588	-3.35286	-3.27976328	-2.73907	-2.47153	-2.785390078	-3.95452	-4.1978	-4.639109415	-4.93191
+0.05	42.59341	33.51047	30.88493193	27.23653	22.71262	27.75545137	37.29851	39.38569	39.3006617	39.40666
-0.1	-5.48681	-3.35286	-4.02426373	-3.97912	-3.35485	-2.785390078	-3.95452	-4.1978	-4.639109415	-4.93191
+0.1	37.82597	29.74862	27.49990216	24.07148	19.99707	24.7578141	32.99234	34.88067	34.81995593	34.80553
-0.15	-7.09467	-3.35286	-4.34433371	-4.53118	-3.81692	-3.51458604	-3.95452	-4.1978	-4.639109415	-4.93191
+0.15	35.48534	27.9487	25.97954343	22.41882	18.67903	23.28289805	31.00053	32.67591	32.62632754	32.61158
-0.2	-10.1495	-5.6056	-6.491023977	-6.70266	-5.54657	-5.273191018	-5.41386	-5.41636	-5.387217405	-5.36064
+0.2	30.91144	24.43347	23.20356939	19.57529	16.23948	20.21719661	27.10199	28.38231	28.35283152	28.33759
-0.25	-11.5976	-7.01015	-8.079739007	-7.91804	-6.43344	-6.147751008	-6.77042	-6.77333	-6.744607758	-6.71841
+0.25	28.68665	22.72474	21.83216211	17.80515	14.91016	18.81189316	25.20238	26.30166	26.28108627	26.31297
-0.3	-14.6671	-9.80646	-11.34048766	-10.0721	-8.166	-7.880142646	-9.77313	-9.77773	-9.743405689	-9.7121
+0.3	24.38257	19.42153	19.13413752	15.06261	12.57363	16.08696627	21.52027	22.57807	22.56234635	22.67206
-0.35	-15.9473	-11.1936	-13.04182657	-11.0919	-9.01234	-8.735076609	-11.4323	-11.4374	-11.40366345	-11.3729
+0.35	22.31177	17.83365	17.73737969	13.97086	11.64486	14.77261168	19.74489	20.81172	20.79584602	20.90278
-0.4	-18.4062	-13.9341	-16.34788171	-13.1999	-10.7739	-10.41517728	-14.72	-14.726	-14.69366374	-14.8448
+0.4	18.24384	15.19035	15.00479609	11.9263	9.818038	12.25329606	16.45076	17.3983	17.38228803	17.36768
-0.45	-19.6089	-15.2829	-18.02515764	-14.2085	-11.6349	-11.2374473	-16.343	-16.6445	-16.60674456	-16.6167
+0.45	16.36935	13.94147	13.75833613	10.93446	8.97216	11.05360043	15.00754	15.75782	15.74182088	15.72723
-0.5	-21.9691	-17.9259	-20.98369332	-16.3772	-13.4757	-13.48751389	-19.5334	-20.4756	-20.43963184	-20.763
+0.5	12.84293	11.53043	11.35345076	9.02094	7.354959	8.787305853	12.23445	12.62582	12.61003622	12.59565
-0.55	-23.4252	-19.2842	-22.30846445	-17.5175	-14.4593	-14.98243785	-21.0953	-22.3585	-22.3235108	-22.7764
+0.55	11.51765	10.33825	10.19968601	8.102976	6.586141	7.907667543	10.9101	11.1409	11.12532167	11.11112
-0.6	-27.1201	-22.1923	-24.77949441	-19.6252	-16.3168	-17.92087241	-24.3103	-26.0425	-26.00963087	-26.6708
+0.6	9.361233	8.133212	8.001166664	6.353923	5.134261	6.435252053	8.39963	8.415123	8.401556105	8.389186
-0.65	-29.5513	-23.5689	-25.92612373	-20.5942	-17.1917	-19.35911332	-26.0371	-27.837	-27.80526454	-28.5468
+0.65	8.330443	7.089256	7.097218776	5.526547	4.453623	5.709901922	7.219059	7.182318	7.220228677	7.208114
-0.7	-34.2653	-26.3604	-28.04254019	-22.3666	-18.8355	-22.16048163	-29.8429	-31.3146	-31.28518572	-32.1436
+0.7	6.374455	5.014807	5.104759686	3.975384	3.188936	4.374972357	4.967284	4.905057	4.97205841	5.009494
-0.75	-36.5405	-28.0613	-29.0126973	-23.1716	-19.6052	-23.51833649	-31.6887	-33.2123	-33.21234235	-33.8593
+0.75	5.453557	4.137109	4.155495106	3.255311	2.607232	3.746259136	3.86221	3.990942	4.004166219	4.062869
-0.8	-40.9089	-31.3466	-30.82694629	-25.1812	-21.9619	-26.13522641	-35.2482	-37.0956	-37.02522158	-37.3263
+0.8	3.736705	2.475447	2.489543791	2.012028	1.550886	2.436450972	2.392757	2.386205	2.397429012	2.407668
-0.85	-42.9947	-32.9245	-31.67146864	-26.6077	-23.148	-27.38899132	-36.9549	-39.1048	-39.01574555	-39.3075
+0.85	2.945051	1.724401	1.736508139	1.453205	1.119635	1.983988531	1.667245	1.66096	1.671175947	1.680496
-0.9	-46.9509	-35.9341	-33.17783659	-29.3446	-25.4442	-29.77398865	-40.204	-42.9528	-42.93111247	-43.3888
+0.9	1.506039	0.809711	0.814830769	0.739109	0.577146	1.006075276	0.782982	0.779606	0.784554851	0.789069
-0.95	-48.8139	-37.3592	-33.83899101	-30.6491	-26.5505	-30.89995522	-41.7395	-44.7836	-44.85777349	-45.382
+0.95	0.86298	0.459613	0.463868535	0.420021	0.328285	0.569117567	0.444774	0.441574	0.446032558	0.450099
-1	-52.6396	-40.0338	-36.00626107	-33.1156	-28.67	-33.00565099	-44.6143	-48.2381	-48.92732632	-49.307
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	51.74482	39.384	35.34110475	32.51502	28.1513	32.4948709	43.91672	47.39651	47.89166056	48.22785
-2.05	-5.62E-01	-0.29646	-0.300099966	-0.27106	-2.13E-01	-0.365592154	-0.28717	-0.28403	-0.288195666	-0.292
+2.05	50.02041	38.04614	34.14490878	31.28128	27.09128	31.44152496	42.47867	45.66851	45.78572489	46.33914
-2.1	-1.84708	-0.99655	-1.0018735	-0.90908	-0.71076	-1.239388854	-0.96349	-0.95998	-0.965122783	-0.96981
+2.1	46.32275	35.1963	32.82237521	28.67283	24.87903	29.18993662	39.40827	42.00761	41.93282802	42.35306
-2.15	-2.56686	-1.38849	-1.394747132	-1.28343	-0.99694	-1.728640983	-1.3421	-1.33845	-1.344083034	-1.36204
+2.15	44.35691	33.69093	32.06899755	27.30396	23.73065	27.99696682	37.78305	40.08289	39.98490502	40.32316
-2.2	-4.14963	-2.87385	-2.888449636	-2.25119	-1.80183	-2.804609306	-2.77764	-2.77086	-2.78247768	-2.79308
+2.2	40.20978	30.53574	30.37973865	24.4515	21.35894	25.48983554	34.37035	36.06535	36.00455726	36.4755
-2.25	-5.00832	-3.70514	-3.721845743	-2.91144	-2.33019	-3.388427818	-3.58064	-3.57366	-3.586273766	-3.59778
+2.25	38.0359	28.89252	29.47356446	23.55244	20.13937	24.18094215	32.59	33.98071	33.93849126	34.7265

-2.3	-6.84958	-5.51681	-5.580679857	-4.3513	-3.49337	-4.701465823	-5.49889	-5.32339	-5.503782385	-5.54076
+2.3	33.1248	25.52909	27.53291438	21.94209	18.43683	21.4656864	28.89906	30.45497	30.42517465	31.25973
-2.35	-7.82784	-6.58605	-6.583333639	-5.12719	-4.1259	-5.369197464	-6.65219	-6.41013	-6.652679874	-6.64058
+2.35	30.56059	24.23305	26.47458332	21.05586	17.61494	20.06458092	26.9956	28.71565	28.68468526	29.46086
-2.4	-9.88889	-8.67364	-8.539092949	-6.78162	-5.48694	-6.798005432	-9.01299	-9.02881	-9.014953207	-9.00231
+2.4	25.69231	21.47993	24.18098427	19.11734	15.86503	17.18860567	23.55729	25.12723	25.09404511	25.70924
-2.45	-10.9674	-9.77657	-9.638742371	-7.65644	-6.21306	-7.53446403	-10.2687	-10.4244	-10.40878163	-10.3945
+2.45	23.87356	20.02555	22.94534481	18.06346	14.93624	15.7189938	21.86185	23.28471	23.25048461	23.76157
-2.5	-13.7158	-12.1253	-11.94585952	-9.49203	-7.75043	-9.340113302	-12.917	-13.3938	-13.37772353	-13.3631
+2.5	21.3488	17.26858	20.29546578	15.78245	12.96888	12.72971229	18.73855	19.51959	19.48341952	19.73523
-2.55	-15.4805	-13.3312	-13.14866657	-10.4491	-8.55922	-10.47374671	-14.304	-14.9604	-14.94417956	-14.9294
+2.55	20.18284	15.94672	18.88085088	14.69912	12.05864	11.71697283	17.14292	17.60358	17.56650461	17.66165
-2.6	-19.2301	-15.8286	-15.64114105	-12.4324	-10.2507	-12.8727683	-17.19	-18.2408	-18.22455922	-18.2098
+2.6	17.78907	13.24963	15.56909399	12.68175	10.33654	9.996516462	13.89752	13.90356	13.87110902	14.0229
-2.65	-21.2066	-17.1154	-16.92614888	-13.4549	-11.184	-14.13288507	-18.8806	-19.9481	-19.93188145	-19.9171
+2.65	16.56551	11.87902	13.8656691	11.62719	9.452341	9.156249658	12.2533	12.25888	12.22572398	12.19549
-2.7	-25.3417	-20.2371	-19.80560649	-15.7358	-13.1446	-16.76116903	-22.4308	-23.4802	-23.46426826	-23.5751
+2.7	14.00471	9.105315	10.46264378	9.549538	7.736907	7.446689646	8.935632	8.940239	8.905852673	8.874499
-2.75	-27.5608	-21.8893	-21.15495225	-17.1076	-14.3132	-18.12406858	-24.2725	-25.2984	-25.28272825	-25.396
+2.75	12.57144	7.706864	8.857719742	8.487725	6.870648	6.580286885	7.443257	7.446594	7.512263015	7.392456
-2.8	-32.0874	-25.3061	-23.89726276	-20.3102	-16.8665	-20.9341968	-28.071	-29.4464	-29.41181356	-29.3964
+2.8	9.402162	4.898327	5.68032707	6.134812	5.096741	4.831504011	4.730692	4.733194	4.704047189	4.931891
-2.85	-34.3758	-27.0643	-25.28556588	-21.5451	-18.0323	-22.37616784	-30.0208	-31.5938	-31.54918479	-31.534
+2.85	7.874681	3.492895	4.620499565	4.854169	4.188385	3.952015609	3.954508	4.197759	4.63913266	4.931891
-2.9	-39.0574	-30.6634	-28.33975639	-24.85	-20.6679	-25.50673493	-34.0037	-36.0025	-35.93562996	-35.9211
+2.9	4.658558	3.352833	3.850645654	3.707595	3.138098	2.785406433	3.954508	4.197759	4.63913266	4.931891
-2.95	-41.4422	-32.4979	-30.03275697	-26.4482	-22.026	-27.00593017	-36.0956	-38.2556	-38.17658139	-38.1624
+2.95	4.395296	3.352833	3.478531367	3.032016	2.69655	2.785406433	3.954508	4.197759	4.63913266	4.931891
-3	-46.5673	-36.4543	-33.49299757	-29.643	-24.8116	-30.04025543	-40.3908	-42.8389	-42.84644579	-43.0075
+3	4.395296	3.352833	3.133477003	2.67122	2.352511	2.785406433	3.954508	4.197759	4.63913266	4.931891

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-4.39588	-5.0455	-5.284006765	-4.98043	-5.79335	-3.727408805	-3.94714	-2.09225
End Shear	46.66331	52.17122	54.23520118	49.9966	56.54233	38.56551936	40.81159	25.64012
-0.05	-4.39588	-5.0455	-5.284006765	-4.98043	-5.79335	-3.727408805	-3.94714	-2.09225
+0.05	42.59341	48.32624	50.12318895	46.17324	51.97457	35.81420599	37.88781	23.57534
-0.1	-5.48681	-5.0455	-5.284006765	-4.98043	-5.79335	-4.385035391	-4.67468	-2.766
+0.1	37.82597	43.33449	44.79678441	40.86935	45.66649	32.17569632	34.02255	21.0792
-0.15	-7.09467	-5.0455	-5.284006765	-4.98043	-5.79335	-4.745154746	-5.07487	-3.69148
+0.15	35.48534	40.66348	41.965765	38.41393	42.75798	30.37626042	32.11155	19.70417
-0.2	-10.1495	-7.95854	-7.958541603	-6.36924	-6.36924	-7.116075332	-7.53836	-5.53849
+0.2	30.91144	35.72245	36.70291245	33.60364	37.08379	26.83258432	28.34938	17.3235
-0.25	-11.5976	-9.95299	-9.952986652	-7.9652	-7.9652	-8.866437469	-9.38027	-6.45693
+0.25	28.68665	33.35255	34.19070852	31.25746	34.32867	25.09456844	26.50483	16.16871
-0.3	-14.6671	-13.9237	-13.923739	-11.671	-11.8974	-12.47768042	-13.1791	-8.27601
+0.3	24.38257	28.73514	29.30805758	26.70478	29.00872	21.70173817	22.90534	14.16207
-0.35	-15.9473	-15.8935	-15.89345676	-13.8061	-14.2722	-14.37640341	-15.176	-9.17358
+0.35	22.31177	26.49619	26.94682595	24.50699	26.45445	20.02989105	21.13254	13.27061
-0.4	-18.4062	-19.7851	-19.785115	-18.0415	-18.9881	-18.05393339	-19.0418	-11.0357
+0.4	18.24384	22.17921	22.40761747	20.39772	21.76281	16.67447559	17.57562	11.52218
-0.45	-19.6089	-21.7005	-21.70046791	-20.1346	-21.3214	-19.89972022	-20.982	-12.0448
+0.45	16.36935	20.10975	20.23885765	18.56337	19.75002	15.14892221	15.95935	10.66829
-0.5	-21.9691	-25.6378	-25.63775703	-24.2538	-25.9189	-23.14178848	-24.3884	-13.964
+0.5	12.84293	16.30287	16.30286835	15.04482	15.89658	12.41799662	13.07158	9.008826
-0.55	-23.4252	-27.8222	-28.00124916	-26.2728	-28.1752	-24.58584017	-25.9051	-14.8728
+0.55	11.51765	14.66147	14.66147164	13.36772	14.06383	11.16764337	11.75541	8.206327
-0.6	-27.1201	-32.5768	-33.15542523	-30.434	-32.8319	-27.69418824	-29.2106	-16.5849
+0.6	9.361233	11.5319	11.53190237	10.19571	10.60604	8.783646538	9.245944	6.664238
-0.65	-29.5513	-34.8953	-35.67420423	-32.5471	-35.4308	-29.36511651	-30.9906	-17.6781
+0.65	8.330443	10.05032	10.05032173	8.707908	8.988927	7.661770269	8.065021	5.926931
-0.7	-34.2653	-39.3934	-40.57211446	-37.2012	-41.1767	-32.5004719	-34.3332	-19.0541
+0.7	6.374455	7.270023	7.270023171	5.883246	5.934745	5.510820115	5.800863	4.52828
-0.75	-36.5405	-41.5644	-42.94201331	-39.4566	-43.9735	-33.96370627	-35.8944	-19.7329
+0.75	5.453557	5.977898	5.977898119	4.543777	4.766577	4.486045853	4.722154	3.870009
-0.8	-40.9089	-45.729	-47.50066301	-43.8028	-49.3882	-36.86005021	-38.9899	-21.4968
+0.8	3.736705	3.333313	3.333313055	2.815008	2.870633	2.687575684	2.829027	2.643255
-0.85	-42.9947	-47.714	-49.68018862	-45.8847	-51.9956	-38.23203427	-40.4546	-22.5675
+0.85	2.945051	2.459401	2.459401147	1.961465	1.949771	1.874639468	1.973305	2.077844
-0.9	-46.9509	-51.4681	-53.81658176	-49.8446	-56.9841	-40.47857587	-42.8596	-24.6058
+0.9	1.506039	1.065284	1.065283952	0.921156	0.936732	0.879646853	0.925944	1.050636
-0.95	-48.8139	-53.2285	-55.76423244	-51.7139	-59.3547	-41.49181497	-43.9458	-25.5687
+0.95	0.86298	0.575034	0.575033782	0.523264	0.537574	0.500767168	0.527123	0.591908
-1	-52.6396	-56.4949	-59.39538069	-55.2093	-63.8222	-43.29525205	-45.8825	-27.3702
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	51.74482	55.7062	58.51617284	54.36178	62.73419	42.87028464	45.42569	26.9352
-2.05	-5.62E-01	-0.42611	-0.426105132	-0.33785	-0.34696	-0.323971554	-0.34102	-0.37736
+2.05	50.02041	54.07216	56.69971475	52.61327	60.49949	41.96830681	44.45707	26.03406
-2.1	-1.84708	-1.42112	-1.421121612	-1.13352	-1.1497	-1.081567982	-1.13849	-1.29451
+2.1	46.32275	50.55177	52.80501371	48.87531	55.75906	39.9416155	42.28435	24.10878
-2.15	-2.56686	-2.00442	-2.004417597	-1.57894	-1.59632	-1.505692926	-1.58494	-1.80834
+2.15	44.35691	48.67396	50.7359787	46.89458	53.26388	38.81809049	41.08157	23.08932
-2.2	-4.14963	-4.09293	-4.092933165	-3.26781	-3.3254	-3.118212675	-3.28233	-2.93885
+2.2	40.20978	44.70455	46.37761394	42.73135	48.04996	36.21378949	38.29925	20.94845
-2.25	-5.00832	-5.27405	-5.274047609	-4.21251	-4.27389	-4.017901654	-4.22937	-3.55245
+2.25	38.0359	42.62151	44.09750643	40.55756	45.34175	34.68763256	36.67202	20.05684

-2.3	**-6.84958**	**-7.94566**	**-7.945656495**	**-6.54993**	**-6.65539**	**-6.024597573**	**-6.34168**	**-4.86866**
+2.3	**33.1248**	**38.28015**	**39.35847933**	**36.04736**	**39.74923**	**31.73885254**	**33.52087**	**18.69946**
-2.35	**-7.82784**	**-9.33643**	**-9.336432889**	**-7.99457**	**-8.21487**	**-7.110305832**	**-7.48453**	**-5.56821**
+2.35	**30.56059**	**36.0304**	**36.90878941**	**33.71967**	**36.87546**	**30.17092946**	**31.84934**	**18.05743**
-2.4	**-9.88889**	**-12.2992**	**-12.29917087**	**-10.9697**	**-11.4486**	**-9.367134441**	**-9.86014**	**-7.04249**
+2.4	**25.69231**	**31.39416**	**31.87209125**	**29.45868**	**31.73959**	**26.82888219**	**28.28918**	**16.48129**
-2.45	**-10.9674**	**-13.8645**	**-13.86454416**	**-12.5564**	**-13.1782**	**-10.55955149**	**-11.1153**	**-7.81415**
+2.45	**23.87356**	**29.01624**	**29.29431456**	**27.26424**	**29.28386**	**25.2779354**	**26.63191**	**15.63848**
-2.5	**-13.7158**	**-17.1468**	**-17.14684502**	**-15.9101**	**-16.8432**	**-13.05981239**	**-13.7472**	**-9.41885**
+2.5	**21.3488**	**24.70546**	**24.70545694**	**23.22694**	**24.77208**	**22.38933706**	**23.59802**	**13.84701**
-2.55	**-15.4805**	**-19.1057**	**-19.18859928**	**-17.67**	**-18.7706**	**-14.40674429**	**-15.1732**	**-10.2488**
+2.55	**20.18284**	**22.64281**	**22.64280665**	**21.16681**	**22.47276**	**20.83813742**	**21.9683**	**12.89982**
-2.6	**-19.2301**	**-23.244**	**-23.52544618**	**-21.3381**	**-22.7955**	**-17.45729475**	**-18.4052**	**-11.9563**
+2.6	**17.78907**	**18.81277**	**18.81277365**	**16.98139**	**17.80703**	**17.19263097**	**18.13649**	**10.90619**
-2.65	**-21.2066**	**-25.4032**	**-25.79584198**	**-23.4364**	**-25.2139**	**-19.04574659**	**-20.0889**	**-12.8307**
+2.65	**16.56551**	**16.86647**	**16.86646888**	**14.86323**	**15.44854**	**15.29337035**	**16.14019**	**9.8612**
-2.7	**-25.3417**	**-29.8804**	**-30.51753775**	**-27.8313**	**-30.3216**	**-22.54269835**	**-23.7973**	**-14.6261**
+2.7	**14.00471**	**12.92778**	**12.92777651**	**10.59377**	**10.70004**	**11.49540601**	**12.14593**	**7.823013**
-2.75	**-27.5608**	**-32.1898**	**-32.95960819**	**-30.1083**	**-32.9824**	**-24.23957187**	**-25.5976**	**-15.7435**
+2.75	**12.57144**	**10.94196**	**10.94195975**	**8.756773**	**8.837956**	**9.722071378**	**10.28049**	**6.913274**
-2.8	**-32.0874**	**-36.9288**	**-37.98315801**	**-34.7999**	**-38.4918**	**-27.71495461**	**-29.286**	**-18.0589**
+2.8	**9.402162**	**6.953881**	**6.953880641**	**5.565521**	**5.793352**	**6.380412459**	**6.760108**	**5.076774**
-2.85	**-34.3758**	**-39.3498**	**-40.55540731**	**-37.2057**	**-41.3297**	**-29.48724098**	**-31.1676**	**-19.2523**
+2.85	**7.874681**	**5.045489**	**5.284005541**	**4.980409**	**5.793352**	**5.188545784**	**5.507132**	**4.153078**
-2.9	**-39.0574**	**-44.5839**	**-46.12859062**	**-42.1156**	**-47.1457**	**-33.08541657**	**-34.9888**	**-21.6988**
+2.9	**4.658558**	**5.045489**	**5.284005541**	**4.980409**	**5.793352**	**4.19028091**	**4.459068**	**2.302481**
-2.95	**-41.4422**	**-47.0803**	**-48.79244249**	**-44.7025**	**-50.2643**	**-34.90508312**	**-36.9219**	**-22.9472**
+2.95	**4.395296**	**5.045489**	**5.284005541**	**4.980409**	**5.793352**	**3.774011137**	**3.999823**	**2.09225**
-3	**-46.5673**	**-52.1148**	**-54.17481066**	**-49.9784**	**-56.5206**	**-38.57004255**	**-40.8164**	**-25.4825**
+3	**4.395296**	**5.045489**	**5.284005541**	**4.980409**	**5.793352**	**3.727363538**	**3.947102**	**2.09225**

2-Span: Shear (Max and Min) Raw Data Results - 30' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	**-4.39588**	**-5.37779**	**-5.60484**	**-4.4522**	**-5.15213**	**-5.43417**
End Shear	**46.66331**	**53.73203**	**54.24844**	**45.74629**	**50.36178**	**53.33793**
-0.05	**-4.39588**	**-5.45906**	**-5.88151**	**-4.4522**	**-5.44271**	**-5.43417**
+0.05	**42.59341**	**48.76625**	**49.12756**	**42.51047**	**46.69369**	**49.2792**
-0.1	**-5.48681**	**-7.41562**	**-7.46048**	**-5.91217**	**-6.4863**	**-6.9386**
+0.1	**37.82597**	**43.05679**	**42.75348**	**38.22721**	**41.95965**	**43.93664**
-0.15	**-7.09467**	**-8.29841**	**-8.38556**	**-7.14753**	**-7.12087**	**-8.03046**
+0.15	**35.48534**	**40.23841**	**39.66137**	**36.10713**	**39.61493**	**41.3054**
-0.2	**-10.1495**	**-10.5568**	**-11.1269**	**-9.83748**	**-9.39099**	**-10.4066**
+0.2	**30.91144**	**34.49979**	**33.85996**	**31.92829**	**34.98999**	**36.14619**
-0.25	**-11.5976**	**-12.365**	**-12.6117**	**-12.0404**	**-11.6221**	**-12.3778**
+0.25	**28.68665**	**32.08125**	**31.26107**	**29.87682**	**32.71771**	**33.62751**
-0.3	**-14.6671**	**-15.748**	**-16.0812**	**-16.22**	**-16.3048**	**-16.2832**
+0.3	**24.38257**	**27.65964**	**26.25792**	**25.86797**	**28.17069**	**28.66639**
-0.35	**-15.9473**	**-18.1158**	**-18.0126**	**-18.2012**	**-18.7087**	**-18.2207**
+0.35	**22.31177**	**25.50869**	**23.9037**	**23.91788**	**25.74229**	**26.11867**
-0.4	**-18.4062**	**-23.5369**	**-22.4287**	**-22.3295**	**-23.2272**	**-23.9355**
+0.4	**18.24384**	**21.34638**	**20.02422**	**20.06422**	**21.56716**	**21.8759**
-0.45	**-19.6089**	**-26.027**	**-24.7092**	**-24.1242**	**-25.3555**	**-26.5586**
+0.45	**16.36935**	**19.34299**	**18.1561**	**18.10657**	**19.55658**	**19.8224**
-0.5	**-21.9691**	**-30.5732**	**-28.9931**	**-27.3929**	**-30.6515**	**-31.5607**
+0.5	**12.84293**	**15.5116**	**14.58168**	**14.72449**	**15.7093**	**15.95797**
-0.55	**-23.4252**	**-32.9546**	**-31.0003**	**-29.0403**	**-33.1636**	**-33.8068**
+0.55	**11.51765**	**13.69156**	**12.88284**	**13.25516**	**14.12591**	**14.09619**
-0.6	**-27.1201**	**-37.7682**	**-35.5003**	**-32.8591**	**-37.5826**	**-38.0221**
+0.6	**9.361233**	**10.26269**	**9.680452**	**10.39323**	**11.05572**	**10.63001**
-0.65	**-29.5513**	**-40.0148**	**-37.6333**	**-34.6649**	**-39.6325**	**-39.9927**
+0.65	**8.330443**	**8.661815**	**8.206482**	**9.056863**	**9.553936**	**8.940246**
-0.7	**-34.2653**	**-44.1588**	**-41.669**	**-38.2055**	**-43.4607**	**-44.4633**
+0.7	**6.374455**	**5.707068**	**5.759473**	**6.549248**	**6.888697**	**5.919703**
-0.75	**-36.5405**	**-46.0589**	**-44.4813**	**-39.9958**	**-45.239**	**-46.767**
+0.75	**5.453557**	**4.643638**	**4.63046**	**5.318423**	**5.650872**	**4.78396**
-0.8	**-40.9089**	**-49.5218**	**-50.9267**	**-42.9843**	**-48.5239**	**-51.175**
+0.8	**3.736705**	**2.760111**	**2.633766**	**3.187664**	**3.380711**	**2.839024**
-0.85	**-42.9947**	**-51.3926**	**-54.0748**	**-44.3418**	**-50.1049**	**-53.1007**
+0.85	**2.945051**	**1.909614**	**2.071767**	**2.224479**	**2.35473**	**1.982314**
-0.9	**-46.9509**	**-56.4243**	**-60.0156**	**-46.834**	**-52.9898**	**-56.5762**
+0.9	**1.506039**	**0.94014**	**1.050655**	**1.043827**	**1.104334**	**0.930222**
-0.95	**-48.8139**	**-58.7646**	**-62.8034**	**-47.9673**	**-54.2892**	**-58.1705**
+0.95	**0.86298**	**0.532899**	**0.594601**	**0.594922**	**0.626239**	**0.530936**
-1	**-52.6396**	**-63.8317**	**-68.6031**	**-50.0049**	**-56.5977**	**-61.069**
+1	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
+2	**51.74482**	**62.40603**	**67.03793**	**49.52191**	**56.05441**	**60.37757**
-2.05	**-5.62E-01**	**-0.34636**	**-0.38102**	**-0.38541**	**-0.40314**	**-0.34455**
+2.05	**50.02041**	**60.39685**	**64.14961**	**48.50285**	**54.89979**	**58.92802**
-2.1	**-1.84708**	**-1.15325**	**-1.29277**	**-1.28303**	**-1.35912**	**-1.14294**
+2.1	**46.32275**	**55.20453**	**58.57451**	**46.23612**	**52.30082**	**55.7391**
-2.15	**-2.56686**	**-1.60277**	**-1.80353**	**-1.80482**	**-1.92514**	**-1.60429**
+2.15	**44.35691**	**52.68826**	**55.6038**	**44.98977**	**50.85805**	**54.00105**
-2.2	**-4.14963**	**-3.21069**	**-3.06402**	**-3.6978**	**-3.92417**	**-3.29268**
+2.2	**40.20978**	**48.69409**	**49.3081**	**42.27443**	**47.73276**	**50.19508**
-2.25	**-5.00832**	**-4.15292**	**-4.09129**	**-4.76371**	**-5.05981**	**-4.2407**
+2.25	**38.0359**	**46.96252**	**45.98789**	**40.80676**	**46.09006**	**47.99084**

-2.3	-6.84958	-6.41683	-6.34861	-7.15748	-7.53499	-6.63786
+2.3	33.1248	43.16151	40.60197	37.38656	42.53307	43.33233
-2.35	-7.82784	-7.89489	-7.57251	-8.41179	-8.86815	-8.13194
+2.35	30.56059	41.08942	38.6527	35.53749	40.61877	41.01228
-2.4	-9.88889	-11.096	-10.456	-11.084	-11.7931	-11.4731
+2.4	25.69231	36.59543	34.38605	31.92573	36.51858	36.9979
-2.45	-10.9674	-12.8111	-12.0577	-12.5224	-13.3573	-13.2069
+2.45	23.87356	34.17089	32.13812	30.01606	34.33267	34.8901
-2.5	-13.7158	-16.4505	-15.4545	-15.4959	-16.6526	-16.9056
+2.5	21.3488	29.46341	27.95542	26.59842	29.45081	30.39726
-2.55	-15.4805	-18.3668	-17.2422	-17.2255	-18.5769	-18.8385
+2.55	20.18284	27.19031	25.81368	24.96398	26.80266	27.96491
-2.6	-19.2301	-22.3729	-20.9776	-20.9951	-22.5974	-22.9101
+2.6	17.78907	22.29782	21.28183	21.42748	22.12818	22.62392
-2.65	-21.2066	-24.4546	-22.9178	-22.9626	-24.6855	-24.9697
+2.65	16.56551	19.5874	19.01025	19.39315	19.86877	19.687
-2.7	-25.3417	-28.7557	-27.4837	-26.862	-29.2723	-29.8756
+2.7	14.00471	14.92693	15.16032	15.19828	15.06039	15.39439
-2.75	-27.5608	-31.2961	-29.9859	-28.867	-31.5511	-32.3911
+2.75	12.57144	13.23563	13.32887	13.10835	12.74622	13.3847
-2.8	-32.0874	-35.8297	-35.1824	-32.9692	-36.1424	-37.4275
+2.8	9.402162	9.728409	10.35852	8.870209	8.708669	9.708365
-2.85	-34.3758	-38.6999	-38.1428	-35.0591	-38.4554	-40.0078
+2.85	7.874681	8.715274	8.828296	7.736608	7.666354	8.568267
-2.9	-39.0574	-44.4682	-44.3255	-39.2984	-43.144	-45.2693
+2.9	4.658558	6.948759	7.083027	5.265013	6.24561	6.35947
-2.95	-41.4422	-47.3115	-47.5134	-41.4405	-45.5115	-47.9412
+2.95	4.395296	5.970666	6.294655	4.496676	5.724077	5.454916
-3	-46.5673	-53.6767	-54.2497	-45.7515	-50.2733	-53.3442
+3	4.395296	5.377774	5.604844	4.452189	5.152168	5.434161

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	-3.40E-14	-1.7E-14	-1.56319E-14	-1.6E-14	-1.39E-14	-2.10687E-14	-1.8E-14	-1.7E-14	-1.808E-14	-1.8E-14
End Shear	1.43E-14	1.56E-14	1.48082E-14	1.16E-14	9.82E-15	9.59085E-15	1.5E-14	1.57E-14	1.53355E-14	1.55E-14
-0.05	-6.593824838	-5.02929	-4.700215639	-4.00681	-3.52876	-4.178085117	-5.93178	-6.2967	-6.958664123	-7.39787
+0.05	63.89011246	50.40321	46.3273979	40.85479	34.20993	41.63317706	55.94776	59.21128	59.19250766	59.27347
-0.1	-13.18764968	-10.0586	-9.400431277	-8.01362	-7.05751	-8.356170233	-11.8636	-12.5934	-13.91732825	-14.7957
+0.1	117.0235734	92.42259	85.00690195	74.63114	62.65912	76.50522131	101.992	107.9873	107.7876339	107.7449
-0.15	-19.78147451	-15.0879	-14.10064692	-12.0204	-10.5863	-12.53425535	-17.7953	-18.8901	-20.87599237	-22.1936
+0.15	159.079242	125.7692	116.9079454	101.4931	85.53043	104.7730412	139.5024	147.0416	150.7301278	150.7081
-0.2	-26.37529935	-20.1172	-18.80086255	-16.0272	-14.115	-16.71234047	-23.7271	-25.1868	-27.83465649	-29.5915
+0.2	191.4548418	151.804	143.3631555	121.8004	103.275	125.5764572	168.7153	176.9724	189.1155711	189.068
-0.25	-32.96912419	-25.1464	-23.50107819	-20.0341	-17.6438	-20.89042558	-29.6589	-31.4835	-34.79332061	-36.9893
+0.25	214.1965136	170.702	163.7412158	135.9265	115.9671	141.0891987	189.8129	198.1137	217.1090294	217.0353
-0.3	-39.56294903	-30.1757	-28.20129383	-24.0409	-21.1725	-25.0685107	-35.5907	-37.7802	-41.75198474	-44.3872
+0.3	227.8514155	182.6956	178.220818	144.2885	123.8633	150.8099975	203.8798	217.7446	237.0108198	242.4409
-0.35	-46.15677386	-35.205	-32.90150947	-28.0477	-24.7013	-29.24659582	-41.5224	-44.0769	-48.71064886	-51.7851
+0.35	233.2373989	188.1389	186.9636334	149.5405	128.9688	155.1124227	218.158	231.32	248.9703158	260.4716
-0.4	-52.7505987	-40.2343	-37.60172511	-32.0545	-28.2301	-33.42468093	-47.4542	-50.3736	-55.66931298	-59.1829
+0.4	230.8115356	193.6109	190.2431871	152.8534	132.032	154.4235355	224.6242	236.6664	256.1549242	268.8148
-0.45	-59.34442354	-45.2636	-42.30194075	-36.0613	-31.7588	-37.60276605	-53.386	-56.6703	-62.62797711	-66.5808
+0.45	221.3672912	193.0282	188.4442851	151.0765	130.8018	149.2236059	223.7879	237.8025	258.0950399	268.2186
-0.5	-65.93824838	-50.2929	-47.00215639	-40.0681	-35.2876	-41.78085117	-59.3178	-62.967	-69.58664123	-73.9787
+0.5	212.310288	186.7482	186.7702702	148.3621	128.7507	142.7320353	216.2305	232.6672	254.337757	264.0414
-0.55	-72.53207321	-55.3222	-51.70237203	-44.0749	-38.8163	-45.95893628	-65.2495	-69.2637	-76.54530535	-81.3765
+0.55	216.2832481	180.5129	180.490288	143.2714	124.2872	144.9549672	209.2656	222.3315	242.8100643	255.012
-0.6	-79.12589805	-60.3515	-56.40258766	-48.0817	-42.3451	-50.1370214	-71.1813	-75.5604	-83.50396947	-88.7744
+0.6	212.3778756	169.5665	169.4816309	134.5481	116.5418	141.2245899	196.4515	206.1779	225.8087366	237.455
-0.65	-85.71972289	-65.3808	-61.1028033	-52.0885	-45.8738	-54.31510652	-77.1131	-81.8571	-90.4626336	-96.1723
+0.65	199.2710472	155.8697	154.1589293	122.3871	105.7701	131.8987083	177.1656	187.2332	204.5643249	212.15
-0.7	-92.31354773	-70.4101	-65.80301894	-56.0953	-49.4026	-58.49319163	-83.0449	-88.1538	-97.42129772	-103.57
+0.7	177.5923123	139.6279	134.9843089	109.8974	94.1354	117.3885962	153.8002	162.0228	176.6531543	179.9651
-0.75	-98.90737256	-75.4393	-70.50323458	-60.1022	-52.9314	-62.67127675	-88.9767	-94.4505	-104.3799618	-110.968
+0.75	148.0570768	117.6895	112.4668886	93.17584	79.16925	98.15882201	127.4025	131.546	143.5509983	143.6475
-0.8	-105.5011974	-80.4686	-75.20345022	-64.109	-56.4601	-66.84936187	-94.9084	-100.747	-111.338626	-118.366
+0.8	111.4666322	89.97715	87.16310344	71.3523	59.88521	74.7272872	95.33568	98.20046	104.9572658	105.0678
-0.85	-112.0950222	-85.4979	-81.36187228	-68.1158	-61.837	-71.02744698	-100.84	-107.044	-118.2972901	-125.764
+0.85	75.09881151	60.25481	59.67639282	47.3049	38.74318	51.50557359	60.29779	60.3637	62.43914166	62.37202
-0.9	-118.6888471	-90.5272	-109.9167187	-83.4773	-74.4725	-75.2055321	-106.772	-113.341	-125.2559542	-133.162
+0.9	49.87122059	31.24141	31.31138898	24.94889	19.69494	34.06472535	30.20946	30.08189	30.2207494	30.325
-0.95	-146.281321	-102.369	-144.4103262	-112.695	-100.374	-79.38361722	-112.704	-125.761	-141.4688559	-153.134
+0.95	24.59493703	13.34612	13.40885695	12.13715	9.459681	16.57097337	12.91255	12.83001	12.92664004	13.01478
-1	-182.5099308	-125.44	-180.9181187	-143.264	-128.384	-92.34051853	-127.492	-147.206	-162.8156298	-174.724
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-182.5099308	-125.44	-180.9181187	-143.264	-128.384	-92.34051853	-127.492	-147.206	-162.8156298	-174.724
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-146.285082	-102.368	-144.4088854	-112.695	-100.374	-79.38408173	-112.703	-125.76	-141.4683327	-153.132
+2.05	24.59493828	13.32198	13.38991955	12.12185	9.467769	16.53877197	12.88892	12.80755	12.90520221	12.99432
-2.1	-118.6729998	-90.5265	-109.9159306	-83.477	-74.4724	-75.20597208	-106.772	-113.339	-125.2565823	-133.161
+2.1	49.87124586	31.20564	31.28331902	24.95833	19.69902	34.03520608	30.17445	30.04857	30.18894437	30.31702
-2.15	-112.0800552	-85.4972	-81.36254094	-68.1161	-61.8373	-71.02786243	-100.84	-107.043	-118.2978833	-125.763
+2.15	75.09881306	60.22068	59.64959858	47.31543	38.73503	51.47782145	60.31262	60.32868	62.41628062	62.39446
-2.2	-105.4871106	-80.468	-75.20344955	-64.1093	-56.4603	-66.84975278	-94.9082	-100.746	-111.3391843	-118.365
+2.2	112.5141787	89.94205	87.1367487	71.36212	59.8767	74.76856009	95.29757	98.21143	104.978641	105.1342
-2.25	-98.89416606	-75.4387	-70.50323404	-60.1025	-52.9315	-62.67164312	-88.9764	-94.4496	-104.3804853	-110.968

+2.25	149.2328864	117.6512	112.4402257	93.18347	79.15973	98.19789634	127.4134	131.5529	143.5692107	143.6649
-2.3	-92.30122149	-70.4095	-65.80301854	-56.0956	-49.4027	-58.49353347	-83.0447	-88.1529	-97.42178632	-103.57
+2.3	178.7495515	139.6393	134.9566162	109.9022	94.1246	117.4245483	153.8069	162.0137	176.6722131	179.9917
-2.35	-85.70827693	-65.3802	-61.10280304	-52.0888	-45.874	-54.31542382	-77.1129	-81.8563	-90.46308733	-96.1719
+2.35	200.2652108	155.876	154.1295049	122.3664	105.7612	131.9306257	177.1579	187.2198	204.5797173	212.1735
-2.4	-79.11533236	-60.351	-56.40258753	-48.082	-42.3452	-50.13731417	-71.1811	-75.5597	-83.50438834	-88.774
+2.4	213.1800132	169.5801	169.4498605	134.5256	116.5322	141.251638	196.4393	205.7783	225.8193124	237.4742
-2.45	-72.52238779	-55.3217	-51.70237203	-44.0751	-38.8164	-45.95920452	-65.2494	-69.263	-76.54568935	-81.3762
+2.45	216.8679125	180.523	180.4556437	143.27	124.2766	144.9765086	209.2478	222.3184	242.8320645	255.0257
-2.5	-65.92944322	-50.2925	-47.00215652	-40.0683	-35.2877	-41.78109487	-59.3176	-62.9664	-69.58699036	-73.9784
+2.5	212.824863	186.7542	186.7322275	148.3655	128.7456	142.7473982	216.2587	232.6488	254.3542201	264.0485
-2.55	-59.33649866	-45.2632	-42.30194102	-36.0615	-31.7589	-37.60298522	-53.3859	-56.6697	-62.62829137	-66.5805
+2.55	222.2528005	193.0412	188.4425133	151.0554	130.8056	149.2766638	223.8111	237.824	258.1050375	268.2123
-2.6	-52.74355409	-40.234	-37.60172551	-32.0546	-28.2301	-33.42487557	-47.4541	-50.3731	-55.66959238	-59.1827
+2.6	231.6738044	193.6187	190.2379954	152.8295	132.0346	154.4732387	224.6413	236.6816	256.1338228	268.8016
-2.65	-46.15060952	-35.2047	-32.90151001	-28.0478	-24.7014	-29.24676592	-41.5223	-44.0765	-48.71089339	-51.7849
+2.65	234.304185	188.1361	186.9545505	149.3356	128.8785	155.1579415	218.1681	231.3354	248.9615449	260.4966
-2.7	-39.55766496	-30.1755	-28.2012945	-24.041	-21.1726	-25.06865627	-35.5906	-37.7798	-41.7521944	-44.387
+2.7	229.1608589	182.6871	178.2504459	144.2849	123.8618	150.8505077	203.8822	217.7523	237.0428612	242.4575
-2.75	-32.96472039	-25.1462	-23.501079	-20.0342	-17.6438	-20.89054662	-29.6588	-31.4832	-34.79349541	-36.9892
+2.75	215.4938338	170.6872	163.7663557	135.9195	115.9641	141.1241535	189.8043	198.1096	217.1372226	217.8838
-2.8	-26.37177582	-20.117	-18.80086349	-16.0273	-14.1151	-16.71243697	-23.727	-25.1866	-27.83479642	-29.5913
+2.8	192.52466	151.8368	143.383589	121.8612	103.7036	125.6051878	168.6987	176.9601	189.1347251	189.0863
-2.85	-19.77883126	-15.0877	-14.10064799	-12.0205	-10.5863	-12.53432732	-17.7953	-18.8899	-20.87609743	-22.1935
+2.85	159.9022447	125.7944	116.9234002	101.4776	85.53682	104.7402247	139.5307	147.0713	150.7394848	150.717
-2.9	-13.18588669	-10.0585	-9.400432486	-8.01366	-7.05753	-8.356217673	-11.8635	-12.5933	-13.91739844	-14.7957
+2.9	117.1720312	92.38487	85.01923813	74.62609	62.66348	76.52017855	102.0112	108.0076	107.8068721	107.7632
-2.95	-6.592942122	-5.02925	-4.700216981	-4.00683	-3.52877	-4.178108023	-5.93176	-6.29664	-6.958699453	-7.39784
+2.95	64.06211226	50.357	46.33373346	40.86	34.21218	41.64076703	55.91721	59.17053	59.15354221	59.23624
-3	-3.72E-14	-2.6E-14	-3.08808E-14	-2.5E-14	-2.03E-14	-1.95399E-14	-2.5E-14	-2.7E-14	-2.84451E-14	-3E-14
+3	4.21E-14	2.33E-14	2.29211E-14	1.81E-14	1.55E-14	2.55602E-14	2.36E-14	2.43E-14	2.41927E-14	2.39E-14

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.40E-14	-2.3E-14	-2.3E-14	-2.2E-14	-2.5E-14	-1.8E-14	-1.9E-14	-2E-14
End Shear	1.43E-14	2.19E-14	2.19E-14	1.77E-14	1.77E-14	1.61E-14	1.69E-14	9.55E-15
-0.05	-6.593824838	-7.56825	-7.92601	-7.47064	-8.69003	-5.59111	-5.92071	-3.13837
+0.05	63.89011246	72.48936	75.18478	69.25987	77.96185	53.72131	56.83172	35.36301
-0.1	-13.18764968	-15.1365	-15.852	-14.9413	-17.3801	-11.1822	-11.8414	-6.27674
+0.1	117.0235734	132.796	137.3672	126.3231	141.4089	98.56373	104.2309	65.0926
-0.15	-19.78147451	-22.7048	-23.778	-22.4119	-26.0701	-16.7733	-17.7621	-9.41511
+0.15	159.079242	182.5346	188.3071	172.8627	192.8172	135.8861	143.6618	89.35066
-0.2	-26.37529935	-30.273	-31.704	-29.8826	-34.7601	-22.3645	-23.6828	-12.5535
+0.2	191.4548418	221.6855	228.2325	209.305	232.0887	165.6322	175.0354	108.3464
-0.25	-32.96912419	-37.8413	-39.6301	-37.3532	-43.4501	-27.9556	-29.6036	-15.6919
+0.25	214.1965136	250.8622	257.4111	235.5746	264.7455	187.7361	198.3021	122.3366
-0.3	-39.56294903	-45.4095	-47.5561	-44.8239	-52.1402	-33.5467	-35.5243	-18.8302
+0.3	227.8514155	270.0702	276.0939	256.8388	293.9422	202.5117	213.7992	132.0926
-0.35	-46.15677386	-52.9778	-55.4821	-52.2945	-60.8302	-39.1378	-41.445	-21.9686
+0.35	233.2373989	279.8492	288.0533	274.7053	311.2469	210.3356	221.9313	140.0098
-0.4	-52.7505987	-60.546	-63.4081	-59.7651	-69.5202	-44.7289	-47.3657	-25.107
+0.4	230.8115356	288.6112	297.8436	282.8893	317.364	214.8523	227.1254	144.1905
-0.45	-59.34442354	-68.1143	-71.3341	-67.2358	-78.2103	-50.32	-53.2864	-28.2453
+0.45	221.3672912	290.1036	297.8381	282.0019	313.4432	216.6217	228.8296	144.814
-0.5	-65.93824838	-75.6825	-79.2601	-74.7064	-86.9003	-55.9111	-59.2071	-31.3837
+0.5	212.310288	282.873	289.2619	272.7419	302.7406	211.9322	223.6978	142.0907
-0.55	-72.53207321	-83.2508	-87.1861	-82.1771	-95.5903	-61.5022	-65.1278	-34.5221
+0.55	216.2832481	270.3608	279.3831	264.1287	297.0051	201.2943	212.533	136.2621
-0.6	-79.12589805	-90.819	-95.1121	-89.6477	-104.28	-67.0934	-71.0485	-37.6605
+0.6	212.3778756	253.3123	260.5306	247.3754	280.4141	190.6571	201.1338	127.6009
-0.65	-85.71972289	-98.3873	-103.038	-97.1184	-112.97	-72.6845	-76.9693	-40.7988
+0.65	199.2710472	233.5058	238.4891	222.7633	253.9352	175.4276	185.1746	116.4106
-0.7	-92.31354773	-105.956	-110.964	-104.589	-121.66	-78.2756	-82.89	-43.9372
+0.7	177.5923123	205.6367	210.388	191.1423	218.5993	154.4588	163.0807	103.2656
-0.75	-98.90737256	-113.524	-118.89	-112.06	-130.35	-83.8667	-88.8107	-47.0756
+0.75	148.0570768	170.8463	174.1823	156.8198	175.1813	128.3533	135.4895	89.73073
-0.8	-105.5011974	-121.092	-126.816	-119.53	-139.04	-89.4578	-94.7314	-50.2139
+0.8	111.4666322	129.2371	130.9618	116.5271	124.8542	97.77673	103.1055	72.51499
-0.85	-112.0950222	-128.66	-134.742	-127.001	-147.731	-97.6591	-103.444	-53.3523
+0.85	75.09881151	85.59118	85.59118	72.40526	74.57377	65.09591	68.52201	53.52344
-0.9	-118.6888471	-136.229	-142.668	-134.472	-156.421	-132.237	-139.879	-61.331
+0.9	49.87122059	44.57941	44.57941	35.54055	35.59692	33.80207	35.58112	35.33297
-0.95	-146.281321	-143.797	-150.594	-141.942	-165.111	-170.446	-180.038	-77.6184
+0.95	24.59493703	19.08844	19.08844	15.19123	15.32087	14.47547	15.23734	17.0891
-1	-182.5099308	-151.365	-158.52	-155.474	-181.226	-210.677	-222.311	-94.2674
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-182.5099308	-151.365	-158.52	-155.474	-181.226	-210.677	-222.311	-94.2674
+2	0	0	0	0	0	0	0	0
-2.05	-146.285082	-143.796	-150.594	-141.942	-165.111	-170.444	-180.036	-77.6184
+2.05	24.59493828	19.0523	19.0523	15.16343	15.35483	14.45503	15.21582	17.0788
-2.1	-118.6729998	-136.228	-142.668	-134.471	-156.421	-132.235	-139.878	-61.331
+2.1	49.87124586	44.5258	44.5258	35.49935	35.6165	33.77176	35.54923	35.32353
-2.15	-112.0800552	-128.66	-134.742	-127	-147.73	-97.658	-103.443	-53.3524
+2.15	75.09881306	85.61957	85.61957	72.42059	74.58634	65.06696	68.49154	53.51456
-2.2	-105.4871106	-121.092	-126.816	-119.53	-139.04	-89.4567	-94.7304	-50.214
+2.2	112.5141787	129.1842	130.9079	116.5412	124.8426	97.79217	103.1217	72.50603
-2.25	-98.89416606	-113.524	-118.89	-112.059	-130.35	-83.8657	-88.8098	-47.0756

+2.25	149.2328864	170.7904	174.2046	156.8304	175.1678	128.3675	135.5044	89.72111
-2.3	-92.30122149	-105.955	-110.964	-104.589	-121.66	-78.2746	-82.8891	-43.9373
+2.3	178.7495515	205.6565	210.4052	191.1343	218.5819	154.471	163.0933	103.2551
-2.35	-85.70827693	-98.387	-103.038	-97.118	-112.97	-72.6836	-76.9685	-40.7989
+2.35	200.2652108	233.5198	238.4996	222.7513	253.912	175.4369	185.184	116.4018
-2.4	-79.11533236	-90.8188	-95.1121	-89.6474	-104.28	-67.0925	-71.0478	-37.6605
+2.4	213.1800132	253.3193	260.5225	247.358	280.4449	190.6627	201.1393	127.5915
-2.45	-72.52238779	-83.2506	-87.1861	-82.1768	-95.5903	-61.5015	-65.1272	-34.5221
+2.45	216.8679125	270.3511	279.3679	264.1046	297.0272	201.3104	212.577	136.2521
-2.5	-65.92944322	-75.6823	-79.2601	-74.7061	-86.9003	-55.9105	-59.2065	-31.3838
+2.5	212.824863	282.8989	289.2382	272.7802	302.7527	211.9448	223.7116	142.0799
-2.55	-59.33649866	-68.1141	-71.3341	-67.2355	-78.2103	-50.3194	-53.2859	-28.2454
+2.55	222.2528005	290.1223	297.8622	282.0338	313.429	216.6302	228.839	144.8023
-2.6	-52.74355409	-60.5459	-63.4081	-59.7649	-69.5202	-44.7284	-47.3652	-25.107
+2.6	231.6738044	288.6213	297.8591	282.9137	317.4033	214.8561	227.1299	144.1778
-2.65	-46.15060952	-52.9776	-55.4821	-52.2943	-60.8302	-39.1373	-41.4446	-21.9686
+2.65	234.304185	279.8445	288.0589	274.7209	311.2764	210.3314	221.9273	139.9959
-2.7	-39.55766496	-45.4094	-47.556	-44.8237	-52.1402	-33.5463	-35.5239	-18.8303
+2.7	229.1608589	270.0566	276.0842	256.8448	293.9608	202.5025	213.7899	132.0774
-2.75	-32.96472039	-37.8412	-39.63	-37.3531	-43.4501	-27.9552	-29.6033	-15.6919
+2.75	215.4938338	250.8387	257.3911	235.5672	264.7521	187.7215	198.287	122.3454
-2.8	-26.37177582	-30.2729	-31.704	-29.8825	-34.7601	-22.3642	-23.6826	-12.5535
+2.8	192.52466	221.6512	228.2012	209.2876	232.0795	165.6117	175.0142	108.3537
-2.85	-19.77883126	-22.7047	-23.778	-22.4118	-26.0701	-16.7731	-17.762	-9.41513
+2.85	159.9022447	182.571	188.3459	172.8976	192.7955	135.8595	143.6339	89.35626
-2.9	-13.18588669	-15.1365	-15.852	-14.9412	-17.3801	-11.1821	-11.8413	-6.27675
+2.9	117.1720312	132.8207	137.3934	126.3468	141.437	98.5771	104.2451	65.09642
-2.95	-6.592942122	-7.56823	-7.92601	-7.47061	-8.69003	-5.59104	-5.92065	-3.13838
+2.95	64.06211226	72.50183	75.1981	69.22446	77.92877	53.72806	56.83889	35.36495
-3	-3.72E-14	-3.7E-14	-3.7E-14	-3E-14	-3E-14	-3.3E-14	-3.5E-14	-2.1E-14
+3	4.21E-14	3.33E-14	3.33E-14	2.87E-14	2.99E-14	2.48E-14	2.61E-14	1.96E-14

2-Span: Moment (Max and Min) Raw Data Results - 30' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.40E-14	-3.4E-14	-4.2E-14	-2.5E-14	-2.6E-14	-2.7E-14
End Shear	1.43E-14	1.6E-14	1.46E-14	1.96E-14	2.09E-14	1.77E-14
-0.05	-6.593824838	-8.06669	-8.40726	-6.67829	-7.7282	-8.15125
+0.05	63.89011246	73.14938	74.24361	63.76571	70.04053	73.9188
-0.1	-13.18764968	-16.1334	-16.8145	-13.3566	-15.4564	-16.3025
+0.1	117.0235734	133.3859	134.6019	117.0801	129.415	134.8617
-0.15	-19.78147451	-24.2001	-25.2218	-20.0349	-23.1846	-24.4538
+0.15	159.079242	181.2499	181.1567	161.6889	178.2672	185.2847
-0.2	-26.37529935	-32.2668	-33.6291	-26.7132	-30.9128	-32.605
+0.2	191.4548418	217.1772	214.5919	197.2038	216.8216	224.2548
-0.25	-32.96912419	-40.3334	-42.0363	-33.3915	-38.641	-40.7563
+0.25	214.1965136	243.4348	236.9596	223.6873	245.3829	252.2167
-0.3	-39.56294903	-48.4001	-50.4436	-40.0698	-46.3692	-48.9075
+0.3	227.8514155	270.1691	264.3222	241.4954	266.3585	279.9694
-0.35	-46.15677386	-56.4668	-58.8509	-46.7481	-54.0974	-57.0588
+0.35	233.2373989	286.3449	280.0046	251.0581	287.5616	298.9434
-0.4	-52.7505987	-64.5335	-67.2581	-53.4264	-61.8256	-65.21
+0.4	230.8115356	296.8072	284.196	256.5661	299.1442	307.5795
-0.45	-59.34442354	-72.6002	-75.6654	-60.1046	-69.5538	-73.3613
+0.45	221.3672912	299.1791	282.2237	258.9899	301.4546	306.9411
-0.5	-65.93824838	-80.6669	-84.0726	-66.7829	-77.282	-81.5125
+0.5	212.310288	292.922	274.0304	253.7304	295.1343	299.0459
-0.55	-72.53207321	-88.7336	-92.4799	-73.4612	-85.0102	-89.6638
+0.55	216.2832481	278.6061	266.4686	241.374	280.8334	289.2158
-0.6	-79.12589805	-96.8003	-100.887	-80.1395	-92.7384	-97.815
+0.6	212.3778756	257.0367	252.7567	228.0046	259.2597	270.2978
-0.65	-85.71972289	-104.867	-109.294	-86.8178	-100.467	-105.966
+0.65	199.2710472	231.8415	230.3487	209.3122	231.2007	243.1184
-0.7	-92.31354773	-112.934	-117.702	-93.4961	-108.195	-114.118
+0.7	177.5923123	202.1125	196.9025	183.9683	197.6909	208.5323
-0.75	-98.90737256	-121	-126.109	-100.174	-115.923	-122.269
+0.75	148.0570768	164.0527	157.4824	152.6635	163.9484	167.5556
-0.8	-105.5011974	-129.067	-134.516	-106.853	-123.651	-130.42
+0.8	111.4666322	119.461	115.7745	116.0844	124.3673	122.8712
-0.85	-112.0950222	-140.332	-145.708	-120.751	-135.35	-145.524
+0.85	75.09881151	72.76091	70.31829	77.07275	82.00483	74.58107
-0.9	-118.6888471	-188.877	-190.881	-156.904	-181.349	-193.265
+0.9	49.87122059	34.5543	35.13227	40.08446	42.46808	35.68142
-0.95	-146.281321	-249.863	-249.152	-196.288	-233.614	-245.628
+0.95	24.59493703	15.35727	17.07653	17.18159	18.13261	15.31645
-1	-182.5099308	-313.852	-309.844	-238.457	-289.761	-301.732
+1	0	0	0	0	0	0
(Span 2) -2	-182.5099308	-313.852	-309.844	-238.457	-289.761	-301.732
+2	0	0	0	0	0	0
-2.05	-146.285082	-249.862	-249.152	-196.288	-233.614	-245.626
+2.05	24.59493828	15.37184	17.07294	17.15811	18.10753	15.29634
-2.1	-118.6729998	-188.876	-190.881	-156.902	-181.351	-193.264
+2.1	49.87124586	34.52546	35.12899	40.04961	42.43094	35.66261
-2.15	-112.0800552	-140.332	-145.708	-120.75	-135.35	-145.522
+2.15	75.09881306	72.77024	70.32146	77.09123	81.96937	74.54645
-2.2	-105.4871106	-129.067	-134.516	-106.853	-123.652	-130.42
+2.2	112.5141787	119.4691	115.777	116.0503	124.3306	122.8573
-2.25	-98.89416606	-121	-126.109	-100.174	-115.924	-122.269

+2.25	149.2328864	164.0433	157.484	152.6278	163.91	167.5484
-2.3	-92.30122149	-112.933	-117.702	-93.496	-108.196	-114.117
+2.3	178.7495515	202.0999	196.9007	183.9824	197.7054	208.5234
-2.35	-85.70827693	-104.867	-109.294	-86.8177	-100.467	-105.966
+2.35	200.2652108	231.8245	230.346	209.323	231.1935	243.1509
-2.4	-79.11533236	-96.7999	-100.887	-80.1394	-92.739	-97.8149
+2.4	213.1800132	257.0268	252.7529	228.0114	259.2495	270.3263
-2.45	-72.52238779	-88.7333	-92.4799	-73.4611	-85.0108	-89.6636
+2.45	216.8679125	278.5927	266.4653	241.3926	280.8195	289.2395
-2.5	-65.92944322	-80.6666	-84.0727	-66.7828	-77.2825	-81.5124
+2.5	212.824863	292.9041	274.0322	253.7449	295.1155	299.0638
-2.55	-59.33649866	-72.5999	-75.6654	-60.1045	-69.5543	-73.3612
+2.55	222.2528005	299.2003	282.2278	258.9996	301.4303	306.9243
-2.6	-52.74355409	-64.5333	-67.2581	-53.4263	-61.826	-65.2099
+2.6	231.6738044	296.8226	284.1923	256.5703	299.1371	307.5565
-2.65	-46.15060952	-56.4666	-58.8509	-46.748	-54.0978	-57.0587
+2.65	234.304185	286.3183	280.0078	251.0533	287.5712	298.9587
-2.7	-39.55766496	-48.4	-50.4436	-40.0697	-46.3695	-48.9074
+2.7	229.1608589	270.1794	264.3241	241.4848	266.3608	279.9772
-2.75	-32.96472039	-40.3333	-42.0363	-33.3914	-38.6413	-40.7562
+2.75	215.4938338	243.4281	236.9583	223.6704	245.4232	252.2142
-2.8	-26.37177582	-32.2666	-33.6291	-26.7131	-30.913	-32.605
+2.8	192.52466	217.1686	214.5902	197.1802	216.8545	224.2445
-2.85	-19.77883126	-24.2	-25.2218	-20.0349	-23.1848	-24.4537
+2.85	159.9022447	181.2331	181.1535	161.6581	178.2922	185.266
-2.9	-13.18588669	-16.1333	-16.8145	-13.3566	-15.4565	-16.3025
+2.9	117.1720312	133.4046	134.5971	117.0954	129.4318	134.8342
-2.95	-6.592942122	-8.06665	-8.40727	-6.67828	-7.72825	-8.15124
+2.95	64.06211226	73.16012	74.23716	63.7734	70.04906	73.9281
-3	-3.72E-14	-4.6E-14	-4.2E-14	-4E-14	-4.1E-14	-3.9E-14
+3	4.21E-14	3.31E-14	3.58E-14	2.96E-14	3.16E-14	3.09E-14

2-Span: Shear (Max and Min) Raw Data Results - 35' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-13.57827466	-12.89288789	-12.22040993	-10.28643729	-10.8653567	-10.22639604	-12.05366096	-7.552472893	-8.00815	-4.375627756
End Shear	133.2973994	125.8472721	119.9676591	103.8835507	108.6030839	100.451578	114.9208517	77.81044818	81.90573	51.6179669
-0.05	-13.63650133	-12.95111455	-13.56496535	-10.28643729	-10.8653567	-10.22639604	-12.05366096	-7.552472893	-8.00815	-4.375627756
+0.05	119.7675732	114.74603	107.4599755	95.26245391	99.36782307	91.82928472	104.5825473	70.35777912	74.49224	46.98022926
-0.1	-13.85037741	-13.16499064	-17.3109342	-10.28643729	-10.8653567	-10.22639604	-12.05366096	-7.552472893	-8.00815	-5.382660154
+0.1	107.3025056	104.7149584	96.27051736	86.87692586	90.4008939	83.40909587	94.52061415	64.25640794	68.00849	42.6916352
-0.15	-17.30938279	-14.8466564	-20.11860308	-10.28643729	-10.8653567	-10.22639604	-12.05366096	-8.644394737	-9.26845	-7.691753832
+0.15	98.23445317	97.82435142	88.49767605	80.66256448	83.76635947	76.67218607	86.51090016	59.72998749	63.19958	39.5320984
-0.2	-24.3132993	-23.35444889	-24.27578456	-16.6013468	-16.6013468	-13.2847458	-13.2847458	-13.61703908	-14.4153	-10.75805539
+0.2	87.00846146	88.18189137	77.79961887	72.00580808	74.5406104	68.54126644	76.84383378	53.78412804	56.88426	35.41272416
-0.25	-29.80750016	-29.81679563	-27.69318029	-21.5739253	-21.5739253	-17.6863498	-17.8675381	-17.50222005	-18.5108	-13.04060123
+0.25	78.93539455	81.12722789	71.0636157	66.02060243	68.17383639	62.58288213	69.79544068	49.40759239	52.23705	32.40510049
-0.3	-36.87702985	-38.51090696	-32.24023893	-28.15737969	-28.15737969	-24.81891779	-25.79931175	-23.23060661	-24.5454	-16.04963875
+0.3	68.57750322	71.98548004	61.75651674	58.2353009	59.90827444	54.8572837	60.69141608	43.70591554	46.1845	28.52160335
-0.35	-41.98905221	-45.06822756	-35.64225373	-33.04321065	-33.04321065	-30.1294131	-31.7102871	-27.62004351	-29.1673	-18.27283671
+0.35	61.13845538	65.3464056	54.64475453	52.56436692	53.90019646	49.24942094	54.11062247	39.54576976	41.76973	25.71588493
-0.4	-49.22043885	-53.82826169	-40.16504802	-39.46402576	-39.46402576	-37.13157472	-39.51157005	-33.59952353	-35.4608	-21.18086842
+0.4	51.69462709	56.81113534	46.26381067	45.25917208	46.17867207	42.0532299	45.70527093	33.85016959	35.72771	22.28134526
-0.45	-53.91675698	-60.38879951	-47.03193067	-44.60318512	-44.74003141	-42.30619403	-45.28237634	-38.27000235	-40.3749	-23.31191006
+0.45	44.96913582	50.23042896	40.25328228	39.9941084	40.62793498	36.88894638	39.70487496	29.98443541	31.62848	20.17022721
-0.5	-60.91084922	-69.09046938	-56.18326199	-52.76485126	-53.56750784	-49.07643395	-52.84037412	-44.36109573	-46.7807	-26.41701222
+0.5	36.37007619	42.42233644	32.72652032	33.29113112	33.58195248	30.67531569	32.69706263	25.05409404	26.40259	17.43739877
-0.55	-69.18186119	-75.55954838	-63.02908123	-58.7666916	-60.06964501	-54.75528233	-59.58015107	-49.16027558	-51.8816	-28.7796767
+0.55	30.51642082	36.86075498	27.46777665	28.5235345	28.58719889	26.45874739	28.07499032	21.59050284	22.72685	15.4570848
-0.6	-80.1386561	-84.07468406	-72.49735215	-66.57797203	-68.54678249	-62.7916934	-69.44808857	-55.46510125	-58.5885	-31.74290681
+0.6	23.94252693	29.863119	21.4948498	23.13477272	23.13477272	21.12974313	22.24508188	17.63172511	18.55971	12.92053793
-0.65	-88.32861348	-90.35471782	-79.79797809	-72.27123368	-74.73685424	-68.66694274	-76.68609031	-59.89851925	-63.3076	-33.82136915
+0.65	20.40896581	24.94504891	18.3339589	19.44103067	19.44103067	17.3709236	18.14242339	14.81834689	15.59826	11.10383621
-0.7	-99.45291232	-98.55124969	-89.72735152	-79.60999671	-82.73212649	-76.2653668	-86.08010124	-65.41172811	-69.1802	-37.77082377
+0.7	16.01400488	18.8519679	14.40196087	14.81339907	14.81339907	12.70300171	13.06145665	11.27946155	11.87312	8.807307688
-0.75	-107.5951857	-104.5417435	-97.03536763	-84.903078	-88.51148438	-81.7655973	-92.90626018	-69.24506743	-73.2666	-40.63809044
+0.75	12.96422796	14.64653257	11.61755386	11.58247867	11.58247867	9.36986057	9.454612016	8.714034888	9.172668	7.187026455
-0.8	-118.143724	-112.2837294	-106.5029718	-91.64720944	-95.8933839	-88.80195587	-101.6759474	-73.94967867	-78.2861	-44.31044263
+0.8	9.23929697	9.5482388	8.287767918	7.198728289	7.198728289	5.990294614	6.073998856	5.706805719	6.007164	5.17077672
-0.85	-125.796723	-117.8812528	-113.3717227	-96.44850955	-101.1633809	-93.83410849	-107.977465	-77.60291347	-82.1892	-46.9398009
+0.85	6.710087226	6.12164304	6.026300206	4.812795381	4.812795381	3.841129062	3.917378277	3.66143806	3.854145	3.77997514
-0.9	-136.4110887	-125.0288648	-123.0314479	-102.4758777	-107.8003812	-100.1843222	-115.9724289	-81.5040715	-86.3598	-50.26161037
+0.9	3.702287157	2.903964062	3.27168326	2.146264277	2.146264277	1.838015174	1.860994653	1.750833323	1.842982	2.095076012
-0.95	-144.3423832	-130.1270862	-130.1463623	-106.6938145	-112.4623907	-104.6553305	-121.6364966	-84.05371352	-89.0903	-52.60306306
+0.95	1.727513222	1.242060748	1.510735536	0.937382265	0.937382265	0.858327505	0.878952135	0.837454812	0.881531	0.966340544
-1	-154.4981871	-136.5365992	-139.2559683	-111.8822939	-118.222972	-110.1953275	-128.7063473	-89.35702109	-94.1489	-55.50767283
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.52E+02	1.35E+02	136.5484426	1.11E+02	1.17E+02	108.8497035	126.9830492	8.74E+01	9.21E+01	5.48E+01
-2.05	-1.73E+00	-1.34E+00	-1.520895907	-1.08E+00	-1.08E+00	-0.860046974	-0.880671551	-8.20E-01	-8.63E-01	-9.67E-01
+2.05	1.44E+02	1.30E+02	1.30E+02	106.6858373	112.453559	1.05E+02	1.22E+02	8.41E+01	89.08636	5.26E+01
-2.1	-4.41E+00	-3.47E+00	-3.918492535	-2.742627397	-2.742627397	-2.18909961	-2.212837735	-2.084519327	-2.19423	-2.498204594
+2.1	1.34E+02	1.23E+02	1.20E+02	101.002344	106.1753368	9.86E+01	1.14E+02	8.06E+01	85.38157	4.95E+01
-2.15	-6.71E+00	-6.13E+00	-6.039079452	-4.817727521	-4.817727521	-3.84494015	-3.875440898	-3.66431589	-3.85717	-3.78077578
+2.15	126.5109118	117.8723382	113.78766	96.43935308	101.1533189	93.82480973	107.965798	77.68026733	82.27059	46.93823785
-2.2	-10.13321853	-10.77465964	-9.10106119	-8.454531818	-8.454531818	-6.753791621	-6.839893199	-6.432586865	-6.77114	-5.658285408
+2.2	116.3013329	110.3670062	104.6100706	89.9868593	94.07394226	87.06677816	99.50910881	72.81303158	77.08125	43.40786627
-2.25	-12.96422791	-14.6548575	-11.54721132	-11.5884963	-11.5884963	-9.158910485	-9.444363354	-8.717545835	-9.17636	-7.184166663

+2.25	107.9005645	104.5316016	97.49594771	84.89293052	88.50039497	81.75538554	92.89356787	69.23952911	73.26071	40.63637668
-2.3	-17.0780514	-20.33319731	-15.37024624	-15.94358394	-15.94358394	-13.8379661	-14.29519944	-12.13885532	-12.7777	-9.364218416
+2.3	96.36310892	96.51238149	87.31152223	77.79356333	80.75138493	74.38220036	83.74820473	64.07026308	67.75085	36.7935772
-2.35	-20.40896578	-24.95468686	-18.35101746	-19.44799272	-19.44799272	-17.37773029	-18.14984172	-14.82241562	-15.6025	-11.10060332
+2.35	87.98196903	90.34353428	79.24479366	72.26026181	74.72491651	68.65599489	76.67258637	59.8920756	63.30075	34.15377434
-2.4	-25.16415794	-31.57660901	-22.60563683	-24.41339085	-24.41339085	-22.43638898	-23.67320409	-18.60424743	-19.5834	-13.53945447
+2.4	77.07033717	81.94805188	69.47870288	64.63614708	66.43779358	60.79173317	66.98894634	53.92392731	56.94859	31.56277753
-2.45	-30.55294565	-36.87151324	-27.4966594	-28.53253427	-28.5966079	-26.46647381	-28.08345075	-21.5950456	-22.7316	-15.45353386
+2.45	68.83653929	75.54752575	62.08346625	58.75508119	60.05705961	54.7437607	59.56603299	49.15294533	51.87382	29.35031918
-2.5	-38.44412884	-44.34459396	-34.58543028	-34.94063594	-35.31348349	-32.12811583	-34.29120026	-26.2667544	-27.6877	-18.10744586
+2.5	58.77643454	66.90948462	53.67377786	50.72834773	51.36334673	47.38975996	50.95659063	42.96361911	45.31124	26.2132591
-2.55	-44.79063171	-50.24210502	-40.28613015	-40.00413102	-40.63848532	-36.89841291	-39.71583952	-29.99008404	-31.6345	-20.16642094
+2.55	53.9112746	60.37613078	46.96555103	44.59111171	44.72698708	42.29649823	45.27155992	38.26322124	40.36772	23.51078252
-2.6	-53.78915784	-58.92156565	-48.36853404	-47.06669705	-48.08716855	-43.83027934	-47.77642855	-35.17425678	-37.1321	-23.01359908
+2.6	47.61356919	51.62537758	39.0359141	37.8609236	37.8609236	35.38113243	37.56055476	31.97450851	33.75067	20.45924405
-2.65	-61.17274447	-65.35881385	-54.77024769	-52.57523992	-53.91170232	-49.25977533	-54.12274455	-39.51107612	-41.7333	-25.71754999
+2.65	42.21809855	45.05510772	35.5226539	33.03371525	33.03371525	30.11942854	31.69917019	27.61360419	29.16048	18.27150118
-2.7	-71.1571651	-74.25370419	-64.08012923	-60.1701264	-61.96065329	-56.77411742	-62.94633195	-45.1219805	-47.6875	-29.47963049
+2.7	35.1301258	36.31759435	31.09105441	26.50835462	26.50835462	23.03022965	23.80942283	21.72377133	22.95838	15.30036574
-2.75	-78.97224656	-81.14019293	-71.10248453	-66.03212426	-68.18608073	-62.59395278	-69.80851075	-49.41405327	-52.2439	-32.40689995
+2.75	29.80034717	29.80341277	27.20088888	21.56425881	21.56425881	17.67624906	17.85631278	17.49644097	18.50472	13.03923253
-2.8	-89.7917428	-90.58147543	-80.82392371	-74.03723569	-76.70381215	-70.56669324	-79.24470052	-55.26628464	-58.4583	-36.43340712
+2.8	22.43732789	21.20119127	22.74885719	14.92999419	14.92999419	11.94764999	12.05369666	12.30530412	13.03216	9.992097703
-2.85	-98.59703314	-97.83763949	-88.73583741	-80.67456726	-83.77916188	-76.68379729	-86.50993096	-59.73670036	-63.2067	-39.53399077
+2.85	16.95440265	14.83318871	19.81361169	10.28643292	10.86537415	10.22639143	12.05369666	8.642289442	9.26616	7.690362042
-2.9	-110.7535423	-107.2176873	-99.65772058	-88.97606764	-92.64405078	-85.51414861	-97.03283108	-65.78238794	-69.6299	-43.75827544
+2.9	13.78225683	13.09686426	16.18101716	10.28643292	10.86537415	10.22639143	12.05369666	7.552415116	8.008105	4.610980797
-2.95	-120.147464	-114.7594801	-108.0974481	-95.27476392	-99.38099557	-91.841226	-104.5968353	-70.36464356	-74.4995	-46.98218164
+2.95	13.63646249	12.95106992	13.45414328	10.28643292	10.86537415	10.22639143	12.05369666	7.552415116	8.008105	4.375629506
-3	-132.9982734	-124.9656476	-119.6428691	-103.737809	-108.4468555	-100.3640051	-114.815719	-77.54622512	-81.6276	-51.33757926
+3	13.57823581	12.89284323	12.2203882	10.28643292	10.86537415	10.22639143	12.05369666	7.552415116	8.008105	4.375629506

2-Span: Shear (Max and Min) Raw Data Results - 35' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-7.096585895	-6.16690307	-5.82950327	-4.973678817	-5.877555398	-8.185260315	-8.856174196	-9.711658601	-10.265061
End Shear	73.60895989	70.76069611	60.62828064	50.0176178	60.53487356	81.323336	87.69679873	87.36931801	87.36633458
-0.05	-7.096585895	-6.16690307	-5.82950327	-5.566978657	-5.877555398	-8.185260315	-8.856174196	-9.711658601	-10.265061
+0.05	67.21412177	63.39588011	55.06229197	45.09375966	55.29510117	74.30287555	79.54826404	79.61776155	79.59872021
-0.1	-7.096585895	-6.559520456	-7.852653164	-6.664032352	-5.877555398	-8.185260315	-8.856174196	-9.711658601	-10.265061
+0.1	60.73422	56.52923093	49.68845669	40.53636722	50.22763442	67.45177751	71.69566968	71.94131801	71.67380904
-0.15	-7.096585895	-7.899220672	-9.238948449	-7.924808373	-7.327397907	-8.185260315	-8.856174196	-9.711658601	-10.265061
+0.15	55.98543672	51.79144628	45.7406355	37.2075572	46.48362015	61.97400554	66.04732557	65.89111126	65.87003967
-0.2	-11.69160411	-12.56144479	-13.09461947	-10.9349084	-10.24866159	-11.29203393	-11.29587819	-11.25254221	-11.21263648
+0.2	49.98410282	46.18096342	40.60871671	32.90442307	41.39950835	55.36751841	58.69275711	58.57723769	58.55531219
-0.25	-15.19319046	-16.15663328	-16.27612168	-13.41585858	-12.42342761	-14.91562493	-14.92136952	-14.86895845	-14.82069106
+0.25	45.59760351	42.1197881	36.71146876	29.78956623	37.70444177	50.52991215	53.33006775	53.24256469	53.22013444
-0.3	-19.82909274	-21.37314263	-20.4104224	-16.62129281	-15.29071941	-20.45882405	-20.46587244	-20.41505513	-20.36825487
+0.3	39.92623652	37.64309745	31.48285633	25.80244668	33.06365596	44.26271262	46.41469633	46.36096909	46.33807467
-0.35	-23.26954185	-25.35024237	-23.56999767	-18.93056029	-17.40950921	-24.58243304	-24.59042142	-24.54094075	-24.76818919
+0.35	35.82246583	34.35481502	28.04489025	22.94749557	29.69702083	39.7176427	41.42514854	41.39392456	41.45350497
-0.4	-27.79083216	-30.73934116	-27.19523646	-21.88551816	-20.29515454	-30.01484155	-31.05421456	-30.99730443	-30.94489692
+0.4	30.57507161	30.08012487	23.67891783	19.33716013	25.37979826	33.89125569	35.54196486	35.51904541	35.49795995
-0.45	-31.12050224	-34.91603861	-29.71941908	-24.01017506	-23.90893405	-34.02574643	-35.86667488	-35.81152478	-35.76074273
+0.45	26.9298681	26.63063056	21.16817109	17.22598268	22.28401642	29.71485993	31.40024185	31.37722847	31.35605699
-0.5	-35.46099014	-40.38147451	-32.88328655	-26.72312422	-28.94456286	-39.26840774	-42.17706612	-42.12445339	-42.07600723
+0.5	22.9295199	22.63895672	17.99219213	14.48452616	18.365504	24.75988283	26.11581289	26.09290811	26.20207548
-0.55	-38.85222292	-44.37315029	-35.10761668	-28.66919886	-32.65835563	-43.82363275	-46.81339753	-46.76281488	-47.09218112
+0.55	19.97103567	19.76542025	15.70598627	12.5978196	15.59692895	21.43937738	22.34769934	22.32504757	22.30418852
-0.6	-44.58853601	-48.84105242	-38.80286941	-31.80728094	-37.5064948	-50.39720136	-52.84191529	-52.79420692	-53.60885662
+0.6	16.30946731	16.1117352	12.79928151	10.21813827	12.41292816	17.23531146	17.60845875	17.58639139	17.5660856
-0.65	-49.02873959	-51.93131743	-41.44160592	-34.34565447	-41.05149202	-55.20583887	-57.53527693	-57.46516514	-58.29954966
+0.65	13.70729096	13.7264687	10.7348722	8.541569693	10.67981054	14.2638102	14.28595302	14.26669521	14.24896777
-0.7	-54.78223561	-55.70549099	-44.63217741	-38.34814384	-45.63699848	-61.42871541	-64.78640025	-64.65309769	-64.60332487
+0.7	10.44707016	10.33085445	8.150339315	6.459429634	8.48795395	10.56455575	10.36511959	10.56557664	10.54859764
-0.75	-58.95549299	-58.27743925	-47.86971288	-41.36803312	-48.95685016	-65.93626515	-70.06005054	-69.8793833	-69.83207719
+0.75	7.989581073	8.059746201	6.347398012	5.018853241	6.940665481	7.909293044	7.815720883	7.916848713	7.984839944
-0.8	-64.30605745	-61.36317095	-52.69632013	-45.33449072	-53.20459441	-71.70693115	-76.84147252	-76.5978977	-76.72792798
+0.8	5.26877836	5.27533056	4.216680021	3.27217701	4.903640142	5.091750422	5.081725749	5.098639667	5.114220182
-0.85	-68.14185445	-63.42075863	-56.17306195	-48.20130175	-56.24294335	-75.83725398	-81.71911387	-82.03727038	-81.98466388
+0.85	3.377637541	3.381647006	2.707872063	2.09231192	3.617076459	3.264959703	3.255409782	3.270434404	3.284275187
-0.9	-72.99546025	-67.70778992	-60.59599651	-51.86581681	-60.07778228	-81.05418988	-87.91418465	-89.43893853	-89.46017256
+0.9	1.616096222	1.616803395	1.473329046	1.14546754	2.011360717	1.562312898	1.55723744	1.564527885	1.588455045
-0.95	-76.42328581	-72.73458864	-63.7388103	-54.48622005	-62.77827462	-84.73114043	-92.3083307	-94.74288381	-95.06501142
+0.95	0.754060849	0.775747615	0.688092377	0.531175755	0.935042796	0.729578379	0.724834551	0.731205288	0.737072081
-1	-80.68592052	-79.15642433	-67.67494455	-57.79529508	-66.12506992	-89.29283291	-97.80041222	-101.4507806	-102.9618386
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	7.96E+01	7.76E+01	6.67E+01	5.70E+01	6.53E+01	8.82E+01	96.46117751	99.80623857	1.01E+02
-2.05	-7.56E-01	-7.55E-01	-7.05E-01	-5.35E-01	-9.37E-01	-7.31E-01	-0.726232623	-0.732545807	-7.38E-01
+2.05	7.64E+01	7.27E+01	6.37E+01	5.45E+01	6.28E+01	8.47E+01	92.30059497	94.73387756	9.51E+01
-2.1	-1.925005722	-1.925736241	-1.754292893	-1.365089264	-2.397205447	-1.860734669	-1.855491649	-1.863025065	-1.887737591
+2.1	7.18E+01	6.60E+01	5.95E+01	5.10E+01	5.91E+01	7.98E+01	86.39198625	87.61300176	8.76E+01
-2.15	-3.380954847	-3.384317333	-2.709771498	-2.093168377	-3.61956479	-3.268199128	-3.258512772	-3.273414181	-3.28712735
+2.15	68.13485135	63.41779867	56.16847337	48.19936147	56.23707592	75.82961901	81.71047785	82.02742772	81.9752434
-2.2	-5.940573799	-5.947318803	-4.751804321	-3.692181803	-5.408177718	-5.740722878	-5.730411093	-5.747814405	-5.763836185
+2.2	62.9853587	60.62506224	51.50446968	44.3557038	52.15674678	70.28339821	75.1656235	74.9381888	74.96312662
-2.25	-8.053336922	-8.063003972	-6.349715086	-5.019888119	-6.943598811	-7.78153514	-7.770908978	-7.887461	-7.988876585
+2.25	58.94783294	58.27370587	47.86474422	41.36588177	48.95040501	65.92789422	70.05067503	69.8704606	69.82353042

-2.3	-11.24310737	-11.12445182	-8.780190411	-6.964156404	-9.025700903	-11.46506952	-11.22076491	-11.46611415	-11.44873344
+2.3	53.35519684	54.79478558	43.86615855	37.35702937	44.5001697	59.88602688	62.98620875	62.86918314	62.8190076
-2.35	-13.71197346	-13.73023762	-10.73755337	-8.542774387	-10.68312944	-14.26919832	-14.2911141	-14.27164398	-14.25371155
+2.35	49.02055066	51.92680594	41.4381776	34.34347566	41.04457606	55.19687649	57.52530095	57.45568563	58.29191769
-2.4	-17.20996326	-17.00913483	-13.51284278	-10.79923465	-13.01001533	-18.26700082	-18.76753935	-18.74504739	-18.72432505
+2.4	43.07876599	47.75641581	37.87205055	31.00566922	36.29957456	48.76088021	51.3445536	51.29642434	51.99903677
-2.45	-19.97626312	-19.7696279	-15.70898203	-12.5991564	-15.60218835	-21.44546772	-22.35428279	-22.33136022	-22.31023971
+2.45	38.62440419	44.3678523	35.10469813	28.66788694	32.65109233	43.81421175	46.80511643	46.75485142	47.08389611
-2.5	-23.91879483	-23.62480271	-18.77618575	-15.13330855	-19.32723126	-25.90289358	-27.41699383	-27.3937613	-27.50452821
+2.5	34.38146627	39.12158214	32.11055913	26.05621492	27.68646605	37.96285602	40.60379157	40.5508758	40.50215663
-2.55	-26.93555207	-26.63519987	-21.442939	-17.22670832	-22.28995931	-29.72251034	-31.40752676	-31.38423401	-31.36276247
+2.55	31.11434068	34.90996153	29.71610068	24.00869769	23.90142027	34.01823339	35.85804482	35.80324059	35.75279522
-2.6	-31.86864634	-31.14076928	-24.75010225	-20.21973241	-26.44584642	-35.32935426	-36.96160204	-36.93844059	-36.91711167
+2.6	26.66230482	29.29018651	26.32106224	21.1583439	19.6051209	28.65733805	29.42867467	29.37155773	29.31899323
-2.65	-35.8299399	-34.35966238	-28.04940519	-22.94952075	-29.70352946	-39.7260302	-41.43393669	-41.40231489	-41.46075867
+2.65	23.26316596	25.34440002	23.62026353	18.92889356	17.40536149	24.57468219	24.58300693	24.5338363	24.48855475
-2.7	-41.33146468	-38.75804429	-32.66246398	-26.78263203	-34.21512313	-45.81710654	-48.12580414	-48.06361865	-48.04045619
+2.7	18.66818602	20.0104133	19.43101117	15.8317988	14.57377596	19.06921964	19.07629401	19.02535004	18.97846374
-2.75	-45.60564834	-42.12484752	-36.60848393	-29.79176266	-37.71141035	-50.5388967	-53.33957443	-53.25162679	-53.22882092
+2.75	15.18669143	16.15128469	16.27195765	13.41398707	12.41915362	14.90777029	14.91385374	14.8617282	14.81378637
-2.8	-51.47733944	-47.57129599	-41.88137769	-33.96703232	-42.6197203	-57.01268729	-60.52054025	-60.3947448	-60.3726352
+2.8	10.51497407	11.34790569	11.99824248	10.1346851	9.515918702	10.15550249	10.15935517	10.11598648	10.26505084
-2.85	-55.99389947	-51.79781866	-45.74583565	-37.20988358	-46.49091453	-61.98344322	-66.05737662	-65.90072062	-65.87923028
+2.85	7.096600056	7.897320885	9.237180912	7.944195911	7.323067934	8.185272406	8.856178821	9.711626256	10.26505084
-2.9	-62.29386908	-58.22698027	-51.02632251	-41.66601433	-51.49462358	-69.16408981	-73.61080634	-73.84696657	-73.57989569
+2.9	7.096600056	6.166938833	7.358055553	6.309507252	5.877527116	8.185272406	8.856178821	9.711626256	10.26505084
-2.95	-67.22290035	-63.40370003	-55.06771784	-45.09617959	-55.30263403	-74.31259438	-79.38325421	-79.50071232	-79.60827624
+2.95	7.096600056	6.166938833	5.829516474	5.566391957	5.877527116	8.185272406	8.856178821	9.711626256	10.26505084
-3	-73.55785096	-70.52996369	-60.54257006	-49.77080172	-60.43391746	-81.2520139	-87.68354018	-87.39416323	-87.37602485
+3	7.096600056	6.166938833	5.829516474	4.973684708	5.877527116	8.185272406	8.856178821	9.711626256	10.26505084

2-Span: Shear (Max and Min) Raw Data Results - 35' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.44210868	-11.21218161	-8.04796	-9.182	-9.93154
End Shear	101.7301418	104.5025574	81.21081	93.55869	95.98669
-0.05	-10.68609335	-11.21218161	-8.04796	-9.182	-9.93154
+0.05	91.18542014	93.12341264	74.73414	83.9839	87.83603
-0.1	-13.00972238	-13.71551888	-8.54253	-9.93627	-10.9483
+0.1	81.16176203	82.31030916	68.30435	75.52295	79.78011
-0.15	-14.57917289	-15.5477297	-9.82187	-11.7129	-12.0251
+0.15	73.88923527	74.47510174	63.53105	69.67118	73.82361
-0.2	-19.14624603	-20.6724847	-15.4261	-14.7764	-16.0404
+0.2	65.00022198	65.07665207	57.25642	62.75576	66.02656
-0.25	-23.12305515	-24.24650013	-20.1276	-19.6369	-20.5004
+0.25	58.93845441	58.3456723	52.63439	57.65873	60.30865
-0.3	-29.85274318	-30.86696204	-26.8302	-26.5553	-26.794
+0.3	50.65297334	49.74241174	46.60798	51.00862	52.88897
-0.35	-35.64440328	-36.07814328	-31.8579	-31.7473	-33.0562
+0.35	45.296074	44.17656503	42.20703	46.14865	47.24434
-0.4	-42.56330186	-42.63811873	-38.1574	-39.5503	-41.4061
+0.4	39.04725536	37.0890972	36.52191	39.48988	40.1549
-0.45	-48.45801634	-47.27334854	-42.7058	-45.96	-47.754
+0.45	34.5294089	32.32389027	32.07732	34.85305	35.21745
-0.5	-56.49191321	-54.05001681	-48.9164	-54.0216	-56.1473
+0.5	28.75724818	26.94597249	26.84405	29.06193	29.40689
-0.55	-61.72232582	-58.78931144	-53.7615	-59.9484	-62.1019
+0.55	24.63500323	23.10381853	23.109	25.25978	25.25315
-0.6	-68.55747807	-65.31207262	-59.8493	-67.5731	-69.0444
+0.6	19.44112084	18.26086312	18.72579	19.97418	20.00969
-0.65	-73.70249801	-71.81585594	-64.133	-72.5518	-74.8912
+0.65	15.79067984	14.85554179	15.73818	16.78739	16.13093
-0.7	-79.94754027	-79.96877567	-69.4638	-78.605	-82.1932
+0.7	11.27667636	10.78671612	11.8577	12.62893	11.58145
-0.75	-84.1822012	-87.15438186	-73.3478	-82.7814	-87.2963
+0.75	8.174259677	8.232925033	9.358	9.85212	8.450594
-0.8	-91.62639789	-97.31052239	-78.2719	-87.8652	-93.9867
+0.8	5.276522171	5.122324414	6.053744	6.447739	5.389331
-0.85	-98.13320172	-104.9126982	-81.3521	-91.3145	-98.6421
+0.85	3.356155228	3.378913777	3.953071	4.216609	3.51384
-0.9	-108.1451732	-115.7242833	-85.0609	-95.4289	-103.853
+0.9	1.675584775	1.877610734	1.856205	1.975568	1.653416
-0.95	-115.2038125	-123.3621513	-87.5408	-98.1512	-107.375
+0.95	0.779745261	0.871747075	0.866657	0.920499	0.773342
-1	-124.1336117	-133.3952973	-90.4406	-104.07	-111.552
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.22E+02	1.31E+02	8.98E+01	1.02E+02	1.11E+02
-2.05	-7.90E-01	-8.72E-01	-8.89E-01	-9.48E-01	-7.90E-01
+2.05	1.15E+02	1.23E+02	8.75E+01	98.14738	1.07E+02
-2.1	-1.991264922	-2.23641679	-2.2104	-2.35323	-1.96836
+2.1	1.06E+02	1.13E+02	8.42E+01	94.44784	1.03E+02
-2.15	-3.358629635	-3.37917236	-3.88537	-4.13566	-3.46079
+2.15	98.12264468	104.9108379	81.34778	91.30966	98.6362
-2.2	-5.958041074	-5.867726183	-6.82416	-7.26926	-6.07438
+2.2	89.47857809	94.83352815	77.18384	86.6407	92.47666
-2.25	-8.178305017	-8.233464791	-9.24998	-9.856	-8.45476
+2.25	84.17668958	87.15262797	73.51219	82.77547	87.31361

-2.3	**-12.37027172**	**-11.67851264**	**-12.77**	**-13.5991**	**-12.6843**
+2.3	**78.4449428**	**77.98475186**	**68.16643**	**77.1371**	**80.4133**
-2.35	**-15.79549671**	**-14.85626811**	**-15.7308**	**-16.7017**	**-16.1359**
+2.35	**73.69576484**	**71.81444863**	**64.12688**	**72.54481**	**74.8832**
-2.4	**-20.71083204**	**-19.44094468**	**-19.7584**	**-21.0757**	**-21.2913**
+2.4	**66.7453157**	**63.19870691**	**58.36094**	**65.86178**	**67.35808**
-2.45	**-24.64048379**	**-23.10464748**	**-23.1143**	**-25.2657**	**-25.2588**
+2.45	**61.71542055**	**58.78830379**	**53.75458**	**60.09108**	**62.16697**
-2.5	**-30.17759928**	**-28.26497312**	**-28.1318**	**-30.4876**	**-30.8374**
+2.5	**54.67020809**	**52.3942169**	**47.42002**	**52.04944**	**54.2262**
-2.55	**-34.53544569**	**-32.32480333**	**-32.0832**	**-34.8595**	**-35.2237**
+2.55	**48.59073273**	**47.27234411**	**42.8691**	**45.95086**	**47.83059**
-2.6	**-40.59271443**	**-38.82447317**	**-37.9283**	**-41.0446**	**-41.8577**
+2.6	**40.7458172**	**41.03808696**	**36.61876**	**37.57932**	**39.20627**
-2.65	**-45.30259187**	**-44.17777024**	**-42.2133**	**-46.1556**	**-47.1067**
+2.65	**35.63668495**	**36.07702797**	**31.85074**	**31.73991**	**33.04756**
-2.7	**-52.57620187**	**-51.85246479**	**-48.1051**	**-52.6612**	**-54.7279**
+2.7	**27.86328206**	**29.07226351**	**25.08851**	**24.76856**	**25.113**
-2.75	**-58.8763885**	**-58.34711716**	**-52.6411**	**-57.6661**	**-60.3166**
+2.75	**23.11779466**	**24.26691909**	**20.12085**	**19.62983**	**20.4943**
-2.8	**-67.06678807**	**-67.37062337**	**-58.8209**	**-64.4804**	**-67.9666**
+2.8	**17.76993966**	**19.45084519**	**13.81877**	**13.27787**	**14.50053**
-2.85	**-73.89895455**	**-74.47680484**	**-63.538**	**-69.6788**	**-73.8319**
+2.85	**14.57714966**	**15.5680279**	**9.818094**	**11.71047**	**12.02367**
-2.9	**-83.64452968**	**-84.97799834**	**-69.9127**	**-77.6223**	**-81.7915**
+2.9	**12.45197628**	**13.07036562**	**8.106796**	**9.292696**	**10.54749**
-2.95	**-91.1958464**	**-93.12522831**	**-74.7412**	**-83.9933**	**-87.8446**
+2.95	**10.68359966**	**11.21218251**	**8.047944**	**9.182025**	**9.931534**
-3	**-101.5427485**	**-104.5045619**	**-81.2179**	**-93.279**	**-95.9953**
+3	**10.44212983**	**11.21218251**	**8.047944**	**9.182025**	**9.931534**

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.97E-14	-2.49E-14	-3.05E-14	-2.20E-14	-2.30E-14	-1.59E-14	-1.93E-14	-1.78E-14	-1.88E-14	-1.83E-14
End Shear	9.87E-14	5.04E-14	6.17E-14	4.28E-14	4.28E-14	3.41E-14	4.59E-14	3.20E-14	3.37E-14	3.83E-14
-0.05	-23.76198066	-22.5625538	-21.38571738	-18.0012653	-19.0143742	-17.8961931	-21.0939067	-13.2168276	-14.0142698	-7.657348572
+0.05	212.1023525	202.9745505	189.5216276	165.7881603	172.9080085	159.775336	181.9643657	122.4561309	129.6493752	82.2154012
-0.1	-47.52396132	-45.1251076	-42.77143476	-36.0025305	-38.0287485	-35.7923861	-42.1878134	-26.4336551	-28.0285396	-15.31469714
+0.1	392.8335974	380.9701874	351.2595411	309.5472942	322.2569876	297.4265344	337.3796436	228.8849005	242.2666504	153.1471632
-0.15	-71.28594198	-67.6876614	-64.15715214	-54.0037958	-57.0431227	-53.6885792	-63.2817201	-39.6504827	-42.0428095	-22.97204572
+0.15	529.5338616	526.9323421	477.1743775	423.312751	439.789322	406.0131985	459.6447424	313.8770626	332.1270247	207.5435166
-0.2	-95.04792264	-90.2502152	-85.54286952	-72.005061	-76.0574969	-71.5847723	-84.3756267	-52.8673103	-56.0570793	-30.62939429
+0.2	645.4852051	652.4394422	583.6606065	519.1095938	538.2336108	495.5543367	557.605262	385.8122991	408.1253978	255.0208395
-0.25	-118.8099033	-112.812769	-106.9285869	-90.0063263	-95.0718711	-89.4809653	-105.469533	-66.0841378	-70.0713491	-38.28674286
+0.25	722.5637729	742.6659521	650.1735576	585.6691434	605.6057328	558.1438977	638.2753343	435.309002	460.3111261	283.6583433
-0.3	-142.571884	-135.3753228	-128.3143043	-108.007592	-114.086245	-107.377158	-126.56344	-79.3009654	-84.0856189	-45.94409143
+0.3	782.0210821	816.3027248	705.8530658	634.6844164	654.1003711	612.1127353	707.1795587	473.2701533	500.2137509	309.5178084
-0.35	-166.3338646	-157.9378766	-149.7000217	-126.008857	-133.10062	-125.273351	-147.657347	-92.5177929	-98.0998888	-53.60144001
+0.35	804.1354158	856.6773731	724.0406631	658.796901	685.5443054	650.0004364	744.684522	491.9458579	519.7637474	317.6174965
-0.4	-190.0958453	-180.5004304	-171.085739	-144.010122	-152.114994	-143.169545	-168.751253	-105.734621	-112.114159	-61.25878858
+0.4	810.8458054	878.7770287	729.7612224	681.4977444	708.221963	670.8550202	762.3542838	504.9976099	534.3774367	323.3137307
-0.45	-213.8578259	-203.0629842	-192.4714564	-162.011387	-171.129368	-161.065738	-189.84516	-118.951448	-126.128428	-68.91613715
+0.45	794.5763736	874.1180174	715.7155972	681.0074629	703.7806986	665.4940223	752.1788712	506.382257	535.4175815	319.7709315
-0.5	-237.6198066	-225.625538	-213.8571738	-180.012653	-190.143742	-178.961931	-210.939067	-132.168276	-140.142698	-76.57348572
+0.5	785.9040641	863.7464303	706.3245084	667.2050511	691.318046	651.3196354	736.493232	496.6507584	524.8436672	318.4913884
-0.55	-261.3817873	-248.1880918	-235.2428912	-198.013918	-209.158117	-196.858124	-232.032974	-145.385103	-154.156968	-84.23083429
+0.55	770.3135896	829.3495735	694.0555312	638.1496343	663.3635677	626.9537202	714.8051687	472.7437894	500.3354731	300.6548546
-0.6	-285.1437679	-270.7506456	-256.6286086	-216.015183	-228.172491	-214.754317	-253.12688	-158.601931	-168.171238	-91.88818287
+0.6	736.3009097	778.9123536	664.5713853	597.1129776	619.723415	587.9639952	674.0713998	446.4802434	471.6377316	286.8055383
-0.65	-308.9057486	-293.3131994	-278.0143259	-234.016448	-247.186865	-232.65051	-274.220787	-171.818758	-182.185508	-99.54553144
+0.65	672.6440169	702.1110931	605.986915	545.5577779	562.0901453	527.3340408	606.7901639	407.2282839	430.3826636	265.5110056
-0.7	-332.6677293	-315.8757532	-299.4000433	-252.017714	-266.201239	-250.546703	-295.314694	-185.035586	-196.199778	-107.20288
+0.7	594.1425746	615.9001287	536.2397224	480.1690814	494.3078765	454.8552198	523.8756381	358.8706008	379.2326408	243.515551
-0.75	-356.4297099	-338.438307	-320.7857607	-270.018979	-285.215613	-268.442896	-316.4086	-198.252413	-210.214047	-114.8602286
+0.75	479.7257249	504.7120446	431.754127	394.0544867	404.8141066	368.6050494	419.7502478	295.1017758	311.7558319	203.4556037
-0.8	-380.1916906	-361.0008608	-342.1714781	-288.020244	-304.229988	-286.339089	-337.502507	-211.469241	-224.228317	-122.5175772
+0.8	359.4516312	389.7810593	323.5064672	300.7232217	305.8041579	274.7531859	303.764067	226.9692005	239.4431886	164.3561097
-0.85	-407.499999	-387.1097423	-366.7488904	-306.021509	-323.244362	-304.235282	-358.596414	-224.686069	-238.242587	-130.1749257
+0.85	218.0853659	257.3036786	196.1831896	195.6043975	195.6043975	171.8047791	179.649427	148.7740828	156.6042977	116.4645774
-0.9	-447.724724	-426.1350405	-402.9510774	-324.022775	-342.258736	-322.131475	-379.69032	-299.207357	-317.189345	-137.8322743
+0.9	143.7661258	138.4053702	129.3895131	108.042297	108.042297	86.26553271	86.27949889	81.93256631	86.24480664	79.44727681
-0.95	-536.780127	-475.2186627	-459.6508098	-342.02404	-361.27311	-340.027668	-400.784227	-396.026129	-419.05809	-166.1245188
+0.95	60.27573711	47.4995492	53.99252794	37.71613025	37.71613025	30.15942202	30.22169519	28.66221024	30.17074762	34.62475373
-1	-674.0765589	-532.5022318	-538.032361	-360.025314	-380.288095	-357.923857	-421.879379	-496.744578	-525.019879	-205.9125394
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-674.0765589	-532.5022318	-538.032361	-360.025314	-380.288095	-357.923857	-421.879379	-496.744578	-525.019879	-205.9125394
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-536.7760502	-475.2171839	-459.6630386	-342.023904	-361.273691	-340.027511	-400.78541	-396.026356	-419.05415	-166.1244337
+2.05	60.27573119	47.46228474	54.13566992	37.7228392	37.7228392	30.16460603	30.22687877	28.72293306	30.23466638	34.62667146
-2.1	-447.723498	-426.1336406	-402.9503937	-324.022646	-342.259286	-322.131326	-379.691441	-299.203741	-317.185864	-137.8323322
+2.1	143.7661982	138.460923	129.1290211	108.0147229	108.0147229	86.19190019	86.31051939	81.87697844	86.1862931	79.43096707
-2.15	-407.4988388	-387.1084185	-366.7482428	-306.021388	-323.244881	-304.235141	-358.597472	-224.684358	-238.241147	-130.1749806
+2.15	218.0854221	257.3634219	195.8555544	195.6475274	195.6475274	171.823058	179.683061	148.7541594	156.5833256	116.4690043
-2.2	-380.1905945	-360.9996112	-342.1708651	-288.020131	-304.230476	-286.338956	-337.503503	-211.467632	-224.226962	-122.517629
+2.2	359.2663565	389.8469363	322.8228244	300.7638628	305.8424633	274.7719542	303.7410843	226.9937467	239.4688383	164.3405659

-2.25	-356.4286818	-338.4371355	-320.7851857	-270.018873	-285.216072	-268.442771	-316.409533	-198.250905	-210.212778	-114.8602773
+2.25	479.7246971	504.7756006	431.7544456	394.0897974	404.8458918	368.6174694	419.7765753	295.1237364	311.7786626	203.4589281
-2.3	-332.6667692	-315.8746599	-299.3995064	-252.017616	-266.201667	-250.546586	-295.315564	-185.034179	-196.198593	-107.2029257
+2.3	596.5227533	615.9624058	537.1625242	480.1998117	494.333871	454.8405271	523.8439606	358.8903036	379.2529977	243.4976318
-2.35	-308.9048565	-293.3121842	-278.013827	-234.016358	-247.187262	-232.650401	-274.221595	-171.817452	-182.184408	-99.54557405
+2.35	672.9847181	702.1650475	605.8584226	545.5782398	562.1044281	527.3143937	606.8018083	407.2425203	430.3971491	265.5112361
-2.4	-285.1429438	-270.7497086	-256.6281477	-216.0151	-228.172857	-214.754216	-253.127626	-158.600726	-168.170224	-91.88822242
+2.4	737.9858032	778.9585542	664.2443876	597.1233658	619.7096387	587.9340831	674.1240154	446.4891277	471.6464641	286.7837252
-2.45	-261.3810312	-248.1872329	-235.2424683	-198.013843	-209.158452	-196.858031	-232.033657	-145.383999	-154.156039	-84.23087078
+2.45	771.585912	829.3827046	694.4205845	638.1345527	663.3389983	626.9658063	714.7902465	472.7782154	500.3709386	301.0225804
-2.5	-237.6191185	-225.6247573	-213.856789	-180.012585	-190.144048	-178.961846	-210.939688	-132.167273	-140.141855	-76.57351915
+2.5	787.0917487	863.7663432	708.3174355	667.1763557	691.2782931	651.3245641	736.51471	496.6738117	524.86879	318.4729107
-2.55	-213.8572058	-203.0622816	-192.4711096	-162.011328	-171.129643	-161.065661	-189.845719	-118.950546	-126.12767	-68.91616751
+2.55	795.6832368	874.11159	715.9980613	681.0401743	703.8235981	665.4981298	752.2119402	506.3976079	535.4345646	319.7708596
-2.6	-190.0952932	-180.499806	-171.0854303	-144.01007	-152.115238	-143.169476	-168.751749	-105.73382	-112.113485	-61.25881588
+2.6	810.7532183	878.7542013	729.4194456	681.5165688	708.2505613	670.8990415	762.3188146	505.0050106	534.3860193	323.2918056
-2.65	-166.3333805	-157.9373303	-149.6997509	-126.008812	-133.100833	-125.273291	-147.65778	-92.5170935	-98.0993009	-53.60146424
+2.65	805.2036897	856.6376093	724.5397822	658.7924228	685.5553679	650.0287912	744.6849461	491.9402587	519.7585087	317.6181239
-2.7	-142.5714679	-135.3748546	-128.3140716	-108.007555	-114.086429	-107.377106	-126.563811	-79.300367	-84.0851163	-45.94411261
+2.7	784.5403956	816.243332	706.4925014	634.6635106	654.0867986	612.1247719	707.2140743	473.2552105	500.1986158	309.5361362
-2.75	-118.8095552	-112.812379	-106.9283922	-90.0062971	-95.0720239	-89.4809205	-105.469842	-66.0836406	-70.0709317	-38.28676097
+2.75	722.7533726	742.6828881	650.4916855	585.7006575	605.6436764	558.1339233	638.2885404	435.3250558	460.3285453	284.8339185
-2.8	-95.04764254	-90.24990334	-85.54271285	-72.0050395	-76.0576191	-71.5847355	-84.3758727	-52.8669141	-56.0567471	-30.62940934
+2.8	647.8280444	652.3380794	583.1247261	519.0527247	538.1821954	495.5263113	557.5922224	385.7770562	408.0887414	255.0338424
-2.85	-71.28572987	-67.68742769	-64.1570335	-54.0037819	-57.0432143	-53.6885505	-63.2819035	-39.6501877	-42.0425625	-22.9720577
+2.85	530.22682	526.9053451	477.1963026	423.3059877	439.7868098	406.0203073	459.6635347	313.8715412	332.1215562	207.5534313
-2.9	-47.52381721	-45.12495203	-42.77135415	-36.0025243	-38.0288096	-35.7923655	-42.1879344	-26.4334612	-28.0283779	-15.31470607
+2.9	392.8032149	380.8229904	353.4512586	309.5898796	322.3024953	297.4679007	337.4290291	228.9086942	242.2919327	153.1539384
-2.95	-23.76190455	-22.56247638	-21.3856748	-18.0012667	-19.0144048	-17.8961805	-21.0939652	-13.2167348	-14.0141933	-7.657354433
+2.95	211.8362198	202.9011225	190.5908746	165.8097212	172.931089	159.796259	181.9366203	122.4681468	129.6621465	82.21883256
-3	-1.62E-13	-7.71E-14	-9.17E-14	-6.33E-14	-6.35E-14	-6.40E-14	-8.43E-14	-5.42E-14	-5.71E-14	-5.40E-14
+3	1.31E-13	5.45E-14	9.39E-14	4.77E-14	5.10E-14	4.06E-14	4.74E-14	4.64E-14	4.88E-14	3.89E-14

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.56E-14	-1.50E-14	-1.68E-14	-1.24E-14	-1.84E-14	-1.35E-14	-1.42E-14	-1.38E-14	-1.36E-14
End Shear	3.01E-14	2.96E-14	3.86E-14	2.88E-14	3.44E-14	2.90E-14	2.88E-14	2.87E-14	2.90E-14
-0.05	-12.41902532	-10.79208037	-10.20163072	-8.70393793	-10.28572195	-14.32420555	-15.4983048	-16.9954026	-17.9638567
+0.05	116.9374844	110.9427902	96.35901094	79.32269545	96.20902936	129.2764582	138.902396	138.489661	138.4561709
-0.1	-24.83805063	-21.58416074	-20.40326144	-17.40787586	-20.57144389	-28.6484111	-30.9966097	-33.9908051	-35.9277135
+0.1	217.4658584	203.7678427	178.5733679	147.1602144	180.2051429	240.5507723	257.6017523	256.9000617	256.8299658
-0.15	-37.25707595	-32.37624112	-30.60489217	-26.11181379	-30.85716584	-42.97261665	-46.4949145	-50.9862077	-53.8915702
+0.15	295.6097588	272.1383003	240.427006	199.7823752	243.2350963	327.9238109	350.0724582	366.2065556	366.1673554
-0.2	-49.67610127	-43.16832149	-40.80652289	-34.81575172	-41.14288779	-57.29682221	-61.9932194	-67.9816102	-71.855427
+0.2	360.6071638	332.9555391	293.1340331	243.469336	297.474762	400.1747573	424.8665616	458.8888482	458.8063768
-0.25	-62.09512659	-53.96040186	-51.00815361	-43.51968965	-51.42860973	-71.62102776	-77.4915242	-84.9770128	-89.8192837
+0.25	404.8101595	372.1988292	326.6587741	272.6458051	332.2178159	450.1074508	476.378639	523.9009298	532.1612938
-0.3	-74.5141519	-64.75248223	-61.20978433	-52.22362758	-61.71433168	-85.94523331	-92.9898291	-101.972415	-107.78314
+0.3	435.7327421	406.9071386	348.8687937	292.5105866	359.1876038	488.3262385	526.5904358	570.1277221	594.2904564
-0.35	-86.93317722	-75.5445626	-71.41141506	-60.92756551	-72.00005363	-100.2694389	-108.488134	-118.967818	-125.746997
+0.35	452.3086022	425.9075168	365.5229852	306.9367797	368.8142496	518.9228679	554.9252023	594.5588564	627.8354566
-0.4	-99.35220254	-86.33664297	-81.61304578	-69.63150344	-82.28577557	-114.5936444	-123.986439	-135.96322	-143.710854
+0.4	465.493439	435.9044029	373.8429335	314.2254729	370.6615439	535.0133599	569.0895536	616.5616478	645.6263326
-0.45	-111.7712279	-97.12872335	-91.8146765	-78.33544137	-92.57149752	-128.91785	-139.484744	-152.958623	-161.674711
+0.45	460.820628	432.3373619	366.6393534	309.1799777	357.9850716	529.8469875	560.3659542	613.9570137	643.0937977
-0.5	-124.1902532	-107.9208037	-102.0163072	-87.0393793	-102.8572195	-143.2420555	-154.983048	-169.954026	-179.638567
+0.5	446.9332374	427.9347458	352.442645	297.7088718	351.5907274	517.8947954	544.3718255	600.5324288	634.1576281
-0.55	-136.6092785	-118.7128841	-112.2179379	-95.74331724	-113.1429414	-157.5662611	-170.481353	-186.949428	-197.602424
+0.55	432.5950407	411.470833	344.6487082	291.3561618	348.9927653	499.5492908	526.6671134	570.7057068	607.9083702
-0.6	-149.0283038	-129.5049645	-122.4195687	-104.4472552	-123.4286634	-171.8904666	-185.979658	-203.944831	-215.566281
+0.6	408.1794314	387.3711353	329.4261336	277.3943217	338.1320995	469.3041281	499.7705599	534.7009788	567.4933675
-0.65	-161.4473291	-140.2970448	-132.6211994	-113.1511931	-133.7143853	-186.2146722	-201.477963	-220.940233	-233.530138
+0.65	373.7510631	350.1089557	299.2123261	251.2696631	309.7016651	421.5228802	451.7078622	484.6630294	508.0583964
-0.7	-173.8663544	-151.0891252	-142.8228301	-121.855131	-144.0001073	-200.5388777	-216.976268	-237.935636	-251.493994
+0.7	331.9537917	308.7574255	266.0976465	222.4375205	275.7214338	364.5456161	391.4414395	425.1494251	439.6851668
-0.75	-186.2853798	-161.8812056	-153.0244608	-130.559069	-154.2858292	-214.8630833	-232.474573	-254.931038	-269.457851
+0.75	274.003751	256.144457	220.4434479	183.3189206	225.6354221	298.9615264	314.5683602	344.2807509	348.6965053
-0.8	-198.7044051	-172.6732859	-163.2260916	-139.2630069	-164.5715511	-229.1872888	-247.972877	-271.926441	-287.421708
+0.8	209.0995695	202.2827989	166.7557289	137.2173691	172.6678625	223.8582819	232.8674826	253.0866672	253.2618244
-0.85	-211.1234304	-187.846923	-173.4277223	-153.3940358	-174.8572731	-243.5114944	-263.471182	-288.921843	-305.385565
+0.85	137.8041325	137.5350988	109.3118817	87.81446594	111.6314136	141.3771971	141.8962596	148.8670229	149.1007318
-0.9	-223.5424557	-249.3941482	-212.0323135	-183.1310406	-185.142995	-257.8356999	-278.969487	-305.917246	-323.349421
+0.9	75.85128631	75.70211464	59.56546546	47.30382851	76.65333373	73.32570281	73.09259454	73.33863908	73.44759456
-0.95	-235.961481	-336.6102626	-286.7521054	-247.0650484	-195.428717	-272.1599055	-294.467792	-322.912648	-352.657351
+0.95	26.53650819	26.47042027	24.13305171	18.53179745	33.147564	25.63550872	25.6213711	25.64078037	25.65865607
-1	-269.4788826	-427.6570345	-365.7145126	-316.3571932	-205.7144382	-286.4845336	-327.945722	-369.210051	-404.437202
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-269.4788826	-427.6570345	-365.7145126	-316.3571932	-205.7144382	-286.4845336	-327.945722	-369.210051	-404.437202
+2	0	0	0	0	0	0	0	0	0
-2.05	-235.9619481	-336.6083612	-286.7530354	-247.0654712	-195.4277758	-272.1603069	-294.467943	-322.911569	-352.656518
+2.05	26.54102053	26.60650642	24.13599796	18.53311555	33.15353019	25.63991512	25.6255919	25.64482731	25.66253515
-2.1	-223.542898	-249.3932234	-212.0346183	-183.1307569	-185.1421033	-257.8360802	-278.96963	-305.916223	-323.349096
+2.1	75.78719415	75.6505333	59.58091223	47.31079215	76.60267954	73.26311516	73.03264366	73.28115798	73.47081679
-2.15	-211.123848	-187.8479852	-173.4281114	-153.3947423	-174.8564309	-243.5118535	-263.471317	-288.920877	-305.385257
+2.15	137.7888294	137.5228056	109.3031243	87.81052773	111.5847742	141.3975552	141.9114937	148.8614916	149.1320712
-2.2	-198.7047979	-172.6742895	-163.2264576	-139.2631681	-164.5707584	-229.1876268	-247.973005	-271.925531	-287.421418
+2.2	209.036339	202.3068528	166.7715376	137.2009132	172.735133	223.8777435	232.8824666	253.1208018	253.2945928
-2.25	-186.2857478	-161.8821465	-153.0248038	-130.5592199	-154.285086	-214.8634001	-232.474692	-254.930185	-269.457579

+2.25	274.0268544	256.1272018	220.4296904	183.3127482	225.6383415	298.9756395	314.5586556	344.2695987	348.7010329
-2.3	-173.8666977	-151.0900036	-142.82315	-121.8552716	-143.9994135	-200.5391734	-216.976379	-237.934839	-251.49374
+2.3	331.972041	308.7073621	266.1057902	222.417555	275.7809702	364.5547983	391.4254097	425.1719209	439.7227726
-2.35	-161.4476476	-140.2978606	-132.6214961	-113.1513234	-133.7137411	-186.2149467	-201.478066	-220.939493	-233.529901
+2.35	373.7607161	350.0933772	299.2083838	251.267897	309.6933054	421.5106497	451.7276892	484.6749641	508.0481757
-2.4	-149.0285975	-129.5057176	-122.4198423	-104.4473752	-123.4280686	-171.8907199	-185.979753	-203.944147	-215.566062
+2.4	408.1703046	387.3143532	329.4165875	277.3900499	338.1777136	469.2833653	499.7382058	534.6886487	567.5266856
-2.45	-136.6095474	-118.7135747	-112.2181885	-95.74342692	-113.1423962	-157.5664932	-170.48144	-186.948801	-197.602223
+2.45	432.5778598	411.4466851	344.6334891	291.3493302	348.9674753	499.5645143	526.6669216	570.7240315	607.931411
-2.5	-124.1904973	-107.9214317	-102.0165346	-87.03947868	-102.8567237	-143.2422665	-154.983127	-169.953455	-179.638384
+2.5	446.9666247	427.9425347	352.4125455	297.7189969	351.6173523	517.8538013	545.7340068	600.5613975	634.1703235
-2.55	-111.7714472	-97.12928878	-91.81488081	-78.33553044	-92.57105125	-128.9180398	-139.484814	-152.95811	-161.674545
+2.55	460.8455928	432.3348425	366.6313178	309.1763799	358.017705	529.8439188	560.375595	613.9473929	643.08548
-2.6	-99.35239706	-86.33714582	-81.61322698	-69.6315822	-82.2853788	-114.5938131	-123.986501	-135.962764	-143.710706
+2.6	465.5096908	435.9708052	373.8028811	314.2313901	370.6258897	535.0448579	569.1318173	616.5810425	645.6050335
-2.65	-86.93334696	-75.54500286	-71.41157315	-60.92763396	-71.99970634	-100.2695864	-108.488188	-118.967418	-125.746867
+2.65	452.3137331	425.9295034	365.5032401	306.9397816	368.8325307	518.9417352	554.9115579	594.5636046	627.8507131
-2.7	-74.51429687	-64.7528599	-61.20991932	-52.22368572	-61.71403389	-85.94535968	-92.9898752	-101.972072	-107.783028
+2.7	435.7213809	406.9594538	348.865172	292.5089615	359.2587983	488.3319536	526.6064013	570.1111806	594.3305375
-2.75	-62.09524677	-53.96071695	-51.00826549	-43.51973748	-51.42836144	-71.62113297	-77.4915622	-84.9767257	-89.8191889
+2.75	404.8340319	372.2137143	326.6485215	272.6411993	332.2169227	450.0952302	476.3752029	523.911088	532.1843254
-2.8	-49.67619667	-43.16857399	-40.80661166	-34.81578925	-41.14268899	-57.29690626	-61.9932493	-67.9813798	-71.8553499
+2.8	360.5715383	332.9991353	293.1697046	243.461282	297.5250193	400.147922	424.8478592	458.9244918	458.8405967
-2.85	-37.25714657	-32.37643103	-30.60495784	-26.11184101	-30.85701653	-42.97267955	-46.4949364	-50.9860338	-53.891511
+2.85	295.6073786	272.1341412	240.4275668	199.7826266	243.2112576	327.9275762	350.0816131	366.2244083	366.1844301
-2.9	-24.83809647	-21.58428807	-20.40330401	-17.40789277	-20.57134408	-28.64845284	-30.9966234	-33.9906879	-35.927672
+2.9	217.4961448	203.7944196	178.5920645	147.168625	180.231115	240.5844223	257.6377865	258.4643158	256.8629563
-2.95	-12.41904637	-10.79214512	-10.20165018	-8.703944527	-10.28567163	-14.32422613	-15.4983105	-16.9953419	-17.963833
+2.95	116.952871	110.9564927	96.36849297	79.32692047	96.22221592	129.2934852	138.9207222	138.5071331	138.4729064
-3	-4.41E-14	-4.92E-14	-4.45E-14	-3.51E-14	-5.49E-14	-4.95E-14	-5.06E-14	-5.27E-14	-5.20E-14
+3	2.96E-14	4.02E-14	3.89E-14	3.45E-14	4.86E-14	3.60E-14	3.39E-14	3.04E-14	3.20E-14

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.85E-14	-1.71E-14	-1.90E-14	-2.06E-14	-1.72E-14
End Shear	4.49E-14	5.16E-14	3.61E-14	3.95E-14	3.31E-14
-0.05	-18.27369018	-19.62131781	-14.0839227	-16.0685047	-17.3801902
+0.05	159.5744852	164.9110038	130.1381869	146.9718216	153.1477431
-0.1	-36.54738036	-39.24263563	-28.1678455	-32.1370095	-34.7603804
+0.1	292.7203624	301.1425942	243.2684801	271.6458969	284.8750038
-0.15	-54.82107055	-58.86395344	-42.2517682	-48.2055142	-52.1405706
+0.15	392.1674427	400.531466	333.9678786	366.919117	389.3428157
-0.2	-73.09476073	-78.48527125	-56.335691	-64.274019	-69.5207608
+0.2	469.4085915	478.3783373	410.8828644	451.3099973	475.4763052
-0.25	-91.36845091	-98.10658907	-70.4196137	-80.3425237	-86.900951
+0.25	539.3004386	545.4530395	463.8151166	511.0086213	535.9311596
-0.3	-109.6421411	-117.7279069	-84.5035364	-96.4110284	-104.281141
+0.3	589.5794265	601.1346175	504.8294833	557.7753933	595.5998464
-0.35	-127.9158313	-137.3492247	-98.5874592	-112.479533	-121.661331
+0.35	619.3160642	628.8715134	525.2236295	598.0543222	632.3465937
-0.4	-146.1895215	-156.9705425	-112.671382	-128.548038	-139.041522
+0.4	633.6773304	649.5450253	539.1590195	622.524063	652.0085693
-0.45	-164.4632116	-176.5918603	-126.755305	-144.616543	-156.421712
+0.45	622.9000737	652.8846165	541.3449187	622.6969526	648.222311
-0.5	-182.7369018	-196.2131781	-140.839227	-160.685047	-173.801902
+0.5	609.6154052	639.1560215	531.6262011	613.7063194	637.0073311
-0.55	-201.010592	-215.8344959	-154.92315	-176.753552	-191.182092
+0.55	582.0839535	618.2082323	504.9749075	581.7820671	610.4592162
-0.6	-219.2842822	-235.4558138	-169.007073	-192.822057	-208.562282
+0.6	556.5178604	576.1360171	476.965526	540.4211225	572.9635547
-0.65	-237.5579724	-255.0771316	-183.090996	-208.890562	-225.942473
+0.65	504.4495606	513.0408582	434.341325	482.0538288	513.1906283
-0.7	-255.8316625	-274.6984494	-197.174918	-224.959066	-243.322663
+0.7	441.406642	445.3476806	382.4255226	415.1810395	443.222295
-0.75	-274.1053527	-294.3197672	-211.258841	-241.027571	-260.702853
+0.75	359.9258215	348.3077182	314.3879759	338.1885616	356.8099272
-0.8	-292.3790429	-313.941085	-225.342764	-257.096076	-278.083043
+0.8	262.0440618	248.3416152	241.881151	259.4030817	263.1125316
-0.85	-315.5792768	-336.0683523	-246.116367	-278.914476	-304.617539
+0.85	157.475171	146.5501516	157.8788476	168.4041041	161.0219629
-0.9	-416.0737916	-427.3402978	-332.852866	-373.047286	-411.40794
+0.9	75.37879257	73.23530124	86.86423122	92.48632616	77.32135915
-0.95	-548.4416498	-555.8966255	-426.790289	-496.48298	-535.543623
+0.95	27.07159292	30.81301594	30.41226597	32.43975037	27.04952838
-1	-685.9727152	-688.6706874	-525.24701	-626.467754	-665.971735
+1	0	0	0	0	0
(Span 2) -2	-685.9727152	-688.6706874	-525.24701	-626.467754	-665.971735
+2	0	0	0	0	0
-2.05	-548.4405358	-555.8969479	-426.788033	-496.487047	-535.539292
+2.05	27.07495776	30.81363239	30.41632183	32.44407662	27.05300711
-2.1	-416.0726351	-427.3403305	-332.852004	-373.048646	-411.405589
+2.1	75.33089542	73.23971877	86.80657577	92.42498746	77.27199574
-2.15	-315.5774026	-336.0686449	-246.11553	-278.914755	-304.616439
+2.15	157.4651432	146.5486593	157.9543295	168.3894299	161.0116704
-2.2	-292.3796301	-313.941115	-225.342427	-257.096723	-278.082942
+2.2	262.0291277	248.3392848	241.8240124	259.3416843	263.1003454
-2.25	-274.1059029	-294.3197957	-211.258525	-241.028179	-260.702758

+2.25	359.9055881	348.306979	314.4106076	338.212023	356.798824
-2.3	-255.8321757	-274.6984763	-197.174623	-224.959634	-243.322574
+2.3	441.37605	445.3518066	382.4460835	415.1720456	443.2774856
-2.35	-237.5584485	-255.0771569	-183.090722	-208.89109	-225.942389
+2.35	504.4240976	513.0428559	434.3563879	482.0430549	513.2065022
-2.4	-219.2847213	-235.4558375	-169.00682	-192.822545	-208.562205
+2.4	556.4830856	576.1328246	476.9752984	540.4049075	573.008785
-2.45	-201.0109941	-215.8345181	-154.922918	-176.754001	-191.182021
+2.45	582.0736745	618.2095755	505.0111433	581.7604388	610.461274
-2.5	-182.7372669	-196.2131987	-140.839017	-160.685456	-173.801837
+2.5	609.5871832	639.1490197	531.6497295	613.6766095	637.0359147
-2.55	-164.4635397	-176.5918793	-126.755115	-144.616911	-156.421652
+2.55	622.8813893	652.8833624	541.3604861	622.6968322	648.2327398
-2.6	-146.1898124	-156.9705599	-112.671213	-128.548367	-139.041468
+2.6	633.6489834	649.5480738	539.1662703	622.5502586	651.9734082
-2.65	-127.9160852	-137.3492405	-98.5873115	-112.479822	-121.661284
+2.65	619.3116331	628.8707573	525.2175724	598.0695462	632.336196
-2.7	-109.642358	-117.7279211	-84.5034098	-96.4112779	-104.281099
+2.7	589.5392746	601.1396904	504.813745	557.7793186	595.613285
-2.75	-91.36863085	-98.10660172	-70.4195081	-80.3427334	-86.9009152
+2.75	539.2816143	545.4553803	463.8314222	511.0356126	535.9289236
-2.8	-73.09490364	-78.48528233	-56.3356064	-64.2741889	-69.5207309
+2.8	469.4675247	478.3760987	410.8461307	451.3626548	475.4611577
-2.85	-54.82117644	-58.86396294	-42.2517047	-48.2056444	-52.1405467
+2.85	392.1840132	400.5276969	333.9619083	366.9216378	389.3502922
-2.9	-36.54744924	-39.24264354	-28.167803	-32.1370999	-34.7603624
+2.9	292.7558437	301.1358139	243.2929839	271.6778884	284.8320017
-2.95	-18.27372204	-19.62132415	-14.0839013	-16.0685553	-17.3801781
+2.95	159.5927241	164.9077806	130.108265	146.9882681	153.1265198
-3	-9.46E-14	-1.15E-13	-6.71E-14	-7.36E-14	-6.68E-14
+3	5.97E-14	6.15E-14	4.97E-14	5.14E-14	4.58E-14

2-Span: Shear (Max and Min) Raw Data Results - 35' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-4.83644	-3.67985	-3.19777188	-3.02282	-2.6819	-3.047734197	-4.24437	-4.59226	-5.035861343	-5.32282
End Shear	49.72669	38.16902	36.69209028	31.43805	26.71399	31.38961554	42.16922	45.4741	45.30428728	45.30274
-0.05	-4.83644	-3.67985	-3.19777188	-3.02282	-2.99213	-3.047734197	-4.24437	-4.59226	-5.035861343	-5.32282
+0.05	44.85105	34.85306	32.87315536	28.55188	24.06412	28.67259589	38.52884	41.24878	41.28481283	41.27494
-0.1	-4.83644	-3.67985	-3.401358805	-4.0719	-3.57047	-3.047734197	-4.24437	-4.59226	-5.035861343	-5.32282
+0.1	40.366	31.49298	29.31253872	25.76534	21.61117	26.04492322	34.97629	37.17691	37.30428728	37.16557
-0.15	-6.20973	-3.67985	-4.096043905	-4.79074	-4.23586	-3.799532231	-4.24437	-4.59226	-5.035861343	-5.32282
+0.15	37.0789	29.03056	26.85581866	23.71825	19.82225	24.10351058	32.13586	34.24803	34.16702684	34.1561
-0.2	-9.01004	-6.06254	-6.513582985	-6.79005	-5.81826	-5.314317651	-5.85535	-5.85734	-5.834867624	-5.81417
+0.2	33.00922	25.91864	23.94657165	21.05715	17.51321	21.46720682	28.71015	30.43441	30.37450749	30.36314
-0.25	-11.1704	-7.87824	-8.377823844	-8.43978	-7.12537	-6.442015874	-7.73431	-7.73729	-7.710115868	-7.68509
+0.25	30.06226	23.64408	21.84069904	19.03628	15.84425	19.55117541	26.20167	27.65365	27.60827829	27.59665
-0.3	-13.8834	-10.2821	-11.08278073	-10.5836	-8.82096	-7.928814833	-10.6087	-10.6123	-10.58597621	-10.5617
+0.3	26.25003	20.70326	19.51936606	16.32505	13.71098	17.1447529	22.95189	24.06777	24.03991137	24.02804
-0.35	-15.7939	-12.0661	-13.14505697	-12.2219	-10.0479	-9.027487273	-12.7469	-12.7511	-12.72540355	-12.8432
+0.35	23.48984	18.5753	17.81426758	14.54233	12.18563	15.39902558	20.5951	21.4805	21.46431141	21.49521
-0.4	-18.464	-14.4106	-15.93950799	-14.1018	-11.6252	-10.52380323	-15.5638	-16.1028	-16.07327168	-16.0461
+0.4	19.95795	15.85433	15.59767948	12.27841	10.25933	13.16038282	17.57389	18.42985	18.41796495	18.40703
-0.45	-20.1133	-16.1372	-18.10528318	-15.4106	-12.7649	-12.39768424	-17.6436	-18.5982	-18.56962654	-18.5433
+0.45	17.42169	13.96415	13.80898655	10.9765	9.128166	11.55510315	15.40828	16.28221	16.27027663	16.2593
-0.5	-22.5739	-18.3879	-20.93931787	-17.0512	-14.2278	-15.00884773	-20.3622	-21.8704	-21.84311817	-21.818
+0.5	14.14519	11.88982	11.73915308	9.32963	7.663507	9.52320664	12.83893	13.54203	13.53015717	13.58676
-0.55	-25.6806	-20.1463	-23.00915234	-18.2046	-15.283	-16.93458938	-22.7242	-24.2745	-24.24828358	-24.4191
+0.55	11.9051	10.35574	10.24911602	8.144146	6.656829	8.087596031	11.11713	11.58813	11.57637935	11.56556
-0.6	-29.7427	-23.1208	-25.32592814	-20.1208	-16.9768	-19.44853243	-26.1329	-27.4005	-27.37578788	-27.7982
+0.6	9.397613	8.457074	8.354542494	6.63691	5.390188	6.436571512	8.937159	9.13065	9.119207357	9.108678
-0.65	-32.7417	-25.4233	-26.92834712	-21.489	-18.3466	-21.28674722	-28.6263	-29.8342	-29.79785592	-30.2305
+0.65	8.081421	7.107747	7.117691834	5.566436	4.499994	5.537884646	7.396324	7.407806	7.397819658	7.388627
-0.7	-36.7828	-28.4067	-28.88539849	-23.1435	-20.4982	-23.66450531	-31.8531	-33.5942	-33.5250701	-33.4993
+0.7	6.417172	5.4172	5.35693775	4.226258	3.397223	4.401324319	5.478121	5.374706	5.478650061	5.469846
-0.75	-39.6951	-30.5706	-30.21905069	-24.8223	-22.1246	-25.38597364	-34.1904	-36.3288	-36.23509634	-36.2106
+0.75	5.242657	4.142899	4.179282448	3.291365	2.636224	3.598996879	4.101267	4.052746	4.10518471	4.140441
-0.8	-43.4057	-33.3451	-31.81911898	-27.325	-24.266	-27.58858927	-37.1827	-39.8452	-39.71889951	-39.7863
+0.8	3.783174	2.73206	2.7354579	2.186508	1.715975	2.542722396	2.640265	2.635067	2.643837006	2.651916
-0.85	-46.0496	-35.3341	-32.88605581	-29.1279	-25.819	-29.16408781	-39.3245	-42.3744	-42.53941943	-42.5121
+0.85	2.774131	1.751432	1.75351154	1.404134	1.096166	1.875590593	1.693005	1.688053	1.695843611	1.703021
-0.9	-49.7169	-37.8509	-35.10904326	-31.4213	-27.8113	-31.15259646	-42.0297	-45.5868	-46.37746359	-46.3885
+0.9	1.551144	0.838007	0.838373552	0.763977	0.598044	1.042966408	0.810118	0.807486	0.811266728	0.823674
-0.95	-52.4315	-39.6284	-37.71562802	-33.051	-29.2416	-32.55290361	-43.9363	-47.8654	-49.1277593	-49.2948
+0.95	0.731372	0.391009	0.402254403	0.356802	0.276553	0.484854963	0.378314	0.375854	0.379157526	0.3822
-1	-55.8433	-41.8387	-41.04559208	-35.092	-31.0556	-34.28834323	-46.3017	-50.7132	-52.60605684	-53.3896
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	54.89248	41.30093	40.22596875	34.59452	30.61166	33.86667149	45.72682	50.01876	51.75329975	52.37113
-2.05	-7.31E-01	-0.39178	-0.391502841	-0.36569	-2.79E-01	-0.485879681	-0.37907	-0.37658	-0.379852635	-0.38287
+2.05	52.30371	39.62513	37.71178964	33.04884	29.24068	32.55022015	43.9328	47.86134	49.12308922	49.29009
-2.1	-1.84329	-0.99819	-0.998566887	-0.90967	-0.71336	-1.243041456	-0.96486	-0.96214	-0.966048776	-0.97886
+2.1	48.85713	37.23347	34.2171261	30.85815	27.32112	30.6651872	41.36652	44.7975	45.43064649	45.40511
-2.15	-2.77413	-1.75315	-1.754896206	-1.40512	-1.09661	-1.876880887	-1.69468	-1.68966	-1.697388738	-1.7045
+2.15	46.35647	35.33049	32.88452096	29.12547	25.81802	29.16104533	39.32052	42.36997	42.53431564	42.50726
-2.2	-4.13614	-3.08041	-3.083909154	-2.46399	-1.93697	-2.804344163	-2.97678	-2.97143	-2.980458597	-2.98877
+2.2	42.82366	32.66028	31.43638177	26.70701	23.7369	27.04524075	36.44459	38.97621	38.85827783	38.87121
-2.25	-5.24266	-4.17596	-4.180971725	-3.29257	-2.63676	-3.600517921	-4.03502	-4.02951	-4.089946072	-4.14253
+2.25	39.82629	30.56668	30.21711479	24.81968	22.12346	25.38263159	34.1861	36.32392	36.23046959	36.20613

-2.3	-6.82303	-5.82998	-5.768447924	-4.55286	-3.66423	-4.6801664	-5.94507	-5.81839	-5.945612728	-5.9366
+2.3	35.64457	27.66668	28.41316338	22.74626	19.96476	23.07501669	31.05316	32.66073	32.60004311	32.57403
-2.35	-8.08142	-7.11018	-7.119646162	-5.56783	-4.50062	-5.539605623	-7.39912	-7.41048	-7.400385782	-7.39109
+2.35	32.59273	25.419	26.92600775	21.48726	18.3455	21.28316104	28.62166	29.82904	29.79294043	30.22656
-2.4	-9.84843	-8.92402	-8.819878053	-7.00692	-5.69914	-6.746183732	-9.47213	-9.73168	-9.720014201	-9.70927
+2.4	28.59097	22.33797	24.76350314	19.63809	16.54394	18.82269876	25.28436	26.62409	26.59913111	26.96346
-2.45	-11.9208	-10.3584	-10.25129785	-8.1457	-6.65752	-8.090323231	-11.1203	-11.5915	-11.57965269	-11.5687
+2.45	25.53225	20.02821	23.00640513	18.20311	15.28232	16.93082309	22.71932	24.27022	24.24415423	24.41478
-2.5	-14.9374	-12.4028	-12.25035142	-9.73616	-8.01013	-10.0218985	-13.4316	-14.2167	-14.20469862	-14.2621
+2.5	21.79854	17.82809	20.28601615	16.65054	13.86737	14.35647708	19.68517	21.0546	21.02715883	21.0019
-2.55	-17.345	-13.9671	-13.81135591	-11.119	-9.12854	-11.55818476	-15.4122	-16.286	-16.27390926	-16.2628
+2.55	20.11093	16.13396	18.10213198	15.40892	12.76413	12.39378806	17.63974	18.59375	18.56533087	18.53917
-2.6	-20.7323	-16.5251	-16.14766361	-12.8339	-10.7299	-13.713169	-18.3196	-19.166	-19.1539749	-19.1429
+2.6	17.88873	13.82541	15.18806664	13.64846	11.23625	10.16599476	14.85991	15.25988	15.23026069	15.203
-2.65	-23.5046	-18.5792	-17.81678112	-14.5447	-12.1867	-15.40240055	-20.5994	-21.4851	-21.46866212	-21.499
+2.65	15.89229	12.06283	13.14202749	12.248	10.04702	9.025336527	12.7429	12.74722	12.72171963	12.69824
-2.7	-27.205	-21.4319	-20.09750806	-16.9367	-14.2351	-17.74183206	-23.7579	-24.955	-24.9227994	-24.9108
+2.7	13.22003	9.680159	10.37615416	10.07571	8.402586	7.557052609	9.88811	9.891778	9.8653617	9.841049
-2.75	-30.0781	-23.6482	-21.84332254	-18.9829	-15.8454	-19.55478888	-26.2063	-27.6586	-27.61297734	-27.6012
+2.75	11.16732	7.874872	8.375050397	8.437624	7.124399	6.439799646	7.730241	7.733396	7.70636671	7.681507
-2.8	-34.0229	-26.6929	-24.66751153	-21.7171	-18.083	-22.09993275	-29.5632	-31.3822	-31.31695349	-31.3055
+2.8	8.262504	5.452411	5.884317182	6.221541	5.397281	4.934362822	5.266011	5.268009	5.245520603	5.322816
-2.85	-37.2347	-29.0349	-26.85912298	-23.7209	-19.8235	-24.10729299	-32.1408	-34.2532	-34.17200965	-34.1609
+2.85	6.057215	3.679855	4.095058795	4.789827	4.245917	3.797286977	4.244373	4.592263	5.035844571	5.322816
-2.9	-41.6374	-32.3017	-30.1928858	-26.4591	-22.2187	-26.70190489	-35.8642	-38.17	-38.29243794	-38.154
+2.9	4.836423	3.679855	3.197790424	3.815429	3.383615	3.047719531	4.244373	4.592263	5.035844571	5.322816
-2.95	-45.0143	-34.8576	-32.87721028	-28.5547	-24.0654	-28.67650196	-38.5339	-41.1632	-41.22411839	-41.2799
+2.95	4.836423	3.679855	3.197790424	3.022824	2.991822	3.047719531	4.244373	4.592263	5.035844571	5.322816
-3	-49.5982	-38.1425	-36.57244682	-31.3936	-26.586	-31.33726599	-42.1322	-45.4672	-45.31717046	-45.3078
+3	4.836423	3.679855	3.197790424	3.022824	2.681901	3.047719531	4.244373	4.592263	5.035844571	5.322816

2-Span: Shear (Max and Min) Raw Data Results - 35' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-4.83644	-5.33391	-5.63409733	-5.30277	-6.25028	-3.916242102	-4.15253	-2.26893
End Shear	49.72669	53.86754	56.31479591	52.08793	59.5908	40.34765267	42.47121	26.76586
-0.05	-4.83644	-5.33391	-5.63409733	-5.30277	-6.25028	-3.916242102	-4.15253	-2.26893
+0.05	44.85105	49.39718	51.52596478	47.61695	54.23	36.48316262	38.62704	24.36102
-0.1	-4.83644	-5.33391	-5.63409733	-5.30277	-6.25028	-3.916242102	-4.15253	-2.79111
+0.1	40.366	45.04896	46.87627374	43.25076	49.0125	33.3193715	35.26497	22.13722
-0.15	-6.20973	-5.33391	-5.63409733	-5.30277	-6.25028	-4.482444769	-4.80604	-3.98846
+0.15	37.0789	41.82658	43.43601735	39.75742	44.85917	30.97225174	32.77137	20.49888
-0.2	-9.01004	-8.60842	-8.608424577	-6.88864	-6.88864	-7.060948448	-7.4749	-5.57846
+0.2	33.00922	37.33773	38.65211843	35.54123	39.84643	27.88909932	29.49664	18.36283
-0.25	-11.1704	-11.1869	-11.18689412	-9.17104	-9.26499	-9.075561342	-9.59855	-6.76204
+0.25	30.06226	34.23417	35.35070593	32.45159	36.19157	25.61970049	27.08688	16.80327
-0.3	-13.8834	-14.6007	-14.60066357	-12.8695	-13.3779	-12.04594587	-12.7277	-8.32234
+0.3	26.25003	30.1972	31.06470025	28.44557	31.47079	22.66316595	23.9484	14.78953
-0.35	-15.7939	-17.1342	-17.13415123	-15.6232	-16.443	-14.32203449	-15.1243	-9.47516
+0.35	23.48984	27.25661	27.94928517	25.53768	28.0584	20.50597343	21.65918	13.33466
-0.4	-18.464	-20.4636	-20.46358608	-19.2541	-20.4882	-17.42262044	-18.3878	-10.9831
+0.4	19.95795	23.46859	23.9453835	21.80619	23.69991	17.55258989	18.52617	11.55372
-0.45	-20.1133	-23.1284	-23.19939404	-21.9374	-23.4806	-19.8444399	-20.9359	-12.0881
+0.45	17.42169	20.73845	21.06711692	19.12831	20.58848	15.54806088	16.40056	10.45902
-0.5	-22.5739	-27.3606	-27.77677358	-25.448	-27.3997	-23.0029016	-24.2576	-13.6982
+0.5	14.14519	17.26271	17.41350919	15.90631	16.95466	12.99149289	13.69074	9.041949
-0.55	-25.6806	-30.4727	-31.14837698	-28.3927	-30.8946	-25.49145739	-26.9026	-14.9233
+0.55	11.9051	14.79053	14.82354104	13.71986	14.55794	11.19549019	11.78473	8.015082
-0.6	-29.7427	-34.5232	-35.54409256	-32.5599	-36.0115	-28.76074734	-30.3803	-16.4599
+0.6	9.397613	11.99625	11.99625238	10.95657	11.53491	9.142714603	9.62391	6.699786
-0.65	-32.7417	-37.4754	-38.75387827	-35.6064	-39.7646	-31.05964182	-32.8274	-17.5377
+0.65	8.081421	10.08091	10.08090779	9.007479	9.407531	7.683871866	8.088286	5.757758
-0.7	-36.7828	-41.2808	-42.89972854	-39.5465	-44.6358	-33.91844859	-35.8726	-19.5856
+0.7	6.417172	7.681306	7.681306233	6.586986	6.772858	5.848826315	6.156659	4.566921
-0.75	-39.6951	-44.0254	-45.89654363	-42.3985	-48.1754	-35.90617964	-37.9915	-21.0724
+0.75	5.242657	6.005952	6.005952126	4.858626	4.902573	4.518555814	4.756375	3.726744
-0.8	-43.4057	-47.5225	-49.724337	-46.0472	-52.7228	-38.34569804	-40.5943	-22.9766
+0.8	3.783174	3.732812	3.73281218	3.106194	3.149598	2.959194046	3.114941	2.681243
-0.85	-46.0496	-50.0122	-52.45702925	-48.6565	-55.9904	-40.2400381	-42.6182	-24.3401
+0.85	2.774131	2.495616	2.495615961	1.99177	2.031308	1.898593757	1.99852	1.96006
-0.9	-49.7169	-53.1376	-55.89856425	-51.9494	-60.1361	-42.2629357	-44.7808	-26.0625
+0.9	1.551144	1.112919	1.112918993	0.95308	0.964996	0.907873126	0.955656	1.086376
-0.95	-52.4315	-55.3248	-58.31599208	-54.2677	-63.0731	-43.58502127	-46.1967	-27.2767
+0.95	0.731372	0.486068	0.486068066	0.445075	0.45577	0.434251912	0.457107	0.501084
-1	-55.8433	-58.0152	-61.30307076	-57.1404	-66.7391	-46.33498631	-48.8198	-28.7828
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	54.89248	57.3639	60.57837141	56.44268	65.8455	45.33887841	47.77046	28.41822
-2.05	-7.31E-01	-0.56043	-0.560431413	-0.44597	-0.45666	-0.425168987	-0.44755	-0.50141
+2.05	52.30371	55.32063	58.31141248	54.26349	63.06772	43.58311444	46.19464	27.27596
-2.1	-1.84329	-1.42216	-1.422155767	-1.13513	-1.14744	-1.080901907	-1.13779	-1.29541
+2.1	48.85713	52.37353	55.05591742	51.1425	59.11768	41.78887901	44.27357	25.6419
-2.15	-2.77413	-2.49817	-2.498173462	-1.99375	-2.00956	-1.90008602	-2.00009	-1.96047
+2.15	46.35647	50.00744	52.4518117	48.6517	55.98434	40.28014899	42.66041	24.33925
-2.2	-4.13614	-4.38399	-4.383993683	-3.5021	-3.54674	-3.33553895	-3.51109	-2.93403
+2.2	42.82366	46.66158	48.78088787	45.14741	51.59923	37.75630365	39.96954	22.50862
-2.25	-5.24266	-6.00907	-6.009072494	-4.74924	-4.89726	-4.520376373	-4.75829	-3.72526
+2.25	39.82629	44.02019	45.89079334	42.39325	48.16882	35.90330781	37.98844	21.07149

-2.3	-6.82303	-8.26735	-8.26734972	-7.17551	-7.4126	-6.294454406	-6.62574	-4.8557
+2.3	35.64457	40.3389	41.87263932	38.56998	43.4266	33.22284837	35.13137	19.07886
-2.35	-8.08142	-10.0845	-10.08451787	-9.01101	-9.41138	-7.685981652	-8.09051	-5.75608
+2.35	32.59273	37.46967	38.74768811	35.60072	39.75763	31.05630054	32.82383	17.71002
-2.4	-9.84843	-12.6593	-12.65926412	-11.6341	-12.2754	-9.647004111	-10.1547	-7.02072
+2.4	28.59097	33.51628	34.45050224	31.52281	34.7363	27.96159051	29.52999	16.36649
-2.45	-11.9208	-14.7952	-14.82841996	-13.7239	-14.5623	-11.19784579	-11.7872	-8.01324
+2.45	25.53225	30.46673	31.14185098	28.38671	30.88724	25.48765638	26.89853	15.21925
-2.5	-14.9374	-18.118	-18.31137334	-16.6596	-17.7813	-13.62030303	-14.3571	-9.38939
+2.5	21.79854	26.30456	26.63383289	24.57338	26.42291	22.27825725	23.49559	13.59256
-2.55	-17.345	-20.7437	-21.07258767	-19.1332	-20.5942	-15.55098991	-16.4037	-10.4571
+2.55	20.11093	23.12217	23.19263006	21.93233	23.47501	19.84092364	20.93218	12.19123
-2.6	-20.7323	-24.4059	-24.93501091	-22.7277	-24.7739	-18.23917904	-19.2544	-11.9334
+2.6	17.88873	19.63232	19.63231714	18.34645	19.47656	16.57998886	17.501	10.60889
-2.65	-23.5046	-27.2622	-27.9552514	-25.5431	-28.0647	-20.48798347	-21.6403	-13.3355
+2.65	15.89229	17.12923	17.12922751	15.61806	16.43722	14.31869546	15.12081	9.474463
-2.7	-27.205	-31.2005	-32.12893611	-29.4395	-32.64	-23.39744906	-24.7278	-15.2863
+2.7	13.22003	13.74558	13.74558186	11.94204	12.34608	11.26459494	11.90478	7.933817
-2.75	-30.0781	-34.2401	-35.35705508	-32.4573	-36.1983	-25.6230507	-27.0904	-16.8042
+2.75	11.16732	11.18188	11.18188168	9.165802	9.259172	9.072564673	9.595395	6.761334
-2.8	-34.0229	-38.3911	-39.77382014	-36.5915	-41.0914	-28.65765343	-30.3129	-18.8921
+2.8	8.262504	7.741765	7.7417652	6.195307	6.250296	6.380764388	6.757665	5.18128
-2.85	-37.2347	-41.8328	-43.44265589	-39.7634	-44.8587	-30.97573262	-32.7751	-20.4999
+2.85	6.057215	5.333904	5.634106379	5.30277	6.250296	4.481353094	4.804853	3.987743
-2.9	-41.6374	-46.1374	-48.0394352	-44.3423	-50.3152	-34.1106497	-36.1058	-22.6903
+2.9	4.836423	5.333904	5.634106379	5.30277	6.250296	3.916212142	4.152505	2.390967
-2.95	-45.0143	-49.4036	-51.53279521	-47.6231	-54.2374	-36.48672209	-38.6308	-24.362
+2.95	4.836423	5.333904	5.634106379	5.30277	6.250296	3.916212142	4.152505	2.268929
-3	-49.5982	-53.792	-56.23378561	-52.0425	-59.5363	-40.21064305	-42.327	-26.6205
+3	4.836423	5.333904	5.634106379	5.30277	6.250296	3.916212142	4.152505	2.268929

2-Span: Shear (Max and Min) Raw Data Results - 35’ Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-4.83644	-6.03939	-6.48478	-4.65469	-5.31059	-5.74409
End Shear	49.72669	58.83756	60.44104	46.96982	54.11145	55.51573
-0.05	-4.83644	-6.18051	-6.48478	-4.65469	-5.31059	-5.74409
+0.05	44.85105	52.73882	53.85969	43.22391	48.57368	50.80164
-0.1	-4.83644	-7.52442	-7.93263	-4.94074	-5.74683	-6.33216
+0.1	40.366	46.94145	47.60573	39.50512	43.68013	46.14234
-0.15	-6.20973	-8.43214	-8.99232	-5.68067	-6.77438	-6.95492
+0.15	37.0789	42.73524	43.07409	36.74439	40.29565	42.69729
-0.2	-9.01004	-11.0736	-11.9563	-8.92196	-8.54619	-9.27725
+0.2	33.00922	37.59411	37.63832	33.11534	36.29599	38.18771
-0.25	-11.1704	-13.3737	-14.0234	-11.6412	-11.3574	-11.8568
+0.25	30.06226	34.08817	33.74533	30.4421	33.34802	34.88065
-0.3	-13.8834	-17.2659	-17.8525	-15.5178	-15.3588	-15.4968
+0.3	26.25003	29.29611	28.76947	26.95661	29.50181	30.58934
-0.35	-15.7939	-20.6156	-20.8665	-18.4256	-18.3617	-19.1187
+0.35	23.48984	26.19784	25.55036	24.41124	26.69095	27.32466
-0.4	-18.464	-24.6173	-24.6606	-22.069	-22.8746	-23.948
+0.4	19.95795	22.58372	21.45118	21.12314	22.83972	23.22435
-0.45	-20.1133	-28.0266	-27.3414	-24.6997	-26.5818	-27.6194
+0.45	17.42169	19.97074	18.69514	18.55253	20.15792	20.36868
-0.5	-22.5739	-32.6732	-31.2609	-28.2917	-31.2444	-32.4739
+0.5	14.14519	16.6323	15.58472	15.52577	16.80852	17.00804
-0.55	-25.6806	-35.6983	-34.0019	-31.094	-34.6723	-35.9178
+0.55	11.9051	14.24812	13.36253	13.36553	14.60948	14.60564
-0.6	-29.7427	-39.6515	-37.7745	-34.615	-39.0822	-39.9331
+0.6	9.397613	11.24414	10.56152	10.83042	11.55245	11.57299
-0.65	-32.7417	-42.6272	-41.5361	-37.0925	-41.9617	-43.3147
+0.65	8.081421	9.13284	8.591985	9.102474	9.709305	9.329629
-0.7	-36.7828	-46.2392	-46.2515	-40.1757	-45.4627	-47.538
+0.7	6.417172	6.52208	6.238702	6.858124	7.304179	6.698353
-0.75	-39.6951	-48.6884	-50.4074	-42.4221	-47.8782	-50.4895
+0.75	5.242657	4.727738	4.761669	5.412377	5.698161	4.887561
-0.8	-43.4057	-52.9939	-56.2814	-45.27	-50.8185	-54.359
+0.8	3.783174	3.051777	2.962594	3.501298	3.729173	3.117022
-0.85	-46.0496	-56.7572	-60.6783	-47.0516	-52.8135	-57.0515
+0.85	2.774131	1.941096	1.954259	2.286333	2.438756	2.032296
-0.9	-49.7169	-62.5478	-66.9313	-49.1966	-55.1931	-60.0656
+0.9	1.551144	0.969106	1.085952	1.073572	1.142607	0.956284
-0.95	-52.4315	-66.6303	-71.3488	-50.6309	-56.7676	-62.1026
+0.95	0.731372	0.45098	0.504191	0.501247	0.532388	0.447277
-1	-55.8433	-71.795	-77.1517	-52.3081	-60.1908	-64.518
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	54.89248	70.5704	75.54859	51.91233	58.77733	63.94399
-2.05	-7.31E-01	-0.45711	-0.50431	-0.51425	-0.54853	-0.45711
+2.05	52.30371	66.62491	71.34789	50.62888	56.7654	62.09983
-2.1	-1.84329	-1.15169	-1.29347	-1.27842	-1.36103	-1.13844
+2.1	48.85713	61.13117	65.40542	48.68287	54.6257	59.34078
-2.15	-2.77413	-1.94253	-1.95441	-2.24718	-2.39194	-2.00162
+2.15	46.35647	56.7511	60.67718	47.04903	52.81068	57.04812
-2.2	-4.13614	-3.44595	-3.39371	-3.94688	-4.20431	-3.51323
+2.2	42.82366	51.75164	54.84877	44.64074	50.1103	53.48563
-2.25	-5.24266	-4.73008	-4.76198	-5.3499	-5.70041	-4.88997
+2.25	39.82629	48.68519	50.40638	42.51717	47.87476	50.49948

-2.3	-6.82303	-7.15458	-6.75449	-7.38578	-7.86532	-7.33621
+2.3	35.64457	45.37012	45.10396	39.42535	44.61371	46.50856
-2.35	-8.08142	-9.13563	-8.5924	-9.09822	-9.65974	-9.3325
+2.35	32.59273	42.62335	41.53525	37.089	41.95767	43.31012
-2.4	-9.84843	-11.9785	-11.244	-11.4277	-12.1895	-12.3142
+2.4	28.59097	38.60342	36.55217	33.75416	38.09241	38.95782
-2.45	-11.9208	-14.2513	-13.363	-13.3686	-14.6129	-14.6089
+2.45	25.53225	35.69429	34.00133	31.08998	34.75482	35.95545
-2.5	-14.9374	-17.4538	-16.3476	-16.2706	-17.6331	-17.8354
+2.5	21.79854	31.61955	30.30319	27.42627	30.10378	31.36275
-2.55	-17.345	-19.9742	-18.6957	-18.5559	-20.1617	-20.3723
+2.55	20.11093	28.10337	27.34086	24.79416	26.57655	27.66373
-2.6	-20.7323	-23.4776	-22.4549	-21.9366	-23.7389	-24.2092
+2.6	17.88873	23.56612	23.73516	21.17916	21.73471	22.67569
-2.65	-23.5046	-26.2016	-25.5511	-24.4149	-26.695	-27.2451
+2.65	15.89229	20.61115	20.86583	18.42148	18.35738	19.11368
-2.7	-27.205	-30.4084	-29.9899	-27.8225	-30.4576	-31.6529
+2.7	13.22003	16.11526	16.8145	14.51042	14.32537	14.52458
-2.75	-30.0781	-34.0523	-33.7462	-30.446	-33.3523	-34.8852
+2.75	11.16732	13.37062	14.03523	11.63727	11.35329	11.85327
-2.8	-34.0229	-38.7894	-38.9651	-34.0202	-37.2934	-39.3098
+2.8	8.262504	10.27758	11.24977	7.992349	7.679511	8.386656
-2.85	-37.2347	-42.7409	-43.0751	-36.7484	-40.3001	-42.7021
+2.85	6.057215	8.430971	9.004065	5.678481	6.77297	6.954119
-2.9	-41.6374	-48.3774	-49.1486	-40.4354	-44.8943	-47.3057
+2.9	4.836423	7.201837	7.559494	4.68872	5.374607	6.100344
-2.95	-45.0143	-52.7449	-53.8607	-43.228	-48.5791	-50.8066
+2.95	4.836423	6.179063	6.484779	4.654681	5.310599	5.744091
-3	-49.5982	-58.7292	-60.4422	-46.9739	-53.9497	-55.5207
+3	4.836423	6.039404	6.484779	4.654681	5.310599	5.744091

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	-1.67E-14	-8.1E-15	-7.76367E-15	-8.7E-15	-6.49E-15	-9.55443E-15	-7E-15	-7.3E-15	-7.16262E-15	-7.1E-15
End Shear	4.14E-14	1.56E-14	1.53615E-14	2E-14	1.51E-14	1.78158E-14	1.5E-14	1.5E-14	1.4885E-14	1.5E-14
-0.05	-8.463769242	-6.43973	-5.596100789	-5.28993	-4.693320713	-5.333534844	-7.42764	-8.03646	-8.812757351	-9.31494
+0.05	78.889328	60.6365	57.52802188	49.96578	42.39400865	49.88801108	67.03472	72.02613	71.81211358	71.79475
-0.1	-16.92753848	-12.8795	-11.19220158	-10.5799	-9.386641425	-10.66706969	-14.8553	-16.0729	-17.6255147	-18.6299
+0.1	145.7438084	112.7643	105.6613133	92.59703	78.68364782	93.44316461	124.7346	133.5762	133.2123732	133.176
-0.15	-25.39130773	-19.3192	-16.78830237	-15.8698	-14.07996214	-16.00060453	-22.2829	-24.1094	-26.43827205	-27.9448
+0.15	195.1843336	153.2848	141.1139747	124.6705	106.9284747	126.1265731	170.0409	181.5258	189.8919137	189.8716
-0.2	-33.85507697	-25.7589	-22.38440316	-21.1597	-18.77328285	-21.33413938	-29.7106	-32.1458	-35.2510294	-37.2597
+0.2	237.1537864	186.9884	172.6500073	152.0011	130.3911911	154.2518859	207.5057	220.3093	237.9511787	237.9084
-0.25	-42.31884621	-32.1987	-27.98050395	-26.4497	-23.46660356	-26.66767422	-37.1382	-40.1823	-44.06378675	-46.5747
+0.25	263.9254839	209.9093	192.9991336	169.3849	146.1745949	172.26747	233.3977	247.0203	271.6623956	275.9457
-0.3	-50.78261545	-38.6384	-33.57660473	-31.7396	-28.15992428	-32.00120906	-44.5658	-48.2187	-52.87654411	-55.8896
+0.3	284.5698947	225.9439	210.9967014	180.9016	156.9806653	186.2523224	253.2156	273.057	295.6327312	308.162
-0.35	-59.24638469	-45.0781	-39.17270552	-37.0295	-32.85324499	-37.33474391	-51.9935	-56.2552	-61.68930146	-65.2046
+0.35	290.6738222	234.5391	220.8491142	189.5375	164.8115473	191.2441014	269.0811	287.7497	308.3011959	325.5564
-0.4	-67.71015393	-51.5179	-44.76880631	-42.3194	-37.5465657	-42.66827875	-59.4211	-64.2916	-70.50205881	-74.5195
+0.4	291.6031227	241.3759	226.0328768	193.8517	168.7924941	192.2019932	277.4246	295.0944	319.7104733	334.7816
-0.45	-76.17392318	-57.9576	-50.3649071	-47.6094	-42.23988641	-48.0018136	-66.8488	-72.3281	-79.31481616	-83.8344
+0.45	284.1630049	238.9529	224.1832315	190.1163	166.2226237	185.6287641	274.7457	290.5709	318.3598723	333.4684
-0.5	-84.63769242	-64.3973	-55.96100789	-52.8993	-46.93320713	-53.33534844	-74.2764	-80.3646	-88.12757351	-93.1494
+0.5	281.4305659	231.7517	221.900309	182.7548	160.1719596	182.3130554	268.548	282.2773	311.3987186	328.8347
-0.55	-93.10146166	-70.8371	-61.55710868	-58.1892	-51.62652784	-58.66888328	-81.7041	-88.401	-96.94033086	-102.464
+0.55	277.2295271	224.3168	213.3631491	178.7134	156.6203017	180.9659141	259.0352	273.0968	295.9324381	315.2234
-0.6	-101.5652309	-77.2768	-67.15320947	-63.4792	-56.31984855	-64.00241813	-89.1317	-96.4375	-105.7530882	-111.779
+0.6	266.5570789	211.6564	200.8665467	170.8199	148.9741507	175.3342491	243.3519	259.1499	277.2626284	294.2667
-0.65	-110.0290001	-83.7165	-72.74931026	-68.7691	-61.01316926	-69.33595297	-96.5593	-104.474	-114.5658456	-121.094
+0.65	244.6518865	193.804	181.5447009	155.1529	134.8660442	160.5919964	218.5755	234.2276	251.316064	263.4474
-0.7	-118.4927694	-90.1563	-78.34541105	-74.059	-65.70648998	-74.66948781	-103.987	-112.51	-123.3786029	-130.409
+0.7	217.8124084	172.1306	160.1023726	137.9817	119.2051329	142.9719647	189.0307	202.9772	220.4560151	227.9933
-0.75	-126.9565386	-96.596	-83.94151184	-79.349	-70.39981069	-80.00302266	-111.415	-120.547	-132.1913603	-139.724
+0.75	177.0457951	142.0813	132.8205637	114.3082	98.05523027	117.0004782	155.0228	163.1156	178.5225569	180.8123
-0.8	-135.4203079	-103.036	-89.53761263	-84.6389	-75.0931314	-85.3365575	-118.842	-128.583	-141.0041176	-149.039
+0.8	135.2062521	108.426	104.8912621	86.46914	73.13553162	89.53480038	116.079	120.7506	131.2349843	131.3258
-0.85	-143.8840771	-109.475	-97.40571586	-89.9288	-82.75773135	-90.67009235	-126.27	-136.62	-149.816875	-158.354
+0.85	84.28464729	71.45664	71.31713705	56.68233	46.50601023	57.88509911	73.30941	73.57856	77.19316715	77.31435
-0.9	-152.3478464	-115.915	-129.3202739	-109.947	-99.08690875	-96.00362719	-133.698	-144.656	-158.6296323	-167.669
+0.9	58.06362617	39.33175	39.2544022	30.88694	24.91088211	39.74764518	38.02214	37.90127	38.02885096	38.08535
-0.95	-177.4699846	-122.355	-174.5451193	-148.692	-133.5941784	-101.337162	-141.125	-152.693	-167.4423897	-182.866
+0.95	25.08450708	13.76018	13.72591147	12.5139	9.693245205	17.18826238	13.29298	13.28565	13.29571189	13.30498
-1	-219.7955957	-139.735	-221.7563052	-189.637	-171.2431609	-106.6706965	-148.553	-170.052	-191.4493392	-209.716
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-219.7955957	-139.735	-221.7563052	-189.637	-171.2431609	-106.6706965	-148.553	-170.052	-191.4493392	-209.716
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-177.4682308	-122.355	-174.5441334	-148.692	-133.5943979	-101.336674	-141.125	-152.693	-167.4418299	-182.866
+2.05	25.08450413	13.76252	13.79647727	12.51543	9.693928734	17.19135607	13.29526	13.28784	13.29781038	13.30699
-2.1	-152.347317	-115.915	-129.3197944	-109.948	-99.08676195	-96.0031648	-133.698	-144.656	-158.6291019	-167.669
+2.1	58.06365657	39.29852	39.22765533	30.89495	24.9144931	39.72137907	37.98969	37.87018	37.99904484	38.09739
-2.15	-143.883577	-109.476	-97.40626664	-89.929	-82.75809786	-90.66965562	-126.27	-136.62	-149.8163739	-158.354
+2.15	84.28467178	71.44871	71.31076256	56.67779	46.50396808	57.86091478	73.31997	73.58646	77.19029901	77.3306
-2.2	-135.4198369	-103.036	-89.53813299	-84.6391	-75.093215	-85.33614644	-118.842	-128.583	-141.0036459	-149.039
+2.2	135.1266517	108.3932	104.9037349	86.47733	73.12699839	89.56968267	116.0891	120.7583	131.2526844	131.3428
-2.25	-126.9560969	-96.5962	-83.94199975	-79.3491	-70.39988895	-80.00263726	-111.415	-120.547	-132.1909179	-139.724

+2.25	177.0453556	142.0933	132.8116162	114.3011	98.05202942	117.001992	155.0301	163.1105	178.516774	180.8146
-2.3	-118.4923569	-90.1564	-78.34586651	-74.0592	-65.70656289	-74.66912808	-103.987	-112.51	-123.3781899	-130.409
+2.3	218.8350431	172.14	160.0764128	137.9859	119.1947799	143.0028365	189.0354	202.9688	220.46768	228.0128
-2.35	-110.0286169	-83.7167	-72.74973327	-68.7692	-61.01323683	-69.33561891	-96.5595	-104.474	-114.5654619	-121.094
+2.35	244.7982683	193.809	181.5366229	155.1508	134.8651283	160.5876616	218.5692	234.2378	251.3222526	263.4421
-2.4	-101.5648768	-77.2769	-67.15360003	-63.4793	-56.31991077	-64.00210973	-89.1318	-96.4375	-105.7527339	-111.779
+2.4	267.2809866	211.6517	200.837103	170.8149	148.9719355	175.3579018	243.3411	259.1331	277.2562347	294.284
-2.45	-93.10113681	-70.8372	-61.55746678	-58.1894	-51.62658471	-58.66860055	-81.7042	-88.4011	-96.94000592	-102.464
+2.45	277.7761749	224.3079	213.3506275	178.7055	156.6167593	180.9528002	259.043	273.0967	295.9419401	315.2354
-2.5	-84.63739679	-64.3975	-55.96133354	-52.8994	-46.93325865	-53.33509137	-74.2765	-80.3646	-88.12727792	-93.1493
+2.5	281.940849	231.7691	221.9043478	182.7392	160.1772099	182.3268614	268.5267	282.9837	311.41374	328.8412
-2.55	-76.17365676	-57.9577	-50.3652003	-47.6095	-42.2399326	-48.00158219	-66.8489	-72.3281	-79.31454992	-83.8344
+2.55	284.6385629	238.9658	224.181925	190.1122	166.2207582	185.6456858	274.7441	290.5759	318.3548835	333.4641
-2.6	-67.70991673	-51.518	-44.76906706	-42.3195	-37.54660654	-42.66807301	-59.4212	-64.2917	-70.50182192	-74.5194
+2.6	291.5633418	241.3843	226.0673089	193.8309	168.7955625	192.1835052	277.4409	295.1163	319.7205302	334.7706
-2.65	-59.24617671	-45.0782	-39.17293381	-37.0296	-32.85328048	-37.33456383	-51.9936	-56.2552	-61.68909392	-65.2045
+2.65	291.1327997	234.5417	220.8605151	189.5272	164.813104	191.2535809	269.0909	287.7426	308.3036581	325.5643
-2.7	-50.78243668	-38.6385	-33.57680057	-31.7397	-28.15995442	-32.00105465	-44.5659	-48.2188	-52.87636592	-55.8896
+2.7	285.6523045	225.938	211.0238288	180.8998	156.9798229	186.2892395	253.2185	273.0653	295.6241538	308.1828
-2.75	-42.31869665	-32.1987	-27.98066733	-26.4497	-23.46662836	-26.66754547	-37.1383	-40.1823	-44.06363792	-46.5746
+2.75	264.0069419	209.9217	193.0068521	169.3796	146.1722069	172.2670068	233.3914	247.0185	271.6676629	275.9576
-2.8	-33.85495663	-25.759	-22.38453409	-21.1598	-18.77330231	-21.33403629	-29.7106	-32.1458	-35.25090992	-37.2597
+2.8	238.1603742	186.9699	172.6726136	152.0196	130.387015	154.2779463	207.4918	220.2996	237.9696613	237.9262
-2.85	-25.3912166	-19.3192	-16.78840085	-15.8698	-14.07997625	-16.00052711	-22.283	-24.1094	-26.43818192	-27.9448
+2.85	195.4820575	153.2836	141.1118181	124.6708	106.9286053	126.1142119	170.0428	181.5305	189.901171	189.8804
-2.9	-16.92747657	-12.8795	-11.1922676	-10.5799	-9.38665019	-10.66701793	-14.8553	-16.0729	-17.62545392	-18.6299
+2.9	145.7307523	112.78	105.6750944	92.60672	78.68800929	93.45663211	124.7521	133.5949	134.023498	133.1931
-2.95	-8.463736546	-6.43974	-5.596134361	-5.28994	-4.693324132	-5.333508753	-7.42765	-8.03646	-8.812725921	-9.31493
+2.95	78.7749829	60.64448	57.53512716	49.9707	42.39619973	49.89484881	67.04355	72.03564	71.8211735	71.80343
-3	-6.78E-14	-2.3E-14	-2.55016E-14	-2.3E-14	-1.84E-14	-2.8491E-14	-2.6E-14	-2.6E-14	-2.73115E-14	-2.7E-14
+3	5.39E-14	1.53E-14	2.08501E-14	2.02E-14	1.81E-14	2.51774E-14	1.87E-14	1.76E-14	1.57777E-14	1.66E-14

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.67E-14	-1.1E-14	-1.2E-14	-8.2E-15	-1E-14	-9.2E-15	-9.8E-15	-9.5E-15
End Shear	4.14E-14	2.22E-14	2.22E-14	1.77E-14	2.38E-14	1.66E-14	1.75E-14	1.99E-14
-0.05	-8.463769242	-9.33434	-9.85967	-9.27985	-10.938	-6.85342	-7.26693	-3.97062
+0.05	78.889328	85.96742	89.65933	82.84954	94.35539	63.49812	67.22809	42.63179
-0.1	-16.92753848	-18.6687	-19.7193	-18.5597	-21.876	-13.7068	-14.5339	-7.94125
+0.1	145.7438084	160.5119	167.1024	154.2269	174.9441	118.6855	125.6244	79.41258
-0.15	-25.39130773	-28.003	-29.579	-27.8396	-32.814	-20.5603	-21.8008	-11.9119
+0.15	195.1843336	219.5036	228.0474	210.5332	238.3431	162.7571	172.2204	107.6191
-0.2	-33.85507697	-37.3373	-39.4387	-37.1194	-43.7519	-27.4137	-29.0677	-15.8825
+0.2	237.1537864	269.1779	279.0944	256.9636	289.1394	200.0582	211.6284	132.2379
-0.25	-42.31884621	-46.6717	-49.2984	-46.3993	-54.6899	-34.2671	-36.3346	-19.8531
+0.25	263.9254839	303.6915	314.0294	289.4187	330.9698	225.7241	238.6887	147.0876
-0.3	-50.78261545	-56.006	-59.158	-55.6791	-65.6279	-41.1205	-43.6016	-23.8237
+0.3	284.5698947	329.1078	339.1757	317.4035	366.6993	245.4084	259.3797	160.4967
-0.35	-59.24638469	-65.3403	-69.0177	-64.959	-76.5659	-47.974	-50.8685	-27.7944
+0.35	290.6738222	341.611	355.4806	337.0497	386.147	255.0925	269.5171	164.6967
-0.4	-67.71015393	-74.6747	-78.8774	-74.2388	-87.5039	-54.8274	-58.1354	-31.765
+0.4	291.6031227	353.3823	367.2398	347.8636	395.3095	261.8603	277.0949	167.6504
-0.45	-76.17392318	-84.009	-88.737	-83.5187	-98.4419	-61.6808	-65.4023	-35.7356
+0.45	284.1630049	353.1281	364.9368	345.0838	390.0331	262.5783	277.6342	165.8133
-0.5	-84.63769242	-93.3434	-98.5967	-92.7985	-109.38	-68.5342	-72.6693	-39.7062
+0.5	281.4305659	345.971	358.4745	337.7338	381.8995	257.5322	272.1512	165.1498
-0.55	-93.10146166	-102.678	-108.456	-102.078	-120.318	-75.3877	-79.9362	-43.6769
+0.55	277.2295271	330.9047	343.979	325.0992	370.6534	245.1355	259.4428	155.9009
-0.6	-101.5652309	-112.012	-118.316	-111.358	-131.256	-82.2411	-87.2031	-47.6475
+0.6	266.5570789	309.6256	321.35	304.8815	349.5314	231.5168	244.562	148.7195
-0.65	-110.0290001	-121.346	-128.176	-120.638	-142.194	-89.0945	-94.4701	-51.6181
+0.65	244.6518865	282.8923	291.4649	273.4426	314.6436	211.1632	223.1696	137.6775
-0.7	-118.4927694	-130.681	-138.035	-129.918	-153.132	-95.9479	-101.737	-55.5887
+0.7	217.8124084	248.9858	256.3173	235.8596	271.6493	186.0879	196.6464	126.272
-0.75	-126.9565386	-140.015	-147.895	-139.198	-164.07	-102.801	-109.004	-59.5594
+0.75	177.0457951	204.3321	209.9114	191.1356	217.6563	153.0214	161.6572	105.4994
-0.8	-135.4203079	-149.349	-157.755	-148.478	-175.008	-109.655	-116.271	-63.53
+0.8	135.2062521	155.9363	158.571	142.4699	157.5131	117.6921	124.1603	85.22484
-0.85	-143.8840771	-158.684	-167.614	-157.757	-185.946	-116.508	-123.538	-67.5006
+0.85	84.28464729	101.4283	101.4283	89.08726	93.155	77.14497	81.20524	60.39128
-0.9	-152.3478464	-168.018	-177.474	-167.037	-196.884	-155.15	-164.475	-71.4712
+0.9	58.06362617	56.02401	56.02401	44.73193	44.73917	42.48513	44.72119	41.19641
-0.95	-177.4699846	-177.352	-187.334	-176.317	-207.822	-205.354	-217.297	-86.1418
+0.95	25.08450708	19.55724	19.55724	15.6388	15.67109	14.86244	15.64467	17.95424
-1	-219.7955957	-186.687	-197.194	-185.597	-218.76	-257.581	-272.243	-106.773
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-219.7955957	-186.687	-197.194	-185.597	-218.76	-257.581	-272.243	-106.773
+2	0	0	0	0	0	0	0	0
-2.05	-177.4682308	-177.352	-187.334	-176.317	-207.822	-205.355	-217.295	-86.1418
+2.05	25.08450413	19.56072	19.56072	15.64149	15.67378	14.89392	15.67782	17.95524
-2.1	-152.347317	-168.018	-177.474	-167.037	-196.884	-155.148	-164.473	-71.4713
+2.1	58.06365657	56.00971	56.00971	44.69375	44.75526	42.4563	44.69084	41.18795
-2.15	-143.883577	-158.684	-167.615	-157.757	-185.946	-116.507	-123.537	-67.5006
+2.15	84.28467178	101.4506	101.4506	89.09674	93.17245	77.13464	81.19436	60.39357
-2.2	-135.4198369	-149.349	-157.755	-148.478	-175.008	-109.654	-116.27	-63.53
+2.2	135.1266517	155.9574	158.5909	142.4796	157.5012	117.7048	124.1736	85.21678
-2.25	-126.9560969	-140.015	-147.895	-139.198	-164.07	-102.801	-109.003	-59.5594

+2.25	177.0453556	204.3504	209.9279	191.1421	217.67	153.0328	161.669	105.5011
-2.3	-118.4923569	-130.681	-138.036	-129.918	-153.132	-95.9472	-101.736	-55.5888
+2.3	218.8350431	249.0017	256.3308	235.852	271.6329	186.0982	196.657	126.2627
-2.35	-110.0286169	-121.346	-128.176	-120.638	-142.194	-89.0938	-94.4695	-51.6181
+2.35	244.7982683	282.9029	291.4724	273.4324	314.6496	211.1706	223.1772	137.6776
-2.4	-101.5648768	-112.012	-118.316	-111.358	-131.256	-82.2405	-87.2026	-47.6475
+2.4	267.2809866	309.631	321.3428	304.866	349.5587	231.5215	244.5665	148.7082
-2.45	-93.10113681	-102.678	-108.457	-102.078	-120.318	-75.3871	-79.9357	-43.6769
+2.45	277.7761749	330.8968	343.9663	325.1054	370.6457	245.1533	259.4612	156.0916
-2.5	-84.63739679	-93.3433	-98.5969	-92.7985	-109.38	-68.5337	-72.6688	-39.7063
+2.5	281.940849	345.9561	358.4539	337.7364	381.9107	257.5441	272.1643	165.1402
-2.55	-76.17365676	-84.009	-88.7372	-83.5186	-98.4422	-61.6803	-65.402	-35.7356
+2.55	284.6385629	353.145	364.9591	345.0859	390.0503	262.5863	277.643	165.8133
-2.6	-67.70991673	-74.6747	-78.8775	-74.2388	-87.5041	-54.827	-58.1351	-31.765
+2.6	291.5633418	353.3921	367.2546	347.8865	395.2911	261.8641	277.0993	167.639
-2.65	-59.24617671	-65.3403	-69.0178	-64.9589	-76.5661	-47.9736	-50.8682	-27.7944
+2.65	291.1327997	341.6087	355.4863	337.0644	386.1472	255.0896	269.5144	164.697
-2.7	-50.78243668	-56.006	-59.1581	-55.6791	-65.6281	-41.1202	-43.6013	-23.8238
+2.7	285.6523045	329.097	339.1687	317.4098	366.7172	245.4007	259.3719	160.5062
-2.75	-42.31869665	-46.6717	-49.2984	-46.3992	-54.6901	-34.2669	-36.3344	-19.8531
+2.75	264.0069419	303.7079	314.0491	289.4135	330.9767	225.7325	238.6977	147.6971
-2.8	-33.85495663	-37.3373	-39.4387	-37.1194	-43.7521	-27.4135	-29.0675	-15.8825
+2.8	238.1603742	269.1484	279.0678	256.9491	289.1326	200.04	211.6094	132.2447
-2.85	-25.3912166	-28.003	-29.5791	-27.8395	-32.8141	-20.5601	-21.8007	-11.9119
+2.85	195.4820575	219.5001	228.0461	210.5368	238.3529	162.7542	172.2176	107.6243
-2.9	-16.92747657	-18.6687	-19.7194	-18.5597	-21.876	-13.7067	-14.5338	-7.94125
+2.9	145.7307523	160.534	167.126	154.2483	174.9697	118.6978	125.6375	79.41609
-2.95	-8.463736546	-9.33434	-9.85969	-9.27984	-10.938	-6.85338	-7.26689	-3.97063
+2.95	78.7749829	85.9786	89.67129	82.86039	94.341	63.50435	67.23471	42.63357
-3	-6.78E-14	-3.3E-14	-3.3E-14	-3.3E-14	-4.4E-14	-2.8E-14	-3E-14	-2.8E-14
+3	5.39E-14	2.47E-14	2.64E-14	2.1E-14	2.46E-14	2.4E-14	2.53E-14	2.02E-14

2-Span: Moment (Max and Min) Raw Data Results - 35' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.67E-14	-1.1E-14	-9.9E-15	-1.1E-14	-1.2E-14	-1E-14
End Shear	4.14E-14	2.6E-14	2.98E-14	2.09E-14	2.28E-14	1.91E-14
-0.05	-8.463769242	-10.5689	-11.3484	-8.1457	-9.29353	-10.0522
+0.05	78.889328	92.29294	95.37941	75.26789	85.00395	88.57591
-0.1	-16.92753848	-21.1379	-22.6967	-16.2914	-18.5871	-20.1043
+0.1	145.7438084	169.3004	174.1715	140.6989	157.1116	164.7629
-0.15	-25.39130773	-31.7068	-34.0451	-24.4371	-27.8806	-30.1565
+0.15	195.1843336	226.8175	231.655	193.1567	212.2146	225.1838
-0.2	-33.85507697	-42.2757	-45.3934	-32.5828	-37.1741	-40.2087
+0.2	237.1537864	271.4914	276.6792	237.6419	261.0237	275.0008
-0.25	-42.31884621	-52.8447	-56.7418	-40.7285	-46.4676	-50.2608
+0.25	263.9254839	311.9147	315.4731	268.2563	295.5515	309.966
-0.3	-50.78261545	-63.4136	-68.0902	-48.8742	-55.7612	-60.313
+0.3	284.5698947	340.9945	347.6776	291.9777	322.6	344.4765
-0.35	-59.24638469	-73.9826	-79.4385	-57.0199	-65.0547	-70.3651
+0.35	290.6738222	358.1932	363.7198	303.7731	345.8961	365.7297
-0.4	-67.71015393	-84.5515	-90.7869	-65.1656	-74.3482	-80.4173
+0.4	291.6031227	366.4993	375.6767	311.8329	360.0486	377.1015
-0.45	-76.17392318	-95.1204	-102.135	-73.3113	-83.6417	-90.4695
+0.45	284.1630049	360.2661	377.6082	313.0971	360.1486	374.9117
-0.5	-84.63769242	-105.689	-113.484	-81.457	-92.9353	-100.522
+0.5	281.4305659	352.5827	369.668	307.4761	354.9487	368.4253
-0.55	-93.10146166	-116.258	-124.832	-89.6027	-102.229	-110.574
+0.55	277.2295271	336.6593	357.5525	292.0618	336.4847	353.0707
-0.6	-101.5652309	-126.827	-136.18	-97.7485	-111.522	-120.626
+0.6	266.5570789	321.8727	333.2192	275.8621	312.5628	331.3844
-0.65	-110.0290001	-137.396	-147.529	-105.894	-120.816	-130.678
+0.65	244.6518865	291.758	296.7269	251.2096	278.805	296.8136
-0.7	-118.4927694	-147.965	-158.877	-114.04	-130.109	-140.73
+0.7	217.8124084	255.2959	257.5753	221.1831	240.1278	256.346
-0.75	-126.9565386	-158.534	-170.225	-122.186	-139.403	-150.782
+0.75	177.0457951	208.1699	201.4504	181.8323	195.5978	206.3678
-0.8	-135.4203079	-169.103	-181.574	-130.331	-148.696	-160.835
+0.8	135.2062521	151.5582	143.6331	139.8966	150.0307	152.1761
-0.85	-143.8840771	-182.521	-194.372	-142.346	-161.315	-176.181
+0.85	84.28464729	91.07876	84.76006	91.31223	97.39971	93.13011
-0.9	-152.3478464	-240.644	-247.16	-192.512	-215.759	-237.946
+0.9	58.06362617	43.59676	42.35703	50.23958	53.49122	44.72028
-0.95	-177.4699846	-317.202	-321.513	-246.842	-287.15	-309.742
+0.95	25.08450708	15.65737	17.82129	17.58951	18.76215	15.64461
-1	-219.7955957	-396.745	-398.306	-303.787	-362.33	-385.177
+1	0	0	0	0	0	0
(Span 2) -2	-219.7955957	-396.745	-398.306	-303.787	-362.33	-385.177
+2	0	0	0	0	0	0
-2.05	-177.4682308	-317.201	-321.514	-246.841	-287.153	-309.739
+2.05	25.08450413	15.65932	17.82165	17.59186	18.76465	15.64662
-2.1	-152.347317	-240.644	-247.16	-192.511	-215.76	-237.944
+2.1	58.06365657	43.56905	42.35958	50.20623	53.45575	44.69173
-2.15	-143.883577	-182.52	-194.372	-142.346	-161.316	-176.181
+2.15	84.28467178	91.07296	84.7592	91.35589	97.39123	93.12416
-2.2	-135.4198369	-169.103	-181.574	-130.331	-148.697	-160.835
+2.2	135.1266517	151.5495	143.6317	139.8635	149.9952	152.1691
-2.25	-126.9560969	-158.534	-170.225	-122.185	-139.403	-150.782

+2.25	177.0453556	208.1582	201.45	181.8453	195.6113	206.3614
-2.3	-118.4923569	-147.965	-158.877	-114.04	-130.11	-140.73
+2.3	218.8350431	255.2782	257.5777	221.195	240.1226	256.378
-2.35	-110.0286169	-137.396	-147.529	-105.894	-120.816	-130.678
+2.35	244.7982683	291.7433	296.7281	251.2183	278.7988	296.8227
-2.4	-101.5648768	-126.827	-136.18	-97.7483	-111.523	-120.626
+2.4	267.2809866	321.8526	333.2174	275.8677	312.5534	331.4105
-2.45	-93.10113681	-116.259	-124.832	-89.6026	-102.229	-110.574
+2.45	277.7761749	336.6534	357.5533	292.0828	336.4722	353.0719
-2.5	-84.63739679	-105.69	-113.484	-81.4569	-92.9355	-100.522
+2.5	281.940849	352.5663	369.664	307.4897	354.9315	368.4418
-2.55	-76.17365676	-95.1206	-102.135	-73.3112	-83.6419	-90.4694
+2.55	284.6385629	360.2553	377.6075	313.1061	360.1485	374.9177
-2.6	-67.70991673	-84.5517	-90.7869	-65.1655	-74.3484	-80.4173
+2.6	291.5633418	366.4829	375.6785	311.8371	360.0638	377.0812
-2.65	-59.24617671	-73.9827	-79.4385	-57.0198	-65.0548	-70.3651
+2.65	291.1327997	358.1906	363.7194	303.7696	345.9049	365.7237
-2.7	-50.78243668	-63.4137	-68.0902	-48.8742	-55.7613	-60.313
+2.7	285.6523045	340.9712	347.6806	291.9686	322.6023	344.4843
-2.75	-42.31869665	-52.8448	-56.7418	-40.7285	-46.4677	-50.2608
+2.75	264.0069419	311.9038	315.4745	268.2657	295.5672	309.9647
-2.8	-33.85495663	-42.2758	-45.3935	-32.5828	-37.1742	-40.2086
+2.8	238.1603742	271.5255	276.6779	237.6207	261.0542	274.992
-2.85	-25.3912166	-31.7069	-34.0451	-24.4371	-27.8807	-30.1565
+2.85	195.4820575	226.8271	231.6528	193.1532	212.2161	225.1881
-2.9	-16.92747657	-21.1379	-22.6967	-16.2914	-18.5871	-20.1043
+2.9	145.7307523	169.3209	174.1676	140.7131	157.1301	164.738
-2.95	-8.463736546	-10.569	-11.3484	-8.14569	-9.29355	-10.0522
+2.95	78.7749829	92.30348	95.37755	75.25059	85.01346	88.56363
-3	-6.78E-14	-5.5E-14	-6.6E-14	-3.9E-14	-4.3E-14	-3.9E-14
+3	5.39E-14	3.45E-14	3.56E-14	2.87E-14	2.97E-14	2.65E-14

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-14.84161317	-13.39772843	-13.35753706	-10.67129629	-11.3293832	-10.66038971	-12.66188353	-7.80438093	-8.28213	-4.795520724
End Shear	141.4616888	129.2531951	127.3155195	106.4070258	111.6996481	103.5791452	119.4905803	84.48358707	88.93009	53.37030163
-0.05	-14.8929003	-13.44901555	-16.31539913	-10.67129629	-11.3293832	-10.66038971	-12.66188353	-7.80438093	-8.28213	-4.795520724
+0.05	129.0310226	119.1981727	116.6816696	98.2768116	102.9798891	95.42503834	110.2531539	76.57056554	80.6006	49.20648716
-0.1	-15.14964291	-13.70575817	-21.29584875	-10.67129629	-11.3293832	-10.66038971	-12.66188353	-7.80438093	-8.28213	-5.415262929
+0.1	114.7284867	107.8469818	102.7663194	89.4602078	93.53771399	86.55093733	99.05150638	67.37794316	70.92415	44.39212258
-0.15	-16.76658403	-15.5835902	-24.22633003	-10.67129629	-11.3293832	-10.66038971	-12.66188353	-7.907879346	-8.35094	-7.44467977
+0.15	106.3903652	101.1705397	95.28493936	83.95208558	87.64644915	81.01877087	92.43634435	62.04966271	65.61752	41.54900571
-0.2	-23.17673159	-25.00262944	-28.98648216	-17.54271644	-17.54271644	-14.03713805	-14.13201135	-13.87052795	-14.6506	-10.80999097
+0.2	92.94561578	90.2988015	83.23135616	74.90970932	77.98864586	71.5117712	81.09985665	55.38502023	58.62346	36.90546996
-0.25	-27.06049992	-30.73093154	-31.77727828	-21.91010344	-21.91010344	-18.72871417	-19.24176886	-17.38895624	-18.3656	-12.81256716
+0.25	85.173327	84.37012356	76.58227331	69.1459242	71.84205167	66.19695708	74.7809002	51.50479143	54.50173	34.18606451
-0.3	-35.11715243	-40.37171923	-36.33710635	-29.12769633	-29.12769633	-26.5581461	-27.95169597	-23.13868153	-24.4328	-16.10993783
+0.3	73.15631461	74.08311433	65.90571057	60.48775798	62.62388343	57.56628328	64.55134164	45.17893526	47.78377	29.78407435
-0.35	-40.17250763	-46.1945272	-39.02661426	-33.4077033	-33.4077033	-31.21382748	-33.1350246	-26.51193939	-27.9903	-18.05782418
+0.35	66.40125154	68.11260949	59.76112624	55.43354967	57.252021	52.5424086	58.61679032	41.48109383	43.85773	27.23081046
-0.4	-48.28342531	-55.92731715	-47.54349364	-41.23913077	-41.50891767	-38.87411844	-41.67039856	-32.75027334	-34.5645	-21.24084552
+0.4	55.53653216	58.52726409	49.99100375	47.27948682	48.6018158	44.46254897	49.10780311	35.21532075	37.20725	23.14109068
-0.45	-54.54485555	-61.76536553	-53.78940367	-46.69176366	-47.40151162	-43.39596344	-46.71304943	-36.49740863	-38.5115	-23.1062017
+0.45	49.13920865	52.62544489	44.34918522	42.56666424	43.61264923	39.80870847	43.65352938	31.76484351	33.54609	20.79640268
-0.5	-66.85295968	-71.45568731	-64.11645176	-55.61885372	-57.06205469	-52.12170421	-57.19143254	-44.22175178	-46.6985	-26.12846326
+0.5	39.48057531	43.86539726	35.66553535	35.04645279	35.67013585	32.41146412	35.02487293	26.25088151	27.6975	17.34419372
-0.55	-74.21477886	-77.22688735	-70.25096001	-60.86089479	-62.7429066	-57.50173296	-63.78271927	-48.92082926	-51.6912	-28.33115207
+0.55	34.05891354	38.87512393	30.7898126	30.75286503	31.14750233	28.2199835	30.16880852	23.09754483	24.35411	15.75514862
-0.6	-86.39839545	-86.73555878	-80.34798841	-69.37212957	-71.98068808	-66.25892317	-74.54068824	-56.28350013	-59.5179	-32.91986584
+0.6	25.68146295	31.02770944	23.02603785	23.99625674	24.05241318	22.28263071	23.6560337	18.16875773	19.12501	12.9766028
-0.65	-93.63238652	-92.35498998	-86.3172939	-74.32573624	-77.36596811	-71.36939961	-80.8369958	-60.41715352	-63.9147	-35.60096544
+0.65	21.15592087	26.61435937	19.04032875	20.55855671	20.55855671	18.92236194	19.97698635	15.68142643	16.50676	11.3839472
-0.7	-105.9429088	-101.5381392	-96.09250647	-82.29138128	-86.04127412	-79.61144069	-91.02345988	-66.8284671	-70.7382	-39.9301039
+0.7	16.25238605	19.77611182	14.62714742	15.42931744	15.42931744	13.68802339	14.25871998	11.7455399	12.36373	8.866209771
-0.75	-113.2965196	-106.9180566	-102.6078784	-86.87870538	-91.04714525	-84.37328392	-96.92893317	-70.38589191	-74.527	-42.43424352
+0.75	13.53385241	15.99618303	12.18046715	12.55718675	12.55718675	10.78191336	11.09232259	9.559305031	10.06243	7.443963286
-0.8	-126.1095204	-115.6270821	-113.9352355	-94.1690057	-99.02023937	-91.96836075	-106.3841157	-75.82780324	-80.3274	-46.43308681
+0.8	9.387087935	10.25890345	8.421429013	8.139684849	8.139684849	6.191713579	6.495044406	6.119334693	6.441405	5.233444476
-0.85	-133.6096623	-120.6769155	-120.6584024	-98.31220929	-103.5628767	-96.30249454	-111.8029047	-78.89918055	-83.6095	-48.71783226
+0.85	7.137495073	7.166071598	6.40983932	5.342759185	5.342759185	4.50185709	4.563884185	4.286871513	4.512496	4.009451358
-0.9	-145.7403573	-128.7585101	-131.5308553	-104.7974227	-110.6940366	-103.1188124	-120.3670554	-84.74581216	-89.2709	-52.31565863
+0.9	3.796835297	2.980452507	3.383998183	2.387325856	2.387325856	1.777520558	1.902321961	1.793535729	1.887932	2.152558521
-0.95	-152.7679261	-133.3848624	-137.8285554	-108.4186486	-114.6895934	-106.9461434	-125.2032883	-90.09719025	-94.9129	-54.33857658
+0.95	2.041715638	1.601977355	1.816374245	1.146496745	1.146496745	1.018139212	1.034697439	0.969752983	1.020793	1.154663401
-1	-164.004433	-140.6810095	-147.8965372	-113.9690471	-120.8391123	-112.8519003	-132.7166471	-98.57450368	-103.847	-57.46466454
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.62E+02	1.39E+02	146.0811614	1.13E+02	1.20E+02	111.714153	131.2635704	9.69E+01	1.02E+02	5.69E+01
-2.05	-1.50E+00	-1.16E+00	-1.349170021	-9.40E-01	-9.40E-01	-0.748267616	-0.764276681	-7.13E-01	-7.50E-01	-8.38E-01
+2.05	1.55E+02	1.35E+02	1.40E+02	109.5722801	115.9649696	1.08E+02	1.27E+02	9.18E+01	96.74032	5.50E+01
-2.1	-4.42E+00	-3.48E+00	-3.964445454	-2.772349462	-2.772349462	-2.191456842	-2.210124077	-2.085558928	-2.19533	-2.500291813
+2.1	1.43E+02	1.27E+02	1.29E+02	103.5376477	109.3065262	1.02E+02	1.19E+02	8.29E+01	87.80678	5.16E+01
-2.15	-6.43E+00	-6.20E+00	-5.756916498	-4.878968737	-4.878968737	-3.895777954	-3.956079282	-3.709729765	-3.90498	-3.61434394
+2.15	135.8161072	122.3213214	122.1719347	99.64536047	105.026592	97.70045928	113.5548544	80.12402021	84.91253	49.45779406
-2.2	-10.17834563	-11.35484527	-9.107037319	-8.989223291	-8.989223291	-7.105616574	-7.174266667	-6.763360544	-7.11933	-5.653265494
+2.2	123.303303	113.9059364	110.9289525	92.74085183	97.45644073	90.47779188	104.5246513	74.78406796	79.21441	45.65053728
-2.25	-12.66584097	-14.79816742	-11.32958148	-11.64064826	-11.64064826	-9.858914846	-10.08819785	-8.785712912	-9.24812	-6.979535017

+2.25	115.6062514	*108.6792139*	*104.7586502*	88.36555384	92.6713905	85.9196473	98.85023111	71.51849778	75.73375	43.25074519
-2.3	-17.19623681	*-21.09776193*	*-15.42872522*	-16.42697017	-16.42697017	-14.70183185	-15.36486907	-12.5040937	-13.1622	-9.348955907
+2.3	103.5831444	*99.71372855*	*94.15622151*	80.7209304	84.32927543	77.98420495	89.00897658	65.58913706	69.41877	39.07784801
-2.35	-20.1386699	*-25.20164393*	*-18.03732728*	-19.50539815	-19.50539815	-17.84340774	-18.79691479	-14.84734988	-15.6288	-10.85960412
+2.35	95.76563772	*94.20261849*	*88.08161127*	75.94049488	79.12297274	73.03793871	82.8958562	61.74194819	65.32419	36.47988776
-2.4	-27.31805135	*-32.55680193*	*-24.65853695*	-25.31261865	-25.43233186	-23.44318722	-24.92792614	-19.09442196	-20.1114	-13.51311365
+2.4	83.70144858	*84.83798203*	*78.27547249*	67.68548757	70.14860391	64.52152353	72.40331108	54.85221518	57.996	32.01206806
-2.45	-32.34694799	*-37.26615912*	*-29.17884517*	-29.36772812	-29.69062751	-27.00652308	-28.83662271	-22.0781981	-23.2736	-15.1802939
+2.45	76.38526409	*79.13163926*	*71.84320796*	62.57774647	64.60486765	59.26621601	65.94734602	50.43421263	53.29951	29.25837461
-2.5	-41.38418524	*-45.58271442*	*-37.30022416*	-36.52286619	-37.22746019	-33.8604157	-36.71063566	-27.3330656	-28.8451	-18.07148655
+2.5	64.11054693	*69.51409732*	*61.7647336*	53.84207491	55.13794271	50.30063235	54.96327229	42.60213563	44.97814	25.5323779
-2.55	-47.18158709	*-50.83963151*	*-42.50919336*	-41.03608154	-41.99415027	-38.299877	-41.88920088	-30.64218304	-32.3551	-20.03559813
+2.55	56.72124627	*63.69886326*	*55.65899558*	48.48487173	49.34060466	44.88124934	48.37012736	37.70927805	39.78676	23.7186996
-2.6	-57.63674279	*-60.41561753*	*-51.89606744*	-48.88985668	-50.30844393	-46.05534249	-50.97855761	-36.39223812	-38.4562	-23.94274638
+2.6	46.68727516	*53.9699331*	*45.59148743*	39.39833193	39.52090428	37.34579546	39.96677874	31.46303525	33.20835	20.61023825
-2.65	-64.12764073	*-66.16767348*	*-57.67694304*	-53.78333153	-55.49969406	-50.90432209	-56.68525984	-40.27149393	-42.5737	-26.39706234
+2.65	41.82045751	*48.12930264*	*39.89943248*	34.81665666	34.81665666	32.74886349	34.84471788	27.61794087	29.15634	18.70011078
-2.7	-75.46336864	*-76.11768278*	*-67.76989863*	-62.20598667	-64.45171022	-59.27641754	-66.57496517	-46.43376512	-49.1162	-30.65182506
+2.7	33.39430593	*38.4258143*	*35.04829274*	27.68423268	27.68423268	24.99041719	26.20698152	21.99631807	23.22774	15.45409051
-2.75	-82.91760793	*-82.29071187*	*-74.73768205*	-67.40187418	-69.983685	-64.45583286	-72.71394593	-50.22995669	-53.1477	-33.29349394
+2.75	28.35562868	*32.64046621*	*32.35750942*	23.35299631	23.35299631	20.29204188	20.9802347	18.54604846	19.58695	13.4753691
-2.8	-95.88126609	*-92.4560919*	*-86.38578922*	-76.71189841	-79.91209234	-73.31275648	-83.24424035	-56.6961698	-60.0164	-37.82514938
+2.8	21.88325079	*23.09452965*	*27.78336455*	16.07498628	16.07498628	12.86296623	12.95794964	12.68249162	13.39586	10.13821305
-2.85	-103.9552657	*-98.97996032*	*-93.63973516*	-82.13825932	-85.70779104	-79.05286662	-90.11703309	-60.64648573	-64.2135	-40.61173683
+2.85	18.03672115	*17.44231548*	*24.97591987*	11.68635235	11.68635235	10.66038851	12.66191692	9.104486419	9.615602	8.118732801
-2.9	-117.8590257	*-110.1062292*	*-106.1304709*	-91.31729606	-95.52532501	-88.41791291	-101.2868479	-69.19397194	-72.8358	-45.34956325
+2.9	15.08053859	*13.6373104*	*20.17303043*	10.67129014	11.32939599	10.66038851	12.66191692	7.804385388	8.28209	4.79551891
-2.95	-126.4459831	*-116.9177424*	*-113.8443058*	-96.42255433	-100.9928576	-94.02519903	-108.0089596	-74.71067486	-78.6428	-48.23863738
+2.95	14.92649221	*13.48326403*	*17.20581015*	10.67129014	11.32939599	10.66038851	12.66191692	7.804385388	8.28209	4.79551891
-3	-141.1182392	*-128.4639217*	*-127.1750839*	-105.7734323	-111.0197459	-102.9876933	-118.7789301	-84.44754002	-88.8921	-53.11191246
+3	14.84099046	*13.39776228*	*13.35796975*	10.67129014	11.32939599	10.66038851	12.66191692	7.804385388	8.28209	4.79551891

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-7.551911412	-6.676201286	-6.319952585	-5.435969377	-6.221454276	-8.577692788	-9.407148461	-10.3673749	-11.11017866
End Shear	76.20590357	76.11260125	65.36512894	54.20082994	62.48112698	83.96924762	91.31000669	92.56333365	92.72019117
-0.05	-7.551911412	-6.676201286	-6.319952585	-6.114977752	-6.221454276	-8.577692788	-9.407148461	-10.3673749	-11.11017866
+0.05	70.47770366	69.23063005	59.27860033	48.90204414	57.52381495	77.70484572	84.27561466	84.68670315	84.8146528
-0.1	-7.551911412	-6.676201286	-7.639077545	-7.492310903	-6.221454276	-8.577692788	-9.407148461	-10.3673749	-11.11017866
+0.1	63.51123184	61.21270532	52.43597191	43.11069886	52.17356982	70.09173005	75.40788977	75.43183981	75.41664597
-0.15	-7.551911412	-7.308002819	-8.697717525	-9.269340698	-7.095203068	-8.577692788	-9.407148461	-10.3673749	-11.11017866
+0.15	59.35149087	56.5524319	48.74649408	39.99212005	48.83917567	65.58671267	70.20067749	69.98090437	70.26980585
-0.2	-12.35351604	-12.81643222	-12.40348111	-12.36796722	-10.30276325	-11.93156734	-11.93469851	-12.01220965	-11.86836059
+0.2	52.33232598	49.07149366	42.96015886	35.08098729	43.37974536	57.84940557	61.94378519	61.77434164	61.75754971
-0.25	-15.42878275	-16.06834583	-15.21578711	-14.17331044	-12.21161351	-15.58592149	-15.59049981	-15.54879327	-15.51008971
+0.25	48.39286405	44.78676444	39.58027746	32.23022206	40.0063153	53.52662636	57.1139617	56.97274399	56.95550815
-0.3	-20.51097845	-21.38488367	-20.22351625	-17.45635045	-15.35499316	-21.66861677	-21.67434641	-21.63414609	-21.81615257
+0.3	42.00997042	38.78140317	34.12424312	27.65628536	34.71388937	46.51156564	49.30497892	49.20730186	49.18947097
-0.35	-23.52467965	-24.50532683	-23.05371729	-19.42434233	-17.21216147	-25.28297524	-25.96515769	-25.91829832	-25.87481238
+0.35	38.30368696	35.32644341	30.81910747	25.02713112	31.69068387	42.43109768	44.78107051	44.7072598	44.68918781
-0.4	-28.46911906	-30.17519172	-27.65957145	-22.66352368	-22.27893407	-31.22541859	-33.08286351	-33.03801649	-32.99640126
+0.4	32.35936786	30.62387875	25.44573999	20.85437461	26.83098938	35.87381991	37.54389278	37.50588957	37.48760319
-0.45	-31.37907545	-33.56876319	-30.37741655	-24.74392587	-25.64283763	-34.73046302	-37.29217371	-37.24863261	-37.20823332
+0.45	28.94619112	27.88351769	22.58737804	18.48485542	24.03353281	32.10037687	33.41571957	33.3980047	33.54815094
-0.5	-36.89949096	-39.53516251	-34.21230693	-28.0421139	-31.16356446	-41.79120911	-44.1784424	-44.13723507	-44.09899198
+0.5	23.54031021	23.26197022	18.44876298	15.01916957	19.59001455	26.10871906	27.51935626	27.50158141	27.48509118
-0.55	-40.96605024	-43.02237187	-36.3487435	-30.40418401	-34.4135525	-46.19333934	-48.21891754	-48.17919014	-48.14231689
+0.55	20.83694423	20.67250749	16.43030749	13.2620124	17.06621009	22.72024971	24.14629169	24.12860377	24.11219307
-0.6	-47.59555435	-48.92422344	-39.63963597	-35.22398456	-39.70449928	-53.36235189	-56.10530985	-56.00296322	-55.95946784
+0.6	16.79311059	16.63509588	13.21833066	10.59635528	13.11868469	18.04752416	18.82616127	18.80881874	18.79273889
-0.65	-51.47066333	-51.8732523	-41.98897484	-38.00369566	-42.79267394	-57.54820895	-60.97393367	-60.82934688	-60.78751624
+0.65	14.49033109	14.52364716	11.39013794	9.097533959	10.93266953	15.39850177	15.82879718	15.8118134	15.79605067
-0.7	-57.73116059	-56.36853962	-47.27256592	-42.29035544	-47.77401925	-64.30285265	-68.85668523	-68.64193299	-68.6030076
+0.7	10.87727615	10.77040197	8.523339205	6.76875777	8.529760399	11.2638671	11.27999738	11.26549994	11.25205304
-0.75	-61.35491135	-58.81463059	-50.52981154	-44.76757231	-50.65248361	-68.20773439	-73.43033174	-73.43539261	-73.38923918
+0.75	8.854054345	8.751344254	6.919098064	5.477854351	7.171776442	8.962860355	8.79364802	8.963559789	8.950546927
-0.8	-67.1465326	-62.93989236	-55.7560957	-48.82598264	-55.24439328	-74.44016014	-80.7595011	-82.03480791	-81.99205291
+0.8	5.451537262	5.647490525	4.509972299	3.520271391	5.059958215	5.262956542	5.455676856	5.469237859	5.532644477
-0.85	-70.45899919	-67.64920708	-58.75826766	-51.2423873	-57.865248	-77.99936795	-84.96383192	-87.00421811	-87.22131377
+0.85	3.95954818	3.951620331	3.159154074	2.45733418	3.703321144	3.826578527	3.818749714	3.831014588	3.842395436
-0.9	-75.68188326	-75.22201033	-64.12746474	-55.69191867	-61.98790038	-83.60174389	-91.61552507	-94.93184522	-96.49152992
+0.9	1.65698456	1.651929068	1.509433643	1.16647879	2.064423683	1.510892474	1.597474105	1.603225495	1.622324927
-0.95	-78.62314836	-79.58210956	-67.87906962	-58.81105964	-64.30324735	-86.7505646	-95.37620252	-99.45650072	-101.8241614
+0.95	0.894937164	0.88967655	0.815541882	0.626580293	1.112700989	0.86541833	0.861570169	0.866690421	0.871442156
-1	-83.17742971	-86.50758566	-74.44333435	-64.30182393	-67.87680949	-91.61505279	-101.226547	-106.5733943	-110.2873896
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.23E+01	8.52E+01	7.29E+01	6.31E+01	6.72E+01	9.07E+01	100.0944698	105.1879081	1.09E+02
-2.05	-6.57E-01	-6.52E-01	-5.99E-01	-4.60E-01	-8.16E-01	-6.36E-01	-0.632215671	-0.637086212	-6.42E-01
+2.05	7.96E+01	8.10E+01	6.91E+01	5.98E+01	6.50E+01	8.78E+01	96.58318379	100.9165929	1.04E+02
-2.1	-1.92736523	-1.922165948	-1.75532009	-1.359425513	-2.402205913	-1.862738315	-1.85855129	-1.86446826	-1.884108928
+2.1	7.47E+01	7.37E+01	6.28E+01	5.46E+01	6.12E+01	8.25E+01	90.31617575	93.37647602	9.47E+01
-2.15	-3.426200311	-3.4175425	-2.733548858	-2.123782868	-3.464698467	-3.311411261	-3.303594498	-3.315337064	-3.32623175
+2.15	71.52881747	69.18611916	59.73144918	52.02800698	58.71051259	79.14785477	86.32412094	88.61877034	89.10282874
-2.2	-6.250720311	-6.243560665	-4.984541539	-3.895101515	-5.468684505	-6.039774088	-6.031443672	-6.045336514	-6.110269681
+2.2	66.00871695	61.7812231	54.72854127	48.0009538	54.34294065	73.21657407	79.31777256	80.33747722	80.29433142
-2.25	-8.123359929	-8.10648285	-6.468250451	-5.066800805	-6.736175645	-8.231043666	-7.885429254	-8.231181559	-8.218214124
+2.25	62.53292026	59.58507499	51.59209538	45.57556682	51.58711837	69.47622228	74.91928218	75.17675342	75.13158013

-2.3	-11.57988652	-11.47111138	-9.079927862	-7.218039187	-8.999224767	-12.06558288	-12.0820208	-12.0672536	-12.05353901
+2.3	56.49409556	55.50776434	46.1640921	41.44696949	46.79026165	62.96887858	67.29750587	67.09707327	67.05782919
-2.35	-13.74833699	-13.63604524	-10.80046269	-8.615563358	-10.441351	-14.547117	-14.86862973	-14.8516098	-14.83581752
+2.35	52.73701586	52.8103622	42.79908666	38.87478918	43.80081962	58.91524306	62.56689053	62.40858625	62.36760877
-2.4	-17.58584437	-17.42570351	-13.84703535	-11.11330642	-13.88519128	-18.96162885	-19.86360025	-19.84599204	-19.82964325
+2.4	46.27929443	47.89482782	39.00581432	34.31909672	38.6544795	51.93967424	54.453551	54.36563604	54.32189427
-2.45	-20.01273669	-19.84871274	-15.77465271	-12.7081834	-16.25441808	-21.76597986	-23.05653605	-23.03870463	-23.02214925
+2.45	42.30084945	44.34482634	37.03122541	31.42698053	35.47930983	47.63745667	49.54218227	49.5031916	49.4670107
-2.5	-24.5970486	-24.13164332	-19.13830344	-15.59742439	-20.46025375	-27.281679	-28.6776317	-28.65964771	-28.64294639
+2.5	35.52413907	38.32537446	33.47007875	27.39799205	30.06334886	40.30150313	42.80890146	42.76744318	42.7289867
-2.55	-27.84142825	-26.98857972	-21.66408565	-17.72011718	-23.12704919	-30.87758852	-32.21626637	-32.198308	-32.18164937
+2.55	32.33347737	34.66722758	31.16908548	25.41905442	26.75034445	35.88129123	38.67640426	38.63356697	38.59381992
-2.6	-33.52935352	-31.55526762	-26.42733956	-21.66878178	-27.78891768	-37.16589927	-38.96616728	-38.92112709	-38.90263348
+2.6	27.48414722	29.01123267	26.80572062	21.95149549	21.14456002	30.04028701	31.6617966	31.61677494	31.57501572
-2.65	-37.09675843	-34.37732536	-29.59280779	-24.17289813	-30.7053811	-41.10113919	-43.30948003	-43.24293993	-43.22456089
+2.65	24.51697967	25.52864844	23.96497261	20.06338101	17.82234052	26.47422861	27.3904757	27.34426231	27.30138595
-2.7	-43.27313563	-39.96483974	-35.20044202	-28.55425839	-35.74346353	-47.90108192	-50.84838611	-50.74206092	-50.72407103
+2.7	19.49479867	20.32835802	19.24753206	16.7829309	14.72744877	20.4510878	20.45684043	20.41653475	20.59898079
-2.75	-47.10364744	-43.56883894	-38.47472604	-31.29905365	-38.86170257	-52.11094801	-55.53474727	-55.40227269	-55.38462649
+2.75	16.44500379	17.13803022	16.24282938	14.76517956	12.84110545	16.80091027	16.80596623	16.76476946	16.72653137
-2.8	-53.66858103	-50.54320863	-44.10709081	-36.04973451	-44.46639824	-59.31468511	-63.58343652	-63.40391434	-63.38700775
+2.8	11.32024676	11.71863818	11.47074936	11.75602711	9.660109428	10.93352129	10.9366617	11.0142572	11.110129
-2.85	-57.70227914	-55.03277353	-47.5795268	-38.99687017	-47.74264083	-63.98101969	-68.53850061	-68.32874957	-68.31965034
+2.85	8.230007236	8.4131927	9.034527684	9.896911802	7.735285183	8.577707038	9.407171305	10.36737829	11.110129
-2.9	-64.90188651	-62.79880565	-53.78856839	-44.25103136	-53.29926339	-71.61247669	-77.12064325	-77.1333607	-77.11809444
+2.9	7.551877991	6.676206139	7.269657294	7.186699245	6.221440839	8.577707038	9.407171305	10.36737829	11.110129
-2.95	-69.0824636	-67.61051883	-57.89497141	-47.72640174	-56.67997137	-76.18109306	-82.55364399	-82.65433396	-82.78700589
+2.95	7.551877991	6.676206139	6.319941331	6.378576981	6.221440839	8.577707038	9.407171305	10.36737829	11.110129
-3	-75.77540058	-75.84817833	-65.21557232	-53.90393952	-62.08506954	-83.48699028	-90.81911138	-92.56108754	-92.54370974
+3	7.551877991	6.676206139	6.319941331	5.435981937	6.221440839	8.577707038	9.407171305	10.36737829	11.110129

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.73549422	-12.70635882	-8.28844	-9.36284	-10.303
End Shear	110.8585084	115.1284625	83.20143	101.9006	101.0262
-0.05	-11.73549422	-12.70635882	-8.28844	-9.36284	-10.303
+0.05	100.1029198	104.0638476	76.76245	92.20254	91.23458
-0.1	-12.56970385	-12.70635882	-8.28844	-9.36284	-10.303
+0.1	87.93336663	90.70926402	70.01754	80.94589	82.75627
-0.15	-14.54871957	-14.29262026	-8.81143	-9.36284	-10.436
+0.15	81.22057397	83.13782634	65.79767	74.4765	77.46921
-0.2	-17.66354642	-19.4363717	-15.0082	-15.0222	-14.4686
+0.2	70.39884854	71.51259913	58.85963	65.29616	68.80695
-0.25	-21.74635477	-23.29300941	-18.6704	-18.7861	-18.1893
+0.25	64.15027856	64.8083663	54.76742	59.99498	63.71659
-0.3	-29.80797046	-31.02605698	-25.4744	-26.1	-26.8421
+0.3	54.57616131	54.69411789	48.09151	52.64954	55.44505
-0.35	-35.4230008	-36.24940673	-29.5835	-30.9138	-32.0804
+0.35	49.45931674	49.03090747	44.18622	48.35021	50.62685
-0.4	-44.30890498	-44.42064054	-36.9244	-39.6355	-41.2326
+0.4	40.71247967	40.19564872	37.87124	41.3937	42.49534
-0.45	-48.94480876	-49.00803432	-41.5006	-44.8655	-46.6322
+0.45	36.6878769	35.58677686	33.93991	37.36006	38.03701
-0.5	-57.10397119	-56.13851707	-49.5611	-54.0496	-55.8695
+0.5	30.26545537	28.31726519	28.07405	30.53908	30.94662
-0.55	-62.55755144	-60.84250363	-54.1248	-59.4337	-61.5928
+0.55	26.58681539	24.87104922	24.73106	26.84912	27.14087
-0.6	-70.62619696	-70.23854783	-61.2718	-67.9928	-71.3053
+0.6	20.77630267	19.45944469	19.45359	21.06181	21.27025
-0.65	-75.03890819	-75.97215096	-65.2819	-73.0364	-76.7704
+0.65	17.49715559	16.40442202	16.64133	17.76711	17.96505
-0.7	-82.56693927	-85.45686997	-71.4972	-80.3649	-85.2699
+0.7	12.56759672	11.65986116	12.40875	13.236	12.67693
-0.75	-86.81075119	-92.58173537	-74.943	-84.2818	-90.0018
+0.75	9.591453631	9.150894406	10.15377	10.83069	9.956325
-0.8	-99.44110483	-106.0709491	-80.6276	-90.2174	-97.3551
+0.8	5.680840649	5.655881118	6.485291	6.917643	5.839671
-0.85	-106.5958055	-113.7310063	-83.5396	-93.4231	-101.698
+0.85	3.95854396	3.758734268	4.540444	4.84314	4.09871
-0.9	-117.7950556	-127.0006593	-87.7766	-99.4247	-107.84
+0.9	1.712989565	1.923664674	1.927113	2.025296	1.71299
-0.95	-124.0695299	-134.9637928	-90.0242	-106.129	-111.026
+0.95	0.921083661	1.034984318	1.024501	1.092801	0.930753
-1	-133.8385634	-147.4396483	-95.221	-116.856	-116.71
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.32E+02	1.45E+02	9.34E+01	1.15E+02	1.15E+02
-2.05	-6.78E-01	-7.57E-01	-7.52E-01	-8.02E-01	-6.73E-01
+2.05	1.26E+02	1.38E+02	9.07E+01	108.3121	1.12E+02
-2.1	-1.98916225	-2.23767743	-2.23781	-2.35584	-1.98916
+2.1	1.16E+02	1.24E+02	8.70E+01	97.27881	1.07E+02
-2.15	-3.416147897	-3.230098702	-3.92787	-4.18973	-3.50151
+2.15	108.9001292	116.2088028	84.43223	94.42834	103.1459
-2.2	-6.286170308	-6.32268298	-7.16878	-7.64669	-6.44903
+2.2	96.9756453	103.4429379	79.6304	89.08488	95.97357
-2.25	-8.698423011	-8.42023514	-9.30507	-9.9254	-8.94187
+2.25	89.3966314	95.3487298	76.03967	85.52319	91.5116

-2.3	**-13.5538157**	**-12.57316099**	**-13.2144**	**-14.0954**	**-13.6664**
+2.3	**81.13258774**	**83.62548667**	**70.29639**	**78.99433**	**83.62468**
-2.35	**-16.44461011**	**-15.42055783**	**-15.7887**	**-16.8331**	**-16.7407**
+2.35	**76.6157768**	**77.93458958**	**66.56682**	**74.72141**	**78.52449**
-2.4	**-21.9090697**	**-20.51128307**	**-20.4824**	**-22.1998**	**-22.4115**
+2.4	**69.12134115**	**68.40495525**	**59.88298**	**66.38402**	**69.41563**
-2.45	**-25.39624296**	**-23.75889344**	**-23.6496**	**-25.6549**	**-25.9424**
+2.45	**64.43611734**	**62.76703689**	**55.59443**	**61.16218**	**63.58767**
-2.5	**-31.52647817**	**-29.72882291**	**-29.2205**	**-31.804**	**-32.3342**
+2.5	**55.48843499**	**54.76252388**	**47.98798**	**52.18818**	**54.01429**
-2.55	**-35.38076541**	**-34.0914557**	**-32.7248**	**-35.995**	**-36.5895**
+2.55	**50.58003125**	**50.4844176**	**43.15125**	**46.56344**	**48.37813**
-2.6	**-42.31216091**	**-41.79877268**	**-39.1184**	**-42.768**	**-44.019**
+2.6	**42.57237514**	**42.83828635**	**35.42842**	**37.84676**	**39.37855**
-2.65	**-47.60020642**	**-47.1886589**	**-42.9081**	**-46.9427**	**-48.8187**
+2.65	**37.24055808**	**37.93571143**	**30.91693**	**32.49615**	**33.79074**
-2.7	**-56.32227622**	**-56.62569166**	**-49.4161**	**-54.1074**	**-57.0826**
+2.7	**28.02940351**	**29.22964661**	**24.06827**	**24.474**	**25.06062**
-2.75	**-62.11920889**	**-62.62376782**	**-53.4224**	**-58.5154**	**-62.0465**
+2.75	**23.05975072**	**24.5484877**	**19.87579**	**20.03114**	**19.73986**
-2.8	**-72.53202254**	**-73.79551535**	**-60.2418**	**-67.109**	**-70.5293**
+2.8	**16.95174306**	**18.12000966**	**13.77264**	**13.75887**	**13.1991**
-2.85	**-79.02640926**	**-80.77193644**	**-64.4053**	**-72.6184**	**-75.7275**
+2.85	**15.17226192**	**15.02972968**	**10.05416**	**9.976861**	**10.93089**
-2.9	**-90.21284158**	**-93.33582**	**-71.4375**	**-83.1644**	**-84.5381**
+2.9	**11.87283464**	**12.70635979**	**8.28843**	**9.362846**	**10.30295**
-2.95	**-97.54710086**	**-101.3499878**	**-75.3431**	**-89.9199**	**-89.8953**
+2.95	**11.73549528**	**12.70635979**	**8.28843**	**9.362846**	**10.30295**
-3	**-110.5830072**	**-115.1302192**	**-82.9266**	**-101.563**	**-100.722**
+3	**11.73549528**	**12.70635979**	**8.28843**	**9.362846**	**10.30295**

2-Span: Moment (Max and Min) Raw Data Results – 40' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.22E-14	-4.56E-14	-9.30E-14	-5.40E-14	-5.82E-14	-4.26E-14	-5.13E-14	-3.91E-14	-4.16E-14	-3.73E-14
End Shear	1.04E-13	1.09E-13	7.82E-14	9.59E-14	9.93E-14	6.85E-14	6.85E-14	7.27E-14	7.69E-14	4.20E-14
-0.05	-29.68322635	-26.79545686	-26.71507412	-21.3425926	-22.6587664	-21.3207794	-25.3237671	-15.6087619	-16.5642557	-9.591041449
+0.05	259.6394711	239.9737713	234.7830223	196.5536232	205.9597781	190.8500767	219.3783393	153.4936945	161.57231	98.41297431
-0.1	-59.3664527	-53.59091371	-53.43014825	-42.6851852	-45.3175328	-42.6415588	-50.6475341	-31.2175237	-33.1285114	-19.1820829
+0.1	477.0813034	448.0446514	430.9350653	363.3827662	380.0822674	351.7761824	403.0485687	276.7460917	291.3116755	181.3919964
-0.15	-89.04967905	-80.38637057	-80.14522237	-64.0277778	-67.9762992	-63.9623382	-75.9713012	-46.8262856	-49.6927672	-28.77312435
+0.15	653.4332954	623.9298158	589.9458172	501.1833264	523.5392835	484.1926242	553.2352204	372.2979763	392.5058936	249.2940343
-0.2	-118.7329054	-107.1818274	-106.8602965	-85.3703704	-90.6350656	-85.2831177	-101.295068	-62.4350474	-66.2570229	-38.3641658
+0.2	790.0818212	767.755991	713.2306953	611.4462865	637.2864858	588.5608279	669.3755932	452.693258	479.2339716	302.5891723
-0.25	-148.4161317	-133.9772843	-133.5753706	-106.712963	-113.293832	-106.603897	-126.618835	-78.0438093	-82.8212786	-47.95520724
+0.25	888.6917814	880.1302862	802.2676496	693.9855756	721.526721	665.3086549	769.5410044	514.508709	544.4803333	341.8606451
-0.3	-178.0993581	-160.7727411	-160.2904447	-128.055556	-135.952598	-127.924676	-151.942602	-93.6525712	-99.3855343	-57.54624869
+0.3	952.8647474	961.8520463	860.0907865	749.8944779	777.4975763	729.8928477	849.0497926	556.8599295	589.0654975	367.8048339
-0.35	-207.7825844	-187.568198	-187.0055189	-149.398148	-158.611365	-149.245456	-177.266369	-109.261333	-115.94979	-67.13729014
+0.35	990.375721	1013.912967	891.3381458	780.9056431	818.6514276	776.6169049	896.7921087	580.6625783	613.9702448	381.2313465
-0.4	-237.4658108	-214.3636549	-213.720593	-170.740741	-181.270131	-170.566235	-202.590137	-124.870095	-132.514046	-76.72833159
+0.4	1010.0897	1037.497083	911.7751945	807.5128752	843.4352893	797.7540915	915.2826742	596.3605905	631.5180977	383.1533805
-0.45	-267.1490371	-241.1591117	-240.4356671	-192.083333	-203.928898	-191.887015	-227.913904	-140.478857	-149.078301	-86.31937304
+0.45	999.946815	1033.980739	902.016736	809.6621413	842.3946252	794.8437181	905.9665109	599.3957494	634.3756849	374.7498264
-0.5	-296.8322635	-267.9545686	-267.1507412	-213.425926	-226.587664	-213.207794	-253.237671	-156.087619	-165.642557	-95.91041449
+0.5	987.0071604	1019.563261	888.9105462	791.7624109	825.168427	777.7047094	889.200368	585.6494526	619.5431576	363.0839846
-0.55	-326.5154898	-294.7500254	-293.8658154	-234.768518	-249.24643	-234.528574	-278.561438	-171.69638	-182.206813	-105.5014559
+0.55	965.3453691	980.8675873	869.4655263	758.2288878	792.9596532	749.5272269	862.3804147	559.3815463	592.4513678	356.7731479
-0.6	-356.1987162	-321.5454823	-320.5808895	-256.111111	-271.905197	-255.849353	-303.885205	-187.305142	-198.771069	-115.0924974
+0.6	909.2048986	917.6297778	818.9313053	706.2913695	737.9637564	699.5405771	808.2751444	525.7215524	555.8567106	345.3797806
-0.65	-385.8819425	-348.3409391	-347.2959636	-277.453704	-294.563963	-277.170132	-329.208972	-202.913904	-215.335324	-124.6835388
+0.65	821.544559	831.7245869	741.6260076	645.5033017	668.0449907	629.7652669	729.2304406	480.2405005	507.871187	321.9080551
-0.7	-415.5651689	-375.136396	-374.0110377	-298.796296	-317.22273	-298.490912	-354.532739	-218.522666	-231.89958	-134.2745803
+0.7	718.5113936	725.2194233	646.6602521	565.1733482	584.5555646	542.4328324	628.1242431	420.841281	445.0171096	287.3452745
-0.75	-445.2483952	-401.9318528	-400.7261118	-320.138889	-339.881496	-319.811691	-379.856506	-234.131428	-248.463836	-143.8656217
+0.75	585.9157157	600.3738464	530.1239845	467.5059679	481.7739363	439.9856232	507.3574353	349.1466315	369.0141247	242.7917957
-0.8	-474.9316216	-428.7273097	-427.441186	-341.481481	-362.540262	-341.132471	-405.180273	-249.74019	-265.028092	-153.4566632
+0.8	426.5418235	459.6400209	387.1915291	354.9133424	362.2376255	327.3802057	369.9162889	266.9299831	281.7421838	189.4611353
-0.85	-510.0326956	-460.9406143	-459.0323229	-362.824074	-385.199029	-362.45325	-430.50404	-265.348952	-281.592347	-163.0477046
+0.85	260.2925462	311.0798465	233.7135079	234.7849538	234.7849538	212.5485589	223.1024728	178.5630306	187.9610848	137.2056083
-0.9	-561.5471146	-509.5672637	-513.1434313	-384.166667	-407.857795	-383.774029	-455.827807	-327.375099	-347.628212	-172.6387461
+0.9	165.3942469	168.5255367	147.9211292	130.7909387	130.7909387	104.6176242	104.6377311	99.30783923	104.5345676	90.78008779
-0.95	-643.9203222	-571.129005	-588.4216191	-405.509259	-430.516562	-405.094809	-481.151574	-446.482726	-472.988878	-182.2297875
+0.95	78.68074983	61.97069511	70.00822134	49.17263361	49.17263361	39.21166072	39.31850267	37.26032753	39.2213974	44.13774145
-1	-812.0561131	-643.3558593	-679.1239325	-426.85185	-453.175845	-426.415594	-506.476684	-569.502323	-602.493222	-224.9771205
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-812.0561131	-643.3558593	-679.1239325	-426.85185	-453.175845	-426.415594	-506.476684	-569.502323	-602.493222	-224.9771205
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-643.9188119	-571.1303016	-588.4216025	-405.509024	-430.517053	-405.094769	-481.15285	-446.482139	-472.988532	-182.2297218
+2.05	78.68074824	61.97874348	70.69786949	49.11676116	49.11676116	39.1684004	39.37093637	37.22699017	39.18630544	44.12173401
-2.1	-561.524693	-509.5684937	-513.1434495	-384.166443	-407.858261	-383.773992	-455.829016	-327.375216	-347.62466	-172.638684
+2.1	165.4247933	168.5715052	148.2685759	130.8247279	130.8247279	104.5805683	104.6140799	99.2551843	104.4791414	90.76531053
-2.15	-510.0115207	-460.9417777	-483.4424522	-362.823863	-385.199469	-362.453215	-430.505182	-265.349099	-281.591054	-163.0476461
+2.15	260.3212375	311.1323046	233.6312865	234.8235071	234.8235071	212.6112957	223.1792848	178.5860698	187.9853367	137.1917399
-2.2	-474.9116928	-428.7284062	-427.4550362	-341.481283	-362.540677	-341.132438	-405.181348	-249.740328	-265.026874	-153.4566083
+2.2	428.9099161	459.6956305	386.1422884	354.9461037	362.2676836	327.392997	369.892848	266.9506118	281.763674	189.4467199

-2.25	-445.2297119	-401.9328816	-400.7390967	-320.138702	-339.881885	-319.811661	-379.857514	-234.131557	-248.462694	-143.8655705
+2.25	586.9154001	600.4295582	530.1239578	467.5361748	481.8005736	439.9745108	507.3321365	349.1660369	369.0342559	242.7767293
-2.3	-415.547731	-375.1373571	-374.0231572	-298.796122	-317.223093	-298.490884	-354.53368	-218.522786	-231.898515	-134.2745327
+2.3	718.031695	725.2722553	645.8275583	565.1984136	584.5760423	542.4187273	628.0939572	420.8580141	445.0343437	287.329022
-2.35	-385.8657501	-348.3418325	-347.3072177	-277.453542	-294.564301	-277.170107	-329.209847	-202.914016	-215.334335	-124.6834949
+2.35	823.3867811	831.771865	741.285738	645.5208342	668.0567767	629.745638	729.2871552	480.2531154	507.8839907	321.8903396
-2.4	-356.1837691	-321.546308	-320.5912782	-256.110962	-271.905509	-255.84933	-303.886013	-187.305245	-198.770155	-115.092457
+2.4	911.1357318	917.6690449	820.7545559	706.2992234	737.9511739	699.5131999	808.3217782	525.7288765	555.8638412	345.3601309
-2.45	-326.5017882	-294.7507834	-293.8753387	-234.768381	-249.246717	-234.528553	-278.562179	-171.696474	-182.205975	-105.5014192
+2.45	966.9063579	980.896652	870.7069948	758.2144915	792.9365904	749.490024	862.4144929	559.376221	592.4450457	356.7515306
-2.5	-296.8198073	-267.9552588	-267.1593993	-213.425801	-226.587925	-213.207776	-253.238345	-156.087703	-165.641796	-95.9103814
+2.5	988.1386833	1019.579977	889.6076835	791.7368256	825.1328521	777.7058193	889.2197406	585.6710998	619.5301924	363.0672663
-2.55	-267.1378263	-241.1597343	-240.4434598	-192.083221	-203.929133	-191.886999	-227.914511	-140.478933	-149.077616	-86.31934358
+2.55	999.4377471	1033.974768	900.159106	809.6931929	842.4353978	794.8970291	905.9510582	599.4106081	634.392129	374.7363989
-2.6	-237.4558454	-214.3642097	-213.7275203	-170.740641	-181.270341	-170.566222	-202.590677	-124.870162	-132.513436	-76.72830576
+2.6	1010.00236	1037.477407	911.7752058	807.5307554	843.4623378	797.7951271	915.2529563	596.3678221	631.5264695	383.1384749
-2.65	-207.7738645	-187.5686851	-187.0115808	-149.39806	-158.611549	-149.245445	-177.266844	-109.261391	-115.949257	-67.13726794
+2.65	989.5772406	1013.877827	890.921753	780.9087496	818.6629928	776.644039	896.8425905	580.6579826	613.9660428	381.2506352
-2.7	-178.0918836	-160.7731606	-160.2956413	-128.05548	-135.952757	-127.924668	-151.94301	-93.6526202	-99.385077	-57.54623012
+2.7	954.5692732	961.8001401	859.8844211	749.8771944	777.4872734	729.9047197	849.0825205	556.8469551	589.0524187	367.8218984
-2.75	-148.4099026	-133.977636	-133.5797018	-106.7129	-113.293965	-106.603891	-126.619176	-78.0438495	-82.8208973	-47.9551923
+2.75	891.5445777	880.060237	803.472208	693.9523863	721.4996392	665.3007135	769.5544371	514.4865591	544.4575231	341.8753617
-2.8	-118.7279217	-107.1821115	-106.8637623	-85.3703194	-90.6351733	-85.2831136	-101.295342	-62.4350787	-66.2567176	-38.36415448
+2.8	792.4369418	767.666988	713.9344447	611.3961088	637.2414195	588.5366421	669.365474	452.6613432	479.2008002	302.6012246
-2.85	-89.04594077	-80.3865869	-80.14782277	-64.0277391	-67.9763813	-63.9623366	-75.9715082	-46.8263079	-49.6925379	-28.77311666
+2.85	655.2475121	623.8209422	590.1763019	501.1151261	523.4750714	484.1510769	553.2045891	372.3410053	392.4618486	249.3032974
-2.9	-59.36395985	-53.59106234	-53.43188327	-42.6851588	-45.3175894	-42.6415596	-50.6476744	-31.2175371	-33.1283582	-19.18207884
+2.9	478.3178025	447.9153845	430.7154128	363.4214984	380.1237203	351.8138954	402.996406	276.7758809	291.3430326	181.3982143
-2.95	-29.68197892	-26.79553778	-26.71594378	-21.3425786	-22.6587974	-21.3207826	-25.3238405	-15.6087664	-16.5641785	-9.591041021
+2.95	260.2690558	239.9946549	234.7830664	196.5732196	205.9807802	190.8691721	219.4012554	153.4340398	161.5095156	98.4161461
-3	-2.06E-13	-1.41E-13	-1.41E-13	-1.11E-13	-1.20E-13	-1.06E-13	-1.26E-13	-1.03E-13	-1.09E-13	-7.59E-14
+3	1.29E-13	8.40E-14	1.14E-13	6.76E-14	6.98E-14	6.57E-14	7.14E-14	5.80E-14	6.13E-14	3.92E-14

2-Span: Moment (Max and Min) Raw Data Results - 40' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.87E-14	-3.16E-14	-2.90E-14	-2.19E-14	-3.77E-14	-3.78E-14	-3.00E-14	-3.06E-14	-3.14E-14
End Shear	6.03E-14	6.03E-14	5.47E-14	4.20E-14	4.07E-14	5.82E-14	5.82E-14	5.82E-14	5.82E-14
-0.05	-15.10382282	-13.35240257	-12.63990517	-10.87193875	-12.44290855	-17.15538558	-18.8142969	-20.7347498	-22.2203573
+0.05	140.9554073	138.4612601	118.5572007	98.21252889	115.0476299	155.4096914	168.5512293	168.8211985	168.7849358
-0.1	-30.20764565	-26.70480514	-25.27981034	-21.74387751	-24.8858171	-34.31077115	-37.6285938	-41.4694996	-44.4407146
+0.1	258.1959382	251.1692015	215.1342412	178.8248018	212.0533324	284.9059462	307.8591222	309.1119598	309.1687656
-0.15	-45.31146847	-40.05720771	-37.91971551	-32.61581626	-37.32872565	-51.46615673	-56.4428908	-62.2042494	-66.661072
+0.15	354.3235622	339.3145914	292.4789645	244.2882062	291.381298	391.7896888	421.778932	446.5719531	446.5365551
-0.2	-60.41529129	-53.40961028	-50.55962068	-43.48775502	-49.7716342	-68.6215423	-75.2571877	-82.9389992	-88.8814293
+0.2	430.055083	404.2973046	352.8227692	295.9043236	353.5234195	476.0088078	510.3885916	555.0551277	556.6255342
-0.25	-75.51911412	-66.76201286	-63.19952585	-54.35969377	-62.21454276	-85.77692788	-94.0714846	-103.673749	-111.101787
+0.25	485.5209866	447.8676444	395.8027746	333.2964956	399.0993203	537.7807719	574.568954	635.4359895	657.5088716
-0.3	-90.62293694	-80.11441543	-75.83943101	-65.23163252	-74.65745131	-102.9323135	-112.885782	-124.408499	-133.322144
+0.3	521.5313138	479.5199868	422.3574239	357.1665044	429.231585	584.3990007	635.1496167	689.50995	727.784209
-0.35	-105.7267598	-93.466818	-88.47933618	-76.10357128	-87.10035986	-120.087699	-131.700078	-145.143249	-155.542501
+0.35	545.2551421	494.7925848	446.4529301	377.5955102	444.3996898	621.753349	671.5210028	723.5778645	769.3424604
-0.4	-120.8305826	-106.8192206	-101.1192414	-86.97551003	-99.54326841	-137.2430846	-150.514375	-165.877998	-177.762859
+0.4	559.684513	504.9604448	455.2722674	385.4806795	445.5298157	638.3541963	685.0616416	747.4516441	783.8568886
-0.45	-135.9344054	-120.1716231	-113.7591465	-97.84744879	-111.986177	-154.3984702	-169.328672	-186.612748	-199.983216
+0.45	556.5426273	502.0298029	449.2972111	381.1852779	433.7407159	635.4780671	677.3482364	746.5789292	788.749112
-0.5	-151.0382282	-133.5240257	-126.3990517	-108.7193875	-124.4290855	-171.5538558	-188.142969	-207.347498	-222.203573
+0.5	540.9639748	495.7842896	434.1233184	370.3843477	427.6234544	621.1839498	658.3251284	722.9589375	771.289571
-0.55	-166.1420511	-146.8764283	-139.0389569	-119.5913263	-136.8719941	-188.7092413	-206.957266	-228.082248	-244.423931
+0.55	524.7454166	477.9143899	425.8481106	362.0481931	423.3095425	599.6994985	641.2452223	698.2414092	730.5708468
-0.6	-181.2458739	-160.2288309	-151.678862	-130.463265	-149.3149026	-205.8646269	-225.771563	-248.816998	-266.644288
+0.6	491.7775193	448.2462705	402.2586149	341.0277407	404.2499755	560.2771164	603.559805	650.7345279	690.2344566
-0.65	-196.3496967	-173.5812334	-164.3187672	-141.3352038	-161.7578112	-223.0200125	-244.58586	-269.551747	-288.864645
+0.65	448.6310738	407.6680757	364.582436	308.3078214	371.482944	504.5528844	546.3213473	589.0953905	625.2247426
-0.7	-211.4535195	-186.933636	-176.9586724	-152.2071426	-174.2007197	-240.1753981	-263.400157	-290.286497	-311.085002
+0.7	395.0429233	365.5423769	320.2145251	269.6909482	326.1745628	434.3355247	471.437155	513.3061655	537.6583347
-0.75	-226.5573423	-200.2860386	-189.5985775	-163.0790813	-186.6436283	-257.3307836	-282.214454	-311.021247	-333.30536
+0.75	327.0647634	308.8145774	264.7295653	221.592541	269.6185601	356.5285047	381.0720716	418.0917829	430.1692348
-0.8	-241.6611652	-213.6384411	-202.2384827	-173.9510201	-199.0865368	-274.4861692	-301.028751	-331.755997	-355.525717
+0.8	246.4309991	239.2811821	197.3282015	163.3229459	203.2363225	266.1476614	278.3517431	305.9120545	306.0553473
-0.85	-256.764988	-226.9908437	-215.3828308	-191.3233543	-211.5294454	-291.6415548	-319.843048	-352.490747	-377.746074
+0.85	165.3987234	164.4865118	130.5781514	105.764092	132.0880236	173.806231	173.9749743	187.6260715	188.3276015
-0.9	-271.8688108	-272.7417192	-260.5086485	-237.2991224	-223.9723539	-308.7969404	-338.657345	-373.225496	-399.966432
+0.9	91.96361374	91.18717908	72.431428	57.56150413	87.60838821	88.91191101	88.75955821	88.91640806	88.92264591
-0.95	-286.9726336	-379.8889131	-353.7828748	-307.8215533	-236.4152625	-325.9523259	-357.471642	-393.960246	-422.186789
+0.95	34.47066569	34.24455511	31.31856714	24.23845265	42.92350774	33.32991161	33.19638184	33.34507535	33.48293761
-1	-302.0764547	-490.960777	-455.1517042	-396.9831065	-248.8581804	-343.1082835	-376.28686	-417.885685	-464.431828
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-302.0764547	-490.960777	-455.1517042	-396.9831065	-248.8581804	-343.1082835	-376.28686	-417.885685	-464.431828
+2	0	0	0	0	0	0	0	0	0
-2.05	-286.971362	-379.8874656	-353.7829192	-307.8215702	-236.4147612	-325.9528694	-357.472518	-393.960378	-422.1849
+2.05	34.43299915	34.2136167	31.293212	24.22668974	42.87383684	33.29314034	33.16105475	33.31102578	33.45016556
-2.1	-271.867606	-272.7414453	-260.5078528	-237.2996139	-223.9718795	-308.7974553	-338.658175	-373.225622	-399.964642
+2.1	91.90402542	91.20584593	72.44486431	57.56774319	87.56272246	88.87170046	88.72092739	88.87923607	88.94249658
-2.15	-256.76385	-226.9910069	-215.3830591	-191.3233673	-211.5289978	-291.6420412	-319.843833	-352.490865	-377.744384
+2.15	165.4247525	164.4401337	130.5934545	105.7486377	132.0450194	173.8504084	173.9869967	187.6550563	188.3555478
-2.2	-241.660094	-213.6385946	-202.2381239	-173.9514243	-199.0861162	-274.4866272	-301.02949	-331.756109	-355.524126
+2.2	246.4539073	239.3010747	197.3411441	163.306414	203.2942158	266.1619259	278.3616785	305.9401677	306.0824037
-2.25	-226.556338	-200.2861824	-189.5982412	-163.0794604	-186.6432345	-257.3312131	-282.215147	-311.021352	-333.303868

+2.25	327.084562	308.8273009	264.7399561	221.5747138	269.6741824	356.5397153	381.0606561	418.1164416	430.2077946
-2.3	-211.4525821	-186.9337701	-176.9583585	-152.2074966	-174.2003528	-240.175799	-263.400805	-290.286596	-311.08361
+2.3	395.0578618	365.555358	320.221184	269.6712949	326.226362	434.3276711	471.4218101	513.3249615	537.6920123
-2.35	-196.3488261	-173.5813578	-164.3184759	-141.3355327	-161.7574711	-223.0203849	-244.586462	-269.551839	-288.863352
+2.35	448.639468	407.6186684	364.5781275	308.3058129	371.5296118	504.5403761	546.2999421	589.1061706	625.2511343
-2.4	-181.2450701	-160.2289455	-151.6785932	-130.4635688	-149.3145894	-205.8649709	-225.77212	-248.817082	-266.643094
+2.4	491.7693745	448.1935339	402.2498449	341.0236576	404.2900594	560.258146	603.5303942	650.72383	690.2512756
-2.45	-166.1413141	-146.8765333	-139.0387106	-119.5916049	-136.8717078	-188.7095568	-206.957777	-228.082326	-244.422836
+2.45	524.7296119	477.9262093	425.8339407	362.0416083	423.341978	599.6723761	641.2843111	698.2211684	730.3064413
-2.5	-151.0375581	-133.524121	-126.3988279	-108.7196411	-124.4288261	-171.5541427	-188.143434	-207.347569	-222.202578
+2.5	540.9391985	495.7910856	434.1029512	370.3978235	427.6472633	621.1471674	658.3532049	722.9273785	771.3154386
-2.55	-135.9338021	-120.1717087	-113.7589452	-97.84767718	-111.9859444	-154.3987286	-169.329092	-186.612813	-199.98232
+2.55	556.5676314	502.0273641	449.2668505	381.1940564	433.7170174	635.5176374	677.39864	746.6101907	788.7635334
-2.6	-120.8300462	-106.8192964	-101.1190626	-86.97571331	-99.54306274	-137.2433146	-150.514749	-165.878056	-177.762062
+2.6	559.7009064	504.9524425	455.2860783	385.4871119	445.4997728	638.3838881	685.1020664	747.4713973	783.8501848
-2.65	-105.7262902	-93.46688414	-88.47917991	-76.10374943	-87.10018106	-120.0879005	-131.700407	-145.143299	-155.541804
+2.65	545.2615501	494.7888408	446.4606667	377.5990635	444.3621458	621.7718155	671.5499117	723.5844223	769.3228283
-2.7	-90.6225342	-80.11447186	-75.83929725	-65.23178556	-74.65729938	-102.9324864	-112.886064	-124.408543	-133.321546
+2.7	521.5230055	479.5781198	422.4053185	357.1657155	429.1855616	584.4051111	635.1656485	689.4973494	727.8232147
-2.75	-75.51877822	-66.76205958	-63.19941458	-54.35982168	-62.21441771	-85.77707234	-94.0717213	-103.673786	-111.101288
+2.75	485.5017662	447.9179327	395.8440152	333.2925539	399.1551714	537.7707264	574.5709311	635.4090123	657.5320235
-2.8	-60.41502224	-53.40964731	-50.55953192	-43.48785781	-49.77153603	-68.62165826	-75.2573787	-82.9390297	-88.8810302
+2.8	430.0241001	404.3457285	352.8567394	295.8970615	353.5691715	475.9855834	510.3731795	555.0889215	556.3142809
-2.85	-45.31126625	-40.05723503	-37.91964926	-32.61589394	-37.32865435	-51.46624419	-56.4430361	-62.2042731	-66.6607722
+2.85	354.364636	339.3522797	292.5050502	244.2771229	291.4163494	391.7523748	421.7485214	446.5893075	446.5532566
-2.9	-30.20751027	-26.70482275	-25.2797666	-21.74393006	-24.88577267	-34.31083011	-37.6286935	-41.4695165	-44.4405142
+2.9	258.2237701	251.1952166	215.1542568	178.8109837	212.0770162	284.9366646	307.8923293	309.1109902	309.1130718
-2.95	-15.10375429	-13.35241047	-12.63988394	-10.87196619	-12.442891	-17.15541604	-18.8143509	-20.7347599	-22.2202562
+2.95	140.9695373	138.4746958	118.5675263	98.21728259	115.0596343	155.4253079	168.5681204	168.8389995	168.8020678
-3	-8.85E-14	-8.91E-14	-7.94E-14	-6.20E-14	-7.82E-14	-8.51E-14	-1.01E-13	-1.01E-13	-1.01E-13
+3	4.63E-14	4.93E-14	5.97E-14	4.56E-14	4.29E-14	5.30E-14	5.62E-14	5.57E-14	5.54E-14

2-Span: Moment (Max and Min) Raw Data Results - 40' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.46E-14	-5.16E-14	-4.07E-14	-5.14E-14	-3.83E-14
End Shear	6.14E-14	7.34E-14	6.91E-14	7.37E-14	6.14E-14
-0.05	-23.47098845	-25.41271765	-16.5768897	-18.7256878	-20.605906
+0.05	200.2058396	209.9921844	153.5249082	184.4050793	182.4691595
-0.1	-46.94197689	-50.8254353	-33.1537794	-37.4513756	-41.211812
+0.1	360.8168598	377.7098598	284.3427922	332.622261	336.955401
-0.15	-70.41296534	-76.23815294	-49.7306691	-56.1770634	-61.8177181
+0.15	487.3234438	505.012591	393.7757564	446.8589811	464.2299593
-0.2	-93.88395379	-101.6508706	-66.3075588	-74.9027512	-82.4236241
+0.2	584.6462971	602.9380064	481.229266	536.9016914	564.1425317
-0.25	-117.3549422	-127.0635882	-82.8844485	-93.628439	-103.02953
+0.25	675.6569506	699.1962751	547.3301476	608.1393878	637.6279118
-0.3	-140.8259307	-152.4763059	-99.4613382	-112.354127	-123.635436
+0.3	734.9824215	761.370498	592.8633685	668.3191789	707.9298993
-0.35	-164.2969191	-177.8890235	-116.038228	-131.079815	-144.241342
+0.35	763.8287731	798.4648362	618.7718623	702.7508965	752.7017373
-0.4	-187.7679076	-203.3017412	-132.615118	-149.805502	-164.847248
+0.4	765.8759183	829.7829069	635.3252763	728.1691606	773.4289108
-0.45	-211.238896	-228.7144588	-149.192007	-168.53119	-185.453154
+0.45	776.6000302	834.2101292	639.2962043	732.5714982	771.5539678
-0.5	-234.7098845	-254.1271765	-165.768897	-187.256878	-206.05906
+0.5	766.4161393	825.7815904	625.4655162	717.2417505	757.2164909
-0.55	-258.1808729	-279.5398941	-182.345787	-205.982566	-226.664966
+0.55	728.3436389	788.1875931	595.8090265	683.635971	728.5525768
-0.6	-281.6518614	-304.9526118	-198.922676	-224.708254	-247.270872
+0.6	676.3054412	731.3870049	560.2775709	633.1456495	679.2984048
-0.65	-305.1228498	-330.3653294	-215.499566	-243.433942	-267.876778
+0.65	626.7129543	654.3657435	511.2843087	567.7769145	611.406515
-0.7	-328.5938383	-355.7780471	-232.076456	-262.159629	-288.482684
+0.7	550.3024967	559.255925	447.8284468	500.3287593	527.0308742
-0.75	-352.0648267	-381.1907647	-248.653346	-280.885317	-309.08859
+0.75	447.1844841	442.3855676	371.6305192	413.4517256	428.5265277
-0.8	-375.5358152	-406.6034824	-265.230235	-299.611005	-329.694496
+0.8	320.292617	304.6550643	284.569283	309.826755	318.2247784
-0.85	-399.0068036	-432.0162	-281.807125	-324.295971	-350.547202
+0.85	196.3050019	182.524745	189.6181366	202.2593457	200.1950413
-0.9	-496.6488984	-530.0367183	-375.650341	-412.134036	-465.308417
+0.9	91.77048538	90.77174356	105.1660883	112.1771608	93.68037623
-0.95	-662.7268569	-686.9326038	-494.000229	-566.677001	-621.521739
+0.95	35.32535961	39.55079102	39.39223283	42.01838168	35.3685967
-1	-833.9676742	-848.1929754	-616.961306	-727.872717	-784.239205
+1	0	0	0	0	0
(Span 2) -2	-833.9676742	-848.1929754	-616.961306	-727.872717	-784.239205
+2	0	0	0	0	0
-2.05	-662.7265517	-686.9323288	-493.99721	-566.680393	-621.521698
+2.05	35.29641708	39.54538044	39.35776111	41.98161185	35.11561811
-2.1	-496.6484978	-530.0369426	-375.648833	-412.135254	-465.305851
+2.1	91.72486391	90.77561698	105.1115377	112.1189736	93.84499763
-2.15	-399.0068413	-432.0162374	-281.806622	-324.297934	-350.546375
+2.15	196.293988	182.5230555	189.3845834	202.0102223	200.0983222
-2.2	-375.5358508	-406.6035178	-265.229762	-299.611079	-329.694355
+2.2	320.2771476	304.6525526	284.552554	309.8142253	318.2124802
-2.25	-352.0648602	-381.1907982	-248.652901	-280.885386	-309.088458

+2.25	447.1637583	442.3817928	371.6505887	413.4371912	428.5464594
-2.3	-328.5938697	-355.7780786	-232.07604	-262.159693	-288.482561
+2.3	550.2741014	559.2597287	447.8458693	500.3083157	527.0813365
-2.35	-305.1228791	-330.365359	-215.49918	-243.434001	-267.876664
+2.35	626.6749333	654.3707186	511.2976696	567.7658328	611.4533436
-2.4	-281.6518886	-304.9526395	-198.922319	-224.708308	-247.270767
+2.4	676.2732604	731.390244	560.285657	633.1305138	679.3399281
-2.45	-258.180898	-279.5399199	-182.345458	-205.982616	-226.664871
+2.45	728.3245611	788.1831968	595.8041287	683.6493356	728.5872504
-2.5	-234.7099075	-254.1272003	-165.768597	-187.256923	-206.058974
+2.5	766.3871723	825.7774765	625.4874868	717.2825269	757.2429732
-2.55	-211.2389169	-228.7144807	-149.191737	-168.531231	-185.453077
+2.55	776.6234635	834.2037781	639.3111315	732.6044645	771.5314971
-2.6	-187.7679264	-203.3017611	-132.614876	-149.805538	-164.84718
+2.6	765.8518057	829.7861332	635.3322747	728.193292	773.3972017
-2.65	-164.2969358	-177.8890415	-116.038015	-131.079846	-144.241283
+2.65	763.807505	798.4592092	618.7667349	702.7652807	752.7260496
-2.7	-140.8259452	-152.476322	-99.4611545	-112.354153	-123.635387
+2.7	734.9493908	761.3635968	592.8495516	668.337114	707.9430126
-2.75	-117.3549547	-127.0636024	-82.8842937	-93.6284606	-103.02949
+2.75	675.6105815	699.2001234	547.3068435	608.1451578	637.6265048
-2.8	-93.88396414	-101.6508828	-66.307433	-74.9027681	-82.4235931
+2.8	584.6501553	602.93932	481.1959438	536.8911177	564.1292199
-2.85	-70.41297359	-76.2381632	-49.7305723	-56.1770755	-61.8176963
+2.85	487.3735295	505.0091236	393.731728	446.9039762	464.2038792
-2.9	-46.94198303	-50.82544362	-33.1537116	-37.451383	-41.2117995
+2.9	360.8513445	377.7041146	284.3352864	332.6578198	336.9160523
-2.95	-23.47099248	-25.41272403	-16.5768508	-18.7256904	-20.6059027
+2.95	200.2253329	209.9835049	153.5363809	184.4234654	182.4831535
-3	-1.38E-13	-1.53E-13	-1.11E-13	-1.19E-13	-1.30E-13
+3	8.11E-14	1.03E-13	6.74E-14	7.35E-14	7.60E-14

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-5.22255	-3.91595	-3.461862217	-3.27713	-2.93777	-3.226058738	-4.44786	-4.87796	-5.37587498	-5.76105
End Shear	52.18811	39.51564	39.46725499	33.89429	28.99105	32.39882135	43.54122	47.34768	47.99758032	48.07892
-0.05	-5.22255	-3.91595	-3.461862217	-3.27713	-3.29213	-3.226058738	-4.44786	-4.87796	-5.37587498	-5.76105
+0.05	48.04283	36.54535	35.89869331	30.73819	26.14645	29.82826806	40.29289	43.70009	43.91325027	43.9796
-0.1	-5.22255	-3.91595	-3.461862217	-3.96115	-4.01771	-3.226058738	-4.44786	-4.87796	-5.37587498	-5.76105
+0.1	42.73538	32.93297	31.74109687	27.19003	23.03074	27.05396413	36.34521	39.10184	39.1142545	39.10638
-0.15	-5.80693	-3.91595	-3.789475146	-4.51009	-4.95054	-3.679130448	-4.44786	-4.87796	-5.37587498	-5.76105
+0.15	39.76442	30.77599	29.3245693	25.2769	21.35058	25.32495498	34.00918	36.4017	36.28773885	36.43755
-0.2	-8.30386	-6.40576	-6.645803589	-6.43167	-6.58382	-5.342371403	-6.18697	-6.18859	-6.228783846	-6.15419
+0.2	34.93379	27.13629	25.44542062	22.27646	18.70643	22.49403441	29.9971	32.12019	32.03232649	32.02362
-0.25	-9.77453	-8.00041	-8.332043469	-7.88996	-7.54037	-6.332182269	-8.08189	-8.08426	-8.062635866	-8.04257
+0.25	32.11829	25.09353	23.22362688	20.52387	17.17418	20.74478367	27.75557	29.61574	29.54251698	29.53358
-0.3	-12.8341	-10.6357	-11.0888689	-10.4867	-9.2842	-7.962143198	-11.236	-11.239	-11.21812087	-11.3125
+0.3	27.75631	21.78375	20.10962052	17.69471	14.71981	18.00046117	24.118	25.56649	25.51584229	25.5066
-0.35	-14.7223	-12.1984	-12.70693639	-11.9542	-10.3339	-8.925155025	-13.1102	-13.4639	-13.43961541	-13.4171
+0.35	25.29205	19.86191	18.31809355	15.98087	13.31132	16.43281507	22.00212	23.22067	23.18240073	23.17303
-0.4	-17.6646	-14.7623	-15.64697522	-14.3425	-12.0695	-11.55246776	-16.1916	-17.1547	-17.13145786	-17.1099
+0.4	21.28448	16.77955	15.87963638	13.19458	11.07949	13.91288016	18.60193	19.46792	19.4482186	19.43874
-0.45	-19.9883	-16.2712	-17.40667005	-15.7518	-13.1861	-13.29677865	-18.0091	-19.3374	-19.31482116	-19.2939
+0.45	18.89121	15.00969	14.45865579	11.71241	9.81416	12.46229339	16.64526	17.32731	17.31812533	17.39598
-0.5	-24.5992	-19.1338	-20.50047317	-17.7404	-14.9662	-16.15948378	-21.6703	-22.9082	-22.8868214	-22.867
+0.5	15.26728	12.20654	12.06220909	9.56638	7.962841	10.15816155	13.53836	14.26982	14.26060742	14.25206
-0.55	-27.3173	-21.2424	-22.30872278	-18.8482	-16.2369	-17.84472518	-23.953	-25.0033	-24.98272758	-24.9636
+0.55	13.21475	10.80474	10.71947497	8.519734	7.023138	8.849473732	11.78131	12.52076	12.51159127	12.50308
-0.6	-31.7484	-24.6801	-25.36905545	-20.5546	-18.819	-20.58828067	-27.6704	-29.0927	-29.03964907	-29.0171
+0.6	10.01489	8.707861	8.625924748	6.854203	5.599698	6.802532894	9.358322	9.762075	9.753082052	9.744744
-0.65	-34.3385	-26.6895	-26.89823816	-21.7729	-20.3138	-22.18961573	-29.8409	-31.6173	-31.54231106	-31.5206
+0.65	8.274427	7.513783	7.531058935	5.906216	4.801474	5.66900157	7.984704	8.207828	8.199021726	8.190848
-0.7	-38.7079	-29.9358	-29.22921422	-24.5126	-22.6314	-24.77263119	-33.3435	-35.7048	-35.59343168	-35.5732
+0.7	6.450908	5.640278	5.58485972	4.419673	3.564704	4.423002541	5.84074	5.849104	5.841586694	5.834614
-0.75	-41.2833	-31.8148	-30.49760466	-26.2016	-23.9762	-26.26522355	-35.3683	-38.0764	-38.07902132	-38.0551
+0.75	5.420581	4.591161	4.537902128	3.587813	2.881124	3.718836631	4.647581	4.559838	4.647943888	4.641196
-0.8	-45.7646	-34.818	-32.63670851	-28.9116	-26.1862	-28.64630193	-38.6	-41.8768	-42.53814255	-42.516
+0.8	3.818188	2.826828	2.928436881	2.338591	1.847558	2.623779214	2.729042	2.828974	2.836006149	2.868885
-0.85	-48.3445	-36.5356	-35.07866584	-30.4684	-27.5055	-30.00531397	-40.4456	-44.057	-45.11496921	-45.2275
+0.85	2.931032	2.053175	2.049064211	1.638141	1.2882	1.920311716	1.984225	1.980166	1.986525584	1.992427
-0.9	-52.4429	-39.2439	-39.00545	-33.2525	-29.9275	-32.14306475	-43.3507	-47.5061	-49.22574292	-50.0345
+0.9	1.585184	0.859209	0.856587538	0.782698	0.609618	1.070481557	0.783455	0.828351	0.831332899	0.841237
-0.95	-54.7706	-40.7691	-41.26632593	-35.1979	-31.6163	-33.3436595	-44.9834	-49.4562	-51.57194748	-52.7997
+0.95	0.861309	0.464059	0.461330853	0.422889	0.326546	0.576977438	0.448752	0.446757	0.449411678	0.451876
-1	-58.4112	-43.1306	-44.85744655	-38.6017	-34.5858	-35.19668628	-47.5059	-52.4898	-55.2623253	-57.1882
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	57.61376	42.6748	44.1550047	37.81376	33.91825	34.8395776	47.01959	51.90276	54.54389842	56.32975
-2.05	-6.35E-01	-0.34092	-0.338061745	-0.31062	-2.39E-01	-0.423232464	-0.3298	-0.32783	-0.330353234	-0.3327
+2.05	55.424	41.2574	41.9997975	35.8294	32.16743	33.72737993	45.50563	50.08202	52.32906035	53.69599
-2.1	-1.84075	-0.99941	-0.996715555	-0.9102	-0.7111	-1.245634386	-0.9659	-0.96373	-0.966797127	-0.97698
+2.1	51.5376	38.71579	38.23219743	32.58764	29.35327	31.72662836	42.78467	46.83234	48.41922531	49.08798
-2.15	-2.64881	-1.77661	-1.772124708	-1.41745	-1.11297	-1.796576856	-1.71709	-1.71304	-1.719127334	-1.72478
+2.15	49.07395	37.09039	35.87561274	30.97301	27.93536	30.44361555	41.04115	44.76231	45.95217544	46.20318
-2.2	-4.12712	-3.24123	-3.237521735	-2.58467	-2.04512	-2.835719214	-3.13185	-3.12753	-3.134735034	-3.16841
+2.2	44.76844	34.22801	32.03589479	28.37881	25.73678	28.17886474	37.96556	41.12926	41.65801256	41.63564
-2.25	-5.0884	-4.21227	-4.203517163	-3.35403	-2.66377	-3.492961185	-4.26811	-4.08889	-4.268178148	-4.26145
+2.25	42.07579	32.42568	30.89710915	26.75245	24.41577	26.74986693	36.02604	38.84847	38.98198259	38.95856

-2.3	-6.80526	-6.00461	-5.948203981	-4.70829	-3.80295	-4.666437525	-6.25646	-6.26498	-6.25732621	-6.25021
+2.3	37.88352	29.29432	28.78286976	23.93782	22.17456	24.26251577	32.65174	34.8963	34.79236364	34.77201
-2.35	-7.89958	-7.12903	-7.070803857	-5.60045	-4.54514	-5.41423438	-7.54323	-7.70995	-7.701119938	-7.69293
+2.35	35.07668	27.34613	27.384165	22.19294	20.78387	22.7123773	30.54978	32.44329	32.36120625	32.33996
-2.4	-10.6442	-9.11892	-9.035884631	-7.18021	-5.87537	-7.199995478	-9.83232	-10.3	-10.29089554	-10.2824
+2.4	30.75639	23.99756	24.83527499	20.22599	18.33257	20.04380581	26.93268	28.23622	28.19063315	28.16795
-2.45	-12.5652	-10.3774	-10.29230632	-8.17975	-6.72709	-8.428528948	-11.2865	-11.9557	-11.94643746	-11.9379
+2.45	28.09521	21.93459	22.9944653	19.20209	16.78317	18.39736056	24.70182	25.68949	25.66927228	25.65051
-2.5	-15.9865	-12.7545	-12.51316739	-9.92393	-8.27286	-10.6094134	-14.1466	-14.8704	-14.86110848	-14.8524
+2.5	23.56291	18.42061	19.87315243	17.3555	14.61753	15.58898048	20.89785	22.19803	22.17653263	22.15659
-2.55	-18.1619	-14.4368	-13.99459669	-11.2336	-9.40609	-11.99224744	-16.0112	-16.7053	-16.69603734	-16.6874
+2.55	20.79447	16.76613	17.97626527	16.16235	13.54947	13.87106272	18.6058	20.05517	20.03296187	20.01235
-2.6	-22.0616	-17.3862	-16.36259664	-13.7036	-11.5147	-14.40960212	-19.2719	-20.2054	-20.18207264	-20.1725
+2.6	17.09418	14.25157	15.04341855	13.89978	11.68842	10.96425202	15.57702	16.41784	16.39449051	16.37284
-2.65	-24.4542	-19.2361	-17.82594004	-15.345	-12.854	-15.92189842	-21.3125	-22.4576	-22.42309563	-22.4136
+2.65	15.32877	12.71298	13.23756725	12.42674	10.67579	9.241555881	13.72789	14.20299	14.17903153	14.1568
-2.7	-28.5944	-22.4388	-20.72327702	-18.2528	-15.2012	-18.53433421	-24.8385	-26.3668	-26.31167276	-26.3023
+2.7	12.18142	10.10879	10.54102049	9.980571	8.925982	7.636737759	10.60466	10.60764	10.58674346	10.68135
-2.75	-31.3165	-24.425	-22.59208656	-19.9506	-16.6741	-20.15125879	-27.0215	-28.7969	-28.72816837	-28.719
+2.75	10.25776	8.527355	8.88671518	8.42252	7.85483	6.658597591	8.711906	8.714527	8.693165394	8.673337
-2.8	-36.0132	-27.8292	-26.20856035	-22.8712	-19.2275	-23.05750492	-30.7569	-32.9704	-32.87732141	-32.8686
+2.8	7.806859	5.869975	6.076555968	5.948016	6.260447	5.009131153	5.669443	5.671072	5.711307853	5.761021
-2.85	-38.9147	-29.9208	-28.53656911	-24.6718	-20.8142	-24.75636029	-33.1766	-35.5398	-35.43103426	-35.4263
+2.85	6.308523	4.267569	4.362557791	4.684743	5.280512	4.01103717	4.447865	4.877973	5.37587674	5.761021
-2.9	-43.8692	-33.6541	-32.56354973	-27.8914	-23.6438	-27.63767871	-37.1338	-39.99	-39.99655727	-39.9886
+2.9	5.22228	3.915934	3.461864734	3.769592	3.856203	3.22605177	4.447865	4.877973	5.37587674	5.761021
-2.95	-46.9029	-35.8219	-35.05860453	-30.0207	-25.5135	-29.39070333	-39.5028	-42.8072	-42.85939018	-42.9282
+2.95	5.22228	3.915934	3.461864734	3.277128	3.430336	3.22605177	4.447865	4.877973	5.37587674	5.761021
-3	-52.0405	-39.2924	-39.33014173	-33.8167	-28.8371	-32.19345063	-43.2912	-47.0931	-47.99641563	-47.9874
+3	5.22228	3.915934	3.461864734	3.277128	2.937777	3.22605177	4.447865	4.877973	5.37587674	5.761021

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-5.22255	-5.53347	-5.874712573	-5.52781	-6.56566	-4.046865921	-4.2946	-2.48666
End Shear	52.18811	55.17606	57.92048126	53.70969	61.96037	43.80792692	46.11361	27.67451
-0.05	-5.22255	-5.53347	-5.874712573	-5.52781	-6.56566	-4.046865921	-4.2946	-2.48666
+0.05	48.04283	50.96023	53.39895726	49.48148	57.17042	39.70472675	41.79445	25.51542
-0.1	-5.22255	-5.53347	-5.874712573	-5.52781	-6.56566	-4.046865921	-4.2946	-2.80802
+0.1	42.73538	46.38849	48.50283329	44.87993	51.36194	34.93800527	36.77685	23.01899
-0.15	-5.80693	-5.53347	-5.874712573	-5.52781	-6.56566	-4.100533755	-4.33028	-3.86035
+0.15	39.76442	43.53232	45.44799023	42.01129	47.93173	32.17509085	34.02516	21.54473
-0.2	-8.30386	-9.09656	-9.096560248	-7.27879	-7.32798	-7.192391989	-7.59691	-5.60539
+0.2	34.93379	38.84351	40.44005489	37.08155	42.05334	28.71922231	30.39847	19.13688
-0.25	-9.77453	-11.3612	-11.36121516	-9.71154	-9.97758	-9.016829783	-9.52326	-6.6438
+0.25	32.11829	35.85477	37.25281393	34.32562	38.77672	26.7071773	28.2612	17.72676
-0.3	-12.8341	-15.1038	-15.10380935	-13.7714	-14.494	-11.99827925	-12.6693	-8.35361
+0.3	27.75631	31.36518	32.47284596	29.85029	33.47231	23.42698224	24.77769	15.44417
-0.35	-14.7223	-17.3232	-17.32315442	-16.1855	-17.1818	-13.7474407	-14.514	-9.36366
+0.35	25.29205	28.74439	29.68733264	27.24522	30.39502	21.50951197	22.74189	14.1202
-0.4	-17.6646	-21.384	-21.52393968	-20.1577	-21.6077	-16.98225219	-17.923	-11.0142
+0.4	21.28448	24.5162	25.20187493	23.05551	25.46425	18.26047226	19.29336	11.99953
-0.45	-19.9883	-24.2114	-24.57947193	-22.5024	-24.2225	-18.92528319	-19.9697	-11.9814
+0.45	18.89121	22.07242	22.61480385	20.64232	22.636	16.47126965	17.39491	10.78372
-0.5	-24.5992	-28.8405	-29.58882794	-27.0271	-29.6559	-22.9306465	-24.2149	-13.5486
+0.5	15.26728	18.17291	18.49631105	16.80657	18.16172	13.61207234	14.3622	8.993619
-0.55	-27.3173	-31.5587	-32.53456396	-29.8168	-33.0737	-25.36729544	-26.8038	-14.6908
+0.55	13.21475	15.94652	16.15115496	14.63313	15.64367	11.97694832	12.62853	8.169639
-0.6	-31.7484	-35.9721	-37.32470214	-34.3578	-38.6522	-29.18511804	-30.8623	-17.0702
+0.6	10.01489	12.44296	12.47208358	11.55438	12.26655	9.421186276	9.917038	6.728858
-0.65	-34.3385	-38.5407	-40.11717299	-37.0077	-41.917	-31.32857325	-33.1422	-18.4604
+0.65	8.274427	10.66039	10.6603872	9.811958	10.35882	8.131411165	8.55938	5.903006
-0.7	-38.7079	-42.6712	-44.61564642	-41.2815	-47.1991	-34.65308121	-36.6804	-20.7053
+0.7	6.450908	8.000683	8.000683141	7.097756	7.393684	6.09050552	6.411058	4.597464
-0.75	-41.2833	-45.0499	-47.21137944	-43.7507	-50.2613	-36.49774016	-38.6451	-22.0038
+0.75	5.420581	6.511375	6.511375033	5.590829	5.751788	4.95686027	5.217748	3.859976
-0.8	-45.7646	-48.8302	-51.34572951	-47.6891	-55.1642	-39.31957648	-41.6528	-24.0773
+0.8	3.818188	4.220734	4.220733653	3.210637	3.367926	3.173105882	3.340111	2.713738
-0.85	-48.3445	-50.9786	-53.70125835	-49.9365	-57.974	-40.91220148	-43.3547	-25.262
+0.85	2.931032	2.770422	2.770422186	2.334383	2.366546	2.222904596	2.3399	2.079052
-0.9	-52.4429	-54.3414	-57.39903373	-53.471	-62.4149	-43.94390053	-46.2903	-27.1276
+0.9	1.585184	1.237919	1.237918515	0.921711	0.986426	0.930015934	0.978964	1.116183
-0.95	-54.7706	-56.2192	-59.47088069	-55.4556	-64.9226	-46.71879194	-49.2159	-28.1766
+0.95	0.861309	0.594502	0.594501812	0.527944	0.53653	0.502853504	0.529319	0.598737
-1	-58.4112	-59.0973	-62.65963821	-58.518	-68.8186	-51.11459875	-53.8488	-29.7976
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	57.61376	58.54484	62.0461327	57.928	68.06511	50.25580386	52.94387	29.48614
-2.05	-6.35E-01	-0.48734	-0.487343359	-0.388	-0.39631	-0.369619434	-0.38907	-0.43468
+2.05	55.424	56.81736	60.13221138	56.08997	65.72679	47.61774123	50.16351	28.51329
-2.1	-1.84075	-1.43757	-1.437567779	-1.13635	-1.14603	-1.081440979	-1.13836	-1.2965
+2.1	51.5376	53.68818	56.67955726	52.78269	61.5477	42.9934127	45.53113	26.76535
-2.15	-2.64881	-2.52993	-2.529929342	-2.02011	-2.05138	-1.923634828	-2.02488	-1.87417
+2.15	49.07395	51.66988	54.46024993	50.66137	58.88248	41.54732705	44.03035	25.64573
-2.2	-4.12712	-4.66125	-4.661251382	-3.68453	-3.72013	-3.50705758	-3.69164	-2.93143
+2.2	44.76844	48.08963	50.53484093	46.91615	54.19997	38.77836036	41.07566	23.67153
-2.25	-5.0884	-6.03612	-6.036115249	-5.11222	-5.23111	-4.555723574	-4.7955	-3.61915
+2.25	42.07579	45.82087	48.05361187	44.55258	51.25757	37.08503904	39.27081	22.42714

-2.3	**-6.80526**	**-8.518**	**-8.518003717**	**-7.62345**	**-7.96726**	**-6.483844283**	**-6.8251**	**-4.84779**
+2.3	**37.88352**	**41.85685**	**43.72791052**	**40.43775**	**46.15451**	**34.01044182**	**35.99625**	**20.26334**
-2.35	**-7.89958**	**-10.1143**	**-10.11428476**	**-9.25248**	**-9.74691**	**-7.698911007**	**-8.10412**	**-5.63111**
+2.35	**35.07668**	**39.37801**	**41.02824617**	**37.87293**	**42.98463**	**32.01552926**	**33.87306**	**18.9162**
-2.4	**-10.6442**	**-13.1255**	**-13.18762347**	**-12.1562**	**-12.9261**	**-9.901178097**	**-10.4285**	**-7.00706**
+2.4	**30.75639**	**35.09748**	**36.37469739**	**33.45684**	**37.54385**	**28.4429428**	**30.07311**	**16.59946**
-2.45	**-12.5652**	**-15.2283**	**-15.3957104**	**-14.0039**	**-14.9529**	**-11.44837858**	**-12.0682**	**-7.87156**
+2.45	**28.09521**	**32.44892**	**33.50006101**	**30.73177**	**34.19619**	**26.15204181**	**27.63781**	**15.17157**
-2.5	**-15.9865**	**-18.9385**	**-19.30384246**	**-17.5579**	**-19.0358**	**-14.17322561**	**-14.9573**	**-9.37075**
+2.5	**23.56291**	**27.91915**	**28.5911033**	**26.08278**	**28.50053**	**22.09081443**	**23.32286**	**13.2395**
-2.55	**-18.1619**	**-21.2788**	**-21.77555109**	**-19.8599**	**-21.7211**	**-15.88912784**	**-16.7773**	**-10.3892**
+2.55	**20.79447**	**25.14124**	**25.58496482**	**23.27262**	**25.08174**	**19.5536832**	**20.63094**	**12.29904**
-2.6	**-22.0616**	**-25.3512**	**-26.08682599**	**-23.8814**	**-26.4343**	**-18.87074831**	**-19.941**	**-12.4152**
+2.6	**17.09418**	**20.42952**	**20.49307974**	**19.3652**	**20.72428**	**16.31477067**	**17.21978**	**10.68719**
-2.65	**-24.4542**	**-27.8887**	**-28.77868502**	**-26.3958**	**-29.3934**	**-20.88228879**	**-22.0761**	**-13.6879**
+2.65	**15.32877**	**18.05375**	**18.05374989**	**16.98152**	**18.0683**	**14.32094419**	**15.11866**	**9.696713**
-2.7	**-28.5944**	**-32.2562**	**-33.4206431**	**-30.7371**	**-34.5216**	**-24.07765886**	**-25.4686**	**-15.8941**
+2.7	**12.18142**	**14.35532**	**14.35531899**	**12.95847**	**13.58931**	**11.4059207**	**12.04446**	**8.013529**
-2.75	**-31.3165**	**-34.9504**	**-36.28918071**	**-33.4228**	**-37.7049**	**-26.0461274**	**-27.5591**	**-17.2639**
+2.75	**10.25776**	**12.10941**	**12.10940955**	**10.52219**	**10.87904**	**9.616825753**	**10.15657**	**6.987487**
-2.8	**-36.0132**	**-39.778**	**-41.43743445**	**-38.0154**	**-43.1653**	**-29.39910283**	**-31.1208**	**-19.6138**
+2.8	**7.806859**	**8.335487**	**8.335486795**	**6.669933**	**6.719186**	**6.576350334**	**6.946257**	**5.257046**
-2.85	**-38.9147**	**-42.5918**	**-44.44272286**	**-40.9919**	**-46.7291**	**-31.44749066**	**-33.2971**	**-21.0587**
+2.85	**6.308523**	**6.059815**	**6.059814546**	**5.527814**	**6.565682**	**4.721019663**	**4.986053**	**4.209869**
-2.9	**-43.8692**	**-47.3515**	**-49.53348458**	**-45.848**	**-52.5211**	**-35.8796847**	**-37.7681**	**-23.5155**
+2.9	**5.22228**	**5.533466**	**5.874719208**	**5.527814**	**6.565682**	**4.046868233**	**4.294576**	**2.486657**
-2.95	**-46.9029**	**-49.9987**	**-52.36860647**	**-48.7556**	**-56.0067**	**-38.74030327**	**-40.7793**	**-25.0136**
+2.95	**5.22228**	**5.533466**	**5.874719208**	**5.527814**	**6.565682**	**4.046868233**	**4.294576**	**2.486657**
-3	**-52.0405**	**-54.8475**	**-57.56792634**	**-53.403**	**-61.5914**	**-43.78923517**	**-46.0939**	**-27.5405**
+3	**5.22228**	**5.533466**	**5.874719208**	**5.527814**	**6.565682**	**4.046868233**	**4.294576**	**2.486657**

2-Span: Shear (Max and Min) Raw Data Results - 40' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-5.22255	-6.78745	-7.34896	-4.79378	-5.41518	-5.95891
End Shear	52.18811	64.11712	66.58673	48.12113	58.93615	58.43045
-0.05	-5.22255	-6.78745	-7.34896	-4.79378	-5.41518	-5.95891
+0.05	48.04283	57.89643	60.1873	44.39702	53.32709	52.76725
-0.1	-5.22255	-7.26993	-7.34896	-4.79378	-5.41518	-5.95891
+0.1	42.73538	50.85793	52.46343	40.49597	46.81659	47.86366
-0.15	-5.80693	-8.41453	-8.26641	-5.09626	-5.41518	-6.03588
+0.15	39.76442	46.97546	48.08434	38.05534	43.0749	44.80579
-0.2	-8.30386	-10.216	-11.2414	-8.68025	-8.68838	-8.36819
+0.2	34.93379	40.71651	41.36067	34.04258	37.76527	39.7958
-0.25	-9.77453	-12.5774	-13.472	-10.7984	-10.8653	-10.5201
+0.25	32.11829	37.10253	37.48315	31.67578	34.69924	36.8517
-0.3	-12.8341	-17.24	-17.9445	-14.7336	-15.0955	-15.5247
+0.3	27.75631	31.56516	31.63338	27.81464	30.45086	32.0677
-0.35	-14.7223	-20.4876	-20.9655	-17.1102	-17.8796	-18.5543
+0.35	25.29205	28.60574	28.35796	25.55594	27.96426	29.281
-0.4	-17.6646	-25.6269	-25.6915	-21.3559	-22.9239	-23.8477
+0.4	21.28448	23.54684	23.24792	21.90355	23.94084	24.57799
-0.45	-19.9883	-28.3082	-28.3447	-24.0027	-25.9488	-26.9706
+0.45	18.89121	21.21913	20.58229	19.62979	21.6079	21.99943
-0.5	-24.5992	-33.0272	-32.4688	-28.6646	-31.2606	-32.3132
+0.5	15.26728	17.5046	16.37783	16.23716	17.66286	17.89857
-0.55	-27.3173	-36.1813	-35.1894	-31.3041	-34.3746	-35.6234
+0.55	13.21475	15.37699	14.38464	14.30368	15.5287	15.69744
-0.6	-31.7484	-40.848	-40.6238	-35.4377	-39.3249	-41.2408
+0.6	10.01489	12.01637	11.25474	11.25135	12.1815	12.30205
-0.65	-34.3385	-43.4002	-43.9399	-37.757	-42.242	-44.4016
+0.65	8.274427	10.11981	9.487809	9.624829	10.27595	10.39043
-0.7	-38.7079	-47.7542	-49.4256	-41.3518	-46.4805	-49.3175
+0.7	6.450908	7.268708	6.743702	7.176838	7.655294	7.331942
-0.75	-41.2833	-50.2086	-53.5464	-43.3447	-48.746	-52.0542
+0.75	5.420581	5.547399	5.292594	5.872625	6.264133	5.75843
-0.8	-45.7646	-57.5137	-61.3481	-46.6325	-52.1789	-56.3072
+0.8	3.818188	3.285622	3.271186	3.750891	4.00095	3.377485
-0.85	-48.3445	-61.6517	-65.7785	-48.3167	-54.033	-58.8192
+0.85	2.931032	2.289499	2.173935	2.626052	2.801122	2.370567
-0.9	-52.4429	-68.129	-73.4532	-50.7672	-57.5042	-62.3716
+0.9	1.585184	0.99074	1.112588	1.114583	1.171369	0.99074
-0.95	-54.7706	-71.758	-78.0589	-52.0672	-61.3818	-64.214
+0.95	0.861309	0.532726	0.598603	0.592539	0.632042	0.538318
-1	-58.4112	-77.4081	-85.2745	-55.0729	-67.5861	-67.5015
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	57.61376	76.33844	83.87757	54.03805	66.3678	66.41103
-2.05	-6.35E-01	-0.39228	-0.43779	-0.43483	-0.46382	-0.38895
+2.05	55.424	72.91959	79.54769	52.47032	62.64435	64.78918
-2.1	-1.84075	-1.15047	-1.2942	-1.29428	-1.36255	-1.15047
+2.1	51.5376	66.87134	71.8723	50.30353	56.26305	61.71824
-2.15	-2.64881	-1.97579	-1.86819	-2.27176	-2.42321	-2.02516
+2.15	49.07395	62.98446	67.21157	48.83298	54.61443	59.65638
-2.2	-4.12712	-3.63573	-3.65684	-4.1462	-4.42261	-3.72992
+2.2	44.76844	56.08771	59.82819	46.05576	51.52393	55.50814
-2.25	-5.0884	-5.0309	-4.87	-5.38176	-5.74055	-5.1717
+2.25	42.07579	51.70424	55.14675	43.97899	49.46396	52.92747

-2.3	-6.80526	-7.83911	-7.27193	-7.6428	-8.15232	-7.90424
+2.3	37.88352	46.92457	48.36639	40.65725	45.68787	48.36592
-2.35	-7.89958	-9.51105	-8.91877	-9.13168	-9.73576	-9.6823
+2.35	35.07668	44.31219	45.07495	38.50018	43.21655	45.41613
-2.4	-10.6442	-12.6715	-11.8631	-11.8464	-12.8397	-12.9621
+2.4	30.75639	39.97764	39.56331	34.63446	38.39446	40.14785
-2.45	-12.5652	-14.6884	-13.7414	-13.6782	-14.838	-15.0043
+2.45	28.09521	37.26785	36.30251	32.15409	35.37431	36.77714
-2.5	-15.9865	-18.2339	-17.1942	-16.9003	-18.3944	-18.7011
+2.5	23.56291	32.09279	31.67295	27.75476	30.18403	31.24019
-2.55	-18.1619	-20.4631	-19.7174	-18.927	-20.8184	-21.1622
+2.55	20.79447	29.25392	29.19862	24.95734	26.93085	27.98041
-2.6	-22.0616	-24.472	-24.1751	-22.6249	-24.7357	-25.4592
+2.6	17.09418	24.62254	24.77634	20.4907	21.88939	22.77533
-2.65	-24.4542	-27.5305	-27.2925	-24.8167	-27.1502	-28.2352
+2.65	15.32877	21.53878	21.94084	17.88139	18.79477	19.54351
-2.7	-28.5944	-32.5751	-32.7505	-28.5807	-31.294	-33.0148
+2.7	12.18142	16.21134	16.90552	13.92034	14.155	14.49429
-2.75	-31.3165	-35.9278	-36.2196	-30.8978	-33.8435	-35.8858
+2.75	10.25776	13.33704	14.19808	11.49554	11.58539	11.41693
-2.8	-36.0132	-41.9503	-42.681	-34.842	-38.8138	-40.792
+2.8	7.806859	9.804363	10.48005	7.965666	7.957707	7.633953
-2.85	-38.9147	-45.7064	-46.716	-37.25	-42.0002	-43.7985
+2.85	6.308523	8.775166	8.69273	5.815017	5.770307	6.322088
-2.9	-43.8692	-52.1763	-53.9825	-41.3172	-48.0997	-48.8942
+2.9	5.22228	6.866879	7.348965	4.793771	5.41518	5.958906
-2.95	-46.9029	-56.4182	-58.6177	-43.5761	-52.0069	-51.9926
+2.95	5.22228	6.787447	7.348965	4.793771	5.41518	5.958906
-3	-52.0405	-63.9578	-66.5877	-47.9622	-58.741	-58.2547
+3	5.22228	6.787447	7.348965	4.793771	5.41518	5.958906

2-Span: Moment (Max and Min) Raw Data Results - 40’ Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	**-3.38E-14**	**-1.5E-14**	**-1.64085E-14**	**-1.5E-14**	**-1.15E-14**	**-1.95727E-14**	**-2E-14**	**-1.6E-14**	**-1.58542E-14**	**-1.6E-14**
End Shear	**4.23E-14**	**3.13E-14**	**3.12639E-14**	**2.83E-14**	**2.20E-14**	**2.10901E-14**	**3.02E-14**	**3.02E-14**	**3.01981E-14**	**3.02E-14**
-0.05	**-10.445095**	**-7.8319**	**-6.923724434**	**-6.55427**	**-5.875540505**	**-6.452117475**	**-8.89571**	**-9.75592**	**-10.75174996**	**-11.5221**
+0.05	**96.08565987**	**73.0907**	**71.79738663**	**61.47638**	**52.57458534**	**59.65653612**	**80.58579**	**87.40017**	**87.54015995**	**87.52136**
-0.1	**-20.89019**	**-15.6638**	**-13.84744887**	**-13.1085**	**-11.75108101**	**-12.90423495**	**-17.7914**	**-19.5118**	**-21.50349992**	**-23.0442**
+0.1	**175.8359554**	**133.8843**	**130.240706**	**111.5552**	**95.82427777**	**109.9576523**	**147.7345**	**159.6366**	**160.286212**	**160.3157**
-0.15	**-31.335285**	**-23.4957**	**-20.7711733**	**-19.6628**	**-17.62662151**	**-19.35635243**	**-26.6871**	**-29.2678**	**-32.25524988**	**-34.5663**
+0.15	**238.5865098**	**183.7301**	**175.9474158**	**151.6614**	**131.0202142**	**151.092195**	**203.1577**	**218.7083**	**231.564404**	**231.546**
-0.2	**-41.78037999**	**-31.3276**	**-27.69489774**	**-26.2171**	**-23.50216202**	**-25.8084699**	**-35.5829**	**-39.0237**	**-43.00699984**	**-46.0884**
+0.2	**287.0938328**	**222.9998**	**209.643404**	**182.9519**	**158.8373136**	**183.3152292**	**246.8285**	**264.6557**	**287.8170224**	**288.6313**
-0.25	**-52.22547499**	**-39.1595**	**-34.61862217**	**-32.7713**	**-29.37770252**	**-32.26058738**	**-44.4786**	**-48.7796**	**-53.7587498**	**-57.6105**
+0.25	**321.1828677**	**251.7609**	**232.2362688**	**205.2387**	**179.0802645**	**206.948053**	**278.8596**	**297.9357**	**329.4975315**	**340.9432**
-0.3	**-62.67056999**	**-46.9914**	**-41.5423466**	**-39.3256**	**-35.25324303**	**-38.71270485**	**-53.3743**	**-58.5355**	**-64.51049976**	**-69.1326**
+0.3	**342.4010135**	**270.4337**	**248.6492024**	**219.0083**	**192.1129676**	**222.572769**	**303.0329**	**329.349**	**357.5369199**	**377.3836**
-0.35	**-73.11566499**	**-54.8233**	**-48.46607104**	**-45.8799**	**-41.12878353**	**-45.16482233**	**-62.27**	**-68.2915**	**-75.26224972**	**-80.6547**
+0.35	**354.0887651**	**282.7354**	**256.5686206**	**231.5027**	**203.1628844**	**230.4380035**	**322.4026**	**348.209**	**375.2024187**	**398.9331**
-0.4	**-83.56075999**	**-62.6552**	**-55.38979547**	**-52.4341**	**-47.00432404**	**-51.6169398**	**-71.1657**	**-78.0474**	**-86.01399968**	**-92.1767**
+0.4	**360.0549293**	**290.2175**	**261.8410395**	**236.0758**	**207.5098526**	**231.0240165**	**331.0107**	**355.2303**	**387.581874**	**406.4594**
-0.45	**-94.00585499**	**-70.4871**	**-62.31351991**	**-58.9884**	**-52.87986454**	**-58.06905728**	**-80.0614**	**-87.8033**	**-96.76574963**	**-103.699**
+0.45	**355.1180369**	**288.5883**	**260.3213912**	**232.9776**	**205.3422391**	**224.9109234**	**329.5194**	**351.2306**	**387.1293384**	**408.9962**
-0.5	**-104.45095**	**-78.319**	**-69.23724434**	**-65.5427**	**-58.75540505**	**-64.52117475**	**-88.9571**	**-97.5592**	**-107.5174996**	**-115.221**
+0.5	**350.904337**	**280.5102**	**257.082857**	**225.1093**	**199.6027673**	**221.7388926**	**322.1073**	**341.3664**	**374.8814817**	**399.9427**
-0.55	**-114.896045**	**-86.1509**	**-76.16096878**	**-72.0969**	**-64.63094555**	**-70.97329223**	**-97.8529**	**-107.315**	**-118.2692496**	**-126.743**
+0.55	**344.8680219**	**272.1003**	**247.8166398**	**220.8183**	**194.9428784**	**219.5019666**	**310.9668**	**332.5098**	**362.0645109**	**378.8285**
-0.6	**-125.34114**	**-93.9828**	**-83.08469321**	**-78.6512**	**-70.50648605**	**-77.4254097**	**-106.749**	**-117.071**	**-129.0209995**	**-138.265**
+0.6	**325.942908**	**255.0052**	**232.4326007**	**208.5863**	**183.5072064**	**209.6188621**	**290.5248**	**312.9685**	**337.4304008**	**357.9126**
-0.65	**-135.786235**	**-101.815**	**-90.00841764**	**-85.2055**	**-76.38202656**	**-83.87752718**	**-115.644**	**-126.827**	**-139.7727495**	**-149.787**
+0.65	**295.4002347**	**232.6321**	**211.3912759**	**189.0497**	**165.8064232**	**192.6279202**	**261.6297**	**283.2882**	**305.4681828**	**324.2026**
-0.7	**-146.23133**	**-109.647**	**-96.93214208**	**-91.7597**	**-82.25756706**	**-90.32964465**	**-124.54**	**-136.583**	**-150.5244994**	**-161.309**
+0.7	**260.1775074**	**204.8447**	**189.547512**	**166.0433**	**144.8493506**	**169.1338153**	**225.2194**	**244.4579**	**266.1686106**	**278.7961**
-0.75	**-156.676425**	**-117.479**	**-103.8558665**	**-98.314**	**-88.13310757**	**-96.78176213**	**-133.436**	**-146.339**	**-161.2762494**	**-172.831**
+0.75	**214.1781902**	**169.5954**	**160.132008**	**137.2723**	**118.7772488**	**139.8073944**	**184.8735**	**197.6002**	**216.7963614**	**223.059**
-0.8	**-167.12152**	**-125.31**	**-110.7795909**	**-104.868**	**-94.00864807**	**-103.2338796**	**-142.331**	**-156.095**	**-172.0279994**	**-184.353**
+0.8	**158.5985448**	**127.7838**	**124.0763195**	**102.3221**	**87.23250619**	**105.3857**	**138.0076**	**144.3359**	**158.6269404**	**158.7012**
-0.85	**-177.566615**	**-133.142**	**-117.7033154**	**-111.684**	**-103.4949385**	**-109.6859971**	**-151.227**	**-165.851**	**-182.7797493**	**-195.876**
+0.85	**99.66197894**	**85.76548**	**85.29246137**	**67.7097**	**56.09786296**	**68.49262309**	**90.12509**	**90.21259**	**97.291196**	**97.65497**
-0.9	**-188.01171**	**-140.974**	**-141.4268702**	**-135.084**	**-128.5404177**	**-116.1381146**	**-160.123**	**-175.607**	**-193.5314993**	**-207.398**
+0.9	**66.25393392**	**47.6866**	**47.28399226**	**37.55843**	**30.34352981**	**45.42825419**	**46.10418**	**46.02518**	**46.10651183**	**46.10975**
-0.95	**-206.1576414**	**-148.806**	**-196.9867322**	**-183.45**	**-166.8873853**	**-122.590232**	**-169.019**	**-185.363**	**-204.2832492**	**-218.92**
+0.95	**32.72975981**	**17.87434**	**17.75709365**	**16.23986**	**12.67941903**	**22.25745799**	**17.28282**	**17.21358**	**17.29067946**	**17.36217**
-1	**-256.5694537**	**-156.638**	**-254.5816837**	**-236.013**	**-215.3719216**	**-129.0423544**	**-177.915**	**-195.119**	**-216.6894917**	**-240.825**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-256.5694537**	**-156.638**	**-254.5816837**	**-236.013**	**-215.3719216**	**-129.0423544**	**-177.915**	**-195.119**	**-216.6894917**	**-240.825**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-206.1569938**	**-148.805**	**-196.9859817**	**-183.45**	**-166.8873939**	**-122.5899721**	**-169.019**	**-185.363**	**-204.2833178**	**-218.919**
+2.05	**32.72975922**	**17.85481**	**17.74105092**	**16.22671**	**12.67331951**	**22.23170176**	**17.26375**	**17.19526**	**17.27302348**	**17.34517**
-2.1	**-188.0020775**	**-140.974**	**-141.4267282**	**-135.083**	**-128.5406725**	**-116.1378686**	**-160.123**	**-175.607**	**-193.5315644**	**-207.397**
+2.1	**66.26705742**	**47.6557**	**47.29367173**	**37.5654**	**30.34676507**	**45.40457478**	**46.08333**	**46.00515**	**46.08723675**	**46.12004**
-2.15	**-177.5575176**	**-133.142**	**-117.7034**	**-111.684**	**-103.4949452**	**-109.685765**	**-151.227**	**-165.851**	**-182.7798109**	**-195.875**
+2.15	**99.67430496**	**85.77897**	**85.26841261**	**67.71763**	**56.08984947**	**68.47032378**	**90.148**	**90.21882**	**97.30622572**	**97.66946**
-2.2	**-167.1129577**	**-125.31**	**-110.7796705**	**-104.868**	**-94.00885769**	**-103.2336615**	**-142.332**	**-156.095**	**-172.0280574**	**-184.353**
+2.2	**159.6159842**	**127.7956**	**124.0866345**	**102.3288**	**87.22393384**	**105.4157199**	**138.015**	**144.341**	**158.6415181**	**158.7153**
-2.25	**-156.6683978**	**-117.478**	**-103.8559411**	**-98.3138**	**-88.13330416**	**-96.78155794**	**-133.436**	**-146.339**	**-161.2763039**	**-172.831**

+2.25	214.6076993	169.6057	160.1386056	137.2777	118.7680048	139.8362366	184.8793	197.5943	216.8091479	223.079
-2.3	-146.2238378	-109.646	-96.93221161	-91.7596	-82.25775063	-90.32945439	-124.54	-136.583	-150.5245504	-161.309
+2.3	259.9714062	204.8524	189.5542432	166.0468	144.8391597	169.1606752	225.2153	244.45	266.178357	278.8136
-2.35	-135.7792779	-101.814	-90.00848214	-85.2053	-76.3821971	-83.87735085	-115.644	-126.827	-139.772797	-149.787
+2.35	296.1917365	232.6365	211.3656564	189.0475	165.8053817	192.6521192	261.6232	283.2771	305.4737727	324.2163
-2.4	-125.334718	-93.9824	-83.08475267	-78.6511	-70.50664357	-77.42524731	-106.749	-117.071	-129.0210435	-138.265
+2.4	326.7724812	255.001	232.4052548	208.5817	183.5050892	209.6396471	290.515	312.9533	337.4248535	357.9213
-2.45	-114.8901581	-86.1505	-76.16102321	-72.0968	-64.63109003	-70.97314377	-97.853	-107.315	-118.26929	-126.742
+2.45	345.5386932	272.0921	247.8227686	220.811	194.939464	219.5187856	310.9527	332.5301	362.0540153	378.6914
-2.5	-104.4455982	-78.3187	-69.23729374	-65.5426	-58.7555365	-64.52104023	-88.9573	-97.5595	-107.5175365	-115.22
+2.5	351.3904903	280.4974	257.0863809	225.0988	199.6097551	221.7512384	322.0882	341.381	374.8651172	399.9562
-2.55	-94.0010383	-70.4868	-62.31356427	-58.9883	-52.87998297	-58.06893669	-80.0616	-87.8035	-96.76578305	-103.698
+2.55	354.899318	288.6013	260.3201266	232.9618	205.3467911	224.8986349	329.5399	351.2567	387.1455487	409.0036
-2.6	-83.55647839	-62.6549	-55.3898348	-52.434	-47.00442944	-51.61683315	-71.1658	-78.0476	-86.01402957	-92.1763
+2.6	360.0174039	290.226	261.8368901	236.083	207.5131881	231.0084381	331.0261	355.2513	387.5921168	406.4559
-2.65	-73.11191848	-54.8231	-48.46610534	-45.8798	-41.12887591	-45.16472961	-62.2701	-68.2916	-75.26227609	-80.6543
+2.65	353.7457015	282.7387	256.5666792	231.5067	203.164727	230.4185356	322.4121	348.224	375.2058192	398.9229
-2.7	-62.66735857	-46.9912	-41.54237587	-39.3255	-35.25332238	-38.71262607	-53.3744	-58.5357	-64.51052261	-69.1323
+2.7	343.1333555	270.4294	248.6793465	219.0331	192.1125585	222.5489041	303.0361	329.3573	357.530386	377.4038
-2.75	-52.22279866	-39.1593	-34.6186464	-32.7713	-29.37776885	-32.26052253	-44.4786	-48.7797	-53.75876913	-57.6102
+2.75	322.4085589	251.751	232.2623452	205.2601	179.0782206	206.9770139	278.8544	297.9367	329.4835428	340.9552
-2.8	-41.77823876	-31.3275	-27.69491693	-26.217	-23.50221532	-25.80841899	-35.5829	-39.0238	-43.00701565	-46.0882
+2.8	288.1057	222.9837	209.6685136	182.9695	158.8335479	183.3389533	246.8165	264.6477	287.8345458	288.4699
-2.85	-31.33367885	-23.4956	-20.77118747	-19.6628	-17.62666179	-19.35631545	-26.6872	-29.2678	-32.25526216	-34.5661
+2.85	239.3659805	183.7514	175.9669586	151.6749	131.014467	151.1103705	203.1384	218.6925	231.5734029	231.5547
-2.9	-20.88911894	-15.6637	-13.847458	-13.1085	-11.75110826	-12.90421191	-17.7915	-19.5119	-21.50350868	-23.0441
+2.9	175.4768385	133.8988	130.2541958	111.5656	95.8171125	109.9699332	147.7504	159.6538	160.2857092	160.2868
-2.95	-10.44455903	-7.83187	-6.92372853	-6.55426	-5.875554731	-6.452108373	-8.89573	-9.75595	-10.7517552	-11.522
+2.95	95.84589715	73.09802	71.80435354	61.48174	52.57705027	59.66276085	80.59389	87.40893	87.54939048	87.53024
-3	-8.33E-14	-4.6E-14	-4.62232E-14	-4.1E-14	-3.27E-14	-4.05313E-14	-4.4E-14	-5.2E-14	-5.24025E-14	-5.2E-14
+3	5.09E-14	2.4E-14	2.55468E-14	3.1E-14	2.41E-14	2.2267E-14	2.75E-14	2.92E-14	2.89078E-14	2.87E-14

2-Span: Moment (Max and Min) Raw Data Results - 40' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.38E-14	-2.8E-14	-3E-14	-2.2E-14	-2.7E-14	-2E-14	-2.2E-14	-1.9E-14
End Shear	4.23E-14	4.97E-14	5.15E-14	3.55E-14	3.55E-14	3.77E-14	3.99E-14	2.18E-14
-0.05	-10.445095	-11.0669	-11.7494	-11.0556	-13.1313	-8.09373	-8.58919	-4.97332
+0.05	96.08565987	101.9205	106.7979	98.96296	113.7559	79.59227	83.78134	51.03084
-0.1	-20.89019	-22.1339	-23.4989	-22.1113	-26.2627	-16.1875	-17.1784	-9.94663
+0.1	175.8359554	188.4277	197.087	182.4092	208.9959	143.5033	151.0561	94.05859
-0.15	-31.335285	-33.2008	-35.2483	-33.1669	-39.394	-24.2812	-25.7676	-14.92
+0.15	238.5865098	259.8825	271.4749	251.0721	286.8733	193.0505	203.5291	129.2684
-0.2	-41.78037999	-44.2678	-46.9977	-44.2225	-52.5253	-32.3749	-34.3568	-19.8933
+0.2	287.0938328	317.058	330.4571	305.191	347.0965	234.7385	248.5009	156.9039
-0.25	-52.22547499	-55.3347	-58.7471	-55.2781	-65.6566	-40.4687	-42.946	-24.8666
+0.25	321.1828677	359.8577	374.1388	344.9876	399.036	266.7922	282.3336	177.2676
-0.3	-62.67056999	-66.4016	-70.4966	-66.3338	-78.788	-48.5624	-51.5351	-29.8399
+0.3	342.4010135	388.8486	403.1618	378.477	440.2643	288.7529	305.4527	190.7207
-0.35	-73.11566499	-77.4686	-82.246	-77.3894	-91.9193	-56.6561	-60.1243	-34.8132
+0.35	354.0887651	404.929	424.5016	402.7052	465.0205	301.0955	318.3667	197.6828
-0.4	-83.56075999	-88.5355	-93.9954	-88.445	-105.051	-64.7499	-68.7135	-39.7865
+0.4	360.0549293	418.7259	437.353	413.6656	474.6086	309.2355	327.466	198.6795
-0.45	-94.00585499	-99.6025	-105.745	-99.5007	-118.182	-72.8436	-77.3027	-44.7599
+0.45	355.1180369	419.8404	436.8134	412.1565	469.7778	310.8093	328.9477	194.3219
-0.5	-104.45095	-110.669	-117.494	-110.556	-131.313	-80.9373	-85.8919	-49.7332
+0.5	350.904337	410.5587	427.881	403.2692	461.0839	303.6813	321.2565	188.2727
-0.55	-114.896045	-121.736	-129.244	-121.612	-144.445	-89.0311	-94.4811	-54.7065
+0.55	344.8680219	393.1703	411.1795	388.6581	447.1768	290.0604	307.2084	185.0003
-0.6	-125.34114	-132.803	-140.993	-132.668	-157.576	-97.1248	-103.07	-59.6798
+0.6	325.942908	366.2387	382.662	362.7382	419.1212	272.6065	288.2327	179.0924
-0.65	-135.786235	-143.87	-152.743	-143.723	-170.707	-105.219	-111.659	-64.6531
+0.65	295.4002347	334.7178	346.4065	326.557	378.1335	249.0228	263.3504	166.9215
-0.7	-146.23133	-154.937	-164.492	-154.779	-183.839	-113.312	-120.249	-69.6264
+0.7	260.1775074	293.0637	303.1141	281.2719	325.7061	218.2221	230.7582	148.9994
-0.75	-156.676425	-166.004	-176.241	-165.834	-196.97	-121.406	-128.838	-74.5998
+0.75	214.1781902	242.4195	249.818	228.1491	263.084	181.0457	191.3477	125.8967
-0.8	-167.12152	-177.071	-187.991	-176.89	-210.101	-129.5	-137.427	-79.5731
+0.8	158.5985448	184.036	187.8339	169.759	191.8156	138.4133	146.094	98.24275
-0.85	-177.566615	-188.138	-199.74	-187.946	-223.233	-137.593	-146.016	-84.5464
+0.85	99.66197894	121.7449	121.7449	110.2144	115.687	92.59167	97.46491	71.14628
-0.9	-188.01171	-199.205	-211.49	-199.001	-236.364	-169.756	-180.258	-89.5197
+0.9	66.25393392	67.82004	67.82004	54.24818	54.25861	51.49486	54.20512	47.0729
-0.95	-206.1576414	-210.272	-223.239	-210.057	-249.495	-231.518	-245.263	-94.493
+0.95	32.72975981	25.49787	25.49787	20.33273	20.38813	19.32089	20.33777	22.88708
-1	-256.5694537	-221.339	-234.989	-221.113	-262.627	-295.308	-312.415	-116.659
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-256.5694537	-221.339	-234.989	-221.113	-262.627	-295.308	-312.415	-116.659
+2	0	0	0	0	0	0	0	0
-2.05	-206.1569938	-210.272	-223.239	-210.057	-249.496	-231.518	-245.262	-94.493
+2.05	32.72975922	25.46889	25.46889	20.31029	20.41532	19.3036	20.31958	22.87878
-2.1	-188.0020775	-199.205	-211.49	-199.001	-236.365	-169.756	-180.256	-89.5197
+2.1	66.26705742	67.83756	67.83756	54.22897	54.24635	51.46756	54.17638	47.06524
-2.15	-177.5575176	-188.138	-199.74	-187.946	-223.233	-137.594	-146.016	-84.5464
+2.15	99.67430496	121.7648	121.7648	110.247	115.7269	92.60361	97.47749	71.13909
-2.2	-167.1129577	-177.071	-187.991	-176.89	-210.102	-129.5	-137.426	-79.573
+2.2	159.6159842	184.0529	187.8495	169.7656	191.8034	138.424	146.1051	98.23527
-2.25	-156.6683978	-166.004	-176.242	-165.834	-196.97	-121.406	-128.837	-74.5997

+2.25	214.6076993	242.4351	249.8318	228.1434	263.0709	181.0558	191.3582	125.8889
-2.3	-146.2238378	-154.937	-164.492	-154.779	-183.839	-113.312	-120.248	-69.6264
+2.3	259.9714062	293.0767	303.1247	281.2646	325.6904	218.2308	230.7671	148.9909
-2.35	-135.7792779	-143.87	-152.743	-143.723	-170.708	-105.219	-111.659	-64.6531
+2.35	296.1917365	334.7269	346.4126	326.5469	378.1629	249.0294	263.357	166.9123
-2.4	-125.334718	-132.803	-140.993	-132.668	-157.576	-97.1248	-103.07	-59.6798
+2.4	326.7724812	366.2428	382.6555	362.724	419.1453	272.6103	288.2364	179.0823
-2.45	-114.8901581	-121.736	-129.244	-121.612	-144.445	-89.0311	-94.4807	-54.7065
+2.45	345.5386932	393.1628	411.1675	388.6389	447.1944	290.0577	307.2051	184.9891
-2.5	-104.4455982	-110.669	-117.494	-110.556	-131.314	-80.9374	-85.8915	-49.7332
+2.5	351.3904903	410.5454	427.8625	403.2698	461.094	303.6926	321.2498	188.2641
-2.55	-94.0010383	-99.6024	-105.745	-99.5006	-118.182	-72.8436	-77.3024	-44.7598
+2.55	354.899318	419.8565	436.8345	412.1841	469.7698	310.817	328.9563	194.315
-2.6	-83.55647839	-88.5355	-93.9955	-88.445	-105.051	-64.7499	-68.7132	-39.7865
+2.6	360.0174039	418.7352	437.367	413.6869	474.5932	309.2392	327.4703	198.6718
-2.65	-73.11191848	-77.4685	-82.2461	-77.3894	-91.9195	-56.6562	-60.1241	-34.8132
+2.65	353.7457015	404.9306	424.5076	402.7192	465.0467	301.0931	318.3646	197.6928
-2.7	-62.66735857	-66.4016	-70.4966	-66.3338	-78.7882	-48.5624	-51.5349	-29.8399
+2.7	343.1333555	388.8396	403.1565	378.4831	440.2813	288.7462	305.4459	190.7295
-2.75	-52.22279866	-55.3347	-58.7472	-55.2781	-65.6568	-40.4687	-42.9458	-24.8666
+2.75	322.4085589	359.8405	374.1248	344.9835	399.043	266.7807	282.3218	177.2753
-2.8	-41.77823876	-44.2677	-46.9978	-44.2225	-52.5255	-32.3749	-34.3566	-19.8933
+2.8	288.1057	317.0319	330.4337	305.1785	347.0912	234.722	248.4837	156.9102
-2.85	-31.33367885	-33.2008	-35.2483	-33.1669	-39.3941	-24.2812	-25.7675	-14.9199
+2.85	239.3659805	259.8471	271.4416	251.0506	286.8574	193.0729	203.5063	129.2732
-2.9	-20.88911894	-22.1339	-23.4989	-22.1113	-26.2627	-16.1875	-17.1783	-9.94663
+2.9	175.4768385	188.4478	197.1085	182.4288	208.9688	143.5187	151.0724	94.06182
-2.95	-10.44455903	-11.0669	-11.7494	-11.0556	-13.1314	-8.09373	-8.58915	-4.97332
+2.95	95.84589715	101.9306	106.8088	98.97287	113.7678	79.56134	83.74878	51.03248
-3	-8.33E-14	-5.8E-14	-6.2E-14	-5.5E-14	-6.6E-14	-5.4E-14	-5.6E-14	-3.9E-14
+3	5.09E-14	3.51E-14	3.62E-14	3.41E-14	3.7E-14	3.01E-14	3.18E-14	2.03E-14

2-Span: Moment (Max and Min) Raw Data Results - 40' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.38E-14	-2.6E-14	-3E-14	-2.4E-14	-3E-14	-2.2E-14
End Shear	4.23E-14	3.55E-14	4.24E-14	4E-14	4.26E-14	3.55E-14
-0.05	-10.445095	-13.5749	-14.6979	-9.58756	-10.8304	-11.9178
+0.05	96.08565987	115.7929	121.453	88.79405	106.6542	105.5345
-0.1	-20.89019	-27.1498	-29.3959	-19.1751	-21.6607	-23.8356
+0.1	175.8359554	208.6853	218.4557	164.4551	192.3784	194.8846
-0.15	-31.335285	-40.7247	-44.0938	-28.7627	-32.4911	-35.7535
+0.15	238.5865098	281.8528	292.0836	227.7477	258.4494	268.4962
-0.2	-41.78037999	-54.2996	-58.7917	-38.3502	-43.3214	-47.6713
+0.2	287.0938328	338.1413	348.7207	278.3281	310.5273	326.2826
-0.25	-52.22547499	-67.8745	-73.4896	-47.9378	-54.1518	-59.5891
+0.25	321.1828677	390.779	404.3935	316.5588	351.729	368.7842
-0.3	-62.67056999	-81.4494	-88.1876	-57.5254	-64.9821	-71.5069
+0.3	342.4010135	425.091	440.3531	342.8938	386.5351	409.4447
-0.35	-73.11566499	-95.0242	-102.885	-67.1129	-75.8125	-83.4247
+0.35	354.0887651	441.7749	461.8073	357.8785	406.4493	435.3394
-0.4	-83.56075999	-108.599	-117.583	-76.7005	-86.6429	-95.3425
+0.4	360.0549293	442.9589	479.9207	367.4524	421.1505	447.3273
-0.45	-94.00585499	-122.174	-132.281	-86.288	-97.4732	-107.26
+0.45	355.1180369	449.1614	482.4813	369.7491	423.6966	446.2429
-0.5	-104.45095	-135.749	-146.979	-95.8756	-108.304	-119.178
+0.5	350.904337	443.2713	477.6065	361.7499	414.8304	437.9505
-0.55	-114.896045	-149.324	-161.677	-105.463	-119.134	-131.096
+0.55	344.8680219	421.2514	455.8633	344.5975	395.3939	421.3722
-0.6	-125.34114	-162.899	-176.375	-115.051	-129.964	-143.014
+0.6	325.942908	391.1541	423.0116	324.0472	366.1918	392.8851
-0.65	-135.786235	-176.474	-191.073	-124.638	-140.795	-154.932
+0.65	295.4002347	362.4713	378.4649	295.711	328.3846	353.6186
-0.7	-146.23133	-190.048	-205.771	-134.226	-151.625	-166.849
+0.7	260.1775074	318.2779	323.4563	259.0101	289.3746	304.8183
-0.75	-156.676425	-203.623	-220.469	-143.813	-162.455	-178.767
+0.75	214.1781902	258.6376	255.8621	214.9396	239.1277	247.8465
-0.8	-167.12152	-217.198	-235.167	-153.401	-173.286	-190.685
+0.8	158.5985448	185.2473	176.203	164.5861	179.1942	184.0513
-0.85	-177.566615	-230.773	-249.865	-162.989	-187.563	-202.746
+0.85	99.66197894	113.5367	105.5667	109.6693	116.9805	115.7866
-0.9	-188.01171	-287.246	-306.557	-217.265	-238.366	-269.12
+0.9	66.25393392	53.0772	52.49956	60.82481	64.87979	54.18183
-0.95	-206.1576414	-383.301	-397.301	-285.714	-327.748	-359.469
+0.95	32.72975981	20.43109	22.87495	22.78325	24.30213	20.4561
-1	-256.5694537	-482.341	-490.569	-356.831	-420.979	-453.58
+1	0	0	0	0	0	0
(Span 2) -2	-256.5694537	-482.341	-490.569	-356.831	-420.979	-453.58
+2	0	0	0	0	0	0
-2.05	-206.1569938	-383.3	-397.3	-285.713	-327.75	-359.469
+2.05	32.72975922	20.41435	22.87182	22.76331	24.28086	20.30978
-2.1	-188.0020775	-287.246	-306.557	-217.264	-238.366	-269.118
+2.1	66.26705742	53.05082	52.5018	60.79325	64.84614	54.27704
-2.15	-177.5575176	-230.773	-249.865	-162.988	-187.564	-202.745
+2.15	99.67430496	113.5304	105.5657	109.5342	116.8365	115.7307
-2.2	-167.1129577	-217.198	-235.167	-153.401	-173.286	-190.685
+2.2	159.6159842	185.2384	176.2016	164.5764	179.1869	184.0442
-2.25	-156.6683978	-203.623	-220.469	-143.813	-162.455	-178.767

+2.25	214.6076993	258.6257	255.8599	214.9512	239.1193	247.858
-2.3	-146.2238378	-190.049	-205.771	-134.226	-151.625	-166.849
+2.3	259.9714062	318.2615	323.4585	259.0202	289.3628	304.8475
-2.35	-135.7792779	-176.474	-191.073	-124.638	-140.795	-154.932
+2.35	296.1917365	362.4494	378.4677	295.7187	328.3782	353.6457
-2.4	-125.334718	-162.899	-176.375	-115.051	-129.964	-143.014
+2.4	326.7724812	391.1355	423.0134	324.0519	366.1831	392.9092
-2.45	-114.8901581	-149.324	-161.677	-105.463	-119.134	-131.096
+2.45	345.5386932	421.2403	455.8607	344.5946	395.4016	421.3923
-2.5	-104.4455982	-135.749	-146.979	-95.8754	-108.304	-119.178
+2.5	351.3904903	443.2546	477.6041	361.7626	414.854	437.9659
-2.55	-94.0010383	-122.174	-132.281	-86.2879	-97.4732	-107.26
+2.55	354.899318	449.1749	482.4776	369.7577	423.7157	446.2299
-2.6	-83.55647839	-108.599	-117.583	-76.7003	-86.6429	-95.3425
+2.6	360.0174039	442.9449	479.9226	367.4565	421.1644	447.309
-2.65	-73.11191848	-95.0243	-102.886	-67.1128	-75.8125	-83.4247
+2.65	353.7457015	441.7626	461.8041	357.8755	406.4577	435.3534
-2.7	-62.66735857	-81.4494	-88.1876	-57.5252	-64.9822	-71.5069
+2.7	343.1333555	425.0719	440.3491	342.8858	386.5455	409.4523
-2.75	-52.22279866	-67.8745	-73.4896	-47.9377	-54.1518	-59.5891
+2.75	322.4085589	390.7522	404.3957	316.5453	351.7323	368.7834
-2.8	-41.77823876	-54.2996	-58.7917	-38.3502	-43.3214	-47.6713
+2.8	288.1057	338.1435	348.7214	278.3088	310.5212	326.2749
-2.85	-31.33367885	-40.7247	-44.0938	-28.7626	-32.4911	-35.7534
+2.85	239.3659805	281.8817	292.0816	227.7222	258.4754	268.4811
-2.9	-20.88911894	-27.1498	-29.3959	-19.1751	-21.6607	-23.8356
+2.9	175.4768385	208.7052	218.4524	164.4507	192.399	194.8618
-2.95	-10.44455903	-13.5749	-14.6979	-9.58754	-10.8304	-11.9178
+2.95	95.84589715	115.8041	121.4479	88.80068	106.6648	105.5426
-3	-8.33E-14	-8E-14	-8.8E-14	-6.4E-14	-6.9E-14	-7.5E-14
+3	5.09E-14	4.69E-14	5.95E-14	3.9E-14	4.25E-14	4.4E-14

2-Span: Shear (Max and Min) Raw Data Results - 45' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-15.96119008	-13.85835244	-14.3651044	-10.94587365	-11.65907673	-10.97171784	-13.09514257	-8.751914977	-9.21254	-5.11293598
End Shear	148.5538243	132.4559929	133.6984415	108.4086685	114.1573349	106.0678308	123.1320741	91.08110975	95.92598	54.79759372
-0.05	-16.03754049	-13.93470285	-18.09047477	-10.94587365	-11.65907673	-10.97171784	-13.09514257	-8.751914977	-9.21254	-5.11293598
+0.05	134.3746013	121.1221285	121.4649867	99.42620222	104.5165914	97.035492	112.2585066	81.38359419	85.6824	50.15362161
-0.1	-16.30493743	-14.20209979	-22.90523899	-10.94587365	-11.65907673	-10.97171784	-13.09514257	-8.751914977	-9.21254	-5.438209216
+0.1	121.1967545	110.7284155	109.559787	91.11542059	95.60813485	88.65884277	102.1984373	72.56420901	76.38338	45.80403078
-0.15	-17.47151636	-17.91625579	-26.87071289	-11.75289569	-11.75289569	-10.97171784	-13.09514257	-8.944258784	-9.41501	-7.849933354
+0.15	110.9492266	102.5918803	100.3004217	84.54083103	88.56886119	82.45490239	94.76343338	65.94275141	69.41342	42.37623285
-0.2	-23.40622874	-26.39166648	-31.73584852	-18.27341555	-18.27341555	-15.32678687	-15.62919153	-13.90441124	-14.6362	-10.84658901
+0.2	98.54674811	92.67056503	89.09220809	76.84493568	80.33864571	74.18468195	84.90031166	57.95520823	61.00548	38.17227826
-0.25	-28.20157946	-33.26894583	-35.48130756	-23.45766709	-23.45766709	-20.94185231	-21.87303207	-18.06299677	-19.0424	-13.22173657
+0.25	88.97840111	84.95210994	80.44403399	70.42282859	73.48304393	67.54573322	76.95616328	52.0387487	55.0992	34.88559564
-0.3	-34.24015105	-41.95758546	-40.12291782	-29.87525269	-29.87525269	-27.90920633	-29.62580959	-23.3006924	-24.5764	-16.1524916
+0.3	77.49726573	75.60240948	69.45083618	62.3174288	64.83397746	59.77926732	67.71757006	46.37124967	49.07881	30.88879202
-0.35	-40.67309079	-48.9600153	-46.52093451	-35.27891683	-35.39108839	-33.42382283	-35.76631974	-27.38858762	-28.8929	-18.45877407
+0.35	69.03716192	68.74233286	61.94088893	56.26656702	58.38976055	53.74507309	60.56001077	41.95190458	44.38532	27.79243353
-0.4	-51.74553063	-57.74710584	-55.52301613	-43.47090769	-44.23782216	-40.44232973	-43.58708385	-32.47693266	-34.2647	-21.2832624
+0.4	58.85139264	60.04785226	52.9785634	48.93777685	50.59703749	46.45580089	51.94076418	36.41870975	38.5119	24.06427944
-0.45	-60.63268524	-64.78102032	-62.6132506	-49.92258814	-51.21321791	-46.7622063	-51.29895479	-37.46216222	-39.5675	-23.48839334
+0.45	51.08082221	53.04270602	46.1698521	43.28432776	44.59632443	40.84926208	45.33431895	32.19880254	34.03099	21.20744864
-0.5	-71.73879267	-73.54717175	-71.33278436	-57.83051317	-59.77343585	-54.86263512	-61.20471057	-44.0423165	-46.5627	-27.20116651
+0.5	42.19662487	45.11545916	38.13819791	36.50877946	37.41880166	34.15193156	37.4735071	27.24107671	28.77004	17.80946371
-0.55	-80.59177654	-80.51522628	-78.19045822	-64.00976169	-66.47096463	-61.20565766	-68.97923751	-49.58916529	-52.4561	-30.53975412
+0.55	35.53604358	39.10168943	32.11652085	31.34310815	31.95890891	29.06484045	31.52943976	23.45599036	24.75479	15.48431466
-0.6	-91.57760277	-89.13645028	-86.94459225	-71.520664	-74.62302089	-68.93304007	-78.47374573	-56.4344119	-59.7292	-34.61156312
+0.6	27.79808287	32.01605813	25.05323999	25.2337725	25.51824704	23.21031962	24.79302207	18.97223231	20.0002	13.02258671
-0.65	-100.7244719	-95.93759841	-94.66557791	-77.33711486	-80.94536571	-74.93173631	-85.86365112	-61.55116277	-65.1686	-37.77602523
+0.65	22.09926093	26.70837756	19.93361835	20.6462458	20.69649265	19.19119179	20.38380093	15.59908282	16.4249	11.14219614
-0.7	-112.6973798	-104.2853027	-104.685994	-84.33804466	-88.5676224	-82.17133946	-94.80784155	-67.49372117	-71.4894	-41.59942702
+0.7	16.47486207	20.54515386	14.82857587	15.92128942	15.92128942	14.48797215	15.23377171	12.11745629	12.75522	8.913409169
-0.75	-122.1152233	-110.8148274	-112.5219638	-89.70132372	-94.41745667	-87.73391788	-101.7018635	-71.8820553	-76.16	-44.54056231
+0.75	13.22587673	16.00635583	11.9044207	12.50412352	12.50412352	11.00001918	11.42302485	9.516971333	10.01786	7.235518144
-0.8	-133.6396357	-118.7558035	-122.0644145	-96.07931939	-101.3882625	-94.37100732	-109.9566638	-76.90626106	-81.5112	-48.05404719
+0.8	9.519417411	10.84172192	8.568515564	8.557948158	8.557948158	6.919165265	6.9847054	6.449422164	6.788865	5.280038189
-0.85	-142.6253377	-124.9052924	-129.4758802	-100.8990712	-106.6682811	-99.40567378	-116.243537	-83.69564439	-88.1382	-50.72264386
+0.85	6.844800838	7.130895738	6.161282218	5.338203499	5.338203499	4.479634043	4.529745299	4.263431566	4.487823	3.836934664
-0.9	-153.5166744	-132.3017277	-149.2044339	-106.5411656	-112.865979	-105.3255041	-123.6698623	-91.9026158	-96.796	-53.86471082
+0.9	3.873185519	3.043955645	3.457152735	2.426059359	2.426059359	1.821428764	1.934772206	1.845599879	1.942737	2.195117561
-0.95	-161.9206997	-137.959101	-146.1267536	-110.7270202	-117.47886	-109.7404659	-129.2383219	-98.15172753	-103.386	-56.21156707
+0.95	1.799063256	1.412386394	1.604015781	1.009780228	1.009780228	0.899235252	0.912421387	0.856047907	0.901103	1.019090997
-1	-171.9897712	-144.6685691	-155.140957	-115.5202721	-122.7818213	-114.8282957	-135.6970921	-106.0942209	-111.784	-58.92069944
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.70E+02	1.43E+02	153.3423598	1.15E+02	1.22E+02	113.845981	134.4459729	1.04E+02	1.10E+02	5.84E+01
-2.05	-1.80E+00	-1.40E+00	-1.585454499	-1.13E+00	-1.13E+00	-0.900334067	-0.913520269	-8.57E-01	-9.02E-01	-1.01E+00
+2.05	1.62E+02	1.38E+02	1.46E+02	110.7222343	117.4735778	1.10E+02	1.29E+02	9.81E+01	103.3801	5.62E+01
-2.1	-4.44E+00	-3.81E+00	-3.936981972	-2.998168786	-2.998168786	-2.392757324	-2.410803273	-2.278255425	-2.39816	-2.502422236
+2.1	1.51E+02	1.31E+02	1.37E+02	105.4430071	111.6580469	1.04E+02	1.22E+02	9.03E+01	95.09431	5.33E+01
-2.15	-6.85E+00	-7.14E+00	-6.16128272	-5.610341373	-5.610341373	-4.482138903	-4.532250113	-4.265395493	-4.48989	-3.830233753
+2.15	142.415166	124.8999694	128.7869907	100.8935077	106.6621799	99.40001162	116.2364537	83.6892307	88.13143	50.72167616
-2.2	-10.22988002	-11.83330935	-9.188629659	-9.320722243	-9.320722243	-7.687524407	-7.832213513	-7.027990149	-7.39788	-5.650613109
+2.2	131.1377243	117.1832845	119.5532044	94.82825587	100.0195625	93.06717536	108.3322749	75.93891836	80.48054	47.36561491
-2.25	-13.22713409	-16.01158621	-11.86928288	-12.50800518	-12.50800518	-11.00384623	-11.42719996	-9.519339095	-10.0204	-7.227633561

+2.25	121.8854986	110.8087355	111.9546111	89.69509024	94.41065239	87.72763338	101.6940643	71.87803837	76.15576	44.53948928
-2.3	-17.32712141	-21.74056104	-15.53565852	-16.81414946	-16.81414946	-15.40306897	-16.2348604	-12.79629779	-13.4698	-9.339340764
+2.3	110.0801505	102.6247018	102.2182314	82.95676023	87.06258314	80.74134038	93.03874654	66.34130603	70.26334	40.84617547
-2.35	-22.12181811	-26.71439029	-19.68910522	-20.65147888	-20.70198261	-19.19566514	-20.38870351	-15.60218231	-16.4282	-11.13328487
+2.35	100.4789149	95.9308458	94.25761018	77.33031494	80.93796974	74.92491056	85.85523345	61.54643895	65.16359	37.77486059
-2.4	-29.3165789	-33.40014697	-26.12845069	-26.42887832	-26.77656216	-24.25359145	-25.93860666	-19.84923193	-20.93	-13.49596065
+2.4	89.16781191	87.41472721	84.83875872	70.03186451	73.00609508	67.39990171	76.58785653	55.10006355	58.31116	33.80582306
-2.45	-35.56218092	-39.10836493	-32.0855493	-31.34905741	-31.96518868	-29.07051417	-31.53605148	-23.45949916	-24.7585	-15.47453467
+2.45	80.36479307	80.50793954	77.99679563	64.00252657	66.46311875	61.19841803	68.97035618	49.58375493	52.45038	30.53852623
-2.5	-44.10892596	-46.6721646	-39.66598151	-37.84282197	-38.83063932	-35.46829185	-39.01559905	-28.21688505	-29.8054	-18.47386299
+2.5	69.28735938	71.79035141	69.50787388	56.2568897	58.06905974	53.24943547	59.23000155	42.74599466	45.1844	26.35526378
-2.55	-51.2735577	-53.04994787	-46.09754104	-43.29088529	-44.60327762	-40.85557422	-45.34174192	-32.20265792	-34.0351	-21.20849111
+2.55	60.39655381	64.77329905	62.60263698	49.91500524	51.20501584	46.75466972	51.2897514	37.45703076	39.56205	23.48758679
-2.6	-60.75479658	-61.76250566	-54.60831461	-50.38801777	-52.13791098	-47.89622885	-53.64146418	-37.47921814	-39.6378	-24.79754755
+2.6	49.28681036	55.9803205	53.61072583	41.83515968	42.47044126	39.08798473	42.07741206	31.37318286	33.09812	20.72324983
-2.65	-68.94595721	-68.75000648	-61.77374232	-56.27362966	-58.39727617	-53.75189581	-60.56809106	-41.95603454	-44.3897	-27.79356273
+2.65	40.43116717	48.95196769	46.4466938	35.27109335	35.38264557	33.41749911	35.75927651	27.38474094	28.88886	18.45792265
-2.7	-79.98194477	-77.45245462	-71.37327497	-63.86119305	-66.47946698	-61.32068636	-69.54890781	-47.49694818	-50.2745	-31.67860021
+2.7	33.02553421	40.20500967	39.19197838	28.5924006	28.5924006	26.51513634	28.07411672	22.26013578	23.4773	15.56939852
-2.75	-89.2185402	-84.9601173	-80.42247576	-70.203172	-73.26389299	-67.55298778	-76.96480466	-52.04309902	-55.1038	-34.88681126
+2.75	28.19775122	33.26070625	35.23020838	23.45154337	23.45154337	20.93540499	21.8658609	18.05894861	19.03815	13.22086092
-2.8	-101.2372184	-94.63950607	-91.26465964	-78.46120238	-82.06622185	-75.80620604	-86.83713599	-59.53124661	-62.6645	-39.00632449
+2.8	22.20959388	24.676572	30.58090778	16.96600255	16.96600255	13.91274613	14.05738872	12.91079867	13.59031	10.24850443
-2.85	-111.2028312	-102.6001144	-100.2171582	-84.54855168	-88.57712256	-82.46246117	-94.77248183	-65.94893933	-69.4199	-42.37749933
+2.85	17.46751756	17.90791142	26.71515028	11.74669705	11.74669705	10.97171359	13.09516572	8.940482669	9.411034	7.84904501
-2.9	-124.0602493	-112.7964802	-111.7664955	-92.77813045	-97.38951696	-90.33311572	-104.2072575	-74.25539089	-78.1636	-46.66998037
+2.9	16.23634687	14.13334312	21.82908786	10.94586313	11.65908145	10.97171359	13.09516572	8.751928976	9.212557	5.112937548
-2.95	-134.6379073	-121.1304811	-121.2673757	-99.43410622	-104.5250685	-97.04323966	-112.2678213	-81.38933492	-85.6898	-50.15492578
+2.95	16.03771154	13.93470779	18.0351317	10.94586313	11.65908145	10.97171359	13.09516572	8.751928976	9.212557	5.112937548
-3	-148.1855381	-131.7420726	-133.4353522	-107.8152437	-113.5200813	-105.5079971	-122.4574486	-90.73176604	-95.557	-54.55886485
+3	15.96136113	13.85835738	14.3655422	10.94586313	11.65908145	10.97171359	13.09516572	8.751928976	9.212557	5.112937548

2-Span: Shear (Max and Min) Raw Data Results - 45’ Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-7.884175157	-7.664118583	-6.677100003	-5.797023999	-6.463901486	-8.859731474	-9.809325698	-10.8496152	-11.73375272
End Shear	78.29109643	81.47396878	70.77735205	58.89132114	64.0259318	86.07871392	94.21607152	96.77154062	98.36345275
-0.05	-7.884175157	-7.664118583	-6.677100003	-6.548551819	-6.463901486	-8.859731474	-9.809325698	-10.8496152	-11.73375272
+0.05	71.53382613	73.05222392	63.24530063	52.38162885	58.53978296	78.70982397	85.89909781	87.64109084	88.62012171
-0.1	-7.884175157	-7.664118583	-7.030476516	-8.136249936	-6.463901486	-8.859731474	-9.809325698	-10.8496152	-11.73375272
+0.1	65.26824356	65.38344231	56.17320101	46.42157743	53.48366635	71.87922634	78.16771274	79.32167366	79.4425479
-0.15	-8.276101222	-8.285208137	-8.621871696	-10.59771281	-7.484137016	-8.859731474	-9.809325698	-10.8496152	-11.73375272
+0.15	60.63450938	59.61653768	50.99311698	42.06196952	49.73993809	66.82253954	72.20440741	72.49366011	72.52293968
-0.2	-12.8673265	-12.87987568	-12.04332624	-13.26358288	-10.34135572	-12.83120581	-12.83442016	-12.7998277	-12.767527
+0.2	54.26693592	52.64293744	45.03939688	37.02979862	44.83070182	60.08014817	64.62455642	64.40785677	64.39468599
-0.25	-16.51764618	-16.71364028	-15.23086431	-15.56317145	-12.60615064	-17.19530762	-17.19921419	-17.16546709	-17.13395382
+0.25	49.52516361	47.27397732	40.82959436	33.46901828	40.98398214	54.67903903	58.80098978	58.62060968	58.60694125
-0.3	-21.03636057	-21.55220196	-19.42637529	-18.47658974	-15.40101467	-22.60703327	-23.21768686	-23.17877074	-23.14243358
+0.3	43.75473773	40.8546315	35.87142882	29.27057272	36.06439335	48.35869096	51.72676766	51.58889485	51.57470787
-0.35	-24.6041894	-25.33027397	-22.9402498	-20.77176847	-18.95059925	-26.88762642	-28.33754372	-28.29977085	-28.2645012
+0.35	39.28058606	36.29449979	32.04007321	26.04810895	32.42778518	43.45105141	46.25234369	46.14600371	46.13150779
-0.4	-28.98918661	-29.92460389	-27.27856565	-23.89711616	-24.0025921	-32.33189008	-34.65593158	-34.61970941	-34.58588603
+0.4	33.88813977	31.21433036	27.39321228	22.20456701	28.0366062	37.52663889	39.66846314	39.5982203	39.58348191
-0.45	-33.1328712	-33.73292136	-30.51866149	-26.2573405	-27.98955571	-37.50159333	-39.6287434	-39.5938462	-39.56126696
+0.45	29.75114892	27.80587926	23.50655137	19.28774472	24.66072197	32.97330277	34.62944799	34.58528966	34.5704637
-0.5	-39.26177311	-38.72735501	-34.64507596	-30.47101275	-32.88694463	-44.13046624	-45.97238349	-45.92044697	-45.8817845
+0.5	24.82363161	23.87702044	19.35937606	15.8530832	20.63020004	27.53871057	28.65632047	28.64218959	28.62897293
-0.55	-44.06744866	-42.88967499	-37.40761272	-33.82812513	-36.72242295	-49.32341319	-51.98587254	-51.88319889	-51.84607441
+0.55	21.09334153	20.83226624	16.41281666	13.36961925	17.57063292	23.41478041	24.61357611	24.59946557	24.58628167
-0.6	-49.93020567	-48.02710141	-40.69175167	-38.03825531	-41.39570452	-55.6525709	-59.33454271	-59.16855032	-59.13345124
+0.6	17.17896354	17.04975429	13.55028754	10.91288449	13.97026751	18.70001509	19.82334324	19.80941709	19.79640193
-0.65	-54.48818994	-52.20042721	-44.76411845	-41.52711142	-45.02409889	-60.5681999	-65.05816369	-64.84174872	-64.80833802
+0.65	14.44282901	14.33876333	11.37713789	9.116180404	11.28263067	15.53731708	16.21846112	16.20481237	16.1920487
-0.7	-59.99786492	-56.45418084	-49.7016085	-45.60704914	-49.40377061	-66.50376985	-71.99057166	-72.71220633	-72.67381357
+0.7	11.2210747	11.12193534	8.819458886	7.023367836	8.56471971	11.83000662	12.01903917	12.00590032	11.99362274
-0.75	-64.23861334	-61.70620577	-53.51445133	-48.64269044	-52.76947867	-71.06697867	-77.33804735	-78.941843	-78.97396643
+0.75	8.814186562	8.719686364	6.953840251	5.477238501	6.962636898	9.075062623	9.087244838	9.075995836	9.065483316
-0.8	-69.30826617	-68.85201213	-58.641685	-52.72495589	-56.78604042	-76.51508708	-83.74635461	-86.45336885	-87.6501934
+0.8	5.803160121	5.946801227	4.797387419	3.744752846	5.094619254	5.838689388	5.628056558	5.843598994	5.903966564
-0.85	-73.16222419	-74.37515371	-63.39252716	-56.41518283	-59.83345125	-80.65077152	-88.63140653	-92.21888938	-94.34947426
+0.85	3.940361715	3.924251769	3.135099155	2.448610035	3.633228819	3.807688936	3.801242191	3.81111067	3.820323849
-0.9	-77.704923	-81.00774481	-69.95886702	-61.53721374	-63.41739902	-85.51753594	-94.40777299	-99.08982715	-102.3864918
+0.9	1.603827564	1.709608309	1.537608193	1.188736343	2.105528769	1.54821445	1.628719678	1.633376104	1.648980672
-0.95	-81.10254329	-86.63814112	-75.5810391	-65.98917957	-66.09092281	-89.15059275	-98.74413674	-104.2944912	-108.5204481
+0.95	0.790495537	0.781992519	0.719908702	0.551053279	0.98347348	0.764349965	0.761224403	0.765275827	0.769058502
-1	-85.03135266	-93.69275478	-82.32725383	-71.39361623	-69.17275361	-93.34213377	-103.7807292	-110.4038773	-115.7833231
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.43E+01	9.23E+01	8.10E+01	7.03E+01	6.86E+01	9.25E+01	102.8045718	109.2137054	1.14E+02
-2.05	-7.91E-01	-7.83E-01	-7.21E-01	-5.51E-01	-9.85E-01	-7.65E-01	-0.762128864	-0.766146132	-7.70E-01
+2.05	8.11E+01	8.66E+01	7.56E+01	6.60E+01	6.61E+01	8.91E+01	98.73944804	104.2890449	1.09E+02
-2.1	-2.10399218	-2.08784762	-1.756238471	-1.361136202	-2.405921527	-2.033843725	-2.027704913	-2.036264171	-2.044268544
+2.1	7.68E+01	7.97E+01	6.85E+01	6.04E+01	6.27E+01	8.46E+01	93.27819685	97.74130008	1.01E+02
-2.15	-3.942551325	-3.926071008	-3.136417914	-2.449238105	-3.672857748	-3.809818067	-3.803300485	-3.813091027	-3.822243981
+2.15	73.15791481	74.36997749	63.38847721	56.41346838	59.82989281	80.64611899	88.62608467	92.21282797	94.34261588
-2.2	-6.498541123	-6.482165825	-5.224643969	-4.083867615	-5.457481051	-6.447870949	-6.27190176	-6.452778519	-6.512681115
+2.2	68.31147343	67.43801992	57.42614597	51.78019429	55.9968014	75.44450123	82.48501845	84.9707711	85.93353553
-2.25	-8.816822003	-8.721879491	-6.95543358	-5.478003539	-6.964480806	-9.078089376	-9.017662113	-9.07881577	-9.068217481
+2.25	64.23384263	61.70065054	53.51120065	48.64130847	52.76552486	71.06182197	77.33218805	78.93526106	78.96662051

-2.3	-11.84984178	-11.74916044	-9.317964825	-7.428758628	-8.981393249	-12.5519442	-12.83413151	-12.820738	-12.80824653
+2.3	58.9087897	55.63575196	48.7253154	44.82709165	48.5384558	65.33106222	70.61914453	71.11984921	71.08117059
-2.35	-14.4458588	-14.34128993	-11.37896576	-9.117054245	-11.28570993	-15.54084043	-16.2223287	-16.20853354	-16.19566338
+2.35	54.4830441	52.19699197	44.76061649	41.5700601	45.01982196	60.5626054	65.05187057	64.83574445	64.8025163
-2.4	-17.88700397	-17.75627133	-14.11216145	-11.37938455	-14.67285325	-19.52029285	-20.7610092	-20.74688328	-20.73369526
+2.4	48.76631585	47.04802018	39.97068481	37.19039204	40.4682913	54.39658273	57.87469033	57.72162628	57.68630207
-2.45	-21.09745787	-20.66557447	-16.41485645	-13.37058993	-17.57418275	-23.4193773	-24.61796137	-24.60367757	-24.59037314
+2.45	44.06200157	42.88562693	37.40528685	33.82651191	36.71787339	49.31748528	51.97924201	51.87685322	51.83992135
-2.5	-25.79072666	-24.65273921	-20.16860323	-16.5218717	-21.42232567	-28.60643705	-29.81684653	-29.79591993	-29.78097005
+2.5	38.04053421	37.74925486	33.92081291	29.61225147	31.91139907	42.81007931	44.50847558	44.47519307	44.4440638
-2.55	-29.75575341	-27.80891394	-23.50143514	-19.28915722	-24.66466079	-32.97842703	-34.63491398	-34.59053178	-34.57553735
+2.55	33.12720207	33.72900064	30.58233731	26.25624515	27.98481555	37.49542733	39.62324271	39.58855839	39.55614472
-2.6	-34.95253428	-32.21329203	-28.29859951	-22.95764369	-28.90432502	-38.69698124	-40.96654538	-40.8891397	-40.87426528
+2.6	28.11565632	29.01429538	26.4336979	23.28663333	22.99288431	31.28165925	33.3950283	33.35869183	33.3247482
-2.65	-39.285596	-36.29844705	-32.04331721	-26.04965918	-32.43205116	-43.45659828	-46.258322	-46.15172308	-46.13705326
+2.65	24.60013248	25.32671817	22.93713308	20.77049043	18.94573728	26.88271893	28.33186556	28.2943149	28.25920641
-2.7	-44.89895603	-42.11584472	-36.85205653	-30.09717666	-36.99371651	-49.6127684	-53.12816872	-52.98180415	-52.96752265
+2.7	20.13323591	20.59074573	18.60160898	17.90276318	14.84309239	21.52452865	21.92472186	21.88574968	21.8493269
-2.75	-49.53050461	-47.27897059	-40.83307442	-33.47068108	-40.98852194	-54.68494465	-58.80738189	-58.62672152	-58.61287813
+2.75	16.51348501	16.70990161	15.2278711	15.56194841	12.60345959	17.1902979	17.19436925	17.16079734	17.12942797
-2.8	-55.47350842	-54.02050275	-46.21475539	-38.0195514	-45.8088045	-61.40091241	-66.10760691	-65.98807446	-65.9717867
+2.8	11.94690612	11.95947667	11.28297032	12.69497046	9.769201281	11.73181652	11.73502327	11.7004206	11.73373189
-2.85	-60.64010653	-59.62193375	-50.99732344	-42.06396366	-49.7446697	-66.8286989	-72.08798522	-72.50070311	-72.48498023
+2.85	8.27188994	8.281710262	8.620539057	10.3724878	7.48139151	8.859741127	9.809294924	10.84962694	11.73373189
-2.9	-66.51970467	-66.85451232	-57.5689621	-47.59418451	-54.49431879	-73.24421438	-79.71074712	-81.01498155	-81.13563312
+2.9	7.884156145	7.664129821	6.677098451	7.675790557	6.4638922	8.859741127	9.809294924	10.84962694	11.73373189
-2.95	-71.53958149	-73.05827663	-63.25030056	-52.38399941	-58.54464154	-78.7161431	-85.90601966	-87.64844457	-88.56420037
+2.95	7.884156145	7.664129821	6.677098451	6.556996221	6.4638922	8.859741127	9.809294924	10.84962694	11.73373189
-3	-77.88106188	-81.17085968	-70.59434234	-58.59877252	-63.65530166	-85.62189005	-93.74350294	-96.29683866	-97.89366673
+3	7.884156145	7.664129821	6.677098451	5.797037021	6.4638922	8.859741127	9.809294924	10.84962694	11.73373189

2-Span: Shear (Max and Min) Raw Data Results - 45' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-12.68459767	-14.15793174	-8.45921	-10.4874	-10.5681
End Shear	120.8204945	124.1435496	89.59134	109.5582	109.8066
-0.05	-12.68459767	-14.15793174	-8.45921	-10.4874	-10.5681
+0.05	107.2113427	111.3936342	80.16174	98.04814	97.89495
-0.1	-12.68459767	-14.15793174	-8.45921	-10.4874	-10.5681
+0.1	95.19068732	99.02082975	71.53818	87.50001	86.7828
-0.15	-13.05162801	-14.15793174	-9.49733	-10.4874	-10.5681
+0.15	86.08274093	89.43413087	66.03764	79.34306	78.81573
-0.2	-16.48085499	-17.61054158	-15.0912	-15.6649	-14.2725
+0.2	75.52597432	77.89011531	60.14349	69.54255	71.04402
-0.25	-21.82469352	-22.56158519	-19.5439	-20.1319	-20.1407
+0.25	67.82266612	69.32002025	55.26183	62.29677	64.95073
-0.3	-29.8342124	-30.3503789	-24.9967	-27.0753	-27.3673
+0.3	58.57383385	59.41637481	49.28654	54.41625	57.51758
-0.35	-36.14096102	-36.28107756	-29.3831	-32.891	-33.1599
+0.35	51.50915025	51.93219507	44.62431	48.83347	51.7389
-0.4	-44.12801539	-44.28021207	-35.9408	-39.9932	-40.9687
+0.4	43.82431387	43.66900525	38.9663	42.6137	44.41315
-0.45	-50.56689043	-50.29182443	-41.8126	-45.8813	-47.264
+0.45	37.82760683	37.39551417	34.34005	37.8027	39.04921
-0.5	-57.77477543	-57.65784249	-49.3809	-53.5851	-55.809
+0.5	31.47078478	30.54669301	29.08245	32.0193	32.63871
-0.55	-63.47489356	-65.03606468	-55.0847	-60.0002	-63.2529
+0.55	27.07072314	25.53417869	25.07641	27.30694	27.76693
-0.6	-71.4111566	-73.78827818	-61.7717	-67.8758	-72.3187
+0.6	21.85061986	20.42418536	20.32579	22.0889	22.28231
-0.65	-77.03542909	-80.40717323	-66.7642	-73.8511	-79.1051
+0.65	17.91659915	16.76232482	16.7474	18.14016	18.32241
-0.7	-85.09870855	-90.819539	-72.5543	-81.1042	-87.0016
+0.7	13.32595657	12.48807535	12.87877	13.73736	13.57005
-0.75	-94.77269646	-101.0729889	-76.823	-85.991	-92.8464
+0.75	9.933029739	9.32802575	10.01832	10.68621	10.15673
-0.8	-106.1941722	-114.3277125	-81.8024	-91.5317	-99.5579
+0.8	6.065683507	6.089628053	6.837669	7.293513	6.262228
-0.85	-114.7824761	-124.9201542	-85.6539	-99.3481	-104.722
+0.85	3.995323031	3.81355586	4.517445	4.818608	4.024092
-0.9	-124.8155291	-137.4367584	-89.5511	-109.518	-110.477
+0.9	1.741276096	1.959686162	1.935038	2.06404	1.724104
-0.95	-132.2681015	-146.8505888	-95.8395	-117.336	-118.483
+0.95	0.812611045	0.935365086	0.904713	0.965027	0.80775
-1	-143.4876881	-157.8412702	-103.845	-127.139	-129.478
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.41E+02	1.56E+02	1.02E+02	1.25E+02	1.27E+02
-2.05	-8.13E-01	-9.13E-01	-9.06E-01	-9.66E-01	-8.09E-01
+2.05	1.32E+02	1.47E+02	9.58E+01	117.3288	1.18E+02
-2.1	-2.082246563	-2.238886712	-2.41047	-2.57116	-2.15013
+2.1	1.23E+02	1.35E+02	8.88E+01	107.5103	1.09E+02
-2.15	-3.949980623	-3.813871158	-4.51948	-4.82078	-4.02585
+2.15	114.7751609	124.9186679	85.65079	99.34037	104.8422
-2.2	-6.807303072	-6.692117962	-7.45174	-7.94852	-7.0095
+2.2	103.9625087	111.599696	80.87462	90.47005	98.26398
-2.25	-9.935880793	-9.328464364	-10.0208	-10.6888	-10.1597
+2.25	94.76445767	101.0715315	76.81923	85.98663	92.84132

-2.3	**-14.21693136**	**-13.3153119**	**-13.5997**	**-14.5064**	**-14.466**
+2.3	**82.59814493**	**88.25192438**	**71.43237**	**79.81448**	**85.4691**
-2.35	**-17.9199417**	**-16.7628334**	**-16.9**	**-18.1268**	**-18.3345**
+2.35	**77.03080889**	**80.40624346**	**66.75972**	**73.97362**	**79.0992**
-2.4	**-22.87210358**	**-21.37208005**	**-21.2554**	**-23.1141**	**-23.3101**
+2.4	**69.96202755**	**72.07908054**	**60.46899**	**66.34543**	**70.55077**
-2.45	**-27.07449804**	**-25.53489376**	**-25.08**	**-27.3109**	**-27.7712**
+2.45	**63.55365796**	**65.03501107**	**55.0795**	**59.99413**	**63.24615**
-2.5	**-32.60395679**	**-31.84402136**	**-30.1146**	**-33.1585**	**-33.8977**
+2.5	**56.29176106**	**55.92572753**	**47.90057**	**52.07277**	**54.01354**
-2.55	**-37.71167075**	**-37.39640023**	**-34.3286**	**-37.8071**	**-39.0539**
+2.55	**50.5613989**	**50.29099225**	**41.80675**	**45.87543**	**47.25805**
-2.6	**-45.29211184**	**-45.2863111**	**-40.0858**	**-43.8447**	**-45.7896**
+2.6	**42.45964671**	**42.71686167**	**34.52372**	**38.58342**	**39.4281**
-2.65	**-51.51517655**	**-51.93318814**	**-44.6286**	**-48.8382**	**-51.744**
+2.65	**36.13553957**	**36.28023891**	**29.37837**	**32.88564**	**33.15416**
-2.7	**-60.39412961**	**-61.35876163**	**-50.4736**	**-55.9697**	**-58.9918**
+2.7	**28.21660973**	**28.82508681**	**23.91286**	**25.59884**	**25.92748**
-2.75	**-67.82928951**	**-69.32119583**	**-55.2663**	**-62.3027**	**-64.9561**
+2.75	**21.81951436**	**22.56064727**	**19.53976**	**20.12777**	**20.13546**
-2.8	**-77.49773209**	**-80.15863358**	**-61.3808**	**-71.4724**	**-72.591**
+2.8	**15.82377067**	**16.49058017**	**13.9624**	**14.53956**	**12.96149**
-2.85	**-86.09058502**	**-89.43550028**	**-66.0423**	**-79.3505**	**-78.8214**
+2.85	**13.04910193**	**14.15792992**	**9.493409**	**10.48737**	**10.56814**
-2.9	**-97.52144956**	**-101.4637914**	**-73.2435**	**-89.5875**	**-88.9752**
+2.9	**12.68456679**	**14.15792992**	**8.459192**	**10.48737**	**10.56814**
-2.95	**-107.2204109**	**-111.3950652**	**-80.1682**	**-98.0561**	**-97.9031**
+2.95	**12.68456679**	**14.15792992**	**8.459192**	**10.48737**	**10.56814**
-3	**-120.4652205**	**-124.1450696**	**-89.2687**	**-109.165**	**-109.455**
+3	**12.68456679**	**14.15792992**	**8.459192**	**10.48737**	**10.56814**

2-Span: Moment (Max and Min) Raw Data Results – 45' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.04E-13	-1.07E-13	-8.19E-14	-8.21E-14	-8.21E-14	-6.57E-14	-6.94E-14	-6.50E-14	-6.84E-14	-4.51E-14
End Shear	1.40E-13	8.12E-14	1.33E-13	6.85E-14	7.71E-14	5.82E-14	6.85E-14	5.61E-14	5.91E-14	4.88E-14
-0.05	-35.91267769	-31.18129299	-32.32148491	-24.6282157	-26.2329226	-24.6863651	-29.4640708	-19.6918087	-20.7282197	-11.50410596
+0.05	304.9710646	275.930751	275.6616104	223.708955	235.1885686	218.4130591	253.0488945	183.1103379	192.7854081	112.8456486
-0.1	-71.82535538	-62.36258598	-64.64296982	-49.2564314	-52.4658453	-49.3727303	-58.9281416	-39.3836174	-41.4564394	-23.00821191
+0.1	565.9461414	517.3183051	511.564671	417.4662488	438.2149637	406.4644407	469.4198788	334.120428	351.7057136	210.0091091
-0.15	-107.7380331	-93.54387898	-96.96445473	-73.8846471	-78.6987679	-74.0590954	-88.3922124	-59.0754261	-62.184659	-34.51231787
+0.15	771.8633305	716.8514346	695.7373306	573.6665455	601.2429258	557.8957669	642.6254594	448.2698261	471.8629748	286.1455849
-0.2	-143.6507108	-124.725172	-129.2859396	-98.5128629	-104.931691	-98.7454606	-117.856283	-78.7672348	-82.9128787	-46.01642382
+0.2	941.2302956	886.9624481	850.7912912	704.2568755	736.9485156	682.2506127	782.2275225	536.2414138	564.4646461	351.0457203
-0.25	-179.5633884	-155.906465	-161.6074245	-123.141079	-131.164613	-123.431826	-147.320354	-98.4590435	-103.641098	-57.52052978
+0.25	1057.567518	1012.315809	952.4959859	797.2191023	833.1082204	771.8195035	898.9451516	592.6109685	623.8010195	393.174803
-0.3	-215.4760661	-187.087758	-193.9289095	-147.769294	-157.397536	-148.118191	-176.784425	-118.150852	-124.369318	-69.02463574
+0.3	1140.253811	1112.415941	1029.226111	865.9641657	901.993594	848.3159427	991.9260152	647.8737929	683.4697784	427.6452886
-0.35	-251.3887438	-218.2690509	-226.2503944	-172.39751	-183.630459	-172.804556	-206.248496	-137.842661	-145.097538	-80.52874169
+0.35	1187.150735	1170.482966	1069.266798	904.1848085	950.3032969	898.8535582	1045.062952	674.5679535	712.7205273	441.1778997
-0.4	-287.3014215	-249.4503439	-258.5718793	-197.025726	-209.863381	-197.490921	-235.712566	-157.53447	-165.825757	-92.03284765
+0.4	1220.233106	1201.77929	1100.743715	934.2649083	979.5627843	925.6833793	1069.6952	688.95909	729.1777716	446.7122383
-0.45	-323.2140992	-280.6316369	-290.8933642	-221.653941	-236.096304	-222.177286	-265.176637	-177.226278	-186.553977	-103.5369536
+0.45	1204.58692	1198.379333	1086.126569	933.3106871	974.7994164	920.1467777	1058.623578	689.3911443	729.9855305	434.9373812
-0.5	-359.1267769	-311.8129299	-323.2148491	-246.282157	-262.329226	-246.863651	-294.640708	-196.918087	-207.282197	-115.0410596
+0.5	1194.444769	1180.980982	1076.783048	916.7105594	959.460191	904.3978746	1042.287385	675.7678428	715.8044904	422.4297765
-0.55	-395.0394546	-342.9942229	-355.536334	-270.910373	-288.562149	-271.550017	-324.104779	-216.609896	-228.010416	-126.5451655
+0.55	1156.224261	1132.782767	1042.307579	876.0881261	918.774986	868.0019772	1005.50241	645.1666167	683.5905745	416.6781764
-0.6	-430.9521323	-374.1755159	-387.8578189	-295.538589	-314.795072	-296.236382	-353.56885	-236.301704	-248.738636	-138.0492715
+0.6	1089.645161	1061.403945	983.1141468	816.1709366	857.0227339	811.7939645	943.4323527	605.4545407	640.6046447	403.6619394
-0.65	-466.8648099	-405.3568089	-420.1793038	-320.166804	-341.027994	-320.922747	-383.03292	-255.993513	-269.466856	-149.5533774
+0.65	975.2623465	957.7732837	878.1237844	743.0345888	772.8739416	729.3386735	848.919348	551.8889524	582.8808346	369.1379716
-0.7	-502.7774876	-436.5381019	-452.5007887	-344.79502	-367.260917	-345.609112	-412.496991	-275.685322	-290.195076	-161.0574834
+0.7	851.2405679	838.4641372	769.4832758	651.4191304	676.321772	631.1155582	734.0142534	491.3006715	518.0856211	331.5100686
-0.75	-538.6901653	-467.7193949	-484.8222736	-369.423236	-393.49384	-370.295477	-441.961062	-295.37713	-310.923295	-172.5615893
+0.75	688.0978633	689.5797043	619.8049481	536.6474543	555.4711496	513.038816	593.8950748	400.7709598	422.367835	273.9558834
-0.8	-574.602843	-498.9006879	-517.1437585	-394.051451	-419.726762	-394.981842	-471.425133	-315.068939	-331.651515	-184.0656953
+0.8	502.4812516	531.7092847	455.8578425	410.9408637	420.9750478	383.5097943	438.6203464	308.0988232	325.3622598	215.6643093
-0.85	-618.0794082	-537.6458684	-575.7445494	-418.679667	-445.959685	-419.668207	-500.889203	-334.760748	-352.379735	-195.5698013
+0.85	293.52666	357.1502263	264.2704977	266.9033798	266.9033798	247.7827654	265.915819	203.0268373	213.7165827	149.9893848
-0.9	-681.9085701	-596.7436456	-666.3739601	-443.307883	-472.192608	-444.354573	-530.353274	-354.452557	-373.107954	-207.0739072
+0.9	187.4199599	199.5587111	168.7034062	154.0311441	154.0311441	129.4447925	132.099168	117.0442172	123.2044392	102.1311835
-0.95	-761.9380791	-672.0417699	-777.9578003	-467.936099	-498.42553	-469.040938	-559.817345	-484.0202	-513.270577	-218.5780132
+0.95	80.40911704	63.49583212	72.19206821	49.96111115	49.96111115	39.95798362	40.0074379	37.96742307	39.96570849	45.89850565
-1	-946.1419187	-760.7823847	-947.6428475	-492.564318	-524.658675	-493.727311	-589.282464	-628.779242	-665.739964	-240.5768923
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-946.1419187	-760.7823847	-947.6428475	-492.564318	-524.658675	-493.727311	-589.282464	-628.779242	-665.739964	-240.5768923
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-761.945384	-672.041998	-777.9577687	-467.935653	-498.425742	-469.040764	-559.818341	-484.019068	-513.269559	-218.5780824
+2.05	80.41241511	63.50304152	72.23193372	49.96646325	49.96646325	39.96214819	40.0116051	37.97069604	39.96915373	45.87846867
-2.1	-681.9154918	-596.7438642	-666.3739535	-443.307461	-472.192809	-444.354409	-530.354218	-354.453124	-373.108551	-207.0739729
+2.1	187.4483145	199.597965	168.3523307	154.0602882	154.0602882	129.4106405	132.0775645	117.1189739	123.2831304	102.1176602
-2.15	-618.0859406	-537.6460714	-575.7445526	-418.679269	-445.959876	-419.668053	-500.890095	-334.761284	-352.380299	-195.5698634
+2.15	293.6290631	357.1936488	264.2705417	266.9355689	266.9355689	247.7966964	265.9327284	203.0429456	213.7333276	150.5339861
-2.2	-574.608986	-498.9008753	-517.1595015	-394.051077	-419.726942	-394.981697	-471.425972	-315.069443	-331.652046	-184.0657539
+2.2	504.6075746	531.7573457	455.3591522	410.9677018	420.9989412	383.4988722	438.6818261	308.1163153	325.3804238	215.6508858

-2.25	-538.6959235	-467.7195712	-484.8370316	-369.422885	-393.494009	-370.295342	-441.961849	-295.377603	-310.923793	-172.5616444
+2.25	687.8191924	689.6265988	619.0916646	536.6712276	555.491227	513.0290876	593.9130903	400.7805497	422.3842466	273.9581538
-2.3	-502.7828609	-436.5382671	-452.5145616	-344.794693	-367.261076	-345.608986	-412.497727	-275.685763	-290.19554	-161.0575349
+2.3	852.967087	838.5101865	768.3495613	651.4398901	676.3380671	631.1019714	733.9920889	491.315184	518.1016725	331.4950379
-2.35	-466.8697984	-405.356963	-420.1920917	-320.166501	-341.028142	-320.922631	-383.033604	-255.993923	-269.467287	-149.5534255
+2.35	975.0769586	957.8134861	878.0890036	743.0480362	772.881942	729.3635569	848.9266891	552.7909163	583.5913264	369.1380356
-2.4	-430.9567358	-374.1756589	-387.8696217	-295.538309	-314.795209	-296.236275	-353.569481	-236.302083	-248.739034	-138.049316
+2.4	1091.433498	1061.438001	982.6048665	816.1767606	857.0109301	811.7686991	943.4738428	605.4605584	640.6104299	403.6439243
-2.45	-395.0436733	-342.9943548	-355.5471518	-270.910116	-288.562276	-271.54992	-324.105358	-216.610242	-228.010782	-126.5452065
+2.45	1157.098672	1132.807277	1042.269847	876.0757409	918.7546443	868.011588	1005.489478	645.1621097	683.5851576	416.6747351
-2.5	-359.1306107	-311.8130507	-323.2246818	-246.281924	-262.329343	-246.863564	-294.641235	-196.918402	-207.282529	-115.041097
+2.5	1195.507636	1180.995369	1076.583623	916.687485	959.4280023	904.4111479	1042.304814	675.7572583	715.7925771	422.4080019
-2.55	-323.2175482	-280.6317465	-290.9022119	-221.653732	-236.096409	-222.177208	-265.177112	-177.226562	-186.554276	-103.5369875
+2.55	1205.632785	1198.374874	1085.638134	933.3389526	974.7810404	920.1524722	1058.611927	689.4049306	730.0008091	434.9422081
-2.6	-287.3044856	-249.4504424	-258.5797419	-197.02554	-209.863476	-197.490853	-235.712989	-157.534722	-165.826023	-92.03287805
+2.6	1219.564025	1201.761998	1098.874202	934.2816812	979.5881161	925.7215618	1069.669814	688.9494929	729.1857943	446.699156
-2.65	-251.3914231	-218.2691383	-226.2572719	-172.397348	-183.630543	-172.804497	-206.248866	-137.842882	-145.09777	-80.52876857
+2.65	1187.554355	1170.452095	1068.925993	904.1878676	950.3141796	898.835093	1045.066293	674.5843746	712.736717	441.1794401
-2.7	-215.4783605	-187.0878342	-193.934802	-147.769156	-157.39761	-148.118142	-176.784744	-118.151041	-124.369517	-69.02465909
+2.7	1141.965395	1112.369648	1028.966917	865.9494382	901.9854462	848.3274097	991.956835	647.8579179	683.4518553	427.6611376
-2.75	-179.565298	-155.9065301	-161.612332	-123.140964	-131.164676	-123.431786	-147.320621	-98.4592013	-103.641265	-57.52054961
+2.75	1058.012114	1012.329691	952.4160519	797.2464625	833.08496	771.8135653	898.9580522	592.2743615	623.6077129	394.1214572
-2.8	-143.6522354	-124.725226	-129.2898621	-98.5127722	-104.931743	-98.7454305	-117.856498	-78.7673611	-82.9130117	-46.01644013
+2.8	943.4631352	886.8828952	850.4772938	704.2121592	736.9085515	682.2294385	782.2194573	536.2263127	564.4487502	351.056923
-2.85	-107.7391729	-93.54392186	-96.96739211	-73.8845801	-78.6988097	-74.0590749	-88.3923749	-59.0755209	-62.1847588	-34.51233065
+2.85	771.4075457	716.8305872	695.1754235	573.6621341	601.2422152	557.9027098	642.6424962	448.2772218	471.8707598	286.1376883
-2.9	-71.82611035	-62.36261775	-64.64492216	-49.2563881	-52.4658765	-49.3727193	-58.928252	-39.3836807	-41.456506	-23.00822116
+2.9	567.1136205	517.202388	510.9074623	417.5015515	438.2527988	406.4989708	469.3731094	334.1492316	351.7360333	210.0148868
-2.95	-35.9130478	-31.18131364	-32.3224522	-24.628196	-26.2329432	-24.6863637	-29.4641291	-19.6918405	-20.7282532	-11.50411168
+2.95	305.5634169	275.8728487	275.2168963	223.72669	235.1813594	218.3862669	253.0256486	183.1260491	192.8019992	112.8485662
-3	-2.21E-13	-1.56E-13	-1.84E-13	-1.34E-13	-1.41E-13	-1.11E-13	-1.37E-13	-1.05E-13	-1.12E-13	-7.67E-14
+3	6.96E-14	5.10E-14	6.24E-14	4.14E-14	4.14E-14	3.50E-14	3.56E-14	3.21E-14	3.37E-14	2.49E-14

2-Span: Moment (Max and Min) Raw Data Results - 45' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.73E-14	-5.72E-14	-5.13E-14	-3.73E-14	-3.90E-14	-5.67E-14	-5.82E-14	-5.82E-14	-5.82E-14
End Shear	5.55E-14	5.09E-14	5.01E-14	4.81E-14	4.99E-14	4.80E-14	5.62E-14	5.57E-14	5.63E-14
-0.05	-17.7393941	-17.24426681	-15.02347501	-13.043304	-14.54377834	-19.93439582	-22.0709828	-24.4116342	-26.4009436
+0.05	160.9511088	164.3675038	142.3019264	118.8545502	131.7145116	177.1026659	193.2729701	198.1989159	200.2787899
-0.1	-35.47878821	-34.48853362	-30.04695001	-26.086608	-29.08755669	-39.86879163	-44.1419656	-48.8232684	-52.8018873
+0.1	299.3130164	300.8202282	259.0385483	216.9385596	245.2027593	329.5707716	358.6676041	365.8517933	372.1158118
-0.15	-53.21818231	-51.73280043	-45.07042502	-39.12991199	-43.63133503	-59.80318745	-66.2129485	-73.2349026	-79.2028309
+0.15	409.351404	404.7309544	346.2271863	291.597436	335.2989723	451.8864311	490.5734682	524.0943762	530.3125601
-0.2	-70.95757641	-68.97706724	-60.09390003	-52.17321599	-58.17511338	-79.73758327	-88.2839313	-97.6465368	-105.603775
+0.2	500.3169373	486.1374654	415.8961441	352.0027144	410.0468923	552.4770431	597.0833691	652.4284687	665.4122717
-0.25	-88.69697051	-86.22133405	-75.11737504	-65.21651999	-72.71889172	-99.67197908	-110.354914	-122.058171	-132.004718
+0.25	563.9122301	539.1215527	464.308697	394.3471618	461.2673121	624.3218977	674.9141259	745.2221622	779.8113919
-0.3	-106.4363646	-103.4656009	-90.14085004	-78.25982399	-87.26267007	-119.6063749	-132.425897	-146.469805	-158.405662
+0.3	608.7814624	576.8739441	500.8505489	426.3744465	500.0732678	681.0742233	744.8838982	810.882225	863.347903
-0.35	-124.1757587	-120.7098677	-105.1643251	-91.30312798	-101.8064484	-139.5407707	-154.49688	-170.881439	-184.806605
+0.35	637.9969156	598.2791652	526.5629435	448.9950733	516.5939234	721.7501282	784.4685703	852.676257	910.4645503
-0.4	-141.9151528	-137.9541345	-120.1878001	-104.346432	-116.3502268	-159.4751665	-176.567863	-195.293074	-211.207549
+0.4	655.1745569	600.9990292	538.0854386	459.3082312	521.5649164	742.6645198	802.881445	880.1451505	929.1028537
-0.45	-159.6545469	-155.1984013	-135.2112751	-117.389736	-130.8940051	-179.4095623	-198.638845	-219.704708	-237.608493
+0.45	648.9063349	587.7550427	528.7440919	453.1308993	507.4616424	736.9478797	793.0509124	875.8696454	934.4262741
-0.5	-177.393941	-172.4426681	-150.2347501	-130.43304	-145.4377834	-199.3439582	-220.709828	-244.116342	-264.009436
+0.5	636.547458	567.3595749	517.9217476	444.7457204	503.7476638	724.7001839	776.9741442	855.7344742	914.2318774
-0.55	-195.1333351	-189.6869349	-165.2582251	-143.476344	-159.9815618	-219.278354	-242.780811	-268.527976	-290.41038
+0.55	614.0023168	548.9975211	503.338597	431.1710717	492.9601004	696.3451686	751.8689532	822.576658	869.8994104
-0.6	-212.8727292	-206.9312017	-180.2817001	-156.519648	-174.5253401	-239.2127498	-264.851794	-292.93961	-316.811324
+0.6	575.8718564	528.8746581	475.502223	406.1686245	470.8892084	651.8216348	707.8315032	767.4939656	819.5389852
-0.65	-230.6121233	-224.1754685	-195.3051751	-169.562952	-189.0691185	-259.1471456	-286.922777	-317.351245	-343.212267
+0.65	522.3624072	492.6565934	429.4635689	365.9853137	428.1870754	585.9063575	638.2935095	691.8779997	738.3144646
-0.7	-248.3515174	-241.4197354	-210.3286501	-182.606256	-203.6128968	-279.0815414	-308.993759	-341.762879	-369.613211
+0.7	459.0274816	435.4218154	375.085384	318.3899354	377.6602994	506.401179	552.5814909	602.6081885	637.1485308
-0.75	-266.0909115	-258.6640022	-225.3521251	-195.64956	-218.1566752	-299.0159372	-331.064742	-366.174513	-396.014154
+0.75	377.4577137	366.119787	307.5875443	259.5038796	308.4438013	413.3095704	446.7912095	488.6301129	508.8408426
-0.8	-283.8303056	-275.908269	-240.3756001	-208.692864	-232.7004535	-318.9503331	-353.135725	-390.586147	-422.415098
+0.8	285.7427034	277.3273027	230.1141357	191.4936375	235.4171676	310.2838618	329.1634129	361.0269064	367.0910523
-0.85	-301.5696997	-293.1525358	-256.5327203	-237.2472837	-247.2442319	-338.8847289	-375.206708	-414.997781	-448.816042
+0.85	187.9925845	187.8041891	149.2897725	121.3165285	146.3308586	200.0983722	204.903595	222.2078938	222.7717815
-0.9	-319.3090938	-310.3968026	-300.4722902	-297.7388237	-261.7880102	-358.8191247	-397.277691	-439.409416	-475.216985
+0.9	108.4059584	107.6593192	86.29813896	68.37442285	98.55982331	108.3027296	108.1596823	108.3039692	108.2097038
-0.95	-337.0484879	-411.8502574	-408.5208489	-374.6318706	-276.3317885	-378.7535205	-419.348674	-463.82105	-501.617929
+0.95	35.15994331	35.10393763	31.96915606	24.73436763	43.93227845	33.96428608	33.95268608	33.96799738	34.00378965
-1	-354.7878803	-542.4282065	-531.5095998	-469.6070477	-290.8755686	-398.6883565	-441.419664	-488.233223	-528.018879
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-354.7878803	-542.4282065	-531.5095998	-469.6070477	-290.8755686	-398.6883565	-441.419664	-488.233223	-528.018879
+2	0	0	0	0	0	0	0	0	0
-2.05	-337.0476734	-411.8493222	-408.522975	-374.6325581	-276.3313932	-378.753939	-419.347365	-463.821562	-501.617044
+2.05	35.16357177	35.10697195	31.97168175	24.7355768	43.93703176	33.96782596	33.95611464	33.97129857	33.98549198
-2.1	-319.3083221	-310.3972596	-300.471222	-297.7392017	-261.7876358	-358.8195215	-397.276452	-439.409902	-475.216148
+2.1	108.3506029	108.4891548	85.55455286	68.11170947	98.5184123	108.2655439	108.1237348	108.2693866	108.2416929
-2.15	-301.5689708	-293.1529675	-256.5319687	-237.2475136	-247.2438783	-338.8851039	-375.205538	-414.998241	-448.815251
+2.15	188.0144412	187.7917708	149.2807506	121.3122645	146.3319392	200.1015566	204.9110148	222.2311675	222.7943192
-2.2	-283.8296194	-275.9086754	-240.3755401	-208.6933295	-232.7001209	-318.9506864	-353.134625	-390.58658	-422.414354
+2.2	285.7613109	277.3443296	230.1239035	191.476578	235.4675596	310.2941763	329.1529183	361.0500435	367.1269633
-2.25	-266.0902681	-258.6643833	-225.3520686	-195.6499962	-218.1563634	-299.0162689	-331.063711	-366.17492	-396.013457

+2.25	377.4730864	366.1302937	307.5954429	259.4970029	308.4427678	413.3166059	446.7806597	488.6494416	508.8424145
-2.3	-248.3509168	-241.4200912	-210.328597	-182.606663	-203.612606	-279.0818513	-308.992798	-341.763259	-369.612561
+2.3	459.0396934	435.4176298	375.0906722	318.3706266	377.7059238	506.3934158	552.5665499	602.6238628	637.1785924
-2.35	-230.6115655	-224.1757991	-195.3051255	-169.5633297	-189.0688485	-259.1474338	-286.921884	-317.351599	-343.211664
+2.35	522.3684563	492.6457525	429.4596928	365.9834421	428.1782676	585.8953066	638.3088249	691.8859508	738.3051442
-2.4	-212.8722141	-206.931507	-180.281654	-156.5199964	-174.5250911	-239.2130163	-264.85097	-292.939938	-316.810767
+2.4	575.8642686	528.8547582	475.493849	406.1646211	470.924674	651.8040981	707.8042524	767.4842537	819.5542127
-2.45	-195.1328628	-189.6872149	-165.2581825	-143.4766631	-159.9813336	-219.2785987	-242.780057	-268.528277	-290.40987
+2.45	613.9884221	548.9862502	503.3256196	431.1757678	492.9387899	696.3574865	751.8688204	822.5928006	869.9037688
-2.5	-177.3935115	-172.4429228	-150.234711	-130.4333298	-145.4375762	-199.3441812	-220.709143	-244.116617	-264.008974
+2.5	636.5250581	567.3795187	517.9027617	444.7587053	503.7688998	724.6667542	776.9998281	855.706032	914.2572271
-2.55	-159.6541602	-155.1986307	-135.2112395	-117.3899965	-130.8938187	-179.4097637	-198.63823	-219.704956	-237.608077
+2.55	648.9299686	587.7698289	528.7626496	453.1289331	507.4918133	736.947633	793.0629448	875.8653101	934.4405049
-2.6	-141.9148088	-137.9543386	-120.187768	-104.3466632	-116.3500613	-159.4753461	-176.567316	-195.293296	-211.20718
+2.6	655.1905607	601.0198553	538.0993104	459.3148649	521.5390737	742.6923461	802.9199664	880.1645742	929.0989087
-2.65	-124.1754575	-120.7100465	-105.1642964	-91.30332988	-101.8063038	-139.5409286	-154.496402	-170.881635	-184.806283
+2.65	638.0034401	598.2926591	526.5708352	448.9988761	516.6112423	721.7673573	784.4602636	852.6830898	910.4818831
-2.7	-106.4361062	-103.4657544	-90.14082493	-78.25999658	-87.26254635	-119.6065111	-132.425489	-146.469974	-158.405387
+2.7	608.775116	576.879566	500.8582941	426.3781355	500.0325011	681.0804217	744.8996182	810.8722246	863.385264
-2.75	-88.69675485	-86.22146231	-75.11735341	-65.21666329	-72.7187889	-99.67209352	-110.354575	-122.058314	-132.00449
+2.75	563.8959294	539.1461279	464.3248697	394.3438959	461.268127	624.3138938	674.9166026	745.2335724	779.8003184
-2.8	-70.95740352	-68.97717021	-60.0938819	-52.17332999	-58.17503145	-79.73767598	-88.2836617	-97.6466532	-105.603593
+2.8	500.2894611	486.184531	415.9328695	351.9981102	410.0887318	552.4566611	597.0703133	652.4603222	665.4191034
-2.85	-53.2180522	-51.73287811	-45.07041038	-39.1299967	-43.631274	-59.80325845	-66.2127481	-73.2349925	-79.2026963
+2.85	409.3507332	404.7354942	346.2324232	291.599941	335.2806255	451.8905366	490.5826204	524.1109111	530.3169524
-2.9	-35.47870087	-34.48858601	-30.04693887	-26.0866634	-29.08751654	-39.86884091	-44.1418346	-48.8233319	-52.8017996
+2.9	299.3386356	300.8452749	259.0602493	216.9267085	245.2244085	329.5989234	358.6983252	365.8523351	372.1193107
-2.95	-17.73934954	-17.24429391	-15.02346735	-13.0433301	-14.54375909	-19.93442338	-22.070921	-24.4116713	-26.4009028
+2.95	160.9640217	164.3811511	142.3131505	118.8488062	131.7254152	177.1112808	193.2884725	198.1990813	200.280398
-3	-9.84E-14	-8.68E-14	-8.66E-14	-7.70E-14	-7.54E-14	-9.05E-14	-9.14E-14	-9.83E-14	-1.13E-13
+3	2.96E-14	2.85E-14	2.37E-14	2.01E-14	1.97E-14	2.93E-14	2.98E-14	2.94E-14	3.12E-14

2-Span: Moment (Max and Min) Raw Data Results - 45' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.39E-14	-7.70E-14	-6.84E-14	-7.29E-14	-6.44E-14
End Shear	8.98E-14	9.02E-14	5.41E-14	6.00E-14	6.07E-14
-0.05	-28.54034475	-31.85534641	-19.0332182	-23.5966241	-23.7783229
+0.05	241.2255211	253.0596073	180.3639154	220.6083087	220.2636409
-0.1	-57.08068951	-63.71069281	-38.0664364	-47.1932482	-47.5566459
+0.1	438.8098301	461.2406703	329.5674599	403.1088697	400.3527644
-0.15	-85.62103426	-95.56603922	-57.0996546	-70.7898723	-71.3349688
+0.15	588.3629513	616.9523734	448.4631646	541.5884818	534.6394015
-0.2	-114.161379	-127.4213856	-76.1328727	-94.3864964	-95.1132917
+0.2	720.816674	749.752921	551.8535187	651.5174641	653.3916815
-0.25	-142.7017238	-159.276732	-95.1660909	-117.98312	-118.891615
+0.25	818.2923359	863.2100208	625.4321703	742.489082	740.4279288
-0.3	-171.2420685	-191.1320784	-114.199309	-141.579745	-142.669938
+0.3	885.4174247	937.9061408	681.3820303	802.2654182	820.7875045
-0.35	-199.7824133	-222.9874248	-133.232527	-165.176369	-166.448261
+0.35	917.957173	993.05308	711.6194289	828.1016675	869.9341389
-0.4	-228.322758	-254.8427712	-152.265745	-188.772993	-190.226583
+0.4	927.5204293	1026.972507	731.9097757	842.3572995	895.6430869
-0.45	-256.8631028	-286.6981177	-171.298964	-212.369617	-214.004906
+0.45	945.1013323	1037.307726	734.0475623	834.8867094	891.4955356
-0.5	-285.4034475	-318.5534641	-190.332182	-235.966241	-237.783229
+0.5	931.8423283	1024.287637	719.9124585	821.0965446	877.7693779
-0.55	-313.9437923	-350.4088105	-209.3654	-259.562865	-261.561552
+0.55	882.4129979	967.8321807	686.0343008	780.5351329	840.0850317
-0.6	-342.484137	-382.2641569	-228.398618	-283.159489	-285.339875
+0.6	821.2267406	906.8118415	644.1297669	735.1438427	786.2829307
-0.65	-371.0244818	-414.1195033	-247.431836	-306.756113	-309.118198
+0.65	753.8408635	805.0133453	585.4977106	675.8965544	706.0969615
-0.7	-399.5648265	-445.9748497	-266.465055	-330.352737	-332.896521
+0.7	659.858732	685.1381814	514.0885249	603.2491932	611.8321353
-0.75	-428.1051713	-477.8301961	-285.498273	-353.949361	-356.674844
+0.75	534.0399793	541.0365708	424.7581738	499.0055534	498.025231
-0.8	-456.645516	-509.6855425	-304.531491	-377.545985	-380.453167
+0.8	383.9392033	368.0853344	328.3255343	367.0753622	374.69145
-0.85	-485.1858608	-541.5408889	-323.564709	-401.14261	-404.23149
+0.85	232.8933888	216.3312794	217.5045477	236.5539369	237.7021026
-0.9	-559.4951831	-620.1905739	-403.576731	-434.930341	-500.414262
+0.9	114.2620277	108.9685848	124.0094797	132.2767783	118.2833882
-0.95	-756.3428845	-808.4665983	-545.432416	-619.275067	-687.638219
+0.95	35.86837742	40.86099169	40.29471975	42.9810344	35.88166713
-1	-961.0019223	-1003.017551	-692.223617	-810.590893	-881.533562
+1	0	0	0	0	0
(Span 2) -2	-961.0019223	-1003.017551	-692.223617	-810.590893	-881.533562
+2	0	0	0	0	0
-2.05	-756.340718	-808.4666796	-545.432311	-619.278218	-687.637723
+2.05	35.85213767	40.90514987	40.2981178	42.98465899	35.83389745
-2.1	-559.494926	-620.1905727	-403.575027	-434.931974	-500.412054
+2.1	114.2464107	108.9719729	123.9578622	132.2217197	118.2681888
-2.15	-485.1846695	-541.5408156	-323.564088	-401.141958	-404.231198
+2.15	232.8841142	216.3298472	217.4869423	236.5440403	237.6890949
-2.2	-456.6443942	-509.6854733	-304.530907	-377.545372	-380.452893
+2.2	383.921668	368.0826781	328.3435984	367.0628637	374.6791583
-2.25	-428.1041189	-477.8301309	-285.497726	-353.948786	-356.674588

+2.25	534.0446476	541.0382995	424.7747022	499.0165484	498.0430573
-2.3	-399.5638437	-445.9747886	-266.464544	-330.352201	-332.896283
+2.3	659.831494	685.1328469	514.1036072	603.2818949	611.8786294
-2.35	-371.0235684	-414.1194463	-247.431363	-306.755615	-309.117978
+2.35	753.8346804	805.0125516	585.5086949	675.9019729	706.109656
-2.4	-342.4832931	-382.264104	-228.398182	-283.159029	-285.339672
+2.4	821.1808692	906.8149133	644.1364709	735.1722778	786.3211252
-2.45	-313.9430179	-350.4087616	-209.365001	-259.562444	-261.561367
+2.45	882.426719	967.8307219	686.0302049	780.5475149	840.0865019
-2.5	-285.4027426	-318.5534193	-190.33182	-235.965858	-237.783062
+2.5	931.8170164	1024.284311	719.9330003	821.1343836	877.7938368
-2.55	-256.8624673	-286.698077	-171.298639	-212.369272	-214.004757
+2.55	945.0945876	1037.30786	734.0613217	834.8856033	891.5059515
-2.6	-228.322192	-254.8427346	-152.265457	-188.772686	-190.226452
+2.6	927.5312999	1026.970092	731.9164644	842.3959569	895.6142398
-2.65	-199.7819168	-222.9873923	-133.232276	-165.176101	-166.448146
+2.65	917.9412501	993.0484507	711.6154676	828.0996125	869.9263954
-2.7	-171.2416415	-191.13205	-114.199095	-141.579515	-142.669841
+2.7	885.3895921	937.9014663	681.3696467	802.2970111	820.8000979
-2.75	-142.7013662	-159.2767077	-95.1659138	-117.982929	-118.891536
+2.75	818.2896485	863.2086803	625.4110764	742.5079119	740.429122
-2.8	-114.1610909	-127.4213653	-76.1327327	-94.3863434	-95.1132307
+2.8	720.7691268	749.7544071	551.8229363	651.5225558	653.3798829
-2.85	-85.62081568	-95.56602301	-57.0995515	-70.7897577	-71.3349255
+2.85	588.3861239	616.9502417	448.45863	541.6070355	534.6595153
-2.9	-57.0805404	-63.71068069	-38.0663703	-47.1931719	-47.5566203
+2.9	438.8464899	461.2354729	329.5957963	403.1435656	400.3881448
-2.95	-28.54026513	-31.85533836	-19.0331892	-23.5965862	-23.7783151
+2.95	241.2459113	253.057344	180.3785371	220.6261697	220.2819466
-3	-1.35E-13	-1.51E-13	-1.11E-13	-1.09E-13	-1.18E-13
+3	4.66E-14	4.08E-14	3.45E-14	4.61E-14	4.56E-14

2-Span: Shear (Max and Min) Raw Data Results - 45' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-5.548129958	-4.08824	-3.974134603	-3.46233	-3.141020318	-3.351776762	-4.5941	-5.08651	-5.625934768	-6.08439
End Shear	54.18764448	40.59689	42.24732631	36.70073	31.5312743	33.19986093	44.63506	48.85459	50.17969438	51.00516
-0.05	-5.548129958	-4.08824	-3.974134603	-3.46233	-3.534098716	-3.351776762	-4.5941	-5.08651	-5.625934768	-6.08439
+0.05	49.26580841	37.09299	37.88033389	32.79507	28.035076	30.35508579	40.81401	44.54192	45.44521174	45.95288
-0.1	-5.548129958	-4.08824	-3.974134603	-3.64557	-4.369227692	-3.351776762	-4.5941	-5.08651	-5.625934768	-6.08439
+0.1	44.91835763	33.84405	33.90378134	29.12792	24.83235196	27.7332986	37.27209	40.53291	41.13128009	41.19396
-0.15	-5.898403652	-4.29147	-4.296192967	-4.47077	-5.661154916	-3.880807372	-4.5941	-5.08651	-5.625934768	-6.08439
+0.15	41.10078643	31.44128	30.91342374	26.44185	22.48804854	25.79203427	34.65001	37.44071	37.59069749	37.60588
-0.2	-8.186111485	-6.67219	-6.678701413	-6.24492	-7.070539711	-5.362383053	-6.65346	-6.65513	-6.637193516	-6.62044
+0.2	36.71300942	28.13945	27.29734895	23.35463	19.78164854	23.24641007	31.15382	33.51027	33.39790343	33.39107
-0.25	-9.978423745	-8.56502	-8.666652984	-7.89778	-8.290599482	-6.536764656	-8.91642	-8.91844	-8.900942232	-8.8846
+0.25	33.29642898	25.68067	24.51334058	21.17168	17.86363784	21.2517408	28.35314	30.49053	30.3969975	30.38991
-0.3	-12.16587872	-10.9081	-11.17562974	-10.0733	-9.843287652	-7.98600709	-11.7226	-12.0392	-12.01906702	-12.0002
+0.3	29.15962745	22.68848	21.18466762	18.60069	15.60449617	18.70074843	25.07581	26.82228	26.7507881	26.74343
-0.35	-14.54740124	-12.7582	-13.1347026	-11.8954	-11.07285542	-9.826600597	-13.9422	-14.6941	-14.67449876	-14.6562
+0.35	26.10482618	20.36847	18.8200673	16.61399	13.87371003	16.81502991	22.53101	23.98359	23.92844372	23.92093
-0.4	-18.75709257	-15.032	-15.51703598	-14.145	-12.74993045	-12.44624947	-16.7653	-17.9704	-17.95162531	-17.9341
+0.4	22.38403021	17.57228	16.18580781	14.20441	11.81309275	14.53803795	19.45898	20.56959	20.53317101	20.52553
-0.45	-22.08294297	-17.1806	-17.49179225	-15.8251	-14.0245824	-14.5136405	-19.446	-20.549	-20.53090288	-20.514
+0.45	19.5153693	15.42709	14.41839733	12.18903	10.25214882	12.78751463	17.0979	17.95668	17.93377737	17.92609
-0.5	-26.17286881	-20.3587	-20.08159451	-17.9648	-16.2798373	-17.0531214	-22.8833	-23.8384	-23.81148404	-23.7914
+0.5	16.21955729	12.87199	12.38113583	10.03857	8.417393989	10.69753697	14.27986	14.85938	14.85205579	14.8452
-0.55	-29.37976471	-22.8506	-22.23991444	-19.3973	-18.08216647	-19.0419616	-25.5761	-26.9566	-26.90339585	-26.8841
+0.55	13.72352507	10.93769	10.80231591	8.510665	7.091915883	9.111035995	12.14145	12.76307	12.75575088	12.74891
-0.6	-33.29207304	-25.8907	-24.90386384	-21.1002	-20.34857216	-21.46523439	-28.858	-30.7672	-30.68112539	-30.6629
+0.6	10.7942493	8.907941	8.840940776	7.026335	5.777240447	7.244110711	9.696663	10.27915	10.27193004	10.26518
-0.65	-36.5283871	-28.2542	-27.0678907	-23.2119	-22.22920291	-23.34669375	-31.4069	-33.7351	-33.62289278	-33.6056
+0.65	8.614584334	7.489152	7.435189696	5.899475	4.817860727	5.850469625	8.056685	8.409884	8.40280652	8.396188
-0.7	-40.74912209	-31.1112	-29.27362242	-25.7722	-24.44002721	-25.61771875	-34.4847	-37.3298	-37.70402195	-37.6841
+0.7	6.477722445	5.818551	5.767143032	4.573222	3.703820997	4.441130262	6.134305	6.232325	6.225512222	6.219146
-0.75	-44.01401898	-33.3101	-31.99699547	-27.7493	-26.0947075	-27.36296535	-36.8509	-40.1027	-40.93432357	-40.951
+0.75	5.262778778	4.570488	4.521486318	3.605828	2.883432244	3.610389887	4.705762	4.712079	4.70624622	4.700795
-0.8	-47.93864141	-35.939	-35.70236564	-30.4079	-28.31740385	-29.44570413	-39.676	-43.4256	-44.82933308	-45.4499
+0.8	3.846532537	3.009157	3.083640771	2.487626	1.966900648	2.641752271	3.027581	2.91836	3.03012652	3.061429
-0.85	-50.94062223	-37.9374	-38.5663229	-32.8714	-30.31947773	-31.02590161	-41.8205	-45.9587	-47.81897297	-48.9238
+0.85	2.801115479	2.043226	2.034872579	1.625667	1.284105577	1.883966201	1.97443	1.971087	1.976204651	1.980982
-0.9	-54.50405725	-40.2929	-42.00557159	-36.2763	-33.09052934	-32.88431373	-44.3441	-48.954	-51.38181341	-53.0913
+0.9	1.611402452	0.831645	0.886496401	0.797308	0.621838752	1.091796095	0.802808	0.844553	0.846967127	0.855059
-0.95	-57.19105009	-42.0547	-44.92514447	-39.1916	-35.49430423	-34.27063666	-46.2279	-51.2026	-54.08062805	-56.2719
+0.95	0.758911892	0.409902	0.40549262	0.3733	0.287190574	0.509968099	0.396344	0.394724	0.396824385	0.398786
-1	-60.32822193	-44.092	-48.58322778	-42.6898	-38.41932001	-35.86868219	-48.4014	-53.8142	-57.24857523	-60.038
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	59.64603218	43.69797	47.86478346	42.00154	37.84345694	35.56004989	47.98154	53.30805	56.63142617	59.3013
-2.05	-7.59E-01	-0.4104	-0.405906433	-0.37364	-2.87E-01	-0.510617773	-0.39683	-0.39519	-0.397275671	-0.39922
+2.05	57.11076709	42.05277	44.92228083	39.18913	35.49319746	34.269032	46.22584	51.20013	54.07780395	56.26871
-2.1	-1.838973999	-1.091	-1.082627752	-0.91068	-0.712660478	-1.247561072	-1.05462	-1.05144	-1.055879788	-1.06003
+2.1	53.72298599	39.83297	41.32841711	35.52994	32.49385443	32.52175093	43.85167	48.36826	50.68255125	52.2708
-2.15	-2.801574707	-2.04436	-2.035815923	-1.62635	-1.284431255	-1.904515296	-1.97553	-1.97215	-1.977231541	-1.98198
+2.15	50.85032292	37.93514	38.56363884	32.86932	30.31858872	31.02405642	41.81805	45.95597	47.8158299	48.92021
-2.2	-4.120796204	-3.36974	-3.361247511	-2.70917	-2.145939614	-2.829909801	-3.34346	-3.25222	-3.346009084	-3.37707
+2.2	47.07332439	35.42208	34.96915734	29.77762	27.80589246	29.03645393	39.12082	42.77159	44.06055022	44.55978
-2.25	-5.263319016	-4.57185	-4.522623537	-3.60665	-2.883828943	-3.611346023	-4.70733	-4.676	-4.707708462	-4.70221
+2.25	43.91531882	33.30767	31.99411488	27.74758	26.09399089	27.36091515	36.84824	40.09966	40.93091058	40.94717

-2.3	-6.792818069	-6.14459	-6.092382909	-4.83172	-3.919298401	-4.65719121	-6.50866	-6.65498	-6.6480363	-6.64156
+2.3	39.8141689	30.54643	28.84923617	25.26591	24.01604479	25.16902038	33.87662	36.61869	36.87832471	36.85827
-2.35	-8.624275934	-7.49072	-7.436499835	-5.90042	-4.818313845	-5.852066338	-8.05851	-8.41189	-8.404736083	-8.39806
+2.35	36.42288459	28.25151	27.06610939	23.21007	22.25147342	23.344476	31.404	33.73185	33.61977934	33.60255
-2.4	-11.37296218	-9.27509	-9.207296515	-7.31769	-6.026738867	-7.608427925	-10.122	-10.7654	-10.75804163	-10.7512
+2.4	32.42361646	25.28717	24.39617328	20.72631	19.89171158	20.98433565	28.20668	30.01021	29.93084069	29.91252
-2.45	-13.73475488	-10.9398	-10.71587994	-8.51172	-7.092419217	-9.112876718	-12.1438	-12.7653	-12.75793496	-12.751
+2.45	29.28224228	22.84781	22.23781536	19.39605	18.08132995	19.03960248	25.57298	26.9532	26.90010538	26.88095
-2.5	-16.94269629	-13.3735	-12.78337527	-10.4582	-8.774341049	-11.10828399	-14.8335	-15.4612	-15.45030849	-15.4426
+2.5	25.26175027	19.72545	19.57441268	17.58922	15.81988014	16.54726423	22.19864	23.07932	23.06206537	23.04592
-2.55	-19.59817727	-15.4295	-14.41997093	-12.1864	-10.25288125	-12.78955706	-17.1006	-17.9595	-17.93649561	-17.9287
+2.55	21.98149017	17.1777	17.48975921	15.8581	14.02401442	14.51118255	19.44279	20.54615	20.52816095	20.51135
-2.6	-23.07682988	-18.1242	-16.70380712	-14.6739	-12.21648094	-14.9879829	-20.0658	-21.2427	-21.20256142	-21.1948
+2.6	17.8163265	14.57903	15.04500668	13.70687	12.42144957	11.92267789	16.22072	17.31658	17.29774012	17.28014
-2.65	-26.06564051	-20.3711	-18.8221141	-16.6157	-13.87451389	-16.81724198	-22.5339	-23.9867	-23.93140943	-23.9238
+2.65	14.44345985	12.7561	13.13285879	11.89377	11.07219271	9.82407948	13.9397	14.69114	14.67166964	14.65346
-2.7	-30.07430227	-23.2818	-21.83865425	-19.1092	-16.04888482	-19.18263755	-25.7261	-27.549	-27.47306412	-27.4657
+2.7	11.73176905	10.43984	10.67707842	9.645636	9.536688228	7.69670334	11.16128	11.3688	11.34858682	11.3297
-2.75	-33.39960369	-25.6834	-24.51592979	-21.1735	-17.86450006	-21.25409486	-28.3562	-30.4938	-30.40016672	-30.393
+2.75	9.976778966	8.562865	8.664714345	7.896226	8.289965285	6.535369245	8.913818	8.915929	8.898520789	8.882255
-2.8	-37.68727992	-28.7651	-28.01166852	-23.9641	-20.31360825	-23.75359321	-31.8387	-34.2793	-34.21730592	-34.2089
+2.8	7.730906067	6.194922	6.201439806	5.850646	6.769616246	5.065699394	6.083389	6.085052	6.067109465	6.084383
-2.85	-41.20974653	-31.4442	-30.9162218	-26.444	-22.48908258	-25.79448779	-34.6532	-37.3803	-37.59434955	-37.5862
+2.85	5.896685598	4.289287	4.294379187	4.470075	5.544367251	3.879383723	4.59411	5.086489	5.625940854	6.084383
-2.9	-45.71135626	-34.493	-34.66658663	-29.8517	-25.46215836	-28.25736002	-37.9799	-41.333	-42.00932411	-42.0719
+2.9	5.548203449	4.088232	3.974140431	3.462327	4.1274155	3.351771947	4.59411	5.086489	5.625940854	6.084383
-2.95	-49.37893666	-37.096	-37.88347246	-32.7977	-28.03630522	-30.35760516	-40.8173	-44.5455	-45.44902493	-45.9239
+2.95	5.548203449	4.088232	3.974140431	3.462327	3.538477456	3.351771947	4.59411	5.086489	5.625940854	6.084383
-3	-54.02941194	-40.3843	-42.0901528	-36.6058	-31.3795768	-33.00767522	-44.3982	-48.6095	-49.93354351	-50.7616
+3	5.548203449	4.088232	3.974140431	3.462327	3.14102707	3.351771947	4.59411	5.086489	5.625940854	6.084383

2-Span: Shear (Max and Min) Raw Data Results - 45' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-5.548129958	-5.67585	-6.045671108	-5.68925	-6.79033	-4.538198069	-4.77705	-2.65125
End Shear	54.18764448	56.21398	59.1948846	55.00017	63.84863	47.22899131	49.74124	28.41462
-0.05	-5.548129958	-5.67585	-6.045671108	-5.68925	-6.79033	-4.538198069	-4.77705	-2.65125
+0.05	49.26580841	51.55624	54.19579538	50.31656	58.21027	42.20046367	44.42956	26.00654
-0.1	-5.548129958	-5.67585	-6.045671108	-5.68925	-6.79033	-4.538198069	-4.77705	-2.81992
+0.1	44.91835763	47.24678	49.57642461	45.97295	52.99375	37.62727976	39.60766	23.75112
-0.15	-5.898403652	-6.09432	-6.094319775	-5.68925	-6.79033	-4.63793559	-4.88204	-4.07049
+0.15	41.10078643	43.83761	45.92629566	42.75598	49.13842	34.1938042	35.99348	21.97368
-0.2	-8.186111485	-9.47546	-9.475455303	-7.94752	-8.10433	-7.209961753	-7.58943	-5.62437
+0.2	36.71300942	39.847	41.65861846	38.46756	44.02401	30.05196175	31.63364	19.79377
-0.25	-9.978423745	-12.1637	-12.1636853	-10.8591	-11.342	-9.366345225	-9.87422	-6.85597
+0.25	33.29642898	36.51689	38.10373033	35.02501	39.90467	26.98405429	28.57102	18.0895
-0.3	-12.16587872	-15.4914	-15.49144552	-14.472	-15.3621	-12.08228799	-12.7438	-8.37568
+0.3	29.15962745	32.31394	33.61886309	30.99781	35.11411	24.04524224	25.44921	16.017
-0.35	-14.54740124	-18.2934	-18.35161441	-17.3315	-18.5462	-14.20201588	-14.9821	-9.57157
+0.35	26.10482618	29.17634	30.27729352	27.86885	31.40265	21.7536451	23.01546	14.41143
-0.4	-18.75709257	-22.5413	-22.9389796	-20.9709	-22.6015	-16.84051473	-17.7675	-11.0362
+0.4	22.38403021	25.37608	26.23647264	24.08909	26.93325	18.88447485	19.96987	12.47824
-0.45	-22.08294297	-25.8867	-26.55598543	-24.248	-26.6004	-19.42554432	-20.5172	-12.1796
+0.45	19.5153693	22.44456	23.12487655	21.18188	23.50755	16.69629377	17.64635	10.99686
-0.5	-26.17286881	-29.9873	-30.99478136	-28.4483	-31.737	-22.83760254	-24.1445	-14.1048
+0.5	16.21955729	18.93118	19.40306023	17.70906	19.43143	14.12552591	14.91835	9.234879
-0.55	-29.37976471	-33.1915	-34.46770269	-31.7374	-35.7683	-25.71385288	-27.2005	-15.836
+0.55	13.72352507	16.25258	16.57189988	15.07122	16.3492	12.16281585	12.83629	8.029201
-0.6	-33.29207304	-37.0862	-38.69485138	-35.7444	-40.6916	-29.26337148	-30.9719	-17.9474
+0.6	10.7942493	13.08466	13.23217373	12.03543	12.85612	9.837818155	10.37086	6.752702
-0.65	-36.5283871	-40.1022	-41.97322567	-38.8549	-44.5235	-31.91659983	-33.7924	-19.5883
+0.65	8.614584334	10.70586	10.73191219	9.951357	10.56977	8.088712895	8.51693	5.777649
-0.7	-40.74912209	-43.7325	-45.9256533	-42.6089	-49.1614	-34.99804053	-37.07	-21.5709
+0.7	6.477722445	8.255789	8.255789174	7.51256	7.899285	6.283358198	6.614061	4.621939
-0.75	-44.01401898	-46.5135	-48.95901305	-45.4933	-52.7363	-37.27355732	-39.4919	-23.096
+0.75	5.262778778	6.48386	6.483859745	5.703925	5.923269	4.934908651	5.194641	3.751889
-0.8	-47.93864141	-49.8208	-52.57363886	-48.9349	-57.0167	-39.87879754	-42.2666	-24.9178
+0.8	3.846532537	4.437619	4.437618956	3.587848	3.621833	3.344268688	3.520283	2.737899
-0.85	-50.94062223	-52.32	-55.31152765	-51.5456	-60.2767	-43.39934892	-45.703	-26.3016
+0.85	2.801115479	2.76806	2.76805989	2.322859	2.348844	2.210750099	2.327105	1.989595
-0.9	-54.50405725	-55.2456	-58.52526782	-54.6152	-64.1275	-47.65497319	-50.1924	-27.9309
+0.9	1.611402452	1.258003	1.258003298	0.94448	1.003252	0.95701316	1.007382	1.138251
-0.95	-57.19105009	-57.4161	-60.91722064	-56.9046	-67.0149	-50.89537336	-53.6096	-29.1478
+0.95	0.758911892	0.523609	0.523609141	0.466287	0.473125	0.443893133	0.467256	0.528437
-1	-60.32822193	-59.9016	-63.66700613	-59.5428	-70.3641	-55.01385579	-57.9643	-30.5526
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	59.64603218	59.42325	63.13669568	59.03344	69.71531	54.16168566	57.06012	30.282
-2.05	-7.59E-01	-0.5855	-0.585496456	-0.46686	-0.47369	-0.444341695	-0.46773	-0.52566
+2.05	57.11076709	57.41366	60.91448161	56.90201	67.01171	50.89236527	53.60647	29.14738
-2.1	-1.838973999	-1.55466	-1.554663617	-1.24073	-1.25009	-1.181361382	-1.24354	-1.2976
+2.1	53.72298599	54.67618	57.89890948	54.01655	63.37472	46.81839304	49.30998	27.6139
-2.15	-2.801574707	-2.90917	-2.909173644	-2.32416	-2.35014	-2.211768469	-2.32818	-1.98612
+2.15	50.85032292	52.31709	55.30836394	51.54266	60.27299	43.39602318	45.69947	26.3011
-2.2	-4.120796204	-4.83315	-4.833146094	-3.98627	-4.0613	-3.644278014	-3.83608	-2.93006
+2.2	47.07332439	49.17203	51.86391625	48.25884	56.17437	39.37719386	41.7322	24.56086
-2.25	-5.263319016	-6.48587	-6.485872536	-5.70591	-5.92543	-4.936136425	-5.19593	-3.7478
+2.25	43.91531882	46.51029	48.95548477	45.49009	52.73221	37.2714744	39.48964	23.09541

-2.3	-6.792818069	-8.71877	-8.718770788	-7.98707	-8.41839	-6.635363127	-6.98459	-4.8428
+2.3	39.8141689	43.01621	45.14523368	41.86743	48.2441	34.40046981	36.43419	21.18028
-2.35	-8.624275934	-10.7086	-10.73475894	-9.95368	-10.5723	-8.090320098	-8.51863	-5.77303
+2.35	36.42288459	40.09869	41.96939059	38.85139	44.51918	31.91415035	33.78978	19.58769
-2.4	-11.37296218	-13.7044	-13.88465759	-12.5764	-13.4501	-10.29257554	-10.853	-6.99816
+2.4	32.42361646	36.31416	37.85641435	34.94939	39.71369	28.57146152	30.23654	17.52959
-2.45	-13.73475488	-16.2557	-16.57515617	-15.0742	-16.3526	-12.16463529	-12.8382	-8.02413
+2.45	29.28224228	33.18772	34.4636343	31.73369	35.76373	25.71104741	27.1975	15.83538
-2.5	-16.94269629	-19.6229	-20.13515132	-18.3916	-20.2311	-14.63151934	-15.4552	-9.57939
+2.5	25.26175027	29.17132	30.11099805	27.61184	30.71299	22.16541077	23.42982	13.6662
-2.55	-19.59817727	-22.448	-23.12848204	-21.1852	-23.5114	-16.69829293	-17.6485	-10.9974
+2.55	21.98149017	25.88281	26.55173235	24.24406	26.59567	19.42288346	20.51441	12.1792
-2.6	-23.07682988	-26.1281	-27.03547368	-24.836	-27.8151	-19.43438846	-20.5537	-12.8585
+2.6	17.8163265	21.69311	22.02252593	20.26859	21.81873	16.26817882	17.16262	10.74579
-2.65	-26.06564051	-29.18	-30.28119065	-27.8724	-31.4068	-21.75578664	-23.0177	-14.412
+2.65	14.44345985	18.28939	18.34723649	17.32823	18.54253	14.20002123	14.97996	9.571129
-2.7	-30.07430227	-33.1144	-34.47211147	-31.7971	-36.0637	-24.62895939	-26.0692	-16.4265
+2.7	11.73176905	14.82624	14.82623832	13.7491	14.55749	11.54272014	12.17387	8.07332
-2.75	-33.39960369	-36.403	-37.9900923	-35.0288	-39.9092	-26.9863101	-28.5734	-18.0901
+2.75	9.976778966	12.16051	12.16050991	10.8558	11.33827	9.364246106	9.871999	6.855515
-2.8	-37.68727992	-40.6851	-42.55443187	-39.3084	-45.0283	-30.8691971	-32.4939	-20.2263
+2.8	7.730906067	8.797512	8.797512339	7.214284	7.289286	6.694736154	7.047091	5.314236
-2.85	-41.20974653	-43.8416	-45.9305795	-42.7599	-49.1431	-34.19701287	-35.9969	-21.9743
+2.85	5.896685598	6.091106	6.091105548	5.689247	6.790337	4.635977531	4.879976	4.070026
-2.9	-45.71135626	-48.109	-50.50013843	-46.8411	-54.0354	-38.50422136	-40.5308	-24.2001
+2.9	5.548203449	5.675843	6.045673556	5.689247	6.790337	4.538205329	4.777058	2.651251
-2.95	-49.37893666	-51.5603	-54.20019108	-50.3206	-58.2151	-42.20344046	-44.4334	-26.0072
+2.95	5.548203449	5.675843	6.045673556	5.689247	6.790337	4.538205329	4.777058	2.651251
-3	-54.02941194	-55.9063	-58.86444456	-54.7099	-63.4988	-47.04784342	-49.5499	-28.2908
+3	5.548203449	5.675843	6.045673556	5.689247	6.790337	4.538205329	4.777058	2.651251

2-Span: Shear (Max and Min) Raw Data Results - 45' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-5.548129958	-7.336378061	-8.18851	-4.89254	-6.06558	-6.11229
End Shear	54.18764448	69.8788285	71.80078	51.81686	63.36509	63.50874
-0.05	-5.548129958	-7.336378061	-8.18851	-4.89254	-6.06558	-6.11229
+0.05	49.26580841	62.00771702	64.42662	46.36307	56.708	56.61941
-0.1	-5.548129958	-7.336378061	-8.18851	-4.89254	-6.06558	-6.11229
+0.1	44.91835763	55.05534258	57.27058	41.37547	50.60729	50.19248
-0.15	-5.898403652	-7.548657034	-8.18851	-5.49296	-6.06558	-6.11229
+0.15	41.10078643	49.78758874	51.72593	38.19412	45.88957	45.58457
-0.2	-8.186111485	-9.532015612	-10.1854	-8.72828	-9.0601	-8.25476
+0.2	36.71300942	43.6818822	45.04923	34.78513	40.22125	41.08966
-0.25	-9.978423745	-12.62272615	-13.0489	-11.3036	-11.6437	-11.6488
+0.25	33.29642898	39.22652754	40.09255	31.96173	36.03052	37.56549
-0.3	-12.16587872	-17.25518357	-17.5537	-14.4573	-15.6595	-15.8284
+0.3	29.15962745	33.87728967	34.36459	28.50581	31.47267	33.26639
-0.35	-14.54740124	-20.90281146	-20.9839	-16.9943	-19.0231	-19.1787
+0.35	26.10482618	29.79129569	30.03597	25.80932	28.24377	29.92418
-0.4	-18.75709257	-25.52227611	-25.6103	-20.787	-23.1309	-23.695
+0.4	22.38403021	25.34662456	25.2568	22.5369	24.64644	25.68719
-0.45	-22.08294297	-29.24632182	-29.0872	-24.1831	-26.5363	-27.336
+0.45	19.5153693	21.87831512	21.62841	19.86122	21.86391	22.58485
-0.5	-26.17286881	-33.41513905	-33.3475	-28.5604	-30.9919	-32.2782
+0.5	16.21955729	18.20172631	17.66726	16.82039	18.51897	18.87722
-0.55	-29.37976471	-36.71191068	-37.6148	-31.8593	-34.7023	-36.5835
+0.55	13.72352507	15.65686706	14.76818	14.50342	15.79349	16.05953
-0.6	-33.29207304	-41.30199919	-42.6769	-35.7268	-39.2572	-41.8269
+0.6	10.7942493	12.63772115	11.81272	11.75581	12.77554	12.8874
-0.65	-36.5283871	-44.55490404	-46.505	-38.6144	-42.7132	-45.752
+0.65	8.614584334	10.36240553	9.694809	9.68618	10.49171	10.59712
-0.7	-40.74912209	-49.21845492	-52.5272	-41.9632	-46.9081	-50.319
+0.7	6.477722445	7.707320166	7.222716	7.448683	7.945262	7.848497
-0.75	-44.01401898	-54.81358962	-58.4575	-44.4321	-49.7345	-53.6995
+0.75	5.262778778	5.744956472	5.395041	5.794284	6.18057	5.874338
-0.8	-47.93864141	-61.41941714	-66.1236	-47.312	-52.9391	-57.5812
+0.8	3.846532537	3.508203301	3.522052	3.954696	4.218342	3.621878
-0.85	-50.94062223	-66.38662583	-72.2499	-49.5396	-57.4599	-60.5681
+0.85	2.801115479	2.310770984	2.205642	2.61275	2.786933	2.32741
-0.9	-54.50405725	-72.18943265	-79.4892	-51.7936	-63.3417	-63.8964
+0.9	1.611402452	1.007100113	1.133422	1.119166	1.193777	0.997168
-0.95	-57.19105009	-76.4997695	-84.9338	-55.4306	-67.8635	-68.527
+0.95	0.758911892	0.469989037	0.540986	0.523258	0.558142	0.467177
-1	-60.32822193	-82.9888306	-91.2905	-60.0608	-73.5334	-74.8861
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	59.64603218	81.51939931	90.05917	59.15382	72.31031	73.63664
-2.05	-7.59E-01	-0.470423314	-0.52794	-0.52378	-0.55869	-0.46762
+2.05	57.11076709	76.49612203	84.93305	55.42706	67.85936	68.52229
-2.1	-1.838973999	-1.204306861	-1.2949	-1.39414	-1.48708	-1.24357
+2.1	53.72298599	71.0614937	78.07851	51.36527	62.18061	63.29566
-2.15	-2.801574707	-2.284546341	-2.20582	-2.61393	-2.78819	-2.32843
+2.15	50.85032292	66.38239496	72.24908	49.53776	57.45539	60.63748
-2.2	-4.120796204	-3.937133067	-3.87051	-4.30986	-4.59718	-4.05408
+2.2	47.07332439	60.12869216	64.5458	46.77537	52.32507	56.83284
-2.25	-5.263319016	-5.746605433	-5.39529	-5.79571	-6.18209	-5.87603
+2.25	43.91531882	54.80882456	58.45664	44.42986	49.732	53.69654

-2.3	-6.792818069	-8.222632367	-7.70116	-7.86565	-8.39003	-8.3667
+2.3	39.8141689	47.77220644	51.04218	41.31427	46.16222	49.43268
-2.35	-8.624275934	-10.36433875	-9.6951	-9.77445	-10.484	-10.6041
+2.35	36.42288459	44.55223186	46.50448	38.61175	42.78405	45.74853
-2.4	-11.37296218	-13.22851566	-12.3609	-12.2935	-13.3685	-13.4818
+2.4	32.42361646	40.46386787	41.68831	34.97339	38.37214	40.80438
-2.45	-13.73475488	-15.65905034	-14.7686	-14.5055	-15.7958	-16.062
+2.45	29.28224228	36.75746557	37.61423	31.85628	34.69874	36.57961
-2.5	-16.94269629	-18.85711787	-18.4176	-17.4173	-19.1778	-19.6054
+2.5	25.26175027	32.55740952	32.34571	27.7042	30.11728	31.23976
-2.55	-19.59817727	-21.81126128	-21.6289	-19.8546	-21.8664	-22.5876
+2.55	21.98149017	29.24314569	29.08675	24.17973	26.53293	27.33259
-2.6	-23.07682988	-26.19555341	-26.1922	-23.1844	-25.3584	-26.4833
+2.6	17.8163265	24.55734338	24.70611	19.96745	22.31545	22.80399
-2.65	-26.06564051	-29.79478112	-30.0365	-25.8118	-28.2465	-29.9271
+2.65	14.44345985	20.89967586	20.98337	16.99154	19.02003	19.17534
-2.7	-30.07430227	-34.93009231	-35.488	-29.1924	-32.3711	-34.119
+2.7	11.73176905	16.31961234	16.67154	13.83045	14.80557	14.99565
-2.75	-33.39960369	-39.2303583	-40.0932	-31.9643	-36.034	-37.5686
+2.75	9.976778966	12.61973069	13.04838	11.30119	11.64128	11.64573
-2.8	-37.68727992	-44.82228576	-46.3613	-35.5008	-41.3374	-41.9844
+2.8	7.730906067	9.151978411	9.53764	8.075419	8.409232	7.496524
-2.85	-41.20974653	-49.79212552	-51.7267	-38.1968	-45.8939	-45.5878
+2.85	5.896685598	7.547196027	8.188508	5.490694	6.065571	6.112282
-2.9	-45.71135626	-56.4033832	-58.6835	-42.3618	-51.8146	-51.4605
+2.9	5.548203449	7.336360201	8.188508	4.892534	6.065571	6.112282
-2.95	-49.37893666	-62.01296177	-64.4275	-46.3668	-56.7126	-56.6241
+2.95	5.548203449	7.336360201	8.188508	4.892534	6.065571	6.112282
-3	-54.02941194	-69.67334904	-71.8017	-51.6302	-63.1376	-63.3055
+3	5.548203449	7.336360201	8.188508	4.892534	6.065571	6.112282

2-Span: Moment (Max and Min) Raw Data Results - 45' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-4.26E-14	-3E-14	-2.96651E-14	-2.7E-14	-1.95E-14	-2.02373E-14	-2.9E-14	-3E-14	-3.01981E-14	-3E-14
End Shear	5.68E-14	2.88E-14	2.63986E-14	2.6E-14	2.53E-14	2.5884E-14	2.49E-14	2.92E-14	2.88771E-14	2.92E-14
-0.05	-12.4833	-9.19855	-8.941802858	-7.79024	-7.067295715	-7.541497716	-10.3367	-11.4446	-12.65835323	-13.6899
+0.05	110.8481	83.45922	85.23075126	73.78892	63.71177376	68.29894304	91.83441	100.2193	102.7736147	103.8521
-0.1	-24.9666	-18.3971	-17.88360572	-15.5805	-14.13459143	-15.08299543	-20.6735	-22.8893	-25.31670646	-27.3798
+0.1	205.1995	155.2051	155.9866363	134.3213	116.4051183	127.1468807	170.8949	185.9827	189.7079561	192.9561
-0.15	-37.4499	-27.5956	-26.82540857	-23.3707	-21.20188714	-22.62449315	-31.0102	-34.3339	-37.97505968	-41.0697
+0.15	278.3617	212.2641	209.8682678	179.5319	156.6973244	173.8651658	234.3202	254.3808	271.7627048	274.9871
-0.2	-49.9332	-36.7942	-35.76721143	-31.161	-28.26918286	-30.16599086	-41.3469	-45.7785	-50.63341291	-54.7595
+0.2	338.2262	259.4332	252.0806147	215.6578	189.3503819	212.6247821	286.4802	309.6103	338.308773	345.0414
-0.25	-62.4165	-45.9927	-44.70901429	-38.9512	-35.33647857	-37.70748858	-51.6837	-57.2232	-63.29176614	-68.4494
+0.25	377.773	292.4098	279.5548627	240.7616	212.3838939	239.184502	323.7345	349.9684	386.4258036	404.3616
-0.3	-74.8998	-55.1913	-53.65081715	-46.7414	-42.40377429	-45.24898629	-62.0204	-68.6678	-75.95011937	-82.1393
+0.3	405.2678	315.6762	299.1309018	259.7099	229.8194476	259.3068539	353.1627	386.2504	420.4730231	447.6785
-0.35	-87.383	-64.3898	-62.59262	-54.5317	-49.47107	-52.79048401	-72.3572	-80.1125	-88.60847259	-95.8292
+0.35	419.852	330.8255	310.2303164	273.0428	242.122971	267.8734371	374.2547	406.7765	442.1448053	472.1102
-0.4	-99.8663	-73.5884	-71.53442286	-62.3219	-56.53836572	-60.33198172	-82.6939	-91.5571	-101.2668258	-109.519
+0.4	430.9068	339.7327	311.6406685	279.0176	247.7964872	270.4510844	385.0996	416.3243	456.3884628	481.7749
-0.45	-112.35	-82.7869	-80.47622572	-70.1121	-63.60566143	-67.87347944	-93.0306	-103.002	-113.925179	-123.209
+0.45	423.4918	336.4824	304.7731619	274.1738	244.664739	263.1380049	382.1353	411.2268	454.1714521	484.5353
-0.5	-124.833	-91.9855	-89.41802858	-77.9024	-70.67295715	-75.41497716	-103.367	-114.446	-126.5835323	-136.899
+0.5	420.8477	330.0739	294.1973424	268.562	240.1400185	261.2121669	375.7844	402.8904	443.7306063	474.0637
-0.55	-137.316	-101.184	-98.35983143	-85.6926	-77.74025286	-82.95647487	-113.704	-125.891	-139.2418855	-150.589
+0.55	408.6059	318.3834	284.6759249	261.0001	232.670039	255.6184083	361.0812	389.8724	426.5370277	451.0757
-0.6	-149.8	-110.383	-107.3016343	-93.4829	-84.80754858	-90.49797259	-124.041	-137.336	-151.9002387	-164.279
+0.6	386.586	298.6113	274.2414613	246.5658	219.0261945	244.1738182	337.9941	367.0373	397.9745738	424.9619
-0.65	-162.283	-119.581	-116.2434371	-101.273	-91.87484429	-98.0394703	-134.378	-148.78	-164.558592	-177.969
+0.65	346.4936	270.8646	255.4610285	222.6931	197.2561761	222.0311514	303.8145	330.9793	358.764843	382.8439
-0.7	-174.766	-128.78	-125.18524	-109.063	-98.94214001	-105.580968	-144.714	-160.225	-177.2169452	-191.658
+0.7	304.6659	238.0231	225.782637	194.4959	171.3946009	195.8311119	262.5881	286.5343	312.4750783	330.3855
-0.75	-187.249	-137.978	-134.1270429	-116.854	-106.0094357	-113.1224657	-155.051	-171.67	-189.8752984	-205.348
+0.75	248.4963	195.7261	189.8469209	159.4957	139.4240601	159.9397466	214.3166	231.6781	253.3731464	263.8532
-0.8	-199.733	-147.177	-143.0688457	-124.644	-113.0767314	-120.6639634	-165.388	-183.114	-202.5336516	-219.038
+0.8	185.0768	148.1684	143.8046682	119.3229	102.4741643	122.0726822	160.8939	170.6836	187.2060702	190.3506
-0.85	-212.216	-156.375	-152.0106486	-133.022	-128.5222605	-128.2054612	-175.725	-194.559	-215.1920049	-232.728
+0.85	110.8467	97.48125	97.3835567	77.41238	64.48147754	75.87807032	103.7586	106.2502	115.2231754	115.5156
-0.9	-224.699	-165.574	-160.9524514	-155.806	-161.4301577	-135.7469589	-186.061	-206.003	-227.8503581	-246.418
+0.9	74.46627	56.21258	55.82541831	44.74884	36.07943635	51.10698642	56.15905	56.08488	56.15969363	56.11081
-0.95	-237.183	-174.772	-213.5598949	-211.833	-203.5606469	-143.2884566	-196.398	-217.448	-240.5087113	-260.108
+0.95	33.20317	18.23176	18.20271591	16.57721	12.96432792	22.78054366	17.61176	17.60575	17.61368803	17.63225
-1	-288.648	-183.971	-281.2694874	-275.608	-255.6629916	-150.8299552	-206.735	-228.893	-253.167344	-273.798
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-288.648	-183.971	-281.2694874	-275.608	-255.6629916	-150.8299552	-206.735	-228.893	-253.167344	-273.798
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-237.186	-174.772	-213.55941	-211.835	-203.5610037	-143.2882516	-196.398	-217.447	-240.5089771	-260.107
+2.05	33.20459	18.23364	18.20428932	16.57852	12.964955	22.78300843	17.6136	17.60753	17.61539983	17.62276
-2.1	-224.702	-165.573	-160.9526884	-155.806	-161.4303541	-135.7467647	-186.061	-206.003	-227.8506101	-246.417
+2.1	74.47845	56.18387	56.25571936	44.36326	35.94320966	51.08551325	56.13977	56.06624	56.14176125	56.1274
-2.15	-212.219	-156.375	-152.0108724	-133.022	-128.5223799	-128.2052778	-175.725	-194.558	-215.1922432	-232.728
+2.15	110.8907	97.49258	97.37711734	77.4077	64.47926637	75.87863065	103.7602	106.2541	115.2352437	115.5273
-2.2	-199.735	-147.176	-143.0690565	-124.644	-113.0769729	-120.663791	-165.388	-183.114	-202.5338763	-219.038
+2.2	185.9904	148.178	143.8134973	119.3279	102.465318	122.0988123	160.8992	170.6782	187.2180677	190.3692
-2.25	-187.252	-137.978	-134.1272405	-116.854	-106.009662	-113.1223041	-155.051	-171.669	-189.8755094	-205.348

+2.25	248.3765	195.734	189.852369	159.4998	139.420494	159.9392107	214.3203	231.6726	253.3831691	263.854
-2.3	-174.768	-128.779	-125.1854245	-109.063	-98.94235107	-105.5808172	-144.714	-160.224	-177.2171425	-191.658
+2.3	305.4077	238.0294	225.7804666	194.4987	171.3845884	195.8547699	262.5841	286.5266	312.483206	330.4011
-2.35	-162.285	-119.581	-116.2436086	-101.273	-91.87504016	-98.03933031	-134.378	-148.78	-164.5587755	-177.968
+2.35	346.414	270.8678	255.4554071	222.6911	197.2552055	222.0265842	303.8088	330.9872	358.7689659	382.8391
-2.4	-149.801	-110.382	-107.3017926	-93.4828	-84.80772926	-90.49784343	-124.041	-137.335	-151.9004086	-164.278
+2.4	387.3544	298.6073	274.2311424	246.5615	219.0241185	244.1922085	337.985	367.0232	397.9695379	424.9698
-2.45	-137.318	-101.184	-98.35997661	-85.6926	-77.74041835	-82.95635655	-113.704	-125.891	-139.2420417	-150.588
+2.45	408.9816	318.3762	284.6700805	260.9933	232.6724741	255.607358	361.0876	389.8723	426.5453983	451.0779
-2.5	-124.835	-91.9852	-89.41816064	-77.9024	-70.67310744	-75.41486967	-103.367	-114.446	-126.5836748	-136.899
+2.5	421.3043	330.0623	294.207684	268.5521	240.1467518	261.2231785	375.767	402.9037	443.7158579	474.0769
-2.55	-112.351	-82.7867	-80.47634467	-70.1121	-63.60579654	-67.87338279	-93.0307	-103.001	-113.9253079	-123.209
+2.55	423.9412	336.4947	304.7808291	274.1834	244.6637196	263.1536496	382.1351	411.2331	454.1692041	484.5427
-2.6	-99.8677	-73.5882	-71.5345287	-62.3219	-56.53848563	-60.3318959	-82.694	-91.5568	-101.2669409	-109.519
+2.6	430.6194	339.741	311.6514676	279.0248	247.7999273	270.4376841	385.114	416.3443	456.3985347	481.7728
-2.65	-87.3842	-64.3897	-62.59271273	-54.5317	-49.47117472	-52.79040902	-72.3572	-80.1122	-88.60857401	-95.829
+2.65	420.0254	330.8289	310.2373135	273.0468	242.1249432	267.8824176	374.2636	406.7722	442.1483484	472.1192
-2.7	-74.9007	-55.1911	-53.65089676	-46.7414	-42.40386381	-45.24892214	-62.0205	-68.6676	-75.95020709	-82.1392
+2.7	406.0031	315.6729	299.133817	259.7139	229.8213609	259.2857149	353.1659	386.2586	420.4678375	447.6978
-2.75	-62.4173	-45.9926	-44.70908079	-38.9512	-35.33655291	-37.70743526	-51.6837	-57.223	-63.29184017	-68.4493
+2.75	377.964	292.4013	279.5676059	240.77	212.3822009	239.1849245	323.7303	349.9697	386.4317202	404.3559
-2.8	-49.9338	-36.7941	-35.76726482	-31.1609	-28.269242	-30.16594838	-41.347	-45.7784	-50.63347325	-54.7594
+2.8	339.1856	259.419	252.10502	215.6769	189.3479949	212.6464775	286.4696	309.6035	338.3252902	345.0449
-2.85	-37.4504	-27.5956	-26.82544885	-23.3707	-21.20193109	-22.6244615	-31.0102	-34.3338	-37.97510632	-41.0696
+2.85	278.1658	212.2638	209.8706219	179.5346	156.6986238	173.8556523	234.3223	254.3856	271.7712787	274.9893
-2.9	-24.9669	-18.397	-17.88363288	-15.5805	-14.13462019	-15.08297461	-20.6735	-22.8892	-25.3167394	-27.3797
+2.9	205.7011	155.2184	155.999624	134.3325	116.3989735	127.1581066	170.9095	185.9986	189.708237	192.9579
-2.95	-12.4835	-9.19852	-8.941816912	-7.79023	-7.067309278	-7.541487733	-10.3368	-11.4446	-12.65837248	-13.6899
+2.95	111.1026	83.46592	85.23782791	73.79474	63.70879571	68.30459693	91.83888	100.2274	102.7737004	103.8529
-3	-8.53E-14	-5.1E-14	-4.49833E-14	-4.5E-14	-4.09E-14	-3.90799E-14	-4.7E-14	-4.7E-14	-5.09506E-14	-5.9E-14
+3	2.84E-14	1.53E-14	1.47771E-14	1.23E-14	1.06E-14	1.02307E-14	1.52E-14	1.54E-14	1.5242E-14	1.62E-14

2-Span: Moment (Max and Min) Raw Data Results - 45' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-4.26E-14	-4.3E-14	-4.3E-14	-3.4E-14	-3.6E-14	-3.4E-14	-3.5E-14	-2.33917E-14
End Shear	5.68E-14	3.55E-14	4E-14	3.02E-14	3.55E-14	2.91E-14	3.06E-14	2.53074E-14
-0.05	-12.4833	-12.7707	-13.6028	-12.8008	-15.2782	-10.2109	-10.7484	-5.965312915
+0.05	110.8481	116.0015	121.9541	113.2554	131.2154	94.94962	99.96651	58.51472576
-0.1	-24.9666	-25.5413	-27.2055	-25.6016	-30.5565	-20.4219	-21.4967	-11.93062583
+0.1	205.1995	216.472	227.231	210.7671	243.4119	173.254	182.3727	108.8976454
-0.15	-37.4499	-38.312	-40.8083	-38.4024	-45.8347	-30.6328	-32.2451	-17.89593874
+0.15	278.3617	297.4677	311.7671	289.29	333.2255	232.4448	244.6788	148.3772802
-0.2	-49.9332	-51.0826	-54.411	-51.2032	-61.1129	-40.8438	-42.9935	-23.86125166
+0.2	338.2262	365.1838	382.1356	353.7727	405.6145	278.0614	292.6962	182.0304487
-0.25	-62.4165	-63.8533	-68.0138	-64.0041	-76.3912	-51.0547	-53.7418	-29.82656457
+0.25	377.773	413.3882	431.998	400.2175	466.137	307.2911	323.4644	203.8759673
-0.3	-74.8998	-76.624	-81.6166	-76.8049	-91.6694	-61.2657	-64.4902	-35.79187749
+0.3	405.2678	449.0351	467.7177	439.8838	514.3511	335.947	354.4049	221.7502144
-0.35	-87.383	-89.3946	-95.2193	-89.6057	-106.948	-71.4766	-75.2385	-41.7571904
+0.35	419.852	468.8539	492.7681	466.0895	541.9046	349.7889	369.5725	228.7673838
-0.4	-99.8663	-102.165	-108.822	-102.406	-122.226	-81.6876	-85.9869	-47.72250332
+0.4	430.9068	484.4516	507.9403	480.0018	554.6773	357.2513	378.1062	231.6371471
-0.45	-112.35	-114.936	-122.425	-115.207	-137.504	-91.8985	-96.7353	-53.68781623
+0.45	423.4918	483.9568	505.4703	477.1308	548.9363	357.4753	378.525	225.5314395
-0.5	-124.833	-127.707	-136.028	-128.008	-152.782	-102.109	-107.484	-59.65312915
+0.5	420.8477	475.349	497.5163	468.9644	540.4653	350.4111	371.1716	219.0457747
-0.55	-137.316	-140.477	-149.63	-140.809	-168.061	-112.32	-118.232	-65.61844206
+0.55	408.6059	454.2847	476.4195	450.0918	521.3909	334.5432	354.4675	216.0633531
-0.6	-149.8	-153.248	-163.233	-153.61	-183.339	-122.531	-128.98	-71.58375498
+0.6	386.586	423.2154	444.3986	420.9458	489.2053	313.951	332.1777	209.3139432
-0.65	-162.283	-166.019	-176.836	-166.411	-198.617	-132.742	-139.729	-77.54906789
+0.65	346.4936	385.2915	400.7643	378.1896	440.1967	286.1752	302.2457	191.4119635
-0.7	-174.766	-178.789	-190.439	-179.211	-213.895	-142.953	-150.477	-83.51438081
+0.7	304.6659	337.7854	350.6984	327.2572	380.6141	254.7579	268.6469	171.9004764
-0.75	-187.249	-191.56	-204.041	-192.012	-229.173	-153.164	-161.225	-89.47969372
+0.75	248.4963	278.2719	288.0327	266.03	307.957	207.8149	219.0137	142.0564602
-0.8	-199.733	-204.331	-217.644	-204.813	-244.452	-163.375	-171.974	-95.44500663
+0.8	185.0768	213.0883	218.2914	198.8643	227.4412	159.7609	168.7126	111.83008
-0.85	-212.216	-217.101	-231.247	-217.614	-259.73	-173.586	-182.722	-101.4103195
+0.85	110.8467	138.3995	138.3995	128.4847	137.8874	105.2771	110.8201	77.77515419
-0.9	-224.699	-229.872	-244.85	-230.415	-275.008	-183.797	-193.471	-107.3756325
+0.9	74.46627	79.87096	79.87096	67.12201	68.4984	60.69184	63.88615	52.95887141
-0.95	-237.183	-242.643	-258.452	-243.215	-290.286	-250.983	-266.15	-113.3409454
+0.95	33.20317	25.90672	25.90672	20.71972	20.74537	19.68754	20.72373	23.80010664
-1	-288.648	-255.413	-272.055	-256.016	-305.565	-326.046	-345.211	-124.7481941
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-288.648	-255.413	-272.055	-256.016	-305.565	-326.046	-345.211	-124.7481941
+2	0	0	0	0	0	0	0	0
-2.05	-237.186	-242.642	-258.453	-243.215	-290.287	-250.982	-266.15	-113.3409813
+2.05	33.20459	25.9095	25.9095	20.72188	20.74753	19.68924	20.72551	23.78971671
-2.1	-224.702	-229.872	-244.85	-230.415	-275.009	-183.797	-193.471	-107.3756665
+2.1	74.47845	79.88607	79.88607	67.1043	68.4872	60.73061	63.92695	52.95185905
-2.15	-212.219	-217.101	-231.247	-217.614	-259.73	-173.586	-182.722	-101.4103518
+2.15	110.8907	138.4162	138.4162	128.4919	137.8962	105.2854	110.8288	78.05755046
-2.2	-199.735	-204.33	-217.644	-204.813	-244.452	-163.375	-171.974	-95.44503703
+2.2	185.9904	213.1023	218.3038	198.8586	227.4731	159.7699	168.722	111.8231194
-2.25	-187.252	-191.56	-204.041	-192.012	-229.174	-153.164	-161.226	-89.47972229

+2.25	248.3765	278.2843	288.0432	266.0249	307.9663	207.8198	219.0222	142.0576374
-2.3	-174.768	-178.789	-190.439	-179.211	-213.896	-142.953	-150.477	-83.51440754
+2.3	305.4077	337.7962	350.7068	327.2502	380.6026	254.7655	268.6553	171.8926823
-2.35	-162.285	-166.018	-176.836	-166.41	-198.617	-132.743	-139.729	-77.5490928
+2.35	346.414	385.2984	400.7684	378.2025	440.2005	286.6429	302.6141	191.4119967
-2.4	-149.801	-153.248	-163.233	-153.61	-183.339	-122.532	-128.981	-71.58377806
+2.4	387.3544	423.2184	444.3925	420.9327	489.2268	313.9541	332.1807	209.3046017
-2.45	-137.318	-140.477	-149.63	-140.809	-168.061	-112.321	-118.232	-65.61846331
+2.45	408.9816	454.2783	476.4089	450.0968	521.3842	334.5409	354.4647	216.0615686
-2.5	-124.835	-127.706	-136.028	-128.008	-152.783	-102.11	-107.484	-59.65314857
+2.5	421.3043	475.337	497.4996	468.9713	540.4744	350.4056	371.1655	219.0344837
-2.55	-112.351	-114.936	-122.425	-115.207	-137.504	-91.8987	-96.7354	-53.68783383
+2.55	423.9412	483.9715	505.4607	477.1338	548.9302	357.4825	378.533	225.5339425
-2.6	-99.8677	-102.165	-108.822	-102.406	-122.226	-81.6877	-85.987	-47.72251908
+2.6	430.6194	484.4603	507.9534	480.0216	554.6642	357.2463	378.1103	231.6303635
-2.65	-87.3842	-89.3945	-95.2194	-89.6057	-106.948	-71.4767	-75.2387	-41.75720434
+2.65	420.0254	468.8555	492.7738	466.0799	541.9063	349.7974	369.5809	228.7681826
-2.7	-74.9007	-76.6239	-81.6166	-76.8048	-91.6696	-61.2658	-64.4903	-35.7918896
+2.7	406.0031	449.0275	467.7135	439.8898	514.367	335.9388	354.3956	221.7584328
-2.75	-62.4173	-63.8532	-68.0138	-64.004	-76.3913	-51.0548	-53.7419	-29.82657486
+2.75	377.964	413.4024	431.986	400.2144	466.1437	307.1166	323.3641	204.3668432
-2.8	-49.9338	-51.0826	-54.4111	-51.2032	-61.113	-40.8438	-42.9935	-23.86126011
+2.8	339.1856	365.1606	382.1149	353.7617	405.6103	278.0536	292.688	182.0362577
-2.85	-37.4504	-38.3119	-40.8083	-38.4024	-45.8348	-30.6329	-32.2451	-17.89594537
+2.85	278.1658	297.4655	311.7668	289.2936	333.2344	232.4487	244.6828	148.3731856
-2.9	-24.9669	-25.5413	-27.2055	-25.6016	-30.5565	-20.4219	-21.4968	-11.93063063
+2.9	205.7011	216.4903	227.2506	210.7851	243.3877	173.269	182.3884	108.9006413
-2.95	-12.4835	-12.7706	-13.6028	-12.8008	-15.2783	-10.211	-10.7484	-5.965315883
+2.95	111.1026	116.0107	121.9504	113.2415	131.2033	94.95776	99.97511	58.51623863
-3	-8.53E-14	-6.9E-14	-7.3E-14	-5.7E-14	-7.1E-14	-5.5E-14	-5.8E-14	-3.97877E-14
+3	2.84E-14	2.15E-14	2.15E-14	1.81E-14	1.85E-14	1.66E-14	1.75E-14	1.28927E-14

2-Span: Moment (Max and Min) Raw Data Results - 45' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**-4.26E-14**	**-4.27163E-14**	**-4.5E-14**	**-4E-14**	**-4.2E-14**	**-3.7E-14**
End Shear	**5.68E-14**	**5.19486E-14**	**5.22E-14**	**3.13E-14**	**3.47E-14**	**3.51E-14**
-0.05	**-12.4833**	**-16.50685064**	**-18.4241**	**-11.0082**	**-13.6476**	**-13.7526**
+0.05	**110.8481**	**139.5173633**	**146.3618**	**104.3169**	**127.593**	**127.3937**
-0.1	**-24.9666**	**-33.01370128**	**-36.8483**	**-22.0164**	**-27.2951**	**-27.5053**
+0.1	**205.1995**	**253.7940024**	**266.7673**	**190.6116**	**233.1457**	**231.5516**
-0.15	**-37.4499**	**-49.52055191**	**-55.2724**	**-33.0247**	**-40.9427**	**-41.2579**
+0.15	**278.3617**	**340.2908915**	**356.8261**	**259.3772**	**313.238**	**309.2189**
-0.2	**-49.9332**	**-66.02740255**	**-73.6966**	**-44.0329**	**-54.5902**	**-55.0106**
+0.2	**338.2262**	**416.8980185**	**433.6338**	**319.175**	**376.8175**	**377.9015**
-0.25	**-62.4165**	**-82.53425319**	**-92.1207**	**-55.0411**	**-68.2378**	**-68.7632**
+0.25	**377.773**	**473.2749196**	**499.2539**	**361.7306**	**429.4327**	**428.2406**
-0.3	**-74.8998**	**-99.04110383**	**-110.545**	**-66.0493**	**-81.8853**	**-82.5159**
+0.3	**405.2678**	**512.09799**	**542.4558**	**394.0902**	**464.0054**	**474.718**
-0.35	**-87.383**	**-115.5479545**	**-128.969**	**-77.0576**	**-95.5329**	**-96.2685**
+0.35	**419.852**	**530.9179717**	**574.3511**	**411.5786**	**478.9483**	**503.1429**
-0.4	**-99.8663**	**-132.0548051**	**-147.393**	**-88.0658**	**-109.18**	**-110.021**
+0.4	**430.9068**	**536.4490626**	**593.9691**	**423.3139**	**487.1933**	**518.0122**
-0.45	**-112.35**	**-148.5616557**	**-165.817**	**-99.074**	**-122.828**	**-123.774**
+0.45	**423.4918**	**546.6173119**	**599.9466**	**424.5504**	**482.8726**	**515.6134**
-0.5	**-124.833**	**-165.0685064**	**-184.241**	**-110.082**	**-136.476**	**-137.526**
+0.5	**420.8477**	**538.948715**	**592.4162**	**416.375**	**474.8968**	**507.6746**
-0.55	**-137.316**	**-181.575357**	**-202.666**	**-121.09**	**-150.123**	**-151.279**
+0.55	**408.6059**	**510.3603227**	**559.7641**	**396.781**	**451.4373**	**485.8791**
-0.6	**-149.8**	**-198.0822077**	**-221.09**	**-132.099**	**-163.771**	**-165.032**
+0.6	**386.586**	**474.9720883**	**524.4719**	**372.5447**	**425.1844**	**454.7617**
-0.65	**-162.283**	**-214.5890583**	**-239.514**	**-143.107**	**-177.418**	**-178.784**
+0.65	**346.4936**	**435.9981859**	**465.5948**	**338.6337**	**390.9176**	**408.3846**
-0.7	**-174.766**	**-231.0959089**	**-257.938**	**-154.115**	**-191.066**	**-192.537**
+0.7	**304.6659**	**381.6418346**	**396.2627**	**297.3329**	**348.9006**	**353.8647**
-0.75	**-187.249**	**-247.6027596**	**-276.362**	**-165.123**	**-204.713**	**-206.29**
+0.75	**248.4963**	**308.8721685**	**312.9188**	**245.667**	**288.6093**	**288.0424**
-0.8	**-199.733**	**-264.1096102**	**-294.786**	**-176.132**	**-218.361**	**-220.042**
+0.8	**185.0768**	**222.0585328**	**212.8891**	**189.8933**	**212.305**	**216.7099**
-0.85	**-212.216**	**-280.6164608**	**-313.21**	**-187.14**	**-232.008**	**-233.795**
+0.85	**110.8467**	**134.6983162**	**125.1193**	**125.7979**	**136.8155**	**137.4795**
-0.9	**-224.699**	**-323.5946692**	**-358.699**	**-233.416**	**-251.55**	**-289.424**
+0.9	**74.46627**	**66.08561462**	**63.02405**	**71.72324**	**76.50479**	**68.41144**
-0.95	**-237.183**	**-437.4452773**	**-467.592**	**-315.461**	**-358.17**	**-397.709**
+0.95	**33.20317**	**20.74515756**	**23.63273**	**23.30522**	**24.8589**	**20.75284**
-1	**-288.648**	**-555.8137202**	**-580.114**	**-400.361**	**-468.821**	**-509.852**
+1	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-288.648**	**-555.8137202**	**-580.114**	**-400.361**	**-468.821**	**-509.852**
+2	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-237.186**	**-437.4440243**	**-467.592**	**-315.461**	**-358.171**	**-397.708**
+2.05	**33.20459**	**20.73576499**	**23.65827**	**23.30718**	**24.86099**	**20.72522**
-2.1	**-224.702**	**-323.5945205**	**-358.699**	**-233.415**	**-251.551**	**-289.423**
+2.1	**74.47845**	**66.07658225**	**63.02601**	**71.69338**	**76.47294**	**68.40265**
-2.15	**-212.219**	**-280.6157718**	**-313.21**	**-187.139**	**-232.008**	**-233.795**
+2.15	**110.8907**	**134.6929521**	**125.1185**	**125.7877**	**136.8097**	**137.472**
-2.2	**-199.735**	**-264.1089614**	**-294.786**	**-176.131**	**-218.361**	**-220.042**
+2.2	**185.9904**	**222.048391**	**212.8876**	**189.9038**	**212.2978**	**216.7028**
-2.25	**-187.252**	**-247.6021509**	**-276.362**	**-165.123**	**-204.713**	**-206.29**

+2.25	248.3765	308.8748685	312.9198	245.6765	288.6157	288.0527
-2.3	-174.768	-231.0953405	-257.938	-154.115	-191.065	-192.537
+2.3	305.4077	381.626081	396.2596	297.3416	348.9195	353.8916
-2.35	-162.285	-214.58853	-239.514	-143.107	-177.418	-178.784
+2.35	346.414	435.9946098	465.5943	338.6401	390.9207	408.3919
-2.4	-149.801	-198.0817196	-221.09	-132.098	-163.77	-165.032
+2.4	387.3544	474.9455576	524.4736	372.5486	425.2009	454.7838
-2.45	-137.318	-181.5749091	-202.666	-121.09	-150.123	-151.279
+2.45	408.9816	510.3682585	559.7633	396.7786	451.4445	485.88
-2.5	-124.835	-165.0680987	-184.241	-110.082	-136.475	-137.526
+2.5	421.3043	538.9340754	592.4143	416.3869	474.9187	507.6887
-2.55	-112.351	-148.5612882	-165.817	-99.0738	-122.828	-123.774
+2.55	423.9412	546.613411	599.9467	424.5583	482.872	515.6194
-2.6	-99.8677	-132.0544778	-147.393	-88.0656	-109.18	-110.021
+2.6	430.6194	536.4553499	593.9677	423.3178	487.2157	517.9955
-2.65	-87.3842	-115.5476673	-128.969	-77.0574	-95.5327	-96.2684
+2.65	420.0254	530.9087623	574.3484	411.5763	478.9471	503.1385
-2.7	-74.9007	-99.04085685	-110.545	-66.0492	-81.8852	-82.5158
+2.7	406.0031	512.0818925	542.4531	394.0831	464.0237	474.7253
-2.75	-62.4173	-82.5340464	-92.1207	-55.041	-68.2377	-68.7632
+2.75	377.964	473.2733653	499.2531	361.7184	429.4436	428.2413
-2.8	-49.9338	-66.02723595	-73.6966	-44.0328	-54.5901	-55.0105
+2.8	339.1856	416.8705187	433.6347	319.1573	376.8204	377.8947
-2.85	-37.4504	-49.52042549	-55.2724	-33.0246	-40.9426	-41.2579
+2.85	278.1658	340.3042938	356.8249	259.3746	313.2487	309.2305
-2.9	-24.9669	-33.01361504	-36.8483	-22.0164	-27.2951	-27.5053
+2.9	205.7011	253.8152053	266.7643	190.628	233.1657	231.5721
-2.95	-12.4835	-16.50680459	-18.4241	-11.0082	-13.6475	-13.7526
+2.95	111.1026	139.5291563	146.3605	104.3254	127.6033	127.4042
-3	-8.53E-14	-7.81385E-14	-8.8E-14	-6.4E-14	-6.3E-14	-6.8E-14
+3	2.84E-14	2.69714E-14	2.36E-14	2E-14	2.67E-14	2.64E-14

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-16.88820152	-14.28995611	-15.20034241	-11.14752037	-11.90079712	-11.20119995	-13.41302315	-9.740091081	-10.2602	-5.353318705
End Shear	154.829881	135.5138971	139.3468924	110.0332218	116.1528458	108.0918589	126.0965394	97.04777301	102.2706	55.97601333
-0.05	-16.95714752	-14.35890211	-18.56358768	-11.14752037	-11.90079712	-11.20119995	-13.41302315	-9.740091081	-10.2602	-5.353318705
+0.05	141.6254652	124.9995358	127.9726955	101.8806383	107.397354	99.88335679	116.2020881	87.92588712	92.63082	51.7431638
-0.1	-17.26751697	-14.66927156	-23.79624831	-11.14752037	-11.90079712	-11.20119995	-13.41302315	-9.740091081	-10.2602	-5.454957179
+0.1	126.9090433	113.4299151	114.6825593	92.84492928	97.70415797	90.76467842	105.2332658	77.74019389	81.87001	46.98491603
-0.15	-17.61217505	-18.36019495	-27.39898909	-11.79695734	-11.90079712	-11.20119995	-13.41302315	-9.740091081	-10.2602	-7.630699034
+0.15	117.3672221	105.8913853	106.0641954	86.88459154	91.31656627	84.7595866	98.02350289	71.1664486	74.92712	43.85648113
-0.2	-23.76558282	-27.59839901	-32.95620398	-18.85597015	-18.85597015	-16.38874747	-16.94671407	-14.34467047	-15.0997	-10.8733303
+0.2	103.5000314	94.87401647	93.53731124	78.07132822	81.88149239	75.89553477	87.83909251	61.93154281	65.1911	39.24685128
-0.25	-28.24996757	-33.85446167	-36.75199911	-23.52987817	-23.52987817	-21.45317506	-22.57896005	-17.89955342	-18.8416	-13.01442512
+0.25	94.57623589	87.73898112	85.47498518	72.29933567	76.09116688	70.17577441	80.61854163	56.16144657	59.11731	36.2392867
-0.3	-35.45818049	-43.35218348	-44.12971111	-30.61711817	-30.61711817	-28.98675558	-30.96221316	-23.26900981	-24.4937	-16.18363316
+0.3	81.71246029	77.37839494	73.85163096	63.82865428	66.66153645	61.61348233	70.34860008	47.86599816	50.38526	31.84364408
-0.35	-43.48267977	-49.7405115	-51.10758212	-36.40302491	-36.86056992	-33.95157242	-36.49038268	-27.27792353	-28.7598	-18.26148124
+0.35	73.6665682	70.71473093	66.43722193	58.325098	60.79061684	56.11061077	63.7998076	43.33970767	45.88215	29.00052171
-0.4	-55.6013404	-59.37406339	-61.3406342	-45.25614953	-46.42318046	-42.37778135	-46.48200141	-33.67388197	-35.5671	-21.31437625
+0.4	61.93315109	61.42775045	55.85278778	50.31715949	52.25994634	48.12192023	54.31816109	37.46024029	39.63804	24.88423245
-0.45	-63.71004088	-65.81038023	-68.00688588	-51.06053882	-52.69923331	-48.31206286	-53.72487008	-37.8645697	-40.0281	-23.9506224
+0.45	54.63537256	55.08375842	49.25741508	45.16215071	46.77676229	42.99219702	48.2477792	33.49293927	35.42518	22.24913412
-0.5	-75.87382614	-75.4506275	-78.00018169	-59.58852245	-61.93025666	-57.04655862	-64.40641987	-44.30987707	-46.8867	-28.55962575
+0.5	44.6821335	46.22676563	40.28166682	37.73710073	38.89238316	35.62425777	39.55772238	28.06896164	29.66739	18.47756475
-0.55	-83.95763944	-81.84704035	-84.49996074	-65.13609553	-67.94211542	-62.73929562	-71.38261677	-48.95976573	-51.8302	-31.56669597
+0.55	38.45204862	40.69494729	34.66352284	33.01073271	33.8831891	30.94903108	34.06435521	24.61217503	25.99891	16.09406856
-0.6	-96.86991079	-91.35941348	-94.82521906	-73.21878973	-76.71216151	-71.05044746	-81.59018735	-56.22470092	-59.55	-35.9614768
+0.6	29.6995606	32.87748879	26.81334021	26.28871819	26.77449029	24.32386986	26.31379989	19.68901553	20.77596	13.06100126
-0.65	-105.7305776	-97.62439124	-101.8136892	-78.42945007	-82.373568	-76.42027001	-88.20108258	-61.02995471	-64.6557	-38.8039494
+0.65	24.34421509	27.99889944	21.98081858	22.07109078	22.32554755	20.30655113	21.69947614	16.59513666	17.49492	11.36509632
-0.7	-118.8486219	-106.868886	-112.0299359	-85.94669804	-90.55323717	-84.18604073	-97.78674903	-67.72483237	-71.7727	-42.91914849
+0.7	17.00804261	21.2019535	15.36063113	16.32327688	16.32327688	15.14895759	16.04093679	12.42116719	13.07491	8.95213475
-0.75	-127.4483325	-112.9072748	-118.9633299	-90.74034696	-95.7779313	-89.15159624	-103.9337334	-73.4769416	-77.3441	-45.5534345
+0.75	13.71141597	17.02997596	12.34027435	13.21541918	13.21541918	11.9532745	12.54155906	10.05650973	10.5858	7.437428233
-0.8	-140.07667	-121.7384538	-129.5127224	-97.57200524	-103.2378386	-96.24995169	-112.7495758	-82.562877	-86.9164	-49.32368474
+0.8	9.640430504	11.33088142	8.676387442	8.900929755	8.900929755	7.550439758	7.731544163	6.773818616	7.130335	5.317711878
-0.85	-148.2835588	-127.4514836	-136.3173828	-101.8685519	-107.9395685	-100.7298816	-118.3340324	-88.73735572	-93.429	-51.70621495
+0.85	7.194488341	7.915253965	6.475855726	6.270510782	6.270510782	4.772573765	5.005877119	4.722072024	4.970602	4.01279992
-0.9	-160.2216509	-135.7184473	-146.1501452	-107.8944676	-114.5503182	-107.0387786	-126.2321204	-98.41654097	-103.692	-55.06614464
+0.9	3.938503406	3.385909226	3.545375437	2.666602399	2.666602399	2.128558963	1.962438913	2.026177691	2.132819	2.229221756
-0.95	-167.9001912	-141.0037164	-152.4368888	-111.6137954	-118.6428047	-110.9517235	-131.1554321	-104.6130885	-110.265	-57.15334055
+0.95	2.046421398	1.606676253	1.842435322	1.171426419	1.171426419	1.022913258	1.033952557	0.973229062	1.024452	1.162700369
-1	-178.9420664	-148.5501559	-171.717134	-116.7138231	-124.2750093	-116.3491187	-137.9878329	-113.4815493	-119.674	-60.03758383
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.77E+02	1.47E+02	159.9700597	1.16E+02	1.23E+02	115.4867538	136.8923512	1.12E+02	1.18E+02	5.96E+01
-2.05	-1.61E+00	-1.25E+00	-1.441304743	-1.01E+00	-1.01E+00	-0.80613788	-0.816890318	-7.67E-01	-8.07E-01	-9.06E-01
+2.05	1.70E+02	1.42E+02	1.53E+02	112.5007259	119.6204	1.12E+02	1.32E+02	1.06E+02	111.866	5.77E+01
-2.1	-4.45E+00	-4.09E+00	-3.9780615	-3.225757861	-3.225757861	-2.575758253	-2.590822037	-2.451121257	-2.58013	-2.504465306
+2.1	1.58E+02	1.34E+02	1.44E+02	106.9223363	113.4823273	1.06E+02	1.25E+02	9.68E+01	102.0085	5.45E+01
-2.15	-6.62E+00	-7.11E+00	-5.917934544	-5.589396763	-5.589396763	-4.466413709	-4.507746182	-4.248918373	-4.47255	-3.693162104
+2.15	150.1334018	128.8513499	137.514033	102.9041412	109.0741774	101.8119005	119.685591	90.37483366	95.16511	52.28369974
-2.2	-10.28552702	-12.2372215	-9.194558752	-9.592892583	-9.592892583	-8.253387256	-8.498454351	-7.299873969	-7.68408	-5.649334698
+2.2	137.8140481	120.2826915	127.3636294	96.45998614	102.0223066	95.09268649	111.3097481	81.04891843	85.31465	48.71038363
-2.25	-12.99969968	-16.03729926	-11.6962447	-12.4699403	-12.4699403	-11.18939641	-11.70600692	-9.488857484	-9.98827	-7.062195907

+2.25	129.3875035	*114.3941568*	*120.3738798*	91.90466406	97.04808938	90.35957819	105.4314753	75.00622422	78.95392	46.19649266
-2.3	-18.1849623	*-22.29503866*	*-16.39187403*	-17.1312561	-17.1312561	-15.98240806	-16.95450777	-13.03544374	-13.7215	-9.33316943
+2.3	116.4807038	*105.337474*	*110.0500111*	84.71487724	89.21179595	82.91197533	96.21190103	66.64815223	70.62783	42.24555141
-2.35	-23.07046563	*-26.82699753*	*-20.76494513*	-21.05583245	-21.25614021	-19.42156356	-20.72771463	-15.84913993	-16.704	-10.94159636
+2.35	107.728954	*99.17345666*	*103.2940829*	79.70252927	83.75777371	77.7339349	89.82042492	62.18456331	65.88276	39.50169959
-2.4	-31.09198705	*-34.1445516*	*-27.94232956*	-27.38163298	-27.92887263	-25.39873808	-27.56817852	-20.48943672	-21.625	-13.48447322
+2.4	94.43253329	*89.77691185*	*92.90135018*	71.88729955	75.26649132	69.68000757	79.90507626	54.9764718	58.22404	35.23849875
-2.45	-36.88446845	*-39.35686536*	*-33.12383627*	-31.86386724	-32.66896994	-29.81643203	-32.73634049	-23.77215717	-25.1076	-15.51633831
+2.45	86.28746095	*83.43437246*	*86.10425355*	66.49802435	69.4189245	64.13841387	73.09903963	50.09080039	53.03293	32.30826121
-2.5	-46.34339102	*-47.65414837*	*-41.46413837*	-38.9527221	-40.18201852	-36.82855975	-40.97554522	-28.95679397	-30.6097	-19.09109411
+2.5	73.65439169	*73.84066139*	*76.35478156*	58.17747576	60.40201811	55.60015082	62.63578181	43.11617819	45.61784	27.7981643
-2.55	-52.97186623	*-53.49161272*	*-47.69236501*	-43.90361138	-45.43919835	-41.7413853	-46.76997736	-32.57337256	-34.4489	-21.60586968
+2.55	65.54124706	*67.41296086*	*69.4922805*	52.49137527	54.24716996	49.77638541	55.51382851	38.89809889	41.12836	24.7251216
-2.6	-63.88071611	*-63.00277708*	*-57.51335283*	-51.6353794	-53.66317986	-49.43522438	-55.87466243	-38.42310757	-40.6606	-25.55802151
+2.6	53.37585105	*57.7593977*	*59.50272925*	43.78566378	44.83403782	40.87585253	44.65061984	32.61270071	34.43762	20.810735
-2.65	-71.69571099	*-69.08695943*	*-64.50925889*	-56.97482394	-59.35118102	-54.76186027	-62.19679222	-42.35357637	-44.8347	-28.30260167
+2.65	45.29391374	*51.33622755*	*52.71976676*	37.88283567	38.45816752	35.36598696	38.06579059	28.34819659	29.89883	18.77522332
-2.7	-84.01041303	*-79.08184202*	*-75.53160103*	-65.22935041	-68.15669834	-63.01536925	-72.01902979	-49.22160651	-51.8122	-32.56677987
+2.7	33.53791387	*41.75465804*	*42.32381702*	29.46341827	29.46341827	27.73239803	29.56595853	22.39219789	23.57073	15.65879002
-2.75	-92.59231144	*-85.98953601*	*-83.21214707*	-71.23315678	-74.56956614	-68.67441821	-78.77019375	-54.75286464	-57.6346	-35.49759008
+2.75	29.02427984	*35.42208535*	*37.50673141*	24.68790577	24.68790577	22.70940683	23.97645463	18.78101029	19.76948	13.54573981
-2.8	-105.9836324	*-96.69137071*	*-95.57933751*	-79.53441372	-83.44695036	-77.36555944	-89.16205933	-63.40709145	-66.7443	-40.00843197
+2.8	22.31221847	*26.03894375*	*31.85889123*	17.67776865	17.67776865	15.11355481	15.52896698	13.44926312	14.15712	10.33444369
-2.85	-115.233267	*-104.0369327*	*-103.887751*	-85.41067355	-89.73781385	-83.27568279	-96.24366566	-69.5581464	-73.2288	-43.0818926
+2.85	17.92738817	*19.87945057*	*28.18488888*	12.97122559	12.97122559	11.20119208	13.41303647	9.869490551	10.38894	8.172449739
-2.9	-129.5497398	*-115.3438888*	*-116.7461732*	-94.35027305	-99.31823264	-92.28241749	-107.0572331	-79.41772544	-83.642	-47.77402256
+2.9	17.19894199	*14.60029687*	*22.82921608*	11.14750631	11.9007951	11.20119208	13.41303647	9.740071939	10.26022	5.353321786
-2.95	-139.3643268	*-123.0576139*	*-125.5605805*	-100.3747901	-105.7811344	-98.36227972	-114.3706927	-86.20921029	-90.817	-50.94655671
+2.95	16.9920211	*14.39337599*	*19.37272919*	11.14750631	11.9007951	11.20119208	13.41303647	9.740071939	10.26022	5.353321786
-3	-154.4490522	*-134.8624649*	*-139.1073365*	-109.4767017	-115.5549163	-107.5625695	-125.4580367	-96.68207936	-101.884	-55.75461996
+3	16.88859133	*14.28994621*	*15.20051879*	11.14750631	11.9007951	11.20119208	13.41303647	9.740071939	10.26022	5.353321786

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-8.131285479**	**-8.425592097**	**-7.53837671**	**-6.53679855**	**-6.640538974**	**-9.067915575**	**-10.10917163**	**-11.20992301**	**-12.19987916**
End Shear	**79.99700453**	**86.34640889**	**75.59428721**	**63.13590117**	**65.28039634**	**87.79650689**	**96.59601185**	**100.2338885**	**103.0391462**
-0.05	**-8.131285479**	**-8.425592097**	**-7.53837671**	**-7.194223818**	**-6.640538974**	**-9.067915575**	**-10.10917163**	**-11.20992301**	**-12.19987916**
+0.05	**73.84170164**	**78.43999081**	**68.47786874**	**56.95981516**	**60.29301798**	**81.09591414**	**89.01331501**	**91.88148919**	**93.93299826**
-0.1	**-8.131285479**	**-8.425592097**	**-7.53837671**	**-8.895967563**	**-6.640538974**	**-9.067915575**	**-10.10917163**	**-11.20992301**	**-12.19987916**
+0.1	**67.0042572**	**69.59703367**	**60.45318357**	**50.14998266**	**54.78451316**	**73.65549271**	**80.56945353**	**82.57277912**	**83.85924943**
-0.15	**-8.306736183**	**-8.425592097**	**-7.664077022**	**-11.21192716**	**-7.27725373**	**-9.067915575**	**-10.10917163**	**-11.20992301**	**-12.19987916**
+0.15	**62.50728892**	**63.88078423**	**55.28366339**	**45.78170822**	**51.15768215**	**68.75753489**	**75.02313622**	**76.48157974**	**77.16409553**
-0.2	**-13.2769869**	**-13.28769475**	**-11.99179024**	**-14.53987763**	**-10.36989665**	**-13.56775706**	**-13.57046616**	**-13.54178523**	**-13.5148568**
+0.2	**55.87848849**	**55.84106274**	**47.83343088**	**39.51173512**	**45.80541349**	**61.53071119**	**66.85862206**	**67.55099005**	**67.53801068**
-0.25	**-16.56787517**	**-16.58063896**	**-14.80275535**	**-16.63678798**	**-12.41209077**	**-17.50343856**	**-17.50667246**	**-17.47865413**	**-17.60284331**
+0.25	**51.55143543**	**50.8097743**	**43.42699998**	**35.79979102**	**42.52381442**	**56.85946715**	**61.53676648**	**61.75474322**	**61.74137734**
-0.3	**-21.4529256**	**-21.52159029**	**-18.90001587**	**-19.61377673**	**-16.23402939**	**-23.35469482**	**-24.47562755**	**-24.44344569**	**-24.41322607**
+0.3	**45.22373221**	**43.55885268**	**37.35524637**	**30.68214809**	**37.18527665**	**49.89505526**	**53.76629981**	**53.59274298**	**53.58125305**
-0.35	**-24.66531485**	**-24.99429659**	**-21.93747181**	**-21.56768719**	**-19.91950404**	**-27.20860989**	**-29.08682746**	**-29.05553257**	**-29.02615513**
+0.35	**41.12823842**	**38.94104016**	**33.83245327**	**27.68901786**	**33.86533365**	**45.41502747**	**48.74537826**	**48.6025869**	**48.59081279**
-0.4	**-30.04416463**	**-30.05562629**	**-26.5065458**	**-24.51878831**	**-25.38444802**	**-33.99035582**	**-35.90828236**	**-35.87843164**	**-35.85040288**
+0.4	**35.19410383**	**32.52212349**	**28.74436644**	**23.39759522**	**29.0473202**	**38.91494241**	**41.4836337**	**41.383666**	**41.3715726**
-0.45	**-34.5353172**	**-33.32351546**	**-29.69023083**	**-27.86126603**	**-28.97406469**	**-38.84637276**	**-40.57733908**	**-40.57733908**	**-40.57733908**
+0.45	**31.39180044**	**28.91958417**	**25.49575523**	**20.67768649**	**25.95475174**	**34.74372917**	**36.84009629**	**36.76628739**	**36.75407729**
-0.5	**-41.15346784**	**-38.272583**	**-34.12727964**	**-32.93074332**	**-34.25825243**	**-45.99645535**	**-48.5931642**	**-48.49025338**	**-48.45827234**
+0.5	**25.94369469**	**24.209492**	**20.48818219**	**16.82431789**	**21.51476255**	**28.75679828**	**30.20178284**	**30.16342858**	**30.15118877**
-0.55	**-45.4721311**	**-41.81675831**	**-37.14907092**	**-36.16586904**	**-37.70272492**	**-50.658356**	**-53.99492346**	**-53.84599503**	**-53.8152154**
+0.55	**22.49623115**	**21.47458918**	**17.58614211**	**14.41503873**	**18.6988527**	**24.96095727**	**26.01208022**	**25.99469959**	**25.98253768**
-0.6	**-51.78531142**	**-47.29328761**	**-42.671406**	**-40.80293857**	**-42.73222581**	**-57.46733345**	**-61.90352656**	**-61.85257503**	**-61.81761848**
+0.6	**17.62661587**	**17.38645553**	**13.81978614**	**11.23888298**	**14.71081645**	**19.58702073**	**20.65191095**	**20.64048957**	**20.62977115**
-0.65	**-55.86984218**	**-52.45631456**	**-46.32049884**	**-43.78372707**	**-45.98226202**	**-61.86854279**	**-67.02873539**	**-67.75561027**	**-67.72208173**
+0.65	**15.01252073**	**14.9079884**	**11.84816111**	**9.539282172**	**12.220847**	**16.35516721**	**17.3494308**	**17.3381703**	**17.3276021**
-0.7	**-61.78559702**	**-60.59767794**	**-51.62020326**	**-48.22136963**	**-50.68315324**	**-68.23656586**	**-74.46516484**	**-76.36085381**	**-76.90583404**
+0.7	**11.50211854**	**11.40952768**	**9.060157788**	**7.238467851**	**8.758698149**	**12.29682747**	**12.72056788**	**12.70970181**	**12.69949735**
-0.75	**-65.57435034**	**-65.87861142**	**-56.0965299**	**-51.84792201**	**-53.68946684**	**-72.31052262**	**-79.237359**	**-81.91146785**	**-83.28182272**
+0.75	**9.313281117**	**9.224586016**	**7.353445163**	**5.821247622**	**7.148081359**	**9.777898357**	**9.865614734**	**9.855115335**	**9.845254803**
-0.8	**-71.00021096**	**-73.54782959**	**-63.18938865**	**-57.61860835**	**-57.98781369**	**-78.13774565**	**-86.08692223**	**-89.92377099**	**-92.53204419**
+0.8	**6.274538156**	**6.192552705**	**4.939409532**	**3.907388865**	**5.123325969**	**6.300155932**	**6.037638643**	**6.300372228**	**6.292144646**
-0.85	**-74.43155659**	**-78.79736265**	**-68.5649155**	**-61.88405625**	**-60.70112161**	**-81.81788362**	**-90.42964332**	**-95.03621056**	**-98.46737535**
+0.85	**4.201656381**	**4.344933333**	**3.468273506**	**2.719970951**	**3.876242438**	**4.0566877**	**4.213645298**	**4.056345531**	**4.262422238**
-0.9	**-79.27506141**	**-87.00997802**	**-76.36035304**	**-68.04057466**	**-64.52299436**	**-87.00445309**	**-96.57765162**	**-102.3269615**	**-106.9848733**
+0.9	**1.871791461**	**1.851500284**	**1.560216278**	**1.207548606**	**2.138305606**	**1.809275119**	**1.804226522**	**1.811190299**	**1.817731942**
-0.95	**-82.28734834**	**-92.25680865**	**-81.35913408**	**-71.9750809**	**-66.89401463**	**-90.22420559**	**-100.4144394**	**-106.9155046**	**-112.3838981**
+0.95	**0.899465464**	**0.888798385**	**0.818720799**	**0.626430666**	**1.120469662**	**0.86947627**	**0.866843976**	**0.870238698**	**0.87342755**
-1	**-86.45603707**	**-99.74851884**	**-88.52639892**	**-77.60686509**	**-70.16547974**	**-94.67026748**	**-105.7462035**	**-113.35609**	**-120.0252144**
+1	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**
(Span 2) -2	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**
+2	**8.58E+01**	**9.85E+01**	**8.74E+01**	**7.67E+01**	**6.96E+01**	**9.40E+01**	**104.890773**	**112.316982**	**1.19E+02**
-2.05	**-7.09E-01**	**-6.98E-01**	**-6.45E-01**	**-4.92E-01**	**-8.82E-01**	**-6.85E-01**	**-0.682606287**	**-0.68586716**	**-6.89E-01**
+2.05	**8.30E+01**	**9.35E+01**	**8.26E+01**	**7.29E+01**	**6.75E+01**	**9.10E+01**	**101.3353936**	**108.0223032**	**1.14E+02**
-2.1	**-2.265295316**	**-2.244478439**	**-1.795594957**	**-1.405638948**	**-2.408785183**	**-2.189394515**	**-2.184215869**	**-2.191364842**	**-2.198072089**
+2.1	**7.85E+01**	**8.57E+01**	**7.51E+01**	**6.70E+01**	**6.39E+01**	**8.62E+01**	**95.58082843**	**101.1402391**	**1.06E+02**
-2.15	**-3.928997615**	**-3.907264555**	**-3.119670151**	**-2.444282002**	**-3.543416571**	**-3.796451653**	**-3.790997073**	**-3.799054541**	**-3.806614398**
+2.15	**75.26126646**	**80.18805792**	**69.88307617**	**62.92875414**	**61.35642678**	**82.70705999**	**91.48131871**	**96.27881812**	**99.91452402**
-2.2	**-6.761836083**	**-6.678342487**	**-5.326084798**	**-4.216756273**	**-5.449644637**	**-6.856085555**	**-6.588371238**	**-6.856310379**	**-6.847919783**
+2.2	**70.11478864**	**72.28769175**	**61.82067029**	**56.53095047**	**57.28687246**	**77.18741214**	**84.96790182**	**88.61093045**	**91.01244989**
-2.25	**-8.788166804**	**-8.700177442**	**-6.935816748**	**-5.482622052**	**-6.799796406**	**-9.175190119**	**-9.185362547**	**-9.17606139**	**-9.167330436**
+2.25	**66.49687973**	**67.17408307**	**57.21093115**	**52.75621457**	**54.4207609**	**73.30188531**	**80.40071898**	**83.26850771**	**84.84465369**

-2.3	-12.07108041	-11.97721055	-9.511516545	-7.60827324	-9.314490019	-12.95318204	-13.46685203	-13.45581235	-13.44544484
+2.3	60.81430306	59.25353223	50.74961495	47.54024525	49.91172933	67.19155005	73.24315554	74.94342333	75.28164362
-2.35	-14.41183675	-14.314612	-11.37054778	-9.142354551	-11.62316489	-15.65933084	-16.55345603	-16.54215587	-16.53153251
+2.35	56.86984088	53.82518579	47.21593681	44.582107	46.77728859	62.94549937	68.28474234	69.2057403	69.17275732
-2.4	-18.41522186	-18.02506448	-14.32766657	-11.66521358	-15.35772781	-20.45843045	-21.50666553	-21.49511313	-21.48426562
+2.4	50.74364591	46.35381959	41.74288622	40.04663087	41.90270155	56.34434755	60.59770938	60.39171315	60.36264152
-2.45	-21.66232641	-20.80769556	-16.88563985	-13.83459875	-18.01698147	-24.04180852	-25.00994124	-24.99832406	-24.98740309
+2.45	46.53424075	42.67309532	37.99182558	36.9552023	38.54920532	51.80435501	55.32454233	55.16435419	55.13403679
-2.5	-26.83299474	-24.90962079	-21.23819286	-17.44815784	-22.24042934	-29.73498961	-31.28388772	-31.23979841	-31.22741425
+2.5	40.05690031	37.3568014	33.41346819	32.10237697	33.38301151	44.81219532	47.22272292	47.13155069	47.09944085
-2.55	-30.46572033	-28.04438589	-24.66166376	-20.01743029	-25.20095161	-33.72698729	-35.71024988	-35.6425001	-35.63015875
+2.55	35.64421164	34.12360372	30.45537263	28.72267324	29.85973477	40.04484662	41.71126299	41.66620832	41.63295334
-2.6	-36.16861193	-33.44761505	-29.57770608	-24.09689347	-29.83936739	-39.9831987	-42.67487732	-42.56786721	-42.55568969
+2.6	28.90816065	29.22206766	25.67950741	24.03810666	24.47585557	32.76155117	34.77586316	34.7459008	34.71777535
-2.65	-40.12534278	-37.81938743	-32.97031044	-26.95820028	-33.05188352	-44.31727967	-47.51681859	-47.38126595	-47.36927885
+2.65	25.45855104	25.84750717	22.68715475	22.07082197	20.83211061	28.30621656	30.22764199	30.19673012	30.16771296
-2.7	-46.2679766	-44.74533516	-38.25394196	-31.44749001	-38.03131158	-51.03666994	-55.04747522	-54.8657531	-54.85420016
+2.7	20.64044441	20.65621428	18.22525719	19.13007885	15.30447258	22.380724	23.31156109	23.27930112	23.24903405
-2.75	-50.48706026	-49.58009997	-42.37640709	-34.91038406	-41.66191984	-55.64623636	-60.22854108	-60.3329433	-60.31932519
+2.75	17.38334668	17.39714637	15.49353559	17.14564776	12.91735066	18.47941473	18.65269232	18.61962534	18.58858251
-2.8	-56.97700277	-57.12623679	-49.05215846	-40.53392736	-46.69307511	-62.7289567	-68.21053925	-69.0264462	-69.09723283
+2.8	12.44753149	12.45826478	11.27725924	13.99974295	9.854373258	12.57650368	12.57921369	12.55050871	12.5235448
-2.85	-61.39677776	-62.48108449	-54.0198322	-44.7144986	-50.26171865	-67.54745866	-73.65426687	-75.00711891	-75.53737596
+2.85	9.133651301	9.142264931	8.391909231	11.78135251	7.792373187	9.067920156	10.10914934	11.20993431	12.19986928
-2.9	-68.14155405	-71.05455614	-61.77323322	-51.26622915	-55.70141051	-74.89365865	-81.97291492	-84.11688253	-85.46109544
+2.9	8.131272107	8.425592478	7.538388949	8.575387176	6.640530535	9.067920156	10.10914934	11.20993431	12.19986928
-2.95	-72.70041242	-76.95073614	-67.12382921	-55.80670253	-59.37420313	-79.85454934	-87.60284699	-90.32348693	-92.23027003
+2.95	8.131272107	8.425592478	7.538388949	7.46219706	6.640530535	9.067920156	10.10914934	11.20993431	12.19986928
-3	-79.60753782	-86.02962989	-75.3886084	-62.85114967	-64.93313179	-87.36437934	-96.14345597	-99.77312826	-102.5758683
+3	8.131272107	8.425592478	7.538388949	6.53680451	6.640530535	9.067920156	10.10914934	11.20993431	12.19986928

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-13.9692412	-15.24980733	-9.06516	-11.7424	-11.8076
End Shear	130.3978964	131.7716333	96.03965	117.231	117.9803
-0.05	-13.9692412	-15.24980733	-9.06516	-11.7424	-11.8076
+0.05	117.4721742	119.9757181	86.79645	105.9983	106.3468
-0.1	-13.9692412	-15.24980733	-9.06516	-11.7424	-11.8076
+0.1	102.9756601	106.1861577	76.49411	93.46153	93.71854
-0.15	-13.9692412	-15.24980733	-9.53047	-11.7424	-11.8076
+0.15	93.67091873	97.24877778	70.13432	85.70717	85.59053
-0.2	-16.02338912	-16.23010687	-15.2312	-16.1767	-15.2151
+0.2	81.07595764	84.28084748	61.19349	74.60334	73.8879
-0.25	-21.5782502	-21.59435425	-19.0423	-20.2661	-20.2689
+0.25	73.15019625	75.95952985	56.4958	67.4917	67.34136
-0.3	-29.71467286	-29.38094593	-25.0641	-27.7875	-28.1681
+0.3	62.46195544	64.01808491	50.26803	57.30849	59.22668
-0.35	-35.17137719	-35.06202533	-29.3113	-32.9741	-33.3605
+0.35	55.84861381	56.93889395	46.03708	51.47751	53.96273
-0.4	-43.77692518	-43.24974863	-36.0181	-40.7746	-40.9746
+0.4	46.39864873	46.84582615	39.87031	43.6112	46.00594
-0.45	-49.30647001	-48.92767624	-41.0791	-45.8318	-46.8672
+0.45	40.74740375	40.93198283	35.79251	39.24369	41.10302
-0.5	-58.04864881	-59.14069461	-48.7666	-53.5008	-56.2915
+0.5	32.95233198	32.64872753	29.92057	32.93662	34.05806
-0.55	-63.17246974	-66.10801814	-54.1612	-58.9691	-62.7849
+0.55	28.44750068	27.80587468	26.26676	28.91023	29.58579
-0.6	-70.92690126	-76.00185807	-61.7465	-67.413	-72.6109
+0.6	22.73227147	21.26624663	21.05825	22.93447	23.24498
-0.65	-77.65362068	-82.6626758	-66.4632	-72.9606	-79.0023
+0.65	19.13536581	17.87059273	17.78157	19.3268	19.49722
-0.7	-89.96062079	-96.68789523	-73.0234	-80.9435	-87.9184
+0.7	14.08648423	13.17331718	13.19922	14.26048	14.41647
-0.75	-98.69332799	-106.9707025	-77.0512	-87.4624	-93.4125
+0.75	10.96706612	10.27046071	10.68781	11.40033	11.17286
-0.8	-111.2518465	-122.2091098	-82.5697	-99.1178	-100.974
+0.8	6.684281782	6.44809601	7.125628	7.60067	6.864776
-0.85	-119.0991554	-131.8291197	-86.5457	-106.64	-106.752
+0.85	4.388967228	4.35849186	5.005687	5.3394	4.456862
-0.9	-132.7888189	-145.4209131	-96.0168	-117.936	-119.583
+0.9	1.853597074	1.988643364	2.144263	2.287214	1.912194
-0.95	-142.2906217	-153.905902	-102.398	-125.89	-127.781
+0.95	0.922500798	1.039336833	1.02974	1.098389	0.91835
-1	-155.972829	-165.7392455	-111.929	-137.309	-139.497
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.54E+02	1.64E+02	1.10E+02	1.35E+02	1.38E+02
-2.05	-7.34E-01	-8.16E-01	-8.11E-01	-8.65E-01	-7.24E-01
+2.05	1.45E+02	1.56E+02	1.04E+02	127.8301	1.30E+02
-2.1	-2.252999255	-2.240003159	-2.59526	-2.76828	-2.31324
+2.1	1.30E+02	1.43E+02	9.45E+01	115.9006	1.17E+02
-2.15	-3.943739027	-3.863433179	-4.50344	-4.80367	-4.01018
+2.15	120.988174	134.1637929	88.15431	108.4807	108.9253
-2.2	-7.366039853	-6.997229882	-7.68294	-8.19514	-7.55096
+2.2	109.2172531	119.7346395	81.69069	97.19833	99.7666
-2.25	-10.22196838	-9.575103453	-10.0178	-10.6857	-10.4238
+2.25	100.8442079	109.5750131	78.01133	89.42689	94.72508

-2.3	**-14.90052307**	**-13.92866804**	**-13.9256**	**-15.0777**	**-15.2361**
+2.3	**87.84834049**	**94.12723416**	**71.96951**	**79.725**	**86.48366**
-2.35	**-18.26715084**	**-17.06072204**	**-16.991**	**-18.456**	**-18.624**
+2.35	**79.54311542**	**84.95766868**	**67.59566**	**74.28899**	**80.53921**
-2.4	**-23.66189163**	**-22.31912326**	**-21.9054**	**-23.8668**	**-24.2732**
+2.4	**69.64370232**	**74.39890384**	**60.52044**	**65.96712**	**70.95171**
-2.45	**-27.47273066**	**-26.67962004**	**-25.3784**	**-27.8704**	**-28.5012**
+2.45	**64.49022692**	**67.80276578**	**55.46322**	**60.29405**	**64.36143**
-2.5	**-34.17470527**	**-33.98847682**	**-30.8585**	**-33.9698**	**-35.2088**
+2.5	**56.63350711**	**57.35200459**	**47.3712**	**52.09161**	**54.62155**
-2.55	**-39.4660561**	**-39.51154048**	**-34.6782**	**-38.1752**	**-39.9063**
+2.55	**50.80514993**	**50.35615909**	**42.33134**	**47.07273**	**48.41355**
-2.6	**-47.93742532**	**-48.48371589**	**-40.8855**	**-44.7258**	**-47.2599**
+2.6	**42.37056311**	**41.92229107**	**34.90569**	**39.48738**	**39.71695**
-2.65	**-54.23855487**	**-55.21347612**	**-44.9973**	**-50.1029**	**-52.6711**
+2.65	**36.63318441**	**36.46377229**	**30.43389**	**34.28652**	**34.6403**
-2.7	**-64.15748972**	**-65.96174931**	**-51.3431**	**-58.9689**	**-60.5662**
+2.7	**28.37136221**	**28.1046652**	**24.06891**	**26.53573**	**26.85225**
-2.75	**-71.21897044**	**-73.9238985**	**-55.4053**	**-65.7589**	**-65.9767**
+2.75	**22.94662898**	**22.91334345**	**20.05398**	**21.52086**	**21.55772**
-2.8	**-83.10628274**	**-86.40422067**	**-62.5332**	**-76.4252**	**-75.8015**
+2.8	**14.55929542**	**15.24981009**	**14.28053**	**15.16254**	**13.94405**
-2.85	**-91.40064899**	**-95.05068667**	**-68.5953**	**-83.8289**	**-83.6046**
+2.85	**13.96923679**	**15.24981009**	**10.47961**	**11.74237**	**11.80766**
-2.9	**-105.3561894**	**-108.4550661**	**-78.1869**	**-95.5228**	**-95.7953**
+2.9	**13.96923679**	**15.24981009**	**9.065171**	**11.74237**	**11.80766**
-2.95	**-115.0220729**	**-117.6492917**	**-85.0562**	**-103.882**	**-104.215**
+2.95	**13.96923679**	**15.24981009**	**9.065171**	**11.74237**	**11.80766**
-3	**-130.0020472**	**-131.772881**	**-95.6939**	**-116.811**	**-117.582**
+3	**13.96923679**	**15.24981009**	**9.065171**	**11.74237**	**11.80766**

2-Span: Moment (Max and Min) Raw Data Results – 50' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.72E-13	*-1.06E-13*	*-1.41E-13*	-9.02E-14	-9.39E-14	-8.55E-14	-1.02E-13	-8.55E-14	-9.00E-14	-5.88E-14
End Shear	1.94E-13	*9.80E-14*	*2.02E-13*	1.11E-13	1.19E-13	8.60E-14	1.10E-13	7.58E-14	8.07E-14	7.54E-14
-0.05	-42.2205038	*-35.72489028*	*-38.00085603*	-27.8688009	-29.7519928	-28.0029999	-33.5325579	-24.3502277	-25.6505697	-13.38329676
+0.05	356.691298	*315.1264743*	*322.29661*	254.7015958	268.4933851	249.708392	290.5052203	219.8147178	231.5770462	129.3579095
-0.1	-84.4410076	*-71.44978056*	*-76.00171206*	-55.7376018	-59.5039856	-56.0059997	-67.0651158	-48.7004554	-51.3011395	-26.76659352
+0.1	657.6944234	*588.783202*	*594.2852284*	471.7189043	496.5563558	461.4376527	536.0701355	397.0591043	418.1788484	238.8647278
-0.15	-126.6615114	*-107.1746708*	*-114.0025681*	-83.6064027	-89.2559784	-84.0089996	-100.597674	-73.0506831	-76.9517092	-40.14989028
+0.15	904.2243637	*820.2422478*	*817.0546431*	652.5205799	686.156854	637.1649611	737.7631492	533.7483645	561.9533726	328.9236084
-0.2	-168.8820152	*-142.8995611*	*-152.0034241*	-111.475204	-119.007971	-112.011999	-134.130232	-97.4009108	-102.602279	-53.53318705
+0.2	1097.831604	*1010.030497*	*991.9987184*	797.3878619	837.0209771	776.396338	895.7976686	635.1031773	668.5296603	400.0738976
-0.25	-211.102519	*-178.6244514*	*-190.0042801*	-139.344005	-148.759964	-140.014999	-167.662789	-121.751139	-128.252849	-66.91648381
+0.25	1241.300364	*1158.928365*	*1120.816411*	906.9814047	950.2208583	880.3026379	1031.719586	720.2713731	759.1291458	452.9910838
-0.3	-253.3230228	*-214.3493417*	*-228.0051362*	-167.212805	-178.511957	-168.017999	-201.195347	-146.101366	-153.903418	-80.29978057
+0.3	1336.258689	*1267.948157*	*1205.51185*	982.6160135	1027.230453	967.1855475	1135.493223	783.1118531	826.7866572	488.4868938
-0.35	-295.5435266	*-250.074232*	*-266.0059922*	-195.081606	-208.26395	-196.020999	-234.727905	-170.451594	-179.553988	-93.68307733
+0.35	1404.324853	*1338.334417*	*1266.794319*	1028.58941	1084.837821	1026.966695	1198.95274	814.2557469	858.610421	507.6364904
-0.4	-337.7640304	*-285.7991222*	*-304.0068482*	-222.950407	-238.015942	-224.023999	-268.260463	-194.801822	-205.204558	-107.0663741
+0.4	1437.319413	*1371.563691*	*1296.001134*	1061.534962	1116.328864	1054.319971	1225.11799	829.9360794	876.2369	511.7403008
-0.45	-379.9845342	*-321.5240125*	*-342.0077043*	-250.819208	-267.767935	-252.026999	-301.793021	-219.152049	-230.855128	-120.4496709
+0.45	1425.637596	*1369.344533*	*1284.991736*	1063.666417	1115.132391	1051.146847	1215.159473	813.9009756	860.1722068	501.5803232
-0.5	-422.205038	*-357.2489028*	*-380.0085603*	-278.688009	-297.519928	-280.029999	-335.325579	-243.502277	-256.505697	-133.8329676
+0.5	1408.154261	*1347.908242*	*1269.141859*	1042.004528	1094.153483	1031.415996	1195.806912	778.9924269	823.9409258	489.4055828
-0.55	-464.4255418	*-392.9737931*	*-418.0094163*	-306.55681	-327.271921	-308.032999	-368.858137	-267.852505	-282.156267	-147.2162644
+0.55	1364.371714	*1294.831091*	*1230.203512*	997.1394036	1049.549719	991.4846231	1154.374713	762.2831843	805.0148768	483.6443474
-0.6	-506.6460456	*-428.6986834*	*-456.0102723*	-334.425611	-357.023914	-336.035998	-402.390695	-292.202732	-307.806837	-160.5995611
+0.6	1279.460864	*1210.113248*	*1151.514773*	926.6896346	976.7425558	924.6284647	1079.420559	732.9198528	773.3062379	462.057852
-0.65	-548.8665494	*-464.4235736*	*-494.0111284*	-362.294412	-386.775907	-364.038998	-435.923252	-316.55296	-333.457407	-173.9828579
+0.65	1148.06456	*1096.130229*	*1035.933649*	844.4167821	880.590564	833.4161721	973.9583827	669.6486833	707.4040759	425.8192181
-0.7	-591.0870532	*-500.1484639*	*-532.0119844*	-390.163213	-416.527899	-392.041998	-469.45581	-340.903188	-359.107976	-187.3661547
+0.7	992.9985089	*955.4898996*	*896.8437017*	738.6753331	769.3384679	720.6708698	841.310899	590.5032782	623.1356734	376.2380231
-0.75	-633.307557	*-535.8733542*	*-570.0128404*	-418.032014	-446.279892	-420.044998	-502.988368	-365.253416	-384.758546	-200.7494514
+0.75	805.8852012	*791.0319616*	*728.6149409*	612.3020704	635.2189614	589.4697951	685.1084195	478.8636168	504.6319098	314.7600032
-0.8	-675.5280608	*-571.5982445*	*-608.0136965*	-445.900815	-476.031885	-448.047998	-536.520926	-389.603643	-410.409116	-214.1327482
+0.8	583.6143658	*605.8282256*	*528.5677952*	468.3843432	481.4988983	443.1443393	509.2895793	350.191204	369.9937584	242.9668871
-0.85	-727.7314866	*-617.3060569*	*-689.8972033*	-473.769616	-505.783878	-476.050998	-570.053484	-413.953871	-436.059686	-227.5160449
+0.85	352.6168692	*413.1651854*	*318.1281866*	310.259431	311.7142578	289.535731	318.1013232	235.5729486	248.1171005	171.3101681
-0.9	-804.6582759	*-687.7372326*	*-835.6877506*	-501.638416	-535.535871	-504.053998	-603.586042	-438.304099	-461.710255	-240.8993417
+0.9	209.7969	*231.3197308*	*188.8410511*	177.6089521	177.6089521	154.6562417	160.0166745	135.0268518	142.1335283	113.4957475
-0.95	-901.4513935	*-778.0347366*	*-1022.075334*	-529.507217	-565.287863	-532.056998	-637.1186	-511.753343	-543.120168	-254.2826385
+0.95	99.00772834	*78.11390377*	*89.13278135*	61.51234836	61.51234836	49.10263573	49.11274644	46.6438185	49.09875631	55.36388897
-1	-1074.841132	*-884.8757396*	*-1251.693586*	-557.376008	-595.039867	-560.060001	-670.651815	-677.711967	-717.978775	-267.6660908
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-1074.841132	*-884.8757396*	*-1251.693586*	-557.376008	-595.039867	-560.060001	-670.651815	-677.711967	-717.978775	-267.6660908
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-901.4699363	*-778.034263*	*-1022.075324*	-529.50654	-565.287778	-532.056627	-637.119224	-511.751861	-543.118703	-254.2827864
+2.05	99.00772956	*78.18859486*	*88.67236869*	61.46599375	61.46599375	49.06647265	49.15638505	46.6149605	49.06837948	54.93291659
-2.1	-804.6758448	*-687.7367843*	*-835.6878211*	-501.637774	-535.53579	-504.053647	-603.586633	-438.303235	-461.70972	-240.8994819
+2.1	209.796982	*231.3537128*	*187.736244*	177.6344469	177.6344469	154.6636662	160.0356872	134.9798859	142.0840904	112.7009035
-2.15	-727.7480802	*-617.3056325*	*-689.8972639*	-473.769008	-505.783803	-476.050667	-570.054042	-413.953055	-436.05918	-227.5161774
+2.15	353.3747836	*413.2046961*	*317.2323698*	310.2810207	311.7331618	289.5875449	318.1538156	235.587359	248.132039	170.2151224
-2.2	-675.5436793	*-571.5978443*	*-608.0207851*	-445.900243	-476.031815	-448.047686	-536.52145	-389.602875	-410.40864	-214.132873
+2.2	585.4990612	*605.8703369*	*528.222834*	468.4066492	481.5181126	443.1333913	509.3444636	350.2062273	370.0093069	242.9541495

-2.25	-633.322201	-535.8729788	-570.0194882	-418.031477	-446.279827	-420.044706	-502.988859	-365.252696	-384.7581	-200.7495685
+2.25	807.6359823	791.0745155	728.4385534	612.3230259	635.2362609	589.4588756	685.1626711	478.8841502	504.6542438	314.746864
-2.3	-591.1007227	-500.1481133	-532.0181912	-390.162711	-416.527839	-392.041726	-469.456268	-340.902516	-359.107559	-187.366264
+2.3	994.5466252	955.5304957	896.2979883	738.6927296	769.3515114	720.6578388	841.3620092	590.5167377	623.1506047	376.2241361
-2.35	-548.8792444	-464.4232477	-494.0168942	-362.293945	-386.775852	-364.038746	-435.923677	-316.552336	-333.457019	-173.9829596
+2.35	1149.969678	1096.166671	1034.899603	844.428631	880.5972482	833.3988773	974.0038286	669.6531769	707.4095941	425.8042102
-2.4	-506.6577661	-428.6983822	-456.0155972	-334.425179	-357.023864	-336.035766	-402.391086	-292.202156	-307.806479	-160.5996551
+2.4	1278.280027	1210.143449	1150.108715	926.6940792	976.7315184	924.6049621	1079.457964	732.9070627	773.2934734	462.0413622
-2.45	-464.4362877	-392.9735167	-418.0143003	-306.556414	-327.271876	-308.032785	-368.858495	-267.851976	-282.155939	-147.2163506
+2.45	1365.724631	1294.853304	1229.341842	997.1273638	1049.53027	991.4532786	1154.402201	762.2599298	804.9911051	483.6263135
-2.5	-422.2148094	-357.2486511	-380.0130033	-278.687648	-297.519888	-280.029805	-335.325903	-243.501796	-256.505399	-133.8330462
+2.5	1409.148517	1347.920839	1268.979662	1041.983439	1094.124001	1031.447651	1195.822663	779.0050747	823.9535344	489.3854931
-2.55	-379.9933311	-321.5237856	-342.0117063	-250.818882	-267.767901	-252.026825	-301.793312	-219.151617	-230.854859	-120.4497417
+2.55	1424.674162	1369.340252	1284.338698	1063.693137	1115.167671	1051.1928	1215.149377	813.9223979	860.1939538	501.5700796
-2.6	-337.7718528	-285.7989201	-304.0104094	-222.950116	-238.015913	-224.023845	-268.260721	-194.801437	-205.204319	-107.0664372
+2.6	1436.167117	1371.548171	1294.682253	1061.550626	1116.35252	1054.355358	1225.095557	829.9497153	876.2503467	511.7285854
-2.65	-295.5503745	-250.0740545	-266.0091124	-195.081351	-208.263925	-196.020865	-234.72813	-170.451257	-179.553779	-93.68313278
+2.65	1403.834879	1338.306341	1265.026273	1028.592847	1084.848591	1026.990412	1198.916523	814.2597951	858.6136668	507.6231265
-2.7	-253.3288961	-214.349189	-228.0078154	-167.212585	-178.511937	-168.017884	-201.195539	-146.101077	-153.903238	-80.29982831
+2.7	1337.147414	1267.906398	1204.955203	982.6032647	1027.223878	967.1965093	1135.522219	783.1004034	826.7734795	488.5016845
-2.75	-211.1074178	-178.6243235	-190.0065185	-139.343819	-148.75995	-140.014904	-167.662948	-121.750897	-128.252698	-66.91652384
+2.75	1242.974487	1158.872099	1120.483785	906.9552414	950.2000546	880.2975987	1031.73226	720.2488233	759.1041738	453.0037261
-2.8	-168.8859395	-142.8994579	-152.0052215	-111.475053	-119.007962	-112.011924	-134.130356	-97.4007173	-102.602158	-53.53321938
+2.8	1099.94614	1009.958759	991.8921963	797.3474597	836.9850119	776.3774153	895.7909542	635.0911549	668.5170052	400.0843721
-2.85	-126.6644612	-107.1745924	-114.0039245	-83.6062875	-89.255974	-84.0089437	-100.597765	-73.0505374	-76.9516181	-40.14991491
+2.85	905.8470399	820.1544471	816.5642049	652.4649205	686.1046325	637.13138	737.7390212	533.7911045	561.9985052	328.931554
-2.9	-84.44298287	-71.44972686	-76.00262756	-55.7375217	-59.5039862	-56.0059635	-67.0651741	-48.7003576	-51.301078	-26.76661045
+2.9	658.7968742	588.6786516	593.6742103	471.7513131	496.5911148	461.4120232	536.0275051	397.0886645	418.2100742	238.8700658
-2.95	-42.22150456	-35.72486133	-38.00133059	-27.8687559	-29.7519985	-28.0029833	-33.532583	-24.3501777	-25.6505379	-13.38330598
+2.95	357.2510307	315.1435089	321.8455789	254.7179079	268.5108853	249.7244664	290.5245689	219.829895	231.5930818	129.3605937
-3	-1.42E-13	-7.58E-14	-1.28E-13	-6.85E-14	-7.71E-14	-7.46E-14	-9.63E-14	-7.12E-14	-7.49E-14	-5.83E-14
+3	2.17E-13	1.52E-13	2.44E-13	1.12E-13	1.12E-13	1.20E-13	1.41E-13	1.04E-13	1.10E-13	7.40E-14

2-Span: Moment (Max and Min) Raw Data Results - 50' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.27E-14	-7.17E-14	-6.58E-14	-5.19E-14	-6.80E-14	-7.56E-14	-6.30E-14	-6.04E-14	-5.59E-14
End Shear	5.99E-14	6.63E-14	7.14E-14	6.08E-14	9.59E-14	7.85E-14	8.34E-14	6.41E-14	6.33E-14
-0.05	-20.3282137	-21.06398024	-18.84594178	-16.34199638	-16.60134743	-22.66978894	-25.2729291	-28.0248075	-30.4996979
+0.05	184.6042541	196.099977	171.1946718	143.0799077	150.7325449	202.7397853	222.5332875	229.9320025	235.0612006
-0.1	-40.65642739	-42.12796048	-37.69188355	-32.68399275	-33.20269487	-45.33957788	-50.5458582	-56.0496151	-60.9993958
+0.1	340.6840396	355.2471308	308.8448521	259.9199682	278.4870983	374.4423399	409.8359886	423.4931368	435.7932317
-0.15	-60.98464109	-63.19194073	-56.53782533	-49.02598913	-49.8040423	-68.00936682	-75.8187872	-84.0744226	-91.4990937
+0.15	469.2490979	479.1058817	414.6274754	350.9803298	383.6826161	516.7362331	563.9102906	606.0226034	619.6294967
-0.2	-81.31285479	-84.25592097	-75.3837671	-65.3679855	-66.40538974	-90.67915575	-101.091716	-112.09923	-121.998792
+0.2	571.1094145	571.5626279	491.032718	417.7129705	466.8961696	629.3657063	684.5405026	750.5924718	775.2655304
-0.25	-101.6410685	-105.3199012	-94.22970888	-81.70998188	-83.00673717	-113.3489447	-126.364645	-140.124038	-152.498489
+0.25	646.6437455	636.4940511	552.7640888	471.2829682	529.3764801	713.2246789	776.4530828	859.5454722	907.6888665
-0.3	-121.9692822	-126.3838815	-113.0756507	-98.05197825	-99.60808461	-136.0187336	-151.637574	-168.148845	-182.998187
+0.3	696.9809851	685.0145933	592.654434	507.0765992	571.4091097	778.1647339	855.4029882	933.5548759	1000.325161
-0.35	-142.2974959	-147.4478617	-131.9215924	-114.3939746	-116.209432	-158.6885226	-176.910504	-196.173653	-213.497885
+0.35	732.9242875	712.330744	616.0870823	528.5510267	594.0175968	826.0840298	903.3373184	984.4216378	1056.320645
-0.4	-162.6257096	-168.5118419	-150.7675342	-130.735971	-132.8107795	-181.3583115	-202.183433	-224.19846	-243.997583
+0.4	751.5358016	713.6265612	621.9426021	535.3040577	598.3794957	847.6361798	921.9295232	1014.051468	1077.543869
-0.45	-182.9539233	-189.5758222	-169.613476	-147.0779674	-149.4121269	-204.0281004	-227.456362	-252.223268	-274.497281
+0.45	747.6044827	691.3687152	614.8744298	530.3137854	585.8264272	844.3933931	913.2896884	1012.017284	1085.183378
-0.5	-203.282137	-210.6398024	-188.4594178	-163.4199638	-166.0134743	-226.6978894	-252.729291	-280.248075	-304.996979
+0.5	732.3345416	655.6069468	601.8582544	520.5762085	580.0752157	828.4813897	895.812392	988.8091159	1059.031536
-0.55	-223.6103507	-231.7037827	-207.3053595	-179.7619601	-182.6148218	-249.3676783	-278.00222	-308.272883	-335.496677
+0.55	706.7447213	654.4994059	584.95793	504.6506746	568.0105993	797.2464096	867.0659918	951.0272826	1011.081839
-0.6	-243.9385644	-252.7677629	-226.1513013	-196.1039565	-199.2161692	-272.0374673	-303.275149	-336.29769	-365.996375
+0.6	660.4674282	635.2878912	549.2303213	472.8171233	538.0333194	743.8712789	812.6663262	884.9751947	949.5500006
-0.65	-264.2667781	-273.8317431	-244.9972431	-212.4459529	-215.8175166	-294.7072562	-328.548078	-364.322498	-396.496073
+0.65	598.2058343	587.6393605	502.6619653	431.4192956	491.5203689	670.4411521	734.4392159	797.565117	857.5258083
-0.7	-284.5949918	-294.8957234	-263.8431849	-228.7879493	-232.4188641	-317.3770451	-353.821007	-392.347305	-426.99577
+0.7	523.9327166	513.7591641	440.2070752	375.7681184	430.0031804	579.249404	634.7520393	693.1187167	738.0985877
-0.75	-304.9232055	-315.9597036	-282.6891266	-245.1299456	-249.0202115	-340.0468341	-379.093936	-420.372113	-457.495468
+0.75	432.6323852	426.7634861	361.4025319	306.2507027	355.1670492	473.0928787	516.3705154	565.5835516	594.6561873
-0.8	-325.2514192	-337.0236839	-301.5350684	-261.471942	-265.621559	-362.716623	-404.366865	-448.396921	-487.995166
+0.8	326.5629297	316.8695737	265.665883	222.2044772	268.8510941	355.9136191	382.299457	418.1454597	430.8856833
-0.85	-345.5796329	-358.0876641	-320.3810102	-295.5758592	-282.2229064	-385.386412	-429.639794	-476.421728	-518.494864
+0.85	215.8949346	215.2597124	170.9445489	139.9470942	173.0838424	233.7856862	240.1821542	263.7121772	264.2281342
-0.9	-365.9078466	-379.1516444	-342.9315624	-369.0544224	-298.8242538	-408.0562009	-454.912723	-504.446536	-548.994562
+0.9	125.0736234	124.3448824	98.82223695	78.87350148	109.5084874	127.9735241	127.8721794	127.9745163	127.8581994
-0.95	-386.2360602	-435.2309246	-452.5420766	-463.7601944	-315.4256013	-430.7259898	-480.185653	-532.471343	-579.49426
+0.95	43.17994161	42.70616317	39.22345702	30.39949202	53.84184318	41.73724037	41.62272187	41.7460151	41.86181907
-1	-406.5642803	-584.9008287	-596.5248479	-575.9605619	-332.0269594	-453.3960091	-505.458574	-560.496725	-609.993968
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-406.5642803	-584.9008287	-596.5248479	-575.9605619	-332.0269594	-453.3960091	-505.458574	-560.496725	-609.993968
+2	0	0	0	0	0	0	0	0	0
-2.05	-386.2354313	-435.2302907	-452.5434625	-463.7603007	-315.425211	-430.7262087	-480.184586	-532.47189	-579.493801
+2.05	43.14834956	42.67954752	39.20125967	30.38876164	53.80061731	41.70650175	41.59287754	41.71717672	41.83387488
-2.1	-365.9072511	-379.151655	-342.9311917	-369.0544093	-298.8238847	-408.0564083	-454.911713	-504.447054	-548.994127
+2.1	125.0219766	124.3595285	98.83295278	78.87871678	109.470407	127.9723026	127.8386676	127.9733727	127.8874781
-2.15	-345.5790708	-358.0876738	-320.3815376	-295.5764201	-282.2225584	-385.3866079	-429.638839	-476.422218	-518.494454
+2.15	215.9151403	215.21822	170.9570151	139.9324205	173.0932757	233.8217255	240.1740683	263.7334757	264.2487702
-2.2	-325.2508905	-337.0236926	-301.5355652	-261.4721876	-265.621232	-362.7168075	-404.365966	-448.397382	-487.994781
+2.2	326.5781679	316.8836418	265.6731792	222.1874628	268.8958304	355.9210429	382.2886107	418.1646865	430.9174892
-2.25	-304.9227103	-315.9597114	-282.6895929	-245.1301763	-249.0199057	-340.0470071	-379.093093	-420.372546	-457.495108

+2.25	432.645797	426.772689	361.3968618	306.2479365	355.2103445	473.0984952	516.3588362	565.6007501	594.6867455
-2.3	-284.59453	-294.8957302	-263.8436205	-228.7881651	-232.4185793	-317.3772067	-353.820219	-392.347711	-426.995435
+2.3	523.9427121	513.7548253	440.2003965	375.7648999	430.0438844	579.2418054	634.7375342	693.1318109	738.1255552
-2.35	-264.2663497	-273.831749	-244.9976481	-212.4461538	-215.817253	-294.7074063	-328.547346	-364.322875	-396.495761
+2.35	598.2110094	587.6286903	502.6501798	431.4135583	491.5572316	670.4299615	734.4200663	797.5721729	857.5471221
-2.4	-243.9381695	-252.7677678	-226.1516757	-196.1041425	-199.2159267	-272.037606	-303.274473	-336.298039	-365.996088
+2.4	660.4602742	635.2696553	549.2223397	472.8340932	538.0651648	743.8549282	812.6408984	884.9662066	949.5637559
-2.45	-223.6099892	-231.7037866	-207.3057034	-179.7621312	-182.6146003	-249.3678056	-278.001599	-308.273203	-335.496415
+2.45	706.7314753	654.4724275	584.9454794	504.6655501	568.0365406	797.223571	867.0984712	951.0105086	1011.086264
-2.5	-203.2818089	-210.6398054	-188.459731	-163.42012	-166.013274	-226.6980052	-252.728726	-280.248368	-304.996742
+2.5	732.3139624	655.589748	601.8405103	520.5885464	580.0944321	828.4507632	895.8359061	988.7829979	1059.056018
-2.55	-182.9536287	-189.5758242	-169.6137586	-147.0781087	-149.4119477	-204.0282048	-227.455853	-252.223532	-274.497069
+2.55	747.6273936	691.3964909	614.8928624	530.3227615	585.8092851	844.4278479	913.2690192	1012.046055	1085.197915
-2.6	-162.6254484	-168.511843	-150.7677863	-130.7360974	-132.8106213	-181.3584044	-202.182979	-224.198696	-243.997395
+2.6	751.5511716	713.6489145	621.9562497	535.3106956	598.3567633	847.6621044	921.9658818	1014.070201	1077.546976
-2.65	-142.2972681	-147.4478618	-131.9218139	-114.3940861	-116.209295	-158.688604	-176.910106	-196.17386	-213.497722
+2.65	732.931066	712.3460706	616.1022319	528.5583391	593.9882935	826.100496	903.3636309	984.4290267	1056.306953
-2.7	-121.9690879	-126.3838807	-113.0758415	-98.05207487	-99.60796864	-136.0188036	-151.637232	-168.149025	-182.998049
+2.7	696.9759681	685.0217954	592.6632904	507.0808852	571.3723311	778.1708277	855.4180866	933.5467414	1000.313008
-2.75	-101.6409076	-105.3198995	-94.22986915	-81.7100636	-83.0066423	-113.3490032	-126.364359	-140.124189	-152.498376
+2.75	646.629322	636.4893337	552.7710263	471.2863452	529.3316859	713.2177347	776.4560671	859.5246958	907.7106163
-2.8	-81.31272734	-84.25591826	-75.38389677	-65.36805232	-66.40531596	-90.67920284	-101.091486	-112.099353	-121.998703
+2.8	571.0847378	571.5485476	491.0289135	417.7111324	466.9307132	629.3474689	684.5291593	750.6224837	775.2724341
-2.85	-60.98454707	-63.19193707	-56.5379244	-49.02604105	-49.80398962	-68.00940245	-75.8186124	-84.0745172	-91.4990293
+2.85	469.2134771	479.1430744	414.6582849	350.9742567	383.7121025	516.7060683	563.8859739	606.0383633	619.6195809
-2.9	-40.65636681	-42.12795588	-37.69195203	-32.68402978	-33.20266328	-45.33960206	-50.5457391	-56.0496815	-60.9993561
+2.9	340.7076679	355.2728042	308.8661366	259.9091956	278.5070238	374.4682365	409.8645588	423.493946	435.7969175
-2.95	-20.32818654	-21.06397468	-18.84597966	-16.3420185	-16.60133694	-22.66980167	-25.2728657	-28.0248457	-30.4996829
+2.95	184.6162443	196.1131448	171.2056684	143.0852323	150.7426859	202.7528964	222.5477624	229.9171716	235.048175
-3	-4.23E-14	-6.27E-14	-5.28E-14	-4.33E-14	-3.77E-14	-6.01E-14	-6.54E-14	-4.52E-14	-4.56E-14
+3	8.56E-14	9.52E-14	1.07E-13	8.06E-14	8.59E-14	9.80E-14	8.74E-14	1.01E-13	1.01E-13

2-Span: Moment (Max and Min) Raw Data Results - 50' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.99E-14	-9.23E-14	-7.89E-14	-9.04E-14	-8.23E-14
End Shear	1.05E-13	1.25E-13	8.55E-14	9.20E-14	8.69E-14
-0.05	-34.923103	-38.12451832	-22.6629077	-29.3559521	-29.519116
+0.05	293.6804356	302.0917017	216.9911236	265.0896023	265.8669317
-0.1	-69.84620599	-76.24903664	-45.3258153	-58.7119043	-59.038232
+0.1	526.7419924	547.1441851	390.9052624	477.5783967	478.9414492
-0.15	-104.769309	-114.373555	-67.988723	-88.0678564	-88.557348
+0.15	708.3382185	736.7845191	526.0074244	643.7723106	643.1586173
-0.2	-139.692412	-152.4980733	-90.6516306	-117.423809	-118.076464
+0.2	872.3033108	899.5653744	627.1582998	778.7127511	780.6654966
-0.25	-174.615515	-190.6225916	-113.314538	-146.779761	-147.59558
+0.25	982.6312148	1035.450456	720.1200318	888.4213298	884.0114717
-0.3	-209.538618	-228.7471099	-135.977446	-176.135713	-177.114696
+0.3	1054.271753	1122.324606	778.9476573	955.7754977	954.5296921
-0.35	-244.461721	-266.8716282	-158.640354	-205.491665	-206.633812
+0.35	1084.813567	1198.462022	812.913491	983.9698963	1006.107301
-0.4	-279.384824	-304.9961466	-181.303261	-234.847617	-236.152928
+0.4	1113.110218	1231.789358	828.7935513	977.1570474	1023.516828
-0.45	-314.307927	-343.1206649	-203.966169	-264.203569	-265.672044
+0.45	1119.486511	1248.521475	832.938388	959.3004472	1022.408434
-0.5	-349.23103	-381.2451832	-226.629077	-293.559521	-295.19116
+0.5	1099.181559	1225.853113	814.7852993	925.2173835	998.6475188
-0.55	-384.154133	-419.3697015	-249.291984	-322.915473	-324.710276
+0.55	1042.689195	1160.282898	777.7240723	901.70883	958.9375536
-0.6	-419.077236	-457.4942198	-271.954892	-352.271426	-354.229392
+0.6	968.800641	1084.514059	728.4354741	862.3181498	893.8039702
-0.65	-454.000339	-495.6187381	-294.6178	-381.627378	-383.748508
+0.65	888.4469814	966.2855923	664.6016809	810.8257512	819.5871669
-0.7	-488.923442	-533.7432565	-317.280707	-410.98333	-413.267624
+0.7	783.5108978	817.595403	589.1065322	718.4623733	716.2215255
-0.75	-523.846545	-571.8677748	-339.943615	-440.339282	-442.78674
+0.75	636.2277037	647.9784142	488.9126931	589.3471717	588.1429817
-0.8	-558.769648	-609.9922931	-362.606523	-469.695234	-472.305856
+0.8	451.9198497	441.7690968	372.9758577	427.5891513	432.1366798
-0.85	-593.692751	-648.1168114	-385.26943	-499.051186	-501.824972
+0.85	272.8551351	253.3231168	252.280446	276.6791247	281.5812419
-0.9	-628.6158539	-705.5806622	-420.04792	-528.407138	-531.344088
+0.9	139.1594412	129.7237724	143.1142459	152.6551956	143.3530709
-0.95	-832.4012303	-911.51897	-584.818265	-658.357899	-738.206752
+0.95	44.15657642	49.5885007	49.37558752	52.66729335	44.00071035
-1	-1069.822934	-1138.901446	-754.638524	-879.00411	-962.456526
+1	0	0	0	0	0
(Span 2) -2	-1069.822934	-1138.901446	-754.638524	-879.00411	-962.456526
+2	0	0	0	0	0
-2.05	-832.4014863	-911.5191773	-584.817526	-658.360891	-738.205951
+2.05	44.13134628	49.58373052	49.34561208	52.63531956	44.16919271
-2.1	-628.615657	-705.5804407	-420.046163	-528.406492	-531.344695
+2.1	139.144762	129.7217192	143.0652492	152.6029325	143.3387731
-2.15	-593.692565	-648.116933	-385.269772	-499.050575	-501.825546
+2.15	272.8453242	253.3216809	252.2298818	276.6686821	281.5671286
-2.2	-558.769473	-609.9924078	-362.606844	-469.694659	-472.306396
+2.2	451.9003145	441.7661878	372.9914883	426.405373	432.1525327
-2.25	-523.846381	-571.8678826	-339.943917	-440.338743	-442.787247

+2.25	636.2024053	647.9746049	488.9353438	589.3274702	588.1778981
-2.3	-488.9232891	-533.7433574	-317.280989	-410.982826	-413.268097
+2.3	783.4766714	817.5904348	589.1210377	718.4924287	716.2567519
-2.35	-454.0001971	-495.6188322	-294.618061	-381.62691	-383.748948
+2.35	888.4017524	966.2900118	664.6196959	810.8456305	819.6225248
-2.4	-419.0771051	-457.4943069	-271.955133	-352.270993	-354.229799
+2.4	968.7575866	1084.51695	728.4412799	862.3261298	893.8396543
-2.45	-384.1540131	-419.3697817	-249.292206	-322.915077	-324.710649
+2.45	1042.675212	1160.284029	777.7198592	901.7266972	958.9673251
-2.5	-349.2309211	-381.2452565	-226.629278	-293.559161	-295.1915
+2.5	1099.158718	1225.850317	814.8045932	925.2526042	998.6703614
-2.55	-314.3078291	-343.1207313	-203.96635	-264.203244	-265.67235
+2.55	1119.509125	1248.516739	832.9515871	959.3464782	1022.437201
-2.6	-279.3847371	-304.9962061	-181.303423	-234.847328	-236.153201
+2.6	1113.133255	1231.787516	828.7999033	977.1511538	1023.53658
-2.65	-244.4616452	-266.8716808	-158.640495	-205.491412	-206.634052
+2.65	1084.818449	1198.457954	812.8964785	984.0137814	1006.128305
-2.7	-209.5385532	-228.7471556	-135.977567	-176.135495	-177.114902
+2.7	1054.257452	1122.320898	778.9325098	955.8086936	954.5479133
-2.75	-174.6154612	-190.6226304	-113.31464	-146.779579	-147.595753
+2.75	982.6038559	1035.454522	720.1610644	888.442264	884.0361322
-2.8	-139.6923692	-152.4981052	-90.6517121	-117.423663	-118.076604
+2.8	872.2674875	899.5669903	625.805649	778.7197836	780.6762696
-2.85	-104.7692772	-114.3735799	-67.9887844	-88.0677464	-88.5574541
+2.85	708.3198123	736.7827429	526.0476291	643.7619412	643.1513441
-2.9	-69.84618522	-76.24905472	-45.3258567	-58.7118301	-59.0383047
+2.9	526.7809527	547.1395895	390.9345073	477.6140215	478.9764124
-2.95	-34.92309323	-38.1245295	-22.6629291	-29.3559137	-29.5191554
+2.95	293.7006449	302.0840974	217.0062249	265.0482591	265.8849601
-3	-8.25E-14	-7.67E-14	-6.66E-14	-7.55E-14	-8.17E-14
+3	1.49E-13	1.41E-13	1.15E-13	1.23E-13	1.30E-13

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-5.791898083	-4.21638	-4.368987346	-3.90893	-3.54056	-3.443369963	-4.70206	-5.24199	-5.812767962	-6.3261
End Shear	55.83563495	41.48146	44.77387031	39.19849	33.84037	33.85034811	45.5258	50.08868	51.97505236	53.42968
-0.05	-5.791898083	-4.21638	-4.368987346	-3.90893	-3.88451	-3.443369963	-4.70206	-5.24199	-5.812767962	-6.3261
+0.05	51.33580174	38.28971	40.67409427	35.50836	30.51684	31.26420429	42.05129	46.15676	47.64401825	48.7078
-0.1	-5.791898083	-4.21638	-4.368987346	-3.90893	-4.78068	-3.443369963	-4.70206	-5.24199	-5.812767962	-6.3261
+0.1	46.32321679	34.74424	36.08868741	31.34726	26.85056	28.40783675	38.19315	41.7783	42.81710092	43.48418
-0.15	-5.791898083	-4.30736	-4.368987346	-3.97411	-5.99686	-3.773530583	-4.70206	-5.24199	-5.812767962	-6.3261
+0.15	43.03794104	32.41239	33.12459644	28.66666	24.50147	26.52718805	35.65338	38.90233	39.65858426	40.01249
-0.2	-8.125263587	-6.88462	-6.890170988	-6.2182	-7.75454	-5.377182601	-7.03539	-7.0368	-7.021926484	-7.00796
+0.2	38.21315464	28.9751	28.95569756	24.80344	21.13339	23.75183484	31.90599	34.66872	35.02773661	35.02101
-0.25	-9.786607406	-8.59107	-8.597686781	-7.67579	-8.86924	-6.436137294	-9.07619	-9.07787	-9.063341522	-9.12774
+0.25	35.07613956	26.73136	26.3467847	22.51854	19.13672	22.05020193	29.48378	31.90913	32.02216397	32.01523
-0.3	-12.39904433	-11.1242	-11.15975644	-9.80037	-10.4629	-8.417956645	-12.1103	-12.6915	-12.67484868	-12.6592
+0.3	30.50834508	23.45021	22.58690831	19.3701	16.38413	19.2819687	25.87247	27.87985	27.78985895	27.7839
-0.35	-15.4668561	-12.7899	-12.96048566	-11.3754	-11.5152	-10.32901428	-14.1087	-15.0826	-15.06638972	-15.0512
+0.35	27.63399083	21.32654	20.19239832	17.5434	14.772	17.56045302	23.5494	25.27632	25.20227477	25.19617
-0.4	-20.02020947	-15.579	-15.58497604	-13.7446	-13.1129	-13.16279389	-17.6253	-18.6198	-18.60432027	-18.5898
+0.4	23.38301431	18.24947	16.86394788	14.90504	12.46525	15.0621313	20.17887	21.51083	21.45899196	21.45272
-0.45	-23.01397379	-17.9079	-17.27949985	-15.3955	-14.8966	-15.02414555	-20.1433	-21.0409	-21.04088104	-21.0409
+0.45	20.71985959	16.27783	14.99589534	13.22051	11.00617	13.45851788	18.01593	19.10298	19.06470697	19.05838
-0.5	-27.42550092	-21.3396	-19.84577806	-17.6963	-17.6093	-17.76419623	-23.8509	-25.1974	-25.14402561	-25.1274
+0.5	17.0725148	13.45278	12.55353487	10.6239	8.94318	11.156216	14.91148	15.66076	15.64087559	15.63453
-0.55	-30.30420836	-23.579	-21.68356666	-19.2632	-19.3482	-19.55028515	-26.2683	-27.9984	-27.92117969	-27.9052
+0.55	14.76372568	11.66514	11.13538459	9.119078	7.655935	9.696060514	12.9432	13.48824	13.47923235	13.47293
-0.6	-34.88606345	-26.8526	-24.5233537	-22.1267	-21.8523	-22.1582711	-29.799	-32.0993	-32.07289346	-32.0548
+0.6	11.48102248	9.140065	9.015533073	7.16608	5.959709	7.628113274	10.15661	10.70879	10.70287248	10.69731
-0.65	-38.00159586	-28.9706	-27.20057794	-24.0189	-23.4692	-23.84353747	-32.0812	-34.7569	-35.13383991	-35.1165
+0.65	9.451114539	7.784558	7.730354371	6.143718	5.050455	6.336970183	8.480771	8.996334	8.990495361	8.985015
-0.7	-42.53289906	-32.0382	-31.42218198	-26.767	-25.8842	-26.28112691	-35.3832	-38.613	-39.59598331	-39.8786
+0.7	6.637963666	5.964282	5.916270513	4.698034	3.822457	4.5417154	6.376369	6.596094	6.590459846	6.585168
-0.75	-45.44834112	-34.0028	-34.1605452	-29.0882	-27.8451	-27.84001392	-37.4957	-41.0876	-42.47418608	-43.1848
+0.75	5.404603481	4.829288	4.783295834	3.813039	3.068701	3.706549836	5.070209	5.115693	5.110249072	5.105136
-0.8	-49.64491345	-36.8163	-38.13732413	-32.7661	-30.9642	-30.06886891	-40.5174	-44.6393	-46.62886751	-47.9814
+0.8	3.869995117	3.253585	3.211072183	2.56127	2.054176	2.656637786	3.266869	3.130743	3.266980673	3.262714
-0.85	-52.3141424	-38.5956	-40.85940505	-35.5535	-33.2644	-31.47582142	-42.4257	-46.8912	-49.27986029	-51.059
+0.85	2.924688739	2.178717	2.25301184	1.798431	1.427567	2.00997793	2.103546	2.184934	2.103368178	2.210227
-0.9	-56.1067905	-41.1071	-45.11795594	-39.5957	-36.5946	-33.45760662	-45.1151	-50.0792	-53.06038966	-55.4757
+0.9	1.632878326	0.970594	0.960072743	0.809031	0.632273	1.108792121	0.938177	0.93556	0.939170495	0.942563
-0.95	-58.48366808	-42.6691	-47.83863555	-42.1878	-38.7299	-34.68707007	-46.7847	-52.0687	-55.43972236	-58.2753
+0.95	0.860186724	0.466407	0.460875491	0.424538	0.326792	0.581005788	0.450856	0.449491	0.451251593	0.452905
-1	-61.80320066	-44.8307	-51.72336989	-45.9043	-41.7971	-36.38344814	-49.0901	-54.8334	-58.77940888	-62.2376
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	61.20989798	44.4847	51.09090709	45.298	41.29672	36.11232351	48.72152	54.38982	58.24059219	61.59543
-2.05	-6.79E-01	-0.36749	-0.36197902	-0.33443	-2.56E-01	-0.457460804	-0.35531	-0.35396	-0.355647996	-0.35724
+2.05	58.99261339	43.04325	48.50059705	42.8199	39.25169	34.98110284	47.18415	52.54622	56.01363918	58.95336
-2.1	-1.837332089	-1.17464	-1.16384674	-0.93108	-0.73642	-1.249045985	-1.13528	-1.1326	-1.136305337	-1.13978
+2.1	55.42246707	40.70053	44.42003699	38.93225	36.04897	33.13710107	44.68008	49.56227	52.44502933	54.75441
-2.15	-2.699092865	-2.03733	-2.026064068	-1.61767	-1.28234	-1.837395162	-1.9686	-1.96577	-1.969953093	-1.97387
+2.15	52.89031079	39.02581	41.58053301	36.23701	33.82861	31.81562187	42.88673	47.43651	49.92419918	51.80945
-2.2	-4.11620903	-3.50627	-3.462972511	-2.76178	-2.21779	-2.825846325	-3.55514	-3.41632	-3.555255576	-3.5509
+2.2	48.88244057	36.35716	37.48389513	32.05635	30.37858	29.70540444	40.02458	44.05906	45.94811016	47.19339
-2.25	-5.139453888	-4.557	-4.511370206	-3.59648	-2.88892	-3.525950949	-4.75768	-4.76296	-4.758133985	-4.75361
+2.25	46.08153195	34.48114	34.83229612	29.66603	28.33673	28.21921747	38.00979	41.69081	43.17786244	43.99515

-2.3	-7.092616072	-6.25931	-6.210635492	-4.93208	-4.01948	-4.829914451	-6.71671	-6.98307	-6.977346303	-6.97197
+2.3	41.7051292	31.53451	30.72519172	26.31559	25.5115	25.88111451	34.84135	37.97934	38.86099213	39.03637
-2.35	-8.96586345	-7.47308	-7.422666319	-5.89606	-4.83824	-6.027049463	-8.11995	-8.58359	-8.577731849	-8.57222
+2.35	38.68159755	29.48916	27.91038931	24.48324	23.90163	24.25578874	32.63962	35.40821	35.88578704	35.86868
-2.4	-12.0056736	-9.54899	-9.346675903	-7.42944	-6.18837	-7.963561218	-10.6085	-11.152	-11.14602703	-11.1404
+2.4	34.00585786	26.31249	24.03620409	21.64526	21.44288	21.72813147	29.21667	31.4222	31.31538146	31.30031
-2.45	-14.17594622	-11.2327	-10.78957509	-8.75584	-7.34611	-9.342484558	-12.4666	-12.9686	-12.96257405	-12.9569
+2.45	31.15032864	24.12976	22.1276097	19.70019	19.77344	19.98921717	26.86251	28.68786	28.60479865	28.58908
-2.5	-17.6879288	-13.9139	-12.91657806	-11.0128	-9.27681	-11.5325016	-15.4187	-16.2219	-16.19901396	-16.1926
+2.5	26.61419439	20.77101	19.37091076	17.32614	17.16512	17.3103508	23.23681	24.48676	24.43948701	24.42284
-2.55	-20.11653226	-15.7976	-14.54207202	-12.788	-10.6523	-13.06764408	-17.4887	-18.5171	-18.48198087	-18.4756
+2.55	23.67153259	18.48287	17.69437579	15.79226	15.35661	15.4833989	20.76476	21.62886	21.60550081	21.58826
-2.6	-24.09494279	-18.7548	-17.34385017	-15.3372	-12.8407	-15.47283764	-20.7328	-22.1285	-22.07304496	-22.0667
+2.6	19.17980522	14.98997	15.15274445	13.31579	12.85168	12.69165443	16.9881	18.0326	18.01706031	18.00248
-2.65	-26.92584029	-20.8065	-19.61077906	-17.0963	-14.3788	-17.13864844	-22.9802	-24.6393	-24.56897379	-24.5628
+2.65	16.14306267	13.20122	13.40290753	11.76415	11.78665	10.80223522	14.67784	15.67417	15.6581437	15.6431
-2.7	-31.34295222	-23.9917	-23.20214424	-19.8361	-16.7967	-19.72066973	-26.4644	-28.5442	-28.44996272	-28.444
+2.7	11.66191381	10.70285	10.71102633	9.450483	10.203	7.935946373	11.60525	12.08792	12.07119581	12.0555
-2.75	-34.39077639	-26.1794	-25.70915218	-21.9738	-18.6583	-21.60327707	-28.8547	-31.2308	-31.28490708	-31.2778
+2.75	10.04570684	9.013921	9.021076676	8.033983	9.140686	6.698133608	9.582274	9.672125	9.654978141	9.638881
-2.8	-39.09868258	-29.5447	-29.62210879	-25.4354	-21.6822	-24.21212088	-32.5273	-35.3697	-35.79281628	-35.8295
+2.8	7.55989342	6.454515	6.460080261	5.847684	7.468373	5.109864277	6.521392	6.522797	6.507912218	6.49393
-2.85	-42.31730309	-31.8365	-32.39879932	-28.0113	-23.9278	-26.06259718	-35.0259	-38.1925	-38.89402069	-39.169
+2.85	5.88293283	4.736143	4.740609246	4.351522	6.296711	4.040639454	4.702059	5.241975	5.812773818	6.326092
-2.9	-47.24680921	-35.334	-36.84446779	-32.0318	-27.4511	-28.88328261	-38.8352	-42.506	-43.61777679	-44.3148
+2.9	5.792065563	4.216371	4.368987543	3.908939	4.611392	3.443365587	4.702059	5.241975	5.812773818	6.326092
-2.95	-50.59009939	-37.6979	-39.90185955	-34.8062	-29.8956	-30.78776413	-41.4076	-45.4254	-46.8361353	-47.8249
+2.95	5.792065563	4.216371	4.368987543	3.908939	4.024993	3.443365587	4.702059	5.241975	5.812773818	6.326092
-3	-55.67201357	-41.2795	-44.60960845	-39.0918	-33.6927	-33.67027835	-45.3017	-49.854	-51.73613081	-53.1895
+3	5.792065563	4.216371	4.368987543	3.908939	3.540559	3.443365587	4.702059	5.241975	5.812773818	6.326092

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-5.791898083	-5.78041	-6.17101225	-5.80824	-6.95516	-5.050604657	-5.32032	-2.7759
End Shear	55.83563495	57.05638	60.22963226	56.04971	65.38581	50.3229313	53.03117	29.02567
-0.05	-5.791898083	-5.78041	-6.17101225	-5.80824	-6.95516	-5.050604657	-5.32032	-2.7759
+0.05	51.33580174	52.82895	55.68957949	51.79329	60.25517	45.59288935	48.03257	26.83078
-0.1	-5.791898083	-5.78041	-6.17101225	-5.80824	-6.95516	-5.050604657	-5.32032	-2.8286
+0.1	46.32321679	48.1436	50.66329166	47.06491	54.56742	40.31122318	42.45269	24.36345
-0.15	-5.791898083	-6.11717	-6.17101225	-5.80824	-6.95516	-5.050604657	-5.32032	-3.95681
+0.15	43.03794104	45.05294	47.3510844	43.95104	50.82888	36.90248826	38.85254	22.74124
-0.2	-8.125263587	-9.77753	-9.77753184	-8.49818	-8.78751	-7.438252771	-7.82974	-5.63823
+0.2	38.21315464	40.48293	42.45864267	39.3547	45.54788	32.11384123	33.80404	20.35097
-0.25	-9.786607406	-12.2011	-12.20112947	-11.1243	-11.708	-9.281593684	-9.7701	-6.74847
+0.25	35.07613956	37.48993	39.45614046	36.38879	41.80376	29.12182866	30.65456	18.79144
-0.3	-12.39904433	-15.8761	-15.87613076	-15.0307	-16.0551	-12.06585938	-12.7009	-8.39182
+0.3	30.50834508	33.09757	34.56652136	31.94891	36.4784	24.82032572	26.12666	16.51213
-0.35	-15.4668561	-18.8763	-19.11359602	-17.6052	-18.9216	-14.14463237	-14.913	-9.46927
+0.35	27.63399083	30.24376	31.52222807	29.09547	33.08261	22.47327336	23.79162	15.03786
-0.4	-20.02020947	-23.467	-24.07217032	-21.9745	-24.1027	-17.4611781	-18.4429	-11.0523
+0.4	23.38301431	26.09135	27.09875361	24.95303	28.16602	19.42454772	20.55382	12.90341
-0.45	-23.01397379	-26.4768	-27.32654048	-25.0516	-27.8584	-19.63420778	-20.7561	-12.4193
+0.45	20.71985959	23.41828	24.25551584	22.29308	25.01829	17.36735249	18.36929	11.53702
-0.5	-27.42550092	-30.8989	-32.11317431	-29.5808	-33.3972	-22.97634279	-24.3125	-14.8092
+0.5	17.0725148	19.56811	20.16716783	18.47252	20.51217	14.55481547	15.38366	9.581314
-0.55	-30.30420836	-33.7755	-35.23054987	-32.5327	-37.0146	-25.38748547	-26.8759	-16.3685
+0.55	14.76372568	17.11731	17.56971174	16.04824	17.66365	12.76234121	13.48141	8.345382
-0.6	-34.88606345	-37.9667	-39.77814961	-36.8423	-42.3076	-29.15462843	-30.8789	-18.6474
+0.6	11.48102248	13.63169	13.88358325	12.61284	13.6447	10.20949729	10.77312	6.772622
-0.65	-38.00159586	-40.6686	-42.71380244	-39.6268	-45.7356	-31.64633379	-33.5264	-20.1213
+0.65	9.451114539	11.44469	11.57663861	10.52971	11.252	8.605204389	9.071774	5.893231
-0.7	-42.53289906	-44.5666	-46.95526947	-43.6536	-50.7061	-35.11788041	-37.2169	-22.2552
+0.7	6.637963666	8.464235	8.464234835	7.855306	8.317831	6.440843761	6.779836	4.64202
-0.75	-45.44834112	-47.0523	-49.66447047	-46.2285	-53.8936	-38.10056603	-40.1059	-23.6212
+0.75	5.404603481	6.852693	6.85269338	6.198224	6.503271	5.214679662	5.489136	3.856587
-0.8	-49.64491345	-50.5948	-53.5327138	-49.9092	-58.4649	-42.81196629	-45.0694	-25.5762
+0.8	3.869995117	4.615468	4.615467853	3.915188	4.009097	3.512480485	3.697348	2.757434
-0.85	-52.3141424	-52.8227	-55.97073816	-52.2322	-61.3607	-46.01366644	-48.4465	-26.8116
+0.85	2.924688739	3.251496	3.251496387	2.47476	2.595736	2.448572478	2.577445	2.080788
-0.9	-56.1067905	-55.9474	-59.39866124	-55.5036	-65.4561	-51.03268912	-53.7684	-28.5539
+0.9	1.632878326	1.382734	1.382733938	1.103738	1.017599	1.050649568	1.105947	1.155936
-0.95	-58.48366808	-57.876	-61.52076986	-57.5327	-68.009	-54.24583275	-57.1765	-29.6362
+0.95	0.860186724	0.607429	0.607428788	0.530419	0.536143	0.504655982	0.531217	0.602904
-1	-61.80320066	-60.5205	-64.44128044	-60.3314	-71.5519	-58.84446426	-62.0557	-31.1318
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	61.20989798	60.0994	63.97522559	59.88424	70.98385	58.09481219	61.26015	30.89324
-2.05	-6.79E-01	-0.5241	-0.524101095	-0.41801	-0.42359	-0.397708533	-0.41864	-0.46979
+2.05	58.99261339	58.33587	62.02768994	58.01791	68.62135	55.02849536	58.00676	29.89597
-2.1	-1.837332089	-1.67268	-1.672677138	-1.33563	-1.34344	-1.270998837	-1.33789	-1.29866
+2.1	55.42246707	55.44326	58.84486765	54.97472	64.79237	50.20931824	52.89524	28.27278
-2.15	-2.699092865	-2.89831	-2.898313074	-2.316	-2.33744	-2.203224461	-2.31918	-1.91504
+2.15	52.89031079	53.35968	56.55907564	52.79331	62.06149	46.86276052	49.3467	27.11107
-2.2	-4.11620903	-4.97428	-4.974276683	-4.27969	-4.40677	-3.785260031	-3.98448	-2.92939
+2.2	48.88244057	50.01814	52.90241462	49.30915	57.7183	42.02692167	44.23886	25.25817
-2.25	-5.139453888	-6.46613	-6.466134459	-5.80212	-6.07001	-4.92033056	-5.1793	-3.66201
+2.25	46.08153195	47.65604	50.32309535	46.85485	54.6702	38.89355677	40.94059	23.95462

-2.3	-7.092616072	-8.8832	-8.883202542	-8.28748	-8.79155	-6.759369323	-7.11513	-4.8396
+2.3	41.7051292	43.92786	46.25968159	42.99299	49.8895	34.55958114	36.62319	21.90591
-2.35	-8.96586345	-10.9182	-11.02211056	-10.0708	-10.7481	-8.218376939	-8.66163	-5.67363
+2.35	38.68159755	41.32877	43.43156532	40.30798	46.57528	32.2450419	34.1627	20.48312
-2.4	-12.0056736	-14.1984	-14.48217404	-13.1702	-14.2951	-10.62454587	-11.2134	-6.99221
+2.4	34.00585786	37.27628	39.02851508	36.13171	41.4338	28.50737454	30.19136	18.27249
-2.45	-14.17594622	-16.5226	-16.94009331	-15.4609	-16.975	-12.32676026	-13.0192	-8.04581
+2.45	31.15032864	34.48173	35.99633108	33.25819	37.90461	25.97396961	27.49957	16.75305
-2.5	-17.6879288	-20.1985	-20.83589241	-19.097	-21.2474	-15.01519003	-15.8723	-9.89945
+2.5	26.61419439	30.16722	31.32072497	28.83078	32.47902	22.35736489	23.65457	14.4144
-2.55	-20.11653226	-22.7657	-23.56193848	-21.6445	-24.252	-16.89052246	-17.8631	-11.2035
+2.55	23.67153259	27.21876	28.12920402	25.81093	28.78601	20.17013165	21.32661	12.82091
-2.6	-24.09494279	-26.7749	-27.82638313	-25.634	-28.9731	-19.92383074	-21.084	-13.2528
+2.6	19.17980522	22.70452	23.24813991	21.19567	23.15303	16.91091559	17.85721	10.79115
-2.65	-26.92584029	-29.5436	-30.7758263	-28.3961	-32.2514	-21.96192708	-23.2485	-14.676
+2.65	16.14306267	19.64368	19.94201064	18.3386	19.73855	14.69960933	15.50367	9.735662
-2.7	-31.34295222	-33.8239	-35.3418192	-32.6758	-37.3446	-25.52325979	-26.8666	-16.8871
+2.7	11.66191381	15.27789	15.27789384	14.38029	15.33106	11.61119932	12.22232	8.119673
-2.75	-34.39077639	-36.9371	-38.66713308	-35.6103	-40.8453	-28.39142579	-29.8857	-18.4068
+2.75	10.04570684	12.80161	12.80161046	11.77568	12.4327	9.738662321	10.25122	7.023977
-2.8	-39.09868258	-41.2416	-43.27039168	-40.117	-46.2339	-32.87896886	-34.6094	-20.7459
+2.8	7.55989342	9.16659	9.166589916	7.836948	8.052355	6.973950281	7.341	5.358799
-2.85	-42.31730309	-44.2887	-46.53244172	-43.1816	-49.906	-36.06852289	-37.9719	-22.3396
+2.85	5.88293283	6.72607	6.726069791	5.808241	6.955165	5.117703163	5.387056	4.237723
-2.9	-47.24680921	-48.9242	-51.50025027	-47.8519	-55.5132	-41.18108656	-43.3715	-24.7726
+2.9	5.792065563	5.780403	6.171011202	5.808241	6.955165	5.050594731	5.320309	2.775899
-2.95	-50.59009939	-52.0481	-54.85150865	-51.0046	-59.3055	-44.70272766	-47.092	-26.4177
+2.95	5.792065563	5.780403	6.171011202	5.808241	6.955165	5.050594731	5.320309	2.775899
-3	-55.67201357	-56.7678	-59.91958323	-55.7752	-65.0547	-50.13330535	-52.8308	-28.9109
+3	5.792065563	5.780403	6.171011202	5.808241	6.955165	5.050594731	5.320309	2.775899

2-Span: Shear (Max and Min) Raw Data Results - 50' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-5.791898083	-8.07938	-8.82002	-5.24301	-6.79143	-6.82918
End Shear	55.83563495	75.4181	76.21263	55.54636	67.80279	68.23617
-0.05	-5.791898083	-8.07938	-8.82002	-5.24301	-6.79143	-6.82918
+0.05	51.33580174	67.94226	69.39024	50.20038	61.3061	61.50768
-0.1	-5.791898083	-8.07938	-8.82002	-5.24301	-6.79143	-6.82918
+0.1	46.32321679	59.55793	61.41478	44.24182	54.05525	54.2039
-0.15	-5.791898083	-8.07938	-8.82002	-5.51213	-6.79143	-6.82918
+0.15	43.03794104	54.17636	56.24568	40.56352	49.57037	49.50291
-0.2	-8.125263587	-9.26743	-9.38699	-8.80926	-9.3561	-8.79995
+0.2	38.21315464	46.89182	48.74543	35.39242	43.14826	42.73447
-0.25	-9.786607406	-12.4802	-12.4895	-11.0135	-11.7213	-11.7229
+0.25	35.07613956	42.30781	43.93264	32.67542	39.03511	38.94815
-0.3	-12.39904433	-17.186	-16.993	-14.4963	-16.0714	-16.2915
+0.3	30.50834508	36.12606	37.02608	29.07347	33.14545	34.25487
-0.35	-15.4668561	-20.342	-20.2788	-16.9527	-19.0712	-19.2947
+0.35	27.63399083	32.30111	32.93169	26.62642	29.773	31.21037
-0.4	-20.02020947	-25.3192	-25.0143	-20.8318	-23.5828	-23.6985
+0.4	23.38301431	26.83554	27.09417	23.05975	25.22337	26.60841
-0.45	-23.01397379	-28.5173	-28.2983	-23.7589	-26.5077	-27.1066
+0.45	20.71985959	23.56704	23.67379	20.70128	22.69733	23.77271
-0.5	-27.42550092	-33.5735	-34.2051	-28.2051	-30.9432	-32.5573
+0.5	17.0725148	19.05861	18.88301	17.30513	19.04952	19.69812
-0.55	-30.30420836	-36.537	-38.2348	-31.3252	-34.1059	-36.3128
+0.55	14.76372568	16.45315	16.08206	15.19188	16.72078	17.1115
-0.6	-34.88606345	-41.0219	-43.9571	-35.7123	-38.9896	-41.9959
+0.6	11.48102248	13.14764	12.29974	12.17944	13.26458	13.44418
-0.65	-38.00159586	-44.9124	-47.8095	-38.4403	-42.1982	-45.6925
+0.65	9.451114539	11.0673	10.3358	10.28431	11.17802	11.27659
-0.7	-42.53289906	-52.0304	-55.9213	-42.2345	-46.8152	-50.8493
+0.7	6.637963666	8.147186	7.619038	7.634018	8.247817	8.338038
-0.75	-45.44834112	-57.0812	-61.8685	-44.564	-50.5855	-54.0269
+0.75	5.404603481	6.343011	5.940116	6.181499	6.593599	6.462039
-0.8	-49.64491345	-64.3446	-70.682	-47.7558	-57.3267	-58.4003
+0.8	3.869995117	3.865981	3.729379	4.121242	4.395992	3.970374
-0.85	-52.3141424	-68.8833	-76.2459	-50.0554	-61.6774	-61.7421
+0.85	2.924688739	2.538443	2.520817	2.895134	3.088143	2.577711
-0.9	-56.1067905	-76.8009	-84.1069	-55.5331	-68.2104	-69.1629
+0.9	1.632878326	1.072063	1.15017	1.240175	1.322854	1.105954
-0.95	-58.48366808	-82.2965	-89.0144	-59.2239	-72.8106	-73.9045
+0.95	0.860186724	0.533546	0.60112	0.59557	0.635274	0.531145
-1	-61.80320066	-90.2098	-95.8584	-64.7362	-79.4155	-80.6805
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	61.20989798	88.91588	94.76107	63.83564	78.33702	79.5768
-2.05	-6.79E-01	-0.42429	-0.47215	-0.46896	-0.50022	-0.41853
+2.05	58.99261339	83.63942	90.19799	60.16013	73.93295	75.05873
-2.1	-1.837332089	-1.30306	-1.29555	-1.50102	-1.60109	-1.3379
+2.1	55.42246707	75.39702	82.83729	54.6381	67.03334	67.94693
-2.15	-2.699092865	-2.28094	-2.23449	-2.60465	-2.77829	-2.31936
+2.15	52.89031079	69.97581	77.59618	50.98572	62.74188	62.99903
-2.2	-4.11620903	-4.26029	-4.04698	-4.44357	-4.73981	-4.36724
+2.2	48.88244057	63.16787	69.2508	47.24736	56.2165	57.70191
-2.25	-5.139453888	-5.91207	-5.53794	-5.794	-6.18026	-6.02877
+2.25	46.08153195	58.32516	63.37479	45.11934	51.72174	54.78605

-2.3	-7.092616072	-8.618	-8.05591	-8.05411	-8.72047	-8.81207
+2.3	41.7051292	50.80876	54.44027	41.62493	46.11047	50.01947
-2.35	-8.96586345	-10.5652	-9.86739	-9.82706	-10.6744	-10.7715
+2.35	38.68159755	46.00527	49.13688	39.09524	42.96645	46.58138
-2.4	-12.0056736	-13.6853	-12.9087	-12.6694	-13.8038	-14.0388
+2.4	34.00585786	40.27976	43.03002	35.00315	38.15334	41.03627
-2.45	-14.17594622	-15.8894	-15.4307	-14.6781	-16.1194	-16.4842
+2.45	31.15032864	37.29915	39.21502	32.0782	34.87221	37.22466
-2.5	-17.6879288	-19.7656	-19.6579	-17.8476	-19.6471	-20.3637
+2.5	26.61419439	32.75506	33.17062	27.39804	30.12817	31.59141
-2.55	-20.11653226	-22.8259	-22.8523	-20.0568	-22.0793	-23.0806
+2.55	23.67153259	29.38412	29.12444	24.48313	27.22541	28.00089
-2.6	-24.09494279	-27.7255	-28.0415	-23.6469	-25.868	-27.3337
+2.6	19.17980522	24.50582	24.24655	20.18837	22.83828	22.97105
-2.65	-26.92584029	-31.3699	-31.9338	-26.025	-28.978	-30.4633
+2.65	16.14306267	21.1875	21.08952	17.60202	19.83026	20.03488
-2.7	-31.34295222	-37.1067	-38.1502	-29.6952	-34.1058	-35.0296
+2.7	11.66191381	16.40912	16.25487	13.92071	15.34745	15.53051
-2.75	-34.39077639	-41.1908	-42.7553	-32.0447	-38.0329	-38.1589
+2.75	10.04570684	13.27162	13.25237	11.5986	12.447	12.46832
-2.8	-39.09868258	-48.0661	-49.9735	-36.1673	-44.2019	-43.8412
+2.8	7.55989342	8.420645	8.820017	8.259415	8.769542	8.064805
-2.85	-42.31730309	-52.8633	-54.9744	-39.6734	-48.484	-48.3543
+2.85	5.88293283	8.079374	8.820017	6.061079	6.791421	6.829184
-2.9	-47.24680921	-60.9348	-62.727	-45.2209	-55.2474	-55.405
+2.9	5.792065563	8.079374	8.820017	5.243014	6.791421	6.829184
-2.95	-50.59009939	-66.5252	-68.0447	-49.1939	-60.0821	-60.275
+2.95	5.792065563	8.079374	8.820017	5.243014	6.791421	6.829184
-3	-55.67201357	-75.1892	-76.2133	-55.3464	-67.5599	-68.0059
+3	5.792065563	8.079374	8.820017	5.243014	6.791421	6.829184

2-Span: Moment (Max and Min) Raw Data Results - 50’ Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-7.01E-14**	**-3.8E-14**	**-3.71899E-14**	**-3.4E-14**	**-2.73E-14**	**-3.52471E-14**	**-3.9E-14**	**-3.3E-14**	**-3.13146E-14**	**-2.9E-14**
End Shear	**7.91E-14**	**3.11E-14**	**3.43608E-14**	**3.7E-14**	**3.20E-14**	**4.97149E-14**	**4.07E-14**	**4.32E-14**	**3.32578E-14**	**3.28E-14**
-0.05	**-14.4797**	**-10.5409**	**-10.92246837**	**-9.77233**	**-8.85139**	**-8.608424908**	**-11.7551**	**-13.105**	**-14.5319199**	**-15.8152**
+0.05	**128.3395**	**95.72427**	**101.6852357**	**88.7709**	**76.76131**	**78.16051073**	**105.1282**	**115.3919**	**119.2284172**	**121.8881**
-0.1	**-28.9595**	**-21.0819**	**-21.84493673**	**-19.5447**	**-17.7028**	**-17.21684982**	**-23.5103**	**-26.2099**	**-29.06383981**	**-31.6305**
+0.1	**235.7604**	**176.6575**	**184.2090385**	**160.1477**	**139.6061**	**144.406066**	**194.1625**	**212.5154**	**219.5971671**	**225.9752**
-0.15	**-43.4392**	**-31.6228**	**-32.7674051**	**-29.317**	**-26.5542**	**-25.82527472**	**-35.2654**	**-39.3149**	**-43.59575971**	**-47.4457**
+0.15	**322.7846**	**243.3234**	**248.4344733**	**215**	**188.773**	**198.9539104**	**267.9472**	**292.4088**	**314.2455812**	**321.3013**
-0.2	**-57.919**	**-42.1638**	**-43.68987346**	**-39.0893**	**-35.4056**	**-34.43369963**	**-47.0206**	**-52.4199**	**-58.12767962**	**-63.261**
+0.2	**390.0783**	**296.1418**	**296.376784**	**254.619**	**225.015**	**242.1032769**	**326.3499**	**354.9601**	**389.2105117**	**402.0044**
-0.25	**-72.3987**	**-52.7047**	**-54.61234183**	**-48.8617**	**-44.257**	**-43.04212454**	**-58.7757**	**-65.5248**	**-72.65959952**	**-79.0762**
+0.25	**438.8377**	**335.3092**	**330.0461763**	**286.629**	**254.1214**	**274.5016749**	**369.8339**	**402.6202**	**445.7067525**	**470.6709**
-0.3	**-86.8785**	**-63.2457**	**-65.53481019**	**-58.634**	**-53.1083**	**-51.65054945**	**-70.5308**	**-78.6298**	**-87.19151942**	**-94.8915**
+0.3	**469.7624**	**361.4109**	**355.2059079**	**307.3137**	**273.7**	**296.297179**	**403.5078**	**443.5587**	**484.0834202**	**518.7063**
-0.35	**-101.358**	**-73.7866**	**-76.45727856**	**-68.4063**	**-61.9597**	**-60.25897435**	**-82.286**	**-91.7348**	**-101.7234393**	**-110.707**
+0.35	**492.1406**	**380.0489**	**369.3703624**	**319.4644**	**285.5433**	**308.0205324**	**428.3557**	**468.4145**	**510.4597551**	**547.7421**
-0.4	**-115.838**	**-84.3276**	**-87.37974692**	**-78.1787**	**-70.8111**	**-68.86739926**	**-94.0411**	**-104.84**	**-116.2553592**	**-126.522**
+0.4	**502.4578**	**389.6997**	**370.0422926**	**322.5007**	**289.443**	**310.2823416**	**439.5313**	**478.0552**	**525.8239398**	**558.7471**
-0.45	**-130.318**	**-94.8685**	**-98.30221529**	**-87.951**	**-79.6625**	**-77.47582417**	**-105.796**	**-117.945**	**-130.7872791**	**-142.337**
+0.45	**496.5876**	**387.6611**	**358.5007597**	**318.8356**	**286.9431**	**303.773102**	**437.8498**	**473.5752**	**524.7691386**	**562.7085**
-0.5	**-144.797**	**-105.409**	**-109.2246837**	**-97.7233**	**-88.5139**	**-86.08424908**	**-117.551**	**-131.05**	**-145.319199**	**-158.152**
+0.5	**491.2323**	**379.7431**	**339.9569338**	**312.0862**	**281.6714**	**300.7908819**	**429.5989**	**464.5125**	**512.734828**	**549.1478**
-0.55	**-159.277**	**-115.95**	**-120.147152**	**-107.496**	**-97.3653**	**-94.69267398**	**-129.307**	**-144.155**	**-159.8511189**	**-173.968**
+0.55	**477.5852**	**366.4738**	**339.3826321**	**303.3228**	**272.8809**	**294.5349232**	**413.4023**	**449.6064**	**493.1435222**	**524.2841**
-0.6	**-173.757**	**-126.491**	**-131.0696204**	**-117.268**	**-106.217**	**-103.3010989**	**-141.062**	**-157.26**	**-174.3830388**	**-189.783**
+0.6	**449.275**	**342.4773**	**329.420737**	**284.7966**	**255.5314**	**278.9905727**	**385.7253**	**421.3981**	**458.8930229**	**492.3775**
-0.65	**-188.237**	**-137.032**	**-141.9920887**	**-127.04**	**-115.068**	**-111.9095238**	**-152.817**	**-170.365**	**-188.9149588**	**-205.598**
+0.65	**404.0001**	**310.1923**	**304.7131763**	**260.6492**	**232.9122**	**254.8718532**	**347.649**	**380.8344**	**413.5676002**	**444.6595**
-0.7	**-202.716**	**-147.573**	**-152.9145571**	**-136.813**	**-123.919**	**-120.5179487**	**-164.572**	**-183.47**	**-203.4468787**	**-221.413**
+0.7	**351.5631**	**271.6789**	**266.4035074**	**228.264**	**202.592**	**222.9728703**	**300.3627**	**329.1429**	**359.4082015**	**382.732**
-0.75	**-217.196**	**-158.114**	**-163.8370255**	**-146.585**	**-132.771**	**-129.1263736**	**-176.327**	**-196.575**	**-217.9787986**	**-237.229**
+0.75	**288.3646**	**224.3362**	**221.2929666**	**187.4008**	**164.7715**	**184.1675132**	**245.3165**	**267.7576**	**293.2764073**	**308.3517**
-0.8	**-231.676**	**-168.655**	**-174.7594938**	**-156.357**	**-141.622**	**-137.7347985**	**-188.082**	**-209.679**	**-232.5107185**	**-253.044**
+0.8	**213.0684**	**169.3352**	**164.3088274**	**137.7578**	**119.107**	**139.4094343**	**184.5546**	**198.2367**	**216.8241948**	**223.4305**
-0.85	**-246.156**	**-179.196**	**-185.6819622**	**-166.13**	**-160.126**	**-146.3432234**	**-199.837**	**-222.784**	**-247.0426384**	**-268.859**
+0.85	**132.7412**	**111.9497**	**111.6202813**	**88.6412**	**74.50237**	**89.75050163**	**121.2267**	**124.5435**	**136.744712**	**137.0123**
-0.9	**-260.635**	**-189.737**	**-196.6044306**	**-177.823**	**-200.143**	**-154.9516483**	**-211.593**	**-235.889**	**-261.5745583**	**-284.674**
+0.9	**82.68436**	**64.85539**	**64.47751228**	**51.24306**	**41.66757**	**56.78428178**	**66.3591**	**66.30655**	**66.35961435**	**66.2993**
-0.95	**-275.115**	**-200.278**	**-225.6836529**	**-234.66**	**-252.047**	**-163.5600732**	**-223.348**	**-248.994**	**-276.1064782**	**-300.49**
+0.95	**40.86142**	**22.39043**	**22.14475663**	**20.33884**	**15.9362**	**27.9190268**	**21.64233**	**21.58295**	**21.64688364**	**21.70693**
-1	**-315.396**	**-210.819**	**-303.2931443**	**-309.321**	**-313.755**	**-172.1685037**	**-235.103**	**-262.099**	**-290.638696**	**-316.305**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-315.396**	**-210.819**	**-303.2931443**	**-309.321**	**-313.755**	**-172.1685037**	**-235.103**	**-262.099**	**-290.638696**	**-316.305**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-275.123**	**-200.278**	**-225.6833242**	**-234.661**	**-252.047**	**-163.5598709**	**-223.348**	**-248.994**	**-276.1067615**	**-300.489**
+2.05	**40.86142**	**22.37405**	**22.13095542**	**20.32733**	**15.93064**	**27.89764963**	**21.62639**	**21.56748**	**21.63192985**	**21.69244**
-2.1	**-260.643**	**-189.737**	**-196.6044361**	**-177.823**	**-200.143**	**-154.9514569**	**-211.593**	**-235.889**	**-261.574827**	**-284.674**
+2.1	**82.68439**	**64.82861**	**64.48510682**	**51.24861**	**41.67028**	**56.76453566**	**66.35847**	**66.28917**	**66.35902137**	**66.31448**
-2.15	**-246.163**	**-179.196**	**-185.6819672**	**-166.13**	**-160.126**	**-146.343043**	**-199.837**	**-222.784**	**-247.0428924**	**-268.859**
+2.15	**133.0669**	**111.9601**	**111.5987659**	**88.64766**	**74.49477**	**89.75539316**	**121.2454**	**124.5393**	**136.7557561**	**137.023**
-2.2	**-231.683**	**-168.655**	**-174.7594984**	**-156.358**	**-141.622**	**-137.734629**	**-188.082**	**-209.679**	**-232.5109579**	**-253.044**
+2.2	**213.8782**	**169.3431**	**164.3161223**	**137.7616**	**119.0982**	**139.4326318**	**184.5585**	**198.2311**	**216.8341646**	**223.447**
-2.25	**-217.202**	**-158.114**	**-163.8370295**	**-146.585**	**-132.771**	**-129.126215**	**-176.327**	**-196.574**	**-217.9790233**	**-237.228**

+2.25	289.1168	224.3432	221.2977386	187.3979	164.77	184.1899635	245.3194	267.7515	293.2853254	308.3675
-2.3	-202.722	-147.573	-152.9145606	-136.813	-123.92	-120.5178011	-164.572	-183.469	-203.4470888	-221.413
+2.3	352.2282	271.6841	266.4012576	228.2605	202.5903	222.9939769	300.3587	329.1354	359.4149914	382.7459
-2.35	-188.242	-137.032	-141.9920918	-127.041	-115.068	-111.9093871	-152.817	-170.364	-188.9151542	-205.598
+2.35	404.8186	310.195	304.7076434	260.6431	232.9092	254.8909679	347.6432	380.8245	413.571259	444.6705
-2.4	-173.762	-126.491	-131.0696229	-117.268	-106.217	-103.3009731	-141.062	-157.259	-174.3832197	-189.783
+2.4	448.7677	342.4736	329.411281	284.7925	255.5402	279.0070857	385.7168	421.385	458.8883622	492.3846
-2.45	-159.282	-115.95	-120.1471541	-107.496	-97.3654	-94.69255915	-129.307	-144.154	-159.8512851	-173.968
+2.45	478.1665	366.4669	339.3686427	303.3163	272.8886	294.5483747	413.3905	449.6233	493.1348243	524.2864
-2.5	-144.802	-105.409	-109.2246852	-97.7235	-88.514	-86.08414519	-117.551	-131.049	-145.3193506	-158.152
+2.5	491.6595	379.7324	339.9480156	312.077	281.6778	300.8008463	429.583	464.5247	512.7212849	549.1605
-2.55	-130.321	-94.8684	-98.30221635	-87.9511	-79.6626	-77.47573122	-105.796	-117.944	-130.7874161	-142.337
+2.55	496.1737	387.673	358.5151625	318.8451	286.9478	303.7642132	437.8677	473.5644	524.7840577	562.7161
-2.6	-115.841	-84.3274	-87.37974749	-78.1788	-70.8112	-68.86731725	-94.0412	-104.84	-116.2554815	-126.522
+2.6	501.9628	389.7076	370.0538836	322.5078	289.4464	310.270554	439.5448	478.0741	525.8336536	558.7488
-2.65	-101.361	-73.7865	-76.45727863	-68.4064	-61.9598	-60.25890328	-82.286	-91.7346	-101.723547	-110.707
+2.65	491.93	380.0524	369.3783099	319.4722	285.5471	308.0053376	428.3643	468.4281	510.4635866	547.735
-2.7	-86.881	-63.2456	-65.53480977	-58.6341	-53.1084	-51.65048931	-70.5309	-78.6296	-87.19161242	-94.8914
+2.7	470.1443	361.4083	355.2096424	307.3183	273.7022	296.2781079	403.5109	443.5665	484.0792022	518.7
-2.75	-72.4008	-52.7046	-54.61234092	-48.8617	-44.257	-43.04207534	-58.7757	-65.5247	-72.65967788	-79.0762
+2.75	439.557	335.3017	330.0437302	286.6326	254.1231	274.4784474	369.8303	402.6218	445.6959792	470.6822
-2.8	-57.9207	-42.1637	-43.68987206	-39.0894	-35.4056	-34.43366137	-47.0206	-52.4197	-58.12774333	-63.2609
+2.8	390.9868	296.129	296.3694828	254.617	225.014	242.1211891	326.3404	354.9542	389.226074	402.008
-2.85	-43.4405	-31.6228	-32.7674032	-29.317	-26.5542	-25.82524741	-35.2654	-39.3148	-43.59580879	-47.4457
+2.85	323.4817	243.3049	248.4537591	215.016	188.7699	198.9692001	267.9316	292.3961	314.2537534	321.2961
-2.9	-28.9603	-21.0819	-21.84493434	-19.5447	-17.7028	-17.21683344	-23.5103	-26.2099	-29.06387424	-31.6305
+2.9	236.234	176.6698	184.2223511	160.1587	139.6005	144.4163981	194.1759	212.5302	219.5975867	225.9771
-2.95	-14.4802	-10.5409	-10.92246548	-9.77235	-8.8514	-8.608419468	-11.7551	-13.1049	-14.5319397	-15.8152
+2.95	128.58	95.73049	101.6920637	88.7766	76.76407	78.16576918	105.135	115.3994	119.2207268	121.8813
-3	-5.68E-14	-2.2E-14	-3.25221E-14	-2.7E-14	-2.29E-14	-1.95399E-14	-3.1E-14	-3.4E-14	-2.34351E-14	-2.4E-14
+3	8.49E-14	4.44E-14	4.93889E-14	5.55E-14	4.26E-14	4.45319E-14	5.08E-14	4.53E-14	5.24025E-14	5.24E-14

2-Span: Moment (Max and Min) Raw Data Results - 50' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-7.01E-14	-4.7E-14	-4.9E-14	-4.4E-14	-5.3E-14	-4.4E-14	-4.7E-14	-3.04664E-14
End Shear	7.91E-14	5.75E-14	6.2E-14	4.46E-14	5.69E-14	3.93E-14	4.18E-14	3.90908E-14
-0.05	-14.4797	-14.451	-15.4275	-14.5206	-17.3879	-12.6265	-13.3008	-6.939744237
+0.05	128.3395	132.0724	139.2239	129.4832	150.6379	113.9822	120.0814	67.07695593
-0.1	-28.9595	-28.902	-30.8551	-29.0412	-34.7758	-25.253	-26.6016	-13.87948847
+0.1	235.7604	244.604	257.4832	239.2728	277.9726	205.8901	216.8415	123.8603722
-0.15	-43.4392	-43.3531	-46.2826	-43.5618	-52.1637	-37.8795	-39.9024	-20.81923271
+0.15	322.7846	338.3565	355.7982	330.3941	382.558	276.7687	291.394	170.5592992
-0.2	-57.919	-57.8041	-61.7101	-58.0824	-69.5516	-50.506	-53.2032	-27.75897695
+0.2	390.0783	413.4757	434.027	402.5908	464.5049	329.325	346.6578	207.4534082
-0.25	-72.3987	-72.2551	-77.1377	-72.6031	-86.9395	-63.1326	-66.5039	-34.69872119
+0.25	438.8377	470.3041	492.7254	456.4701	534.9855	373.4879	393.6371	234.8929654
-0.3	-86.8785	-86.7061	-92.5652	-87.1237	-104.327	-75.7591	-79.8047	-41.63846542
+0.3	469.7624	509.5235	532.6577	501.5222	588.7961	406.073	428.7201	253.2988819
-0.35	-101.358	-101.157	-107.993	-101.644	-121.715	-88.3856	-93.1055	-48.57820966
+0.35	492.1406	533.3624	562.5293	532.521	621.7022	422.2223	445.2219	263.2286702
-0.4	-115.838	-115.608	-123.42	-116.165	-139.103	-101.012	-106.406	-55.5179539
+0.4	502.4578	550.4459	578.8586	546.7047	635.2699	430.3532	454.3619	265.3566506
-0.45	-130.318	-130.059	-138.848	-130.686	-156.491	-113.639	-119.707	-62.45769813
+0.45	496.5876	551.5512	578.2382	545.0593	630.106	422.0384	446.0317	260.088319
-0.5	-144.797	-144.51	-154.275	-145.206	-173.879	-126.265	-133.008	-69.39744237
+0.5	491.2323	540.3187	567.3599	534.8281	620.071	403.937	427.2445	253.7752568
-0.55	-159.277	-158.961	-169.703	-159.727	-191.267	-138.892	-146.309	-76.33718661
+0.55	477.5852	517.0544	544.2311	514.1222	598.5868	395.2726	417.4306	250.787839
-0.6	-173.757	-173.412	-185.13	-174.247	-208.655	-151.518	-159.609	-83.27693085
+0.6	449.275	480.5235	506.4779	479.4547	559.7203	380.0466	400.9885	239.5944268
-0.65	-188.237	-187.863	-200.558	-188.768	-226.043	-164.145	-172.91	-90.21667508
+0.65	404.0001	437.862	456.6194	432.1577	505.0342	347.2381	366.8157	220.803328
-0.7	-202.716	-202.314	-215.985	-203.289	-243.431	-176.771	-186.211	-97.15641932
+0.7	351.5631	383.031	398.931	373.695	436.2514	306.1982	323.1194	195.093608
-0.75	-217.196	-216.765	-231.413	-217.809	-260.818	-189.398	-199.512	-104.0961636
+0.75	288.3646	317.5017	329.385	305.6623	355.2546	248.3088	261.6707	163.2149355
-0.8	-231.676	-231.216	-246.84	-232.33	-278.206	-202.024	-212.813	-111.0359078
+0.8	213.0684	242.875	249.6753	229.7871	264.0859	181.5873	191.8557	125.9874965
-0.85	-246.156	-245.667	-262.268	-246.85	-295.594	-214.651	-226.113	-117.975652
+0.85	132.7412	160.8812	161.6356	150.1352	164.9475	122.1535	128.6581	88.83078458
-0.9	-260.635	-260.118	-277.696	-261.371	-312.982	-227.277	-239.414	-124.9153963
+0.9	82.68436	92.09694	92.09694	80.1951	82.97468	70.01652	73.7016	58.85182657
-0.95	-275.115	-274.569	-293.123	-275.892	-330.37	-265.363	-281.628	-131.8551405
+0.95	40.86142	31.89647	31.89647	25.46157	25.46681	24.18658	25.45956	28.70826496
-1	-315.396	-289.02	-308.551	-290.412	-347.758	-351.419	-372.299	-138.7949654
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-315.396	-289.02	-308.551	-290.412	-347.758	-351.419	-372.299	-138.7949654
+2	0	0	0	0	0	0	0	0
-2.05	-275.123	-274.569	-293.123	-275.891	-330.37	-265.363	-281.628	-131.8552172
+2.05	40.86142	31.87244	31.87244	25.44282	25.48944	24.17162	25.44381	28.48478952
-2.1	-260.643	-260.118	-277.696	-261.371	-312.982	-227.277	-239.414	-124.915469
+2.1	82.68439	92.11016	92.11016	80.19895	82.98454	69.99216	73.67596	58.43966994
-2.15	-246.163	-245.667	-262.268	-246.85	-295.595	-214.65	-226.113	-117.9757207
+2.15	133.0669	160.8924	161.6454	150.1621	164.9748	122.1609	128.6658	88.26296209
-2.2	-231.683	-231.216	-246.84	-232.33	-278.207	-202.024	-212.812	-111.0359725
+2.2	213.8782	242.8865	249.6853	229.7814	264.1143	181.5951	191.8638	125.9808916
-2.25	-217.202	-216.765	-231.413	-217.809	-260.819	-189.397	-199.512	-104.0962243

+2.25	**289.1168**	**317.5126**	**329.394**	**305.6567**	**355.2827**	**248.3195**	**261.6823**	**163.2081224**
-2.3	**-202.722**	**-202.314**	**-215.985**	**-203.288**	**-243.431**	**-176.771**	**-186.211**	**-97.15647604**
+2.3	**352.2282**	**383.04**	**398.9378**	**373.6883**	**436.2779**	**306.2052**	**323.1271**	**195.0864071**
-2.35	**-188.242**	**-187.863**	**-200.558**	**-188.768**	**-226.043**	**-164.144**	**-172.91**	**-90.2167278**
+2.35	**404.8186**	**437.8681**	**456.6229**	**432.1488**	**505.0577**	**347.2404**	**366.8186**	**220.7955459**
-2.4	**-173.762**	**-173.412**	**-185.13**	**-174.247**	**-208.655**	**-151.518**	**-159.609**	**-83.27697957**
+2.4	**448.7677**	**480.5258**	**506.4721**	**479.4426**	**559.7397**	**380.04**	**400.9818**	**239.5858762**
-2.45	**-159.282**	**-158.961**	**-169.703**	**-159.727**	**-191.267**	**-138.891**	**-146.308**	**-76.33723134**
+2.45	**478.1665**	**517.0482**	**544.221**	**514.1059**	**598.6011**	**395.2605**	**417.4183**	**250.7784877**
-2.5	**-144.802**	**-144.51**	**-154.275**	**-145.206**	**-173.879**	**-126.265**	**-133.008**	**-69.39748311**
+2.5	**491.6595**	**540.3077**	**567.3446**	**534.8445**	**620.0792**	**403.9435**	**427.251**	**253.7648396**
-2.55	**-130.321**	**-130.059**	**-138.848**	**-130.685**	**-156.491**	**-113.638**	**-119.707**	**-62.45773488**
+2.55	**496.1737**	**551.565**	**578.2565**	**545.0831**	**630.1008**	**422.0495**	**446.043**	**260.0830073**
-2.6	**-115.841**	**-115.608**	**-123.42**	**-116.165**	**-139.103**	**-101.012**	**-106.406**	**-55.51798664**
+2.6	**501.9628**	**550.454**	**578.8709**	**546.723**	**635.2583**	**430.3602**	**454.3689**	**265.3505758**
-2.65	**-101.361**	**-101.157**	**-107.993**	**-101.644**	**-121.715**	**-88.3854**	**-93.1054**	**-48.57823841**
+2.65	**491.93**	**533.3642**	**562.5349**	**532.5333**	**621.6834**	**422.2244**	**445.2236**	**263.2217404**
-2.7	**-86.881**	**-86.706**	**-92.5652**	**-87.1236**	**-104.327**	**-75.7589**	**-79.8046**	**-41.63849018**
+2.7	**470.1443**	**509.5169**	**532.6543**	**501.5279**	**588.8111**	**406.0671**	**428.7132**	**253.3065514**
-2.75	**-72.4008**	**-72.255**	**-77.1376**	**-72.603**	**-86.9396**	**-63.1324**	**-66.5039**	**-34.69874195**
+2.75	**439.557**	**470.2905**	**492.7146**	**456.4675**	**534.9921**	**373.4762**	**393.6242**	**234.8995209**
-2.8	**-57.9207**	**-57.804**	**-61.7101**	**-58.0824**	**-69.5516**	**-50.5059**	**-53.2031**	**-27.75899371**
+2.8	**390.9868**	**413.4547**	**434.0083**	**402.581**	**464.5014**	**329.3187**	**346.6513**	**207.4588396**
-2.85	**-43.4405**	**-43.353**	**-46.2826**	**-43.5618**	**-52.1637**	**-37.8795**	**-39.9023**	**-20.81924548**
+2.85	**323.4817**	**338.3277**	**355.7711**	**330.3767**	**382.5455**	**276.7908**	**291.4174**	**170.5634193**
-2.9	**-28.9603**	**-28.902**	**-30.8551**	**-29.0412**	**-34.7758**	**-25.253**	**-26.6015**	**-13.87949725**
+2.9	**236.234**	**244.6209**	**257.5012**	**239.2595**	**277.9505**	**205.9055**	**216.8577**	**123.8631402**
-2.95	**-14.4802**	**-14.451**	**-15.4275**	**-14.5206**	**-17.3879**	**-12.6265**	**-13.3008**	**-6.939749017**
+2.95	**128.58**	**132.0808**	**139.233**	**129.4916**	**150.6479**	**113.9901**	**120.0897**	**67.07834777**
-3	**-5.68E-14**	**-3.6E-14**	**-4E-14**	**-3.9E-14**	**-5E-14**	**-3.7E-14**	**-3.9E-14**	**-3.02057E-14**
+3	**8.49E-14**	**5.82E-14**	**5.82E-14**	**6.24E-14**	**7.33E-14**	**5.38E-14**	**5.69E-14**	**3.83912E-14**

2-Span: Moment (Max and Min) Raw Data Results - 50' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-7.01E-14	-5.77823E-14	-5.34014E-14	-4.6E-14	-5.2E-14	-4.8E-14
End Shear	7.91E-14	6.04819E-14	7.25461E-14	4.95E-14	5.32E-14	5.03E-14
-0.05	-14.4797	-20.19844014	-22.05003951	-13.1075	-16.9786	-17.0729
+0.05	128.3395	169.8556597	174.7204752	125.5009	153.3196	153.7692
-0.1	-28.9595	-40.39688027	-44.10007903	-26.215	-33.9571	-34.1459
+0.1	235.7604	304.6512391	316.4512349	226.0875	276.2165	277.0049
-0.15	-43.4392	-60.59532041	-66.15011854	-39.3226	-50.9357	-51.2188
+0.15	322.7846	409.6808667	426.1333251	304.2264	372.3379	371.983
-0.2	-57.919	-80.79376055	-88.20015805	-52.4301	-67.9143	-68.2918
+0.2	390.0783	504.513193	520.2807255	362.7289	450.3833	451.5127
-0.25	-72.3987	-100.9922007	-110.2501976	-65.5376	-84.8929	-85.3647
+0.25	438.8377	568.3234325	598.872444	416.4951	513.8354	511.2848
-0.3	-86.8785	-121.1906408	-132.3002371	-78.6451	-101.871	-102.438
+0.3	469.7624	609.7580992	649.1177593	450.5192	552.7909	552.0704
-0.35	-101.358	-141.389081	-154.3502766	-91.7527	-118.85	-119.511
+0.35	492.1406	627.4225372	693.1532807	470.164	569.0977	581.9013
-0.4	-115.838	-161.5875211	-176.4003161	-104.86	-135.829	-136.584
+0.4	502.4578	643.7884432	712.4287787	479.3485	565.1573	591.9704
-0.45	-130.318	-181.7859612	-198.4503556	-117.968	-152.807	-153.656
+0.45	496.5876	647.4762934	722.1061164	481.7457	554.8296	591.3293
-0.5	-144.797	-201.9844014	-220.5003951	-131.075	-169.786	-170.729
+0.5	491.2323	635.7325382	708.9954384	471.2466	535.1171	577.5868
-0.55	-159.277	-222.1828415	-242.5504346	-144.183	-186.764	-187.802
+0.55	477.5852	603.0591065	671.0716588	449.8115	521.5204	554.6198
-0.6	-173.757	-242.3812816	-264.6004742	-157.29	-203.743	-204.875
+0.6	449.275	560.3242574	627.2493112	421.3045	498.7381	516.9485
-0.65	-188.237	-262.5797218	-286.6505137	-170.398	-220.721	-221.948
+0.65	404.0001	513.8501917	558.8696312	384.385	468.9565	474.0238
-0.7	-202.716	-282.7781619	-308.7005532	-183.505	-237.7	-239.021
+0.7	351.5631	453.158414	472.8718352	340.721	415.5364	414.2403
-0.75	-217.196	-302.9766021	-330.7505927	-196.613	-254.679	-256.094
+0.75	288.3646	367.9743804	374.770627	282.7719	340.8601	340.1637
-0.8	-231.676	-323.1750422	-352.8006322	-209.72	-271.657	-273.167
+0.8	213.0684	261.3764313	255.5055505	215.7177	247.3043	249.9345
-0.85	-246.156	-343.3734823	-374.8506717	-222.828	-288.636	-290.24
+0.85	132.7412	157.8109515	146.5142376	145.9112	160.0226	162.8579
-0.9	-260.635	-363.5719225	-408.0859816	-242.943	-305.614	-307.313
+0.9	82.68436	80.48550675	75.02820843	82.77284	88.29103	82.91097
-0.95	-275.115	-481.4350667	-527.1943146	-338.241	-380.774	-426.956
+0.95	40.86142	25.53879492	28.68045154	28.55731	30.46113	25.44865
-1	-315.396	-618.7524198	-658.70529	-436.46	-508.389	-556.655
+1	0	0	0	0	0	0
(Span 2) -2	-315.396	-618.7524198	-658.70529	-436.46	-508.389	-556.655
+2	0	0	0	0	0	0
-2.05	-275.123	-481.4352147	-527.1944346	-338.24	-380.776	-426.955
+2.05	40.86142	25.52420259	28.67769261	28.53997	30.44264	25.54609
-2.1	-260.643	-363.5718086	-408.0858535	-242.942	-305.614	-307.313
+2.1	82.68439	80.47701677	75.02702091	82.74451	88.26081	82.9027
-2.15	-246.163	-343.3733748	-374.8507421	-222.828	-288.635	-290.24
+2.15	133.0669	157.8052772	146.5134071	145.8819	160.0166	162.8497
-2.2	-231.683	-323.174941	-352.8006986	-209.721	-271.657	-273.167
+2.2	213.8782	261.3651327	255.503868	215.7267	246.6196	249.9436
-2.25	-217.202	-302.9765073	-330.7506551	-196.613	-254.678	-256.094

+2.25	**289.1168**	**367.9597486**	**374.7684239**	**282.785**	**340.8487**	**340.1839**
-2.3	**-202.722**	**-282.7780735**	**-308.7006116**	**-183.505**	**-237.7**	**-239.021**
+2.3	**352.2282**	**453.1386185**	**472.8689617**	**340.7293**	**415.5537**	**414.2607**
-2.35	**-188.242**	**-262.5796397**	**-286.650568**	**-170.398**	**-220.721**	**-221.948**
+2.35	**404.8186**	**513.8240326**	**558.8721873**	**384.3954**	**468.968**	**474.0443**
-2.4	**-173.762**	**-242.3812059**	**-264.6005245**	**-157.29**	**-203.743**	**-204.876**
+2.4	**448.7677**	**560.299356**	**627.250983**	**421.3079**	**498.7427**	**516.9691**
-2.45	**-159.282**	**-222.1827722**	**-242.550481**	**-144.183**	**-186.764**	**-187.803**
+2.45	**478.1665**	**603.0510189**	**671.0723132**	**449.8091**	**521.5308**	**554.637**
-2.5	**-144.802**	**-201.9843384**	**-220.5004375**	**-131.075**	**-169.786**	**-170.73**
+2.5	**491.6595**	**635.7193279**	**708.9938212**	**471.2577**	**535.1374**	**577.6**
-2.55	**-130.321**	**-181.7859046**	**-198.450394**	**-117.968**	**-152.807**	**-153.657**
+2.55	**496.1737**	**647.4893723**	**722.103377**	**481.7534**	**554.8563**	**591.346**
-2.6	**-115.841**	**-161.5874709**	**-176.4003505**	**-104.86**	**-135.828**	**-136.584**
+2.6	**501.9628**	**643.8017667**	**712.4277129**	**479.3522**	**565.1539**	**591.9818**
-2.65	**-101.361**	**-141.3890371**	**-154.350307**	**-91.7527**	**-118.85**	**-119.511**
+2.65	**491.93**	**627.4253612**	**693.1509275**	**470.1541**	**569.1231**	**581.9134**
-2.7	**-86.881**	**-121.1906033**	**-132.3002635**	**-78.6452**	**-101.871**	**-102.438**
+2.7	**470.1443**	**609.7498276**	**649.1156147**	**450.5104**	**552.8101**	**552.0809**
-2.75	**-72.4008**	**-100.9921696**	**-110.25022**	**-65.5377**	**-84.8928**	**-85.3648**
+2.75	**439.557**	**568.307609**	**598.8747958**	**416.5188**	**513.8475**	**511.2991**
-2.8	**-57.9207**	**-80.7937358**	**-88.2001765**	**-52.4301**	**-67.9142**	**-68.2918**
+2.8	**390.9868**	**504.492474**	**520.2816601**	**361.9466**	**450.3874**	**451.519**
-2.85	**-43.4405**	**-60.59530203**	**-66.15013299**	**-39.3226**	**-50.9357**	**-51.2189**
+2.85	**323.4817**	**409.6702211**	**426.1322978**	**304.2496**	**372.3319**	**371.9788**
-2.9	**-28.9603**	**-40.39686826**	**-44.10008949**	**-26.2151**	**-33.9571**	**-34.1459**
+2.9	**236.234**	**304.6737725**	**316.4485769**	**226.1044**	**276.2371**	**277.0251**
-2.95	**-14.4802**	**-20.19843449**	**-22.05004598**	**-13.1075**	**-16.9786**	**-17.073**
+2.95	**128.58**	**169.8673481**	**174.7160772**	**125.5097**	**153.2957**	**153.7796**
-3	**-5.68E-14**	**-4.76888E-14**	**-4.43466E-14**	**-3.9E-14**	**-4.4E-14**	**-4.7E-14**
+3	**8.49E-14**	**8.60605E-14**	**8.18268E-14**	**6.65E-14**	**7.14E-14**	**7.49E-14**

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-17.67908755	-14.70144377	-15.91204747	-11.2994495	-12.08305056	-11.37456415	-13.65238816	-10.70170683	-11.2866	-5.53816321
End Shear	160.4784963	138.4648681	144.4306462	111.3770116	117.8039876	109.768501	128.5539113	102.2368674	107.7929	56.96240203
-0.05	-17.77334905	-14.79570527	-19.75796205	-11.2994495	-12.08305056	-11.37456415	-13.65238816	-10.70170683	-11.2866	-5.53816321
+0.05	145.7760879	126.801203	131.6827776	102.5343013	108.3037001	100.8520091	117.7974961	92.05807415	97.03221	52.34555771
-0.1	-18.09386126	-15.11621747	-24.55812557	-11.2994495	-12.08305056	-11.37456415	-13.65238816	-10.70170683	-11.2866	-5.53816321
+0.1	132.0269354	115.997799	119.2699519	94.28379183	99.44832506	92.51909101	107.7634486	82.51991163	86.95129	47.98268966
-0.15	-18.53339333	-20.1873724	-28.69982884	-12.90532871	-12.90532871	-11.37456415	-13.65238816	-10.70170683	-11.2866	-7.943281708
+0.15	120.8852563	107.2114685	109.2097371	87.48017945	92.1524999	85.65770431	99.51532659	74.80187622	78.79606	44.39538756
-0.2	-23.66788412	-28.67246714	-33.82362848	-19.33074968	-19.33074968	-17.25867015	-18.02681167	-14.70353402	-15.4774	-10.89346441
+0.2	107.930459	96.95228184	97.51084029	79.42983623	83.5278514	77.5515467	89.78812611	65.85319552	69.34301	40.16384546
-0.25	-28.90653282	-35.86357377	-38.20845425	-24.64396917	-24.64396917	-23.01792713	-24.43248373	-18.74422157	-19.7308	-13.32692373
+0.25	97.50855153	88.65871436	88.0981236	72.83802754	76.47275849	70.92481482	81.85108915	58.69596818	61.78523	36.71043139
-0.3	-38.5256014	-44.60875881	-47.35244158	-31.88015065	-32.19057341	-29.86511756	-32.05231415	-23.93251973	-25.2231	-16.20711857
+0.3	85.65108438	79.03655259	77.23805956	65.09583251	68.29581887	63.15507594	72.56365526	50.90816887	53.58755	32.66891603
-0.35	-47.75915404	-51.97017841	-55.68477923	-38.67546521	-39.52493201	-35.98074851	-39.12793411	-28.84328428	-30.4491	-18.56620597
+0.35	76.04556509	71.31085666	68.57492125	58.8058091	61.47766724	56.85439885	65.04849138	44.70331725	47.05612	29.39832654
-0.4	-58.91821403	-60.86263225	-65.68049888	-46.71318844	-48.20811699	-44.1860548	-49.12740788	-34.6486113	-36.628	-21.93172855
+0.4	65.06755532	62.41317315	58.67375443	51.47974149	53.66333422	49.5307694	56.33378257	38.24973646	40.49438	25.60554243
-0.45	-68.25346827	-68.29809944	-73.79649004	-53.29225738	-55.32223238	-50.91276881	-57.33903531	-39.39758221	-41.6833	-25.48699731
+0.45	56.40211488	55.41790554	50.85822965	45.58148645	47.38041694	43.64753797	49.35126859	33.73217452	35.69648	22.5666834
-0.5	-79.46055782	-77.21963966	-83.25426916	-61.01648569	-63.68297017	-58.82332442	-67.01322161	-44.96963822	-47.6157	-29.67200222
+0.5	46.79044347	47.23483853	42.17926985	38.77954182	40.14568691	36.87967247	41.34219929	28.76920656	30.42675	19.08133639
-0.55	-89.56843759	-84.6284336	-91.65218639	-67.28931965	-70.47992955	-65.25870539	-74.89837246	-49.7566813	-52.7099	-33.07988287
+0.55	39.53498311	40.85230026	35.63735493	33.36303304	34.39420918	31.50528502	35.00312116	24.81284989	26.22691	16.32314096
-0.6	-101.9211688	-93.45548439	-101.740961	-74.59207651	-78.40193808	-72.76482773	-84.11432329	-56.07545998	-59.2293	-37.05866633
+0.6	31.41743795	33.64442269	28.31830664	27.19318551	27.85536215	25.40286849	27.83264286	20.30071142	21.43847	13.20393169
-0.65	-112.120348	-100.732401	-110.0210462	-80.46868458	-84.78482839	-78.81748932	-91.56222732	-63.47135218	-66.8119	-40.27023888
+0.65	25.16395085	28.02822665	22.68018526	22.34842358	22.73224762	20.62871807	22.24778001	16.75264502	17.67438	11.17163613
-0.7	-124.2002636	-109.3360394	-119.6505408	-87.24198161	-92.15181276	-85.80950346	-100.1870023	-72.1353048	-75.9319	-43.98409716
+0.7	18.26478929	21.77492897	16.49055064	16.91865467	17.00557131	15.70360034	16.71912054	12.76957115	13.45045	8.984501277
-0.75	-134.0981526	-116.3713852	-127.4104528	-92.63239249	-98.02374227	-91.38803747	-107.0868615	-79.52878344	-83.7145	-46.95043271
+0.75	13.47826883	16.98229016	12.13044192	13.11930636	13.11930636	12.04632998	12.70800112	9.981902249	10.50727	7.268991825
-0.8	-146.1323561	-124.6173057	-136.3924388	-98.76825072	-104.7194169	-97.756273	-114.9875279	-88.41399004	-93.1324	-50.34066205
+0.8	9.751231938	11.7495422	8.776108731	9.18712424	9.18712424	8.009616672	8.289825447	6.990535629	7.358459	5.348823914
-0.85	-155.1717203	-131.2969393	-149.8814824	-103.5824628	-109.9834603	-102.7693	-121.2285791	-95.91987605	-101.09	-53.01285093
+0.85	6.960492328	7.833179796	6.264443088	6.188861836	6.188861836	4.73299897	4.942312706	4.666913589	4.912541	3.8718406
-0.9	-166.1640916	-139.0454624	-152.8596635	-108.972908	-115.8915456	-108.4040804	-128.2721949	-104.5848671	-110.279	-56.02074519
+0.9	3.995603476	3.681576224	3.596043125	2.902712203	2.902712203	2.318140417	2.34932258	2.205571492	2.321654	2.257167799
-0.95	-175.0010765	-145.2507443	-160.1317258	-113.1209435	-120.450804	-112.7601972	-133.7436465	-111.4920258	-117.606	-58.34985751
+0.95	1.848291297	1.451294334	1.664015463	1.05761428	1.05761428	0.924874754	0.934029251	0.87971526	0.926016	1.050810772
-1	-185.1679554	-152.3568377	-168.4296942	-117.65798	-125.4549969	-117.5518492	-139.7972753	-119.3677822	-125.963	-60.91671275
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.83E+02	1.51E+02	166.6737852	1.17E+02	1.25E+02	116.784495	138.8248466	1.18E+02	1.25E+02	6.05E+01
-2.05	-1.85E+00	-1.45E+00	-1.664013928	-1.16E+00	-1.16E+00	-0.925636755	-0.934791261	-8.80E-01	-9.27E-01	-1.04E+00
+2.05	1.75E+02	1.45E+02	1.60E+02	113.1177579	120.4472979	1.13E+02	1.34E+02	1.11E+02	117.601	5.83E+01
-2.1	-4.46E+00	-4.33E+00	-4.014381429	-3.416225955	-3.416225955	-2.728862244	-2.760755661	-2.595830723	-2.73245	-2.506375572
+2.1	1.64E+02	1.38E+02	1.51E+02	108.1015414	114.9353412	1.07E+02	1.27E+02	1.03E+02	108.7715	5.55E+01
-2.15	-6.96E+00	-7.84E+00	-6.25085787	-6.191125503	-6.191125503	-4.908724194	-4.944081865	-4.668339677	-4.91404	-3.863607035
+2.15	155.0266548	131.2934054	143.3977248	103.5787339	109.9793789	102.7655091	121.2238517	95.91498873	101.0849	53.01219428
-2.2	-10.3346807	-12.58501722	-9.29416181	-9.82025493	-9.82025493	-8.657215279	-8.997851632	-7.471848093	-7.8651	-5.648875462
+2.2	143.6557538	123.2556346	134.6282985	97.76804269	103.6269973	96.71680971	113.6959738	86.87898238	91.50522	49.78843978
-2.25	-13.4782666	-16.9858744	-12.09344549	-13.12201561	-13.12201561	-12.04905564	-12.71098747	-9.983612814	-10.5091	-7.25931283

+2.25	**133.9380416**	***116.36733***	***127.1607938***	**92.62819055**	**98.01916137**	**91.38379258**	**107.0816042**	**79.14920489**	**83.31495**	**46.94970734**
-2.3	**-19.36740631**	***-22.78342607***	***-17.36928509***	**-17.79677809**	**-17.93045796**	**-16.46853873**	**-17.55887735**	**-13.41383748**	**-14.1335**	**-9.329169163**
+2.3	**122.0338296**	***107.9090499***	***117.8781446***	**86.13101015**	**90.9426471**	**84.66149566**	**98.76923201**	**70.70401966**	**74.42528**	**43.37563234**
-2.35	**-25.12713823**	***-28.03233393***	***-22.52473138***	**-22.35215729**	**-22.73619086**	**-20.63230295**	**-22.25196253**	**-16.75491429**	**-17.6768**	**-11.16070214**
+2.35	**111.9477956**	***100.7278804***	***109.883513***	**80.46406603**	**84.77980963**	**78.81284599**	**91.55650829**	**63.46650183**	**66.80684**	**40.2694468**
-2.4	**-32.6732879**	***-34.81508188***	***-29.28150365***	**-28.19925398**	**-28.9205734**	**-26.39626326**	**-28.99766314**	**-21.03642029**	**-22.2191**	**-13.70932431**
+2.4	**99.69153237**	***91.98586671***	***99.98983179***	**73.38840876**	**77.09548282**	**71.52663532**	**82.59258963**	**54.88737296**	**58.16503**	**36.40377157**
-2.45	**-39.57959001**	***-40.85684759***	***-35.61070077***	**-33.36724609**	**-34.39867867**	**-31.50936027**	**-35.00791849**	**-24.81539713**	**-26.2296**	**-16.32381128**
+2.45	**89.3860204**	***84.6235331***	***91.64585463***	**67.28437416**	**70.47456831**	**65.25375089**	**74.89229717**	**49.75320145**	**52.70617**	**33.07903532**
-2.5	**-48.32831135**	***-48.55591461***	***-43.44961857***	**-39.8954987**	**-41.33177632**	**-37.98856671**	**-42.65257107**	**-29.58328362**	**-31.2911**	**-19.6500522**
+2.5	**77.42959117**	***75.72913536***	***81.46477494***	**59.73818092**	**62.29867371**	**57.51329294**	**65.40976169**	**44.0484201**	**46.63479**	**28.98047303**
-2.55	**-56.43785365**	***-55.3308937***	***-50.71097402***	**-45.58609183**	**-47.38531888**	**-43.65201111**	**-49.35656986**	**-33.73496375**	**-35.6994**	**-22.56743423**
+2.55	**68.08588571**	***68.2929116***	***73.58759295***	**53.28706078**	**55.31661066**	**50.90757052**	**57.33268465**	**39.39447803**	**41.67996**	**25.48611482**
-2.6	**-66.87945982**	***-63.87200317***	***-60.0638048***	**-52.68750421**	**-54.95082867**	**-50.73681987**	**-57.7672707**	**-39.13043062**	**-41.4298**	**-26.22778353**
+2.6	**56.88339475**	***59.37211224***	***63.86143261***	**45.37832828**	**46.76545233**	**42.82253909**	**47.46447119**	**33.68540643**	**35.60273**	**21.21335819**
-2.65	**-76.06129407**	***-71.31607903***	***-68.28784294***	**-58.8107567**	**-61.48294801**	**-56.85922675**	**-65.05424382**	**-44.70732458**	**-47.0603**	**-29.39913106**
+2.65	**47.5864244**	***51.96474448***	***55.55455907***	**38.67006731**	**39.51910429**	**35.97537059**	**39.12138744**	**28.84005379**	**30.44568**	**18.56562148**
-2.7	**-87.6234007**	***-80.61957357***	***-78.64372997***	**-66.37732342**	**-69.56455685**	**-64.43994459**	**-74.09803289**	**-52.18530284**	**-54.9319**	**-33.33489782**
+2.7	**36.51390526**	***43.13822163***	***45.62245367***	**30.50680634**	**30.70900122**	**28.72537362**	**30.78364374**	**22.94042802**	**24.16741**	**15.72995809**
-2.75	**-97.68559744**	***-88.66416756***	***-87.65641767***	**-72.84323042**	**-76.47832396**	**-70.92991611**	**-81.85719333**	**-58.7003333**	**-61.7898**	**-36.71128615**
+2.75	**28.60149697**	***35.85798125***	***38.20901531***	**24.6397489**	**24.6397489**	**23.01346552**	**24.4275201**	**18.74156731**	**19.72797**	**13.32632268**
-2.8	**-110.2387027**	***-98.6450647***	***-99.01325072***	**-80.76701099**	**-84.95978758**	**-78.89687354**	**-91.40113782**	**-67.32416239**	**-70.8967**	**-40.86375705**
+2.8	**22.64836808**	***27.2409717***	***32.82546006***	**18.25876027**	**18.25876027**	**16.09799663**	**16.73623925**	**13.88885559**	**14.61985**	**10.40316529**
-2.85	**-121.0710695**	***-107.217061***	***-109.1697043***	**-87.48556607**	**-92.15827355**	**-85.66301088**	**-99.52169983**	**-74.8068961**	**-78.8014**	**-44.39628573**
+2.85	**18.5334753**	***20.18171211***	***28.59620124***	**12.90105026**	**12.90105026**	**11.37455348**	**13.65239378**	**10.70171727**	**11.28657**	**7.9426622**
-2.9	**-134.4801937**	***-117.7850059***	***-121.2118034***	**-95.6585567**	**-100.92328**	**-93.90653363**	**-109.4328617**	**-84.09481964**	**-88.6156**	**-48.70674276**
+2.9	**18.02482646**	***15.04708326***	***23.67805956***	**11.29943316**	**12.08304369**	**11.37455348**	**13.65239378**	**10.70171727**	**11.28657**	**5.538166245**
-2.95	**-145.9680525**	***-126.8068752***	***-131.5277183***	**-102.5398169**	**-108.309623**	**-100.8574443**	**-117.8040466**	**-92.06338571**	**-97.0378**	**-52.34647829**
+2.95	**17.77343099**	***14.79568779***	***19.72149798***	**11.29943316**	**12.08304369**	**11.37455348**	**13.65239378**	**10.70171727**	**11.28657**	**5.538166245**
-3	**-160.0929538**	***-137.8660857***	***-144.3835358***	**-110.8540161**	**-117.241863**	**-109.2678584**	**-127.949487**	**-101.8635892**	**-107.398**	**-56.75622984**
+3	**17.6791695**	***14.7014263***	***15.91211103***	**11.29943316**	**12.08304369**	**11.37455348**	**13.65239378**	**10.70171727**	**11.28657**	**5.538166245**

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.319202233	-9.213018333	-8.333086156	-7.225280124	-6.772877138	-9.225367829	-10.33731994	-11.48480319	-12.55562029
End Shear	81.41595764	90.58901992	80.03763913	67.10071398	66.318539	89.22074862	98.57697817	103.1248807	106.9617429
-0.05	-8.319202233	-9.213018333	-8.333086156	-8.340045656	-6.772877138	-9.225367829	-10.33731994	-11.48480319	-12.55562029
+0.05	74.71772738	81.7766133	71.84161018	59.9959938	60.90453045	81.9394392	90.31588965	93.99844902	96.97275625
-0.1	-8.319202233	-9.213018333	-8.333086156	-9.732485544	-6.772877138	-9.225367829	-10.33731994	-11.48480319	-12.55562029
+0.1	68.45896413	73.50732861	64.30499852	53.55433088	55.86782509	75.13721675	82.58277726	85.45275791	87.61983121
-0.15	-9.086834753	-9.213018333	-8.333086156	-11.90894481	-7.57723031	-9.225367829	-10.33731994	-11.48480319	-12.55562029
+0.15	63.31134099	66.80696893	58.21588874	48.37517405	51.72134981	69.53816332	76.22987932	78.4558734	79.98908112
-0.2	-13.61087425	-13.62011572	-11.68783447	-15.05726706	-10.39164304	-14.17057764	-14.17289177	-14.14873192	-14.12594163
+0.2	57.23721561	59.02677302	51.16781084	42.40850032	46.82362867	62.92577358	68.74259138	70.2388043	71.06141116
-0.25	-17.35182052	-17.3630684	-14.99939997	-17.80806188	-12.71325811	-18.64577627	-19.15037083	-19.12233002	-19.09588135
+0.25	52.27808028	52.79419621	45.5330124	37.66003743	42.8206539	57.52229547	62.63747754	63.56392628	63.83875037
-0.3	-21.79098611	-21.80454445	-18.85335969	-20.9076256	-17.35782555	-23.96367213	-25.50391762	-25.47686615	-25.45134803
+0.3	46.47169025	46.00707851	39.29790763	32.42073332	38.32084284	51.18945894	55.49907037	55.79105131	55.77963786
-0.35	-25.54311341	-25.45221201	-21.95967461	-23.33222823	-21.54864586	-28.81856398	-30.73876492	-30.71260007	-30.68792273
+0.35	41.77029394	40.58707725	34.66797611	28.51258039	34.32425889	46.05633754	49.72764498	49.55955429	49.54977211
-0.4	-31.60046445	-30.05516772	-25.91010976	-26.99183067	-26.51373192	-35.53252899	-37.0972704	-37.0972704	-37.0972704
+0.4	36.31472369	34.39416353	29.87313083	24.45525935	29.9038252	40.09280118	43.04117274	42.91440927	42.90434394
-0.45	-36.69704201	-33.8183322	-29.52399554	-30.4248285	-30.58462831	-41.03844065	-43.24102079	-43.15896479	-43.130722
+0.45	31.94030456	29.52288073	26.12112962	21.28845224	26.35396986	35.30481084	37.68931036	37.5944054	37.58418893
-0.5	-42.69701629	-38.26424481	-34.8483804	-34.83056596	-35.37258359	-47.51554804	-50.7335524	-50.58828099	-50.56140032
+0.5	26.91866204	24.75086892	21.82905328	17.69456888	22.27185011	29.80029218	31.55784703	31.49787647	31.48758975
-0.55	-47.58361305	-43.19309062	-39.19373785	-38.53161354	-39.26819085	-52.78668038	-56.8437635	-56.72662407	-56.69584007
+0.55	22.9404606	21.37968641	18.11476367	14.88148064	19.0316086	25.43221325	26.71143549	26.67766418	26.66741025
-0.6	-53.29006636	-50.84316254	-44.27931828	-42.98512031	-43.81257623	-58.93718953	-63.98919763	-64.91896108	-64.88980671
+0.6	18.43583358	17.80949341	14.32123312	11.73641408	15.35425138	20.47645441	21.34991649	21.34040356	21.33143034
-0.65	-57.89743301	-57.13537486	-48.59886077	-46.62807888	-47.47751742	-63.89877283	-69.76723614	-71.57016719	-72.17612044
+0.65	14.9326995	14.84455099	11.79903598	9.580122623	12.47898694	16.60306321	17.56565428	17.55627227	17.54741678
-0.7	-63.22726299	-64.49464849	-54.92617696	-52.03602457	-51.71188802	-69.63294925	-76.46252076	-79.31096117	-81.02842243
+0.7	11.73616488	11.65217585	9.259619397	7.424118003	9.272832467	12.68797215	13.31656016	13.30743901	13.29883552
-0.75	-67.48616577	-70.76371482	-61.01902789	-57.07165197	-55.09079703	-74.21019463	-81.82248212	-85.53772671	-88.1801521
+0.75	9.244123271	9.164164443	7.301174511	5.799854822	6.981664433	9.809294242	10.03578097	10.02698062	10.01867932
-0.8	-72.356283	-78.33071961	-68.50574796	-62.94511145	-58.9487076	-79.43830843	-87.96456131	-92.71140794	-96.45880274
+0.8	6.474834382	6.400404535	5.101182781	4.042379388	5.147509443	6.626038467	6.572283184	6.626437157	6.619490756
-0.85	-76.19746252	-84.71315364	-74.54790527	-67.6895989	-61.98621485	-83.55645108	-92.82056715	-98.4174243	-103.078783
+0.85	4.163275842	4.293988212	3.42436429	2.702263094	3.736048472	4.022847614	4.166276535	4.033696658	4.207296066
-0.9	-80.52477922	-92.06821009	-81.53318084	-73.36980715	-65.40121591	-88.18876677	-98.3063682	-104.908424	-110.6548779
+0.9	2.038821233	2.017438266	1.64507144	1.273501619	2.165054001	1.970419354	1.966094482	1.972007923	1.97758226
-0.95	-83.87899754	-97.91956802	-87.11027364	-77.88385882	-68.04195447	-91.77302202	-102.5725331	-109.9973855	-116.6356832
+0.95	0.813303031	0.802358242	0.74005358	0.564875507	1.013480279	0.786143541	0.783928877	0.786730714	0.789372994
-1	-87.58040781	-104.576395	-93.91354563	-83.40177752	-70.94760772	-95.71980709	-107.2989919	-115.6901321	-123.3803104
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.70E+01	1.03E+02	9.26E+01	8.24E+01	7.05E+01	9.51E+01	106.5393047	114.7706468	1.22E+02
-2.05	-8.14E-01	-8.03E-01	-7.41E-01	-5.65E-01	-1.01E+00	-7.87E-01	-0.784557428	-0.787340121	-7.90E-01
+2.05	8.39E+01	9.79E+01	8.71E+01	7.79E+01	6.80E+01	9.18E+01	102.5694104	109.9937667	1.17E+02
-2.1	-2.400227508	-2.378354652	-1.933087097	-1.497835997	-2.411047107	-2.319532908	-2.315108952	-2.321155203	-2.326854581
+2.1	7.98E+01	9.09E+01	8.04E+01	7.24E+01	6.48E+01	8.74E+01	97.41574276	103.8510187	1.09E+02
-2.15	-4.318433926	-4.295312236	-3.425332242	-2.702746112	-3.737128633	-4.172415565	-4.167735894	-4.174651868	-4.208669706
+2.15	76.19457212	84.70900068	74.5442787	67.68788713	61.98384483	83.55333596	92.81698229	98.41333692	103.0741682
-2.2	-6.920671702	-6.845018118	-5.455016301	-4.326972309	-5.444002353	-7.137219358	-7.08360023	-7.137625053	-7.130556595
+2.2	71.56070207	77.02430565	67.271314	61.98228784	58.31885461	78.58470726	86.96022576	91.53541278	95.0986442
-2.25	-9.245968215	-9.165745429	-7.302335815	-5.80042818	-6.98293206	-9.811441598	-10.03814185	-10.02927434	-10.02090587
+2.25	67.48294158	70.44209333	61.01517362	57.06986993	55.08813992	74.20671099	81.81851804	85.53324259	88.17513331

-2.3	**-12.25570658**	**-12.17069237**	**-9.671956776**	**-7.764510054**	**-9.789998301**	**-13.28953781**	**-14.00425363**	**-13.99500389**	**-13.98626862**
+2.3	**62.35160059**	**63.27982393**	**53.88181195**	**51.19122632**	**51.01651675**	**68.69125835**	**75.36171791**	**78.03571058**	**79.56743196**
-2.35	**-14.93481419**	**-14.84636326**	**-11.80035732**	**-9.560394066**	**-12.48121509**	**-16.60597021**	**-17.56841454**	**-17.5589485**	**-17.55000898**
+2.35	**57.89393206**	**57.13125084**	**48.59561246**	**46.66730996**	**47.47462242**	**63.89496577**	**69.76293062**	**71.56535359**	**72.170802**
-2.4	**-19.16806964**	**-18.39345986**	**-14.93569102**	**-12.24350548**	**-15.95279927**	**-21.28285657**	**-22.13489297**	**-22.12527861**	**-22.1162037**
+2.4	**52.34823562**	**49.56489771**	**43.43975544**	**42.25545174**	**43.0628077**	**57.92243082**	**62.80917291**	**63.56379003**	**63.53450887**
-2.45	**-22.94344382**	**-21.38169646**	**-18.11676064**	**-14.88247398**	**-19.03413912**	**-25.43552403**	**-26.714984**	**-26.68108681**	**-26.67073265**
+2.45	**47.57987569**	**43.18985673**	**39.19112057**	**38.53034128**	**39.26509381**	**52.78262191**	**56.83919356**	**56.72155596**	**56.69092039**
-2.5	**-27.74056811**	**-25.52926576**	**-22.5297497**	**-18.27841307**	**-22.94065599**	**-30.70191354**	**-32.5603279**	**-32.49465614**	**-32.48426989**
+2.5	**41.70292781**	**37.45523884**	**33.96613721**	**34.0683596**	**34.57952945**	**46.44273173**	**49.4915365**	**49.35697839**	**49.32999238**
-2.55	**-31.94360002**	**-29.525575**	**-26.12335821**	**-21.28956088**	**-26.35675516**	**-35.30844998**	**-37.69325821**	**-37.59821072**	**-37.58789074**
+2.55	**36.69313615**	**33.81588354**	**29.52126495**	**30.42363469**	**30.58138607**	**41.03418513**	**43.23625363**	**43.1543918**	**43.12627369**
-2.6	**-37.2123879**	**-35.40483212**	**-30.64377627**	**-25.10771499**	**-30.63176402**	**-41.0746337**	**-44.14042237**	**-44.0068466**	**-43.99669883**
+2.6	**30.56801509**	**29.28581171**	**25.22331272**	**26.28902661**	**25.68851465**	**34.41667279**	**36.07052456**	**36.07052456**	**36.07052456**
-2.65	**-41.77386375**	**-40.59058216**	**-34.67070953**	**-28.51393631**	**-34.32726541**	**-46.06026975**	**-49.73192782**	**-49.56368051**	**-49.55376883**
+2.65	**25.43403445**	**25.44981343**	**21.95781065**	**23.33139344**	**21.54528895**	**28.81416421**	**30.73482762**	**30.70879442**	**30.68421283**
-2.7	**-47.43120377**	**-47.12123093**	**-40.24971485**	**-33.22573221**	**-39.09777275**	**-52.23649892**	**-56.67784624**	**-57.07192008**	**-57.06043397**
+2.7	**21.05273672**	**21.06633024**	**18.21849313**	**20.40483064**	**16.51155759**	**23.078692**	**24.44586256**	**24.41877286**	**24.39320342**
-2.75	**-52.28186462**	**-52.79799674**	**-45.53636139**	**-37.66171603**	**-42.8238293**	**-57.52645412**	**-62.64204042**	**-63.56873245**	**-63.84378671**
+2.75	**17.3489408**	**17.36060972**	**14.99741367**	**17.80707102**	**12.76337159**	**18.64231021**	**19.14634427**	**19.11844004**	**19.09210144**
-2.8	**-58.24469323**	**-60.30658148**	**-52.3250905**	**-43.38493357**	**-47.63648801**	**-64.02299893**	**-69.9836527**	**-71.59836952**	**-72.53573285**
+2.8	**12.85620797**	**12.86546623**	**11.01301464**	**14.48693317**	**9.92260184**	**13.26843944**	**13.27075439**	**13.2465714**	**13.22375258**
-2.85	**-63.31527785**	**-66.81133015**	**-58.21952179**	**-48.37699272**	**-51.72466097**	**-69.54249297**	**-76.23464618**	**-78.46093236**	**-79.99443592**
+2.85	**9.083915434**	**9.213001651**	**8.333093225**	**11.90795368**	**7.575340667**	**9.225368268**	**10.33730907**	**11.48481153**	**12.55561418**
-2.9	**-69.50048551**	**-74.87354505**	**-65.54826146**	**-54.61323181**	**-56.70647709**	**-76.2696202**	**-83.86886795**	**-86.87168913**	**-89.17019418**
+2.9	**8.319191086**	**9.213001651**	**8.333093225**	**9.516255325**	**6.772868633**	**9.225368268**	**10.33730907**	**11.48481153**	**12.55561418**
-2.95	**-74.72178042**	**-81.78121536**	**-71.8454877**	**-59.99792275**	**-60.9079175**	**-81.9438769**	**-90.32079494**	**-94.00369585**	**-96.97835865**
+2.95	**8.319191086**	**9.213001651**	**8.333093225**	**8.339583359**	**6.772868633**	**9.225368268**	**10.33730907**	**11.48481153**	**12.55561418**
-3	**-81.04625917**	**-90.26603471**	**-79.79869661**	**-66.80223094**	**-65.99244762**	**-88.81185319**	**-98.14458222**	**-102.6800009**	**-106.508988**
+3	**8.319191086**	**9.213001651**	**8.333093225**	**7.225283668**	**6.772868633**	**9.225368268**	**10.33730907**	**11.48481153**	**12.55561418**

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-15.44480127	-16.12764692	-10.2304	-12.8895	-13.0985
End Shear	139.8530952	140.2419993	101.7589	124.0076	125.7661
-0.05	-15.44480127	-16.12764692	-10.2304	-12.8895	-13.0985
+0.05	124.2949725	125.5818799	91.36304	111.4061	112.5092
-0.1	-15.44480127	-16.12764692	-10.2304	-12.8895	-13.0985
+0.1	110.6262753	112.358325	81.63658	99.60322	100.1058
-0.15	-15.44480127	-16.12764692	-10.4236	-12.8895	-13.0985
+0.15	99.61640161	101.9657784	73.79629	90.07879	90.37264
-0.2	-15.8595966	-16.12764692	-15.612	-16.5933	-16.1806
+0.2	86.91521584	89.86937923	64.83257	79.17484	79.28751
-0.25	-21.6082895	-21.7624572	-19.9023	-21.9252	-21.9277
+0.25	77.06816017	80.13839963	57.96796	70.80762	70.43308
-0.3	-29.89194697	-29.14442606	-25.7416	-28.761	-28.764
+0.3	66.3560639	68.9278269	50.84398	61.18478	60.65784
-0.35	-36.04338424	-35.07110511	-30.892	-34.3892	-34.6472
+0.35	58.17039838	60.01168502	46.25979	53.54651	54.63553
-0.4	-43.35565251	-42.515552	-36.9783	-41.2715	-42.323
+0.4	49.3331284	50.31854642	40.62811	45.43278	47.44152
-0.45	-49.82627639	-49.81979907	-41.9552	-47.0795	-48.7283
+0.45	42.34173598	42.86008201	35.99239	39.47459	41.72743
-0.5	-57.40173792	-59.83828249	-48.5583	-53.823	-56.9419
+0.5	34.86656947	34.95276619	30.62653	33.71586	35.26111
-0.55	-64.24527956	-68.04237141	-54.2841	-59.5295	-63.95
+0.55	29.11395554	28.90477164	26.4485	29.11831	30.12417
-0.6	-74.88630456	-78.66134103	-61.4239	-66.7559	-72.5464
+0.6	23.46814271	22.65073193	21.67971	23.79573	24.28874
-0.65	-83.5528183	-89.33098163	-66.9697	-75.1501	-79.9778
+0.65	19.35225214	18.05137666	17.92634	19.69998	19.7211
-0.7	-95.13351995	-103.1400011	-73.1361	-86.2594	-88.3338
+0.7	14.72479843	13.74872002	13.70818	14.88627	15.02081
-0.75	-105.2383585	-114.566745	-77.8645	-95.2782	-94.7719
+0.75	11.14637445	10.42082902	10.60704	11.31417	11.36557
-0.8	-118.5804498	-128.4099416	-86.3258	-106.262	-106.671
+0.8	7.030488039	6.758083444	7.365203	7.856216	7.375044
-0.85	-129.9826434	-139.3459779	-93.8646	-115.305	-116.362
+0.85	4.401262049	4.358794802	4.948277	5.278162	4.404693
-0.9	-143.2084596	-151.665056	-103.132	-126.415	-127.923
+0.9	2.028818329	2.012438452	2.335682	2.491394	2.081472
-0.95	-154.4719052	-161.2405243	-110.547	-135.296	-137.776
+0.95	0.839302572	0.938850102	0.931006	0.993073	0.830089
-1	-168.1616936	-173.6778565	-119.035	-145.454	-149.095
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.66E+02	1.71E+02	1.18E+02	1.44E+02	1.47E+02
-2.05	-8.35E-01	-9.39E-01	-9.32E-01	-9.94E-01	-8.31E-01
+2.05	1.54E+02	1.61E+02	1.11E+02	135.2901	1.38E+02
-2.1	-2.395820672	-2.243683673	-2.74989	-2.93321	-2.44977
+2.1	1.41E+02	1.50E+02	1.02E+02	124.5907	1.26E+02
-2.15	-4.345885243	-4.359025904	-4.94976	-5.27975	-4.40597
+2.15	129.9757301	139.3448868	93.85948	115.2993	116.3556
-2.2	-7.838888567	-7.342833439	-7.87528	-8.4003	-8.00876
+2.2	116.2547883	126.1500927	84.88856	104.5371	104.7082
-2.25	-11.14849145	-10.42115598	-10.6088	-11.3161	-11.3352
+2.25	105.2322397	114.5655996	77.86157	95.27239	94.76557

-2.3	-15.47371344	-14.44333471	-14.3908	-15.6377	-15.7741
+2.3	93.0764276	100.7991641	72.14231	84.42256	86.98529
-2.35	-19.35470991	-18.05176777	-17.9287	-19.5305	-19.7239
+2.35	83.54754893	89.3298002	66.96624	75.14401	79.97323
-2.4	-24.32078798	-23.63175385	-22.4575	-24.6526	-25.2382
+2.4	73.124634	76.76152589	60.26679	65.58074	71.14601
-2.45	-29.01119285	-28.90537163	-26.4511	-29.106	-30.1273
+2.45	64.23979183	68.04152652	54.2801	59.52548	63.9454
-2.5	-36.00243005	-36.20507842	-31.4858	-34.661	-36.32
+2.5	56.04545372	58.14783327	47.43659	52.71339	55.55623
-2.55	-42.34592544	-42.86081988	-35.8697	-39.4778	-41.7309
+2.55	49.82237778	49.81895251	41.952	47.07575	48.72428
-2.6	-50.77757755	-51.85658429	-41.5565	-46.6674	-48.5948
+2.6	42.022346	41.23384968	35.96871	40.08673	41.02558
-2.65	-58.17504895	-60.01259002	-46.2629	-53.5513	-54.6393
+2.65	36.03963827	35.07050555	30.88864	34.38558	34.64351
-2.7	-68.10924453	-70.75972523	-51.825	-62.7602	-61.9651
+2.7	28.63822369	27.93367613	24.70092	27.62358	27.62664
-2.75	-77.07375953	-80.13937823	-57.9723	-70.8129	-70.4385
+2.75	22.29533575	21.76180832	19.97702	21.92145	21.92408
-2.8	-88.99738976	-91.85598148	-66.2401	-80.8891	-81.1071
+2.8	15.44481236	16.12764606	14.74707	15.67061	15.02353
-2.85	-99.62305006	-101.9668299	-73.8013	-90.0848	-90.3786
+2.85	15.44481236	16.12764606	10.4208	12.88953	13.09852
-2.9	-112.8781576	-114.4689435	-83.2397	-101.55	-102.147
+2.9	15.44481236	16.12764606	10.23044	12.88953	13.09852
-2.95	-124.3021043	-125.5831219	-91.3684	-111.413	-112.516
+2.95	15.44481236	16.12764606	10.23044	12.88953	13.09852
-3	-139.3992185	-140.2432827	-101.4	-123.573	-125.346
+3	15.44481236	16.12764606	10.23044	12.88953	13.09852

2-Span: Moment (Max and Min) Raw Data Results – 55' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.79E-13	-1.43E-13	-2.80E-13	-1.52E-13	-1.61E-13	-1.17E-13	-1.56E-13	-1.10E-13	-1.16E-13	-1.07E-13
End Shear	2.09E-13	9.44E-14	1.57E-13	7.14E-14	7.71E-14	5.74E-14	7.81E-14	6.33E-14	6.71E-14	7.46E-14
-0.05	-48.61749077	-40.42897036	-43.75813054	-31.0734861	-33.228389	-31.2800514	-37.5440674	-29.4296938	-31.0381035	-15.22994883
+0.05	404.8250224	353.5424553	365.6743409	282.1470621	298.1531981	277.6935173	324.6878027	253.1597039	266.8385661	143.9502837
-0.1	-97.23498154	-80.85794073	-87.51626108	-62.1469723	-66.4567781	-62.5601028	-75.0881349	-58.8593876	-62.0762071	-30.45989765
+0.1	752.0977963	662.4337702	679.3751295	526.091983	555.1691612	516.7492889	602.9125511	462.4929819	487.3558361	267.8821052
-0.15	-145.8524723	-121.2869111	-131.2743916	-93.2204584	-99.6851671	-93.8401542	-112.632202	-88.2890814	-93.1143106	-45.68984648
+0.15	1031.139774	919.2260428	928.9091094	725.0464748	763.9946951	711.1560312	827.7831364	622.1530218	655.4194173	366.5331839
-0.2	-194.4699631	-161.7158815	-175.0325222	-124.293945	-132.913556	-125.120206	-150.17627	-117.718775	-124.152414	-60.91979531
+0.2	1259.385555	1136.940303	1137.599489	890.7456055	937.3832379	870.8616564	1009.869499	742.3566198	781.7779057	449.4916824
-0.25	-243.0874538	-202.1448518	-218.7906527	-155.367431	-166.141945	-156.400257	-187.720337	-147.148469	-155.190518	-76.14974413
+0.25	1422.577177	1299.969324	1281.22585	1011.037214	1062.904312	988.0137598	1161.89299	848.1059598	894.5718807	505.8226892
-0.3	-291.7049446	-242.5738222	-262.5487832	-186.440917	-199.370334	-187.680308	-225.264405	-176.578163	-186.228621	-91.37969296
+0.3	1539.08482	1428.416026	1387.746774	1099.681508	1152.991895	1086.378517	1279.556818	922.8621804	974.8515046	550.0119899
-0.35	-340.3224354	-283.0027926	-306.3069138	-217.514403	-232.598723	-218.96036	-262.808472	-206.007857	-217.266725	-106.6096418
+0.35	1616.975726	1505.515519	1456.299879	1152.511288	1217.269797	1150.336562	1348.895817	963.852081	1017.232517	569.845903
-0.4	-388.9399262	-323.4317629	-350.0650443	-248.587889	-265.827112	-250.240411	-300.352539	-235.43755	-248.304828	-121.8395906
+0.4	1660.901826	1546.807805	1497.13175	1189.18334	1253.559298	1183.464556	1381.261662	981.8136728	1037.134681	577.7707827
-0.45	-437.5574169	-363.8607333	-393.8231749	-279.661375	-299.055501	-281.520463	-337.896607	-264.867244	-279.342932	-137.0695394
+0.45	1644.942288	1544.851061	1482.221675	1188.311284	1249.009586	1178.189299	1370.155975	959.598526	1014.555397	564.6636135
-0.5	-486.1749077	-404.2897036	-437.5813054	-310.734861	-332.28389	-312.800514	-375.440674	-294.296938	-310.381035	-152.2994883
+0.5	1627.994341	1520.281245	1467.007693	1167.588148	1229.187468	1158.743475	1349.727997	914.7433342	967.0327499	556.362944
-0.55	-534.7923985	-444.718674	-481.3394359	-341.808347	-365.512279	-344.080565	-412.984742	-323.726632	-341.419139	-167.5294371
+0.55	1567.926976	1457.369477	1412.848391	1115.774958	1176.272188	1110.808027	1298.647676	910.6300687	962.0357795	543.6442949
-0.6	-583.4098892	-485.1476444	-525.0975665	-372.881834	-398.740668	-375.360617	-450.528809	-353.156326	-372.457243	-182.7593859
+0.6	1469.738753	1363.676544	1325.308681	1038.565123	1096.988906	1037.941449	1216.097898	869.8415418	918.2177649	520.7024326
-0.65	-632.02738	-525.5766147	-568.855697	-403.95532	-431.969057	-406.640668	-488.072877	-382.586019	-403.495346	-197.9893347
+0.65	1314.800121	1231.108842	1183.845894	943.7076227	987.5615363	934.3222905	1095.315149	789.4739299	834.1791206	473.9032047
-0.7	-680.6448708	-566.0055851	-612.6138276	-435.028806	-465.197446	-437.92072	-525.616944	-412.015713	-434.53345	-213.2192836
+0.7	1139.821233	1076.202208	1028.787146	826.7381775	863.3600469	810.9117702	949.7013523	690.8741424	729.4396841	421.5460887
-0.75	-729.2623615	-606.4345555	-656.3719581	-466.102292	-498.425835	-469.200771	-563.161011	-441.445407	-465.571553	-228.4492324
+0.75	918.725427	886.3216018	827.7239478	683.9905621	712.0833047	664.1733191	774.3988661	553.8425562	583.9762931	347.550704
-0.8	-777.8798523	-646.8635258	-700.1300886	-497.175778	-531.654225	-500.480822	-600.705079	-470.875101	-496.609657	-243.6791812
+0.8	672.5579244	681.89404	605.30213	526.9229572	543.4097098	503.696446	581.3370996	392.9940185	415.4040089	271.2399957
-0.85	-839.1595964	-699.9547495	-814.138233	-528.249264	-564.882614	-531.760874	-638.249146	-500.304795	-527.64776	-258.9091301
+0.85	398.6842589	461.8621332	359.3643481	350.1580024	353.9122389	328.3007489	367.6792545	264.7004993	279.0190237	184.173628
-0.9	-929.9960283	-782.602661	-1019.173881	-559.32275	-598.111003	-563.040925	-675.793214	-529.734488	-558.685864	-274.1390789
+0.9	232.5557296	263.7065774	209.3001563	201.4279045	201.4279045	180.1385162	188.2561666	153.1555356	161.2163533	124.8705441
-0.95	-1044.736712	-889.1548241	-1266.295052	-590.396236	-631.339392	-594.320977	-713.337281	-559.164182	-589.723967	-289.3690277
+0.95	100.8993677	79.83967605	90.81191919	62.26359544	62.26359544	49.77115983	49.81233085	47.28796569	49.77680599	56.92776784
-1	-1200.825754	-1015.686132	-1554.422462	-621.46973	-664.567792	-625.601036	-750.881663	-718.739119	-761.77547	-304.5991408
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1200.825754	-1015.686132	-1554.422462	-621.46973	-664.567792	-625.601036	-750.881663	-718.739119	-761.77547	-304.5991408
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-1044.740984	-889.1539038	-1266.294926	-590.39539	-631.339044	-594.320427	-713.33758	-559.164727	-589.723058	-289.3691836
+2.05	100.8993974	79.84551695	90.81194598	62.22983996	62.22983996	49.77460567	49.81577723	47.29075167	49.7797386	57.15227663
-2.1	-930.0000743	-782.6017875	-1019.173847	-559.321949	-598.110674	-563.040405	-675.793497	-529.735004	-558.685003	-274.1392265
+2.1	232.5309107	263.7366939	209.3002429	201.4506826	201.4506826	180.1814529	188.3098891	153.1403597	161.2003787	124.0655611
-2.15	-839.1634175	-699.9539245	-814.1382978	-528.248508	-564.882304	-531.760383	-638.249414	-500.305282	-527.646947	-258.9092693
+2.15	399.2903921	461.8959215	359.1684219	350.1747694	353.9260982	328.3238382	367.6904547	264.7122284	279.0311158	184.6877931
-2.2	-777.8834502	-646.862751	-700.1328761	-497.175067	-531.653933	-500.480361	-600.705331	-470.875559	-496.608892	-243.6793121
+2.2	670.8507559	681.9316762	603.9861305	526.9419367	543.4255169	503.6855938	581.3863388	393.0072401	415.41765	271.2281714

-2.25	**-729.2657341**	***-606.4338287***	***-656.3745708***	**-466.101625**	**-498.425563**	**-469.200339**	**-563.161248**	**-441.445837**	**-465.570836**	**-228.4493549**
+2.25	**918.3406367**	***886.3588188***	***827.599645***	**684.0076712**	**712.0967211**	**664.1635069**	**774.4115957**	**553.8601087**	**583.9954723**	**347.5521454**
-2.3	**-680.648018**	***-566.0049064***	***-612.6162655***	**-435.028184**	**-465.197193**	**-437.920317**	**-525.617165**	**-412.016114**	**-434.53278**	**-213.2193978**
+2.3	**1141.216049**	***1076.238742***	***1028.7873***	**826.7530664**	**863.3707083**	**810.8992323**	**949.747666**	**690.8862971**	**729.4532266**	**421.5331232**
-2.35	**-632.0303018**	***-525.575984***	***-568.8579602***	**-403.954743**	**-431.968823**	**-406.640295**	**-488.073083**	**-382.586392**	**-403.494725**	**-197.9894406**
+2.35	**1314.607391**	***1231.140873***	***1183.607156***	**943.7169812**	**987.5659263**	**934.3426185**	**1095.319855**	**789.4776053**	**834.1837504**	**473.9029909**
-2.4	**-583.4125857**	***-485.1470617***	***-525.0996549***	**-372.881302**	**-398.740453**	**-375.360273**	**-450.529**	**-353.156669**	**-372.456669**	**-182.7594834**
+2.4	**1471.280386**	***1363.703733***	***1323.124775***	**1038.560759**	**1096.978422**	**1037.919491**	**1216.132038**	**869.8300036**	**918.2063082**	**520.6872046**
-2.45	**-534.7948696**	***-444.7181394***	***-481.3413495***	**-341.807861**	**-365.512083**	**-344.080251**	**-412.984917**	**-323.726947**	**-341.418614**	**-167.5295262**
+2.45	**1568.604821**	***1457.388873***	***1412.391928***	**1115.764174**	**1176.254488**	**1110.815725**	**1298.635875**	**910.6386416**	**962.0454905**	**543.6412645**
-2.5	**-486.1771535**	***-404.2892171***	***-437.5830442***	**-310.73442**	**-332.283713**	**-312.800229**	**-375.440834**	**-294.297224**	**-310.380558**	**-152.2995691**
+2.5	**1628.923993**	***1520.292406***	***1466.034836***	**1167.568646**	**1229.160153**	**1158.779617**	**1349.742232**	**914.7709798**	**967.0625212**	**556.3445728**
-2.55	**-437.5594373**	***-363.8602948***	***-393.8247389***	**-279.660978**	**-299.055342**	**-281.520206**	**-337.896751**	**-264.867502**	**-279.342503**	**-137.0696119**
+2.55	**1645.417558**	***1544.847783***	***1482.221819***	**1188.335945**	**1248.99512**	**1178.195298**	**1370.147987**	**959.5921001**	**1014.547878**	**564.6684659**
-2.6	**-388.9417212**	***-323.4313725***	***-350.0664336***	**-248.587537**	**-265.826972**	**-250.240184**	**-300.352668**	**-235.43778**	**-248.304447**	**-121.8396547**
+2.6	**1659.720211**	***1546.793786***	***1496.388852***	**1189.198101**	**1253.581571**	**1183.497803**	**1381.241751**	**981.8290918**	**1037.150063**	**577.7602188**
-2.65	**-340.3240051**	***-283.0024502***	***-306.3081283***	**-217.514096**	**-232.598602**	**-218.960162**	**-262.808585**	**-206.008057**	**-217.266392**	**-106.6096975**
+2.65	**1617.399098**	***1505.490208***	***1456.049176***	**1152.514444**	**1217.279782**	**1150.321736**	**1348.900054**	**963.8577934**	**1017.237582**	**569.8477235**
-2.7	**-291.706289**	***-242.5735278***	***-262.5498229***	**-186.440655**	**-199.370232**	**-187.68014**	**-225.264502**	**-176.578335**	**-186.228336**	**-91.37974037**
+2.7	**1539.141994**	***1428.377925***	***1387.03196***	**1099.670176**	**1152.986369**	**1086.388896**	**1279.584033**	**922.8538281**	**974.8416587**	**550.0257716**
-2.75	**-243.0885729**	***-202.1446055***	***-218.7915176***	**-155.367214**	**-166.141862**	**-156.400118**	**-187.720419**	**-147.148612**	**-155.19028**	**-76.1497832**
+2.75	**1423.042008**	***1299.98112***	***1280.739418***	**1011.013546**	**1062.885705**	**988.0097177**	**1161.904999**	**848.1166811**	**894.5820103**	**506.6465847**
-2.8	**-194.4708567**	***-161.7156832***	***-175.0332123***	**-124.293772**	**-132.913492**	**-125.120096**	**-150.176336**	**-117.71889**	**-124.152225**	**-60.91982602**
+2.8	**1261.358357**	***1136.874864***	***1137.494297***	**890.708481**	**937.3502803**	**870.8445529**	**1009.863883**	**742.3500926**	**781.771231**	**449.5013403**
-2.85	**-145.8531406**	***-121.2867609***	***-131.274907***	**-93.2203312**	**-99.6851216**	**-93.8400741**	**-112.632254**	**-88.2891671**	**-93.1141692**	**-45.68986885**
+2.85	**1030.696118**	***919.2089852***	***928.5788433***	**725.0432293**	**763.9946549**	**711.1625351**	**827.7645553**	**622.1644978**	**655.4316608**	**366.5267921**
-2.9	**-97.23542449**	***-80.85783857***	***-87.51660165***	**-62.14689**	**-66.4567515**	**-62.5600521**	**-75.0881707**	**-58.8594446**	**-62.0761137**	**-30.45991167**
+2.9	**753.1397814**	***662.3381145***	***678.8137552***	**526.1219799**	**555.1055928**	**516.7040797**	**602.8733829**	**462.5213659**	**487.3858334**	**267.8870104**
-2.95	**-48.61770837**	***-40.42891625***	***-43.75829633***	**-31.0734488**	**-33.2283814**	**-31.28003**	**-37.5440878**	**-29.4297222**	**-31.0380581**	**-15.2299545**
+2.95	**405.3528458**	***353.4947956***	***365.4225258***	**282.114288**	**298.1215487**	**277.6710924**	**324.6684636**	**253.1743904**	**266.8540908**	**143.9528161**
-3	**-2.05E-13**	***-9.37E-14***	***-2.22E-13***	**-8.59E-14**	**-8.96E-14**	**-1.19E-13**	**-1.64E-13**	**-8.02E-14**	**-8.44E-14**	**-7.16E-14**
+3	**3.35E-13**	***2.54E-13***	***2.81E-13***	**2.08E-13**	**2.15E-13**	**1.82E-13**	**2.24E-13**	**1.81E-13**	**1.91E-13**	**1.33E-13**

2-Span: Moment (Max and Min) Raw Data Results - 55' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.14E-13	-8.81E-14	-1.03E-13	-8.34E-14	-1.36E-13	-1.04E-13	-9.08E-14	-9.81E-14	-1.00E-13
End Shear	5.06E-14	5.52E-14	8.24E-14	6.45E-14	6.27E-14	4.88E-14	5.12E-14	5.36E-14	5.38E-14
-0.05	-22.87780614	-25.33580041	-22.91598693	-19.86952034	-18.62541213	-25.36976153	-28.4276298	-31.5832088	-34.5279558
+0.05	205.480939	224.8856866	197.564428	166.5582124	167.4874587	225.5669826	248.6124372	259.7120539	268.1878077
-0.1	-45.75561228	-50.67160083	-45.83197386	-39.73904068	-37.25082426	-50.73952306	-56.8552597	-63.1664175	-69.0559116
+0.1	382.2306251	411.7797533	360.4946554	304.808578	311.8671558	419.5791729	461.3925896	481.3556532	499.8582031
-0.15	-68.63341843	-76.00740124	-68.74796079	-59.60856103	-55.87623639	-76.10928459	-85.2828895	-94.7496263	-103.583867
+0.15	524.743658	555.0973769	484.2833304	411.1522569	428.1919683	577.113935	633.3539541	684.5666657	707.6750462
-0.2	-91.51122457	-101.3432017	-91.66394772	-79.47808137	-74.50164852	-101.4790461	-113.710519	-126.332835	-138.111823
+0.2	642.2670933	664.5760976	576.6073401	492.0572262	524.1865787	706.5476083	772.5212739	849.3033441	885.6401382
-0.25	-114.3890307	-126.6790021	-114.5799346	-99.34760171	-93.12706065	-126.8488077	-142.138149	-157.916044	-172.639779
+0.25	726.4041142	740.0736963	651.7487063	557.5744787	592.0472439	800.8674209	877.6863959	970.8257186	1031.929809
-0.3	-137.2668369	-152.0148025	-137.4959216	-119.2171221	-111.7524728	-152.2185692	-170.565779	-189.499253	-207.167735
+0.3	785.8366651	799.005451	699.92173	600.6880695	643.0933813	875.5543339	966.4737203	1057.125581	1138.465419
-0.35	-160.144643	-177.3506029	-160.4119085	-139.0866424	-130.3778849	-177.5883307	-198.993409	-221.082461	-241.695691
+0.35	826.7286059	825.1218452	714.5133654	616.8292592	667.1025428	926.8904277	1018.133671	1114.998727	1200.112717
-0.4	-183.0224491	-202.6864033	-183.3278954	-158.9561627	-149.003297	-202.9580922	-227.421039	-252.66567	-276.223646
+0.4	848.5114915	829.9708978	716.1399846	620.6380903	675.7423339	953.0804854	1041.837865	1148.815064	1227.949358
-0.45	-205.9002553	-228.0222037	-206.2438824	-178.8256831	-167.6287092	-228.3278538	-255.848668	-284.248879	-310.751602
+0.45	841.8029639	802.1202883	706.0965175	614.127546	661.1465771	947.4559185	1031.705788	1143.955299	1233.249379
-0.5	-228.7780614	-253.3580041	-229.1598693	-198.6952034	-186.2541213	-253.6976153	-284.276298	-315.832088	-345.279558
+0.5	828.3490331	767.3573465	698.7357455	606.9368877	656.6232618	932.5109185	1014.898104	1122.211709	1206.09424
-0.55	-251.6558676	-278.6938046	-252.0758562	-218.5647238	-204.8795334	-279.0673768	-312.703928	-347.415296	-379.807514
+0.55	796.6477775	768.7064001	663.9660269	576.9484028	638.2716564	894.6187792	978.4139768	1076.331636	1151.596956
-0.6	-274.5336737	-304.029605	-274.9918431	-238.4342441	-223.5049456	-304.4371384	-341.131558	-378.998505	-414.33547
+0.6	745.5076803	741.8522969	634.7438241	550.0074478	605.6168995	836.342946	918.0279894	1003.092832	1080.28205
-0.65	-297.4114798	-329.3654054	-297.9078301	-258.3037644	-242.1303577	-329.8068999	-369.559188	-410.581714	-448.863425
+0.65	673.4338915	680.2062027	585.36582	504.0659874	549.3873461	752.8534677	827.9231318	902.2836265	972.6463576
-0.7	-320.289286	-354.7012058	-320.823817	-278.1732848	-260.7557698	-355.1766614	-397.986818	-442.164923	-483.391381
+0.7	589.6592501	596.1463265	519.8138372	445.1439412	483.0384891	652.717375	717.7838349	784.7184592	840.3163064
-0.75	-343.1670921	-380.0370062	-343.7398039	-298.0428051	-279.3811819	-380.546423	-426.414447	-473.748131	-517.919337
+0.75	485.5913523	486.8945636	421.6444858	358.5963351	395.7850428	533.8554082	584.3808906	639.4892837	676.5644703
-0.8	-366.0448983	-405.3728066	-366.6557909	-317.9123255	-298.0065941	-405.9161845	-454.842077	-505.33134	-552.447293
+0.8	368.6292279	359.1884636	303.3068442	254.9514821	303.2599206	402.8240134	436.6800494	476.9277323	496.5826561
-0.85	-388.9227044	-430.7086071	-389.5717778	-361.6727839	-316.6320062	-431.285946	-483.269707	-536.914549	-586.975249
+0.85	239.0536022	238.9530351	189.9751395	156.2281907	193.1769308	260.5847544	274.5882532	300.5710502	301.6406899
-0.9	-411.8005106	-456.0444075	-412.4877647	-451.0443083	-335.2574183	-456.6557076	-511.697337	-568.497758	-621.503204
+0.9	141.8692873	141.183061	112.2222821	89.82755113	120.4546985	147.8412661	147.8068776	150.4092323	150.330839
-0.95	-434.6783167	-481.3802079	-487.6968985	-567.8841341	-353.8828305	-482.0254691	-540.124967	-600.080966	-656.03116
+0.95	43.79600559	43.74721685	39.81822459	31.02763376	54.73069844	42.30548586	42.29561184	42.30829306	42.35227264
-1	-457.556114	-620.4665363	-652.2710702	-699.0510582	-372.5082378	-507.3952604	-568.552602	-631.664639	-690.559117
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-457.556114	-620.4665363	-652.2710702	-699.0510582	-372.5082378	-507.3952604	-568.552602	-631.664639	-690.559117
+2	0	0	0	0	0	0	0	0	0
-2.05	-434.6777254	-481.3793323	-487.6976454	-567.8844742	-353.8823813	-482.0254977	-540.1244	-600.081407	-656.030842
+2.05	43.79901411	43.74979086	39.82037613	31.02870365	54.73460749	42.30841482	42.29846029	42.31105558	42.34080457
-2.1	-411.7999499	-456.0435778	-412.4881115	-451.0444546	-335.2569925	-456.6557349	-511.6968	-568.498176	-621.502903
+2.1	141.852876	141.196365	112.2320353	89.83241634	120.419673	147.8707515	147.775582	150.4296881	150.3506974
-2.15	-388.9221744	-430.7078233	-389.5721051	-361.6730994	-316.6316038	-431.2859722	-483.2692	-536.914944	-586.974964
+2.15	239.0709887	238.9410379	189.9663452	156.2238013	193.1747825	260.5867813	274.6073992	300.5886089	301.6424068
-2.2	-366.0443989	-405.3720687	-366.6560988	-317.9124789	-298.0062151	-405.9162095	-454.841601	-505.331712	-552.447025
+2.2	368.6417931	359.1996047	303.3124311	254.9343593	303.29974	402.8181304	436.6690129	476.9439562	496.611019
-2.25	-343.1666235	-380.0363142	-343.7400924	-298.0429488	-279.3808263	-380.5464467	-426.414001	-473.748481	-517.919086

+2.25	485.6018893	486.8994768	421.63894	358.5935691	395.7819512	533.8502809	584.3993031	639.5029269	676.56365
-2.3	-320.288848	-354.7005596	-320.824086	-278.1734187	-260.7554376	-355.176684	-397.986401	-442.165249	-483.391147
+2.3	589.6675058	596.138219	519.8022899	445.1381883	483.0750848	652.709934	717.7697275	784.7294418	840.3405318
-2.35	-297.4110725	-329.3648051	-297.9080796	-258.3038886	-242.1300488	-329.8069212	-369.558801	-410.582017	-448.863208
+2.35	673.4374598	680.196332	585.3677325	504.066944	549.3785146	752.8433154	827.9351704	902.2887443	972.637262
-2.4	-274.533297	-304.0290506	-274.9920733	-238.4343585	-223.5046601	-304.4371585	-341.131201	-378.998785	-414.335269
+2.4	745.500931	741.8350479	634.7269851	550.0191759	605.6457324	836.3276356	918.0041308	1003.084393	1080.294398
-2.45	-251.6555215	-278.693296	-252.0760669	-218.5648284	-204.8792714	-279.0673958	-312.703601	-347.415554	-379.80733
+2.45	796.6357058	768.7088141	663.9685904	576.9496759	638.2528993	894.6288679	978.4133829	1076.345394	1151.600369
-2.5	-228.777746	-253.3575415	-229.1600605	-198.6952983	-186.2538826	-253.697633	-284.276001	-315.832322	-345.279391
+2.5	828.3300091	767.378636	698.7551725	606.9234729	656.6406034	932.4824777	1014.919736	1122.187539	1206.082682
-2.55	-205.8999705	-228.0217869	-206.2440542	-178.8257683	-167.6284939	-228.3278703	-255.848401	-284.24909	-310.751452
+2.55	841.7924032	802.1213836	706.0943918	614.1264986	661.1319561	947.4568107	1031.717987	1143.953273	1233.263238
-2.6	-183.0221951	-202.6860324	-183.3280478	-158.9562382	-149.0031051	-202.9581076	-227.420801	-252.665859	-276.223513
+2.6	848.5261644	829.9939291	716.1609935	620.6284629	675.7221307	953.1049475	1041.872291	1148.833088	1227.952885
-2.65	-160.1444196	-177.3502779	-160.4120414	-139.0867081	-130.3777164	-177.5883448	-198.993201	-221.082627	-241.695574
+2.65	826.7351562	825.1377048	714.515206	616.8301662	667.1184049	926.9058296	1018.127917	1115.005844	1200.101101
-2.7	-137.2666441	-152.0145233	-137.4960351	-119.217178	-111.7523277	-152.2185821	-170.565601	-189.499395	-207.167635
+2.7	785.8326305	799.0176789	699.9373699	600.6755739	643.0600013	875.5602073	966.4882493	1057.118798	1138.441514
-2.75	-114.3888686	-126.6787688	-114.5800287	-99.34764792	-93.12693892	-126.8488194	-142.138001	-157.916163	-172.639696
+2.75	726.3913099	740.0766706	651.7568384	557.5684749	592.0487351	800.8615278	877.6894866	970.8368886	1031.921727
-2.8	-91.51109311	-101.3430142	-91.66402232	-79.47811783	-74.50155018	-101.4790566	-113.710401	-126.332932	-138.111757
+2.8	642.2447025	664.5670033	576.6052813	492.0561963	524.1377741	706.5311015	772.5112521	849.3316759	885.6470329
-2.85	-68.63331762	-76.0072597	-68.74801595	-59.60858774	-55.87616144	-76.10929388	-85.2828014	-94.7497	-103.583818
+2.85	524.743721	555.1056123	484.2931678	411.1470709	428.1768843	577.117967	633.3625441	684.5517825	707.6799086
-2.9	-45.75554214	-50.67150516	-45.83200958	-39.73905766	-37.2507727	-50.73953114	-56.8552015	-63.1664683	-69.0558791
+2.9	382.252653	411.8043771	360.5154033	304.7985674	311.8855494	419.5397422	461.3575528	481.3565705	499.8618754
-2.95	-22.87776665	-25.33575062	-22.91600321	-19.86952757	-18.62538396	-25.36976841	-28.4276016	-31.5832366	-34.5279402
+2.95	205.4848891	224.8984071	197.575037	166.5532951	167.4967477	225.5474144	248.5951532	259.7124877	268.1895716
-3	-6.00E-14	-7.21E-14	-7.19E-14	-6.72E-14	-8.09E-14	-9.39E-14	-9.13E-14	-9.36E-14	-9.12E-14
+3	1.68E-13	1.53E-13	1.28E-13	1.13E-13	1.32E-13	1.46E-13	1.69E-13	1.52E-13	1.75E-13

2-Span: Moment (Max and Min) Raw Data Results - 55' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.40E-13	-1.37E-13	-1.17E-13	-1.27E-13	-1.23E-13
End Shear	9.47E-14	1.22E-13	6.76E-14	7.37E-14	6.18E-14
-0.05	-42.47320349	-44.35102902	-28.1336727	-35.4462177	-36.020918
+0.05	342.2329333	348.208447	251.2483584	306.4973145	309.5260636
-0.1	-84.94640698	-88.70205803	-56.2673454	-70.8924354	-72.041836
+0.1	620.8976409	634.6151077	457.7901938	558.4881517	561.7752875
-0.15	-127.4196105	-133.053087	-84.4010181	-106.338653	-108.062754
+0.15	842.1989298	856.0244031	613.4441852	752.0196502	754.4016243
-0.2	-169.892814	-177.4041161	-112.534691	-141.784871	-144.083672
+0.2	1035.069291	1051.398368	741.9679863	917.9407437	921.282352
-0.25	-212.3660175	-221.7551451	-140.668363	-177.231089	-180.10459
+0.25	1162.432948	1206.293072	849.5735348	1036.003672	1039.314564
-0.3	-254.8392209	-266.1061741	-168.802036	-212.677306	-216.125508
+0.3	1239.53985	1328.623709	919.5943256	1114.562005	1140.243224
-0.35	-297.3124244	-310.4572031	-196.935709	-248.123524	-252.146426
+0.35	1297.220263	1405.518928	949.90197	1147.728771	1186.202584
-0.4	-339.7856279	-354.8082321	-225.069381	-283.569742	-288.167344
+0.4	1329.50547	1450.059861	962.7195226	1147.102066	1195.523309
-0.45	-382.2588314	-399.1592611	-253.203054	-319.015959	-324.188262
+0.45	1319.212535	1456.417552	937.197953	1120.27847	1171.395955
-0.5	-424.7320349	-443.5102902	-281.336727	-354.462177	-360.20918
+0.5	1290.215207	1429.692113	910.1612699	1063.230842	1132.795321
-0.55	-467.2052384	-487.8613192	-309.4704	-389.908395	-396.230098
+0.55	1237.663341	1356.478901	871.2447044	1059.067899	1095.300765
-0.6	-509.6784419	-532.2123482	-337.604072	-425.354612	-432.251016
+0.6	1167.092225	1264.222752	845.9755048	1020.34428	1051.69159
-0.65	-552.1516454	-576.5633772	-365.737745	-460.80083	-468.271934
+0.65	1044.163466	1130.066299	780.2094368	947.3340497	971.18365
-0.7	-594.6248489	-620.9144062	-393.871418	-496.247048	-504.292852
+0.7	916.4348159	963.3126643	694.1210872	834.5897519	851.7641024
-0.75	-637.0980524	-665.2654352	-422.00509	-531.693266	-540.31377
+0.75	743.6249586	752.9221768	565.6935172	679.6135022	681.7415498
-0.8	-679.5712559	-709.6164643	-450.138763	-567.139483	-576.334688
+0.8	524.0704752	519.687076	418.306142	489.8935386	490.2675419
-0.85	-722.0444593	-753.9674933	-478.272436	-602.585701	-612.355606
+0.85	310.142424	287.7826862	283.3570233	313.9833516	322.0019582
-0.9	-764.5176628	-798.3185223	-506.406108	-638.031919	-648.376524
+0.9	164.4036613	153.1257407	162.4043861	173.2313451	168.7386543
-0.95	-894.1827173	-998.7964226	-614.766888	-687.001024	-776.657506
+0.95	44.67317309	50.92927063	50.19251037	53.53867773	44.62700893
-1	-1163.814624	-1258.470525	-807.076556	-936.382719	-1030.59987
+1	0	0	0	0	0
(Span 2) -2	-1163.814624	-1258.470525	-807.076556	-936.382719	-1030.59987
+2	0	0	0	0	0
-2.05	-894.1808082	-998.7968286	-614.765851	-687.000847	-776.656381
+2.05	44.66153629	50.92974823	50.19541359	53.5417745	44.62950495
-2.1	-764.5182183	-798.3184753	-506.406624	-638.031926	-648.376817
+2.1	164.3905402	153.1237655	162.357789	173.1816416	168.7252132
-2.15	-722.0449843	-753.9674486	-478.272923	-602.585708	-612.355883
+2.15	310.1338242	287.781334	283.3540882	313.9743227	321.989094
-2.2	-679.5717504	-709.616422	-450.139221	-567.13949	-576.33495
+2.2	524.0497214	519.6838948	418.3198003	489.8787473	490.3082372
-2.25	-637.0985164	-665.2653953	-422.00552	-531.693272	-540.314016

+2.25	743.621049	752.92309	565.7134179	679.6183752	681.7465313
-2.3	-594.6252824	-620.9143686	-393.871818	-496.247054	-504.293082
+2.3	916.3942535	963.316962	694.134591	834.6172114	851.7972006
-2.35	-552.1520484	-576.563342	-365.738117	-460.800837	-468.272148
+2.35	1044.14131	1130.068883	780.2135179	947.3250614	971.1798626
-2.4	-509.6788144	-532.2123153	-337.604416	-425.354619	-432.251214
+2.4	1167.058409	1264.225718	845.9638428	1020.351755	1051.715927
-2.45	-467.2055804	-487.8612886	-309.470714	-389.908401	-396.23028
+2.45	1238.470907	1356.480458	871.2470918	1059.058071	1095.314049
-2.5	-424.7323464	-443.5102619	-281.337013	-354.462183	-360.209346
+2.5	1290.186907	1429.689641	910.1523689	1063.20833	1132.831065
-2.55	-382.2591124	-399.1592353	-253.203311	-319.015965	-324.188412
+2.55	1319.210669	1456.416544	937.2026131	1120.291667	1171.410104
-2.6	-339.7858784	-354.8082086	-225.06961	-283.569747	-288.167478
+2.6	1329.490428	1450.061387	962.7315547	1147.107195	1195.555702
-2.65	-297.3126444	-310.4571819	-196.935908	-248.123529	-252.146544
+2.65	1297.218228	1405.516878	949.904856	1147.745532	1186.208573
-2.7	-254.8394104	-266.1061553	-168.802207	-212.677311	-216.12561
+2.7	1239.543983	1328.618962	919.5832384	1114.595691	1140.26397
-2.75	-212.3661764	-221.7551286	-140.668505	-177.231093	-180.104676
+2.75	1162.417275	1206.292417	849.5831617	1036.00218	1039.213752
-2.8	-169.8929424	-177.4041019	-112.534804	-141.784876	-144.083742
+2.8	1035.038224	1051.400139	741.9970548	917.9529533	921.2945738
-2.85	-127.4197084	-133.0530752	-84.4011026	-106.338658	-108.062808
+2.85	842.1774315	856.023191	613.4541857	752.0144258	754.396836
-2.9	-84.94647445	-88.70204858	-56.2674012	-70.8924398	-72.0418744
+2.9	620.8828263	634.6107681	457.8185308	558.5225837	561.8105234
-2.95	-42.47324046	-44.35102191	-28.1336998	-35.4462219	-36.0209405
+2.95	342.2273793	348.2067573	251.2629911	306.4873079	309.5172707
-3	-1.36E-13	-1.29E-13	-9.19E-14	-1.02E-13	-1.17E-13
+3	2.13E-13	2.25E-13	1.76E-13	2.02E-13	1.92E-13

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-5.97788	-4.31382	-4.777297554	-4.32102	-3.91342	-3.511992293	-4.7837	-5.36029	-5.9553037	-6.51056
End Shear	57.21335	42.21725	46.97382417	41.50254	36.00448	34.38866425	46.26432	51.11588	53.4741409	55.4637
-0.05	-5.97788	-4.31382	-4.777297554	-4.32102	-4.49565	-3.511992293	-4.7837	-5.36029	-5.9553037	-6.51056
+0.05	52.29964	38.74396	42.4042589	37.25259	32.17572	31.58129658	42.48869	46.8322	48.74174178	50.28403
-0.1	-5.97788	-4.31382	-4.777297554	-4.32102	-5.23188	-3.511992293	-4.7837	-5.36029	-5.9553037	-6.51056
+0.1	47.69828	35.49856	38.11632285	33.34457	28.7008	28.96957484	38.96148	42.82229	44.31047856	45.43419
-0.15	-5.97788	-4.71187	-4.777297554	-4.32102	-6.37993	-3.929079756	-4.7837	-5.36029	-5.9553037	-6.51056
+0.15	43.92547	32.82932	34.64193359	30.18713	25.91063	26.81947099	36.05816	39.52807	40.68233	41.47736
-0.2	-7.86889	-7.05775	-7.062543802	-6.06058	-8.04494	-5.388458928	-7.34798	-7.34918	-7.336651243	-7.32483
+0.2	39.4881	29.67966	30.60760851	26.53244	22.70029	24.27981782	32.62939	35.64563	36.42146969	36.84802
-0.25	-9.78412	-8.99757	-9.003405963	-7.77775	-9.50593	-6.592303921	-9.66854	-9.93019	-9.915649479	-9.90193
+0.25	35.87786	27.10816	27.37578232	23.61058	20.14858	22.2041244	29.82748	32.4799	32.96029364	33.1028
-0.3	-13.4278	-11.2994	-11.30647884	-9.77618	-11.1636	-9.00068735	-12.4261	-13.2247	-13.21071618	-13.1975
+0.3	31.7378	24.09732	23.85640576	20.37745	17.33337	19.87080261	26.54367	28.77836	28.92976474	28.92385
-0.35	-16.9163	-13.2451	-13.19793208	-11.3869	-12.4702	-11.17378577	-14.9435	-15.9392	-15.92564173	-15.9128
+0.35	28.33521	21.65947	21.04593065	17.97665	15.23215	17.79842307	23.88195	25.78566	25.69849847	25.69343
-0.4	-21.0529	-16.386	-15.58473825	-13.4354	-14.4357	-13.7483702	-18.425	-19.2363	-19.23633415	-19.2363
+0.4	24.4043	18.83055	17.83467126	15.49035	13.04724	15.50626145	20.78963	22.31847	22.25274009	22.24752
-0.45	-24.4475	-19.0288	-17.536081	-15.3093	-16.2794	-15.85928354	-21.28	-22.4221	-22.37955136	-22.3649
+0.45	21.26801	16.56225	15.30872737	13.54479	11.34462	13.66552754	18.30688	19.54333	19.4941174	19.48882
-0.5	-28.4437	-22.14	-19.8414544	-18.0702	-18.6484	-18.34201898	-24.6386	-26.3073	-26.23193207	-26.218
+0.5	17.76321	13.95834	12.83425923	11.31919	9.416624	11.54879446	15.45258	16.36393	16.33283716	16.3275
-0.55	-32.0402	-24.6739	-22.39724689	-20.3234	-20.6445	-20.3620383	-27.3719	-29.4756	-29.41489451	-29.3989
+0.55	15.10254	11.89549	11.08617392	9.393188	7.910844	9.868606999	13.18756	13.85089	13.83337525	13.82806
-0.6	-36.3778	-27.6329	-26.36409776	-22.9605	-23.0538	-22.71847355	-30.5612	-33.1808	-33.6629303	-33.6478
+0.6	12.0888	9.559675	9.234894173	7.4261	6.231135	7.961758558	10.61781	11.07074	11.06580429	11.06115
-0.65	-39.8926	-30.022	-29.62684722	-25.2003	-25.0322	-24.61888381	-33.1339	-36.1769	-37.11183157	-37.426
+0.65	9.737797	7.743168	7.697459678	6.118245	5.078389	6.470825483	8.609315	9.108454	9.103589459	9.098998
-0.7	-43.9745	-32.7857	-33.44290822	-28.4813	-27.9507	-26.8145647	-36.1073	-39.6487	-41.12572526	-42.0163
+0.7	7.109031	6.085644	6.04209274	4.801462	3.925828	4.808313439	6.579192	6.905139	6.90040913	6.895948
-0.75	-47.2503	-34.9941	-36.6936556	-31.6407	-30.6626	-28.56665648	-38.4808	-42.428	-44.35453809	-45.7247
+0.75	5.278754	4.793427	4.751964969	3.785934	3.060256	3.620256382	5.086489	5.203931	5.199367708	5.195063
-0.8	-51.1887	-37.5195	-40.61743303	-35.5228	-33.8353	-30.56712865	-41.1918	-45.6129	-48.07436243	-50.0175
+0.8	3.889055	3.357446	3.318851198	2.645156	2.127117	2.669177829	3.435851	3.407977	3.436057639	3.432456
-0.85	-53.9993	-39.5113	-43.92696585	-38.6559	-36.4062	-32.14219074	-43.3272	-48.131	-51.03314716	-53.4502
+0.85	2.819902	2.158816	2.226594873	1.775662	1.418823	1.93728207	2.085998	2.160372	2.091623883	2.181642
-0.9	-57.3833	-41.7551	-47.74084008	-42.278	-39.4896	-33.91299762	-45.7292	-50.9756	-54.39897535	-57.3787
+0.9	1.650821	1.057206	1.046117846	0.853032	0.667152	1.122662173	1.021737	1.019494	1.022560499	1.025451
-0.95	-60.0257	-43.4944	-50.7749899	-45.17	-41.9494	-35.28232018	-47.5878	-53.1877	-57.0377939	-60.48
+0.95	0.776878	0.421728	0.416053016	0.383746	0.294686	0.525527757	0.407645	0.406497	0.407949554	0.40932
-1	-62.9675	-45.4137	-54.2268058	-48.6977	-44.9577	-36.789011	-49.6343	-55.6386	-59.98969774	-63.9773
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	62.4443	45.10587	53.66469274	48.0242	44.39817	36.5476566	49.3064	55.24465	59.51290991	63.41019
-2.05	-7.77E-01	-0.42207	-0.416348641	-0.38399	-2.95E-01	-0.525976098	-0.40798	-0.40682	-0.408265554	-0.40963
+2.05	59.97094	43.49313	50.77302513	45.16824	41.9486	35.28125934	47.58638	53.18611	57.03591738	60.47786
-2.1	-1.83642	-1.24461	-1.233266607	-1.00238	-0.7849	-1.250218879	-1.20277	-1.20047	-1.203606535	-1.20656
+2.1	56.77599	41.39132	47.11578994	41.68363	38.98466	33.62613938	45.34003	50.51374	53.85067083	56.73691
-2.15	-2.81957	-2.23927	-2.227281429	-1.77616	-1.41907	-1.937842174	-2.16355	-2.16113	-2.164714477	-2.18235
+2.15	53.93698	39.50976	43.92481238	38.65402	36.40527	32.1409618	43.32556	48.12911	51.0310277	53.44784
-2.2	-4.10881	-3.58863	-3.549400113	-2.82863	-2.26576	-2.822920588	-3.70092	-3.67311	-3.701127847	-3.69746
+2.2	50.33434	37.10692	39.94000811	34.88271	33.31441	30.24052612	40.74914	45.09216	47.46456457	49.31223
-2.25	-5.27875	-4.79438	-4.75278477	-3.78654	-3.06055	-3.620913695	-5.0876	-5.20516	-5.200557086	-5.19622
+2.25	47.18149	34.99245	36.52688272	31.63867	30.66171	28.56527867	38.47898	42.42599	44.35221291	45.72213

-2.3	-7.53181	-6.35505	-6.310963117	-5.01527	-4.10759	-5.076483433	-6.89113	-7.26173	-7.256937462	-7.25241
+2.3	43.23332	32.33166	32.81297585	27.93975	27.49312	26.45398846	35.61901	39.07789	40.46445972	41.25872
-2.35	-9.72198	-7.74426	-7.698399407	-6.11893	-5.06816	-6.471980863	-8.61082	-9.10989	-9.104977185	-9.10034
+2.35	39.81844	30.02019	29.62470876	25.19866	25.05258	24.61738264	33.13195	36.17471	37.10933554	37.42328
-2.4	-12.5548	-9.93937	-9.537702804	-7.74472	-6.50166	-8.272128217	-11.036	-11.4778	-11.4727916	-11.4681
+2.4	35.5869	27.14453	25.70126923	22.52515	22.6582	22.32969028	30.03497	32.56893	32.96022299	32.94504
-2.45	-15.1217	-11.897	-11.08721621	-9.39422	-7.91136	-9.86991917	-13.1893	-13.8527	-13.83515002	-13.8298
+2.45	31.96178	24.67196	22.39556999	20.32207	20.64382	20.36043236	27.36978	29.47327	29.41226651	29.39638
-2.5	-18.3257	-14.3845	-13.23788735	-11.6825	-9.7295	-11.89559554	-15.9201	-16.8838	-16.84970502	-16.8443
+2.5	27.71352	21.62454	19.42195428	17.61272	18.23846	17.93079049	24.08231	25.66323	25.59345522	25.57946
-2.55	-21.2834	-16.564	-15.31012445	-13.5459	-11.3452	-13.66697182	-18.3088	-19.5454	-19.4960906	-19.4907
+2.55	24.37547	19.02678	17.53481127	15.30789	16.27878	15.85760232	21.27777	22.41963	22.37718009	22.3626
-2.6	-25.0581	-19.296	-18.35874105	-15.89	-13.3984	-15.88372519	-21.2987	-22.8885	-22.81921006	-22.8139
+2.6	20.29449	15.85067	15.18579814	13.07924	14.05933	13.32046391	17.84634	18.70393	18.7039277	18.70393
-2.65	-28.342	-21.6613	-21.04774807	-17.9781	-15.2328	-17.79998206	-23.884	-25.7879	-25.70063807	-25.6955
+2.65	16.84206	13.18851	13.19668832	11.38595	12.46979	11.17204508	14.94123	15.93717	15.92366835	15.91092
-2.7	-32.4326	-24.5949	-24.43413582	-20.871	-17.7665	-20.27367008	-27.0866	-29.3896	-29.59394352	-29.588
+2.7	12.65146	10.91664	10.92368693	9.446976	10.89382	8.561865484	11.96717	12.6761	12.66205489	12.6488
-2.75	-35.9539	-27.1101	-27.37775304	-23.6123	-20.1494	-22.20577096	-29.8296	-32.4823	-32.96278582	-33.1054
+2.75	9.653062	8.99608	9.002131045	7.776725	9.505418	6.618289649	9.666741	9.928102	9.913632377	9.899975
-2.8	-40.2984	-30.2021	-31.27123748	-27.1325	-23.2253	-24.70131605	-33.1983	-36.2892	-37.12645554	-37.6125
+2.8	7.490019	6.666429	6.671229573	5.710664	7.743099	5.14524337	6.880186	6.881387	6.868846978	6.857015
-2.85	-44.0053	-32.8314	-34.64419505	-30.189	-25.9116	-26.82118795	-36.0604	-39.5305	-40.68495326	-41.4801
+2.85	5.977913	4.710353	4.777288904	4.321023	6.379417	3.928099905	4.783701	5.360285	5.955308027	6.51056
-2.9	-48.5414	-36.0386	-38.82475761	-33.9892	-29.2716	-29.40444755	-39.5487	-43.4892	-45.04624793	-46.2381
+2.9	5.977913	4.313814	4.777288904	4.321023	5.116695	3.511987883	4.783701	5.360285	5.955308027	6.51056
-2.95	-52.3821	-38.7461	-42.40664525	-37.2546	-32.1767	-31.58305289	-42.491	-46.8347	-48.74446246	-50.2869
+2.95	5.977913	4.313814	4.777288904	4.321023	4.495407	3.511987883	4.783701	5.360285	5.955308027	6.51056
-3	-57.0477	-42.0255	-46.80634416	-41.3786	-35.8497	-34.21957356	-46.0523	-50.8917	-53.24345394	-55.2289
+3	5.977913	4.313814	4.777288904	4.321023	3.913424	3.511987883	4.783701	5.360285	5.955308027	6.51056

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-5.97788	-5.85919	-6.26551753	-5.89814	-7.07928	-5.549238701	-5.85252	-2.87175
End Shear	57.21335	57.75318	61.08581156	56.91911	66.66005	53.01367252	55.89467	29.53715
-0.05	-5.97788	-5.85919	-6.26551753	-5.89814	-7.07928	-5.549238701	-5.85252	-2.87175
+0.05	52.29964	53.1679	56.15955413	52.29557	61.08245	47.73558421	50.31486	27.14315
-0.1	-5.97788	-5.85919	-6.26551753	-5.89814	-7.07928	-5.549238701	-5.85252	-2.87175
+0.1	47.69828	48.8897	51.56770809	47.97464	55.87941	42.78968713	45.08752	24.88083
-0.15	-5.97788	-6.6919	-6.691899771	-5.89814	-7.07928	-5.549238701	-5.85252	-4.11889
+0.15	43.92547	45.36177	47.78454752	44.41675	51.60245	38.78759462	40.85873	23.02068
-0.2	-7.86889	-10.0237	-10.02372294	-8.94927	-9.34758	-7.624337059	-8.02562	-5.64867
+0.2	39.4881	41.18737	43.31234192	40.2134	46.55853	34.1473661	35.95697	20.82647
-0.25	-9.78412	-12.7788	-12.77882767	-11.9357	-12.6692	-9.719585982	-10.2311	-6.91051
+0.25	35.87786	37.76926	39.65401011	36.77719	42.44288	30.43607373	32.03797	19.03574
-0.3	-13.4278	-16.5311	-16.69202666	-15.4862	-16.6203	-12.4099143	-13.0791	-8.404
+0.3	31.7378	33.75464	35.41395845	32.74829	37.62699	26.397806	27.78716	16.94007
-0.35	-16.9163	-20.0547	-20.49516827	-18.6574	-20.2893	-14.95633097	-15.789	-9.62728
+0.35	28.33521	30.49303	31.87848963	29.48115	33.7301	23.18035636	24.40038	15.24414
-0.4	-21.0529	-24.2226	-24.99772724	-22.9121	-25.4744	-17.96661203	-18.993	-11.3724
+0.4	24.4043	26.69419	27.82646317	25.68357	29.21119	19.83393127	20.99786	13.27744
-0.45	-24.4475	-27.634	-28.68666444	-26.4002	-29.7325	-20.42913259	-21.6143	-13.216
+0.45	21.26801	23.63572	24.56853354	22.63289	25.59049	17.49140499	18.50997	11.70168
-0.5	-28.4437	-31.6393	-33.02202238	-30.5021	-34.7489	-23.31845383	-24.6905	-15.3861
+0.5	17.76321	20.10866	20.8170531	19.1235	21.43749	14.91791888	15.77742	9.894393
-0.55	-32.0402	-34.8921	-36.54650223	-33.8391	-38.8376	-25.80071626	-27.3321	-17.1532
+0.55	15.10254	17.29999	17.83469493	16.33668	18.15044	12.8663987	13.59964	8.464164
-0.6	-36.3778	-38.6788	-40.6543625	-37.7313	-43.6164	-29.07724137	-30.7127	-19.2163
+0.6	12.0888	14.10069	14.44405608	13.17235	14.43228	10.52668469	11.11665	6.846737
-0.65	-39.8926	-41.726	-43.96413191	-40.8698	-47.4785	-32.91229048	-34.6445	-20.8816
+0.65	9.737797	11.5885	11.78752794	10.69677	11.53631	8.686878411	9.164833	5.792915
-0.7	-43.9745	-45.2383	-47.78419122	-44.4955	-51.9507	-37.40487674	-39.3736	-22.8074
+0.7	7.109031	8.772961	8.818030236	8.142909	8.669495	6.621504354	6.974565	4.658803
-0.75	-47.2503	-48.0334	-50.82900818	-47.3881	-55.5286	-41.23867433	-43.4091	-24.3456
+0.75	5.278754	6.802855	6.802855256	6.246477	6.589578	5.175992869	5.448414	3.769246
-0.8	-51.1887	-51.2151	-54.30096804	-50.6903	-59.6254	-45.84598913	-48.2927	-26.1035
+0.8	3.889055	4.76387	4.76387049	4.153288	4.298587	3.624856432	3.815638	2.773567
-0.85	-53.9993	-53.7114	-57.03057312	-53.2898	-62.8616	-49.73807418	-52.419	-27.4892
+0.85	2.819902	3.209158	3.209158328	2.454239	2.562776	2.419970749	2.547338	2.007695
-0.9	-57.3833	-56.5066	-60.09413827	-56.2116	-66.514	-54.23119894	-57.1838	-29.0489
+0.9	1.650821	1.505166	1.505165778	1.202043	1.218212	1.143672021	1.203865	1.170427
-0.95	-60.0257	-58.6575	-62.45828573	-58.4704	-69.3511	-57.81282128	-60.983	-30.2566
+0.95	0.776878	0.548413	0.548412901	0.479582	0.484329	0.456165548	0.480174	0.544885
-1	-62.9675	-61.0101	-65.05314851	-60.9551	-72.4902	-61.89669804	-65.3164	-31.5876
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	62.4443	60.63444	64.63804058	60.55717	71.98592	61.23090166	64.60983	31.37482
-2.05	-7.77E-01	-0.60132	-0.601319121	-0.47998	-0.48472	-0.456484696	-0.48051	-0.54146
+2.05	59.97094	58.65582	62.45646768	58.46872	69.34899	57.81049983	60.98057	30.25631
-2.1	-1.83642	-1.77144	-1.77144203	-1.41502	-1.43156	-1.346036154	-1.41688	-1.29965
+2.1	56.77599	56.05473	59.59831018	55.73839	65.92122	53.49418865	56.40213	28.79676
-2.15	-2.81957	-3.21033	-3.210332125	-2.54536	-2.56369	-2.420710229	-2.54812	-2.00343
+2.15	53.93698	53.70948	57.02845679	53.28779	62.85914	49.73553992	52.41634	27.48882
-2.2	-4.10881	-5.09217	-5.092172637	-4.48909	-4.66573	-3.874435101	-4.07835	-2.92916
+2.2	50.33434	50.69642	53.73450729	50.15131	58.95565	45.05002976	47.44891	25.81718
-2.25	-5.27875	-6.80426	-6.804260103	-6.24789	-6.59113	-5.176879862	-5.44935	-3.76423
+2.25	47.18149	48.03121	50.82663281	47.38594	55.52585	41.04184853	43.20195	24.34519

-2.3	-7.53181	-9.2283	-9.297618852	-8.53956	-9.10494	-6.955580751	-7.32877	-4.83753
+2.3	43.23332	44.66218	47.15719321	43.90018	51.21557	36.6627014	38.59232	22.4919
-2.35	-9.72198	-11.5904	-11.78957265	-10.6986	-11.5385	-8.688055116	-9.16608	-5.78725
+2.35	39.81844	41.72365	43.9615295	40.86743	47.4755	32.90977538	34.64187	20.88123
-2.4	-12.5548	-14.6224	-14.9964083	-13.6875	-15.0364	-10.90817749	-11.5214	-7.1088
+2.4	35.5869	38.05466	39.97691616	37.08926	42.82737	28.46117343	30.16076	18.87673
-2.45	-15.1217	-17.3022	-17.83701253	-16.3388	-18.1529	-12.86771954	-13.601	-8.46451
+2.45	31.96178	34.88949	36.54372222	33.83653	38.83448	25.79891182	27.33014	17.15273
-2.5	-18.3257	-20.6873	-21.43208521	-19.6985	-22.117	-15.34004854	-16.2256	-10.1893
+2.5	27.71352	30.9765	32.30421245	29.82281	33.91743	22.84076749	24.1819	15.02747
-2.55	-21.2834	-23.6381	-24.57107538	-22.6352	-25.5932	-17.49285131	-18.5115	-11.7021
+2.55	24.37547	27.63135	28.68374937	26.3975	29.72916	20.42752296	21.61263	13.21551
-2.6	-25.0581	-27.3205	-28.49407761	-26.309	-29.9545	-20.29060442	-21.4829	-13.6001
+2.6	20.29449	23.53038	24.24965119	22.2051	24.61212	17.46715397	18.46136	10.99993
-2.65	-28.342	-30.4956	-31.8812279	-29.4837	-33.7331	-23.18243432	-24.4026	-15.2446
+2.65	16.84206	20.05189	20.49214638	18.65459	20.28592	14.95465584	15.78723	9.626975
-2.7	-32.4326	-34.4191	-36.07184695	-33.4145	-38.4226	-27.06004814	-28.4843	-17.2854
+2.7	12.65146	15.81893	15.92377559	14.89519	15.96248	11.89547733	12.53171	8.156577
-2.75	-35.9539	-37.772	-39.65689601	-36.7798	-42.446	-30.43833721	-32.0404	-19.0362
+2.75	9.653062	12.77664	12.77663931	11.93335	12.66659	9.718209651	10.22969	6.910201
-2.8	-40.2984	-41.8807	-44.05485485	-40.911	-47.3949	-34.91011791	-36.7626	-21.1894
+2.8	7.490019	9.467856	9.467855984	8.347419	8.678371	7.201895561	7.580943	5.394434
-2.85	-44.0053	-45.3646	-47.78754138	-44.4195	-51.6058	-38.79019761	-40.8615	-23.0211
+2.85	5.977913	6.689681	6.689681234	5.898135	7.079281	5.54924411	5.85251	4.11857
-2.9	-48.5414	-49.6026	-52.33252789	-48.6941	-56.7451	-43.60633634	-45.9505	-25.2563
+2.9	5.977913	5.859182	6.265513967	5.898135	7.079281	5.54924411	5.85251	2.871748
-2.95	-52.3821	-53.1708	-56.16262534	-52.2984	-61.0858	-47.73833845	-50.3178	-27.1436
+2.95	5.977913	5.859182	6.265513967	5.898135	7.079281	5.54924411	5.85251	2.871748
-3	-57.0477	-57.482	-60.79432875	-56.6595	-66.3466	-52.82011364	-55.69	-29.4302
+3	5.977913	5.859182	6.265513967	5.898135	7.079281	5.54924411	5.85251	2.871748

2-Span: Shear (Max and Min) Raw Data Results - 55' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-5.97788	-8.93279	-9.32773	-5.91696	-7.45491	-7.57578
End Shear	57.21335	80.88669	81.11162	58.85419	71.72215	72.73919
-0.05	-5.97788	-8.93279	-9.32773	-5.91696	-7.45491	-7.57578
+0.05	52.29964	71.88836	72.63267	52.84155	64.43384	65.07184
-0.1	-5.97788	-8.93279	-9.32773	-5.91696	-7.45491	-7.57578
+0.1	47.69828	63.98281	64.98457	47.21607	57.60742	57.89807
-0.15	-5.97788	-8.93279	-9.32773	-6.02869	-7.45491	-7.57578
+0.15	43.92547	57.61504	58.97385	42.68149	52.09878	52.26873
-0.2	-7.86889	-9.1727	-9.32773	-9.02952	-9.59707	-9.35835
+0.2	39.4881	50.26907	51.97766	37.49715	45.79228	45.85744
-0.25	-9.78412	-12.4976	-12.5867	-11.5109	-12.6808	-12.6823
+0.25	35.87786	44.57383	46.34957	33.52687	40.95293	40.73631
-0.3	-13.4278	-17.2886	-16.8562	-14.8881	-16.6344	-16.6362
+0.3	31.7378	38.37829	39.86572	29.40658	35.38738	35.08262
-0.35	-16.9163	-20.8464	-20.284	-17.8669	-19.8896	-20.0389
+0.35	28.33521	33.64396	34.7089	26.75523	30.96964	31.5995
-0.4	-21.0529	-25.0756	-24.5897	-21.3871	-23.8702	-24.4783
+0.4	24.4043	28.53275	29.10269	23.49804	26.27691	27.4387
-0.45	-24.4475	-28.818	-28.8142	-24.2656	-27.2293	-28.1829
+0.45	21.26801	24.48915	24.78894	20.81689	22.83088	24.13385
-0.5	-28.4437	-33.1994	-34.6086	-28.0846	-31.1295	-32.9334
+0.5	17.76321	20.16574	20.2156	17.71344	19.50021	20.39393
-0.55	-32.0402	-37.1575	-39.3536	-31.3962	-34.43	-36.9867
+0.55	15.10254	16.83861	16.71762	15.29699	16.84113	17.42288
-0.6	-36.3778	-43.3119	-45.4953	-35.5257	-38.6095	-41.9586
+0.6	12.0888	13.57325	13.10048	12.53887	13.76271	14.04786
-0.65	-39.8926	-48.3244	-51.6663	-38.7332	-43.4645	-46.2567
+0.65	9.737797	11.19274	10.44036	10.36804	11.39386	11.40607
-0.7	-43.9745	-55.0223	-59.653	-42.2996	-49.8898	-51.0895
+0.7	7.109031	8.516367	7.951833	7.928388	8.609754	8.687574
-0.75	-47.2503	-60.8666	-66.2619	-45.0344	-55.1059	-54.8131
+0.75	5.278754	6.446717	6.027084	6.13478	6.543766	6.573491
-0.8	-51.1887	-68.5833	-74.2683	-49.9281	-61.4585	-61.6952
+0.8	3.889055	4.066216	3.908666	4.259805	4.543792	4.265497
-0.85	-53.9993	-75.1779	-80.5934	-54.2884	-66.6891	-67.3001
+0.85	2.819902	2.545554	2.520992	2.86193	3.052725	2.547538
-0.9	-57.3833	-82.8273	-87.7184	-59.6486	-73.1146	-73.9864
+0.9	1.650821	1.173406	1.163932	1.350886	1.440945	1.203859
-0.95	-60.0257	-89.3418	-93.2565	-63.9368	-78.2509	-79.6854
+0.95	0.776878	0.485427	0.543002	0.538465	0.574363	0.480098
-1	-62.9675	-97.2595	-100.45	-68.8461	-84.1258	-86.2321
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	62.4443	95.88557	99.1577	68.04417	83.16659	85.16103
-2.05	-7.77E-01	-0.48287	-0.54306	-0.53883	-0.57476	-0.48042
+2.05	59.97094	88.95353	93.25595	63.93406	78.2476	79.68185
-2.1	-1.83642	-1.38567	-1.29768	-1.59045	-1.69648	-1.41687
+2.1	56.77599	81.56997	86.56619	58.76799	72.05937	72.87263
-2.15	-2.81957	-2.51353	-2.52113	-2.86279	-3.05364	-2.54828
+2.15	53.93698	75.17393	80.59276	54.28541	66.68555	67.2965
-2.2	-4.10881	-4.53377	-4.24687	-4.55482	-4.85847	-4.63202
+2.2	50.33434	67.23817	72.9613	49.09691	60.46102	60.55999
-2.25	-5.27875	-6.44794	-6.02727	-6.13581	-6.54487	-6.55592
+2.25	47.18149	60.86307	66.26119	45.03272	55.1026	54.80947

-2.3	-7.53181	-8.94952	-8.35358	-8.3232	-9.04438	-9.12326
+2.3	43.23332	53.83252	58.29911	41.72488	48.82739	50.30959
-2.35	-9.72198	-11.1942	-10.4406	-10.3694	-11.2958	-11.4077
+2.35	39.81844	48.32131	51.66559	38.7312	43.46097	46.25404
-2.4	-12.5548	-14.0664	-13.6679	-12.9887	-14.2583	-14.597
+2.4	35.5869	42.29302	44.39649	34.85644	37.92987	41.14864
-2.45	-15.1217	-16.7792	-16.718	-15.2985	-16.834	-17.4247
+2.45	31.96178	37.1543	39.35311	31.39393	34.42769	36.98404
-2.5	-18.3257	-20.8227	-20.9399	-18.2104	-20.0469	-21.0064
+2.5	27.71352	32.41495	33.6309	27.43585	30.48779	32.132
-2.55	-21.2834	-24.4916	-24.7894	-20.746	-22.8327	-24.1359
+2.55	24.37547	28.81572	28.81374	24.26373	27.22715	28.18061
-2.6	-25.0581	-29.3682	-29.9922	-24.035	-26.991	-28.1057
+2.6	20.29449	24.30442	23.84838	20.80319	23.18492	23.72792
-2.65	-28.342	-33.6466	-34.7094	-26.757	-30.9724	-31.6017
+2.65	16.84206	20.84421	20.28369	17.86503	19.88755	20.03673
-2.7	-32.4326	-39.3923	-40.9252	-29.974	-36.2985	-35.8387
+2.7	12.65146	16.56346	16.15597	14.28625	15.97662	15.97839
-2.75	-35.9539	-44.5771	-46.3501	-33.5294	-40.956	-40.7395
+2.75	9.653062	12.89493	12.58636	11.55409	12.67869	12.68021
-2.8	-40.2984	-51.4733	-53.1267	-38.3112	-46.7838	-46.9099
+2.8	7.490019	8.932801	9.327731	8.529248	9.063396	8.689143
-2.85	-44.0053	-57.6189	-58.9745	-42.6844	-52.1023	-52.2722
+2.85	5.977913	8.932801	9.327731	6.027066	7.454907	7.575779
-2.9	-48.5414	-65.2852	-66.2053	-48.1433	-58.7331	-59.0789
+2.9	5.977913	8.932801	9.327731	5.916968	7.454907	7.575779
-2.95	-52.3821	-71.8925	-72.6334	-52.8446	-64.4376	-65.0757
+2.95	5.977913	8.932801	9.327731	5.916968	7.454907	7.575779
-3	-57.0477	-80.6242	-81.1124	-58.6467	-71.4707	-72.496
+3	5.977913	8.932801	9.327731	5.916968	7.454907	7.575779

2-Span: Moment (Max and Min) Raw Data Results - 55’ Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**			**Moment Z (kips-ft)**						
-0	-1.14E-13	-5.9E-14	-4.56601E-14	-5.4E-14	-4.39E-14	-7.06275E-14	-5.4E-14	-4.7E-14	-5.08735E-14	-5.2E-14
End Shear	8.57E-14	2.62E-14	2.86392E-14	4.27E-14	3.39E-14	3.25145E-14	2.53E-14	2.66E-14	2.78123E-14	2.79E-14
-0.05	-16.4392	-11.863	-13.13756827	-11.8828	-10.7619	-9.657978807	-13.1552	-14.7408	-16.37708518	-17.904
+0.05	143.824	106.5496	116.611712	102.4446	89.47153	86.84856558	116.965	128.9149	134.6704972	139.0655
-0.1	-32.8783	-23.726	-26.27513655	-23.7656	-21.5238	-19.31595761	-26.3104	-29.4816	-32.75417035	-35.8081
+0.1	266.53	198.201	213.5233359	186.9301	163.8922	161.714885	217.5676	239.2495	249.6010647	259.1953
-0.15	-49.3175	-35.589	-39.41270482	-35.6484	-32.2857	-28.97393642	-39.4655	-44.2224	-49.13125553	-53.7121
+0.15	363.59	272.0994	287.8389302	251.1192	221.3896	222.0336885	299.2553	328.4179	354.9736405	366.9562
-0.2	-65.7567	-47.452	-52.55027309	-47.5312	-43.0476	-38.63191523	-52.6207	-58.9632	-65.50834071	-71.6162
+0.2	442.4348	333.0397	344.6077768	298.9927	265.324	271.8105152	366.3716	400.5814	440.3958227	459.2378
-0.25	-82.1958	-59.315	-65.68784137	-59.414	-53.8096	-48.28989404	-65.7759	-73.704	-81.88542588	-89.5202
+0.25	496.9984	376.6679	383.7561298	337.9563	300.9008	306.9988301	415.28	455.1135	503.4097582	535.0945
-0.3	-98.635	-71.178	-78.82540964	-71.2968	-64.5715	-57.94787284	-78.9311	-88.4448	-98.26251106	-107.424
+0.3	535.1136	407.486	414.3144677	362.9358	324.4884	333.468178	454.008	501.1531	548.1594922	590.3373
-0.35	-115.074	-83.041	-91.96297791	-83.1796	-75.3334	-67.60585165	-92.0862	-103.186	-114.6395962	-125.328
+0.35	560.3064	428.69	427.8568033	370.5021	333.7113	345.917834	480.6277	527.9407	578.1689018	622.3037
-0.4	-131.513	-94.904	-105.1005462	-95.0624	-86.0953	-77.26383046	-105.241	-117.926	-131.0166814	-143.232
+0.4	574.5154	439.9852	430.37122	371.3456	336.1673	350.3978916	494.2082	540.2322	595.7039482	636.7381
-0.45	-147.952	-106.767	-118.2381145	-106.945	-96.8572	-86.92180926	-118.397	-132.667	-147.3937666	-161.136
+0.45	566.6639	436.5066	415.9296284	366.1377	332.8939	342.8294411	491.2916	534.9784	593.1839769	639.4863
-0.5	-164.392	-118.63	-131.3756827	-118.828	-107.619	-96.57978807	-131.552	-147.408	-163.7708518	-179.04
+0.5	561.9969	429.5302	397.9037317	362.3208	328.8956	340.4839315	483.5421	526.263	581.9091048	625.4054
-0.55	-180.831	-130.493	-144.513251	-130.711	-118.381	-106.2377669	-144.707	-162.149	-180.1479369	-196.945
+0.55	542.4729	413.0919	398.6032668	344.2914	312.6974	330.9679317	463.8936	507.3446	558.1185564	597.1465
-0.6	-197.27	-142.356	-157.6508193	-142.594	-129.143	-115.8957457	-157.862	-176.89	-196.5250221	-214.849
+0.6	510.1795	386.5739	384.6784013	329.1386	297.7074	314.0352085	433.6754	476.0321	520.1414736	560.167
-0.65	-213.709	-154.219	-170.7883876	-154.476	-139.905	-125.5537245	-171.017	-191.63	-212.9021073	-232.753
+0.65	457.1727	349.2009	352.7125759	303.5343	272.4864	284.8780638	390.3829	429.3094	467.8680977	504.3538
-0.7	-230.148	-166.082	-183.9259558	-166.359	-150.667	-135.2117033	-184.172	-206.371	-229.2791925	-250.657
+0.7	399.1647	305.7606	309.1243591	269.5431	240.1623	250.4736786	338.4586	372.198	406.9061235	435.7357
-0.75	-246.587	-177.945	-197.0635241	-178.242	-161.429	-144.8696821	-197.328	-221.112	-245.6562776	-268.561
+0.75	325.012	251.7974	252.4731986	218.6386	193.135	205.2294751	276.8242	303.0235	331.5993175	350.8242
-0.8	-263.027	-189.808	-210.2010924	-190.125	-172.191	-154.5276609	-210.483	-235.853	-262.0333628	-286.465
+0.8	243.6964	191.1482	186.2527683	157.276	136.8699	157.2517089	208.8794	226.4351	247.3050206	257.4968
-0.85	-279.466	-201.671	-223.3386606	-202.008	-195.902	-164.1856397	-223.638	-250.594	-278.410448	-304.369
+0.85	148.7058	123.9583	123.9061629	98.50928	83.33951	100.169526	135.123	142.3844	155.8574282	156.4121
-0.9	-295.905	-213.534	-236.4762289	-213.89	-244.574	-173.8436185	-236.793	-265.334	-294.7875332	-322.273
+0.9	90.91755	73.56458	73.20874305	58.19149	47.50699	62.46030514	76.66127	76.64344	77.99286095	77.95221
-0.95	-312.344	-225.397	-249.6137972	-252.889	-308.548	-183.5015973	-249.948	-280.075	-311.1646184	-340.177
+0.95	41.33894	22.70988	22.68458224	20.64725	16.29649	28.37993178	21.93699	21.93187	21.93844598	21.96125
-1	-337.964	-237.26	-321.7353053	-338.227	-380.837	-193.1595736	-263.104	-294.816	-327.541944	-358.081
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-337.964	-237.26	-321.7353053	-338.227	-380.837	-193.1595736	-263.104	-294.816	-327.541944	-358.081
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-312.346	-225.397	-249.6133432	-252.89	-308.548	-183.5013644	-249.948	-280.075	-311.1648469	-340.177
+2.05	41.33895	22.71144	22.68591696	20.64837	16.29704	28.38195877	21.93851	21.93335	21.93987844	21.9553
-2.1	-295.907	-213.534	-236.4757987	-213.891	-244.574	-173.8433977	-236.793	-265.334	-294.7877499	-322.273
+2.1	90.90689	73.55607	73.2156417	58.19654	47.50952	62.44214313	76.67656	76.62721	78.00346805	77.96251
-2.15	-279.467	-201.671	-223.3382542	-202.008	-195.902	-164.1854311	-223.638	-250.593	-278.4106528	-304.369
+2.15	148.9662	123.9673	123.8999419	98.50472	83.33723	100.168412	135.1241	142.3943	155.866533	156.413
-2.2	-263.028	-189.808	-210.2007097	-190.125	-172.191	-154.5274644	-210.483	-235.853	-262.0335557	-286.465
+2.2	242.9629	191.1547	186.2585453	157.2789	136.861	157.2723567	208.8764	226.4294	247.3134333	257.5115
-2.25	-246.589	-177.945	-197.0631653	-178.242	-161.429	-144.8694977	-197.328	-221.112	-245.6564586	-268.561

+2.25	324.8467	251.8029	252.4757463	218.6357	193.1336	205.227872	276.8215	303.0331	331.6063919	350.8238
-2.3	-230.15	-166.082	-183.9256208	-166.359	-150.667	-135.211531	-184.173	-206.371	-229.2793616	-250.657
+2.3	399.764	305.7648	309.120155	269.5371	240.1594	250.4926548	338.4547	372.1907	406.9118184	435.7483
-2.35	-213.71	-154.219	-170.7880763	-154.477	-139.905	-125.5535643	-171.017	-191.63	-212.9022645	-232.753
+2.35	457.0899	349.2027	352.7074576	303.5353	272.4869	284.8734844	390.3777	429.3156	467.8707515	504.3491
-2.4	-197.271	-142.356	-157.6505318	-142.594	-129.143	-115.8955977	-157.862	-176.889	-196.5251674	-214.848
+2.4	510.8419	386.5704	384.669457	329.1299	297.7134	314.0501594	433.6674	476.0198	520.137098	560.1734
-2.45	-180.832	-130.493	-144.5129873	-130.711	-118.381	-106.237631	-144.707	-162.149	-180.1480704	-196.944
+2.45	542.7641	413.0857	398.6045186	344.2928	312.6981	330.9582055	463.8988	507.3442	558.1256906	597.1482
-2.5	-164.393	-118.63	-131.3754428	-118.828	-107.619	-96.57966431	-131.552	-147.408	-163.7709733	-179.04
+2.5	562.3963	429.5204	397.9147711	362.3309	328.8887	340.4929237	483.5273	526.2742	581.8965722	625.3994
-2.55	-147.953	-106.767	-118.2378983	-106.945	-96.8573	-86.92169763	-118.397	-132.667	-147.3938762	-161.136
+2.55	566.8681	436.5011	415.9301963	366.1366	332.8933	342.8218595	491.2921	534.9847	593.1829262	639.4935
-2.6	-131.514	-94.9039	-105.1003539	-95.0625	-86.0953	-77.26373095	-105.241	-117.926	-131.0167791	-143.232
+2.6	574.0077	439.9928	430.3831626	371.3565	336.1623	350.3874154	494.2209	540.2501	595.7132941	636.7399
-2.65	-115.075	-83.0409	-91.96280937	-83.1797	-75.3334	-67.60576427	-92.0863	-103.185	-114.6396821	-125.328
+2.65	560.4883	428.6934	427.8650271	370.5031	333.7118	345.926059	480.6356	527.9377	578.1725921	622.2977
-2.7	-98.6356	-71.1779	-78.82526488	-71.2969	-64.5715	-57.94779759	-78.9311	-88.4447	-98.26258499	-107.424
+2.7	535.1381	407.4839	414.3208084	362.9439	324.4819	333.4508692	454.011	501.1606	548.155975	590.3249
-2.75	-82.1963	-59.3149	-65.68772039	-59.4141	-53.8096	-48.28983092	-65.7759	-73.7039	-81.88548791	-89.5202
+2.75	497.1982	376.6613	383.7576721	337.9605	300.8977	306.9996034	415.2769	455.1151	503.4155502	535.0903
-2.8	-65.757	-47.452	-52.55017591	-47.5313	-43.0477	-38.63186424	-52.6207	-58.9631	-65.50839084	-71.6162
+2.8	443.2824	333.0281	344.6030611	298.9916	265.3235	271.7852082	366.363	400.5762	440.4105138	459.2414
-2.85	-49.3178	-35.589	-39.41263142	-35.6484	-32.2857	-28.97389756	-39.4655	-44.2223	-49.13129377	-53.7121
+2.85	363.3994	272.0994	287.8432006	251.1243	221.387	222.0258669	299.2574	328.4224	354.965923	366.9587
-2.9	-32.8785	-23.726	-26.27508694	-23.7656	-21.5238	-19.31593088	-26.3104	-29.4816	-32.75419669	-35.8081
+2.9	266.9776	198.2124	213.5361043	186.9408	163.887	161.7244228	217.5472	239.2313	249.6015403	259.1972
-2.95	-16.4393	-11.863	-13.13754245	-11.8828	-10.7619	-9.657964203	-13.1552	-14.7408	-16.37709962	-17.904
+2.95	144.0508	106.5517	116.6183081	102.4501	89.46898	86.85338226	116.9548	128.906	134.6707222	139.0664
-3	-8.17E-14	-3.1E-14	-3.73639E-14	-3.7E-14	-3.55E-14	-4.19732E-14	-4.9E-14	-4.7E-14	-4.85531E-14	-4.7E-14
+3	1.31E-13	8.73E-14	7.9297E-14	6.65E-14	5.99E-14	6.83544E-14	7.57E-14	8.75E-14	7.86982E-14	9.06E-14

2-Span: Moment (Max and Min) Raw Data Results - 55' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.14E-13	-7.9E-14	-8.3E-14	-6.1E-14	-8.1E-14	-5.7E-14	-6E-14	-5.57176E-14
End Shear	8.57E-14	3.7E-14	4E-14	2.97E-14	4.05E-14	3.28E-14	3.48E-14	3.86813E-14
-0.05	-16.4392	-16.1128	-17.2302	-16.2199	-19.468	-15.2604	-16.0944	-7.897302996
+0.05	143.824	146.3039	154.6037	143.9946	168.3629	131.2729	138.3659	74.64365243
-0.1	-32.8783	-32.2255	-34.4603	-32.4398	-38.936	-30.5208	-32.1889	-15.79460599
+0.1	266.53	272.7985	287.8762	267.954	312.6329	239.8201	252.7124	138.906977
-0.15	-49.3175	-48.3383	-51.6905	-48.6597	-58.404	-45.7812	-48.2833	-23.69190899
+0.15	363.59	375.9639	396.1601	368.7612	429.2368	322.6098	339.8597	190.0612828
-0.2	-65.7567	-64.4511	-68.9207	-64.8795	-77.8721	-61.0416	-64.3777	-31.58921198
+0.2	442.4348	461.8852	486.0686	451.5746	523.6554	384.9399	405.3813	233.0783938
-0.25	-82.1958	-80.5639	-86.1509	-81.0994	-97.3401	-76.302	-80.4721	-39.48651498
+0.25	496.9984	524.2609	551.156	512.3224	602.4853	439.7749	463.8693	262.2881458
-0.3	-98.635	-96.6766	-103.381	-97.3193	-116.808	-91.5624	-96.5666	-47.38381797
+0.3	535.1136	570.2263	597.8698	563.3282	663.4985	478.5389	505.4973	285.2019652
-0.35	-115.074	-112.789	-120.611	-113.539	-136.276	-106.823	-112.661	-55.28112097
+0.35	560.3064	597.6206	631.2003	596.4929	699.4534	499.7937	527.4734	295.4865974
-0.4	-131.513	-128.902	-137.841	-129.759	-155.744	-122.083	-128.755	-63.17842396
+0.4	574.5154	616.6364	650.0178	613.671	716.2363	509.1074	537.7935	299.5959464
-0.45	-147.952	-145.015	-155.072	-145.979	-175.212	-137.344	-144.85	-71.07572696
+0.45	566.6639	616.1842	647.6586	610.9356	710.4776	497.588	526.0852	292.7993847
-0.5	-164.392	-161.128	-172.302	-162.199	-194.68	-152.604	-160.944	-78.97302996
+0.5	561.9969	605.4385	637.3801	600.8522	699.8849	474.3289	501.443	288.4951745
-0.55	-180.831	-177.241	-189.532	-178.419	-214.148	-167.864	-177.039	-86.87033295
+0.55	542.4729	578.5714	609.9415	575.9959	673.3978	472.196	498.8518	281.9000751
-0.6	-197.27	-193.353	-206.762	-194.639	-233.616	-183.125	-193.133	-94.76763595
+0.6	510.1795	538.5352	568.8301	538.2118	630.5926	451.0457	476.1305	270.0038541
-0.65	-213.709	-209.466	-223.992	-210.859	-253.084	-198.385	-209.228	-102.6649389
+0.65	457.1727	489.348	512.0879	484.4814	567.9622	409.372	432.5533	245.736689
-0.7	-230.148	-225.579	-241.222	-227.078	-272.552	-213.646	-225.322	-110.5622419
+0.7	399.1647	428.6949	447.6848	420.4883	492.456	358.2443	378.242	218.5875493
-0.75	-246.587	-241.692	-258.453	-243.298	-292.02	-228.906	-241.416	-118.4595449
+0.75	325.012	354.6749	369.2421	344.3989	401.555	287.1883	302.8137	180.2181509
-0.8	-263.027	-257.804	-275.683	-259.518	-311.488	-244.167	-257.511	-126.3568479
+0.8	243.6964	273.2294	281.7784	261.1856	301.4452	203.7822	215.4026	140.6481699
-0.85	-279.466	-273.917	-292.913	-275.738	-330.956	-259.427	-273.605	-134.2541509
+0.85	148.7058	181.5701	183.5168	170.2363	190.6556	137.2572	144.6819	95.50097383
-0.9	-295.905	-290.03	-310.143	-291.958	-350.424	-274.687	-289.7	-142.1514539
+0.9	90.91755	104.448	104.448	93.40862	97.61792	79.41692	83.59676	64.75008767
-0.95	-312.344	-306.143	-327.373	-308.178	-369.892	-289.948	-305.794	-150.0487569
+0.95	41.33894	32.28602	32.28602	25.80822	25.82957	24.52059	25.81115	29.51919515
-1	-337.964	-322.255	-344.603	-324.398	-389.36	-372.693	-395.009	-157.9461451
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-337.964	-322.255	-344.603	-324.398	-389.36	-372.693	-395.009	-157.9461451
+2	0	0	0	0	0	0	0	0
-2.05	-312.346	-306.142	-327.373	-308.178	-369.892	-289.948	-305.794	-150.0488378
+2.05	41.33895	32.26852	32.26852	25.81001	25.83136	24.52204	25.81267	29.63561142
-2.1	-295.907	-290.03	-310.143	-291.958	-350.424	-274.688	-289.699	-142.1515304
+2.1	90.90689	104.4598	104.4598	93.43088	97.64578	79.40905	83.58848	64.33267365
-2.15	-279.467	-273.917	-292.913	-275.738	-330.956	-259.427	-273.605	-134.2542231
+2.15	148.9662	181.5788	183.524	170.2483	190.6614	137.2633	144.6882	95.76758782
-2.2	-263.028	-257.804	-275.683	-259.518	-311.488	-244.167	-257.51	-126.3569158
+2.2	242.9629	273.2393	281.7866	261.18	301.4707	203.7891	215.4097	140.6420386
-2.25	-246.589	-241.691	-258.452	-243.298	-292.02	-228.906	-241.416	-118.4596085

+2.25	324.8467	354.6838	369.249	344.3938	401.5616	287.1974	302.8237	180.2188983
-2.3	-230.15	-225.579	-241.222	-227.078	-272.552	-213.646	-225.322	-110.5623011
+2.3	399.764	428.7027	447.6903	420.4818	492.48	358.2506	378.249	218.5808261
-2.35	-213.71	-209.466	-223.992	-210.858	-253.084	-198.385	-209.227	-102.6649938
+2.35	457.0899	489.3529	512.0902	484.4919	567.9647	409.3739	432.5557	245.7365781
-2.4	-197.271	-193.353	-206.762	-194.638	-233.616	-183.125	-193.133	-94.7676865
+2.4	510.8419	538.5329	568.8247	538.2004	630.6103	451.0397	476.1246	269.9959578
-2.45	-180.832	-177.24	-189.532	-178.419	-214.148	-167.865	-177.038	-86.87037918
+2.45	542.7641	578.5658	609.9323	575.9999	673.3917	472.2005	498.8569	281.8985038
-2.5	-164.393	-161.128	-172.302	-162.199	-194.68	-152.604	-160.944	-78.97307185
+2.5	562.3963	605.4284	637.3659	600.8709	699.8923	474.3433	501.4584	288.4856483
-2.55	-147.953	-145.015	-155.071	-145.979	-175.212	-137.344	-144.85	-71.07576453
+2.55	566.8681	616.197	647.6511	610.9387	710.4734	497.5847	526.0813	292.8019009
-2.6	-131.514	-128.902	-137.841	-129.759	-155.744	-122.083	-128.755	-63.17845721
+2.6	574.0077	616.6441	650.0293	613.6883	716.226	509.1154	537.8014	299.5904687
-2.65	-115.075	-112.789	-120.611	-113.539	-136.276	-106.823	-112.661	-55.28114988
+2.65	560.4883	597.6222	631.2055	596.4852	699.4556	499.7966	527.4761	295.4875414
-2.7	-98.6356	-96.6765	-103.381	-97.3192	-116.808	-91.5625	-96.5664	-47.38384256
+2.7	535.1381	570.2205	597.8669	563.3336	663.5126	478.5345	505.4922	285.2091115
-2.75	-82.1963	-80.5638	-86.1508	-81.0994	-97.3401	-76.3021	-80.472	-39.48653523
+2.75	497.1982	524.2487	551.1463	512.3203	602.4916	439.7805	463.8745	262.7153667
-2.8	-65.757	-64.451	-68.9207	-64.8795	-77.8721	-61.0417	-64.3776	-31.58922791
+2.8	443.2824	461.8659	486.0515	451.5658	523.6525	384.9365	405.3779	233.0834018
-2.85	-49.3178	-48.3383	-51.6905	-48.6596	-58.4041	-45.7813	-48.2832	-23.69192059
+2.85	363.3994	375.9623	396.16	368.7646	429.2271	322.6158	339.866	190.0579684
-2.9	-32.8785	-32.2255	-34.4603	-32.4397	-38.936	-30.5208	-32.1888	-15.79461326
+2.9	266.9776	272.8141	287.8432	267.9306	312.6126	239.8348	252.7279	138.9095206
-2.95	-16.4393	-16.1128	-17.2302	-16.2199	-19.468	-15.2604	-16.0944	-7.897305937
+2.95	144.0508	146.2869	154.5873	143.9829	168.3528	131.2805	138.3739	74.64496557
-3	-8.17E-14	-4.5E-14	-4.6E-14	-6.2E-14	-8.5E-14	-4.2E-14	-4.4E-14	-3.71294E-14
+3	1.31E-13	1.08E-13	1.11E-13	9.42E-14	1.16E-13	9.38E-14	9.92E-14	6.89845E-14

2-Span: Moment (Max and Min) Raw Data Results - 55' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.14E-13	-8.1E-14	-7.9E-14	-6.8E-14	-7.3E-14	-7.1E-14
End Shear	8.57E-14	5.48E-14	7.05E-14	3.91E-14	4.26E-14	3.58E-14
-0.05	-16.4392	-24.5652	-25.6513	-16.2716	-20.501	-20.8334
+0.05	143.824	197.9369	201.393	145.3143	177.2685	179.0203
-0.1	-32.8783	-49.1304	-51.3025	-32.5433	-41.002	-41.6668
+0.1	266.53	359.1079	367.0417	264.7717	323.0122	324.9134
-0.15	-49.3175	-73.6956	-76.9538	-48.8149	-61.503	-62.5001
+0.15	363.59	487.1018	495.098	354.7971	434.9449	436.3225
-0.2	-65.7567	-98.2607	-102.605	-65.0866	-82.004	-83.3335
+0.2	442.4348	598.652	608.0962	429.1313	530.9085	532.8412
-0.25	-82.1958	-122.826	-128.256	-81.3582	-102.505	-104.167
+0.25	496.9984	672.3152	697.6825	491.367	599.1924	601.1073
-0.3	-98.635	-147.391	-153.908	-97.6299	-123.006	-125
+0.3	535.1136	716.9114	768.4348	531.8648	644.6281	659.4813
-0.35	-115.074	-171.956	-179.559	-113.902	-143.507	-145.834
+0.35	560.3064	750.272	812.9086	549.3939	663.8107	686.0628
-0.4	-131.513	-196.521	-205.21	-130.173	-164.008	-166.667
+0.4	574.5154	768.9447	838.6697	556.8071	663.4483	691.4536
-0.45	-147.952	-221.087	-230.861	-146.445	-184.509	-187.5
+0.45	566.6639	762.9916	842.3468	542.0462	647.9343	677.4991
-0.5	-164.392	-245.652	-256.513	-162.716	-205.01	-208.334
+0.5	561.9969	746.2205	826.8896	526.4091	614.9398	655.1737
-0.55	-180.831	-270.217	-282.164	-178.988	-225.511	-229.167
+0.55	542.4729	715.8261	784.5453	503.9009	612.532	633.488
-0.6	-197.27	-294.782	-307.815	-195.26	-246.012	-250.001
+0.6	510.1795	675.01	731.1872	489.286	590.1355	608.2658
-0.65	-213.709	-319.347	-333.466	-211.531	-266.513	-270.834
+0.65	457.1727	603.9118	653.5953	451.249	547.9086	561.7025
-0.7	-230.148	-343.913	-359.118	-227.803	-287.014	-291.667
+0.7	399.1647	530.0375	557.1502	401.4581	482.7008	492.634
-0.75	-246.587	-368.478	-384.769	-244.075	-307.515	-312.501
+0.75	325.012	430.0896	435.4668	327.1796	393.0674	394.2982
-0.8	-263.027	-393.043	-410.42	-260.346	-328.016	-333.334
+0.8	243.6964	303.1061	300.5709	241.9353	283.3392	283.5555
-0.85	-279.466	-417.608	-436.071	-276.618	-348.517	-354.167
+0.85	148.7058	179.3768	166.4446	163.8849	181.5982	186.236
-0.9	-295.905	-442.173	-461.723	-292.89	-369.018	-375.001
+0.9	90.91755	95.08598	88.56318	93.92966	100.1916	97.59321
-0.95	-312.344	-517.168	-577.673	-355.562	-397.34	-449.195
+0.95	41.33894	25.83758	29.45591	29.02979	30.96511	25.81088
-1	-337.964	-673.114	-727.86	-466.788	-541.575	-596.067
+1	0	0	0	0	0	0
(Span 2) -2	-337.964	-673.114	-727.86	-466.788	-541.575	-596.067
+2	0	0	0	0	0	0
-2.05	-312.346	-517.166	-577.673	-355.562	-397.34	-449.194
+2.05	41.33895	25.83085	29.45619	29.03147	30.9669	25.81232
-2.1	-295.907	-442.174	-461.723	-292.89	-369.018	-375.001
+2.1	90.90689	95.07839	88.56204	93.90271	100.1629	97.58543
-2.15	-279.467	-417.608	-436.071	-276.618	-348.517	-354.168
+2.15	148.9662	179.3718	166.4438	163.8832	181.593	186.2285
-2.2	-263.028	-393.043	-410.42	-260.347	-328.016	-333.334
+2.2	242.9629	303.0941	300.5691	241.9432	283.3307	283.5791
-2.25	-246.589	-368.478	-384.769	-244.075	-307.515	-312.501

+2.25	**324.8467**	**430.0874**	**435.4674**	**327.1911**	**393.0702**	**394.3011**
-2.3	**-230.15**	**-343.913**	**-359.118**	**-227.803**	**-287.014**	**-291.667**
+2.3	**399.764**	**530.014**	**557.1527**	**401.4659**	**482.7167**	**492.6531**
-2.35	**-213.71**	**-319.348**	**-333.466**	**-211.532**	**-266.513**	**-270.834**
+2.35	**457.0899**	**603.899**	**653.5968**	**451.2513**	**547.9034**	**561.7003**
-2.4	**-197.271**	**-294.782**	**-307.815**	**-195.26**	**-246.012**	**-250.001**
+2.4	**510.8419**	**674.9904**	**731.189**	**489.2793**	**590.1398**	**608.2799**
-2.45	**-180.832**	**-270.217**	**-282.164**	**-178.988**	**-225.511**	**-229.167**
+2.45	**542.7641**	**716.2932**	**784.5462**	**503.9023**	**612.5264**	**633.4957**
-2.5	**-164.393**	**-245.652**	**-256.513**	**-162.717**	**-205.01**	**-208.334**
+2.5	**562.3963**	**746.2041**	**826.8882**	**526.4039**	**614.9267**	**655.1944**
-2.55	**-147.953**	**-221.087**	**-230.861**	**-146.445**	**-184.509**	**-187.501**
+2.55	**566.8681**	**762.9906**	**842.3462**	**542.0489**	**647.942**	**677.5073**
-2.6	**-131.514**	**-196.522**	**-205.21**	**-130.173**	**-164.008**	**-166.667**
+2.6	**574.0077**	**768.936**	**838.6706**	**556.8141**	**663.4512**	**691.4724**
-2.65	**-115.075**	**-171.956**	**-179.559**	**-113.902**	**-143.507**	**-145.834**
+2.65	**560.4883**	**750.2708**	**812.9074**	**549.3955**	**663.8204**	**686.0663**
-2.7	**-98.6356**	**-147.391**	**-153.908**	**-97.63**	**-123.006**	**-125**
+2.7	**535.1381**	**716.9138**	**768.432**	**531.8584**	**644.6476**	**659.4933**
-2.75	**-82.1963**	**-122.826**	**-128.256**	**-81.3583**	**-102.505**	**-104.167**
+2.75	**497.1982**	**672.3061**	**697.6821**	**491.3726**	**599.1915**	**601.049**
-2.8	**-65.757**	**-98.2608**	**-102.605**	**-65.0866**	**-82.004**	**-83.3336**
+2.8	**443.2824**	**598.634**	**608.0972**	**429.1481**	**530.9155**	**532.8482**
-2.85	**-49.3178**	**-73.6956**	**-76.9538**	**-48.815**	**-61.503**	**-62.5002**
+2.85	**363.3994**	**487.0893**	**495.0973**	**354.8029**	**434.9418**	**436.3197**
-2.9	**-32.8785**	**-49.1304**	**-51.3025**	**-32.5433**	**-41.002**	**-41.6668**
+2.9	**266.9776**	**359.0994**	**367.0392**	**264.788**	**323.0321**	**324.9338**
-2.95	**-16.4393**	**-24.5652**	**-25.6513**	**-16.2717**	**-20.501**	**-20.8334**
+2.95	**144.0508**	**197.9337**	**201.392**	**145.3227**	**177.2628**	**179.0152**
-3	**-8.17E-14**	**-7.9E-14**	**-7.5E-14**	**-5.3E-14**	**-5.9E-14**	**-6.8E-14**
+3	**1.31E-13**	**1.23E-13**	**1.3E-13**	**1.02E-13**	**1.17E-13**	**1.11E-13**

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-18.37209183	-15.09922733	-16.53551849	-11.41668505	-12.22331368	-11.50839845	-13.83673743	-11.46041787	-12.0961	-5.682784138
End Shear	165.63757	141.3346979	149.0738124	112.5064058	119.1920253	111.1791227	130.6224639	106.752508	112.601	57.79860099
-0.05	-18.45866457	-15.18580007	-20.06786171	-11.41668505	-12.22331368	-11.50839845	-13.83673743	-11.46041787	-12.0961	-5.682784138
+0.05	151.782757	130.3422328	137.0705287	104.3589896	110.4355446	102.9573298	120.696752	97.19443452	102.4937	53.53545703
-0.1	-18.82224101	-15.54937651	-25.22770704	-11.41668505	-12.22331368	-11.50839845	-13.83673743	-11.46041787	-12.0961	-5.682784138
+0.1	136.6738619	118.4637547	123.4338367	95.49886301	100.9214119	94.0021061	109.9032599	86.74373852	91.4448	48.83463625
-0.15	-19.25464369	-20.49973437	-29.05558635	-12.84403047	-12.84403047	-11.50839845	-13.83673743	-11.46041787	-12.0961	-7.750035633
+0.15	126.1785245	110.1916752	113.9598954	89.23340633	94.1989312	87.67785113	102.2923971	79.47528907	83.76191	45.51904281
-0.2	-24.18989089	-29.64718793	-34.59614227	-19.7248316	-19.7248316	-17.98359915	-18.92741431	-15.00145261	-15.791	-10.90900839
+0.2	111.939521	98.93487661	101.1049802	80.58046651	84.92265295	78.95584759	91.81266825	69.61390405	73.34061	40.95261598
-0.25	-29.35240625	-36.30350836	-39.36223605	-24.60007351	-24.60007351	-23.26830857	-24.80536081	-18.70873722	-19.6934	-13.14217
+0.25	102.1177909	91.14225281	92.23692013	74.5038849	78.41409746	72.83969908	84.4762501	62.81994896	66.1627	37.75523033
-0.3	-41.19742586	-45.76263311	-50.05038454	-33.09627469	-33.67946169	-30.72943446	-33.10816335	-24.7466779	-26.1091	-16.22527992
+0.3	89.05147682	80.60461277	80.29522415	66.17260373	69.49895082	64.46716663	74.4511946	53.69782196	56.52774	33.3853933
-0.35	-49.75428088	-52.5989245	-57.77051832	-39.32861973	-40.40659875	-36.91663134	-40.63725797	-29.24984188	-30.9014	-18.38967749
+0.35	79.99091774	73.35885603	72.12494046	60.36666776	63.29238103	58.64217159	67.48988325	47.7672422	50.28131	30.35064048
-0.4	-61.82772834	-62.24865612	-68.66181016	-47.92307995	-49.6910698	-45.68978759	-51.32907125	-35.45650714	-37.5074	-22.85959781
+0.4	67.90057276	63.63164075	61.22231429	52.47151525	54.86164167	50.73537418	58.06042716	39.93788123	42.03987	26.23958279
-0.45	-70.49211559	-69.17622877	-76.4765822	-53.94923379	-56.20667617	-51.85001884	-58.84831829	-39.80602586	-42.1374	-26.12132568
+0.45	59.71162413	56.99572389	53.83770577	47.01797167	49.04509288	45.28455838	51.57486101	34.72156954	36.76203	23.41188442
-0.5	-83.36934898	-78.8892947	-87.97601337	-62.19779697	-65.13337288	-60.29483591	-69.17321716	-45.75611565	-48.4721	-30.59670304
+0.5	48.90714949	48.16399892	44.09442589	39.6734169	41.22203487	37.959762	42.88193231	29.36812511	31.07645	19.6217966
-0.55	-92.98325571	-85.81502477	-96.30708225	-67.93600431	-71.34940466	-66.17902792	-76.3800653	-50.51733334	-53.1761	-33.71788951
+0.55	41.84302921	42.19647089	37.71548059	34.65404756	35.88357967	32.96617701	36.97277951	25.7059856	27.18799	17.04557723
-0.6	-106.3706835	-95.45795949	-107.6044054	-75.72419453	-79.79504453	-74.17925365	-86.19713694	-60.19105582	-63.359	-37.96541293
+0.6	32.91294391	34.33909469	29.66471645	27.9745585	28.79147628	26.33963054	29.15728629	20.82731718	22.00912	13.63865974
-0.65	-115.8501774	-102.284295	-115.4072755	-81.09268637	-85.62344289	-79.70436096	-92.99092555	-66.95304021	-70.4769	-40.90163154
+0.65	27.00754051	29.09405417	24.34095524	23.47110926	24.01914904	21.88631545	23.92520059	17.53391097	18.51409	11.3583412
-0.7	-128.9551704	-111.7174144	-125.9493	-88.30604945	-93.46476854	-87.14373917	-102.1592541	-76.48884061	-80.5328	-44.85910543
+0.7	19.42896837	22.28368069	17.50916027	17.57115449	17.78127417	16.17529999	17.2964371	13.21293629	13.93015	9.011964837
-0.75	-138.1645577	-118.3423601	-133.3642283	-93.22305459	-98.8174715	-92.22672067	-108.4393268	-83.7738888	-88.2534	-47.56593562
+0.75	14.52423477	17.81081771	13.08806302	13.67218506	13.67218506	12.7814671	13.56902209	10.40120313	10.94863	7.435102824
-0.8	-150.7940854	-127.419784	-143.3381685	-99.74711508	-105.9312013	-98.98900204	-116.8180036	-93.66149454	-98.7343	-51.17117003
+0.8	9.855125962	12.11389769	8.869613351	9.429495809	9.429495809	8.402524215	8.768373155	7.174007577	7.551587	5.37496141
-0.85	-159.5932679	-133.736935	-150.1621448	-104.1308868	-110.7201745	-103.5468109	-122.4836976	-100.4762844	-105.96	-53.60419068
+0.85	7.258833639	8.458463638	6.532950267	6.651978092	6.651978092	5.556759683	5.65553548	5.023944229	5.288362	4.015649387
-0.9	-171.5480633	-142.3065731	-159.2796151	-109.8511747	-116.9830331	-109.5157296	-129.9317948	-109.6305374	-115.668	-56.79499174
+0.9	4.045215684	3.935240054	3.640694113	2.908859864	2.908859864	2.479069388	2.505875273	2.357910626	2.482011	2.28048594
-0.95	-179.7925045	-148.2050663	-171.5445812	-113.6199352	-121.1202078	-113.4653306	-134.8824614	-115.8679576	-122.284	-58.90977348
+0.95	2.053431924	1.612788996	1.84808873	1.189170712	1.189170712	1.025787409	1.033671652	0.975426183	1.026764	1.167875148
-1	-190.867113	-156.1086278	-174.7106714	-118.4219834	-126.4089229	-118.5246303	-141.2590617	-124.1389133	-131.06	-61.62394853
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.89E+02	1.55E+02	173.1319802	1.18E+02	1.26E+02	117.8342175	140.3860854	1.23E+02	1.30E+02	6.13E+01
-2.05	-1.69E+00	-1.32E+00	-1.517063215	-1.06E+00	-1.06E+00	-0.844629059	-0.852342964	-8.03E-01	-8.45E-01	-9.52E-01
+2.05	1.81E+02	1.49E+02	1.67E+02	114.3378585	121.909524	1.14E+02	1.36E+02	1.17E+02	123.5696	5.93E+01
-2.1	-4.47E+00	-4.54E+00	-4.026626635	-3.57782514	-3.57782514	-2.858709312	-2.886065558	-2.718628991	-2.86171	-2.508136261
+2.1	1.70E+02	1.41E+02	1.58E+02	109.0620955	116.118024	1.09E+02	1.29E+02	1.08E+02	114.3074	5.64E+01
-2.15	-6.77E+00	-7.77E+00	-6.092596996	-6.124826444	-6.124826444	-4.862353302	-5.026289177	-4.623376412	-4.86671	-3.747058366
+2.15	161.2056989	134.9787592	151.2435804	104.9754217	111.6437448	104.4264675	123.5791671	101.8084044	107.3721	54.07522838
-2.2	-10.39338156	-12.88953227	-9.355596431	-10.01296714	-10.01296714	-9.002597621	-9.425542978	-7.617551863	-8.01848	-5.648913832
+2.2	148.880166	126.1355598	141.7317638	98.83869744	104.9397862	98.0460953	115.6478837	92.26854645	97.25761	50.66939962
-2.25	-13.58089572	-16.95925761	-12.21313099	-13.04404624	-13.04404624	-12.13106139	-12.85529872	-9.92312477	-10.4454	-7.120043843

+2.25	139.8527827	119.6507578	134.6417693	94.17791451	99.85775707	93.21516762	109.6622406	85.20512865	89.77037	48.09389635
-2.3	-20.434531	-23.22108417	-18.43977114	-18.38684555	-18.64256109	-16.88198099	-18.07318613	-13.81045833	-14.5639	-9.326582758
+2.3	126.9542152	110.3766325	124.3487814	87.29469089	92.36460575	86.09959829	100.8708806	75.0069503	78.96243	44.30473106
-2.35	-25.83855154	-28.08614872	-23.28905723	-22.60184721	-23.09899528	-21.02822198	-22.91924636	-16.89739472	-17.8387	-11.00076606
+2.35	117.5881554	103.6378145	116.8614785	82.14158479	86.76290418	80.78504679	94.32122126	68.28480678	71.87874	41.4776311
-2.4	-34.18064145	-35.42894404	-30.69207101	-28.90611203	-29.77965048	-27.26228789	-30.24347932	-21.50772548	-22.7313	-14.11096528
+2.4	104.3126964	94.08174322	106.0024687	74.62630967	78.60381201	73.05053574	84.81070123	58.81884179	61.91457	37.36732588
-2.45	-40.55318999	-41.04185983	-36.40361545	-33.67791272	-34.84623573	-31.99628714	-35.82689169	-24.99298915	-26.431	-16.54481537
+2.45	94.74585373	87.19310321	97.28428701	69.06263621	72.57048233	67.33540755	77.79768824	51.90830449	54.64032	34.33305419
-2.5	-50.43210274	-49.39606931	-45.24946117	-40.70444098	-42.31944343	-38.98670902	-44.09899124	-30.11953255	-31.8744	-20.15112965
+2.5	81.28344583	77.49786845	85.67426187	61.02981227	63.86875994	59.09821374	67.70892788	44.91435251	47.57583	29.9638112
-2.55	-58.14280627	-55.70495768	-52.15905516	-45.95125137	-47.90809879	-44.21942411	-50.30910247	-33.94392013	-35.936	-22.85866799
+2.55	72.08325052	70.55920404	77.82335186	55.13731333	57.49183183	53.06554671	60.33321325	40.66381659	43.05054	26.76679098
-2.6	-69.59501086	-64.99482523	-62.42159626	-53.58559035	-56.05060162	-51.84993212	-59.38813613	-41.03080227	-43.1903	-26.81704067
+2.6	59.95117876	60.86138241	66.919379	46.70139324	48.37073606	44.44192719	49.80713011	34.57500775	36.56909	22.20078648
-2.65	-78.22282049	-71.94335048	-70.15347701	-59.22565527	-62.07328342	-57.49832705	-66.12429604	-46.6240232	-49.0779	-29.75384626
+2.65	51.32474629	53.96801574	59.17105136	40.56186762	41.73830077	38.17474374	42.1693475	30.14123363	31.85004	18.88544003
-2.7	-90.89359054	-82.08691805	-81.50918662	-67.35330723	-70.76177659	-65.65266522	-75.86934699	-54.97546729	-57.877	-34.00208984
+2.7	39.34435023	44.39797946	48.17125025	31.83730148	32.32108523	29.68562644	31.9463062	23.83733332	25.1414	15.78786411
-2.75	-100.3440579	-89.6143426	-89.97950803	-73.30488762	-77.13045815	-71.63370415	-83.03090602	-61.4921697	-64.7601	-37.12372803
+2.75	30.88190759	37.6408174	40.58196254	25.56645014	25.56645014	24.31683173	25.97187117	19.44403576	20.46741	13.58543487
-2.8	-114.0980373	-100.5234412	-102.3082845	-81.81139745	-86.24168195	-80.19561288	-93.30105352	-71.00285748	-74.8082	-41.59965674
+2.8	23.24185791	28.3227306	33.68638712	18.74167256	18.74167256	16.91887292	17.74345329	14.25427581	15.0045	10.45928863
-2.85	-124.2722777	-108.5645351	-112.0750148	-87.99268872	-92.86826594	-86.42625179	-100.7873526	-78.04755821	-82.2529	-44.86171064
+2.85	19.35838336	21.7882274	29.74345581	13.82636275	13.82636275	11.59972137	13.8367374	11.46041371	12.09606	8.202672908
-2.9	-138.9679829	-120.1447934	-125.3404531	-96.7636082	-102.2789685	-95.27947449	-111.4416799	-88.22252121	-93.0081	-49.50311117
+2.9	18.75305842	15.48015028	24.41801132	11.41669486	12.2233036	11.50838594	13.8367374	11.46041371	12.09606	5.682786714
-2.95	-149.7626868	-128.6299522	-135.0287149	-103.0928688	-109.0754256	-101.6766735	-119.1520638	-95.68813226	-100.901	-52.86115609
+2.95	18.49334864	15.2204405	20.75607284	11.41669486	12.2233036	11.50838594	13.8367374	11.46041371	12.09606	5.682786714
-3	-165.252353	-140.7807932	-148.9297607	-112.0137095	-118.6623117	-110.7049516	-130.0496515	-106.3773657	-112.204	-57.60586341
+3	18.37214257	15.09923443	16.53568495	11.41669486	12.2233036	11.50838594	13.8367374	11.46041371	12.09606	5.682786714

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.465017284	-9.856951872	-8.964561067	-7.790829474	-6.874409896	-9.347399767	-10.51468283	-11.69860291	-12.83239788
End Shear	82.61337982	94.28396036	84.84952782	71.34225403	67.19139925	90.41980935	100.2494683	105.5711761	110.2921406
-0.05	-8.465017284	-9.856951872	-8.964561067	-8.849160496	-6.874409896	-9.347399767	-10.51468283	-11.69860291	-12.83239788
+0.05	76.42908875	86.01662408	76.61392753	64.21363604	62.19854172	83.70369338	92.61813131	97.12418969	101.0221149
-0.1	-8.465017284	-9.856951872	-8.964561067	-10.65134009	-6.874409896	-9.347399767	-10.51468283	-11.69860291	-12.83239788
+0.1	69.69381129	76.96629295	67.73499009	56.63949728	56.7833091	76.3908876	84.29222229	87.90406915	90.90171836
-0.15	-9.043442145	-9.856951872	-8.964561067	-11.94670397	-7.394421861	-9.347399767	-10.51468283	-11.69860291	-12.83239788
+0.15	64.9421557	70.66441048	61.98655726	51.7136735	52.95965973	71.2281291	78.42447654	81.42560925	83.81295647
-0.2	-13.88802648	-13.89608242	-11.23456649	-15.21626801	-10.40862703	-14.67257943	-14.67457746	-14.65395166	-14.74401295
+0.2	58.39605061	62.10355419	54.19854966	45.07540859	47.68727278	64.11031842	70.34953473	72.53837446	74.12087914
-0.25	-17.32054161	-17.33019869	-14.37582694	-17.71293674	-12.85881551	-18.77897832	-19.56035429	-19.53637305	-19.51366383
+0.25	53.81097626	56.19741935	48.84151272	40.53282657	43.99081846	59.12081357	64.70006046	66.34143554	67.38685744
-0.3	-22.07064514	-22.08245075	-18.63571267	-21.40534562	-18.29642369	-24.57384551	-26.35922819	-26.33617652	-26.3143412
+0.3	47.54212557	48.25516845	41.66145136	34.47491522	38.93171887	52.29311261	56.98532158	57.90957528	58.25974125
-0.35	-26.25289244	-25.42678794	-21.57521831	-24.08231724	-22.14168055	-29.63592131	-31.15793238	-31.13559704	-31.11443879
+0.35	43.18654583	43.08748506	36.78820761	30.39285991	35.41276638	47.54480896	51.63216544	52.0816549	52.07186575
-0.4	-32.89811958	-30.02230122	-26.38776216	-29.06471544	-27.45220132	-36.81576733	-38.68622127	-38.62168962	-38.59664174
+0.4	37.28302938	36.25169076	30.94697558	25.45835831	30.63739319	41.10234238	44.38687995	44.23615231	44.22766454
-0.45	-37.56864232	-33.48179764	-30.52498245	-32.46359359	-31.18152812	-41.8587414	-44.50998042	-44.39685261	-44.37267451
+0.45	33.21986702	31.61678988	27.35784343	22.42238358	27.34625597	36.66317024	39.40805493	39.28828792	39.27965981
-0.5	-43.97763105	-39.9392421	-36.21245705	-37.00482371	-36.29453002	-48.77412485	-52.51057605	-52.35418697	-52.3269315
+0.5	27.76976676	25.63084188	22.68236016	18.47549761	22.92503815	30.70106504	32.74146848	32.66165956	32.65291686
-0.55	-48.4479549	-45.8858719	-40.18710261	-40.40764059	-39.85761357	-53.59423336	-58.09782407	-58.73293143	-58.70672513
+0.55	24.06192499	22.09989839	19.51255707	15.82285232	19.9120283	26.63897545	28.2150239	28.16118935	28.15244011
-0.6	-54.53263968	-54.12807298	-46.03601987	-45.21295682	-44.70265234	-60.15003928	-65.71268144	-67.45659749	-68.12708953
+0.6	19.15332166	18.02168241	15.04760898	12.35565876	15.91540648	21.25234421	22.23638109	22.21510902	22.20645839
-0.65	-58.7398538	-59.88142673	-50.98199325	-49.32882689	-48.04918046	-64.67933573	-70.98537413	-73.51957772	-75.03108409
+0.65	15.86372514	15.41527884	12.2770785	10.06355594	13.23083847	17.63527841	18.43471174	18.42674345	18.41920277
-0.7	-64.41213579	-67.9950159	-59.09514006	-56.1544875	-52.55582819	-70.78044487	-78.105242	-81.73992411	-84.42657532
+0.7	11.93409784	11.86196051	9.427582997	7.587232846	9.72924858	13.02026587	13.82810963	13.82034511	13.81300342
-0.75	-68.29333138	-74.21050333	-64.94839506	-61.16929682	-55.6354903	-74.95098692	-82.98536342	-87.39964143	-90.92166747
+0.75	9.632316012	9.563256866	7.612043521	6.075279873	7.423427507	10.3523363	10.77267251	10.76513552	10.75801175
-0.8	-73.46513935	-82.63494887	-72.90194519	-67.69216526	-59.73330325	-80.50228637	-89.50099677	-94.99417434	-99.67637164
+0.8	6.644512928	6.580408166	5.238357363	4.159379576	5.168159685	6.904343772	6.911116537	6.904841247	6.898907083
-0.85	-76.95738932	-88.4325852	-78.39064138	-72.10191646	-62.49578682	-84.24612637	-93.91049941	-100.1631331	-105.6649681
+0.85	4.627885719	4.628370493	3.684957668	2.911385891	3.869234825	4.659041463	4.451861467	4.659080636	4.653439709
-0.9	-81.54064168	-96.20745889	-86.09236836	-77.9991285	-66.11433608	-89.15248965	-99.71265464	-107.0093546	-113.6422691
+0.9	2.180593072	2.161908822	1.722175288	1.359269762	2.099771129	2.10720898	2.103466644	2.108540179	1.976512311
-0.95	-84.58104161	-101.4950022	-91.9277974	-82.8824373	-68.50933028	-92.40168983	-103.5735134	-111.6000581	-119.0267734
+0.95	0.902186388	0.892635876	0.820744769	0.627367449	1.125034754	0.871919298	0.870004891	0.872420408	0.880878862
-1	-88.48765858	-108.4911751	-100.2843079	-89.69451197	-71.57817527	-96.56799799	-108.5529462	-117.5754813	-126.0900301
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.80E+01	1.08E+02	9.91E+01	8.87E+01	7.12E+01	9.60E+01	107.8708073	116.7526074	1.25E+02
-2.05	-7.43E-01	-7.33E-01	-6.76E-01	-5.14E-01	-9.26E-01	-7.18E-01	-0.716031182	-0.718365948	-7.21E-01
+2.05	8.52E+01	1.03E+02	9.31E+01	8.39E+01	6.90E+01	9.30E+01	104.3133358	112.4836589	1.20E+02
-2.1	-2.514653261	-2.49558848	-1.987653374	-1.567192291	-2.412878826	-2.429902915	-2.426080873	-2.431268987	-2.436171064
+2.1	8.09E+01	9.51E+01	8.51E+01	7.72E+01	6.56E+01	8.85E+01	98.9086466	106.0572723	1.13E+02
-2.15	-4.277805443	-4.257752315	-3.389957518	-2.676004326	-3.621525128	-4.133000307	-4.128981244	-4.194073259	-4.228455735
+2.15	77.63209797	89.56495801	79.4645202	72.96125884	63.02894206	84.96892842	94.763551	101.1663455	106.8305908
-2.2	-7.055368139	-6.990304134	-5.564474559	-4.404733228	-5.439849032	-7.377293496	-7.384173163	-7.377806042	-7.371770993
+2.2	72.74338671	81.44899275	71.78104172	66.78774869	59.16180405	79.72801166	88.59079176	93.93043551	98.44729009
-2.25	-9.189919012	-9.121311376	-7.260278904	-5.786306177	-6.984313941	-9.840647918	-10.18824965	-10.18072372	-10.17357852
+2.25	69.04868183	75.43080271	66.09923441	62.17025598	56.23434776	75.76220409	83.93609326	88.50502979	92.1931078

-2.3	**-12.41212896**	**-12.33918381**	**-9.807102503**	**-7.902898746**	**-10.21215005**	**-13.5754005**	**-14.465441**	**-14.45758828**	**-14.45014425**
+2.3	**63.61547125**	**66.72988159**	**57.90541955**	**55.16948366**	**51.92318481**	**69.92394158**	**77.10451035**	**80.58209117**	**83.10074841**
-2.35	**-15.23084541**	**-14.85742801**	**-11.76036095**	**-9.624997147**	**-12.71375674**	**-16.93864247**	**-17.7564523**	**-17.74844664**	**-17.74085365**
+2.35	**59.56331286**	**61.01371855**	**51.9557603**	**50.13513909**	**48.70372183**	**65.56542649**	**72.01823725**	**74.70969861**	**76.38889212**
-2.4	**-19.83585479**	**-18.55835937**	**-15.62370563**	**-12.83366439**	**-16.4718226**	**-22.00206518**	**-23.06657471**	**-23.04085129**	**-23.03209724**
+2.4	**53.67369258**	**52.95971573**	**45.03198477**	**44.40532908**	**44.01896743**	**59.22493554**	**64.6370751**	**66.2222274**	**66.7241088**
-2.45	**-23.34256639**	**-21.41665325**	**-18.78259507**	**-15.31051663**	**-19.32700196**	**-25.85027502**	**-27.33774019**	**-27.28874744**	**-27.27991022**
+2.45	**49.32697523**	**47.07179465**	**40.9699928**	**41.07340644**	**40.55780033**	**54.54166073**	**59.19726359**	**59.99034797**	**59.964484**
-2.5	**-28.53308416**	**-26.35951705**	**-23.33563113**	**-19.02394587**	**-23.54485826**	**-31.536713**	**-33.67421278**	**-33.58883938**	**-33.58001483**
+2.5	**43.06904118**	**39.02307614**	**35.40598069**	**36.37025152**	**35.56990032**	**47.79406242**	**51.37576699**	**51.20464899**	**51.18168213**
-2.55	**-32.42656407**	**-30.71883188**	**-26.67573331**	**-21.84343261**	**-26.7033035**	**-35.79594782**	**-38.43673313**	**-38.32282263**	**-38.31406688**
+2.55	**38.49069**	**34.41013807**	**31.34307154**	**33.12656879**	**31.9173507**	**42.85396773**	**45.66043024**	**45.53772822**	**45.51385347**
-2.6	**-38.11452367**	**-37.20707242**	**-31.76292729**	**-26.14465592**	**-31.31051507**	**-42.01027126**	**-45.40649406**	**-45.33029835**	**-45.32019209**
+2.6	**31.95250967**	**29.37065216**	**25.55144784**	**28.36786879**	**26.69672197**	**35.79438171**	**37.50784378**	**37.45318583**	**37.42808357**
-2.65	**-42.33183683**	**-42.0904827**	**-35.93582101**	**-29.66967442**	**-34.72192651**	**-46.61259222**	**-50.58234561**	**-50.9410228**	**-50.93108689**
+2.65	**27.20543928**	**26.08778863**	**22.15078538**	**24.80907629**	**22.90311146**	**30.6653946**	**32.10743647**	**32.08532582**	**32.06441113**
-2.7	**-48.42914661**	**-49.36848607**	**-42.66589039**	**-35.31929244**	**-39.64804726**	**-53.25968288**	**-58.07615036**	**-59.09943287**	**-59.54490977**
+2.7	**21.39427397**	**21.4061061**	**18.03559564**	**20.88022103**	**17.52020097**	**23.76334063**	**25.38980781**	**25.36670687**	**25.34483581**
-2.75	**-52.90740937**	**-55.04229204**	**-47.79521192**	**-39.64686974**	**-43.26210303**	**-58.13715193**	**-63.58730326**	**-65.12289798**	**-66.06509247**
+2.75	**18.00101843**	**18.01131734**	**14.99263505**	**18.19837932**	**13.63583103**	**19.59353133**	**20.53300867**	**20.50923315**	**20.48674279**
-2.8	**-59.32597511**	**-63.31014458**	**-55.29438731**	**-46.0059371**	**-48.43671706**	**-65.1218878**	**-71.49590749**	**-73.79789712**	**-75.49192977**
+2.8	**13.19589277**	**13.20396075**	**10.5950002**	**14.7027237**	**9.978408603**	**13.84506474**	**13.84704922**	**13.82639552**	**13.91656902**
-2.85	**-64.0022558**	**-69.42577424**	**-60.85794207**	**-50.74805111**	**-52.20309293**	**-70.20655992**	**-77.26434605**	**-80.14660413**	**-82.41561939**
+2.85	**9.73516254**	**9.856951533**	**8.964559225**	**12.40471061**	**7.825196477**	**9.710052415**	**10.51469093**	**11.69860798**	**12.83239263**
-2.9	**-70.65402358**	**-78.2476591**	**-68.90501919**	**-57.64363956**	**-57.55575433**	**-77.43382214**	**-85.47850449**	**-89.21569813**	**-92.33905604**
+2.9	**8.465007073**	**9.856951533**	**8.964559225**	**10.38698886**	**6.874401149**	**9.347397139**	**10.51469093**	**11.69860798**	**12.83239263**
-2.95	**-75.46539578**	**-84.71289114**	**-75.31150285**	**-63.09955628**	**-61.42414973**	**-82.65775548**	**-91.42616164**	**-95.80215209**	**-99.56866193**
+2.95	**8.465007073**	**9.856951533**	**8.964559225**	**9.072530205**	**6.874401149**	**9.347397139**	**10.51469093**	**11.69860798**	**12.83239263**
-3	**-82.2622692**	**-93.95962751**	**-84.59667847**	**-71.04981257**	**-66.88442148**	**-90.03242357**	**-99.83662847**	**-105.1428434**	**-109.8520625**
+3	**8.465007073**	**9.856951533**	**8.964559225**	**7.790838671**	**6.874401149**	**9.347397139**	**10.51469093**	**11.69860798**	**12.83239263**

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-16.72220089	-17.65562938	-11.1641	-13.9245	-14.3175
End Shear	148.9865759	149.6435555	106.8	129.9643	132.673
-0.05	-16.72220089	-17.65562938	-11.1641	-13.9245	-14.3175
+0.05	134.1018362	134.4661629	96.98338	118.0873	120.1155
-0.1	-16.72220089	-17.65562938	-11.1641	-13.9245	-14.3175
+0.1	117.8834409	118.8163654	86.26128	105.1029	106.3949
-0.15	-16.72220089	-17.65562938	-11.1641	-13.9245	-14.3175
+0.15	107.0290341	107.9931669	78.82806	96.09319	96.90621
-0.2	-16.72220089	-17.65562938	-15.9282	-16.9838	-16.9857
+0.2	92.93802379	94.75604102	68.77895	83.90054	84.19379
-0.25	-21.96578087	-20.49590753	-19.8645	-22.2566	-22.2588
+0.25	83.27569784	85.61136744	61.88294	75.52416	75.76633
-0.3	-29.28243825	-28.57204204	-26.5445	-29.5695	-29.6832
+0.3	70.47848081	73.28342867	53.00933	64.72625	64.48051
-0.35	-34.72212459	-34.21575484	-31.2668	-34.7278	-35.3859
+0.35	62.4003162	64.84961385	47.1122	57.46335	56.81736
-0.4	-42.58274218	-42.91332368	-37.7733	-41.8329	-43.7381
+0.4	51.95062704	53.61430237	41.27195	47.80563	48.67592
-0.45	-48.97626873	-50.72152053	-42.3313	-46.9687	-49.6021
+0.45	45.35411913	46.34247579	37.07989	41.64855	43.28572
-0.5	-59.33693364	-61.97740141	-48.5643	-54.2608	-57.6397
+0.5	36.62192371	37.03548915	31.2285	34.37386	36.29154
-0.55	-67.61170262	-70.90626352	-53.6009	-60.3911	-63.8672
+0.55	31.16470799	31.27820418	27.36417	30.12641	31.52171
-0.6	-78.95990903	-84.00736693	-60.9362	-71.3959	-72.7809
+0.6	24.09130649	23.86260815	22.21247	24.4352	25.18959
-0.65	-88.21647216	-94.04038499	-66.2012	-80.0583	-79.2079
+0.65	20.27765255	19.4378413	18.7319	20.44711	20.9322
-0.7	-101.4943121	-108.4047311	-74.5827	-91.8974	-91.8634
+0.7	15.26758705	14.23826256	14.16099	15.41801	15.53522
-0.75	-112.4747459	-118.8931053	-81.5634	-100.275	-101.16
+0.75	11.9400166	11.14528881	11.12636	12.08	12.18955
-0.8	-127.4343997	-133.3810303	-92.0933	-112.905	-114.306
+0.8	7.483182943	7.164472541	7.567578	8.072083	7.811871
-0.85	-137.7875449	-143.4477944	-99.3716	-121.629	-123.367
+0.85	4.724380747	4.783438001	5.328165	5.683376	5.023564
-0.9	-153.0725692	-156.9095219	-109.179	-133.376	-136.361
+0.9	2.171893446	2.03699666	2.49819	2.664736	2.225226
-0.95	-164.4170421	-167.8979276	-115.885	-141.402	-145.272
+0.95	0.929154208	1.042320187	1.033004	1.101871	0.920427
-1	-179.6579806	-184.0741953	-124.813	-152.077	-157.174
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.78E+02	1.82E+02	1.24E+02	1.51E+02	1.56E+02
-2.05	-7.65E-01	-8.56E-01	-8.50E-01	-9.07E-01	-7.58E-01
+2.05	1.67E+02	1.70E+02	1.17E+02	142.9633	1.47E+02
-2.1	-2.516921451	-2.36612028	-2.88106	-3.07313	-2.56564
+2.1	1.51E+02	1.55E+02	1.08E+02	131.7283	1.35E+02
-2.15	-4.360779085	-4.361592666	-4.90294	-5.2298	-4.49708
+2.15	139.8162129	145.3968578	100.7966	123.3364	125.2527
-2.2	-8.24344236	-7.707502521	-8.03777	-8.57362	-8.40025
+2.2	125.3231163	131.3040683	90.60782	111.124	112.5262
-2.25	-11.30267034	-10.55140646	-10.5453	-11.4406	-11.5485
+2.25	114.6363941	120.9469466	83.0856	102.1018	102.9881

-2.3	-15.96078374	-14.88097876	-14.7934	-16.1133	-16.232
+2.3	99.58905439	106.3876336	73.18842	90.22349	89.97424
-2.35	-19.53999197	-18.58564657	-18.0589	-19.7022	-20.1111
+2.35	90.12683392	96.12655787	67.21265	81.76598	80.57271
-2.4	-24.88245848	-24.84705095	-22.9312	-25.2259	-26.0709
+2.4	77.35268902	82.00301899	59.84147	69.63971	71.46961
-2.45	-30.16922438	-30.17594948	-26.6115	-29.2732	-30.5945
+2.45	69.24597675	72.67450102	54.59204	61.74402	65.0933
-2.5	-37.83524681	-38.32467793	-32.0211	-35.2447	-37.2717
+2.5	57.66229873	60.17525154	47.68271	53.23468	56.50155
-2.55	-44.07348695	-44.97341994	-36.0541	-40.5534	-42.2682
+2.55	50.31278594	52.27103592	43.23012	48.0256	50.75978
-2.6	-53.30777636	-55.17712738	-42.1271	-49.1511	-49.7408
+2.6	42.3040305	41.34056489	36.84946	40.82413	42.55095
-2.65	-60.82888972	-63.38930547	-46.2375	-56.0505	-55.3314
+2.65	36.71243941	35.32136013	32.2015	35.74855	36.58446
-2.7	-72.17264353	-75.00938115	-54.2338	-66.2176	-66.0588
+2.7	28.33438912	27.42041684	25.59081	28.52763	28.64152
-2.75	-81.3918274	-83.81605445	-60.5381	-73.8896	-74.1212
+2.75	23.01338793	22.07756112	20.80961	23.30364	23.30599
-2.8	-94.91782234	-96.61725334	-70.1916	-85.6154	-85.9185
+2.8	16.72219693	17.65562877	15.13492	16.09256	15.92418
-2.85	-104.9841287	-106.0652176	-77.3704	-94.3255	-95.0478
+2.85	16.72219693	17.65562877	11.16624	13.92448	14.31753
-2.9	-120.1655227	-121.01899	-87.776	-106.938	-108.331
+2.9	16.72219693	17.65562877	11.16407	13.92448	14.31753
-2.95	-131.7515349	-132.1986041	-95.4355	-116.214	-118.132
+2.95	16.72219693	17.65562877	11.16407	13.92448	14.31753
-3	-148.5101625	-149.3485283	-106.435	-129.523	-132.24
+3	16.72219693	17.65562877	11.16407	13.92448	14.31753

2-Span: Moment (Max and Min) Raw Data Results – 60' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.38E-13	*-2.21E-13*	*-2.87E-13*	-2.21E-13	-2.38E-13	-1.37E-13	-1.70E-13	-1.44E-13	-1.52E-13	-1.09E-13
End Shear	1.86E-13	*9.49E-14*	*2.15E-13*	7.03E-14	8.31E-14	8.29E-14	9.32E-14	7.13E-14	7.50E-14	7.58E-14
-0.05	-55.1162755	*-45.29768199*	*-49.60655547*	-34.2500551	-36.669941	-34.5251953	-41.5102123	-34.3812536	-36.2881658	-17.04835242
+0.05	459.2885527	*395.1258544*	*414.7578396*	313.0769688	331.3066338	308.8719894	362.0902559	291.5833036	307.4810791	160.6063711
-0.1	-110.232551	*-90.59536398*	*-99.21311094*	-68.5001103	-73.3398821	-69.0503907	-83.0204246	-68.7625072	-72.5763316	-34.09670483
+0.1	849.0153797	*738.2660411*	*766.7115733*	580.6158336	613.9840142	572.142664	669.8923644	529.3077552	558.0194948	297.0140241
-0.15	-165.3488265	*-135.893046*	*-148.8196664*	-102.750165	-110.009823	-103.575586	-124.530637	-103.143761	-108.864497	-51.14505725
+0.15	1170.503754	*1028.891574*	*1057.046388*	804.4588155	849.5559751	791.0167795	923.6955019	716.0944482	754.7448776	409.6713853
-0.2	-220.465102	*-181.190728*	*-198.4262219*	-137.000221	-146.679764	-138.100781	-166.040849	-137.525014	-145.152663	-68.19340966
+0.2	1425.93777	*1267.677529*	*1287.305579*	984.2695366	1037.957548	965.5595931	1124.305517	854.3381896	900.1577323	499.1868011
-0.25	-275.5813775	*-226.48841*	*-248.0327774*	-171.250276	-183.349705	-172.625977	-207.551061	-171.906268	-181.440829	-85.24176208
+0.25	1617.908846	*1455.571912*	*1459.390483*	1121.288727	1180.581736	1097.119219	1295.450213	982.2730033	1036.678783	566.3284549
-0.3	-330.697653	*-271.7860919*	*-297.6393328*	-205.500331	-220.019646	-207.151172	-249.061274	-206.287522	-217.728995	-102.2901145
+0.3	1747.8145	*1593.795761*	*1575.560726*	1217.051591	1279.138634	1205.81319	1423.989188	1065.776938	1126.246542	612.0246217
-0.35	-385.8139285	*-317.0837739*	*-347.2458883*	-239.750386	-256.689587	-241.676367	-290.571486	-240.668775	-254.01716	-119.3384669
+0.35	1846.157684	*1683.843096*	*1664.279014*	1277.522235	1352.564309	1279.021316	1503.942144	1117.995647	1180.352418	637.788014
-0.4	-440.930204	*-362.3814559*	*-396.8524438*	-274.000441	-293.359528	-276.201563	-332.081698	-275.050029	-290.305326	-136.3868193
+0.4	1890.684599	*1727.480936*	*1703.861465*	1317.116804	1391.138522	1312.987123	1537.938647	1137.031151	1201.548519	644.5161477
-0.45	-496.0464795	*-407.6791379*	*-446.4589992*	-308.250496	-330.029469	-310.726758	-373.591911	-309.431283	-326.593492	-153.4351717
+0.45	1878.805493	*1726.749261*	*1692.65854*	1319.557692	1390.186768	1309.973929	1527.965708	1115.464864	1179.64499	633.4516682
-0.5	-551.162755	*-452.9768199*	*-496.0655547*	-342.500551	-366.69941	-345.251953	-415.102123	-343.812536	-362.881658	-170.4835242
+0.5	1855.839978	*1698.054899*	*1670.255973*	1293.410282	1364.504043	1286.330392	1503.998781	1074.642354	1136.290498	623.3942443
-0.55	-606.2790305	*-498.2745019*	*-545.6721102*	-376.750607	-403.369351	-379.777149	-456.612335	-378.19379	-399.169824	-187.5318766
+0.55	1788.202226	*1629.703553*	*1611.647385*	1237.498529	1307.878428	1234.976235	1448.52715	1063.228592	1123.554578	610.8238229
-0.6	-661.395306	*-543.5721839*	*-595.2786657*	-411.000662	-440.039292	-414.302344	-498.122547	-412.575043	-435.457989	-204.580229
+0.6	1668.686456	*1522.037607*	*1504.347842*	1150.893571	1217.655415	1151.644311	1353.339207	1007.790951	1064.237221	579.6263944
-0.65	-716.5115815	*-588.8698659*	*-644.8852211*	-445.250717	-476.709233	-448.827539	-539.63276	-446.956297	-471.746155	-221.6285814
+0.65	1499.160286	*1377.932444*	*1351.870086*	1046.036921	1097.176469	1039.41213	1222.114529	911.4787161	963.4960203	531.2704692
-0.7	-771.627857	*-634.1675479*	*-694.4917766*	-479.500772	-513.379174	-483.352735	-581.142972	-481.337551	-508.034321	-238.6769338
+0.7	1291.567119	*1200.537501*	*1165.185308*	915.4454553	958.1878508	901.6949819	1058.895612	792.8647462	837.4662844	467.3844954
-0.75	-826.7441325	*-679.4652299*	*-744.0983321*	-513.750827	-550.049115	-517.87793	-622.653184	-515.718804	-544.322487	-255.7252862
+0.75	1046.11781	*993.274716*	*944.3887773*	760.9520123	793.5044621	742.2068047	868.086781	636.8043329	671.9598888	389.7571685
-0.8	-881.860408	*-724.7629119*	*-793.7048875*	-548.000882	-586.719057	-552.403125	-664.163397	-550.100058	-580.610652	-272.7736386
+0.8	758.7283129	*759.8388886*	*685.6789516*	586.3189076	606.4091164	564.9606261	654.4550131	447.5226582	471.4644723	300.33658
-0.85	-952.5833583	*-785.6672687*	*-928.8682986*	-582.250938	-623.388998	-586.928321	-705.673609	-584.481311	-616.898818	-289.8219911
+0.85	463.1461812	*519.8045548*	*417.9621425*	395.6027569	401.2136806	374.2682928	423.1294854	298.3162293	314.5992596	205.4809473
-0.9	-1058.137082	*-881.4023989*	*-1190.301259*	-616.500993	-660.058939	-621.453516	-747.183821	-618.862565	-653.186984	-306.8703435
+0.9	255.6326184	*296.6365123*	*230.0693561*	225.4252349	225.4252349	205.8527641	216.7653941	171.3888367	180.4093018	136.2533304
-0.95	-1192.032002	*-1005.478725*	*-1506.021117*	-650.751048	-696.72888	-655.978711	-788.694033	-653.243819	-689.47515	-323.9186959
+0.95	119.7100098	*94.5933629*	*107.7390087*	73.8398582	73.8398582	58.97895284	58.97895284	56.01922014	58.96760014	66.6150404
-1	-1349.669028	*-1153.294523*	*-1864.358295*	-685.001687	-733.398807	-690.503898	-830.204228	-753.780733	-799.221145	-340.9671931
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-1349.669028	*-1153.294523*	*-1864.358295*	-685.001687	-733.398807	-690.503898	-830.204228	-753.780733	-799.221145	-340.9671931
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-1192.034894	*-1005.479114*	*-1506.021218*	-650.751603	-696.728292	-655.977989	-788.694016	-653.243588	-689.475241	-323.918833
+2.05	119.6847714	*94.65616135*	*107.7390068*	73.80025458	73.80025458	58.9477981	58.95677971	55.99401241	58.9410657	66.17385081
-2.1	-1058.139822	*-881.4027671*	*-1190.301213*	-616.501518	-660.058381	-621.452832	-747.183804	-618.862347	-653.187071	-306.8704728
+2.1	255.6094249	*296.6634705*	*230.069469*	225.4457541	225.4457541	205.8924717	216.8152578	171.4019264	180.4230804	135.4393378
-2.15	-952.585945	*-785.6676141*	*-928.8818643*	-582.251433	-623.38847	-586.927674	-705.673591	-584.481106	-616.8989	-289.8221127
+2.15	464.3311136	*519.8359371*	*416.9692476*	395.6177515	401.2257195	374.2554246	423.1720142	298.3269798	314.6103146	204.3591139
-2.2	-881.8628475	*-724.763241*	*-793.7128833*	-548.001349	-586.71856	-552.402516	-664.163379	-550.099864	-580.61073	-272.7737525
+2.2	760.2396978	*759.8727996*	*683.327783*	586.3350996	606.4220932	564.949915	654.4997606	447.5424033	471.4859047	300.3252459

-2.25	**-826.7464198**	***-679.4655377***	***-744.1058284***	**-513.751264**	**-550.048649**	**-517.877358**	**-622.653167**	**-515.718623**	**-544.322559**	**-255.7253924**
+2.25	**1047.536583**	***993.3091163***	***942.7052981***	**760.9674352**	**793.5162881**	**742.1963595**	**868.1314902**	**636.820388**	**671.9774808**	**389.7455843**
-2.3	**-771.6299921**	***-634.1678344***	***-694.4987736***	**-479.50118**	**-513.378738**	**-483.3522**	**-581.142955**	**-481.337382**	**-508.034389**	**-238.6770322**
+2.3	**1292.831167**	***1200.570514***	***1164.214012***	**915.4583083**	**958.1966175**	**901.6828766**	**1058.938**	**792.8753958**	**837.4782192**	**467.3723816**
-2.35	**-716.5135643**	***-588.8701311***	***-644.8917187***	**-445.251095**	**-476.708827**	**-448.827042**	**-539.632743**	**-446.956141**	**-471.746218**	**-221.6286721**
+2.35	**1500.806198**	***1377.961999***	***1348.479544***	**1046.045339**	**1097.171824**	**1039.396573**	**1222.152228**	**911.4822325**	**963.5004603**	**531.2573345**
-2.4	**-661.3971366**	***-543.5724278***	***-595.2846639***	**-411.001011**	**-440.038916**	**-414.301885**	**-498.12253**	**-412.5749**	**-435.458048**	**-204.580312**
+2.4	**1670.124647**	***1522.061987***	***1501.376641***	**1150.889409**	**1217.645497**	**1151.623623**	**1353.370401**	**1007.780231**	**1064.22661**	**579.6120978**
-2.45	**-606.2807089**	***-498.2747245***	***-545.677609***	**-376.750926**	**-403.369006**	**-379.776727**	**-456.612318**	**-378.193659**	**-399.169877**	**-187.5319518**
+2.45	**1789.380546**	***1629.721565***	***1609.192458***	**1237.488086**	**1307.861481**	**1234.949029**	**1448.550005**	**1063.209038**	**1123.534666**	**610.808192**
-2.5	**-551.1642812**	***-452.9770212***	***-496.0705542***	**-342.500841**	**-366.699095**	**-345.251569**	**-415.102106**	**-343.812418**	**-362.881706**	**-170.4835917**
+2.5	**1854.692287**	***1698.064912***	***1668.470076***	**1293.392185**	**1364.478641**	**1286.363843**	**1504.011773**	**1074.668555**	**1136.318722**	**623.3769752**
-2.55	**-496.0478535**	***-407.6793179***	***-446.4634993***	**-308.250757**	**-330.029184**	**-310.726411**	**-373.591894**	**-309.431176**	**-326.593536**	**-153.4352315**
+2.55	**1878.030336**	***1726.745973***	***1692.436423***	**1319.581054**	**1390.217717**	**1310.014138**	**1527.958456**	**1115.488979**	**1179.669665**	**633.4433806**
-2.6	**-440.9314257**	***-362.3816146***	***-396.8564445***	**-274.000672**	**-293.359273**	**-276.201253**	**-332.081682**	**-275.049935**	**-290.305365**	**-136.3868714**
+2.6	**1889.601377**	***1727.468323***	***1703.711535***	**1317.130635**	**1391.159391**	**1313.018351**	**1537.920822**	**1137.047562**	**1201.564998**	**644.5066154**
-2.65	**-385.814998**	***-317.0839113***	***-347.2493896***	**-239.750588**	**-256.689362**	**-241.676096**	**-290.571469**	**-240.668694**	**-254.017195**	**-119.3385113**
+2.65	**1844.959069**	***1683.819685***	***1664.233418***	**1277.525615**	**1352.574148**	**1279.042224**	**1503.912087**	**1118.002928**	**1180.359194**	**637.7768452**
-2.7	**-330.6985703**	***-271.786208***	***-297.6423348***	**-205.500503**	**-220.019452**	**-207.150938**	**-249.061257**	**-206.287453**	**-217.729024**	**-102.2901511**
+2.7	**1747.388265**	***1593.760926***	***1574.694552***	**1217.041464**	**1279.133992**	**1205.823076**	**1424.014872**	**1065.770849**	**1126.239147**	**612.0376017**
-2.75	**-275.5821426**	***-226.4885047***	***-248.0352799***	**-171.250418**	**-183.349541**	**-172.62578**	**-207.551045**	**-171.906212**	**-181.440854**	**-85.24179097**
+2.75	**1618.348219**	***1455.524705***	***1458.670533***	**1121.267078**	**1180.564819**	**1097.115746**	**1295.461692**	**982.2563236**	**1036.660148**	**566.3395573**
-2.8	**-220.4657149**	***-181.1908014***	***-198.4282251***	**-137.000334**	**-146.67963**	**-138.100622**	**-166.040833**	**-137.524971**	**-145.152683**	**-68.19343083**
+2.8	**1427.37249**	***1267.617318***	***1286.993446***	**984.235444**	**1037.927383**	**965.5440416**	**1124.300772**	**854.3335657**	**900.1530757**	**499.1959305**
-2.85	**-165.3492871**	***-135.8930981***	***-148.8211702***	**-102.750249**	**-110.009719**	**-103.575464**	**-124.530621**	**-103.14373**	**-108.864513**	**-51.14507068**
+2.85	**1171.959584**	***1028.817876***	***1056.796138***	**804.411846**	**849.5120331**	**790.9885094**	**923.6755151**	**716.0781731**	**754.7279196**	**409.6783146**
-2.9	**-110.2328594**	***-90.59539479***	***-99.21411536***	**-68.5001646**	**-73.3398084**	**-69.0503066**	**-83.0204083**	**-68.7624885**	**-72.5763421**	**-34.09671054**
+2.9	**850.0024407**	***738.1781377***	***766.6177995***	**580.5815019**	**613.9253536**	**572.1008711**	**669.8562303**	**529.3350748**	**558.0483759**	**297.0186424**
-2.95	**-55.1164317**	***-45.29769149***	***-49.60706051***	**-34.25008**	**-36.6698976**	**-34.5251488**	**-41.5101961**	**-34.3812473**	**-36.2881716**	**-17.0483504**
+2.95	**459.7885852**	***395.0238994***	***414.5199944***	**313.0910191**	**331.3217264**	**308.8858356**	**362.106944**	**291.597264**	**307.4958405**	**160.6087678**
-3	**-5.44E-13**	***-3.51E-13***	***-4.44E-13***	**-3.32E-13**	**-3.64E-13**	**-2.69E-13**	**-3.18E-13**	**-2.83E-13**	**-2.99E-13**	**-1.85E-13**
+3	**2.42E-13**	***1.60E-13***	***2.18E-13***	**1.44E-13**	**1.57E-13**	**1.29E-13**	**1.54E-13**	**1.27E-13**	**1.34E-13**	**7.38E-14**

2-Span: Moment (Max and Min) Raw Data Results - 60' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.12E-13	-1.30E-13	-1.22E-13	-9.77E-14	-1.37E-13	-1.16E-13	-1.16E-13	-1.16E-13	-1.14E-13
End Shear	5.94E-14	6.42E-14	7.97E-14	7.04E-14	7.83E-14	6.38E-14	7.07E-14	7.14E-14	5.59E-14
-0.05	-25.39505185	-29.57085562	-26.8936832	-23.37248842	-20.62322969	-28.0421993	-31.5440485	-35.0958087	-38.4971936
+0.05	229.2872662	258.0498722	229.8417826	194.15945	186.5956252	251.1110801	277.8543939	291.8435611	303.5720552
-0.1	-50.7901037	-59.14171123	-53.7873664	-46.74497685	-41.24645937	-56.0843986	-63.088097	-70.1916174	-76.9943873
+0.1	423.9035573	469.4622382	413.410077	351.2035697	345.3173661	464.8717244	513.1883158	539.3762111	564.197423
-0.15	-76.18515556	-88.71256685	-80.6810496	-70.11746527	-61.86968906	-84.12659791	-94.6321454	-105.287426	-115.491581
+0.15	585.3377506	636.3551377	558.1361604	476.2547442	476.6369376	642.4907192	707.5161748	767.0293755	798.132571
-0.2	-101.5802074	-118.2834225	-107.5747328	-93.48995369	-82.49291875	-112.1687972	-126.176194	-140.383235	-153.988775
+0.2	713.6867288	761.3764552	665.1731484	569.5671638	581.6112391	783.9421033	860.877042	948.5414185	996.3923956
-0.25	-126.9752593	-147.8542781	-134.468416	-116.8624421	-103.1161484	-140.2109965	-157.720242	-175.479044	-192.485968
+0.25	809.8638412	853.237173	756.1755901	648.710727	660.8055758	890.3449918	980.0709061	1086.519301	1160.880631
-0.3	-152.3703111	-177.4251337	-161.3620992	-140.2349305	-123.7393781	-168.2531958	-189.264291	-210.574852	-230.983162
+0.3	875.1650685	920.6099046	810.8149047	698.4871441	715.0327	973.1665654	1077.94749	1181.342893	1277.252705
-0.35	-177.765363	-206.9959893	-188.2557824	-163.607419	-144.3626078	-196.2953951	-220.808339	-245.670661	-269.480355
+0.35	922.6452493	950.4281516	831.7641514	720.3158784	745.4775219	1031.997257	1138.058719	1248.108225	1348.045184
-0.4	-203.1604148	-236.5668449	-215.1494656	-186.9799074	-164.9858375	-224.3375944	-252.352388	-280.76647	-307.977549
+0.4	945.9376032	948.9454499	822.0048045	716.5309181	753.5062305	1058.875085	1162.373496	1284.20797	1379.006077
-0.45	-228.5554667	-266.1377005	-242.0431488	-210.3523958	-185.6090672	-252.3797937	-283.896436	-315.862278	-346.474743
+0.45	941.7595221	922.5948609	836.1979979	728.7338137	740.665972	1055.667979	1153.775777	1281.790274	1386.121772
-0.5	-253.9505185	-295.7085562	-268.936832	-233.7248842	-206.2322969	-280.421993	-315.440485	-350.958087	-384.971936
+0.5	924.5786523	891.0063061	823.4959681	716.3044752	733.3771838	1036.757676	1134.231027	1255.922375	1354.694802
-0.55	-279.3455704	-325.2794118	-295.8305152	-257.0973727	-226.8555266	-308.4641923	-346.984533	-386.053896	-423.46913
+0.55	890.0443827	887.7112188	783.8822413	682.2329167	713.9941919	996.1178261	1094.358995	1205.681118	1293.682953
-0.6	-304.7406222	-354.8502674	-322.7241984	-280.4698611	-247.4787562	-336.5063916	-378.528582	-421.149705	-461.966324
+0.6	830.9262899	848.8934056	733.1365225	637.594829	673.5701844	929.1615235	1023.850247	1121.750134	1211.670514
-0.65	-330.1356741	-384.421123	-349.6178816	-303.8423495	-268.1019859	-364.5485909	-410.07263	-456.245513	-500.463517
+0.65	750.2501625	782.4055902	683.8736173	591.1131888	613.8178252	838.4222289	925.2993605	1009.284833	1093.712819
-0.7	-355.5307259	-413.9919786	-376.5115648	-327.2148379	-288.7252156	-392.5907902	-441.616679	-491.341322	-538.960711
+0.7	656.0861078	684.1702501	600.5185149	515.9608952	536.6309604	726.6781156	801.5253277	877.2519582	943.5993293
-0.75	-380.9257778	-443.5628342	-403.405248	-350.5873264	-309.3484453	-420.6329895	-473.160727	-526.437131	-577.457905
+0.75	542.3138193	554.0659506	485.2644358	414.2495439	444.0844705	596.9517473	655.8945455	718.5446904	765.4701162
-0.8	-406.3208296	-473.1336899	-430.2989312	-373.9598148	-329.971675	-448.6751888	-504.704776	-561.532939	-615.955098
+0.8	411.7128189	403.8340158	342.6731424	289.4201232	338.4343574	452.5104112	492.054474	537.0728822	563.8167922
-0.85	-431.7158815	-502.7045455	-457.1926144	-429.2853252	-350.5949047	-476.7173881	-536.248824	-596.628748	-654.452292
+0.85	267.2893948	266.6789803	211.806058	175.4199377	222.1179127	296.8658693	313.9332163	343.1957684	350.1783311
-0.9	-457.1109333	-532.2754011	-484.0862976	-539.0774757	-371.2181344	-504.7595874	-567.792873	-631.724557	-692.949486
+0.9	158.7573291	158.134219	126.3008548	101.1671864	131.399056	167.88164	167.9051309	173.5288698	173.4580344
-0.95	-482.5059852	-561.8462567	-521.1925318	-685.931592	-391.8413641	-532.8017867	-599.336921	-666.820366	-731.446679
+0.95	51.87499239	51.37454433	47.12201611	36.65713737	64.73222003	50.13210991	50.03179694	50.13715922	50.21009511
-1	-507.901055	-650.647107	-700.4772088	-847.75877	-412.4645873	-560.8439814	-630.88145	-701.916469	-769.94388
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-507.901055	-650.647107	-700.4772088	-847.75877	-412.4645873	-560.8439814	-630.88145	-701.916469	-769.94388
+2	0	0	0	0	0	0	0	0	0
-2.05	-482.5054211	-561.8462453	-521.1917848	-685.9323447	-391.840859	-532.8016324	-599.337378	-666.820645	-731.446387
+2.05	51.84780859	51.3511947	47.10216151	36.64707806	64.69707875	50.10562839	50.006101	50.11213638	50.21256142
-2.1	-457.1103999	-532.2753907	-484.0861993	-539.0779241	-371.2176556	-504.7594409	-567.793305	-631.724821	-692.949209
+2.1	158.7713585	158.146309	125.7203281	100.9449228	131.366521	167.90879	167.8757409	173.547505	173.476088
-2.15	-431.7153786	-502.7045361	-457.1925216	-429.2859505	-350.5944522	-476.7172495	-536.249232	-596.628997	-654.452031
+2.15	267.2996858	266.6416961	211.8148095	175.4058307	222.1534806	296.8581924	313.9436419	343.2122494	350.2054843
-2.2	-406.3203574	-473.1336815	-430.2988439	-373.9602562	-329.9712487	-448.6750581	-504.705159	-561.533174	-615.954854
+2.2	411.7233446	403.8427356	342.6769176	289.4028757	338.4703873	452.5044249	492.0433314	537.0865491	563.8421395
-2.25	-380.9253362	-443.5628269	-403.4051662	-350.5877402	-309.3480453	-420.6328667	-473.161086	-526.43735	-577.457676

+2.25	542.3231271	554.0698453	485.257855	414.2461689	444.1194932	596.9458827	655.8830096	718.5570808	765.4947653
-2.3	-355.530315	-413.9919723	-376.5114886	-327.2152242	-288.7248418	-392.5906753	-441.617014	-491.341526	-538.960498
+2.3	656.0929635	684.1620084	600.5070259	515.95511	536.6641278	726.6708062	801.5116814	877.261313	943.6213601
-2.35	-330.1352937	-384.4211177	-349.6178109	-303.8427082	-268.1016384	-364.5484838	-410.072941	-456.245702	-500.46332
+2.35	750.2531944	782.3908183	683.8561379	591.123661	613.8480331	838.4120181	925.2819845	1009.289343	1093.730296
-2.4	-304.7402725	-354.8502631	-322.7241332	-280.4701922	-247.4784349	-336.5062924	-378.528868	-421.149878	-461.966142
+2.4	830.9197949	848.8769899	733.1499943	637.6016985	673.5963608	929.147067	1023.827638	1121.742073	1211.681614
-2.45	-279.3452513	-325.2794085	-295.8304555	-257.0976762	-226.8552315	-308.464101	-346.984795	-386.054054	-423.468964
+2.45	890.0328057	887.6875184	783.9071837	682.223472	714.0156013	996.0979652	1094.386482	1205.666471	1293.686332
-2.5	-253.9502301	-295.7085539	-268.9367779	-233.7251602	-206.232028	-280.4219096	-315.440723	-350.95823	-384.971786
+2.5	924.5609502	891.0262745	823.5150633	716.2920512	733.3930029	1036.731216	1134.251004	1255.899833	1354.684286
-2.55	-228.5552089	-266.1376993	-242.0431002	-210.3526442	-185.6088246	-252.3797182	-283.89665	-315.862406	-346.474608
+2.55	941.7801799	922.6235318	836.2186655	728.7220646	740.652731	1055.698309	1153.759377	1281.816487	1386.135475
-2.6	-203.1601876	-236.5668447	-215.1494225	-186.9801281	-164.9856211	-224.3375268	-252.352577	-280.766582	-307.977431
+2.6	945.9516084	948.9685191	822.0328362	716.5377959	753.4879802	1058.898121	1162.405995	1284.225303	1379.009807
-2.65	-177.7651664	-206.9959901	-188.2557448	-163.6076121	-144.3624177	-196.2953353	-220.808504	-245.670758	-269.480253
+2.65	922.6518286	950.4490313	831.7868581	720.3080732	745.4534638	1032.011922	1138.082264	1248.115503	1348.034713
-2.7	-152.3701452	-177.4251355	-161.3620672	-140.2350961	-123.7392142	-168.2531439	-189.264431	-210.574934	-230.983075
+2.7	875.161795	920.6229723	810.8312525	698.4760414	715.0021818	973.1722597	1077.961259	1181.3371	1277.230949
-2.75	-126.975124	-147.8542809	-134.4683895	-116.8625801	-103.1160108	-140.2109525	-157.720359	-175.47911	-192.485897
+2.75	809.8522493	853.2413797	756.184591	648.7143419	660.7679672	890.339787	980.0741974	1086.502378	1160.900578
-2.8	-101.5801028	-118.2834263	-107.5747118	-93.4900641	-82.49280734	-112.1687611	-126.176286	-140.383286	-153.988719
+2.8	713.6662006	761.3691686	665.1739538	569.5675799	581.5662267	783.927051	860.8681174	948.5126011	996.3992637
-2.85	-76.18508155	-88.71257171	-80.68103415	-70.11754809	-61.86960389	-84.12656968	-94.6322131	-105.287462	-115.491541
+2.85	585.307806	636.3377066	558.126995	476.2500429	476.6623105	642.4653259	707.495793	767.0434766	798.1247367
-2.9	-50.79006033	-59.14171711	-53.78735648	-46.74503208	-41.24640045	-56.08437826	-63.0881403	-70.1916383	-76.9943633
+2.9	423.9240164	469.4859021	413.4300683	351.1950172	345.3345278	464.8352932	513.1559264	539.3771848	564.2010244
-2.95	-25.39503911	-29.57086251	-26.8936788	-23.37251606	-20.623197	-28.04218684	-31.5440675	-35.0958144	-38.4971855
+2.95	229.2976285	258.0619594	229.8530902	194.1455189	186.6042511	251.1223826	277.866951	291.8308722	303.5611426
-3	-2.47E-13	-2.36E-13	-2.57E-13	-2.10E-13	-2.12E-13	-2.42E-13	-2.27E-13	-2.42E-13	-2.51E-13
+3	9.95E-14	1.07E-13	9.23E-14	7.74E-14	1.02E-13	1.09E-13	1.18E-13	1.25E-13	1.29E-13

2-Span: Moment (Max and Min) Raw Data Results - 60' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.93E-13	-2.03E-13	-1.54E-13	-1.61E-13	-1.38E-13
End Shear	1.13E-13	1.53E-13	6.25E-14	9.84E-14	8.51E-14
-0.05	-50.16660267	-52.96688815	-33.4922019	-41.773481	-42.9526273
+0.05	402.3055085	405.9590458	290.9501398	354.2617508	360.3464472
-0.1	-100.3332053	-105.9337763	-66.9844037	-83.5469619	-85.9052546
+0.1	722.0189073	731.8285935	526.6283978	641.8650373	650.2411054
-0.15	-150.499808	-158.9006645	-100.476606	-125.320443	-128.857882
+0.15	989.172044	1002.015769	709.8150013	867.300136	874.8213249
-0.2	-200.6664107	-211.8675526	-133.968807	-167.093924	-171.810509
+0.2	1202.563416	1237.27635	861.2954272	1060.874261	1072.591494
-0.25	-250.8330133	-264.8344408	-167.461009	-208.867405	-214.763136
+0.25	1353.435011	1423.257253	986.8019044	1200.472109	1217.706437
-0.3	-300.999616	-317.8013289	-200.953211	-250.640886	-257.715764
+0.3	1449.651523	1560.681037	1065.070416	1283.700202	1331.56843
-0.35	-351.1662187	-370.7682171	-234.445413	-292.414367	-300.668391
+0.35	1526.277485	1654.127716	1106.790621	1318.44683	1386.466116
-0.4	-401.3328213	-423.7351052	-267.937615	-334.187848	-343.621018
+0.4	1564.694344	1702.173338	1120.054093	1324.156358	1388.266633
-0.45	-451.499424	-476.7019934	-301.429817	-375.961329	-386.573646
+0.45	1581.722046	1692.676616	1093.101935	1296.840868	1356.781393
-0.5	-501.6660267	-529.6688815	-334.922019	-417.73481	-429.526273
+0.5	1533.137724	1651.675411	1030.892476	1246.455149	1283.792551
-0.55	-551.8326293	-582.6357697	-368.41422	-459.508291	-472.4789
+0.55	1487.780863	1582.280185	1030.991274	1233.526112	1278.639806
-0.6	-601.999232	-635.6026578	-401.906422	-501.281772	-515.431528
+0.6	1374.619788	1482.794602	990.8379049	1178.488236	1231.839283
-0.65	-652.1658347	-688.569546	-435.398624	-543.055253	-558.384155
+0.65	1234.76805	1331.297551	908.1307127	1089.08754	1138.693349
-0.7	-702.3324373	-741.5364341	-468.890826	-584.828734	-601.336782
+0.7	1063.678582	1131.650509	799.972209	958.128466	989.1152716
-0.75	-752.49904	-794.5033223	-502.383028	-626.602215	-644.289409
+0.75	859.6791352	889.6679258	650.6998739	780.0160418	788.8767303
-0.8	-802.6656427	-847.4702104	-535.87523	-668.375695	-687.242037
+0.8	600.299158	601.3242011	464.5621728	556.5919027	556.1066556
-0.85	-852.8322453	-900.4370986	-569.367432	-710.149176	-730.194664
+0.85	351.2987802	329.7708078	319.0651453	354.6499391	367.6100249
-0.9	-902.998848	-953.4039867	-602.859633	-751.922657	-773.147291
+0.9	189.9675656	176.7551641	181.830424	194.1454906	194.3573074
-0.95	-953.1654507	-1073.017189	-637.319684	-793.696138	-816.099919
+0.95	52.96178986	59.63225998	59.34599091	63.3023903	52.84904065
-1	-1245.748302	-1364.45566	-851.867058	-985.131383	-1088.74884
+1	0	0	0	0	0
(Span 2) -2	-1245.748302	-1364.45566	-851.867058	-985.131383	-1088.74884
+2	0	0	0	0	0
-2.05	-953.1652286	-1073.01736	-637.318248	-793.695519	-816.099465
+2.05	52.96407801	59.62787501	59.31962733	63.27426915	52.82619798
-2.1	-902.9986378	-953.4039632	-602.859787	-751.92207	-773.146862
+2.1	189.9551404	176.7533821	181.7862191	194.1324778	194.3446265
-2.15	-852.832047	-900.4370769	-569.367577	-710.148621	-730.194259
+2.15	351.2835182	329.768314	319.0763424	354.6405389	367.5964144
-2.2	-802.6654562	-847.4701906	-535.875366	-668.375172	-687.241655
+2.2	600.2765167	601.3208199	464.5853108	556.5760289	556.0908871
-2.25	-752.4988654	-794.5033043	-502.383156	-626.601722	-644.289052

+2.25	859.6494974	889.6714888	650.7184352	780.0447625	788.8653212
-2.3	-702.3322746	-741.5364179	-468.890946	-584.828273	-601.336448
+2.3	1063.688318	1131.653456	799.9844438	958.1490244	989.1461157
-2.35	-652.1656838	-688.5695316	-435.398735	-543.054824	-558.383845
+2.35	1234.786451	1331.29433	908.134886	1089.104118	1138.71462
-2.4	-601.999093	-635.6026453	-401.906525	-501.281375	-515.431241
+2.4	1374.603317	1482.791096	990.8272942	1178.494922	1231.849189
-2.45	-551.8325022	-582.635759	-368.414315	-459.507926	-472.478638
+2.45	1487.803058	1582.27697	1030.971031	1233.516689	1278.631026
-2.5	-501.6659114	-529.6688727	-334.922104	-417.734477	-429.526034
+2.5	1533.146459	1651.670695	1030.904441	1246.434284	1283.797772
-2.55	-451.4993206	-476.7019863	-301.429894	-375.961028	-386.573431
+2.55	1581.699244	1692.680654	1093.123076	1296.856443	1356.791638
-2.6	-401.3327298	-423.7351	-267.937684	-334.187578	-343.620828
+2.6	1564.706853	1702.586387	1120.068101	1324.163305	1388.260639
-2.65	-351.166139	-370.7682137	-234.445473	-292.414129	-300.668224
+2.65	1526.253267	1655.525756	1106.795977	1318.439044	1386.449819
-2.7	-300.9995482	-317.8013274	-200.953263	-250.64068	-257.715621
+2.7	1449.657833	1560.678242	1065.062313	1283.687124	1331.590659
-2.75	-250.8329574	-264.8344411	-167.461053	-208.867231	-214.763017
+2.75	1353.422576	1423.252987	986.7834051	1200.49877	1217.715233
-2.8	-200.6663666	-211.8675547	-133.968842	-167.093782	-171.810414
+2.8	1202.541007	1237.273671	861.3241281	1060.887433	1072.607695
-2.85	-150.4997758	-158.9006684	-100.476632	-125.320333	-128.85781
+2.85	989.182585	1002.009917	709.7962993	867.2965218	874.8222589
-2.9	-100.333185	-105.9337821	-66.9844215	-83.5468837	-85.9052069
+2.9	722.008617	731.8253113	526.655884	641.8461083	650.2244403
-2.95	-50.16659416	-52.96689578	-33.4922112	-41.7734345	-42.9526035
+2.95	402.326016	405.9527813	290.9643746	354.2789744	360.3642494
-3	-3.75E-13	-4.30E-13	-2.69E-13	-3.27E-13	-3.18E-13
+3	1.80E-13	1.80E-13	1.22E-13	1.41E-13	1.42E-13

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.12234	-4.38943	-5.111201386	-4.64846	-4.22249	-3.564640859	-4.84698	-5.45226	-6.06616692	-6.65408
End Shear	58.3802	42.83815	48.88979018	43.99768	38.31213	34.84127522	46.88608	51.98313	54.74263732	57.19064
-0.05	-6.12234	-4.38943	-5.111201386	-4.64846	-4.77511	-3.564640859	-4.84698	-5.45226	-6.06616692	-6.65408
+0.05	53.83395	39.63137	44.60286444	39.72721	34.47063	32.25229024	43.40352	48.02599	50.36255623	52.38378
-0.1	-6.12234	-4.38943	-5.111201386	-4.64846	-5.72572	-3.564640859	-4.84698	-5.45226	-6.06616692	-6.65408
+0.1	48.87049	36.13887	39.90992634	35.12315	30.38558	29.44428784	39.61156	43.7087	45.58157592	47.13597
-0.15	-6.12234	-4.68937	-5.111201386	-4.64846	-6.41657	-3.834286679	-4.84698	-5.45226	-6.06616692	-6.65408
+0.15	45.37844	33.67496	36.64216255	32.14237	27.72646	27.4615814	36.93447	40.66605	42.22225006	43.46018
-0.2	-7.87941	-7.20147	-7.205642946	-5.82555	-8.14943	-5.397265766	-7.60829	-7.60932	-7.598626736	-7.64533
+0.2	40.58158	30.28056	32.20303562	28.10399	24.14805	24.72764987	33.24362	36.47889	37.61388357	38.43447
-0.25	-9.76481	-8.98135	-8.98636178	-7.45441	-9.47835	-6.667780923	-9.73761	-10.1428	-10.13034641	-10.1186
+0.25	37.23208	27.90302	29.1404819	25.32617	21.70279	22.81089886	30.65637	33.54942	34.40053697	34.94263
-0.3	-14.2872	-11.4445	-11.45058374	-9.66332	-11.4515	-9.487385892	-12.7425	-13.6683	-13.65630102	-13.645
+0.3	32.73567	24.65239	25.0221252	21.60303	18.4463	20.18756488	27.11595	29.54904	30.02829934	30.20987
-0.35	-17.4877	-13.6131	-13.18474874	-11.1876	-12.8886	-11.48129663	-15.3673	-16.1566	-16.14498161	-16.134
+0.35	29.56995	22.39385	22.34248642	19.07607	16.25462	18.36285527	24.65378	26.77323	27.00630277	27.00123
-0.4	-21.9113	-17.0589	-15.56769573	-13.6831	-15.551	-14.23500198	-19.0904	-20.0603	-20.02680302	-20.0138
+0.4	25.29586	19.33266	18.7978692	16.04717	13.60097	15.88664412	21.31312	23.01627	22.93811372	22.93371
-0.45	-25.0203	-19.4808	-17.36157513	-15.8284	-17.3767	-16.16879861	-21.7053	-23.0801	-23.02144289	-23.0089
+0.45	22.3669	17.22575	16.39449825	14.18607	11.96592	14.18006532	19.01124	20.43456	20.37245938	20.36799
-0.5	-29.6013	-22.8041	-20.71000368	-18.7775	-19.8296	-18.82008298	-25.2912	-27.2287	-27.14762093	-27.1335
+0.5	18.45735	14.39967	13.29055841	11.76166	9.843767	11.8874971	15.91966	16.97769	16.9363026	16.93177
-0.55	-32.9879	-25.1221	-23.79355556	-20.8385	-21.6708	-20.66767621	-27.7906	-30.1259	-30.45524057	-30.4417
+0.55	15.88137	12.47702	11.459631	10.118	8.420927	10.32513783	13.81331	14.63055	14.60263902	14.5981
-0.6	-37.6119	-28.2772	-28.06744775	-23.8714	-24.2789	-23.18001158	-31.1901	-34.0745	-34.97879051	-35.3265
+0.6	12.60095	9.93172	9.344922174	7.802753	6.565683	8.252738645	11.02014	11.5304	11.51937206	11.51489
-0.65	-40.8199	-30.4588	-31.05077871	-26.4361	-26.5023	-24.91531266	-33.5387	-36.8086	-38.12267447	-38.9064
+0.65	10.40184	8.22594	7.993403601	6.366128	5.342272	6.860688861	9.144557	9.559093	9.554961601	9.551051
-0.7	-45.1607	-33.4001	-35.25798076	-30.6431	-30.1747	-27.25217951	-36.7023	-40.5005	-42.38523417	-43.7784
+0.7	7.540286	6.18828	6.150874001	4.888557	4.017518	5.044982411	6.751499	7.170396	7.166370295	7.162563
-0.75	-48.1429	-35.4127	-38.48094547	-33.6782	-32.8755	-28.84910049	-38.8649	-43.031	-45.32001111	-47.1463
+0.75	5.661384	4.994719	4.958909446	3.947132	3.20996	3.849327201	5.368077	5.586037	5.582128865	5.578435
-0.8	-52.1347	-38.0944	-42.84933828	-37.8024	-36.4058	-30.97397109	-41.7435	-46.4096	-49.25806292	-51.686
+0.8	3.905134	3.445431	3.412189871	2.716286	2.190731	2.679885758	3.580163	3.583675	3.580420662	3.577344
-0.85	-54.844	-39.9053	-45.85563142	-40.6485	-38.8029	-32.40642304	-43.6848	-48.6961	-51.93836304	-54.7913
+0.85	2.921456	2.399733	2.3999847	1.91079	1.530007	2.006344218	2.415889	2.308458	2.415909067	2.412984
-0.9	-58.4209	-42.2819	-49.88719673	-44.6421	-42.0216	-34.28277733	-46.2289	-51.7048	-55.48838716	-58.9278
+0.9	1.665546	1.13072	1.121031279	0.893013	0.712305	1.088810541	1.092667	1.090727	1.093357624	1.024896
-0.95	-60.8104	-43.8585	-52.62898742	-47.668	-44.6727	-35.52467217	-47.9138	-53.7068	-57.86884006	-61.7199
+0.95	0.86005	0.467818	0.462865375	0.425587	0.327603	0.58337296	0.452123	0.45113	0.452382892	0.456769
-1	-63.9065	-45.8842	-56.25676696	-52.0012	-48.3764	-37.11598406	-50.0741	-56.2888	-60.96732242	-65.3824
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	63.43981	45.60726	55.75273676	51.39465	47.85855	36.89876461	49.77916	55.93508	60.54063124	64.87589
-2.05	-7.08E-01	-0.38515	-0.380227557	-0.35033	-2.68E-01	-0.480099805	-0.37228	-0.37129	-0.372499843	-0.37365
+2.05	61.22488	44.16001	53.16104928	48.2991	45.21279	35.76186548	48.2357	54.0904	58.32702041	62.25932
-2.1	-1.83572	-1.30394	-1.29405677	-1.03067	-0.82154	-1.251168694	-1.26	-1.25801	-1.260704686	-1.26325
+2.1	57.8761	41.95303	49.32290308	44.10677	41.57385	34.02337954	45.87715	51.28786	54.99469655	58.3508
-2.15	-2.73292	-2.2182	-2.207805193	-1.75782	-1.40569	-1.877897396	-2.14312	-2.14103	-2.174785201	-2.19261
+2.15	55.31815	40.25517	46.44280944	41.20535	39.27105	32.68288414	44.05959	49.13848	52.45856651	55.39569
-2.2	-4.10549	-3.65847	-3.624736393	-2.88539	-2.32114	-2.820766934	-3.8254	-3.82897	-3.82567075	-3.82254
+2.2	51.52207	37.72019	42.23437529	37.22118	35.91522	30.6776272	41.34198	45.93767	48.70647421	51.04863
-2.25	-5.29665	-4.76532	-4.729744037	-3.76473	-3.05593	-3.621630252	-5.10275	-5.28299	-5.279089303	-5.27538
+2.25	48.66817	35.80435	39.11371673	34.27495	33.4152	29.15963068	39.28556	43.52403	45.89319668	47.8056

-2.3	-7.92141	-6.43616	-6.398332283	-5.08535	-4.18645	-5.29538504	-7.03936	-7.50088	-7.496804915	-7.49294
+2.3	44.49069	32.98702	34.6019609	30.02614	29.64434	26.92413006	36.2582	39.9816	41.78485412	43.09087
-2.35	-9.96148	-7.89777	-7.704136897	-6.09819	-5.10848	-6.592562477	-8.78333	-9.20739	-9.203239119	-9.1993
+2.35	41.38787	30.88582	31.63791473	26.94102	26.93884	25.25471705	33.99815	37.34417	38.73979705	39.61052
-2.4	-13.0721	-10.2856	-9.623209424	-8.10148	-6.82112	-8.541261395	-11.4089	-11.9609	-11.94755058	-11.943
+2.4	36.89486	27.83183	27.46161044	23.35078	23.84286	22.82549517	30.71036	33.51676	34.33872305	34.59897
-2.45	-15.4128	-12.104	-11.10534262	-9.73948	-8.14644	-10.0217796	-13.4043	-14.1756	-14.15024498	-14.1457
+2.45	33.5902	25.5779	24.40850124	21.24449	22.03204	21.03074946	28.28191	30.69601	31.10725847	31.09385
-2.5	-19.0144	-14.7955	-13.66840397	-12.1004	-10.1383	-12.20889721	-16.353	-17.4613	-17.41708031	-17.4125
+2.5	28.84753	22.33292	20.23493707	18.35934	19.48589	18.44433514	24.78302	26.64027	26.55154213	26.53963
-2.55	-21.8041	-16.8144	-15.92887315	-13.8324	-11.6542	-13.84667021	-18.5615	-19.9309	-19.87182921	-19.8673
+2.55	25.57453	19.95887	17.84295466	16.25256	17.73381	16.55035037	22.2214	23.67666	23.61302993	23.60065
-2.6	-25.8992	-19.7638	-19.29327063	-16.4703	-13.9697	-16.23568321	-21.7839	-23.545	-23.50546972	-23.5002
+2.6	21.22104	16.56858	15.22979111	13.24939	15.17766	13.84325744	18.56074	19.44923	19.42088972	19.40787
-2.65	-28.9487	-21.9507	-21.82550309	-18.6341	-15.8653	-18.00462873	-24.1704	-26.2289	-26.414842	-26.4097
+2.65	18.0603	14.10705	13.52750253	11.48602	13.27603	11.87612728	15.90116	16.64892	16.63745181	16.62661
-2.7	-33.3746	-25.1123	-25.59942239	-22.1239	-18.8999	-20.55900817	-27.6172	-30.1147	-30.64528539	-30.8763
+2.7	13.57918	11.09374	11.09987353	9.352137	11.17007	9.084885131	12.32219	13.16557	13.15359444	13.14225
-2.75	-36.6368	-27.4345	-28.54150481	-24.7836	-21.2262	-22.43303243	-30.1463	-32.9724	-33.76867927	-34.2572
+2.75	10.34817	9.334207	9.339547493	7.774247	9.737682	7.070692782	10.15999	10.64714	10.63481107	10.62315
-2.8	-41.3276	-30.7628	-32.82869825	-28.6722	-24.6493	-25.116265	-33.7682	-37.0733	-38.26699358	-39.1454
+2.8	7.531333	6.842568	6.846751751	5.493907	7.87703	5.174181282	7.179188	7.180217	7.169507657	7.216266
-2.85	-44.7555	-33.1876	-35.99988294	-31.5571	-27.2055	-27.06927298	-36.4047	-40.0645	-41.55903766	-42.7356
+2.85	6.122364	5.048049	5.11120121	4.648462	6.658657	4.057659568	5.035028	5.452264	6.066169552	6.65408
-2.9	-49.6453	-36.6368	-40.57436303	-35.7299	-30.928	-29.84482983	-40.1524	-44.3238	-46.26170502	-47.8813
+2.9	6.122364	4.389425	5.11120121	4.648462	5.585572	3.564636323	4.846978	5.452264	6.066169552	6.65408
-2.95	-53.1918	-39.1317	-43.92682973	-39.0519	-33.8697	-31.85073878	-42.8612	-47.4079	-49.67702986	-51.6301
+2.95	6.122364	4.389425	5.11120121	4.648462	4.892469	3.564636323	4.846978	5.452264	6.066169552	6.65408
-3	-58.2147	-42.6561	-48.72161136	-43.8666	-38.1605	-34.68209566	-46.6852	-51.7691	-54.52053069	-56.9624
+3	6.122364	4.389425	5.11120121	4.648462	4.222493	3.564636323	4.846978	5.452264	6.066169552	6.65408

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.12234	-5.91998	-6.338249249	-5.96754	-7.17487	-5.942658995	-6.27226	-2.94674
End Shear	58.3802	58.33882	61.80556148	57.65057	67.73268	55.35520251	58.38787	29.97075
-0.05	-6.12234	-5.91998	-6.338249249	-5.96754	-7.17487	-5.942658995	-6.27226	-2.94674
+0.05	53.83395	54.11407	57.2649959	53.38726	62.58582	50.39898082	53.14685	27.76015
-0.1	-6.12234	-5.91998	-6.338249249	-5.96754	-7.17487	-5.942658995	-6.27226	-2.94674
+0.1	48.87049	49.51976	52.33155921	48.74364	56.98899	44.97990071	47.41758	25.3226
-0.15	-6.12234	-6.66011	-6.660114322	-5.96754	-7.17487	-5.942658995	-6.27226	-4.01869
+0.15	45.37844	46.27089	48.84569935	45.46427	53.04247	41.21093548	43.43371	23.60334
-0.2	-7.87941	-10.2281	-10.22806928	-9.32517	-9.81458	-7.77881909	-8.18823	-5.65673
+0.2	40.58158	41.78401	44.03559914	40.94159	47.60833	36.09743534	38.02987	21.23548
-0.25	-9.76481	-12.7561	-12.75606612	-12.0655	-12.8625	-9.701186012	-10.2118	-6.81471
+0.25	37.23208	38.63307	40.6606676	37.77013	43.80412	32.57451333	34.30785	19.57751
-0.3	-14.2872	-17.1617	-17.4640714	-15.9344	-17.1678	-12.83208602	-13.5385	-8.41342
+0.3	32.73567	34.31299	36.03782775	33.42866	38.60575	27.84434636	29.31177	17.31159
-0.35	-17.4877	-20.3934	-20.95234573	-19.1427	-21.072	-15.16714642	-16.0235	-9.53574
+0.35	29.56995	31.30239	32.81948718	30.40818	34.99605	24.76911703	26.07275	15.73795
-0.4	-21.9113	-24.8499	-25.76669422	-23.6919	-26.6161	-18.3855365	-19.449	-11.8536
+0.4	25.29586	27.20846	28.44783078	26.30821	30.10652	20.70929802	21.79926	13.60621
-0.45	-25.0203	-27.9747	-29.14528191	-26.8862	-30.5151	-20.64092603	-21.8498	-13.5449
+0.45	22.3669	24.38059	25.43173082	23.48175	26.74351	18.00444363	19.0625	12.13995
-0.5	-29.6013	-32.2519	-33.7741109	-31.2651	-35.8689	-23.72627205	-25.1346	-15.8655
+0.5	18.45735	20.57216	21.37518012	19.68357	22.2359	15.22848074	16.11431	10.17464
-0.55	-32.9879	-35.2274	-36.99735788	-34.3163	-39.6059	-26.19514304	-27.5738	-17.484
+0.55	15.88137	17.96943	18.60698972	17.09421	19.17178	13.32952325	14.098	8.838775
-0.6	-37.6119	-39.2659	-41.37674075	-38.4647	-44.6965	-31.21133307	-32.854	-19.6865
+0.6	12.60095	14.50586	14.92946657	13.65809	15.11915	10.79974964	11.41256	7.07216
-0.65	-40.8199	-42.0496	-44.39898516	-41.3297	-48.2193	-34.71767706	-36.5449	-21.209
+0.65	10.40184	12.17066	12.45483486	11.34888	12.40612	9.091994281	9.600254	5.889728
-0.7	-45.1607	-45.79	-48.46500832	-45.1873	-52.9734	-39.66234929	-41.7593	-23.2611
+0.7	7.540286	9.111306	9.220261433	8.387503	8.968855	6.851405908	7.223309	4.673044
-0.75	-48.1429	-48.3397	-51.24058673	-47.823	-56.2299	-43.4399216	-45.7627	-24.6647
+0.75	5.661384	7.089544	7.08954372	6.627673	7.03605	5.393416192	5.67728	3.855381
-0.8	-52.1347	-51.7226	-54.92932397	-51.3295	-60.5745	-48.56701817	-51.1975	-26.5342
+0.8	3.905134	4.889549	4.889549292	4.357026	4.546732	3.719993558	3.915783	2.78712
-0.85	-54.844	-53.9958	-57.41258724	-53.6929	-63.5124	-52.10074377	-54.944	-27.7958
+0.85	2.921456	3.449302	3.449301578	2.88139	2.932608	2.605104604	2.742215	2.082266
-0.9	-58.4209	-56.962	-60.6601157	-56.788	-67.3745	-56.84756932	-59.978	-29.4503
+0.9	1.665546	1.508354	1.508353572	1.285491	1.299391	1.222665609	1.287016	1.182518
-0.95	-60.8104	-58.9162	-62.80539683	-58.8361	-69.9416	-60.08190697	-63.4089	-30.5469
+0.95	0.86005	0.61663	0.616629874	0.531909	0.535998	0.505795272	0.532416	0.605587
-1	-63.9065	-61.4063	-65.5477951	-61.4595	-73.2482	-64.3707095	-67.9598	-31.9543
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	63.43981	61.0675	65.17397677	61.10149	72.79548	63.77411821	67.32666	31.76254
-2.05	-7.08E-01	-0.54861	-0.548608941	-0.43797	-0.44197	-0.416452349	-0.43837	-0.49353
+2.05	61.22488	59.28849	63.21468706	59.2272	70.4332	60.71020632	64.07552	30.75708
-2.1	-1.83572	-1.85524	-1.855237304	-1.48235	-1.49653	-1.409711688	-1.48391	-1.30056
+2.1	57.8761	56.55281	60.21157583	56.36025	66.83959	56.18255525	59.27268	29.22204
-2.15	-2.73292	-3.17595	-3.175953562	-2.52131	-2.60632	-2.39739508	-2.52357	-1.94299
+2.15	55.31815	54.43372	57.89149331	54.14906	64.08046	52.79149826	55.67649	28.04005
-2.2	-4.10549	-5.1921	-5.192101188	-4.66819	-4.8875	-3.949988003	-4.15788	-2.92917
+2.2	51.52207	51.25159	54.41523785	50.8406	59.96779	47.84472204	50.43174	26.274
-2.25	-5.29665	-6.76383	-6.763830044	-6.29041	-6.66596	-5.145514529	-5.41633	-3.69201
+2.25	48.66817	48.8348	51.78001404	48.33558	56.86401	44.18207345	46.54932	24.9385

-2.3	-7.92141	-9.53427	-9.666871188	-8.75394	-9.37163	-7.161243626	-7.55194	-4.83618
+2.3	44.49069	45.26559	47.89453241	44.64589	52.30536	38.89393326	40.945	22.97367
-2.35	-9.96148	-11.7199	-11.97770043	-10.9039	-11.8845	-8.761936591	-9.25005	-5.70431
+2.35	41.38787	42.59351	44.98983883	41.89009	48.90911	35.40824827	37.27184	21.50772
-2.4	-13.0721	-14.9889	-15.44187217	-14.1365	-15.6824	-11.15256701	-11.787	-7.31707
+2.4	36.89486	38.69656	40.75904175	37.87946	43.97755	30.49978833	32.10504	19.37637
-2.45	-15.4128	-17.4633	-18.06908775	-16.5913	-18.5776	-12.9598077	-13.7055	-8.57911
+2.45	33.5902	35.81158	37.63053271	34.91595	40.34104	26.91641405	28.33307	17.80298
-2.5	-19.0144	-21.1068	-21.94422786	-20.2161	-22.867	-15.61811384	-16.5281	-10.4491
+2.5	28.84753	31.64626	33.11836139	30.64465	35.10963	23.28978611	24.66986	15.53737
-2.55	-21.8041	-23.8275	-24.84215649	-22.9294	-26.0872	-17.60120308	-18.6342	-11.8531
+2.55	25.57453	28.59078	29.81168361	27.51649	31.28505	21.08572289	22.32333	13.87959
-2.6	-25.8992	-27.7862	-29.06435137	-26.8861	-30.795	-21.27601881	-22.3958	-13.9056
+2.6	21.22104	24.21643	25.08205137	23.04482	25.82688	17.92844581	18.96245	11.51195
-2.65	-28.9487	-30.7107	-32.18733908	-29.8151	-34.2879	-24.17631485	-25.4488	-15.4285
+2.65	18.0603	21.03286	21.64288347	19.79504	21.8664	15.62936667	16.51545	9.792813
-2.7	-33.3746	-34.9252	-36.69265055	-34.0434	-39.3411	-28.50685366	-30.0114	-17.6314
+2.7	13.57918	16.50884	16.75970196	15.39312	16.56536	12.36055656	13.03676	8.186603
-2.75	-36.6368	-38.0113	-39.99505219	-37.1448	-43.0547	-31.8860097	-33.5805	-19.2501
+2.75	10.34817	13.25717	13.25716886	12.60919	13.46739	10.08246604	10.61312	7.04456
-2.8	-41.3276	-42.4223	-44.71956544	-41.5845	-48.3801	-36.81766009	-38.7909	-21.571
+2.8	7.531333	9.718264	9.718264226	8.773074	9.20065	7.391379731	7.7804	5.423536
-2.85	-44.7555	-45.6275	-48.15569921	-44.8153	-52.262	-40.47060317	-42.6513	-23.2625
+2.85	6.122364	7.169491	7.169490664	6.014893	7.17487	5.942656838	6.272262	4.253395
-2.9	-49.6453	-50.1756	-53.03550353	-49.406	-57.7867	-45.74670532	-48.2282	-25.6692
+2.9	6.122364	5.919987	6.338244024	5.967532	7.17487	5.942656838	6.272262	2.946739
-2.95	-53.1918	-53.4575	-56.55972287	-52.7232	-61.7848	-49.61790628	-52.321	-27.4105
+2.95	6.122364	5.919987	6.338244024	5.967532	7.17487	5.942656838	6.272262	2.946739
-3	-58.2147	-58.0833	-61.530885	-57.4047	-67.4357	-55.16067705	-58.1822	-29.8708
+3	6.122364	5.919987	6.338244024	5.967532	7.17487	5.942656838	6.272262	2.946739

2-Span: Shear (Max and Min) Raw Data Results - 60' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	**-6.12234**	**-9.6716**	**-10.2115**	**-6.45695**	**-8.0535**	**-8.28082**
End Shear	**58.3802**	**86.16922**	**86.54919**	**61.76979**	**75.16732**	**76.73395**
-0.05	**-6.12234**	**-9.6716**	**-10.2115**	**-6.45695**	**-8.0535**	**-8.28082**
+0.05	**53.83395**	**77.56034**	**77.77106**	**56.09218**	**68.298**	**69.47107**
-0.1	**-6.12234**	**-9.6716**	**-10.2115**	**-6.45695**	**-8.0535**	**-8.28082**
+0.1	**48.87049**	**68.18013**	**68.7197**	**49.89085**	**60.78825**	**61.53549**
-0.15	**-6.12234**	**-9.6716**	**-10.2115**	**-6.45695**	**-8.0535**	**-8.28082**
+0.15	**45.37844**	**61.90228**	**62.4599**	**45.59171**	**55.57732**	**56.04755**
-0.2	**-7.87941**	**-9.6716**	**-10.2115**	**-9.21238**	**-9.82293**	**-9.82399**
+0.2	**40.58158**	**53.75247**	**54.80396**	**39.77961**	**48.52547**	**48.69508**
-0.25	**-9.76481**	**-12.7043**	**-11.8542**	**-11.489**	**-12.8725**	**-12.8738**
+0.25	**37.23208**	**48.16408**	**49.51496**	**35.79118**	**43.68083**	**43.8209**
-0.3	**-14.2872**	**-16.9361**	**-16.5252**	**-15.3525**	**-17.1021**	**-17.1678**
+0.3	**32.73567**	**40.76257**	**42.38486**	**30.65896**	**37.43565**	**37.29353**
-0.35	**-17.4877**	**-20.0822**	**-19.7893**	**-18.0838**	**-20.0855**	**-20.4661**
+0.35	**29.56995**	**36.09041**	**37.50701**	**27.24824**	**33.23502**	**32.8614**
-0.4	**-21.9113**	**-24.6285**	**-24.8197**	**-21.8469**	**-24.1948**	**-25.2968**
+0.4	**25.29586**	**30.04663**	**31.00885**	**23.87042**	**27.64929**	**28.15265**
-0.45	**-25.0203**	**-28.3264**	**-29.3358**	**-24.4831**	**-27.1653**	**-28.6883**
+0.45	**22.3669**	**26.23142**	**26.80305**	**21.44586**	**24.08823**	**25.03512**
-0.5	**-29.6013**	**-34.3186**	**-35.8458**	**-28.0881**	**-31.3828**	**-33.337**
+0.5	**18.45735**	**21.18099**	**21.42018**	**18.0616**	**19.88077**	**20.9899**
-0.55	**-32.9879**	**-39.1045**	**-41.01**	**-31.0011**	**-34.9283**	**-36.9388**
+0.55	**15.88137**	**18.0247**	**18.09034**	**15.82658**	**17.42418**	**18.23118**
-0.6	**-37.6119**	**-45.668**	**-48.5873**	**-35.2436**	**-41.2932**	**-42.0942**
+0.6	**12.60095**	**13.93366**	**13.80139**	**12.847**	**14.13256**	**14.56888**
-0.65	**-40.8199**	**-51.0217**	**-54.39**	**-38.2887**	**-46.3032**	**-45.8114**
+0.65	**10.40184**	**11.72797**	**11.24224**	**10.83395**	**11.82598**	**12.10654**
-0.7	**-45.1607**	**-58.7012**	**-62.6979**	**-43.1363**	**-53.1506**	**-53.131**
+0.7	**7.540286**	**8.830299**	**8.23497**	**8.190279**	**8.9173**	**8.985087**
-0.75	**-48.1429**	**-65.0519**	**-68.7641**	**-47.1737**	**-57.9962**	**-58.5077**
+0.75	**5.661384**	**6.905735**	**6.44609**	**6.435139**	**6.986699**	**7.050058**
-0.8	**-52.1347**	**-73.7041**	**-77.1435**	**-53.2639**	**-65.3008**	**-66.1108**
+0.8	**3.905134**	**4.328041**	**4.143709**	**4.376852**	**4.668642**	**4.518144**
-0.85	**-54.844**	**-79.692**	**-82.9658**	**-57.4734**	**-70.3464**	**-71.3517**
+0.85	**2.921456**	**2.732435**	**2.766592**	**3.081645**	**3.287088**	**2.905474**
-0.9	**-58.4209**	**-88.5324**	**-90.7516**	**-63.1459**	**-77.1406**	**-78.8672**
+0.9	**1.665546**	**1.256156**	**1.178136**	**1.444876**	**1.541201**	**1.287002**
-0.95	**-60.8104**	**-95.0937**	**-97.107**	**-67.0244**	**-81.7824**	**-84.021**
+0.95	**0.86005**	**0.537394**	**0.602846**	**0.597457**	**0.637288**	**0.532347**
-1	**-63.9065**	**-103.909**	**-106.463**	**-72.1877**	**-87.9564**	**-90.9047**
+1	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**0.00E+00**	**0**	**0**	**0**	**0**	**0**
+2	**63.43981**	**102.6738**	**105.0407**	**71.46796**	**87.09618**	**89.94347**
-2.05	**-7.08E-01**	**-0.44238**	**-0.49517**	**-0.49168**	**-0.52446**	**-0.43828**
+2.05	**61.22488**	**96.37665**	**98.3426**	**67.77935**	**82.68552**	**85.02576**
-2.1	**-1.83572**	**-1.45571**	**-1.36849**	**-1.66632**	**-1.7774**	**-1.48389**
+2.1	**57.8761**	**87.19169**	**89.5458**	**62.3499**	**76.18756**	**77.81113**
-2.15	**-2.73292**	**-2.52214**	**-2.52261**	**-2.83571**	**-3.02476**	**-2.60097**
+2.15	**55.31815**	**80.86536**	**84.09304**	**58.29761**	**71.33393**	**72.44225**
-2.2	**-4.10549**	**-4.76775**	**-4.45778**	**-4.6488**	**-4.95872**	**-4.85844**
+2.2	**51.52207**	**72.48301**	**75.9422**	**52.40476**	**64.2707**	**65.08164**
-2.25	**-5.29665**	**-6.53711**	**-6.10261**	**-6.09909**	**-6.61688**	**-6.6793**
+2.25	**48.66817**	**66.30214**	**69.95196**	**48.05413**	**59.05252**	**59.5651**

-2.3	-7.92141	-9.23122	-8.6067	-8.55603	-9.31944	-9.38806
+2.3	44.49069	57.59922	61.53131	42.32991	52.18247	52.03831
-2.35	-9.96148	-11.3013	-10.7494	-10.4447	-11.3952	-11.6316
+2.35	41.38787	52.12657	55.59662	38.87371	47.29091	46.60076
-2.4	-13.0721	-14.3912	-14.3708	-13.2627	-14.5899	-15.0786
+2.4	36.89486	44.7384	47.428	34.61045	40.27745	41.33581
-2.45	-15.4128	-17.4489	-17.4528	-15.3913	-16.9307	-17.6949
+2.45	33.5902	40.04973	42.03268	31.57434	35.71083	37.64795
-2.5	-19.0144	-21.8827	-22.1658	-18.52	-20.3845	-21.5568
+2.5	28.84753	33.35009	34.8035	27.5782	30.78929	32.67875
-2.55	-21.8041	-25.4907	-26.0112	-20.8526	-23.4548	-24.4466
+2.55	25.57453	29.09936	30.23195	25.00296	27.77652	29.35788
-2.6	-25.8992	-30.8316	-31.9127	-24.365	-28.4275	-28.7686
+2.6	21.22104	24.46734	23.9101	21.31259	23.61141	24.61015
-2.65	-28.9487	-35.1815	-36.6624	-26.7423	-32.4179	-32.002
+2.65	18.0603	21.23334	20.42878	18.62435	20.67585	21.15932
-2.7	-33.3746	-41.7424	-43.3831	-31.3671	-38.2982	-38.2063
+2.7	13.57918	16.38773	15.85912	14.80093	16.4995	16.56536
-2.75	-36.6368	-47.0745	-48.4766	-35.0133	-42.7354	-42.8694
+2.75	10.34817	13.31023	12.76898	12.03564	13.4781	13.47946
-2.8	-41.3276	-54.8975	-55.8804	-40.5966	-49.5173	-49.6926
+2.8	7.531333	9.6716	10.21147	8.753567	9.30744	9.210054
-2.85	-44.7555	-60.7196	-61.3448	-44.7487	-54.555	-54.9727
+2.85	6.122364	9.6716	10.21147	6.458207	8.053489	8.280818
-2.9	-49.6453	-69.5	-69.9936	-50.7669	-61.8496	-62.6551
+2.9	6.122364	9.6716	10.21147	6.456952	8.053489	8.280818
-2.95	-53.1918	-76.201	-76.4596	-55.197	-67.2144	-68.3241
+2.95	6.122364	9.6716	10.21147	6.456952	8.053489	8.280818
-3	-58.2147	-85.8937	-86.3786	-61.5587	-74.912	-76.4833
+3	6.122364	9.6716	10.21147	6.456952	8.053489	8.280818

2-Span: Moment (Max and Min) Raw Data Results - 60' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-1.38E-13**	**-5.8E-14**	**-6.73457E-14**	**-6.3E-14**	**-5.14E-14**	**-7.08224E-14**	**-6E-14**	**-6E-14**	**-6.03825E-14**	**-5.9E-14**
End Shear	**7.59E-14**	**3.08E-14**	**3.32778E-14**	**4.13E-14**	**3.69E-14**	**4.05865E-14**	**3.31E-14**	**3.67E-14**	**3.7021E-14**	**2.9E-14**
-0.05	**-18.367**	**-13.1683**	**-15.33360416**	**-13.9454**	**-12.6675**	**-10.69392258**	**-14.5409**	**-16.3568**	**-18.19850076**	**-19.9622**
+0.05	**161.5019**	**118.8941**	**133.8085933**	**119.1816**	**104.3739**	**96.75687071**	**130.2106**	**144.078**	**151.3318958**	**157.4136**
-0.1	**-36.7341**	**-26.3366**	**-30.66720831**	**-27.8908**	**-25.3349**	**-21.38784515**	**-29.0819**	**-32.7136**	**-36.39700152**	**-39.9245**
+0.1	**297.4477**	**219.81**	**243.4338803**	**214.3687**	**189.0555**	**179.0600809**	**241.0535**	**266.1075**	**279.6869127**	**292.5576**
-0.15	**-55.1011**	**-39.5049**	**-46.00081247**	**-41.8362**	**-38.0024**	**-32.08176773**	**-43.6228**	**-49.0703**	**-54.59550228**	**-59.8867**
+0.15	**408.4059**	**303.5197**	**329.9741445**	**289.4147**	**256.7009**	**247.1542326**	**333.1557**	**366.8738**	**397.7336663**	**413.8618**
-0.2	**-73.4681**	**-52.6732**	**-61.33441663**	**-55.7816**	**-50.6699**	**-42.7756903**	**-58.1638**	**-65.4271**	**-72.79400304**	**-79.849**
+0.2	**495.3151**	**370.0735**	**394.8024139**	**344.9174**	**307.442**	**301.587368**	**406.5036**	**446.3972**	**491.8545079**	**516.667**
-0.25	**-91.8351**	**-65.8415**	**-76.66802078**	**-69.7269**	**-63.3373**	**-53.46961288**	**-72.7047**	**-81.7839**	**-90.9925038**	**-99.8112**
+0.25	**559.2885**	**419.945**	**442.4356614**	**392.1056**	**350.3894**	**342.652619**	**461.6775**	**508.2037**	**563.4012448**	**601.9604**
-0.3	**-110.202**	**-79.0098**	**-92.00162494**	**-83.6723**	**-76.0048**	**-64.16353545**	**-87.2456**	**-98.1407**	**-109.1910046**	**-119.773**
+0.3	**600.9266**	**453.8061**	**477.3709643**	**420.4381**	**377.6621**	**370.7714285**	**504.6236**	**558.9564**	**612.5708546**	**662.3037**
-0.35	**-128.569**	**-92.178**	**-107.3352291**	**-97.6177**	**-88.6723**	**-74.85745803**	**-101.787**	**-114.497**	**-127.3895053**	**-139.736**
+0.35	**633.3348**	**478.4264**	**492.8328502**	**431.3011**	**389.9964**	**386.5582172**	**535.1295**	**590.1264**	**647.1911976**	**699.0123**
-0.4	**-146.936**	**-105.346**	**-122.6688333**	**-111.563**	**-101.34**	**-85.5513806**	**-116.328**	**-130.854**	**-145.5880061**	**-159.698**
+0.4	**646.952**	**490.5043**	**492.0640134**	**426.2405**	**388.6023**	**390.7214055**	**549.0667**	**602.7345**	**665.9102776**	**715.0667**
-0.45	**-165.303**	**-118.515**	**-138.0024374**	**-125.509**	**-114.007**	**-96.24530318**	**-130.868**	**-147.211**	**-163.7865068**	**-179.66**
+0.45	**640.6654**	**488.3378**	**478.400239**	**433.6002**	**395.052**	**384.0632471**	**547.4037**	**598.2763**	**664.656611**	**718.7564**
-0.5	**-183.67**	**-131.683**	**-153.3360416**	**-139.454**	**-126.675**	**-106.9392258**	**-145.409**	**-163.568**	**-181.9850076**	**-199.622**
+0.5	**633.9464**	**479.4289**	**462.0203817**	**427.0137**	**388.2822**	**380.2837355**	**537.598**	**588.1416**	**651.2431292**	**702.4604**
-0.55	**-202.037**	**-144.851**	**-168.6696457**	**-153.399**	**-139.342**	**-117.6331483**	**-159.95**	**-179.925**	**-200.1835084**	**-219.585**
+0.55	**612.365**	**461.5216**	**460.3117546**	**406.4725**	**369.8436**	**370.2329229**	**516.5247**	**567.4664**	**625.1911424**	**670.8234**
-0.6	**-220.404**	**-158.02**	**-184.0032499**	**-167.345**	**-152.01**	**-128.3270709**	**-174.491**	**-196.281**	**-218.3820091**	**-239.547**
+0.6	**572.8252**	**430.8666**	**440.1832541**	**380.1589**	**345.4792**	**349.2715501**	**481.8053**	**530.905**	**581.6697607**	**628.2969**
-0.65	**-238.771**	**-171.188**	**-199.336854**	**-181.29**	**-164.677**	**-139.0209935**	**-189.032**	**-212.638**	**-236.5805099**	**-259.509**
+0.65	**516.1296**	**389.033**	**405.7068137**	**354.6143**	**319.7122**	**318.2876978**	**434.7536**	**479.8026**	**523.3522597**	**567.1314**
-0.7	**-257.138**	**-184.356**	**-214.6704582**	**-195.235**	**-177.345**	**-149.7149161**	**-203.573**	**-228.995**	**-254.7790106**	**-279.471**
+0.7	**447.4094**	**340.2054**	**354.768084**	**311.3915**	**278.6318**	**278.2633966**	**376.81**	**415.6211**	**454.8882335**	**489.2918**
-0.75	**-275.505**	**-197.524**	**-230.0040624**	**-209.181**	**-190.012**	**-160.4088386**	**-218.114**	**-245.352**	**-272.9775114**	**-299.434**
+0.75	**366.7554**	**281.2102**	**287.3040967**	**251.6279**	**223.3329**	**230.2745504**	**309.542**	**340.1061**	**372.5925281**	**396.9251**
-0.8	**-293.872**	**-210.693**	**-245.3376665**	**-223.126**	**-202.679**	**-171.1027612**	**-232.655**	**-261.708**	**-291.1760122**	**-319.396**
+0.8	**272.4128**	**213.4886**	**209.4031713**	**177.689**	**155.5998**	**175.4909813**	**234.6437**	**255.1488**	**278.4925497**	**292.3603**
-0.85	**-312.239**	**-223.861**	**-260.6712707**	**-237.072**	**-232.607**	**-181.7966838**	**-247.196**	**-278.065**	**-309.3745129**	**-339.358**
+0.85	**172.1757**	**138.5996**	**138.2831114**	**109.8294**	**93.72695**	**115.1765168**	**153.9362**	**162.7862**	**177.9599525**	**181.5807**
-0.9	**-330.606**	**-237.029**	**-276.0048748**	**-251.017**	**-292.321**	**-192.4906064**	**-261.737**	**-294.422**	**-327.5730137**	**-359.32**
+0.9	**99.14283**	**82.32166**	**81.99855797**	**65.49176**	**53.56126**	**68.13536739**	**87.05296**	**87.06514**	**89.98126512**	**89.94453**
-0.95	**-348.973**	**-250.198**	**-291.338479**	**-270.258**	**-372.509**	**-203.1845289**	**-276.278**	**-310.779**	**-345.7715145**	**-379.283**
+0.95	**49.02285**	**26.89914**	**26.63963927**	**24.43454**	**19.25664**	**33.56609802**	**25.99539**	**25.94337**	**25.99800841**	**26.03583**
-1	**-367.342**	**-263.366**	**-337.3850697**	**-363.224**	**-461.513**	**-213.8784482**	**-290.819**	**-327.136**	**-363.9701682**	**-399.245**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-367.342**	**-263.366**	**-337.3850697**	**-363.224**	**-461.513**	**-213.8784482**	**-290.819**	**-327.136**	**-363.9701682**	**-399.245**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-348.975**	**-250.197**	**-291.3384731**	**-270.258**	**-372.51**	**-203.1842671**	**-276.278**	**-310.779**	**-345.7716595**	**-379.283**
+2.05	**49.01201**	**26.88504**	**26.6275316**	**24.42425**	**19.25143**	**33.54787594**	**25.98166**	**25.93005**	**25.98503312**	**26.03711**
-2.1	**-330.608**	**-237.029**	**-276.0048694**	**-251.017**	**-292.322**	**-192.4903581**	**-261.737**	**-294.422**	**-327.5731509**	**-359.32**
+2.1	**99.13286**	**82.32894**	**82.00482704**	**65.19073**	**53.44601**	**68.11849675**	**87.06704**	**87.0499**	**89.99092816**	**89.9539**
-2.15	**-312.241**	**-223.861**	**-260.6712658**	**-237.072**	**-232.608**	**-181.7964491**	**-247.196**	**-278.065**	**-309.3746422**	**-339.358**
+2.15	**172.6848**	**138.605**	**138.2637781**	**109.834**	**93.71963**	**115.1949601**	**153.9322**	**162.7916**	**177.9684985**	**181.5948**
-2.2	**-293.873**	**-210.692**	**-245.3376622**	**-223.126**	**-202.68**	**-171.1025402**	**-232.655**	**-261.709**	**-291.1761335**	**-319.396**
+2.2	**273.0621**	**213.4941**	**209.4076928**	**177.6909**	**155.5909**	**175.5096642**	**234.6406**	**255.143**	**278.4996366**	**292.3734**
-2.25	**-275.506**	**-197.524**	**-230.0040585**	**-209.181**	**-190.012**	**-160.4086312**	**-218.114**	**-245.352**	**-272.9776249**	**-299.434**

+2.25	367.365	281.215	287.3061163	251.6245	223.3312	230.292711	309.539	340.1001	372.598953	396.9379
-2.3	-257.139	-184.356	-214.6704549	-195.235	-177.345	-149.7147222	-203.573	-228.995	-254.7791162	-279.471
+2.3	447.9525	340.209	354.7638104	311.3855	278.6288	278.2805952	376.8062	415.614	454.8930843	489.3033
-2.35	-238.772	-171.188	-199.3368513	-181.29	-164.677	-139.0208133	-189.032	-212.638	-236.5806076	-259.509
+2.35	516.8367	389.0346	405.6991539	354.6052	319.7176	318.3033617	434.7483	479.7936	523.3545986	567.1404
-2.4	-220.405	-158.019	-184.0032477	-167.345	-152.01	-128.3269043	-174.491	-196.281	-218.3820989	-239.547
+2.4	573.4432	430.8633	440.174742	380.1659	345.4827	349.2851236	481.7978	530.8933	581.6655812	628.3026
-2.45	-202.038	-144.851	-168.669644	-153.399	-139.342	-117.6329953	-159.95	-179.925	-200.1835903	-219.585
+2.45	612.8712	461.5156	460.2994651	406.4854	369.8387	370.2440245	516.5144	567.4807	625.1835476	670.8252
-2.5	-183.671	-131.683	-153.3360404	-139.454	-126.675	-106.9390863	-145.409	-163.568	-181.9850816	-199.622
+2.5	633.4533	479.4197	462.030736	427.0236	388.2758	380.2919383	537.5842	588.1519	651.2314406	702.4549
-2.55	-165.304	-118.514	-138.0024368	-125.508	-114.007	-96.24517738	-130.868	-147.211	-163.7865729	-179.66
+2.55	640.3324	488.3486	478.4151059	433.6109	395.0459	384.0563811	547.4194	598.2678	664.6702031	718.7635
-2.6	-146.937	-105.346	-122.6688331	-111.563	-101.34	-85.55126841	-116.327	-130.854	-145.5880643	-159.698
+2.6	646.4866	490.5116	492.0759757	426.255	388.6059	390.711942	549.0786	602.7514	665.9192652	715.0686
-2.65	-128.57	-92.1779	-107.3352295	-97.6177	-88.6724	-74.85735944	-101.787	-114.498	-127.3895556	-139.736
+2.65	632.8199	478.4298	492.8436771	431.3129	389.9923	386.5457422	535.1371	590.1386	647.194972	699.0069
-2.7	-110.203	-79.0097	-92.00162588	-83.6723	-76.0049	-64.16345047	-87.2456	-98.1407	-109.191047	-119.773
+2.7	600.7435	453.8044	477.3777404	420.4466	377.6564	370.7556037	504.6265	558.9636	612.5678509	662.2924
-2.75	-91.8355	-65.8414	-76.66802225	-69.7269	-63.3374	-53.4695415	-72.7047	-81.784	-90.99253832	-99.8112
+2.75	559.4773	419.9389	442.4378427	392.1102	350.3912	342.6331175	461.6748	508.2054	563.3924698	601.9707
-2.8	-73.4684	-52.6731	-61.33441862	-55.7815	-50.6699	-42.77563253	-58.1637	-65.4272	-72.79402966	-79.849
+2.8	495.9315	370.0628	394.7986355	344.9178	307.4422	301.5640273	406.4957	446.3926	491.839565	516.6706
-2.85	-55.1013	-39.5048	-46.00081499	-41.8362	-38.0024	-32.08172356	-43.6228	-49.0704	-54.595521	-59.8867
+2.85	409.0314	303.5042	329.9651059	289.4099	256.6985	247.1673894	333.1425	366.8633	397.7409783	413.8578
-2.9	-36.7342	-26.3366	-30.66721136	-27.8908	-25.335	-21.3878146	-29.0819	-32.7136	-36.39701235	-39.9245
+2.9	297.8717	219.8206	243.4461509	214.3791	189.0511	179.0689799	241.0346	266.0907	279.6874176	292.5595
-2.95	-18.3671	-13.1683	-15.33360773	-13.9454	-12.6675	-10.69390563	-14.5409	-16.3568	-18.19850369	-19.9622
+2.95	161.7167	118.8995	133.814861	119.1875	104.3667	96.76134361	130.2164	144.0845	151.3253162	157.4079
-3	-2.27E-13	-1.3E-13	-1.225E-13	-1.3E-13	-1.12E-13	-1.1008E-13	-1.3E-13	-1.2E-13	-1.25682E-13	-1.3E-13
+3	9.06E-14	5.16E-14	5.57186E-14	4.78E-14	4.15E-14	5.27134E-14	5.65E-14	6.14E-14	6.46867E-14	6.66E-14

2-Span: Moment (Max and Min) Raw Data Results - 60' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.38E-13	-1.1E-13	-1.2E-13	-7.1E-14	-8.8E-14	-7.4E-14	-7.9E-14	-5.7E-14
End Shear	7.59E-14	3.65E-14	4.31E-14	4.3E-14	4.83E-14	3.7E-14	3.89E-14	3.93E-14
-0.05	-18.367	-17.7599	-19.0147	-17.9026	-21.5246	-17.828	-18.8168	-8.84021
+0.05	161.5019	162.3422	171.795	160.1618	187.7575	151.1969	159.4405	83.28046
-0.1	-36.7341	-35.5199	-38.0295	-35.8052	-43.0492	-35.656	-37.6336	-17.6804
+0.1	297.4477	301.0712	318.3739	296.6776	347.3645	274.466	289.3542	154.013
-0.15	-55.1011	-53.2798	-57.0442	-53.7078	-64.5738	-53.4839	-56.4503	-26.5206
+0.15	408.4059	417.1422	440.5268	410.172	478.971	371.322	391.3637	212.4301
-0.2	-73.4681	-71.0398	-76.059	-71.6105	-86.0984	-71.3119	-75.2671	-35.3609
+0.2	495.3151	510.3809	538.2201	500.6791	582.9948	443.0066	466.7657	258.8472
-0.25	-91.8351	-88.7997	-95.0737	-89.5131	-107.623	-89.1399	-94.0839	-44.2011
+0.25	559.2885	581.4305	612.1762	568.8977	671.7398	509.3456	537.5571	293.6627
-0.3	-110.202	-106.56	-114.088	-107.416	-129.148	-106.968	-112.901	-53.0413
+0.3	600.9266	631.0872	663.2816	625.2596	738.3921	552.6455	584.0013	317.3579
-0.35	-128.569	-124.32	-133.103	-125.318	-150.672	-124.796	-131.717	-61.8815
+0.35	633.3348	662.4435	701.3556	663.2208	779.8507	579.7229	612.0573	330.7171
-0.4	-146.936	-142.08	-152.118	-143.221	-172.197	-142.624	-150.534	-70.7217
+0.4	646.952	682.9747	721.3578	680.8334	797.4792	589.5935	623.0482	334.2059
-0.45	-165.303	-159.84	-171.133	-161.124	-193.721	-160.452	-169.351	-79.5619
+0.45	640.6654	684.2404	720.8643	679.2709	792.3079	578.4106	611.6904	328.4686
-0.5	-183.67	-177.599	-190.147	-179.026	-215.246	-178.28	-188.168	-88.4021
+0.5	633.9464	670.682	707.5468	667.0108	779.8801	557.2426	589.2095	323.2534
-0.55	-202.037	-195.359	-209.162	-196.929	-236.771	-196.108	-206.985	-97.2424
+0.55	612.365	641.6897	678.1843	640.3818	751.116	551.3241	582.6054	316.7352
-0.6	-220.404	-213.119	-228.177	-214.831	-258.295	-213.936	-225.801	-106.083
+0.6	572.8252	596.7817	631.4003	597.171	701.7574	522.5776	551.8471	300.5582
-0.65	-238.771	-230.879	-247.192	-232.734	-279.82	-231.764	-244.618	-114.923
+0.65	516.1296	542.4096	568.9274	538.9744	633.7125	472.6361	499.609	275.4838
-0.7	-257.138	-248.639	-266.206	-250.637	-301.345	-249.592	-263.435	-123.763
+0.7	447.4094	474.693	496.8565	467.5629	549.0773	411.1303	434.2579	242.3565
-0.75	-275.505	-266.399	-285.221	-268.539	-322.869	-267.42	-282.252	-132.603
+0.75	366.7554	394.5823	411.462	384.8622	450.1357	330.2071	348.4366	202.1038
-0.8	-293.872	-284.159	-304.236	-286.442	-344.394	-285.248	-301.069	-141.443
+0.8	272.4128	304.0285	314.446	292.9534	339.3596	232.0574	244.4721	155.7358
-0.85	-312.239	-301.919	-323.251	-304.344	-365.918	-303.076	-319.885	-150.284
+0.85	172.1757	205.135	208.0444	194.0722	219.4086	154.6882	163.1316	106.5496
-0.9	-330.606	-319.679	-342.265	-322.247	-387.443	-320.904	-338.702	-159.124
+0.9	99.14283	116.8915	116.8915	106.7424	112.401	88.87158	93.54903	70.65249
-0.95	-348.973	-337.439	-361.28	-340.15	-408.968	-338.732	-357.519	-167.964
+0.95	49.02285	38.28875	38.28875	30.58281	30.58281	29.04808	30.57693	34.54241
-1	-367.342	-355.199	-380.295	-358.052	-430.492	-390.864	-414.426	-176.804
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-367.342	-355.199	-380.295	-358.052	-430.492	-390.864	-414.426	-176.804
+2	0	0	0	0	0	0	0	0
-2.05	-348.975	-337.439	-361.28	-340.149	-408.968	-338.731	-357.519	-167.964
+2.05	49.01201	38.26822	38.26822	30.56666	30.57131	29.03501	30.56317	34.31364
-2.1	-330.608	-319.679	-342.265	-322.247	-387.443	-320.903	-338.702	-159.124
+2.1	99.13286	116.9021	116.9021	106.763	112.4269	88.87836	93.55617	70.23041
-2.15	-312.241	-301.919	-323.25	-304.344	-365.918	-303.076	-319.885	-150.284
+2.15	172.6848	205.1427	208.0507	194.0656	219.4307	154.6938	163.1373	105.9679
-2.2	-293.873	-284.159	-304.236	-286.442	-344.394	-285.248	-301.069	-141.443
+2.2	273.0621	304.0369	314.4527	292.9478	339.3828	232.0676	244.4832	155.73
-2.25	-275.506	-266.399	-285.221	-268.539	-322.869	-267.42	-282.252	-132.603

+2.25	367.365	394.5903	411.4681	384.8568	450.1589	330.2154	348.4457	202.0978
-2.3	-257.139	-248.639	-266.206	-250.636	-301.345	-249.592	-263.435	-123.763
+2.3	447.9525	474.6997	496.8611	467.5566	549.0993	411.1358	434.264	242.3502
-2.35	-238.772	-230.879	-247.192	-232.734	-279.82	-231.764	-244.618	-114.923
+2.35	516.8367	542.414	568.925	538.9663	633.732	472.6379	499.6113	275.477
-2.4	-220.405	-213.12	-228.177	-214.831	-258.295	-213.936	-225.801	-106.083
+2.4	573.4432	596.7796	631.3951	597.1603	701.7736	522.5721	551.8416	300.5507
-2.45	-202.038	-195.36	-209.162	-196.929	-236.771	-196.108	-206.985	-97.2424
+2.45	612.8712	641.6843	678.1755	640.3677	751.1278	551.314	582.5951	316.7271
-2.5	-183.671	-177.6	-190.147	-179.026	-215.246	-178.28	-188.168	-88.4022
+2.5	633.4533	670.6726	707.5336	667.0282	779.8868	557.2562	589.2241	323.2445
-2.55	-165.304	-159.84	-171.133	-161.123	-193.721	-160.452	-169.351	-79.562
+2.55	640.3324	684.2526	720.8803	679.2917	792.3041	578.4231	611.7032	328.4643
-2.6	-146.937	-142.08	-152.118	-143.221	-172.197	-142.624	-150.534	-70.7217
+2.6	646.4866	682.9819	721.3686	680.8495	797.47	589.6021	623.0568	334.201
-2.65	-128.57	-124.32	-133.103	-125.318	-150.672	-124.796	-131.717	-61.8815
+2.65	632.8199	662.4452	701.3607	663.2316	779.8351	579.7267	612.0608	330.7114
-2.7	-110.203	-106.56	-114.088	-107.416	-129.148	-106.968	-112.901	-53.0413
+2.7	600.7435	631.0819	663.2792	625.2648	738.4054	552.6424	583.9975	317.3646
-2.75	-91.8355	-88.7998	-95.0737	-89.513	-107.623	-89.1399	-94.0839	-44.2011
+2.75	559.4773	581.4193	612.1674	568.8959	671.7458	509.337	537.5474	293.6684
-2.8	-73.4684	-71.0398	-76.0589	-71.6104	-86.0984	-71.3119	-75.2671	-35.3609
+2.8	495.9315	510.3632	538.2045	500.671	582.9924	443.0042	466.7633	258.8519
-2.85	-55.1013	-53.2799	-57.0442	-53.7078	-64.5738	-53.4839	-56.4504	-26.5206
+2.85	409.0314	417.1179	440.504	410.1574	478.9606	371.3135	391.3549	212.4337
-2.9	-36.7342	-35.5199	-38.0295	-35.8052	-43.0492	-35.6559	-37.6336	-17.6804
+2.9	297.8717	301.0534	318.3435	296.6559	347.3457	274.4802	289.3691	154.0154
-2.95	-18.3671	-17.76	-19.0147	-17.9026	-21.5246	-17.828	-18.8168	-8.84021
+2.95	161.7167	162.3495	171.8028	160.169	187.7661	151.2042	159.4482	83.2817
-3	-2.27E-13	-1.7E-13	-1.9E-13	-1.4E-13	-1.6E-13	-1.5E-13	-1.6E-13	-9.6E-14
+3	9.06E-14	7.48E-14	8.14E-14	6.67E-14	7.98E-14	6.58E-14	6.95E-14	3.83E-14

2-Span: Moment (Max and Min) Raw Data Results - 60' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.38E-13	-1.1E-13	-1.2E-13	-8.9E-14	-9.3E-14	-8E-14
End Shear	7.59E-14	6.51E-14	8.86E-14	3.61E-14	5.69E-14	4.92E-14
-0.05	-18.367	-29.0148	-30.6344	-19.3709	-24.1605	-24.8425
+0.05	161.5019	232.681	234.7941	168.2765	204.894	208.4132
-0.1	-36.7341	-58.0296	-61.2688	-38.7417	-48.321	-49.6849
+0.1	297.4477	417.5934	423.267	304.5855	371.2348	376.0793
-0.15	-55.1011	-87.0444	-91.9032	-58.1126	-72.4815	-74.5274
+0.15	408.4059	572.1064	579.5349	410.535	501.6195	505.9695
-0.2	-73.4681	-116.059	-122.538	-77.4834	-96.6419	-99.3699
+0.2	495.3151	695.5254	715.6023	498.1466	613.5768	620.3537
-0.25	-91.8351	-145.074	-153.172	-96.8543	-120.802	-124.212
+0.25	559.2885	782.7849	823.1679	570.7356	694.3159	704.2837
-0.3	-110.202	-174.089	-183.806	-116.225	-144.963	-149.055
+0.3	600.9266	838.4335	902.6495	616.0037	742.4524	770.1379
-0.35	-128.569	-203.104	-214.441	-135.596	-169.123	-173.897
+0.35	633.3348	882.7516	956.6962	640.1334	762.5488	801.889
-0.4	-146.936	-232.118	-245.075	-154.967	-193.284	-198.74
+0.4	646.952	904.9707	984.4843	647.8046	765.851	802.9304
-0.45	-165.303	-261.133	-275.71	-174.338	-217.444	-223.582
+0.45	640.6654	914.819	978.9917	632.2163	750.0526	784.7203
-0.5	-183.67	-290.148	-306.344	-193.709	-241.605	-248.425
+0.5	633.9464	886.7193	955.2779	596.2362	720.911	742.5058
-0.55	-202.037	-319.163	-336.978	-213.079	-265.765	-273.267
+0.55	612.365	860.4863	915.1418	596.2934	713.4333	739.5256
-0.6	-220.404	-348.178	-367.613	-232.45	-289.926	-298.11
+0.6	572.8252	795.0375	857.6024	573.0699	681.6011	712.4577
-0.65	-238.771	-377.193	-398.247	-251.821	-314.086	-322.952
+0.65	516.1296	714.1516	769.9812	525.2347	629.8945	658.5849
-0.7	-257.138	-406.207	-428.882	-271.192	-338.247	-347.795
+0.7	447.4094	615.1987	654.5116	462.6791	554.1518	572.0736
-0.75	-275.505	-435.222	-459.516	-290.563	-362.407	-372.637
+0.75	366.7554	497.2118	514.5563	376.3446	451.1371	456.2618
-0.8	-293.872	-464.237	-490.15	-309.934	-386.568	-397.479
+0.8	272.4128	347.1944	347.7873	268.6884	321.9155	321.6348
-0.85	-312.239	-493.252	-520.785	-329.304	-410.728	-422.322
+0.85	172.1757	203.1803	190.7292	184.5374	205.1185	212.6142
-0.9	-330.606	-522.267	-551.419	-348.675	-434.889	-447.164
+0.9	99.14283	109.8714	102.2297	105.1651	112.2877	112.4102
-0.95	-348.973	-551.281	-620.6	-368.606	-459.049	-472.007
+0.95	49.02285	30.63146	34.48945	34.32388	36.61214	30.56625
-1	-367.342	-720.502	-789.159	-492.693	-569.769	-629.699
+1	0	0	0	0	0	0
(Span 2) -2	-367.342	-720.502	-789.159	-492.693	-569.769	-629.699
+2	0	0	0	0	0	0
-2.05	-348.975	-551.281	-620.6	-368.605	-459.049	-472.007
+2.05	49.01201	30.63278	34.48691	34.30863	36.59588	30.55304
-2.1	-330.608	-522.266	-551.419	-348.675	-434.888	-447.164
+2.1	99.13286	109.8642	102.2287	105.1395	112.2802	112.4029
-2.15	-312.241	-493.252	-520.785	-329.305	-410.728	-422.322
+2.15	172.6848	203.1715	190.7278	184.5439	205.1131	212.6064
-2.2	-293.873	-464.237	-490.15	-309.934	-386.567	-397.479
+2.2	273.0621	347.1813	347.7853	268.7017	321.9063	321.6257
-2.25	-275.506	-435.222	-459.516	-290.563	-362.407	-372.637

+2.25	367.365	497.1946	514.5584	376.3554	451.1537	456.2552
-2.3	-257.139	-406.207	-428.882	-271.192	-338.247	-347.794
+2.3	447.9525	615.2043	654.5133	462.6862	554.1637	572.0914
-2.35	-238.772	-377.192	-398.247	-251.821	-314.086	-322.952
+2.35	516.8367	714.1622	769.9794	525.2371	629.9041	658.5972
-2.4	-220.405	-348.178	-367.613	-232.45	-289.926	-298.109
+2.4	573.4432	795.0279	857.6004	573.0638	681.6049	712.4634
-2.45	-202.038	-319.163	-336.978	-213.079	-265.765	-273.267
+2.45	612.8712	860.4992	915.1399	596.2817	713.4278	739.5205
-2.5	-183.671	-290.148	-306.344	-193.709	-241.605	-248.425
+2.5	633.4533	886.7244	955.2751	596.2432	720.8989	742.5088
-2.55	-165.304	-261.133	-275.71	-174.338	-217.444	-223.582
+2.55	640.3324	914.8058	978.994	632.2285	750.0616	784.7262
-2.6	-146.937	-232.118	-245.075	-154.967	-193.284	-198.74
+2.6	646.4866	904.9779	984.7232	647.8127	765.855	802.9269
-2.65	-128.57	-203.104	-214.441	-135.596	-169.123	-173.897
+2.65	632.8199	882.7376	957.5048	640.1365	762.5443	801.8796
-2.7	-110.203	-174.089	-183.806	-116.225	-144.963	-149.055
+2.7	600.7435	838.4372	902.6479	615.999	742.4448	770.1508
-2.75	-91.8355	-145.074	-153.172	-96.8543	-120.802	-124.212
+2.75	559.4773	782.7777	823.1654	570.7249	694.3313	704.2887
-2.8	-73.4684	-116.059	-122.538	-77.4834	-96.6419	-99.3698
+2.8	495.9315	695.5124	715.6007	498.1632	613.5844	620.363
-2.85	-55.1013	-87.0444	-91.9032	-58.1126	-72.4814	-74.5274
+2.85	409.0314	572.1125	579.5315	410.5242	501.6174	505.9701
-2.9	-36.7342	-58.0296	-61.2688	-38.7417	-48.3209	-49.6849
+2.9	297.8717	417.5874	423.2651	304.6014	371.2239	376.0697
-2.95	-18.3671	-29.0148	-30.6344	-19.3709	-24.1605	-24.8425
+2.95	161.7167	232.6929	234.7905	168.2848	204.904	208.4235
-3	-2.27E-13	-2.2E-13	-2.5E-13	-1.6E-13	-1.9E-13	-1.8E-13
+3	9.06E-14	1.04E-13	1.04E-13	7.03E-14	8.17E-14	8.21E-14

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-18.99370556	-15.48710371	-17.09490661	-11.50917696	-12.33338808	-11.6138153	-13.98209601	-12.06552305	-12.7423	-5.797766969
End Shear	170.4088238	144.1415355	153.3679408	113.4685341	120.3747121	112.3817808	132.3867641	110.6981175	116.8038	58.51561009
-0.05	-19.10575638	-15.59915453	-21.02810588	-11.50917696	-12.33338808	-11.6138153	-13.98209601	-12.06552305	-12.7423	-5.797766969
+0.05	155.216551	132.0902826	140.13829	104.7392764	110.9907303	103.5646915	121.7373197	100.2877547	105.793	53.9307905
-0.1	-19.47916619	-15.97256434	-25.82996588	-11.50917696	-12.33338808	-11.6138153	-13.98209601	-12.06552305	-12.7423	-5.797766969
+0.1	140.9434294	120.8501742	127.2588394	96.53814425	102.1814843	95.27147974	111.7354363	90.47651854	95.41787	49.56932224
-0.15	-20.00664407	-22.02212543	-30.11614946	-13.70201968	-13.70201968	-11.71788442	-13.98209601	-12.06552305	-12.7423	-8.004233677
+0.15	129.0501963	111.4688729	116.5255271	89.57840392	94.71121361	88.24217247	103.2696098	82.27358199	86.74505	45.87672763
-0.2	-24.70539975	-30.54568951	-35.29945923	-20.05701164	-20.05701164	-18.59658456	-19.68930169	-15.25261449	-16.0554	-10.92126399
+0.2	115.6069323	100.8426955	104.3919149	81.5670457	86.11880149	80.16098278	93.55100917	72.9798664	76.92093	41.63674659
-0.25	-32.5116319	-37.9989066	-42.44021206	-25.97792478	-26.15158292	-24.45060117	-26.20065262	-19.54562598	-20.5913	-13.39475598
+0.25	104.6497341	92.02614281	94.34968863	74.81493847	78.88281707	73.35908605	85.38336305	65.27942434	68.78278	38.07271106
-0.3	-43.56150924	-46.83812485	-52.40900933	-34.12479434	-34.93935091	-31.84153156	-34.77560667	-25.43400558	-26.8571	-16.23962026
+0.3	92.1513286	82.10220018	83.08135044	67.09829124	70.62024734	65.59648646	76.07721852	56.64067582	59.6552	34.0112072
-0.35	-53.14592143	-54.51434694	-61.05462905	-41.0223253	-42.38498752	-38.87347903	-43.33395667	-30.41706841	-32.1602	-19.36231292
+0.35	81.89065841	73.92343409	73.83020255	60.64376375	63.71541496	59.11334008	68.31846788	49.56054309	52.17647	30.62456648
-0.4	-64.42295294	-63.55667728	-71.22564477	-48.94279311	-50.94139985	-46.95850595	-53.18770641	-36.13634876	-38.2475	-23.64542815
+0.4	70.47899079	64.78386684	63.54102778	53.32676006	55.89569229	51.77591923	59.55397766	42.03430391	44.24664	26.7985266
-0.45	-74.46544474	-71.35679856	-80.30767484	-55.60128859	-58.14029488	-53.76435039	-61.49452367	-40.94189088	-43.3628	-27.25389409
+0.45	61.20178429	57.31065752	55.17620407	47.25975964	49.41887829	45.70287871	52.31485649	36.01330265	37.90874	23.63812971
-0.5	-87.06166787	-80.48354266	-91.6659447	-63.19041526	-66.35234047	-61.53230654	-70.99023172	-46.98610382	-49.4591	-31.37592524
+0.5	50.99655033	49.03143908	45.97453527	40.44734101	42.15501655	38.89720226	44.2211912	29.88562971	31.63799	20.10452844
-0.55	-97.84250097	-88.30318651	-101.3569502	-69.51993605	-73.20763611	-68.02070174	-78.93479343	-54.76438017	-57.6467	-34.82190246
+0.55	42.80277945	42.32628084	38.58653112	34.85782304	36.20309557	33.32561829	37.61242716	25.81092782	27.31068	17.21922007
-0.6	-110.3576673	-97.3894834	-112.3251639	-76.67278409	-80.96230468	-75.36500529	-87.94326895	-63.66259814	-67.0133	-38.72586996
+0.6	34.26137726	34.97723751	30.87831068	28.65492611	29.60810354	27.15826038	30.31876786	21.28460662	22.50486	14.03504993
-0.65	-120.9950323	-105.1189872	-121.3919979	-82.58336958	-87.37712077	-81.44459816	-95.41484419	-71.40307695	-75.1781	-41.96051116
+0.65	27.59007642	29.09733499	24.86466612	23.63282244	24.27792557	22.17948152	24.45108652	17.61576864	18.61051	11.47367345
-0.7	-133.2549263	-114.0338262	-131.5712496	-89.19500136	-94.5614027	-88.25867951	-103.8069126	-81.0112746	-85.3595	-45.5894255
+0.7	20.45114065	22.74213359	18.42972972	18.14438569	18.46481381	16.75701107	18.08660769	13.60095368	14.35023	9.035565724
-0.75	-143.5968731	-121.5582556	-139.9470748	-94.59672196	-100.438892	-93.83812088	-110.6947746	-89.01515346	-93.8424	-48.56388851
+0.75	14.90213974	17.73941838	13.42824562	13.77965001	13.85325201	12.80542205	13.64245843	10.40312381	10.95814	7.293494727
-0.8	-155.421149	-130.1644646	-149.3015115	-100.5621982	-106.9397756	-100.0154063	-118.341256	-98.04743261	-103.417	-51.86077251
+0.8	9.953625094	12.43556716	8.958262569	9.637353519	9.637353519	8.742189474	9.182631366	7.331318663	7.717178	5.397236404
-0.85	-165.3104401	-137.3636051	-157.1361784	-105.3650992	-112.1830637	-105.0033469	-124.5346781	-105.4987524	-111.317	-54.52621271
+0.85	7.063069233	8.356692695	6.356762301	6.555912829	6.555912829	5.570630493	5.708562007	4.987683721	5.250193	3.896383406
-0.9	-176.5125632	-145.517856	-165.8322774	-110.5794834	-117.8875407	-110.4372611	-131.3063898	-113.8176712	-120.14	-57.43407479
+0.9	4.089662462	4.155542538	3.680696212	3.092020358	3.092020358	2.617292121	2.640571665	2.488798207	2.619788	2.300240897
-0.95	-185.7866891	-152.266215	-172.8924492	-114.6936127	-122.399756	-114.7423521	-136.6946467	-120.5986464	-127.333	-59.74164842
+0.95	1.885215236	1.48088047	1.696693711	1.091621734	1.091621734	0.942424347	0.949151219	0.896017493	0.943176	1.072657561
-1	-196.1739993	-159.8190244	-180.6537056	-119.0519674	-127.1948166	-119.3263253	-142.4624134	-128.0667536	-135.258	-62.20350916
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	1.95E+02	1.59E+02	179.3283878	1.18E+02	1.27E+02	118.6993417	141.6712569	1.27E+02	1.34E+02	6.19E+01
-2.05	-1.89E+00	-1.48E+00	-1.696692096	-1.18E+00	-1.18E+00	-0.942984291	-0.94971364	-8.96E-01	-9.44E-01	-1.07E+00
+2.05	1.86E+02	1.52E+02	1.73E+02	114.6913543	122.3972758	1.15E+02	1.37E+02	1.21E+02	127.3297	5.97E+01
-2.1	-4.49E+00	-4.72E+00	-4.039212804	-3.716571802	-3.716571802	-2.970173203	-2.993887331	-2.824077205	-2.97271	-2.509752754
+2.1	1.75E+02	1.44E+02	1.64E+02	109.8587966	117.0982485	1.10E+02	1.30E+02	1.13E+02	118.9034	5.70E+01
-2.15	-7.06E+00	-8.36E+00	-6.356762322	-6.557592223	-6.557592223	-5.572313439	-5.710403211	-4.956345369	-5.21721	-3.887698341
+2.15	165.2045142	137.3610988	156.9458037	105.3624254	112.1801423	105.0006264	124.5312946	105.495198	111.3137	54.5257393
-2.2	-10.45393152	-13.16002289	-9.419296976	-10.1783782	-10.1783782	-9.301110469	-9.795568964	-7.742585134	-8.15009	-5.64925136
+2.2	153.6372419	128.945092	147.8372753	99.73036878	106.0325777	99.15299499	117.2722687	96.77493543	102.068	51.40128465
-2.25	-14.88567851	-17.74202232	-13.42376954	-13.78204785	-13.85578184	-12.80745504	-13.6446916	-10.40460909	-10.9597	-7.283297739

+2.25	143.4791332	121.5553639	139.8256567	94.59369866	100.4356003	93.83505711	110.6909877	89.01131832	93.8383	48.56335666
-2.3	-21.40019684	-23.61896503	-19.27049378	-18.90555842	-19.27014762	-17.50764316	-18.96575002	-14.15784875	-14.9411	-9.32493666
+2.3	131.391946	112.7653687	130.0674228	88.26708291	93.55251045	87.30146646	102.6267821	79.65171221	83.91872	45.08058028
-2.35	-27.6260858	-29.10030395	-24.79062934	-23.63560859	-24.28087968	-22.18218163	-24.45426179	-17.61750173	-18.6124	-11.47412766
+2.35	120.8673818	105.1157584	121.3581619	82.58004871	87.37351499	81.44123991	95.41071332	71.39900585	75.1738	41.95992604
-2.4	-35.45007399	-35.99836572	-31.8048544	-29.52198233	-30.52925211	-28.01918575	-31.33536678	-21.91729603	-23.1765	-14.4778399
+2.4	108.4434778	96.09180198	110.1763134	75.66381208	79.86791056	74.32826596	86.67051133	62.40062381	65.68487	38.17580412
-2.45	-42.8307215	-42.32956917	-38.41318829	-34.86095194	-36.2064248	-33.32866299	-37.61603316	-25.81285956	-27.3127	-17.21974049
+2.45	97.70687691	88.29968875	100.7815255	69.51634878	73.20374942	68.01708694	78.93036395	54.76064813	57.64279	34.82128483
-2.5	-52.43168196	-50.18793008	-47.01928632	-41.40524066	-43.17578303	-39.85314754	-45.35673401	-30.5832221	-32.3789	-20.59917202
+2.5	85.12328046	79.17559987	89.51090943	62.11542794	65.18863896	60.43132077	69.64336708	45.67401897	48.36585	30.79279342
-2.55	-61.21257009	-57.3142199	-54.89054439	-47.26317822	-49.4225254	-45.7062364	-52.31885409	-36.01614915	-37.9117	-23.63869662
+2.55	74.32370707	71.3530714	80.05906852	55.5975083	58.13620655	53.7605495	61.48988192	40.93957869	43.36038	27.25324153
-2.6	-72.07127521	-66.06589728	-64.62494035	-54.36047208	-56.99988924	-52.81161083	-60.78995029	-43.07030131	-45.3372	-27.33687721
+2.6	62.67962972	62.25656274	69.57837736	47.81684309	49.72460229	45.80855094	51.78525315	35.3239298	37.38271	23.03738304
-2.65	-81.88105771	-73.92720069	-73.41963032	-60.64741075	-63.71931453	-59.11694236	-68.32277488	-49.56388689	-52.18	-30.62517792
+2.65	53.01658936	54.51045748	60.70428804	41.01840241	42.38075137	38.86954083	43.3291608	30.41466357	32.15761	19.36164594
-2.7	-93.88117908	-83.49905381	-84.17897334	-68.19275554	-71.79165636	-66.69664691	-77.39510335	-57.85417583	-60.9372	-34.5851078
+2.7	41.84249089	45.56306649	50.6756408	32.96292707	33.68565951	30.65786379	33.33605686	24.59484239	25.96412	15.8358448
-2.75	-104.6175017	-92.03007329	-93.8061483	-74.81876424	-78.88691531	-73.36287285	-85.38790687	-65.28310454	-68.7867	-38.07335979
+2.75	32.37971644	37.99488842	42.18384059	25.97391007	26.14725398	24.44731834	26.19700027	19.54315304	20.58869	13.39430489
-2.8	-117.6365563	-102.3428058	-105.4815483	-82.70722256	-87.34122556	-81.31033207	-94.9322846	-74.29174191	-78.3075	-42.23805378
+2.8	23.81809968	29.31200208	34.44686353	19.149186	19.149186	17.61332294	18.59589363	14.56267773	15.32913	10.50593806
-2.85	-129.1917689	-111.4729022	-116.5169274	-89.58237397	-94.71547345	-88.24610301	-103.2743404	-82.27750844	-86.7492	-45.87740092
+2.85	20.00681935	22.01804375	30.03809165	13.69889594	13.69889594	11.71457064	13.98209197	12.06552808	12.74229	8.003776476
-2.9	-143.1011345	-122.4410588	-129.005857	-97.70900796	-103.4387422	-96.45474387	-113.1615887	-91.86707266	-96.8882	-50.18988735
+2.9	19.41001699	15.90323965	25.07954002	11.50918079	12.33337596	11.61382324	13.98209197	12.06552808	12.74229	5.797769017
-2.95	-155.3623544	-132.0943804	-140.0141783	-104.7433203	-110.9950755	-103.5687109	-121.7421706	-100.2918758	-105.797	-53.93147449
+2.95	19.10593171	15.59915436	20.99847416	11.50918079	12.33337596	11.61382324	13.98209197	12.06552808	12.74229	5.797769017
-3	-170.0271853	-143.6263498	-153.1798772	-113.0031931	-119.8742939	-111.9319765	-131.8431292	-110.3249458	-116.409	-58.33476345
+3	18.99388091	15.48710356	17.09507859	11.50918079	12.33337596	11.61382324	13.98209197	12.06552808	12.74229	5.797769017

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.580253441	-10.37331533	-9.523297676	-8.302000951	-6.954011337	-9.443543806	-10.65493279	-11.8678084	-13.05150306
End Shear	83.63660522	97.51427148	89.20206803	75.23953816	67.93523938	91.44261376	101.6791448	107.6658017	113.1508925
-0.05	-8.580253441	-10.37331533	-9.523297676	-9.148236147	-6.954011337	-9.443543806	-10.65493279	-11.8678084	-13.05150306
+0.05	76.99757343	88.51534712	80.10220004	67.33762749	62.58331933	84.23862841	93.48060768	98.57474484	103.1508931
-0.1	-8.580253441	-10.37331533	-9.523297676	-11.12250776	-6.954011337	-9.443543806	-10.65493279	-11.8678084	-13.05150306
+0.1	70.75413133	80.02524205	71.54198158	59.9969159	57.56676604	77.46470799	85.76028362	90.01303167	93.73418607
-0.15	-9.64733809	-10.37331533	-9.523297676	-13.06888345	-7.638327745	-9.749793577	-10.65493279	-11.8678084	-13.05150306
+0.15	65.4671057	72.91947494	64.45165446	53.94448561	53.31538489	71.72477258	79.22878036	82.78942736	85.81166218
-0.2	-14.12165366	-14.12873763	-11.24146777	-15.38587669	-10.42217209	-15.09683074	-15.38004445	-15.35880526	-15.33861917
+0.2	59.39485021	64.8597985	56.92989268	47.51575739	48.42859902	65.1278599	71.73460486	74.52483757	76.77459714
-0.25	-17.92354283	-17.93217944	-14.2746553	-17.98168285	-14.06937618	-19.64547755	-20.80823519	-20.78759735	-20.76798451
+0.25	54.28916713	58.17369821	50.84523811	42.32436696	44.3161149	59.57701746	65.43985943	67.60402651	69.23117561
-0.3	-22.54227123	-22.31610515	-18.31287013	-21.36641169	-19.09102283	-25.52717537	-27.08128357	-27.06140948	-27.04252108
+0.3	48.4688488	50.66281633	44.02955587	36.54170389	39.62366789	53.2443044	58.27196746	59.7488491	60.69900533
-0.35	-27.86723374	-26.01607939	-22.1334069	-25.43629802	-23.348239	-31.28128344	-32.57805495	-32.54645448	-32.52387326
+0.35	43.61371399	44.49784228	38.45316103	31.83639405	35.70543499	47.95728804	52.29981385	53.22708896	53.64201078
-0.4	-33.99489952	-30.25083248	-27.55353441	-30.40357959	-28.24353087	-37.89888576	-40.20987896	-40.11516927	-40.09353234
+0.4	38.1260749	37.93865044	32.37887591	26.73884138	31.27189414	41.97598364	45.55836025	45.89360611	45.88503444
-0.45	-39.15763962	-35.40591309	-32.1275124	-34.45470112	-32.36477041	-43.47103043	-46.64637213	-46.49772078	-46.47694201
+0.45	33.59069083	32.6816024	27.88605979	22.94617274	27.60325774	37.02753837	39.99463639	39.86712642	39.85845002
-0.5	-45.0556722	-42.68240225	-37.36174359	-38.9459049	-37.06913567	-49.83274602	-54.00735779	-54.55288854	-54.52946905
+0.5	28.51648044	26.88770319	23.43564792	19.17956888	23.49320335	31.48483254	33.77974896	33.68192403	33.67440081
-0.55	-49.98698771	-49.31754186	-41.92401145	-42.72714385	-40.99904778	-55.14818973	-60.16878666	-61.5846959	-62.01046256
+0.55	24.37006429	22.45695362	19.88016527	16.18403001	20.12951227	26.94970005	28.71029187	28.64279855	28.63524299
-0.6	-55.57464382	-56.89874027	-48.44053705	-48.34289107	-45.44791415	-61.16681536	-67.15878396	-69.58796873	-71.09258319
+0.6	19.79001438	18.20651857	15.78444763	12.91793771	16.4075127	21.93278982	23.12211919	23.08659603	23.07909363
-0.65	-60.20532121	-63.49599579	-55.16399807	-53.82434913	-49.13115631	-66.15081437	-72.95930891	-76.25261599	-78.68017056
+0.65	16.10177891	15.3178825	12.57758645	10.32381539	13.40411098	17.88570979	18.63276449	18.62155397	18.61418038
-0.7	-65.40186657	-71.70519065	-62.87968109	-60.04011038	-53.25995239	-71.73915711	-79.47819026	-83.77138475	-87.27032883
+0.7	12.10369108	11.91677904	9.570951656	7.765783305	10.13473891	13.48178802	14.27139471	14.26472694	14.25837283
-0.75	-69.66269123	-78.53555753	-69.31368932	-65.50049183	-56.64117003	-76.31697141	-84.83197662	-89.97261233	-94.38256977
+0.75	9.551560549	9.491849122	7.543229433	6.045353972	7.546980858	10.3405351	10.86325724	10.85678764	10.85063445
-0.8	-74.3873765	-86.23353701	-76.58246245	-71.64085156	-60.38532193	-81.38783431	-90.77958601	-96.89459354	-102.3555207
+0.8	6.790072157	6.734282837	5.356145092	4.248153375	5.186002522	7.144573823	7.209885201	7.203735103	7.197886482
-0.85	-78.20914565	-92.57498368	-82.96163222	-76.96025928	-63.40917021	-85.48472332	-95.60079854	-102.5361747	-108.8850591
+0.85	4.620096626	4.56811727	3.632780913	2.872307438	3.75182752	4.645380434	4.453561358	4.645482995	4.640620401
-0.9	-82.38122729	-99.64338626	-91.21277728	-83.63456628	-66.70411002	-89.95090853	-100.8770063	-108.7490827	-116.1155781
+0.9	2.302355429	2.285891179	1.817135131	1.432679255	2.123666002	2.224698303	2.221427734	2.225834229	2.101377184
-0.95	-85.69473576	-105.3944781	-98.00857871	-89.08514318	-69.31524197	-93.49213251	-105.0798088	-113.7347592	-121.955059
+0.95	0.828898256	0.82059415	0.753935399	0.575338376	1.03385164	0.801060695	0.799411859	0.801461528	0.808702539
-1	-89.23346523	-111.7149342	-105.5811355	-95.11638989	-72.09639012	-97.26644657	-109.5844661	-119.1263105	-128.3178936
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.87E+01	1.11E+02	1.05E+02	9.43E+01	7.17E+01	9.67E+01	108.9662045	118.3828805	1.27E+02
-2.05	-8.29E-01	-8.21E-01	-7.54E-01	-5.76E-01	-1.03E+00	-8.02E-01	-0.799872663	-0.801913644	-8.04E-01
+2.05	8.57E+01	1.05E+02	9.80E+01	8.91E+01	6.93E+01	9.35E+01	105.0775947	113.7321972	1.22E+02
-2.1	-2.612869852	-2.596101084	-2.06386882	-1.626465718	-2.414391389	-2.524647223	-2.521310637	-2.525802194	-2.530069174
+2.1	8.18E+01	9.87E+01	9.01E+01	8.27E+01	6.62E+01	8.93E+01	100.1448495	107.8842232	1.15E+02
-2.15	-4.586811531	-4.569120713	-3.63352059	-2.872689915	-3.752616349	-4.646708072	-4.454846109	-4.646738237	-4.641845461
+2.15	78.20707899	92.57196078	82.95839235	76.95865001	63.40747262	85.48248821	95.59824791	102.5332448	108.8817336
-2.2	-7.171020623	-7.114474667	-5.658561313	-4.493794094	-5.436733925	-7.584545877	-7.711324899	-7.705080212	-7.699156942
+2.2	73.72726708	85.14971643	75.55808148	70.7845596	59.86250658	80.67971153	89.94790148	95.92440381	101.2357095
-2.25	-9.552926	-9.493042186	-7.54410618	-6.045809688	-7.548409811	-10.34213302	-10.86503866	-10.8585191	-10.85232427
+2.25	69.66037049	78.53228644	69.31082278	65.5368157	56.63925675	76.31445682	84.82911991	89.96937548	94.37893132

-2.3	**-12.65019445**	**-12.48307725**	**-9.922483885**	**-8.060717597**	**-10.58723934**	**-14.0911455**	**-14.86507403**	**-14.85832111**	**-14.85191263**
+2.3	**64.67145316**	**70.54420692**	**61.78764135**	**59.17600406**	**52.67986365**	**70.95397619**	**78.56131261**	**82.71194697**	**86.05793093**
-2.35	**-16.10375878**	**-15.3192425**	**-12.57894788**	**-10.32452553**	**-13.40579227**	**-17.88790377**	**-18.63512566**	**-18.62383705**	**-18.61641956**
+2.35	**60.20277322**	**63.49251513**	**55.16096151**	**53.82284449**	**49.12906174**	**66.1480607**	**72.95619609**	**76.24912676**	**78.67627819**
-2.4	**-20.42864707**	**-18.70304601**	**-16.32875084**	**-13.36974578**	**-16.92703177**	**-22.6328938**	**-23.90045329**	**-23.8605118**	**-23.85294595**
+2.4	**54.78550503**	**55.82418334**	**47.51696078**	**47.55847249**	**44.81981131**	**60.3170742**	**66.17107136**	**68.4554003**	**69.80554708**
-2.45	**-24.37231781**	**-22.4588287**	**-19.88172093**	**-16.18484064**	**-20.13140658**	**-26.95217768**	**-28.71298127**	**-28.64540345**	**-28.63779164**
+2.45	**49.98426406**	**49.31435997**	**41.92147373**	**42.7257687**	**40.9968078**	**55.14522768**	**60.16545956**	**61.58100103**	**62.00636834**
-2.5	**-29.22860798**	**-27.69430817**	**-24.04695978**	**-19.69665661**	**-24.07048674**	**-32.26318681**	**-34.65120453**	**-34.54799658**	**-34.54041575**
+2.5	**44.21936588**	**41.56243946**	**36.61944915**	**38.31855224**	**36.4022629**	**48.93094617**	**52.96315897**	**53.36325915**	**53.33974751**
-2.55	**-33.5931741**	**-32.6840909**	**-27.88802839**	**-22.94719049**	**-27.60533743**	**-37.03027357**	**-39.9975964**	**-39.8702566**	**-39.86150514**
+2.55	**39.15478126**	**35.40340916**	**32.12546495**	**34.45361541**	**32.36240152**	**43.46791795**	**46.64288402**	**46.49435961**	**46.47364556**
-2.6	**-38.90014343**	**-38.84209832**	**-33.15105519**	**-27.39244806**	**-31.89768442**	**-42.82009145**	**-46.50859976**	**-46.92524093**	**-46.9166211**
+2.6	**33.12300902**	**29.6500969**	**26.78225283**	**29.70881543**	**27.54715554**	**36.95752669**	**39.12356691**	**39.0379859**	**39.01627887**
-2.65	**-43.61637963**	**-44.50075639**	**-38.45561131**	**-31.83766067**	**-35.70766372**	**-47.9602253**	**-52.30301483**	**-53.2304949**	**-53.64560072**
+2.65	**27.86428113**	**26.01429082**	**22.13128759**	**25.43505314**	**23.34578822**	**31.27806058**	**32.57445152**	**32.54298535**	**32.52049174**
-2.7	**-49.29327341**	**-51.71858713**	**-44.98603083**	**-37.35028047**	**-40.28870526**	**-54.14166651**	**-59.28664423**	**-60.85897109**	**-61.90266228**
+2.7	**21.68171281**	**21.69211263**	**17.7436015**	**20.89089035**	**18.37440198**	**24.55874**	**26.18698131**	**26.16705186**	**26.14813392**
-2.75	**-54.29198212**	**-58.17689566**	**-50.8479285**	**-42.32578046**	**-44.31847348**	**-59.58010746**	**-65.44324809**	**-67.607649**	**-69.23504164**
+2.75	**17.92142357**	**17.93034876**	**14.27306399**	**17.98094299**	**14.06687484**	**19.64292734**	**20.8052745**	**20.78473331**	**20.76515843**
-2.8	**-60.25805636**	**-65.99810328**	**-57.96706591**	**-48.40241147**	**-49.12363883**	**-66.06597382**	**-72.79935996**	**-75.69733149**	**-78.05475181**
+2.8	**13.48255004**	**13.48963832**	**10.73311235**	**15.04542034**	**10.02485415**	**14.33265355**	**14.46888303**	**14.44762116**	**14.42741682**
-2.85	**-65.47003176**	**-72.92287807**	**-64.45477445**	**-53.94612093**	**-53.31782791**	**-71.72798178**	**-79.23231682**	**-82.79322385**	**-85.81573966**
+2.85	**9.645181954**	**10.37332266**	**9.523297863**	**13.06833544**	**7.636941805**	**9.747217057**	**10.6549372**	**11.86781056**	**13.05149757**
-2.9	**-71.64454229**	**-81.22911837**	**-72.74990457**	**-61.02941285**	**-58.28254417**	**-78.43107723**	**-86.86075319**	**-91.23182717**	**-95.07287542**
+2.9	**8.580259654**	**10.37332266**	**9.523297863**	**10.79078886**	**6.95401587**	**9.443539007**	**10.6549372**	**11.86781056**	**13.05149757**
-2.95	**-77.00057328**	**-88.51891149**	**-80.10556379**	**-67.33937399**	**-62.58581701**	**-84.24191201**	**-93.48422857**	**-98.57867636**	**-103.1551276**
+2.95	**8.580259654**	**10.37332266**	**9.523297863**	**9.147965177**	**6.95401587**	**9.443539007**	**10.6549372**	**11.86781056**	**13.05149757**
-3	**-83.3027638**	**-97.19184084**	**-88.94045317**	**-74.95450824**	**-67.64552392**	**-91.07505394**	**-101.2848798**	**-107.2539162**	**-112.7244708**
+3	**8.580259654**	**10.37332266**	**9.523297863**	**8.302001048**	**6.95401587**	**9.443539007**	**10.6549372**	**11.86781056**	**13.05149757**

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.06604049	-19.23550664	-11.917	-14.7564	-15.3262
End Shear	157.1761582	159.4245153	111.244	135.2056	138.7888
-0.05	-18.06604049	-19.23550664	-11.917	-14.7564	-15.3262
+0.05	140.7531236	141.9801614	100.5066	122.2317	125.0182
-0.1	-18.06604049	-19.23550664	-11.917	-14.7564	-15.3262
+0.1	125.3259388	125.4331945	90.39732	110.0071	112.0507
-0.15	-18.06604049	-19.23550664	-11.917	-14.7564	-15.3262
+0.15	112.551281	113.1452405	81.96885	99.80723	101.2625
-0.2	-18.06604049	-19.23550664	-16.1947	-17.6652	-17.6668
+0.2	98.37990365	99.29813339	72.44889	88.27652	89.10556
-0.25	-23.23743859	-21.66109558	-21.0456	-23.5058	-23.5077
+0.25	87.37025549	88.74255196	64.58771	78.74584	79.09284
-0.3	-29.98664123	-28.21883056	-27.2218	-30.2515	-30.5415
+0.3	75.07516003	77.14579391	55.80208	68.0829	68.31216
-0.35	-35.69578572	-35.59698878	-32.4468	-35.957	-37.2351
+0.35	65.04993022	67.60435303	48.89274	59.68293	59.54629
-0.4	-44.17581136	-45.5766405	-38.4419	-42.5016	-44.9303
+0.4	54.82853729	56.98349935	41.62881	50.51625	49.85995
-0.45	-51.97872241	-54.20500927	-43.4775	-47.9973	-51.4072
+0.45	46.83531309	48.35502157	37.16768	43.08231	43.67832
-0.5	-62.83122009	-65.84561275	-49.2117	-56.1573	-58.7987
+0.5	38.60083345	39.36158898	31.74744	35.55975	37.18284
-0.55	-71.96530644	-76.22713788	-54.0821	-64.839	-65.0552
+0.55	31.96144816	32.33375566	27.45021	30.21591	31.86353
-0.6	-83.96573258	-89.23515807	-61.7119	-76.2283	-75.0091
+0.6	25.41581253	25.31829223	22.67363	24.93651	25.97332
-0.65	-94.67439555	-100.1385003	-69.6669	-85.78	-85.7496
+0.65	20.38280526	19.95694194	18.79908	20.67671	21.21633
-0.7	-109.1142727	-113.0987637	-79.1667	-97.1798	-97.9969
+0.7	15.7344858	14.65958716	14.55548	15.87515	16.03293
-0.75	-121.1832511	-124.3282257	-87.6815	-107.392	-108.336
+0.75	12.02692248	11.21485725	11.17195	12.15706	12.2527
-0.8	-135.3987739	-137.4336201	-97.3149	-118.938	-121.037
+0.8	7.875813884	7.516211636	7.789997	8.309331	8.189604
-0.85	-148.0513802	-149.7083348	-105.284	-128.484	-131.569
+0.85	4.793901961	4.754862086	5.255997	5.606397	5.07725
-0.9	-163.0441675	-166.1019122	-114.209	-139.167	-143.393
+0.9	2.300219239	2.164255817	2.637786	2.813639	2.348737
-0.95	-175.4049177	-180.2792613	-121.508	-147.897	-153.092
+0.95	0.85301996	0.957041656	0.949047	1.012317	0.845488
-1	-189.1943178	-196.1737552	-129.578	-157.541	-163.85
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.87E+02	1.94E+02	1.28E+02	1.56E+02	1.62E+02
-2.05	-8.51E-01	-9.57E-01	-9.50E-01	-1.01E+00	-8.46E-01
+2.05	1.75E+02	1.80E+02	1.22E+02	147.8932	1.53E+02
-2.1	-2.620819532	-2.514675662	-2.99366	-3.19324	-2.66515
+2.1	1.61E+02	1.64E+02	1.13E+02	137.6681	1.42E+02
-2.15	-4.950224289	-4.755038546	-5.25712	-5.6076	-5.07862
+2.15	148.0453885	150.1538644	105.2805	128.4798	131.5641
-2.2	-8.593072117	-8.022882094	-8.22673	-8.77518	-8.73848
+2.2	133.4728605	135.5137074	95.95614	117.3103	119.2439
-2.25	-12.02855502	-11.21510638	-11.1735	-12.1588	-12.2544
+2.25	121.1778022	124.3273704	87.67753	107.387	108.3305

-2.3	**-16.3795352**	**-15.31860081**	**-15.1443**	**-16.522**	**-16.7502**
+2.3	**107.0683445**	**111.2416825**	**77.72227**	**95.44691**	**96.26289**
-2.35	**-20.38469716**	**-19.95730275**	**-18.8009**	**-20.6787**	**-21.2185**
+2.35	**94.66868224**	**100.1376918**	**69.66315**	**85.77553**	**85.74461**
-2.4	**-26.29734991**	**-26.28924897**	**-23.3415**	**-25.6705**	**-26.7952**
+2.4	**82.15993517**	**87.39393134**	**60.36609**	**74.61183**	**73.1946**
-2.45	**-31.96438206**	**-32.33422076**	**-27.4522**	**-30.1862**	**-31.8659**
+2.45	**71.96118121**	**76.22627786**	**54.07945**	**64.83425**	**65.05203**
-2.5	**-39.7490052**	**-40.58219222**	**-32.4829**	**-36.5428**	**-38.0948**
+2.5	**61.28869126**	**64.18672737**	**48.40031**	**54.87668**	**57.75179**
-2.55	**-46.83865324**	**-48.35565531**	**-37.1682**	**-43.0857**	**-43.8999**
+2.55	**51.97440417**	**54.20437835**	**43.47512**	**47.9947**	**51.40421**
-2.6	**-56.25256074**	**-58.46594955**	**-42.4204**	**-51.7978**	**-51.2101**
+2.6	**42.91622893**	**44.12666158**	**37.59046**	**41.57223**	**43.83649**
-2.65	**-65.05441921**	**-67.60506135**	**-48.8959**	**-59.6868**	**-59.5503**
+2.65	**35.79610916**	**35.59642526**	**32.44432**	**35.95425**	**37.23205**
-2.7	**-76.79806112**	**-78.77362589**	**-57.0338**	**-69.5786**	**-69.8165**
+2.7	**29.02515182**	**27.41735826**	**26.34177**	**29.29049**	**29.41542**
-2.75	**-87.37518596**	**-88.74332116**	**-64.5914**	**-78.7503**	**-79.0974**
+2.75	**23.23476661**	**21.66068391**	**21.04304**	**23.503**	**23.50505**
-2.8	**-100.2595**	**-101.2427494**	**-73.7906**	**-89.9023**	**-90.8168**
+2.8	**18.06604645**	**19.23423445**	**15.46224**	**16.68491**	**16.68652**
-2.85	**-112.5570094**	**-113.146172**	**-81.9728**	**-99.812**	**-101.267**
+2.85	**18.06604645**	**19.23423445**	**11.91698**	**14.75645**	**15.32623**
-2.9	**-127.5026648**	**-127.770086**	**-91.8283**	**-111.738**	**-113.884**
+2.9	**18.06604645**	**19.23423445**	**11.91698**	**14.75645**	**15.32623**
-2.95	**-140.7592922**	**-141.9812579**	**-100.511**	**-122.237**	**-125.023**
+2.95	**18.06604645**	**19.23423445**	**11.91698**	**14.75645**	**15.32623**
-3	**-156.6862486**	**-159.1359789**	**-110.877**	**-134.763**	**-138.349**
+3	**18.06604645**	**19.23423445**	**11.91698**	**14.75645**	**15.32623**

2-Span: Moment (Max and Min) Raw Data Results – 65' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.40E-13	-1.75E-13	-3.07E-13	-1.38E-13	-1.38E-13	-1.14E-13	-1.70E-13	-1.63E-13	-1.71E-13	-1.48E-13
End Shear	2.93E-13	2.13E-13	2.05E-13	1.63E-13	1.63E-13	1.70E-13	1.93E-13	1.28E-13	1.35E-13	7.90E-14
-0.05	-61.72954306	-50.33308704	-55.55844647	-37.4048251	-40.0835113	-37.7448997	-45.441812	-39.2129499	-41.4124766	-18.84274265
+0.05	509.9696254	435.7917834	460.4136936	340.7874312	361.2472657	337.1287432	396.5901971	325.9352029	343.827277	175.2750691
-0.1	-123.4590861	-100.6661741	-111.1168929	-74.8096502	-80.1670225	-75.4897995	-90.883624	-78.4258998	-82.8249531	-37.6854853
+0.1	948.3558114	816.2772962	856.2152236	635.328473	672.8502006	627.5959684	736.9734194	597.1097599	629.7457357	326.2298225
-0.15	-185.1886292	-150.9992611	-166.6753394	-112.214475	-120.250534	-113.234699	-136.325436	-117.63885	-124.23743	-56.52822795
+0.15	1304.828645	1133.936177	1175.115353	876.9504958	927.4440949	865.1084858	1014.207044	808.0736311	852.0416167	447.6823148
-0.2	-246.9181722	-201.3323482	-222.2337859	-149.6193	-160.334045	-150.979599	-181.767248	-156.8518	-165.649906	-75.37097059
+0.2	1596.813522	1402.231964	1440.930116	1077.918809	1138.691577	1060.431949	1239.014058	969.0351328	1021.594323	549.0861259
-0.25	-308.6477153	-251.6654352	-277.7922323	-187.024126	-200.417556	-188.724499	-227.20906	-196.06475	-207.062383	-94.21371324
+0.25	1810.587648	1605.416154	1629.528876	1225.820528	1293.867818	1205.479569	1426.036053	1114.148485	1176.372598	619.9578769
-0.3	-370.3772584	-301.9985223	-333.3506788	-224.428951	-240.501068	-226.469398	-272.650872	-235.277699	-248.474859	-113.0564559
+0.3	1962.47869	1764.070289	1768.629349	1334.6527	1405.57696	1325.433373	1568.703185	1210.994072	1280.064848	674.3973756
-0.35	-432.1068014	-352.3316093	-388.9091253	-261.833776	-280.584579	-264.214298	-318.092684	-274.490649	-289.887336	-131.8991985
+0.35	2070.237498	1861.511982	1864.360372	1401.806506	1485.430152	1403.043508	1654.537642	1271.804263	1343.407085	700.9470837
-0.4	-493.8363445	-402.6646963	-444.4675717	-299.238601	-320.66809	-301.959198	-363.534496	-313.703599	-331.299812	-150.7419412
+0.4	2126.46346	1913.56038	1916.001215	1445.270039	1528.985997	1442.798213	1695.021366	1294.709623	1368.55397	711.7894088
-0.45	-555.5658875	-452.9977834	-500.0260182	-336.643426	-360.751601	-339.704098	-408.976308	-352.916549	-372.712289	-169.5846838
+0.45	2111.029796	1913.21362	1901.560097	1444.75186	1524.90392	1438.002254	1684.24896	1268.305949	1341.552852	697.9724004
-0.5	-617.2954306	-503.3308704	-555.5844647	-374.048251	-400.835113	-377.448997	-454.41812	-392.129499	-414.124766	-188.4274265
+0.5	2085.511656	1881.196506	1878.777047	1419.428555	1500.054085	1414.128977	1658.56725	1234.905196	1305.945939	690.5343426
-0.55	-679.0249737	-553.6639575	-611.1429112	-411.453076	-440.918624	-415.193897	-499.859932	-431.342449	-455.537242	-207.2701691
+0.55	2003.541639	1802.619977	1804.931267	1356.633917	1435.187831	1354.895416	1593.620636	1212.754649	1281.855754	671.2524911
-0.6	-740.7545167	-603.9970445	-666.7013576	-448.857901	-481.002135	-452.938797	-545.301744	-470.555399	-496.949719	-226.1129118
+0.6	1873.226911	1685.156368	1688.419612	1263.49789	1338.660186	1265.665389	1491.041763	1146.795567	1211.386901	638.8203601
-0.65	-802.4840598	-654.3301316	-722.2598041	-486.262726	-521.085647	-490.683696	-590.743556	-509.768349	-538.362195	-244.9556544
+0.65	1676.729402	1521.538653	1509.672392	1146.518311	1206.508853	1141.180018	1344.517904	1033.882417	1092.614737	580.243322
-0.7	-864.2136028	-704.6632186	-777.8182506	-523.667552	-561.169158	-528.428596	-636.185368	-548.981299	-579.774672	-263.7983971
+0.7	1448.050167	1328.451224	1305.86799	1004.671448	1053.666529	992.9118923	1168.733233	896.5437475	947.2833565	513.6873757
-0.75	-925.9431459	-754.9963056	-833.376697	-561.072377	-601.252669	-566.173496	-681.62718	-588.194249	-621.187148	-282.6411397
+0.75	1167.494072	1094.303505	1051.936067	834.2752012	872.4143703	817.9555939	958.7851046	716.8254637	756.6387986	423.8208508
-0.8	-987.672689	-805.3293927	-888.9351435	-598.477202	-641.33618	-603.918396	-727.068992	-627.407199	-662.599625	-301.4838824
+0.8	851.9156311	839.6157762	769.3530449	646.3950454	670.273862	626.7866467	728.4180691	506.830942	534.3268959	330.1234073
-0.85	-1068.213035	-874.4732828	-1043.880243	-635.882027	-681.419692	-641.663295	-772.510804	-666.620148	-704.012102	-320.326625
+0.85	514.9267767	570.7447704	464.3555995	437.6183698	446.089884	418.7727791	474.5222745	328.813818	347.0027846	218.3981814
-0.9	-1189.321044	-984.1848357	-1354.053376	-673.286852	-721.503203	-679.408195	-817.952616	-705.833098	-745.424578	-339.1693677
+0.9	279.0649382	330.0727436	251.1584438	249.5579812	249.5579812	231.7432941	245.479652	189.7256096	199.7111679	147.642417
-0.95	-1343.576873	-1127.044209	-1733.530358	-710.691677	-761.586714	-717.153095	-863.394428	-745.046048	-786.837055	-358.0121103
+0.95	121.7151131	100.8658136	109.5436016	78.28340526	78.28340526	62.56343736	62.56343736	59.42721256	62.55496059	68.22243301
-1	-1525.679999	-1297.73946	-2158.658134	-748.096738	-801.670225	-754.898512	-908.836237	-784.259339	-831.401957	-376.8549862
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1525.679999	-1297.73946	-2158.658134	-748.096738	-801.670225	-754.898512	-908.836237	-784.259339	-831.401957	-376.8549862
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-1343.587722	-1127.04421	-1733.530442	-710.6919	-761.585966	-717.153586	-863.394176	-745.046373	-786.836247	-358.0122369
+2.05	121.7152336	100.8821672	109.5437101	78.2562854	78.2562854	62.54212812	62.60305799	59.40971421	62.53654128	68.43785314
-2.1	-1189.331327	-984.1848407	-1354.053634	-673.287062	-721.502494	-679.408661	-817.952377	-705.833406	-745.423813	-339.1694876
+2.1	279.0428969	330.0970141	251.1585679	249.5766522	249.5766522	231.7804039	245.5264052	189.73761	199.7238	146.8205602
-2.15	-1068.222742	-874.4732825	-1043.881889	-635.882225	-681.419022	-641.663735	-772.510578	-666.62044	-704.01138	-320.3267383
+2.15	515.8447474	570.7725563	463.7906647	437.6304702	446.0989421	418.7917138	474.5297985	328.8228677	347.012039	218.8915082
-2.2	-987.6818105	-805.3293774	-888.9440867	-598.477387	-641.33555	-603.91881	-727.068779	-627.407474	-662.598946	-301.483989
+2.2	853.2827861	839.6465618	766.3271071	646.4090573	670.284652	626.7762217	728.4591395	506.8482049	534.3457055	330.1124365

-2.25	-925.9516976	-754.9962908	-833.3850813	-561.07255	-601.252078	-566.173884	-681.62698	-588.194508	-621.186512	-282.6412397
+2.25	1167.14584	1094.334119	1051.450015	834.2879903	872.423573	817.9772458	958.7946883	716.8389191	756.6536343	423.4087252
-2.3	-864.2215846	-704.6632042	-777.8260759	-523.667712	-561.168606	-528.428959	-636.185182	-548.981541	-579.774078	-263.7984904
+2.3	1449.201915	1328.481302	1304.293161	1004.682619	1053.673711	992.9002017	1168.772144	896.5529387	947.2937362	513.6757983
-2.35	-802.4914717	-654.3301177	-722.2670705	-486.262875	-521.085135	-490.684033	-590.743383	-509.768575	-538.361645	-244.9557411
+2.35	1676.529471	1521.565193	1509.277856	1146.524986	1206.5048	1141.19697	1344.520718	1033.879449	1092.617877	580.2428952
-2.4	-740.7613587	-603.9970311	-666.7080651	-448.858037	-481.001663	-452.939108	-545.301584	-470.555609	-496.949211	-226.1129918
+2.4	1874.573251	1685.178668	1685.083919	1263.493836	1338.65066	1265.645734	1491.070392	1146.785398	1211.376853	638.8067515
-2.45	-679.0312458	-553.6639445	-611.1490597	-411.453199	-440.918191	-415.194182	-499.859785	-431.342643	-455.536777	-207.2702425
+2.45	2004.105346	1802.636044	1804.159029	1356.624491	1435.172295	1354.901848	1593.609804	1212.762706	1281.86488	671.249784
-2.5	-617.3011329	-503.3308579	-555.5900542	-374.048362	-400.834719	-377.449256	-454.417986	-392.129676	-414.124343	-188.4274932
+2.5	2086.328823	1881.205557	1876.64939	1419.411643	1500.030296	1414.160097	1658.579124	1234.930105	1305.972784	690.5181433
-2.55	-555.5710199	-452.9977714	-500.0310488	-336.643524	-360.751247	-339.704331	-408.976187	-352.91671	-372.711909	-169.5847439
+2.55	2111.098349	1913.210917	1901.293278	1444.773504	1524.891943	1438.007937	1684.242924	1268.304099	1341.550235	697.9769206
-2.6	-493.840907	-402.6646848	-444.4720434	-299.238687	-320.667775	-301.959405	-363.534388	-313.703744	-331.299476	-150.7419946
+2.6	2125.462455	1913.548811	1915.971908	1445.283107	1529.005714	1442.827715	1695.005071	1294.726657	1368.571146	711.7805113
-2.65	-432.110794	-352.3315982	-388.913038	-261.833849	-280.584303	-264.21448	-318.092589	-274.490777	-289.887042	-131.8992453
+2.65	2070.651671	1861.49057	1864.259528	1401.809613	1485.439319	1403.031137	1654.542024	1271.812194	1343.414595	700.9488587
-2.7	-370.3806811	-301.9985116	-333.3540326	-224.429011	-240.500831	-226.469554	-272.65079	-235.277811	-248.474608	-113.056496
+2.7	1961.552966	1764.037968	1767.783902	1334.643432	1405.572881	1325.442773	1568.7275	1210.98958	1280.059189	674.4096106
-2.75	-308.6505681	-251.6654251	-277.7950272	-187.024174	-200.417359	-188.724629	-227.208991	-196.064845	-207.062174	-94.21374666
+2.75	1809.851142	1605.426292	1628.881426	1225.800562	1293.852357	1205.476647	1426.046931	1114.160185	1176.383895	620.7060555
-2.8	-246.9204552	-201.3323385	-222.2360217	-149.619336	-160.333888	-150.979703	-181.767193	-156.851879	-165.649741	-75.37099735
+2.8	1597.775757	1402.176459	1440.680258	1077.887246	1138.663707	1060.417648	1239.009971	969.0091359	1021.62162	549.0947449
-2.85	-185.1903422	-150.9992519	-166.6770163	-112.214499	-120.250416	-113.234778	-136.325394	-117.638912	-124.237307	-56.52824805
+2.85	1304.4574	1133.92186	1175.031631	876.9480008	927.4443404	865.1144289	1014.188454	808.0855258	852.0543141	447.6766868
-2.9	-123.4602293	-100.6661653	-111.1180109	-74.8096612	-80.1669438	-75.4898522	-90.8835947	-78.4259461	-82.8248731	-37.68549874
+2.9	949.2924624	816.1959193	855.7596104	635.2716921	672.7953516	627.5569914	736.9397526	597.1359775	629.7734598	326.2342506
-2.95	-61.73011635	-50.33307877	-55.55900549	-37.4048236	-40.083472	-37.7449266	-45.4417958	-39.2129798	-41.4124393	-18.84274944
+2.95	510.4433829	435.7511882	460.0101926	340.7591497	361.2199673	337.1092433	396.573383	325.9485919	343.841439	175.2772437
-3	-2.89E-13	-1.79E-13	-2.26E-13	-1.35E-13	-1.35E-13	-1.30E-13	-1.39E-13	-1.61E-13	-1.69E-13	-1.15E-13
+3	2.94E-13	2.14E-13	2.94E-13	1.71E-13	1.62E-13	1.23E-13	1.23E-13	1.57E-13	1.65E-13	7.89E-14

2-Span: Moment (Max and Min) Raw Data Results - 65' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.77E-14	-1.37E-13	-1.08E-13	-8.47E-14	-1.21E-13	-9.42E-14	-1.33E-13	-1.34E-13	-1.12E-13
End Shear	1.14E-13	1.12E-13	8.97E-14	7.01E-14	9.55E-14	1.41E-13	1.17E-13	1.25E-13	1.28E-13
-0.05	-27.88582368	-33.71327482	-30.95071745	-26.98150309	-22.60053685	-30.69151737	-34.6285316	-38.5703773	-42.417385
+0.05	250.426683	287.6748781	260.3321501	221.0870746	203.3957878	274.173526	304.249045	321.7284928	336.9306256
-0.1	-55.77164737	-67.42654963	-61.90143489	-53.96300618	-45.20107369	-61.38303474	-69.2570631	-77.1407546	-84.8347699
+0.1	465.6728952	527.9665772	472.8530978	403.0908008	378.820443	510.2192869	565.087853	597.5133138	628.7373062
-0.15	-83.65747105	-101.1398245	-92.85215234	-80.94450927	-67.80161054	-92.07455211	-103.885595	-115.711132	-127.252155
+0.15	640.9796661	715.6484243	634.0837444	542.8066229	521.503273	702.9708134	777.2334465	846.1947249	886.8419978
-0.2	-111.5432947	-134.8530993	-123.8028698	-107.9260124	-90.40214738	-122.7660695	-138.514126	-154.281509	-169.66954
+0.2	785.3004939	860.0114941	762.3843454	654.5914111	639.1366367	861.4954938	949.5103082	1048.117128	1107.42685
-0.25	-139.4291184	-168.5663741	-154.7535872	-134.9075155	-113.0026842	-153.4575868	-173.142658	-192.851886	-212.086925
+0.25	890.3414395	966.8514773	859.4505412	740.8197304	723.6704693	978.5783645	1081.762782	1198.519216	1286.171407
-0.3	-167.3149421	-202.2796489	-185.7043047	-161.8890185	-135.6032211	-184.1491042	-207.771189	-231.422264	-254.50431
+0.3	964.8455136	1044.493455	924.2330432	799.3976164	787.164501	1070.949088	1189.72481	1306.04147	1416.523709
-0.35	-195.2007658	-235.9929237	-216.6550221	-188.8705216	-158.2037579	-214.8406216	-242.399721	-269.992641	-296.921695
+0.35	1017.00599	1076.592384	947.9000297	823.7601947	818.9997858	1133.277482	1253.863355	1379.46582	1493.457437
-0.4	-223.0865895	-269.7061985	-247.6057396	-215.8520247	-180.8042948	-245.532139	-277.028252	-308.563018	-339.33908
+0.4	1043.703855	1076.085979	955.6388358	833.923104	831.5724596	1164.936305	1283.394835	1420.076841	1530.561953
-0.45	-250.9724131	-303.4194734	-278.556457	-242.8335278	-203.4048316	-276.2236563	-311.656784	-347.133396	-381.756465
+0.45	1037.005457	1045.969628	966.0218203	842.2858942	816.9734921	1159.64035	1273.339885	1415.160657	1535.487809
-0.5	-278.8582368	-337.1327482	-309.5071745	-269.8150309	-226.0053685	-306.9151737	-346.285316	-385.703773	-424.17385
+0.5	1021.000144	1018.184075	949.4296021	827.8884971	810.3133784	1141.190028	1253.790606	1389.906687	1503.695071
-0.55	-306.7440605	-370.846023	-340.4578919	-296.796534	-248.6059053	-337.6066911	-380.913847	-424.27415	-466.591235
+0.55	980.4541927	1003.81963	900.4676626	785.3946401	784.737415	1094.014374	1206.340572	1331.7596	1435.18599
-0.6	-334.6298842	-404.5592978	-371.4086094	-323.7780371	-271.2064422	-368.2982084	-415.542379	-462.844528	-509.00862
+0.6	916.6622937	963.9461223	843.781038	735.4826521	741.8314023	1022.264925	1130.065423	1240.859409	1343.632322
-0.65	-362.5157079	-438.2725726	-402.3593268	-350.7595402	-293.806979	-398.9897258	-450.17091	-501.414905	-551.426004
+0.65	826.8527195	886.0529309	779.4883405	675.0553536	672.4686932	921.5095335	1019.877966	1115.598406	1210.398348
-0.7	-390.4015316	-471.9858474	-433.3100443	-377.7410433	-316.4075158	-429.6812432	-484.799442	-539.985282	-593.843389
+0.7	723.1015147	773.4209263	682.2678007	588.4293081	590.674067	801.0343639	885.8505367	970.5729107	1047.769645
-0.75	-418.2873552	-505.6991223	-464.2607617	-404.7225464	-339.0080527	-460.3727605	-519.427973	-578.555659	-636.260774
+0.75	597.0966657	623.0817908	548.1840568	469.9857434	485.8259067	658.91885	725.4796477	794.8647045	849.7060769
-0.8	-446.1731789	-539.4123971	-495.2114792	-431.7040494	-361.6085895	-491.0642779	-554.056505	-617.126037	-678.678159
+0.8	455.6280896	450.7866307	386.794665	328.1545395	374.2184278	502.7161861	548.2288557	598.3341769	632.2983431
-0.85	-474.0590026	-573.1256719	-526.1621966	-495.90935	-384.2091264	-521.7557953	-588.685036	-655.696414	-721.095544
+0.85	297.1048202	290.55587	234.179047	194.6942289	243.7454685	332.8114901	353.5465656	381.4046298	392.2886732
-0.9	-501.9448263	-606.8389467	-557.112914	-624.6322951	-406.8096632	-552.4473127	-623.313568	-694.266791	-763.512929
+0.9	175.7417681	175.1712716	139.268218	112.1979375	142.3417636	188.0531674	188.1274129	196.91788	196.8532279
-0.95	-529.83065	-640.5522215	-588.0636315	-796.218217	-429.4102001	-583.13883	-657.9421	-732.837169	-805.930314
+0.95	55.03768458	54.764434	47.67390476	37.40401466	65.53614023	53.17892176	53.11030803	53.18203312	53.23800382
-1	-557.7168763	-676.5622675	-742.3961591	-995.0025344	-452.0110242	-613.8303465	-692.57092	-771.407694	-848.347699
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-557.7168763	-676.5622675	-742.3961591	-995.0025344	-452.0110242	-613.8303465	-692.57092	-771.407694	-848.347699
+2	0	0	0	0	0	0	0	0	0
-2.05	-529.8310324	-640.5526794	-588.0636481	-796.2187543	-429.4104726	-583.1385328	-657.942374	-732.83731	-805.929975
+2.05	55.01910236	54.7719301	47.67584687	37.40503526	65.53954607	53.1608089	53.09285165	53.16498459	53.23351498
-2.1	-501.9451886	-606.8393808	-557.11293	-624.63256	-406.8099211	-552.447031	-623.313828	-694.266925	-763.512608
+2.1	175.7545082	175.1824287	139.2764449	112.2022118	142.3114634	188.0784425	188.0997075	196.9348616	196.8698834
-2.15	-474.0593447	-573.1260821	-526.1622119	-495.9098983	-384.2093695	-521.7555292	-588.685282	-655.696541	-721.095241
+2.15	297.1128137	290.5447518	234.1831518	194.687263	243.7416617	332.8306574	353.5600523	381.4186791	392.2891956
-2.2	-446.1735008	-539.4127835	-495.2114939	-431.7040599	-361.6088179	-491.0640274	-554.056736	-617.126157	-678.677873
+2.2	455.6369085	450.7932479	386.7904146	328.1522702	374.2511802	502.7102116	548.2177994	598.3458503	632.3214302
-2.25	-418.2876569	-505.6994849	-464.2607758	-404.7225565	-339.0082663	-460.3725257	-519.42819	-578.555773	-636.260506

+2.25	597.1040852	623.0782821	548.1773328	469.9823225	485.8217227	658.9135608	725.4944802	794.8745948	849.7037422
-2.3	-390.4018131	-471.9861862	-433.3100578	-377.7410531	-316.4077147	-429.6810239	-484.799644	-539.985388	-593.843139
+2.3	723.1071739	773.4123614	682.2563257	588.4420863	590.7044766	801.0272123	885.8372118	970.5807419	1047.789778
-2.35	-362.5159692	-438.2728876	-402.3593397	-350.7595497	-293.8071632	-398.9895221	-450.171098	-501.415004	-551.425772
+2.35	826.8504746	886.0627474	779.4893167	675.0597385	672.4599755	921.5000335	1019.887487	1115.601438	1210.413757
-2.4	-334.6301253	-404.5595889	-371.4086217	-323.7780463	-271.2066116	-368.2980204	-415.542552	-462.84462	-509.008405
+2.4	916.6560296	963.9246399	843.793613	735.4892227	741.8553731	1022.251144	1130.044014	1240.851686	1343.64237
-2.45	-306.7442815	-370.8462903	-340.4579036	-296.7965428	-248.60606	-337.6065186	-380.914006	-424.274235	-466.591038
+2.45	980.4435043	1003.82231	900.471298	785.3965326	784.7207259	1094.022931	1206.339667	1331.771614	1435.188598
-2.5	-278.8584376	-337.1329917	-309.5071856	-269.8150394	-226.0055084	-306.9150168	-346.28546	-385.703851	-424.173671
+2.5	1020.983503	1018.199198	949.4483046	827.8767852	810.3278816	1141.165208	1253.8091	1389.885618	1503.685314
-2.55	-250.9725937	-303.419693	-278.5564675	-242.833536	-203.4049568	-276.223515	-311.656915	-347.133467	-381.756304
+2.55	1036.996989	1045.971936	966.0210201	842.2854903	816.9617103	1159.6416	1273.351429	1415.159727	1535.500802
-2.6	-223.0867498	-269.7063944	-247.6057495	-215.8520326	-180.8044053	-245.5320133	-277.028369	-308.563082	-339.338937
+2.6	1043.717285	1076.113864	955.6512635	833.9080136	831.5558454	1164.95812	1283.411548	1420.093431	1530.565797
-2.65	-195.200906	-235.9930957	-216.6550314	-188.8705292	-158.2038537	-214.8405115	-242.399823	-269.992698	-296.92157
+2.65	1017.012251	1076.589216	947.9049218	823.7534452	819.0140691	1133.264057	1253.859197	1379.472824	1493.448343
-2.7	-167.3150621	-202.2797971	-185.7043133	-161.8890258	-135.6033021	-184.1490097	-207.771277	-231.422314	-254.504203
+2.7	964.8427377	1044.506961	924.2497035	799.3875402	787.1362349	1070.95456	1189.737955	1306.03643	1416.50367
-2.75	-139.4292182	-168.5664984	-154.7535953	-134.9075224	-113.0027505	-153.457508	-173.142731	-192.851929	-212.086836
+2.75	890.330906	966.8562284	859.4599349	740.8152709	723.6721523	978.5737764	1081.76595	1198.529691	1286.165026
-2.8	-111.5433743	-134.8531998	-123.8028772	-107.926019	-90.40219895	-122.7660062	-138.514185	-154.281545	-169.669468
+2.8	785.2815056	860.0054663	762.3892827	654.5940003	639.0946919	861.4816398	949.5022071	1048.09048	1107.433511
-2.85	-83.65753046	-101.1399012	-92.85215918	-80.94451559	-67.80164737	-92.07450441	-103.885639	-115.711161	-127.252101
+2.85	640.9799718	715.6571379	634.0782859	542.8037736	521.4904938	702.9745816	777.2412256	846.1822425	886.8468624
-2.9	-55.77168659	-67.42660252	-61.90144113	-53.96301219	-45.20109579	-61.38300264	-69.2570932	-77.1407763	-84.8347342
+2.9	465.6894869	527.9892682	472.8742948	403.0828382	378.8365354	510.1853021	565.0577732	597.5143532	628.740887
-2.95	-27.88584271	-33.71330388	-30.95072307	-26.98150878	-22.60054421	-30.69150087	-34.6285473	-38.570392	-42.4173672
+2.95	250.408045	287.6864524	260.3429703	221.0832102	203.4038623	274.1565234	304.2340533	321.729007	336.9323904
-3	-1.12E-13	-1.35E-13	-1.32E-13	-1.08E-13	-9.08E-14	-1.05E-13	-1.05E-13	-1.05E-13	-1.22E-13
+3	1.09E-13	1.37E-13	1.28E-13	1.31E-13	1.04E-13	1.05E-13	1.54E-13	1.69E-13	1.66E-13

2-Span: Moment (Max and Min) Raw Data Results - 65' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.11E-13	-1.92E-13	-1.52E-13	-1.61E-13	-1.53E-13
End Shear	1.59E-13	1.57E-13	1.35E-13	1.68E-13	1.68E-13
-0.05	-58.71463158	-62.51539658	-38.730193	-47.958447	-49.8102248
+0.05	458.4731381	462.1940592	326.646525	397.7838254	406.8791335
-0.1	-117.4292632	-125.0307932	-77.460386	-95.9168941	-99.6204496
+0.1	830.2870363	834.7741262	596.8570828	726.9035116	740.914755
-0.15	-176.1438947	-187.5461898	-116.190579	-143.875341	-149.430674
+0.15	1139.896659	1155.948498	804.8827461	983.8008037	1001.960438
-0.2	-234.8585263	-250.0615863	-154.920772	-191.833788	-199.240899
+0.2	1387.590605	1428.802184	982.6960536	1206.358554	1227.490213
-0.25	-293.5731579	-312.5769829	-193.650965	-239.792235	-249.051124
+0.25	1548.734369	1658.256902	1122.792605	1362.978968	1396.780207
-0.3	-352.2877895	-375.0923795	-232.381158	-287.750682	-298.861349
+0.3	1688.003353	1812.517512	1214.035307	1462.096247	1526.960692
-0.35	-411.002421	-437.6077761	-271.111351	-335.709129	-348.671574
+0.35	1774.259643	1931.8771	1265.117017	1506.815312	1588.661763
-0.4	-469.7170526	-500.1231727	-309.841544	-383.667576	-398.481799
+0.4	1832.151914	1974.183355	1281.230749	1516.972789	1593.717495
-0.45	-528.4316842	-562.6385693	-348.571737	-431.626023	-448.292023
+0.45	1842.875732	1959.400775	1247.979871	1471.714978	1563.174492
-0.5	-587.1463158	-625.1539658	-387.30193	-479.58447	-498.102248
+0.5	1797.715614	1937.79072	1192.451616	1429.888699	1499.771335
-0.55	-645.8609473	-687.6693624	-426.032123	-527.542917	-547.912473
+0.55	1732.202195	1832.103897	1188.143437	1405.42557	1483.398687
-0.6	-704.5755789	-750.184759	-464.762316	-575.501364	-597.722698
+0.6	1601.44828	1724.761292	1136.433169	1343.932644	1420.616981
-0.65	-763.2902105	-812.7001556	-503.492509	-623.459812	-647.532923
+0.65	1434.815751	1553.220532	1035.398403	1237.678685	1302.096744
-0.7	-822.0048421	-875.2155522	-542.222702	-671.418259	-697.343147
+0.7	1223.404374	1314.685346	907.1806187	1087.10225	1128.649528
-0.75	-880.7194737	-937.7309488	-580.952895	-719.376706	-747.153372
+0.75	976.6326325	1030.142248	731.7237714	878.7066872	896.9410398
-0.8	-939.4341052	-1000.246345	-619.683088	-767.335153	-796.963597
+0.8	681.9608673	686.7488615	523.0566769	626.6865149	626.9940303
-0.85	-998.1487368	-1062.761742	-658.413281	-815.2936	-846.773822
+0.85	394.1846389	378.8592763	351.4130703	392.314528	409.0363407
-0.9	-1056.863368	-1125.277139	-697.143474	-863.252047	-896.584047
+0.9	215.7180105	200.5575769	201.3591989	219.95257	220.1527756
-0.95	-1115.578	-1187.792535	-735.873667	-911.210494	-946.394271
+0.95	54.63497611	61.00643099	63.00464835	67.20495824	56.07080344
-1	-1317.739011	-1459.243374	-890.480432	-1027.02902	-1139.00322
+1	0	0	0	0	0
(Span 2) -2	-1317.739011	-1459.243374	-890.480432	-1027.02902	-1139.00322
+2	0	0	0	0	0
-2.05	-1115.578364	-1187.713982	-735.873228	-911.210782	-946.394914
+2.05	54.61938276	61.00687798	62.98646079	67.18555817	56.05498074
-2.1	-1056.863713	-1125.20272	-697.143058	-863.25232	-896.584656
+2.1	215.7060776	200.5559026	201.3172512	219.9402712	220.1407476
-2.15	-998.1490617	-1062.691458	-658.412889	-815.293858	-846.774397
+2.15	394.1700316	378.860944	351.4225305	392.3062524	409.0351577
-2.2	-939.4344107	-1000.180196	-619.68272	-767.335396	-796.964139
+2.2	681.936813	686.7509793	523.0770426	626.6902439	626.9770655
-2.25	-880.7197598	-937.6689339	-580.95255	-719.376934	-747.15388

+2.25	**976.6220773**	**1030.145286**	**731.739632**	**878.708192**	**896.9525159**
-2.3	**-822.0051088**	**-875.1576719**	**-542.222381**	**-671.418472**	**-697.343622**
+2.3	**1223.432042**	**1314.686881**	**907.1913985**	**1087.12045**	**1128.677904**
-2.35	**-763.2904578**	**-812.6464099**	**-503.492212**	**-623.46001**	**-647.533364**
+2.35	**1434.809624**	**1553.222005**	**1035.401549**	**1237.687367**	**1302.092906**
-2.4	**-704.5758069**	**-750.1351479**	**-464.762043**	**-575.501548**	**-597.723105**
+2.4	**1601.433969**	**1724.765022**	**1136.423237**	**1343.925434**	**1420.626367**
-2.45	**-645.8611559**	**-687.623886**	**-426.031873**	**-527.543086**	**-547.912847**
+2.45	**1732.401116**	**1832.101935**	**1188.152075**	**1406.167422**	**1483.391325**
-2.5	**-587.1465049**	**-625.112624**	**-387.301704**	**-479.584623**	**-498.102589**
+2.5	**1797.725257**	**1937.7867**	**1192.477638**	**1429.869191**	**1499.751115**
-2.55	**-528.431854**	**-562.601362**	**-348.571535**	**-431.626161**	**-448.29233**
+2.55	**1842.879893**	**1959.398625**	**1247.974675**	**1471.731062**	**1563.186368**
-2.6	**-469.717203**	**-500.0901001**	**-309.841365**	**-383.667699**	**-398.482072**
+2.6	**1832.119171**	**1974.180076**	**1281.245968**	**1516.987664**	**1593.720412**
-2.65	**-411.0025521**	**-437.5788381**	**-271.111196**	**-335.709237**	**-348.671814**
+2.65	**1774.271073**	**1931.875733**	**1265.123455**	**1506.819897**	**1588.67253**
-2.7	**-352.2879011**	**-375.0675761**	**-232.381027**	**-287.750775**	**-298.861555**
+2.7	**1688.023951**	**1812.516497**	**1214.02933**	**1462.086018**	**1526.983647**
-2.75	**-293.5732501**	**-312.5563141**	**-193.650858**	**-239.792313**	**-249.051297**
+2.75	**1549.32984**	**1658.253311**	**1122.804054**	**1362.981239**	**1396.789879**
-2.8	**-234.8585992**	**-250.0450522**	**-154.920688**	**-191.833851**	**-199.241038**
+2.8	**1387.573717**	**1428.800223**	**982.7240785**	**1206.372158**	**1227.506981**
-2.85	**-176.1439482**	**-187.5337902**	**-116.190519**	**-143.875389**	**-149.43078**
+2.85	**1139.908117**	**1155.948152**	**804.8938482**	**983.7986592**	**1001.962558**
-2.9	**-117.4292972**	**-125.0225282**	**-77.4603498**	**-95.916927**	**-99.6205217**
+2.9	**830.2785602**	**834.771317**	**596.8837122**	**726.8864566**	**740.9000966**
-2.95	**-58.71464627**	**-62.51126625**	**-38.7301805**	**-47.9584649**	**-49.8102633**
+2.95	**458.4695234**	**462.2631397**	**326.6601384**	**397.7756355**	**406.8720928**
-3	**-1.90E-13**	**-1.90E-13**	**-1.70E-13**	**-1.97E-13**	**-1.83E-13**
+3	**2.03E-13**	**1.83E-13**	**1.71E-13**	**1.77E-13**	**1.53E-13**

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.23656	-4.44919	-5.378955317	-4.93819	-4.50331	-3.605917209	-4.89683	-5.52498	-6.153906352	-6.7677
End Shear	59.38	43.36873	50.56482835	46.25464	40.44131	35.22698438	47.41644	52.72447	55.82877973	58.67301
-0.05	-6.23656	-4.44919	-5.378955317	-4.93819	-4.94708	-3.605917209	-4.89683	-5.52498	-6.153906352	-6.7677
+0.05	54.48877	39.92615	45.8985466	41.53601	36.17516	32.45181194	43.68091	48.47322	51.11472379	53.48763
-0.1	-6.23656	-4.44919	-5.378955317	-4.93819	-5.98736	-3.605917209	-4.89683	-5.52498	-6.153906352	-6.7677
+0.1	49.88017	36.68869	41.49610684	37.09722	32.21158	29.85053982	40.16837	44.46994	46.67515254	48.60471
-0.15	-6.23656	-5.00251	-5.378955317	-4.93819	-7.02	-3.960761081	-5.05564	-5.52498	-6.153906352	-6.7677
+0.15	45.98727	33.94716	37.81149854	33.42061	28.94767	27.64603832	37.192	41.08311	42.9294412	44.49658
-0.2	-7.88765	-7.32261	-7.326283448	-5.82913	-8.25937	-5.404289389	-7.82828	-7.97513	-7.964119918	-7.95365
+0.2	41.52794	30.79847	33.63225227	29.5203	25.47836	25.11205549	33.77125	37.1971	38.64393963	39.81052
-0.25	-10.8386	-9.29403	-9.298511504	-7.40195	-9.64695	-7.295502295	-10.1869	-10.7899	-10.77915341	-10.769
+0.25	37.86092	28.15098	30.16525705	26.36517	22.67911	22.97957734	30.89293	33.93304	35.05523801	35.89898
-0.3	-15.0151	-11.689	-11.57174237	-9.49591	-11.4609	-9.899415518	-13.2368	-14.0427	-14.03236167	-14.0226
+0.3	33.60414	25.13293	26.27058145	22.83099	19.56579	20.54636655	27.60918	30.21621	30.9820322	31.47472
-0.35	-18.5582	-14.4502	-13.49031859	-11.477	-13.6306	-12.1069427	-16.2205	-16.893	-16.87656442	-16.8649
+0.35	30.06456	22.61536	23.07380984	19.93941	17.03631	18.51461498	24.86766	27.11943	27.60025354	27.81541
-0.4	-22.6354	-17.6276	-15.68619781	-14.2875	-16.2855	-14.64533621	-19.652	-20.8503	-20.80122856	-20.79
+0.4	26.07784	19.76981	19.67262144	16.78967	14.29855	16.2156568	21.76613	23.62373	23.79756604	23.79312
-0.45	-26.2103	-20.3047	-18.35930157	-16.6593	-18.4625	-16.78235438	-22.5414	-24.1879	-24.11082229	-24.1
+0.45	22.7957	17.41804	16.94664371	14.45997	12.25933	14.31333043	19.20018	20.73873	20.67260898	20.66811
-0.5	-30.6665	-23.3631	-22.1324357	-19.3735	-20.8899	-19.22174523	-25.8402	-28.0049	-28.28773064	-28.2756
+0.5	19.13964	14.78687	13.94228841	12.15227	10.23107	12.18211218	16.32607	17.51607	17.46534821	17.46145
-0.55	-34.4026	-25.9201	-25.57300589	-21.7392	-22.943	-21.25955291	-28.5964	-31.1998	-31.93398802	-32.1548
+0.55	16.1669	12.6368	11.64477761	10.30862	8.62129	10.43791147	13.97444	14.88737	14.85237156	14.84845
-0.6	-38.6481	-28.8175	-29.50414326	-25.1182	-25.9717	-23.56645795	-31.7173	-34.8244	-36.0839869	-36.8642
+0.6	13.04983	10.26187	9.440766695	8.184832	6.8707	8.507914287	11.37298	11.98969	11.97127095	11.96738
-0.65	-42.1777	-31.2187	-32.92506912	-28.6046	-28.9213	-25.47635795	-34.3017	-37.8322	-39.53985792	-40.7986
+0.65	10.58639	8.34938	7.942899924	6.521953	5.484005	6.950537194	9.274415	9.661791	9.655978207	9.652155
-0.7	-46.1522	-33.9133	-37.18184633	-32.6055	-32.2778	-27.61729447	-37.1995	-41.2124	-43.43862315	-45.253
+0.7	7.910497	6.27622	6.179299477	4.962899	4.117214	5.255244445	6.990816	7.400257	7.396799034	7.393504
-0.75	-49.4235	-36.1227	-40.72364923	-35.9418	-35.2301	-29.37058337	-39.5732	-43.9886	-46.65419359	-48.9409
+0.75	5.797951	4.952844	4.921881836	3.911449	3.197102	3.913394274	5.361958	5.633009	5.629653951	5.626463
-0.8	-53.0666	-38.5727	-44.71534198	-39.7109	-38.5623	-31.31206737	-42.2027	-47.0726	-50.24350196	-53.0752
+0.8	3.918885	3.520909	3.491979693	2.777363	2.23971	2.689137942	3.704731	3.738597	3.735408402	3.732376
-0.85	-56.0279	-40.5544	-48.0036213	-43.0187	-41.4534	-32.88004678	-44.3271	-49.5726	-53.1688746	-56.461
+0.85	2.833038	2.395694	2.36874113	1.883734	1.510187	1.945464101	2.408805	2.30934	2.408858178	2.406337
-0.9	-59.2792	-42.7178	-51.66885469	-47.2973	-45.0753	-34.58859736	-46.6429	-52.3085	-56.39050178	-60.2103
+0.9	1.67805	1.193858	1.185320808	0.942253	0.751051	1.101200934	1.15359	1.151894	1.154179014	1.089643
-0.95	-61.8788	-44.436	-54.65101277	-50.8211	-48.0444	-35.94256778	-48.4792	-54.4878	-58.97576312	-63.2383
+0.95	0.789567	0.429815	0.425509023	0.390944	0.300439	0.536091076	0.41538	0.414525	0.415588037	0.419343
-1	-64.6779	-46.2709	-57.92840768	-54.7478	-51.3435	-37.38469801	-50.4363	-56.8237	-61.77148585	-66.5377
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	64.25742	46.01954	57.47280935	54.19821	50.88265	37.18739823	50.16849	56.50309	61.38598939	66.08094
-2.05	-7.90E-01	-0.43007	-0.425729687	-0.39113	-3.01E-01	-0.536420657	-0.41563	-0.41476	-0.415822475	-0.41683
+2.05	61.83921	44.43503	54.64960328	50.81959	48.04371	35.94181327	48.47821	54.4867	58.97443463	63.23677
-2.1	-1.83517	-1.35487	-1.346176346	-1.07019	-0.85296	-1.251953015	-1.30912	-1.30739	-1.30972372	-1.31194
+2.1	58.78587	42.41794	51.15565405	46.69505	44.56734	34.35199533	46.32219	51.92888	55.94203953	59.68695
-2.15	-2.83181	-2.37843	-2.369261453	-1.88412	-1.51039	-1.945873139	-2.40949	-2.31001	-2.409509068	-2.40697
+2.15	55.98243	40.55332	48.00205381	43.01706	41.45252	32.87916651	44.32589	49.5713	53.16735538	56.45929
-2.2	-4.10295	-3.71844	-3.689123498	-2.93418	-2.37027	-2.819151633	-3.93287	-3.99861	-3.995374753	-3.9923
+2.2	52.50986	38.23037	44.15334012	39.17972	38.09662	31.04096789	41.83547	46.64138	49.74042199	52.49453
-2.25	-5.79088	-4.95355	-4.922500485	-3.9119	-3.19734	-3.91413524	-5.36279	-5.63393	-5.630551776	-5.62734
+2.25	49.37293	36.12153	40.72195304	35.94028	35.24889	29.36959126	39.57192	43.9871	46.65251516	48.93904

-2.3	-8.26737	-6.5596	-6.472946461	-5.14518	-4.2754	-5.489882989	-7.30679	-7.7081	-7.704600003	-7.70128
+2.3	45.54149	33.53459	36.57983247	32.03922	31.81013	27.31649658	36.79231	40.737	42.8892647	44.62428
-2.35	-10.6019	-8.35041	-7.943605135	-6.52266	-5.48437	-6.951409005	-9.27555	-9.66302	-9.657162067	-9.65332
+2.35	42.12283	31.21741	32.92326426	28.60304	28.92055	25.47527184	34.30026	37.83054	39.53804862	40.79662
-2.4	-13.4871	-10.593	-9.698234905	-8.46707	-7.11255	-8.777304523	-11.736	-12.3933	-12.37257547	-12.3687
+2.4	37.9929	28.40835	28.94694495	24.63934	25.54767	23.24076293	31.27668	34.3122	35.49670744	36.19681
-2.45	-16.1789	-12.638	-11.64574991	-10.3094	-8.62171	-10.43889374	-13.9757	-14.8888	-14.8537223	-14.8498
+2.45	34.34428	25.91873	25.57135596	21.73787	22.94229	21.25839139	28.59488	31.19806	31.93207209	32.15264
-2.5	-19.6581	-15.1561	-14.36054352	-12.4693	-10.5093	-12.4814554	-16.7297	-17.968	-17.9144395	-17.9105
+2.5	29.97623	22.92941	21.55169275	18.98857	20.54989	18.87594654	25.37254	27.4634	27.67086293	27.65867
-2.55	-22.8003	-17.4193	-16.94793409	-14.461	-12.2599	-14.31440883	-19.2016	-20.7403	-20.6742321	-20.6697
+2.55	26.14938	20.30323	18.35800319	16.65827	18.46192	16.78112602	22.53976	24.18609	24.1090794	24.09834
-2.6	-26.6374	-20.1712	-20.14109325	-17.1901	-14.6503	-16.54015267	-22.2038	-24.1165	-24.33250761	-24.328
+2.6	22.00243	17.17553	15.37469375	13.88761	15.9133	14.28423933	19.16387	20.28705	20.24266834	20.23141
-2.65	-30.0604	-22.6167	-23.07532092	-19.9407	-17.037	-18.51577066	-24.8692	-27.1211	-27.60201965	-27.8173
+2.65	18.50266	14.44868	13.48939114	11.47591	13.62996	12.10567188	16.21885	16.89108	16.87476555	16.8631
-2.7	-34.1949	-25.5604	-26.81803844	-23.327	-20.0008	-20.89121351	-28.0745	-30.7424	-31.55767233	-32.0989
+2.7	14.36469	11.24279	11.2481787	9.200727	11.20528	9.527820576	12.73463	13.57894	13.56860351	13.55879
-2.75	-37.8471	-28.1524	-30.16691504	-26.3666	-22.6798	-22.98080035	-30.8945	-33.9348	-35.05711641	-35.901
+2.75	10.78197	9.292934	9.297562228	7.401122	9.646562	7.294205259	10.1856	10.78832	10.77766829	10.76752
-2.8	-42.2187	-31.2461	-34.22250624	-30.0581	-25.9568	-25.47245985	-34.2577	-37.7492	-39.25192195	-40.4743
+2.8	7.565729	6.991211	6.994886346	5.565524	8.076715	5.19826505	7.432022	7.502662	7.491636588	7.48116
-2.85	-46.0481	-33.9487	-37.8132632	-33.4222	-28.9485	-27.64730511	-37.1937	-41.0849	-42.93140982	-44.4987
+2.85	6.236632	5.001391	5.378959118	4.938189	7.019718	3.960042419	5.0543	5.524987	6.153907473	6.767694
-2.9	-50.5964	-37.1504	-42.12036213	-37.7236	-32.7687	-30.22169778	-40.6695	-45.0406	-47.30714398	-49.2989
+2.9	6.236632	4.449188	5.378959118	4.938189	5.812282	3.605919559	4.896831	5.524987	6.153907473	6.767694
-2.95	-54.5514	-39.9277	-45.90039486	-41.5378	-36.1761	-32.45310708	-43.6826	-48.4751	-51.11676244	-53.4898
+2.95	6.236632	4.449188	5.378959118	4.938189	4.946943	3.605919559	4.896831	5.524987	6.153907473	6.767694
-3	-59.216	-43.1956	-50.3976359	-46.119	-40.2935	-35.07675598	-47.2259	-52.52	-55.61520158	-58.4519
+3	6.236632	4.449188	5.378959118	4.938189	4.503314	3.605919559	4.896831	5.524987	6.153907473	6.767694

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.23656	-5.96794	-6.395326982	-6.0222	-7.25024	-6.256428856	-6.60736	-3.00636
End Shear	59.38	58.83772	62.4188292	58.27419	68.64753	57.40114984	60.56715	30.34255
-0.05	-6.23656	-5.96794	-6.395326982	-6.0222	-7.25024	-6.256428856	-6.60736	-3.00636
+0.05	54.48877	54.31127	57.55288063	53.7022	63.12539	52.00298404	54.85767	27.96515
-0.1	-6.23656	-5.96794	-6.395326982	-6.0222	-7.25024	-6.256428856	-6.60736	-3.00636
+0.1	49.88017	50.05867	52.98495429	49.40186	57.93904	46.91548797	49.47776	25.70356
-0.15	-6.23656	-7.10501	-7.105014094	-6.07617	-7.25024	-6.256428856	-6.60736	-4.1505
+0.15	45.98727	46.44978	49.11133711	45.7569	53.54919	42.66195592	44.98058	23.78881
-0.2	-7.88765	-10.4003	-10.40031716	-9.64303	-10.2096	-7.909055995	-8.32532	-5.66309
+0.2	41.52794	42.29559	44.65584728	41.56649	48.50973	37.84281379	39.8864	21.59022
-0.25	-10.8386	-13.4705	-13.56058227	-12.6786	-13.586	-10.1351444	-10.6774	-6.94569
+0.25	37.86092	38.79437	40.9037164	38.03945	44.27449	33.84984409	35.66647	19.74214
-0.3	-15.0151	-17.695	-18.11737149	-16.511	-18.0325	-13.18849136	-13.9264	-8.42086
+0.3	33.60414	34.793	36.6192623	34.01425	39.44891	29.3703271	30.93347	17.63609
-0.35	-18.5582	-21.2716	-21.97821494	-20.1574	-22.4703	-15.77239741	-16.6763	-10.0401
+0.35	30.06456	31.44608	33.03884623	30.6525	35.4257	25.6990112	27.05547	15.87999
-0.4	-22.6354	-25.3787	-26.41503752	-24.3498	-27.5798	-18.73806003	-19.8327	-12.261
+0.4	26.07784	27.65194	28.98402504	26.84777	30.88098	21.79637226	22.94355	13.89605
-0.45	-26.2103	-28.8314	-30.14793616	-27.8788	-31.8872	-21.2299149	-22.4853	-14.1322
+0.45	22.7957	24.50597	25.62555265	23.69867	27.12723	18.67425598	19.65711	12.25726
-0.5	-30.6665	-32.7666	-34.40619158	-31.9068	-36.8111	-24.36406732	-25.6464	-16.2696
+0.5	19.13964	20.97347	21.85896632	20.16967	22.93036	15.4968264	16.40549	10.42496
-0.55	-34.4026	-36.0487	-37.96092098	-35.2713	-40.9307	-28.39739703	-29.892	-18.0565
+0.55	16.1669	18.0751	18.77267076	17.28059	19.50346	13.38393976	14.16162	8.928815
-0.6	-38.6481	-39.7577	-41.98200917	-39.0796	-45.6019	-33.01145872	-34.7489	-20.0808
+0.6	13.04983	14.85866	15.35291861	14.08258	15.72142	11.03687146	11.66962	7.277703
-0.65	-42.1777	-42.8226	-45.3083333	-42.2321	-49.4762	-37.02518898	-38.9827	-21.7581
+0.65	10.58639	12.25451	12.58902026	11.5009	12.67881	9.134440568	9.650252	5.949533
-0.7	-46.1522	-46.251	-49.0336545	-45.7655	-53.8278	-42.00740192	-44.2621	-23.6398
+0.7	7.910497	9.408548	9.574702518	8.689142	9.378588	7.052607559	7.441137	4.685282
-0.75	-49.4235	-49.052	-52.08135444	-48.6586	-57.3994	-46.15771504	-48.6608	-25.1822
+0.75	5.797951	7.145268	7.18343376	6.640094	7.074129	5.394412138	5.682207	3.781952
-0.8	-53.0666	-52.1453	-55.45230782	-51.8618	-61.3644	-50.84129251	-53.6256	-26.8918
+0.8	3.918885	4.997331	4.997331356	4.533155	4.761541	3.80156529	4.001648	2.798671
-0.85	-56.0279	-54.6358	-58.1711505	-54.4482	-64.5759	-54.70508293	-57.7223	-28.2739
+0.85	2.833038	3.399488	3.399488115	2.888582	2.960105	2.586302163	2.722423	2.020422
-0.9	-59.2792	-57.3396	-61.12913697	-57.2659	-68.0873	-59.01875611	-62.297	-29.7817
+0.9	1.67805	1.603329	1.603329198	1.357165	1.369236	1.290535757	1.358459	1.192762
-0.95	-61.8788	-59.473	-63.46889086	-59.4982	-70.8813	-62.53494755	-66.027	-30.9783
+0.95	0.789567	0.566047	0.566047049	0.488683	0.492171	0.464618871	0.489072	0.556213
-1	-64.6779	-61.7329	-65.95531066	-61.8752	-73.8721	-66.40744287	-70.1362	-32.2549
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	64.25742	61.42466	65.61556992	61.55009	73.46189	65.86853045	69.56425	32.08048
-2.05	-7.90E-01	-0.61221	-0.612214081	-0.48897	-0.49246	-0.464858288	-0.48932	-0.5526
+2.05	61.83921	59.47179	63.46760476	59.49703	70.87982	62.53328422	66.02524	30.97809
-2.1	-1.83517	-1.92718	-1.927182682	-1.54015	-1.55244	-1.464390565	-1.54146	-1.3014
+2.1	58.78587	56.96593	60.71985922	56.87577	67.60024	58.4142711	61.65588	29.5733
-2.15	-2.83181	-3.40036	-3.400358944	-2.88945	-2.96106	-2.570052045	-2.70532	-2.01592
+2.15	55.98243	54.63439	58.1696356	54.44679	64.57417	54.70323983	57.72033	28.27365
-2.2	-4.10295	-5.27787	-5.277873065	-4.82298	-5.07937	-4.01482247	-4.22613	-2.92935
+2.2	52.50986	51.71396	54.98189145	51.41457	60.8101	50.18145472	52.9261	26.65351
-2.25	-5.79088	-7.14651	-7.184745575	-6.64115	-7.07529	-5.395182314	-5.68302	-3.77666
+2.25	49.37293	49.0504	52.07964756	48.65702	57.39745	46.15572638	48.6587	25.18193

-2.3	-8.26737	-9.80325	-9.992298482	-9.07837	-9.83446	-7.341378661	-7.74751	-4.83533
+2.3	45.54149	45.76981	48.51050581	45.2691	53.21586	41.30241753	43.51502	23.37598
-2.35	-10.6019	-12.256	-12.59055208	-11.5023	-12.6805	-9.135339244	-9.65121	-5.94977
+2.35	42.12283	42.82087	45.30646356	42.23036	49.47405	37.02307796	38.98045	21.7578
-2.4	-13.4871	-15.3083	-15.83056889	-14.529	-16.2486	-11.36494479	-12.0179	-7.50731
+2.4	37.9929	39.23454	41.41452453	38.54201	44.94193	32.35707742	34.06008	19.79559
-2.45	-16.1789	-18.0767	-18.77439709	-17.2822	-19.5053	-13.38494144	-14.1627	-8.92909
+2.45	34.34428	36.04685	37.95890558	35.26943	40.92837	28.39546182	29.88996	18.05615
-2.5	-19.6581	-21.4702	-22.38827225	-20.6654	-23.5192	-15.85855437	-16.7897	-10.6814
+2.5	29.97623	32.20919	33.80276845	31.33592	36.11271	23.68370183	25.07952	15.96723
-2.55	-22.8003	-24.5077	-25.62744381	-23.7004	-27.1293	-18.67573199	-19.6587	-12.2576
+2.55	26.14938	28.82941	30.1458162	27.87687	31.88482	21.22871594	22.48399	14.13183
-2.6	-26.6374	-28.188	-29.55659281	-27.3848	-31.5219	-22.333576	-23.509	-14.1752
+2.6	22.00243	24.79484	25.78408208	23.75346	26.85261	18.31679015	19.38435	11.94575
-2.65	-30.0604	-31.448	-33.04086831	-30.6544	-35.4279	-25.70074508	-27.0573	-15.8803
+2.65	18.50266	21.26959	21.97601834	20.15532	22.4678	15.77115041	16.67494	10.03974
-2.7	-34.1949	-35.3605	-37.22668206	-34.5847	-40.1323	-29.99957264	-31.5982	-17.9337
+2.7	14.36469	17.09252	17.4672852	15.89726	17.286	12.75335359	13.46337	8.211483
-2.75	-37.8471	-38.7964	-40.90584149	-38.0414	-44.2769	-33.85175242	-35.6685	-19.7425
+2.75	10.78197	13.46845	13.55833756	12.67686	13.58413	10.13386209	10.67601	6.945452
-2.8	-42.2187	-42.8868	-45.28972028	-42.1625	-49.226	-38.52307073	-40.6054	-21.902
+2.8	7.565729	9.929575	9.929575318	9.133172	9.642672	7.55129776	7.948734	5.447725
-2.85	-46.0481	-46.4518	-49.113546	-45.7589	-53.5516	-42.66399193	-44.9827	-23.7892
+2.85	6.236632	7.103394	7.103394315	6.074447	7.250242	6.256431467	6.607357	4.15026
-2.9	-50.5964	-50.6658	-53.63688993	-50.0154	-58.6786	-47.63654273	-50.2402	-26.0253
+2.9	6.236632	5.967944	6.395320697	6.022205	7.250242	6.256431467	6.607357	3.006362
-2.95	-54.5514	-54.3134	-57.55513378	-53.7043	-63.1279	-52.00512096	-54.8599	-27.9655
+2.95	6.236632	5.967944	6.395320697	6.022205	7.250242	6.256431467	6.607357	3.006362
-3	-59.216	-58.5964	-62.1593435	-58.041	-68.3656	-57.20764625	-60.3625	-30.2488
+3	6.236632	5.967944	6.395320697	6.022205	7.250242	6.256431467	6.607357	3.006362

2-Span: Shear (Max and Min) Raw Data Results - 65' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.23656	-10.4488	-11.1252	-6.89241	-8.53467	-8.86421
End Shear	59.38	90.90582	92.2062	64.3401	78.19872	80.27113
-0.05	-6.23656	-10.4488	-11.1252	-6.89241	-8.53467	-8.86421
+0.05	54.48877	81.40724	82.11692	58.12992	70.695	72.30663
-0.1	-6.23656	-10.4488	-11.1252	-6.89241	-8.53467	-8.86421
+0.1	49.88017	72.48464	72.54667	52.28301	63.62472	64.80667
-0.15	-6.23656	-10.4488	-11.1252	-6.89241	-8.53467	-8.86421
+0.15	45.98727	65.09617	65.4397	47.40824	57.72541	58.56707
-0.2	-7.88765	-10.4488	-11.1252	-9.36654	-10.217	-10.2179
+0.2	41.52794	56.89989	57.43096	41.90219	51.0564	51.53589
-0.25	-10.8386	-13.4398	-12.5281	-12.1721	-13.595	-13.5962
+0.25	37.86092	50.53225	51.32594	37.35553	45.54415	45.74485
-0.3	-15.0151	-17.3433	-16.3209	-15.7442	-17.4965	-17.6643
+0.3	33.60414	43.42115	44.61874	32.27419	39.37704	39.50964
-0.35	-18.5582	-20.6453	-20.5882	-18.7662	-20.7964	-21.5357
+0.35	30.06456	37.62286	39.10026	28.27804	34.51875	34.43973
-0.4	-22.6354	-25.5499	-26.3601	-22.2336	-24.5816	-25.9863
+0.4	26.07784	31.71113	32.95749	24.07681	29.21703	28.83745
-0.45	-26.2103	-30.0629	-31.3505	-25.146	-27.7602	-29.7323
+0.45	22.7957	27.08809	27.96705	21.49663	24.91747	25.26219
-0.5	-30.6665	-36.3396	-38.0831	-28.4625	-32.4796	-34.0074
+0.5	19.13964	22.32553	22.76552	18.36174	20.56666	21.5054
-0.55	-34.4026	-41.6225	-44.0874	-31.2794	-37.5009	-37.6259
+0.55	16.1669	18.48551	18.70084	15.87635	17.47595	18.42888
-0.6	-38.6481	-48.5632	-51.6108	-35.6922	-44.0881	-43.3829
+0.6	13.04983	14.69972	14.64332	13.11372	14.4225	15.02216
-0.65	-42.1777	-54.7567	-57.917	-40.2932	-49.6125	-49.5949
+0.65	10.58639	11.78878	11.54248	10.8728	11.95877	12.27087
-0.7	-46.1522	-63.1083	-65.4128	-45.7876	-56.2058	-56.6784
+0.7	7.910497	9.100339	8.478651	8.418438	9.181696	9.272947
-0.75	-49.4235	-70.0886	-71.9076	-50.7123	-62.1121	-62.658
+0.75	5.797951	6.955999	6.486326	6.46151	7.031265	7.086584
-0.8	-53.0666	-78.3105	-79.4873	-56.2839	-68.7903	-70.0042
+0.8	3.918885	4.555127	4.347144	4.505493	4.805859	4.736613
-0.85	-56.0279	-85.6283	-86.5867	-60.8931	-74.3113	-76.0954
+0.85	2.833038	2.772644	2.750065	3.039906	3.242566	2.936524
-0.9	-59.2792	-94.2997	-96.0682	-66.0547	-80.4897	-82.9341
+0.9	1.67805	1.330375	1.251738	1.525614	1.627321	1.358437
-0.95	-61.8788	-101.449	-104.268	-70.2765	-85.5392	-88.5437
+0.95	0.789567	0.49336	0.553523	0.548899	0.585493	0.489004
-1	-64.6779	-109.424	-113.461	-74.9441	-91.1171	-94.7659
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	64.25742	108.3072	112.1731	74.29329	90.33968	93.89694
-2.05	-7.90E-01	-0.49247	-0.55357	-0.54918	-0.58579	-0.48924
+2.05	61.83921	101.4455	104.2673	70.2745	85.53684	88.54113
-2.1	-1.83517	-1.5158	-1.45441	-1.73144	-1.84687	-1.54144
+2.1	58.78587	93.07859	94.67431	65.33034	79.62296	81.97325
-2.15	-2.83181	-2.86306	-2.75017	-3.04056	-3.24326	-2.93731
+2.15	55.98243	85.62486	86.84434	60.89096	74.30876	76.09262
-2.2	-4.10295	-4.96997	-4.64019	-4.75808	-5.07529	-5.05407
+2.2	52.50986	77.19656	78.37693	55.49806	67.84863	68.96698
-2.25	-5.79088	-6.95694	-6.48647	-6.46241	-7.03225	-7.08755
+2.25	49.37293	70.08548	71.9071	50.70996	62.10932	62.65499

-2.3	**-8.26737**	**-9.47342**	**-8.8598**	**-8.75902**	**-9.55579**	**-9.68781**
+2.3	**45.54149**	**61.92501**	**64.33874**	**44.95215**	**55.20353**	**55.67547**
-2.35	**-10.6019**	**-11.7899**	**-11.5427**	**-10.8738**	**-11.9599**	**-12.2721**
+2.35	**42.12283**	**54.75343**	**57.91654**	**40.29101**	**49.60991**	**49.59203**
-2.4	**-13.4871**	**-15.2096**	**-15.2049**	**-13.5**	**-14.847**	**-15.4975**
+2.4	**37.9929**	**47.51876**	**50.54594**	**34.91387**	**43.15317**	**42.33349**
-2.45	**-16.1789**	**-18.4872**	**-18.7011**	**-15.8775**	**-17.4588**	**-18.4303**
+2.45	**34.34428**	**41.62012**	**44.08692**	**31.27788**	**37.49812**	**37.62408**
-2.5	**-19.6581**	**-22.9896**	**-23.4715**	**-18.7871**	**-21.1352**	**-22.0329**
+2.5	**29.97623**	**35.44748**	**37.12361**	**27.99324**	**31.73897**	**33.40184**
-2.55	**-22.8003**	**-27.09**	**-27.9674**	**-21.4969**	**-24.9195**	**-25.3903**
+2.55	**26.14938**	**30.06038**	**31.35013**	**25.14466**	**27.75865**	**29.7306**
-2.6	**-26.6374**	**-32.5347**	**-33.8149**	**-24.5346**	**-29.9582**	**-29.6183**
+2.6	**22.00243**	**24.82142**	**25.52149**	**21.74116**	**24.04409**	**25.35367**
-2.65	**-30.0604**	**-37.6255**	**-39.1007**	**-28.2799**	**-34.521**	**-34.442**
+2.65	**18.50266**	**20.70336**	**20.58787**	**18.76479**	**20.79482**	**21.53387**
-2.7	**-34.1949**	**-44.4176**	**-45.5602**	**-32.9866**	**-40.2421**	**-40.3797**
+2.7	**14.36469**	**16.78725**	**15.85735**	**15.23526**	**16.94071**	**17.01297**
-2.75	**-37.8471**	**-50.5351**	**-51.3264**	**-37.3577**	**-45.5467**	**-45.7475**
+2.75	**10.78197**	**13.43827**	**12.52787**	**12.17064**	**13.59341**	**13.59459**
-2.8	**-42.2187**	**-57.987**	**-58.5557**	**-42.6782**	**-51.9967**	**-52.5256**
+2.8	**7.565729**	**10.44884**	**11.12448**	**8.942883**	**9.650033**	**9.650968**
-2.85	**-46.0481**	**-65.0995**	**-65.4402**	**-47.4105**	**-57.7282**	**-58.5699**
+2.85	**6.236632**	**10.44884**	**11.12448**	**6.892409**	**8.534673**	**8.864218**
-2.9	**-50.5964**	**-73.7436**	**-73.8983**	**-53.1106**	**-64.6259**	**-65.8672**
+2.9	**6.236632**	**10.44884**	**11.12448**	**6.892409**	**8.534673**	**8.864218**
-2.95	**-54.5514**	**-81.4108**	**-82.1176**	**-58.1323**	**-70.6979**	**-72.3097**
+2.95	**6.236632**	**10.44884**	**11.12448**	**6.892409**	**8.534673**	**8.864218**
-3	**-59.216**	**-90.6225**	**-92.0393**	**-64.1281**	**-77.9426**	**-80.017**
+3	**6.236632**	**10.44884**	**11.12448**	**6.892409**	**8.534673**	**8.864218**

2-Span: Moment (Max and Min) Raw Data Results - 65' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.41E-13	-5.1E-14	-7.12319E-14	-5.6E-14	-4.44E-14	-6.27975E-14	-4.9E-14	-6.9E-14	-6.97161E-14	-5.8E-14
End Shear	1.20E-13	5.9E-14	5.8021E-14	4.65E-14	3.69E-14	4.95088E-14	7.31E-14	6.06E-14	6.48684E-14	6.62E-14
-0.05	-20.2688	-14.4599	-17.48160478	-16.0491	-14.6358	-11.71923093	-15.9147	-17.9562	-20.00019564	-21.995
+0.05	177.0885	129.8557	149.1702765	134.992	118.9751	105.4683888	142.1693	157.7646	166.8283603	174.7112
-0.1	-40.5376	-28.9197	-34.96320956	-32.0982	-29.2715	-23.43846186	-31.8294	-35.9124	-40.00039129	-43.99
+0.1	328.4742	241.469	273.7705871	245.1922	217.1629	196.4326902	264.5679	293.0194	309.8331936	326.024
-0.15	-60.8064	-43.3796	-52.44481434	-48.1473	-43.9073	-35.15769279	-47.7441	-53.8686	-60.00058693	-65.985
+0.15	449.7789	332.3721	371.0907049	328.7963	292.8956	270.41912	364.5169	403.0249	438.7838864	459.861
-0.2	-81.0752	-57.8394	-69.92641912	-64.1965	-58.5431	-46.87692371	-63.6588	-71.8248	-80.00078257	-87.9801
+0.2	548.4292	407.2079	445.9484024	395.325	353.6239	331.4164567	446.7179	492.3569	543.4882697	574.2426
-0.25	-101.344	-72.2993	-87.4080239	-80.2456	-73.1788	-58.59615464	-79.5735	-89.781	-100.0009782	-109.975
+0.25	618.5895	461.6756	501.3489641	445.6575	400.573	375.2504378	507.4298	560.9348	621.4774259	666.9284
-0.3	-121.613	-86.7591	-104.8896287	-96.2947	-87.8146	-70.31538557	-95.4883	-107.737	-120.0011739	-131.97
+0.3	667.2146	500.3088	541.6092584	479.2497	432.6632	408.1744885	555.3275	616.9172	677.2317708	734.521
-0.35	-141.882	-101.219	-122.3712335	-112.344	-102.45	-82.0346165	-111.403	-125.693	-140.0013695	-153.965
+0.35	701.9913	527.356	558.2537643	491.5219	446.4843	424.6822846	587.6471	650.1754	715.3050661	774.414
-0.4	-162.15	-115.679	-139.8528382	-128.393	-117.086	-93.75384743	-127.318	-143.65	-160.0015651	-175.96
+0.4	719.6797	541.1998	557.991174	495.5348	452.4213	431.2016902	604.0634	665.4886	736.3634124	793.6541
-0.45	-182.419	-130.139	-157.334443	-144.442	-131.722	-105.4730784	-143.232	-161.606	-180.0017608	-197.955
+0.45	711.6927	537.7264	542.3747098	500.9188	456.8975	423.6315748	601.3173	660.2748	733.8141859	796.2084
-0.5	-202.688	-144.599	-174.8160478	-160.491	-146.358	-117.1923093	-159.147	-179.562	-200.0019564	-219.95
+0.5	704.4256	529.4271	527.9668523	492.3151	449.0507	420.1780547	591.7501	650.1377	720.7190494	779.7226
-0.55	-222.957	-159.058	-192.2976526	-176.54	-160.993	-128.9115402	-175.062	-197.518	-220.0021521	-241.945
+0.55	678.0169	508.4025	520.518346	466.9265	426.1076	406.9159528	567.2877	625.5331	690.5675912	744.1981
-0.6	-243.226	-173.518	-209.7792574	-192.589	-175.629	-140.6307711	-190.977	-215.474	-240.0023477	-263.94
+0.6	635.8898	475.324	499.8424279	437.5323	398.7968	384.6675666	530.0829	585.9816	643.432413	696.724
-0.65	-263.495	-187.978	-227.2608621	-208.638	-190.265	-152.3500021	-206.891	-233.431	-260.0025434	-285.935
+0.65	570.4404	428.7543	459.4518698	404.1941	365.5062	348.7003854	477.8375	528.8452	578.4798581	627.6372
-0.7	-283.763	-202.438	-244.7424669	-224.688	-204.901	-164.069233	-222.806	-251.387	-280.002739	-307.93
+0.7	496.2168	374.9554	401.0479265	353.7816	318.1095	306.2867861	415.3665	459.3469	503.2786677	543.3081
-0.75	-304.032	-216.898	-262.2240717	-240.737	-219.537	-175.7884639	-238.721	-269.343	-300.0029346	-329.925
+0.75	404.8173	309.6171	323.0914134	284.2541	253.6869	251.9190598	341.6743	376.1886	412.1673345	440.6047
-0.8	-324.301	-231.358	-279.7056765	-256.786	-234.172	-187.5076949	-254.635	-287.299	-320.0031303	-351.92
+0.8	303.4233	236.2604	233.7498733	200.5676	176.616	194.0463717	260.6773	284.2773	310.258842	327.8705
-0.85	-344.57	-245.817	-297.1872813	-272.835	-268.943	-199.2269258	-270.55	-305.255	-340.0033259	-373.915
+0.85	189.8612	154.0601	150.6641794	121.4307	104.1918	126.3912204	172.5753	183.3272	197.7726885	203.4165
-0.9	-364.839	-260.277	-314.668886	-288.884	-338.967	-210.9461567	-286.465	-323.212	-360.0035216	-395.91
+0.9	107.3708	91.12874	90.83291241	72.21582	59.47083	73.80957407	97.51266	97.55116	102.1093492	102.0758
-0.95	-385.107	-274.737	-332.1504908	-304.933	-432.685	-222.6653876	-302.379	-341.168	-380.0037172	-417.905
+0.95	49.48374	28.53912	28.39742494	24.72072	19.68524	33.98296097	27.57528	27.5397	27.57689039	27.60591
-1	-405.381	-289.197	-350.8230581	-384.96	-541.74	-234.3847675	-318.294	-359.124	-400.0039897	-439.9
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-405.381	-289.197	-350.8230581	-384.96	-541.74	-234.3847675	-318.294	-359.124	-400.0039897	-439.9
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-385.112	-274.737	-332.1507282	-304.933	-432.685	-222.665529	-302.379	-341.168	-380.0037904	-417.905
+2.05	49.48379	28.52948	28.40131195	24.72173	19.68577	33.98472703	27.56588	27.53065	27.56805009	27.60359
-2.1	-364.843	-260.278	-314.6691111	-288.884	-338.967	-210.9462904	-286.465	-323.212	-360.0035911	-395.91
+2.1	107.3614	91.13534	90.83869777	72.22009	59.47305	73.79386227	97.52577	97.53679	102.1181548	102.0845
-2.15	-344.574	-245.818	-297.187494	-272.835	-268.944	-199.2270518	-270.55	-305.256	-340.0033918	-373.915
+2.15	190.2556	154.0642	150.6584142	121.4328	104.1882	126.3892464	172.5853	183.3342	197.7799736	203.4167
-2.2	-324.305	-231.358	-279.7058768	-256.786	-234.172	-187.5078133	-254.635	-287.299	-320.0031926	-351.92
+2.2	304.0107	236.2649	233.7533046	200.5654	176.6148	194.0633551	260.6742	284.2716	310.2648951	327.8825
-2.25	-304.036	-216.898	-262.2242597	-240.737	-219.537	-175.7885747	-238.721	-269.343	-300.0029933	-329.925

+2.25	404.6677	309.621	323.089594	284.2506	253.6852	251.9168902	341.6715	376.1963	412.172463	440.6034
-2.3	-283.767	-202.438	-244.7426426	-224.688	-204.901	-164.0693361	-222.806	-251.387	-280.002794	-307.93
+2.3	496.7116	374.9583	401.0434853	353.7756	318.1161	306.3025546	415.3628	459.34	503.2827285	543.3185
-2.35	-263.498	-187.978	-227.2610254	-208.638	-190.265	-152.3500976	-206.891	-233.431	-260.0025947	-285.935
+2.35	570.3545	428.7532	459.45696	404.1946	365.5085	348.6958649	477.8325	528.8501	578.4814301	627.6452
-2.4	-243.229	-173.518	-209.7794083	-192.589	-175.629	-140.630859	-190.976	-215.474	-240.0023954	-263.94
+2.4	636.4683	475.3207	499.8312885	437.5388	398.8002	384.6799964	530.0758	585.9705	643.4284086	696.7293
-2.45	-222.96	-159.058	-192.2977912	-176.54	-160.993	-128.9116204	-175.062	-197.518	-220.0021961	-241.945
+2.45	678.2591	508.3969	520.5197355	466.9283	426.1085	406.9072989	567.2922	625.5326	690.5738212	744.1994
-2.5	-202.691	-144.599	-174.816174	-160.491	-146.358	-117.1923819	-159.147	-179.562	-200.0019968	-219.95
+2.5	704.7767	529.4185	527.9746944	492.3248	449.0446	420.1855751	591.7372	650.1473	720.7081245	779.7176
-2.55	-182.421	-130.139	-157.3345569	-144.442	-131.722	-105.4731433	-143.232	-161.606	-180.0017975	-197.955
+2.55	711.7222	537.7221	542.3759067	500.9183	456.8973	423.6254656	601.3179	660.2808	733.8137036	796.2151
-2.6	-162.152	-115.679	-139.8529398	-128.393	-117.086	-93.75390473	-127.318	-143.65	-160.0015983	-175.96
+2.6	719.2496	541.2068	558.0056332	495.5412	452.4134	431.1930751	604.0747	665.4973	736.3720149	793.6561
-2.65	-141.883	-101.219	-122.3713226	-112.344	-102.45	-82.03466616	-111.403	-125.693	-140.001399	-153.965
+2.65	702.1692	527.3592	558.2521216	491.5245	446.4808	424.689691	587.6402	650.1733	715.3086977	774.4093
-2.7	-121.614	-86.7592	-104.8897055	-96.2947	-87.8146	-70.31542759	-95.4882	-107.737	-120.0011997	-131.97
+2.7	666.8169	500.3074	541.6162619	479.2583	432.658	408.1598314	555.3303	616.924	677.2291575	734.5106
-2.75	-101.345	-72.2993	-87.40808838	-80.2456	-73.1788	-58.59618902	-79.5735	-89.781	-100.0010004	-109.975
+2.75	618.2731	461.6702	501.3514277	445.6624	400.5707	375.2513105	507.4274	560.9365	621.4828576	666.9251
-2.8	-81.0762	-57.8394	-69.92647125	-64.1965	-58.5431	-46.87695045	-63.6588	-71.8248	-80.00080111	-87.98
+2.8	548.8427	407.1981	445.9452768	395.3276	353.6252	331.3947067	446.7107	492.3527	543.4744516	574.2461
-2.85	-60.8072	-43.3796	-52.44485412	-48.1473	-43.9073	-35.15771189	-47.7441	-53.8686	-60.00060182	-65.985
+2.85	449.6194	332.3723	371.0952232	328.7935	292.8941	270.4124935	364.5188	403.0289	438.7774138	459.8636
-2.9	-40.5381	-28.9197	-34.96323698	-32.0982	-29.2715	-23.43847332	-31.8294	-35.9124	-40.00040253	-43.99
+2.9	328.8766	241.4776	273.7823532	245.2032	217.1587	196.4410347	264.5503	293.0038	309.8337326	326.0259
-2.95	-20.2691	-14.4599	-17.48161985	-16.0491	-14.6358	-11.71923475	-15.9147	-17.9562	-20.00020325	-21.995
+2.95	177.2921	129.846	149.1762781	134.9977	118.9731	105.4725758	142.1605	157.7568	166.8286269	174.7122
-3	-1.15E-13	-5.8E-14	-6.97973E-14	-6.9E-14	-5.68E-14	-4.70735E-14	-5.4E-14	-5.5E-14	-5.44237E-14	-6.3E-14
+3	1.13E-13	5.63E-14	7.08287E-14	6.66E-14	6.92E-14	5.38489E-14	5.43E-14	7.97E-14	8.78349E-14	8.63E-14

2-Span: Moment (Max and Min) Raw Data Results - 65' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.41E-13	-7.1E-14	-7.1E-14	-5.9E-14	-8.8E-14	-8.4E-14	-8.9E-14	-7.7E-14
End Shear	1.20E-13	8.44E-14	8.44E-14	8.81E-14	1E-13	6.65E-14	7E-14	4.1E-14
-0.05	-20.2688	-19.3958	-20.7848	-19.5722	-23.5633	-20.3334	-21.4739	-9.77067
+0.05	177.0885	176.7111	187.3203	174.814	205.647	169.0097	178.2874	90.88674
-0.1	-40.5376	-38.7916	-41.5696	-39.1443	-47.1266	-40.6668	-42.9479	-19.5413
+0.1	328.4742	329.4418	348.8982	325.4322	382.1485	309.6239	326.5469	169.1625
-0.15	-60.8064	-58.1874	-62.3544	-58.7165	-70.6899	-61.0002	-64.4218	-29.312
+0.15	449.7789	454.7319	480.9147	448.5914	525.9046	419.0167	441.8157	232.1402
-0.2	-81.0752	-77.5833	-83.1393	-78.2886	-94.2532	-81.3336	-85.8957	-39.0827
+0.2	548.4292	558.9416	590.4545	549.874	642.4755	502.4813	529.7352	284.7219
-0.25	-101.344	-96.9791	-103.924	-97.8608	-117.816	-101.667	-107.37	-48.8534
+0.25	618.5895	635.6342	670.9193	625.0866	739.4535	577.728	609.9936	321.4715
-0.3	-121.613	-116.375	-124.709	-117.433	-141.38	-122	-128.844	-58.624
+0.3	667.2146	692.0678	728.8447	687.2872	813.4318	627.9461	663.7619	349.7005
-0.35	-141.882	-135.771	-145.494	-137.005	-164.943	-142.334	-150.318	-68.3947
+0.35	701.9913	726.8896	770.2516	727.531	857.9402	659.4785	696.6073	363.4675
-0.4	-162.15	-155.167	-166.279	-156.577	-188.506	-162.667	-171.791	-78.1654
+0.4	719.6797	749.427	792.8369	748.1453	878.9325	671.3558	709.6469	369.0897
-0.45	-182.419	-174.562	-187.063	-176.149	-212.07	-183.001	-193.265	-87.9361
+0.45	711.6927	749.1583	790.7202	745.6584	873.3466	657.6645	695.6458	361.925
-0.5	-202.688	-193.958	-207.848	-195.722	-235.633	-203.334	-214.739	-97.7067
+0.5	704.4256	736.0273	777.8346	733.2792	860.0297	640.3449	677.1822	358.0681
-0.55	-222.957	-213.354	-228.633	-215.294	-259.196	-223.667	-236.213	-107.477
+0.55	678.0169	703.4659	744.199	702.5644	826.3524	628.859	664.6906	348.0697
-0.6	-243.226	-232.75	-249.418	-234.866	-282.76	-244.001	-257.687	-117.248
+0.6	635.8898	655.1713	694.1458	656.2952	773.1614	594.6568	628.1498	331.2525
-0.65	-263.495	-252.146	-270.203	-254.438	-306.323	-264.334	-279.161	-127.019
+0.65	570.4404	594.513	625.6204	591.7449	697.1833	536.107	566.562	300.8781
-0.7	-283.763	-271.541	-290.987	-274.01	-329.886	-284.668	-300.635	-136.789
+0.7	496.2168	520.96	546.3658	514.8623	606.0323	464.8918	491.2022	266.3663
-0.75	-304.032	-290.937	-311.772	-293.582	-353.449	-305.001	-322.109	-146.56
+0.75	404.8173	432.6032	452.3798	424.1408	497.1662	371.701	392.3458	219.7671
-0.8	-324.301	-310.333	-332.557	-313.154	-377.013	-325.334	-343.583	-156.331
+0.8	303.4233	335.1802	347.5623	325.0125	377.7122	262.811	277.0687	171.1814
-0.85	-344.57	-329.729	-353.342	-332.727	-400.576	-345.668	-365.057	-166.101
+0.85	189.8612	226.9216	231.3144	217.1495	246.0577	170.5024	179.934	113.2477
-0.9	-364.839	-349.125	-374.127	-352.299	-424.139	-366.001	-386.531	-175.872
+0.9	107.3708	129.4052	129.4052	120.1676	127.2905	98.37989	103.5578	76.55816
-0.95	-385.107	-368.52	-394.911	-371.871	-447.703	-386.334	-408.005	-185.643
+0.95	49.48374	40.5929	40.5929	32.4415	32.4415	30.81525	32.43711	35.37591
-1	-405.381	-387.916	-415.696	-391.443	-471.266	-406.668	-431.113	-195.414
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-405.381	-387.916	-415.696	-391.443	-471.266	-406.668	-431.113	-195.414
+2	0	0	0	0	0	0	0	0
-2.05	-385.112	-368.521	-394.911	-371.871	-447.702	-386.335	-408.004	-185.643
+2.05	49.48379	40.57884	40.57884	32.43045	32.46205	30.80618	32.42756	35.48761
-2.1	-364.843	-349.125	-374.126	-352.299	-424.139	-366.001	-386.53	-175.872
+2.1	107.3614	129.4149	129.4149	120.1869	127.3147	98.38611	103.5643	76.132
-2.15	-344.574	-329.729	-353.341	-332.727	-400.576	-345.668	-365.056	-166.101
+2.15	190.2556	226.9279	231.3191	217.1593	246.0616	170.5071	179.9388	113.5035
-2.2	-324.305	-310.333	-332.557	-313.155	-377.013	-325.334	-343.583	-156.331
+2.2	304.0107	335.1875	347.5679	325.0071	377.7335	262.8199	277.0784	171.1758
-2.25	-304.036	-290.937	-311.772	-293.583	-353.449	-305.001	-322.109	-146.56

+2.25	**404.6677**	**432.6098**	**452.3845**	**424.1521**	**497.1712**	**371.708**	**392.3535**	**219.5534**
-2.3	**-283.767**	**-271.541**	**-290.987**	**-274.01**	**-329.886**	**-284.668**	**-300.635**	**-136.789**
+2.3	**496.7116**	**520.9658**	**546.3696**	**514.8562**	**606.0524**	**464.8965**	**491.2075**	**266.3603**
-2.35	**-263.498**	**-252.146**	**-270.202**	**-254.438**	**-306.323**	**-264.334**	**-279.161**	**-127.019**
+2.35	**570.3545**	**594.5165**	**625.6183**	**591.7537**	**697.1847**	**536.1055**	**566.5636**	**300.8778**
-2.4	**-243.229**	**-232.75**	**-249.418**	**-234.866**	**-282.759**	**-244.001**	**-257.687**	**-117.248**
+2.4	**636.4683**	**655.1692**	**694.1409**	**656.2851**	**773.1762**	**594.6515**	**628.1446**	**331.2454**
-2.45	**-222.96**	**-213.354**	**-228.633**	**-215.294**	**-259.196**	**-223.667**	**-236.213**	**-107.477**
+2.45	**678.2591**	**703.461**	**744.191**	**702.5677**	**826.3468**	**628.8632**	**664.6953**	**348.0683**
-2.5	**-202.691**	**-193.958**	**-207.848**	**-195.722**	**-235.633**	**-203.334**	**-214.739**	**-97.7068**
+2.5	**704.7767**	**736.0185**	**777.8223**	**733.2954**	**860.0358**	**640.3578**	**677.1962**	**358.0597**
-2.55	**-182.421**	**-174.562**	**-187.063**	**-176.15**	**-212.07**	**-183.001**	**-193.265**	**-87.9361**
+2.55	**711.7222**	**749.1696**	**790.714**	**745.6614**	**873.3435**	**657.6635**	**695.6444**	**361.9274**
-2.6	**-162.152**	**-155.167**	**-166.278**	**-156.577**	**-188.506**	**-162.667**	**-171.791**	**-78.1654**
+2.6	**719.2496**	**749.4338**	**792.8471**	**748.1606**	**878.9241**	**671.3646**	**709.6558**	**369.085**
-2.65	**-141.883**	**-135.771**	**-145.494**	**-137.005**	**-164.943**	**-142.334**	**-150.317**	**-68.3947**
+2.65	**702.1692**	**726.8912**	**770.2563**	**727.5246**	**857.9425**	**659.4826**	**696.6111**	**363.4684**
-2.7	**-121.614**	**-116.375**	**-124.709**	**-117.433**	**-141.38**	**-122**	**-128.843**	**-58.6241**
+2.7	**666.8169**	**692.063**	**728.8426**	**687.2921**	**813.4444**	**627.9438**	**663.759**	**349.7068**
-2.75	**-101.345**	**-96.9791**	**-103.924**	**-97.8608**	**-117.816**	**-101.667**	**-107.37**	**-48.8534**
+2.75	**618.2731**	**635.6238**	**670.9113**	**625.0851**	**739.4591**	**577.7341**	**609.9994**	**321.8595**
-2.8	**-81.0762**	**-77.5833**	**-83.1392**	**-78.2887**	**-94.2531**	**-81.3336**	**-85.8956**	**-39.0827**
+2.8	**548.8427**	**558.9252**	**590.4401**	**549.8666**	**642.4734**	**502.4678**	**529.7493**	**284.7263**
-2.85	**-60.8072**	**-58.1875**	**-62.3544**	**-58.7165**	**-70.6899**	**-61.0002**	**-64.4217**	**-29.312**
+2.85	**449.6194**	**454.7306**	**480.9149**	**448.5945**	**525.895**	**419.0228**	**441.8223**	**232.1373**
-2.9	**-40.5381**	**-38.7916**	**-41.5696**	**-39.1443**	**-47.1266**	**-40.6668**	**-42.9478**	**-19.5414**
+2.9	**328.8766**	**329.4123**	**348.8698**	**325.412**	**382.1311**	**309.6375**	**326.5613**	**169.1648**
-2.95	**-20.2691**	**-19.3958**	**-20.7848**	**-19.5722**	**-23.5633**	**-20.3334**	**-21.4739**	**-9.77068**
+2.95	**177.2921**	**176.6965**	**187.3062**	**174.8039**	**205.6383**	**169.0166**	**178.2948**	**90.88786**
-3	**-1.15E-13**	**-7E-14**	**-7E-14**	**-6.7E-14**	**-7.2E-14**	**-8.3E-14**	**-8.8E-14**	**-5.9E-14**
+3	**1.13E-13**	**8.88E-14**	**8.39E-14**	**6.39E-14**	**6.39E-14**	**8.13E-14**	**8.56E-14**	**4.09E-14**

2-Span: Moment (Max and Min) Raw Data Results - 65' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.41E-13	-1.2E-13	-1.1E-13	-8.8E-14	-9.3E-14	-8.9E-14
End Shear	1.20E-13	9.18E-14	9.09E-14	7.78E-14	9.74E-14	9.69E-14
-0.05	-20.2688	-33.9587	-36.157	-22.4003	-27.7377	-28.8087
+0.05	177.0885	265.1667	267.3187	188.9222	230.0658	235.3263
-0.1	-40.5376	-67.9174	-72.3139	-44.8007	-55.4754	-57.6174
+0.1	328.4742	480.2123	482.8075	345.2036	420.4185	428.5221
-0.15	-60.8064	-101.876	-108.471	-67.201	-83.213	-86.4261
+0.15	449.7789	659.2809	668.5648	465.5192	568.9999	579.5029
-0.2	-81.0752	-135.835	-144.628	-89.6014	-110.951	-115.235
+0.2	548.4292	802.5394	826.3749	568.3609	697.7204	709.9423
-0.25	-101.344	-169.794	-180.785	-112.002	-138.688	-144.043
+0.25	618.5895	895.7399	959.0844	649.3884	788.3048	807.8544
-0.3	-121.613	-203.752	-216.942	-134.402	-166.426	-172.852
+0.3	667.2146	976.2888	1048.304	702.1604	845.6311	883.1467
-0.35	-141.882	-237.711	-253.099	-156.802	-194.164	-201.661
+0.35	701.9913	1026.177	1117.338	731.7045	871.4953	918.8327
-0.4	-162.15	-271.67	-289.256	-179.203	-221.901	-230.47
+0.4	719.6797	1059.66	1141.806	741.0241	877.37	921.7568
-0.45	-182.419	-305.629	-325.413	-201.603	-249.639	-259.278
+0.45	711.6927	1065.862	1133.257	721.7929	851.1943	904.0917
-0.5	-202.688	-339.587	-361.57	-224.003	-277.377	-288.087
+0.5	704.4256	1039.743	1120.758	689.677	827.0033	867.4212
-0.55	-222.957	-373.546	-397.727	-246.404	-305.114	-316.896
+0.55	678.0169	1001.852	1059.632	687.1853	812.8546	857.9518
-0.6	-243.226	-407.505	-433.884	-268.804	-332.852	-345.704
+0.6	635.8898	926.228	997.5485	657.2777	777.289	821.6408
-0.65	-263.495	-441.463	-470.041	-291.204	-360.59	-374.513
+0.65	570.4404	829.853	898.3346	598.8423	715.835	753.0924
-0.7	-283.763	-475.422	-506.198	-313.605	-388.328	-403.322
+0.7	496.2168	707.5792	760.3732	524.6851	628.7462	652.7759
-0.75	-304.032	-509.381	-542.355	-336.005	-416.065	-432.13
+0.75	404.8173	564.854	595.8023	423.2063	508.2167	518.7629
-0.8	-324.301	-543.34	-578.511	-358.405	-443.803	-460.939
+0.8	303.4233	394.425	397.1943	302.5198	362.4561	362.6339
-0.85	-344.57	-577.298	-614.668	-380.806	-471.541	-489.748
+0.85	189.8612	227.9842	219.1205	203.2464	226.9026	236.5739
-0.9	-364.839	-611.257	-650.825	-403.206	-499.278	-518.556
+0.9	107.3708	124.7646	115.9963	116.4599	127.2137	127.3295
-0.95	-385.107	-645.216	-686.982	-425.607	-527.016	-547.365
+0.95	49.48374	31.59918	35.28423	36.43994	38.86926	32.42961
-1	-405.381	-762.139	-843.981	-515.026	-594.002	-658.764
+1	0	0	0	0	0	0
(Span 2) -2	-405.381	-762.139	-843.981	-515.026	-594.002	-658.764
+2	0	0	0	0	0	0
-2.05	-385.112	-645.216	-686.937	-425.606	-527.016	-547.365
+2.05	49.48379	31.59016	35.28449	36.42942	38.85804	32.42046
-2.1	-364.843	-611.257	-650.782	-403.206	-499.278	-518.557
+2.1	107.3614	124.7577	115.9953	116.4357	127.2066	127.3226
-2.15	-344.574	-577.298	-614.628	-380.806	-471.541	-489.748
+2.15	190.2556	227.9757	219.1214	203.2519	226.8978	236.5733
-2.2	-324.305	-543.34	-578.473	-358.405	-443.803	-460.939
+2.2	304.0107	394.4111	397.1955	302.5315	362.4582	362.6241
-2.25	-304.036	-509.381	-542.319	-336.005	-416.065	-432.131

+2.25	**404.6677**	**564.8479**	**595.8041**	**423.2155**	**508.2176**	**518.7695**
-2.3	**-283.767**	**-475.422**	**-506.164**	**-313.605**	**-388.328**	**-403.322**
+2.3	**496.7116**	**707.5952**	**760.3741**	**524.6914**	**628.7568**	**652.7923**
-2.35	**-263.498**	**-441.464**	**-470.009**	**-291.204**	**-360.59**	**-374.513**
+2.35	**570.3545**	**829.8494**	**898.3355**	**598.8442**	**715.84**	**753.0902**
-2.4	**-243.229**	**-407.505**	**-433.855**	**-268.804**	**-332.852**	**-345.705**
+2.4	**636.4683**	**926.2198**	**997.5506**	**657.272**	**777.2848**	**821.6463**
-2.45	**-222.96**	**-373.546**	**-397.7**	**-246.404**	**-305.115**	**-316.896**
+2.45	**678.2591**	**1001.967**	**1059.631**	**687.1903**	**813.2836**	**857.9476**
-2.5	**-202.691**	**-339.587**	**-361.546**	**-224.003**	**-277.377**	**-288.087**
+2.5	**704.7767**	**1039.749**	**1120.756**	**689.6921**	**826.992**	**867.4096**
-2.55	**-182.421**	**-305.629**	**-325.391**	**-201.603**	**-249.639**	**-259.278**
+2.55	**711.7222**	**1065.865**	**1133.255**	**721.7899**	**851.2036**	**904.0985**
-2.6	**-162.152**	**-271.67**	**-289.237**	**-179.203**	**-221.902**	**-230.47**
+2.6	**719.2496**	**1059.641**	**1141.805**	**741.0329**	**877.3786**	**921.7585**
-2.65	**-141.883**	**-237.711**	**-253.082**	**-156.802**	**-194.164**	**-201.661**
+2.65	**702.1692**	**1026.183**	**1117.337**	**731.7082**	**871.4979**	**918.8389**
-2.7	**-121.614**	**-203.752**	**-216.927**	**-134.402**	**-166.426**	**-172.852**
+2.7	**666.8169**	**976.3007**	**1048.303**	**702.1569**	**845.6252**	**883.16**
-2.75	**-101.345**	**-169.794**	**-180.773**	**-112.002**	**-138.688**	**-144.044**
+2.75	**618.2731**	**896.0843**	**959.0823**	**649.3951**	**788.3061**	**807.86**
-2.8	**-81.0762**	**-135.835**	**-144.618**	**-89.6013**	**-110.951**	**-115.235**
+2.8	**548.8427**	**802.5296**	**826.3738**	**568.3771**	**697.7283**	**709.952**
-2.85	**-60.8072**	**-101.876**	**-108.464**	**-67.201**	**-83.2131**	**-86.4261**
+2.85	**449.6194**	**659.2875**	**668.5646**	**465.5256**	**568.9986**	**579.5041**
-2.9	**-40.5381**	**-67.9175**	**-72.3092**	**-44.8007**	**-55.4754**	**-57.6174**
+2.9	**328.8766**	**480.2074**	**482.8059**	**345.219**	**420.4086**	**428.5136**
-2.95	**-20.2691**	**-33.9587**	**-36.1546**	**-22.4003**	**-27.7377**	**-28.8087**
+2.95	**177.2921**	**265.1646**	**267.3587**	**188.9301**	**230.0611**	**235.3222**
-3	**-1.15E-13**	**-1.1E-13**	**-1.1E-13**	**-9.8E-14**	**-1.1E-13**	**-1.1E-13**
+3	**1.13E-13**	**1.17E-13**	**1.06E-13**	**9.91E-14**	**1.02E-13**	**8.86E-14**

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-19.56242236**	***-15.86800038***	***-17.60663826***	**-11.58308291**	**-12.42154904**	**-11.69850373**	**-14.09819611**	**-12.55465749**	**-13.2647**	**-5.89052663**
End Shear	**174.8683689**	***146.898508***	***157.3815314***	**114.2977399**	**121.394159**	**113.4189216**	**133.9087341**	**114.1643269**	**120.4969**	**59.1366933**
-0.05	**-19.66659511**	***-15.97217312***	***-21.26322831***	**-11.58308291**	**-12.42154904**	**-11.69850373**	**-14.09819611**	**-12.55465749**	**-13.2647**	**-5.89052663**
+0.05	**160.4175996**	***135.4143079***	***144.8025715***	**106.1646103**	**112.6489585**	**105.1997761**	**123.9767916**	**104.3527652**	**110.1178**	**54.85951265**
-0.1	**-20.08314418**	***-16.3887222***	***-26.38214261***	**-11.58308291**	**-12.42154904**	**-11.69850373**	**-14.09819611**	**-12.55465749**	**-13.2647**	**-5.89052663**
+0.1	**144.9070332**	***123.173358***	***130.8093815***	**97.43694243**	**103.2712808**	**96.36987457**	**113.3212091**	**93.78469313**	**98.94025**	**50.20869225**
-0.15	**-20.60318478**	***-22.27172392***	***-30.39270101***	**-13.59092677**	**-13.59092677**	**-11.81518662**	**-14.09819611**	**-12.55465749**	**-13.2647**	**-7.832763209**
+0.15	**133.5998206**	***114.2419653***	***120.607104***	**90.95378339**	**96.31000756**	**89.81810323**	**105.4248221**	**86.03945502**	**90.74967**	**46.76131754**
-0.2	**-25.21607901**	***-31.38449296***	***-35.95131183***	**-20.34071068**	**-20.34071068**	**-19.12145536**	**-20.34191785**	**-15.46715357**	**-16.2812**	**-10.93110285**
+0.2	**118.9948549**	***102.6909637***	***107.4278264***	**82.42203268**	**87.15552749**	**81.2060734**	**95.05908164**	**75.99152276**	**80.12587**	**42.2348826**
-0.25	**-33.84970083**	***-38.36939059***	***-43.82914911***	**-26.3552671**	**-26.68762438**	**-24.56040205**	**-26.39146126**	**-19.7700737**	**-20.8444**	**-13.22984253**
+0.25	**108.5805614**	***94.31233741***	***97.88354328***	**76.12734256**	**80.40637869**	**74.85988206**	**87.43119928**	**68.69075676**	**72.40816**	**38.90333546**
-0.3	**-45.68216257**	***-47.85248141***	***-54.50230237***	**-35.00531371**	**-36.01839562**	**-32.93684451**	**-36.37854055**	**-26.02151794**	**-27.4966**	**-16.31083669**
+0.3	**95.00245634**	***83.54361239***	***85.64334976***	**67.90224688**	**71.5943527**	**66.57819536**	**77.49163033**	**59.30798489**	**62.49164**	**34.56139922**
-0.35	**-54.67165662**	***-55.07075714***	***-62.61004209***	**-41.41087459**	**-42.93277295**	**-39.46680863**	**-44.32582422**	**-30.64883879**	**-32.4211**	**-19.77089229**
+0.35	**85.24671423**	***75.78438402***	***76.84858176***	**61.87908823**	**65.14678002**	**60.52194586**	**70.2345094**	**52.56048641**	**55.36198**	**31.39076916**
-0.4	**-66.96047286**	***-64.80401871***	***-73.52126619***	**-49.81331086**	**-52.00909735**	**-48.0424826**	**-54.77636021**	**-36.71592118**	**-38.8784**	**-24.31846319**
+0.4	**72.84301171**	***65.88327928***	***65.66636628***	**54.07142101**	**56.79650241**	**52.68309468**	**60.85746567**	**43.98790145**	**46.30629**	**27.29344257**
-0.45	**-76.86509831**	***-72.16292949***	***-82.64579628***	**-55.99162365**	**-58.68790371**	**-54.35594662**	**-62.48053618**	**-41.17489374**	**-43.6248**	**-27.66903242**
+0.45	**64.01542134**	***58.80483584***	***57.70791972***	**48.40285216**	**50.73995323**	**47.00114537**	**54.07335842**	**38.2007895**	**40.21136**	**24.32881933**
-0.5	**-90.38976441**	***-82.01921468***	***-94.83953715***	**-64.03569263**	**-67.39050404**	**-62.58671315**	**-72.53875742**	**-49.99005036**	**-52.6211**	**-32.04055971**
+0.5	**52.91054292**	***49.84969472***	***47.69626789***	**41.123357**	**42.97068644**	**39.71759221**	**45.39515892**	**30.97689856**	**32.60726**	**20.53622096**
-0.55	**-100.5258116**	***-89.42077887***	***-103.9765469***	**-69.90369603**	**-73.74428849**	**-68.59932078**	**-79.89757598**	**-57.2040314**	**-60.2148**	**-35.2365529**
+0.55	**45.10178971**	***43.50816124***	***40.65622178***	**35.89245701**	**37.3946306**	**34.49430071**	**39.18631711**	**26.52655066**	**28.08052**	**17.82268568**
-0.6	**-113.9826045**	***-99.26595574***	***-116.0953731***	**-77.47863977**	**-81.95388724**	**-76.37271272**	**-89.42715945**	**-66.89590542**	**-70.4326**	**-39.37192474**
+0.6	**35.48650976**	***35.57033644***	***31.98063046***	**29.25188812**	**30.32564835**	**27.87853778**	**31.34331548**	**21.68496908**	**22.93903**	**14.39493073**
-0.65	**-123.998426**	***-106.6069442***	***-124.9432412***	**-82.9532761**	**-87.89320345**	**-82.00010306**	**-96.33836445**	**-74.70853963**	**-78.7103**	**-42.36825323**
+0.65	**29.14383695**	***30.01661795***	***26.26370708***	**24.54170985**	**25.31952733**	**23.19826421**	**25.81199376**	**18.24728795**	**19.28927**	**11.97756797**
-0.7	**-137.2006652**	***-116.2998653***	***-136.2784952***	**-89.9483443**	**-95.49053095**	**-89.20362673**	**-105.2029536**	**-84.85918058**	**-89.4667**	**-46.2073505**
+0.7	**21.37925988**	***23.16046563***	***19.26536491***	**18.65082629**	**19.07010866**	**17.3627568**	**18.9405121**	**13.94273517**	**14.72044**	**9.056068925**
-0.75	**-146.9536206**	***-123.4718049***	***-144.4262167***	**-94.94653429**	**-100.9259087**	**-94.36144199**	**-111.5642934**	**-92.2465892**	**-97.2964**	**-48.95893094**
+0.75	**16.09060136**	***18.44019448***	***14.49883997***	**14.54444043**	**14.72338325**	**13.39601238**	**14.33254919**	**10.93789561**	**11.53216**	**7.434491599**
-0.8	**-159.7076342**	***-132.8643521***	***-154.8066975***	**-101.250978**	**-107.7916968**	**-100.8826331**	**-119.6275685**	**-101.7577366**	**-107.379**	**-52.44164035**
+0.8	**10.04782757**	***12.72307902***	***9.043044792***	**9.81756721**	**9.81756721**	**9.038580628**	**9.544493437**	**7.467679224**	**7.860715**	**5.416446683**
-0.85	**-169.0498586**	***-139.7535245***	***-162.2212823***	**-105.6896641**	**-112.6336894**	**-105.4865151**	**-125.3367904**	**-108.611154**	**-114.645**	**-54.9033899**
+0.85	**7.325619149**	***8.876665924***	***6.593057224***	**6.933087597**	**6.933087597**	**6.056906988**	**6.274116253**	**5.274026375**	**5.551607**	**4.018001069**
-0.9	**-181.1549805**	***-148.6905651***	***-171.6571775***	**-111.1927194**	**-118.6486541**	**-111.2128832**	**-132.4623989**	**-117.3377837**	**-123.9**	**-57.96959626**
+0.9	**4.130033398**	***4.348956027***	***3.717030054***	**3.251364902**	**3.251364902**	**2.737250612**	**2.757655852**	**2.602419695**	**2.739389**	**2.317193316**
-0.95	**-189.9333638**	***-155.1780042***	***-178.4712832***	**-114.9888358**	**-122.8078062**	**-115.1784728**	**-137.4172497**	**-123.5484171**	**-130.488**	**-60.09641931**
+0.95	**2.060126053**	***1.619525657***	***1.854113447***	**1.295058421**	**1.295058421**	**0.963352971**	**1.033588216**	**0.976914995**	**1.028332**	**1.171467386**
-1	**-201.1819202**	***-163.4974262***	***-187.0150951***	**-119.5797581**	**-127.8526837**	**-119.9975453**	**-143.4688609**	**-131.3455049**	**-138.761**	**-62.68600772**
+1	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
(Span 2) -2	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+2	**2.00E+02**	***1.62E+02***	***185.7798304***	**1.19E+02**	**1.27E+02**	**119.4237113**	**142.7461262**	**1.30E+02**	**1.38E+02**	**6.24E+01**
-2.05	**-1.74E+00**	***-1.37E+00***	***-1.56818093***	**-1.09E+00**	**-1.09E+00**	**-0.872063306**	**-0.877869716**	**-8.29E-01**	**-8.73E-01**	**-9.85E-01**
+2.05	**1.91E+02**	***1.56E+02***	***1.79E+02***	**115.5907599**	**123.4682119**	**1.16E+02**	**1.38E+02**	**1.25E+02**	**131.5519**	**6.04E+01**
-2.1	**-4.50E+00**	***-4.88E+00***	***-4.052050774***	**-3.836944126**	**-3.836944126**	**-3.066851172**	**-3.087602965**	**-2.915575233**	**-3.06903**	**-2.51123359**
+2.1	**1.80E+02**	***1.48E+02***	***1.70E+02***	**110.5297144**	**117.9231555**	**1.11E+02**	**1.32E+02**	**1.16E+02**	**122.7685**	**5.76E+01**
-2.15	**-6.90E+00**	***-8.27E+00***	***-6.209098652***	**-6.476247493**	**-6.476247493**	**-5.586319067**	**-5.758519901**	**-4.926442452**	**-5.18573**	**-3.786304047**
+2.15	**170.4944146**	***140.8848611***	***163.2757675***	**106.4017845**	**113.411247**	**106.2263292**	**126.2557291**	**109.7253534**	**115.8267**	**55.30007452**
-2.2	**-10.51583835**	***-13.40329539***	***-9.475691795***	**-10.32187864**	**-10.32187864**	**-9.561517036**	**-10.11861695**	**-7.851040696**	**-8.26425**	**-5.649768722**
+2.2	**158.0330537**	***131.7000457***	***153.4231021***	**100.4840036**	**106.9557629**	**100.0883141**	**118.6440382**	**100.588189**	**106.1388**	**52.01807694**
-2.25	**-15.23806193**	***-17.69150707***	***-13.74545682***	**-13.88934772**	**-14.03082775**	**-12.8301176**	**-13.71024496**	**-10.45792627**	**-11.023**	**-7.16284873**

+2.25	148.4623089	124.6548103	145.6663674	95.75504678	101.8057515	95.19679107	112.5958231	93.45408866	98.57626	49.40575163
-2.3	-22.27796112	-23.98506288	-20.09573872	-19.36406941	-19.82596983	-18.06802137	-19.76925892	-14.46402429	-15.2736	-9.336143292
+2.3	135.4542177	115.0929553	134.8461346	89.09129759	94.55912723	88.32022391	104.1146729	83.60493537	88.13752	45.73730566
-2.35	-28.15792549	-29.12756608	-25.31484352	-23.78286324	-24.51371534	-22.44528986	-24.92364789	-17.69288914	-18.7007	-11.58853482
+2.35	125.5480472	107.822485	126.3799782	83.84438719	88.8604776	82.91696205	97.46548468	75.99122279	80.0694	42.85769797
-2.4	-36.60615103	-36.53232526	-32.8915744	-30.06261637	-31.18802438	-28.68515841	-32.29814773	-22.27608521	-23.5667	-14.81135708
+2.4	112.1903918	98.03521596	114.0541887	76.54541109	80.94197271	75.41432099	88.25121266	65.57512905	69.03337	38.862927
-2.45	-43.86482915	-42.48609369	-39.39654921	-35.04366235	-36.49042995	-33.64761578	-38.18117307	-25.90770658	-27.4233	-17.38246343
+2.45	102.0940327	90.65061259	104.9846442	70.86361637	74.78414363	69.58370007	81.10332989	58.39132765	61.46456	35.76111838
-2.5	-54.26641065	-50.94119759	-48.72311106	-42.01768183	-43.92462061	-40.61148191	-46.45900088	-31.85489278	-33.5315	-21.00017978
+2.5	88.57701052	80.78256177	92.84223763	63.04015245	66.31301562	61.56744721	71.29225308	48.77337758	51.3404	31.50013679
-2.55	-62.58780458	-57.65796289	-56.18434321	-47.47790333	-49.75221943	-46.07475651	-52.9683941	-37.27352767	-39.2353	-23.84491322
+2.55	78.43048673	73.38965688	83.72892083	57.00654951	59.78547403	55.39380786	63.74790714	41.90752994	44.40471	28.22120415
-2.6	-74.34599545	-67.09556842	-66.7272581	-55.0354585	-57.82704294	-53.6501423	-62.013214	-45.03444215	-47.4116	-27.79741358
+2.6	65.43953084	63.57846048	72.15248802	48.76936592	50.88101202	46.9764522	53.47640079	35.96265154	38.07666	23.75413358
-2.65	-83.64041096	-74.52182109	-75.06129927	-60.89177637	-64.0903644	-59.52986397	-69.046708	-51.4646623	-54.2042	-30.87069078
+2.65	56.06444233	56.27788904	63.65416195	42.46700586	44.07319715	40.54413793	45.63782607	31.41196061	33.23322	20.34317992
-2.7	-96.63483115	-84.86705205	-86.71370343	-68.92210208	-72.68653579	-67.60430479	-78.72219824	-60.46063553	-63.7097	-35.09785282
+2.7	44.07771986	46.65419224	52.8911633	33.92685719	34.85467516	31.83812663	35.04218936	25.24263346	26.66775	15.87621014
-2.75	-106.8093098	-92.94403042	-95.83803609	-75.09148102	-79.2961577	-73.81612629	-86.17755378	-67.49845917	-71.1479	-38.35459663
+2.75	35.20183147	39.54129874	44.92217755	27.43878792	27.8560234	25.5620538	27.5057947	20.55366608	21.67822	13.61004839
-2.8	-120.9125645	-104.1150584	-109.0100495	-83.48380731	-88.29438607	-82.27711428	-96.34734179	-77.23208126	-81.4374	-42.79631019
+2.8	24.43011639	30.22875012	35.24401512	19.49756693	19.49756693	18.20822053	19.32636894	14.82637343	15.60671	10.54529325
-2.85	-131.8689881	-112.7787733	-118.852861	-89.88316516	-95.16083488	-88.73669547	-104.1223288	-84.76875684	-89.406	-46.19140658
+2.85	20.707241	23.39365116	31.00361623	14.43482973	14.43482973	12.72808702	14.09818934	12.55464817	13.26468	8.221355164
-2.9	-146.9466819	-124.6867608	-132.477581	-98.52676978	-104.4418809	-97.47178288	-114.6501135	-95.09499462	-100.326	-50.78756638
+2.9	20.01389468	16.31932028	25.68139926	11.58308263	12.42155473	11.69850704	14.09818934	12.55464817	13.26468	5.89052816
-2.95	-158.5816199	-133.86793	-142.922873	-105.073042	-111.4757029	-104.0947138	-122.642417	-103.0217606	-108.71	-54.27595307
+2.95	19.70146759	16.00689319	21.85931162	11.58308263	12.42155473	11.69850704	14.09818934	12.55464817	13.26468	5.89052816
-3	-174.4923956	-146.417047	-157.2061824	-113.8571221	-120.9202401	-112.991408	-133.3918441	-113.7955839	-120.107	-58.96641716
+3	19.56257011	15.8679957	17.6067079	11.58308263	12.42155473	11.69850704	14.09818934	12.55464817	13.26468	5.89052816

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.6729605	-10.79236105	-10.19015747	-8.894237733	-7.017607067	-9.520500694	-10.76756528	-12.00383864	-13.22764994
End Shear	84.52058357	100.3532496	93.12110948	78.81190241	68.57649985	92.32500362	102.9145772	109.4781492	115.6291118
-0.05	-8.6729605	-10.79236105	-10.19015747	-9.86041873	-7.017607067	-9.520500694	-10.76756528	-12.00383864	-13.22764994
+0.05	78.32690972	91.87659247	84.45338031	71.3485197	63.58722995	85.60827124	95.26326193	100.9834773	106.2696583
-0.1	-8.6729605	-10.79236105	-10.19015747	-12.30793556	-7.017607067	-9.520500694	-10.76756528	-12.00383864	-13.22764994
+0.1	71.67388695	82.73760075	75.12640226	63.19365499	58.24460803	78.3943953	87.03384827	91.84504455	96.20060817
-0.15	-9.568971174	-10.79236105	-10.19015747	-14.37979547	-7.475848032	-9.780599385	-10.76756528	-12.00383864	-13.22764994
+0.15	66.74153592	76.03346963	68.34631432	57.37173093	54.28092813	73.04309563	80.93807398	85.09276181	88.77980578
-0.2	-14.32119156	-14.32746857	-11.39927044	-17.014071	-10.46650019	-15.45993644	-15.99639702	-15.97786632	-15.96020251
+0.2	60.26392594	67.32747191	59.6288133	49.92308392	49.07158784	66.01094219	72.93976626	76.25612821	79.09464863
-0.25	-17.85377156	-17.86132653	-14.21078627	-18.90231744	-14.43871025	-19.68615326	-21.04016302	-21.02213039	-21.00494103
+0.25	55.49508687	60.99490589	53.60693175	44.78366075	45.23342849	60.83044228	67.05694547	69.77463199	72.01131836
-0.3	-23.48420416	-22.51524788	-18.43057065	-21.59551812	-19.77176613	-26.46093621	-27.69867124	-27.6813588	-27.6648566
+0.3	49.27810562	52.84679025	46.19006115	38.45138139	40.22551959	54.07203315	59.39541811	61.35829771	62.84222151
-0.35	-28.43115453	-25.95154505	-22.80020423	-25.63592885	-23.72587641	-31.80479305	-33.41726042	-33.36360652	-33.34383013
+0.35	44.73668655	46.9794816	40.86421754	33.93174286	36.56399026	49.13135602	53.804828	55.23646401	56.19550678
-0.4	-34.93307141	-31.4309199	-28.55162219	-31.1646309	-28.91926265	-38.82453072	-41.51381131	-41.39301639	-41.37413827
+0.4	38.86554832	39.51414161	34.109258	28.23311945	31.82566488	42.73873061	46.58577623	47.35892773	47.67463461
-0.45	-39.72378049	-36.72623231	-32.79570389	-35.2104535	-32.74306248	-43.99384901	-47.48503163	-47.5602428	-47.53880481
+0.45	34.61547338	34.47095974	29.40995933	24.29213067	28.39188148	38.10689682	41.36667454	41.68562831	41.67811332
-0.5	-45.97477245	-45.08133655	-38.34216697	-40.3247718	-37.72862846	-50.73485316	-55.2840616	-56.43014043	-56.65542518
+0.5	29.17538813	28.16304871	24.103513	19.81809961	23.99129628	32.17206979	34.6957829	34.58163821	34.57510243
-0.55	-50.5453295	-51.23543009	-43.59443427	-44.80976924	-41.37100641	-55.66061395	-60.99250186	-62.94073949	-64.01987353
+0.55	25.28056243	23.71501792	20.75481182	16.97569529	20.83637096	27.91809926	29.927433	29.84282983	29.83625927
-0.6	-56.46017718	-59.50388259	-51.68043947	-51.67123399	-46.08060084	-62.03086624	-68.38831841	-71.40141262	-73.6173403
+0.6	20.35675662	18.682448	16.5349595	13.42964559	16.84167058	22.53310968	23.91039418	23.86166698	23.85511265
-0.65	-60.74667787	-66.18767851	-57.95035859	-57.0571574	-49.49044236	-66.64404687	-73.75471591	-77.56065215	-80.62550028
+0.65	16.88109281	15.67283423	13.32867022	10.96129295	14.01671877	18.72602426	19.67205617	19.64744437	19.64097871
-0.7	-66.24016805	-74.86268805	-66.1040842	-63.89625409	-53.8559079	-72.55150713	-80.64163372	-85.49359873	-89.68183319
+0.7	12.55877248	12.27879914	9.694750841	7.937011677	10.49606139	13.98288926	14.65891997	14.65311968	14.647588
-0.75	-70.17868855	-81.16908583	-72.04400434	-68.87045966	-56.982102	-76.78308777	-85.58673114	-91.21260753	-96.23457242
+0.75	9.866801389	9.814231028	7.800413814	6.302925188	8.052196095	10.77786159	11.45772641	11.45207312	11.4466868
-0.8	-75.16561002	-89.27844022	-80.46079889	-75.85078733	-60.93529127	-82.13573944	-91.85905689	-98.49933075	-104.6176081
+0.8	6.916304983	6.86731161	5.458397222	4.34295697	5.201575219	7.353950208	7.528895208	7.523527127	7.518406912
-0.85	-78.69224477	-95.11377362	-87.21018056	-81.3201212	-63.72671706	-85.91669963	-96.30358386	-103.6892361	-110.6158133
+0.85	4.885107616	4.839161748	3.845138291	3.04919232	3.865282945	5.007184917	4.961348027	5.00737849	5.003108508
-0.9	-83.08737176	-102.5325816	-95.88215834	-88.46863029	-67.19948093	-90.62250536	-101.8556386	-110.211239	-118.193386
+0.9	2.408022545	2.393407205	1.899813116	1.499963424	2.191854854	2.32666302	2.323780694	2.327639224	2.299428016
-0.95	-86.13820873	-107.803161	-102.1163643	-93.60958219	-69.60502483	-93.88382412	-105.7203293	-114.7831737	-123.5379459
+0.95	0.903967892	0.896595583	0.822125724	0.628838848	1.127971046	0.818850025	0.87206731	0.873872457	0.88026772
-1	-89.85633457	-114.406531	-110.0331714	-100.0867465	-72.52920771	-97.85076054	-110.4464319	-120.4219538	-130.1778792
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	8.94E+01	1.14E+02	1.09E+02	9.93E+01	7.22E+01	9.74E+01	109.8816206	119.7447793	1.29E+02
-2.05	-7.67E-01	-7.60E-01	-6.97E-01	-5.31E-01	-9.57E-01	-7.41E-01	-0.739806903	-0.741561153	-7.43E-01
+2.05	8.66E+01	1.09E+02	1.03E+02	9.44E+01	7.00E+01	9.44E+01	106.3364282	115.5150097	1.24E+02
-2.1	-2.698053546	-2.683190811	-2.130249778	-1.681510154	-2.415652234	-2.606823497	-2.603891506	-2.607816521	-2.611557484
+2.1	8.26E+01	1.02E+02	9.48E+01	8.76E+01	6.68E+01	9.01E+01	101.183955	109.4196192	1.17E+02
-2.15	-4.563378129	-4.51785567	-3.589515362	-2.843555885	-3.652793373	-4.636440665	-4.457821291	-4.636524771	-4.632263385
+2.15	79.25949337	96.06174988	88.31251972	82.20863532	64.1752853	86.52446052	97.01930674	104.5274515	111.5871035
-2.2	-7.271399325	-7.221800246	-5.740315346	-4.57320744	-5.434362314	-7.765174537	-7.999403458	-7.993960218	-7.988768314
+2.2	74.55769102	88.28192693	79.31404532	74.95094191	60.45367527	81.48358535	91.09375346	97.60811834	103.5901104
-2.25	-9.484615551	-9.432321854	-7.49657483	-6.02310402	-7.663279481	-10.33351718	-10.94652235	-10.94086643	-10.93546655
+2.25	70.81702293	82.19927178	73.01558999	69.72965092	57.48840578	77.46858197	86.38892358	92.14243266	97.30213231

-2.3	-13.08037379	-12.69123353	-10.11471429	-8.298521658	-10.9214832	-14.55588163	-15.21441842	-15.20855772	-15.20296843
+2.3	65.56605827	73.79136258	65.096284	63.06143545	53.32045952	71.82690043	79.79595331	84.51765433	88.56576964
-2.35	-16.3226	-15.23709462	-12.85507802	-10.56698021	-13.56237396	-18.11375566	-18.99179416	-18.97090565	-18.96441401
+2.35	61.44548381	67.28447304	58.98041212	57.93204316	50.04599376	67.39579959	74.63020029	78.56731711	81.77283662
-2.4	-20.95645275	-19.25540308	-17.04771118	-13.85789875	-17.32868257	-23.18946415	-24.64244097	-24.58940204	-24.58279939
+2.4	55.73056286	58.37338978	50.62116277	50.75068322	45.49986222	61.2453394	67.4755243	70.35559074	72.42932101
-2.45	-24.64978093	-23.00045111	-20.21299866	-16.51768284	-20.32508452	-27.22872631	-29.15581315	-29.07586161	-29.06923163
+2.45	51.29398614	52.24771607	44.46472457	45.55011326	41.96730667	56.46717883	61.92811753	64.00948067	65.23052557
-2.5	-29.84248849	-28.93065295	-24.67757425	-20.30731949	-24.53134317	-32.90026052	-35.5131376	-35.39378159	-35.38720667
+2.5	45.20033486	44.0428477	37.65484824	39.70180567	37.11115216	49.89995464	54.31739538	55.32928461	55.41198775
-2.55	-33.92301757	-33.6621987	-28.71837474	-23.70622824	-27.83215723	-37.35188019	-40.51687567	-40.76372456	-40.75614014
+2.55	40.51166537	37.77598036	33.4946321	35.86609487	33.37162776	44.84374012	48.46759489	48.67628818	48.65505436
-2.6	-39.58937163	-40.42624851	-34.93297103	-28.92529957	-32.41020124	-43.52721228	-47.47516663	-48.3275755	-48.72018545
+2.6	34.12451079	30.61746137	27.83626101	30.4714474	28.27358145	37.95180471	40.50652577	40.39420969	40.37527456
-2.65	-43.99316907	-46.02592406	-39.99980915	-33.19967166	-35.96430633	-48.32215885	-52.89001139	-54.23634322	-55.11154268
+2.65	29.24764857	26.517517	23.52233606	26.29863247	24.37821317	32.68654472	34.43359758	34.37165553	34.3520406
-2.7	-50.04796449	-53.84840402	-47.10036435	-39.22541866	-40.84600607	-54.90927229	-60.34360856	-62.3982147	-63.97318358
+2.7	22.65218301	21.93611233	17.69657957	21.0776389	19.10642793	25.56190011	26.86878209	26.8514563	26.8349169
-2.75	-54.7111312	-59.96012983	-52.66361412	-43.97505072	-44.60227664	-59.97853489	-66.09028956	-68.71105645	-70.85070033
+2.75	18.43740772	18.44538194	14.67555608	19.20979911	15.10632939	20.46431415	21.8745179	21.85661268	21.83957838
-2.8	-61.0691421	-68.4029174	-60.69974604	-50.83500164	-49.71946801	-66.88537786	-73.93349613	-77.35245184	-80.29445644
+2.8	13.72762911	13.73390381	10.92713413	16.69180642	10.09747766	14.75019099	15.14997559	15.13141325	15.11372991
-2.85	-65.9277504	-74.93303883	-67.23855928	-56.42198613	-53.62681103	-72.15995068	-79.93275242	-83.9805017	-87.55896291
+2.85	10.16317845	10.79235579	10.19015313	14.71628475	7.845923082	10.49035165	10.76756686	12.00383844	13.22764388
-2.9	-72.50376082	-83.87123473	-76.27798652	-64.18400964	-58.91133357	-79.29452028	-88.05988054	-92.98290584	-97.45268701
+2.9	8.67296393	10.79235579	10.19015313	11.9534644	7.017609021	9.520494451	10.76756686	12.00383844	13.22764388
-2.95	-77.49393795	-90.7260895	-83.27390986	-70.25293526	-62.91862485	-84.70534083	-94.23241299	-99.8373209	-105.0051093
+2.95	8.67296393	10.79235579	10.19015313	10.10246405	7.017609021	9.520494451	10.76756686	12.00383844	13.22764388
-3	-84.20273301	-100.0347972	-92.8545105	-78.80945314	-68.30233551	-91.97559798	-102.5377772	-109.0822543	-115.2166177
+3	8.67296393	10.79235579	10.19015313	8.894243443	7.017609021	9.520494451	10.76756686	12.00383844	13.22764388

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-19.1650159	-20.55187287	-12.5291	-15.4331	-16.147
End Shear	164.5053204	168.254923	115.1735	139.8336	144.2135
-0.05	-19.1650159	-20.55187287	-12.5291	-15.4331	-16.147
+0.05	148.8766784	151.5955349	105.0213	127.5797	131.1699
-0.1	-19.1650159	-20.55187287	-12.5291	-15.4331	-16.147
+0.1	132.0823929	133.4914568	94.0944	114.3818	117.1261
-0.15	-19.1650159	-20.55187287	-12.5291	-15.4331	-16.147
+0.15	119.8773488	120.3938449	86.10589	104.7264	106.8783
-0.2	-19.1650159	-20.55187287	-16.4739	-18.2488	-18.2503
+0.2	104.1890378	104.6272244	75.7702	92.22482	93.64657
-0.25	-23.4255394	-21.82368039	-21.2437	-23.6749	-23.6766
+0.25	92.90530328	93.74549256	68.28248	83.16055	84.08238
-0.3	-30.58844249	-29.71578603	-27.8002	-30.8343	-31.5726
+0.3	79.37763635	80.57918017	58.69099	71.53884	71.86168
-0.35	-36.46287378	-37.03475181	-32.652	-36.1309	-37.7871
+0.35	69.76947009	71.53981462	51.81879	63.20334	63.42834
-0.4	-45.85284405	-47.85583715	-39.0115	-43.0719	-45.9477
+0.4	57.71543249	60.01174096	43.42207	53.00221	52.80937
-0.45	-54.3175979	-56.762702	-43.684	-48.8438	-51.9549
+0.45	49.82165107	51.792621	37.78121	45.89615	45.29277
-0.5	-65.82082364	-69.41289425	-49.7623	-59.0723	-59.7854
+0.5	40.38900476	41.45235885	32.19915	36.97163	37.96069
-0.55	-75.14258602	-79.93703592	-55.2535	-68.2968	-67.1421
+0.55	34.07354242	34.71896351	28.18273	31.42755	32.97602
-0.6	-88.64650418	-93.69269081	-65.3006	-80.3601	-80.3326
+0.6	26.42139455	26.88467868	23.07636	25.37175	26.66045
-0.65	-100.3541021	-103.7684228	-72.9368	-89.5237	-90.2796
+0.65	21.38795923	21.34421831	19.44826	21.38668	22.1909
-0.7	-115.6101403	-117.0489812	-83.7213	-102.459	-103.488
+0.7	16.14019175	15.3588663	14.90173	16.15519	16.6157
-0.75	-127.2433549	-128.2363073	-91.5877	-111.889	-113.838
+0.75	12.66129488	11.79476534	11.72505	12.78437	12.86964
-0.8	-143.4995895	-145.0544313	-101.74	-124.052	-127.222
+0.8	8.385815585	7.82339005	7.934069	8.496111	8.527088
-0.85	-155.7379417	-158.7746241	-109.075	-132.835	-136.914
+0.85	5.315422451	5.112725815	5.439542	5.780786	5.588959
-0.9	-171.4756234	-176.7539904	-118.443	-144.043	-149.321
+0.9	2.451574953	2.316243901	2.75894	2.94287	2.45596
-0.95	-182.8000782	-189.7476577	-125.132	-152.041	-158.206
+0.95	0.928547865	1.044496966	1.035192	1.104205	0.921845
-1	-197.1967865	-206.3463519	-133.562	-162.11	-169.437
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	1.95E+02	2.04E+02	1.33E+02	1.61E+02	1.68E+02
-2.05	-7.87E-01	-8.85E-01	-8.78E-01	-9.37E-01	-7.82E-01
+2.05	1.85E+02	1.92E+02	1.26E+02	153.3338	1.60E+02
-2.1	-2.71090435	-2.644403813	-3.09135	-3.29744	-2.7515
+2.1	1.70E+02	1.75E+02	1.17E+02	142.6715	1.48E+02
-2.15	-5.007835702	-4.731699131	-5.19584	-5.54223	-5.12682
+2.15	157.7374799	161.0593526	110.2696	134.2642	138.4939
-2.2	-8.898004216	-8.298141004	-8.34115	-9.01	-9.04204
+2.2	141.4209274	142.9327684	100.4902	122.5551	125.5728
-2.25	-12.10513483	-11.27705703	-11.2173	-12.2267	-12.3109
+2.25	128.7943547	131.142631	92.87502	113.4315	115.5334

-2.3	**-16.7432548**	**-16.05764632**	**-15.4525**	**-16.8768**	**-17.2893**
+2.3	**113.7224034**	**115.430489**	**82.38729**	**100.8591**	**101.7348**
-2.35	**-20.47689578**	**-20.49277536**	**-18.8629**	**-20.7435**	**-21.4713**
+2.35	**102.2793537**	**105.4248259**	**74.29816**	**91.15694**	**91.914**
-2.4	**-27.25277471**	**-27.57495387**	**-23.7**	**-26.0565**	**-27.4302**
+2.4	**86.94111488**	**91.99161639**	**64.05461**	**78.86447**	**78.65228**
-2.45	**-33.05691428**	**-33.63427278**	**-27.5302**	**-30.5563**	**-32.1675**
+2.45	**76.83884305**	**81.67401274**	**56.51865**	**69.81622**	**68.49994**
-2.5	**-41.4768072**	**-42.70493234**	**-32.885**	**-38.0541**	**-38.8132**
+2.5	**64.39206995**	**67.64294578**	**49.01072**	**57.51773**	**58.81626**
-2.55	**-48.54681654**	**-50.46100747**	**-37.072**	**-44.7484**	**-44.0914**
+2.55	**55.76394629**	**58.32333464**	**44.45158**	**50.04692**	**52.94284**
-2.6	**-59.10239761**	**-61.41873275**	**-44.4255**	**-54.2224**	**-54.1038**
+2.6	**44.68469612**	**46.51148505**	**38.22211**	**42.21042**	**44.93384**
-2.65	**-68.21263706**	**-70.06565718**	**-50.7049**	**-61.8515**	**-62.069**
+2.65	**37.64162278**	**38.39503355**	**33.45207**	**37.00424**	**38.81288**
-2.7	**-81.02246944**	**-82.11705403**	**-59.8671**	**-72.9646**	**-73.3581**
+2.7	**29.69629318**	**28.56733474**	**26.98351**	**29.94253**	**30.52739**
-2.75	**-91.08869609**	**-91.9692413**	**-67.0615**	**-81.6819**	**-82.5247**
+2.75	**24.3237**	**22.65788697**	**22.06569**	**24.57257**	**24.66037**
-2.8	**-106.1161482**	**-106.4769097**	**-77.0444**	**-93.7666**	**-95.2759**
+2.8	**19.16502068**	**20.55187275**	**15.79365**	**17.33835**	**17.33983**
-2.85	**-117.8836708**	**-118.254899**	**-84.797**	**-103.144**	**-105.201**
+2.85	**19.16502068**	**20.55187275**	**12.52907**	**15.43307**	**16.14703**
-2.9	**-134.1558066**	**-135.7167989**	**-95.4475**	**-116.017**	**-118.863**
+2.9	**19.16502068**	**20.55187275**	**12.52907**	**15.43307**	**16.14703**
-2.95	**-146.7527185**	**-149.2961267**	**-103.643**	**-125.916**	**-129.397**
+2.95	**19.16502068**	**20.55187275**	**12.52907**	**15.43307**	**16.14703**
-3	**-164.0083311**	**-167.9740246**	**-114.809**	**-139.393**	**-143.773**
+3	**19.16502068**	**20.55187275**	**12.52907**	**15.43307**	**16.14703**

2-Span: Moment (Max and Min) Raw Data Results – 70’ Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-2.45E-13**	***-1.06E-13***	***-1.67E-13***	**-1.07E-13**	**-1.16E-13**	**-9.74E-14**	**-1.17E-13**	**-1.02E-13**	**-1.08E-13**	**-7.66E-14**
End Shear	**2.97E-13**	***1.52E-13***	***1.86E-13***	**1.22E-13**	**1.22E-13**	**9.94E-14**	**9.98E-14**	**9.76E-14**	**1.03E-13**	**1.07E-13**
-0.05	**-68.46847827**	***-55.53800132***	***-61.62323391***	**-40.5407902**	**-43.4754216**	**-40.9447631**	**-49.3436864**	**-43.9413012**	**-46.426393**	**-20.6168432**
+0.05	**566.976994**	***479.7543287***	***511.7728561***	**371.576136**	**394.2713548**	**368.1992163**	**433.9187704**	**365.2346781**	**385.4122094**	**192.0082943**
-0.1	**-136.9369565**	***-111.0760026***	***-123.2464678***	**-81.0815804**	**-86.9508433**	**-81.8895261**	**-98.6873728**	**-87.8826024**	**-92.8527861**	**-41.23368641**
+0.1	**1050.056966**	***896.4655054***	***947.8324456***	**690.0687042**	**731.7549574**	**683.0942808**	**804.1309088**	**665.6397477**	**702.2553426**	**355.5087633**
-0.15	**-205.4054348**	***-166.614004***	***-184.8697017***	**-121.622371**	**-130.426265**	**-122.834289**	**-148.031059**	**-131.823904**	**-139.279179**	**-61.85052961**
+0.15	**1450.670111**	***1249.813594***	***1309.459387***	**956.7200867**	**1013.375089**	**945.3363459**	**1110.373706**	**904.9398687**	**954.5096306**	**490.9938342**
-0.2	**-273.8739131**	***-222.1520053***	***-246.4929356***	**-162.163161**	**-173.901687**	**-163.779052**	**-197.374746**	**-175.765205**	**-185.705572**	**-82.46737281**
+0.2	**1771.878357**	***1540.595997***	***1598.346517***	**1171.664749**	**1239.548677**	**1155.438235**	**1353.931564**	**1087.756725**	**1147.20454**	**599.1401871**
-0.25	**-342.3423914**	***-277.6900066***	***-308.1161695***	**-202.703951**	**-217.377108**	**-204.723815**	**-246.718432**	**-219.706506**	**-232.131965**	**-103.084216**
+0.25	**2015.311582**	***1769.924791***	***1816.598586***	**1336.317653**	**1411.855613**	**1314.923775**	**1560.0538**	**1251.58534**	**1321.919952**	**680.8083705**
-0.3	**-410.8108696**	***-333.2280079***	***-369.7394034***	**-243.244741**	**-260.85253**	**-245.668578**	**-296.062118**	**-263.647807**	**-278.558358**	**-123.7010592**
+0.3	**2182.713636**	***1939.226616***	***1966.732452***	**1452.43294**	**1532.241042**	**1445.198859**	**1713.636991**	**1357.936709**	**1435.699447**	**737.0808565**
-0.35	**-479.2793479**	***-388.7660093***	***-431.3626373***	**-283.785531**	**-304.327951**	**-286.613341**	**-345.405805**	**-307.589108**	**-324.984751**	**-144.3179024**
+0.35	**2310.745211**	***2050.242729***	***2082.294752***	**1527.180491**	**1621.178921**	**1532.039208**	**1810.274129**	**1429.914802**	**1510.702544**	**769.7073288**
-0.4	**-547.7478262**	***-444.3040106***	***-492.9858712***	**-324.326321**	**-347.803373**	**-327.558104**	**-394.749491**	**-351.53041**	**-371.411144**	**-164.9347456**
+0.4	**2368.09271**	***2105.029319***	***2133.416513***	**1573.596386**	**1667.044403**	**1572.834944**	**1852.420063**	**1454.253728**	**1537.524593**	**779.4634807**
-0.45	**-616.2163044**	***-499.8420119***	***-554.6091051***	**-364.867112**	**-391.278795**	**-368.502867**	**-444.093177**	**-395.471711**	**-417.837537**	**-185.5515888**
+0.45	**2356.808863**	***2105.956865***	***2122.740646***	**1576.525529**	**1666.555993**	**1570.39358**	**1842.772361**	**1429.302667**	**1512.04819**	**767.9363042**
-0.5	**-684.6847827**	***-555.3800132***	***-616.2323391***	**-405.407902**	**-434.754216**	**-409.447631**	**-493.436864**	**-439.413012**	**-464.26393**	**-206.168432**
+0.5	**2322.960923**	***2069.682013***	***2092.479388***	**1545.608758**	**1635.797475**	**1542.105127**	**1813.387293**	**1395.603412**	**1476.070962**	**757.7923769**
-0.55	**-753.153261**	***-610.9180146***	***-677.855573***	**-445.948692**	**-478.229638**	**-450.392394**	**-542.78055**	**-483.354313**	**-510.690323**	**-226.7852752**
+0.55	**2235.231371**	***1985.122208***	***2013.95971***	**1478.810511**	**1567.359555**	**1479.534776**	**1744.200848**	**1366.730401**	**1444.853728**	**738.7228626**
-0.6	**-821.6217393**	***-666.4560159***	***-739.4788069***	**-486.489482**	**-521.70506**	**-491.337157**	**-592.124237**	**-527.295614**	**-557.116717**	**-247.4021184**
+0.6	**2083.176887**	***1853.003989***	***1877.359982***	**1376.32611**	**1459.939731**	**1379.947542**	**1629.123722**	**1286.794435**	**1359.598092**	**698.2605659**
-0.65	**-890.0902175**	***-721.9940172***	***-801.1020408***	**-527.030272**	**-565.180481**	**-532.28192**	**-641.467923**	**-571.236916**	**-603.54311**	**-268.0189616**
+0.65	**1871.406059**	***1676.703186***	***1686.844516***	**1249.448749**	**1317.4595**	**1246.926436**	**1472.499808**	**1159.249137**	**1224.219279**	**638.1675928**
-0.7	**-958.5586958**	***-777.5320185***	***-862.7252747***	**-567.571063**	**-608.655903**	**-573.226683**	**-690.811609**	**-615.178217**	**-649.969503**	**-288.6358049**
+0.7	**1609.088712**	***1459.911282***	***1450.669032***	**1094.318949**	**1149.67528**	**1084.479635**	**1279.091655**	**1001.82582**	**1058.798056**	**560.390233**
-0.75	**-1027.027174**	***-833.0700199***	***-924.3485086***	**-608.111853**	**-652.131324**	**-614.171446**	**-740.155296**	**-659.119518**	**-696.395896**	**-309.2526481**
+0.75	**1303.349137**	***1206.633967***	***1175.568578***	**912.0294801**	**954.8577139**	**896.9595759**	**1054.078841**	**803.8145415**	**848.8969432**	**467.0588269**
-0.8	**-1095.495652**	***-888.6080212***	***-985.9717425***	**-648.652643**	**-695.606746**	**-655.116209**	**-789.498982**	**-703.060819**	**-742.822289**	**-329.8694913**
+0.8	**948.4132441**	***921.1913201***	***856.0326482***	**707.0185382**	**734.8359248**	**689.0628988**	**803.0584392**	**568.7480997**	**599.9488203**	**360.48772**
-0.85	**-1186.238909**	***-966.4208006***	***-1161.011346***	**-689.193433**	**-739.082168**	**-696.060972**	**-838.842669**	**-747.00212**	**-789.248682**	**-350.4863345**
+0.85	**583.4074739**	***630.4930723***	***526.4019211***	**484.0635781**	**494.6987595**	**465.9084736**	**532.0447138**	**363.0549322**	**383.2738498**	**243.1752876**
-0.9	**-1323.732893**	***-1090.984308***	***-1507.222678***	**-729.734223**	**-782.557589**	**-737.005735**	**-888.186355**	**-790.943422**	**-835.675075**	**-371.1031777**
+0.9	**302.8358588**	***363.9646618***	***272.5522723***	**273.7960649**	**273.7960649**	**257.7714288**	**274.3540669**	**208.142857**	**219.0977442**	**159.0365774**
-0.95	**-1499.582964**	***-1253.903902***	***-1946.666621***	**-770.275014**	**-826.033011**	**-777.950498**	**-937.530041**	**-834.884723**	**-882.101468**	**-391.7200209**
+0.95	**140.6951191**	***118.4763414***	***126.625607***	**91.99636598**	**91.99636598**	**73.4768403**	**73.54956931**	**69.77674046**	**73.44920048**	**77.8818479**
-1	**-1707.697485**	***-1449.07761***	***-2438.823084***	**-810.815756**	**-869.508825**	**-818.895497**	**-986.87372**	**-878.826028**	**-928.527865**	**-412.336976**
+1	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-1707.697485**	***-1449.07761***	***-2438.823084***	**-810.815756**	**-869.508825**	**-818.895497**	**-986.87372**	**-878.826028**	**-928.527865**	**-412.336976**
+2	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-1499.592796**	***-1253.903604***	***-1946.666565***	**-770.274967**	**-826.033383**	**-777.950723**	**-937.529583**	**-834.884108**	**-882.101103**	**-391.7201274**
+2.05	**140.6951219**	***118.4921458***	***126.6256096***	**91.97064375**	**91.97064375**	**73.42716256**	**73.55907284**	**69.73530484**	**73.40558404**	**77.43254426**
-2.1	**-1323.742205**	***-1090.984024***	***-1507.22253***	**-729.734178**	**-782.557941**	**-737.005948**	**-888.185921**	**-790.942839**	**-835.67473**	**-371.1032788**
+2.1	**302.83599**	***363.9869037***	***272.5523904***	**273.813134**	**273.813134**	**257.8059922**	**274.3977282**	**208.1539956**	**219.1094691**	**158.2077066**
-2.15	**-1186.247706**	***-966.4205352***	***-1161.001705***	**-689.193388**	**-739.0825**	**-696.061174**	**-838.842258**	**-747.00157**	**-789.248356**	**-350.4864303**
+2.15	**584.7130627**	***630.5192294***	***525.7307508***	**484.0745818**	**494.7067501**	**465.95521**	**532.0802743**	**363.063373**	**383.2824614**	**243.164764**
-2.2	**-1095.503921**	***-888.6077608***	***-985.9756344***	**-648.652599**	**-695.607058**	**-655.116399**	**-789.498595**	**-703.060302**	**-742.821982**	**-329.8695817**
+2.2	**949.6574399**	***921.2197144***	***853.4947693***	**707.0308062**	**734.8450094**	**689.0527297**	**803.0959971**	**568.763098**	**599.9652309**	**360.4773026**

-2.25	-1027.034926	*-833.0697758*	*-924.3521568*	-608.11181	-652.131617	-614.171624	-740.154933	-659.119033	-696.395609	-309.2527331
+2.25	1304.527311	*1206.662872*	*1173.758455*	912.0413648	954.8661389	896.9496215	1054.116703	803.826925	848.9106386	467.0481714
-2.3	-958.5659302	*-777.5317908*	*-862.7286791*	-567.571021	-608.656175	-573.22685	-690.81127	-615.177765	-649.969235	-288.6358846
+2.3	1610.14397	*1459.939123*	*1449.615867*	1094.328809	1149.681295	1084.468467	1279.127592	1001.833794	1058.807133	560.379237
-2.35	-890.0969348	*-721.9938059*	*-801.1052015*	-527.030232	-565.180734	-532.282075	-641.467607	-571.236496	-603.542861	-268.019036
+2.35	1872.849702	*1676.728101*	*1683.822967*	1249.454912	1317.455055	1246.912363	1472.531815	1159.245634	1224.222097	638.1556944
-2.4	-821.6279395	*-666.4558209*	*-739.4817239*	-486.489442	-521.705292	-491.3373	-592.123945	-527.295227	-557.116488	-247.4021875
+2.4	2084.441402	*1853.024495*	*1874.82578*	1376.322238	1459.930658	1379.928994	1629.150128	1286.784672	1359.588451	698.2477718
-2.45	-753.1589441	*-610.9178359*	*-677.8582462*	-445.948653	-478.229851	-450.392526	-542.780282	-483.353959	-510.690114	-226.7853389
+2.45	2236.269951	*1985.137302*	*2012.015971*	1478.801235	1567.344477	1479.51068	1744.220365	1366.713007	1444.836048	738.7088378
-2.5	-684.6899487	*-555.379851*	*-616.2347686*	-405.407864	-434.754409	-409.447751	-493.436619	-439.41269	-464.263741	-206.1684903
+2.5	2323.72999	*2069.690227*	*2091.284359*	1545.592873	1635.77513	1542.134147	1813.398199	1395.62696	1476.096353	757.7769768
-2.55	-616.2209533	*-499.841866*	*-554.611291*	-364.867075	-391.278968	-368.502977	-444.092956	-395.471422	-417.837367	-185.5516418
+2.55	2356.159081	*2105.954244*	*2122.686564*	1576.546243	1666.583496	1570.369071	1842.766779	1429.327197	1512.073373	767.9292896
-2.6	-547.7519579	*-444.303881*	*-492.9878133*	-324.326286	-347.803526	-327.558202	-394.749294	-351.530153	-371.410993	-164.9347932
+2.6	2367.161775	*2105.018604*	*2132.99771*	1573.608762	1667.06306	1572.862641	1852.405196	1454.271049	1537.54211	779.455317
-2.65	-479.2829625	*-388.7658961*	*-431.3643357*	-283.785497	-304.328084	-286.613427	-345.405631	-307.588884	-324.98462	-144.3179447
+2.65	2309.495566	*2050.222667*	*2082.29477*	1527.183686	1621.187842	1532.057858	1810.248583	1429.923417	1510.71082	769.6976832
-2.7	-410.8139672	*-333.2279111*	*-369.7408581*	-243.244707	-260.852643	-245.668653	-296.061968	-263.647616	-278.558246	-123.7010961
+2.7	2181.856618	*1939.196469*	*1966.328393*	1452.424507	1532.237526	1445.207715	1713.65981	1357.933441	1435.695131	737.0695373
-2.75	-342.3449718	*-277.6899261*	*-308.1173804*	-202.703918	-217.377201	-204.723878	-246.718306	-219.706347	-232.131872	-103.0842475
+2.75	2014.590151	*1769.88409*	*1816.497884*	1336.298998	1411.841175	1314.921144	1560.064345	1251.572142	1321.905096	680.8183906
-2.8	-273.8759764	*-222.1519412*	*-246.4939028*	-162.163129	-173.90176	-163.779103	-197.374643	-175.765079	-185.705499	-82.46739897
+2.8	1772.421671	*1540.544101*	*1597.821922*	1171.635297	1239.522696	1155.425027	1353.927956	1087.732723	1147.178225	599.1483342
-2.85	-205.406981	*-166.6139562*	*-184.8704252*	-121.62234	-130.426318	-122.834329	-148.03098	-131.82381	-139.279125	-61.85055041
+2.85	1451.985315	*1249.750014*	*1309.45934*	956.6793681	1013.337039	945.3118552	1110.356517	904.9266674	954.4959113	491.0001732
-2.9	-136.9379856	*-111.0759712*	*-123.2469475*	-81.0815506	-86.9508767	-81.8895542	-98.6873175	-87.8825413	-92.8527515	-41.23370185
+2.9	1050.947299	*896.3895817*	*947.4315158*	690.0159055	731.7039867	683.0578763	804.099474	665.6647582	702.2817946	355.5129628
-2.95	-68.46899026	*-55.53798626*	*-61.62346991*	-40.5407614	-43.4754352	-40.9447796	-49.3436548	-43.9412727	-46.4263779	-20.61685328
+2.95	567.4277513	*479.6662777*	*511.3673385*	371.5884728	394.2846054	368.2114021	433.9334929	365.2475711	385.4258456	192.0103921
-3	-2.33E-13	*-1.22E-13*	*-1.97E-13*	-1.22E-13	-1.22E-13	-1.09E-13	-1.20E-13	-1.04E-13	-1.09E-13	-7.59E-14
+3	2.92E-13	*1.93E-13*	*2.92E-13*	1.84E-13	1.91E-13	1.36E-13	1.36E-13	1.20E-13	1.52E-13	1.04E-13

2-Span: Moment (Max and Min) Raw Data Results - 70' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.84E-14	-9.02E-14	-9.54E-14	-8.79E-14	-6.88E-14	-7.75E-14	-8.43E-14	-8.33E-14	-8.49E-14
End Shear	8.67E-14	8.99E-14	8.03E-14	6.73E-14	1.07E-13	8.42E-14	8.47E-14	8.34E-14	8.22E-14
-0.05	-30.35536175	-37.77326368	-35.66555113	-31.12983207	-24.56162474	-33.32175243	-37.6864785	-42.0134352	-46.2967748
+0.05	274.144184	321.5680736	295.5868311	251.6373353	222.5553048	299.6289493	333.4214167	354.093576	372.6551229
-0.1	-60.7107235	-75.54652735	-71.33110226	-62.25966413	-49.12324947	-66.64350486	-75.372957	-84.0268704	-92.5935496
+0.1	507.6491138	587.0768302	533.925417	456.6705056	412.3642869	555.6080901	617.0649668	655.7386376	693.4280814
-0.15	-91.06608525	-113.319791	-106.9966534	-93.3894962	-73.68487421	-99.96525729	-113.059435	-126.040306	-138.890324
+0.15	701.9490466	799.3592941	719.0262935	617.1064957	570.0465064	768.6718241	851.8839696	928.8539838	977.9319254
-0.2	-121.421447	-151.0930547	-142.6622045	-124.5193283	-98.24649894	-133.2870097	-150.745914	-168.053741	-185.187099
+0.2	857.0618243	960.0045328	866.7818198	746.2609186	696.7394054	939.1705813	1038.354431	1147.893263	1218.677661
-0.25	-151.7768088	-188.8663184	-178.3277556	-155.6491603	-122.8081237	-166.6087621	-188.432392	-210.067176	-231.483874
+0.25	974.1894814	1083.463203	975.0652325	842.9678554	792.8262592	1068.367043	1184.630425	1315.000963	1415.684379
-0.3	-182.1321705	-226.6395821	-213.9933068	-186.7789924	-147.3697484	-199.9305146	-226.118871	-252.080611	-277.780649
+0.3	1054.794986	1170.080203	1039.533992	902.9445688	859.4448785	1168.864636	1301.736414	1431.10773	1556.165687
-0.35	-212.4875323	-264.4128457	-249.6588579	-217.9088245	-171.9313731	-233.252267	-263.805349	-294.094047	-324.077424
+0.35	1113.492006	1210.79265	1074.859783	937.5905845	897.9418188	1238.797767	1374.355556	1513.36064	1642.30328
-0.4	-242.842894	-302.1861094	-285.324409	-249.0386565	-196.4929979	-266.5740194	-301.491828	-336.107482	-370.374198
+0.4	1141.733455	1209.01051	1104.438379	964.2968873	909.8725098	1271.205477	1404.90451	1556.314432	1682.508831
-0.45	-273.1982558	-339.9593731	-320.9899602	-280.1684886	-221.0546226	-299.8957719	-339.178306	-378.120917	-416.670973
+0.45	1137.597989	1183.303847	1115.557527	973.8345523	897.0007496	1268.251076	1396.459245	1553.92833	1689.588064
-0.5	-303.5536175	-377.7326368	-356.6555113	-311.2983207	-245.6162474	-333.2175243	-376.864785	-420.134352	-462.967748
+0.5	1117.588744	1156.287766	1081.79262	946.0731551	887.4075745	1245.779432	1373.550904	1524.128964	1653.030844
-0.55	-333.9089793	-415.5059004	-392.3210624	-342.4281527	-270.1778721	-366.5392767	-414.551263	-462.147787	-509.264523
+0.55	1074.356364	1136.085678	1036.782519	906.4009137	860.9532327	1195.931558	1322.867118	1461.77757	1578.010931
-0.6	-364.264341	-453.2791641	-427.9866135	-373.5579848	-294.7394968	-399.8610292	-452.237742	-504.161223	-555.561297
+0.6	1002.664124	1083.985202	966.6653047	843.7096879	810.3489421	1115.603002	1236.613218	1360.346636	1476.087152
-0.65	-394.6197028	-491.0524278	-463.6521647	-404.6878169	-319.3011216	-433.1827816	-489.92422	-546.174658	-601.858072
+0.65	905.2399236	994.4807025	879.2129069	765.2319106	737.640986	1007.775133	1118.115686	1223.673013	1332.813869
-0.7	-424.9750645	-528.8256915	-499.3177158	-435.8176489	-343.8627463	-466.504534	-527.610699	-588.188093	-648.154847
+0.7	790.6101936	863.9175162	765.1580941	662.6206715	645.0850073	875.7114396	970.6575995	1064.555325	1152.67927
-0.75	-455.3304263	-566.5989552	-534.9832669	-466.947481	-368.424371	-499.8262864	-565.297177	-630.201528	-694.451622
+0.75	654.8481384	696.2465293	619.1259519	532.6873462	535.1451102	722.9571127	798.2067098	875.3278043	940.5759024
-0.8	-485.685788	-604.3722188	-570.6488181	-498.0773131	-392.9859958	-533.1480389	-602.983656	-672.214964	-740.748397
+0.8	500.2271222	499.9855984	434.7112511	370.0745821	410.4938807	553.3389497	605.0541321	660.5148557	701.8009682
-0.85	-516.0411498	-642.1454825	-606.3143692	-567.076003	-417.5476205	-566.4697913	-640.670134	-714.228399	-787.045171
+0.85	330.309051	318.4483614	261.6585676	218.2008267	274.0127823	370.9658333	396.0819453	425.1130675	442.0922504
-0.9	-546.3965115	-679.9187462	-641.9799203	-724.4194853	-442.1092452	-599.7915437	-678.356613	-756.241834	-833.341946
+0.9	192.8010817	192.2751239	152.8776512	123.5842121	153.2491582	208.3269997	208.5049397	220.517454	220.4581725
-0.95	-576.7518733	-717.6920099	-677.6454714	-939.3990885	-466.67087	-633.1132962	-716.043091	-798.255269	-879.638721
+0.95	64.6167341	64.41448175	55.01532144	43.00659292	75.60515853	62.45531425	62.29229995	62.4606725	62.55033794
-1	-607.1074834	-755.4652632	-779.208172	-1176.977763	-491.2326287	-666.4350541	-753.729695	-840.268698	-925.935489
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-607.1074834	-755.4652632	-779.208172	-1176.977763	-491.2326287	-666.4350541	-753.729695	-840.268698	-925.935489
+2	0	0	0	0	0	0	0	0	0
-2.05	-576.7521096	-717.6916501	-677.6451855	-939.3992311	-466.6709971	-633.1128865	-716.043211	-798.255263	-879.638311
+2.05	64.57323093	64.42183218	54.99764048	42.99738212	75.574296	62.41308818	62.33656073	62.42009513	62.55790465
-2.1	-546.3967359	-679.9184048	-641.9796495	-724.4195107	-442.1093655	-599.7911559	-678.356727	-756.241829	-833.341558
+2.1	192.812817	192.2854466	152.885228	123.5882618	153.2547091	208.350465	208.5438652	220.5331514	220.4735497
-2.15	-516.0413621	-642.1451596	-606.3141136	-567.0765166	-417.5477339	-566.4694253	-640.670243	-714.228394	-787.044804
+2.15	330.3160419	318.4143509	261.661971	218.184777	274.0423586	370.9583121	396.1184939	425.122367	442.1157597
-2.2	-485.6859883	-604.3719143	-570.6485776	-498.0776359	-392.9861024	-533.1476947	-602.983759	-672.21496	-740.748051
+2.2	500.2346054	499.9903354	434.7060142	370.0718059	410.5238689	553.3329901	605.0431083	660.5248045	701.8219133
-2.25	-455.3306146	-566.598669	-534.9830416	-466.9477839	-368.4244708	-499.8259642	-565.297275	-630.201525	-694.451297

+2.25	654.8548499	696.2418494	619.1162031	532.6695139	535.1745495	722.9512767	798.1954888	875.3369587	940.5964446
-2.3	-424.9752408	-528.8254237	-499.3175057	-435.8179318	-343.8628392	-466.5042336	-527.610791	-588.188091	-648.154543
+2.3	790.6149645	863.9087719	765.1465702	662.6323013	645.1129959	875.7045445	970.6447471	1064.562057	1152.697753
-2.35	-394.6198671	-491.0521784	-463.6519697	-404.6880798	-319.3012076	-433.182503	-489.924307	-546.174656	-601.85779
+2.35	905.2373307	994.4665394	879.1963938	765.2409686	737.6664619	1007.7658	1118.099664	1223.670052	1332.828503
-2.4	-364.2644933	-453.2789332	-427.9864338	-373.5582277	-294.7395761	-399.8607724	-452.237823	-504.161221	-555.561036
+2.4	1002.658095	1083.964519	966.6804207	843.7023618	810.3710314	1115.589972	1236.592782	1360.339246	1476.096295
-2.45	-333.9091196	-415.5056879	-392.3208978	-342.4283757	-270.1779445	-366.5390418	-414.551339	-462.147787	-509.264283
+2.45	1074.345934	1136.107814	1036.803151	906.3914685	860.971375	1195.91394	1322.890958	1461.76453	1578.013484
-2.5	-303.5537458	-377.7324426	-356.6553619	-311.2985236	-245.6163129	-333.2173113	-376.864855	-420.134352	-462.967529
+2.5	1117.573065	1156.302057	1081.818272	946.0662897	887.420957	1245.756059	1373.568138	1524.108952	1653.021665
-2.55	-273.1983721	-339.9591973	-320.9898259	-280.1686716	-221.0546813	-299.8955807	-339.178371	-378.120918	-416.670775
+2.55	1137.616566	1183.326946	1115.577142	973.8245946	896.9899521	1268.278083	1396.44558	1553.952133	1689.600835
-2.6	-242.8429983	-302.185952	-285.3242899	-249.0388195	-196.4930498	-266.5738501	-301.491887	-336.107483	-370.374022
+2.6	1141.746263	1209.038312	1104.451091	964.2832733	909.8571941	1271.225997	1404.883841	1556.330291	1682.512667
-2.65	-212.4876245	-264.4127067	-249.658754	-217.9089675	-171.9314182	-233.2521195	-263.805403	-294.094049	-324.077268
+2.65	1113.498181	1210.813958	1074.869482	937.5802838	897.9213424	1238.810942	1374.376864	1513.367609	1642.294927
-2.7	-182.1322508	-226.6394615	-213.993218	-186.7791154	-147.3697866	-199.9303889	-226.118919	-252.080614	-277.780515
+2.7	1054.792645	1170.093921	1039.550551	902.9353127	859.4185643	1168.869819	1301.748958	1431.103294	1556.147023
-2.75	-151.776877	-188.8662162	-178.3276821	-155.6492634	-122.8081551	-166.6086584	-188.432435	-210.06718	-231.483761
+2.75	974.179769	1083.46853	975.0789643	842.9571416	792.793861	1068.362848	1184.633698	1314.98661	1415.702573
-2.8	-121.4215033	-151.0929709	-142.6621461	-124.5194113	-98.24652348	-133.2869278	-150.74595	-168.053745	-185.187008
+2.8	857.0441798	959.9995134	866.7874328	746.2460755	696.7004398	939.157772	1038.347047	1147.868303	1218.684108
-2.85	-91.06612952	-113.3197256	-106.9966102	-93.38955928	-73.6848919	-99.9651972	-113.059466	-126.04031	-138.890254
+2.85	701.9229947	799.3448318	719.0219183	617.1041808	570.0005227	768.6498174	851.8663361	928.8666436	977.9254311
-2.9	-60.71075576	-75.54648033	-71.33107421	-62.25970723	-49.12326033	-66.64346662	-75.3729824	-84.0268759	-92.5935005
+2.9	507.6143049	587.098468	533.945837	456.6631524	412.3792542	555.5763524	617.0367279	655.7396207	693.4314573
-2.95	-30.35538201	-37.77323505	-35.66553826	-31.12985518	-24.56162876	-33.32173604	-37.6864984	-42.0134413	-46.2967469
+2.95	274.153237	321.5792125	295.5974564	251.6247459	222.5629065	299.6389079	333.4325708	354.0824389	372.6456161
-3	-8.64E-14	-8.95E-14	-8.96E-14	-8.17E-14	-6.98E-14	-9.04E-14	-8.79E-14	-8.89E-14	-9.93E-14
+3	1.20E-13	1.17E-13	1.07E-13	1.36E-13	9.97E-14	1.16E-13	1.27E-13	1.23E-13	1.21E-13

2-Span: Moment (Max and Min) Raw Data Results - 70’ Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.38E-13	-1.87E-13	-1.04E-13	-1.07E-13	-1.06E-13
End Shear	1.69E-13	1.20E-13	1.10E-13	1.13E-13	9.27E-14
-0.05	-67.07755565	-71.93155505	-43.8517256	-54.0157846	-56.5146233
+0.05	521.0683744	530.5843721	367.5745568	446.5288306	459.0944788
-0.1	-134.1551113	-143.8631101	-87.7034513	-108.031569	-113.029247
+0.1	941.0319904	951.4813076	668.106878	813.0411139	833.0638458
-0.15	-201.232667	-215.7946651	-131.555177	-162.047354	-169.54387
+0.15	1297.77457	1322.636004	905.2954984	1102.892635	1131.599072
-0.2	-268.3102226	-287.7262202	-175.406903	-216.063138	-226.058493
+0.2	1576.66142	1635.053269	1105.636056	1353.733535	1384.946753
-0.25	-335.3877783	-359.6577752	-219.258628	-270.078923	-282.573116
+0.25	1765.881692	1905.68638	1264.938337	1532.809539	1581.720737
-0.3	-402.4653339	-431.5893303	-263.110354	-324.094708	-339.08774
+0.3	1931.652436	2081.471238	1365.59841	1643.682637	1725.390867
-0.35	-469.5428896	-503.5208853	-306.962079	-378.110492	-395.602363
+0.35	2030.370841	2217.329216	1428.13123	1701.659213	1797.748659
-0.4	-536.6204452	-575.4524404	-350.813805	-432.126277	-452.116986
+0.4	2102.440249	2261.315286	1445.296043	1713.605876	1809.083559
-0.45	-603.6980009	-647.3839954	-394.665531	-486.142061	-508.631609
+0.45	2113.488741	2260.114952	1412.925443	1666.892765	1777.968967
-0.5	-670.7755565	-719.3155505	-438.517256	-540.157846	-565.146233
+0.5	2064.083634	2227.5014	1361.686913	1613.665669	1719.194566
-0.55	-737.8531122	-791.2471055	-482.368982	-594.173631	-621.660856
+0.55	1987.494945	2106.425869	1349.968811	1596.708399	1691.877115
-0.6	-804.9306678	-863.1786606	-526.220708	-648.189415	-678.175479
+0.6	1831.357183	1982.284753	1282.886759	1520.29644	1610.285413
-0.65	-872.0082235	-935.1102156	-570.072433	-702.2052	-734.690103
+0.65	1642.358594	1783.171733	1164.861768	1394.117266	1472.447605
-0.7	-939.0857791	-1007.041771	-613.924159	-756.220984	-791.204726
+0.7	1396.055252	1504.020275	1015.90189	1217.794145	1270.39411
-0.75	-1006.163335	-1078.973326	-657.775884	-810.236769	-847.719349
+0.75	1106.478036	1181.306213	820.6679068	984.5241879	1010.605017
-0.8	-1073.24089	-1150.904881	-701.62761	-864.252554	-904.233972
+0.8	767.6331296	783.8047719	584.3522498	700.4321162	701.933784
-0.85	-1140.318446	-1222.836436	-745.479336	-918.268338	-960.748596
+0.85	443.5322673	434.585379	387.6866079	433.2961617	455.6688342
-0.9	-1207.396002	-1294.767991	-789.331061	-972.284123	-1017.26322
+0.9	241.6130742	224.4945543	220.9671417	245.8958979	246.0857334
-0.95	-1274.473557	-1366.699546	-833.182787	-1026.29991	-1073.77784
+0.95	63.87632324	69.6790579	73.97631109	78.90806517	65.81840137
-1	-1381.650869	-1544.682467	-924.044553	-1080.3157	-1182.73122
+1	0	0	0	0	0
(Span 2) -2	-1381.650869	-1544.682467	-924.044553	-1080.3157	-1182.73122
+2	0	0	0	0	0
-2.05	-1274.473878	-1366.699515	-833.182894	-1026.2992	-1073.77753
+2.05	64.07866969	69.67527065	73.98459392	78.91690018	65.79757197
-2.1	-1207.396306	-1294.76796	-789.331162	-972.283456	-1017.26293
+2.1	241.6017364	224.4930638	220.9271315	245.8842414	246.0742795
-2.15	-1140.318734	-1222.836406	-745.47943	-918.267709	-960.74832
+2.15	443.5169204	434.5829437	387.695404	433.28766	455.7003799
-2.2	-1073.241161	-1150.904851	-701.627698	-864.251962	-904.233713
+2.2	767.6081113	783.8086068	584.3701742	700.4593317	701.9599377
-2.25	-1006.163589	-1078.973296	-657.775966	-810.236215	-847.719106

+2.25	**1106.488894**	**1181.309075**	**820.6824486**	**984.5470212**	**1010.59261**
-2.3	**-939.0860165**	**-1007.041742**	**-613.924234**	**-756.220469**	**-791.2045**
+2.3	**1396.080828**	**1504.021657**	**1015.911398**	**1217.81023**	**1270.420375**
-2.35	**-872.0084441**	**-935.1101871**	**-570.072502**	**-702.204722**	**-734.689893**
+2.35	**1642.374726**	**1783.169009**	**1164.864639**	**1394.125119**	**1472.465954**
-2.4	**-804.9308717**	**-863.1786325**	**-526.22077**	**-648.188975**	**-678.175286**
+2.4	**1831.344474**	**1982.280073**	**1282.877325**	**1520.289341**	**1610.294069**
-2.45	**-737.8532994**	**-791.2470779**	**-482.369038**	**-594.173228**	**-621.660679**
+2.45	**1987.517001**	**2106.424314**	**1349.950873**	**1596.69093**	**1691.869864**
-2.5	**-670.775727**	**-719.3155232**	**-438.517306**	**-540.157481**	**-565.146073**
+2.5	**2064.093645**	**2227.498083**	**1361.711587**	**1613.647143**	**1719.175502**
-2.55	**-603.6981546**	**-647.3839686**	**-394.665574**	**-486.141734**	**-508.631466**
+2.55	**2113.472166**	**2261.446591**	**1412.948285**	**1666.916843**	**1777.982763**
-2.6	**-536.6205823**	**-575.452414**	**-350.813842**	**-432.125987**	**-452.116859**
+2.6	**2102.410711**	**2261.312649**	**1445.312031**	**1713.621807**	**1809.088179**
-2.65	**-469.5430099**	**-503.5208594**	**-306.96211**	**-378.11024**	**-395.602253**
+2.65	**2030.361379**	**2217.651181**	**1428.138839**	**1701.665413**	**1797.73836**
-2.7	**-402.4654375**	**-431.5893047**	**-263.110378**	**-324.094493**	**-339.087646**
+2.7	**1931.673727**	**2081.47178**	**1365.593992**	**1643.674515**	**1725.414186**
-2.75	**-335.3878652**	**-359.6577501**	**-219.258646**	**-270.078747**	**-282.573039**
+2.75	**1765.884224**	**1905.683205**	**1264.924143**	**1532.836149**	**1581.731277**
-2.8	**-268.3102928**	**-287.7261955**	**-175.406914**	**-216.063**	**-226.058433**
+2.8	**1576.690184**	**1635.047298**	**1105.662313**	**1353.747346**	**1384.963993**
-2.85	**-201.2327204**	**-215.7946409**	**-131.555182**	**-162.047253**	**-169.543826**
+2.85	**1297.786695**	**1322.632355**	**905.2804934**	**1102.891304**	**1131.601755**
-2.9	**-134.1551481**	**-143.8630862**	**-87.7034504**	**-108.031506**	**-113.029219**
+2.9	**941.0247939**	**951.6408185**	**668.1321787**	**813.025277**	**833.0502416**
-2.95	**-67.07757568**	**-71.93153163**	**-43.8517184**	**-54.015759**	**-56.5146124**
+2.95	**521.0876367**	**530.5877087**	**367.5875924**	**446.5445746**	**459.1109101**
-3	**-1.55E-13**	**-1.58E-13**	**-1.15E-13**	**-1.12E-13**	**-1.23E-13**
+3	**1.56E-13**	**1.71E-13**	**1.37E-13**	**1.47E-13**	**1.34E-13**

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-6.328384119	-4.49726	-5.596246332	-5.28398	-4.82614	-3.638893994	-4.93674	-5.58339	-6.224443161	-6.85904
End Shear	60.24553299	43.82711	52.03694559	48.28681	42.40205	35.55950212	47.874	53.36509	56.76855028	59.95806
-0.05	-6.328384119	-4.49726	-5.596246332	-5.28398	-5.33176	-3.638893994	-4.93674	-5.58339	-6.224443161	-6.85904
+0.05	55.6762775	40.61546	47.64147911	43.79226	38.36294	32.97237747	44.39112	49.39759	52.36374245	55.10483
-0.1	-6.328384119	-4.49726	-5.596246332	-5.28398	-6.61934	-3.638893994	-4.93674	-5.58339	-6.224443161	-6.85904
+0.1	50.75807534	37.16561	42.90256715	38.95587	33.95429	30.20202646	40.65045	45.13033	47.62512033	49.88364
-0.15	-6.328384119	-4.96187	-5.596246332	-5.28398	-7.71672	-3.876509221	-5.07161	-5.58339	-6.224443161	-6.85904
+0.15	47.1201577	34.608	39.42622226	35.44014	30.80957	28.14670891	37.8756	41.96944	44.12380701	46.03568
-0.2	-7.894218445	-7.42608	-7.429332936	-5.91095	-9.1256	-5.427275181	-8.01656	-8.29474	-8.28512643	-8.27597
+0.2	42.35393617	31.24912	34.91183402	30.91979	26.79158	25.44546946	34.22916	37.82202	39.54167913	41.01356
-0.25	-11.20373487	-9.25785	-9.261771598	-7.36883	-10.146	-7.487015947	-10.208	-10.9101	-10.90076764	-10.8919
+0.25	38.92320967	28.7763	31.62815965	27.79722	24.01896	23.45523904	31.54288	34.77156	36.18077884	37.34059
-0.3	-15.63879099	-12.1774	-11.67500538	-9.55695	-11.6094	-10.2524066	-13.721	-14.3628	-14.35382878	-14.3453
+0.3	34.36554102	25.55256	27.40305432	23.95129	20.60384	20.85844936	28.03839	30.79876	31.81659202	32.58606
-0.35	-18.9292407	-14.7426	-13.45685509	-11.8228	-13.7635	-12.30276194	-16.492	-17.3281	-17.30028858	-17.29
+0.35	31.04579256	23.19766	24.36063345	21.18964	18.17033	18.95980828	25.47646	27.89983	28.64219031	29.13949
-0.4	-23.33521271	-18.1141	-16.29811765	-14.8051	-16.7204	-14.99572862	-20.132	-21.5265	-21.4638405	-21.4541
+0.4	26.76754593	20.15325	20.48957304	17.68694	15.107	16.50280782	22.16164	24.15648	24.55739058	24.7211
-0.45	-26.8536146	-20.5983	-19.0439369	-17.0058	-18.8943	-16.97851309	-22.8125	-24.6228	-24.66178003	-24.6507
+0.45	23.68134379	17.94943	17.874493	15.25017	12.99059	14.72226159	19.75986	21.45018	21.61557081	21.61167
-0.5	-31.57589265	-23.8397	-23.37637363	-19.8819	-21.6586	-19.56371712	-26.3079	-28.6669	-29.26115656	-29.378
+0.5	19.74645981	15.12854	14.60360317	12.49858	10.5844	12.44039216	16.68243	17.99107	17.93188395	17.92849
-0.55	-35.03748342	-26.2097	-26.56750329	-22.6054	-24.0763	-21.45242749	-28.8621	-31.6269	-32.63714778	-33.1967
+0.55	16.94175606	13.10893	12.29713141	10.76215	9.053754	10.80444436	14.47659	15.5185	15.47463304	15.47123
-0.6	-39.52941721	-29.2767	-30.85500782	-26.7983	-27.7673	-23.89452986	-32.1653	-35.4619	-37.02432596	-38.1734
+0.6	13.44568858	10.55575	9.687554058	8.574	7.149499	8.733041526	11.68427	12.39844	12.37317448	12.36978
-0.65	-42.79435635	-31.4994	-34.32080814	-30.0494	-30.6671	-25.66266132	-34.5575	-38.2446	-40.21812401	-41.8074
+0.65	11.12588255	8.753483	8.126955786	6.911418	5.827769	7.268197443	9.71015	10.2007	10.18794108	10.18459
-0.7	-46.99223294	-34.348	-38.81912785	-34.2775	-34.3655	-27.92631988	-37.6207	-41.8157	-44.33165607	-46.5034
+0.7	8.240271992	6.512197	6.367020557	5.027094	4.213117	5.442603779	7.250656	7.601203	7.598195322	7.595327
-0.75	-50.01273266	-36.3903	-42.089233	-37.3575	-37.0655	-29.54736946	-39.8149	-44.3799	-47.29717788	-49.9013
+0.75	6.241818316	5.116309	5.089049016	4.044809	3.337546	4.175367433	5.588728	5.941263	5.938331929	5.935539
-0.8	-53.85284032	-38.9762	-46.29423916	-41.722	-40.8541	-31.59724722	-42.5905	-47.6324	-51.07561874	-54.2482
+0.8	3.93078208	3.586365	3.560960129	2.830385	2.291816	2.697212973	3.813301	3.904016	3.90123263	3.898578
-0.85	-56.58112191	-40.8049	-49.32007966	-45.2218	-43.8227	-33.0447068	-44.551	-49.937	-53.76678044	-57.3585
+0.85	2.919242859	2.533113	2.509287917	1.993849	1.604652	2.004295019	2.596414	2.572646	2.596514643	2.5943
-0.9	-59.99974893	-43.0839	-53.16701148	-49.7185	-47.7133	-34.84546587	-46.9912	-52.816	-57.14868499	-61.2877
+0.9	1.68880105	1.248651	1.241071924	0.985125	0.78662	1.136559427	1.206463	1.204968	1.206968745	1.19234
-0.95	-62.38803389	-44.6659	-55.90000572	-52.9512	-50.5217	-36.09283113	-48.6823	-54.82	-59.51940558	-64.0591
+0.95	0.859775245	0.468741	0.464918632	0.426303	0.328691	0.584895539	0.424605	0.4522	0.453135835	0.456452
-1	-65.32146272	-46.5939	-59.32410213	-57.0564	-54.0763	-37.60913026	-50.7393	-57.2706	-62.44332579	-67.5021
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	64.93948769	46.36394	58.90931351	56.55542	53.64355	37.42852575	50.49424	56.97777	62.09218529	67.08695
-2.05	-7.30E-01	-0.39774	-0.393931291	-0.36168	-2.77E-01	-0.496176023	-0.38437	-0.38362	-0.384527432	-0.38539
+2.05	62.73664855	44.91769	56.34088595	53.47618	50.97746	36.29109355	48.9512	55.13945	59.89889019	64.50427
-2.1	-1.834938049	-1.39904	-1.391335655	-1.10461	-0.88218	-1.252606811	-1.35174	-1.35022	-1.352251242	-1.35419
+2.1	59.54954468	42.80857	52.69719089	49.1663	47.233	34.62808128	46.69657	52.4677	56.73820025	60.80944
-2.15	-2.757896423	-2.36628	-2.342678595	-1.8613	-1.49576	-1.894111161	-2.40417	-2.31155	-2.404213001	-2.402
+2.15	56.98311668	41.09904	49.81164111	45.79337	44.30602	33.27730635	44.8662	50.30817	54.20142676	57.86212
-2.2	-4.100985328	-3.77049	-3.74477586	-2.97657	-2.41439	-2.817921864	-4.02654	-4.14799	-4.145169934	-4.14248
+2.2	53.3430903	38.66098	45.77750943	41.12732	40.36589	31.34751116	42.25231	47.23555	50.61349149	53.71538
-2.25	-5.916057162	-4.91813	-4.891014703	-3.88726	-3.18827	-3.973699497	-5.35832	-5.67618	-5.673251976	-5.67045
+2.25	50.46086094	36.7213	42.62342327	37.86134	37.53163	29.80990707	40.17038	44.79592	47.77932728	50.45483

-2.3	-8.575533622	-6.78267	-6.580883344	-5.24486	-4.40582	-5.663201035	-7.54777	-7.88925	-7.886210899	-7.88331
+2.3	46.4316197	33.99847	38.26360517	33.75488	33.91307	27.6486697	37.24496	41.37721	43.82559208	45.92469
-2.35	-10.7641171	-8.46388	-7.901008359	-6.66584	-5.61693	-7.032602519	-9.39267	-9.84796	-9.837130228	-9.83376
+2.35	43.28136967	31.8618	34.88953749	30.58357	31.13924	25.95073568	34.94726	38.69857	40.74011776	42.4023
-2.4	-13.85335901	-10.8667	-9.98465288	-8.83988	-7.37913	-8.985575615	-12.0246	-12.778	-12.75053256	-12.7471
+2.4	38.92662404	28.8984	30.26880465	26.24898	27.27268	23.59339498	31.75802	34.9886	36.48202787	37.55734
-2.45	-16.49577031	-12.7818	-11.92660156	-10.4812	-8.80744	-10.53932306	-14.1191	-15.1184	-15.07693109	-15.0735
+2.45	35.55612994	26.59787	27.09241176	23.05664	24.47623	21.76163167	29.28036	32.11207	33.1913304	33.82449
-2.5	-20.23095118	-15.4745	-15.00163493	-12.7963	-10.8482	-12.72042684	-17.06	-18.4149	-18.35301093	-18.3496
+2.5	30.93960135	23.43808	22.83787799	19.52546	21.32084	19.24353236	25.87501	28.16562	28.69032129	28.73321
-2.55	-23.17905304	-17.5904	-17.45511989	-14.8916	-12.6753	-14.43202345	-19.3684	-21.0095	-21.13752894	-21.1336
+2.55	27.39665367	21.00683	19.58827086	17.36823	19.24768	17.30444789	23.25317	25.13228	25.24049167	25.22948
-2.6	-27.28879237	-20.5286	-20.96253487	-18.1141	-15.4788	-16.80591197	-22.5705	-24.6177	-25.05967099	-25.2633
+2.6	22.79784441	17.69485	15.87630872	14.43415	16.34901	14.66091857	19.67944	21.00416	20.94592154	20.9361
-2.65	-30.49393171	-22.8121	-23.86617789	-20.7414	-17.7765	-18.64884954	-25.0569	-27.4255	-28.12358995	-28.5774
+2.65	19.42532356	15.16601	13.7503329	12.19722	14.11765	12.64102317	16.94921	17.85512	17.82300001	17.81283
-2.7	-34.91452278	-25.9518	-27.92242884	-24.4233	-21.0209	-21.180195	-28.4725	-31.2904	-32.35582821	-33.1725
+2.7	15.03769003	11.74601	11.37470175	9.176344	11.33175	9.907403648	13.25481	13.93248	13.92349303	13.91492
-2.75	-38.32889783	-28.3698	-31.09158923	-27.3081	-23.5825	-23.127963	-31.1011	-34.2703	-35.6292748	-36.7388
+2.75	11.71076878	9.560491	9.564626364	7.609829	10.31303	7.833201655	10.61152	11.34276	11.33347819	11.32465
-2.8	-42.99662504	-31.6667	-35.46949308	-31.4751	-27.2831	-25.78141976	-34.6826	-38.3373	-40.11016429	-41.6357
+2.8	7.615888119	7.118294	7.121547218	5.666131	8.952373	5.235923082	7.64853	7.855834	7.846208582	7.837039
-2.85	-46.57247093	-34.186	-38.85560738	-34.8657	-30.2969	-27.80752452	-37.4177	-41.4481	-43.54705818	-45.4026
+2.85	6.328447597	5.269991	5.596243606	5.283979	7.895807	4.068407095	5.439643	5.58339	6.224443062	6.859032
-2.9	-51.42361601	-37.5959	-43.49039913	-39.553	-34.4896	-30.5477488	-41.1172	-45.6624	-48.21514433	-50.5329
+2.9	6.328447597	4.497259	5.596243606	5.283979	6.432461	3.638895007	4.936736	5.58339	6.224443062	6.859032
-2.95	-55.11313917	-40.1835	-47.04489992	-43.1807	-37.7716	-32.6256805	-43.9229	-48.8631	-51.76941711	-54.4491
+2.95	6.328447597	4.497259	5.596243606	5.283979	5.458804	3.638895007	4.936736	5.58339	6.224443062	6.859032
-3	-60.08399774	-43.6623	-51.87181602	-48.1486	-42.4008	-35.41733757	-47.6928	-53.1697	-56.56326381	-59.7442
+3	6.328447597	4.497259	5.596243606	5.283979	4.826142	3.638895007	4.936736	5.58339	6.224443062	6.859032

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.328384119	-6.00627	-6.441041761	-6.06612	-7.31045	-6.510063514	-6.87824	-3.05446
End Shear	60.24553299	59.26769	62.94745088	58.81199	69.43673	59.19851017	62.48218	30.66461
-0.05	-6.328384119	-6.00627	-6.441041761	-6.06612	-7.31045	-6.510063514	-6.87824	-3.05446
+0.05	55.6762775	55.05036	58.41273452	54.55005	64.28664	54.11084531	57.10022	28.44673
-0.1	-6.328384119	-6.00627	-6.441041761	-6.06612	-7.31045	-6.510063514	-6.87824	-3.05446
+0.1	50.75807534	50.52473	53.55005485	49.97142	58.76132	48.63090129	51.30425	26.0351
-0.15	-6.328384119	-7.04741	-7.047408227	-6.12662	-7.31045	-6.510063514	-6.87824	-4.06158
+0.15	47.1201577	47.16297	49.94037208	46.57407	54.66675	44.61470315	47.05713	24.24751
-0.2	-7.894218445	-10.5474	-10.54742581	-9.9152	-10.5481	-8.020302602	-8.44242	-5.66819
+0.2	42.35393617	42.73893	45.19342883	42.10841	49.29172	39.40447123	41.54829	21.90038
-0.25	-11.20373487	-13.6662	-13.83854	-12.7355	-13.685	-10.25152901	-10.8086	-6.86017
+0.25	38.92320967	39.4749	41.69374057	38.81767	45.33638	35.61874864	37.54636	20.17285
-0.3	-15.63879099	-18.1516	-18.67689687	-17.079	-18.8636	-13.49313868	-14.258	-8.45778
+0.3	34.36554102	35.20988	37.12437267	34.52331	40.18233	30.75342747	32.40427	17.92139
-0.35	-18.9292407	-21.4731	-22.26226235	-20.465	-22.9846	-15.8925791	-16.8115	-10.252
+0.35	31.04579256	32.08664	33.78106301	31.38291	36.41924	27.25459498	28.70727	16.2773
-0.4	-23.33521271	-25.8301	-26.96867895	-24.9118	-28.4036	-19.03859019	-20.1599	-12.61
+0.4	26.76754593	28.03807	29.45112907	27.31817	31.55689	22.80938628	24.01156	14.15268
-0.45	-26.8536146	-29.0338	-30.43189199	-28.1856	-32.3985	-21.35073567	-22.6211	-14.3474
+0.45	23.68134379	25.0987	26.31057984	24.37187	28.03908	19.80855043	20.85111	12.61541
-0.5	-31.57589265	-33.2049	-34.94451856	-32.4536	-37.6141	-25.92172692	-27.286	-16.6142
+0.5	19.74645981	21.32401	22.28192193	20.59507	23.5391	16.06269047	16.9081	10.64881
-0.55	-35.03748342	-36.2477	-38.23919548	-35.5713	-41.4299	-29.66244822	-31.2236	-18.2715
+0.55	16.94175606	18.61159	19.39052662	17.8866	20.31958	13.75501719	14.56081	9.241735
-0.6	-39.52941721	-40.1756	-42.49618213	-39.6021	-46.3714	-34.68805052	-36.522	-20.4158
+0.6	13.44568858	15.16821	15.72499266	14.45607	16.25269	11.24447451	11.89475	7.464315
-0.65	-42.79435635	-43.0144	-45.57594164	-42.5201	-49.9551	-38.73919607	-40.8142	-21.9695
+0.65	11.12588255	12.7258	13.12913007	12.02918	13.38449	9.461907155	10.00221	6.210821
-0.7	-46.99223294	-46.6416	-49.51544254	-46.2554	-54.5517	-44.00268633	-46.3919	-23.9603
+0.7	8.240271992	9.671157	9.888570736	9.003244	9.82137	7.229834154	7.633101	4.695913
-0.75	-50.01273266	-49.2334	-52.33389096	-48.93	-57.8503	-47.83333637	-50.4518	-25.3871
+0.75	6.241818316	7.541841	7.634629633	6.946338	7.431967	5.67171149	5.979862	3.855064
-0.8	-53.85284032	-52.5025	-55.89406109	-52.3115	-62.0314	-52.76522508	-55.6799	-27.193
+0.8	3.93078208	5.090779	5.090778952	4.686845	4.94918	3.872273385	4.076077	2.808632
-0.85	-56.58112191	-54.8041	-58.40481692	-54.6987	-64.9919	-56.31898054	-59.4478	-28.4695
+0.85	2.919242859	3.595067	3.59506746	3.140735	3.253366	2.734781631	2.878718	2.083485
-0.9	-59.99974893	-57.6576	-61.52380302	-57.6681	-68.6868	-60.84406727	-64.2467	-30.0594
+0.9	1.68880105	1.685955	1.685955355	1.419368	1.429949	1.349452785	1.420477	1.201552
-0.95	-62.38803389	-59.626	-63.68048029	-59.7244	-71.256	-64.06451498	-67.6629	-31.1623
+0.95	0.859775245	0.671537	0.671536646	0.499535	0.535954	0.506567278	0.533229	0.60745
-1	-65.32146272	-62.0066	-66.29643957	-62.2233	-74.394	-68.10759912	-71.953	-32.5051
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	64.93948769	61.72394	65.98526332	61.9257	74.01925	67.61726387	71.43264	32.34532
-2.05	-7.30E-01	-0.56611	-0.566113089	-0.4522	-0.45521	-0.429846916	-0.45247	-0.51068
+2.05	62.73664855	59.93817	64.02292552	60.0512	71.66535	64.58453959	68.21464	31.33807
-2.1	-1.834938049	-1.9896	-1.989600273	-1.59028	-1.60104	-1.511835744	-1.59141	-1.30217
+2.1	59.54954468	57.31383	61.1476046	57.3097	68.23993	60.29095612	63.66009	29.86779
-2.15	-2.757896423	-3.35818	-3.358178633	-2.89672	-2.98601	-2.554546255	-2.689	-1.96334
+2.15	56.98311668	55.17334	58.80800986	55.08236	65.46836	56.89673495	60.06049	28.67517
-2.2	-4.100985328	-5.35228	-5.352283453	-4.95801	-5.24688	-4.071060771	-4.28533	-2.92962
+2.2	53.3430903	52.10475	55.4605978	51.89957	61.52141	52.15877054	55.03697	26.97334
-2.25	-5.916057162	-7.20215	-7.27551348	-6.6529	-7.10928	-5.422829284	-5.71584	-3.71421
+2.25	50.46086094	49.6526	52.79012264	49.36313	58.38518	48.4594704	51.11551	25.61875

-2.3	-8.575533622	-10.041	-10.28051327	-9.36895	-10.2511	-7.500142228	-7.91996	-4.84114
+2.3	46.4316197	46.1972	49.03247458	45.79737	53.98739	43.35231287	45.70263	23.71652
-2.35	-10.7641171	-12.3323	-12.71128615	-11.6387	-12.9239	-9.174430461	-9.69704	-6.00909
+2.35	43.28136967	43.47648	46.07750978	42.99557	50.53953	39.40431568	41.51901	22.22333
-2.4	-13.85335901	-15.5886	-16.17216717	-14.8743	-16.7478	-11.55099052	-12.2202	-7.68025
+2.4	38.92662404	39.69168	41.97146627	39.10517	45.76158	34.00317814	35.7964	20.15189
-2.45	-16.49577031	-18.1715	-18.92166448	-17.4476	-19.7984	-13.43412319	-14.22	-9.01346
+2.45	35.55612994	36.74546	38.7783996	36.08177	42.05514	30.27810612	31.87169	18.54349
-2.5	-20.23095118	-21.7878	-22.77657278	-21.0586	-24.0907	-16.51796359	-17.3873	-10.8894
+2.5	30.93960135	32.6887	34.38580016	31.92504	36.96772	25.29083619	26.62193	16.33401
-2.55	-23.17905304	-24.6191	-25.79840261	-23.8915	-27.4661	-19.32773019	-20.345	-12.3645
+2.55	27.39665367	29.56005	31.00102361	28.72378	33.05569	21.73063518	23.02552	14.63376
-2.6	-27.28879237	-28.538	-29.98550321	-27.8196	-32.1562	-23.35205712	-24.5847	-14.414
+2.6	22.79784441	25.28876	26.38372415	24.35906	27.72953	18.64799146	19.74419	12.31741
-2.65	-30.49393171	-31.5747	-33.23327166	-30.8685	-35.8033	-26.68636884	-28.1069	-16.0076
+2.65	19.42532356	22.02074	22.85361533	21.02366	23.66493	16.28828655	17.23268	10.54871
-2.7	-34.91452278	-35.7387	-37.69071081	-35.0554	-40.8204	-31.35112032	-33.0359	-18.1996
+2.7	15.03769003	17.59236	18.07346391	16.50927	18.1707	13.08925769	13.82823	8.232414
-2.75	-38.32889783	-38.9378	-41.1180491	-38.2764	-44.6863	-35.00049737	-36.8929	-19.8883
+2.75	11.71076878	14.22805	14.44439896	13.25489	14.26279	10.65785122	11.24098	7.057324
-2.8	-42.99662504	-43.2895	-45.78396996	-42.6638	-49.9597	-40.0477476	-42.2284	-22.1915
+2.8	7.615888119	10.11022	10.11022397	9.441649	10.02145	7.688033929	8.092667	5.468132
-2.85	-46.57247093	-46.6078	-49.3444827	-46.0133	-53.9914	-43.95579821	-46.3604	-23.952
+2.85	6.328447597	7.485004	7.485003747	6.599993	7.310443	6.510058685	6.878236	4.263083
-2.9	-51.42361601	-51.0898	-54.15705515	-50.5428	-59.4504	-49.31034204	-52.0228	-26.3353
+2.9	6.328447597	6.006265	6.441044712	6.066117	7.310443	6.510058685	6.878236	3.054461
-2.95	-55.11313917	-54.4843	-57.80435721	-53.977	-63.5947	-53.42066923	-56.3702	-28.1441
+2.95	6.328447597	6.006265	6.441044712	6.066117	7.310443	6.510058685	6.878236	3.054461
-3	-60.08399774	-59.0392	-62.70170602	-58.5903	-69.1687	-59.00730302	-62.2799	-30.5763
+3	6.328447597	6.006265	6.441044712	6.066117	7.310443	6.510058685	6.878236	3.054461

2-Span: Shear (Max and Min) Raw Data Results - 70' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.328384119	-11.0845	-11.8866	-7.24642	-8.92602	-9.33894
End Shear	60.24553299	95.14478	97.31343	66.61281	80.87541	83.40863
-0.05	-6.328384119	-11.0845	-11.8866	-7.24642	-8.92602	-9.33894
+0.05	55.6762775	86.10566	87.67816	60.74107	73.78812	75.86458
-0.1	-6.328384119	-11.0845	-11.8866	-7.24642	-8.92602	-9.33894
+0.1	50.75807534	76.39236	77.20732	54.42128	66.15487	67.7421
-0.15	-6.328384119	-11.0845	-11.8866	-7.24642	-8.92602	-9.33894
+0.15	47.1201577	69.33334	69.63207	49.80098	60.57051	61.81507
-0.2	-7.894218445	-11.0845	-11.8866	-9.52799	-10.5546	-10.5554
+0.2	42.35393617	60.25971	60.51314	43.82313	53.33998	54.16227
-0.25	-11.20373487	-13.5486	-12.6221	-12.2867	-13.6928	-13.6938
+0.25	38.92320967	53.73355	54.21949	39.49247	48.09748	48.63064
-0.3	-15.63879099	-17.6914	-17.1867	-16.0788	-17.8336	-18.2606
+0.3	34.36554102	45.90956	46.6045	33.94505	41.37585	41.56257
-0.35	-18.9292407	-21.089	-21.4198	-18.8849	-20.897	-21.8549
+0.35	31.04579256	40.3525	41.37641	29.97038	36.55485	36.68499
-0.4	-23.33521271	-26.5199	-27.6783	-22.5631	-24.9114	-26.5747
+0.4	26.76754593	33.38082	34.70893	25.11398	30.65483	30.5433
-0.45	-26.8536146	-31.4156	-32.8298	-25.2654	-28.2497	-30.0491
+0.45	23.68134379	28.8153	29.95525	21.85148	26.54491	26.19594
-0.5	-31.57589265	-38.0687	-40.1463	-28.7809	-34.1656	-34.578
+0.5	19.74645981	23.35975	23.97476	18.62299	21.38325	21.95529
-0.55	-35.03748342	-43.4601	-46.2331	-31.9569	-39.5008	-38.8329
+0.55	16.94175606	19.70708	20.08037	16.30002	18.17672	19.07231
-0.6	-39.52941721	-51.2704	-54.1889	-37.7678	-46.4778	-46.4619
+0.6	13.44568858	15.28132	15.54926	13.34665	14.67423	15.41958
-0.65	-42.79435635	-58.0417	-60.0164	-42.1844	-51.7777	-52.2149
+0.65	11.12588255	12.37013	12.34483	11.24827	12.36939	12.83453
-0.7	-46.99223294	-66.8653	-67.6975	-48.4218	-59.2589	-59.8543
+0.7	8.240271992	9.334987	8.883092	8.618698	9.34366	9.610008
-0.75	-50.01273266	-73.5936	-74.1679	-52.9715	-64.7129	-65.8403
+0.75	6.241818316	7.3229	6.821727	6.781407	7.394083	7.4434
-0.8	-53.85284032	-82.9957	-83.895	-58.8434	-71.748	-73.5815
+0.8	3.93078208	4.850096	4.524806	4.58882	4.913887	4.931803
-0.85	-56.58112191	-90.074	-91.8303	-63.0858	-76.8275	-79.1868
+0.85	2.919242859	3.074276	2.957042	3.146063	3.343427	3.232481
-0.9	-59.99974893	-99.1762	-102.229	-68.5037	-83.3101	-86.3629
+0.9	1.68880105	1.417915	1.339644	1.595686	1.702065	1.420451
-0.95	-62.38803389	-105.726	-109.744	-72.3724	-87.9355	-91.5012
+0.95	0.859775245	0.537043	0.604105	0.598723	0.638638	0.533167
-1	-65.32146272	-114.053	-119.344	-77.2478	-93.7596	-97.9972
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	64.93948769	113.0358	118.1716	76.65533	93.05213	97.20642
-2.05	-7.30E-01	-0.45504	-0.51169	-0.50788	-0.54174	-0.45239
+2.05	62.73664855	106.7901	110.9707	72.99827	88.68353	92.33382
-2.1	-1.834938049	-1.5679	-1.52944	-1.78794	-1.90714	-1.59138
+2.1	59.54954468	98.05786	100.9515	67.84041	82.51678	85.48325
-2.15	-2.757896423	-2.89638	-2.73667	-3.00511	-3.20546	-2.96519
+2.15	56.98311668	91.23047	93.15174	63.7765	77.65426	80.10055
-2.2	-4.100985328	-5.14633	-4.79939	-4.82426	-5.21111	-5.22963
+2.2	53.3430903	81.79348	82.66788	58.12043	70.88206	72.62742
-2.25	-5.916057162	-7.00123	-6.5223	-6.48776	-7.07156	-7.12027
+2.25	50.46086094	74.49066	75.84883	53.71604	65.60525	66.82094

-2.3	**-8.575533622**	**-9.68378**	**-9.28724**	**-8.93727**	**-9.761**	**-9.99962**
+2.3	**46.4316197**	**65.77351**	**66.76142**	**47.65026**	**58.3338**	**58.84025**
-2.35	**-10.7641171**	**-11.8432**	**-11.8524**	**-10.9097**	**-11.9974**	**-12.4183**
+2.35	**43.28136967**	**59.15521**	**60.97445**	**42.97175**	**52.72235**	**53.16021**
-2.4	**-13.85335901**	**-15.7622**	**-15.9485**	**-13.7073**	**-15.0703**	**-15.8648**
+2.4	**38.92662404**	**50.28405**	**53.2051**	**37.0472**	**45.61277**	**45.49004**
-2.45	**-16.49577031**	**-19.1191**	**-19.453**	**-15.9226**	**-17.6728**	**-18.6047**
+2.45	**35.55612994**	**44.4412**	**47.23772**	**32.68863**	**40.37954**	**39.61824**
-2.5	**-20.23095118**	**-23.9889**	**-24.6992**	**-19.0197**	**-22.0093**	**-22.4484**
+2.5	**30.93960135**	**37.24238**	**39.12258**	**28.34628**	**33.26647**	**34.0175**
-2.55	**-23.17905304**	**-28.078**	**-29.1851**	**-21.4413**	**-25.8811**	**-25.5011**
+2.55	**27.39665367**	**32.25214**	**33.73241**	**25.70941**	**28.94559**	**30.6205**
-2.6	**-27.28879237**	**-34.183**	**-35.5227**	**-25.6943**	**-31.3605**	**-31.292**
+2.6	**22.79784441**	**25.84424**	**26.9008**	**22.10648**	**24.4132**	**25.98834**
-2.65	**-30.49393171**	**-39.4521**	**-40.5238**	**-29.3262**	**-35.773**	**-35.8988**
+2.65	**19.42532356**	**21.77075**	**22.2065**	**19.34764**	**21.4021**	**22.44817**
-2.7	**-34.91452278**	**-46.8609**	**-47.494**	**-34.6253**	**-42.2005**	**-42.428**
+2.7	**15.03769003**	**17.17542**	**16.52246**	**15.60643**	**17.31783**	**17.6561**
-2.75	**-38.32889783**	**-52.6829**	**-53.1922**	**-38.7863**	**-47.2423**	**-47.7297**
+2.75	**11.71076878**	**14.06807**	**13.10462**	**12.76211**	**14.21201**	**14.26279**
-2.8	**-42.99662504**	**-61.3743**	**-61.5829**	**-44.5601**	**-54.2317**	**-55.1046**
+2.8	**7.615888119**	**11.08445**	**11.88657**	**9.134558**	**10.02797**	**10.02882**
-2.85	**-46.57247093**	**-68.1803**	**-68.395**	**-49.0439**	**-59.6552**	**-60.8448**
+2.85	**6.328447597**	**11.08445**	**11.88657**	**7.246424**	**8.92601**	**9.338942**
-2.9	**-51.42361601**	**-77.5916**	**-78.4944**	**-55.2039**	**-67.1004**	**-68.7469**
+2.9	**6.328447597**	**11.08445**	**11.88657**	**7.246424**	**8.92601**	**9.338942**
-2.95	**-55.11313917**	**-84.8772**	**-86.3483**	**-59.9442**	**-72.8259**	**-74.8394**
+2.95	**6.328447597**	**11.08445**	**11.88657**	**7.246424**	**8.92601**	**9.338942**
-3	**-60.08399774**	**-94.8573**	**-97.151**	**-66.4018**	**-80.6207**	**-83.1536**
+3	**6.328447597**	**11.08445**	**11.88657**	**7.246424**	**8.92601**	**9.338942**

2-Span: Moment (Max and Min) Raw Data Results - 70' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-9.99E-14**	**-4.6E-14**	**-4.67837E-14**	**-4.9E-14**	**-4.61E-14**	**-3.56761E-14**	**-4E-14**	**-4.4E-14**	**-4.32023E-14**	**-4.4E-14**
End Shear	**1.24E-13**	**4.5E-14**	**4.6606E-14**	**4.17E-14**	**3.53E-14**	**5.56416E-14**	**4.36E-14**	**4.39E-14**	**4.32674E-14**	**4.26E-14**
-0.05	**-22.1493**	**-15.7404**	**-19.58686216**	**-18.4939**	**-16.8915**	**-12.73612898**	**-17.2786**	**-19.5419**	**-21.78555106**	**-24.0066**
+0.05	**194.867**	**142.1541**	**166.7451769**	**153.2729**	**135.509**	**115.4033211**	**155.3689**	**172.8916**	**183.6108769**	**193.2357**
-0.1	**-44.2987**	**-31.4808**	**-39.17372432**	**-36.9879**	**-33.783**	**-25.47225796**	**-34.5572**	**-39.0837**	**-43.57110213**	**-48.0132**
+0.1	**359.5827**	**263.2352**	**304.4214831**	**276.8605**	**246.244**	**213.8264386**	**288.1038**	**319.9715**	**340.0252204**	**359.5686**
-0.15	**-66.448**	**-47.2212**	**-58.76058648**	**-55.4818**	**-50.6745**	**-38.20838694**	**-51.8358**	**-58.6256**	**-65.35665319**	**-72.0199**
+0.15	**494.7617**	**363.9871**	**414.4979487**	**372.8423**	**333.2458**	**295.5906178**	**398.5853**	**441.734**	**481.6458303**	**507.0946**
-0.2	**-88.5974**	**-62.9616**	**-78.34744864**	**-73.9757**	**-67.5659**	**-50.94451592**	**-69.1143**	**-78.1674**	**-87.14220425**	**-96.0265**
+0.2	**601.7194**	**444.4189**	**497.7985651**	**449.4591**	**403.4191**	**361.2856652**	**486.9954**	**538.4259**	**595.2259595**	**631.9303**
-0.25	**-110.747**	**-78.702**	**-97.9343108**	**-92.4697**	**-84.4574**	**-63.68064489**	**-86.3929**	**-97.7093**	**-108.9277553**	**-120.033**
+0.25	**681.1562**	**505.154**	**561.8165427**	**505.6081**	**456.1592**	**411.1103237**	**553.9886**	**614.2756**	**681.8776062**	**734.0858**
-0.3	**-132.896**	**-94.4424**	**-117.521173**	**-110.964**	**-101.349**	**-76.41677387**	**-103.672**	**-117.251**	**-130.7133064**	**-144.04**
+0.3	**733.8212**	**546.951**	**606.7307248**	**539.0376**	**489.2454**	**445.6545909**	**606.1004**	**674.9994**	**742.0833444**	**806.9306**
-0.35	**-155.045**	**-110.183**	**-137.1080351**	**-129.458**	**-118.24**	**-89.15290285**	**-120.95**	**-136.793**	**-152.4988574**	**-168.046**
+0.35	**775.4657**	**577.3876**	**627.8416647**	**557.3553**	**508.5888**	**465.6167067**	**642.3634**	**712.6552**	**784.7345811**	**851.5962**
-0.4	**-177.195**	**-125.923**	**-156.6948973**	**-147.951**	**-135.132**	**-101.8890318**	**-138.229**	**-156.335**	**-174.2844085**	**-192.053**
+0.4	**792.6358**	**592.0319**	**626.9175577**	**572.693**	**523.2073**	**471.80322**	**659.168**	**728.496**	**807.0077425**	**872.4443**
-0.45	**-199.344**	**-141.664**	**-176.2817594**	**-166.445**	**-152.023**	**-114.6251608**	**-155.507**	**-175.877**	**-196.0699596**	**-216.06**
+0.45	**786.2134**	**589.8875**	**613.5876832**	**578.4587**	**528.3153**	**465.1287268**	**657.636**	**724.1168**	**805.7704591**	**876.1151**
-0.5	**-221.493**	**-157.404**	**-195.8686216**	**-184.939**	**-168.915**	**-127.3612898**	**-172.786**	**-195.419**	**-217.8555106**	**-240.066**
+0.5	**775.9913**	**579.5119**	**599.5788261**	**560.9503**	**513.4744**	**460.1543036**	**645.9836**	**712.238**	**790.3183634**	**857.1589**
-0.55	**-243.643**	**-173.144**	**-215.4554838**	**-203.433**	**-185.806**	**-140.0974188**	**-190.064**	**-214.96**	**-239.6410617**	**-264.073**
+0.55	**748.5139**	**557.0943**	**589.1032814**	**537.6108**	**491.8494**	**446.4367294**	**620.1356**	**685.9565**	**757.9868134**	**818.2582**
-0.6	**-265.792**	**-188.885**	**-235.0423459**	**-221.927**	**-202.698**	**-152.8335477**	**-207.343**	**-234.502**	**-261.4266128**	**-288.079**
+0.6	**699.2943**	**519.9192**	**562.0872191**	**501.2524**	**457.6803**	**420.1964958**	**578.4822**	**641.2306**	**705.391048**	**765.4069**
-0.65	**-287.941**	**-204.625**	**-254.6292081**	**-240.421**	**-219.589**	**-165.5696767**	**-224.622**	**-254.044**	**-283.2121638**	**-312.086**
+0.65	**630.3126**	**469.401**	**515.6757597**	**455.9051**	**414.7174**	**382.4946777**	**522.5694**	**579.7852**	**634.5206186**	**691.1143**
-0.7	**-310.091**	**-220.366**	**-274.2160702**	**-258.915**	**-236.481**	**-178.3058057**	**-241.9**	**-273.586**	**-304.9977149**	**-336.093**
+0.7	**545.5085**	**409.9612**	**447.9738222**	**396.7633**	**358.6325**	**334.5009112**	**454.0894**	**503.3226**	**552.0120948**	**597.7077**
-0.75	**-332.24**	**-236.106**	**-293.8029324**	**-277.409**	**-253.372**	**-191.0419347**	**-259.179**	**-293.128**	**-326.7832659**	**-360.099**
+0.75	**447.943**	**339.5635**	**361.0300904**	**321.0402**	**287.7721**	**277.4929272**	**374.8805**	**413.9003**	**453.8904871**	**487.7241**
-0.8	**-354.39**	**-251.846**	**-313.3897946**	**-295.903**	**-270.264**	**-203.7780637**	**-276.457**	**-312.67**	**-348.568817**	**-384.106**
+0.8	**335.1353**	**259.3866**	**259.261394**	**225.4142**	**199.3583**	**212.8565625**	**286.9271**	**313.7434**	**342.5018697**	**363.9103**
-0.85	**-376.539**	**-267.587**	**-332.9766567**	**-314.397**	**-307.779**	**-216.5141926**	**-293.736**	**-332.212**	**-370.3543681**	**-408.113**
+0.85	**214.3255**	**171.2777**	**165.1274884**	**135.6798**	**116.8922**	**142.0859644**	**192.3598**	**205.3834**	**220.4371623**	**229.2415**
-0.9	**-398.688**	**-283.327**	**-352.5635189**	**-332.891**	**-393.175**	**-229.2503216**	**-311.015**	**-351.753**	**-392.1399191**	**-432.119**
+0.9	**115.601**	**99.97463**	**99.70190503**	**79.27283**	**65.57953**	**79.46546967**	**108.0254**	**108.1177**	**114.3466186**	**114.3159**
-0.95	**-420.838**	**-299.068**	**-372.1503811**	**-351.385**	**-510.157**	**-241.9864506**	**-328.293**	**-371.295**	**-413.9254702**	**-456.126**
+0.95	**57.17505**	**33.50621**	**33.40133873**	**28.52752**	**22.63817**	**39.2041268**	**32.38544**	**32.30091**	**32.38821493**	**32.43471**
-1	**-442.991**	**-314.808**	**-391.7372379**	**-404.049**	**-640.287**	**-254.722649**	**-345.572**	**-390.837**	**-435.7110178**	**-480.132**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-442.991**	**-314.808**	**-391.7372379**	**-404.049**	**-640.287**	**-254.722649**	**-345.572**	**-390.837**	**-435.7110178**	**-480.132**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-420.842**	**-299.068**	**-372.1501945**	**-351.385**	**-510.157**	**-241.9865165**	**-328.293**	**-371.295**	**-413.9254671**	**-456.126**
+2.05	**57.17505**	**33.48366**	**33.40515021**	**28.51835**	**22.63339**	**39.18812341**	**32.36354**	**32.32386**	**32.36717404**	**32.43863**
-2.1	**-398.692**	**-283.327**	**-352.5633419**	**-332.891**	**-393.175**	**-229.250384**	**-311.014**	**-351.754**	**-392.1399164**	**-432.119**
+2.1	**115.6011**	**99.98072**	**99.70725778**	**79.27676**	**65.58163**	**79.46834797**	**108.0376**	**108.1379**	**114.3547583**	**114.3239**
-2.15	**-376.543**	**-267.587**	**-332.9764893**	**-314.397**	**-307.779**	**-216.5142515**	**-293.736**	**-332.212**	**-370.3543657**	**-408.112**
+2.15	**214.8865**	**171.2813**	**165.1098527**	**135.6816**	**116.8839**	**142.1013008**	**192.3559**	**205.4024**	**220.4419844**	**229.2537**
-2.2	**-354.393**	**-251.847**	**-313.3896367**	**-295.903**	**-270.264**	**-203.7781189**	**-276.457**	**-312.67**	**-348.568815**	**-384.106**
+2.2	**335.6698**	**259.3905**	**259.2638503**	**225.4115**	**199.3569**	**212.8721125**	**286.924**	**313.7377**	**342.5070285**	**363.9211**
-2.25	**-332.243**	**-236.106**	**-293.802784**	**-277.409**	**-253.372**	**-191.0419864**	**-259.179**	**-293.128**	**-326.7832643**	**-360.099**

+2.25	448.4492	339.5669	361.0276637	321.0351	287.7629	277.5081926	374.8775	413.8945	453.895234	487.7347
-2.3	-310.094	-220.366	-274.2159314	-258.915	-236.481	-178.3058539	-241.9	-273.586	-304.9977135	-336.093
+2.3	545.9619	409.9637	447.969288	396.7574	358.6385	334.5154244	454.0858	503.3159	552.0155855	597.7173
-2.35	-287.944	-204.625	-254.6290788	-240.421	-219.589	-165.5697214	-224.621	-254.044	-283.2121628	-312.086
+2.35	630.9328	469.3997	515.6684156	455.8965	414.7221	382.5078879	522.5646	579.7769	634.5190833	691.1219
-2.4	-265.795	-188.885	-235.0422262	-221.927	-202.698	-152.8335888	-207.343	-234.502	-261.4266121	-288.079
+2.4	699.8376	519.916	562.0764943	501.2603	457.6765	420.2079499	578.4755	641.22	705.3872161	765.4116
-2.45	-243.645	-173.144	-215.4553735	-203.433	-185.806	-140.0974563	-190.064	-214.961	-239.6410614	-264.073
+2.45	748.9601	557.0889	589.1147598	537.6215	491.8445	446.4461369	620.1265	685.9689	757.9800519	818.2595
-2.5	-221.496	-157.404	-195.8685209	-184.939	-168.915	-127.3613238	-172.786	-195.419	-217.8555107	-240.066
+2.5	776.3217	579.5038	599.5862366	560.9636	513.4708	460.1612429	645.9715	712.2469	790.3079863	857.1541
-2.55	-199.346	-141.664	-176.2816683	-166.445	-152.023	-114.6251913	-155.507	-175.877	-196.06996	-216.06
+2.55	785.9343	589.8971	613.5996606	578.4688	528.3101	465.1231279	657.65	724.1097	805.7828016	876.1218
-2.6	-177.197	-125.923	-156.6948157	-147.951	-135.132	-101.8890587	-138.229	-156.335	-174.2844092	-192.053
+2.6	792.2358	592.0385	626.9319743	572.6996	523.2002	471.7952783	659.1786	728.4853	807.0159663	872.4463
-2.65	-155.047	-110.183	-137.1079631	-129.457	-118.24	-89.15292621	-120.95	-136.793	-152.4988585	-168.046
+2.65	774.9288	577.3908	627.8527138	557.3604	508.5835	465.6060889	642.3702	712.6663	784.738195	851.5919
-2.7	-132.897	-94.4424	-117.5211104	-110.964	-101.349	-76.41679369	-103.671	-117.251	-130.7133078	-144.04
+2.7	733.453	546.9498	606.7378385	539.0462	489.2406	445.640946	606.1031	675.0059	742.0810445	806.9209
-2.75	-110.748	-78.702	-97.93425781	-92.4696	-84.4575	-63.68066116	-86.3929	-97.7093	-108.9277571	-120.033
+2.75	680.8462	505.149	561.8193051	505.6152	456.1537	411.093524	553.9864	614.2773	681.8701633	734.0952
-2.8	-88.5983	-62.9616	-78.34740518	-73.9757	-67.566	-50.94452864	-69.1143	-78.1675	-87.14220638	-96.0264
+2.8	601.9528	444.4097	497.7959623	449.462	403.4114	361.2654601	486.9887	538.4221	595.2130171	631.9337
-2.85	-66.4487	-47.2212	-58.76055256	-55.4818	-50.6745	-38.20839611	-51.8357	-58.6256	-65.35665567	-72.0198
+2.85	495.3267	363.9736	414.4904495	372.84	333.2446	295.5667735	398.5739	441.7248	481.6523949	507.0912
-2.9	-44.2991	-31.4808	-39.17369994	-36.9879	-33.783	-25.47226359	-34.5572	-39.0837	-43.57110495	-48.0132
+2.9	359.9652	263.2172	304.4327031	276.8711	246.2402	213.8341998	288.0873	319.9568	340.0257302	359.5704
-2.95	-22.1496	-15.7404	-19.58684732	-18.4939	-16.8915	-12.73613106	-17.2786	-19.5419	-21.78555424	-24.0066
+2.95	195.0606	142.1588	166.7509528	153.2784	135.5024	115.4072629	155.3741	172.8974	183.6051018	193.2308
-3	-9.28E-14	-4.5E-14	-4.6411E-14	-4.6E-14	-4.32E-14	-3.61749E-14	-4.7E-14	-4.6E-14	-4.61075E-14	-5.2E-14
+3	1.13E-13	6.22E-14	6.08039E-14	5.57E-14	7.19E-14	5.16865E-14	6.02E-14	6.58E-14	6.39005E-14	6.28E-14

2-Span: Moment (Max and Min) Raw Data Results - 70' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-9.99E-14	-5.6E-14	-6E-14	-5E-14	-6.1E-14	-5.3E-14	-5.6E-14	-3.97178E-14
End Shear	1.24E-13	6.34E-14	6.34E-14	5.15E-14	5.18E-14	5.06E-14	5.33E-14	5.54024E-14
-0.05	-22.1493	-21.0219	-22.5436	-21.2314	-25.5866	-22.7852	-24.0738	-10.69061094
+0.05	194.867	192.6762	204.4446	190.9252	225.0033	189.388	199.8508	99.56354383
-0.1	-44.2987	-42.0439	-45.0873	-42.4628	-51.1731	-45.5704	-48.1477	-21.38122189
+0.1	359.5827	357.8267	379.4425	354.2102	416.9722	345.1593	364.1459	184.3447049
-0.15	-66.448	-63.0658	-67.6309	-63.6942	-76.7597	-68.3557	-72.2215	-32.07183283
+0.15	494.7617	496.0955	525.4732	490.1926	575.7707	469.2455	494.9493	254.5988251
-0.2	-88.5974	-84.0877	-90.1746	-84.9256	-102.346	-91.1409	-96.2953	-42.76244377
+0.2	601.7194	607.5524	642.7527	599.1383	702.0646	564.0429	594.8688	310.6767887
-0.25	-110.747	-105.11	-112.718	-106.157	-127.933	-113.926	-120.369	-53.45305472
+0.25	681.1562	692.9311	732.1004	681.8376	808.9467	648.9942	685.4654	353.0248227
-0.3	-132.896	-126.132	-135.262	-127.388	-153.519	-136.711	-144.443	-64.14366566
+0.3	733.8212	753.1413	794.5248	749.3901	888.5854	704.1414	744.4643	382.2042295
-0.35	-155.045	-147.154	-157.806	-148.62	-179.106	-159.497	-168.517	-74.8342766
+0.35	775.4657	791.9007	840.6424	794.4201	938.6954	741.4648	783.3563	399.1222861
-0.4	-177.195	-168.175	-180.349	-169.851	-204.693	-182.282	-192.591	-85.52488754
+0.4	792.6358	815.9691	864.4254	815.5743	960.5497	754.0854	797.2645	404.1812189
-0.45	-199.344	-189.197	-202.893	-191.083	-230.279	-205.067	-216.665	-96.21549849
+0.45	786.2134	817.488	864.1722	814.3083	955.547	741.1474	784.054	398.2039431
-0.5	-221.493	-210.219	-225.436	-212.314	-255.866	-227.852	-240.738	-106.9061094
+0.5	775.9913	801.4564	848.2227	799.6397	940.3097	723.673	765.3985	392.9439341
-0.55	-243.643	-231.241	-247.98	-233.545	-281.452	-250.637	-264.812	-117.5967204
+0.55	748.5139	766.819	812.7351	767.1946	904.4339	708.7013	749.2112	383.0556716
-0.6	-265.792	-252.263	-270.524	-254.777	-307.039	-273.423	-288.886	-128.2873313
+0.6	699.2943	713.677	757.0338	715.5549	844.7621	667.2515	705.0029	362.0744443
-0.65	-287.941	-273.285	-293.067	-276.008	-332.625	-296.208	-312.96	-138.9779423
+0.65	630.3126	647.8863	683.1525	646.5784	763.5467	601.1144	634.8039	330.9139709
-0.7	-310.091	-294.307	-315.611	-297.24	-358.212	-318.993	-337.034	-149.6685532
+0.7	545.5085	567.4457	596.15	562.3436	663.2573	519.4845	549.0267	290.5834758
-0.75	-332.24	-315.329	-338.155	-318.471	-383.798	-341.778	-361.108	-160.3591641
+0.75	447.943	472.9217	495.1297	465.1074	546.5796	416.8082	440.1851	242.1876209
-0.8	-354.39	-336.351	-360.698	-339.702	-409.385	-364.564	-385.181	-171.0497751
+0.8	335.1353	366.6158	381.0401	357.3051	416.4161	294.9173	311.0961	186.9264817
-0.85	-376.539	-357.373	-383.242	-360.934	-434.972	-387.349	-409.255	-181.740386
+0.85	214.3255	251.0052	256.52	241.5911	275.8853	188.2577	198.7419	126.0955601
-0.9	-398.688	-378.395	-405.786	-382.165	-460.558	-410.134	-433.329	-192.430997
+0.9	115.601	141.9736	141.9736	133.6642	142.2629	107.9299	113.6104	82.46646483
-0.95	-420.838	-399.417	-428.329	-403.397	-486.145	-432.919	-457.403	-203.1216079
+0.95	57.17505	47.70359	47.70359	38.10051	38.13823	36.18187	38.08618	40.38467612
-1	-442.991	-420.439	-450.873	-424.628	-511.731	-455.704	-481.477	-213.8122769
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-442.991	-420.439	-450.873	-424.628	-511.731	-455.704	-481.477	-213.8122769
+2	0	0	0	0	0	0	0	0
-2.05	-420.842	-399.417	-428.329	-403.397	-486.144	-432.919	-457.403	-203.1216632
+2.05	57.17505	47.69025	47.69025	38.07475	38.14315	36.16039	38.06356	40.15169523
-2.1	-398.692	-378.395	-405.786	-382.165	-460.558	-410.134	-433.329	-192.4310494
+2.1	115.6011	141.9824	141.9824	133.6821	142.2856	107.9357	113.6165	82.03666404
-2.15	-376.543	-357.373	-383.242	-360.934	-434.971	-387.348	-409.255	-181.7404357
+2.15	214.8865	251.0109	256.5241	241.6154	275.9037	188.2621	198.7464	126.0901032
-2.2	-354.393	-336.351	-360.699	-339.703	-409.385	-364.563	-385.181	-171.049822
+2.2	335.6698	366.6221	381.0449	357.2998	416.4356	294.9251	311.1046	186.9210799
-2.25	-332.243	-315.329	-338.155	-318.471	-383.798	-341.778	-361.107	-160.3592083

+2.25	448.4492	472.9279	495.1341	465.1022	546.5993	416.8146	440.1922	242.1820956
-2.3	-310.094	-294.307	-315.611	-297.24	-358.212	-318.993	-337.034	-149.6685945
+2.3	545.9619	567.4508	596.1531	562.3378	663.2759	519.4886	549.0314	290.5777739
-2.35	-287.944	-273.285	-293.068	-276.008	-332.625	-296.208	-312.96	-138.9779808
+2.35	630.9328	647.8895	683.1501	646.5711	763.5633	601.1126	634.8053	330.9078011
-2.4	-265.795	-252.263	-270.524	-254.777	-307.039	-273.422	-288.886	-128.2873671
+2.4	699.8376	713.675	757.0291	715.5452	844.7758	667.2464	704.9979	362.0678101
-2.45	-243.645	-231.241	-247.98	-233.546	-281.452	-250.637	-264.812	-117.5967534
+2.45	748.9601	766.8142	812.7272	767.1821	904.4441	708.6923	749.202	383.0483992
-2.5	-221.496	-210.219	-225.437	-212.314	-255.866	-227.852	-240.738	-106.9061397
+2.5	776.3217	801.4482	848.2111	799.6547	940.3154	723.6852	765.4116	392.9359485
-2.55	-199.346	-189.197	-202.893	-191.083	-230.279	-205.067	-216.664	-96.21552594
+2.55	785.9343	817.4987	864.1864	814.2956	955.5441	741.1601	784.0671	398.2003057
-2.6	-177.197	-168.175	-180.349	-169.851	-204.692	-182.282	-192.591	-85.52491222
+2.6	792.2358	815.9755	864.4351	815.5886	960.542	754.0944	797.2736	404.1769858
-2.65	-155.047	-147.153	-157.806	-148.62	-179.106	-159.496	-168.517	-74.8342985
+2.65	774.9288	791.9024	840.6471	794.4298	938.6822	741.4692	783.3605	399.1172845
-2.7	-132.897	-126.132	-135.262	-127.388	-153.519	-136.711	-144.443	-64.14368478
+2.7	733.453	753.1369	794.523	749.3947	888.5973	704.1397	744.4621	382.19836
-2.75	-110.748	-105.11	-112.718	-106.157	-127.933	-113.926	-120.369	-53.45307106
+2.75	680.8462	692.9214	732.0929	681.8362	808.9522	648.9874	685.4577	353.0300185
-2.8	-88.5983	-84.0877	-90.1746	-84.9256	-102.346	-91.1408	-96.2953	-42.76245733
+2.8	601.9528	607.5371	642.7393	599.1315	702.0627	564.0304	594.8552	310.6810133
-2.85	-66.4487	-63.0658	-67.631	-63.6942	-76.7596	-68.3556	-72.2215	-32.07184361
+2.85	495.3267	496.0743	525.4535	490.1799	575.7617	469.2386	494.9421	254.6021121
-2.9	-44.2991	-42.0438	-45.0873	-42.4628	-51.1731	-45.5704	-48.1477	-21.38122989
+2.9	359.9652	357.7993	379.4161	354.1913	416.9559	345.1723	364.1596	184.3468824
-2.95	-22.1496	-21.0219	-22.5437	-21.2314	-25.5865	-22.7852	-24.0738	-10.69061617
+2.95	195.0606	192.6826	204.4514	190.9315	225.0109	189.3946	199.8578	99.56463164
-3	-9.28E-14	-6.3E-14	-6.3E-14	-5.6E-14	-6.2E-14	-5.4E-14	-5.7E-14	-3.93382E-14
+3	1.13E-13	9.55E-14	9.93E-14	7.08E-14	7.08E-14	6.24E-14	7.86E-14	5.38018E-14

2-Span: Moment (Max and Min) Raw Data Results - 70' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-9.99E-14	-8E-14	-1.1E-13	-6E-14	-6.2E-14	-6.1E-14
End Shear	1.24E-13	9.77E-14	6.96E-14	6.39E-14	6.52E-14	5.36E-14
-0.05	-22.1493	-38.7956	-41.603	-25.3625	-31.2411	-32.6863
+0.05	194.867	301.3698	306.8736	212.5937	258.2584	265.526
-0.1	-44.2987	-77.5912	-83.206	-50.725	-62.4821	-65.3726
+0.1	359.5827	544.2637	550.3073	386.4123	470.2378	481.8183
-0.15	-66.448	-116.387	-124.809	-76.0874	-93.7232	-98.0589
+0.15	494.7617	750.5926	764.9717	523.5949	637.8789	654.4818
-0.2	-88.5974	-155.182	-166.412	-101.45	-124.964	-130.745
+0.2	601.7194	911.8921	945.6641	639.4656	782.9575	801.0103
-0.25	-110.747	-193.978	-208.015	-126.812	-156.205	-163.432
+0.25	681.1562	1021.331	1102.19	731.6011	886.5295	914.8182
-0.3	-132.896	-232.773	-249.618	-152.175	-187.446	-196.118
+0.3	733.8212	1117.208	1203.858	789.8198	950.6551	997.9126
-0.35	-155.045	-271.569	-291.221	-177.537	-218.687	-228.804
+0.35	775.4657	1174.304	1282.434	825.9868	984.1869	1039.762
-0.4	-177.195	-310.365	-332.824	-202.9	-249.928	-261.49
+0.4	792.6358	1215.986	1307.875	835.9144	991.0965	1046.318
-0.45	-199.344	-349.16	-374.427	-228.262	-281.169	-294.177
+0.45	786.2134	1222.376	1307.18	817.1923	964.0791	1028.322
-0.5	-221.493	-387.956	-416.03	-253.625	-312.411	-326.863
+0.5	775.9913	1193.802	1288.318	787.5575	933.2942	994.3288
-0.55	-243.643	-426.751	-457.633	-278.987	-343.652	-359.549
+0.55	748.5139	1149.505	1218.291	780.7801	923.4866	978.5293
-0.6	-265.792	-465.547	-499.236	-304.35	-374.893	-392.236
+0.6	699.2943	1059.2	1146.492	741.9819	879.2923	931.3392
-0.65	-287.941	-504.343	-540.839	-329.712	-406.134	-424.922
+0.65	630.3126	949.8893	1031.331	673.7199	806.3142	851.618
-0.7	-310.091	-543.138	-582.442	-355.075	-437.375	-457.608
+0.7	545.5085	807.4351	869.8787	587.5662	704.3344	734.7566
-0.75	-332.24	-581.934	-624.045	-380.437	-468.616	-490.295
+0.75	447.943	639.9526	683.2309	474.6489	569.4183	584.5026
-0.8	-354.39	-620.729	-665.648	-405.8	-499.857	-522.981
+0.8	335.1353	443.9752	453.3284	337.9712	405.1082	405.9767
-0.85	-376.539	-659.525	-707.251	-431.162	-531.098	-555.667
+0.85	214.3255	256.5253	251.3507	224.2259	250.6051	263.5447
-0.9	-398.688	-698.32	-748.854	-456.525	-562.339	-588.354
+0.9	115.601	139.7415	129.8407	127.8005	142.2186	142.3284
-0.95	-420.838	-737.116	-790.457	-481.887	-593.58	-621.04
+0.95	57.17505	36.94409	40.30021	42.78561	45.63798	38.06732
-1	-442.991	-799.104	-893.396	-534.439	-624.821	-684.055
+1	0	0	0	0	0	0
(Span 2) -2	-442.991	-799.104	-893.396	-534.439	-624.821	-684.055
+2	0	0	0	0	0	0
-2.05	-420.842	-737.116	-790.457	-481.887	-593.58	-621.04
+2.05	57.17505	37.06112	40.29802	42.7904	45.64309	38.05528
-2.1	-398.692	-698.321	-748.854	-456.525	-562.339	-588.353
+2.1	115.6011	139.735	129.8398	127.7774	142.2118	142.3217
-2.15	-376.543	-659.525	-707.251	-431.162	-531.098	-555.667
+2.15	214.8865	256.5164	251.3493	224.231	250.6002	263.563
-2.2	-354.393	-620.729	-665.648	-405.8	-499.857	-522.981
+2.2	335.6698	443.9607	453.3306	337.9816	405.124	405.9919
-2.25	-332.243	-581.934	-624.045	-380.437	-468.616	-490.294

+2.25	448.4492	639.9589	683.2325	474.6573	569.4315	584.4954
-2.3	-310.094	-543.138	-582.442	-355.075	-437.374	-457.608
+2.3	545.9619	807.4499	869.8795	587.5717	704.3437	734.7718
-2.35	-287.944	-504.343	-540.839	-329.712	-406.133	-424.922
+2.35	630.9328	949.8986	1031.33	673.7216	806.3188	851.6287
-2.4	-265.795	-465.547	-499.236	-304.35	-374.892	-392.236
+2.4	699.8376	1059.193	1146.489	741.9765	879.2882	931.3442
-2.45	-243.645	-426.751	-457.633	-278.987	-343.651	-359.549
+2.45	748.9601	1149.518	1218.291	780.7697	923.4765	978.5251
-2.5	-221.496	-387.956	-416.03	-253.625	-312.41	-326.863
+2.5	776.3217	1193.808	1288.316	787.5718	933.2835	994.3178
-2.55	-199.346	-349.16	-374.427	-228.262	-281.169	-294.177
+2.55	785.9343	1222.367	1307.951	817.2055	964.093	1028.33
-2.6	-177.197	-310.365	-332.824	-202.9	-249.928	-261.49
+2.6	792.2358	1215.969	1307.873	835.9237	991.1057	1046.321
-2.65	-155.047	-271.569	-291.221	-177.537	-218.687	-228.804
+2.65	774.9288	1174.298	1282.621	825.9912	984.1905	1039.756
-2.7	-132.897	-232.774	-249.618	-152.175	-187.446	-196.118
+2.7	733.453	1117.22	1203.859	789.8172	950.6504	997.9261
-2.75	-110.748	-193.978	-208.015	-126.812	-156.205	-163.431
+2.75	680.8462	1021.333	1102.188	731.5929	886.5449	914.8243
-2.8	-88.5983	-155.182	-166.412	-101.45	-124.964	-130.745
+2.8	601.9528	911.9087	945.6607	639.4808	782.9655	801.0202
-2.85	-66.4487	-116.387	-124.809	-76.0874	-93.7231	-98.0589
+2.85	495.3267	750.5996	764.9696	523.5862	637.8781	654.4834
-2.9	-44.2991	-77.5912	-83.2059	-50.725	-62.4821	-65.3726
+2.9	359.9652	544.2596	550.3995	386.4269	470.2286	481.8104
-2.95	-22.1496	-38.7956	-41.603	-25.3625	-31.241	-32.6863
+2.95	195.0606	301.3809	306.8755	212.6013	258.2675	265.5355
-3	-9.28E-14	-9E-14	-9.1E-14	-6.6E-14	-6.5E-14	-7.1E-14
+3	1.13E-13	9.05E-14	9.89E-14	7.93E-14	8.52E-14	7.74E-14

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-20.58842595	-16.61393575	-18.529626	-11.69290155	-12.55213535	-11.82407991	-14.26976371	-13.28555994	-14.0448	-6.029045037
End Shear	183.0704221	152.2993887	165.6327585	115.6536142	123.0613952	115.1159432	136.3999488	119.9489327	126.6619	60.15790802
-0.05	-20.7101785	-16.7356883	-22.28260149	-11.69290155	-12.55213535	-11.82407991	-14.26976371	-13.28555994	-14.0448	-6.029045037
+0.05	168.0505522	140.3135143	151.6378606	107.5373179	114.3315614	106.9058241	126.4726258	109.9793744	116.1133	55.8743763
-0.1	-21.17955729	-17.20506709	-27.38134419	-11.69290155	-12.55213535	-11.82407991	-14.26976371	-13.28555994	-14.0448	-6.029045037
+0.1	152.1242167	127.6756424	137.2743525	98.91286332	105.0608973	98.17456835	115.9273044	99.35975718	104.8785	51.26572306
-0.15	-21.78715426	-23.81347249	-31.54816251	-14.1498233	-14.1498233	-12.77452369	-14.26976371	-13.28555994	-14.0448	-7.893353741
+0.15	140.0927418	118.1315637	126.4223128	92.26679502	97.92103464	91.45267947	107.8176852	91.26858892	96.31966	47.72073857
-0.2	-28.45117965	-32.92835264	-39.22899885	-21.2283009	-21.3712329	-19.9728215	-21.40095782	-15.9835197	-16.8389	-10.94575594
+0.2	125.2758795	106.2515299	112.9128534	83.82952583	88.86238355	82.92768108	97.54436983	81.11921728	85.58524	43.22899864
-0.25	-37.51158839	-40.19760907	-47.40037142	-27.91924786	-28.58473131	-26.04522936	-28.44287967	-20.82022087	-21.9852	-13.29356587
+0.25	114.0244016	97.33199588	102.7726007	77.37110063	81.93270937	76.40892272	89.69807926	73.44885267	77.47398	39.79775197
-0.3	-49.37331838	-49.74481929	-58.09704498	-36.43270638	-37.7683958	-34.71436573	-38.98150965	-26.9720741	-28.5314	-17.4032226
+0.3	100.1162547	86.29807689	90.23756486	69.2291614	73.20253533	68.20000284	79.82988753	63.91130825	67.38993	35.48157138
-0.35	-58.73680072	-57.30437457	-66.53986918	-42.96476024	-44.81889022	-41.37243716	-47.08424301	-31.6903346	-33.5526	-20.9363101
+0.35	89.75620889	78.06873017	80.90000458	63.04250539	66.57364671	61.96980066	72.35047051	56.77186668	59.84282	32.2096924
-0.4	-72.04694296	-67.16370473	-78.55830218	-51.21984425	-53.73473429	-49.79545582	-57.34654608	-37.66627832	-39.8963	-25.40904058
+0.4	77.05585374	67.96140797	69.45276723	55.3040518	58.28842457	54.18679536	63.02053655	47.98773635	50.55905	28.12773519
-0.45	-82.60292245	-74.91703432	-88.07455797	-57.50888506	-60.53163353	-56.21939182	-65.18258813	-45.25449651	-47.6363	-28.82260323
+0.45	67.68171101	60.4818116	61.00333877	49.47327527	52.05090233	48.33057146	56.01153637	41.48935729	43.6927	25.06083999
-0.5	-96.22688625	-84.96047545	-100.3548282	-65.39745124	-69.06319507	-64.28646377	-75.03543847	-54.85907927	-57.7464	-33.11232858
+0.5	56.30672697	51.37378048	50.75025158	42.24645729	44.3271014	41.08331123	47.35298838	33.76310975	35.54012	21.27176297
-0.55	-106.8301521	-92.80498032	-109.9108134	-71.35935714	-75.5159068	-70.39083893	-82.50124333	-62.83258274	-66.1773	-36.36074001
+0.55	48.00689941	44.69743794	43.26894706	36.8556804	38.57153629	35.68649042	40.91794935	28.34628086	29.83819	18.45547516
-0.6	-120.4237933	-102.8967328	-122.1596782	-78.77325169	-83.5467124	-77.99213322	-91.81151226	-73.24891454	-77.2125	-40.40880266
+0.6	38.06706182	36.65359329	34.30934484	30.24865171	31.52562951	29.08480755	33.06391683	22.35180897	23.66241	15.01794051
-0.65	-130.9311488	-110.7237559	-131.6257686	-84.3239077	-89.56465093	-83.691524	-98.80353643	-81.15610152	-85.5906	-43.44644226
+0.65	30.93016882	30.82794213	27.87069372	25.38199028	26.3426079	24.23280809	27.30637687	18.80492195	19.89555	12.4978793
-0.7	-144.3064542	-120.720217	-143.6678492	-91.1549779	-96.97822859	-90.71720848	-107.4380941	-91.03566115	-96.0601	-47.19418419
+0.7	23.00348898	23.90537718	20.72725753	19.50289593	20.09105951	18.3865371	20.38999268	14.51582314	15.34151	9.470535022
-0.75	-154.5686363	-128.4150383	-152.7392461	-96.21026903	-102.4708087	-95.92619189	-113.8527944	-98.47029694	-103.94	-49.97542964
+0.75	17.39880976	18.97178822	15.67654763	15.24447202	15.57117424	14.16478881	15.41350297	11.40536586	12.03983	7.434628241
-0.8	-167.529797	-138.1648107	-163.8679061	-102.3503631	-109.150687	-102.2664367	-121.6785139	-107.6714995	-113.694	-53.36419269
+0.8	10.93279361	13.21980955	9.849945289	10.20146837	10.23046019	9.530477566	10.14575984	7.716525561	8.125524	5.447909913
-0.85	-177.3914744	-145.6066432	-172.0978888	-106.8261707	-114.0273193	-106.8995928	-127.4123511	-114.5234571	-120.958	-55.84342168
+0.85	7.394225569	9.213599238	6.654803001	7.148695979	7.148695979	6.445329722	6.755406433	5.437127635	5.723292	4.019944574
-0.9	-189.7348769	-154.9505284	-182.1173385	-112.1671428	-119.8570337	-112.4445615	-134.2960971	-122.9047184	-129.847	-58.81455043
+0.9	4.201561283	4.673692683	3.781405151	3.693877612	3.693877612	2.81432678	2.951096965	2.688884032	2.830404	2.344779709
-0.95	-199.0346704	-162.0125218	-189.4619864	-115.9793444	-124.0271247	-116.4164607	-139.24552	-129.0638963	-136.38	-60.94613737
+0.95	2.067044626	1.626565139	1.860340162	1.294371103	1.294371103	0.971291846	1.033589035	0.977984255	1.029457	1.174102514
-1	-210.5489198	-170.7835399	-198.3122477	-120.4130384	-128.8901994	-121.0563285	-145.0541719	-136.4836296	-144.252	-63.44097157
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.09E+02	1.70E+02	197.2219441	1.20E+02	1.28E+02	120.5662986	144.4390183	1.36E+02	1.43E+02	6.32E+01
-2.05	-1.79E+00	-1.41E+00	-1.608272642	-1.12E+00	-1.12E+00	-0.89260633	-0.897134212	-8.48E-01	-8.93E-01	-1.01E+00
+2.05	2.00E+02	1.63E+02	1.90E+02	116.4970008	124.5940983	1.17E+02	1.40E+02	1.30E+02	137.2823	6.12E+01
-2.1	-4.53E+00	-5.15E+00	-4.078243415	-4.058151995	-4.058151995	-3.226177412	-3.242457206	-3.066427373	-3.22782	-2.513825031
+2.1	1.88E+02	1.54E+02	1.81E+02	111.5959881	119.2329737	1.12E+02	1.34E+02	1.22E+02	128.883	5.85E+01
-2.15	-7.01E+00	-8.68E+00	-6.313099304	-6.745662282	-6.745662282	-6.027324542	-6.296464805	-5.130552801	-5.40058	-3.816171912
+2.15	178.7116014	146.6564306	173.1478979	107.4413435	114.6981549	107.5373099	128.2027451	115.4768033	121.9693	56.18553572
-2.2	-11.59900854	-13.82733097	-10.45971991	-10.73838253	-10.79833279	-9.993605558	-10.65511682	-8.109451191	-8.54238	-5.651065857
+2.2	166.0283856	137.0890621	162.5945577	101.6871574	108.4286572	101.5808279	120.831197	106.6677472	112.6295	52.99823694
-2.25	-16.62136353	-18.30138398	-14.99177944	-14.66126957	-14.9528161	-13.58760719	-14.73455299	-10.97894096	-11.5873	-7.195816371

+2.25	**155.9430539**	***129.5051486***	***153.9635969***	**96.91098344**	**103.2326104**	**96.64898717**	**114.7438764**	**99.51059781**	**105.0425**	**50.36227671**
-2.3	**-23.86627101**	***-24.64446813***	***-21.48520074***	**-20.13598746**	**-20.76366943**	**-19.01514112**	**-21.13238186**	**-14.97779049**	**-15.8319**	**-9.794876123**
+2.3	**142.7455828**	***119.6124863***	***142.3364074***	**90.41176592**	**96.17120011**	**89.95216835**	**106.4969483**	**89.95241446**	**94.91208**	**46.78667669**
-2.35	**-30.02636024**	***-30.02898235***	***-27.04149146***	**-24.70914867**	**-25.62656021**	**-23.56280182**	**-26.51247531**	**-18.31413633**	**-19.3744**	**-12.14973113**
+2.35	**132.3387595**	***111.8367623***	***132.5124628***	**85.09818465**	**90.40451873**	**84.48722373**	**99.7805498**	**82.2676737**	**86.7685**	**43.87152044**
-2.4	**-39.14351262**	***-37.5189599***	***-35.25205506***	**-30.96586177**	**-32.28999101**	**-29.80063761**	**-33.91448581**	**-22.87408795**	**-24.2171**	**-15.3895236**
+2.4	**118.8267549**	***101.7741018***	***120.3649659***	**77.96208471**	**82.66766388**	**77.15989714**	**90.79136778**	**72.10194654**	**75.99732**	**39.96627191**
-2.45	**-46.86842492**	***-43.77560059***	***-42.18238429***	**-36.10518323**	**-37.77070375**	**-34.93582345**	**-40.02383964**	**-27.5991484**	**-29.0517**	**-18.06342095**
+2.45	**108.2506834**	***93.92430004***	***110.858214***	**72.19521106**	**76.42093254**	**71.24727436**	**83.54943857**	**63.99969891**	**67.41366**	**36.8175227**
-2.5	**-57.52983166**	***-52.35925375***	***-51.74588061***	**-43.03574163**	**-45.1702434**	**-41.87413209**	**-48.29690656**	**-34.56311245**	**-36.3822**	**-21.68407719**
+2.5	**94.61609051**	***83.83914197***	***98.60365536***	**64.53038283**	**68.12510712**	**63.39928631**	**73.95114958**	**53.79879278**	**56.63031**	**32.64128442**
-2.55	**-66.36966434**	***-59.44361135***	***-59.67470844***	**-48.65711896**	**-51.17820453**	**-47.51141909**	**-55.03197668**	**-40.58846647**	**-42.7409**	**-24.63138567**
+2.55	**84.01703724**	***76.02696094***	***89.07844672***	**58.39434808**	**61.48892925**	**57.12437841**	**66.28719557**	**46.32801603**	**48.76633**	**29.30459209**
-2.6	**-78.41080762**	***-69.05996907***	***-70.47441652***	**-56.15335703**	**-59.19736657**	**-55.04036732**	**-64.04296785**	**-48.94293531**	**-51.5685**	**-28.57424926**
+2.6	**70.44390391**	***66.059022***	***76.88165608***	**50.30891562**	**52.75057417**	**48.86554821**	**56.21291395**	**36.99344112**	**39.19667**	**24.91600434**
-2.65	**-88.28056349**	***-76.921559***	***-79.32643432***	**-62.17264706**	**-65.64196065**	**-61.09434458**	**-71.30022625**	**-55.77571833**	**-58.7899**	**-31.7493567**
+2.65	**59.99344854**	***58.39008519***	***67.49694016***	**43.8878216**	**45.8155208**	**42.31383352**	**48.23054631**	**32.35719251**	**34.26228**	**21.43697524**
-2.7	**-101.588233**	***-87.50183262***	***-91.57555038***	**-70.1264271**	**-74.1642894**	**-69.10410384**	**-80.9160165**	**-64.95437147**	**-68.4927**	**-35.95576762**
+2.7	**47.95408538**	***48.67125711***	***56.67975659***	**35.48998955**	**36.75116452**	**33.75399076**	**37.81339873**	**26.29123588**	**27.80687**	**16.89473382**
-2.75	**-112.3968167**	***-96.0841421***	***-101.2911823***	**-76.45954862**	**-80.95496671**	**-75.4893067**	**-88.59187076**	**-72.37311025**	**-76.3365**	**-39.31303653**
+2.75	**38.7268973**	***41.24512737***	***48.38986982***	**28.86795607**	**29.60782617**	**27.01083784**	**29.616094**	**21.50613029**	**22.71502**	**13.62641319**
-2.8	**-126.8500716**	***-107.5517063***	***-114.2821151***	**-84.76272024**	**-89.86399216**	**-83.87004491**	**-98.67932979**	**-82.23436198**	**-86.7646**	**-43.72435156**
+2.8	**27.07781702**	***31.89949275***	***37.92484886***	**20.26581978**	**20.3338788**	**19.17362919**	**20.51223491**	**15.28790466**	**16.09877**	**10.6079877**
-2.85	**-138.5003062**	***-116.792123***	***-124.7531101***	**-91.32550331**	**-96.910109**	**-90.5011031**	**-106.6702994**	**-90.12895084**	**-95.1142**	**-47.21816929**
+2.85	**21.89121731**	***24.80969437***	***32.09912007***	**14.8893267**	**14.8893267**	**13.5745848**	**14.28704852**	**13.28555744**	**14.04477**	**8.233742739**
-2.9	**-153.9703127**	***-129.0626179***	***-138.8119779***	**-99.86994353**	**-106.089391**	**-99.14299071**	**-117.0963009**	**-100.5312162**	**-106.118**	**-51.77570347**
+2.9	**21.11006373**	***17.1355653***	***26.75906117***	**11.69289658**	**12.55213426**	**11.82407765**	**14.2697683**	**13.28555744**	**14.04477**	**6.029045728**
-2.95	**-166.3590233**	***-138.8924779***	***-149.932762***	**-106.578299**	**-113.3003896**	**-105.9344237**	**-125.2987737**	**-108.7915313**	**-114.857**	**-55.36044581**
+2.95	**20.74497402**	***16.77047558***	***22.80917526***	**11.69289658**	**12.55213426**	**11.82407765**	**14.2697683**	**13.28555744**	**14.04477**	**6.029045728**
-3	**-182.7091896**	***-151.873722***	***-165.6327585***	**-115.2557982**	**-122.633395**	**-114.7276298**	**-135.9301897**	**-119.5932253**	**-126.286**	**-60.00557111**
+3	**20.58843698**	***16.61393854***	***18.52962628***	**11.69289658**	**12.55213426**	**11.82407765**	**14.2697683**	**13.28555744**	**14.04477**	**6.029045728**

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.810674933	-11.42045197	-11.20847554	-9.841366651	-7.111452792	-9.634729802	-10.93527615	-12.20667518	-13.48965945
End Shear	85.96983309	105.0930902	99.82630765	85.10743449	69.62543677	93.76944934	104.9405666	112.4543195	119.7071399
-0.05	-8.810674933	-11.42045197	-11.20847554	-10.63036991	-7.111452792	-9.634729802	-10.93527615	-12.20667518	-13.48965945
+0.05	79.77557726	96.48627992	90.88307889	77.43652935	64.64312554	87.0582974	97.28276062	103.9352985	110.2963746
-0.1	-8.810674933	-11.42045197	-11.20847554	-13.33392014	-7.111452792	-9.634729802	-10.93527615	-12.20667518	-13.48965945
+0.1	73.18917992	87.31096623	81.36324124	69.10394431	59.35818747	79.92281112	89.13221405	94.86781235	100.2806503
-0.15	-9.962237123	-11.42045197	-11.20847554	-15.91134837	-7.535604824	-10.45329861	-10.93527615	-12.20667518	-13.48965945
+0.15	68.1222026	80.31478766	74.15736887	62.78371126	55.28995907	74.43066553	82.866582	87.91211479	92.61429614
-0.2	-14.64390157	-14.64892924	-11.65453611	-19.16721183	-11.50334609	-16.04860966	-16.9976669	-16.98320496	-16.96935201
+0.2	61.70090344	71.53168187	65.18255721	54.86463191	50.13107521	67.46689398	74.93237629	79.12365371	82.95016131
-0.25	-18.44851165	-18.25698665	-14.52499128	-21.42248289	-15.62554119	-20.88301485	-22.14773787	-22.13369	-22.12023096
+0.25	56.7946986	64.88796761	58.4524379	49.08258222	46.1867697	62.14324685	68.8751397	72.42997605	75.60745638
-0.3	-25.01546232	-22.83653314	-20.05820659	-24.1475647	-20.87604394	-27.97690197	-29.39354819	-29.34790222	-29.33192883
+0.3	50.62170968	56.61899607	50.15595609	41.99493434	41.22048444	55.44104321	61.26046596	64.03623686	66.42394773
-0.35	-30.06245393	-26.98455754	-24.51697579	-26.91912225	-24.90889509	-33.42631007	-35.67165859	-35.57432011	-35.55887455
+0.35	45.94099034	50.4225784	44.29124337	36.98927624	37.45186627	50.35578847	55.49188783	57.69455288	59.50524465
-0.4	-36.4518081	-34.28043514	-30.16881594	-32.05850399	-30.01125613	-40.32178638	-43.62579692	-43.88880976	-43.87154769
+0.4	40.09952026	42.78967265	37.34671582	31.0689098	32.74473576	44.00501879	48.29994161	49.8112331	50.93139901
-0.45	-41.32831125	-40.7668849	-34.63814754	-36.23554205	-33.90300669	-45.58193044	-49.70156277	-50.77708152	-51.06330522
+0.45	35.7090065	37.13540105	32.21697421	26.72575708	29.20355862	39.22804719	42.9002813	43.91153486	44.53706635
-0.5	-47.4568623	-48.96941006	-42.01315716	-43.35069631	-38.79067425	-52.1891359	-57.34394198	-59.46190491	-60.85933226
+0.5	30.28226309	30.40527619	26.00025003	21.49807091	24.82213833	33.31857248	36.23425545	36.65433203	36.70192076
-0.55	-52.09816278	-55.79540562	-48.64261006	-49.41176184	-42.48955632	-57.19012163	-63.1370948	-66.06179943	-68.32139073
+0.55	26.24667998	25.68164416	21.89230215	18.03825731	21.56016951	28.91977713	31.28377088	31.28661284	31.28071896
-0.6	-57.88270147	-64.71768028	-56.99918707	-56.88349655	-47.09597869	-63.41919487	-70.36452178	-74.31799923	-77.67991304
+0.6	21.31787382	19.99432356	17.5053957	14.32594265	17.57100742	23.54146053	25.24686562	25.17484469	25.16973641
-0.65	-62.22407102	-71.48484969	-63.34775761	-62.57772806	-50.55023307	-68.09113059	-75.79480117	-80.53952517	-84.75150911
+0.65	17.70192935	16.24219186	14.40235703	11.71502806	14.64000843	19.59072898	20.8258228	20.78071918	20.7756414
-0.7	-67.58138843	-79.932112	-71.95852263	-70.29877672	-54.80885877	-73.85220854	-82.50408185	-88.25139727	-93.54349005
+0.7	13.35427241	12.51525495	10.48835645	8.623771246	11.1096514	14.83343496	15.52122435	15.5069915	15.50203924
-0.75	-71.55812105	-86.28240965	-79.19249303	-76.56516951	-57.96672449	-78.12520294	-87.49122841	-94.00456911	-100.1242605
+0.75	10.22268918	10.02510001	7.953389462	6.465274273	8.561387644	11.40066437	11.9914458	11.98705598	11.98284734
-0.8	-76.40500772	-94.13273013	-88.20790203	-84.48429097	-61.81100201	-83.32842496	-93.57916915	-101.056429	-108.2206631
+0.8	7.124361355	7.085705975	5.631290474	4.504972068	5.556390586	7.700972452	8.063330092	8.059131691	8.055110066
-0.85	-79.95237463	-99.97131719	-94.9730578	-90.18458755	-64.62071872	-87.13258882	-98.0429212	-106.2512601	-114.2102544
+0.85	5.036018099	4.999760558	3.972169727	3.161701004	3.862924738	5.276980402	5.280723405	5.27723767	5.273893181
-0.9	-84.2056256	-107.1027667	-103.3190308	-96.99453987	-67.98409622	-91.68808858	-103.4063329	-112.527405	-121.4820416
+0.9	2.477297815	2.570512226	2.040106157	1.611208719	2.26162637	2.392177763	2.492505696	2.392092095	2.511222204
-0.95	-87.2589166	-112.3348261	-109.5116679	-101.9689527	-70.39389623	-94.95352492	-107.2664234	-117.0739031	-126.7800786
+0.95	0.855051965	0.899344854	0.823120036	0.630597202	1.129983981	0.825598069	0.873496978	0.874897916	0.879905335
-1	-90.83531153	-118.6254736	-117.0548956	-108.1878579	-73.20982367	-98.77144614	-111.8021072	-122.4586347	-133.0982137
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.05E+01	1.18E+02	1.16E+02	1.08E+02	7.29E+01	9.84E+01	111.3214487	121.8853922	1.32E+02
-2.05	-7.85E-01	-7.79E-01	-7.14E-01	-5.45E-01	-9.80E-01	-7.59E-01	-0.757578463	-0.758943114	-7.64E-01
+2.05	8.77E+01	1.13E+02	1.10E+02	1.03E+02	7.07E+01	9.54E+01	107.7931561	117.6966771	1.28E+02
-2.1	-2.838425664	-2.826513889	-2.243675487	-1.772518594	-2.431211172	-2.7422508	-2.739930007	-2.743006759	-2.758923471
+2.1	8.37E+01	1.06E+02	1.02E+02	9.63E+01	6.76E+01	9.12E+01	102.8305758	111.8516267	1.21E+02
-2.15	-4.752215275	-4.716225847	-3.746629968	-2.978777155	-3.676855116	-4.948284689	-4.951944322	-4.948458957	-4.945127945
+2.15	80.44107453	100.7831053	95.91835765	90.96303865	65.0074638	87.65634811	98.65850972	106.9696085	115.0404761
-2.2	-7.43700992	-7.397929286	-5.879599235	-4.709950817	-5.875538964	-8.064582405	-8.481869871	-8.477621607	-8.473558606
+2.2	75.88049999	93.27686856	87.2209087	83.65825628	61.39523808	82.76563502	92.91981787	100.291015	107.3401166
-2.25	-9.795172352	-9.668834566	-7.685908658	-6.239622507	-8.213104256	-10.93155368	-11.53750404	-11.53310347	-11.52888913
+2.25	72.11028215	87.17049502	80.20830455	77.48944008	58.40490819	78.71824384	88.18424403	94.80566506	101.0422821

-2.3	-13.82117741	-12.87770552	-10.8845422	-8.952616814	-11.48919529	-15.34476596	-16.09019752	-16.07270603	-16.06771275
+2.3	66.99769529	79.00637081	70.90810518	69.38002144	54.34507127	73.22475912	81.77262939	87.40922235	92.58184521
-2.35	-17.20311422	-15.76348011	-13.97483909	-11.35712449	-14.23536347	-19.04534282	-20.21652405	-20.17500409	-20.16991481
+2.35	62.83048815	72.43572616	64.24072236	63.40371307	51.03248102	68.74349285	76.55380197	81.41054131	85.743052
-2.4	-21.85184851	-20.60537888	-17.96415553	-14.71383325	-18.00352618	-24.12448767	-25.90030289	-25.82418985	-25.81904276
+2.4	57.24908842	63.73564268	56.07878705	56.07003979	46.59158365	62.73709657	69.57246501	73.4119604	76.65157687
-2.45	-25.68577752	-25.02938186	-21.33461109	-17.56842696	-21.10654298	-28.30806822	-30.59618999	-30.54268333	-30.53676393
+2.45	52.74961042	56.7955293	49.57873965	50.25859431	43.00850148	57.89184899	63.95066152	66.98993379	69.37212613
-2.5	-30.87404477	-31.10216599	-26.67052696	-22.05929052	-25.30022083	-33.96328563	-36.96065994	-37.44356628	-37.5521474
+2.5	46.78259833	48.06433166	41.05571495	42.46576646	38.25307808	51.46241512	56.5027684	58.50490196	59.77864817
-2.55	-35.09523883	-36.35095361	-31.50630453	-26.12563002	-28.70831747	-38.55997695	-42.14584628	-43.08860983	-43.64677267
+2.55	42.01556594	41.68412008	35.42643499	37.01899795	34.45126767	46.32305343	50.55823748	51.74951422	52.15896388
-2.6	-40.73982394	-43.62022136	-38.10121265	-31.70934089	-33.2609652	-44.70140319	-49.08781563	-50.67343832	-51.8675189
+2.6	35.74616084	33.34492826	29.54451031	31.52747971	29.44788732	39.56043446	42.74703164	42.8937271	42.87641947
-2.65	-45.28358212	-49.55751148	-43.50305012	-36.31442511	-36.92237271	-49.64132389	-54.68203859	-56.80544558	-58.53667341
+2.65	30.77631335	27.70287946	25.1483088	27.51042359	25.47910143	34.19689543	36.56003472	36.45538857	36.44006579
-2.7	-51.30127602	-57.52379056	-51.05891094	-42.76350044	-41.76745317	-56.17909919	-62.09831349	-64.95853625	-67.43157995
+2.7	24.28772351	22.33025098	19.41597121	23.85354485	20.29431322	27.19095159	28.48865674	28.45050623	28.43449329
-2.75	-56.10284879	-63.95576993	-57.51237086	-48.27653418	-45.63040706	-61.39232358	-68.02132344	-71.48753593	-74.57491644
+2.75	19.17973665	18.76813129	14.93170139	21.73424371	16.21031467	21.67308219	22.87789405	22.86395996	22.85058592
-2.8	-62.41044151	-72.49713015	-66.1647821	-55.71015022	-50.70135579	-68.23658558	-75.80871116	-80.09315018	-84.01494716
+2.8	14.12444385	14.1294903	11.24134915	18.83423094	10.91067194	15.42749109	16.25679311	16.24231086	16.22843958
-2.85	-67.40515347	-79.32897841	-73.1457897	-61.83743946	-54.71410368	-73.65326515	-81.98020636	-86.92914143	-91.5320551
+2.85	10.48290085	11.42045202	11.20847189	16.26725944	7.85993672	11.07529566	11.07623095	12.20667177	13.48965223
-2.9	-73.91943701	-88.32349019	-82.40988606	-70.01643633	-59.94436833	-80.71415311	-90.03551337	-95.87160949	-101.3881727
+2.9	8.810674663	11.42045202	11.20847189	12.95302605	7.111451576	9.634731772	10.93527399	12.20667177	13.48965223
-2.95	-79.04254943	-95.46037148	-89.814779	-76.49777772	-64.05514721	-86.26434931	-96.37528725	-102.924605	-109.1787556
+2.95	8.810674663	11.42045202	11.20847189	10.78221101	7.111451576	9.634731772	10.93527399	12.20667177	13.48965223
-3	-85.68031427	-104.7861051	-99.55718273	-85.07786088	-69.378176	-93.45200165	-104.59532	-112.0882306	-119.321925
+3	8.810674663	11.42045202	11.20847189	9.841370611	7.111451576	9.634731772	10.93527399	12.20667177	13.48965223

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-20.82641275	-22.5490256	-13.4509	-16.45	-17.38
End Shear	176.9694973	183.4029418	121.7754	147.5977	153.3567
-0.05	-20.82641275	-22.5490256	-13.4509	-16.45	-17.38
+0.05	160.8669679	166.130369	111.412	135.1071	140.0053
-0.1	-20.82641275	-22.5490256	-13.4509	-16.45	-17.38
+0.1	143.745964	147.5284827	100.3795	121.8027	125.788
-0.15	-20.82641275	-22.5490256	-13.4509	-16.45	-17.38
+0.15	130.7898057	133.5013599	91.99051	111.6808	114.994
-0.2	-20.82641275	-22.5490256	-17.2105	-19.1961	-19.1973
+0.2	114.6572624	116.1030636	81.49037	99.00412	101.5058
-0.25	-24.51704097	-23.06879001	-22.284	-24.7352	-24.9941
+0.25	102.562872	103.1158973	73.57358	89.44007	91.35449
-0.3	-32.06914977	-32.55381096	-28.7354	-31.7773	-33.243
+0.3	87.65780746	87.98475166	63.75516	77.57019	78.78976
-0.35	-39.34581516	-40.92200568	-33.6823	-37.1759	-39.5777
+0.35	76.62429473	77.35575006	56.42667	68.70336	69.43217
-0.4	-50.45598897	-52.76139487	-39.9298	-45.2313	-47.5908
+0.4	64.06963416	65.1954121	47.43934	57.81956	58.04453
-0.45	-59.38167426	-62.79616144	-44.6861	-53.5797	-53.7014
+0.45	54.82370543	56.50621012	40.82115	49.79636	49.9755
-0.5	-72.48674843	-76.77470821	-53.4487	-65.8552	-65.1872
+0.5	44.14549604	45.9164419	33.25629	40.60828	40.20477
-0.55	-83.78661194	-87.44955859	-61.2627	-75.2339	-75.6954
+0.55	36.80678684	38.16687354	28.81524	33.89457	34.10453
-0.6	-99.35921764	-100.8727555	-72.1404	-88.2838	-89.2816
+0.6	28.76128722	29.33976161	23.74529	26.48372	27.80665
-0.65	-111.2100905	-112.3302701	-80.5365	-98.3521	-99.9243
+0.65	23.02586896	23.34018451	20.00544	21.98791	23.17649
-0.7	-128.1340734	-129.3822379	-91.0471	-110.95	-113.727
+0.7	16.8102138	16.68740192	15.48005	17.02085	17.59548
-0.75	-141.2111484	-143.9962017	-98.973	-120.446	-124.154
+0.75	13.21631137	12.47300107	12.1957	13.16517	13.56356
-0.8	-157.5183563	-162.5020814	-108.804	-132.218	-137.111
+0.8	8.948873087	8.333628588	8.297	9.047684	9.109444
-0.85	-169.7635135	-176.4453263	-116.144	-141.001	-146.804
+0.85	5.776761551	5.522828736	5.776684	6.161797	5.880926
-0.9	-184.8815648	-193.7239297	-125.147	-151.767	-158.721
+0.9	2.625203868	2.568830455	2.958735	3.155984	2.632831
-0.95	-196.1088491	-206.608781	-131.784	-159.699	-167.529
+0.95	0.928829015	1.046150792	1.036741	1.105857	0.922866
-1	-209.7987276	-222.3930984	-139.809	-169.281	-178.212
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.08E+02	2.21E+02	1.39E+02	1.68E+02	1.77E+02
-2.05	-8.06E-01	-9.06E-01	-8.99E-01	-9.59E-01	-8.00E-01
+2.05	1.98E+02	2.08E+02	1.33E+02	160.7957	1.69E+02
-2.1	-2.85925567	-2.859872279	-3.25234	-3.46917	-2.89385
+2.1	1.83E+02	1.92E+02	1.24E+02	150.599	1.57E+02
-2.15	-5.511379403	-5.141572851	-5.4196	-5.78091	-5.61654
+2.15	171.4751348	178.4016471	117.1667	142.2242	148.1557
-2.2	-9.403693724	-8.755037093	-8.71249	-9.5038	-9.56627
+2.2	155.7324298	160.4759741	107.7307	130.9324	135.6942
-2.25	-12.72326767	-11.89742339	-11.7452	-12.8317	-13.012
+2.25	143.047984	146.0814019	100.0833	121.7755	125.6155

-2.3	**-17.34363862**	**-17.387475**	**-15.9676**	**-17.5562**	**-18.1955**
+2.3	**126.2356901**	**127.4472819**	**89.89352**	**109.568**	**112.2111**
-2.35	**-22.33261491**	**-22.57030079**	**-19.4878**	**-21.4199**	**-22.5368**
+2.35	**112.8784135**	**114.981367**	**81.71792**	**99.76856**	**101.4747**
-2.4	**-29.62711578**	**-30.25933352**	**-24.2958**	**-27.2255**	**-28.4894**
+2.4	**97.64259209**	**99.39904111**	**70.92366**	**86.82437**	**87.82266**
-2.45	**-35.88546011**	**-37.09680964**	**-28.2395**	**-32.9702**	**-33.3882**
+2.45	**85.52962794**	**88.95800759**	**62.36517**	**76.55676**	**77.17945**
-2.5	**-45.24784259**	**-47.05961951**	**-34.0734**	**-41.6015**	**-41.2578**
+2.5	**70.97485481**	**75.23414644**	**52.3192**	**64.49929**	**63.66975**
-2.55	**-53.54498525**	**-55.29687854**	**-39.9579**	**-48.7485**	**-48.8582**
+2.55	**60.6433925**	**64.36123152**	**45.35572**	**54.95094**	**54.56254**
-2.6	**-65.43171742**	**-66.46775343**	**-48.4148**	**-59.0015**	**-59.2319**
+2.6	**49.16821833**	**51.37949494**	**39.24092**	**44.15748**	**46.70651**
-2.65	**-75.19747457**	**-75.87378726**	**-55.4057**	**-67.4676**	**-68.13**
+2.65	**40.37625211**	**42.11017145**	**34.38136**	**37.93881**	**40.47366**
-2.7	**-89.27983968**	**-89.53849768**	**-64.8274**	**-78.8669**	**-80.1604**
+2.7	**31.02114627**	**31.35175451**	**28.02155**	**30.99813**	**32.3296**
-2.75	**-100.8738006**	**-101.3028889**	**-72.4646**	**-88.0999**	**-89.9338**
+2.75	**25.30278924**	**24.08156539**	**23.0034**	**25.52053**	**25.91335**
-2.8	**-116.4226825**	**-117.9992719**	**-82.6427**	**-100.396**	**-102.985**
+2.8	**20.82640984**	**22.54902534**	**16.48074**	**18.39931**	**18.40053**
-2.85	**-128.9712905**	**-131.5324018**	**-90.8102**	**-110.256**	**-113.476**
+2.85	**20.82640984**	**22.54902534**	**13.45094**	**16.45**	**17.38004**
-2.9	**-145.6281116**	**-149.5659229**	**-101.595**	**-123.269**	**-127.353**
+2.9	**20.82640984**	**22.54902534**	**13.45094**	**16.45**	**17.38004**
-2.95	**-158.9454806**	**-164.0351516**	**-110.177**	**-133.618**	**-138.412**
+2.95	**20.82640984**	**22.54902534**	**13.45094**	**16.45**	**17.38004**
-3	**-176.4711917**	**-183.1387049**	**-121.419**	**-147.169**	**-152.922**
+3	**20.82640984**	**22.54902534**	**13.45094**	**16.45**	**17.38004**

2-Span: Moment (Max and Min) Raw Data Results – 80' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading Comparison)

Location (20th pts)	**HL93 (Variable) + Lane Load**	***HL-93 Design Tandem (with Lane Load)***	***HL-93 Truck Train (with Lane Load)***	**SC SHV1A**	**SC SHV1B**	**SC SHV2A**	**SC SHV2B**	**SC SHV3A**	**SC SHV3B**	**SC School Bus**
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-4.31E-13**	*-1.79E-13*	*-3.50E-13*	**-1.71E-13**	**-1.84E-13**	**-1.52E-13**	**-1.94E-13**	**-1.95E-13**	**-2.06E-13**	**-1.47E-13**
End Shear	**4.12E-13**	*2.28E-13*	*2.85E-13*	**1.73E-13**	**1.95E-13**	**1.96E-13**	**2.26E-13**	**1.91E-13**	**2.01E-13**	**1.54E-13**
-0.05	**-82.3537038**	*-66.45574298*	*-74.118504*	**-46.7716062**	**-50.2085414**	**-47.2963196**	**-57.0790548**	**-53.1422397**	**-56.179061**	**-24.11618015**
+0.05	**679.5551984**	*568.9940087*	*613.1691329*	**430.1492718**	**457.3262457**	**427.6232962**	**505.8905033**	**439.9174977**	**464.4533456**	**223.4975052**
-0.1	**-164.7074076**	*-132.911486*	*-148.237008*	**-93.5432124**	**-100.417083**	**-94.5926393**	**-114.15811**	**-106.284479**	**-112.358122**	**-48.2323603**
+0.1	**1260.379343**	*1063.367112*	*1137.268727*	**799.6076616**	**849.6468513**	**794.1870898**	**938.6101991**	**804.4656499**	**849.1933743**	**414.2019711**
-0.15	**-247.0611114**	*-199.367229*	*-222.355512*	**-140.314819**	**-150.625624**	**-141.888959**	**-171.237165**	**-159.426719**	**-168.537183**	**-72.34854044**
+0.15	**1744.168725**	*1482.973928*	*1573.673485*	**1109.172872**	**1177.443461**	**1099.931969**	**1297.492175**	**1097.28672**	**1158.043208**	**572.6488629**
-0.2	**-329.4148152**	*-265.8229719*	*-296.474016*	**-187.086425**	**-200.834166**	**-189.185279**	**-228.316219**	**-212.568959**	**-224.716244**	**-96.46472059**
+0.2	**2138.027842**	*1828.731243*	*1924.225049*	**1359.369617**	**1441.533791**	**1345.744625**	**1584.224246**	**1327.259868**	**1400.843004**	**699.5823712**
-0.25	**-411.768519**	*-332.2787149*	*-370.59252*	**-233.858031**	**-251.042707**	**-236.481598**	**-285.395274**	**-265.711199**	**-280.895305**	**-120.5809007**
+0.25	**2431.577251**	*2101.91247*	*2191.231325*	**1551.785062**	**1643.682726**	**1533.323056**	**1825.195938**	**1525.050845**	**1611.531517**	**795.9550394**
-0.3	**-494.1222228**	*-398.7344579*	*-444.711024*	**-280.629637**	**-301.251248**	**-283.777918**	**-342.474329**	**-318.853438**	**-337.074366**	**-144.6970809**
+0.3	**2640.515806**	*2304.148042*	*2379.427737*	**1688.391081**	**1786.069441**	**1685.055622**	**2003.995379**	**1655.511961**	**1750.853222**	**863.1094136**
-0.35	**-576.4759266**	*-465.1902009*	*-518.829528*	**-327.401243**	**-351.45979**	**-331.074238**	**-399.553384**	**-371.995678**	**-393.253427**	**-168.813261**
+0.35	**2797.275265**	*2437.424917*	*2520.089138*	**1777.296285**	**1890.351334**	**1785.654727**	**2117.432588**	**1746.600266**	**1846.071699**	**902.6599352**
-0.4	**-658.8296304**	*-531.6459439*	*-592.948032*	**-374.172849**	**-401.668331**	**-378.370557**	**-456.632439**	**-425.137918**	**-449.432488**	**-192.9294412**
+0.4	**2868.502743**	*2504.087087*	*2583.705144*	**1830.639349**	**1943.635871**	**1833.413163**	**2167.921855**	**1777.383617**	**1879.724369**	**915.6814668**
-0.45	**-741.1833342**	*-598.1016869*	*-667.066536*	**-420.944456**	**-451.876872**	**-425.666877**	**-513.711494**	**-478.280158**	**-505.611549**	**-217.0456213**
+0.45	**2858.349893**	*2506.835189*	*2574.042212*	**1834.165625**	**1943.743892**	**1831.684802**	**2158.805074**	**1750.303327**	**1852.000938**	**903.9511555**
-0.5	**-823.537038**	*-664.5574298*	*-741.18504*	**-467.716062**	**-502.085414**	**-472.963196**	**-570.790548**	**-531.422397**	**-561.79061**	**-241.1618015**
+0.5	**2814.818414**	*2462.617205*	*2535.143903*	**1798.351272**	**1907.741713**	**1798.482096**	**2123.633413**	**1718.318024**	**1817.733371**	**892.6471913**
-0.55	**-905.8907418**	*-731.0131728*	*-815.303544*	**-514.487668**	**-552.293955**	**-520.259516**	**-627.869603**	**-584.564637**	**-617.969671**	**-265.2779816**
+0.55	**2704.434341**	*2360.895529*	*2436.22631*	**1720.765285**	**1827.620621**	**1724.831855**	**2040.933542**	**1672.822935**	**1768.920855**	**867.2785802**
-0.6	**-988.2444456**	*-797.4689158*	*-889.422048*	**-561.259274**	**-602.502497**	**-567.555836**	**-684.948658**	**-637.706877**	**-674.148732**	**-289.3941618**
+0.6	**2518.770211**	*2202.805321*	*2269.366396*	**1602.503113**	**1703.138154**	**1609.125086**	**1906.179115**	**1569.403159**	**1658.801639**	**817.7726722**
-0.65	**-1070.598149**	*-863.9246588*	*-963.540552*	**-608.03088**	**-652.711038**	**-614.852155**	**-742.027713**	**-690.849117**	**-730.327793**	**-313.5103419**
+0.65	**2263.157267**	*1992.223256*	*2039.380088*	**1454.070978**	**1538.795729**	**1455.456538**	**1724.378751**	**1412.262776**	**1491.958439**	**746.1838585**
-0.7	**-1152.951853**	*-930.3804018*	*-1037.659056*	**-654.802487**	**-702.919579**	**-662.148475**	**-799.106768**	**-743.991356**	**-786.506854**	**-337.6265221**
+0.7	**1944.211648**	*1733.383028*	*1752.057134*	**1274.59385**	**1342.92766**	**1268.427732**	**1501.014824**	**1216.624934**	**1286.307797**	**654.7755483**
-0.75	**-1235.305557**	*-996.8361448*	*-1111.77756*	**-701.574093**	**-753.128121**	**-709.444795**	**-856.185823**	**-797.133596**	**-842.685915**	**-361.7427022**
+0.75	**1575.757095**	*1430.875469*	*1420.48366*	**1064.70723**	**1118.24013**	**1053.030737**	**1242.043293**	**978.2452804**	**1033.682452**	**546.0196672**
-0.8	**-1317.659261**	*-1063.291888*	*-1185.896064*	**-748.345699**	**-803.336662**	**-756.741114**	**-913.264877**	**-850.275836**	**-898.864977**	**-385.8588824**
+0.8	**1150.343103**	*1089.647625*	*1037.494867*	**829.5259102**	**865.5681606**	**814.6479797**	**953.8927025**	**699.1074905**	**738.0904401**	**422.5964053**
-0.85	**-1429.993621**	*-1159.728287*	*-1404.386057*	**-795.117305**	**-853.545204**	**-804.037434**	**-970.343932**	**-903.418076**	**-955.044038**	**-409.9750625**
+0.85	**711.428583**	*744.9841089*	*641.5160546*	**574.5493473**	**590.7786755**	**559.296373**	**643.4655172**	**429.0840557**	**453.3670707**	**287.3946119**
-0.9	**-1602.818507**	*-1316.655212*	*-1819.422873*	**-841.888911**	**-903.753745**	**-851.333754**	**-1027.42299**	**-956.560315**	**-1011.2231**	**-434.0912427**
+0.9	**351.4240365**	*433.0557275*	*316.281632*	**322.5064366**	**322.5064366**	**310.1339156**	**332.4594387**	**245.15655**	**258.0595263**	**181.8363743**
-0.95	**-1825.553055**	*-1523.4918*	*-2349.20191*	**-888.660517**	**-953.962286**	**-898.630073**	**-1084.50204**	**-1009.70256**	**-1067.40216**	**-458.2074228**
+0.95	**161.9890526**	*149.2992163*	*145.7901472*	**115.5933405**	**115.5933405**	**92.44645982**	**92.45810037**	**87.76775839**	**92.3871141**	**89.15862298**
-1	**-2090.377533**	*-1772.417694*	*-2964.74012*	**-935.432121**	**-1004.17082**	**-945.926401**	**-1141.58144**	**-1062.84479**	**-1123.58122**	**-482.3236527**
+1	**0**	*0*	*0*	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-2090.377533**	*-1772.417694*	*-2964.74012*	**-935.432121**	**-1004.17082**	**-945.926401**	**-1141.58144**	**-1062.84479**	**-1123.58122**	**-482.3236527**
+2	**0**	*0*	*0*	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-1825.553867**	*-1523.492021*	*-2349.198093*	**-888.660137**	**-953.962195**	**-898.629909**	**-1084.50237**	**-1009.70236**	**-1067.40216**	**-458.2074698**
+2.05	**161.9890385**	*149.3123644*	*145.7901344*	**115.6035823**	**115.6035823**	**92.41978772**	**92.44293417**	**87.73001055**	**92.34737953**	**88.70281051**
-2.1	**-1602.819273**	*-1316.655421*	*-1819.418285*	**-841.888551**	**-903.753658**	**-851.333599**	**-1027.42329**	**-956.560127**	**-1011.2231**	**-434.0912869**
+2.1	**351.4241831**	*433.0742806*	*316.281764*	**322.5207984**	**322.5207984**	**310.1645901**	**332.4983889**	**245.1661081**	**258.0695875**	**180.9953446**
-2.15	**-1429.994344**	*-1159.728486*	*-1404.372655*	**-795.116965**	**-853.545121**	**-804.037288**	**-970.34422**	**-903.417897**	**-955.044034**	**-409.975104**
+2.15	**712.5423423**	*745.0064394*	*641.5159621*	**574.5576702**	**590.784008**	**559.3372367**	**643.4958894**	**429.0907985**	**453.3738938**	**287.3851388**
-2.2	**-1317.659935**	*-1063.292071*	*-1185.896051*	**-748.345379**	**-803.336584**	**-756.740978**	**-913.265147**	**-850.275667**	**-898.864971**	**-385.8589211**
+2.2	**1151.39091**	*1089.67193*	*1035.710564*	**829.5354141**	**865.5745932**	**814.6383853**	**953.9253166**	**699.1189046**	**738.1030448**	**422.5870289**
-2.25	**-1235.306187**	*-996.8363164*	*-1111.777546*	**-701.573792**	**-753.128047**	**-709.444667**	**-856.186074**	**-797.133438**	**-842.685908**	**-361.7427382**

+2.25	1576.756134	1430.900242	1419.44255	1064.716558	1118.246155	1053.021418	1242.075944	978.2546457	1033.692928	546.0100531
-2.3	-1152.952439	-930.3805622	-1037.659041	-654.802206	-702.91951	-662.148356	-799.107001	-743.991208	-786.506845	-337.6265552
+2.3	1945.110452	1733.40691	1751.796303	1274.601648	1342.931876	1268.417315	1501.046135	1216.630889	1286.314699	654.7657511
-2.35	-1070.598691	-863.924808	-963.5405354	-608.03062	-652.710973	-614.852046	-742.027928	-690.848978	-730.327782	-313.5103723
+2.35	2264.441148	1992.244652	2037.465627	1454.075551	1538.791465	1455.443504	1724.406549	1412.259145	1491.955214	746.1734919
-2.4	-988.2449431	-797.4690538	-889.4220303	-561.259033	-602.502436	-567.555735	-684.948854	-637.706748	-674.148719	-289.3941894
+2.4	2519.896475	2202.823035	2268.014573	1602.499462	1703.129794	1609.108265	1906.202164	1569.393982	1658.792577	817.7611472
-2.45	-905.8911951	-731.0132996	-815.3035252	-514.487447	-552.293899	-520.259425	-627.869781	-584.564519	-617.969656	-265.2780065
+2.45	2705.360443	2360.908464	2435.554105	1720.757054	1827.607195	1724.81026	2040.950471	1672.807099	1768.90477	867.2662897
-2.5	-823.5374472	-664.5575455	-741.1850201	-467.715861	-502.085362	-472.963114	-570.790708	-531.422289	-561.790593	-241.1618236
+2.5	2815.505249	2462.624294	2535.092217	1798.337102	1907.721747	1798.507864	2123.642976	1718.339445	1817.756486	892.6337784
-2.55	-741.1836993	-598.1017913	-667.066515	-420.944274	-451.876825	-425.666803	-513.711635	-478.280059	-505.61153	-217.0456407
+2.55	2857.789895	2506.833122	2573.125005	1834.184037	1943.768394	1831.663489	2158.800763	1750.327229	1852.025519	903.945327
-2.6	-658.8299513	-531.6460371	-592.9480099	-374.172688	-401.668288	-378.370493	-456.632562	-425.137829	-449.432467	-192.9294578
+2.6	2867.684756	2504.077832	2582.831156	1830.650456	1943.652598	1833.438087	2167.909128	1777.400579	1879.741581	915.6746353
-2.65	-576.4762034	-465.1902829	-518.8295047	-327.401102	-351.459751	-331.074182	-399.553488	-371.9956	-393.253404	-168.8132749
+2.65	2796.16588	2437.407645	2519.536111	1777.299161	1890.359285	1785.671662	2117.410205	1746.609288	1846.080483	902.6516187
-2.7	-494.1224555	-398.7345288	-444.7109996	-280.629515	-301.251214	-283.777872	-342.474415	-318.85337	-337.074341	-144.697092
+2.7	2639.29077	2304.121706	2379.316157	1688.38388	1786.066626	1685.063645	2004.015854	1655.510374	1750.850758	863.0997171
-2.75	-411.7687076	-332.2787746	-370.5924945	-233.857929	-251.042677	-236.481561	-285.395342	-265.71114	-280.895278	-120.580909
+2.75	2430.503183	2101.876702	2189.926947	1551.768939	1643.670389	1533.320927	1825.205434	1525.04005	1611.519288	795.963743
-2.8	-329.4149596	-265.8230204	-296.4739894	-187.086343	-200.83414	-189.18525	-228.316269	-212.56891	-224.716216	-96.46472613
+2.8	2134.06048	1828.685887	1923.108324	1359.343935	1441.511203	1345.733062	1584.221258	1327.23902	1400.820115	699.5897423
-2.85	-247.0612117	-199.3672662	-222.3554843	-140.314756	-150.625603	-141.88894	-171.237196	-159.42668	-168.537153	-72.34854322
+2.85	1745.205723	1482.918092	1573.289674	1109.136857	1177.409857	1099.910389	1297.477198	1097.275413	1158.031482	572.6543454
-2.9	-164.7074638	-132.9115121	-148.2369792	-93.5431699	-100.417066	-94.5926291	-114.158122	-106.284451	-112.35809	-48.23236031
+2.9	1261.189551	1063.300982	1136.980134	799.5610883	849.6018888	794.1549921	938.5826176	804.4434096	849.1700859	414.2055647
-2.95	-82.35371583	-66.45575788	-74.11847407	-46.7715836	-50.2085288	-47.2963185	-57.0790493	-53.1422209	-56.1790267	-24.1161774
+2.95	679.964637	568.9167132	612.7898158	430.1602281	457.338024	427.634208	505.90371	439.9291671	464.4656901	223.4993795
-3	-3.31E-13	-2.60E-13	-4.02E-13	-1.71E-13	-1.71E-13	-1.80E-13	-2.06E-13	-1.79E-13	-1.89E-13	-1.04E-13
+3	3.88E-13	2.75E-13	3.49E-13	1.70E-13	1.78E-13	2.11E-13	2.32E-13	2.02E-13	2.13E-13	1.31E-13

2-Span: Moment (Max and Min) Raw Data Results - 80' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.38E-13	-1.72E-13	-1.31E-13	-1.02E-13	-1.29E-13	-1.32E-13	-1.31E-13	-1.31E-13	-1.32E-13
End Shear	1.42E-13	1.64E-13	1.23E-13	1.10E-13	1.26E-13	1.59E-13	1.44E-13	1.44E-13	1.45E-13
-0.05	-35.24269973	-45.68180787	-44.83390215	-39.3654666	-28.44581117	-38.53891921	-43.7411046	-48.8267007	-53.9586378
+0.05	319.102309	385.9451197	363.5323156	311.6500166	258.5725022	348.2331896	389.1310425	416.5322067	442.0558346
-0.1	-70.48539946	-91.36361575	-89.6678043	-78.7309332	-56.89162233	-77.07783842	-87.4822092	-97.6534014	-107.917276
+0.1	591.7090943	706.5679498	659.5545678	567.7406309	479.5415345	646.4736649	721.1839377	772.3795273	823.1327138
-0.15	-105.7280992	-137.0454236	-134.5017064	-118.0963998	-85.3374335	-115.6167576	-131.223314	-146.480102	-161.875913
+0.15	818.8631409	965.2674413	891.8472945	770.2726495	663.796602	895.10354	996.6931731	1091.159342	1158.478757
-0.2	-140.9707989	-182.7272315	-179.3356086	-157.4618664	-113.7832447	-154.1556768	-174.964418	-195.306803	-215.834551
+0.2	1000.904919	1162.852476	1081.111986	936.7363228	812.1146606	1094.787006	1216.499888	1347.880133	1441.652704
-0.25	-176.2134987	-228.4090394	-224.1695107	-196.827333	-142.2290558	-192.694596	-218.705523	-244.133504	-269.793189
+0.25	1139.167971	1317.804058	1217.592841	1059.212722	925.2034163	1246.929095	1389.757979	1544.372233	1671.451271
-0.3	-211.4561984	-274.0908472	-269.0034129	-236.1927996	-170.674867	-231.2335152	-262.446627	-292.960204	-323.751827
+0.3	1235.281879	1424.884314	1296.950198	1134.130851	1004.334117	1364.993179	1526.276967	1682.04333	1836.263019
-0.35	-246.6988981	-319.7726551	-313.837315	-275.5582662	-199.1206782	-269.7724345	-306.187732	-341.786905	-377.710464
+0.35	1305.023809	1477.840449	1363.916512	1194.564423	1051.014731	1446.146007	1611.603979	1779.568288	1938.074544
-0.4	-281.9415978	-365.454463	-358.6712172	-314.9237328	-227.5664893	-308.3113537	-349.928837	-390.613606	-431.669102
+0.4	1338.3759	1485.667766	1406.251967	1232.275358	1066.989797	1484.207842	1648.676372	1829.607513	1987.279321
-0.45	-317.1842976	-411.1362709	-403.5051193	-354.2891994	-256.0123005	-346.8502729	-393.669941	-439.440306	-485.62774
+0.45	1334.456488	1458.78565	1414.56366	1239.958084	1054.240514	1481.637182	1640.464175	1827.501623	1994.615976
-0.5	-352.4269973	-456.8180787	-448.3390215	-393.654666	-284.4581117	-385.3891921	-437.411046	-488.267007	-539.586378
+0.5	1311.179024	1433.682393	1376.43903	1207.832949	1041.984792	1455.337641	1613.574194	1793.160486	1952.506042
-0.55	-387.669697	-502.4998866	-493.1729236	-433.0201326	-312.9039228	-423.9281113	-481.15215	-537.093708	-593.545016
+0.55	1259.403147	1398.990459	1318.904369	1156.977028	1008.613082	1396.404284	1552.276388	1718.918309	1863.679187
-0.6	-422.9123968	-548.1816945	-538.0068258	-472.3855992	-341.349734	-462.4670305	-524.893255	-585.920409	-647.503653
+0.6	1175.302892	1325.792726	1225.580188	1073.853722	947.993232	1302.832456	1450.51151	1600.223534	1742.201922
-0.65	-458.1550965	-593.8635024	-582.8407279	-511.7510658	-369.7955452	-501.0059497	-568.63436	-634.747109	-701.462291
+0.65	1062.021179	1209.953666	1101.505689	963.3668977	862.5049773	1178.051517	1312.301745	1441.489439	1573.999154
-0.7	-493.3977962	-639.5453102	-627.6746301	-551.1165324	-398.2413563	-539.5448689	-612.375464	-683.57381	-755.420929
+0.7	926.8072022	1048.355747	952.304093	829.7792184	754.7649376	1025.810589	1141.409069	1254.105479	1364.257127
-0.75	-528.640496	-685.2271181	-672.5085322	-590.481999	-426.6871675	-578.0837881	-656.116569	-732.400511	-809.379567
+0.75	769.3558259	845.6659951	767.2136313	664.2996656	627.6263609	850.1782981	942.4028415	1034.763808	1118.621299
-0.8	-563.8831957	-730.908926	-717.3424344	-629.8474656	-455.1329787	-616.6227073	-699.857673	-781.227211	-863.338205
+0.8	591.033088	606.9852266	536.7079006	459.8650197	484.1788829	655.5426728	720.2194005	787.0406163	843.195427
-0.85	-599.1258954	-776.5907338	-762.1763365	-723.8741286	-483.5787898	-655.1616265	-743.598778	-830.053912	-917.296842
+0.85	395.9570163	370.4266071	317.3900159	266.7906248	327.7487993	446.6112758	480.6668187	516.7055074	544.5424556
-0.9	-634.3685952	-822.2725417	-807.0102387	-933.3268137	-512.024601	-693.7005457	-787.339882	-878.880613	-971.25548
+0.9	227.0863744	226.6316182	180.2135359	146.7363918	175.012214	249.1022382	256.2709639	269.8479279	270.0459904
-0.95	-669.6112949	-867.9543496	-851.8441408	-1215.821249	-540.4704122	-732.2394649	-831.080987	-927.707314	-1025.21412
+0.95	81.29006656	81.07972174	64.44951381	51.01122904	86.46616186	78.5719245	78.46372659	78.57375319	78.59790134
-1	-704.8539686	-913.6361652	-896.6780289	-1545.809843	-568.9162301	-770.7785395	-874.822091	-976.53402	-1079.17277
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-704.8539686	-913.6361652	-896.6780289	-1545.809843	-568.9162301	-770.7785395	-874.822091	-976.53402	-1079.17277
+2	0	0	0	0	0	0	0	0	0
-2.05	-669.6112699	-867.9543571	-851.8438498	-1215.821068	-540.4703265	-732.2396124	-831.080823	-927.70706	-1025.21358
+2.05	81.25077596	81.08600261	64.45417254	51.12814705	86.43887896	78.54424566	78.43650337	78.54714113	78.6043457
-2.1	-634.3685712	-822.272549	-807.0099622	-933.3271044	-512.0245202	-693.7006853	-787.339727	-878.880373	-971.254976
+2.1	227.0963754	226.6404226	180.2201925	146.7234768	175.0471389	249.1229324	256.3057061	269.8560759	270.0540406
-2.15	-599.1258726	-776.5907409	-762.1760746	-723.8742125	-483.5787139	-655.1617582	-743.598631	-830.053686	-917.296367
+2.15	395.9619034	370.395803	317.3877256	266.7894331	327.7737713	446.6039442	480.6987112	516.7121141	544.5587424
-2.2	-563.8831739	-730.9089329	-717.3421871	-629.8477013	-455.1329076	-616.6228311	-699.857535	-781.226999	-863.337758
+2.2	591.0384964	606.9814934	536.7009814	459.8613054	484.2044499	655.5369006	720.2086892	787.0481525	843.2131929
-2.25	-528.6404753	-685.2271248	-672.5082995	-590.4822188	-426.6871013	-578.083904	-656.116439	-732.400312	-809.379149

+2.25	769.360786	845.6601596	767.2031926	664.3105823	627.651592	850.1726988	942.3920916	1034.77072	1118.638818
-2.3	-493.3977766	-639.5453167	-627.6744119	-551.1167364	-398.241295	-539.5449769	-612.375343	-683.573625	-755.42054
+2.3	926.8105833	1048.346538	952.3196907	829.787495	754.789026	1025.804036	1141.396805	1254.110386	1364.272856
-2.35	-458.155078	-593.8635086	-582.8405244	-511.7512539	-369.7954886	-501.0060498	-568.634247	-634.746938	-701.461931
+2.35	1062.018537	1209.940071	1101.498435	963.3629754	862.5269359	1178.042793	1312.286843	1441.48641	1574.011449
-2.4	-422.9123793	-548.1817005	-538.0066368	-472.3857715	-341.3496823	-462.4671227	-524.893151	-585.920251	-647.503322
+2.4	1175.297234	1325.773557	1225.594177	1073.847054	948.0123115	1302.820578	1450.492735	1600.2167	1742.209678
-2.45	-387.6696807	-502.4998924	-493.1727492	-433.0202891	-312.903876	-423.9281956	-481.152055	-537.093564	-593.544713
+2.45	1259.393726	1399.00998	1318.923824	1156.98764	1008.628753	1396.388468	1552.297382	1718.906485	1863.681061
-2.5	-352.426982	-456.8180844	-448.3388617	-393.6548066	-284.4580697	-385.3892686	-437.410959	-488.266877	-539.586104
+2.5	1311.164935	1433.695374	1376.45272	1207.840202	1041.996377	1455.316863	1613.58944	1793.142462	1952.49792
-2.55	-317.1842834	-411.1362763	-403.5049741	-354.2893242	-256.0122634	-346.8503415	-393.669863	-439.44019	-485.627495
+2.55	1334.473478	1458.772885	1414.583132	1239.949603	1054.231473	1481.661364	1640.45247	1827.523303	1994.627728
-2.6	-281.9415847	-365.4544682	-358.6710865	-314.9238417	-227.5664571	-308.3114144	-349.928767	-390.613502	-431.668886
+2.6	1338.387706	1485.684412	1406.264889	1232.263146	1066.976652	1484.226356	1648.658301	1829.622142	1987.283143
-2.65	-246.6988861	-319.7726601	-313.837199	-275.5583593	-199.1206508	-269.7724873	-306.187671	-341.786815	-377.710277
+2.65	1305.029597	1477.861141	1363.927116	1194.570068	1050.996891	1446.158012	1611.623383	1779.574861	1938.067705
-2.7	-211.4561874	-274.090852	-269.0033114	-236.1928768	-170.6748445	-231.2335602	-262.446576	-292.960128	-323.751669
+2.7	1235.280134	1424.897963	1296.97133	1134.125623	1004.311025	1364.997945	1526.28854	1682.039888	1836.246741
-2.75	-176.2134888	-228.409044	-224.1694238	-196.8273944	-142.2290382	-192.6946331	-218.70548	-244.133441	-269.79306
+2.75	1139.159522	1317.809876	1217.607178	1059.203817	925.1747997	1246.925556	1389.761053	1544.359837	1671.467874
-2.8	-140.9707901	-182.7272359	-179.3355363	-157.4619119	-113.7832319	-154.155706	-174.964384	-195.306754	-215.834451
+2.8	1000.889376	1162.848923	1081.118507	936.7229991	812.0802457	1094.775781	1216.49347	1347.858128	1441.658689
-2.85	-105.7280915	-137.0454278	-134.5016487	-118.0964295	-85.3374256	-115.6167789	-131.223288	-146.480067	-161.875842
+2.85	818.839966	965.2548707	891.8444886	770.2711927	663.755952	895.0841425	996.6775963	1091.170906	1158.473206
-2.9	-70.48539281	-91.36361972	-89.66776113	-78.73094705	-56.8916193	-77.07785184	-87.4821917	-97.65338	-107.917233
+2.9	591.6783062	706.5878745	659.5428121	567.7509823	479.5549616	646.4456716	721.1587445	772.3806513	823.1361143
-2.95	-35.24269416	-45.68181164	-44.83387356	-39.3654646	-28.44581299	-38.53892475	-43.7410958	-48.8266929	-53.9586238
+2.95	319.1105346	385.9551973	363.5421666	311.6551829	258.5792498	348.2421039	389.1410887	416.5225395	442.0474244
-3	-1.46E-13	-1.45E-13	-1.47E-13	-1.88E-13	-1.06E-13	-1.48E-13	-1.64E-13	-1.76E-13	-1.89E-13
+3	1.70E-13	1.75E-13	1.82E-13	1.53E-13	1.36E-13	1.66E-13	2.09E-13	2.16E-13	2.18E-13

2-Span: Moment (Max and Min) Raw Data Results - 80' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.70E-13	-1.58E-13	-1.67E-13	-1.71E-13	-1.63E-13
End Shear	2.35E-13	2.59E-13	2.03E-13	2.17E-13	2.41E-13
-0.05	-83.30565099	-90.19610239	-53.8037922	-65.8000013	-69.5201547
+0.05	643.4678716	664.5214761	445.6478874	540.4283548	560.0213689
-0.1	-166.611302	-180.3922048	-107.607584	-131.600003	-139.040309
+0.1	1167.650683	1203.019393	812.7381471	987.6037313	1020.426598
-0.15	-249.916953	-270.5883072	-161.411377	-197.400004	-208.560464
+0.15	1615.591255	1669.517072	1105.69031	1345.106548	1393.868458
-0.2	-333.222604	-360.7844096	-215.215169	-263.200005	-278.080619
+0.2	1963.751614	2072.640355	1355.282297	1652.474347	1705.244037
-0.25	-416.5282549	-450.9805119	-269.018961	-329.000007	-347.600774
+0.25	2214.496566	2403.050105	1549.343206	1873.330293	1953.05993
-0.3	-499.8339059	-541.1766143	-322.822753	-394.800008	-417.120928
+0.3	2427.152864	2633.66759	1674.241861	2013.624169	2128.813418
-0.35	-583.1395569	-631.3727167	-376.626545	-460.600009	-486.641083
+0.35	2549.615403	2796.016374	1756.861437	2095.813987	2220.665459
-0.4	-666.4452079	-721.5688191	-430.430338	-526.400011	-556.161238
+0.4	2649.017465	2848.583391	1779.627709	2114.458834	2246.870593
-0.45	-749.7508589	-811.7649215	-484.23413	-592.200012	-625.681393
+0.45	2656.123933	2867.044993	1743.702102	2063.463954	2211.667732
-0.5	-833.0565099	-901.9610239	-538.037922	-658.000013	-695.201547
+0.5	2601.262873	2815.106134	1701.099304	2013.78639	2159.755859
-0.55	-916.3621609	-992.1571263	-591.841714	-723.800015	-764.721702
+0.55	2495.43388	2660.561147	1671.090296	1982.871395	2108.768339
-0.6	-999.6678119	-1082.353229	-645.645507	-789.600016	-834.241857
+0.6	2296.417905	2502.306866	1578.366173	1875.796188	1992.676553
-0.65	-1082.973463	-1172.549331	-699.449299	-855.400017	-903.762012
+0.65	2058.000268	2244.545763	1427.339994	1707.380205	1812.214102
-0.7	-1166.279114	-1262.745433	-753.253091	-921.200019	-973.282166
+0.7	1749.439878	1892.457744	1237.763632	1484.297882	1559.982213
-0.75	-1249.584765	-1352.941536	-807.056883	-987.00002	-1042.80232
+0.75	1372.915256	1486.949504	998.5988563	1198.298179	1243.462992
-0.8	-1332.890416	-1443.137638	-860.860675	-1052.80002	-1112.32248
+0.8	951.2905908	1001.518878	714.3203827	856.6348322	870.8281489
-0.85	-1416.196067	-1533.333741	-914.664468	-1118.60002	-1181.84263
+0.85	542.4254552	548.333716	457.5074763	512.3579104	545.01984
-0.9	-1499.501718	-1623.529843	-968.46826	-1184.40002	-1251.36279
+0.9	293.7251073	272.66892	260.3350162	298.0855734	298.2574393
-0.95	-1582.807369	-1713.725945	-1022.27205	-1250.20003	-1320.88294
+0.95	80.89674057	79.72794938	93.05524664	99.25892975	82.7983282
-1	-1666.113041	-1803.921991	-1076.07583	-1316.00001	-1390.40361
+1	0	0	0	0	0
(Span 2) -2	-1666.113041	-1803.921991	-1076.07583	-1316.00001	-1390.40361
+2	0	0	0	0	0
-2.05	-1582.807169	-1713.725869	-1022.27167	-1250.20001	-1320.88343
+2.05	81.05331748	79.72427771	93.06236016	99.2665175	82.76402538
-2.1	-1499.50153	-1623.529768	-968.467897	-1184.40001	-1251.36325
+2.1	293.7148137	272.6674138	260.3216474	298.0748607	298.2469951
-2.15	-1416.19589	-1533.333666	-914.664124	-1118.60001	-1181.84307
+2.15	542.405429	548.3303052	457.5146214	512.3501669	545.0478776
-2.2	-1332.890251	-1443.137565	-860.860351	-1052.80001	-1112.32289
+2.2	951.2632284	1001.522065	714.3343155	856.6563056	870.8580815
-2.25	-1249.584612	-1352.941463	-807.056578	-987.000009	-1042.80271

+2.25	1372.921564	1486.951898	998.6103273	1198.316261	1243.490121
-2.3	-1166.278972	-1262.745362	-753.252805	-921.200009	-973.28253
+2.3	1749.461626	1894.017925	1237.771006	1484.310847	1560.004413
-2.35	-1082.973333	-1172.549261	-699.449032	-855.40001	-903.76235
+2.35	2058.014201	2244.543223	1427.337185	1707.385942	1812.229537
-2.4	-999.6676937	-1082.353159	-645.645259	-789.60001	-834.242171
+2.4	2298.511067	2502.302175	1578.357165	1875.789165	1992.683644
-2.45	-916.3620543	-992.157058	-591.841485	-723.800011	-764.721991
+2.45	2495.455276	2662.15756	1671.074029	1982.855262	2108.761723
-2.5	-833.056415	-901.9609566	-538.037712	-658.000012	-695.201812
+2.5	2601.273043	2815.103062	1701.121583	2013.801646	2159.738857
-2.55	-749.7507756	-811.7648553	-484.233939	-592.200012	-625.681632
+2.55	2656.111435	2867.904939	1743.725403	2063.488949	2211.683024
-2.6	-666.4451362	-721.5687539	-430.430166	-526.400013	-556.161453
+2.6	2648.992942	2848.581517	1779.644161	2114.475691	2246.877006
-2.65	-583.1394969	-631.3726525	-376.626393	-460.600014	-486.641273
+2.65	2549.610151	2796.012165	1756.869966	2095.821656	2220.658634
-2.7	-499.8338575	-541.1765512	-322.82262	-394.800014	-417.121094
+2.7	2427.17488	2633.668931	1674.239586	2013.61897	2128.795528
-2.75	-416.5282181	-450.9804498	-269.018847	-329.000015	-347.600915
+2.75	2214.50165	2403.048043	1549.331624	1873.314011	1953.0711
-2.8	-333.2225788	-360.7843485	-215.215074	-263.200015	-278.080735
+2.8	1963.780062	2072.635415	1355.260744	1652.488054	1705.261173
-2.85	-249.9169394	-270.5882471	-161.411301	-197.400016	-208.560556
+2.85	1615.603851	1669.513733	1105.677735	1345.107334	1393.872013
-2.9	-166.6113001	-180.3921458	-107.607528	-131.600017	-139.040376
+2.9	1167.64567	1203.019715	812.7619815	987.5901793	1020.415255
-2.95	-83.30566069	-90.19604439	-53.8037549	-65.8000173	-69.5201968
+2.95	643.4861909	664.5247854	445.6598518	540.44285	560.0366353
-3	-2.33E-13	-2.40E-13	-1.86E-13	-2.25E-13	-2.28E-13
+3	2.77E-13	2.77E-13	2.56E-13	3.06E-13	2.75E-13

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.46494	-4.56867	-5.921935166	-5.81202	-5.34864	-3.687556542	-4.99597	-5.67035	-6.32962156	-6.9949
End Shear	61.66776	44.5786	54.49473174	51.76371	45.88327	36.10341549	48.623	54.41564	58.31180683	62.07267
-0.05	-6.46494	-4.56867	-5.921935166	-5.81202	-5.76316	-3.687556542	-4.99597	-5.67035	-6.32962156	-6.9949
+0.05	57.08704	41.36665	50.03177595	47.1263	41.71251	33.51989916	45.14301	50.44478	53.89437309	57.19283
-0.1	-6.46494	-4.56867	-5.921935166	-5.81202	-7.18585	-3.687556542	-4.99597	-5.67035	-6.32962156	-6.9949
+0.1	52.20811	37.95135	45.27402968	42.18991	37.18924	30.77945941	41.44299	46.21842	49.19253946	51.9993
-0.15	-6.46494	-5.1658	-5.921935166	-5.81202	-8.54927	-3.907495371	-5.42043	-5.67035	-6.32962156	-6.9949
+0.15	48.462	35.32393	41.64624717	38.45339	33.7652	28.66992952	38.59511	42.96945	45.58574788	48.02401
-0.2	-8.85941	-7.59342	-7.596022422	-6.04332	-10.2859	-5.964918898	-8.32181	-8.81393	-8.806432438	-8.79925
+0.2	43.79272	31.99425	37.09187548	33.79961	29.48388	25.99485362	34.98413	38.85526	41.02859928	43.01279
-0.25	-12.2851	-9.56625	-9.466936297	-7.53176	-11.5035	-8.102432561	-10.8286	-11.4844	-11.47715323	-11.4702
+0.25	40.17572	29.45019	33.64685901	30.30979	26.36015	23.94958242	32.22362	35.71436	37.5576749	39.20532
-0.3	-16.6509	-12.9715	-11.84160391	-10.4009	-12.9919	-10.8250163	-14.5071	-15.2417	-15.21799441	-15.2097
+0.3	35.63502	26.24927	29.35908534	26.00776	22.53697	21.37437617	28.74827	31.76586	33.20520449	34.44332
-0.35	-20.0062	-15.5885	-13.99251104	-12.713	-14.4979	-12.91620176	-17.3328	-18.4971	-18.44662697	-18.4386
+0.35	32.20034	23.82214	26.14600902	22.96668	19.83652	19.42020548	26.11138	28.77464	29.91680211	30.85571
-0.4	-24.7409	-18.9016	-17.7756988	-15.6437	-17.2643	-15.56196844	-20.9084	-22.6216	-22.75800351	-22.7491
+0.4	27.92525	20.79311	22.18805945	19.36568	16.64474	16.97938074	22.81826	25.04534	25.82900342	26.40985
-0.45	-28.4158	-21.4303	-21.13916769	-17.9612	-19.519	-17.57998791	-23.636	-25.7721	-26.32983226	-26.4783
+0.45	24.72143	18.51647	19.25610633	16.70572	14.3077	15.14314681	20.34122	22.24541	22.76978733	23.09415
-0.5	-33.044	-24.6082	-25.39248642	-21.7854	-23.3349	-20.11442792	-27.062	-29.735	-30.83324081	-31.5579
+0.5	20.77435	15.7025	15.7662827	13.48211	11.5	12.87121511	17.27694	18.78883	19.00665389	19.03133
-0.55	-36.557	-27.0149	-28.93202262	-25.223	-26.5853	-22.03243781	-29.6552	-32.739	-34.2555351	-35.4272
+0.55	17.84991	13.60989	13.3169013	11.35198	9.639796	11.17976122	14.996	16.22182	16.223289	16.22023
-0.6	-40.9459	-30.0144	-33.55855861	-29.5562	-30.6093	-24.42104158	-32.8852	-36.4867	-38.53668615	-40.28
+0.6	14.29325	11.05412	10.36781102	9.077208	7.641196	9.11123019	12.20714	13.09145	13.05410666	13.05146
-0.65	-44.2487	-32.2655	-37.06759123	-32.8482	-33.687	-26.21220279	-35.3078	-39.3025	-41.76278204	-43.9469
+0.65	11.69941	9.179118	8.422189196	7.468165	6.238611	7.591396644	10.15853	10.79897	10.77558682	10.77295
-0.7	-48.3362	-35.0435	-41.4478154	-37.3132	-37.8617	-28.42046086	-38.2952	-42.7815	-45.76167865	-48.5058
+0.7	8.800081	6.924694	6.489631813	5.438608	4.583462	5.76077335	7.691696	8.04834	8.040960075	8.038392
-0.75	-51.3803	-37.1056	-44.74068429	-41.0643	-41.2518	-30.05793336	-40.5109	-45.3675	-48.74491527	-51.9182
+0.75	6.711271	5.30085	5.198392537	4.124132	3.431281	4.43940246	5.911675	6.218017	6.215740722	6.213558
-0.8	-55.1043	-39.6189	-48.8113716	-45.7391	-45.5484	-32.05133628	-43.2089	-48.5243	-52.40157067	-56.1165
+0.8	4.253832	3.69425	3.674205847	2.920037	2.381723	2.881198126	3.993245	4.181141	4.178963802	4.176878
-0.85	-57.8414	-41.4583	-51.83889924	-49.2471	-48.6589	-33.50828039	-45.1815	-50.839	-55.09528657	-59.2223
+0.85	2.917795	2.611365	2.592564459	2.05972	1.666181	2.0030722	2.736313	2.738254	2.736446809	2.734713
-0.9	-61.1395	-43.6638	-55.53682483	-53.5748	-52.3969	-35.25231849	-47.5437	-53.6201	-58.34970443	-62.993
+0.9	1.706343	1.284572	1.332907558	1.057872	0.845665	1.17273859	1.240434	1.292458	1.24038999	1.302163
-0.95	-63.5213	-45.247	-58.249845	-56.7859	-55.1428	-36.50189071	-49.237	-55.6217	-60.70723521	-65.7403
+0.95	0.859595	0.443377	0.466344233	0.426819	0.329928	0.585939321	0.428104	0.452941	0.453667574	0.456264
-1	-66.3314	-47.1015	-61.51178305	-60.6974	-58.5879	-37.96205531	-51.2167	-57.9736	-63.49942169	-69.0164
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	66.05767	46.90537	61.16159103	60.27445	58.21478	37.80780498	51.00753	57.72437	63.2021738	68.6663
-2.05	-7.46E-01	-0.40715	-0.404122799	-0.37019	-2.85E-01	-0.508173466	-0.39342	-0.39283	-0.393540635	-0.39609
+2.05	63.87375	45.46275	58.62421698	57.23188	55.5336	36.67193845	49.46749	55.89482	61.03016703	66.11781
-2.1	-1.83426	-1.47183	-1.465654078	-1.16343	-0.93073	-1.260674707	-1.42196	-1.42076	-1.422352481	-1.43061
+2.1	60.75719	43.42731	55.13630811	53.10361	51.99256	35.06547628	47.29063	53.32153	57.99928787	62.58592
-2.15	-2.77661	-2.4642	-2.445541015	-1.94277	-1.56907	-1.906588082	-2.56587	-2.56777	-2.565962643	-2.56424
+2.15	58.18992	41.71173	52.25984201	49.73729	49.08514	33.7088223	45.45312	51.15816	55.46777729	59.65283
-2.2	-4.50921	-3.85637	-3.836105411	-3.04879	-2.49119	-3.0466886	-4.18179	-4.39817	-4.39596661	-4.39386
+2.2	54.66896	39.3469	48.36757509	45.22733	45.09848	31.835747	42.9171	48.18243	52.00467464	55.6599
-2.25	-6.41775	-5.07917	-5.013655466	-3.98543	-3.3101	-4.258804385	-5.66842	-5.98263	-5.980349218	-5.97816
+2.25	51.77075	37.3919	45.20119005	41.59103	41.75174	30.28514814	40.81838	45.72686	49.16031375	52.39423

-2.3	-9.11995	-7.1668	-6.677576104	-5.64405	-4.75922	-5.957581171	-7.95684	-8.34337	-8.334304395	-8.33172
+2.3	47.85539	34.74083	40.96778367	36.76853	37.36573	28.17996955	37.9698	42.40219	45.32497918	48.00718
-2.35	-11.3729	-8.92046	-8.173959094	-7.24648	-6.04665	-7.381572966	-9.87573	-10.483	-10.46150069	-10.4589
+2.35	44.67463	32.57998	37.56065655	33.31124	34.13371	26.46226654	35.64609	39.69603	42.21443677	44.46101
-2.4	-14.6824	-11.331	-10.68466626	-9.31509	-7.84989	-9.335507481	-12.5095	-13.4303	-13.39081662	-13.3881
+2.4	40.42707	29.68581	33.04933507	29.07897	30.17027	24.15949372	32.53155	36.07595	38.06687083	39.74673
-2.45	-17.4462	-13.319	-12.97867869	-11.0628	-9.38736	-10.94453875	-14.6788	-15.8653	-15.83753349	-15.8345
+2.45	37.0121	27.35266	29.45062447	25.70845	27.04039	22.30153046	30.01911	33.16083	34.73680777	35.97206
-2.5	-21.2019	-16.0094	-16.12764635	-13.8297	-11.8011	-13.11911892	-17.6112	-19.1655	-19.41590162	-19.4722
+2.5	32.49455	24.25854	24.92316913	21.28894	22.86128	19.83566403	26.6852	29.29882	30.33699868	30.99748
-2.55	-24.2687	-18.1982	-18.84934073	-16.3372	-13.9851	-14.88634559	-19.9948	-21.8542	-22.34306965	-22.6325
+2.55	28.89376	21.78666	21.61478874	18.36994	19.93864	17.86428192	24.02025	26.21635	26.8340753	27.04639
-2.6	-28.383	-21.1251	-22.61873029	-19.7569	-16.9897	-17.24706518	-23.1794	-25.4539	-26.27608936	-26.8953
+2.6	24.16839	18.53573	17.2906032	15.31994	16.97699	15.26984046	20.51358	22.16595	22.24201561	22.23304
-2.65	-31.7045	-23.4812	-25.69743919	-22.558	-19.4723	-19.14564309	-25.7409	-28.3547	-29.45576644	-30.3535
+2.65	20.44366	15.95868	14.36498805	13.04035	14.81508	13.21187525	17.73238	18.95776	18.9034942	18.89555
-2.7	-36.1152	-26.6016	-29.82825541	-26.476	-22.9512	-21.65800009	-29.131	-32.2003	-33.68345152	-34.9658
+2.7	16.12947	12.5941	11.57907751	10.06791	12.83032	10.52336698	14.09953	14.77244	14.75266074	14.74436
-2.75	-39.6431	-29.0914	-33.16347935	-29.8223	-25.925	-23.6610874	-31.8342	-35.2716	-37.06898415	-38.6699
+2.75	12.73328	9.945417	9.731984077	7.74265	11.67279	8.40565967	11.23831	11.86305	11.85582575	11.84889
-2.8	-44.2879	-32.3622	-37.59249684	-34.3089	-29.941	-26.29056562	-35.3832	-39.3097	-41.53131977	-43.5649
+2.8	8.328781	7.324057	7.326673736	5.829064	10.1071	5.657594989	7.999736	8.42976	8.422250898	8.415058
-2.85	-47.9737	-34.9521	-41.13506788	-37.9289	-33.2543	-28.37132677	-38.192	-42.5098	-45.07603911	-47.4628
+2.85	6.464943	5.43578	5.921935193	5.812016	8.738429	4.075673695	5.742959	5.743444	6.329619792	6.994894
-2.9	-52.7905	-38.33	-45.79906154	-42.7326	-37.6841	-31.0834163	-41.8533	-46.6868	-49.71304614	-52.5736
+2.9	6.464943	4.568667	5.921935193	5.812016	6.985263	3.687555912	4.995972	5.670352	6.329619792	6.994894
-2.95	-56.5859	-40.9865	-49.49980372	-46.5724	-41.2025	-33.21501022	-44.7313	-49.9742	-53.37029036	-56.6133
+2.95	6.464943	4.568667	5.921935193	5.812016	5.843438	3.687555912	4.995972	5.670352	6.329619792	6.994894
-3	-61.5126	-44.4285	-54.33554839	-51.6242	-45.8679	-35.97520145	-48.4584	-54.2366	-58.12197592	-61.8729
+3	6.464943	4.568667	5.921935193	5.812016	5.348641	3.687555912	4.995972	5.670352	6.329619792	6.994894

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.46494	-6.06321	-6.508755689	-6.13123	-7.39941	-6.889064007	-7.28274	-3.12629
End Shear	61.66776	59.97076	63.81197572	59.69196	70.72852	62.19804651	65.67899	31.19414
-0.05	-6.46494	-6.06321	-6.508755689	-6.13123	-7.39941	-6.889064007	-7.28274	-3.12629
+0.05	57.08704	55.76216	59.28522761	55.4347	65.58083	57.02845446	60.20915	28.97297
-0.1	-6.46494	-6.06321	-6.508755689	-6.13123	-7.39941	-6.889064007	-7.28274	-3.12629
+0.1	52.20811	51.29005	54.47803851	50.90722	60.11268	51.52178231	54.38344	26.58321
-0.15	-6.46494	-7.33722	-7.337217165	-6.62407	-7.39941	-6.889064007	-7.28274	-4.093
+0.15	48.462	47.84381	50.7757504	47.42166	55.90754	47.32620634	49.94538	24.745
-0.2	-8.85941	-11.0077	-11.08179046	-10.3567	-11.0972	-8.288057921	-8.73159	-5.67579
+0.2	43.79272	43.46877	46.07849808	43.00113	50.58044	42.06337427	44.37917	22.41587
-0.25	-12.2851	-14.4772	-14.82226151	-13.5054	-14.7487	-10.79606994	-11.4001	-6.89322
+0.25	40.17572	40.11983	42.4852006	39.62091	46.51184	38.08600087	40.17318	20.63664
-0.3	-16.6509	-18.8917	-19.58433798	-18.0007	-20.2134	-13.9860379	-14.7946	-9.02423
+0.3	35.63502	35.89793	37.95827603	35.36427	41.39481	33.14042429	34.94422	18.39853
-0.35	-20.0062	-22.2788	-23.24028531	-21.4532	-24.415	-16.43263396	-17.3983	-10.8563
+0.35	32.20034	32.68992	34.52094722	32.13368	37.51645	29.43835451	31.03076	16.70194
-0.4	-24.7409	-26.5594	-27.8634868	-25.8208	-29.7363	-19.53138622	-20.6877	-13.1755
+0.4	27.92525	28.67724	30.22474699	28.0979	32.67853	24.88345157	26.21678	14.58529
-0.45	-28.4158	-29.8205	-31.38793546	-29.1519	-33.7996	-23.4661636	-24.7012	-14.9456
+0.45	24.72143	25.65376	26.99035641	25.06122	29.04409	21.51379688	22.65631	12.99499
-0.5	-33.044	-33.911	-35.81187196	-33.335	-38.9087	-28.44650208	-29.9437	-17.17
+0.5	20.77435	21.90638	22.98527425	21.30325	24.55431	17.50744607	18.42889	11.03021
-0.55	-36.557	-37.0025	-39.15784641	-36.5003	-42.78	-32.58106442	-34.3154	-18.8544
+0.55	17.84991	19.11106	20.00079662	18.50479	21.2175	14.69861595	15.47223	9.56986
-0.6	-40.9459	-40.8469	-43.32212207	-40.4419	-47.6077	-37.98232541	-40.0376	-20.9535
+0.6	14.29325	15.68507	16.34722816	15.08157	17.14489	11.59025614	12.26985	7.787369
-0.65	-44.2487	-43.7251	-46.44265021	-43.3972	-51.2334	-42.08250014	-44.382	-22.5286
+0.65	11.69941	13.16152	13.65963594	12.56563	14.15939	9.751061419	10.31659	6.480622
-0.7	-48.3362	-47.2673	-50.28686989	-47.0403	-55.7107	-47.2054245	-49.8108	-24.472
+0.7	8.800081	10.11299	10.41797226	9.534113	10.57298	7.527001887	7.955152	4.91083
-0.75	-51.3803	-49.8887	-53.13497986	-49.7413	-59.037	-51.06056362	-53.8967	-25.9141
+0.75	6.711271	7.904834	8.074241246	7.344977	7.992483	5.914112452	6.243108	3.855135
-0.8	-55.1043	-53.0725	-56.59874875	-53.029	-63.0949	-55.83173424	-58.9544	-27.6713
+0.8	4.253832	5.289846	5.304879538	4.941912	5.260959	4.001309598	4.21339	2.824947
-0.85	-57.8414	-55.3934	-59.12746659	-55.4315	-66.0681	-59.38473276	-62.7215	-28.9569
+0.85	2.917795	3.706869	3.70686854	3.342147	3.502933	2.819355787	2.967743	2.084493
-0.9	-61.1395	-58.1629	-62.15039342	-58.3067	-69.6376	-63.73073289	-67.3303	-30.4976
+0.9	1.706343	1.915415	1.915414888	1.459335	1.530255	1.394287805	1.467671	1.215857
-0.95	-63.5213	-60.1397	-64.31274293	-60.3663	-72.2041	-66.924499	-70.7181	-31.6029
+0.95	0.859595	0.67118	0.671180245	0.503651	0.535955	0.507121729	0.533812	0.608816
-1	-66.3314	-62.4387	-66.83443057	-62.7723	-75.2161	-70.77191058	-74.8003	-32.8965
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	66.05767	62.19652	66.56836674	62.51817	74.89708	70.35840963	74.36149	32.76002
-2.05	-7.46E-01	-0.57924	-0.57923984	-0.46285	-0.4652	-0.439892325	-0.46304	-0.52364
+2.05	63.87375	60.40809	64.60674011	60.64658	72.55405	67.36561814	71.18603	31.7537
-2.1	-1.83426	-2.1043	-2.104304898	-1.67289	-1.68134	-1.59005827	-1.67375	-1.30351
+2.1	60.75719	57.86673	61.82679474	57.99877	69.25457	63.25965037	66.83069	30.33273
-2.15	-2.77661	-3.49788	-3.497880364	-3.1254	-3.26495	-2.660385171	-2.80041	-1.97883
+2.15	58.18992	55.71239	59.47532015	55.76215	66.47796	59.87907872	63.24568	29.13432
-2.2	-4.50921	-5.56826	-5.599342901	-5.18206	-5.52508	-4.205056361	-4.42955	-2.93029
+2.2	54.66896	52.72863	56.22434905	52.67349	62.65553	55.3112508	58.40263	27.48159
-2.25	-6.41775	-7.60242	-7.753599224	-7.04569	-7.64042	-5.692995052	-6.00843	-3.7313
+2.25	51.77075	50.252	53.53000282	50.11615	59.49903	51.59999886	54.46852	26.11474

-2.3	-9.11995	-10.4413	-10.76674588	-9.86007	-10.9579	-7.766549385	-8.20946	-5.07901
+2.3	47.85539	46.88191	49.86839518	46.64359	55.22269	46.64372023	49.2155	24.26066
-2.35	-11.3729	-12.8126	-13.2883382	-12.2182	-13.7477	-9.496570563	-10.0463	-6.30009
+2.35	44.67463	44.12662	46.87815335	43.80981	51.73998	42.65889225	44.99274	22.74904
-2.4	-14.6824	-16.057	-16.74357844	-15.4528	-17.5859	-11.8610775	-12.5575	-7.98005
+2.4	40.42707	40.42628	42.86630224	40.01032	47.07875	37.38757923	39.40748	20.72402
-2.45	-17.4462	-18.7219	-19.58553474	-18.1155	-20.7539	-14.31119958	-15.0644	-9.36657
+2.45	37.0121	37.43594	39.6271364	36.9444	43.32354	33.18625819	34.95652	19.09127
-2.5	-21.2019	-22.3157	-23.42247519	-21.7133	-25.0438	-17.92227765	-18.8656	-11.244
+2.5	32.49455	33.46144	35.32543797	32.87492	38.34646	27.89670354	29.36495	16.92574
-2.55	-24.2687	-25.2306	-26.53782967	-24.6365	-28.5362	-21.04665101	-22.1628	-12.7723
+2.55	28.89376	30.27967	31.8843294	29.62115	34.37241	24.02282397	25.28718	15.19554
-2.6	-28.383	-29.1176	-30.69606771	-28.5405	-33.2087	-25.37875826	-26.7402	-14.8168
+2.6	24.16839	26.08707	27.35316265	25.33863	29.14852	19.18249475	20.32495	12.91989
-2.65	-31.7045	-32.2389	-34.03783285	-31.6797	-36.9719	-28.92181402	-30.4848	-16.4632
+2.65	20.44366	22.75749	23.75707586	21.94132	25.00936	16.77842494	17.76628	11.11588
-2.7	-36.1152	-36.3632	-38.4569818	-35.8331	-41.958	-33.68129192	-35.516	-18.6444
+2.7	16.12947	18.4029	19.05686519	17.50272	19.60767	13.6329976	14.41891	8.760557
-2.75	-39.6431	-39.6472	-41.97820415	-39.1441	-45.9382	-37.52818784	-39.5834	-20.3853
+2.75	12.73328	14.96912	15.35277478	14.00614	15.35706	11.15173985	11.77859	7.065809
-2.8	-44.2879	-43.9527	-46.59786993	-43.4898	-51.169	-42.64161887	-44.9907	-22.6727
+2.8	8.328781	10.50859	10.54388322	9.94225	10.63637	7.927355279	8.347821	5.500642
-2.85	-47.9737	-47.3557	-50.25154732	-46.9282	-55.3126	-46.735261	-49.3203	-24.4844
+2.85	6.464943	7.720678	7.720677574	7.038934	7.408374	6.889062714	7.282741	4.269506
-2.9	-52.7905	-51.7863	-55.01135133	-51.4094	-60.7188	-52.12922801	-55.026	-26.8477
+2.9	6.464943	6.063208	6.508755125	6.13123	7.399413	6.889062714	7.282741	3.126288
-2.95	-56.5859	-55.2649	-58.75052613	-54.931	-64.9721	-56.412513	-59.5575	-28.7065
+2.95	6.464943	6.063208	6.508755125	6.13123	7.399413	6.889062714	7.282741	3.126288
-3	-61.5126	-59.7645	-63.59004148	-59.4906	-70.4849	-62.01359883	-65.4838	-31.1152
+3	6.464943	6.063208	6.508755125	6.13123	7.399413	6.889062714	7.282741	3.126288

2-Span: Shear (Max and Min) Raw Data Results - 80' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.46494	-12.0454	-13.0417	-7.77961	-9.51417	-10.0521
End Shear	61.66776	102.3537	106.0746	70.4311	85.36595	88.69676
-0.05	-6.46494	-12.0454	-13.0417	-7.77961	-9.51417	-10.0521
+0.05	57.08704	93.04047	96.08466	64.43723	78.14175	80.97475
-0.1	-6.46494	-12.0454	-13.0417	-7.77961	-9.51417	-10.0521
+0.1	52.20811	83.13821	85.3259	58.05636	70.44693	72.75187
-0.15	-6.46494	-12.0454	-13.0417	-7.77961	-9.51417	-10.0521
+0.15	48.462	75.64477	77.21305	53.20446	64.59274	66.50894
-0.2	-8.85941	-12.0454	-13.0417	-9.95401	-11.1024	-11.1031
+0.2	43.79272	66.31421	67.15041	47.1315	57.26091	58.70783
-0.25	-12.2851	-14.1799	-13.3423	-12.8884	-14.3061	-14.4558
+0.25	40.17572	59.31919	59.63904	42.55268	51.72936	52.8366
-0.3	-16.6509	-18.5478	-18.8281	-16.6197	-18.379	-19.2267
+0.3	35.63502	50.69856	50.88765	36.87401	44.86419	45.56956
-0.35	-20.0062	-22.7564	-23.668	-19.4808	-21.5014	-22.8905
+0.35	32.20034	44.31712	44.74017	32.63544	39.7359	40.15741
-0.4	-24.7409	-29.1822	-30.5156	-23.0942	-26.1604	-27.525
+0.4	27.92525	37.05589	37.70701	27.43744	33.44104	33.57116
-0.45	-28.4158	-34.3445	-36.3194	-25.845	-30.9888	-31.0592
+0.45	24.72143	31.70833	32.68144	23.60969	28.80067	28.90428
-0.5	-33.044	-41.9241	-44.4041	-30.9131	-38.0886	-37.7023
+0.5	20.77435	25.53239	26.55665	19.23441	23.48657	23.25319
-0.55	-36.557	-48.4596	-50.5781	-35.4324	-43.5129	-43.7799
+0.55	17.84991	21.2879	22.07454	16.66584	19.60357	19.725
-0.6	-40.9459	-57.4663	-58.3417	-41.7238	-51.0606	-51.6377
+0.6	14.29325	16.63464	16.96921	13.73354	15.31736	16.08251
-0.65	-44.2487	-64.3205	-64.9683	-46.5798	-56.8838	-57.7931
+0.65	11.69941	13.31745	13.49924	11.57053	12.71713	13.40456
-0.7	-48.3362	-74.1088	-74.8307	-52.6588	-64.1702	-65.7763
+0.7	8.800081	9.722507	9.651476	8.953183	9.844333	10.17668
-0.75	-51.3803	-81.6722	-83.2829	-57.2429	-69.6621	-71.8066
+0.75	6.711271	7.643905	7.213997	7.053615	7.614325	7.84474
-0.8	-55.1043	-91.1037	-93.9862	-62.9291	-76.4706	-79.3005
+0.8	4.253832	5.175751	4.819912	4.798728	5.2329	5.26862
-0.85	-57.8414	-98.186	-102.051	-67.1741	-81.5505	-84.9067
+0.85	2.917795	3.3411	3.194233	3.341055	3.563792	3.401345
-0.9	-61.1395	-106.93	-112.044	-72.3811	-87.7775	-91.7991
+0.9	1.706343	1.518337	1.485732	1.71124	1.825323	1.522748
-0.95	-63.5213	-113.423	-119.496	-76.2198	-92.3648	-96.8937
+0.95	0.859595	0.537206	0.605061	0.599619	0.639594	0.533757
-1	-66.3314	-121.341	-128.625	-80.8613	-97.9066	-103.072
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	66.05767	120.4845	127.637	80.36141	97.31009	102.4059
-2.05	-7.46E-01	-0.466	-0.52411	-0.52002	-0.55468	-0.46298
+2.05	63.87375	114.3255	120.5359	76.75098	92.99926	97.59971
-2.1	-1.83426	-1.6537	-1.65406	-1.88105	-2.00646	-1.67372
+2.1	60.75719	105.9773	110.9553	71.81586	87.10177	91.05001
-2.15	-2.77661	-3.18761	-2.97373	-3.13453	-3.3435	-3.24843
+2.15	58.18992	99.1759	103.182	67.76556	82.25805	85.68864
-2.2	-4.50921	-5.4388	-5.06364	-5.03903	-5.4967	-5.53283
+2.2	54.66896	90.07081	92.81433	62.30808	75.72722	78.4813
-2.25	-6.41775	-7.35874	-6.8811	-6.79307	-7.42149	-7.52572
+2.25	51.77075	82.73452	84.48895	57.88507	70.4312	72.65214

-2.3	-9.11995	-10.031	-10.0564	-9.23518	-10.154	-10.5237
+2.3	47.85539	73.01081	73.71156	51.99162	63.37072	64.89944
-2.35	-11.3729	-12.9165	-13.054	-11.2711	-12.3886	-13.0346
+2.35	44.67463	65.28538	66.50166	47.26311	57.70304	58.68981
-2.4	-14.6824	-17.1354	-17.5011	-14.0519	-15.7464	-16.4774
+2.4	40.42707	56.47345	57.48932	41.02004	50.21652	50.79391
-2.45	-17.4462	-20.755	-21.4556	-16.3328	-19.0689	-19.3107
+2.45	37.0121	49.46769	51.45055	36.07008	44.27806	44.6382
-2.5	-21.2019	-26.1699	-27.2178	-19.707	-24.061	-23.8623
+2.5	32.49455	41.04966	43.5131	30.2598	37.30439	36.82461
-2.55	-24.2687	-30.9688	-31.982	-23.1104	-28.1946	-28.258
+2.55	28.89376	35.07426	37.22454	26.23234	31.78192	31.55728
-2.6	-28.383	-37.8437	-38.4429	-28.0016	-34.1246	-34.2579
+2.6	24.16839	28.43737	29.71631	22.69573	25.53932	27.01359
-2.65	-31.7045	-43.4919	-43.883	-32.045	-39.0212	-39.4043
+2.65	20.44366	23.35237	24.35522	19.88511	21.94263	23.40871
-2.7	-36.1152	-51.6367	-51.7863	-37.4941	-45.6142	-46.3623
+2.7	16.12947	17.94167	18.13288	16.2068	17.92836	18.69844
-2.75	-39.6431	-58.3423	-58.5905	-41.9113	-50.9543	-52.0149
+2.75	12.73328	14.63435	13.92803	13.30445	14.76028	14.98748
-2.8	-44.2879	-67.3353	-68.2471	-47.798	-58.0658	-59.5632
+2.8	8.328781	12.04535	13.04166	9.531952	10.64159	10.64229
-2.85	-47.9737	-74.593	-76.0743	-52.5218	-63.7688	-65.6312
+2.85	6.464943	12.04535	13.04166	7.779609	9.51417	10.05208
-2.9	-52.7905	-84.2268	-86.5043	-58.7595	-71.2951	-73.6573
+2.9	6.464943	12.04535	13.04166	7.779609	9.51417	10.05208
-2.95	-56.5859	-91.9291	-94.8728	-63.7228	-77.2804	-80.0534
+2.95	6.464943	12.04535	13.04166	7.779609	9.51417	10.05208
-3	-61.5126	-102.065	-105.922	-70.2253	-85.1179	-88.4451
+3	6.464943	12.04535	13.04166	7.779609	9.51417	10.05208

2-Span: Moment (Max and Min) Raw Data Results - 80' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.77E-13	-7.2E-14	-8.91731E-14	-6.8E-14	-5.39E-14	-6.67099E-14	-6.9E-14	-6.8E-14	-6.80844E-14	-6.8E-14
End Shear	1.68E-13	7.36E-14	8.49191E-14	6.37E-14	5.78E-14	6.50858E-14	8.26E-14	7.46E-14	7.4607E-14	7.52E-14
-0.05	-25.8598	-18.2747	-23.68774067	-23.2481	-21.3946	-14.75022617	-19.9839	-22.6814	-25.31848624	-27.9796
+0.05	228.3482	165.4666	200.1271038	188.5052	168.1631	134.0795967	180.572	201.7791	215.9876623	229.2226
-0.1	-51.7195	-36.5493	-47.37548133	-46.4961	-42.7891	-29.50045234	-39.9678	-45.3628	-50.63697248	-55.9592
+0.1	421.9762	306.8235	366.3821363	342.0039	306.7225	248.6603757	335.221	373.9611	400.5079219	426.8254
-0.15	-77.5793	-54.824	-71.063222	-69.7442	-64.1837	-44.25067851	-59.9517	-68.0442	-75.95545873	-83.9388
+0.15	581.6129	424.6114	500.5275817	462.4565	416.7158	344.2035789	464.145	516.823	565.8072813	600.7149
-0.2	-103.439	-73.0987	-94.75096266	-92.9923	-85.5782	-59.00090467	-79.9355	-90.7257	-101.273945	-111.918
+0.2	710.3108	519.007	602.9828758	560.5973	507.2123	421.1120874	567.6884	630.8011	698.926696	747.5513
-0.25	-129.299	-91.3733	-118.4387033	-116.24	-106.973	-73.75113084	-99.9194	-113.407	-126.5924312	-139.898
+0.25	803.6103	590.7016	683.3311163	631.3678	574.1058	479.7528734	646.5798	720.6419	800.8152621	866.7105
-0.3	-155.159	-109.648	-142.126444	-139.488	-128.367	-88.50135701	-119.903	-136.088	-151.9109175	-167.878
+0.3	868.2563	640.5403	738.8562688	672.5176	615.5445	520.7851266	707.8005	791.4322	872.2029194	952.1716
-0.35	-181.018	-127.923	-165.8141847	-162.736	-149.762	-103.2515832	-139.887	-158.77	-177.2294037	-195.857
+0.35	918.1831	676.7041	766.316022	707.2422	648.6785	544.9907864	749.8813	835.6775	922.7732891	1004.965
-0.4	-206.878	-146.197	-189.5019253	-185.985	-171.156	-118.0018093	-159.871	-181.451	-202.5478899	-223.837
+0.4	939.0607	693.9984	770.3747815	729.1947	669.2359	553.2744607	769.6178	854.9009	948.7205149	1030.479
-0.45	-232.738	-164.472	-213.189666	-209.233	-192.551	-132.7520355	-179.855	-204.133	-227.8663762	-251.816
+0.45	932.6729	691.966	756.4353901	733.5046	673.4286	546.6634765	768.2848	850.6426	947.6285313	1034.284
-0.5	-258.598	-182.747	-236.8774067	-232.481	-213.946	-147.5022617	-199.839	-226.814	-253.1848624	-279.796
+0.5	919.6433	679.8958	743.4184046	713.7356	656.1854	540.3084219	754.6475	836.6991	929.8213567	1012.448
-0.55	-284.457	-201.021	-260.5651473	-255.729	-235.34	-162.2524879	-219.823	-249.496	-278.5033487	-307.775
+0.55	885.59	653.048	725.4293281	683.9017	628.4357	523.0039313	724.0883	804.9139	891.3239872	966.388
-0.6	-310.317	-219.296	-284.252888	-278.977	-256.735	-177.002714	-239.807	-272.177	-303.8218349	-335.755
+0.6	826.8923	609.4389	687.4735421	635.5096	583.16	491.5702525	675.5678	752.1449	829.7762684	903.3974
-0.65	-336.177	-237.571	-307.9406286	-302.225	-278.129	-191.7529402	-259.79	-294.858	-329.1403211	-363.735
+0.65	745.8406	550.698	627.4066199	571.1723	522.9014	447.2413675	610.8642	680.478	747.4666524	816.1779
-0.7	-362.037	-255.845	-331.6283693	-325.473	-299.524	-206.5031664	-279.774	-317.54	-354.4588074	-391.714
+0.7	645.2775	480.5845	543.6120026	493.8056	449.8701	391.3740926	531.9215	591.8637	650.3010002	707.4188
-0.75	-387.896	-274.12	-355.31611	-348.721	-320.918	-221.2533925	-299.758	-340.221	-379.7772936	-419.694
+0.75	531.1425	398.94	438.5097201	397.8292	359.5078	325.4479445	440.8495	488.6714	536.5640694	580.0473
-0.8	-413.756	-292.395	-379.0038506	-371.969	-342.313	-236.0036187	-319.742	-362.903	-405.0957799	-447.673
+0.8	400.2342	306.473	314.7447377	278.3033	248.1517	251.0650157	339.9236	373.4609	408.1102496	437.2286
-0.85	-439.616	-310.669	-402.6915913	-395.217	-393.38	-250.7538449	-339.726	-385.584	-430.4142661	-475.653
+0.85	258.3438	205.3186	192.0801696	164.5787	143.2207	169.9501163	231.5848	249.2439	267.9312976	282.3658
-0.9	-465.476	-328.944	-426.379332	-418.465	-506.979	-265.504071	-359.71	-408.265	-455.7327524	-503.633
+0.9	132.0664	117.7529	117.5170434	93.44752	78.03962	90.75043507	129.1689	132.8862	139.9263302	140.029
-0.95	-491.335	-347.219	-450.0670726	-441.713	-660.665	-280.2542972	-379.694	-430.947	-481.0512386	-531.612
+0.95	65.32926	42.15197	42.04289435	33.4195	26.89145	44.83596674	40.74251	40.6864	40.74345512	40.75598
-1	-517.195	-365.493	-473.7548173	-464.961	-840.844	-295.0045269	-399.678	-453.628	-506.3697279	-559.592
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-517.195	-365.493	-473.7548173	-464.961	-840.844	-295.0045269	-399.678	-453.628	-506.3697279	-559.592
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-491.336	-347.219	-450.0670765	-441.713	-660.665	-280.2542528	-379.694	-430.947	-481.0511072	-531.612
+2.05	65.32925	42.13159	42.04615121	33.42192	26.95207	44.82181953	40.72815	40.67229	40.72965576	40.75932
-2.1	-465.476	-328.944	-426.3793358	-418.465	-506.98	-265.5040291	-359.71	-408.265	-455.732628	-503.632
+2.1	132.0665	117.758	117.5216088	93.45097	78.03292	90.76854495	129.1796	132.9042	139.9305553	140.0332
-2.15	-439.616	-310.669	-402.691595	-395.217	-393.38	-250.7538055	-339.726	-385.584	-430.4141489	-475.653
+2.15	258.8223	205.3212	192.0641965	164.5775	143.2201	169.9630652	231.581	249.2604	267.9347234	282.3743
-2.2	-413.756	-292.395	-379.0038542	-371.969	-342.313	-236.0035818	-319.742	-362.903	-405.0956697	-447.673
+2.2	400.6844	306.4758	314.7428019	278.2997	248.1498	251.0782732	339.9206	373.4554	408.1141574	437.2378
-2.25	-387.897	-274.12	-355.3161134	-348.721	-320.918	-221.2533582	-299.758	-340.221	-379.7771905	-419.694

+2.25	531.5717	398.9426	438.5066941	397.8238	359.5134	325.4610277	440.8466	488.6658	536.5676536	580.0564
-2.3	-362.037	-255.845	-331.6283727	-325.473	-299.524	-206.5031345	-279.774	-317.54	-354.4587114	-391.714
+2.3	645.6637	480.5863	543.6072272	493.8137	449.8744	391.3865834	531.9181	591.8573	650.3035449	707.4269
-2.35	-336.177	-237.571	-307.9406319	-302.225	-278.129	-191.7529109	-259.791	-294.858	-329.1402322	-363.734
+2.35	746.3922	550.6967	627.39957	571.1685	522.8994	447.2527539	610.8596	680.4702	747.4650819	816.1843
-2.4	-310.317	-219.296	-284.2528911	-278.977	-256.735	-177.0026872	-239.807	-272.177	-303.821753	-335.755
+2.4	827.3762	609.436	687.4636023	635.5168	583.1566	491.5801459	675.5616	752.1352	829.7727247	903.4014
-2.45	-284.457	-201.021	-260.5651503	-255.729	-235.34	-162.2524636	-219.823	-249.495	-278.5032739	-307.775
+2.45	885.9879	653.0432	725.4394504	683.9118	628.4412	523.0120576	724.0801	804.9248	891.3178557	966.3889
-2.5	-258.598	-182.747	-236.8774096	-232.481	-213.946	-147.5022399	-199.839	-226.814	-253.1847947	-279.796
+2.5	919.9384	679.8885	743.4251356	713.7427	656.1892	540.3144295	754.6367	836.707	929.8120104	1012.444
-2.55	-232.738	-164.472	-213.1896688	-209.233	-192.551	-132.7520163	-179.855	-204.133	-227.8663155	-251.816
+2.55	932.4323	691.9748	756.4287711	733.5147	673.4242	546.6587881	768.2973	850.6365	947.6397733	1034.29
-2.6	-206.878	-146.197	-189.501928	-185.984	-171.156	-118.0017926	-159.871	-181.451	-202.5478364	-223.837
+2.6	938.7093	694.0045	770.383413	729.2014	669.2296	553.2676443	769.6274	854.8915	948.7281004	1030.481
-2.65	-181.018	-127.923	-165.8141873	-162.736	-149.762	-103.251569	-139.887	-158.77	-177.2293572	-195.857
+2.65	917.7065	676.7071	766.326752	707.2477	648.6814	544.9815353	749.8875	835.6875	922.7766976	1004.961
-2.7	-155.159	-109.648	-142.1264465	-139.488	-128.367	-88.50134535	-119.903	-136.088	-151.910878	-167.877
+2.7	867.73	640.5393	738.8633464	672.5286	615.5418	520.7731526	707.8029	791.4382	872.2011344	952.1632
-2.75	-129.299	-91.3733	-118.4387057	-116.24	-106.973	-73.75112171	-99.9194	-113.407	-126.5923989	-139.898
+2.75	803.1488	590.6972	683.3341333	631.3753	574.1012	479.7380346	646.5779	720.6435	800.8088343	866.7191
-2.8	-103.439	-73.0987	-94.75096494	-92.9922	-85.5782	-59.00089806	-79.9355	-90.7256	-101.2739197	-111.918
+2.8	708.6062	518.9989	602.9810332	560.6007	507.2054	421.094242	567.6825	630.7978	698.9152853	747.5544
-2.85	-77.5793	-54.824	-71.06322416	-69.7442	-64.1837	-44.25067441	-59.9517	-68.0442	-75.95544053	-83.9387
+2.85	582.0585	424.5994	500.5210634	462.455	416.7151	344.1825004	464.1349	516.8149	565.8132777	600.7121
-2.9	-51.7195	-36.5493	-47.37548339	-46.4961	-42.7891	-29.50045076	-39.9678	-45.3628	-50.63696136	-55.9592
+2.9	422.3243	306.8075	366.392468	341.9978	306.7279	248.6673381	335.2065	373.948	400.5085047	426.8271
-2.95	-25.8598	-18.2747	-23.68774262	-23.2481	-21.3946	-14.75022712	-19.9839	-22.6814	-25.31848219	-27.9796
+2.95	228.5241	165.4709	200.1323294	188.5103	168.1658	134.0830956	180.5767	201.7843	215.9826495	229.2183
-3	-1.18E-13	-7.6E-14	-7.51638E-14	-7.6E-14	-1.00E-13	-5.50671E-14	-7.7E-14	-8.5E-14	-9.14131E-14	-9.8E-14
+3	1.51E-13	8.81E-14	9.0919E-14	9.44E-14	8.08E-14	7.07576E-14	8.61E-14	1.08E-13	1.12232E-13	1.13E-13

2-Span: Moment (Max and Min) Raw Data Results - 80' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.77E-13	-8.9E-14	-9.5E-14	-7.9E-14	-1E-13	-1E-13	-1.1E-13	-7.61596E-14
End Shear	1.68E-13	8.99E-14	1.01E-13	1.01E-13	1.17E-13	9.89E-14	1.04E-13	7.96489E-14
-0.05	-25.8598	-24.2528	-26.035	-24.5249	-29.5976	-27.5563	-29.131	-12.50514916
+0.05	228.3482	223.0486	237.1409	221.7388	262.3233	228.1138	240.8366	115.8918876
-0.1	-51.7195	-48.5057	-52.07	-49.0499	-59.1953	-55.1125	-58.2619	-25.01029831
+0.1	421.9762	414.6267	440.5739	411.816	486.7048	417.1458	440.3388	214.7793472
-0.15	-77.5793	-72.7585	-78.1051	-73.5748	-88.7929	-82.6688	-87.3929	-37.51544747
+0.15	581.6129	575.148	610.5489	570.3562	672.7986	568.9846	600.4891	296.9400378
-0.2	-103.439	-97.0114	-104.14	-98.0997	-118.391	-110.225	-116.524	-50.02059663
+0.2	710.3108	704.8844	747.4897	697.8194	821.48	688.2343	726.3899	362.7598502
-0.25	-129.299	-121.264	-130.175	-122.625	-147.988	-137.781	-145.655	-62.52574578
+0.25	803.6103	804.6591	852.3115	795.0858	946.4329	790.7964	835.6399	412.7327142
-0.3	-155.159	-145.517	-156.21	-147.15	-177.586	-165.338	-174.786	-75.03089494
+0.3	868.2563	875.4945	926.1444	873.7649	1039.147	858.4454	907.8834	447.5547906
-0.35	-181.018	-169.77	-182.245	-171.674	-207.184	-192.894	-203.917	-87.5360441
+0.35	918.1831	921.5952	980.2185	925.9293	1097.969	905.6781	957.2578	468.063228
-0.4	-206.878	-194.023	-208.28	-196.199	-236.781	-220.45	-233.048	-100.0411933
+0.4	939.0607	949.2556	1007.849	950.6939	1124.149	921.6405	974.708	474.8153834
-0.45	-232.738	-218.276	-234.315	-220.724	-266.379	-248.006	-262.179	-112.5463424
+0.45	932.6729	951.0841	1007.905	949.7977	1119.422	907.5983	960.3324	468.7327744
-0.5	-258.598	-242.528	-260.35	-245.249	-295.976	-275.563	-291.31	-125.0514916
+0.5	919.6433	932.513	989.236	932.5808	1101.184	891.0127	942.5633	462.8712426
-0.55	-284.457	-266.781	-286.385	-269.774	-325.574	-303.119	-320.441	-137.5566407
+0.55	885.59	892.2817	947.6902	894.3904	1058.301	867.4218	917.2522	449.7166607
-0.6	-310.317	-291.034	-312.42	-294.299	-355.172	-330.675	-349.572	-150.0617899
+0.6	826.8923	830.9583	883.1414	834.3921	988.4258	813.7947	860.1512	424.0459799
-0.65	-336.177	-315.287	-338.455	-318.824	-384.769	-358.231	-378.703	-162.566939
+0.65	745.8406	753.9907	797.9236	754.7091	894.1554	732.3115	773.6367	386.9244794
-0.7	-362.037	-339.54	-364.49	-343.349	-414.367	-385.788	-407.833	-175.0720882
+0.7	645.2775	660.925	696.3587	657.7276	778.3328	630.8659	666.9991	339.5258223
-0.75	-387.896	-363.793	-390.525	-367.874	-443.965	-413.344	-436.964	-187.5772373
+0.75	531.1425	552.0909	579.8497	546.0362	644.0463	507.2571	536.0033	283.1317953
-0.8	-413.756	-388.045	-416.56	-392.399	-473.562	-440.9	-466.095	-200.0823865
+0.8	400.2342	430.1405	448.8297	422.4257	494.6294	362.5136	382.7277	219.132178
-0.85	-439.616	-412.298	-442.595	-416.924	-503.16	-468.456	-495.226	-212.5875357
+0.85	258.3438	297.9255	306.341	290.0163	333.6611	222.4963	235.0879	149.0249478
-0.9	-465.476	-436.551	-468.63	-441.449	-532.758	-496.013	-524.357	-225.0926848
+0.9	132.0664	167.2318	167.2318	160.8161	172.3928	127.1229	133.8136	94.28901958
-0.95	-491.335	-460.804	-494.665	-465.974	-562.355	-523.569	-553.488	-237.597834
+0.95	65.32926	59.93951	59.93951	47.93698	47.94301	45.51089	47.9062	46.2321094
-1	-517.195	-485.057	-520.7	-490.499	-591.953	-551.125	-582.619	-250.1030089
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-517.195	-485.057	-520.7	-490.499	-591.953	-551.125	-582.619	-250.1030089
+2	0	0	0	0	0	0	0	0
-2.05	-491.336	-460.804	-494.665	-465.974	-562.355	-523.569	-553.488	-237.5978583
+2.05	65.32925	59.94482	59.94482	47.92315	47.93515	45.49132	47.8856	45.99575344
-2.1	-465.476	-436.551	-468.63	-441.449	-532.758	-496.013	-524.357	-225.0927077
+2.1	132.0665	167.2392	167.2392	160.832	172.413	127.1279	133.8188	93.85291396
-2.15	-439.616	-412.298	-442.595	-416.924	-503.16	-468.456	-495.226	-212.5875572
+2.15	258.8223	297.9298	306.3438	290.0375	333.6769	222.4998	235.0915	149.0200357
-2.2	-413.756	-388.045	-416.56	-392.399	-473.562	-440.9	-466.095	-200.0824066
+2.2	400.6844	430.1454	448.8331	422.4207	494.6463	362.5195	382.7343	219.127316
-2.25	-387.897	-363.792	-390.525	-367.874	-443.965	-413.344	-436.964	-187.577256

+2.25	**531.5717**	**552.0957**	**579.8528**	**546.0313**	**644.0632**	**507.2619**	**536.0088**	**283.12681**
-2.3	**-362.037**	**-339.54**	**-364.49**	**-343.349**	**-414.367**	**-385.788**	**-407.833**	**-175.0721054**
+2.3	**645.6637**	**660.929**	**696.3608**	**657.7222**	**778.349**	**630.869**	**667.0027**	**339.5207421**
-2.35	**-336.177**	**-315.287**	**-338.455**	**-318.824**	**-384.769**	**-358.231**	**-378.703**	**-162.5669548**
+2.35	**746.3922**	**753.993**	**797.9214**	**754.7024**	**894.1698**	**732.3096**	**773.6351**	**386.9191039**
-2.4	**-310.317**	**-291.034**	**-312.42**	**-294.299**	**-355.172**	**-330.675**	**-349.572**	**-150.0618042**
+2.4	**827.3762**	**830.9564**	**883.137**	**834.3833**	**988.4377**	**813.79**	**860.1465**	**424.0400038**
-2.45	**-284.457**	**-266.781**	**-286.385**	**-269.774**	**-325.574**	**-303.119**	**-320.441**	**-137.5566536**
+2.45	**885.9879**	**892.2774**	**947.6833**	**894.3792**	**1058.31**	**867.4136**	**917.2439**	**449.7102877**
-2.5	**-258.598**	**-242.528**	**-260.35**	**-245.249**	**-295.977**	**-275.563**	**-291.31**	**-125.051503**
+2.5	**919.9384**	**932.5056**	**989.2257**	**932.5942**	**1101.189**	**891.0238**	**942.5753**	**462.8642875**
-2.55	**-232.738**	**-218.275**	**-234.315**	**-220.724**	**-266.379**	**-248.006**	**-262.179**	**-112.5463524**
+2.55	**932.4323**	**951.0936**	**1007.917**	**949.7866**	**1119.42**	**907.6107**	**960.3451**	**468.7297521**
-2.6	**-206.878**	**-194.023**	**-208.28**	**-196.199**	**-236.781**	**-220.45**	**-233.048**	**-100.0412019**
+2.6	**938.7093**	**949.2613**	**1007.857**	**950.7068**	**1124.143**	**921.6493**	**974.7169**	**474.811841**
-2.65	**-181.018**	**-169.77**	**-182.245**	**-171.674**	**-207.184**	**-192.894**	**-203.917**	**-87.53605126**
+2.65	**917.7065**	**921.5967**	**980.2226**	**925.9381**	**1097.957**	**905.6828**	**957.2624**	**468.0589156**
-2.7	**-155.159**	**-145.517**	**-156.21**	**-147.15**	**-177.586**	**-165.338**	**-174.786**	**-75.03090068**
+2.7	**867.73**	**875.4907**	**926.1429**	**873.7691**	**1039.158**	**858.4446**	**907.8822**	**447.5497625**
-2.75	**-129.299**	**-121.264**	**-130.175**	**-122.625**	**-147.988**	**-137.781**	**-145.655**	**-62.52575009**
+2.75	**803.1488**	**804.6507**	**852.3051**	**795.0847**	**946.4379**	**790.7908**	**835.6335**	**412.7372274**
-2.8	**-103.439**	**-97.0113**	**-104.14**	**-98.0997**	**-118.391**	**-110.225**	**-116.524**	**-50.0205995**
+2.8	**708.6062**	**704.8711**	**747.4779**	**697.8134**	**821.4785**	**688.2235**	**726.3781**	**362.7636724**
-2.85	**-77.5793**	**-72.7585**	**-78.1051**	**-73.5748**	**-88.7929**	**-82.6687**	**-87.3929**	**-37.51544891**
+2.85	**582.0585**	**575.1293**	**610.5314**	**570.345**	**672.7909**	**568.9787**	**600.483**	**296.9428807**
-2.9	**-51.7195**	**-48.5057**	**-52.07**	**-49.0498**	**-59.1953**	**-55.1125**	**-58.2619**	**-25.01029832**
+2.9	**422.3243**	**414.6026**	**440.5506**	**411.7993**	**486.6905**	**417.1343**	**440.3267**	**214.7812106**
-2.95	**-25.8598**	**-24.2528**	**-26.035**	**-24.5249**	**-29.5976**	**-27.5562**	**-29.1309**	**-12.50514773**
+2.95	**228.5241**	**223.0543**	**237.147**	**221.7445**	**262.3302**	**228.1199**	**240.843**	**115.8928595**
-3	**-1.18E-13**	**-8.9E-14**	**-8.9E-14**	**-9.3E-14**	**-1.1E-13**	**-9.3E-14**	**-9.8E-14**	**-5.3965E-14**
+3	**1.51E-13**	**8.79E-14**	**9.26E-14**	**1.09E-13**	**1.2E-13**	**1.05E-13**	**1.1E-13**	**6.80499E-14**

2-Span: Moment (Max and Min) Raw Data Results - 80' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.77E-13	-9.9E-14	-9.1E-14	-9.7E-14	-9.9E-14	-9.4E-14
End Shear	1.68E-13	1.36E-13	1.5E-13	1.17E-13	1.26E-13	1.4E-13
-0.05	-25.8598	-48.1814	-52.1666	-31.1184	-38.0567	-40.2083
+0.05	228.3482	372.1619	384.3386	257.7489	312.567	323.899
-0.1	-51.7195	-96.3628	-104.333	-62.2369	-76.1134	-80.4166
+0.1	421.9762	675.333	695.7891	470.0625	571.1994	590.1831
-0.15	-77.5793	-144.544	-156.5	-93.3553	-114.17	-120.625
+0.15	581.6129	934.4079	965.5969	639.497	777.9679	806.1703
-0.2	-103.439	-192.726	-208.667	-124.474	-152.227	-160.833
+0.2	710.3108	1135.773	1198.751	783.8533	955.7399	986.2603
-0.25	-129.299	-240.907	-260.833	-155.592	-190.283	-201.042
+0.25	803.6103	1280.796	1389.85	896.0921	1083.476	1129.589
-0.3	-155.159	-289.088	-313	-186.711	-228.34	-241.25
+0.3	868.2563	1403.79	1523.232	968.3296	1164.618	1231.24
-0.35	-181.018	-337.27	-365.166	-217.829	-266.397	-281.458
+0.35	918.1831	1474.619	1617.129	1016.114	1212.154	1284.364
-0.4	-206.878	-385.451	-417.333	-248.948	-304.453	-321.666
+0.4	939.0607	1532.11	1647.532	1029.281	1222.937	1299.52
-0.45	-232.738	-433.633	-469.5	-280.066	-342.51	-361.875
+0.45	932.6729	1536.22	1658.21	1008.503	1193.444	1279.16
-0.5	-258.598	-481.814	-521.666	-311.184	-380.567	-402.083
+0.5	919.6433	1504.49	1628.17	983.8631	1164.712	1249.136
-0.55	-284.457	-529.995	-573.833	-342.303	-418.623	-442.291
+0.55	885.59	1443.282	1538.786	966.5068	1146.831	1219.646
-0.6	-310.317	-578.177	-626	-373.421	-456.68	-482.5
+0.6	826.8923	1328.177	1447.257	912.8781	1084.902	1152.502
-0.65	-336.177	-626.358	-678.166	-404.54	-494.737	-522.708
+0.65	745.8406	1190.284	1298.176	825.5292	987.4958	1048.128
-0.7	-362.037	-674.54	-730.333	-435.658	-532.794	-562.916
+0.7	645.2775	1011.822	1094.539	715.8841	858.4719	902.2454
-0.75	-387.896	-722.721	-782.499	-466.777	-570.85	-603.125
+0.75	531.1425	794.0516	860.0055	577.5586	693.0585	719.1804
-0.8	-413.756	-770.902	-834.666	-497.895	-608.907	-643.333
+0.8	400.2342	550.197	579.2475	413.1408	495.451	503.66
-0.85	-439.616	-819.084	-886.833	-529.014	-646.964	-683.541
+0.85	258.3438	313.7221	317.1392	264.6081	296.3319	315.2226
-0.9	-465.476	-867.265	-938.999	-560.132	-685.02	-723.749
+0.9	132.0664	169.8815	157.7033	150.5697	172.4035	172.5029
-0.95	-491.335	-915.447	-991.166	-591.25	-723.077	-763.958
+0.95	65.32926	46.78817	46.11217	53.82027	57.40829	47.88799
-1	-517.195	-963.628	-1043.33	-622.369	-761.134	-804.166
+1	0	0	0	0	0	0
(Span 2) -2	-517.195	-963.628	-1043.33	-622.369	-761.134	-804.166
+2	0	0	0	0	0	0
-2.05	-491.336	-915.447	-991.166	-591.25	-723.077	-763.958
+2.05	65.32925	46.87873	46.11005	53.82438	57.41268	47.86815
-2.1	-465.476	-867.265	-938.999	-560.132	-685.02	-723.75
+2.1	132.0665	169.8755	157.7024	150.562	172.3973	172.4968
-2.15	-439.616	-819.084	-886.833	-529.013	-646.964	-683.541
+2.15	258.8223	313.7105	317.1372	264.6123	296.3275	315.2388
-2.2	-413.756	-770.902	-834.666	-497.895	-608.907	-643.333
+2.2	400.6844	550.1812	579.2493	413.1488	495.4635	503.6773
-2.25	-387.897	-722.721	-782.499	-466.777	-570.85	-603.125

+2.25	**531.5717**	**794.0553**	**860.0069**	**577.5653**	**693.069**	**719.1961**
-2.3	**-362.037**	**-674.54**	**-730.333**	**-435.658**	**-532.794**	**-562.916**
+2.3	**645.6637**	**1011.834**	**1095.441**	**715.8884**	**858.4794**	**902.2582**
-2.35	**-336.177**	**-626.358**	**-678.166**	**-404.54**	**-494.737**	**-522.708**
+2.35	**746.3922**	**1190.292**	**1298.174**	**825.5276**	**987.4991**	**1048.137**
-2.4	**-310.317**	**-578.177**	**-626**	**-373.421**	**-456.68**	**-482.5**
+2.4	**827.3762**	**1329.388**	**1447.254**	**912.8729**	**1084.898**	**1152.506**
-2.45	**-284.457**	**-529.995**	**-573.833**	**-342.303**	**-418.623**	**-442.291**
+2.45	**885.9879**	**1443.294**	**1539.709**	**966.4974**	**1146.822**	**1219.642**
-2.5	**-258.598**	**-481.814**	**-521.666**	**-311.184**	**-380.567**	**-402.083**
+2.5	**919.9384**	**1504.496**	**1628.168**	**983.876**	**1164.72**	**1249.126**
-2.55	**-232.738**	**-433.633**	**-469.5**	**-280.066**	**-342.51**	**-361.875**
+2.55	**932.4323**	**1536.213**	**1658.707**	**1008.517**	**1193.458**	**1279.169**
-2.6	**-206.878**	**-385.451**	**-417.333**	**-248.947**	**-304.453**	**-321.667**
+2.6	**938.7093**	**1532.095**	**1647.531**	**1029.291**	**1222.947**	**1299.524**
-2.65	**-181.018**	**-337.27**	**-365.166**	**-217.829**	**-266.397**	**-281.458**
+2.65	**917.7065**	**1474.615**	**1617.127**	**1016.119**	**1212.158**	**1284.36**
-2.7	**-155.159**	**-289.088**	**-313**	**-186.711**	**-228.34**	**-241.25**
+2.7	**867.73**	**1403.803**	**1523.232**	**968.3283**	**1164.615**	**1231.229**
-2.75	**-129.299**	**-240.907**	**-260.833**	**-155.592**	**-190.283**	**-201.042**
+2.75	**803.1488**	**1280.799**	**1389.848**	**896.0854**	**1083.467**	**1129.596**
-2.8	**-103.439**	**-192.726**	**-208.666**	**-124.474**	**-152.227**	**-160.833**
+2.8	**708.6062**	**1135.79**	**1198.748**	**783.8408**	**955.7479**	**986.2702**
-2.85	**-77.5793**	**-144.544**	**-156.5**	**-93.3553**	**-114.17**	**-120.625**
+2.85	**582.0585**	**934.4152**	**965.595**	**639.4897**	**777.9684**	**806.1724**
-2.9	**-51.7195**	**-96.3628**	**-104.333**	**-62.2369**	**-76.1134**	**-80.4166**
+2.9	**422.3243**	**675.3301**	**695.7893**	**470.0763**	**571.1915**	**590.1765**
-2.95	**-25.8598**	**-48.1814**	**-52.1666**	**-31.1184**	**-38.0567**	**-40.2083**
+2.95	**228.5241**	**372.1725**	**384.3405**	**257.7558**	**312.5754**	**323.9078**
-3	**-1.18E-13**	**-1.3E-13**	**-1.4E-13**	**-1.1E-13**	**-1.3E-13**	**-1.3E-13**
+3	**1.51E-13**	**1.6E-13**	**1.6E-13**	**1.48E-13**	**1.77E-13**	**1.59E-13**

2-Span: Shear (Max and Min) Raw Data Results - 90' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading Comparison)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-21.51602217	-17.34653335	-19.36453999	-11.76883214	-12.64249561	-11.91098441	-14.38865914	-13.79528879	-14.5892	-6.125661905
End Shear	190.5675459	157.590596	179.9562852	116.7149158	124.366646	116.4451538	138.3519239	124.5661681	131.5841	60.96164166
-0.05	-21.65533911	-17.48585029	-23.19557605	-11.76883214	-12.64249561	-11.91098441	-14.38865914	-13.79528879	-14.5892	-6.125661905
+0.05	174.9928344	145.0956613	162.2501316	108.6154988	115.6530355	108.2464291	128.4339526	114.4930642	120.9244	56.67566267
-0.1	-22.17745445	-18.120158	-28.28838687	-11.76883214	-12.64249561	-11.91098441	-14.38865914	-13.79528879	-14.5892	-6.125661905
+0.1	158.6374568	132.0373936	144.0792335	100.0736143	106.4683671	99.5946578	117.9784198	103.8538953	109.6669	52.10248585
-0.15	-22.87254611	-25.20180749	-32.59393762	-14.58347197	-14.58347197	-13.52059962	-14.38865914	-13.79528879	-14.5892	-7.939590375
+0.15	145.9395459	121.9117887	131.6594746	93.30117376	99.19003824	92.74090595	109.7036931	95.50113876	100.8298	48.48240752
-0.2	-31.26517349	-34.34411815	-41.95363114	-22.33538819	-22.72908713	-20.69750984	-22.29432246	-16.72014641	-17.6409	-10.95599608
+0.2	130.7315852	109.6791783	117.8122344	84.93950631	90.20855333	84.28626032	99.50630151	85.2944622	90.03246	44.02032253
-0.25	-40.61155184	-41.86854923	-50.38104754	-29.1340796	-30.05898926	-27.53544383	-30.59887517	-21.63420089	-22.8695	-13.7107657
+0.25	118.8757092	100.2489588	107.1290887	78.35373309	83.13853304	77.63335441	91.4903842	77.3433146	81.6223	40.51215258
-0.3	-52.53356664	-51.50710194	-61.12975806	-37.53881311	-39.12508509	-36.09326673	-41.00195629	-27.70706111	-29.3316	-18.25315813
+0.3	104.6362811	88.92691551	94.297666	70.2785082	74.47462745	69.48371862	81.68190202	67.7081879	71.4324	36.21874535
-0.35	-62.98812152	-59.38106981	-70.56921914	-44.16723221	-46.27889981	-42.84835259	-49.22158959	-32.49477248	-34.4266	-21.84089097
+0.35	93.73224262	80.25655865	84.47148406	63.96438743	67.70443877	63.1179695	74.02941449	60.269899	63.56705	32.8685518
-0.4	-76.55923477	-69.39499163	-82.80267069	-52.3060101	-55.06768532	-51.15028567	-59.33370196	-41.47823035	-43.6613	-26.25290396
+0.4	80.74164514	69.92137349	72.7646361	56.28184958	59.47252991	55.38121293	64.74059285	51.34535295	54.13175	28.80140717
-0.45	-87.51240908	-77.51836406	-92.67500433	-58.67916923	-61.95388667	-57.65752032	-67.26826978	-49.17181753	-51.7598	-29.71330116
+0.45	70.8822338	62.06847252	63.87931073	50.32436655	53.09369528	49.38892982	57.55615238	44.5311386	46.92897	25.65525376
-0.5	-101.2782436	-87.77819026	-105.0807802	-66.44575048	-70.35094838	-65.59568988	-76.95865802	-59.55930958	-62.7487	-33.93735338
+0.5	59.25215325	52.78784103	53.39803412	43.14074301	45.40818207	42.17293843	48.91776222	36.45623756	38.39553	21.87195153
-0.55	-112.3154259	-96.04394387	-115.0260389	-72.47866167	-76.87801117	-71.76876223	-84.50354136	-67.92136826	-71.6068	-37.224346
+0.55	50.52329468	45.8031053	45.53127354	37.62488111	39.51222181	36.6404201	42.30597256	30.42944391	32.03099	18.97590275
-0.6	-126.0943173	-106.4115858	-127.4398005	-79.76681774	-84.76894884	-79.23529374	-93.64144767	-78.14154233	-82.4344	-41.20285242
+0.6	40.35682061	37.63609897	36.36882311	31.04640708	32.48751109	30.05308132	34.44878623	23.77407647	25.02534	15.53402399
-0.65	-137.06673	-114.7058127	-137.3234112	-85.37449611	-90.84535148	-84.98789354	-100.692028	-86.10498603	-90.8722	-44.27037916
+0.65	32.83752628	31.5633478	29.59213147	26.05716727	27.16596469	25.06662736	28.51425354	19.25172012	20.3815	12.93415553
-0.7	-150.6684205	-125.0345858	-149.5729654	-92.07799642	-98.11576278	-91.87490089	-109.1466818	-95.75735456	-101.101	-47.94575793
+0.7	24.38485511	24.56044117	21.97012253	20.19006579	20.91645083	19.21581405	21.56902621	14.97640904	15.84092	9.891284965
-0.75	-161.4204037	-133.2364922	-159.2540636	-97.17545	-103.6499751	-97.12072959	-115.5983547	-103.2109424	-109.001	-50.74774589
+0.75	18.50989939	19.43660754	16.67643607	15.81242414	16.26083113	14.86173369	16.41636773	11.78314411	12.45034	7.633657462
-0.8	-174.6459907	-143.3711042	-171.1061569	-103.1880619	-110.1854558	-103.3203283	-123.2389864	-112.1564739	-118.483	-54.06241463
+0.8	11.91571715	13.63967143	10.73491042	10.76294688	10.90093866	9.921823834	10.62469236	8.095223443	8.535654	5.472594767
-0.85	-185.0149997	-151.3530083	-180.1588972	-107.6903082	-115.0859582	-107.9730867	-128.9871472	-118.988961	-125.727	-56.55280663
+0.85	7.463906158	9.494802302	6.717515529	7.319245723	7.319245723	6.755266345	7.13992733	5.566140959	5.859096	4.021558354
-0.9	-197.6570222	-161.1295489	-190.8773712	-112.9057863	-120.7720903	-113.3774017	-135.6829993	-127.0886019	-134.316	-59.4491768
+0.9	4.264169337	4.93707555	3.837752399	3.88435769	3.88435769	3.136917965	3.169370412	2.844569411	2.994284	2.366265703
-0.95	-207.4736242	-168.7568823	-201.2376369	-116.7278462	-124.9473669	-117.3507799	-140.6230296	-133.1887576	-140.786	-61.58189965
+0.95	2.074095102	1.794331316	1.866685591	1.41785207	1.41785207	1.132694579	1.034116723	1.076680284	1.133348	1.176110313
-1	-219.315965	-178.002837	-220.3910787	-121.0399654	-129.669754	-121.8519316	-146.2433391	-140.303462	-148.335	-64.00239829
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.18E+02	1.77E+02	218.5024922	1.21E+02	1.29E+02	121.4248691	145.7087284	1.40E+02	1.48E+02	6.38E+01
-2.05	-1.82E+00	-1.44E+00	-1.640989802	-1.14E+00	-1.14E+00	-0.908563374	-0.912192232	-8.63E-01	-9.09E-01	-1.03E+00
+2.05	2.09E+02	1.70E+02	2.03E+02	117.1816117	125.4436467	1.18E+02	1.41E+02	1.34E+02	141.5669	6.18E+01
-2.1	-4.56E+00	-5.36E+00	-4.104884324	-4.210420528	-4.210420528	-3.474674327	-3.569702251	-3.18559131	-3.35325	-2.516008895
+2.1	1.96E+02	1.60E+02	1.90E+02	112.4044047	120.2249488	1.13E+02	1.35E+02	1.26E+02	133.4796	5.92E+01
-2.15	-7.12E+00	-9.01E+00	-6.408662923	-6.958720644	-6.958720644	-6.379420144	-6.726634886	-5.291933213	-5.57046	-3.839685292
+2.15	186.3614211	152.3401225	181.1985785	108.2315354	115.6755197	108.5331429	129.6800044	119.8196924	126.6077	56.8532666
-2.2	-12.52596643	-14.18998759	-11.29483409	-11.24716399	-11.4143548	-10.33730852	-11.08224937	-8.449018394	-8.91114	-5.652479726
+2.2	173.275093	142.3634022	169.9068837	102.6041021	109.5502966	102.7175894	122.4952848	111.2796185	117.5535	53.74052847
-2.25	-17.79485987	-18.82775714	-16.04826225	-15.2872342	-15.7027956	-14.34013404	-15.80019192	-11.39970609	-12.0433	-7.363222351

+2.25	162.6908347	134.2550199	160.4388938	97.79353514	104.3213987	97.75742272	116.3821902	104.1225901	109.9669	51.08856868
-2.3	-25.16963201	-25.23248998	-22.66509809	-20.75891822	-21.5219251	-19.78235008	-22.24055175	-15.39100884	-16.2812	-10.18501792
+2.3	149.2482952	124.0032725	147.9580324	91.42209838	97.40404412	91.20052971	108.3180772	94.80616723	100.0928	47.58633024
-2.35	-31.94890423	-30.83505073	-28.78034976	-25.45307881	-26.52205358	-24.46349451	-27.79733434	-18.81159003	-19.914	-12.61954052
+2.35	138.3636585	115.7396092	138.168698	86.05883777	91.58722035	85.69046187	101.5537973	87.0837039	91.90927	44.64580358
-2.4	-41.34035141	-38.42587245	-37.25083559	-31.68924187	-33.17357131	-30.69615707	-35.21501198	-24.41813355	-25.7033	-15.86913115
+2.4	124.6461313	105.372429	125.8329759	79.04965216	83.99216213	78.50012176	92.74107	77.12997884	81.36265	40.81165101
-2.45	-49.46736492	-44.9597231	-44.58111537	-36.95248655	-38.79384229	-35.96652115	-41.50136051	-29.74296623	-31.3084	-18.62285941
+2.45	113.620195	97.07771472	115.9187388	73.21867753	77.67892915	72.52644626	85.43020188	68.95326081	72.69993	37.62860791
-2.5	-60.36906445	-53.69048176	-54.36767264	-43.84690076	-46.16334906	-42.88174694	-49.76558908	-37.24224025	-39.2261	-22.24266547
+2.5	99.82224685	86.74611811	103.5131641	65.67796257	69.52055825	64.81053652	75.99962238	58.50127548	61.62797	33.52011798
-2.55	-69.66580795	-61.11525512	-62.70818498	-49.59427317	-52.31227054	-48.65501667	-56.67688073	-43.70278735	-46.0535	-25.26953035
+2.55	88.80728919	78.53768723	93.61055161	59.46423881	62.80241592	58.45956118	68.24678108	50.30017329	52.94755	30.14065919
-2.6	-81.97940113	-70.9311653	-73.9006695	-57.04070398	-60.28535961	-56.14493234	-65.65690361	-52.22000522	-55.0564	-29.20196811
+2.6	75.11489002	68.38404198	81.30188001	51.49822819	54.19513726	50.32596184	58.32911191	40.50722325	42.63918	25.81541932
-2.65	-92.36376834	-79.19959705	-83.23868057	-63.18717385	-66.87136104	-62.33480347	-73.08852741	-59.36021759	-62.6052	-32.45590652
+2.65	64.25620916	60.3723741	71.54122618	44.98678638	47.16365824	43.68398789	50.23890576	33.08681198	35.05669	22.28559253
-2.7	-105.982284	-90.03727549	-95.48405388	-71.07938935	-75.33362934	-70.29152902	-82.65358118	-68.65752831	-72.4363	-36.64339192
+2.7	51.2571967	50.53045898	59.85960207	36.70171804	38.22188212	35.24058256	39.96491492	27.1025014	28.68826	17.80118602
-2.75	-117.3652876	-99.09521671	-105.7187804	-77.53999333	-82.26521167	-76.81169784	-90.50092632	-76.36622645	-80.5889	-40.07833769
+2.75	41.71828905	42.81913255	51.28608219	29.97752102	30.96856449	28.39391508	31.64195616	22.2439254	23.51826	14.1670579
-2.8	-132.1731267	-110.8826455	-119.0323443	-85.77175667	-91.10224972	-85.12735221	-100.520246	-86.30458465	-91.101	-44.46328886
+2.8	30.03536345	33.41411311	40.78602083	21.47962578	21.80669332	19.98725199	21.50451664	16.1017006	16.98284	10.65564891
-2.85	-144.4588316	-120.6690815	-130.0779341	-92.46153135	-98.28791357	-91.89151369	-108.6787009	-94.47050366	-99.7394	-48.03318671
+2.85	22.97661836	26.09981974	33.14604936	15.24143753	15.24143753	14.23247981	15.10622918	13.79528804	14.58921	8.242382328
-2.9	-160.3318753	-133.3256834	-145.7358379	-100.9266115	-107.3853192	-100.4582168	-119.0215228	-104.9108625	-110.785	-52.55802166
+2.9	22.10779711	17.93838494	27.72747527	11.76883356	12.64249116	11.9109879	14.38865848	13.79528804	14.58921	6.125662066
-2.95	-173.4174575	-143.7726675	-160.3289685	-107.7605203	-114.7334871	-107.3800667	-127.3864759	-113.4227319	-119.792	-56.21677882
+2.95	21.6900861	17.52067392	23.66789687	11.76883356	12.64249116	11.9109879	14.38865848	13.79528804	14.58921	6.125662066
-3	-190.2228805	-157.2092334	-179.9562852	-116.3526829	-123.9768538	-116.0899381	-137.9220358	-124.2260434	-131.224	-60.82391355
+3	21.51594338	17.3465312	19.36457136	11.76883356	12.64249116	11.9109879	14.38865848	13.79528804	14.58921	6.125662066

2-Span: Shear (Max and Min) Raw Data Results - 90' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.906527146	-11.86059697	-11.93302747	-10.56767147	-7.176107772	-9.71406489	-11.0517711	-12.34753604	-13.67209315
End Shear	87.10718391	108.8778753	105.3007039	91.45431231	70.44680443	94.90132472	106.5309319	114.7936747	122.9189928
-0.05	-8.906527146	-11.86059697	-11.93302747	-10.60374461	-7.176107772	-9.71406489	-11.0517711	-12.34753604	-13.67209315
+0.05	80.91644451	100.186005	96.17220693	82.67960528	65.47252733	88.1982533	98.87332038	106.262766	113.4779979
-0.1	-8.906527146	-11.86059697	-11.93302747	-12.35718886	-7.176107772	-9.71406489	-11.0517711	-12.34753604	-13.67209315
+0.1	74.38472922	90.99942538	86.5365477	73.96055906	60.23434891	81.12621046	90.78790394	97.25607898	103.5122743
-0.15	-10.26738188	-11.86059697	-11.93302747	-15.53356634	-7.581276847	-10.97623523	-11.18335625	-12.34753604	-13.67209315
+0.15	69.21370647	83.78227228	79.01302515	67.33156894	56.08517611	75.52497131	84.39101807	90.14357173	95.65734498
-0.2	-14.89346824	-14.89758591	-11.93302747	-19.41373641	-12.35854657	-16.55495516	-17.77553336	-17.7639358	-17.75278034
+0.2	62.83905345	74.9570114	69.87381366	59.33309989	50.96737837	68.61679526	76.51049634	81.39844577	86.01859737
-0.25	-19.71977404	-18.56298883	-15.60100331	-22.31659092	-16.54813485	-22.14986369	-23.07774443	-23.07774443	-23.07774443
+0.25	57.82637056	68.07680785	62.79982986	53.10308785	46.94065779	63.18195045	70.31807488	74.54064351	78.47594393
-0.3	-26.20504316	-23.45986726	-21.32412309	-25.84537367	-21.73223851	-29.15330073	-31.04998028	-30.97088955	-30.95804786
+0.3	51.69051168	59.73261885	54.28799344	45.66547459	42.00861215	56.52591006	62.74381219	66.17071826	69.29091122
-0.35	-31.32728145	-28.98480457	-25.84934073	-28.5936314	-25.82461957	-34.68248712	-37.42049916	-37.42679067	-37.41234303
+0.35	46.90155452	53.28517035	47.76827244	40.07551662	38.15664878	51.32807725	56.83693992	59.65852166	62.16191434
-0.4	-37.62642717	-37.32552523	-31.71594655	-33.77424927	-30.85452979	-41.47914165	-45.26020406	-46.29194667	-46.63412722
+0.4	41.08621783	45.54178315	40.08559976	33.52760719	33.47572902	45.01242941	49.67029173	51.77742871	53.55732484
-0.45	-42.56708338	-43.90226685	-37.65992917	-38.10771838	-34.7974089	-46.8076068	-51.41368676	-53.2642454	-54.47955936
+0.45	36.58637486	39.622866	34.6932518	28.91641364	29.8508088	40.12222558	44.13005251	45.70175855	46.94338845
-0.5	-48.59837974	-52.80703672	-46.19394625	-46.04782029	-39.60775253	-53.30921874	-58.9314201	-61.80037855	-64.10415195
+0.5	31.17328662	32.60003967	28.3122592	23.50217588	25.48638629	34.23524036	37.4723757	38.42313257	39.04596309
-0.55	-53.29205995	-59.97703244	-52.89957846	-52.63717429	-43.34883596	-58.36634396	-64.78678188	-68.46400627	-71.63364358
+0.55	27.02793909	27.35176761	23.51642995	19.46472504	22.14081644	29.72327359	32.3798532	32.87489543	33.04846079
-0.6	-58.97378129	-68.7338236	-61.28723751	-60.82961583	-47.87424176	-64.48465256	-71.88118325	-76.55748343	-80.7999336
+0.6	22.09883605	21.55221694	18.36197684	15.12812232	18.15826269	24.35322265	26.33251589	26.31237246	26.30766887
-0.65	-63.35510423	-75.55163473	-68.73553261	-67.47823589	-51.361223	-69.19982034	-77.35733855	-82.82153209	-87.9120974
+0.65	18.37336813	17.22952464	15.09097268	12.35630575	15.14433527	20.29010142	21.76880025	21.70620282	21.7021186
-0.7	-68.60551007	-83.80831156	-78.08541626	-76.10352042	-55.5363218	-74.84655489	-83.92705184	-90.35871922	-96.49336101
+0.7	14.00997976	12.78092418	11.31571743	9.209000533	11.60902459	15.52524448	16.43313991	16.40333531	16.39933186
-0.75	-72.60909327	-90.17814002	-85.34851074	-82.82548487	-58.71690724	-79.14915781	-88.94291353	-96.1322874	-103.0868102
+0.75	10.76977532	10.20535361	8.406884873	6.911839433	8.979038013	11.9815856	12.47932413	12.47274292	12.46885771
-0.8	-77.34646246	-97.81497187	-94.12245223	-90.89386395	-62.47632883	-84.23604919	-94.88658179	-102.9995489	-110.9563154
+0.8	7.288733255	7.257450824	5.768763372	4.639932794	5.956335531	7.976685716	8.492553663	8.489190097	8.48595174
-0.85	-80.90692033	-103.6410162	-100.8724406	-97.07731902	-65.29821848	-88.05547853	-99.36106012	-108.1917132	-116.9296697
+0.85	5.15546301	5.126114985	4.07350601	3.242101884	3.861458103	5.491946752	5.626191226	5.622982976	5.619894514
-0.9	-85.0495175	-110.5382536	-108.9395111	-104.0904247	-68.5765877	-92.49426542	-104.5773261	-114.2754159	-123.9606833
+0.9	2.623851682	2.710256435	2.152034705	1.691598282	2.279179801	2.64528618	2.558141789	2.646774774	2.683798603
-0.95	-88.10146626	-115.7247245	-115.0716459	-109.3307145	-70.98749249	-95.75990386	-108.4293477	-118.7952874	-129.2125515
+0.95	0.996313926	0.987310002	0.823862106	0.632514975	1.131433479	0.962790392	0.961053385	0.963160476	0.965189968
-1	-91.56756017	-121.7626244	-122.3009443	-115.4130894	-73.71943388	-99.46232116	-112.8168542	-123.9817956	-135.2783412
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.12E+01	1.21E+02	1.22E+02	1.15E+02	7.35E+01	9.91E+01	112.399235	123.4860005	1.35E+02
-2.05	-7.99E-01	-7.95E-01	-7.27E-01	-5.56E-01	-9.98E-01	-7.72E-01	-0.771361002	-0.772452138	-7.76E-01
+2.05	8.85E+01	1.16E+02	1.16E+02	1.10E+02	7.13E+01	9.61E+01	108.888763	119.3362758	1.30E+02
-2.1	-2.949245186	-2.939489584	-2.334329384	-1.836756759	-2.429958439	-2.91096233	-2.847295204	-2.933995776	-2.949444912
+2.1	8.47E+01	1.10E+02	1.08E+02	1.03E+02	6.83E+01	9.21E+01	104.0740936	113.6868457	1.23E+02
-2.15	-4.901596883	-4.872437021	-3.871715187	-3.077234955	-3.695951294	-5.19681754	-5.286583419	-5.283377422	-5.280300077
+2.15	81.33584941	104.3489195	101.6964421	97.80067918	65.63791065	88.51534485	99.90061798	108.8193699	117.65336
-2.2	-7.567982628	-7.536400704	-5.990618991	-4.825023507	-6.245592128	-8.302500687	-8.869253838	-8.865849881	-8.862583923
+2.2	76.88556664	97.06682353	93.25948124	90.12297346	62.11077977	83.74138175	94.30788942	102.3295873	110.1871361
-2.25	-10.38209074	-9.904645375	-8.077499065	-6.639210702	-8.66405467	-11.55722697	-12.01019023	-12.00667193	-12.00329634
+2.25	73.09531222	90.95683741	86.23979281	83.6422544	59.10295161	79.67146972	89.55249365	96.83527517	103.8909761

-2.3	-14.43206461	-13.18654426	-11.67734597	-9.510520861	-11.95131049	-15.98648625	-16.94872973	-16.91579044	-16.91176825
+2.3	68.09113404	82.99503435	77.16144705	75.23976626	55.12746487	74.293538	83.28306559	89.61874496	95.64966713
-2.35	-17.92314257	-16.71109597	-14.7036363	-12.02853784	-14.77985934	-19.79877641	-21.21771878	-21.15854098	-21.15445371
+2.35	63.89044642	76.38920205	69.68101694	68.33263786	51.7870966	69.77577253	78.02684335	83.58852735	88.78411187
-2.4	-22.57967613	-22.11407346	-18.84237169	-15.53223491	-18.54702433	-24.87734685	-26.92199004	-26.95062373	-26.94591612
+2.4	58.41412274	67.86743608	60.47583558	60.05843897	47.42862058	63.88214831	71.18204409	75.75890462	79.89442923
-2.45	-26.52332326	-26.75417489	-22.93846731	-18.97972629	-21.73335405	-29.1737912	-31.7603079	-32.20114028	-32.32164878
+2.45	53.86839534	60.86150359	53.72743463	53.44430657	43.80801335	58.98713333	65.50610274	69.28364223	72.56086725
-2.5	-31.70470369	-33.28411211	-28.93283392	-24.02625541	-25.91507164	-34.81340494	-38.12557441	-39.13602657	-39.81804954
+2.5	48.00161859	51.8995139	45.34586615	45.25160809	39.13192189	52.6660794	58.18730734	60.95458709	63.14951313
-2.55	-36.03551334	-38.90291154	-34.03811032	-28.35795281	-29.40689337	-39.52338332	-43.45216513	-44.95942275	-46.13653575
+2.55	43.17625585	44.86642942	38.51821946	38.84644001	35.28338833	47.46443045	52.17271495	54.12521354	55.44932815
-2.6	-41.65999998	-46.30108273	-40.77810925	-34.121656	-33.93778545	-45.63577976	-50.37704692	-52.55355666	-54.40346068
+2.6	37.00077593	36.49514448	31.00253659	33.23349297	30.3550556	40.80421279	44.48128067	45.41030735	45.64309173
-2.65	-46.31261977	-52.49628699	-46.97424502	-39.39640246	-37.68280006	-50.68867957	-56.11080529	-58.85891504	-61.28767476
+2.65	31.96112423	29.82214167	26.40983062	29.03192315	26.33086319	35.36653981	38.20909705	38.31775584	38.30338796
-2.7	-52.29848566	-60.55512224	-55.12339129	-46.38347042	-42.49747821	-57.18559373	-63.49398796	-66.99868287	-70.1984194
+2.7	25.55867224	22.81028226	20.75362111	25.51876953	21.21566198	28.45542665	30.24640781	30.17396067	30.16108029
-2.75	-57.20749625	-67.23098648	-61.93340227	-52.28863761	-46.44338563	-62.5108028	-69.5538053	-73.69509588	-77.5469771
+2.75	20.37015435	19.01735812	16.17485433	22.67635258	17.06812213	22.85234283	23.79774189	23.77804587	23.76474964
-2.8	-63.47300682	-75.83074326	-70.77536543	-60.11885243	-51.47650907	-69.30396809	-77.29390991	-82.26689	-86.97475501
+2.8	14.43173619	14.43586894	11.9330294	19.03802257	11.83143903	16.00294216	17.11698426	17.10539904	17.09421607
-2.85	-68.57306103	-82.89144837	-78.08728741	-66.5180102	-55.5710115	-74.83087336	-83.59872047	-89.26342287	-94.6862691
+2.85	10.7306398	11.86059805	11.9330294	15.93406026	7.890737502	11.52967074	11.84293699	12.34753938	13.67209465
-2.9	-75.03646741	-91.9123828	-87.49112174	-74.80385285	-60.75719398	-81.83202439	-91.59438974	-98.1535816	-104.5043737
+2.9	8.906524805	11.86059805	11.9330294	12.10586965	7.176104959	9.714063642	11.05176689	12.34753938	13.67209465
-2.95	-80.26216126	-99.26210542	-95.20019848	-81.75507243	-64.94797709	-87.49001322	-98.06313348	-105.3593804	-112.4774576
+2.95	8.906524805	11.86059805	11.9330294	10.64001938	7.176104959	9.714063642	11.05176689	12.34753938	13.67209465
-3	-86.8417723	-108.5844728	-105.0350124	-91.39754235	-70.22184567	-94.61088418	-106.2129849	-114.454242	-122.5591888
+3	8.906524805	11.86059805	11.9330294	10.56766805	7.176104959	9.714063642	11.05176689	12.34753938	13.67209465

2-Span: Shear (Max and Min) Raw Data Results - 90' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-21.99713343	-23.96104751	-14.0978	-17.1637	-18.2452
End Shear	187.091141	195.7992404	127.0777	153.8252	160.7216
-0.05	-21.99713343	-23.96104751	-14.0978	-17.1637	-18.2452
+0.05	170.6702414	178.108923	116.5744	141.1781	147.1651
-0.1	-21.99713343	-23.96104751	-14.0978	-17.1637	-18.2452
+0.1	153.3539951	159.2001039	105.4867	127.8211	132.8513
-0.15	-21.99713343	-23.96104751	-14.0978	-17.1637	-18.2452
+0.15	139.8366494	144.4823861	96.79643	117.3476	121.6471
-0.2	-21.99713343	-23.96104751	-17.9354	-19.9314	-19.988
+0.2	123.4203463	126.6649014	86.19663	104.5664	108
-0.25	-25.36339952	-25.07378062	-23.0896	-25.5572	-26.3952
+0.25	110.7168408	112.9251469	77.95542	94.62381	97.40549
-0.3	-34.20016981	-35.44938156	-29.458	-32.507	-34.5365
+0.3	95.43525412	96.46113985	67.99022	82.59429	84.6158
-0.35	-42.78757829	-44.64638281	-34.4775	-38.518	-40.9623
+0.35	83.73340693	83.62136857	60.31536	73.32352	74.78353
-0.4	-54.26328728	-57.54591479	-40.6371	-49.199	-48.8587
+0.4	69.82123258	70.29981114	51.13143	62.22173	63.04196
-0.45	-64.93594771	-68.7231549	-47.932	-59.0261	-58.433
+0.45	59.77759668	60.39001193	44.14026	53.76355	54.12445
-0.5	-79.87255929	-82.46494922	-58.2187	-71.371	-71.9552
+0.5	48.2605348	49.63121964	35.8843	43.76552	43.94165
-0.55	-92.34669601	-93.23987119	-67.076	-81.9965	-82.7973
+0.55	39.88899939	41.50253591	30.01381	36.64431	36.40115
-0.6	-108.5257995	-109.4199175	-77.9185	-94.9984	-96.993
+0.6	30.91414625	31.98637743	24.27779	28.38022	28.72299
-0.65	-122.3645892	-124.1087474	-86.3807	-105.142	-108.087
+0.65	24.81227694	25.33796389	20.45038	22.81357	23.96703
-0.7	-139.238539	-143.1525575	-96.656	-117.453	-121.578
+0.7	18.1144411	18.38473738	15.94304	17.52226	18.38491
-0.75	-152.3528553	-157.9932701	-104.606	-126.974	-132.032
+0.75	13.65620398	13.39845601	12.57423	13.82626	14.22924
-0.8	-168.2038322	-175.9833053	-114.167	-138.419	-144.627
+0.8	9.39675864	8.739895807	8.680458	9.486112	9.536789
-0.85	-180.4058917	-189.8761253	-121.488	-147.177	-154.289
+0.85	6.146240261	5.850381225	5.91293	6.364262	6.373149
-0.9	-194.9991961	-206.5502563	-130.188	-157.58	-165.798
+0.9	2.705423876	2.770021112	3.116593	3.324366	2.863241
-0.95	-206.1011999	-219.2855328	-136.762	-165.433	-174.514
+0.95	1.007459333	1.047454527	1.140681	1.216727	1.015941
-1	-219.2020525	-234.381619	-144.455	-174.617	-184.746
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.18E+02	2.33E+02	1.44E+02	1.74E+02	1.84E+02
-2.05	-8.19E-01	-9.23E-01	-9.15E-01	-9.76E-01	-8.15E-01
+2.05	2.07E+02	2.21E+02	1.38E+02	166.3813	1.76E+02
-2.1	-3.111175368	-3.031386178	-3.37946	-3.60476	-3.19531
+2.1	1.94E+02	2.05E+02	1.29E+02	156.5656	1.65E+02
-2.15	-5.913542895	-5.507053138	-5.62175	-5.99653	-6.00757
+2.15	181.8959701	191.5786427	122.3787	148.2427	155.4664
-2.2	-9.805588993	-9.118579949	-9.05417	-9.89594	-9.94714
+2.2	166.6443682	174.2137703	113.2291	137.2966	143.3904
-2.25	-13.21354439	-12.87496759	-12.1695	-13.3436	-13.7311
+2.25	153.9625724	159.8207537	105.5793	128.1398	133.3134

-2.3	-18.70090092	-18.87238099	-16.3803	-18.0018	-18.9254
+2.3	137.5706336	141.2710386	95.64252	116.2394	120.2465
-2.35	-24.07915424	-24.55678877	-19.9865	-22.1856	-23.3915
+2.35	124.0705478	126.0350506	87.42171	106.3895	109.4531
-2.4	-31.70593499	-32.90466909	-24.7704	-29.1786	-29.3361
+2.4	106.7730515	108.1943433	76.84446	93.71071	95.58595
-2.45	-38.94160388	-40.518268	-29.3105	-35.7905	-35.4929
+2.45	93.88783688	95.30036106	68.16991	83.30847	84.22863
-2.5	-49.37887157	-50.678317	-36.6864	-44.7374	-44.9178
+2.5	78.29604338	81.10318458	57.09888	70.02736	70.61114
-2.55	-58.59339512	-59.2860463	-43.2918	-52.7366	-53.0436
+2.55	66.29151106	70.10906699	48.94542	60.24258	59.79263
-2.6	-71.17774143	-71.5995506	-52.0302	-63.3086	-64.1897
+2.6	53.12137432	56.13837152	40.02618	47.95938	48.07492
-2.65	-82.3085095	-82.38153242	-59.3779	-72.1908	-73.5838
+2.65	43.94024786	45.88668107	35.09818	39.48063	41.75736
-2.7	-96.93485576	-98.07049673	-68.9709	-83.7785	-85.8734
+2.7	33.26929641	34.38196634	28.82409	31.81533	33.7256
-2.75	-109.1611497	-111.2427007	-76.9437	-93.4029	-96.1059
+2.75	26.06164494	25.97386671	23.72911	26.25513	27.21215
-2.8	-125.0395855	-128.4162387	-87.2446	-105.83	-109.348
+2.8	21.99713088	23.96020612	17.28664	19.22322	19.27991
-2.85	-138.1735623	-142.6712217	-95.7251	-116.056	-120.267
+2.85	21.99713088	23.96020612	14.09784	17.16371	18.24518
-2.9	-155.0692887	-161.0671727	-106.587	-129.147	-134.271
+2.9	21.99713088	23.96020612	14.09784	17.16371	18.24518
-2.95	-168.9231994	-176.1951779	-115.458	-139.833	-145.723
+2.95	21.99713088	23.96020612	14.09784	17.16371	18.24518
-3	-186.6014742	-195.55143	-126.735	-153.412	-160.299
+3	21.99713088	23.96020612	14.09784	17.16371	18.24518

2-Span: Moment (Max and Min) Raw Data Results – 90' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading Comparison)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.10E-13	*-2.22E-13*	*-3.08E-13*	-1.82E-13	-1.96E-13	-1.64E-13	-2.00E-13	-1.95E-13	-2.05E-13	-1.14E-13
End Shear	3.94E-13	*2.39E-13*	*3.86E-13*	2.40E-13	2.65E-13	1.76E-13	1.98E-13	1.76E-13	1.88E-13	1.17E-13
-0.05	-96.82209976	*-78.05940008*	*-87.14042995*	-52.9597446	-56.8912302	-53.5994284	-64.7489661	-62.0787996	-65.6514418	-27.56547857
+0.05	796.9208286	*662.8471828*	*738.6333584*	488.7697444	520.4386599	487.1089309	578.1362879	515.2187891	544.1598197	255.040482
-0.1	-193.6441995	*-156.1188002*	*-174.2808599*	-105.919489	-113.78246	-107.198857	-129.497932	-124.157599	-131.302884	-55.13095714
+0.1	1479.757981	*1238.963014*	*1345.384488*	909.1991115	967.6133911	905.3669194	1073.239425	944.8027459	997.7299544	473.0187395
-0.15	-290.4662993	*-234.1782002*	*-261.4212899*	-158.879234	-170.673691	-160.798285	-194.246898	-186.236399	-196.954325	-82.69643571
+0.15	2050.756708	*1728.353124*	*1849.37314*	1261.747729	1341.670842	1254.702941	1484.890491	1291.753069	1363.857536	654.5125016
-0.2	-387.288399	*-312.2376003*	*-348.5617198*	-211.838978	-227.564921	-214.397714	-258.995865	-248.315198	-262.605767	-110.2619143
+0.2	2512.98426	*2132.051715*	*2264.483316*	1547.274772	1643.773417	1536.325985	1814.944726	1568.630137	1656.445528	800.332673
-0.25	-484.1104988	*-390.2970004*	*-435.7021498*	-264.798723	-284.456151	-267.997142	-323.744831	-310.393998	-328.257209	-137.8273929
+0.25	2866.67942	*2451.491707*	*2582.669659*	1767.538122	1875.86955	1752.107198	2090.692794	1801.090486	1903.852286	911.5234332
-0.3	-580.9325985	*-468.3564005*	*-522.8425797*	-317.758468	-341.347381	-321.59657	-388.493797	-372.472797	-393.908651	-165.3928714
+0.3	3119.958752	*2688.505836*	*2810.85401*	1924.726556	2040.371648	1925.224735	2294.822469	1957.102732	2069.554707	989.6552272
-0.35	-677.7546983	*-546.4158005*	*-609.9830097*	-370.718212	-398.238612	-375.196009	-453.242763	-434.551597	-459.560093	-192.95835
+0.35	3305.293344	*2845.325642*	*2977.242064*	2027.718344	2159.8961	2039.665937	2425.135045	2066.302585	2184.619005	1036.268127
-0.4	-774.5767981	*-624.4752006*	*-697.1234396*	-423.677957	-455.129842	-428.795427	-517.991729	-496.630397	-525.211535	-220.5238286
+0.4	3391.337144	*2924.582296*	*3054.19576*	2088.058626	2220.684238	2094.474468	2484.095417	2104.257187	2225.869851	1052.707016
-0.45	-871.3988978	*-702.5346007*	*-784.2638696*	-476.637702	-512.021072	-482.394869	-582.740695	-558.709196	-590.862976	-248.0893071
+0.45	3382.714332	*2929.305921*	*3045.906815*	2092.253224	2221.475777	2093.509963	2475.643944	2075.846805	2196.743439	1040.939291
-0.5	-968.2209976	*-780.5940008*	*-871.4042995*	-529.597446	-568.912302	-535.994284	-647.489661	-620.787996	-656.514418	-275.6547857
+0.5	3328.898181	*2876.760765*	*2997.806856*	2051.477719	2180.146682	2055.291129	2434.499638	2042.616521	2161.086346	1027.896069
-0.55	-1065.043097	*-858.6534009*	*-958.5447295*	-582.557191	-625.803533	-589.593728	-712.238627	-682.866795	-722.16586	-303.2202643
+0.55	3195.16617	*2756.914025*	*2877.869295*	1963.169495	2088.427928	1970.652828	2338.419605	1981.087719	2095.300974	996.3649329
-0.6	-1161.865197	*-936.7128009*	*-1045.685159*	-635.516935	-682.694763	-643.193141	-776.987594	-744.945595	-787.817302	-330.7857429
+0.6	2974.661031	*2571.324388*	*2679.643614*	1829.196102	1946.970698	1838.916098	2184.127902	1854.874301	1961.049025	937.9650238
-0.65	-1258.687297	*-1014.772201*	*-1132.825589*	-688.47668	-739.585993	-696.792588	-841.73656	-807.024394	-853.468744	-358.3512214
+0.65	2673.435658	*2324.369107*	*2408.595798*	1659.539114	1760.85736	1664.692948	1977.297302	1668.899054	1763.676675	855.0428567
-0.7	-1355.509397	*-1092.831601*	*-1219.966019*	-741.436425	-796.477223	-750.392018	-906.485526	-869.103194	-919.120186	-385.9167
+0.7	2298.119833	*2020.825664*	*2070.715123*	1455.840952	1537.407655	1453.179088	1724.131135	1436.089591	1518.74989	750.1784078
-0.75	-1452.331496	*-1170.891001*	*-1307.106449*	-794.396169	-853.368454	-803.991426	-971.234492	-931.181993	-984.771627	-413.4821786
+0.75	1862.060276	*1665.869925*	*1688.250425*	1218.488099	1283.024302	1210.007055	1431.361862	1158.415304	1224.533565	626.1851736
-0.8	-1549.153596	*-1248.950401*	*-1394.246879*	-847.355914	-910.259684	-857.590854	-1035.98346	-993.260793	-1050.42307	-441.0476571
+0.8	1362.956441	*1265.077368*	*1228.633616*	953.2733976	997.8848362	941.2459238	1106.251208	836.3657192	883.5215554	486.1094008
-0.85	-1684.696547	*-1365.730652*	*-1657.000922*	-900.315659	-967.150914	-911.190307	-1100.73242	-1055.33959	-1116.07451	-468.6131357
+0.85	845.576091	*863.143007*	*762.4362398*	666.4193195	688.6350445	653.7792457	756.5906129	495.9923999	524.4272311	333.2306746
-0.9	-1896.295885	*-1558.567291*	*-2143.29377*	-953.275403	-1024.04214	-964.789737	-1165.48139	-1117.41839	-1181.72595	-496.1786143
+0.9	401.4678375	*503.7762114*	*361.5200845*	371.4391197	371.4391197	362.7889067	390.9057817	282.3404342	297.200457	204.6475941
-0.95	-2170.902032	*-1814.410738*	*-2763.73059*	-1006.23515	-1080.93337	-1018.38914	-1230.23036	-1179.49719	-1247.37739	-523.7440929
+0.95	183.6003713	*180.7013303*	*165.2403339*	139.4162965	139.4162965	118.0043884	120.7790726	105.9206094	111.4953784	100.4426866
-1	-2498.734253	*-2123.480309*	*-3485.61996*	-1059.19503	-1137.82459	-1071.98889	-1294.97926	-1241.57592	-1313.02899	-551.3095917
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-2498.734253	*-2123.480309*	*-3485.61996*	-1059.19503	-1137.82459	-1071.98889	-1294.97926	-1241.57592	-1313.02899	-551.3095917
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-2170.895281	*-1814.410586*	*-2763.732454*	-1006.23528	-1080.93298	-1018.38945	-1230.2303	-1179.49712	-1247.37754	-523.7441124
+2.05	183.600376	*180.712537*	*165.2403381*	139.4250613	139.4250613	117.9800327	120.7618102	105.8859924	111.4589393	99.98160711
-2.1	-1896.289487	*-1558.567146*	*-2143.290644*	-953.275529	-1024.04177	-964.790004	-1165.48133	-1117.41833	-1181.72609	-496.1786331
+2.1	401.6487432	*503.7925321*	*361.5203423*	371.4519712	371.4519712	362.8165114	390.9409136	282.349001	297.2094747	203.7968175
-2.15	-1684.690507	*-1365.730521*	*-1657.000364*	-900.315778	-967.15056	-911.190558	-1100.73237	-1055.33953	-1116.07464	-468.6131538
+2.15	846.5442164	*863.1623154*	*762.298347*	666.4256827	688.6384987	653.815954	756.6174303	495.9978592	524.432708	333.221866
-2.2	-1549.147902	*-1248.950271*	*-1394.249106*	-847.356027	-910.25935	-857.591113	-1035.98341	-993.260736	-1050.42319	-441.0476745
+2.2	1363.854837	*1265.098469*	*1227.860776*	953.2810991	997.8895763	941.2368401	1106.2799	836.3743966	883.5312486	486.1007479

-2.25	-1452.326157	*-1170.89088*	*-1307.108535*	-794.396276	-853.368139	-803.991667	-971.234443	-931.18194	-984.771744	-413.4821952
+2.25	1862.922356	*1665.891634*	*1688.250294*	1218.4958	1283.028881	1209.99835	1431.390776	1158.422448	1224.541659	626.1764433
-2.3	-1355.504411	*-1092.83149*	*-1219.967964*	-741.436525	-796.476929	-750.392222	-906.48548	-869.103144	-919.120295	-385.916716
+2.3	2299.371874	*2020.846625*	*2070.617352*	1455.847239	1537.410544	1453.169483	1724.158896	1436.093824	1518.754937	750.1694403
-2.35	-1258.682666	*-1014.772099*	*-1132.827393*	-688.476774	-739.585719	-696.792776	-841.736516	-807.024348	-853.468846	-358.3512367
+2.35	2674.59047	*2324.387963*	*2407.693222*	1659.542772	1760.853195	1664.680988	1977.322042	1668.895203	1763.673176	855.0332355
-2.4	-1161.860921	*-936.7127089*	*-1045.686822*	-635.517023	-682.694509	-643.19333	-776.987553	-744.945551	-787.817398	-330.7857574
+2.4	2975.675243	*2571.339762*	*2679.125973*	1829.192846	1946.963151	1838.900723	2184.148274	1854.865677	1961.040499	937.9543915
-2.45	-1065.039176	*-858.6533184*	*-958.5462507*	-582.557272	-625.803299	-589.593885	-712.23859	-682.866755	-722.165949	-303.2202781
+2.45	3196.001019	*2756.925261*	*2877.771581*	1963.162012	2088.415682	1970.633116	2338.434555	1981.073178	2095.286212	996.3533836
-2.5	-968.2174306	*-780.593928*	*-871.4056795*	-529.597521	-568.912088	-535.994439	-647.489627	-620.787959	-656.5145	-275.6547988
+2.5	3329.517322	*2876.766876*	*2997.473295*	2051.464886	2180.128551	2055.314169	2434.507959	2042.635798	2161.107161	1027.883383
-2.55	-871.3956854	*-702.5345376*	*-784.2651084*	-476.637769	-512.020878	-482.394994	-582.740664	-558.709163	-590.863051	-248.0893195
+2.55	3382.22185	*2929.304206*	*3044.674862*	2092.269869	2221.497945	2093.491002	2475.640415	2075.869698	2196.767007	1040.933883
-2.6	-774.5739402	*-624.4751472*	*-697.1245372*	-423.678018	-455.129668	-428.795548	-517.991701	-496.630367	-525.211603	-220.5238402
+2.6	3390.60669	*2924.574266*	*3052.882603*	2088.068782	2220.699537	2094.49726	2484.084289	2104.273802	2225.886752	1052.700673
-2.65	-677.752195	*-546.4157568*	*-609.9839661*	-370.718267	-398.238458	-375.196103	-453.242738	-434.551571	-459.560154	-192.9583609
+2.65	3304.294932	*2845.310143*	*2976.149209*	2027.721159	2159.903607	2039.681285	2425.115127	2066.311723	2184.627969	1036.260463
-2.7	-580.9304498	*-468.3563663*	*-522.843395*	-317.758516	-341.347248	-321.596657	-388.493774	-372.472774	-393.908705	-165.3928816
+2.7	3118.665975	*2688.482568*	*2810.348518*	1924.720401	2040.36951	1925.232093	2294.841251	1957.103535	2069.553463	989.6463293
-2.75	-484.1087046	*-390.2969759*	*-435.7028238*	-264.798765	-284.456037	-267.997211	-323.744811	-310.393978	-328.257256	-137.8274023
+2.75	2865.714836	*2451.460159*	*2582.389936*	1767.52369	1875.858553	1752.105663	2090.70165	1801.081245	1903.841768	911.5313762
-2.8	-387.2869593	*-312.2375855*	*-348.5622527*	-211.839014	-227.564827	-214.397766	-258.995848	-248.315182	-262.605808	-110.261923
+2.8	2511.753576	*2132.011378*	*2262.971959*	1547.251481	1643.752967	1536.315773	1814.942357	1568.61193	1656.425512	800.3392469
-2.85	-290.4652141	*-234.1781951*	*-261.4216815*	-158.879263	-170.673617	-160.79832	-194.246885	-186.236386	-196.954359	-82.6964437
+2.85	2051.248602	*1728.303688*	*1848.608129*	1261.715569	1341.640846	1254.683578	1484.877093	1291.743269	1363.847385	654.5176294
-2.9	-193.6434689	*-156.1188046*	*-174.2811104*	-105.919512	-113.782407	-107.198875	-129.497922	-124.15759	-131.30291	-55.13096441
+2.9	1480.499926	*1238.903708*	*1345.384162*	909.1570749	967.5728445	905.3378988	1073.214444	944.7828527	997.7091314	473.0221837
-2.95	-96.82172371	*-78.05941422*	*-87.14053927*	-52.9597612	-56.8911966	-53.5994292	-64.7489586	-62.0787935	-65.6514615	-27.56548511
+2.95	797.2956833	*662.7783595*	*738.6335768*	488.7795062	520.4491852	487.1185818	578.0998407	515.2294972	544.1711489	255.0421436
-3	-4.54E-13	*-3.47E-13*	*-5.11E-13*	-2.39E-13	-2.49E-13	-2.29E-13	-2.70E-13	-2.49E-13	-2.63E-13	-1.93E-13
+3	5.84E-13	*4.18E-13*	*5.25E-13*	3.41E-13	3.41E-13	2.73E-13	2.90E-13	2.70E-13	2.84E-13	2.66E-13

2-Span: Moment (Max and Min) Raw Data Results - 90' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.22E-13	-1.68E-13	-1.40E-13	-1.21E-13	-1.31E-13	-1.29E-13	-1.59E-13	-1.59E-13	-1.60E-13
End Shear	1.82E-13	1.43E-13	1.62E-13	1.45E-13	1.67E-13	1.47E-13	1.51E-13	1.50E-13	1.44E-13
-0.05	-40.07937216	-53.37268636	-53.6986236	-47.55452162	-32.29248497	-43.71329201	-49.7329699	-55.5639122	-61.5244192
+0.05	364.1240003	450.8370226	432.7749312	374.5058947	294.626373	396.8921399	444.9299417	479.084798	511.6482115
-0.1	-80.15874431	-106.7453727	-107.3972472	-95.10904324	-64.58496995	-87.42658401	-99.4659399	-111.127824	-123.048838
+0.1	675.8653739	827.4756225	788.0781659	682.9379075	546.8026731	737.4187011	825.4515096	889.1951489	953.1319535
-0.15	-120.2381165	-160.1180591	-161.0958708	-142.6635649	-96.87745492	-131.139876	-149.19891	-166.691736	-184.573257
+0.15	935.9669383	1132.931823	1069.075985	929.7677903	757.6409913	1021.693904	1141.779115	1253.769809	1339.492888
-0.2	-160.3174886	-213.4907454	-214.7944944	-190.2180865	-129.1699399	-174.853168	-198.93188	-222.255649	-246.097677
+0.2	1145.044708	1368.27098	1300.368517	1134.52521	927.648639	1250.651892	1395.068537	1548.269225	1665.070415
-0.25	-200.3968608	-266.8634318	-268.493118	-237.7726081	-161.4624249	-218.56646	-248.66485	-277.819561	-307.622096
+0.25	1304.56312	1554.684077	1466.735519	1284.78904	1057.811323	1425.839293	1595.253769	1774.310845	1927.838528
-0.3	-240.4762329	-320.2361182	-322.1917416	-285.3271297	-193.7549098	-262.279752	-298.39782	-333.383473	-369.146515
+0.3	1416.31785	1682.992774	1567.798893	1379.086799	1149.533416	1561.406097	1751.305902	1933.728626	2117.122571
-0.35	-280.5556051	-373.6088045	-375.8903652	-332.8816513	-226.0473948	-305.993044	-348.13079	-388.947385	-430.670934
+0.35	1497.003205	1749.040765	1658.179196	1460.600685	1204.483896	1653.855647	1849.470938	2046.401139	2234.821239
-0.4	-320.6349772	-426.9814909	-429.5889888	-380.4361729	-258.3398798	-349.706336	-397.86376	-444.511297	-492.195353
+0.4	1535.571305	1766.484444	1712.022895	1508.482852	1224.596605	1697.653175	1893.15791	2103.676581	2292.890571
-0.45	-360.7143494	-480.3541773	-483.2876124	-427.9906946	-290.6323648	-393.419628	-447.596729	-500.075209	-553.719772
+0.45	1531.980234	1738.664263	1718.459595	1515.208027	1212.07019	1695.551603	1885.32623	2102.011947	2300.675822
-0.5	-400.7937216	-533.7268636	-536.986236	-475.5452162	-322.9248497	-437.1329201	-497.329699	-555.639122	-615.244192
+0.5	1505.201005	1712.511532	1677.83308	1480.07624	1196.967006	1665.284674	1854.128692	2062.804708	2252.799662
-0.55	-440.8730937	-587.09955	-590.6848596	-523.0997378	-355.2173347	-480.8462121	-547.062669	-611.203034	-676.768611
+0.55	1444.985109	1663.893437	1604.444498	1415.150859	1156.780036	1597.347196	1782.349352	1976.818715	2150.490617
-0.6	-480.9524659	-640.4722363	-644.3834832	-570.6542594	-387.5098197	-524.5595041	-596.795639	-666.766946	-738.29303
+0.6	1348.587309	1569.851302	1488.000662	1311.33033	1086.253934	1490.617364	1665.236935	1841.017084	2009.566073
-0.65	-521.031838	-693.8449227	-698.0821068	-618.208781	-419.8023046	-568.2727961	-646.528609	-722.330858	-799.817449
+0.65	1219.565524	1428.456302	1335.107465	1174.68638	988.1011264	1348.972515	1507.466127	1660.389793	1816.690786
-0.7	-561.1112102	-747.2176091	-751.7807304	-665.7633027	-452.0947896	-611.9860881	-696.261579	-777.89477	-861.341868
+0.7	1064.204717	1236.711354	1147.071435	1005.905659	865.2992932	1176.647971	1313.304174	1445.271703	1577.61666
-0.75	-601.1905823	-800.5902954	-805.479354	-713.3178243	-484.3872746	-655.6993801	-745.994549	-833.458682	-922.866287
+0.75	885.2643069	999.9713307	921.2521796	803.0646027	721.0908369	978.2365094	1087.918366	1196.086842	1298.741765
-0.8	-641.2699545	-853.9629818	-859.1779776	-760.8723459	-516.6797596	-699.4126721	-795.727519	-889.022595	-984.390707
+0.8	683.4518786	724.1034092	646.5953369	557.3205356	558.9823988	758.6880312	836.9650883	915.740716	986.9776117
-0.85	-681.3493266	-907.3356682	-912.8766012	-874.631467	-548.9722445	-743.1259641	-845.460489	-944.586507	-1045.91513
+0.85	463.442465	430.2747227	377.2758976	319.2752591	382.7458532	523.3100187	566.9107227	610.7765604	649.7487842
-0.9	-721.4286988	-960.7083545	-966.5752248	-1126.191712	-581.2647295	-786.8392561	-895.193459	-1000.15042	-1107.43954
+0.9	261.5299341	261.1615378	207.6606817	170.3383133	196.7955072	290.0946019	304.4667794	324.2067702	331.3233271
-0.95	-761.508071	-1014.081041	-1020.273848	-1478.065222	-613.5572145	-830.5525481	-944.926429	-1055.71433	-1168.96396
+0.95	98.11069114	97.89074395	77.82674975	61.71045265	97.31881809	98.50018539	98.40123508	98.50064634	98.46282205
-1	-801.5874622	-1067.453817	-1073.97263	-1894.407142	-645.8496949	-874.265835	-994.659371	-1111.27852	-1230.48853
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-801.5874622	-1067.453817	-1073.97263	-1894.407142	-645.8496949	-874.265835	-994.659371	-1111.27852	-1230.48853
+2	0	0	0	0	0	0	0	0	0
-2.05	-761.5078899	-1014.081126	-1020.273998	-1478.065657	-613.5569694	-830.5524364	-944.926041	-1055.7146	-1168.9641
+2.05	98.07491192	97.89621176	77.8308647	61.71266474	97.29443041	98.47487244	98.37638411	98.47640892	98.47718811
-2.1	-721.4285283	-960.7084345	-966.5753653	-1126.191758	-581.2644971	-786.83915	-895.19309	-1000.15067	-1107.43967
+2.1	261.5387707	261.137365	207.6666437	170.3260727	196.82673	290.1131733	304.4979221	324.2136738	331.3386266
-2.15	-681.3491667	-907.3357432	-912.876733	-874.6313526	-548.9720248	-743.1258636	-845.460139	-944.586743	-1045.91525
+2.15	463.4458224	430.2796055	377.2732917	319.2739173	382.7675029	523.3030139	566.9387601	610.7812483	649.7625752
-2.2	-641.269805	-853.963052	-859.1781008	-760.872086	-516.6795525	-699.4125772	-795.727188	-889.022816	-984.390823
+2.2	683.4559286	724.0984103	646.5870595	557.3159907	559.0045569	758.6824343	836.9945288	915.7463023	986.9928772
-2.25	-601.1904434	-800.5903607	-805.4794685	-713.3175798	-484.3870802	-655.6992909	-745.994237	-833.458889	-922.866397

+2.25	885.2679695	999.9648485	921.2694267	803.0739588	721.1127534	978.2311782	1087.908173	1196.09211	1298.756989
-2.3	-561.1110818	-747.2176695	-751.7808362	-665.7630736	-452.0946078	-611.9860045	-696.261286	-777.894961	-861.341971
+2.3	1064.20712	1236.702111	1147.084691	1005.912929	865.3202745	1176.64188	1313.292848	1445.275501	1577.630436
-2.35	-521.0317202	-693.8449782	-698.0822039	-618.2085673	-419.8021355	-568.2727181	-646.528335	-722.331034	-799.817545
+2.35	1219.562921	1428.442975	1335.100541	1174.682575	988.1203237	1348.964458	1507.452429	1660.386893	1816.701618
-2.4	-480.9523585	-640.472287	-644.3835716	-570.6540611	-387.5096632	-524.5594317	-596.795384	-666.767107	-738.293119
+2.4	1348.582092	1569.870734	1488.013327	1311.337271	1086.270694	1490.60649	1665.259701	1841.010713	2009.572591
-2.45	-440.8729969	-587.0995957	-590.6849394	-523.0995549	-355.2171909	-480.8461453	-547.062433	-611.20318	-676.768693
+2.45	1444.976591	1663.911104	1604.463172	1415.160907	1156.793878	1597.332747	1782.368031	1976.807982	2150.489104
-2.5	-400.7936353	-533.7269045	-536.9863071	-475.5450487	-322.9247186	-437.1328589	-497.329482	-555.639253	-615.244267
+2.5	1505.188309	1712.523156	1677.846045	1480.083378	1196.977148	1665.265759	1854.142395	2062.788507	2252.792421
-2.55	-360.7142737	-480.3542132	-483.2876748	-427.9905425	-290.6322463	-393.4195725	-447.596531	-500.075325	-553.719841
+2.55	1531.995802	1738.653754	1718.478554	1515.218404	1212.06235	1695.573805	1885.316008	2102.0317	2300.686764
-2.6	-320.634912	-426.981522	-429.5890425	-380.4360363	-258.3397739	-349.7062861	-397.86358	-444.511398	-492.195415
+2.6	1535.582123	1766.500694	1712.035647	1508.489927	1224.585193	1697.670138	1893.142042	2103.690068	2292.89427
-2.65	-280.5555504	-373.6088307	-375.8904102	-332.88153	-226.0473016	-305.9929997	-348.130629	-388.947471	-430.67099
+2.65	1497.008535	1749.060531	1658.190037	1460.606615	1204.468057	1653.86656	1849.488587	2046.407184	2234.815242
-2.7	-240.4761888	-320.2361395	-322.191778	-285.3270238	-193.7548293	-262.2797134	-298.397678	-333.383544	-369.146564
+2.7	1416.316517	1683.006015	1567.802967	1379.089073	1149.513183	1561.410503	1751.316394	1933.725808	2117.108036
-2.75	-200.3968272	-266.8634483	-268.4931457	-237.7725176	-161.462357	-218.566427	-248.664727	-277.819616	-307.622138
+2.75	1304.555752	1554.689985	1466.749898	1284.796893	1057.786061	1425.836432	1595.256817	1774.300014	1927.853998
-2.8	-160.3174655	-213.490757	-214.7945134	-190.2180114	-129.1698847	-174.8531406	-198.931776	-222.255689	-246.097712
+2.8	1145.030909	1368.268392	1300.375518	1134.528977	927.6180137	1250.641967	1395.063015	1548.249566	1665.07617
-2.85	-120.2381039	-160.1180658	-161.0958811	-142.6635052	-96.87741236	-131.1398542	-149.198825	-166.691762	-184.573286
+2.85	935.9462697	1132.920816	1069.07399	929.7666841	757.6045086	1021.67648	1141.765236	1253.780391	1339.488054
-2.9	-80.1587423	-106.7453745	-107.3972489	-95.10899895	-64.58494004	-87.42656779	-99.4658739	-111.127835	-123.04886
+2.9	675.8376774	827.4558507	788.0677498	682.9479186	546.8146229	737.3934101	825.428779	889.1961362	953.1349895
-2.95	-40.07938068	-53.37268327	-53.69861658	-47.55449273	-32.29246773	-43.7132814	-49.7329229	-55.5639075	-61.5244339
+2.95	364.1312651	450.8462569	432.7841641	374.5112284	294.6323389	396.9000297	444.9389142	479.0760704	511.640603
-3	-1.78E-13	-2.04E-13	-1.77E-13	-1.47E-13	-2.09E-13	-1.82E-13	-1.89E-13	-2.36E-13	-2.37E-13
+3	2.39E-13	2.43E-13	2.21E-13	2.08E-13	2.24E-13	2.32E-13	2.45E-13	2.45E-13	2.46E-13

2-Span: Moment (Max and Min) Raw Data Results - 90' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-2.09E-13	-2.19E-13	-2.06E-13	-2.43E-13	-2.69E-13
End Shear	2.37E-13	2.44E-13	1.82E-13	2.25E-13	2.08E-13
-0.05	-98.98710045	-107.8247138	-63.4402969	-77.236668	-82.1033288
+0.05	768.0160863	801.4901536	524.5847105	635.3013077	662.242956
-0.1	-197.9742009	-215.6494276	-126.880594	-154.473336	-164.206658
+0.1	1398.783087	1459.778581	959.6310597	1164.189876	1210.49542
-0.15	-296.9613013	-323.4741414	-190.320891	-231.710004	-246.309987
+0.15	1938.942535	2024.369517	1309.043397	1591.779717	1659.456909
-0.2	-395.9484018	-431.2988552	-253.761188	-308.946672	-328.413315
+0.2	2358.83304	2516.944624	1607.743975	1954.806424	2030.371649
-0.25	-494.9355022	-539.1235689	-317.201484	-386.18334	-410.516644
+0.25	2671.058284	2909.513503	1837.594143	2218.996051	2328.916624
-0.3	-593.9226027	-646.9482827	-380.641781	-463.420008	-492.619973
+0.3	2930.495606	3193.643089	1987.885499	2389.694515	2538.539806
-0.35	-692.9097031	-754.7729965	-444.082078	-540.656676	-574.723302
+0.35	3080.715896	3384.350903	2090.207128	2495.619416	2650.803847
-0.4	-791.8968036	-862.5977103	-507.522375	-617.893344	-656.826631
+0.4	3201.281333	3447.757879	2119.648631	2522.259375	2691.165066
-0.45	-890.883904	-970.4224241	-570.962672	-695.130012	-738.92996
+0.45	3205.840457	3480.332535	2081.344927	2468.401591	2653.261048
-0.5	-989.8710045	-1078.247138	-634.402969	-772.36668	-821.033288
+0.5	3143.105627	3410.674341	2041.949776	2423.382153	2602.560381
-0.55	-1088.858105	-1186.071852	-697.843266	-849.603348	-903.136617
+0.55	3009.369221	3231.139553	1994.396464	2371.411528	2528.911701
-0.6	-1187.845205	-1293.896565	-761.283563	-926.840016	-985.239946
+0.6	2771.154072	3028.392876	1876.919736	2234.711517	2378.988259
-0.65	-1286.832306	-1401.721279	-824.72386	-1004.07668	-1067.34328
+0.65	2480.706879	2714.021419	1694.682929	2025.222772	2157.329956
-0.7	-1385.819406	-1509.545993	-888.164156	-1081.31335	-1149.4466
+0.7	2111.938875	2294.965492	1464.830728	1756.906479	1856.496216
-0.75	-1484.806507	-1617.370707	-951.604453	-1158.55002	-1231.54993
+0.75	1657.767508	1805.110652	1183.129577	1419.846347	1485.106994
-0.8	-1583.793607	-1725.195421	-1015.04475	-1235.78669	-1313.65326
+0.8	1150.738941	1234.972932	852.4014562	1022.424785	1052.554726
-0.85	-1682.780708	-1833.020134	-1078.48505	-1313.02336	-1395.75659
+0.85	654.7755627	671.9159444	528.141318	601.5722611	635.2966857
-0.9	-1781.767808	-1940.844848	-1141.92534	-1390.26002	-1477.85992
+0.9	346.1434613	321.1296195	299.8881396	350.5632616	350.7818656
-0.95	-1880.754908	-2048.669562	-1205.36564	-1467.49669	-1559.96325
+0.95	103.1516242	96.51791762	112.3068029	119.7939231	108.1511272
-1	-1979.742038	-2156.49431	-1268.80592	-1544.73357	-1642.06657
+1	0	0	0	0	0
(Span 2) -2	-1979.742038	-2156.49431	-1268.80592	-1544.73357	-1642.06657
+2	0	0	0	0	0
-2.05	-1880.754719	-2048.597664	-1205.36556	-1467.4969	-1559.96288
+2.05	103.1385364	96.51600737	112.3129458	119.8004755	108.1376281
-2.1	-1781.76763	-1940.776736	-1141.92526	-1390.26022	-1477.85957
+2.1	346.1340734	321.128277	299.8923573	350.5536424	350.7677064
-2.15	-1682.780541	-1832.955809	-1078.48497	-1313.02354	-1395.75626
+2.15	654.7557107	671.9128227	528.1472501	601.5965544	635.3222789
-2.2	-1583.793452	-1725.134881	-1015.04468	-1235.78686	-1313.65295
+2.2	1150.746936	1234.975546	852.4123536	1022.441667	1052.579884
-2.25	-1484.806363	-1617.313954	-951.604384	-1158.55019	-1231.54964

+2.25	1657.790788	1805.112397	1183.138378	1419.860826	1485.130372
-2.3	-1385.819274	-1509.493026	-888.164091	-1081.31351	-1149.44633
+2.3	2111.957656	2296.745428	1464.836063	1756.91659	1856.515541
-2.35	-1286.832185	-1401.672099	-824.723798	-1004.07683	-1067.34302
+2.35	2480.71855	2714.01895	1694.679749	2025.226779	2157.343288
-2.4	-1187.845096	-1293.851171	-761.283505	-926.840155	-985.239712
+2.4	2773.13772	3028.395647	1876.911233	2234.704471	2378.994133
-2.45	-1088.858007	-1186.030244	-697.843212	-849.603478	-903.136402
+2.45	3009.389103	3231.140854	1994.381579	2371.396471	2528.905481
-2.5	-989.8709182	-1078.209316	-634.402918	-772.366801	-821.033092
+2.5	3143.115341	3410.672046	2041.970172	2423.395928	2602.544776
-2.55	-890.8838293	-970.3883884	-570.962625	-695.130123	-738.929783
+2.55	3205.830644	3480.869343	2081.367353	2468.426104	2653.277114
-2.6	-791.8967404	-862.5674609	-507.522332	-617.893446	-656.826473
+2.6	3201.260348	3447.756973	2119.664991	2522.276653	2691.172737
-2.65	-692.9096514	-754.7465333	-444.082039	-540.656769	-574.723163
+2.65	3080.719113	3384.347676	2090.216101	2495.627759	2650.799191
-2.7	-593.9225625	-646.9256058	-380.641746	-463.420092	-492.619854
+2.7	2930.480781	3193.644556	1987.884629	2389.691291	2538.524876
-2.75	-494.9354736	-539.1046783	-317.201453	-386.183415	-410.516544
+2.75	2671.064391	2909.512011	1837.584577	2218.982382	2328.927901
-2.8	-395.9483846	-431.2837507	-253.76116	-308.946737	-328.413235
+2.8	2358.860381	2516.940324	1607.724907	1954.819902	2030.388393
-2.85	-296.9612957	-323.4628232	-190.320866	-231.71006	-246.309925
+2.85	1938.955002	2024.367032	1309.032414	1591.780958	1659.460814
-2.9	-197.9742067	-215.6418956	-126.880573	-154.473383	-164.206615
+2.9	1398.778992	1459.779006	959.6099627	1164.177995	1210.485495
-2.95	-98.98711781	-107.8209681	-63.44028	-77.2367059	-82.1033057
+2.95	768.0326675	801.4932853	524.5957134	635.3145575	662.2571789
-3	-2.57E-13	-2.80E-13	-2.58E-13	-2.73E-13	-2.62E-13
+3	3.38E-13	4.08E-13	2.98E-13	3.40E-13	2.76E-13

2-Span: Shear (Max and Min) Raw Data Results - 90’ Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.55997	-4.61837	-6.150166953	-6.18772	-5.75655	-3.721082588	-5.03711	-5.73076	-6.402663229	-7.0895
End Shear	62.78635	45.16836	56.45728559	54.60239	49.39118	36.5293256	49.20992	55.24031	59.52485079	63.73813
-0.05	-6.55997	-4.61837	-6.150166953	-6.18772	-5.78143	-3.721082588	-5.03711	-5.73076	-6.402663229	-7.0895
+0.05	58.20031	41.95823	51.95022298	49.86892	44.62403	33.94997528	45.73412	51.26955	55.1012528	58.84262
-0.1	-6.55997	-4.61837	-6.150166953	-6.18772	-6.71379	-3.721082588	-5.03711	-5.73076	-6.402663229	-7.0895
+0.1	53.35498	38.57129	47.18663489	44.87246	39.87789	31.23378217	42.067	47.07695	50.4309458	53.67502
-0.15	-6.55997	-5.32402	-6.150166953	-6.18772	-8.39166	-3.931178038	-5.69159	-5.79899	-6.402663229	-7.0895
+0.15	49.52555	35.88992	43.44426875	40.97123	36.27281	29.08227955	39.16255	43.75993	46.74284248	49.60194
-0.2	-9.64459	-7.72283	-7.724960287	-6.18772	-10.4574	-6.408372605	-8.58437	-9.21728	-9.211270833	-9.20549
+0.2	44.87629	32.58442	38.86803806	36.23221	31.93093	26.42850836	35.5804	39.67358	42.20816478	44.60389
-0.25	-13.126	-10.2254	-9.625609973	-8.08971	-12.0178	-8.580832174	-11.4855	-11.9667	-11.96668106	-11.9667
+0.25	41.17307	29.98515	35.30039297	32.56408	28.55703	24.34050184	32.76222	36.46257	38.6521356	40.69274
-0.3	-17.436	-13.5883	-12.16482617	-11.0574	-13.9313	-11.26898549	-15.1171	-16.1006	-16.05957457	-16.0529
+0.3	36.6489	26.80348	30.97361621	28.15037	24.53599	21.78305012	29.31082	32.53503	34.31201362	35.92995
-0.35	-21.1641	-16.2444	-15.02971458	-13.4039	-15.4352	-13.39103945	-17.9842	-19.4039	-19.40720284	-19.3997
+0.35	33.12525	24.32023	27.63037093	24.76965	21.51764	19.7856618	26.61554	29.4721	30.93519402	32.2333
-0.4	-25.9012	-19.5107	-19.35469289	-16.4459	-18.2343	-15.99923764	-21.5085	-23.4691	-24.00412065	-24.1816
+0.4	28.85617	21.30475	23.61513256	20.7859	17.98697	17.35842832	23.34064	25.75592	26.84855002	27.77149
-0.45	-29.6233	-22.0726	-22.76498151	-19.5281	-20.5828	-18.0437692	-24.2715	-26.6599	-27.61952056	-28.2497
+0.45	25.56109	18.97142	20.54595074	17.98976	15.49886	15.47877044	20.80489	22.8831	23.69808584	24.34192
-0.5	-34.1758	-25.2001	-27.38244061	-23.9533	-24.8405	-20.53811383	-27.6428	-30.5582	-32.04582761	-33.2404
+0.5	21.60835	16.16453	16.90435036	14.68097	12.5837	13.21565273	17.75226	19.43084	19.9238437	20.2468
-0.55	-37.7259	-27.6339	-31.10035387	-27.4304	-28.3803	-22.47800672	-30.2652	-33.5944	-35.50116996	-37.1447
+0.55	18.59086	14.01501	14.18292332	12.19416	10.41456	11.48084856	15.41264	16.79018	17.04687344	17.13687
-0.6	-42.0328	-30.5801	-35.64108043	-31.7797	-32.7947	-24.82460034	-33.4377	-37.2731	-39.69794319	-41.8978
+0.6	15.01574	11.45908	11.17563751	9.521378	8.084102	9.415744201	12.62806	13.6544	13.64395772	13.64152
-0.65	-45.3619	-32.852	-39.17637269	-35.642	-36.3851	-26.63273166	-35.8827	-40.1127	-42.94608872	-45.5857
+0.65	12.32483	9.527284	8.934158487	7.825239	6.591151	7.852909134	10.52118	11.28794	11.255485	11.25337
-0.7	-49.3621	-35.5745	-43.4577711	-40.4902	-41.0478	-28.79767788	-38.8108	-43.5193	-46.85440457	-50.0354
+0.7	9.255486	7.264703	6.62739133	5.867626	4.901167	6.019717183	8.050425	8.521203	8.505748149	8.503672
-0.75	-52.4215	-37.6506	-46.76076744	-44.2564	-44.6943	-30.44693142	-41.0418	-46.1203	-49.84821747	-53.4544
+0.75	7.095989	5.584535	5.291860828	4.359287	3.672397	4.655969932	6.212904	6.471	6.467587723	6.465573
-0.8	-56.0539	-40.1071	-50.72075285	-48.806	-49.0894	-32.39633333	-43.6796	-49.2023	-53.40915164	-57.535
+0.8	4.618949	3.779483	3.763262029	2.991321	2.457603	3.088584667	4.136212	4.403709	4.401965308	4.400286
-0.85	-58.7947	-41.9533	-53.74177661	-52.3062	-52.4725	-33.85958957	-45.6601	-51.5225	-56.10148467	-60.6324
+0.85	2.916797	2.673302	2.658083995	2.112267	1.711062	2.002311695	2.847782	2.917392	2.915728792	2.914127
-0.9	-61.9982	-44.1014	-57.31825437	-56.4892	-56.3389	-35.55954768	-47.9618	-54.2273	-59.25611401	-64.2783
+0.9	1.720049	1.360566	1.405370202	1.115911	0.888711	1.181840706	1.371681	1.326493	1.372452566	1.391651
-0.95	-64.3715	-45.6839	-60.00763523	-59.669	-59.2464	-36.80969276	-49.6551	-56.2247	-61.59983793	-67.0016
+0.95	0.859471	0.516626	0.511957481	0.427204	0.331247	0.586690941	0.499243	0.498342	0.499435041	0.500487
-1	-67.0851	-47.4812	-63.13851406	-63.4177	-62.6452	-38.22630743	-51.575	-58.4998	-64.28923806	-70.1469
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	66.85068	47.31045	62.83677871	63.05384	62.31682	38.09187088	51.39273	58.28324	64.03214961	69.84512
-2.05	-7.58E-01	-0.41446	-0.411994997	-0.37681	-2.91E-01	-0.517471096	-0.40046	-0.39998	-0.400545573	-0.4026
+2.05	64.68146	45.87241	60.33179447	60.05461	59.59769	36.95841711	49.85663	56.46293	61.8803608	67.32855
-2.1	-1.83379	-1.52929	-1.524236238	-1.21044	-0.9654	-1.260025117	-1.50944	-1.47643	-1.521387491	-1.5294
+2.1	61.71684	43.89437	56.9702982	56.08019	55.96334	35.39585472	47.7401	53.96634	58.95091818	63.92468
-2.15	-2.79129	-2.54166	-2.526542401	-2.00763	-1.62331	-1.916490171	-2.69475	-2.74129	-2.739630502	-2.73803
+2.15	59.15447	42.17571	54.10885116	52.73344	52.87019	34.03573277	45.89855	51.80224	56.42694835	61.00771
-2.2	-4.8503	-3.92428	-3.907908065	-3.10636	-2.55676	-3.238575125	-4.30516	-4.59904	-4.597277615	-4.59558
+2.2	55.67468	39.86807	50.33280971	48.35856	48.66804	32.20678235	43.42307	48.9022	53.06175126	57.13619
-2.25	-6.82926	-5.38351	-5.135932266	-4.18849	-3.52685	-4.492639186	-5.99286	-6.22774	-6.225912329	-6.22416
+2.25	52.76721	37.90268	47.16455142	44.71859	45.13842	30.64710999	41.31266	46.43635	50.21274316	53.87139

-2.3	-9.54186	-7.48357	-6.837720643	-6.05514	-5.06276	-6.197205335	-8.2896	-8.78856	-8.771475469	-8.76939
+2.3	48.94177	35.30782	43.03605618	40.01112	40.58031	28.58567014	38.524	43.18541	46.47070001	49.59796
-2.35	-12.0048	-9.29383	-8.665333665	-7.62439	-6.41482	-7.663914616	-10.2664	-11.0022	-10.97150168	-10.9694
+2.35	45.74029	33.12961	39.61068294	36.13224	36.84659	26.85356318	36.18137	40.45986	43.34380469	46.03791
-2.4	-15.365	-11.7084	-11.46698131	-9.77048	-8.30121	-9.617331775	-12.8998	-13.9601	-13.97491508	-13.9725
+2.4	41.57786	30.28993	35.19182581	31.359	32.37757	24.59352895	33.1253	36.91058	39.28384994	41.42828
-2.45	-18.2225	-13.7533	-13.87304895	-11.8945	-10.1543	-11.26956394	-15.1277	-16.4689	-16.69750598	-16.76
+2.45	38.13122	27.9328	31.55898553	27.8597	28.8148	22.71610752	30.58705	33.96739	35.92618213	37.62555
-2.5	-21.9903	-16.4401	-17.25906773	-15.0028	-12.8656	-13.43794226	-18.0521	-19.7695	-20.29350613	-20.6472
+2.5	33.6929	24.89065	26.9118558	23.51354	24.41293	20.2913777	27.30935	30.17231	31.60725283	32.7454
-2.55	-25.1494	-18.6858	-20.17262719	-17.65	-15.1978	-15.24858355	-20.4944	-22.5316	-23.31315673	-23.9235
+2.55	30.04998	22.38852	23.26493618	19.97315	20.97924	18.29576787	24.6121	27.05352	28.06596502	28.75257
-2.6	-29.2636	-21.6023	-24.00885804	-21.145	-18.3078	-17.59802201	-23.6639	-26.1224	-27.25100164	-28.2102
+2.6	25.39683	19.1863	18.92410914	16.07598	17.9419	15.74024143	21.15852	23.06522	23.5469574	23.66766
-2.65	-32.6754	-24.0148	-27.22130516	-24.3579	-21.1512	-19.53995336	-26.284	-29.0956	-30.52056782	-31.78
+2.65	21.60649	16.57305	15.46390545	13.69449	15.67299	13.65354586	18.33889	19.81286	19.86920188	19.86175
-2.7	-37.075	-27.1187	-31.40011524	-28.5836	-24.924	-22.03654561	-29.6529	-32.924	-34.7413445	-36.4005
+2.7	16.97596	13.25314	11.82799184	10.76154	13.75286	11.00112107	14.75521	15.6839	15.64633688	15.63966
-2.75	-40.6907	-29.6642	-34.86180269	-32.1148	-28.1175	-24.08264746	-32.4142	-36.0663	-38.21368726	-40.211
+2.75	13.52747	10.56269	9.861217587	8.387272	12.21194	8.850465194	11.8498	12.34003	12.32981378	12.32292
-2.8	-45.3145	-32.9131	-39.32110099	-36.6997	-32.3571	-26.69251184	-35.9367	-40.0798	-42.65848587	-45.0997
+2.8	9.175681	7.4834	7.485542619	6.187726	10.25647	6.135047461	8.298129	8.875802	8.869794678	8.863996
-2.85	-49.0852	-35.5577	-42.98234295	-40.4912	-35.8308	-28.8156658	-38.8026	-43.3491	-46.2864521	-49.0984
+2.85	6.559936	5.564242	6.150167516	6.187726	8.603947	4.091645062	5.978569	6.14101	6.402664965	7.089497
-2.9	-53.8723	-38.9092	-47.66003775	-45.3674	-40.3369	-31.50489706	-42.433	-47.4951	-50.89633477	-54.1895
+2.9	6.559936	4.618369	6.150167516	6.187726	6.580391	3.72108113	5.037108	5.730758	6.402664965	7.089497
-2.95	-57.7491	-41.619	-51.47114619	-49.3649	-44.1214	-33.6779762	-45.3669	-50.8494	-54.63281329	-58.3238
+2.95	6.559936	4.618369	6.150167516	6.187726	5.801785	3.72108113	5.037108	5.730758	6.402664965	7.089497
-3	-62.6383	-45.0307	-56.30514536	-54.4646	-49.3617	-36.412676	-49.0593	-55.0754	-59.34884212	-63.5516
+3	6.559936	4.618369	6.150167516	6.187726	5.756552	3.72108113	5.037108	5.730758	6.402664965	7.089497

2-Span: Shear (Max and Min) Raw Data Results - 90' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.55997	-6.10258	-6.555610895	-6.17629	-7.46106	-7.153377647	-7.56506	-3.17639
End Shear	62.78635	60.52109	64.48879749	60.3812	71.74069	64.59225723	68.23134	31.61091
-0.05	-6.55997	-6.10258	-6.555610895	-6.17629	-7.46106	-7.153377647	-7.56506	-3.17639
+0.05	58.20031	56.32123	59.97046177	56.12986	66.59785	59.3689729	62.70387	29.38847
-0.1	-6.55997	-6.10258	-6.555610895	-6.17629	-7.46106	-7.153377647	-7.56506	-3.17639
+0.1	53.35498	51.89194	55.20786472	51.64359	61.17626	53.85216247	56.86644	27.0171
-0.15	-6.55997	-7.56208	-7.562080357	-7.01094	-7.46106	-7.153377647	-7.56506	-4.11698
+0.15	49.52555	48.38018	51.43377664	48.08966	56.8855	49.52094309	52.28404	25.13996
-0.2	-9.64459	-11.5817	-11.7858891	-10.7324	-11.5604	-8.670026659	-9.14745	-5.6811
+0.2	44.87629	44.04434	46.77653789	43.70561	51.59777	44.22839627	46.68523	22.8262
-0.25	-13.126	-15.1071	-15.58671987	-14.2782	-15.8667	-11.21814928	-11.8587	-7.10955
+0.25	41.17307	40.62937	43.11046567	40.25582	47.44122	40.10542629	42.32424	21.00708
-0.3	-17.436	-19.4653	-20.28783256	-18.7157	-21.2611	-14.3671564	-15.2095	-9.46495
+0.3	36.6489	36.44206	38.61790379	36.02993	42.35515	35.10924962	37.04039	18.78079
-0.35	-21.1641	-22.9024	-23.99735536	-22.2185	-25.5233	-16.84976535	-17.8515	-11.3253
+0.35	33.12525	33.16795	35.10730556	32.72905	38.38704	31.25221623	32.96191	17.04358
-0.4	-25.9012	-27.1226	-28.55467219	-26.5234	-30.7668	-21.50802715	-22.64	-13.6131
+0.4	28.85617	29.18426	30.83875028	28.71725	33.57044	26.62450244	28.06936	14.93462
-0.45	-29.6233	-30.4274	-32.12542736	-29.8976	-34.8811	-25.49744233	-26.8394	-15.4075
+0.45	25.56109	26.09508	27.53108389	25.61002	29.84504	23.09107524	24.33444	13.30322
-0.5	-34.1758	-34.4546	-36.47962063	-34.0138	-39.906	-30.88374881	-32.5376	-17.5978
+0.5	21.60835	22.3701	23.54585536	21.86826	25.36571	18.90393443	19.90953	11.34143
-0.55	-37.7259	-37.5829	-39.86414891	-37.2148	-43.8183	-35.21979168	-37.1308	-19.3022
+0.55	18.59086	19.50992	20.48857755	18.99944	21.93724	15.77881458	16.60928	9.839721
-0.6	-42.0328	-41.3621	-43.95589777	-41.0865	-48.5566	-40.51933748	-42.7453	-21.3652
+0.6	15.01574	16.09873	16.84600004	15.58366	17.863	12.3277555	12.97658	8.054977
-0.65	-45.3619	-44.2699	-47.10674176	-44.0694	-52.2126	-44.64868345	-47.1207	-22.9559
+0.65	12.32483	13.51162	14.08657749	12.99799	14.78572	9.982743127	10.56858	6.706848
-0.7	-49.3621	-47.7459	-50.87672429	-47.6406	-56.5967	-49.65380065	-52.4246	-24.8617
+0.7	9.255486	10.46931	10.8459688	9.964124	11.18435	7.765833053	8.214116	5.129004
-0.75	-52.4215	-50.3891	-53.74642217	-50.3608	-59.9421	-53.51876715	-56.5209	-26.3146
+0.75	7.095989	8.199338	8.431854357	7.70637	8.512506	6.110004726	6.45597	3.958339
-0.8	-56.0539	-53.5069	-57.13531543	-53.5755	-63.9041	-58.15736265	-61.4379	-28.0334
+0.8	4.618949	5.580994	5.652547917	5.14484	5.509304	4.197678736	4.426059	2.837747
-0.85	-58.7947	-55.8415	-59.67641079	-55.9881	-66.8847	-61.70026495	-65.1941	-29.3248
+0.85	2.916797	3.795305	3.795305016	3.50286	3.702322	2.886254062	3.038162	2.08533
-0.9	-61.9982	-58.5459	-62.62488478	-58.7905	-70.3568	-65.90023431	-69.6479	-30.8266
+0.9	1.720049	2.014186	2.014185994	1.62661	1.643438	1.475016547	1.552649	1.226998
-0.95	-64.3715	-60.5278	-64.78992319	-60.8508	-72.9183	-69.06339517	-73.003	-31.9325
+0.95	0.859471	0.73521	0.735209785	0.587345	0.536229	0.558299344	0.587684	0.609858
-1	-67.0851	-62.7638	-67.23865907	-63.1848	-75.8327	-72.7526378	-76.9171	-33.1877
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	66.85068	62.55215	67.00653371	62.96338	75.55547	72.39671619	76.53941	33.06864
-2.05	-7.58E-01	-0.59224	-0.592236069	-0.47112	-0.47301	-0.447704769	-0.47127	-0.53379
+2.05	64.68146	60.76309	65.047263	61.0959	73.22368	69.4449962	73.40776	32.06443
-2.1	-1.83379	-2.18326	-2.183261876	-1.80175	-1.85103	-1.651849266	-1.73879	-1.30465
+2.1	61.71684	58.28592	62.34117126	58.52066	70.02193	65.49131278	69.21421	30.68219
-2.15	-2.79129	-3.60836	-3.608359162	-3.30797	-3.48801	-2.744067002	-2.88849	-1.99102
+2.15	59.15447	56.12213	59.98212068	56.27853	67.24397	62.13103052	65.65089	29.48056
-2.2	-4.8503	-5.83208	-5.918773554	-5.36028	-5.74656	-4.381134765	-4.62076	-2.93102
+2.2	55.67468	53.2041	56.80596142	53.26294	63.51843	57.70268008	60.95591	27.86649
-2.25	-6.82926	-7.92701	-8.142491887	-7.4359	-8.193	-5.911177646	-6.24489	-3.81811
+2.25	52.76721	50.70964	54.09458058	50.69091	60.34856	53.99149084	57.02196	26.49135

-2.3	-9.54186	-10.7643	-11.15993005	-10.2579	-11.5326	-7.98081869	-8.44241	-5.28132
+2.3	48.94177	47.40581	50.50767131	47.29092	56.16701	49.16057414	51.90189	24.67531
-2.35	-12.0048	-13.1984	-13.75268529	-12.6852	-14.414	-9.75451907	-10.3262	-6.54371
+2.35	45.74029	44.62475	47.49142875	44.43374	52.65947	45.15618558	47.65842	23.15053
-2.4	-15.365	-16.4321	-17.20174815	-15.9171	-18.2603	-12.66172339	-13.3281	-8.22874
+2.4	41.57786	40.99023	43.55310455	40.70527	48.08974	39.99480365	42.1896	21.16238
-2.45	-18.2225	-19.1613	-20.11607067	-18.65	-21.52	-15.42285	-16.2346	-9.65666
+2.45	38.13122	37.96665	40.2794551	37.6077	44.29878	35.75486689	37.69766	19.51185
-2.5	-21.9903	-22.7363	-23.93743793	-22.2358	-25.8053	-19.31150648	-20.3402	-11.5337
+2.5	33.6929	34.0565	36.04903202	33.60671	39.40867	30.33511822	31.95643	17.38145
-2.55	-25.1494	-25.7165	-27.12588568	-25.2295	-29.3891	-22.66154387	-23.8805	-13.1032
+2.55	30.04998	30.83445	32.56542179	30.31349	35.38853	26.08253735	27.4553	15.62907
-2.6	-29.2636	-29.5778	-31.26023314	-29.1133	-34.0456	-27.07804263	-28.5488	-15.1423
+2.6	25.39683	26.70377	28.1022231	26.09591	30.24584	21.00452333	22.11002	13.38627
-2.65	-32.6754	-32.7649	-34.67532333	-32.3229	-37.8992	-30.7805121	-32.4632	-16.8296
+2.65	21.60649	23.32735	24.45613598	22.6518	26.05077	17.15676016	18.17822	11.55592
-2.7	-37.075	-36.8573	-39.06332867	-36.4488	-42.859	-35.60151844	-37.561	-19.001
+2.7	16.97596	19.03123	19.81948775	18.27357	20.72332	14.05366938	14.87595	9.230586
-2.75	-40.6907	-40.2074	-42.65761559	-39.8298	-46.9281	-39.59876922	-41.7884	-20.7821
+2.75	13.52747	15.54448	16.05836894	14.72332	16.40755	11.53431444	12.1951	7.346154
-2.8	-45.3145	-44.4759	-47.23995319	-44.1417	-52.1235	-44.75218286	-47.2393	-23.0559
+2.8	9.175681	11.138	11.30759312	10.36414	11.1509	8.349339177	8.806244	5.525356
-2.85	-49.0852	-47.9448	-50.96599096	-47.6492	-56.354	-48.98651992	-51.7187	-24.907
+2.85	6.559936	7.90326	7.903260324	7.380078	7.83315	7.153377256	7.565056	4.273986
-2.9	-53.8723	-52.3343	-55.68333896	-52.0914	-61.7171	-54.40023981	-57.4463	-27.2533
+2.9	6.559936	6.102584	6.555608585	6.176297	7.461062	7.153377256	7.565056	3.176387
-2.95	-57.7491	-55.8779	-59.49364122	-55.6806	-66.0547	-58.81396519	-62.1166	-29.1505
+2.95	6.559936	6.102584	6.555608585	6.176297	7.461062	7.153377256	7.565056	3.176387
-3	-62.6383	-60.3333	-64.28667556	-60.197	-71.5178	-64.41588978	-68.0447	-31.5395
+3	6.559936	6.102584	6.555608585	6.176297	7.461062	7.153377256	7.565056	3.176387

2-Span: Shear (Max and Min) Raw Data Results - 90' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.55997	-12.7225	-13.8583	-8.15376	-9.92695	-10.5524
End Shear	62.78635	108.2077	113.2442	73.4978	88.96775	92.95641
-0.05	-6.55997	-12.7225	-13.8583	-8.15376	-9.92695	-10.5524
+0.05	58.20031	98.71038	103.0127	67.42301	81.65302	85.11573
-0.1	-6.55997	-12.7225	-13.8583	-8.15376	-9.92695	-10.5524
+0.1	53.35498	88.6952	92.0764	61.01021	73.92777	76.83706
-0.15	-6.55997	-12.7225	-13.8583	-8.15376	-9.92695	-10.5524
+0.15	49.52555	80.87718	83.56413	55.98405	67.87021	70.35692
-0.2	-9.64459	-12.7225	-13.8583	-10.3733	-11.5277	-11.5604
+0.2	44.87629	71.3825	73.25905	49.85346	60.47794	62.46384
-0.25	-13.126	-14.6694	-14.5019	-13.3543	-14.7815	-15.2661
+0.25	41.17307	64.03519	65.3124	45.087	54.72748	56.33632
-0.3	-17.436	-19.7803	-20.5028	-17.0376	-18.8011	-19.9748
+0.3	36.6489	55.19679	55.79013	39.32343	47.76998	48.93916
-0.35	-21.1641	-24.747	-25.8221	-19.9407	-22.2776	-23.6913
+0.35	33.12525	48.42881	48.36401	34.88453	42.40805	43.25248
-0.4	-25.9012	-31.3842	-33.2828	-23.5033	-28.4552	-28.2583
+0.4	28.85617	40.38244	40.65923	29.57284	35.98712	36.46152
-0.45	-29.6233	-37.5569	-39.7473	-27.7224	-34.1389	-33.7958
+0.45	25.56109	34.57351	34.92771	25.52936	31.09517	31.3039
-0.5	-34.1758	-46.1958	-47.6952	-33.6719	-41.2788	-41.6167
+0.5	21.60835	27.9124	28.70516	20.75437	25.31262	25.41449
-0.55	-37.7259	-53.4105	-53.9271	-38.7947	-47.4242	-47.8874
+0.55	18.59086	23.07056	24.00378	17.35906	21.19394	21.0533
-0.6	-42.0328	-62.768	-63.2851	-45.0656	-54.9441	-56.0978
+0.6	15.01574	17.87978	18.49993	14.04152	16.41424	16.61249
-0.65	-45.3619	-70.7719	-71.7807	-49.9599	-60.8109	-62.5144
+0.65	12.32483	14.35065	14.65469	11.82786	13.19466	13.86179
-0.7	-49.3621	-80.5313	-82.795	-55.9028	-67.9315	-70.317
+0.7	9.255486	10.47683	10.63316	9.220958	10.13433	10.63326
-0.75	-52.4215	-88.1162	-91.3784	-60.5008	-73.438	-76.3634
+0.75	7.095989	7.898325	7.749252	7.272542	7.996679	8.229754
-0.8	-56.0539	-97.2839	-101.783	-66.0309	-80.0575	-83.648
+0.8	4.618949	5.434794	5.054885	5.020508	5.486473	5.515783
-0.85	-58.7947	-104.341	-109.818	-70.2646	-85.1225	-89.2359
+0.85	2.916797	3.554795	3.383679	3.419855	3.680892	3.686032
-0.9	-61.9982	-112.781	-119.462	-75.297	-91.1391	-95.8923
+0.9	1.720049	1.564733	1.602094	1.802541	1.92271	1.65601
-0.95	-64.3715	-119.203	-126.828	-79.0986	-95.6811	-100.933
+0.95	0.859471	0.582683	0.605815	0.659735	0.703717	0.587589
-1	-67.0851	-126.78	-135.559	-83.5484	-100.993	-106.851
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	66.85068	126.0439	134.7106	83.11829	100.4797	106.2782
-2.05	-7.58E-01	-0.47381	-0.53379	-0.52944	-0.56473	-0.47121
+2.05	64.68146	119.9816	127.7252	79.55806	96.22976	101.5435
-2.1	-1.83379	-1.79941	-1.75326	-1.95457	-2.08488	-1.84807
+2.1	61.71684	111.9558	118.5188	74.80629	90.5527	95.24249
-2.15	-2.79129	-3.42021	-3.18511	-3.25144	-3.46821	-3.47459
+2.15	59.15447	105.203	110.8031	70.78004	85.73897	89.91693
-2.2	-4.8503	-5.67125	-5.2739	-5.23665	-5.72351	-5.75312
+2.2	55.67468	96.38194	100.7598	65.48818	79.40812	82.93253
-2.25	-6.82926	-7.6423	-7.44648	-7.03848	-7.71752	-7.94167
+2.25	52.76721	89.04718	92.43537	61.06379	74.1121	77.10434

-2.3	**-9.54186**	**-10.816**	**-10.9152**	**-9.47383**	**-10.4117**	**-10.9458**
+2.3	**48.94177**	**79.56659**	**81.70679**	**55.31667**	**67.22927**	**69.54685**
-2.35	**-12.0048**	**-13.9266**	**-14.2029**	**-11.5596**	**-12.8315**	**-13.5289**
+2.35	**45.74029**	**71.75856**	**72.89477**	**50.56201**	**61.53239**	**63.30427**
-2.4	**-15.365**	**-18.3377**	**-19.031**	**-14.3265**	**-16.876**	**-16.9671**
+2.4	**41.57786**	**61.75422**	**62.57625**	**44.44445**	**54.19937**	**55.28395**
-2.45	**-18.2225**	**-22.5226**	**-23.4345**	**-16.9523**	**-20.7001**	**-20.528**
+2.45	**38.13122**	**54.30181**	**55.11877**	**39.42736**	**48.18304**	**48.71523**
-2.5	**-21.9903**	**-28.5592**	**-29.3108**	**-21.2183**	**-25.8747**	**-25.9791**
+2.5	**33.6929**	**45.284**	**46.90757**	**33.02422**	**40.50165**	**40.8393**
-2.55	**-25.1494**	**-33.8886**	**-34.2892**	**-25.0386**	**-30.5012**	**-30.6787**
+2.55	**30.04998**	**38.34095**	**40.54891**	**28.30852**	**34.84244**	**34.5822**
-2.6	**-29.2636**	**-41.167**	**-41.411**	**-30.0926**	**-36.6157**	**-37.1253**
+2.6	**25.39683**	**30.72376**	**32.46869**	**23.1499**	**27.73822**	**27.80504**
-2.65	**-32.6754**	**-47.6047**	**-47.6469**	**-34.3424**	**-41.7529**	**-42.5586**
+2.65	**21.60649**	**25.41368**	**26.53943**	**20.2997**	**22.83437**	**24.15116**
-2.7	**-37.075**	**-56.0641**	**-56.7209**	**-39.8907**	**-48.4549**	**-49.6665**
+2.7	**16.97596**	**19.24193**	**19.88546**	**16.67096**	**18.401**	**19.50584**
-2.75	**-40.6907**	**-63.1354**	**-64.3393**	**-44.5019**	**-54.0213**	**-55.5847**
+2.75	**13.52747**	**15.07325**	**15.02248**	**13.72418**	**15.18516**	**15.73866**
-2.8	**-45.3145**	**-72.319**	**-74.272**	**-50.4596**	**-61.209**	**-63.2437**
+2.8	**9.175681**	**12.72246**	**13.85784**	**9.998058**	**11.11811**	**11.1509**
-2.85	**-49.0852**	**-79.9153**	**-82.5166**	**-55.3644**	**-67.1232**	**-69.5585**
+2.85	**6.559936**	**12.72246**	**13.85784**	**8.153755**	**9.926955**	**10.55245**
-2.9	**-53.8723**	**-89.6873**	**-93.1563**	**-61.6468**	**-74.6948**	**-77.6583**
+2.9	**6.559936**	**12.72246**	**13.85784**	**8.153755**	**9.926955**	**10.55245**
-2.95	**-57.7491**	**-97.6999**	**-101.906**	**-66.7773**	**-80.8754**	**-84.2817**
+2.95	**6.559936**	**12.72246**	**13.85784**	**8.153755**	**9.926955**	**10.55245**
-3	**-62.6383**	**-107.925**	**-113.101**	**-73.2994**	**-88.7289**	**-92.7118**
+3	**6.559936**	**12.72246**	**13.85784**	**8.153755**	**9.926955**	**10.55245**

2-Span: Moment (Max and Min) Raw Data Results - 90' Max Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.21E-13	-6.3E-14	-8.72449E-14	-7.3E-14	-6.38E-14	-6.80822E-14	-6.7E-14	-8.2E-14	-8.23083E-14	-8.3E-14
End Shear	1.56E-13	9.45E-14	7.42645E-14	8.4E-14	7.66E-14	8.64329E-14	7.61E-14	7.82E-14	7.77508E-14	7.46E-14
-0.05	-29.5199	-20.7827	-27.67575129	-27.8448	-25.9045	-16.74487165	-22.667	-25.7884	-28.81198453	-31.9027
+0.05	261.9014	188.812	233.7760034	224.4101	202.4962	152.7748888	205.8035	230.713	248.4235406	265.3089
-0.1	-59.0397	-41.5653	-55.35150258	-55.6895	-51.809	-33.4897433	-45.334	-51.5768	-57.62396906	-63.8055
+0.1	484.5316	350.4617	429.0773256	408.6483	369.7257	283.5378134	382.3794	428.0277	461.0812284	494.2349
-0.15	-88.5596	-62.348	-83.02725387	-83.5343	-77.7135	-50.23461494	-68.001	-77.3653	-86.43595359	-95.7082
+0.15	668.8552	485.3342	587.4678885	554.3562	504.0073	392.865435	529.7868	592.0555	650.1269427	694.5776
-0.2	-118.079	-83.1307	-110.7030052	-111.379	-103.618	-66.97948659	-90.668	-103.154	-115.2479381	-127.611
+0.2	816.1902	593.7489	709.5001195	674.2901	615.4678	481.0208136	648.5102	723.3957	802.8359994	863.4018
-0.25	-147.599	-103.913	-138.3787564	-139.224	-129.522	-83.72435824	-113.335	-128.942	-144.0599226	-159.514
+0.25	926.6391	676.4652	806.1623424	760.5577	697.6665	548.5150756	739.3515	827.1993	920.0471068	999.657
-0.3	-177.119	-124.696	-166.0545077	-167.069	-155.427	-100.4692299	-136.002	-154.731	-172.8719072	-191.416
+0.3	1003.689	734.4142	872.6952421	812.9629	749.8397	596.0764409	809.648	908.1182	1002.71124	1097.808
-0.35	-206.639	-145.479	-193.730259	-194.913	-181.331	-117.2141015	-158.669	-180.519	-201.6838917	-223.319
+0.35	1061.291	776.2526	906.9436167	859.8285	794.3792	624.5703378	857.5865	959.0205	1061.136188	1158.839
-0.4	-236.159	-166.261	-221.4060103	-222.758	-207.236	-133.9589732	-181.336	-206.307	-230.4958762	-255.222
+0.4	1085.978	796.2516	915.9888224	887.7485	820.4744	634.9995357	880.2972	981.6738	1090.835666	1188.95
-0.45	-265.679	-187.044	-249.0817616	-250.603	-233.14	-150.7038448	-204.003	-232.096	-259.3078608	-287.125
+0.45	1079.736	794.3895	901.5630091	891.0861	824.2233	628.5041172	879.2075	977.6128	1089.97249	1192.987
-0.5	-295.199	-207.827	-276.7575129	-278.448	-259.045	-167.4487165	-226.67	-257.884	-288.1198453	-319.027
+0.5	1063.821	780.5035	888.0018314	870.0197	805.2629	620.6725464	863.5129	961.4357	1069.642057	1168.162
-0.55	-324.719	-228.609	-304.4332642	-306.292	-284.949	-184.1935881	-249.337	-283.673	-316.9318298	-350.93
+0.55	1023.316	749.2793	862.7915151	831.965	769.8485	599.8340869	828.2848	924.2154	1025.055077	1115.111
-0.6	-354.238	-249.392	-332.1090155	-334.137	-310.854	-200.9384598	-272.004	-309.461	-345.7438143	-382.833
+0.6	955.2724	699.2934	814.0271203	771.5845	713.2607	563.2636423	772.9413	863.4882	954.6368079	1042.036
-0.65	-383.758	-270.175	-359.7847668	-361.982	-336.758	-217.6833314	-294.671	-335.249	-374.5557989	-414.736
+0.65	862.2924	632.3907	740.7084794	692.3036	638.6477	512.3677088	699.4931	781.6781	860.9747437	942.0227
-0.7	-413.278	-290.957	-387.4605181	-389.827	-362.663	-234.4282031	-317.338	-361.038	-403.3677834	-446.638
+0.7	747.2243	551.8303	641.2814901	594.7998	546.3658	448.6903257	610.1364	680.9978	749.4278991	818.0538
-0.75	-442.798	-311.74	-415.1362693	-417.671	-388.567	-251.1730747	-340.005	-386.826	-432.1797679	-478.541
+0.75	615.8021	459.0429	518.5228575	477.704	435.4174	373.9128011	507.2525	564.1267	620.2161484	673.4466
-0.8	-472.318	-332.523	-442.8120206	-445.516	-414.472	-267.9179464	-362.672	-412.615	-460.9917525	-510.444
+0.8	467.0377	354.3956	375.4749335	335.2841	301.2172	289.8534606	393.4084	433.998	474.8461063	511.7851
-0.85	-501.838	-353.305	-470.4877719	-473.361	-476.422	-284.662818	-385.339	-438.403	-489.803737	-542.346
+0.85	303.529	240.3124	223.1136752	195.6318	171.7199	198.4681635	271.356	293.9646	316.7106873	336.9193
-0.9	-531.358	-374.088	-498.1635232	-501.206	-613.196	-301.4076897	-408.006	-464.192	-518.6157215	-574.249
+0.9	148.5683	135.6131	135.4221093	107.6799	90.79365	102.0458943	150.425	157.8775	168.1134406	171.8036
-0.95	-560.877	-394.871	-525.8392745	-529.05	-804.779	-318.1525613	-430.673	-489.98	-547.4277061	-606.152
+0.95	73.48481	50.87409	50.76004353	40.35611	32.55589	50.4634784	51.07606	51.02475	51.07630093	51.05669
-1	-590.397	-415.653	-553.5150723	-556.895	-1032.15	-334.8974306	-453.34	-515.768	-576.2398366	-638.055
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-590.397	-415.653	-553.5150723	-556.895	-1032.15	-334.8974306	-453.34	-515.768	-576.2398366	-638.055
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-560.875	-394.871	-525.8393185	-529.051	-804.779	-318.1524342	-430.673	-489.98	-547.4278443	-606.152
+2.05	73.48481	50.85554	50.76287879	40.35824	32.55704	50.45083247	51.06294	51.01187	51.06373291	51.06414
-2.1	-531.355	-374.088	-498.1635647	-501.206	-613.196	-301.4075692	-408.006	-464.191	-518.6158519	-574.249
+2.1	148.6461	135.6177	135.4095748	107.683	90.7873	102.0620845	150.4346	157.8937	168.1170204	171.8116
-2.15	-501.835	-353.305	-470.4878108	-473.361	-476.422	-284.6627041	-385.339	-438.403	-489.8038596	-542.347
+2.15	303.9449	240.3141	223.1162071	195.6304	171.7193	198.4793896	271.3524	293.9791	316.7131181	336.9264
-2.2	-472.315	-332.523	-442.812057	-445.516	-414.472	-267.917839	-362.672	-412.615	-460.9918672	-510.444
+2.2	467.4237	354.3977	375.4723414	335.2798	301.2149	289.8649504	393.4055	434.0132	474.849003	511.793
-2.25	-442.796	-311.74	-415.1363032	-417.671	-388.567	-251.1729739	-340.005	-386.826	-432.1798749	-478.541

+2.25	**616.1725**	**459.0448**	**518.5194962**	**477.713**	**435.4222**	**373.9241656**	**507.2498**	**564.1214**	**620.2188798**	**673.4545**
-2.3	**-413.276**	**-290.957**	**-387.4605494**	**-389.827**	**-362.663**	**-234.4281088**	**-317.338**	**-361.038**	**-403.3678825**	**-446.638**
+2.3	**747.7622**	**551.8315**	**641.2766972**	**594.8067**	**546.3695**	**448.7012054**	**610.1332**	**680.9919**	**749.4298681**	**818.0609**
-2.35	**-383.756**	**-270.175**	**-359.7847956**	**-361.982**	**-336.758**	**-217.6832437**	**-294.671**	**-335.249**	**-374.5558902**	**-414.736**
+2.35	**862.7886**	**632.3894**	**740.7015688**	**692.3**	**638.6458**	**512.3776633**	**699.489**	**781.671**	**860.9732398**	**942.0283**
-2.4	**-354.237**	**-249.392**	**-332.1090417**	**-334.137**	**-310.854**	**-200.9383786**	**-272.004**	**-309.461**	**-345.7438979**	**-382.833**
+2.4	**955.7081**	**699.2907**	**814.037197**	**771.591**	**713.2643**	**563.2723329**	**772.9357**	**863.5**	**954.6335045**	**1042.039**
-2.45	**-324.717**	**-228.609**	**-304.4332879**	**-306.292**	**-284.949**	**-184.1935136**	**-249.337**	**-283.673**	**-316.9319055**	**-350.93**
+2.45	**1023.674**	**749.2749**	**862.8006759**	**831.9747**	**769.8538**	**599.841264**	**828.2773**	**924.2251**	**1025.049511**	**1115.11**
-2.5	**-295.197**	**-207.827**	**-276.7575341**	**-278.448**	**-259.045**	**-167.4486485**	**-226.67**	**-257.884**	**-288.1199132**	**-319.027**
+2.5	**1064.087**	**780.4969**	**888.0078587**	**870.0265**	**805.2666**	**620.6778053**	**863.5031**	**961.4428**	**1069.633657**	**1168.158**
-2.55	**-265.677**	**-187.044**	**-249.0817803**	**-250.603**	**-233.14**	**-150.7037834**	**-204.003**	**-232.096**	**-259.3079208**	**-287.125**
+2.55	**1079.525**	**794.3976**	**901.5575597**	**891.096**	**824.2287**	**628.500052**	**879.219**	**977.6075**	**1089.982733**	**1192.993**
-2.6	**-236.158**	**-166.261**	**-221.4060264**	**-222.758**	**-207.236**	**-133.9589183**	**-181.336**	**-206.307**	**-230.4959285**	**-255.222**
+2.6	**1085.664**	**796.2573**	**915.9972485**	**887.7551**	**820.4781**	**634.9936184**	**880.306**	**981.6656**	**1090.842659**	**1188.952**
-2.65	**-206.638**	**-145.479**	**-193.7302726**	**-194.913**	**-181.331**	**-117.2140532**	**-158.669**	**-180.519**	**-201.6839362**	**-223.319**
+2.65	**1060.862**	**776.2554**	**906.9538664**	**859.8341**	**794.3822**	**624.5621245**	**857.5922**	**959.0296**	**1061.139323**	**1158.836**
-2.7	**-177.118**	**-124.696**	**-166.0545188**	**-167.069**	**-155.427**	**-100.4691881**	**-136.002**	**-154.73**	**-172.8719438**	**-191.416**
+2.7	**1003.134**	**734.4135**	**872.7021079**	**812.965**	**749.8409**	**596.065949**	**809.6502**	**908.1236**	**1002.709779**	**1097.8**
-2.75	**-147.599**	**-103.913**	**-138.378765**	**-139.224**	**-129.522**	**-83.72432305**	**-113.335**	**-128.942**	**-144.0599515**	**-159.514**
+2.75	**926.2247**	**676.4614**	**806.1654057**	**760.5652**	**697.6705**	**548.5019762**	**739.35**	**827.2008**	**920.0414902**	**999.665**
-2.8	**-118.079**	**-83.1307**	**-110.7030112**	**-111.379**	**-103.618**	**-66.97945796**	**-90.6679**	**-103.154**	**-115.2479591**	**-127.611**
+2.8	**815.6615**	**593.7417**	**709.4987775**	**674.2938**	**615.4697**	**481.0049332**	**648.505**	**723.3928**	**802.8258054**	**863.4048**
-2.85	**-88.5591**	**-62.348**	**-83.02725733**	**-83.5343**	**-77.7134**	**-50.23459287**	**-68.001**	**-77.3652**	**-86.43596679**	**-95.7082**
+2.85	**669.0666**	**485.3234**	**587.462181**	**554.3552**	**504.0067**	**392.8465173**	**529.7778**	**592.0483**	**650.1324299**	**694.5751**
-2.9	**-59.0394**	**-41.5653**	**-55.35150351**	**-55.6895**	**-51.809**	**-33.48972779**	**-45.334**	**-51.5768**	**-57.62397445**	**-63.8055**
+2.9	**484.8503**	**350.4473**	**429.0670732**	**408.6429**	**369.7309**	**283.5440098**	**382.3663**	**428.016**	**461.0817403**	**494.2364**
-2.95	**-29.5197**	**-20.7827**	**-27.67574969**	**-27.8448**	**-25.9045**	**-16.7448627**	**-22.667**	**-25.7884**	**-28.81198211**	**-31.9027**
+2.95	**262.0624**	**188.8158**	**233.7807918**	**224.4149**	**202.4989**	**152.7779823**	**205.8076**	**230.7176**	**248.419015**	**265.305**
-3	**-1.77E-13**	**-9.2E-14**	**-1.05569E-13**	**-9.2E-14**	**-7.79E-14**	**-1.08391E-13**	**-9.5E-14**	**-9.8E-14**	**-1.22586E-13**	**-1.2E-13**
+3	**2.27E-13**	**1.24E-13**	**1.26231E-13**	**1.14E-13**	**1.10E-13**	**1.15906E-13**	**1.2E-13**	**1.27E-13**	**1.27104E-13**	**1.27E-13**

2-Span: Moment (Max and Min) Raw Data Results - 90' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.21E-13	-9.4E-14	-1E-13	-8.5E-14	-1E-13	-1E-13	-1.1E-13	-5.92868E-14
End Shear	1.56E-13	1.24E-13	1.37E-13	9.15E-14	1.02E-13	9.11E-14	9.72E-14	6.08804E-14
-0.05	-29.5199	-27.4616	-29.5002	-27.7933	-33.5748	-32.1902	-34.0427	-14.29374051
+0.05	261.9014	253.4456	269.8671	252.5844	299.7855	267.1604	282.1674	132.248111
-0.1	-59.0397	-54.9233	-59.0005	-55.5867	-67.1496	-64.3804	-68.0855	-28.58748102
+0.1	484.5316	471.454	501.744	469.4669	556.5151	489.9159	517.3606	245.2780604
-0.15	-88.5596	-82.3849	-88.5007	-83.38	-100.724	-96.5706	-102.128	-42.88122153
+0.15	668.8552	654.2638	695.7069	650.6108	769.9717	669.8227	707.2116	339.3894227
-0.2	-118.079	-109.847	-118.001	-111.173	-134.299	-128.761	-136.171	-57.17496204
+0.2	816.1902	802.3203	852.3585	796.643	941.1173	813.3939	858.9295	415.0026824
-0.25	-147.599	-137.308	-147.501	-138.967	-167.874	-160.951	-170.214	-71.46870255
+0.25	926.6391	916.5352	972.7091	908.5337	1084.103	933.9334	987.2192	472.6592861
-0.3	-177.119	-164.77	-177.001	-166.76	-201.449	-193.141	-204.256	-85.76244305
+0.3	1003.689	998.0433	1058.01	998.3017	1189.952	1014.832	1073.142	513.1735687
-0.35	-206.639	-192.231	-206.502	-194.553	-235.023	-225.331	-238.299	-100.0561836
+0.35	1061.291	1051.448	1119.988	1057.644	1257.524	1071.456	1132.807	537.3441156
-0.4	-236.159	-219.693	-236.002	-222.347	-268.598	-257.522	-272.342	-114.3499241
+0.4	1085.978	1082.737	1151.509	1086.064	1288.097	1091.137	1154.197	545.8682997
-0.45	-265.679	-247.155	-265.502	-250.14	-302.173	-289.712	-306.385	-128.6436646
+0.45	1079.736	1084.912	1151.919	1085.564	1283.715	1076.405	1139.094	539.7662904
-0.5	-295.199	-274.616	-295.002	-277.933	-335.748	-321.902	-340.427	-142.9374051
+0.5	1063.821	1063.769	1130.488	1065.746	1262.38	1059.174	1120.605	533.0028877
-0.55	-324.719	-302.078	-324.503	-305.727	-369.323	-354.092	-374.47	-157.2311456
+0.55	1023.316	1017.977	1082.929	1021.858	1212.559	1027.269	1086.493	516.6528042
-0.6	-354.238	-329.54	-354.003	-333.52	-402.897	-386.282	-408.513	-171.5248861
+0.6	955.2724	948.5072	1009.578	953.5474	1132.553	961.8223	1016.878	486.3702483
-0.65	-383.758	-357.001	-383.503	-361.313	-436.472	-418.473	-442.556	-185.8186266
+0.65	862.2924	860.5336	913.071	863.2061	1025.303	865.3871	914.5329	443.3719765
-0.7	-413.278	-384.463	-413.003	-389.107	-470.047	-450.663	-476.598	-200.1123671
+0.7	747.2243	754.9085	797.2039	753.5282	894.027	744.6666	787.5291	388.9958039
-0.75	-442.798	-411.924	-442.504	-416.9	-503.622	-482.853	-510.641	-214.4061076
+0.75	615.8021	631.832	665.2965	627.4343	742.2151	600.682	634.9668	324.7006345
-0.8	-472.318	-439.386	-472.004	-444.693	-537.197	-515.043	-544.684	-228.6998481
+0.8	467.0377	494.3082	517.4409	488.0715	573.633	433.6872	458.1393	252.0660621
-0.85	-501.838	-466.848	-501.504	-472.487	-570.771	-547.233	-578.727	-242.9935887
+0.85	303.529	345.5636	357.0832	339.0092	392.3208	257.1908	271.9353	172.7926755
-0.9	-531.358	-494.309	-531.004	-500.28	-604.346	-579.424	-612.769	-257.2873292
+0.9	148.5683	192.6052	192.6052	188.1197	202.6994	146.4042	154.1096	106.1174976
-0.95	-560.877	-521.771	-560.505	-528.073	-637.921	-611.614	-646.812	-271.5810697
+0.95	73.48481	72.29261	72.29261	61.18973	62.62851	54.92383	57.81456	52.08332207
-1	-590.397	-549.233	-590.005	-555.867	-671.496	-643.804	-680.855	-285.8748207
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-590.397	-549.233	-590.005	-555.867	-671.496	-643.804	-680.855	-285.8748207
+2	0	0	0	0	0	0	0	0
-2.05	-560.875	-521.771	-560.505	-528.073	-637.921	-611.614	-646.812	-271.5810798
+2.05	73.48481	72.29715	72.29715	61.1771	62.61955	54.90588	57.79566	51.84423496
-2.1	-531.355	-494.309	-531.004	-500.28	-604.346	-579.424	-612.77	-257.2873389
+2.1	148.6461	192.6119	192.6119	188.134	202.7176	146.4086	154.1143	105.6763378
-2.15	-501.835	-466.848	-501.504	-472.487	-570.771	-547.233	-578.727	-242.993598
+2.15	303.9449	345.5669	357.085	339.0282	392.3347	257.1936	271.9381	172.7881079
-2.2	-472.315	-439.386	-472.004	-444.693	-537.196	-515.043	-544.684	-228.6998572
+2.2	467.4237	494.3122	517.4434	488.0668	573.6479	433.6917	458.1443	252.0615752
-2.25	-442.796	-411.924	-442.504	-416.9	-503.622	-482.853	-510.641	-214.4061163

+2.25	616.1725	631.836	665.2989	627.4298	742.2301	600.6857	634.971	324.6961075
-2.3	-413.276	-384.463	-413.003	-389.107	-470.047	-450.663	-476.599	-200.1123754
+2.3	747.7622	754.9117	797.2054	753.5232	894.0414	744.6688	787.5317	388.9911539
-2.35	-383.756	-357.001	-383.503	-361.313	-436.472	-418.473	-442.556	-185.8186345
+2.35	862.7886	860.5355	913.0688	863.1999	1025.316	865.3851	914.5311	443.3669876
-2.4	-354.237	-329.54	-354.003	-333.52	-402.897	-386.282	-408.513	-171.5248936
+2.4	955.7081	948.5055	1009.574	953.5394	1132.563	961.8178	1016.873	486.364735
-2.45	-324.717	-302.078	-324.503	-305.727	-369.323	-354.092	-374.47	-157.2311527
+2.45	1023.674	1017.974	1082.922	1021.848	1212.567	1027.261	1086.485	516.6468155
-2.5	-295.197	-274.616	-295.002	-277.933	-335.748	-321.902	-340.428	-142.9374119
+2.5	1064.087	1063.762	1130.479	1065.758	1262.384	1059.184	1120.616	532.9963093
-2.55	-265.677	-247.155	-265.502	-250.14	-302.173	-289.712	-306.385	-128.643671
+2.55	1079.525	1084.921	1151.93	1085.554	1283.713	1076.417	1139.107	539.7634859
-2.6	-236.158	-219.693	-236.002	-222.347	-268.598	-257.522	-272.342	-114.3499301
+2.6	1085.664	1082.742	1151.516	1086.076	1288.091	1091.145	1154.206	545.8650108
-2.65	-206.638	-192.231	-206.502	-194.553	-235.023	-225.331	-238.299	-100.0561892
+2.65	1060.862	1051.45	1119.991	1057.652	1257.514	1071.461	1132.812	537.3401418
-2.7	-177.118	-164.77	-177.001	-166.76	-201.449	-193.141	-204.257	-85.76244832
+2.7	1003.134	998.0401	1058.009	998.3055	1189.962	1014.832	1073.142	513.1689548
-2.75	-147.599	-137.308	-147.501	-138.967	-167.874	-160.951	-170.214	-71.46870744
+2.75	926.2247	916.5277	972.7034	908.5329	1084.108	933.9286	987.2138	472.6634048
-2.8	-118.079	-109.847	-118.001	-111.173	-134.299	-128.761	-136.171	-57.17496655
+2.8	815.6615	802.3083	852.3479	796.6377	941.1161	813.3845	858.9191	415.0060912
-2.85	-88.5591	-82.3849	-88.5007	-83.38	-100.724	-96.5706	-102.128	-42.88122567
+2.85	669.0666	654.2471	695.6914	650.6008	769.9648	669.8176	707.2063	339.3920816
-2.9	-59.0394	-54.9233	-59.0005	-55.5867	-67.1496	-64.3804	-68.0855	-28.58748478
+2.9	484.8503	471.4322	501.723	469.4519	556.5022	489.9055	517.3498	245.2798463
-2.95	-29.5197	-27.4616	-29.5002	-27.7933	-33.5748	-32.1902	-34.0428	-14.2937439
+2.95	262.0624	253.4506	269.8725	252.5894	299.7666	267.1659	282.1733	132.2489726
-3	-1.77E-13	-1.2E-13	-1.3E-13	-1.2E-13	-1.4E-13	-1.3E-13	-1.4E-13	-1.00008E-13
+3	2.27E-13	1.77E-13	1.77E-13	1.41E-13	1.5E-13	1.4E-13	1.47E-13	1.38161E-13

2-Span: Moment (Max and Min) Raw Data Results - 90' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.21E-13	-1.2E-13	-1.3E-13	-1.2E-13	-1.4E-13	-1.6E-13
End Shear	1.56E-13	1.37E-13	1.41E-13	1.05E-13	1.3E-13	1.2E-13
-0.05	-29.5199	-57.2511	-62.3625	-36.6919	-44.6713	-47.486
+0.05	261.9014	444.1967	463.5571	303.4035	367.4386	383.0208
-0.1	-59.0397	-114.502	-124.725	-73.3838	-89.3426	-94.972
+0.1	484.5316	809.0128	844.2907	555.0209	673.3313	700.113
-0.15	-88.5596	-171.753	-187.087	-110.076	-134.014	-142.458
+0.15	668.8552	1121.424	1170.833	757.1101	920.636	959.7784
-0.2	-118.079	-229.004	-249.45	-146.768	-178.685	-189.944
+0.2	816.1902	1364.276	1455.723	929.8693	1130.599	1174.304
-0.25	-147.599	-286.255	-311.812	-183.46	-223.356	-237.43
+0.25	926.6391	1544.857	1682.772	1062.807	1283.399	1346.973
-0.3	-177.119	-343.506	-374.175	-220.151	-268.028	-284.916
+0.3	1003.689	1694.908	1847.104	1149.731	1382.125	1468.213
-0.35	-206.639	-400.757	-436.537	-256.843	-312.699	-332.402
+0.35	1061.291	1781.791	1957.404	1208.911	1443.389	1533.143
-0.4	-236.159	-458.009	-498.9	-293.535	-357.37	-379.888
+0.4	1085.978	1851.522	1994.076	1225.939	1458.797	1556.486
-0.45	-265.679	-515.26	-561.262	-330.227	-402.042	-427.374
+0.45	1079.736	1854.159	2012.916	1203.785	1427.647	1534.564
-0.5	-295.199	-572.511	-623.625	-366.919	-446.713	-474.86
+0.5	1063.821	1817.875	1972.628	1181	1401.609	1505.24
-0.55	-324.719	-629.762	-685.987	-403.611	-491.384	-522.346
+0.55	1023.316	1740.526	1868.791	1153.497	1371.551	1462.644
-0.6	-354.238	-687.013	-748.35	-440.303	-536.056	-569.832
+0.6	955.2724	1602.75	1751.529	1085.552	1292.488	1375.933
-0.65	-383.758	-744.264	-810.712	-476.995	-580.727	-617.318
+0.65	862.2924	1434.764	1569.706	980.1521	1171.326	1247.733
-0.7	-413.278	-801.515	-873.075	-513.687	-625.398	-664.804
+0.7	747.2243	1221.48	1327.337	847.2127	1016.14	1073.74
-0.75	-442.798	-858.766	-935.437	-550.379	-670.069	-712.29
+0.75	615.8021	958.8013	1044.02	684.2855	821.1951	858.9398
-0.8	-472.318	-916.017	-997.8	-587.07	-714.741	-759.776
+0.8	467.0377	665.5517	714.2701	493.0026	591.3388	608.765
-0.85	-501.838	-973.268	-1060.16	-623.762	-759.412	-807.262
+0.85	303.529	378.7019	388.6154	305.4606	347.9307	367.4359
-0.9	-531.358	-1030.52	-1122.52	-660.454	-804.083	-854.748
+0.9	148.5683	200.1986	185.7314	173.446	202.7549	202.8814
-0.95	-560.877	-1087.77	-1184.89	-697.146	-848.755	-902.234
+0.95	73.48481	59.6597	55.82297	64.95477	69.28509	62.55126
-1	-590.397	-1145.02	-1247.25	-733.838	-893.426	-949.72
+1	0	0	0	0	0	0
(Span 2) -2	-590.397	-1145.02	-1247.25	-733.838	-893.426	-949.72
+2	0	0	0	0	0	0
-2.05	-560.875	-1087.77	-1184.85	-697.146	-848.755	-902.234
+2.05	73.48481	59.65213	55.82187	64.95833	69.28888	62.54345
-2.1	-531.355	-1030.52	-1122.49	-660.454	-804.083	-854.748
+2.1	148.6461	200.1932	185.7306	173.4484	202.7494	202.8732
-2.15	-501.835	-973.268	-1060.12	-623.762	-759.412	-807.262
+2.15	303.9449	378.6904	388.6135	305.464	347.9448	367.4507
-2.2	-472.315	-916.017	-997.765	-587.07	-714.741	-759.776
+2.2	467.4237	665.5564	714.2716	493.0089	591.3486	608.7796
-2.25	-442.796	-858.766	-935.404	-550.378	-670.07	-712.29

+2.25	**616.1725**	**958.8148**	**1044.021**	**684.2906**	**821.2035**	**858.9534**
-2.3	**-413.276**	**-801.515**	**-873.044**	**-513.687**	**-625.398**	**-664.804**
+2.3	**747.7622**	**1221.491**	**1328.366**	**847.2158**	**1016.146**	**1073.751**
-2.35	**-383.756**	**-744.264**	**-810.684**	**-476.995**	**-580.727**	**-617.318**
+2.35	**862.7886**	**1434.771**	**1569.704**	**980.1502**	**1171.328**	**1247.74**
-2.4	**-354.237**	**-687.013**	**-748.323**	**-440.303**	**-536.056**	**-569.832**
+2.4	**955.7081**	**1603.897**	**1751.53**	**1085.547**	**1292.484**	**1375.936**
-2.45	**-324.717**	**-629.762**	**-685.963**	**-403.611**	**-491.384**	**-522.346**
+2.45	**1023.674**	**1740.537**	**1868.792**	**1153.488**	**1371.542**	**1462.641**
-2.5	**-295.197**	**-572.511**	**-623.603**	**-366.919**	**-446.713**	**-474.86**
+2.5	**1064.087**	**1817.88**	**1972.627**	**1181.012**	**1401.617**	**1505.231**
-2.55	**-265.677**	**-515.26**	**-561.243**	**-330.227**	**-402.042**	**-427.374**
+2.55	**1079.525**	**1854.153**	**2013.227**	**1203.798**	**1427.661**	**1534.573**
-2.6	**-236.158**	**-458.009**	**-498.882**	**-293.535**	**-357.37**	**-379.888**
+2.6	**1085.664**	**1851.51**	**1994.076**	**1225.949**	**1458.807**	**1556.491**
-2.65	**-206.638**	**-400.757**	**-436.522**	**-256.843**	**-312.699**	**-332.402**
+2.65	**1060.862**	**1781.792**	**1957.402**	**1208.916**	**1443.394**	**1533.14**
-2.7	**-177.118**	**-343.506**	**-374.162**	**-220.151**	**-268.028**	**-284.916**
+2.7	**1003.134**	**1694.899**	**1847.105**	**1149.731**	**1382.123**	**1468.204**
-2.75	**-147.599**	**-286.255**	**-311.801**	**-183.459**	**-223.357**	**-237.43**
+2.75	**926.2247**	**1544.861**	**1682.772**	**1062.802**	**1283.391**	**1346.98**
-2.8	**-118.079**	**-229.004**	**-249.441**	**-146.768**	**-178.685**	**-189.944**
+2.8	**815.6615**	**1364.292**	**1455.72**	**929.8582**	**1130.607**	**1174.314**
-2.85	**-88.5591**	**-171.753**	**-187.081**	**-110.076**	**-134.014**	**-142.458**
+2.85	**669.0666**	**1121.431**	**1170.831**	**757.1038**	**920.6368**	**959.7807**
-2.9	**-59.0394**	**-114.502**	**-124.721**	**-73.3838**	**-89.3426**	**-94.972**
+2.9	**484.8503**	**809.0104**	**844.2909**	**555.0087**	**673.3245**	**700.1073**
-2.95	**-29.5197**	**-57.2511**	**-62.3603**	**-36.6919**	**-44.6713**	**-47.486**
+2.95	**262.0624**	**444.2063**	**463.5589**	**303.4099**	**367.4462**	**383.029**
-3	**-1.77E-13**	**-1.5E-13**	**-1.6E-13**	**-1.5E-13**	**-1.6E-13**	**-1.5E-13**
+3	**2.27E-13**	**1.95E-13**	**2.36E-13**	**1.73E-13**	**1.97E-13**	**1.6E-13**

2-Span: Shear (Max and Min) Raw Data Results - 100' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading Comparison)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-22.38069607	*-18.07037397*	*-20.72150298*	-11.82367277	-12.70752639	-11.97378834	-14.4743091	-14.16416181	-14.9831	-6.195556293
End Shear	197.5618495	*162.8045039*	*195.0263361*	117.5678732	125.4157999	117.5139212	139.9218385	128.3267823	135.5939	61.61007587
-0.05	-22.53756588	*-18.22724378*	*-24.03917173*	-11.82367277	-12.70752639	-11.97378834	-14.4743091	-14.16416181	-14.9831	-6.195556293
+0.05	181.4402275	*149.7949128*	*175.7078082*	109.484428	116.7179505	109.3271687	130.0151041	118.1832446	124.8585	57.32373156
-0.1	-23.11235365	*-19.22982498*	*-29.13622123*	-11.82367277	-12.70752639	-11.97378834	-14.4743091	-14.16416181	-14.9831	-6.195556293
+0.1	164.6444947	*136.2995267*	*155.5995627*	101.0100533	107.6038271	100.7407293	119.633942	107.540918	113.5963	52.78057906
-0.15	-23.89489307	*-26.48292112*	*-33.98556965*	-14.92958607	-14.92958607	-14.11708732	-15.0483646	-14.16416181	-14.9831	-7.976002335
+0.15	151.3202572	*125.6142307*	*140.0850208*	94.13679779	100.2150854	93.78184113	111.2276938	98.98389245	104.5418	49.10099794
-0.2	-33.71270337	*-35.67078215*	*-44.29406182*	-23.22056072	-23.81517136	-21.72340109	-23.81751201	-17.30795508	-18.2809	-10.96345078
+0.2	135.7154699	*113.0123902*	*122.8020464*	85.83694485	91.29698574	85.38515546	101.0935735	88.74446488	93.70824	44.66428378
-0.25	-43.3167175	*-43.43012924*	*-52.95220316*	-30.1041309	-31.23655223	-28.72625107	-32.32245129	-22.28304935	-23.5744	-14.43526027
+0.25	123.296312	*103.092699*	*111.0988051*	79.14932837	84.11477209	78.62503819	92.94220014	80.57316538	85.06377	41.09500684
-0.3	-55.77170078	*-53.17928709*	*-64.19155977*	-38.42045752	-40.2067859	-37.19315782	-42.61422065	-28.29183836	-29.9683	-18.93214802
+0.3	108.7224942	*91.4663695*	*97.96788713*	71.1287575	75.50551579	70.52448913	83.18407068	70.87374096	74.80394	36.82148303
-0.35	-66.8240634	*-61.34900679*	*-74.1538922*	-45.12470621	-47.44165953	-44.02421708	-50.92486827	-34.88165064	-36.7175	-22.56223606
+0.35	97.31651083	*82.3755002*	*87.69081298*	64.71250527	68.62214949	64.0501919	75.39308592	63.20034231	66.68827	33.40895022
-0.4	-80.51968132	*-71.53755491*	*-86.4974589*	-53.16947863	-56.12752769	-52.22796213	-60.9146909	-44.52201678	-46.8653	-26.92423216
+0.4	84.03774081	*71.79722948*	*75.72594914*	57.0759805	60.43455878	56.35216707	66.13990207	54.17801959	57.14735	29.35538333
-0.45	-91.84385608	*-80.01404056*	*-96.7025198*	-59.60867897	-63.08357417	-58.80018149	-68.92553339	-53.02909949	-55.8632	-30.4207312
+0.45	73.73588462	*63.59067802*	*66.44318489*	51.01680725	53.9423482	50.25073084	58.81480998	47.11471245	49.67929	26.14602991
-0.5	-105.7833339	*-90.5106444*	*-109.2628439*	-67.2771202	-71.37224024	-66.63437467	-78.48445208	-63.53618027	-66.9925	-34.5910775
+0.5	61.85860972	*54.12358383*	*55.74060819*	43.86909669	46.28925037	43.06161559	50.19552383	38.90658481	41.00244	22.36917934
-0.55	-117.2328757	*-99.18259052*	*-119.578216*	-73.36556647	-77.95716053	-72.86071326	-86.08998529	-71.96147445	-75.9177	-37.90755189
+0.55	52.74411758	*46.84913727*	*47.52741878*	38.25272003	40.28050649	37.42008941	43.44183794	32.56553489	34.30073	19.40944956
-0.6	-131.2325063	*-109.8464964*	*-132.1892118*	-80.55291754	-85.73580712	-80.21896807	-95.08904647	-82.01415498	-86.5678	-41.82948323
+0.6	42.36535965	*38.54690792*	*38.1748813*	31.69858536	33.27472208	30.84627801	35.58541264	25.43919336	26.7781	15.96606588
-0.65	-142.6532597	*-118.5948765*	*-142.4754943*	-86.20488296	-91.85727999	-86.01237618	-102.1837546	-90.01159875	-95.0416	-44.91949595
+0.65	34.51375999	*32.2446358*	*31.0995962*	26.61072224	27.8417556	25.75170066	29.50863488	20.2767882	21.34399	13.30239865
-0.7	-156.5199126	*-129.2758944*	*-154.9624932*	-92.806388	-99.01309321	-92.7883061	-110.4940052	-99.47277071	-105.067	-48.53625543
+0.7	25.72112284	*25.15154565*	*23.17637297*	20.75493239	21.59611238	19.8995696	22.54401104	15.35404146	16.25054	10.24924818
-0.75	-167.7499912	*-137.9739762*	*-165.0733059*	-97.93615428	-104.5788068	-98.06175359	-116.9723982	-106.9301546	-112.971	-51.35336042
+0.75	19.47004027	*19.85381322*	*17.54024432*	16.28129951	16.83123375	15.43898531	17.24964976	12.09411255	12.78839	7.928079309
-0.8	-181.2811058	*-148.5124962*	*-177.2532472*	-103.8470391	-110.9989529	-104.1489714	-124.4648837	-115.662733	-122.227	-54.60819474
+0.8	12.76063001	*14.00469671*	*11.4954234*	11.22861834	11.45855438	10.4149371	11.3058	8.408187122	8.874791	5.492483064
-0.85	-192.1509274	*-157.0258327*	*-187.0294213*	-108.3688937	-115.9166013	-108.8153961	-130.2214314	-122.4678972	-129.442	-57.105955
+0.85	7.90507484	*9.736155016*	*7.121038873*	7.457509542	7.457509542	7.008121278	7.453914967	5.670728834	5.969188	4.022917222
-0.9	-205.1345203	*-167.2528166*	*-204.6025963*	-113.4843853	-121.4882476	-114.1075218	-136.7672067	-130.3347646	-137.784	-59.94210162
+0.9	4.320498745	*5.156419443*	*3.888448865*	4.038953725	4.038953725	3.439609642	3.528244854	3.071689022	3.233357	2.383480253
-0.95	-215.4667898	*-175.4392546*	*-221.3201226*	-117.3126191	-125.6655289	-118.0798881	-141.6964112	-136.3755328	-144.19	-62.07407913
+0.95	2.081228416	*1.934010488*	*1.873105573*	1.528911284	1.528911284	1.221818109	1.231338175	1.161198752	1.222314	1.177691904
-1	-227.6814501	*-185.1762345*	*-241.7415384*	-121.5279602	-130.2758598	-122.4705203	-147.1665046	-143.2395877	-151.472	-64.43477552
+1	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.27E+02	*1.84E+02*	*239.9109299*	1.21E+02	1.30E+02	122.0923808	146.6942701	1.43E+02	1.51E+02	6.42E+01
-2.05	-1.85E+00	*-1.61E+00*	*-1.668529591*	-1.27E+00	-1.27E+00	-1.014364183	-1.018121011	-9.64E-01	-1.01E+00	-1.05E+00
+2.05	2.17E+02	*1.76E+02*	*2.23E+02*	117.7163644	126.1065635	1.18E+02	1.42E+02	1.37E+02	144.8765	6.23E+01
-2.1	-4.59E+00	*-5.54E+00*	*-4.131814976*	-4.334042181	-4.334042181	-3.746733727	-3.865810751	-3.295976877	-3.46945	-2.517867307
+2.1	2.04E+02	*1.66E+02*	*2.03E+02*	113.0377477	121.0013601	1.14E+02	1.36E+02	1.30E+02	137.0465	5.97E+01
-2.15	-7.40E+00	*-9.29E+00*	*-6.667096266*	-7.131385349	-7.131385349	-6.666788065	-7.078126608	-5.422717158	-5.70812	-3.858673959
+2.15	193.4095468	*157.963285*	*188.0549173*	108.851904	116.4422657	109.3144571	130.8378563	123.2025544	130.2208	57.37364678
-2.2	-13.32405536	*-14.50885067*	*-12.01338587*	-11.66935317	-11.92675068	-10.85245846	-11.8224462	-8.729825849	-9.21625	-5.653873839
+2.2	180.1256638	*147.5587209*	*176.1346681*	103.3255399	110.4321811	103.6113992	123.8025022	114.8856151	121.4036	54.32105564
-2.25	-18.83865579	*-19.2946543*	*-16.9593095*	-15.80380563	-16.32305449	-14.96349226	-16.68614171	-11.74589376	-12.4186	-7.680631123

+2.25	169.0533651	*138.9356518*	*166.1882727*	98.48892747	105.1788679	98.6305096	117.6717565	107.7402404	113.8296	51.65780609
-2.3	-26.49430095	*-25.76961199*	*-23.8632232*	-21.27123957	-22.14643039	-20.41496531	-23.15660304	-15.72999501	-16.6499	-10.51739495
+2.3	155.2098819	*128.3052589*	*153.491431*	92.21957211	98.37671652	92.18555635	109.7541728	98.62615749	104.1702	48.21489409
-2.35	-33.68345824	*-31.57324603*	*-30.34610207*	-26.06276658	-27.25696166	-25.20350751	-28.85546	-19.72592035	-20.7641	-13.01563184
+2.35	143.8615361	*119.5656334*	*143.2833815*	86.81791484	92.52150241	86.64118424	102.9543584	90.88465989	95.96669	45.25552129
-2.4	-43.27242251	*-39.27593052*	*-38.99335988*	-32.28091369	-33.89687557	-31.42985665	-36.28220308	-26.03511026	-27.4054	-16.27100785
+2.4	129.9012381	*108.8737385*	*130.7269669*	79.91033776	85.04011331	79.56072481	94.28350167	81.11053681	85.61046	41.47906526
-2.45	-51.7579964	*-46.06888003*	*-46.64570745*	-37.6438037	-39.62932995	-36.80886191	-42.71071237	-31.8842756	-33.5808	-19.08852516
+2.45	118.4445419	*100.1481754*	*120.4232215*	74.02935463	78.67531096	73.53993614	86.9201522	72.88509559	76.89612	38.2700118
-2.5	-62.88902368	*-54.95971394*	*-56.68370342*	-44.50790136	-46.97296077	-43.70369238	-50.96477315	-39.63397487	-41.7713	-22.70575224
+2.5	104.4494839	*89.54967611*	*107.8375344*	66.58831731	70.62750361	65.93035906	77.62497859	62.58803689	65.98817	34.21676512
-2.55	-72.59965088	*-62.70575633*	*-65.43431094*	-50.35643283	-53.23502277	-49.58611504	-58.01742599	-46.35026064	-48.8711	-25.79610632
+2.55	93.0423966	*80.96101625*	*97.57991037*	60.31372459	63.84542313	59.52015443	69.80354925	53.99082516	56.88181	30.80446684
-2.6	-85.18076149	*-72.7357952*	*-76.75012963*	-57.76171206	-61.16954178	-57.04303863	-66.9698491	-54.9827018	-57.9982	-29.71842363
+2.6	79.20100037	*70.60138359*	*85.13404684*	52.44399251	55.34402208	51.48784504	60.01301045	43.64985231	45.94721	26.53119272
-2.65	-96.03737762	*-81.39100423*	*-86.51429996*	-64.01017191	-67.86890505	-63.34181394	-74.5411121	-62.36514696	-65.805	-33.03517884
+2.65	67.99388616	*62.26483234*	*75.05742388*	45.86150758	48.23697449	44.77529029	51.83903596	35.76183417	37.64404	22.9620899
-2.7	-109.9672735	*-92.50182644*	*-99.04185814*	-71.85187017	-76.28149152	-71.2544441	-84.06294424	-71.74322799	-75.7236	-37.20582859
+2.7	54.48511477	*52.28011256*	*62.9119945*	37.66784593	39.39480398	36.42663501	41.68208526	27.7482856	29.38993	18.52554481
-2.75	-121.8830961	*-102.0145396*	*-109.7577336*	-78.41454071	-83.32584417	-77.88257132	-92.04736095	-79.67965644	-84.1186	-40.7025444
+2.75	44.33529042	*44.30308462*	*53.78753443*	30.86318634	32.05510021	29.49877528	33.26107481	22.83172644	24.15826	14.84607756
-2.8	-137.0509408	*-114.1383128*	*-124.2455468*	-86.58789261	-92.10367391	-86.14452175	-102.0096492	-89.66627311	-94.6835	-45.06476597
+2.8	32.59708648	*34.81989919*	*43.23469952*	22.45036148	22.98498538	20.94016295	22.86666822	16.75136389	17.68868	10.6930658
-2.85	-149.931476	*-124.4492137*	*-138.4030659*	-93.37905484	-99.40070373	-93.01493307	-110.301684	-98.04450294	-103.548	-48.6950027
+2.85	23.99899981	*27.30215422*	*34.81977845*	15.52216653	15.52216653	14.75820919	15.76106476	14.16416113	14.98307	8.248660897
-2.9	-166.2171268	*-137.5086812*	*-157.3643815*	-101.7792709	-108.4309264	-101.5198163	-120.5754739	-108.5025527	-114.614	-53.19203782
+2.9	23.0426067	*18.73240149*	*28.62463733*	11.82367117	12.70752704	11.97378834	14.47430557	14.16416113	14.98307	6.195646261
-2.95	-179.9601679	*-148.5506636*	*-173.8197581*	-108.7132337	-115.8883503	-108.5454693	-129.0696199	-117.2104145	-123.829	-56.90935638
+2.95	22.57230591	*18.2621007*	*24.4677929*	11.82367117	12.70752704	11.97378834	14.47430557	14.16416113	14.98307	6.195646261
-3	-197.2339288	*-162.4591433*	*-195.0263361*	-117.2355726	-125.0581671	-117.1868992	-139.5259581	-128.0027947	-135.251	-61.48444609
+3	22.38058079	*18.07037557*	*20.72150298*	11.82367117	12.70752704	11.97378834	14.47430557	14.16416113	14.98307	6.195646261

2-Span: Shear (Max and Min) Raw Data Results - 100' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.975660987	-12.17990351	-12.46421664	-11.21167411	-7.222580681	-9.771191714	-11.13604597	-12.44956848	-13.80403734
End Shear	88.02293509	111.9612748	109.8255722	98.55776101	71.10712918	95.81170524	107.8116422	116.6792736	125.5114167
-0.05	-8.975660987	-12.17990351	-12.46421664	-11.25229218	-7.222580681	-9.771191714	-11.13604597	-12.44956848	-13.80403734
+0.05	81.83757934	103.2117314	100.5673403	88.97968234	66.14097968	89.11753688	100.1576069	108.1434563	116.052553
-0.1	-8.975660987	-12.17990351	-12.46421664	-11.50757887	-7.222580681	-9.771191714	-11.13604597	-12.44956848	-13.80403734
+0.1	75.35140308	94.02646175	90.85965376	78.93325806	60.94139199	82.09780556	92.12665278	99.18890116	106.1320982
-0.15	-10.51094055	-12.17990351	-12.46421664	-14.44486596	-7.818809516	-11.39419399	-11.86876416	-12.44956848	-13.80403734
+0.15	70.09762831	86.63666288	83.09094491	71.34846549	56.72774711	76.40963764	85.62539473	91.95194553	98.12797833
-0.2	-15.43136	-15.09558908	-12.46421664	-18.29999188	-13.04276301	-17.43219949	-18.39687741	-18.38737274	-18.37819808
+0.2	63.76205442	77.7884821	73.84177413	63.0551879	51.64396853	69.54745074	77.79020099	83.24511822	88.51509867
-0.25	-20.73671926	-18.80664345	-16.67164334	-21.83159818	-17.28517088	-23.16244186	-24.39712727	-24.35639972	-24.3454165
+0.25	58.66447181	70.72277915	66.5010234	56.60119522	47.55144641	64.02378846	71.48999435	76.25668674	80.81375391
-0.3	-27.1546835	-24.699536	-22.33546217	-25.89525963	-22.4148873	-30.09183672	-32.37287073	-32.26677858	-32.25623642
+0.3	52.56010698	62.32975807	57.8394541	49.04146185	42.64794143	57.40618613	63.95050795	67.90964228	71.63341769
-0.35	-32.33551568	-31.50923322	-26.91202717	-29.09278592	-26.55381441	-35.6833985	-38.81508193	-39.45054366	-39.45083001
+0.35	47.68466469	55.6847534	51.03227273	43.00506813	38.72929416	52.11825121	57.93313479	61.26142166	64.3371033
-0.4	-38.56097485	-39.75681523	-34.10036893	-34.39575689	-31.52482591	-42.3997705	-46.56114551	-48.20624245	-49.28293755
+0.4	41.89210362	47.86495806	43.08738373	36.17648849	34.0705335	45.83227842	50.78930307	53.38621424	55.71427327
-0.45	-43.55132673	-47.05466723	-41.10286485	-40.29226492	-35.50753073	-47.78142806	-52.77454642	-55.24224939	-57.19776409
+0.45	37.30474196	41.73726764	36.91938212	30.91294529	30.3785032	40.85128601	45.13654569	47.16988473	48.92522942
-0.5	-49.50368146	-56.07157715	-49.52492256	-48.2336383	-40.25536572	-54.19773083	-60.19098207	-63.65674867	-66.68074879
+0.5	31.90458864	34.60875965	30.30944273	25.26818095	26.0289554	34.98398517	38.48832696	39.87857331	40.984883
-0.55	-54.23761292	-63.2973951	-56.39554912	-54.87534649	-44.02909953	-59.29827027	-66.09379514	-70.36775098	-74.2588077
+0.55	27.67125659	29.09497792	25.29553123	21.01173388	22.61629329	30.38115754	33.28195064	34.18581776	34.80535694
-0.6	-59.83626556	-71.91310791	-66.04422885	-64.30253073	-48.48928882	-65.32746002	-73.08064172	-78.32899536	-83.26770278
+0.6	22.74410313	22.89181611	19.56670711	16.19101912	18.6404238	25.01957817	27.22930317	27.59045712	27.67246179
-0.65	-64.24783095	-78.76238872	-73.75694188	-71.74514167	-52.00129997	-70.07565815	-78.5910936	-84.6233193	-90.40674722
+0.65	18.93074567	18.39451229	15.66584994	12.91044811	15.55987487	20.86612892	22.55109596	22.51295709	22.50915007
-0.7	-69.41218515	-86.8588299	-82.92820633	-80.44152601	-56.10937942	-75.63069155	-85.04839964	-92.01924697	-98.81658426
+0.7	14.55719358	13.38332757	11.89897583	9.713684734	12.02216283	16.09730659	17.19396458	17.15064771	17.14735685
-0.75	-73.43543715	-93.23494178	-90.19751317	-87.56995287	-59.30692492	-79.95534189	-90.08470508	-97.80520249	-105.4143659
+0.75	11.22975411	10.31763826	8.890064619	7.32510084	9.32646891	12.46445352	13.12570506	13.1074345	13.10422836
-0.8	-78.0848906	-100.694057	-98.76229019	-95.82245069	-62.99841645	-84.94917489	-95.91252501	-104.5237639	-113.1001744
+0.8	7.49040152	7.329164595	5.879647959	4.77087019	6.291375458	8.375444832	8.844376164	8.84162111	8.838959273
-0.85	-81.65388792	-106.5004103	-105.4825728	-102.4065067	-65.82875249	-88.77904496	-100.3929049	-109.7096681	-119.0544468
+0.85	5.252336431	5.228096561	4.155262908	3.318252295	4.03329051	5.667137189	5.910688718	5.908052284	5.905510686
-0.9	-85.70784145	-113.2041174	-113.3117827	-109.693822	-69.03919357	-93.12463927	-105.4912932	-115.6388065	-125.8912579
+0.9	2.845328969	2.823283554	2.242532824	1.76416107	2.293393135	2.866055308	2.749271958	2.866084411	2.864036283
-0.95	-88.75664005	-118.3441086	-119.3774315	-115.2109803	-71.44956479	-96.38851811	-109.3339626	-120.1329774	-131.0997731
+0.95	1.074821933	1.067295481	0.845933657	0.661016883	1.132517523	1.038545393	1.03710386	1.038837486	1.040508906
-1	-92.13449542	-124.1743387	-126.341993	-121.4494129	-74.11449058	-99.99881817	-113.6029592	-125.1606372	-136.9626175
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.18E+01	1.24E+02	1.26E+02	1.21E+02	7.39E+01	9.97E+01	113.2341925	124.7245564	1.36E+02
-2.05	-8.92E-01	-8.85E-01	-7.37E-01	-5.65E-01	-1.01E+00	-8.62E-01	-0.860774302	-0.862470995	-8.64E-01
+2.05	8.91E+01	1.19E+02	1.20E+02	1.16E+02	7.17E+01	9.67E+01	109.7409556	120.6105467	1.32E+02
-2.1	-3.053096401	-3.030790255	-2.407557344	-1.896317551	-2.429132718	-3.107323602	-2.989134212	-3.107353055	-3.10527665
+2.1	8.54E+01	1.13E+02	1.13E+02	1.09E+02	6.88E+01	9.27E+01	105.0446754	115.1180403	1.25E+02
-2.15	-5.022702251	-4.998599958	-3.972703444	-3.167909078	-3.795963674	-5.399399802	-5.601371803	-5.598744386	-5.596201423
+2.15	82.03587175	107.1268577	106.2108515	103.1317207	66.13146051	89.18873721	100.8728522	110.2664742	119.6950756
-2.2	-7.815616754	-7.648104274	-6.08013497	-4.940031607	-6.555639253	-8.731398827	-9.186739052	-9.183958909	-9.18127283
+2.2	77.67402528	100.0306192	97.99765243	95.09347795	62.67237463	84.50807171	95.3971835	103.9285286	112.4180715
-2.25	-10.87542253	-10.04602578	-8.587658338	-7.072936481	-9.039171428	-12.07731886	-12.69292996	-12.67725612	-12.67403834
+2.25	73.8696117	93.9272427	90.98960305	88.34129541	59.65180082	80.42184955	90.62855596	98.43106322	106.1291833

-2.3	-14.9420291	-13.7553993	-12.22981353	-9.992199513	-12.33369721	-16.51718445	-17.66491963	-17.61863439	-17.61531878
+2.3	68.95257362	86.13464439	82.10538661	79.66837624	55.74390463	75.1364697	84.47341916	91.35973557	98.06566042
-2.35	-18.52072743	-17.91408204	-15.31209083	-12.60788668	-15.22845473	-20.41930444	-22.04844554	-21.97413771	-21.97078934
+2.35	64.72687191	79.50981865	74.60112894	72.5529839	52.38249527	70.59109138	79.18976487	85.30809018	91.18439567
-2.4	-23.18121131	-23.41042842	-20.06954265	-16.61198091	-18.99334672	-25.49545101	-27.76589834	-28.17404878	-28.30228691
+2.4	59.33524266	71.13893115	65.17497827	63.4565202	48.09027194	64.78804355	72.45512643	77.61543559	82.45936642
-2.45	-27.21284793	-28.50219074	-24.7572084	-20.55647651	-22.24659724	-29.8825517	-32.71847379	-33.57069736	-34.13879888
+2.45	54.75422672	64.08926233	57.28015232	55.71059628	44.4407658	59.85474406	66.73824581	71.10125384	75.08797569
-2.5	-32.38663728	-35.240849	-30.88493145	-25.75854855	-26.41739779	-35.50792893	-39.08147167	-40.52811725	-41.69112898
+2.5	48.96860355	55.25815661	48.76478964	47.5212359	39.82867022	53.62107291	59.52406001	62.89932946	65.82636101
-2.55	-36.80526813	-41.07373316	-36.25483012	-30.3475034	-29.97638088	-40.30879093	-44.52131692	-46.49418981	-48.18825107
+2.55	44.09818576	47.8802455	41.87363593	41.02358333	35.9438371	48.37103542	53.45568998	56.01433427	58.06708753
-2.6	-42.41175037	-48.56270975	-43.79304504	-36.7804185	-34.48861972	-46.39635381	-51.42989107	-54.09152013	-56.48553299
+2.6	37.99916827	39.01091905	33.31544415	33.84978	31.07632641	41.79378351	45.86190772	47.41519712	48.39391044
-2.65	-47.15141527	-54.96119243	-50.29391119	-42.36777165	-38.30057766	-51.53974304	-57.27520769	-60.53529291	-63.54106197
+2.65	32.90530949	32.26251397	27.41580011	29.46933276	27.00890098	36.2982432	39.52386985	40.2510263	40.3490039
-2.7	-53.1099914	-63.08241818	-58.61333481	-49.7139987	-43.08980003	-58.00244789	-64.62940651	-68.6604781	-72.45832938
+2.7	26.57351315	24.11507601	21.82248817	25.53775156	21.95045612	29.46445414	31.6504422	31.55031838	31.53974619
-2.75	-58.10477755	-69.94989599	-65.70056675	-55.89956387	-47.10199673	-63.41718128	-70.79845747	-75.49031458	-79.96996951
+2.75	21.32215827	19.21557343	17.18821607	22.21308112	17.75318552	23.79463003	25.12447254	25.07782205	25.0669212
-2.8	-64.33485028	-78.58530003	-74.6721158	-63.78742099	-52.10372131	-70.16798491	-78.49832976	-84.03129841	-89.38225194
+2.8	14.83814842	14.68006657	12.46421397	17.94258454	12.56827612	16.79134923	17.80429884	17.79477932	17.78560366
-2.85	-69.51877829	-85.82516467	-82.24010367	-70.53983381	-56.26340963	-75.78282552	-84.9093132	-91.15546655	-97.24780461
+2.85	10.92815522	12.1799043	12.46421397	14.76825005	8.293907763	11.89262169	12.46282587	12.45304676	13.8040362
-2.9	-75.93974744	-94.85667754	-91.73470091	-79.82913738	-61.41316877	-82.73468371	-92.85488474	-100.0001926	-107.0301336
+2.9	8.975662267	12.1799043	12.46421397	11.38308998	7.222580947	9.77118876	11.13604655	12.44956874	13.8040362
-2.95	-81.24690923	-102.3723311	-99.67783189	-88.04940318	-65.66760099	-88.47841486	-99.42602325	-107.3270614	-115.1473005
+2.95	8.975662267	12.1799043	12.46421397	11.26131566	7.222580947	9.77118876	11.13604655	12.44956874	13.8040362
-3	-87.77817736	-111.6818832	-109.566399	-98.48324372	-70.90092394	-95.54428417	-107.5173877	-116.363475	-125.1747069
+3	8.975662267	12.1799043	12.46421397	11.21167255	7.222580947	9.77118876	11.13604655	12.44956874	13.8040362

2-Span: Shear (Max and Min) Raw Data Results - 100' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-22.84991587	-24.99150168	-14.5679	-17.6821	-18.8729
End Shear	195.4283603	206.0606612	131.4141	158.9137	166.7564
-0.05	-22.84991587	-24.99150168	-14.5679	-17.6821	-18.8729
+0.05	178.7847393	188.0729764	120.8144	146.159	153.0575
-0.1	-22.84991587	-24.99150168	-14.5679	-17.6821	-18.8729
+0.1	161.3478924	168.9669596	109.6988	132.7782	138.6898
-0.15	-22.84991587	-24.99150168	-14.5679	-17.6821	-18.8729
+0.15	147.3968037	153.7181393	100.7743	122.0309	127.1674
-0.2	-22.84991587	-24.99150168	-18.5134	-20.5184	-20.8514
+0.2	130.7907958	135.6160231	90.11186	109.1853	113.4175
-0.25	-26.6635471	-27.15768991	-23.7315	-26.2129	-27.5131
+0.25	117.6141654	121.2942501	81.61729	98.94672	102.4775
-0.3	-36.55962877	-38.06564454	-30.0325	-33.0883	-35.5668
+0.3	102.0704028	104.4543587	71.5526	86.80965	89.53348
-0.35	-45.96010913	-48.17744033	-35.1095	-41.1374	-42.064
+0.35	89.85759293	91.27099903	63.60627	77.22188	79.32967
-0.4	-58.77251304	-62.16337333	-43.4151	-53.4434	-52.9102
+0.4	75.60758191	75.95165867	54.28395	65.96697	67.37959
-0.45	-70.94059148	-73.44350671	-51.7767	-63.4779	-64.0023
+0.45	64.54795208	64.80599199	47.00418	57.17196	58.06588
-0.5	-86.58412774	-87.15882851	-62.8976	-76.8194	-77.7557
+0.5	52.24630726	52.74855409	38.56886	46.97276	47.29771
-0.55	-100.1814165	-100.9660503	-71.8272	-87.5284	-89.4321
+0.55	43.19041477	44.31891537	32.07398	39.1125	39.27875
-0.6	-117.5665064	-119.8617738	-82.497	-100.32	-103.4
+0.6	33.26991313	34.63794392	25.03514	30.58038	30.2695
-0.65	-131.468479	-135.5155364	-90.9984	-110.508	-114.543
+0.65	26.41085367	27.26111529	20.81351	24.16393	24.61426
-0.7	-148.0061852	-154.1809278	-101.072	-122.576	-127.766
+0.7	19.24033287	19.56242826	16.32157	17.92969	19.03332
-0.75	-161.1201741	-169.0194657	-109.027	-132.101	-138.222
+0.75	14.31422767	14.50867959	12.88474	14.16231	14.77804
-0.8	-176.5790492	-186.5592888	-118.361	-143.271	-150.51
+0.8	9.761240494	8.940520208	8.996087	9.712759	9.98335
-0.85	-188.7156553	-200.3712242	-125.651	-151.991	-160.126
+0.85	6.577756302	5.961248505	6.085391	6.652064	6.690781
-0.9	-202.8642463	-216.5271521	-134.1	-162.092	-171.292
+0.9	2.956190117	2.933916842	3.244416	3.46071	3.145368
-0.95	-213.8341408	-229.1011379	-140.606	-169.865	-179.913
+0.95	1.023594395	1.048504351	1.23082	1.312875	1.095726
-1	-226.4410114	-243.6148466	-148.025	-178.72	-189.77
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.25E+02	2.42E+02	1.47E+02	1.78E+02	1.89E+02
-2.05	-8.87E-01	-9.36E-01	-1.02E+00	-1.09E+00	-9.10E-01
+2.05	2.15E+02	2.30E+02	1.41E+02	170.6979	1.81E+02
-2.1	-3.37170684	-3.171040189	-3.48235	-3.71451	-3.44779
+2.1	2.02E+02	2.15E+02	1.33E+02	161.1981	1.70E+02
-2.15	-6.241794421	-5.805610934	-5.77828	-6.31531	-6.3536
+2.15	190.0313423	201.8734529	126.4389	152.9338	161.1659
-2.2	-10.13243749	-9.563922158	-9.33555	-10.2147	-10.4009
+2.2	175.1985258	184.993266	117.5295	142.2766	149.4146
-2.25	-13.68556507	-13.80975353	-12.5175	-13.7596	-14.3242
+2.25	162.5494712	170.6416163	109.8923	133.1362	139.3596

-2.3	-19.86709093	-20.22759692	-16.7178	-18.3639	-19.5248
+2.3	146.522122	152.506655	100.1702	121.4952	126.5806
-2.35	-25.7344635	-26.47332905	-20.3933	-23.4804	-24.0914
+2.35	132.9904092	137.2340912	91.92726	111.6208	115.7616
-2.4	-34.09267765	-35.48874119	-25.6467	-31.3222	-31.06
+2.4	115.9999755	118.1027759	81.53721	99.16938	102.1429
-2.45	-42.21963143	-43.41015784	-31.3775	-38.2691	-38.4319
+2.45	101.7749678	102.6028202	72.80685	88.70303	90.71382
-2.5	-53.28726299	-53.71231875	-39.3152	-47.8756	-48.2492
+2.5	85.17131163	86.4153151	61.89335	75.61483	76.44343
-2.55	-63.35658429	-63.6641628	-46.2174	-56.221	-57.0603
+2.55	72.37132224	74.68604496	52.79391	64.69847	65.22324
-2.6	-76.87307646	-77.30678254	-55.1144	-66.9699	-68.443
+2.6	57.53225903	60.89995001	42.48709	52.32957	51.66696
-2.65	-88.53311642	-89.84172023	-62.7423	-76.1791	-78.2211
+2.65	46.99628592	49.45627621	35.66745	42.26047	42.77848
-2.7	-103.459029	-105.953654	-72.4539	-87.8969	-90.6917
+2.7	35.50740474	36.93824975	29.46257	32.46645	34.83791
-2.75	-116.1775199	-119.7326349	-80.6892	-97.8279	-101.283
+2.75	27.50617577	28.12584137	24.30689	26.84084	28.24812
-2.8	-132.2814522	-137.2359504	-91.0709	-110.341	-114.654
+2.8	22.84991624	24.99150095	17.92955	19.88119	20.10649
-2.85	-145.8690507	-152.0477024	-99.7953	-120.852	-125.904
+2.85	22.84991624	24.99150095	14.56788	17.68206	18.87291
-2.9	-162.9195075	-170.6840756	-110.702	-133.987	-139.986
+2.9	22.84991624	24.99150095	14.56788	17.68206	18.87291
-2.95	-177.1868539	-186.3171472	-119.798	-144.935	-151.742
+2.95	22.84991624	24.99150095	14.56788	17.68206	18.87291
-3	-194.9523956	-205.8282509	-131.085	-158.518	-166.349
+3	22.84991624	24.99150095	14.56788	17.68206	18.87291

2-Span: Moment (Max and Min) Raw Data Results – 100' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading Comparison)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.53E-13	-2.21E-13	-4.29E-13	-1.76E-13	-1.87E-13	-1.90E-13	-2.25E-13	-1.66E-13	-1.75E-13	-1.10E-13
End Shear	4.67E-13	2.35E-13	4.15E-13	1.63E-13	1.63E-13	1.59E-13	2.06E-13	1.94E-13	2.04E-13	1.43E-13
-0.05	-111.9034803	-90.35186986	-103.6075149	-59.1183639	-63.537632	-59.8689417	-72.3715455	-70.8208091	-74.9153393	-30.97778147
+0.05	919.0167879	761.3154145	889.1731263	547.42214	583.5897527	546.6358434	650.4203704	590.9162232	624.2923253	286.6186578
-0.1	-223.8069607	-180.7037397	-207.2150298	-118.236728	-127.075264	-119.737883	-144.743091	-141.641618	-149.830679	-61.95556293
+0.1	1708.066418	1423.248566	1615.565571	1018.824159	1085.628392	1016.603455	1207.9674	1085.948851	1147.137604	531.917236
-0.15	-335.710441	-271.0556096	-310.8225447	-177.355092	-190.612896	-179.606825	-217.114636	-212.462427	-224.746018	-92.9333444
+0.15	2369.865848	1985.939516	2204.081991	1414.404545	1506.005154	1409.591532	1672.476721	1487.589733	1571.146116	736.514969
-0.2	-447.6139214	-361.4074794	-414.4300596	-236.473455	-254.150528	-239.475767	-289.486182	-283.283236	-299.661357	-123.9111259
+0.2	2906.617907	2450.537973	2696.405093	1735.316221	1846.186166	1727.093974	2045.955138	1811.226596	1913.338043	901.2891692
-0.25	-559.5174017	-451.7593493	-518.0375746	-295.591819	-317.68816	-299.344708	-361.857727	-354.104045	-374.576696	-154.8889073
+0.25	3320.033074	2818.635718	3067.294484	1983.487263	2108.302909	1971.15428	2356.435305	2078.829579	2197.961889	1027.375171
-0.3	-671.4208821	-542.1112191	-621.6450895	-354.710183	-381.225792	-359.21365	-434.229273	-424.924854	-449.492036	-185.8666888
+0.3	3622.355119	3092.266356	3325.803641	2161.322023	2294.999775	2165.611195	2585.974505	2262.256467	2390.966197	1116.548469
-0.35	-783.3243624	-632.463089	-725.2526044	-413.828547	-444.763424	-419.082592	-506.600818	-495.745663	-524.407375	-216.8444703
+0.35	3834.526058	3273.905212	3465.408438	2278.35539	2429.701728	2293.952699	2733.214775	2388.032827	2525.303351	1170.317581
-0.4	-895.2278427	-722.8149589	-828.8601193	-472.946911	-508.301056	-478.951534	-578.972364	-566.566473	-599.322714	-247.8222517
+0.4	3936.250086	3366.469999	3544.570287	2345.741221	2498.051851	2355.871828	2800.734437	2433.650354	2574.671692	1190.277069
-0.45	-1007.131323	-813.1668287	-932.4676342	-532.065275	-571.838688	-538.820475	-651.343909	-637.387282	-674.238053	-278.8000332
+0.45	3929.476399	3373.32001	3537.943806	2350.653731	2499.587579	2355.7057	2793.041221	2404.450656	2544.713552	1178.584364
-0.5	-1119.034803	-903.5186986	-1036.075149	-591.183639	-635.37632	-598.689417	-723.715455	-708.208091	-749.153393	-309.7778147
+0.5	3864.870559	3312.05153	3480.173019	2304.883513	2452.88746	2312.417624	2745.823633	2368.231608	2505.841145	1163.46561
-0.55	-1230.938284	-993.8705684	-1139.682664	-650.302003	-698.913952	-658.558345	-796.087	-779.0289	-824.068732	-340.7555961
+0.55	3707.010555	3173.110719	3338.514819	2205.898687	2349.630585	2216.856136	2636.456281	2291.096573	2423.535023	1125.869072
-0.6	-1342.841764	-1084.222438	-1243.290179	-709.420366	-762.451584	-718.4273	-868.458546	-849.849709	-898.984071	-371.7333776
+0.6	3450.338139	2958.490038	3107.731495	2056.260415	2191.259752	2069.151797	2462.724701	2142.579999	2265.669597	1058.681111
-0.65	-1454.745244	-1174.574308	-1346.897694	-768.53873	-825.989216	-778.296242	-940.830091	-920.670518	-973.89941	-402.7111591
+0.65	3101.628106	2673.067305	2806.723934	1865.619315	1983.438101	1874.438588	2230.965655	1928.30762	2038.337371	964.5399035
-0.7	-1566.648725	-1264.926178	-1450.505209	-827.657094	-889.526848	-838.165184	-1013.20164	-991.491327	-1048.81475	-433.6889405
+0.7	2668.293778	2322.163239	2455.613417	1637.787225	1732.772043	1638.506915	1948.103524	1659.211266	1755.056102	846.3426168
-0.75	-1678.552205	-1355.278048	-1554.112724	-886.775458	-953.06448	-898.034125	-1085.57318	-1062.31214	-1123.73009	-464.666722
+0.75	2161.379772	1911.539892	1994.648008	1373.059209	1448.814251	1367.629937	1621.647888	1343.005121	1420.053742	707.2437541
-0.8	-1790.455685	-1445.629918	-1657.720239	-945.893822	-1016.60211	-957.903067	-1157.94473	-1133.13295	-1198.64543	-495.6445034
+0.8	1585.206099	1447.402373	1433.411359	1077.906305	1131.334272	1068.564944	1259.694998	978.8651372	1034.488603	550.6557394
-0.85	-1950.852621	-1584.475243	-1919.386693	-1005.01219	-1080.13974	-1017.77201	-1230.31627	-1203.95375	-1273.56077	-526.6222849
+0.85	992.7201501	984.8896159	894.8764527	759.2753692	788.8628762	749.0392743	870.9265741	575.2011204	607.2786725	380.249251
-0.9	-2204.700796	-1816.771807	-2479.597359	-1064.13055	-1143.67738	-1077.64095	-1302.68782	-1274.77456	-1348.47611	-557.6000664
+0.9	481.4366207	576.047766	434.0666726	425.4010022	436.6881353	416.899659	464.6115188	322.0886033	339.1836801	227.4671096
-0.95	-2536.198124	-2126.717525	-3194.967129	-1123.24891	-1207.21501	-1137.50989	-1375.05936	-1345.59537	-1423.39145	-588.5778478
+0.95	205.5315743	212.6050536	184.9784166	163.3959012	163.3959012	143.7450581	149.3207836	124.1849789	130.7210304	111.7317262
-1	-2933.354428	-2502.322443	-4028.572634	-1182.36726	-1270.75274	-1197.37883	-1447.43088	-1416.41623	-1498.30692	-619.5646237
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-2933.354428	-2502.322443	-4028.572634	-1182.36726	-1270.75274	-1197.37883	-1447.43088	-1416.41623	-1498.30692	-619.5646237
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-2536.187124	-2126.717686	-3194.971524	-1123.24874	-1207.2151	-1137.50989	-1375.059	-1345.59536	-1423.39158	-588.5863924
+2.05	205.5315835	212.6146023	184.9784248	163.4034104	163.4034104	143.7443215	149.3265238	124.1528008	130.6871588	111.2661264
-2.1	-2204.690375	-1816.771963	-2479.598568	-1064.13039	-1143.67747	-1077.64096	-1302.68748	-1274.77455	-1348.47623	-557.6081611
+2.1	482.2141012	576.0620213	434.0668606	425.3976159	436.6814605	416.9296809	464.6318597	322.0916277	339.1865973	226.607981
-2.15	-1950.842772	-1584.475386	-1919.389771	-1005.01203	-1080.13983	-1017.77201	-1230.31595	-1203.95375	-1273.56089	-526.6299298
+2.15	993.8464148	984.9068437	894.8765523	759.2805919	788.8594595	749.0723929	870.9504089	575.2076861	607.286074	380.2408176
-2.2	-1790.44642	-1445.630061	-1657.720229	-945.893675	-1016.6022	-957.903066	-1157.94442	-1133.13294	-1198.64554	-495.6516985
+2.2	1585.98859	1447.421363	1433.4113	1077.912799	1131.33795	1068.556363	1259.720507	978.8717415	1034.496075	550.6475853

-2.25	**-1678.543516**	***-1355.278183***	***-1554.112714***	**-886.775319**	**-953.064562**	**-898.034125**	**-1085.57289**	**-1062.31214**	**-1123.7302**	**-464.6734672**
+2.25	**2162.134682**	***1911.559494***	***1994.648058***	**1373.065706**	**1448.817736**	**1367.621791**	**1621.673822**	**1343.010703**	**1420.060158**	**707.2357067**
-2.3	**-1566.640612**	***-1264.926305***	***-1450.5052***	**-827.656963**	**-889.526927**	**-838.165189**	**-1013.20136**	**-991.49133**	**-1048.81485**	**-433.6952359**
+2.3	**2669.429632**	***2322.181923***	***2455.613459***	**1637.792353**	**1732.773982**	**1638.497832**	**1948.128362**	**1659.214167**	**1755.059705**	**846.3341053**
-2.35	**-1454.737709**	***-1174.574427***	***-1346.897685***	**-768.538607**	**-825.989292**	**-778.296247**	**-940.829836**	**-920.670524**	**-973.899509**	**-402.7170045**
+2.35	**3102.676732**	***2673.084039***	***2806.723886***	**1865.622075**	**1983.434199**	**1874.427507**	**2230.987661**	**1928.303721**	**2038.333793**	**964.530978**
-2.4	**-1342.834805**	***-1084.222549***	***-1243.29017***	**-709.420252**	**-762.451657**	**-718.427304**	**-868.458308**	**-849.849718**	**-898.984165**	**-371.7387732**
+2.4	**3451.260473**	***2958.503963***	***3107.670008***	**2056.257274**	**2191.252629**	**2069.13758**	**2462.742868**	**2142.571682**	**2265.661366**	**1058.671204**
-2.45	**-1230.931901**	***-993.8706712***	***-1139.682655***	**-650.301896**	**-698.914021**	**-658.558364**	**-796.08678**	**-779.028913**	**-824.06882**	**-340.7605419**
+2.45	**3707.77005**	***3173.120832***	***3338.128537***	**2205.891758**	**2349.619305**	**2216.838053**	**2636.469705**	**2291.08294**	**2423.521183**	**1125.85863**
-2.5	**-1119.028997**	***-903.5187934***	***-1036.07514***	**-591.18354**	**-635.376386**	**-598.689423**	**-723.715252**	**-708.208107**	**-749.153476**	**-309.7823106**
+2.5	**3865.433699**	***3312.05679***	***3479.637032***	**2304.871848**	**2452.870986**	**2312.438387**	**2745.830908**	**2368.249092**	**2505.860036**	**1163.453848**
-2.55	**-1007.126093**	***-813.1669155***	***-932.4676249***	**-532.065184**	**-571.838751**	**-538.82048**	**-651.343724**	**-637.387301**	**-674.238131**	**-278.8040793**
+2.55	**3929.036685**	***3373.31849***	***3536.409332***	**2350.669011**	**2499.607938**	**2355.688476**	**2793.038282**	**2404.47256**	**2544.736117**	**1178.579725**
-2.6	**-895.2231888**	***-722.8150376***	***-828.86011***	**-472.946828**	**-508.301116**	**-478.951542**	**-578.972197**	**-566.566496**	**-599.322787**	**-247.825848**
+2.6	**3935.589857**	***3366.462671***	***3542.827858***	**2345.750631**	**2498.065993**	**2355.892556**	**2800.724359**	**2433.666276**	**2574.687909**	**1190.271389**
-2.65	**-783.3202849**	***-632.4631598***	***-725.2525951***	**-413.828472**	**-444.763481**	**-419.082597**	**-506.600669**	**-495.74569**	**-524.407442**	**-216.8476167**
+2.65	**3833.617373**	***3273.891386***	***3465.408374***	**2278.357943**	**2429.708549**	**2293.966806**	**2733.196683**	**2388.04173**	**2525.312126**	**1170.310817**
-2.7	**-671.417381**	***-542.1112819***	***-621.6450802***	**-354.710116**	**-381.225845**	**-359.213661**	**-434.229141**	**-424.924884**	**-449.492098**	**-185.8693854**
+2.7	**3618.026637**	***3092.245313***	***3325.803285***	**2161.316601**	**2294.998069**	**2165.618033**	**2585.991813**	**2262.257594**	**2390.966723**	**1116.540198**
-2.75	**-559.514477**	***-451.759404***	***-518.0375653***	**-295.591761**	**-317.68821**	**-299.344721**	**-361.857613**	**-354.104079**	**-374.576753**	**-154.8911541**
+2.75	**3319.156149**	***2818.607172***	***3067.294586***	**1983.47421**	**2108.293048**	**1971.152896**	**2356.443444**	**2078.821543**	**2197.952705**	**1027.382502**
-2.8	**-447.6115731**	***-361.4075262***	***-414.4300504***	**-236.473405**	**-254.150575**	**-239.47578**	**-289.486085**	**-283.283273**	**-299.661409**	**-123.9129228**
+2.8	**2905.248091**	***2450.501526***	***2696.405326***	**1735.294996**	**1846.167527**	**1727.084744**	**2045.953179**	**1811.209914**	**1913.319694**	**901.29534**
-2.85	**-335.7086692**	***-271.0556483***	***-310.8225355***	**-177.355049**	**-190.61294**	**-179.60684**	**-217.114557**	**-212.462467**	**-224.746064**	**-92.9346915**
+2.85	**2369.904334**	***1985.894631***	***2204.081683***	**1414.375163**	**1505.977736**	**1409.573751**	**1672.464477**	**1487.581251**	**1571.137345**	**736.5195598**
-2.9	**-223.8057652**	***-180.7037704***	***-207.2150206***	**-118.236693**	**-127.075304**	**-119.737899**	**-144.74303**	**-141.641662**	**-149.83072**	**-61.9564602**
+2.9	**1708.750736**	***1423.194982***	***1615.565366***	**1018.785921**	**1085.591505**	**1016.577404**	**1207.945093**	**1085.931064**	**1147.11899**	**531.9202922**
-2.95	**-111.9028613**	***-90.35189257***	***-103.6075057***	**-59.1183371**	**-63.5376692**	**-59.8689587**	**-72.3715017**	**-70.820856**	**-74.9153753**	**-30.97822889**
+2.95	**919.3624427**	***761.2530821***	***889.1734667***	**547.431171**	**583.5994802**	**546.6448374**	**650.3873303**	**590.9262478**	**624.3029354**	**286.6201946**
-3	**-2.94E-13**	***-1.60E-13***	***-3.49E-13***	**-1.11E-13**	**-1.67E-13**	**-8.92E-14**	**-1.60E-13**	**-1.35E-13**	**-1.43E-13**	**-8.28E-14**
+3	**6.46E-13**	***3.94E-13***	***7.23E-13***	**3.06E-13**	**3.23E-13**	**3.35E-13**	**4.10E-13**	**3.54E-13**	**3.74E-13**	**1.62E-13**

2-Span: Moment (Max and Min) Raw Data Results - 100' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.52E-13	-1.45E-13	-1.59E-13	-1.58E-13	-1.65E-13	-1.60E-13	-1.48E-13	-1.55E-13	-1.59E-13
End Shear	1.68E-13	1.56E-13	1.84E-13	1.45E-13	1.44E-13	1.55E-13	1.34E-13	1.46E-13	1.62E-13
-0.05	-44.87830493	-60.89951754	-62.3210832	-56.05837054	-36.11290341	-48.85595857	-55.6802298	-62.2478424	-69.0201867
+0.05	409.1878967	516.058657	502.8367017	447.9578213	330.7048984	445.5876844	500.7880345	541.710548	581.3636075
-0.1	-89.75660987	-121.7990351	-124.6421664	-112.1167411	-72.22580681	-97.71191714	-111.36046	-124.495685	-138.040373
+0.1	760.0839684	949.1205852	918.3157964	810.3409354	614.1207327	828.4154362	929.8158288	1006.126872	1083.32553
-0.15	-134.6349148	-182.6985526	-186.9632496	-168.1751116	-108.3387102	-146.5678757	-167.040689	-186.743527	-207.06056
+0.15	1053.196596	1301.730749	1249.117839	1101.254963	851.5482932	1148.390411	1287.048923	1416.585285	1520.817001
-0.2	-179.5132197	-243.5980702	-249.2843328	-224.2334821	-144.4516136	-195.4238343	-222.720919	-248.99137	-276.080747
+0.2	1289.383657	1575.361592	1522.798435	1338.564742	1043.290127	1406.684953	1573.92114	1748.928075	1888.7883
-0.25	-224.3915247	-304.4975877	-311.605416	-280.2918527	-180.564517	-244.2797928	-278.401149	-311.239212	-345.100933
+0.25	1470.239815	1793.234906	1720.159828	1517.923459	1190.576874	1604.986646	1801.001583	2004.632709	2184.648201
-0.3	-269.2698296	-365.3971052	-373.9264992	-336.3502232	-216.6774204	-293.1357514	-334.081379	-373.487054	-414.12112
+0.3	1597.726247	1943.28367	1851.037849	1652.968245	1294.945403	1758.016352	1976.669653	2185.92224	2398.500816
-0.35	-314.1481345	-426.2966228	-436.2475824	-392.4085938	-252.7903238	-341.99171	-389.761609	-435.734897	-483.141307
+0.35	1689.291009	2022.991659	1955.904077	1734.538709	1358.225491	1861.81628	2087.762644	2313.665375	2532.233103
-0.4	-359.0264395	-487.1961403	-498.5686656	-448.4669643	-288.9032272	-390.8476685	-445.441839	-497.982739	-552.161493
+0.4	1733.147442	2049.622533	2020.494043	1792.180255	1382.540296	1911.405848	2138.125794	2378.280524	2599.087279
-0.45	-403.9047444	-548.0956578	-560.8897488	-504.5253348	-325.0161306	-439.7036271	-501.122068	-560.230582	-621.18168
+0.45	1729.961955	2021.284617	2025.690479	1800.134616	1370.305843	1909.850972	2130.775832	2377.167668	2607.4528
-0.5	-448.7830493	-608.9951754	-623.210832	-560.5837054	-361.1290341	-488.5595857	-556.802298	-622.478424	-690.201867
+0.5	1699.547758	1992.537305	1981.243768	1759.261197	1352.252498	1875.519261	2095.086033	2332.90924	2553.69567
-0.55	-493.6613543	-669.8946929	-685.5319152	-616.6420759	-397.2419375	-537.4155443	-612.482528	-684.726266	-759.222053
+0.55	1630.964417	1930.395735	1892.574081	1680.444208	1305.321819	1798.63457	2012.918049	2235.282456	2438.356507
-0.6	-538.5396592	-730.7942105	-747.8529984	-672.7004464	-433.3548409	-586.2715028	-668.162758	-746.974109	-828.24224
+0.6	1522.346257	1815.989887	1753.314969	1555.71426	1224.965562	1678.806157	1880.637912	2082.483739	2277.862879
-0.65	-583.4179641	-791.693728	-810.1740816	-728.758817	-469.4677443	-635.1274614	-723.842988	-809.221951	-897.262427
+0.65	1377.666323	1649.465902	1572.392947	1392.983551	1114.228693	1520.35938	1703.348122	1880.08014	2060.495916
-0.7	-628.2962691	-852.5932455	-872.4951648	-784.8171875	-505.5806477	-683.98342	-779.523218	-871.469794	-966.282614
+0.7	1202.485442	1428.209761	1345.926091	1190.440504	976.4501244	1328.016267	1486.032574	1637.62882	1792.28202
-0.75	-673.174574	-913.4927631	-934.816248	-840.875558	-541.6935511	-732.8393785	-835.203447	-933.717636	-1035.3028
+0.75	1002.196079	1158.11036	1081.083466	948.6100476	815.2611497	1106.893778	1234.389338	1358.790046	1480.37275
-0.8	-718.0528789	-974.3922806	-997.1373312	-896.9339286	-577.8064545	-781.6953371	-890.883677	-995.965478	-1104.32299
+0.8	777.0427372	845.8008622	763.4121589	661.5981689	634.5863153	862.5049094	954.8615583	1046.022237	1132.48849
-0.85	-762.9311839	-1035.291798	-1059.458414	-1005.361441	-613.9193579	-830.5512957	-946.563907	-1058.21332	-1173.34317
+0.85	532.2576584	507.8532675	438.2537728	373.7901173	438.6429123	600.7579886	654.3449502	706.6429789	756.9166175
-0.9	-807.8094888	-1096.191316	-1121.779498	-1290.354934	-650.0322613	-879.4072542	-1002.24414	-1120.46116	-1242.36336
+0.9	296.0832503	295.8108882	235.1850054	194.3561306	231.9419817	331.2377388	352.9618299	379.212718	393.5370022
-0.95	-852.6877937	-1157.090833	-1184.100581	-1710.422924	-686.1451647	-928.2632128	-1057.92437	-1182.70901	-1311.38355
+0.95	115.0331858	114.8030751	91.2836649	72.55497655	108.1655827	118.5590778	118.4864325	118.5593517	118.5075823
-1	-897.5662009	-1217.990406	-1246.421675	-2212.690845	-722.2581101	-977.1191702	-1113.60461	-1244.9569	-1380.40374
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-897.5662009	-1217.990406	-1246.421675	-2212.690845	-722.2581101	-977.1191702	-1113.60461	-1244.9569	-1380.40374
+2	0	0	0	0	0	0	0	0	0
-2.05	-852.6878896	-1157.090885	-1184.100338	-1710.422914	-686.1452053	-928.262931	-1057.92443	-1182.70905	-1311.38345
+2.05	115.0002964	114.8077623	91.28719682	72.55695055	108.1433641	118.5542418	118.4636153	118.5547058	118.5205541
-2.1	-807.8095783	-1096.191363	-1121.779269	-1290.354741	-650.0323006	-879.4069872	-1002.2442	-1120.46121	-1242.36327
+2.1	296.0909957	295.7833687	235.190254	194.3442202	231.959715	331.2545514	352.9903669	379.2185132	393.5505609
-2.15	-762.9312669	-1035.291842	-1059.458199	-1005.361231	-613.9193959	-830.5510434	-946.563966	-1058.21337	-1173.34309
+2.15	532.2599494	507.8488607	438.2509832	373.7869359	438.662042	600.7616567	654.3699284	706.6464261	756.9285787
-2.2	-718.0529556	-974.39232	-997.1371288	-896.9338033	-577.8064911	-781.6950996	-890.883734	-995.965522	-1104.32291
+2.2	777.0457307	845.7949667	763.4286853	661.6077259	634.6059146	862.4995247	954.8875884	1046.026686	1132.501853
-2.25	-673.1746443	-913.4927985	-934.8160589	-840.8754406	-541.6935864	-732.8391558	-835.203501	-933.717678	-1035.30272

+2.25	1002.198961	1158.10345	1081.09795	948.6182248	815.2807041	1106.888706	1234.379659	1358.794338	1480.386169
-2.3	-628.2963329	-852.593277	-872.4949891	-784.8170778	-505.5806817	-683.983212	-779.523268	-871.469834	-966.282544
+2.3	1202.487114	1428.200451	1345.937114	1190.436844	976.4688712	1328.010426	1486.02185	1637.631598	1792.29402
-2.35	-583.4180216	-791.6937555	-810.1739192	-728.7587151	-469.4677769	-635.1272682	-723.843036	-809.221991	-897.262363
+2.35	1377.663758	1649.453217	1572.386158	1392.992321	1114.245862	1520.351885	1703.335444	1880.077358	2060.505447
-2.4	-538.5397103	-730.7942339	-747.8528494	-672.7003523	-433.3548722	-586.2713244	-668.162803	-746.974147	-828.242182
+2.4	1522.341346	1816.007296	1753.326368	1555.720679	1224.98053	1678.796058	1880.65874	2082.477816	2277.868693
-2.45	-493.6613989	-669.8947124	-685.5317795	-616.6419896	-397.2419675	-537.4153806	-612.48257	-684.726303	-759.222001
+2.45	1630.95647	1930.411735	1892.591299	1680.454095	1305.334195	1798.621289	2012.934911	2235.272365	2438.355115
-2.5	-448.7830876	-608.9951909	-623.2107097	-560.5836268	-361.1290627	-488.5594368	-556.802337	-622.478459	-690.20182
+2.5	1699.535956	1992.54779	1981.255945	1759.268114	1352.261533	1875.50183	2095.098248	2332.89422	2553.688981
-2.55	-403.9047762	-548.0956694	-560.8896398	-504.5252641	-325.016158	-439.703493	-501.122105	-560.230616	-621.181639
+2.55	1729.976219	2021.275769	2025.708481	1800.141403	1370.299038	1909.852614	2130.766794	2377.186173	2607.462921
-2.6	-359.0264649	-487.1961479	-498.56857	-448.4669013	-288.9032533	-390.8475492	-445.441872	-497.982772	-552.161458
+2.6	1733.157436	2049.638068	2020.506237	1792.187346	1382.53017	1911.421318	2138.111423	2378.293004	2599.090752
-2.65	-314.1481536	-426.2966263	-436.2475001	-392.4085386	-252.7903485	-341.9916054	-389.761639	-435.734928	-483.141277
+2.65	1689.295924	2023.010494	1955.914834	1734.544827	1358.21137	1861.826327	2087.778906	2313.671127	2532.228032
-2.7	-269.2698422	-365.3971048	-373.9264302	-336.3501758	-216.6774438	-293.1356616	-334.081406	-373.487085	-414.121096
+2.7	1597.725293	1943.296249	1851.042049	1652.972741	1294.9269	1758.02047	1976.679322	2185.919915	2398.487958
-2.75	-224.3915309	-304.4975833	-311.6053604	-280.2918131	-180.564539	-244.2797178	-278.401174	-311.239241	-345.100915
+2.75	1470.233145	1793.240718	1720.173801	1517.931492	1190.553976	1604.984047	1801.004451	2004.622735	2184.662361
-2.8	-179.5132196	-243.5980618	-249.2842905	-224.2334503	-144.4516343	-195.423774	-222.720941	-248.991397	-276.080734
+2.8	1289.371268	1575.359511	1522.805287	1338.568662	1043.262468	1406.675942	1573.916253	1748.910222	1888.793584
-2.85	-134.6349082	-182.6985403	-186.9632207	-168.1750876	-108.3387296	-146.5678302	-167.040708	-186.743553	-207.060553
+2.85	1053.177905	1301.72107	1249.116472	1101.256783	851.5152135	1148.37445	1287.036452	1416.595056	1520.812667
-2.9	-89.75659689	-121.7990187	-124.6421508	-112.1167249	-72.22582484	-97.71188638	-111.360475	-124.49571	-138.040372
+2.9	760.0586625	949.1028562	918.3066179	810.3521852	614.1315272	828.3927305	929.7952981	1006.127902	1083.328447
-2.95	-44.87828555	-60.89949723	-62.32108097	-56.05836211	-36.11292011	-48.85594259	-55.6802427	-62.2478659	-69.0201906
+2.95	409.1945507	516.0673139	502.8455555	447.9637436	330.7104008	445.5950237	500.7963883	541.7027343	581.3567263
-3	-1.37E-13	-1.24E-13	-1.25E-13	-1.14E-13	-1.01E-13	-1.13E-13	-7.80E-14	-7.76E-14	-7.72E-14
+3	2.29E-13	3.00E-13	2.33E-13	2.57E-13	2.72E-13	2.83E-13	2.22E-13	2.64E-13	2.65E-13

2-Span: Moment (Max and Min) Raw Data Results - 100' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.76E-13	-2.49E-13	-2.35E-13	-2.55E-13	-2.51E-13
End Shear	2.75E-13	3.01E-13	1.92E-13	2.58E-13	2.50E-13
-0.05	-114.2495794	-124.9575084	-72.8394115	-88.4102913	-94.3645835
+0.05	894.0367333	940.3648822	604.0718006	730.7948806	765.2876228
-0.1	-228.4991587	-249.9150168	-145.678823	-176.820583	-188.729167
+0.1	1632.783533	1719.711101	1107.731508	1342.068827	1402.289517
-0.15	-342.7487381	-374.8725252	-218.518235	-265.230874	-283.09375
+0.15	2265.850183	2384.317173	1514.300298	1840.044305	1927.189017
-0.2	-456.9983175	-499.8300336	-291.357646	-353.641165	-377.458334
+0.2	2758.214343	2965.601969	1862.039475	2259.479638	2358.638069
-0.25	-571.2478969	-624.787542	-364.197058	-442.051456	-471.822917
+0.25	3132.80182	3421.901655	2128.363696	2567.749322	2707.74455
-0.3	-685.4974762	-749.7450505	-437.036469	-530.461748	-566.187501
+0.3	3438.856006	3758.765127	2307.219628	2769.790173	2952.042953
-0.35	-799.7470556	-874.7025589	-509.875881	-618.872039	-660.552084
+0.35	3623.85739	3979.088115	2426.622759	2899.175113	3085.721023
-0.4	-913.996635	-999.6600673	-582.715292	-707.28233	-754.916668
+0.4	3757.460972	4054.850051	2463.460644	2934.680584	3139.82045
-0.45	-1028.246214	-1124.617576	-655.554704	-795.692621	-849.281251
+0.45	3760.426686	4098.136757	2423.570079	2879.147935	3100.151246
-0.5	-1142.495794	-1249.575084	-728.394115	-884.102913	-943.645835
+0.5	3688.466057	4011.869642	2384.158501	2834.459126	3047.327191
-0.55	-1256.745373	-1374.532592	-801.233527	-972.513204	-1038.01042
+0.55	3527.7586	3806.04404	2319.612231	2762.090023	2951.742208
-0.6	-1370.994952	-1499.490101	-874.072938	-1060.9235	-1132.375
+0.6	3251.31505	3559.667672	2178.022601	2596.513473	2768.695855
-0.65	-1485.244532	-1624.447609	-946.91235	-1149.33379	-1226.73959
+0.65	2909.216996	3190.062478	1965.282197	2347.024865	2506.86872
-0.7	-1599.494111	-1749.405118	-1019.75176	-1237.74408	-1321.10417
+0.7	2481.706618	2705.640562	1696.175094	2034.571839	2158.560596
-0.75	-1713.743691	-1874.362626	-1092.59117	-1326.15437	-1415.46875
+0.75	1961.17296	2133.650423	1372.935158	1647.648279	1733.528327
-0.8	-1827.99327	-1999.320135	-1165.43058	-1414.56466	-1509.83334
+0.8	1362.758473	1481.115972	996.8377765	1195.76344	1242.384551
-0.85	-1942.242849	-2124.277643	-1238.27	-1502.97495	-1604.19792
+0.85	771.0151492	815.3938053	599.3507241	706.0887765	726.2299859
-0.9	-2056.492429	-2249.235151	-1311.10941	-1591.38524	-1698.5625
+0.9	398.7736626	369.7892001	346.2885726	403.2407538	410.2308643
-0.95	-2170.742008	-2374.19266	-1383.94882	-1679.79553	-1792.92709
+0.95	128.7361128	120.1489062	131.6796189	140.4582602	133.7682503
-1	-2284.991569	-2499.150198	-1456.78826	-1768.20601	-1887.29169
+1	0	0	0	0	0
(Span 2) -2	-2284.991569	-2499.150198	-1456.78826	-1768.20601	-1887.29169
+2	0	0	0	0	0
-2.05	-2170.742025	-2374.19262	-1383.94884	-1679.7957	-1792.92691
+2.05	128.7239676	120.1472701	131.6835525	140.462456	133.7557153
-2.1	-2056.492444	-2249.235115	-1311.10943	-1591.3854	-1698.56234
+2.1	398.7650351	369.7882245	346.2918685	403.2316655	410.2344946
-2.15	-1942.242862	-2124.27761	-1238.27002	-1502.9751	-1604.19777
+2.15	770.9952957	815.396677	599.355809	706.104633	726.2532787
-2.2	-1827.993281	-1999.320106	-1165.43061	-1414.5648	-1509.83319
+2.2	1362.762776	1481.117785	996.8464136	1195.777249	1242.406095
-2.25	-1713.7437	-1874.362601	-1092.59119	-1326.1545	-1415.46862

+2.25	**1961.192903**	**2133.651294**	**1372.942312**	**1647.659984**	**1733.548413**
-2.3	**-1599.494119**	**-1749.405096**	**-1019.75178**	**-1237.7442**	**-1321.10405**
+2.3	**2481.722733**	**2707.651291**	**1696.179056**	**2034.579704**	**2158.576974**
-2.35	**-1485.244538**	**-1624.447591**	**-946.912368**	**-1149.3339**	**-1226.73947**
+2.35	**2909.227155**	**3190.060382**	**1965.278814**	**2347.027461**	**2506.879985**
-2.4	**-1370.994956**	**-1499.490087**	**-874.072956**	**-1060.92359**	**-1132.3749**
+2.4	**3253.236009**	**3559.670077**	**2178.014185**	**2596.50627**	**2768.700511**
-2.45	**-1256.745375**	**-1374.532582**	**-801.233544**	**-972.513292**	**-1038.01033**
+2.45	**3527.77717**	**3806.045054**	**2319.59798**	**2762.075708**	**2951.736221**
-2.5	**-1142.495794**	**-1249.575077**	**-728.394131**	**-884.102991**	**-943.645753**
+2.5	**3688.475322**	**4011.961695**	**2384.177101**	**2834.471567**	**3047.312649**
-2.55	**-1028.246213**	**-1124.617572**	**-655.554719**	**-795.692689**	**-849.281179**
+2.55	**3760.418864**	**4098.441532**	**2423.591999**	**2879.137076**	**3100.1674**
-2.6	**-913.9966315**	**-999.6600676**	**-582.715306**	**-707.282388**	**-754.916606**
+2.6	**3757.4431**	**4054.849339**	**2463.476974**	**2934.697667**	**3139.828651**
-2.65	**-799.7470503**	**-874.7025628**	**-509.875894**	**-618.872086**	**-660.552033**
+2.65	**3623.861289**	**3979.0859**	**2426.631666**	**2899.183764**	**3085.717966**
-2.7	**-685.4974691**	**-749.7450581**	**-437.036482**	**-530.461785**	**-566.18746**
+2.7	**3438.843453**	**3758.766619**	**2307.2208**	**2769.788233**	**2952.030293**
-2.75	**-571.2478879**	**-624.7875533**	**-364.197069**	**-442.051483**	**-471.822886**
+2.75	**3132.808857**	**3421.900862**	**2128.355442**	**2567.737334**	**2707.755598**
-2.8	**-456.9983067**	**-499.8300486**	**-291.357657**	**-353.641182**	**-377.458313**
+2.8	**2759.105151**	**2965.598894**	**1862.022405**	**2259.492479**	**2358.654148**
-2.85	**-342.7487255**	**-374.8725438**	**-218.518244**	**-265.23088**	**-283.09374**
+2.85	**2265.86242**	**2384.315184**	**1514.290828**	**1840.045887**	**1927.193206**
-2.9	**-228.4991443**	**-249.9150391**	**-145.678832**	**-176.820579**	**-188.729167**
+2.9	**1632.780602**	**1719.71173**	**1107.712447**	**1342.058336**	**1402.28081**
-2.95	**-114.249563**	**-124.9575343**	**-72.8394197**	**-88.4102773**	**-94.3645933**
+2.95	**894.0188369**	**940.3675378**	**604.0822535**	**730.807487**	**765.3011416**
-3	**-1.84E-13**	**-1.78E-13**	**-1.42E-13**	**-1.62E-13**	**-1.50E-13**
+3	**4.55E-13**	**4.77E-13**	**3.36E-13**	**3.54E-13**	**3.67E-13**

2-Span: Shear (Max and Min) Raw Data Results - 100' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.62851	-4.65422	-6.315739439	-6.46317	-6.12174	-3.745180545	-5.06673	-5.77446	-6.4555709	-7.15791
End Shear	63.68838	45.64321	58.05614458	56.9487	53.29146	36.8717289	49.68198	55.9044	60.50260493	65.0824
-0.05	-6.62851	-4.65422	-6.315739439	-6.46317	-6.14975	-3.745180545	-5.06673	-5.77446	-6.4555709	-7.15791
+0.05	59.10041	42.43587	53.51917625	52.14796	48.0837	34.29659304	46.2108	51.9355	56.07646166	60.17763
-0.1	-6.62851	-4.65422	-6.315739439	-6.46317	-6.30759	-3.745180545	-5.06673	-5.77446	-6.4555709	-7.15791
+0.1	54.28386	39.07255	48.75626743	47.11416	42.62678	31.60041068	42.57081	47.77114	51.43318702	55.0335
-0.15	-6.62851	-5.45032	-6.315739439	-6.46317	-7.86536	-4.054347688	-5.90832	-6.1544	-6.4555709	-7.15791
+0.15	50.38836	36.34826	44.92437795	43.08579	38.50515	29.41547685	39.62128	44.4	47.68055252	50.88306
-0.2	-10.273	-8.00174	-7.827632396	-6.46317	-9.92355	-6.763164642	-9.03925	-9.53947	-9.534546404	-9.52979
+0.2	45.75672	33.06303	40.33626243	38.28975	33.991	26.77934588	36.06298	40.33715	43.16573411	45.89842
-0.25	-13.7979	-10.7528	-9.751954082	-8.64488	-11.8168	-8.96301316	-12.0106	-12.6508	-12.62971207	-12.624
+0.25	41.98497	30.41974	36.67242891	34.48329	30.48307	24.65721878	33.19875	37.07026	39.54196876	41.90498
-0.3	-18.2552	-14.0807	-12.80764117	-11.5818	-14.0162	-11.62296463	-15.6038	-16.7866	-16.73154192	-16.7261
+0.3	37.47605	27.2544	32.32033086	29.99194	26.38232	22.11456646	29.76727	33.16075	35.21371132	37.14463
-0.35	-22.1444	-16.7672	-16.33872607	-13.9549	-15.7629	-13.76915448	-18.5032	-20.1271	-20.45659511	-20.4567
+0.35	33.88152	24.7263	28.87464527	26.46216	23.11754	20.08260003	27.02528	30.04052	31.76635814	33.36122
-0.4	-26.8251	-19.9953	-20.61540847	-17.6823	-18.6368	-16.34681146	-21.9859	-24.1437	-24.99675522	-25.5551
+0.4	29.6194	21.72264	24.81978639	22.34243	19.42785	17.66685688	23.76577	26.33617	27.68276601	28.88995
-0.45	-30.5833	-22.583	-24.39962003	-21.3134	-21.8085	-18.41199416	-24.7765	-27.3656	-28.64519024	-29.6592
+0.45	26.25149	19.34392	21.64234775	19.14409	16.58937	15.7523999	21.18293	23.405	24.45936465	25.36958
-0.5	-35.0738	-25.6695	-29.07522798	-25.6805	-26.0809	-20.8739257	-28.1036	-31.2113	-33.00842555	-34.5765
+0.5	22.29655	16.54373	17.94594745	15.71659	13.54395	13.49699528	18.14052	19.95765	20.67854462	21.25221
-0.55	-38.6518	-28.1242	-32.82208716	-29.2432	-29.6632	-22.83074905	-30.7484	-34.2721	-36.48833341	-38.506
+0.55	19.20468	14.34859	15.08684362	13.11669	11.25184	11.72740124	15.75378	17.25795	17.72663612	18.04789
-0.6	-42.8918	-31.0274	-37.28965927	-34.2464	-34.7346	-25.14352545	-33.8748	-37.8951	-40.61653895	-43.1774
+0.6	15.61731	11.79368	11.87027022	10.14608	8.66221	9.665762924	12.9736	14.11942	14.30669283	14.34922
-0.65	-46.2403	-33.3149	-40.84126976	-38.2458	-38.7546	-26.96463571	-36.3369	-40.7524	-43.88038336	-46.8793
+0.65	12.85088	9.816306	9.538248528	8.123334	6.898515	8.068382096	10.81987	11.69359	11.67381752	11.67184
-0.7	-50.1697	-35.9928	-45.03957993	-43.0014	-43.4732	-29.09482988	-39.2174	-44.1008	-47.71545085	-51.2401
+0.7	9.691472	7.548454	6.939760211	6.170068	5.17711	6.233944949	8.347061	8.915719	8.893257824	8.891551
-0.75	-53.2393	-38.079	-48.34583447	-46.7708	-47.3505	-30.75287784	-41.4599	-46.7123	-50.71568706	-54.6613
+0.75	7.415821	5.823051	5.350084655	4.609834	3.896247	4.836125958	6.463289	6.806173	6.796699248	6.795037
-0.8	-56.7979	-40.49	-52.21366711	-51.212	-51.8623	-32.66705546	-44.0494	-49.7343	-54.19951459	-58.6467
+0.8	4.924758	3.884056	3.800448325	3.048819	2.531398	3.262315508	4.342984	4.586143	4.584714084	4.583334
-0.85	-59.5395	-42.3406	-55.22448034	-54.6967	-55.4753	-34.13469146	-46.0353	-52.0575	-56.88860158	-61.7342
+0.85	3.075399	2.723535	2.710965289	2.154661	1.75374	2.09141328	2.938624	3.064915	3.063547982	3.06223
-0.9	-62.667	-44.4427	-58.70060535	-58.7564	-59.5068	-35.79942628	-48.2886	-54.7012	-59.9630835	-65.2794
+0.9	1.731057	1.47541	1.463979027	1.162838	0.927698	1.189210856	1.486158	1.425601	1.486172886	1.485111
-0.95	-65.0312	-46.0237	-61.36588466	-61.9017	-62.5816	-37.04929468	-49.9811	-56.6938	-62.29348063	-67.9802
+0.95	0.859383	0.557336	0.553432969	0.438649	0.346352	0.587253058	0.538525	0.537777	0.538676425	0.539543
-1	-67.6673	-47.7752	-64.38907894	-65.5131	-66.0858	-38.43115923	-51.8532	-58.9074	-64.90051188	-71.0203
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	67.46292	47.62415	64.12479202	65.19522	65.77862	38.31212198	51.69185	58.7162	64.67438756	70.75566
-2.05	-7.68E-01	-0.46267	-0.458783254	-0.3821	-2.96E-01	-0.524886475	-0.44709	-0.44634	-0.447223747	-0.44807
+2.05	65.3077	46.19089	61.65101933	62.24018	62.91145	37.18136524	50.15996	56.90483	62.54111835	68.26803
-2.1	-1.83345	-1.58315	-1.57157908	-1.24841	-0.99765	-1.25959695	-1.61126	-1.54998	-1.61127978	-1.6102
+2.1	62.4199	44.25879	58.39366456	58.39621	59.15334	35.65385511	48.09157	54.46963	59.69304654	64.96725
-2.15	-2.8788	-2.60446	-2.591962643	-2.06	-1.67352	-1.968350363	-2.79979	-2.90452	-2.903160169	-2.90184
+2.15	59.86157	42.53869	55.54931695	55.07433	55.8739	34.29165699	46.24772	52.30638	57.17732652	62.06641
-2.2	-5.136	-4.05269	-3.96583058	-3.15278	-2.62229	-3.399346255	-4.52756	-4.76367	-4.762229146	-4.76084
+2.2	56.51125	40.27691	51.86964959	50.81548	51.4627	32.49799047	43.82062	49.46704	53.89086266	58.29301
-2.25	-7.18502	-5.63932	-5.209243339	-4.45302	-3.76132	-4.687151376	-6.26255	-6.58176	-6.573635528	-6.57197
+2.25	53.5992	38.30418	48.70481862	47.18154	47.77116	30.93170901	41.70176	46.99433	51.04021945	55.03199

-2.3	-9.97288	-7.74801	-7.132693439	-6.34162	-5.32677	-6.395487276	-8.56478	-9.15993	-9.13592657	-9.13421
+2.3	49.79668	35.75451	44.66406243	42.57474	43.05269	28.90531741	38.96109	43.80265	47.37346931	50.85074
-2.35	-12.5559	-9.6037	-9.28912732	-7.9399	-6.73526	-7.896528252	-10.5882	-11.433	-11.39441935	-11.3927
+2.35	46.58053	33.56332	41.22884037	38.6835	39.19194	27.16229986	36.60414	41.06288	44.23546289	47.28255
-2.4	-15.9338	-12.0203	-12.13919026	-10.4068	-8.88805	-9.848766774	-13.2204	-14.3977	-14.60930712	-14.6758
+2.4	42.4872	30.76756	36.88821942	33.79568	34.27867	24.93662014	33.59504	37.57072	40.24653129	42.75829
-2.45	-18.8663	-14.1109	-14.7794611	-12.8375	-11.007	-11.53569989	-15.4952	-16.9658	-17.40767299	-17.7023
+2.45	39.01707	28.39213	33.23270019	29.70192	30.11236	23.04421353	31.03694	34.6063	36.86868231	38.93595
-2.5	-22.6414	-16.7937	-18.27370962	-16.015	-13.8083	-13.69841731	-18.4122	-20.2652	-21.01535766	-21.6184
+2.5	34.64342	25.39207	28.65343874	25.28638	25.69682	20.65266799	27.80455	30.86547	32.61567512	34.13345
-2.55	-25.8742	-19.0849	-21.29828009	-18.7995	-16.2847	-15.5438843	-20.9016	-23.086	-24.10899134	-24.9874
+2.55	30.96855	22.86657	24.82771351	21.71306	22.20109	18.63823547	25.08221	27.71879	29.04554538	30.10998
-2.6	-29.9862	-21.9921	-25.18159697	-22.7083	-19.7538	-17.88365036	-24.0583	-26.6683	-28.04849372	-29.2899
+2.6	26.3748	19.704	20.22863316	17.27531	18.34166	16.11424756	21.67165	23.78113	24.58656838	25.09407
-2.65	-33.47	-24.4498	-28.49945161	-26.0793	-22.7728	-19.86029435	-26.7253	-29.6994	-31.38983298	-32.9484
+2.65	22.54451	17.06264	16.72933055	14.21613	15.96868	14.00513403	18.82201	20.49462	20.87167555	20.92248
-2.7	-37.8587	-27.5395	-32.71061353	-30.3932	-26.7467	-22.34368682	-30.0765	-33.5128	-35.60304802	-37.5724
+2.7	17.79087	13.77937	12.50457662	11.31578	13.82169	11.38213955	15.27843	16.41195	16.36003027	16.35455
-2.75	-41.5443	-30.1295	-36.27165983	-34.0682	-30.1021	-24.42416216	-32.8842	-36.7117	-39.14457588	-41.4674
+2.75	14.1615	11.05634	9.963999705	8.912738	12.02229	9.205696405	12.33841	13.02799	13.00379676	12.99814
-2.8	-46.1494	-33.36	-40.74944259	-38.7203	-34.3894	-27.01774504	-36.3847	-40.7043	-43.57339819	-46.3481
+2.8	9.853146	7.69414	7.612168302	6.463165	9.732087	6.51712529	8.706948	9.232201	9.227264362	9.222506
-2.85	-49.9875	-36.0481	-44.50358552	-42.6446	-38.0656	-29.17470035	-39.2963	-44.0287	-47.26754812	-50.4267
+2.85	6.628456	5.666661	6.315739852	6.463165	8.037664	4.300704051	6.166773	6.462445	6.457374518	7.157914
-2.9	-54.7489	-39.3776	-49.18676564	-47.5679	-43.1131	-31.84504474	-42.9011	-48.1488	-51.85387224	-55.4992
+2.9	6.628456	4.654219	6.315739852	6.463165	6.239955	3.745180683	5.06673	5.77446	6.455571037	7.157914
-2.95	-58.6901	-42.1296	-53.08391554	-51.6867	-47.578	-34.05112833	-45.8794	-51.5561	-55.6531301	-59.7082
+2.95	6.628456	4.654219	6.315739852	6.463165	6.155973	3.745180683	5.06673	5.77446	6.455571037	7.157914
-3	-63.5475	-45.5163	-57.91126948	-56.8143	-53.2528	-36.7648037	-49.5433	-55.7518	-60.33885145	-64.9078
+3	6.628456	4.654219	6.315739852	6.463165	6.121736	3.745180683	5.06673	5.77446	6.455571037	7.157914

2-Span: Shear (Max and Min) Raw Data Results - 100’ Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.62851	-6.13102	-6.589331809	-6.20886	-7.50548	-7.344652224	-7.76929	-3.21263
End Shear	63.68838	60.96338	65.03282338	60.9354	72.55475	66.54227757	70.31053	31.94715
-0.05	-6.62851	-6.13102	-6.589331809	-6.20886	-7.50548	-7.344652224	-7.76929	-3.21263
+0.05	59.10041	56.77181	60.52266038	56.69026	67.41774	61.28247064	64.74382	29.72452
-0.1	-6.62851	-6.13102	-6.589331809	-6.20886	-7.50548	-7.344652224	-7.76929	-3.21263
+0.1	54.28386	52.37752	55.79664357	52.23787	62.03471	55.76402284	58.90397	27.36872
-0.15	-6.62851	-7.74155	-7.741553575	-7.32024	-7.80314	-7.344652224	-7.76929	-4.13586
+0.15	50.38836	48.81348	51.96530228	48.62942	57.67576	51.32688226	54.20887	25.46072
-0.2	-10.273	-12.0407	-12.34906474	-11.2644	-12.3503	-8.97482763	-9.47932	-5.68496
+0.2	45.75672	44.50969	47.34093116	44.27542	52.42083	46.0173528	48.59125	23.16012
-0.25	-13.7979	-15.6101	-16.19733069	-14.8956	-16.7604	-11.55460168	-12.2242	-7.48523
+0.25	41.98497	41.04191	43.61668244	40.77005	48.19404	41.78022576	44.10877	21.30931
-0.3	-18.2552	-19.9225	-20.84873524	-19.2861	-22.0971	-14.67038546	-15.5397	-9.81703
+0.3	37.47605	36.88294	39.15245828	36.56961	43.13408	36.7507083	38.78866	19.09333
-0.35	-22.1444	-23.3989	-24.60029014	-22.8282	-26.4065	-18.08745172	-19.0394	-11.6994
+0.35	33.88152	33.55588	35.58317319	33.21244	39.09416	32.77176164	34.58039	17.3238
-0.4	-26.8251	-27.5704	-29.10424044	-27.0822	-31.5866	-23.08634523	-24.3014	-13.9612
+0.4	29.6194	29.59605	31.33759854	29.22072	34.29603	28.09334695	29.63306	15.22187
-0.45	-30.5833	-30.9093	-32.71121295	-30.4901	-35.7405	-27.49758854	-28.9672	-15.7743
+0.45	26.25149	26.45414	27.97114244	26.0569	30.4977	24.43075574	25.76059	13.5577
-0.5	-35.0738	-34.8857	-37.00919898	-34.5524	-40.6971	-32.94590629	-34.7381	-17.9368
+0.5	22.29655	22.74778	24.00272252	22.32907	26.02827	20.17453192	21.26131	11.59926
-0.55	-38.6518	-38.0428	-40.42372856	-37.781	-44.6409	-37.31473915	-39.3662	-19.6565
+0.55	19.20468	19.83548	20.88696214	19.40373	22.52623	16.88645833	17.78622	10.06453
-0.6	-42.8918	-41.7697	-44.45725025	-41.5966	-49.3073	-42.52743323	-44.8887	-21.6902
+0.6	15.61731	16.43691	17.25419864	15.99496	18.45238	13.19118142	13.88545	8.279007
-0.65	-46.2403	-44.7005	-47.63146487	-44.6007	-52.9861	-46.67440951	-49.2826	-23.2925
+0.65	12.85088	13.79866	14.43700057	13.35323	15.30134	10.5142796	11.06766	6.897796
-0.7	-50.1697	-48.1236	-51.34202396	-48.1142	-57.2953	-51.58038408	-54.4814	-25.1679
+0.7	9.691472	10.76222	11.19839895	10.31868	11.68992	7.961649709	8.426519	5.314622
-0.75	-53.2393	-50.7836	-54.22805642	-50.8487	-60.6546	-55.44731895	-58.5797	-26.6287
+0.75	7.415821	8.442468	8.727629632	8.005696	8.944594	6.271253589	6.631261	4.111008
-0.8	-56.7979	-53.8486	-57.55714435	-54.0052	-64.5397	-59.97549027	-63.3795	-28.3164
+0.8	4.924758	5.822462	5.941692706	5.400538	5.862484	4.35996221	4.601914	2.84806
-0.85	-59.5395	-56.1934	-60.10713054	-56.4249	-67.5247	-63.50422464	-67.1205	-29.6116
+0.85	3.075399	3.867	3.867000022	3.633975	3.865136	2.940486821	3.095249	2.086034
-0.9	-62.667	-58.8459	-62.99623935	-59.1691	-70.919	-67.58349215	-71.446	-31.0822
+0.9	1.731057	2.09435	2.09434987	1.783567	1.829528	1.592786633	1.676618	1.235924
-0.95	-65.0312	-60.831	-65.16231729	-61.2289	-73.4749	-70.71585832	-74.7682	-32.1878
+0.95	0.859383	0.792798	0.792798177	0.633559	0.638495	0.602125358	0.633816	0.610678
-1	-67.6673	-63.0168	-67.5529478	-63.5056	-76.3114	-74.27512972	-78.5441	-33.4119
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	67.46292	62.829	67.34723139	63.30951	76.06651	73.96366451	78.21366	33.30649
-2.05	-7.68E-01	-0.65833	-0.658330926	-0.52599	-0.52793	-0.499884687	-0.52619	-0.54195
+2.05	65.3077	61.04038	65.39101037	61.44651	73.7455	71.0512434	75.12395	32.30483
-2.1	-1.83345	-2.24736	-2.247364367	-1.94282	-2.00457	-1.709088347	-1.79904	-1.30561
+2.1	62.4199	58.61434	62.74376984	58.92913	70.62174	67.223039	71.06377	30.95377
-2.15	-2.8788	-3.69789	-3.697892325	-3.45698	-3.67028	-2.811883411	-2.95988	-2.00087
+2.15	59.86157	56.44382	60.37970738	56.68367	67.84436	63.88517211	67.52442	29.7504
-2.2	-5.136	-6.051	-6.184470149	-5.62741	-6.13038	-4.526744023	-4.77897	-2.93175
+2.2	56.51125	53.57819	57.26325182	53.72642	64.19627	59.57252533	62.95232	28.16752
-2.25	-7.18502	-8.19487	-8.464119518	-7.75914	-8.65239	-6.090689014	-6.43952	-3.9827
+2.25	53.5992	51.07022	54.53921072	51.14364	61.01724	55.86737901	59.02493	26.78652

-2.3	-9.97288	-11.0299	-11.4837596	-10.5859	-12.0076	-8.156595807	-8.63358	-5.45367
+2.3	49.79668	47.81933	51.01203864	47.80169	56.91168	51.14138319	54.0162	25.00124
-2.35	-12.5559	-13.5145	-14.13376285	-13.069	-14.9626	-10.22863383	-10.767	-6.7491
+2.35	46.58053	45.01836	47.97588924	44.92672	53.38572	47.12712465	49.76235	23.46669
-2.4	-15.9338	-16.7389	-17.5768087	-16.2976	-18.8137	-13.50018681	-14.2107	-8.43713
+2.4	42.4872	41.43652	44.09650677	41.25524	48.88955	42.05887312	44.39225	21.50846
-2.45	-18.8663	-19.5197	-20.54930254	-19.0868	-22.1471	-16.53319969	-17.4129	-9.89812
+2.45	39.01707	38.38701	40.79611665	38.13323	45.07138	37.79367155	39.87354	19.84444
-2.5	-22.6414	-23.079	-24.35725215	-22.662	-26.4272	-20.55171111	-21.66	-11.7738
+2.5	34.64342	34.52855	36.62302495	34.18738	40.25148	32.45425818	34.21735	17.74268
-2.55	-25.8742	-26.1117	-27.60436753	-25.7123	-30.0842	-24.03435864	-25.3415	-13.3763
+2.55	30.96855	31.27494	33.10626037	30.86345	36.19577	27.99627957	29.49536	15.97328
-2.6	-29.9862	-29.9516	-31.71871495	-29.579	-34.7264	-28.51060503	-30.0743	-15.4101
+2.6	26.3748	27.19419	28.69796323	26.69839	31.11901	22.63409506	23.82536	13.75742
-2.65	-33.47	-33.1917	-35.19258753	-32.8451	-38.6524	-32.33868134	-34.1224	-17.13
+2.65	22.54451	23.78092	25.01269095	23.21768	26.8805	18.54386008	19.51985	11.90671
-2.7	-37.8587	-37.2579	-39.55483097	-36.9481	-43.5898	-37.20157013	-39.2655	-19.2926
+2.7	17.79087	19.5322	20.42769198	18.88858	21.61373	14.38853285	15.23979	9.606194
-2.75	-41.5443	-40.6609	-43.20759356	-40.3851	-47.73	-41.31690767	-43.6187	-21.1058
+2.75	14.1615	16.00373	16.62177869	15.29623	17.24712	11.83911145	12.52697	7.698251
-2.8	-46.1494	-44.8991	-47.75922941	-44.6692	-52.8959	-46.49534514	-49.097	-23.3678
+2.8	9.853146	11.64136	11.918582	10.85826	11.85723	8.6862141	9.172245	5.544758
-2.85	-49.9875	-48.4206	-51.54301464	-48.2318	-57.1956	-50.83977337	-53.6935	-25.2502
+2.85	6.628456	8.048829	8.0488289	7.652688	8.172707	7.34465187	7.769286	4.277242
-2.9	-54.7489	-52.7764	-56.22552573	-52.6419	-62.5229	-56.26266668	-59.4316	-27.5821
+2.9	6.628456	6.13102	6.589332146	6.208861	7.505473	7.34465187	7.769286	3.212676
-2.95	-58.6901	-56.3719	-60.09248135	-56.2849	-66.9275	-60.77802152	-64.21	-29.5096
+2.95	6.628456	6.13102	6.589332146	6.208861	7.505473	7.34465187	7.769286	3.212676
-3	-63.5475	-60.7911	-64.84737728	-60.7658	-72.3495	-66.37427777	-70.1327	-31.882
+3	6.628456	6.13102	6.589332146	6.208861	7.505473	7.34465187	7.769286	3.212676

2-Span: Shear (Max and Min) Raw Data Results - 100' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.62851	-13.2157	-14.4543	-8.42561	-10.2268	-10.9155
End Shear	63.68838	113.0297	119.1791	76.00582	91.91077	96.44671
-0.05	-6.62851	-13.2157	-14.4543	-8.42561	-10.2268	-10.9155
+0.05	59.10041	103.4036	108.7756	69.87528	84.53382	88.52373
-0.1	-6.62851	-13.2157	-14.4543	-8.42561	-10.2268	-10.9155
+0.1	54.28386	93.31862	97.72525	63.44637	76.79482	80.21391
-0.15	-6.62851	-13.2157	-14.4543	-8.42561	-10.2268	-10.9155
+0.15	50.38836	85.24974	88.90581	58.28474	70.57891	73.54966
-0.2	-10.273	-13.2157	-14.4543	-10.7076	-11.8672	-12.0598
+0.2	45.75672	75.64534	78.4361	52.11791	63.14937	65.59719
-0.25	-13.7979	-15.4214	-15.7072	-13.7255	-15.1607	-15.9127
+0.25	41.98497	68.02439	70.15283	47.20491	57.22771	59.26978
-0.3	-18.2552	-21.145	-22.016	-17.3699	-19.1372	-20.5707
+0.3	37.47605	59.03436	60.41316	41.3838	50.20801	51.78339
-0.35	-22.1444	-26.5819	-27.8643	-20.3062	-23.7926	-24.3285
+0.35	33.88152	51.97085	52.78832	36.78789	44.66274	45.88182
-0.4	-26.8251	-33.9922	-35.9534	-25.1099	-30.91	-30.6016
+0.4	29.6194	43.72908	43.92808	31.39615	38.15325	38.97026
-0.45	-30.5833	-41.0298	-42.4774	-29.946	-36.7136	-37.0169
+0.45	26.25149	37.33253	37.48178	27.18576	33.06649	33.5835
-0.5	-35.0738	-50.0776	-50.41	-36.378	-44.4299	-44.9715
+0.5	22.29655	30.21764	30.50813	22.30703	27.16759	27.35553
-0.55	-38.6518	-57.9418	-58.3956	-41.5426	-50.6237	-51.7248
+0.55	19.20468	24.98	25.63269	18.5506	22.62146	22.71761
-0.6	-42.8918	-67.9968	-69.3243	-47.7137	-58.0219	-59.8034
+0.6	15.61731	19.24229	20.03351	14.47955	17.68674	17.50694
-0.65	-46.2403	-76.0373	-78.378	-52.6307	-63.9143	-66.2483
+0.65	12.85088	15.27522	15.76698	12.03789	13.97567	14.23613
-0.7	-50.1697	-85.6022	-89.1735	-58.4572	-70.894	-73.8956
+0.7	9.691472	11.12801	11.3143	9.439891	10.36998	11.00828
-0.75	-53.2393	-93.1869	-97.7556	-63.058	-76.403	-79.9431
+0.75	7.415821	8.278906	8.39137	7.452136	8.191041	8.54716
-0.8	-56.7979	-102.128	-107.9	-68.4563	-82.8638	-87.0505
+0.8	4.924758	5.645599	5.17092	5.203058	5.617558	5.77406
-0.85	-59.5395	-109.147	-115.889	-72.6726	-87.9072	-92.6116
+0.85	3.075399	3.80437	3.447801	3.519602	3.847347	3.86974
-0.9	-62.667	-117.33	-125.233	-77.5591	-93.7487	-99.0702
+0.9	1.731057	1.709769	1.696887	1.876469	2.001567	1.819183
-0.95	-65.0312	-123.675	-132.505	-81.3223	-98.2444	-104.056
+0.95	0.859383	0.592015	0.606422	0.711868	0.759326	0.633734
-1	-67.6673	-130.966	-140.899	-85.6133	-103.366	-109.757
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	67.46292	130.3243	140.1595	85.23707	102.9174	109.2563
-2.05	-7.68E-01	-0.51282	-0.54156	-0.5908	-0.63019	-0.5261
+2.05	65.3077	124.3581	133.2909	81.72593	98.72635	104.5915
-2.1	-1.83345	-1.95009	-1.83403	-2.01408	-2.14836	-1.99409
+2.1	62.4199	116.604	124.403	77.12669	93.23199	98.49803
-2.15	-2.8788	-3.61006	-3.35779	-3.34198	-3.65258	-3.67473
+2.15	59.86157	109.9082	116.7573	73.12833	88.45215	93.21334
-2.2	-5.136	-5.86029	-5.53148	-5.39939	-5.90787	-6.01554
+2.2	56.51125	101.3294	106.9944	67.97541	82.28835	86.41676
-2.25	-7.18502	-7.91531	-7.98713	-7.23973	-7.95814	-8.28468
+2.25	53.5992	94.01357	98.69382	63.55828	77.00185	80.60126

-2.3	**-9.97288**	**-11.4905**	**-11.699**	**-9.66905**	**-10.6211**	**-11.2925**
+2.3	**49.79668**	**84.74385**	**88.20512**	**57.93537**	**70.26903**	**73.21027**
-2.35	**-12.5559**	**-14.884**	**-15.3114**	**-11.7949**	**-13.5804**	**-13.9337**
+2.35	**46.58053**	**76.91753**	**79.37194**	**53.16788**	**64.55799**	**66.95292**
-2.4	**-15.9338**	**-19.7181**	**-20.5256**	**-14.8332**	**-18.1158**	**-17.9641**
+2.4	**42.4872**	**67.09079**	**68.30698**	**47.15859**	**57.3565**	**59.07628**
-2.45	**-18.8663**	**-24.4185**	**-25.1071**	**-18.1478**	**-22.1337**	**-22.2278**
+2.45	**39.01707**	**58.86349**	**59.34229**	**42.10922**	**51.30309**	**52.46606**
-2.5	**-22.6414**	**-30.8197**	**-31.0655**	**-22.7387**	**-27.6897**	**-27.9059**
+2.5	**34.64342**	**49.26045**	**49.97994**	**35.7972**	**43.73327**	**44.21251**
-2.55	**-25.8742**	**-36.6435**	**-36.8214**	**-26.7307**	**-32.5165**	**-33.0019**
+2.55	**30.96855**	**41.85733**	**43.19609**	**30.53436**	**37.41959**	**37.7231**
-2.6	**-29.9862**	**-44.461**	**-44.7118**	**-31.8764**	**-38.7333**	**-39.5853**
+2.6	**26.3748**	**33.27488**	**35.22264**	**24.57322**	**30.2658**	**29.88257**
-2.65	**-33.47**	**-51.2048**	**-51.9617**	**-36.2882**	**-44.0596**	**-45.2407**
+2.65	**22.54451**	**27.18119**	**28.60398**	**20.62895**	**24.44215**	**24.74175**
-2.7	**-37.8587**	**-59.8375**	**-61.2803**	**-41.9051**	**-50.8368**	**-52.4533**
+2.7	**17.79087**	**20.53638**	**21.36394**	**17.04024**	**18.77759**	**20.14917**
-2.75	**-41.5443**	**-67.1935**	**-69.2496**	**-46.6682**	**-56.5806**	**-58.5789**
+2.75	**14.1615**	**15.90872**	**16.26711**	**14.05835**	**15.52391**	**16.33784**
-2.8	**-46.1494**	**-76.5075**	**-79.373**	**-52.6726**	**-63.8178**	**-66.312**
+2.8	**9.853146**	**13.21568**	**14.45431**	**10.3699**	**11.49866**	**11.62897**
-2.85	**-49.9875**	**-84.3661**	**-87.9397**	**-57.7185**	**-69.8969**	**-72.819**
+2.85	**6.628456**	**13.21568**	**14.45431**	**8.425612**	**10.22676**	**10.91551**
-2.9	**-54.7489**	**-94.2276**	**-98.7184**	**-64.0269**	**-77.4937**	**-80.9638**
+2.9	**6.628456**	**13.21568**	**14.45431**	**8.425612**	**10.22676**	**10.91551**
-2.95	**-58.6901**	**-102.479**	**-107.76**	**-69.2872**	**-83.826**	**-87.7631**
+2.95	**6.628456**	**13.21568**	**14.45431**	**8.425612**	**10.22676**	**10.91551**
-3	**-63.5475**	**-112.754**	**-119.045**	**-75.8158**	**-91.6821**	**-96.2109**
+3	**6.628456**	**13.21568**	**14.45431**	**8.425612**	**10.22676**	**10.91551**

2-Span: Moment (Max and Min) Raw Data Results - 100' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-1.35E-13	-7.9E-14	-7.49296E-14	-8.2E-14	-8.34E-14	-8.53477E-14	-8.3E-14	-7.7E-14	-8.04525E-14	-8.3E-14
End Shear	1.84E-13	8.72E-14	8.07108E-14	9.52E-14	7.67E-14	7.47512E-14	8.05E-14	6.93E-14	7.54737E-14	8.38E-14
-0.05	-33.1425	-23.2711	-31.57869719	-32.3158	-30.6087	-18.72590272	-25.3337	-28.8723	-32.2778545	-35.7896
+0.05	295.5021	212.1794	267.5958812	260.7398	242.5284	171.4829652	231.054	259.6775	280.8973544	301.459
-0.1	-66.2851	-46.5422	-63.15739439	-64.6317	-61.2174	-37.45180545	-50.6673	-57.7446	-64.555709	-71.5791
+0.1	547.1944	394.1322	492.1548277	476.1814	439.4426	318.4447668	429.5647	482.1446	521.714738	561.7452
-0.15	-99.4276	-69.8133	-94.73609158	-96.9475	-91.8261	-56.17770817	-76.001	-86.6169	-96.8335635	-107.369
+0.15	756.2443	546.1222	674.9964994	647.7147	598.0567	441.5599135	595.4837	667.3834	734.5529091	788.601
-0.2	-132.57	-93.0844	-126.3147888	-129.263	-122.435	-74.9036109	-101.335	-115.489	-129.111418	-143.158
+0.2	923.5982	668.5941	816.8844137	789.6284	727.6343	540.9852877	729.4192	816.1375	906.8851827	979.408
-0.25	-165.713	-116.355	-157.893486	-161.579	-153.043	-93.62951362	-126.668	-144.361	-161.3892725	-178.948
+0.25	1049.991	762.3748	929.8599461	891.9678	825.9216	617.359022	832.2461	933.8873	1039.477682	1132.823
-0.3	-198.855	-139.627	-189.4721832	-193.895	-183.652	-112.3554163	-152.002	-173.234	-193.667127	-214.737
+0.3	1140.683	828.4813	1007.665891	959.833	899.9898	671.4780414	911.5978	1024.978	1133.483142	1243.713
-0.35	-231.998	-162.898	-221.0508804	-226.211	-214.261	-131.0813191	-177.336	-202.106	-225.9449815	-250.527
+0.35	1204.673	875.9611	1048.99749	1014.21	945.089	704.2911541	965.422	1082.584	1199.722777	1313.058
-0.4	-265.14	-186.169	-252.6295776	-258.527	-244.869	-149.8072218	-202.669	-230.978	-258.222836	-286.317
+0.4	1233.239	898.7023	1062.806603	1047.702	976.5395	716.8992978	991.136	1108.699	1233.228169	1347.725
-0.45	-298.283	-209.44	-284.2082747	-290.842	-275.478	-168.5331245	-228.003	-259.851	-290.5006905	-322.106
+0.45	1227.22	897.0505	1048.112324	1050.397	980.9847	710.5552726	990.3298	1104.888	1232.651111	1352.063
-0.5	-331.425	-232.711	-315.7869719	-323.158	-306.087	-187.2590272	-253.337	-288.723	-322.778545	-357.896
+0.5	1208.384	881.2796	1033.205759	1027.35	958.8703	701.1939321	972.5275	1086.381	1209.701447	1324.188
-0.55	-364.568	-255.982	-347.3656691	-355.474	-336.696	-205.98493	-278.67	-317.595	-355.0563995	-393.685
+0.55	1161.511	845.7166	1000.98301	981.3711	915.8401	676.8586046	932.6599	1043.774	1159.078277	1264.38
-0.6	-397.71	-279.253	-378.9443663	-387.79	-367.304	-224.7108327	-304.004	-346.468	-387.334254	-429.475
+0.6	1084.214	789.394	941.6592619	909.16	847.7617	635.1908539	870.5243	975.1817	1079.846377	1181.158
-0.65	-430.853	-302.524	-410.5230635	-420.106	-397.913	-243.4367354	-329.338	-375.34	-419.6121085	-465.264
+0.65	979.4042	714.372	855.3102942	815.3451	758.7379	577.7696101	788.3637	883.2503	974.892476	1068.445
-0.7	-463.995	-325.795	-442.1017607	-452.422	-428.522	-262.1626381	-354.671	-404.212	-451.889963	-501.054
+0.7	850.2656	623.5341	740.5806381	697.9135	647.8293	506.3262247	688.6265	770.5639	849.1723202	929.3658
-0.75	-497.138	-349.066	-473.6804579	-484.737	-459.13	-280.8885409	-380.005	-433.084	-484.1678175	-536.844
+0.75	701.5439	519.6765	600.5239097	560.5826	515.3081	422.7436607	573.9662	640.0774	704.5838971	767.6291
-0.8	-530.28	-372.338	-505.2591551	-517.053	-489.739	-299.6144436	-405.339	-461.957	-516.445672	-572.633
+0.8	535.0952	402.926	438.5796537	395.858	358.118	329.0569434	447.2413	495.1317	542.4019898	587.238
-0.85	-563.423	-395.609	-536.8378523	-549.369	-549.652	-318.3403463	-430.672	-490.829	-548.7235265	-608.423
+0.85	352.833	275.9957	263.3410772	227.2511	201.423	227.4528972	311.5157	339.3025	366.4210417	392.4898
-0.9	-596.566	-418.88	-568.4165495	-581.685	-705.261	-337.066249	-456.006	-519.701	-581.001381	-644.212
+0.9	177.3383	153.5303	153.3891046	121.9523	103.8241	120.2706672	171.7593	183.024	196.6360996	204.0638
-0.95	-629.708	-442.151	-599.9952467	-614.001	-934.352	-355.7921518	-481.339	-548.574	-613.2792355	-680.002
+0.95	81.64134	59.64905	59.52972524	47.33402	38.30976	56.08793501	61.47735	61.43968	61.47749634	61.45065
-1	-662.851	-465.422	-631.5739726	-646.317	-1208.98	-374.5180763	-506.673	-577.446	-645.5571152	-715.791
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-662.851	-465.422	-631.5739726	-646.317	-1208.98	-374.5180763	-506.673	-577.446	-645.5571152	-715.791
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-629.703	-442.151	-599.9952733	-614.001	-934.352	-355.7921728	-481.339	-548.574	-613.27926	-680.002
+2.05	81.64134	59.63199	59.53215572	47.33586	38.31078	56.07641385	61.47485	61.42785	61.47508727	61.45738
-2.1	-596.561	-418.88	-568.4165741	-581.685	-705.261	-337.0662694	-456.006	-519.701	-581.0014048	-644.212
+2.1	177.6723	153.5344	153.3748347	121.955	103.8179	120.2798626	171.768	183.0388	196.6391046	204.0708
-2.15	-563.419	-395.609	-536.8378748	-549.369	-549.652	-318.340366	-430.672	-490.829	-548.7235496	-608.423
+2.15	353.3169	275.9969	263.3387921	227.2497	201.4214	227.4628167	311.5176	339.3155	366.4228292	392.496
-2.2	-530.276	-372.338	-505.2591755	-517.053	-489.739	-299.6144626	-405.338	-461.957	-516.4456945	-572.633
+2.2	535.4314	402.9275	438.5765967	395.8666	358.1229	329.0671064	447.2385	495.1452	542.4042966	587.2449
-2.25	-497.134	-349.066	-473.6804763	-484.737	-459.13	-280.8885592	-380.005	-433.085	-484.1678393	-536.844

+2.25	701.8683	519.678	600.5203265	560.5901	515.3123	422.7538004	573.9636	640.0724	704.586123	767.6361
-2.3	-463.992	-325.795	-442.101777	-452.422	-428.522	-262.1626558	-354.671	-404.212	-451.8899841	-501.054
+2.3	850.7536	623.5349	740.575811	697.9192	647.8274	506.3359457	688.6235	770.5584	849.173761	929.3721
-2.35	-430.85	-302.524	-410.5230778	-420.106	-397.913	-243.4367524	-329.337	-375.34	-419.6121289	-465.264
+2.35	979.8547	714.3706	855.3037163	815.3415	758.7425	577.7785127	788.3598	883.2437	974.8910333	1068.45
-2.4	-397.707	-279.253	-378.9443785	-387.79	-367.304	-224.7108489	-304.004	-346.468	-387.3342737	-429.475
+2.4	1084.611	789.3914	941.6682896	909.1659	847.7651	635.1986156	870.5191	975.1925	1079.843306	1181.161
-2.45	-364.565	-255.982	-347.3656792	-355.474	-336.696	-205.9849455	-278.67	-317.595	-355.0564185	-393.685
+2.45	1161.837	845.7125	1000.991307	981.38	915.8452	676.8650222	932.653	1043.783	1159.073044	1264.379
-2.5	-331.423	-232.711	-315.78698	-323.158	-306.087	-187.2590421	-253.336	-288.723	-322.7785633	-357.896
+2.5	1208.626	881.2735	1033.211195	1027.356	958.8739	701.198617	972.5184	1086.387	1209.693658	1324.184
-2.55	-298.281	-209.44	-284.2082807	-290.842	-275.478	-168.5331387	-228.003	-259.851	-290.5007082	-322.106
+2.55	1227.031	897.0579	1048.107736	1050.406	980.9882	710.5517438	990.3306	1104.883	1232.660707	1352.068
-2.6	-265.138	-186.169	-252.6295815	-258.527	-244.869	-149.8072353	-202.669	-230.978	-258.222853	-286.317
+2.6	1232.955	898.7075	1062.814658	1047.709	976.5432	716.8940474	991.1441	1108.691	1233.23464	1347.727
-2.65	-231.996	-162.898	-221.0508822	-226.211	-214.261	-131.0813319	-177.336	-202.106	-225.9449978	-250.527
+2.65	1204.282	875.9637	1049.007256	1014.216	945.0922	704.2838318	965.4272	1082.592	1199.725759	1313.056
-2.7	-198.854	-139.627	-189.472183	-193.895	-183.652	-112.3554285	-152.002	-173.234	-193.6671426	-214.737
+2.7	1138.824	828.4808	1007.672413	959.8351	899.9921	671.4684468	911.5999	1024.983	1133.481937	1243.706
-2.75	-165.711	-116.355	-157.8934837	-161.579	-153.043	-93.62952504	-126.668	-144.362	-161.3892874	-178.948
+2.75	1049.614	762.3713	929.8629599	891.975	825.9258	617.3471486	832.2448	933.8887	1039.47251	1132.83
-2.8	-132.569	-93.0844	-126.3147844	-129.263	-122.435	-74.90362163	-101.335	-115.489	-129.1114322	-143.158
+2.8	923.0097	668.5876	816.8833347	789.632	727.6364	540.9709454	729.4145	816.135	906.8759254	979.4107
-2.85	-99.4268	-69.8133	-94.73608518	-96.9475	-91.826	-56.17771821	-76.0009	-86.6169	-96.83357705	-107.369
+2.85	756.2608	546.1125	674.9914802	647.714	598.0576	441.5427604	595.4755	667.377	734.5579755	788.5987
-2.9	-66.2845	-46.5422	-63.15738592	-64.6317	-61.2174	-37.4518148	-50.6673	-57.7446	-64.55572186	-71.5791
+2.9	547.4884	394.1191	492.1456345	476.1766	439.4484	318.4503641	429.5529	482.1339	521.7152722	561.7467
-2.95	-33.1423	-23.2711	-31.57868666	-32.3158	-30.6087	-18.72591138	-25.3336	-28.8723	-32.27786668	-35.7896
+2.95	295.6506	212.1828	267.6003702	260.7444	242.5315	171.4858184	231.0578	259.6818	280.8933027	301.4554
-3	-1.13E-13	-7.1E-14	-6.4511E-14	-6.5E-14	-6.04E-14	-5.2454E-14	-5.9E-14	-4E-14	-4.0226E-14	-4E-14
+3	2.41E-13	1.19E-13	1.55623E-13	1.21E-13	1.37E-13	1.40868E-13	1.47E-13	1.15E-13	1.36794E-13	1.37E-13

2-Span: Moment (Max and Min) Raw Data Results - 100' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.35E-13	-9.1E-14	-9.7E-14	-9.8E-14	-1.2E-13	-8.6E-14	-9.1E-14	-5.70114E-14
End Shear	1.84E-13	8.44E-14	8.44E-14	8.24E-14	1.07E-13	1.01E-13	1.06E-13	7.39652E-14
-0.05	-33.1425	-30.6551	-32.9467	-31.0443	-37.5274	-36.7233	-38.8464	-16.06314828
+0.05	295.5021	283.859	302.6133	283.4513	337.2675	306.4124	323.7191	148.6225864
-0.1	-66.2851	-61.3102	-65.8933	-62.0886	-75.0548	-73.4465	-77.6929	-32.12629657
+0.1	547.1944	528.2988	562.9393	527.1472	626.3767	563.1054	594.8341	275.8191527
-0.15	-99.4276	-91.9653	-98.84	-93.1329	-112.582	-110.17	-116.539	-48.18944485
+0.15	756.2443	733.4221	780.9205	730.9264	867.2423	771.3714	814.6985	381.9107955
-0.2	-132.57	-122.62	-131.787	-124.177	-150.11	-146.893	-155.386	-64.25259314
+0.2	923.5982	899.8269	957.3172	895.5634	1060.905	939.1893	992.138	467.3524341
-0.25	-165.713	-153.276	-164.733	-155.222	-187.637	-183.616	-194.232	-80.31574142
+0.25	1049.991	1028.513	1093.235	1022.118	1221.901	1077.952	1139.726	532.7327825
-0.3	-198.855	-183.931	-197.68	-186.266	-225.164	-220.34	-233.079	-96.3788897
+0.3	1140.683	1120.727	1190.044	1122.951	1340.925	1173.065	1239.806	578.9725013
-0.35	-231.998	-214.586	-230.627	-217.31	-262.692	-257.063	-271.925	-112.442038
+0.35	1204.673	1181.413	1259.892	1189.501	1417.275	1238.285	1309.465	606.8538144
-0.4	-265.14	-245.241	-263.573	-248.354	-300.219	-293.786	-310.771	-128.5051863
+0.4	1233.239	1216.355	1295.334	1221.608	1452.286	1261.94	1335.064	617.2035617
-0.45	-298.283	-275.896	-296.52	-279.399	-337.746	-330.509	-349.618	-144.5683346
+0.45	1227.22	1218.903	1296.13	1221.522	1448.297	1246.798	1319.53	611.1404531
-0.5	-331.425	-306.551	-329.467	-310.443	-375.274	-367.233	-388.464	-160.6314828
+0.5	1208.384	1195.169	1271.915	1199.076	1423.813	1228.017	1299.373	603.3008087
-0.55	-364.568	-337.206	-362.413	-341.487	-412.801	-403.956	-427.311	-176.6946311
+0.55	1161.511	1143.842	1218.372	1149.524	1367.102	1188.02	1256.694	583.8055859
-0.6	-397.71	-367.861	-395.36	-372.532	-450.329	-440.679	-466.157	-192.7577794
+0.6	1084.214	1066.249	1136.251	1072.933	1277.016	1111.009	1174.835	548.9660933
-0.65	-430.853	-398.516	-428.307	-403.576	-487.856	-477.402	-505.004	-208.8209277
+0.65	979.4042	967.394	1028.487	971.9671	1156.84	999.9002	1056.955	500.1503259
-0.7	-463.995	-429.171	-461.253	-434.62	-525.383	-514.126	-543.85	-224.884076
+0.7	850.2656	849.2545	898.5077	849.6276	1010.165	860.3636	910.0628	438.8605739
-0.75	-497.138	-459.827	-494.2	-465.665	-562.911	-550.849	-582.696	-240.9472243
+0.75	701.5439	711.983	751.2648	709.1677	840.8856	696.3988	736.3514	366.7325663
-0.8	-530.28	-490.482	-527.147	-496.709	-600.438	-587.572	-621.543	-257.0103725
+0.8	535.0952	558.9351	586.6395	554.0912	653.1994	507.5785	536.4214	285.5357736
-0.85	-563.423	-521.137	-560.093	-527.753	-637.965	-624.295	-660.389	-273.0735208
+0.85	352.833	393.7129	409.0552	388.4051	451.6083	298.2635	314.8969	197.173581
-0.9	-596.566	-551.792	-593.04	-558.797	-675.493	-661.019	-699.236	-289.1366691
+0.9	177.3383	220.5865	226.4393	216.1782	240.9186	167.0151	175.8795	117.9502772
-0.95	-629.708	-582.447	-625.987	-589.842	-713.02	-697.742	-738.082	-305.1998174
+0.95	81.64134	84.72694	84.72694	74.53724	77.42846	64.3946	67.78379	57.93711495
-1	-662.851	-613.102	-658.933	-620.886	-750.548	-734.465	-776.929	-321.2676296
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-662.851	-613.102	-658.933	-620.886	-750.548	-734.465	-776.929	-321.2676296
+2	0	0	0	0	0	0	0	0
-2.05	-629.703	-582.447	-625.987	-589.842	-713.02	-697.742	-738.082	-305.2042481
+2.05	81.64134	84.73083	84.73083	74.53685	77.43144	64.37791	67.76622	57.69568391
-2.1	-596.561	-551.792	-593.04	-558.797	-675.493	-661.019	-699.236	-289.1408665
+2.1	177.6723	220.5847	226.4358	216.1938	240.9291	167.0167	175.881	117.5047866
-2.15	-563.419	-521.137	-560.093	-527.753	-637.965	-624.295	-660.389	-273.077485
+2.15	353.3169	393.7156	409.0534	388.4223	451.6206	298.2669	314.9007	197.169208
-2.2	-530.276	-490.482	-527.147	-496.709	-600.438	-587.572	-621.543	-257.0141034
+2.2	535.4314	558.9384	586.6414	554.0868	653.2126	507.5819	536.4252	285.5315454
-2.25	-497.134	-459.826	-494.2	-465.665	-562.91	-550.849	-582.696	-240.9507219

+2.25	701.8683	711.9864	751.2667	709.1635	840.8991	696.4017	736.3548	366.7283934
-2.3	-463.992	-429.171	-461.253	-434.62	-525.383	-514.126	-543.85	-224.8873403
+2.3	850.7536	849.2571	898.5087	849.6229	1010.178	860.3651	910.0647	438.8561604
-2.35	-430.85	-398.516	-428.307	-403.576	-487.856	-477.402	-505.004	-208.8239588
+2.35	979.8547	967.3954	1028.485	971.9614	1156.851	999.8982	1056.953	500.1456977
-2.4	-397.707	-367.861	-395.36	-372.532	-450.328	-440.679	-466.157	-192.7605773
+2.4	1084.611	1066.247	1136.247	1072.926	1277.025	1111.004	1174.831	548.960956
-2.45	-364.565	-337.206	-362.413	-341.487	-412.801	-403.956	-427.311	-176.6971957
+2.45	1161.837	1143.838	1218.366	1149.514	1367.109	1188.013	1256.687	583.8001713
-2.5	-331.423	-306.551	-329.467	-310.443	-375.274	-367.233	-388.464	-160.6338142
+2.5	1208.626	1195.163	1271.906	1199.087	1423.817	1228.026	1299.383	603.2947099
-2.55	-298.281	-275.896	-296.52	-279.399	-337.746	-330.509	-349.618	-144.5704326
+2.55	1227.031	1218.911	1296.141	1221.513	1448.296	1246.81	1319.542	611.1380475
-2.6	-265.138	-245.241	-263.573	-248.354	-300.219	-293.786	-310.771	-128.5070511
+2.6	1232.955	1216.36	1295.341	1221.619	1452.281	1261.948	1335.073	617.2006164
-2.65	-231.996	-214.586	-230.627	-217.31	-262.692	-257.063	-271.925	-112.4436695
+2.65	1204.282	1181.415	1259.896	1189.508	1417.266	1238.29	1309.47	606.850307
-2.7	-198.854	-183.931	-197.68	-186.266	-225.164	-220.34	-233.079	-96.380288
+2.7	1138.824	1120.724	1190.043	1122.955	1340.934	1173.066	1239.806	578.9682124
-2.75	-165.711	-153.275	-164.733	-155.222	-187.637	-183.616	-194.232	-80.31690646
+2.75	1049.614	1028.506	1093.229	1022.117	1221.905	1077.947	1139.721	532.7365839
-2.8	-132.569	-122.62	-131.787	-124.177	-150.109	-146.893	-155.386	-64.25352492
+2.8	923.0097	899.8159	957.3075	895.5586	1060.904	939.1807	992.1284	467.3556339
-2.85	-99.4268	-91.9653	-98.84	-93.1329	-112.582	-110.17	-116.539	-48.19014338
+2.85	756.2608	733.4069	780.9063	730.9172	867.2359	771.367	814.694	381.9131759
-2.9	-66.2845	-61.3102	-65.8933	-62.0886	-75.0547	-73.4465	-77.6929	-32.12676183
+2.9	547.4884	528.2789	562.9201	527.1337	626.3651	563.0962	594.8245	275.8207374
-2.95	-33.1423	-30.6551	-32.9467	-31.0443	-37.5274	-36.7233	-38.8464	-16.06338029
+2.95	295.6506	283.8637	302.6183	283.456	337.2504	306.4176	323.7246	148.6233832
-3	-1.13E-13	-5.7E-14	-8.6E-14	-4.6E-14	-8.3E-14	-7E-14	-7.4E-14	-4.29316E-14
+3	2.41E-13	1.59E-13	1.67E-13	1.73E-13	2.12E-13	1.84E-13	1.94E-13	8.38819E-14

2-Span: Moment (Max and Min) Raw Data Results - 100' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.35E-13	-1.6E-13	-1.4E-13	-1.4E-13	-1.5E-13	-1.5E-13
End Shear	1.84E-13	1.59E-13	1.74E-13	1.11E-13	1.49E-13	1.45E-13
-0.05	-33.1425	-66.0784	-72.2715	-42.1281	-51.1338	-54.5775
+0.05	295.5021	517.0831	543.8779	349.3764	422.6691	442.6186
-0.1	-66.2851	-132.157	-144.543	-84.2561	-102.268	-109.155
+0.1	547.1944	944.3514	994.6276	640.6776	776.211	811.0408
-0.15	-99.4276	-198.235	-216.815	-126.384	-153.401	-163.733
+0.15	756.2443	1310.498	1379.015	875.8243	1064.225	1114.626
-0.2	-132.57	-264.314	-289.086	-168.512	-204.535	-218.31
+0.2	923.5982	1595.266	1715.212	1076.946	1306.813	1364.163
-0.25	-165.713	-330.392	-361.358	-210.64	-255.669	-272.888
+0.25	1049.991	1811.915	1979.122	1230.98	1485.107	1566.076
-0.3	-198.855	-396.47	-433.629	-252.768	-306.803	-327.465
+0.3	1140.683	1988.928	2173.953	1334.424	1601.961	1707.37
-0.35	-231.998	-462.549	-505.901	-294.896	-357.936	-382.043
+0.35	1204.673	2095.927	2301.381	1403.483	1676.793	1784.685
-0.4	-265.14	-528.627	-578.172	-337.024	-409.07	-436.62
+0.4	1233.239	2173.199	2345.2	1424.789	1697.328	1815.975
-0.45	-298.283	-594.706	-650.444	-379.153	-460.204	-491.198
+0.45	1227.22	2174.914	2370.235	1401.718	1665.21	1793.031
-0.5	-331.425	-660.784	-722.715	-421.281	-511.338	-545.775
+0.5	1208.384	2133.294	2320.341	1378.923	1639.363	1762.48
-0.55	-364.568	-726.863	-794.987	-463.409	-562.471	-600.353
+0.55	1161.511	2040.346	2201.298	1341.592	1597.507	1707.196
-0.6	-397.71	-792.941	-867.259	-505.537	-613.605	-654.931
+0.6	1084.214	1880.46	2058.801	1259.701	1501.743	1601.328
-0.65	-430.853	-859.019	-939.53	-547.665	-664.739	-709.508
+0.65	979.4042	1682.601	1845.033	1136.658	1357.446	1449.895
-0.7	-463.995	-925.098	-1011.8	-589.793	-715.873	-764.086
+0.7	850.2656	1435.342	1564.859	981.0151	1176.733	1248.445
-0.75	-497.138	-991.176	-1084.07	-631.921	-767.007	-818.663
+0.75	701.5439	1134.282	1234.037	794.0631	952.9487	1002.619
-0.8	-530.28	-1057.25	-1156.34	-674.049	-818.14	-873.241
+0.8	535.0952	788.1773	856.6316	576.5401	691.5925	718.5567
-0.85	-563.423	-1123.33	-1228.62	-716.177	-869.274	-927.818
+0.85	352.833	445.9313	471.5985	346.6459	408.3799	420.0289
-0.9	-596.566	-1189.41	-1300.89	-758.305	-920.408	-982.396
+0.9	177.3383	230.6383	213.8746	200.2826	233.222	237.2648
-0.95	-629.708	-1255.49	-1373.16	-800.433	-971.542	-1036.97
+0.95	81.64134	74.45698	69.4904	76.15941	81.2367	77.36741
-1	-662.851	-1321.57	-1445.43	-842.561	-1022.68	-1091.55
+1	0	0	0	0	0	0
(Span 2) -2	-662.851	-1321.57	-1445.43	-842.561	-1022.68	-1091.55
+2	0	0	0	0	0	0
-2.05	-629.703	-1255.49	-1373.16	-800.433	-971.542	-1036.97
+2.05	81.64134	74.44995	69.48946	76.16168	81.23913	77.36016
-2.1	-596.561	-1189.41	-1300.89	-758.305	-920.408	-982.396
+2.1	177.6723	230.6333	213.874	200.2845	233.2167	237.2669
-2.15	-563.419	-1123.33	-1228.62	-716.177	-869.274	-927.818
+2.15	353.3169	445.9198	471.6002	346.6488	408.389	420.0424
-2.2	-530.276	-1057.25	-1156.34	-674.049	-818.14	-873.241
+2.2	535.4314	788.1797	856.6326	576.5451	691.6005	718.5692
-2.25	-497.134	-991.176	-1084.07	-631.921	-767.007	-818.663

+2.25	**701.8683**	**1134.293**	**1234.038**	**794.0673**	**952.9555**	**1002.631**
-2.3	**-463.992**	**-925.098**	**-1011.8**	**-589.793**	**-715.873**	**-764.086**
+2.3	**850.7536**	**1435.351**	**1566.022**	**981.0174**	**1176.738**	**1248.454**
-2.35	**-430.85**	**-859.019**	**-939.53**	**-547.665**	**-664.739**	**-709.508**
+2.35	**979.8547**	**1682.607**	**1845.032**	**1136.656**	**1357.448**	**1449.902**
-2.4	**-397.707**	**-792.941**	**-867.259**	**-505.537**	**-613.605**	**-654.931**
+2.4	**1084.611**	**1881.571**	**2058.803**	**1259.696**	**1501.739**	**1601.331**
-2.45	**-364.565**	**-726.863**	**-794.987**	**-463.409**	**-562.472**	**-600.353**
+2.45	**1161.837**	**2040.357**	**2201.298**	**1341.584**	**1597.499**	**1707.193**
-2.5	**-331.423**	**-660.784**	**-722.715**	**-421.281**	**-511.338**	**-545.775**
+2.5	**1208.626**	**2133.3**	**2320.394**	**1378.934**	**1639.37**	**1762.471**
-2.55	**-298.281**	**-594.706**	**-650.444**	**-379.153**	**-460.204**	**-491.198**
+2.55	**1227.031**	**2174.91**	**2370.412**	**1401.73**	**1665.204**	**1793.041**
-2.6	**-265.138**	**-528.627**	**-578.172**	**-337.024**	**-409.07**	**-436.62**
+2.6	**1232.955**	**2173.189**	**2345.199**	**1424.799**	**1697.338**	**1815.98**
-2.65	**-231.996**	**-462.549**	**-505.901**	**-294.896**	**-357.936**	**-382.043**
+2.65	**1204.282**	**2095.929**	**2301.38**	**1403.489**	**1676.798**	**1784.684**
-2.7	**-198.854**	**-396.47**	**-433.629**	**-252.768**	**-306.803**	**-327.465**
+2.7	**1138.824**	**1988.92**	**2173.954**	**1334.425**	**1601.96**	**1707.363**
-2.75	**-165.711**	**-330.392**	**-361.358**	**-210.64**	**-255.669**	**-272.888**
+2.75	**1049.614**	**1811.92**	**1979.121**	**1230.975**	**1485.1**	**1566.082**
-2.8	**-132.569**	**-264.314**	**-289.086**	**-168.512**	**-204.535**	**-218.31**
+2.8	**923.0097**	**1595.781**	**1715.21**	**1076.936**	**1306.82**	**1364.172**
-2.85	**-99.4268**	**-198.235**	**-216.815**	**-126.384**	**-153.401**	**-163.733**
+2.85	**756.2608**	**1310.505**	**1379.014**	**875.8189**	**1064.225**	**1114.629**
-2.9	**-66.2845**	**-132.157**	**-144.543**	**-84.2561**	**-102.268**	**-109.155**
+2.9	**547.4884**	**944.3497**	**994.628**	**640.6665**	**776.2049**	**811.0357**
-2.95	**-33.1423**	**-66.0784**	**-72.2716**	**-42.1281**	**-51.1338**	**-54.5776**
+2.95	**295.6506**	**517.0728**	**543.8794**	**349.3824**	**422.6764**	**442.6265**
-3	**-1.13E-13**	**-1.1E-13**	**-1E-13**	**-8.2E-14**	**-9.3E-14**	**-8.7E-14**
+3	**2.41E-13**	**2.63E-13**	**2.76E-13**	**1.94E-13**	**2.05E-13**	**2.12E-13**

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-23.20382854	-18.78857146	-23.35584086	-11.86437974	-12.7559863	-12.02063735	-14.53792167	-14.43929986	-15.2768	-6.248026411
End Shear	204.185477	167.9619081	209.1721885	118.2681481	126.277237	118.3916684	141.2114122	131.4438188	138.9178	62.14393082
-0.05	-23.37824217	-18.96298509	-24.83589117	-11.86437974	-12.7559863	-12.02063735	-14.53792167	-14.43929986	-15.2768	-6.248026411
+0.05	187.5214654	154.4333358	188.7976667	110.1994487	117.5941743	110.2166636	131.3164357	121.2510016	128.1294	57.85835043
-0.1	-24.00565669	-20.27733483	-29.94469357	-11.86437974	-12.7559863	-12.02063735	-14.53792167	-14.43929986	-15.2768	-6.248026411
+0.1	170.2760372	140.4885109	167.4889207	101.7812775	108.5389318	101.6848326	120.9977994	110.6141425	116.8721	53.34084077
-0.15	-24.87560732	-27.68621015	-36.01289666	-15.52870159	-15.63421277	-14.60471617	-15.6481218	-14.43929986	-15.2768	-8.005403032
+0.15	156.4923485	129.2593946	150.5115309	94.82575443	101.0601273	94.64021186	112.4843936	101.8934718	107.6435	49.61298369
-0.2	-35.89279555	-36.93300592	-46.35784869	-23.94406052	-24.70313317	-22.6268083	-25.14190743	-17.78760751	-18.8032	-11.27213027
+0.2	140.3476043	116.276094	131.4542037	86.57735615	92.19497776	86.2920435	102.4036923	91.63565318	96.78923	45.198088
-0.25	-45.73442625	-44.9126313	-55.22884508	-30.89621166	-32.19827889	-29.69908264	-33.73095259	-22.81209356	-24.1493	-15.02791404
+0.25	127.3948641	105.8824061	116.4839405	79.80647603	84.92107019	79.44431032	94.14170015	83.28733674	87.9564	41.57912223
-0.3	-58.88229573	-54.78653022	-67.08934972	-39.13933665	-41.08897707	-38.090478	-43.92990704	-29.4027978	-30.9503	-19.48648849
+0.3	112.4831699	93.93996995	101.3457376	71.83145031	76.3575829	71.38502021	84.42646918	73.54412776	77.64881	37.32294829
-0.35	-70.23845366	-63.23849803	-77.32400296	-45.90478899	-48.38911275	-44.98260411	-52.31335237	-37.45909132	-39.4306	-23.15032539
+0.35	100.6056947	84.44356081	90.64508328	65.33155379	69.38155441	64.82185314	76.52216757	65.68114827	69.33134	33.85963067
-0.4	-84.22784937	-73.61627357	-89.79710665	-53.87207259	-56.99001209	-53.10521197	-62.20181829	-47.57811275	-50.1157	-27.47050866
+0.4	87.03893628	73.61108707	78.42215997	57.73351705	61.23131577	57.15664183	67.29992182	56.58812355	59.71397	29.81828834
-0.45	-95.75690856	-82.43363143	-100.3188358	-60.36448933	-64.0021602	-59.72951714	-70.27339397	-56.3870466	-59.4456	-30.9956476
+0.45	76.32569961	65.06526542	68.769838	51.59094318	54.64614676	50.96572001	59.85958822	49.32344227	52.03147	26.5573739
-0.5	-109.894131	-93.18182	-113.0557246	-67.95232294	-72.2016815	-67.47813757	-79.72385593	-66.77078944	-70.4444	-35.12133567
+0.5	64.20553937	55.401599	57.84966529	44.47349119	47.02072158	43.7998013	51.25785996	41.01617246	43.24785	22.78697588
-0.55	-121.7414094	-102.2490752	-123.728181	-74.08536391	-78.83286012	-73.74694751	-87.37729041	-75.24069005	-79.4168	-38.46101556
+0.55	54.73696936	47.8511324	49.31839485	38.77457464	40.91938819	38.06878856	44.38775375	34.46278573	36.31997	19.77522904
-0.6	-135.9883895	-113.2239625	-136.560645	-81.19013728	-86.51942325	-81.01636305	-96.26221225	-85.1498069	-89.9148	-42.33610158
+0.6	44.15479789	39.40487718	39.78362486	32.24132889	33.93036872	31.50737365	36.53407173	27.07684405	28.51365	16.33187897
-0.65	-147.8463806	-122.4170851	-147.2397587	-86.87746643	-92.67665519	-86.84200009	-103.391229	-93.16769786	-98.41	-45.44355816
+0.65	36.00280154	32.88599116	32.43844096	27.07241301	28.40585578	26.32395049	30.34047243	21.54066696	22.67439	13.61605167
-0.7	-162.0067038	-133.4647049	-159.9902474	-93.39557406	-99.73868499	-93.5270119	-111.5830973	-102.4666097	-108.264	-49.01193227
+0.7	27.03976256	25.69549177	24.36250185	21.22696274	22.1648	20.47225391	23.36236928	15.66899433	16.59227	10.55585929
-0.75	-173.707472	-142.6511184	-170.5242238	-98.55084789	-105.328985	-98.82180319	-118.0814267	-109.9195155	-116.162	-51.84041611
+0.75	20.31312229	20.23588035	18.29858099	16.67439441	17.31009636	15.92409451	17.95154841	12.35423339	13.07125	8.182710525
-0.8	-187.5744626	-153.6072638	-183.9296034	-104.378695	-111.6549182	-104.8171874	-125.4526965	-118.4726685	-125.228	-55.04596154
+0.8	13.49686028	14.32924003	12.1579688	11.62035501	11.92858992	10.88731136	11.97653353	8.67075118	9.159435	5.56178619
-0.85	-198.9415284	-162.6458567	-201.0245265	-108.9155671	-116.5852975	-109.4934593	-131.2140675	-125.2476114	-132.41	-57.54871849
+0.85	8.472927022	9.948050618	7.632192879	7.770458557	7.836660565	7.218238341	7.715010647	5.861515989	6.176876	4.024074158
-0.9	-212.2982902	-173.336069	-222.3435115	-113.9495383	-122.063548	-114.6940229	-137.637233	-132.9194137	-140.545	-60.33533369
+0.9	4.372239522	5.34312462	3.935015564	4.166912255	4.166912255	3.651670676	3.787427878	3.168678352	3.335451	2.3975792
-0.95	-223.1466078	-182.0771892	-239.9170926	-117.781684	-126.2410419	-118.6641002	-142.5553722	-138.9034169	-146.891	-62.46560163
+0.95	2.088416281	2.050967068	1.879574652	1.513012123	1.513012123	1.29553159	1.303510041	1.231125283	1.295921	1.178966753
-1	-235.7659862	-192.3167627	-260.4575286	-121.9181726	-130.7600333	-122.964626	-147.9028968	-145.558315	-153.95	-64.77717259
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.35E+02	1.91E+02	258.7707141	1.22E+02	1.30E+02	122.6255525	147.4803252	1.45E+02	1.53E+02	6.46E+01
-2.05	-1.88E+00	-1.75E+00	-1.692290285	-1.38E+00	-1.38E+00	-1.105803032	-1.108954738	-1.05E+00	-1.11E+00	-1.06E+00
+2.05	2.24E+02	1.83E+02	2.42E+02	118.1452332	126.637753	1.19E+02	1.43E+02	1.39E+02	147.5016	6.27E+01
-2.1	-4.62E+00	-5.70E+00	-4.158925812	-4.436377357	-4.436377357	-3.933184849	-4.097195427	-3.373487637	-3.55104	-2.519458278
+2.1	2.11E+02	1.72E+02	2.21E+02	113.5469647	121.6250912	1.14E+02	1.37E+02	1.32E+02	139.8866	6.01E+01
-2.15	-8.00E+00	-9.54E+00	-7.209457448	-7.405083657	-7.448730807	-6.905657917	-7.370551585	-5.594655394	-5.8936	-3.874335684
+2.15	200.1288586	163.5429762	202.7974588	109.3515923	117.0594563	109.9433875	131.7690502	125.9052416	133.1074	57.78999622
-2.2	-14.02064303	-14.79533859	-12.64024898	-12.02464386	-12.35870682	-11.28964443	-12.45301948	-8.96551379	-9.47243	-5.770516649
+2.2	186.4898581	152.6972707	182.227739	103.9076542	111.143334	104.332188	124.8558029	117.7757342	124.4893	54.78688972
-2.25	-19.72160636	-19.71765309	-17.75755807	-16.23674185	-16.84372499	-15.48735968	-17.43267997	-12.03535868	-12.7326	-7.954802803

+2.25	174.9328077	143.5665369	171.2667627	99.05074252	105.8713224	99.33563279	118.7125916	110.6476428	116.934	52.11541353
-2.3	-27.75842772	-26.26917939	-25.00430163	-21.69951402	-22.66903652	-20.94483698	-23.92528514	-16.08503095	-16.9575	-10.80238684
+2.3	160.8908512	132.5434197	158.6327143	92.8647436	99.16331833	92.98222231	110.915009	101.7045924	107.4562	48.72142596
-2.35	-35.22279382	-32.26139716	-31.73445738	-26.57111207	-27.87033636	-25.82164157	-29.74084617	-21.02732436	-22.134	-13.35273489
+2.35	148.9821802	123.3364935	148.0146456	87.43259782	93.27787444	87.41100611	104.0880013	93.95501197	99.24427	45.74760659
-2.4	-44.99804573	-40.08400446	-40.5484108	-32.77348163	-34.49939793	-32.04141244	-37.17275908	-27.67264734	-29.1433	-16.61153243
+2.4	134.7512735	112.3052972	135.2131459	80.60814273	85.88956302	80.42057409	95.53358566	84.33401246	89.05045	42.01885229
-2.45	-53.81048459	-47.12271112	-48.49429069	-38.21824299	-40.32400089	-37.50965194	-43.7179723	-33.82810812	-35.6491	-19.48116947
+2.45	122.8766335	103.1590241	124.5319371	74.68711969	79.48368665	74.36235885	88.12903812	76.07594363	80.30162	38.7894299
-2.5	-65.16429182	-56.18317229	-58.73151713	-45.05658545	-47.64521716	-44.38651751	-51.96167734	-41.69172946	-43.9621	-23.09507046
+2.5	108.6589525	92.27883876	111.7439591	67.32781684	71.52664569	66.84013172	78.94533605	65.91254637	69.53527	34.78201826
-2.55	-75.25750475	-64.23640342	-67.83192053	-50.98816671	-54.00013869	-50.35849836	-59.13024842	-48.61495087	-51.2823	-26.23725432
+2.55	96.87610554	83.32152123	101.1466157	61.00427537	64.69333865	60.38259159	71.06952028	57.25896495	60.36915	31.34376845
-2.6	-88.10394529	-74.49124506	-79.36309978	-58.35891096	-61.90197108	-57.7872521	-68.05822307	-57.33210209	-60.5008	-30.15014148
+2.6	82.86293137	72.74118077	88.54394465	53.21372906	56.2791424	52.43379688	61.38408113	46.68871327	49.17379	27.11380774
-2.65	-99.40204408	-83.51850919	-89.52223882	-64.69097841	-68.69423571	-64.17530432	-75.74388447	-64.91011367	-68.5158	-33.51810981
+2.65	71.32704178	64.09258208	78.16971984	46.57396982	49.11134359	45.66458667	53.14324537	38.2585555	40.27216	23.51346879
-2.7	-113.6449379	-94.91400553	-102.3330208	-72.49049799	-77.06508694	-72.05073602	-85.22860175	-74.34524393	-78.4963	-37.67388919
+2.7	57.69941689	53.95067862	65.91492898	38.45578808	40.35157004	37.39441494	43.08357268	28.59142978	30.09624	19.11707855
-2.75	-126.0635149	-104.8662602	-115.029077	-79.13671044	-84.20171245	-78.767162	-93.32505407	-82.46504029	-87.0864	-41.22088327
+2.75	46.81718579	45.72202149	56.12763349	31.58616969	32.94228113	30.40122772	34.58401127	23.31079644	24.67993	15.40141951
-2.8	-141.596448	-117.3384446	-132.9926275	-87.26138119	-92.9299871	-86.98408301	-103.2390111	-92.48255715	-97.6853	-45.56342912
+2.8	34.87011056	36.14689979	45.38633296	23.24396044	23.94850778	21.91488997	24.2776334	17.2816802	18.26489	10.89468676
-2.85	-155.042544	-128.1581114	-148.8544371	-94.13539783	-100.3179907	-93.94122941	-111.640008	-101.031186	-106.731	-49.24269099
+2.85	25.30617843	28.44086534	36.78668633	16.2308422	16.39073114	15.18781981	16.29631822	14.43929878	15.27677	8.253384297
-2.9	-171.7488483	-141.6327627	-169.2264517	-102.4816524	-109.2921548	-102.3944104	-121.8556554	-111.4955183	-117.805	-53.71591448
+2.9	23.93600563	19.55061907	29.4735539	11.86438122	12.75598463	12.02063538	14.53792239	14.43929878	15.27677	6.248026676
-2.95	-186.1209425	-153.2537239	-186.98447	-109.4971349	-116.8385567	-109.5046019	-130.4549232	-120.3600292	-127.186	-57.48068676
+2.95	23.4131395	18.99786133	25.22865508	11.86438122	12.75598463	12.02063538	14.53792239	14.43929878	15.27677	6.248026676
-3	-203.8737299	-167.6463759	-209.1721885	-117.9613449	-125.9470105	-118.0888332	-140.8447335	-131.1355771	-138.592	-62.02845751
+3	23.20384862	18.78857045	23.35584086	11.86438122	12.75598463	12.02063538	14.53792239	14.43929878	15.27677	6.248026676

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.027258434	-12.41853184	-12.86389065	-11.99059954	-7.25712764	-9.813805986	-11.198956	-12.52576309	-13.90235624
End Shear	88.77576789	114.5174524	113.6144973	105.7057572	71.64938325	96.55954566	108.8646283	118.2306148	127.6464028
-0.05	-9.027258434	-12.41853184	-12.86389065	-12.03576022	-7.25712764	-9.813805986	-11.198956	-12.52576309	-13.90235624
+0.05	82.59656686	105.7277076	104.2624794	95.06298605	66.6910265	89.87432431	101.2158443	109.6939227	118.1772153
-0.1	-9.027258434	-12.41853184	-12.86389065	-12.19821577	-7.25712764	-9.813805986	-11.198956	-12.52576309	-13.90235624
+0.1	76.14882643	96.55016726	94.50908741	84.58108625	61.52380476	82.89842238	93.23100941	100.7843086	108.2972365
-0.15	-10.70979684	-12.41853184	-12.86389065	-13.46556029	-8.419369537	-11.73579508	-12.42946409	-12.52576309	-13.90235624
+0.15	70.82769791	89.02199179	86.54591674	76.22120055	57.25762411	77.13940535	86.64482198	93.44627832	100.1722716
-0.2	-16.20903142	-15.25695094	-12.86389065	-17.42557166	-13.60225081	-18.20249057	-18.95319031	-18.95319031	-18.95319031
+0.2	64.52525654	80.16199364	77.22055717	66.6723388	52.20243392	70.31583178	78.84826564	84.77314338	90.5841607
-0.25	-21.56806417	-19.31596574	-17.54739337	-20.668296	-17.88714756	-23.98979711	-25.54805157	-25.48457341	-25.475391
+0.25	59.35842411	72.94708208	69.66727062	59.6203038	48.05617973	64.71962104	72.46015432	77.67834774	82.75390553
-0.3	-27.92976527	-26.6756915	-23.16132917	-25.06813274	-22.97159267	-30.85759481	-33.45295666	-33.76989444	-33.7596843
+0.3	53.28099361	64.52137506	60.89759716	51.8847574	43.17678073	58.13446199	64.95070695	69.35250682	73.58123814
-0.35	-33.15746768	-33.57280823	-28.54693016	-28.89723496	-27.14789553	-36.49922417	-39.9523472	-41.10180463	-41.7144921
+0.35	48.33487943	57.71702552	53.86054297	45.72731266	39.2035805	52.77279428	58.84304371	62.59328633	66.14868458
-0.4	-39.32171263	-42.24951827	-36.85387231	-34.98877798	-32.07014552	-43.14916403	-47.62052288	-49.76587184	-51.44180818
+0.4	42.56216087	49.84236342	45.77417901	38.59230405	34.56372738	46.51212298	51.71955589	54.72554613	57.51503377
-0.45	-44.35165314	-49.81451459	-43.91184032	-41.80916919	-36.0847195	-48.57338324	-53.88145423	-56.8516871	-59.4099553
+0.45	37.90319058	43.54585537	39.35973965	33.07298245	30.81671722	41.45673577	45.97471374	48.39425367	50.58315714
-0.5	-50.23873709	-58.72704977	-52.47179442	-50.19613042	-40.78102536	-54.9193932	-61.21405642	-65.16503275	-68.77436182
+0.5	32.51489335	36.33898839	32.08431493	26.86222167	26.48016764	35.60663611	39.33602698	41.09542506	42.61210726
-0.55	-55.00450389	-65.99267996	-60.57308111	-57.8266685	-44.58074296	-60.05446894	-67.15415921	-71.91241158	-76.38859461
+0.55	28.20947774	30.64763175	26.84634902	22.3861366	23.01247134	30.92925437	34.03636254	35.28438785	36.28388803
-0.6	-60.53471584	-74.48759998	-70.09049294	-67.13495603	-48.98734078	-66.01046158	-74.05234021	-79.76422079	-85.26650957
+0.6	23.28531472	24.22531234	21.00455519	17.43266578	19.04297875	25.57580821	27.98132161	28.66528391	29.09902833
-0.65	-64.96988217	-81.35657118	-77.82578382	-74.99162812	-52.51907375	-70.78465758	-79.58924838	-86.08082306	-92.42385082
+0.65	19.39988291	19.40790124	16.53493319	13.67936529	15.90773464	21.34817056	23.20922077	23.46686341	23.47744091
-0.7	-70.06352829	-89.31711869	-86.84017022	-83.99498787	-56.57221181	-76.26456127	-85.95416638	-93.36029527	-100.6917002
+0.7	15.01955231	14.24138937	12.36987858	10.15453851	12.3690571	16.57746254	17.83666761	17.78163642	17.77888829
-0.75	-74.10166491	-95.69213914	-94.10308049	-91.2735937	-59.78282416	-80.60614516	-91.00550637	-99.15376445	-107.2891623
+0.75	11.62052632	10.61001621	9.44348925	7.711221105	9.619387571	12.87130242	13.67449146	13.64598669	13.64329443
-0.8	-78.67903176	-103.001578	-102.4868118	-99.81606883	-63.41874376	-85.52386742	-96.73833002	-105.7500832	-114.8233695
+0.8	7.863729886	7.542443398	6.093190285	5.012538452	6.575281386	8.769401214	9.137782765	9.135483999	9.133261226
-0.85	-82.25372524	-108.785354	-109.1710052	-106.6371933	-66.25511382	-89.36110633	-101.2217252	-110.9280869	-120.7579697
+0.85	5.332479654	5.312117788	4.22259405	3.386086506	4.264323621	5.812600591	6.148607577	6.146410424	6.144282884
-0.9	-86.23510628	-115.326916	-116.7964479	-114.2428689	-69.41005456	-93.63058043	-106.2236022	-116.730448	-127.4349545
+0.9	2.935113694	2.916560495	2.317194648	1.827031779	2.305137334	3.015677894	2.983987882	3.01573126	3.014013542
-0.95	-89.27993933	-120.4221546	-122.7955519	-120.0363228	-71.81904709	-96.89173994	-110.0566974	-121.2006429	-132.6037035
+0.95	1.139750407	1.133369275	0.898923331	0.701749535	1.133352295	1.101201852	1.099987923	1.101439198	1.028445249
-1	-92.58562404	-126.079104	-129.5350734	-129.5559969	-74.42926105	-100.426879	-114.2287855	-126.0982206	-138.2998964
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.23E+01	1.26E+02	1.29E+02	1.29E+02	7.42E+01	1.00E+02	113.8989005	125.7094758	1.38E+02
-2.05	-9.73E-01	-9.66E-01	-7.66E-01	-5.98E-01	-1.02E+00	-9.40E-01	-0.938726195	-0.94014748	-9.42E-01
+2.05	8.96E+01	1.21E+02	1.23E+02	1.21E+02	7.20E+01	9.72E+01	110.4217798	121.6277344	1.33E+02
-2.1	-3.124833802	-3.106091025	-2.467926253	-1.948444727	-2.428564559	-3.236600246	-3.204929851	-3.236654186	-3.234914619
+2.1	8.59E+01	1.15E+02	1.16E+02	1.14E+02	6.92E+01	9.33E+01	105.8223634	116.2638326	1.27E+02
-2.15	-5.122855873	-5.102599149	-4.055932045	-3.247708888	-4.045443529	-5.567628345	-5.864700294	-5.86250664	-5.860377631
+2.15	82.59791499	109.3464502	109.8221916	107.3377737	66.52802721	89.73038953	101.6537576	111.4281329	121.3321827
-2.2	-8.163469239	-7.77260698	-6.348634112	-5.223354547	-6.818404686	-9.096944525	-9.451465965	-9.449158045	-9.446907583
+2.2	78.30852104	102.4062834	101.8015879	99.12483838	63.12457455	85.12597076	96.27398171	105.2148714	114.2110698
-2.25	-11.29444283	-10.29465806	-9.138407276	-7.451445448	-9.355406185	-12.51551984	-13.27555251	-13.24953216	-13.24683033
+2.25	74.49376068	96.31468424	94.8146984	92.0059725	60.09440386	81.02754018	91.4962777	99.71752826	107.9321168

-2.3	-15.37302055	-14.65533359	-12.67457357	-10.41347622	-12.65481926	-16.96265509	-18.26986816	-18.2120148	-18.20924174
+2.3	69.64824172	88.6650349	86.0996331	83.2617645	56.24186856	75.81791706	85.43498897	92.76571929	100.0155648
-2.35	-19.02360406	-18.96114019	-16.15259844	-13.35539013	-15.60394982	-20.93856508	-22.74736818	-22.96471966	-22.96152176
+2.35	65.40325374	82.03082512	78.58720427	75.75879667	52.86402103	71.25102565	80.13052252	86.6990869	93.12524997
-2.4	-23.68585899	-24.74374254	-21.47540055	-17.82968941	-19.36604973	-26.01145484	-28.47358357	-29.20248208	-29.68106579
+2.4	60.08131508	73.78846332	69.30530881	66.330861	48.62615232	65.52226283	73.4865604	79.11953866	84.53685372
-2.45	-27.78963263	-30.09611357	-26.34395733	-21.95782615	-22.67419735	-30.47298229	-33.51981854	-34.71879913	-35.66890348
+2.45	55.4725224	66.7089565	61.37367701	58.57803024	44.95375811	60.55863374	67.73771909	72.57598418	77.13816348
-2.5	-32.95587296	-36.92535933	-32.67323815	-27.36265388	-26.83522016	-36.0855543	-39.87907532	-41.69167842	-43.26236034
+2.5	49.7538724	57.99061615	51.65258313	49.42157472	40.39431467	54.39682538	60.60992876	64.47950948	68.00150094
-2.55	-37.44639813	-42.93150885	-38.73656952	-32.53858833	-30.44924239	-40.96094986	-45.41167052	-47.77443907	-49.9053572
+2.55	44.84769697	50.56310447	44.6106732	42.50413113	36.48050288	49.10819218	54.49909988	57.55133397	60.19741342
-2.6	-43.03690599	-50.48691598	-46.4334867	-39.1615046	-34.94544086	-47.02712665	-52.30515844	-55.37162663	-58.22319332
+2.6	38.8120388	41.48551207	36.14150321	34.32868926	31.66323785	42.59943334	46.9863235	49.04874353	50.63606465
-2.65	-47.84777727	-57.04955665	-53.17257433	-45.1273643	-38.81221007	-52.24466073	-58.24174914	-61.92847371	-65.41834899
+2.65	33.67490199	34.25702933	29.13483891	29.3178717	27.56114073	37.05751365	40.59583915	41.82830946	42.52956309
-2.7	-53.7828437	-65.21439201	-61.61660364	-52.51598501	-43.57982408	-58.67836036	-65.57060786	-70.03915815	-74.3369846
+2.7	27.4019429	25.98085417	22.69545701	24.6879354	22.54979851	30.2878695	32.79692013	33.03041455	33.02020469
-2.75	-58.8476364	-72.2362061	-68.92510527	-58.96258818	-47.64621189	-64.16628008	-71.82882145	-76.97772574	-81.98131702
+2.75	22.10025094	19.85090871	18.01695028	21.02354182	18.31255892	24.56441229	26.20916879	26.14032076	26.13117954
-2.8	-65.04756021	-80.89370075	-77.98861829	-67.40837572	-52.62150138	-70.88143969	-79.49418995	-85.49109532	-91.37717416
+2.8	15.66971421	14.87925129	12.86388934	17.10164299	13.17090795	17.61996449	18.41466264	18.41466264	18.41466264
-2.85	-70.29985354	-88.27741647	-85.76017403	-75.40386631	-56.83436217	-76.56802867	-85.99165911	-92.71908496	-99.36770177
+2.85	11.089281	12.41853201	12.86388934	13.80169386	8.851630209	12.18912287	12.96980607	12.96162676	13.90235352
-2.9	-76.68492442	-97.31081932	-95.31555992	-85.43527021	-61.95355752	-83.47855152	-93.89473	-101.5243284	-109.1172022
+2.9	9.027258064	12.41853201	12.86388934	12.18017419	7.257126658	9.81380603	11.19895479	12.52576152	13.90235352
-2.95	-82.05829746	-104.9591666	-103.4438126	-94.13090148	-66.25978699	-89.29207548	-100.5490849	-108.9493749	-117.3509174
+2.95	9.027258064	12.41853201	12.86388934	12.0447892	7.257126658	9.81380603	11.19895479	12.52576152	13.90235352
-3	-88.54880983	-114.2517024	-113.3633903	-105.6113093	-71.45911827	-96.31188062	-108.5909978	-117.9356818	-127.3305071
+3	9.027258064	12.41853201	12.86388934	11.99059781	7.257126658	9.81380603	11.19895479	12.52576152	13.90235352

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-23.48869383	-25.76466041	-14.9195	-18.0698	-19.3421
End Shear	202.3930784	214.6618576	135.0187	163.1409	171.7794
-0.05	-23.48869383	-25.76466041	-14.9195	-18.0698	-19.3421
+0.05	185.588649	196.4550501	124.3505	150.31	157.9788
-0.1	-23.48869383	-25.76466041	-14.9195	-18.0698	-19.3421
+0.1	168.0759517	177.2186698	113.2227	136.9216	143.582
-0.15	-23.48869383	-25.76466041	-14.9195	-18.0698	-19.3421
+0.15	153.7805073	161.5500029	104.1112	125.9555	131.8059
-0.2	-23.48869383	-25.76466041	-18.9848	-20.9977	-21.6982
+0.2	137.0431215	143.2473759	93.40848	113.0694	117.9876
-0.25	-28.13678587	-29.14313258	-24.2546	-26.748	-28.4252
+0.25	123.4891163	128.4632298	84.71088	102.5934	106.771
-0.3	-39.0661257	-40.84333011	-30.5001	-34.9428	-36.4064
+0.3	107.7558584	111.3496739	74.57626	90.38122	93.71723
-0.35	-49.11141661	-52.08870166	-36.2559	-44.7214	-43.9288
+0.35	95.13401742	97.662849	66.41168	80.53832	83.2151
-0.4	-63.49643284	-65.92916712	-46.5515	-57.0774	-57.3659
+0.4	80.6337707	81.99372526	56.98819	69.17172	71.11168
-0.45	-76.58937165	-77.28644288	-55.7117	-68.0677	-68.7236
+0.45	69.13477556	69.61696177	49.47582	60.10495	61.47898
-0.5	-93.18352791	-93.88658902	-66.7067	-81.2552	-83.0846
+0.5	56.09639499	56.36234726	40.90646	49.7555	50.51183
-0.55	-107.767377	-109.8124984	-75.6866	-92.0224	-94.8253
+0.55	46.29665886	46.71732732	34.16545	41.60785	41.90351
-0.6	-124.9058544	-129.070062	-86.2063	-104.632	-108.594
+0.6	35.74337047	36.91187823	26.63542	32.49777	32.5926
-0.65	-138.8399013	-144.759196	-94.7304	-114.846	-119.764
+0.65	28.10017994	29.27918285	21.14396	25.84306	25.47762
-0.7	-155.0841616	-163.089746	-104.632	-126.705	-132.755
+0.7	20.52203272	21.04138913	16.63661	18.75079	19.5748
-0.75	-168.1776866	-177.8999672	-112.581	-136.223	-143.199
+0.75	15.09718723	15.32192219	13.14383	14.44105	15.2376
-0.8	-183.2989011	-195.048181	-121.721	-147.161	-155.226
+0.8	10.06349147	9.743759055	9.260097	10.15153	10.43276
-0.85	-195.3612005	-208.7666957	-128.977	-155.839	-164.79
+0.85	6.82266258	6.196632116	6.295889	6.890967	6.923793
-0.9	-209.130527	-224.4772148	-137.212	-165.685	-175.667
+0.9	3.203632737	3.085860903	3.266954	3.476085	3.380531
-0.95	-219.9708831	-236.8912607	-143.655	-173.38	-184.195
+0.95	1.096410965	1.053359319	1.305371	1.392396	1.161733
-1	-232.1594467	-250.9087485	-150.843	-181.961	-193.737
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.31E+02	2.50E+02	1.50E+02	1.81E+02	1.93E+02
-2.05	-9.43E-01	-9.47E-01	-1.11E+00	-1.19E+00	-9.92E-01
+2.05	2.21E+02	2.38E+02	1.44E+02	174.122	1.85E+02
-2.1	-3.479159352	-3.340694306	-3.56731	-3.80513	-3.65809
+2.1	2.08E+02	2.23E+02	1.37E+02	164.8875	1.75E+02
-2.15	-6.51460763	-6.053941603	-6.01418	-6.58226	-6.61476
+2.15	196.5367064	210.1077707	129.6817	156.6825	165.7202
-2.2	-10.40332774	-10.14742806	-9.57098	-10.4924	-10.8166
+2.2	182.0627059	193.6464686	120.9758	146.2692	154.2447
-2.25	-14.64230229	-14.80161638	-12.8077	-14.0728	-14.821
+2.25	169.4608718	179.3554563	113.3585	137.1534	144.2214

-2.3	**-21.10443238**	**-21.65997397**	**-16.9988**	**-19.2488**	**-20.0253**
+2.3	**153.7494151**	**161.5841776**	**103.8198**	**125.7329**	**131.689**
-2.35	**-27.39126099**	**-28.54432625**	**-20.7314**	**-25.2038**	**-24.8**
+2.35	**140.2117217**	**146.3078655**	**95.56812**	**115.8492**	**120.8626**
-2.4	**-36.59264038**	**-37.70291768**	**-27.2061**	**-33.189**	**-33.3334**
+2.4	**123.4916592**	**127.4819041**	**85.33962**	**103.5932**	**107.4593**
-2.45	**-45.38778213**	**-45.87467553**	**-33.5136**	**-40.8197**	**-41.0721**
+2.45	**109.2088619**	**111.4330795**	**76.57269**	**93.08475**	**95.98454**
-2.5	**-57.15164793**	**-57.36860067**	**-41.6024**	**-50.5963**	**-51.4015**
+2.5	**91.70904669**	**92.56394066**	**65.79741**	**80.16475**	**81.8963**
-2.55	**-68.0178086**	**-68.41552808**	**-48.744**	**-59.2215**	**-60.5415**
+2.55	**77.88645881**	**78.99670122**	**56.63441**	**69.17451**	**69.92821**
-2.6	**-81.81582226**	**-83.26670648**	**-57.7584**	**-70.101**	**-72.1001**
+2.6	**62.17565218**	**64.7837082**	**45.7095**	**56.06714**	**56.23757**
-2.65	**-93.90017615**	**-96.32510558**	**-65.6118**	**-79.5738**	**-82.187**
+2.65	**50.24721935**	**53.24939928**	**37.10594**	**45.74171**	**44.90495**
-2.7	**-109.0456413**	**-112.7483829**	**-75.4088**	**-91.3847**	**-94.7889**
+2.7	**38.11033956**	**39.81952164**	**29.98241**	**34.14309**	**35.74448**
-2.75	**-122.157491**	**-127.0104694**	**-83.8549**	**-101.562**	**-105.668**
+2.75	**28.90271041**	**30.0228036**	**24.77756**	**27.3187**	**29.09321**
-2.8	**-138.4215137**	**-144.7505048**	**-94.2915**	**-114.133**	**-119.127**
+2.8	**23.48869434**	**25.76466003**	**18.45412**	**20.41864**	**21.02116**
-2.85	**-152.3701381**	**-160.0034975**	**-103.211**	**-124.872**	**-130.643**
+2.85	**23.48869434**	**25.76466003**	**14.91953**	**18.06975**	**19.34212**
-2.9	**-169.523822**	**-178.804952**	**-114.144**	**-138.03**	**-144.774**
+2.9	**23.48869434**	**25.76466003**	**14.91953**	**18.06975**	**19.34212**
-2.95	**-184.1185144**	**-194.8360715**	**-123.418**	**-149.188**	**-156.771**
+2.95	**23.48869434**	**25.76466003**	**14.91953**	**18.06975**	**19.34212**
-3	**-201.933101**	**-214.4436098**	**-134.705**	**-162.763**	**-171.388**
+3	**23.48869434**	**25.76466003**	**14.91953**	**18.06975**	**19.34212**

2-Span: Moment (Max and Min) Raw Data Results – 110' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.30E-13	-2.16E-13	-5.02E-13	-1.53E-13	-1.53E-13	-1.79E-13	-2.34E-13	-1.94E-13	-2.05E-13	-1.79E-13
End Shear	5.55E-13	3.56E-13	5.62E-13	2.51E-13	2.70E-13	2.01E-13	2.39E-13	2.89E-13	3.06E-13	1.79E-13
-0.05	-127.621057	-103.337143	-128.4571247	-65.2540886	-70.1579247	-66.1135054	-79.9585692	-79.4161492	-84.0222481	-34.36414526
+0.05	1045.808784	864.3998153	1051.383819	606.0969678	646.7679587	606.2583122	722.7191409	666.880509	704.7117414	318.2209274
-0.1	-255.2421139	-206.6742861	-256.9142495	-130.508177	-140.315849	-132.227011	-159.917138	-158.832298	-168.044496	-68.72829052
+0.1	1945.228646	1616.22083	1912.454584	1128.471858	1203.676436	1127.87864	1342.76335	1227.63945	1297.131461	590.8722474
-0.15	-382.8631709	-310.0114291	-385.3713742	-195.762266	-210.473774	-198.340516	-239.875707	-238.248448	-252.066744	-103.0924358
+0.15	2702.379396	2255.725377	2625.735828	1567.118721	1670.414406	1564.562406	1860.194677	1684.357995	1779.43678	818.6142309
-0.2	-510.4842279	-413.3485721	-513.8284989	-261.016354	-280.631699	-264.454022	-319.834277	-317.664597	-336.088992	-137.456581
+0.2	3315.840998	2784.177773	3205.694314	1923.454598	2048.721932	1917.994128	2277.170689	2054.668423	2171.119988	1002.390109
-0.25	-638.1052848	-516.6857152	-642.2856237	-326.270443	-350.789623	-330.567527	-399.792846	-397.080746	-420.11124	-171.8207263
+0.25	3791.411984	3203.327171	3617.50452	2199.576409	2340.912163	2190.388563	2622.354554	2357.746083	2493.310954	1143.425861
-0.3	-765.7263418	-620.0228582	-770.7427484	-391.524532	-420.947548	-396.681033	-479.751415	-476.496895	-504.133489	-206.1848716
+0.3	4138.128329	3515.407507	3880.185201	2398.103859	2549.86124	2406.154797	2877.390433	2568.522798	2715.267411	1243.685643
-0.35	-893.3473988	-723.3600012	-899.1998731	-456.77862	-491.105473	-462.794538	-559.709984	-555.913044	-588.155737	-240.5490168
+0.35	4384.799021	3723.137406	4053.150842	2529.148802	2699.69682	2548.438723	3041.566002	2711.190052	2867.491855	1304.678085
-0.4	-1020.968456	-826.6971442	-1027.656998	-522.032709	-561.263397	-528.908043	-639.668553	-635.329194	-672.177985	-274.9131621
+0.4	4503.021951	3829.720727	4128.025138	2603.615489	2775.651559	2617.512277	3117.709146	2764.819198	2925.346032	1328.231553
-0.45	-1148.589513	-930.0342873	-1156.114123	-587.286797	-631.421322	-595.021549	-719.627122	-714.745343	-756.200233	-309.2773073
+0.45	4498.3661	3838.845333	4108.428397	2609.281444	2777.974977	2618.168992	3110.841173	2735.435354	2895.075443	1316.693692
-0.5	-1276.21057	-1033.37143	-1284.571247	-652.540886	-701.579247	-661.135054	-799.585692	-794.161492	-840.222481	-343.6414526
+0.5	4422.512474	3768.449901	3988.900168	2558.498199	2725.879704	2569.783026	3057.493234	2694.917681	2851.734676	1299.292727
-0.55	-1403.831627	-1136.708573	-1413.028372	-717.794974	-771.737171	-727.24856	-879.544261	-873.577641	-924.244729	-378.0055979
+0.55	4239.688814	3609.44316	3817.912261	2448.869413	2611.127315	2463.345823	2934.906258	2602.495905	2753.245636	1255.702051
-0.6	-1531.452684	-1240.045716	-1541.485497	-783.049063	-841.895096	-793.362065	-959.50283	-952.993791	-1008.26698	-412.3697431
+0.6	3945.463205	3364.256886	3588.687027	2283.599779	2435.887062	2299.718837	2741.804799	2432.03728	2572.148954	1179.803896
-0.65	-1659.073741	-1343.382859	-1669.942622	-848.303152	-912.053021	-859.475571	-1039.4614	-1032.40994	-1092.28923	-446.7338884
+0.65	3547.333043	3038.270073	3290.87349	2072.15461	2206.402644	2084.56228	2485.190799	2189.862641	2315.27481	1074.527863
-0.7	-1786.694798	-1446.720002	-1798.399746	-913.55724	-982.210945	-925.589076	-1119.41997	-1111.82609	-1176.31147	-481.0980336
+0.7	3053.495095	2637.34723	2863.514956	1820.251798	1929.481544	1824.261149	2172.709477	1885.208395	1994.399604	943.0876791
-0.75	-1914.315854	-1550.057145	-1926.856871	-978.811329	-1052.36887	-991.702582	-1199.37854	-1191.24224	-1260.33372	-515.4621789
+0.75	2473.106881	2167.83725	2334.237068	1528.214868	1615.348916	1525.730246	1812.648187	1531.032003	1619.203821	788.979297
-0.8	-2041.936911	-1653.394288	-2055.313996	-1044.06542	-1122.52679	-1057.81609	-1279.33711	-1270.65839	-1344.35597	-549.8263242
+0.8	1816.376327	1636.57452	1656.792755	1203.193475	1265.621441	1196.415323	1413.938354	1125.405446	1189.722734	615.9814751
-0.85	-2228.855246	-1816.028709	-2237.138669	-1109.31951	-1192.68472	-1123.92959	-1359.29568	-1350.07454	-1428.37822	-584.1904694
+0.85	1149.471066	1110.174438	1035.906166	852.8585747	890.6043492	844.8704397	986.1532386	677.6882935	715.8799304	428.1563785
-0.9	-2528.447547	-2091.337096	-2828.907652	-1174.57359	-1262.84264	-1190.0431	-1439.25424	-1429.49069	-1512.40047	-618.5546147
+0.9	565.0775231	649.8172405	509.2924307	487.6446831	503.2711593	479.5526593	539.5095007	366.4350537	386.2711417	250.2924557
-0.95	-2921.867873	-2460.473508	-3643.508083	-1239.82768	-1333.00057	-1256.1566	-1519.21281	-1508.90684	-1596.42271	-652.9187599
+0.95	227.7685535	244.9455691	204.9916978	187.4882468	187.4882468	169.6168175	178.021057	142.5118603	150.0124845	123.0244686
-1	-3394.702674	-2909.022249	-4594.365757	-1305.08192	-1403.15853	-1322.27014	-1599.17144	-1588.32299	-1680.44501	-687.2829347
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-3394.702674	-2909.022249	-4594.365757	-1305.08192	-1403.15853	-1322.27014	-1599.17144	-1588.32299	-1680.44501	-687.2829347
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-2921.869911	-2460.473404	-3643.518996	-1239.82782	-1333.00043	-1256.15643	-1519.21287	-1508.90673	-1596.42276	-652.918788
+2.05	227.7685623	244.9539367	204.9917057	187.4948884	187.4948884	169.635776	178.0459135	142.4992317	149.9991913	122.5552531
-2.1	-2528.449474	-2091.336998	-2828.909546	-1174.57372	-1262.84251	-1190.04293	-1439.2543	-1429.49058	-1512.40051	-618.5546412
+2.1	565.7661983	649.8299583	509.2927943	487.641507	503.3149143	479.5797319	539.5275626	366.437504	386.273463	249.4264667
-2.15	-2228.857064	-1816.028617	-2237.138637	-1109.31963	-1192.6846	-1123.92944	-1359.29572	-1350.07444	-1428.37826	-584.1904945
+2.15	1150.494802	1110.189846	1035.905978	852.8628061	890.6009995	844.9001941	986.1742764	677.6931592	715.885518	428.1485313
-2.2	-2041.938636	-1653.394219	-2055.313978	-1044.06553	-1122.52668	-1057.81594	-1279.33715	-1270.6583	-1344.35601	-549.8263478
+2.2	1817.066573	1636.59156	1656.79269	1203.19881	1265.624046	1196.407142	1413.961116	1125.410667	1189.728722	615.9738988

-2.25	**-1914.317469**	***-1550.057082***	***-1926.856854***	**-978.811433**	**-1052.36877**	**-991.702448**	**-1199.37858**	**-1191.24215**	**-1260.33376**	**-515.4622011**
+2.25	**2473.921243**	***2167.854857***	***2334.236968***	**1528.22035**	**1615.351564**	**1525.722583**	**1812.671493**	**1531.036276**	**1619.208824**	**788.9716607**
-2.3	**-1786.696301**	***-1446.719944***	***-1798.399729***	**-913.557337**	**-982.210851**	**-925.588953**	**-1119.42**	**-1111.82601**	**-1176.31151**	**-481.0980544**
+2.3	**3054.534199**	***2637.364025***	***2863.515168***	**1820.256116**	**1929.479718**	**1824.25264**	**2172.731535**	**1885.210305**	**1994.402137**	**943.079996**
-2.35	**-1659.075134**	***-1343.382807***	***-1669.942604***	**-848.30324**	**-912.052936**	**-859.475458**	**-1039.46143**	**-1032.40987**	**-1092.28926**	**-446.7339077**
+2.35	**3548.293807**	***3038.285087***	***3290.873775***	**2072.156827**	**2206.39903**	**2084.55203**	**2485.210805**	**2189.858722**	**2315.271182**	**1074.519824**
-2.4	**-1531.453966**	***-1240.045669***	***-1541.485479***	**-783.049143**	**-841.89502**	**-793.361964**	**-959.502857**	**-952.993723**	**-1008.26701**	**-412.369761**
+2.4	**3946.308252**	***3364.269339***	***3588.687295***	**2283.596823**	**2435.880409**	**2299.705781**	**2741.821407**	**2432.029205**	**2572.140945**	**1179.794877**
-2.45	**-1403.832799**	***-1136.708532***	***-1413.028355***	**-717.795047**	**-771.737105**	**-727.248469**	**-879.544284**	**-873.57758**	**-924.244763**	**-378.0056142**
+2.45	**4240.384513**	***3609.452261***	***3817.527721***	**2448.863068**	**2611.116949**	**2463.329131**	**2934.918244**	**2602.483137**	**2753.232671**	**1255.692619**
-2.5	**-1276.211631**	***-1033.371394***	***-1284.57123***	**-652.54095**	**-701.579189**	**-661.134975**	**-799.585711**	**-794.161436**	**-840.222514**	**-343.6414675**
+2.5	**4423.028485**	***3768.454582***	***3988.900111***	**2558.487553**	**2725.864634**	**2569.802006**	**3057.49978**	**2694.93368**	**2851.751972**	**1299.282435**
-2.55	**-1148.590464**	***-930.0342569***	***-1156.114105***	**-587.286853**	**-631.421274**	**-595.02148**	**-719.627137**	**-714.745293**	**-756.200265**	**-309.2773208**
+2.55	**4497.96898**	***3838.843854***	***4108.428335***	**2609.29544**	**2777.993636**	**2618.153255**	**3110.838609**	**2735.421744**	**2895.060664**	**1316.689516**
-2.6	**-1020.969297**	***-826.6971194***	***-1027.65698***	**-522.032757**	**-561.263358**	**-528.907986**	**-639.668564**	**-635.32915**	**-672.178015**	**-274.9131741**
+2.6	**4502.418844**	***3829.714115***	***4128.025116***	**2603.624042**	**2775.664462**	**2617.531309**	**3117.700125**	**2764.834382**	**2925.361516**	**1328.226469**
-2.65	**-893.3481293**	***-723.3599819***	***-899.1998557***	**-456.77866**	**-491.105443**	**-462.794491**	**-559.709991**	**-555.913007**	**-588.155766**	**-240.5490274**
+2.65	**4383.965282**	***3723.124923***	***4053.150895***	**2529.15118**	**2699.70313**	**2548.451679**	**3041.5498**	**2711.198521**	**2867.500222**	**1304.672168**
-2.7	**-765.7269619**	***-620.0228445***	***-770.742731***	**-391.524563**	**-420.947528**	**-396.680997**	**-479.751418**	**-476.496863**	**-504.133517**	**-206.1848807**
+2.7	**4137.04196**	***3515.388641***	***3880.185135***	**2398.09914**	**2549.859922**	**2406.161251**	**2877.376936**	**2568.524273**	**2715.268353**	**1243.678327**
-2.75	**-638.1057945**	***-516.685707***	***-642.2856062***	**-326.270466**	**-350.789612**	**-330.567502**	**-399.792845**	**-397.08072**	**-420.111267**	**-171.8207339**
+2.75	**3790.608166**	***3203.301067***	***3617.504616***	**2199.564542**	**2340.903203**	**2190.387223**	**2622.361886**	**2357.738786**	**2493.302602**	**1143.43258**
-2.8	**-510.4846271**	***-413.3485696***	***-513.8284815***	**-261.01637**	**-280.631697**	**-264.454007**	**-319.834272**	**-317.664577**	**-336.089018**	**-137.4565872**
+2.8	**3314.757931**	***2784.144589***	***3205.6945***	**1923.435424**	**2048.705185**	**1917.985677**	**2277.168888**	**2054.653363**	**2171.10341**	**1002.395539**
-2.85	**-382.8634596**	***-310.0114321***	***-385.3713568***	**-195.762273**	**-210.473781**	**-198.340513**	**-239.875699**	**-238.248433**	**-252.066768**	**-103.0924405**
+2.85	**2701.043532**	***2255.68468***	***2625.73582***	**1567.09187**	**1670.389339**	**1564.546458**	**1860.183705**	**1684.350232**	**1779.428759**	**818.6185722**
-2.9	**-255.2422922**	***-206.6742946***	***-256.914232***	**-130.508176**	**-140.315866**	**-132.227018**	**-159.917125**	**-158.83229**	**-168.044519**	**-68.7282938**
+2.9	**1945.863144**	***1616.172317***	***1912.453903***	**1128.437198**	**1203.642983**	**1127.854777**	**1342.742886**	**1227.623122**	**1297.114378**	**590.874923**
-2.95	**-127.6211248**	***-103.3371572***	***-128.4571073***	**-65.2540796**	**-70.1579503**	**-66.1135237**	**-79.9585523**	**-79.4161468**	**-84.0222697**	**-34.36414708**
+2.95	**1046.129138**	***864.3436487***	***1051.38358***	**606.1052564**	**646.7768692**	**606.2265964**	**722.6891682**	**666.8897868**	**704.7215593**	**318.222265**
-3	**-4.19E-13**	***-2.41E-13***	***-5.26E-13***	**-2.19E-13**	**-2.36E-13**	**-1.45E-13**	**-1.70E-13**	**-1.91E-13**	**-2.01E-13**	**-1.49E-13**
+3	**8.24E-13**	***4.81E-13***	***7.18E-13***	**3.47E-13**	**3.77E-13**	**3.46E-13**	**4.14E-13**	**4.14E-13**	**4.38E-13**	**2.05E-13**

2-Span: Moment (Max and Min) Raw Data Results - 110' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.26E-13	-1.65E-13	-1.89E-13	-1.47E-13	-1.82E-13	-1.41E-13	-1.80E-13	-1.77E-13	-1.75E-13
End Shear	1.77E-13	2.49E-13	2.10E-13	1.98E-13	1.98E-13	1.71E-13	2.01E-13	1.97E-13	2.15E-13
-0.05	-49.64992139	-68.30192513	-70.75139856	-65.94829749	-39.91420202	-53.97593292	-61.594258	-68.891697	-76.4629593
+0.05	454.2811177	581.5023919	573.4436367	526.5855396	366.8006458	494.3087837	556.6871434	604.3854744	651.1617744
-0.1	-99.29984278	-136.6038503	-141.5027971	-131.896595	-79.82840403	-107.9518658	-123.188516	-137.783394	-152.925919
+0.1	844.344664	1071.214667	1049.697636	954.4391625	681.5820035	919.4473671	1034.246011	1123.139266	1213.653339
-0.15	-148.9497642	-204.9057754	-212.2541957	-197.8448925	-119.7426061	-161.9277988	-184.782774	-206.675091	-229.388878
+0.15	1170.513724	1471.30042	1431.051633	1302.476718	945.4994045	1275.161021	1432.446505	1579.544717	1702.356405
-0.2	-198.5996856	-273.2077005	-283.0055942	-263.79319	-159.6568081	-215.9037317	-246.377032	-275.566788	-305.851837
+0.2	1433.862384	1783.595932	1747.38089	1574.441916	1159.007682	1562.836832	1752.973045	1949.776123	2112.718683
-0.25	-248.2496069	-341.5096256	-353.7569928	-329.7414875	-199.5710101	-269.8796646	-307.97129	-344.458485	-382.314797
+0.25	1636.1152	2032.940145	1976.50122	1773.866941	1323.45455	1784.302448	2006.929042	2235.22487	2441.818234
-0.3	-297.8995283	-409.8115508	-424.5083913	-395.689785	-239.4852121	-323.8555975	-369.565548	-413.350182	-458.777756
+0.3	1779.398458	2205.087752	2136.169663	1941.532869	1440.509193	1954.768977	2202.272696	2438.475761	2680.247403
-0.35	-347.5494497	-478.1134759	-495.2597899	-461.6380824	-279.3994141	-377.8315305	-431.159806	-482.241879	-535.240715
+0.35	1881.800092	2298.855036	2256.043989	2049.398374	1512.162133	2069.958062	2326.358075	2581.239398	2830.11827
-0.4	-397.1993711	-546.415401	-566.0111884	-527.5863799	-319.3136161	-431.8074634	-492.754064	-551.133576	-611.703675
+0.4	1930.996976	2334.431258	2330.888674	2099.858567	1540.725544	2125.380416	2383.441425	2653.268799	2905.707891
-0.45	-446.8492925	-614.7173262	-636.762587	-593.5346774	-359.2278182	-485.7833963	-554.348322	-620.025273	-688.166634
+0.45	1928.272304	2305.838345	2335.360094	2118.741168	1528.832753	2124.480523	2376.645761	2652.78698	2914.748247
-0.5	-496.4992139	-683.0192513	-707.5139856	-659.4829749	-399.1420202	-539.7593292	-615.94258	-688.91697	-764.629593
+0.5	1894.14267	2273.538475	2286.225236	2068.081001	1507.769349	2085.971182	2336.353108	2603.36549	2855.045602
-0.55	-546.1491353	-751.3211764	-778.2653841	-725.4312724	-439.0562222	-593.7352622	-677.536838	-757.808667	-841.092553
+0.55	1817.24462	2198.17061	2182.693965	1966.257351	1454.146839	2000.180622	2243.864112	2494.172734	2726.769305
-0.6	-595.7990567	-819.6231015	-849.0167827	-791.3795699	-478.9704242	-647.7111951	-739.131096	-826.700364	-917.555512
+0.6	1696.462383	2063.715652	2020.975803	1815.934713	1364.015324	1867.296543	2096.488537	2324.457122	2546.870172
-0.65	-645.448978	-887.9250267	-919.7681812	-857.3278674	-518.8846262	-701.687128	-800.725354	-895.592061	-994.018471
+0.65	1536.183821	1872.511751	1812.615889	1638.21553	1240.752848	1692.092814	1899.769862	2100.361929	2305.142702
-0.7	-695.0988994	-956.2269518	-990.5195798	-923.2761649	-558.7988282	-755.6630609	-862.319612	-964.483758	-1070.48143
+0.7	1341.431749	1622.215089	1548.407689	1399.411601	1088.059021	1479.777956	1659.384522	1830.884434	2007.92904
-0.75	-744.7488208	-1024.528877	-1061.270978	-989.2244624	-598.7130303	-809.6389939	-923.91387	-1033.37546	-1146.94439
+0.75	1119.895782	1319.266557	1245.508795	1102.649538	909.9546137	1235.993987	1381.572758	1522.530265	1663.134786
-0.8	-794.3987422	-1092.830802	-1132.022377	-1055.17276	-638.6272323	-863.6149268	-985.508128	-1102.26715	-1223.40735
+0.8	871.5099833	971.0653999	886.268393	771.8600104	710.7819042	966.817232	1073.542133	1177.48766	1279.289129
-0.85	-844.0486636	-1161.132727	-1202.773775	-1136.474817	-678.5414343	-917.5908597	-1047.10239	-1171.15885	-1299.87031
+0.85	602.064181	590.7770223	509.244312	436.4445871	495.2044436	678.8114364	742.6611928	803.8488993	865.5432626
-0.9	-893.698585	-1229.434652	-1273.525174	-1430.157415	-718.4556363	-971.5667926	-1108.69664	-1240.05055	-1376.33327
+0.9	330.7153676	330.5250241	262.7647488	218.771039	268.2071547	379.7258951	401.6740417	434.9955041	456.3621322
-0.95	-943.3485064	-1297.736577	-1344.276573	-1917.642568	-758.3698383	-1025.542726	-1170.2909	-1308.94224	-1452.79623
+0.95	132.0107811	131.7884805	104.798029	83.52372114	119.0079577	138.7115392	138.6777699	138.7120843	138.6649278
-1	-992.9984214	-1366.038537	-1415.027951	-2505.772553	-798.2840531	-1079.518656	-1231.88514	-1377.83396	-1529.25915
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-992.9984214	-1366.038537	-1415.027951	-2505.772553	-798.2840531	-1079.518656	-1231.88514	-1377.83396	-1529.25915
+2	0	0	0	0	0	0	0	0	0
-2.05	-943.3484614	-1297.736611	-1344.276416	-1917.642595	-758.3697484	-1025.542722	-1170.29075	-1308.9421	-1452.79591
+2.05	131.9979587	131.792644	104.801205	83.5255108	118.9874763	138.7238202	138.6567047	138.7240928	138.6766638
-2.1	-893.698542	-1229.434685	-1273.525025	-1430.157498	-718.4555518	-971.5667893	-1108.6965	-1240.05041	-1376.33297
+2.1	330.7223331	330.4996209	262.7695929	218.7600516	268.2231088	379.7508841	401.6999062	435.0125616	456.3743159
-2.15	-844.0486227	-1161.132759	-1202.773633	-1136.474655	-678.5413552	-917.5908561	-1047.10225	-1171.15872	-1299.87002
+2.15	602.0657502	590.772177	509.238557	436.4413716	495.2213639	678.8385566	742.6838555	803.8514612	865.5537855
-2.2	-794.3987033	-1092.830832	-1132.022242	-1055.172612	-638.6271586	-863.6149229	-985.507997	-1102.26703	-1223.40708
+2.2	871.5122679	971.0588815	886.2827928	771.8681551	710.7994703	966.8120193	1073.565978	1177.491121	1279.300884
-2.25	-744.748784	-1024.528906	-1061.270851	-989.2243237	-598.712962	-809.6389898	-923.913745	-1033.37535	-1146.94413

+2.25	1119.898049	1319.25916	1245.520975	1102.655678	909.9722021	1235.989164	1381.563586	1522.533727	1663.146747
-2.3	-695.0988646	-956.2269803	-990.5194593	-923.2760358	-558.7987653	-755.6630566	-862.319494	-964.483657	-1070.48119
+2.3	1341.432929	1622.205641	1548.417126	1399.407891	1088.075961	1479.772452	1659.374318	1830.886459	2007.939545
-2.35	-645.4489453	-887.9250542	-919.768068	-857.3277478	-518.8845687	-701.6871235	-800.725243	-895.591969	-994.018244
+2.35	1536.18144	1872.499518	1812.60935	1638.221207	1240.768598	1692.085861	1899.757959	2100.359202	2305.150958
-2.4	-595.7990259	-819.6231281	-849.0166766	-791.3794599	-478.9703721	-647.7111903	-739.130991	-826.700281	-917.5553
+2.4	1696.457758	2063.731277	2020.986261	1815.939774	1364.02909	1867.287263	2096.507185	2324.451564	2546.875071
-2.45	-546.1491066	-751.321202	-778.2652852	-725.4311719	-439.0561755	-593.7352571	-677.53674	-757.808592	-841.092356
+2.45	1817.237336	2198.185089	2182.710034	1966.252432	1454.15795	2000.168326	2243.87948	2494.163531	2726.768136
-2.5	-496.4991872	-683.019276	-707.5138938	-659.482884	-399.1419789	-539.759324	-615.942489	-688.916904	-764.629411
+2.5	1894.132037	2273.548034	2286.236771	2068.090902	1507.777507	2085.955232	2336.364149	2603.351676	2855.039545
-2.55	-446.8492679	-614.7173499	-636.7625024	-593.534596	-359.2277823	-485.7833908	-554.348237	-620.025216	-688.166467
+2.55	1928.285419	2305.830758	2335.349354	2118.748075	1528.82672	2124.465	2376.637514	2652.803826	2914.757546
-2.6	-397.1993485	-546.4154238	-566.011111	-527.586308	-319.3135856	-431.8074576	-492.753986	-551.133527	-611.703522
+2.6	1931.006195	2334.418881	2330.900617	2099.864358	1540.71624	2125.394612	2383.428382	2653.280403	2905.71119
-2.65	-347.5494291	-478.1134977	-495.2597196	-461.6380201	-279.399389	-377.8315245	-431.159735	-482.241839	-535.240578
+2.65	1881.804628	2298.872962	2256.054513	2049.406963	1512.149264	2069.967291	2326.373108	2581.244704	2830.113808
-2.7	-297.8995098	-409.8115716	-424.5083282	-395.6897321	-239.4851924	-323.8555913	-369.565483	-413.350151	-458.777634
+2.7	1779.397768	2205.099873	2136.174093	1941.537724	1440.492441	1954.772899	2202.281771	2438.473837	2680.235825
-2.75	-248.2495904	-341.5096456	-353.7569369	-329.7414442	-199.5709958	-269.8796581	-307.971232	-344.458462	-382.314689
+2.75	1636.109103	2032.945802	1976.514871	1773.869334	1323.433365	1784.300012	2006.931636	2235.21582	2441.798827
-2.8	-198.5996711	-273.2077195	-283.0055455	-263.7931562	-159.6567992	-215.903725	-246.376981	-275.566774	-305.851745
+2.8	1433.850991	1783.594313	1747.387605	1574.44889	1158.982087	1562.828585	1752.968607	1949.759687	2112.723677
-2.85	-148.9497517	-204.9057934	-212.2541541	-197.8448683	-119.7426026	-161.9277918	-184.782729	-206.675086	-229.388801
+2.85	1170.496669	1471.291524	1431.05089	1302.479072	945.4691659	1275.146702	1432.434994	1579.553654	1702.352547
-2.9	-99.29983237	-136.6038673	-141.5027627	-131.8965803	-79.82840593	-107.9518587	-123.188478	-137.783397	-152.925856
+2.9	844.3217064	1071.198362	1049.689115	954.4501417	681.5466098	919.4265678	1034.227402	1123.140225	1213.656188
-2.95	-49.64991302	-68.30194123	-70.75137132	-65.94829237	-39.91420932	-53.9759255	-61.5942266	-68.8917089	-76.462912
+2.95	454.2872737	581.5104073	573.4518294	526.5916429	366.8056895	494.3156723	556.6947289	604.3781793	651.1554002
-3	-1.67E-13	-1.61E-13	-1.55E-13	-1.93E-13	-1.75E-13	-1.28E-13	-1.02E-13	-9.97E-14	-1.18E-13
+3	3.98E-13	3.48E-13	3.36E-13	3.24E-13	2.45E-13	2.95E-13	2.85E-13	2.83E-13	2.94E-13

2-Span: Moment (Max and Min) Raw Data Results - 110' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.91E-13	-3.01E-13	-1.99E-13	-2.46E-13	-2.69E-13
End Shear	3.60E-13	3.59E-13	3.37E-13	3.25E-13	3.25E-13
-0.05	-129.1878161	-141.7056322	-82.0573894	-99.3836342	-106.381656
+0.05	1021.150978	1080.502776	683.9279479	826.7048954	868.8832076
-0.1	-258.3756321	-283.4112645	-164.114779	-198.767268	-212.763311
+0.1	1868.703961	1981.767014	1256.593484	1520.81695	1595.241892
-0.15	-387.5634482	-425.1168967	-246.172168	-298.150903	-319.144967
+0.15	2595.16378	2747.696228	1720.846541	2089.392883	2196.37755
-0.2	-516.7512643	-566.8225289	-328.229558	-397.534537	-425.526623
+0.2	3162.389276	3417.227785	2117.590609	2565.757199	2689.049615
-0.25	-645.9390803	-708.5281612	-410.286947	-496.918171	-531.908279
+0.25	3597.667151	3938.347037	2420.866241	2918.624942	3088.624478
-0.3	-775.1268964	-850.2337934	-492.344336	-596.301805	-638.289934
+0.3	3950.546102	4325.750734	2628.451758	3152.663714	3368.162162
-0.35	-904.3147125	-991.9394256	-574.401726	-695.685439	-744.67159
+0.35	4169.259648	4578.283997	2765.179907	3305.342436	3523.957644
-0.4	-1033.502529	-1133.645058	-656.459115	-795.069073	-851.053246
+0.4	4316.449786	4668.302409	2809.922866	3350.32668	3591.537954
-0.45	-1162.690345	-1275.35069	-738.516505	-894.452708	-957.434902
+0.45	4318.503727	4719.260063	2769.003165	3293.961174	3550.76508
-0.5	-1291.878161	-1417.056322	-820.573894	-993.836342	-1063.81656
+0.5	4236.522497	4617.183322	2727.548011	3246.853439	3493.735252
-0.55	-1421.065977	-1558.761955	-902.631284	-1093.21998	-1170.19821
+0.55	4049.527024	4384.16482	2646.425207	3154.583664	3376.751735
-0.6	-1550.253793	-1700.467587	-984.688673	-1192.60361	-1276.57987
+0.6	3735.569374	4095.134869	2481.196962	2960.687437	3161.230756
-0.65	-1679.441609	-1842.173219	-1066.74606	-1291.98724	-1382.96152
+0.65	3342.420816	3671.371436	2238.476632	2672.533103	2859.997367
-0.7	-1808.629425	-1983.878851	-1148.80345	-1391.37088	-1489.34318
+0.7	2857.250549	3122.779735	1930.980295	2316.347727	2465.049185
-0.75	-1937.817241	-2125.584483	-1230.86084	-1490.75451	-1595.72484
+0.75	2271.530952	2470.632469	1566.940731	1880.447936	1987.279772
-0.8	-2067.005057	-2267.290116	-1312.91823	-1590.13815	-1702.10649
+0.8	1599.90852	1737.414496	1146.271758	1375.058278	1438.521142
-0.85	-2196.192873	-2408.995748	-1394.97562	-1689.52178	-1808.48815
+0.85	899.1504384	963.2068498	678.6441194	824.1000104	831.541595
-0.9	-2325.380689	-2550.70138	-1477.03301	-1788.90542	-1914.8698
+0.9	451.5566432	427.2150559	393.1513211	456.0617428	470.1523394
-0.95	-2454.568505	-2692.407012	-1559.0904	-1888.28905	-2021.25146
+0.95	154.4831415	143.9347787	151.1669066	161.2447004	159.5410943
-1	-2583.756347	-2834.11259	-1641.14778	-1987.67282	-2127.63311
+1	0	0	0	0	0
(Span 2) -2	-2583.756347	-2834.11259	-1641.14778	-1987.67282	-2127.63311
+2	0	0	0	0	0
-2.05	-2454.568528	-2692.40696	-1559.09039	-1888.28918	-2021.25129
+2.05	154.4719132	143.9332445	151.1407627	161.2168136	159.5292989
-2.1	-2325.38071	-2550.70133	-1477.033	-1788.90553	-1914.86964
+2.1	451.5486899	427.2134715	393.1540809	456.0534789	470.1713413
-2.15	-2196.192891	-2408.9957	-1394.97561	-1689.52189	-1808.48799
+2.15	899.1580555	963.2093087	678.6508865	824.1132668	831.560044
-2.2	-2067.005072	-2267.29007	-1312.91822	-1590.13825	-1702.10635
+2.2	1599.927456	1737.415473	1146.278599	1375.069578	1438.539999
-2.25	-1937.817253	-2125.58444	-1230.86083	-1490.75461	-1595.7247

+2.25	2271.548477	2471.189427	1566.946316	1880.457586	1987.297359
-2.3	-1808.629434	-1983.878809	-1148.80344	-1391.37097	-1489.34305
+2.3	2857.264615	3125.015158	1930.98299	2316.353703	2465.063339
-2.35	-1679.441615	-1842.173179	-1066.74605	-1291.98733	-1382.9614
+2.35	3342.429605	3671.369613	2238.473071	2672.531539	2860.007161
-2.4	-1550.253797	-1700.467549	-984.688656	-1192.60369	-1276.57976
+2.4	3737.42185	4095.13728	2481.189051	2960.68029	3161.234799
-2.45	-1421.065978	-1558.761919	-902.631266	-1093.22005	-1170.19811
+2.45	4049.544482	4384.165832	2646.411809	3154.57008	3376.745962
-2.5	-1291.878159	-1417.056289	-820.573876	-993.836406	-1063.81646
+2.5	4236.531487	4617.986494	2727.565102	3246.864759	3493.72181
-2.55	-1162.69034	-1275.350658	-738.516486	-894.452765	-957.434816
+2.55	4318.49741	4719.391921	2769.024368	3293.95231	3550.781027
-2.6	-1033.502521	-1133.645028	-656.459096	-795.069124	-851.053168
+2.6	4316.433701	4668.303162	2809.93835	3350.343494	3591.546304
-2.65	-904.3147023	-991.9393981	-574.401706	-695.685483	-744.671521
+2.65	4169.263952	4578.28202	2765.188818	3305.35113	3523.955793
-2.7	-775.1268835	-850.233768	-492.344316	-596.301842	-638.289874
+2.7	3950.535016	4327.462048	2628.453405	3152.662802	3368.151209
-2.75	-645.9390646	-708.5281378	-410.286926	-496.9182	-531.908227
+2.75	3598.105636	3938.346345	2420.858831	2918.614332	3088.635071
-2.8	-516.7512458	-566.8225076	-328.229536	-397.534559	-425.526579
+2.8	3162.862908	3417.225032	2117.575163	2565.769472	2689.064984
-2.85	-387.5634269	-425.1168775	-246.172146	-298.150918	-319.144932
+2.85	2595.175692	2747.694582	1720.837974	2089.394604	2196.38182
-2.9	-258.3756081	-283.4112473	-164.114757	-198.767277	-212.763285
+2.9	1868.701315	1981.7677	1256.575683	1520.807111	1595.234006
-2.95	-129.1877892	-141.7056171	-82.0573666	-99.3836361	-106.381638
+2.95	1021.134435	1080.505455	683.9378358	826.7167486	868.8957944
-3	-3.17E-13	-2.79E-13	-1.74E-13	-1.80E-13	-2.14E-13
+3	6.39E-13	6.08E-13	4.40E-13	4.14E-13	5.51E-13

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.67959	-4.68097	-6.439477232	-6.67041	-6.55684	-3.763094446	-5.08883	-5.80708	-6.495080682	-7.2089
End Shear	64.43075	46.03358	59.38161911	58.9134	57.21489	37.15290809	50.06977	56.45042	61.30703384	66.18948
-0.05	-6.67959	-4.68097	-6.439477232	-6.67041	-6.58799	-3.763094446	-5.08883	-5.80708	-6.495080682	-7.2089
+0.05	59.84281	42.82944	54.82380484	54.06403	51.43101	34.58181307	46.60323	52.48423	56.88043696	61.27934
-0.1	-6.67959	-4.68097	-6.439477232	-6.67041	-6.70003	-3.763094446	-5.08883	-5.80708	-6.495080682	-7.2089
+0.1	55.05104	39.48604	50.06490395	49.00653	45.7258	31.90241367	42.98596	48.3438	52.26046594	56.1562
-0.15	-6.67959	-5.55343	-6.439477232	-6.67041	-7.39574	-4.365760714	-6.08545	-6.44515	-6.495080682	-7.2089
+0.15	51.16118	36.72683	46.16126098	44.87732	41.18131	29.69023806	39.99969	44.92861	48.45542044	51.9431
-0.2	-10.7869	-8.40499	-7.911304608	-6.67041	-9.51373	-7.053280169	-9.43868	-9.82794	-9.82794416	-9.82794
+0.2	46.4857	33.45878	41.5670177	40.04177	35.99669	27.06893125	36.46141	40.8858	43.95807279	46.9713
-0.25	-14.3469	-11.1839	-10.01605691	-9.09899	-11.2641	-9.27516078	-12.4396	-13.2476	-13.21471268	-13.21
+0.25	42.6582	30.77958	37.82581388	36.12511	32.16076	24.91894204	33.55956	37.57332	40.27915361	42.91102
-0.3	-19.0202	-14.4826	-13.83235235	-12.01	-13.6462	-11.91163737	-16.0008	-17.3466	-17.51096419	-17.5057
+0.3	38.16309	27.62821	33.45676695	31.5777	27.95245	22.3887896	30.14491	33.67939	35.96189101	38.15465
-0.35	-22.9441	-17.1934	-17.40876756	-14.8027	-15.7303	-14.07720795	-18.9262	-20.7168	-21.31283621	-21.6305
+0.35	34.51079	25.06346	29.92845503	27.92872	24.60997	20.32853539	27.36468	30.51234	32.45698021	34.30059
-0.4	-27.6412	-20.3898	-21.90796903	-19.1101	-19.0244	-16.62958025	-22.3745	-24.693	-25.8054819	-26.6745
+0.4	30.25575	22.07009	25.84514567	23.73564	20.74789	17.92259651	24.11829	26.81854	28.37726011	29.82371
-0.45	-31.3642	-22.998	-25.830705	-22.7699	-22.6879	-18.71128831	-25.1871	-27.9396	-29.47974441	-30.8063
+0.45	26.82839	19.65423	22.58016871	20.40951	17.76469	15.9796304	21.49688	23.83962	25.09424613	26.22928
-0.5	-35.8031	-26.0507	-30.4521907	-27.2086	-27.2055	-21.14650005	-28.4778	-31.7418	-33.79052774	-35.6621
+0.5	22.87313	16.8602	18.84313632	16.63693	14.41505	13.73096585	18.46338	20.39721	21.30952816	22.09599
-0.55	-39.4026	-28.5219	-34.21969404	-31.4094	-31.3159	-23.11679697	-31.1405	-34.822	-37.2892982	-39.6104
+0.55	19.72045	14.62768	15.8919532	13.92084	11.99963	11.9328345	16.03799	17.64914	18.29628615	18.81456
-0.6	-43.5874	-31.3895	-38.62463053	-36.3446	-36.3423	-25.40178417	-34.2289	-38.3989	-41.36075747	-44.2139
+0.6	16.12468	12.07431	12.56173832	10.89165	9.333013	9.87450285	13.26202	14.50937	14.86403107	15.08894
-0.65	-46.9503	-33.6893	-42.18645122	-40.3556	-40.5949	-27.23312095	-36.7045	-41.27	-44.63615404	-47.9253
+0.65	13.29645	10.05957	10.06372893	8.573987	7.317254	8.248760506	11.06983	12.03486	12.16845393	12.17394
-0.7	-50.8214	-36.3306	-46.31429541	-45.0299	-45.4917	-29.33482593	-39.5461	-44.5705	-48.41083499	-52.2124
+0.7	10.11985	7.788204	7.384697625	6.414249	5.419958	6.41382271	8.59604	9.248985	9.220449273	9.219024
-0.75	-53.8981	-38.4245	-49.619984	-48.796	-49.4671	-30.99964955	-41.7973	-47.1898	-51.41496731	-55.6335
+0.75	7.685338	6.025681	5.501693654	4.896805	4.106026	4.988015334	6.674256	7.09074	7.075958874	7.074563
-0.8	-57.3959	-40.798	-53.4102038	-53.1433	-54.1503	-32.88501102	-44.3474	-50.1625	-54.83540742	-59.5402
+0.8	5.183861	4.077641	3.91104143	3.159549	2.662613	3.409531442	4.547265	4.738285	4.737093077	4.73594
-0.85	-60.1367	-42.6517	-56.40930984	-56.6093	-57.9083	-34.3557759	-46.3371	-52.4873	-57.52039768	-62.6176
+0.85	3.288424	2.765092	2.754533466	2.189574	1.792106	2.211212663	3.014053	3.188285	3.18714567	3.186042
-0.9	-63.2017	-44.7162	-59.80135649	-60.5634	-62.1279	-35.99173169	-48.551	-55.0809	-60.5291408	-66.0798
+0.9	1.740091	1.521967	1.51234664	1.201553	0.96166	1.195300666	1.563743	1.54731	1.563770423	1.56288
-0.95	-65.5571	-46.295	-62.44342993	-63.6741	-65.3698	-37.24088519	-50.242	-57.0685	-62.84710545	-68.76
+0.95	0.859317	0.591004	0.587694724	0.466126	0.367798	0.587685919	0.571015	0.570385	0.571137775	0.533288
-1	-68.1297	-48.0091	-65.37677157	-67.1688	-70.5999	-38.5943796	-52.0751	-59.2319	-65.38668424	-71.7137
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	67.94879	47.87381	65.14216253	66.88745	70.10526	38.48763952	51.93053	59.06088	65.1851054	71.47847
-2.05	-7.76E-01	-0.50443	-0.50112886	-0.39727	-3.13E-01	-0.530937174	-0.48739	-0.48676	-0.487501934	-0.48821
+2.05	65.80655	46.44521	62.69748597	63.97496	65.68258	37.35960057	50.40277	57.25786	63.06856854	69.01681
-2.1	-1.8332	-1.62034	-1.610625369	-1.27971	-1.02604	-1.259302338	-1.6783	-1.66188	-1.678327294	-1.67743
+2.1	62.9818	44.5507	59.52718205	60.24226	61.79234	35.86071637	48.37367	54.87289	60.2871831	65.80078
-2.15	-3.10646	-2.65639	-2.645890147	-2.10315	-1.71809	-2.097715079	-2.88703	-3.04107	-3.039930848	-3.03883
+2.15	60.42818	42.83013	56.70025936	56.94695	58.29418	34.49729179	46.52859	52.71131	57.77969038	62.91531
-2.2	-5.37807	-4.23307	-4.03038993	-3.29201	-2.77511	-3.535600045	-4.71711	-4.90094	-4.899744903	-4.89858
+2.2	57.13964	40.60592	53.10152107	52.78796	53.77029	32.73247319	44.14103	49.92169	54.55787989	59.22275
-2.25	-7.47166	-5.85659	-5.338168558	-4.73861	-3.96715	-4.851131027	-6.48977	-6.88387	-6.870382246	-6.86898
+2.25	54.22441	38.62783	49.94279712	49.165	49.86746	31.16121538	42.01584	47.44427	51.70730011	55.96687

-2.3	-10.3779	-7.97149	-7.599343319	-6.57224	-5.55946	-6.56200117	-8.79578	-9.47362	-9.443616696	-9.44218
+2.3	50.53178	36.11524	45.97616536	44.64591	45.0919	29.1635305	39.31445	44.30126	48.10252491	51.86184
-2.35	-13.023	-9.86446	-9.832066469	-8.37573	-7.1429	-8.091236619	-10.8574	-11.7954	-11.90807346	-11.9064
+2.35	47.25943	33.91405	42.53607733	40.75043	41.01115	27.41198912	36.94634	41.5507	44.95674716	48.28896
-2.4	-16.4137	-12.282	-12.83056393	-11.1358	-9.54644	-10.04202734	-13.4879	-14.7646	-15.14258858	-15.3908
+2.4	43.22321	31.15443	38.2621018	35.93742	35.90811	25.21449433	33.97577	38.10555	41.02646547	43.83555
-2.45	-19.4077	-14.41	-15.60597022	-13.6603	-11.7687	-11.75742668	-15.8014	-17.3813	-18.00300707	-18.4957
+2.45	39.73508	28.7646	34.59111045	31.82457	31.72156	23.3102194	31.40194	35.12456	37.63338563	39.99905
-2.5	-23.1872	-17.0889	-19.14719177	-16.9423	-14.6846	-13.91507398	-18.7117	-20.6788	-21.61870802	-22.4332
+2.5	35.4151	25.79926	30.07032209	26.78381	26.78914	20.94597598	28.20681	31.42853	33.43505807	35.26134
-2.55	-26.4803	-19.4174	-22.26160687	-20.0864	-17.4762	-15.78908084	-21.2398	-23.5477	-24.77284888	-25.8778
+2.55	31.71531	23.25522	26.21887709	23.13232	23.06166	18.91651692	25.46445	28.25984	29.84253771	31.21463
-2.6	-30.589	-22.3163	-26.17937048	-24.0775	-21.0559	-18.12052935	-24.3853	-27.1222	-28.71227723	-30.1909
+2.6	27.17112	20.12551	21.51180299	18.74073	18.67012	16.41858327	22.08941	24.36418	25.43362382	26.25671
-2.65	-34.1317	-24.8109	-29.58234724	-27.572	-24.2846	-20.12559506	-27.0908	-30.2005	-32.11224978	-33.9219
+2.65	23.30929	17.46171	17.76356201	15.10751	15.95895	14.29149118	19.21572	21.05047	21.68955637	22.05318
-2.7	-38.5101	-27.8884	-33.81612238	-31.9505	-28.2955	-22.59778277	-30.4269	-34.0008	-36.31794563	-38.5465
+2.7	18.60045	14.20894	13.47205298	11.76845	13.43995	11.69292119	15.7054	17.00644	17.12751597	17.12222
-2.75	-42.2527	-30.5147	-37.45719788	-35.7403	-31.8025	-24.70635825	-33.2726	-37.246	-39.91585468	-42.5104
+2.75	14.73797	11.45981	10.29344501	9.342468	11.45598	9.495752618	12.73757	13.59044	13.55474242	13.55
-2.8	-46.8412	-33.7296	-41.94643544	-40.44	-36.397	-27.28623354	-36.7547	-41.2207	-44.33035796	-47.3825
+2.8	10.40703	8.125338	7.715453092	6.670412	9.339618	6.829612626	9.136616	9.548697	9.548697248	9.548697
-2.85	-50.7341	-36.4531	-45.77517058	-44.4699	-40.7373	-29.47076078	-39.7034	-44.5899	-48.07834325	-51.5259
+2.85	6.819781	5.750211	6.439477322	6.670412	7.574655	4.589904179	6.32052	6.725334	6.721092436	7.208895
-2.9	-55.4732	-39.764	-50.45933073	-49.4247	-46.1905	-32.12525669	-43.2868	-48.688	-52.64419415	-56.5814
+2.9	6.679598	4.680974	6.439477322	6.670412	6.687584	3.763093937	5.088829	5.807081	6.495079864	7.208895
-2.95	-59.4667	-42.5503	-54.42528732	-53.6395	-50.9244	-34.35819911	-46.3013	-52.1385	-56.49436086	-60.8509
+2.95	6.679598	4.680974	6.439477322	6.670412	6.594215	3.763093937	5.088829	5.807081	6.495079864	7.208895
-3	-64.2968	-45.9159	-59.2438177	-58.7832	-57.1659	-37.05424852	-49.9413	-56.3085	-61.15409996	-66.0257
+3	6.679598	4.680974	6.439477322	6.670412	6.556841	3.763093937	5.088829	5.807081	6.495079864	7.208895

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.67959	-6.15213	-6.6144601	-6.23315	-7.53846	-7.487321678	-7.92158	-3.23984
End Shear	64.43075	61.3265	65.47951102	61.39055	73.22344	68.15857857	72.03411	32.22397
-0.05	-6.67959	-6.15213	-6.6144601	-6.23315	-7.53846	-7.487321678	-7.92158	-3.23984
+0.05	59.84281	57.14257	60.97701546	57.1515	68.09253	62.87321837	66.43993	30.00174
-0.1	-6.67959	-6.15213	-6.6144601	-6.23315	-7.53846	-7.487321678	-7.92158	-3.23984
+0.1	55.05104	52.77743	56.28153062	52.72742	62.74192	57.35760567	60.60257	27.65924
-0.15	-6.67959	-8.05222	-8.106929101	-7.5731	-8.11414	-7.487321678	-7.92158	-4.1511
+0.15	51.16118	49.17073	52.40348837	49.07452	58.3274	52.83560893	55.8172	25.7262
-0.2	-10.7869	-12.4159	-12.80950644	-11.7329	-13.037	-9.223545505	-9.75016	-5.84502
+0.2	46.4857	44.89363	47.80657389	44.74568	53.10018	47.516543	50.18887	23.43691
-0.25	-14.3469	-16.0209	-16.69602224	-15.4001	-17.4908	-11.82893107	-12.5223	-7.79254
+0.25	42.6582	41.38267	44.03477842	41.19487	48.81602	43.187626	45.60871	21.56034
-0.3	-19.0202	-20.2952	-21.30618464	-19.7513	-22.7793	-15.24645984	-16.0489	-10.1045
+0.3	38.16309	37.24732	39.59428722	37.01583	43.77831	38.1354046	40.26384	19.35336
-0.35	-22.9441	-23.8034	-25.09158037	-23.3252	-27.1264	-19.42395194	-20.4463	-12.0043
+0.35	34.51079	33.87688	35.97695328	33.61258	39.67963	34.05815311	35.95092	17.5575
-0.4	-27.6412	-27.9347	-29.55147114	-27.5371	-32.254	-24.67104628	-25.9869	-14.2445
+0.4	30.25575	29.93701	31.75074709	29.63787	34.89755	29.34307677	30.96395	15.46191
-0.45	-31.3642	-31.3013	-33.18753446	-30.972	-36.4394	-29.23881079	-30.8248	-16.0724
+0.45	26.82839	26.75185	28.33608855	26.42765	31.03945	25.57606548	26.98028	13.771
-0.5	-35.8031	-35.2358	-37.43929556	-34.99	-41.3398	-34.62317316	-36.5281	-18.2117
+0.5	22.87313	23.06118	24.38201793	22.71185	26.57913	21.2684327	22.42564	11.81591
-0.55	-39.4026	-38.4161	-40.87781183	-38.2406	-45.3084	-39.01513614	-41.1806	-19.9435
+0.55	19.72045	20.10608	21.21824641	19.7401	23.01672	17.87025446	18.83327	10.2542
-0.6	-43.5874	-42.1001	-44.86358478	-42.01	-49.9156	-44.15338703	-46.6242	-21.9529
+0.6	16.12468	16.71835	17.59417616	16.33776	18.94429	14.04036508	14.7854	8.468695
-0.65	-46.9503	-45.0492	-48.05634182	-45.0309	-53.6123	-48.31096596	-51.0293	-23.5642
+0.65	13.29645	14.03807	14.72950779	13.64996	15.73268	11.16964841	11.75752	7.060436
-0.7	-50.8214	-48.4291	-51.71827067	-48.4973	-57.86	-53.13280254	-56.1388	-25.4145
+0.7	10.11985	11.00698	11.49328494	10.61564	12.11427	8.12496465	8.603717	5.473611
-0.75	-53.8981	-51.1023	-54.61705211	-51.2428	-61.2297	-56.99741535	-60.2345	-26.8812
+0.75	7.685338	8.646303	8.97593796	8.257244	9.308555	6.406136058	6.777935	4.243044
-0.8	-57.3959	-54.1243	-57.89728711	-54.3517	-65.052	-61.43254782	-64.9355	-28.5434
+0.8	5.183861	6.025592	6.185423865	5.645482	6.210284	4.496111579	4.749513	2.883996
-0.85	-60.1367	-56.4768	-60.45387475	-56.7765	-68.0394	-64.94561128	-68.6597	-29.8412
+0.85	3.288424	4.029276	4.06360413	3.742929	4.000524	3.039417158	3.202943	2.086634
-0.9	-63.2017	-59.0871	-63.29455432	-59.4732	-71.3701	-68.92373022	-72.8777	-31.2861
+0.9	1.740091	2.160701	2.160701195	1.893529	1.963924	1.643079259	1.729557	1.243235
-0.95	-65.5571	-61.0742	-65.46074248	-61.5318	-73.9203	-72.02666162	-76.1684	-32.3908
+0.95	0.859317	0.784554	0.784553862	0.671782	0.675919	0.638384902	0.671984	0.611339
-1	-68.1297	-63.2192	-67.80401	-63.7618	-76.6932	-75.47747729	-79.829	-33.5894
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	67.94879	63.05041	67.61940028	63.58597	76.47411	75.20121238	79.53592	33.49494
-2.05	-7.76E-01	-0.71746	-0.717463962	-0.5734	-0.57503	-0.544886239	-0.57356	-0.54866
+2.05	65.80655	61.26276	65.66645218	61.72744	74.16311	72.32527156	76.48515	32.49598
-2.1	-1.8332	-2.30043	-2.300429016	-2.0395	-2.12455	-1.7492806	-1.84135	-1.30643
+2.1	62.9818	58.87838	63.06719795	59.25724	71.10302	68.60196823	72.5365	31.17053
-2.15	-3.10646	-3.83982	-3.862447917	-3.58084	-3.82191	-2.901039872	-3.05605	-2.00899
+2.15	60.42818	56.70293	60.699744	57.00979	68.32722	65.28661737	69.02123	29.96629
-2.2	-5.37807	-6.23523	-6.408455704	-5.85411	-6.45736	-4.648957112	-4.91181	-2.99223
+2.2	57.13964	53.88004	57.63201142	54.10018	64.74244	61.0711611	64.5524	28.40907
-2.25	-7.47166	-8.41936	-8.734106816	-8.03078	-9.0395	-6.240787492	-6.60232	-4.12487
+2.25	54.22441	51.36155	54.8982745	51.50927	61.55696	57.37497684	60.63466	27.02381

-2.3	**-10.3779**	**-11.252**	**-11.7547506**	**-10.8607**	**-12.4062**	**-8.340695335**	**-8.79313**	**-5.60145**
+2.3	**50.53178**	**48.15387**	**51.41992135**	**48.21479**	**57.51362**	**52.73766785**	**55.72008**	**25.2639**
-2.35	**-13.023**	**-13.7781**	**-14.45182077**	**-13.3895**	**-15.4218**	**-10.90346091**	**-11.4773**	**-6.9239**
+2.35	**47.25943**	**45.3371**	**48.36809668**	**45.3259**	**53.97356**	**48.71921803**	**51.4619**	**23.72186**
-2.4	**-16.4137**	**-16.9943**	**-17.88923927**	**-16.6147**	**-19.2755**	**-14.34931156**	**-15.1119**	**-8.61371**
+2.4	**43.22321**	**41.79836**	**44.53697849**	**41.7011**	**49.53777**	**43.73036684**	**46.17602**	**21.78836**
-2.45	**-19.4077**	**-19.8176**	**-20.90951563**	**-19.4502**	**-22.6694**	**-17.54115018**	**-18.4854**	**-10.1017**
+2.45	**39.73508**	**38.72809**	**41.21528994**	**38.55969**	**45.69823**	**39.44824663**	**41.63942**	**20.11378**
-2.5	**-23.1872**	**-23.3635**	**-24.70584245**	**-23.0161**	**-26.9441**	**-21.61873449**	**-22.796**	**-11.9757**
+2.5	**35.4151**	**34.91201**	**37.08926404**	**34.65913**	**40.93613**	**34.17814175**	**36.05666**	**18.03579**
-2.55	**-26.4803**	**-26.4393**	**-28.00110899**	**-26.1128**	**-30.6613**	**-25.20868596**	**-26.5918**	**-13.605**
+2.55	**31.71531**	**31.63302**	**33.54593656**	**31.31065**	**36.85223**	**29.69093334**	**31.30368**	**16.25293**
-2.6	**-30.589**	**-30.2613**	**-32.09850717**	**-29.9649**	**-35.2908**	**-29.72885771**	**-31.3719**	**-15.634**
+2.6	**27.17112**	**27.59333**	**29.18285838**	**27.1889**	**31.82996**	**24.2098591**	**25.49846**	**14.05953**
-2.65	**-34.1317**	**-33.5447**	**-35.62055261**	**-33.2773**	**-39.2761**	**-33.65834258**	**-35.528**	**-17.3804**
+2.65	**23.30929**	**24.15036**	**25.46608431**	**23.67881**	**27.55678**	**19.83850428**	**20.88264**	**12.19262**
-2.7	**-38.5101**	**-37.5891**	**-39.96115475**	**-37.361**	**-44.1942**	**-38.55081355**	**-40.7033**	**-19.5353**
+2.7	**18.60045**	**19.94078**	**20.92381127**	**19.39041**	**22.34046**	**14.82573491**	**15.60604**	**9.912926**
-2.75	**-42.2527**	**-41.0354**	**-43.6617643**	**-40.8437**	**-48.3926**	**-42.76123427**	**-45.1576**	**-21.3746**
+2.75	**14.73797**	**16.37862**	**17.08181547**	**15.76418**	**17.93311**	**12.08752732**	**12.79747**	**7.986217**
-2.8	**-46.8412**	**-45.2483**	**-48.18770397**	**-45.1045**	**-53.5333**	**-47.95569466**	**-50.6535**	**-23.6264**
+2.8	**10.40703**	**12.05287**	**12.41820471**	**11.3637**	**12.58887**	**8.961203112**	**9.471034**	**5.649306**
-2.85	**-50.7341**	**-48.8128**	**-52.01866252**	**-48.7121**	**-57.8896**	**-52.38848118**	**-55.3441**	**-25.5342**
+2.85	**6.819781**	**8.416304**	**8.499212415**	**7.875458**	**8.450256**	**7.487321121**	**7.921583**	**4.279691**
-2.9	**-55.4732**	**-53.1406**	**-56.67210518**	**-53.0954**	**-63.1868**	**-57.81463223**	**-61.0862**	**-27.8537**
+2.9	**6.679598**	**6.152129**	**6.614459231**	**6.233153**	**7.538461**	**7.487321121**	**7.921583**	**3.239838**
-2.95	**-59.4667**	**-56.7784**	**-60.58519924**	**-56.7823**	**-67.6458**	**-62.41121555**	**-65.951**	**-29.8059**
+2.95	**6.679598**	**6.152129**	**6.614459231**	**6.233153**	**7.538461**	**7.487321121**	**7.921583**	**3.239838**
-3	**-64.2968**	**-61.1674**	**-65.3082761**	**-61.2335**	**-73.0333**	**-67.99874363**	**-71.8649**	**-32.1641**
+3	**6.679598**	**6.152129**	**6.614459231**	**6.233153**	**7.538461**	**7.487321121**	**7.921583**	**3.239838**

2-Span: Shear (Max and Min) Raw Data Results - 110' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.67959	-13.5851	-14.9015	-8.62899	-10.451	-11.1869
End Shear	64.43075	117.0579	124.1538	78.09062	94.35562	99.35188
-0.05	-6.67959	-13.5851	-14.9015	-8.62899	-10.451	-11.1869
+0.05	59.84281	107.3387	113.6235	71.9205	86.93463	91.37002
-0.1	-6.67959	-13.5851	-14.9015	-8.62899	-10.451	-11.1869
+0.1	55.05104	97.20992	102.4978	65.48448	79.19119	83.0434
-0.15	-6.67959	-13.5851	-14.9015	-8.62899	-10.451	-11.1869
+0.15	51.16118	88.94188	93.43551	60.21471	72.84873	76.23243
-0.2	-10.7869	-13.5851	-14.9015	-10.9802	-12.1444	-12.5496
+0.2	46.4857	79.26149	82.84984	54.02457	65.39583	68.24039
-0.25	-14.3469	-16.2734	-16.8555	-14.0281	-15.4702	-16.4403
+0.25	42.6582	71.42228	74.29915	48.99415	59.33682	61.75305
-0.3	-19.0202	-22.5946	-23.6225	-17.6403	-20.2098	-21.0563
+0.3	38.16309	62.32265	64.4012	43.1326	52.2737	54.20314
-0.35	-22.9441	-28.4045	-30.1265	-20.9693	-25.8655	-25.4071
+0.35	34.51079	55.02257	56.48516	38.41046	46.58087	48.12904
-0.4	-27.6412	-36.7244	-38.1314	-26.9239	-33.0118	-33.1786
+0.4	30.25575	46.63607	47.42263	32.9602	40.00678	41.12879
-0.45	-31.3642	-44.2969	-44.7001	-32.2219	-39.3682	-39.7476
+0.45	26.82839	39.98541	40.26429	28.61528	34.76284	35.55754
-0.5	-35.8031	-53.8945	-54.3011	-38.5811	-46.9955	-48.0535
+0.5	22.87313	32.44442	32.59823	23.65903	28.77704	29.21448
-0.55	-39.4026	-62.3293	-63.5121	-43.7748	-53.2229	-54.844
+0.55	19.72045	26.77655	27.01985	19.76024	24.06469	24.23569
-0.6	-43.5874	-72.2417	-74.6501	-49.859	-60.5158	-62.8076
+0.6	16.12468	20.67286	21.34869	15.4051	18.7957	18.85055
-0.65	-46.9503	-80.3007	-83.7242	-54.7891	-66.4232	-69.2679
+0.65	13.29645	16.25227	16.93417	12.22901	14.94683	14.73546
-0.7	-50.8214	-89.6959	-94.3261	-60.5158	-73.2824	-76.7815
+0.7	10.11985	11.86931	12.16969	9.6221	10.84488	11.32146
-0.75	-53.8981	-97.2688	-102.892	-65.1135	-78.7871	-82.8221
+0.75	7.685338	8.731745	8.861725	7.601981	8.352258	8.812955
-0.8	-57.3959	-106.014	-112.81	-70.3998	-85.1134	-89.7782
+0.8	5.183861	5.820411	5.635488	5.355753	5.871332	6.033984
-0.85	-60.1367	-112.991	-120.744	-74.5961	-90.1326	-95.3094
+0.85	3.288424	3.946017	3.58394	3.641347	3.985522	4.004507
-0.9	-63.2017	-120.955	-129.831	-79.3594	-95.8268	-101.6
+0.9	1.740091	1.852882	1.784766	1.889505	2.01046	1.955194
-0.95	-65.5571	-127.224	-137.011	-83.0853	-100.278	-106.533
+0.95	0.859317	0.63413	0.60923	0.754986	0.805319	0.67191
-1	-68.1297	-134.274	-145.118	-87.2429	-105.241	-112.051
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	67.94879	133.706	144.4642	86.90942	104.8428	111.608
-2.05	-7.76E-01	-0.54516	-0.54792	-0.64427	-0.68722	-0.57348
+2.05	65.80655	127.8309	137.7077	83.44445	100.7068	107.0088
-2.1	-1.8332	-2.01224	-1.93215	-2.06322	-2.20077	-2.11573
+2.1	62.9818	120.3077	129.0923	78.9736	95.36581	101.0904
-2.15	-3.10646	-3.76785	-3.50141	-3.47841	-3.80697	-3.82577
+2.15	60.42818	113.6707	121.5198	75.00386	90.62029	95.84744
-2.2	-5.37807	-6.01696	-5.86896	-5.53556	-6.06848	-6.25596
+2.2	57.13964	105.2994	111.9991	69.96863	84.59755	89.21033
-2.25	-7.47166	-8.46865	-8.5608	-7.40759	-8.13926	-8.57199
+2.25	54.22441	98.01091	103.7336	65.56305	79.32525	83.41319

-2.3	**-10.3779**	**-12.2061**	**-12.5275**	**-9.83159**	**-11.1329**	**-11.582**
+2.3	**50.53178**	**88.9239**	**93.45528**	**60.04616**	**72.72**	**76.16486**
-2.35	**-13.023**	**-15.8423**	**-16.5092**	**-11.9904**	**-14.5771**	**-14.3435**
+2.35	**47.25943**	**81.09411**	**84.61993**	**55.27364**	**67.00361**	**69.90316**
-2.4	**-16.4137**	**-21.164**	**-21.8062**	**-15.7352**	**-19.1955**	**-19.279**
+2.4	**43.22321**	**71.42375**	**73.73158**	**49.35779**	**59.91509**	**62.15112**
-2.45	**-19.4077**	**-26.2509**	**-26.5325**	**-19.3832**	**-23.6088**	**-23.7548**
+2.45	**39.73508**	**63.16302**	**64.44944**	**44.28727**	**53.83733**	**55.51448**
-2.5	**-23.1872**	**-33.0547**	**-33.1802**	**-24.0615**	**-29.2633**	**-29.729**
+2.5	**35.4151**	**53.04167**	**53.53611**	**38.05518**	**46.36481**	**47.36628**
-2.55	**-26.4803**	**-39.3394**	**-39.5694**	**-28.192**	**-34.2519**	**-35.0153**
+2.55	**31.71531**	**45.04711**	**45.68924**	**32.75559**	**40.00839**	**40.44431**
-2.6	**-30.589**	**-47.3197**	**-48.1589**	**-33.4057**	**-40.5443**	**-41.7005**
+2.6	**27.17112**	**35.96047**	**37.46889**	**26.43696**	**32.42749**	**32.52607**
-2.65	**-34.1317**	**-54.309**	**-55.7115**	**-37.9479**	**-46.023**	**-47.5344**
+2.65	**23.30929**	**29.06143**	**30.7978**	**21.46092**	**26.45559**	**25.97163**
-2.7	**-38.5101**	**-63.0686**	**-65.2102**	**-43.6141**	**-52.8541**	**-54.823**
+2.7	**18.60045**	**22.04184**	**23.03038**	**17.34089**	**19.74731**	**20.6735**
-2.75	**-42.2527**	**-70.6521**	**-73.4589**	**-48.4991**	**-58.7404**	**-61.1149**
+2.75	**14.73797**	**16.71643**	**17.36426**	**14.33058**	**15.80029**	**16.82661**
-2.8	**-46.8412**	**-80.0587**	**-83.7192**	**-54.5353**	**-66.0108**	**-68.8994**
+2.8	**10.40703**	**13.58513**	**14.90148**	**10.67329**	**11.80951**	**12.15799**
-2.85	**-50.7341**	**-88.1262**	**-92.5411**	**-59.694**	**-72.2219**	**-75.5598**
+2.85	**6.819781**	**13.58513**	**14.90148**	**8.628991**	**10.45098**	**11.18688**
-2.9	**-55.4732**	**-98.0473**	**-103.415**	**-66.0174**	**-79.8325**	**-83.7326**
+2.9	**6.679598**	**13.58513**	**14.90148**	**8.628991**	**10.45098**	**11.18688**
-2.95	**-59.4667**	**-106.488**	**-112.687**	**-71.381**	**-86.2857**	**-90.6718**
+2.95	**6.679598**	**13.58513**	**14.90148**	**8.628991**	**10.45098**	**11.18688**
-3	**-64.2968**	**-116.792**	**-124.028**	**-77.909**	**-94.1372**	**-99.1254**
+3	**6.679598**	**13.58513**	**14.90148**	**8.628991**	**10.45098**	**11.18688**

2-Span: Moment (Max and Min) Raw Data Results - 110' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-1.71E-13**	**-6.5E-14**	**-8.57265E-14**	**-9.8E-14**	**-7.75E-14**	**-9.43361E-14**	**-7.3E-14**	**-9.4E-14**	**-9.18041E-14**	**-9.1E-14**
End Shear	**2.15E-13**	**9.16E-14**	**1.2894E-13**	**1.09E-13**	**1.05E-13**	**1.029E-13**	**8.85E-14**	**1.04E-13**	**1.02163E-13**	**1.12E-13**
-0.05	**-36.7377**	**-25.7454**	**-35.41712477**	**-36.6873**	**-36.0626**	**-20.69701945**	**-27.9886**	**-31.9389**	**-35.72294375**	**-39.6489**
+0.05	**329.1355**	**235.5619**	**301.5309266**	**297.3522**	**285.4492**	**190.1999719**	**256.3178**	**288.6633**	**313.3966681**	**337.6519**
-0.1	**-73.4755**	**-51.4907**	**-70.83424955**	**-73.3745**	**-72.1253**	**-41.39403891**	**-55.9771**	**-63.8779**	**-71.4458875**	**-79.2979**
+0.1	**609.9319**	**437.8246**	**555.4652148**	**544.3078**	**518.2011**	**353.4259806**	**476.7681**	**536.2956**	**582.3900782**	**629.325**
-0.15	**-110.213**	**-77.2361**	**-106.2513743**	**-110.062**	**-108.188**	**-62.09105836**	**-83.9657**	**-95.8168**	**-107.1688312**	**-118.947**
+0.15	**844.1595**	**606.9555**	**762.9247703**	**742.0543**	**708.0642**	**490.2771089**	**661.2191**	**742.7775**	**819.0535219**	**882.736**
-0.2	**-146.951**	**-102.981**	**-141.6684991**	**-146.749**	**-144.251**	**-82.78807782**	**-111.954**	**-127.756**	**-142.891775**	**-158.596**
+0.2	**1031.208**	**743.5117**	**924.8617744**	**906.0829**	**856.9798**	**600.989205**	**810.3899**	**908.9827**	**1011.032472**	**1095.524**
-0.25	**-183.689**	**-128.727**	**-177.0856239**	**-183.436**	**-180.313**	**-103.4850973**	**-139.943**	**-159.695**	**-178.6147187**	**-198.245**
+0.25	**1173.569**	**848.3875**	**1054.156155**	**1024.89**	**966.7795**	**686.2611098**	**925.2281**	**1040.668**	**1159.048416**	**1266.175**
-0.3	**-220.426**	**-154.472**	**-212.5027486**	**-220.124**	**-216.376**	**-124.1821167**	**-167.931**	**-191.634**	**-214.3376625**	**-237.894**
+0.3	**1275.124**	**922.6852**	**1143.421183**	**1107.685**	**1058.61**	**746.9583578**	**1013.621**	**1141.961**	**1264.44167**	**1389.809**
-0.35	**-257.164**	**-180.218**	**-247.9198734**	**-256.811**	**-252.438**	**-144.8791362**	**-195.92**	**-223.573**	**-250.0606062**	**-277.543**
+0.35	**1348.252**	**975.7843**	**1192.043057**	**1169.844**	**1117.93**	**784.1131103**	**1073.351**	**1206.304**	**1338.470001**	**1467.523**
-0.4	**-293.902**	**-205.963**	**-283.3369982**	**-293.498**	**-288.501**	**-165.5761556**	**-223.908**	**-255.512**	**-285.78355**	**-317.191**
+0.4	**1380.749**	**1001.295**	**1210.49067**	**1208.654**	**1145.982**	**798.9243165**	**1102.09**	**1235.904**	**1375.819963**	**1506.719**
-0.45	**-330.64**	**-231.708**	**-318.754123**	**-330.185**	**-324.564**	**-186.2731751**	**-251.897**	**-287.451**	**-321.5064937**	**-356.84**
+0.45	**1375.008**	**999.8819**	**1195.664167**	**1210.972**	**1156.159**	**792.7574556**	**1101.623**	**1232.38**	**1375.570122**	**1511.407**
-0.5	**-367.377**	**-257.454**	**-354.1712477**	**-366.873**	**-360.626**	**-206.9701945**	**-279.886**	**-319.389**	**-357.2294375**	**-396.489**
+0.5	**1353.234**	**982.1844**	**1178.915465**	**1185.494**	**1128.775**	**781.8352859**	**1081.655**	**1211.487**	**1349.943215**	**1480.449**
-0.55	**-404.115**	**-283.199**	**-389.5883725**	**-403.56**	**-396.689**	**-227.667214**	**-307.874**	**-351.328**	**-392.9523812**	**-436.138**
+0.55	**1300.057**	**942.3099**	**1139.834384**	**1131.809**	**1073.359**	**754.0299917**	**1037.169**	**1163.528**	**1293.322652**	**1413.933**
-0.6	**-440.853**	**-308.944**	**-425.0054973**	**-440.247**	**-432.752**	**-248.3642334**	**-335.863**	**-383.267**	**-428.675325**	**-475.787**
+0.6	**1213.573**	**879.6797**	**1070.114416**	**1047.952**	**991.2934**	**707.2934012**	**968.2637**	**1087.108**	**1205.318705**	**1320.648**
-0.65	**-477.591**	**-334.69**	**-460.4226221**	**-476.934**	**-468.814**	**-269.0612529**	**-363.851**	**-415.206**	**-464.3982687**	**-515.436**
+0.65	**1097.003**	**796.5693**	**970.9679807**	**939.9097**	**893.5205**	**643.3771575**	**877.414**	**985.1023**	**1089.116894**	**1195.303**
-0.7	**-514.328**	**-360.435**	**-495.8397468**	**-513.622**	**-504.877**	**-289.7582724**	**-391.84**	**-447.145**	**-500.1212125**	**-555.085**
+0.7	**953.8693**	**695.583**	**841.1797195**	**802.9078**	**762.5717**	**564.199648**	**767.3207**	**860.4535**	**949.3826467**	**1041.187**
-0.75	**-551.066**	**-386.18**	**-531.2568716**	**-550.309**	**-540.939**	**-310.4552918**	**-419.828**	**-479.084**	**-535.8441562**	**-594.734**
+0.75	**788.1059**	**580.7082**	**684.0894771**	**645.8433**	**600.0684**	**471.845794**	**640.9095**	**716.3976**	**789.4893775**	**862.3981**
-0.8	**-587.804**	**-411.926**	**-566.6739964**	**-586.996**	**-577.002**	**-331.1523113**	**-447.817**	**-511.023**	**-571.5671**	**-634.383**
+0.8	**604.0988**	**451.9108**	**503.5340419**	**459.5636**	**418.4194**	**368.5672306**	**501.3312**	**556.6721**	**610.5717707**	**663.3597**
-0.85	**-624.542**	**-437.671**	**-602.0911212**	**-623.684**	**-623.654**	**-351.8493307**	**-475.805**	**-542.962**	**-607.2900437**	**-674.032**
+0.85	**404.7997**	**312.193**	**306.3401723**	**264.0624**	**235.4979**	**256.7821849**	**351.9893**	**385.0978**	**416.8259784**	**448.8168**
-0.9	**-661.279**	**-463.416**	**-637.5082459**	**-660.371**	**-785.425**	**-372.5463502**	**-503.794**	**-574.901**	**-643.0129875**	**-713.681**
+0.9	**207.0979**	**171.4884**	**171.3896936**	**136.2534**	**117.1211**	**139.0755275**	**196.9022**	**208.2831**	**225.5615785**	**236.641**
-0.95	**-698.017**	**-489.162**	**-672.9253707**	**-697.058**	**-1051.85**	**-393.2433696**	**-531.783**	**-606.84**	**-678.7359312**	**-753.33**
+0.95	**89.79858**	**68.45257**	**68.33729868**	**54.34173**	**44.14151**	**61.7101155**	**71.92717**	**71.90966**	**71.92744845**	**71.903**
-1	**-734.756**	**-514.907**	**-708.3425132**	**-733.745**	**-1373.98**	**-413.9403957**	**-559.771**	**-638.779**	**-714.4588857**	**-792.979**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-734.756**	**-514.907**	**-708.3425132**	**-733.745**	**-1373.98**	**-413.9403957**	**-559.771**	**-638.779**	**-714.4588857**	**-792.979**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-698.018**	**-489.162**	**-672.925388**	**-697.058**	**-1051.85**	**-393.243323**	**-531.783**	**-606.84**	**-678.7358565**	**-753.329**
+2.05	**89.79858**	**68.44592**	**68.33945764**	**54.34338**	**44.14244**	**61.69949512**	**71.93353**	**71.89873**	**71.93367528**	**71.90908**
-2.1	**-661.28**	**-463.416**	**-637.5082627**	**-660.371**	**-785.425**	**-372.5463064**	**-503.794**	**-574.901**	**-643.0129172**	**-713.681**
+2.1	**207.3938**	**171.492**	**171.3765211**	**136.2559**	**117.1154**	**139.0838003**	**196.9152**	**208.2966**	**225.5704234**	**236.6473**
-2.15	**-624.542**	**-437.671**	**-602.0911374**	**-623.684**	**-623.653**	**-351.8492897**	**-475.805**	**-542.962**	**-607.289978**	**-674.032**
+2.15	**405.2395**	**312.1938**	**306.3376599**	**264.0594**	**235.4962**	**256.7909587**	**352.0034**	**385.1096**	**416.8273068**	**448.8223**
-2.2	**-587.805**	**-411.926**	**-566.6740122**	**-586.996**	**-577.002**	**-331.152273**	**-447.817**	**-511.023**	**-571.5670387**	**-634.383**
+2.2	**604.3953**	**451.912**	**503.5306619**	**459.5711**	**418.4236**	**368.5763393**	**501.3285**	**556.6845**	**610.5735655**	**663.3658**
-2.25	**-551.067**	**-386.18**	**-531.2568869**	**-550.309**	**-540.939**	**-310.4552564**	**-419.828**	**-479.084**	**-535.8440995**	**-594.734**

+2.25	788.4558	580.7094	684.0856418	645.8496	600.0716	471.8549142	640.907	716.3928	789.4911728	862.4043
-2.3	-514.329	-360.435	-495.8397616	-513.622	-504.877	-289.7582397	-391.84	-447.145	-500.1211602	-555.085
+2.3	954.3157	695.5836	841.1748202	802.9127	762.5698	564.208432	767.3178	860.4482	949.3836966	1041.192
-2.35	-477.591	-334.69	-460.4226363	-476.934	-468.814	-269.0612231	-363.851	-415.206	-464.398221	-515.436
+2.35	1097.416	796.568	970.9616374	939.9063	893.5234	643.3853246	877.4104	985.0962	1089.115479	1195.308
-2.4	-440.853	-308.944	-425.0055111	-440.247	-432.752	-248.3642064	-335.863	-383.267	-428.6752817	-475.787
+2.4	1213.936	879.6773	1070.122518	1047.958	991.296	707.3005393	968.2589	1087.118	1205.315823	1320.651
-2.45	-404.116	-283.199	-389.5883858	-403.56	-396.689	-227.6671898	-307.874	-351.328	-392.9523424	-436.138
+2.45	1300.356	942.3061	1139.841892	1131.817	1073.356	754.0357531	1037.163	1163.536	1293.31788	1413.932
-2.5	-367.378	-257.454	-354.1712605	-366.873	-360.626	-206.9701731	-279.886	-319.389	-357.2294032	-396.489
+2.5	1353.456	982.1789	1178.920422	1185.5	1128.78	781.8395163	1081.646	1211.493	1349.936052	1480.446
-2.55	-330.64	-231.708	-318.7541353	-330.185	-324.564	-186.2731565	-251.897	-287.45	-321.5064639	-356.84
+2.55	1374.838	999.8887	1195.660232	1210.967	1156.163	792.7543274	1101.615	1232.376	1375.578857	1511.412
-2.6	-293.902	-205.963	-283.33701	-293.498	-288.501	-165.5761398	-223.908	-255.512	-285.7835247	-317.191
+2.6	1380.49	1001.3	1210.484252	1208.66	1145.985	798.9194917	1102.097	1235.898	1375.82598	1506.721
-2.65	-257.164	-180.217	-247.9198847	-256.811	-252.438	-144.8791232	-195.92	-223.573	-250.0605854	-277.542
+2.65	1347.894	975.7867	1192.052352	1169.849	1117.934	784.1064369	1073.356	1206.312	1338.472753	1467.521
-2.7	-220.427	-154.472	-212.5027595	-220.124	-216.376	-124.1821065	-167.931	-191.634	-214.3376462	-237.894
+2.7	1274.658	922.6849	1143.427468	1107.687	1058.612	746.9496714	1013.623	1141.966	1264.440673	1389.803
-2.75	-183.689	-128.727	-177.0856342	-183.436	-180.313	-103.4850899	-139.943	-159.695	-178.6147069	-198.245
+2.75	1173.224	848.3843	1054.159088	1024.898	966.7807	686.2501245	925.2269	1040.67	1159.043723	1266.165
-2.8	-146.951	-102.981	-141.6685089	-146.749	-144.251	-82.7880732	-111.954	-127.756	-142.8917677	-158.596
+2.8	1030.743	743.5058	924.860935	906.0864	856.9834	600.9759331	810.3856	908.9804	1011.02395	1095.527
-2.85	-110.213	-77.2361	-106.2513837	-110.062	-108.188	-62.09105655	-83.9657	-95.8168	-107.1688284	-118.947
+2.85	843.5856	606.9467	762.9201575	742.0539	708.0654	490.2614291	661.2117	742.7716	819.0581559	882.734
-2.9	-73.4756	-51.4907	-70.83425839	-73.3745	-72.1253	-41.39403989	-55.9771	-63.8779	-71.44588916	-79.2978
+2.9	610.2046	437.8127	555.45676	544.3034	518.2068	353.4076276	476.7574	536.2859	582.3905754	629.3265
-2.95	-36.7378	-25.7454	-35.41713313	-36.6873	-36.0626	-20.69702324	-27.9886	-31.9389	-35.7229499	-39.6489
+2.95	329.2731	235.5651	301.5350828	297.3564	285.4524	190.2025873	256.3213	288.6672	313.3928853	337.6486
-3	-1.62E-13	-8.6E-14	-8.35154E-14	-8E-14	-1.02E-13	-9.09191E-14	-6.6E-14	-5.3E-14	-5.16847E-14	-6.1E-14
+3	3.10E-13	2.07E-13	1.80256E-13	1.74E-13	1.73E-13	1.27202E-13	1.53E-13	1.48E-13	1.46661E-13	1.53E-13

2-Span: Moment (Max and Min) Raw Data Results - 110' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-1.71E-13	-7.9E-14	-7.9E-14	-9.3E-14	-1.2E-13	-1E-13	-1.1E-13	-9.27778E-14
End Shear	2.15E-13	1.3E-13	1.4E-13	1.04E-13	1.24E-13	1.5E-13	1.58E-13	9.28606E-14
-0.05	-36.7377	-33.8367	-36.3795	-34.2823	-41.4615	-41.1803	-43.5687	-17.81910566
+0.05	329.1355	314.2841	335.3736	314.3678	374.7571	345.8027	365.4196	165.0095553
-0.1	-73.4755	-67.6734	-72.7591	-68.5647	-82.9231	-82.3605	-87.1374	-35.63821131
+0.1	609.9319	585.1552	624.1516	584.8476	696.2735	636.5774	672.6116	306.3895501
-0.15	-110.213	-101.51	-109.139	-102.847	-124.385	-123.541	-130.706	-53.45731697
+0.15	844.1595	812.6102	866.1729	811.2846	964.5811	873.4032	922.7051	424.4823598
-0.2	-146.951	-135.347	-145.518	-137.129	-165.846	-164.721	-174.275	-71.27642263
+0.2	1031.208	997.3838	1062.34	994.5523	1180.799	1065.423	1125.808	519.7770851
-0.25	-183.689	-169.184	-181.898	-171.412	-207.308	-205.901	-217.844	-89.09552828
+0.25	1173.569	1140.563	1213.851	1135.799	1359.79	1222.58	1292.876	592.9094432
-0.3	-220.426	-203.02	-218.277	-205.694	-248.769	-247.082	-261.412	-106.9146339
+0.3	1275.124	1243.507	1322.199	1247.682	1492.035	1331.876	1407.969	644.897922
-0.35	-257.164	-236.857	-254.657	-239.976	-290.231	-288.262	-304.981	-124.7337396
+0.35	1348.252	1311.459	1399.895	1321.462	1577.167	1405.854	1486.903	676.5248045
-0.4	-293.902	-270.694	-291.036	-274.259	-331.692	-329.442	-348.55	-142.5528453
+0.4	1380.749	1350.073	1439.28	1357.279	1616.65	1433.663	1516.902	688.7381659
-0.45	-330.64	-304.53	-327.416	-308.541	-373.154	-370.622	-392.118	-160.3719509
+0.45	1375.008	1353.011	1440.485	1357.619	1613.089	1418.426	1501.206	682.7553496
-0.5	-367.377	-338.367	-363.795	-342.823	-414.615	-411.803	-435.687	-178.1910566
+0.5	1353.234	1326.678	1413.471	1332.529	1585.426	1397.416	1478.732	673.7322929
-0.55	-404.115	-372.204	-400.175	-377.106	-456.077	-452.983	-479.256	-196.0101622
+0.55	1300.057	1269.831	1353.968	1277.338	1521.86	1349.492	1427.662	651.1288831
-0.6	-440.853	-406.04	-436.554	-411.388	-497.538	-494.163	-522.824	-213.8292679
+0.6	1213.573	1184.133	1263.099	1192.491	1421.729	1261.103	1333.756	611.7728268
-0.65	-477.591	-439.877	-472.934	-445.671	-539	-535.343	-566.393	-231.6483735
+0.65	1097.003	1074.49	1144.103	1080.924	1288.665	1135.526	1200.557	557.1832318
-0.7	-514.328	-473.714	-509.313	-479.953	-580.461	-576.524	-609.962	-249.4674792
+0.7	953.8693	943.8692	1000.509	945.9482	1126.632	977.5517	1034.171	489.0265383
-0.75	-551.066	-507.551	-545.693	-514.235	-621.923	-617.704	-653.531	-267.2865849
+0.75	788.1059	792.4371	837.6193	791.1487	939.9265	793.8978	839.6183	409.1155286
-0.8	-587.804	-541.387	-582.072	-548.518	-663.385	-658.884	-697.099	-285.1056905
+0.8	604.0988	623.9012	656.2725	620.3865	733.1804	583.5652	616.9161	319.4096319
-0.85	-624.542	-575.224	-618.452	-582.8	-704.846	-700.065	-740.668	-302.9247962
+0.85	404.7997	442.2393	461.812	438.0972	511.3577	351.4069	371.2107	222.0152339
-0.9	-661.279	-609.061	-654.832	-617.082	-746.308	-741.245	-784.237	-320.7439018
+0.9	207.0979	252.8622	260.9651	248.6661	279.756	190.0104	200.2962	129.7860802
-0.95	-698.017	-642.897	-691.211	-651.365	-787.769	-782.425	-827.805	-338.5630075
+0.95	89.79858	97.21973	97.21973	87.95272	92.31063	73.89778	77.78713	63.79282789
-1	-734.756	-676.734	-727.591	-685.647	-829.231	-823.605	-871.374	-356.3821284
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-734.756	-676.734	-727.591	-685.647	-829.231	-823.605	-871.374	-356.3821284
+2	0	0	0	0	0	0	0	0
-2.05	-698.018	-642.897	-691.211	-651.364	-787.769	-782.425	-827.805	-338.563022
+2.05	89.79858	97.22317	97.22317	87.96255	92.32352	73.89123	77.78024	63.54952196
-2.1	-661.28	-609.061	-654.831	-617.082	-746.308	-741.245	-784.237	-320.7439156
+2.1	207.3938	252.8605	260.9878	248.6802	279.7654	190.0117	200.2974	129.3370322
-2.15	-624.542	-575.224	-618.452	-582.8	-704.846	-700.065	-740.668	-302.9248092
+2.15	405.2395	442.2415	461.8102	438.1126	511.3686	351.4095	371.2136	222.0111648
-2.2	-587.805	-541.387	-582.072	-548.517	-663.385	-658.884	-697.099	-285.1057028
+2.2	604.3953	623.904	656.2738	620.3822	733.1922	583.5679	616.9192	319.4057033
-2.25	-551.067	-507.551	-545.693	-514.235	-621.923	-617.704	-653.531	-267.2865964

+2.25	788.4558	792.4399	837.6207	791.1447	939.9385	793.9001	839.6209	409.1115689
-2.3	-514.329	-473.714	-509.313	-479.953	-580.462	-576.524	-609.962	-249.46749
+2.3	954.3157	943.8715	1000.508	945.9438	1126.643	977.5527	1034.173	489.0225543
-2.35	-477.591	-439.877	-472.934	-445.67	-539	-535.343	-566.393	-231.6483835
+2.35	1097.416	1074.491	1144.101	1080.919	1288.676	1135.524	1200.555	557.1790633
-2.4	-440.853	-406.041	-436.554	-411.388	-497.538	-494.163	-522.824	-213.8292771
+2.4	1213.936	1184.131	1263.096	1192.484	1421.738	1261.099	1333.752	611.7681497
-2.45	-404.116	-372.204	-400.175	-377.106	-456.077	-452.983	-479.256	-196.0101707
+2.45	1300.356	1269.828	1353.963	1277.329	1521.866	1349.486	1427.655	651.1239921
-2.5	-367.378	-338.367	-363.795	-342.823	-414.615	-411.803	-435.687	-178.1910643
+2.5	1353.456	1326.672	1413.464	1332.539	1585.429	1397.425	1478.741	673.7269561
-2.55	-330.64	-304.53	-327.416	-308.541	-373.154	-370.622	-392.118	-160.3719579
+2.55	1374.838	1353.018	1440.494	1357.611	1613.087	1418.419	1501.198	682.7531843
-2.6	-293.902	-270.694	-291.036	-274.259	-331.692	-329.442	-348.55	-142.5528515
+2.6	1380.49	1350.077	1439.287	1357.289	1616.645	1433.671	1516.91	688.7355296
-2.65	-257.164	-236.857	-254.657	-239.976	-290.231	-288.262	-304.981	-124.7337451
+2.65	1347.894	1311.46	1399.898	1321.468	1577.158	1405.859	1486.907	676.521736
-2.7	-220.427	-203.02	-218.277	-205.694	-248.769	-247.082	-261.412	-106.9146387
+2.7	1274.658	1243.505	1322.199	1247.685	1492.028	1331.877	1407.969	644.8941287
-2.75	-183.689	-169.184	-181.898	-171.412	-207.308	-205.901	-217.844	-89.09553225
+2.75	1173.224	1140.557	1213.847	1135.798	1359.794	1222.577	1292.871	592.9129271
-2.8	-146.951	-135.347	-145.518	-137.129	-165.846	-164.721	-174.275	-71.27642584
+2.8	1030.743	997.3738	1062.331	994.5479	1180.798	1065.415	1125.799	519.7799008
-2.85	-110.213	-101.51	-109.139	-102.847	-124.385	-123.541	-130.706	-53.45731942
+2.85	843.5856	812.5963	866.1599	811.2764	964.5754	873.3991	922.7009	424.4846109
-2.9	-73.4756	-67.6734	-72.7591	-68.5647	-82.9231	-82.3605	-87.1374	-35.63821301
+2.9	610.2046	585.1373	624.1343	584.8352	696.2628	636.5689	672.6027	306.3909375
-2.95	-36.7378	-33.8367	-36.3795	-34.2824	-41.4615	-41.1803	-43.5687	-17.8191066
+2.95	329.2731	314.2884	335.3782	314.3514	374.7416	345.8075	365.4247	165.0102489
-3	-1.62E-13	-1.1E-13	-1.2E-13	-7.5E-14	-8.8E-14	-9.9E-14	-1E-13	-7.70892E-14
+3	3.10E-13	1.8E-13	1.95E-13	1.8E-13	2.15E-13	2.15E-13	2.27E-13	1.0636E-13

2-Span: Moment (Max and Min) Raw Data Results - 110' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-1.71E-13	-1.7E-13	-1.7E-13	-1.2E-13	-1.4E-13	-1.6E-13
End Shear	2.15E-13	2.08E-13	2.08E-13	1.95E-13	1.88E-13	1.88E-13
-0.05	-36.7377	-74.7182	-81.9581	-47.4595	-57.4804	-61.5279
+0.05	329.1355	590.6021	624.9293	395.5627	478.1405	502.5351
-0.1	-73.4755	-149.436	-163.916	-94.9189	-114.961	-123.056
+0.1	609.9319	1080.8	1146.193	726.7747	879.5934	922.6385
-0.15	-110.213	-224.155	-245.874	-142.378	-172.441	-184.584
+0.15	844.1595	1500.962	1589.182	995.2843	1208.44	1270.317
-0.2	-146.951	-298.873	-327.833	-189.838	-229.922	-246.111
+0.2	1031.208	1829.028	1976.419	1224.749	1483.954	1555.263
-0.25	-183.689	-373.591	-409.791	-237.297	-287.402	-307.639
+0.25	1173.569	2080.779	2277.818	1400.154	1688.042	1786.365
-0.3	-220.426	-448.309	-491.749	-284.757	-344.882	-369.167
+0.3	1275.124	2284.873	2501.88	1520.215	1823.403	1948.041
-0.35	-257.164	-523.028	-573.707	-332.216	-402.363	-430.695
+0.35	1348.252	2411.371	2647.938	1599.294	1911.708	2038.148
-0.4	-293.902	-597.746	-655.665	-379.676	-459.843	-492.223
+0.4	1380.749	2496.501	2700.001	1625.172	1937.725	2077.234
-0.45	-330.64	-672.464	-737.623	-427.135	-517.324	-553.751
+0.45	1375.008	2497.689	2729.474	1601.506	1905.125	2053.652
-0.5	-367.377	-747.182	-819.581	-474.595	-574.804	-615.279
+0.5	1353.234	2450.273	2670.436	1577.529	1877.879	2020.668
-0.55	-404.115	-821.901	-901.54	-522.054	-632.285	-676.806
+0.55	1300.057	2342.121	2535.665	1530.61	1824.513	1953.009
-0.6	-440.853	-896.619	-983.498	-569.513	-689.765	-738.334
+0.6	1213.573	2160.538	2368.499	1435.047	1712.37	1828.358
-0.65	-477.591	-971.337	-1065.46	-616.973	-747.245	-799.862
+0.65	1097.003	1933.153	2123.407	1294.665	1545.71	1654.134
-0.7	-514.328	-1046.06	-1147.41	-664.432	-804.726	-861.39
+0.7	953.8693	1652.545	1806.119	1116.819	1339.704	1425.708
-0.75	-551.066	-1120.77	-1229.37	-711.892	-862.206	-922.918
+0.75	788.1059	1313.783	1428.937	906.2699	1087.593	1149.381
-0.8	-587.804	-1195.49	-1311.33	-759.351	-919.687	-984.446
+0.8	604.0988	925.3375	1004.867	662.968	795.2911	831.996
-0.85	-624.542	-1270.21	-1393.29	-806.811	-977.167	-1045.97
+0.85	404.7997	520.0407	557.089	392.5067	476.6339	480.9379
-0.9	-661.279	-1344.93	-1475.25	-854.27	-1034.65	-1107.5
+0.9	207.0979	261.1664	247.0879	227.3865	263.772	271.9215
-0.95	-698.017	-1419.65	-1557.2	-901.73	-1092.13	-1169.03
+0.95	89.79858	89.34826	83.24741	87.43025	93.25894	92.27362
-1	-734.756	-1494.36	-1639.16	-949.189	-1149.61	-1230.56
+1	0	0	0	0	0	0
(Span 2) -2	-734.756	-1494.36	-1639.16	-949.189	-1149.61	-1230.56
+2	0	0	0	0	0	0
-2.05	-698.018	-1419.65	-1557.2	-901.73	-1092.13	-1169.03
+2.05	89.79858	89.34177	83.24653	87.41513	93.24281	92.2668
-2.1	-661.28	-1344.93	-1475.25	-854.27	-1034.65	-1107.5
+2.1	207.3938	261.1618	247.087	227.3881	263.7672	271.9325
-2.15	-624.542	-1270.21	-1393.29	-806.811	-977.167	-1045.97
+2.15	405.2395	520.0451	557.0904	392.5106	476.6416	480.9486
-2.2	-587.805	-1195.49	-1311.33	-759.351	-919.687	-984.446
+2.2	604.3953	925.3484	1004.867	662.972	795.2976	832.0069
-2.25	-551.067	-1120.77	-1229.37	-711.892	-862.206	-922.918

+2.25	788.4558	1313.793	1429.259	906.2732	1087.598	1149.391
-2.3	-514.329	-1046.06	-1147.41	-664.432	-804.726	-861.39
+2.3	954.3157	1652.553	1807.412	1116.821	1339.707	1425.716
-2.35	-477.591	-971.337	-1065.46	-616.973	-747.245	-799.862
+2.35	1097.416	1933.158	2123.406	1294.663	1545.709	1654.139
-2.4	-440.853	-896.619	-983.498	-569.513	-689.765	-738.334
+2.4	1213.936	2161.609	2368.5	1435.043	1712.366	1828.36
-2.45	-404.116	-821.901	-901.54	-522.054	-632.285	-676.806
+2.45	1300.356	2342.131	2535.666	1530.603	1824.506	1953.005
-2.5	-367.378	-747.182	-819.581	-474.594	-574.804	-615.278
+2.5	1353.456	2450.278	2670.9	1577.539	1877.886	2020.66
-2.55	-330.64	-672.464	-737.623	-427.135	-517.324	-553.751
+2.55	1374.838	2497.685	2729.55	1601.518	1905.12	2053.662
-2.6	-293.902	-597.746	-655.665	-379.676	-459.843	-492.223
+2.6	1380.49	2496.491	2700.002	1625.181	1937.735	2077.239
-2.65	-257.164	-523.028	-573.707	-332.216	-402.363	-430.695
+2.65	1347.894	2411.373	2647.936	1599.299	1911.713	2038.147
-2.7	-220.427	-448.309	-491.749	-284.757	-344.882	-369.167
+2.7	1274.658	2284.867	2502.87	1520.216	1823.402	1948.034
-2.75	-183.689	-373.591	-409.791	-237.297	-287.402	-307.639
+2.75	1173.224	2081.033	2277.817	1400.15	1688.036	1786.371
-2.8	-146.951	-298.873	-327.833	-189.838	-229.922	-246.111
+2.8	1030.743	1829.302	1976.417	1224.74	1483.962	1555.272
-2.85	-110.213	-224.155	-245.874	-142.378	-172.441	-184.584
+2.85	843.5856	1500.969	1589.181	995.2793	1208.441	1270.319
-2.9	-73.4756	-149.436	-163.916	-94.9189	-114.961	-123.056
+2.9	610.2046	1080.799	1146.193	726.7644	879.5877	922.6339
-2.95	-36.7378	-74.7182	-81.9581	-47.4594	-57.4804	-61.5278
+2.95	329.2731	590.5925	624.9309	395.5684	478.1473	502.5424
-3	-1.62E-13	-1.8E-13	-1.6E-13	-1E-13	-1E-13	-1.2E-13
+3	3.10E-13	3.69E-13	3.52E-13	2.55E-13	2.39E-13	3.19E-13

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-23.99848049	-19.50267201	-25.77653449	-11.89556179	-12.79288561	-12.05634918	-14.58659456	-14.64974344	-15.5015	-6.288126647
End Shear	210.528266	173.0767795	222.2354082	118.8532519	126.9970518	119.1252418	142.289326	134.0667077	141.715	62.59092594
-0.05	-24.19043084	-19.69462236	-25.9492898	-11.89556179	-12.79288561	-12.05634918	-14.58659456	-14.64974344	-15.5015	-6.288126647
+0.05	193.3244943	159.0258171	200.9399704	110.7980133	118.3276332	110.9613924	132.4059414	123.8386459	130.8887	58.30671944
-0.1	-24.87043821	-21.27827281	-30.7266641	-11.89556179	-12.79288561	-12.05634918	-14.58659456	-14.64974344	-15.5015	-6.288126647
+0.1	175.6216759	144.622198	178.7753862	102.4273494	109.3222636	102.4758685	122.1405703	113.2117588	119.6412	53.811308
-0.15	-26.34203743	-28.83125812	-37.82446506	-16.18816587	-16.43515279	-15.0107106	-16.14755261	-14.64974344	-15.5015	-8.029634935
+0.15	161.2531264	132.861163	160.8045465	95.4034428	101.7686233	95.36001734	113.5381984	104.3572235	110.2702	50.04351448
-0.2	-37.8719999	-38.14714584	-48.21682357	-24.54626269	-25.4423793	-23.37911198	-26.24508902	-18.18628481	-19.2373	-11.7340944
+0.2	144.7108759	119.4871633	140.5499515	87.19853112	92.94835028	87.05304285	103.5031591	94.08972939	99.4048	45.64752383
-0.25	-48.21670889	-46.33613937	-57.54872194	-31.55497064	-32.99825383	-30.50847903	-34.9030738	-23.25155656	-24.6268	-15.52137083
+0.25	131.2466997	108.6310944	124.424774	80.35831505	85.59811081	80.13238667	95.14915646	85.59612837	90.41739	41.98737509
-0.3	-61.69242878	-56.34543019	-69.69320311	-39.73652794	-41.82195491	-38.83621284	-45.02354792	-31.48689798	-33.1441	-19.94731212
+0.3	115.9937646	96.36364696	106.6908799	72.42182331	77.07349976	72.10822238	85.47082699	75.82236466	80.07637	37.74638737
-0.35	-73.33702753	-65.06957856	-80.18649881	-46.5524165	-49.17575769	-45.77848417	-53.46651955	-39.68017365	-41.7731	-23.63865502
+0.35	103.6675493	86.47295976	93.39528171	65.85217119	70.02021673	65.47097066	77.47211391	67.80336635	71.59284	34.24091239
-0.4	-87.34061718	-75.6475458	-92.80433994	-54.4547649	-57.70536702	-53.83298058	-63.2697059	-50.31302634	-53.034	-27.92342603
+0.4	89.81217335	75.37792667	80.91355718	58.28677653	61.90184297	57.83388036	68.27687298	58.65766602	61.91844	30.21051063
-0.45	-99.35783664	-84.79663612	-103.6312645	-60.99096314	-64.76354454	-60.49994646	-71.39074227	-59.17376282	-62.4188	-31.47180313
+0.45	78.71081134	66.50367059	70.91253928	52.07456428	55.23907498	51.56826059	60.74039173	51.2269382	54.05916	26.9067428
-0.5	-113.7114572	-95.80748268	-116.5617581	-68.51142859	-72.88848944	-68.1769409	-80.75025916	-69.44996817	-73.3036	-35.55982299
+0.5	66.35014026	56.63583809	59.77677483	44.98293128	47.63750055	44.42248503	52.15459307	42.84363214	45.19362	23.14251305
-0.55	-125.9461239	-105.2619238	-127.5821056	-74.68106008	-79.5574827	-74.48037423	-88.44241887	-77.95209945	-82.3101	-38.91820623
+0.55	56.55115846	48.81968092	50.9486624	39.21503552	41.45880715	38.61671133	45.18726972	36.11484338	38.07892	20.08747881
-0.6	-140.4608444	-116.5587856	-140.6545639	-81.71697504	-87.16719857	-81.67562435	-97.23191205	-87.73731688	-92.6767	-42.7538919
+0.6	45.77128931	40.22276969	41.23669854	32.69983633	34.48460211	32.06652544	37.33730687	28.62825823	30.16447	16.64500161
-0.65	-152.7484366	-126.1896139	-151.7196932	-87.43316284	-93.35344774	-87.52731208	-104.3882709	-95.76716761	-101.184	-45.87524033
+0.65	37.34284408	33.4970193	33.64314006	27.46312995	28.88353857	26.80880765	31.04606298	22.71508432	23.91473	13.88573864
-0.7	-167.2242772	-137.6145451	-164.7534685	-93.88185597	-100.3373651	-94.13654371	-112.4813471	-104.9270785	-110.891	-49.40301062
+0.7	28.21878221	26.2036714	25.42285418	21.62703797	22.64727399	20.95846251	24.05830037	16.63108853	17.50641	10.82059801
-0.75	-179.3908669	-147.283437	-177.0780145	-99.05772555	-105.9473131	-99.44827449	-118.9949817	-112.3709708	-118.779	-52.24030276
+0.75	21.21966342	20.59126396	19.11706791	17.00839702	17.71739924	16.33703262	18.55008341	12.57486699	13.31123	8.404131963
-0.8	-193.6167642	-158.6674225	-198.51027	-104.8165264	-112.1948638	-105.3672389	-126.2652791	-120.7712303	-127.683	-55.40457161
+0.8	14.14662286	14.6230464	12.74259849	11.95408083	12.32964147	11.29077805	12.55088502	8.893959994	9.401494	5.771910592
-0.85	-205.4790944	-168.2266865	-216.7932883	-109.3652028	-117.1349528	-110.0507808	-132.0292415	-127.5155178	-134.832	-57.91077136
+0.85	8.97186733	10.13754791	8.081237425	8.040379981	8.164512918	7.395557583	7.935468836	6.040649714	6.37155	4.02506678
-0.9	-219.2329122	-179.389631	-238.1953238	-114.3314395	-122.5355675	-115.1752259	-138.3503942	-135.021781	-142.79	-60.65595662
+0.9	4.420525435	5.504958031	3.978472885	4.274550535	4.274550535	3.831042439	4.0068538	3.250270825	3.421338	2.409337799
-0.95	-230.5983217	-188.6821942	-256.1739187	-118.1660481	-126.7122402	-119.1423691	-143.2577634	-140.9527842	-149.08	-62.78402759
+0.95	2.095641229	2.150566021	1.886077104	1.597985078	1.597985078	1.357502892	1.364282174	1.289925463	1.357816	1.18001545
-1	-243.6468604	-199.4329435	-276.8543428	-122.2370508	-131.1553512	-123.3680256	-148.5033841	-147.4307285	-155.951	-65.05454926
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.43E+02	1.99E+02	275.2872882	1.22E+02	1.31E+02	123.0608195	148.1212181	1.47E+02	1.55E+02	6.49E+01
-2.05	-1.90E+00	-1.87E+00	-1.713214622	-1.48E+00	-1.48E+00	-1.182721659	-1.189428055	-1.12E+00	-1.18E+00	-1.07E+00
+2.05	2.32E+02	1.90E+02	2.58E+02	118.4966087	127.0726282	1.19E+02	1.44E+02	1.41E+02	149.6296	6.30E+01
-2.1	-4.65E+00	-5.84E+00	-4.186167716	-4.522489233	-4.522489233	-4.090859261	-4.293008371	-3.438713732	-3.6197	-2.520840915
+2.1	2.18E+02	1.79E+02	2.37E+02	113.9650825	122.1368666	1.15E+02	1.38E+02	1.34E+02	142.1969	6.05E+01
-2.15	-8.53E+00	-9.76E+00	-7.685465813	-7.702433291	-7.805199445	-7.107291141	-7.617558807	-5.794061789	-6.10973	-3.887475388
+2.15	206.6074418	169.0904173	218.4432761	109.7625211	117.5667275	110.4603051	132.5337903	128.1101549	135.4623	58.13030271
-2.2	-14.65763641	-15.0572451	-13.1942471	-12.32743234	-12.72731916	-11.66305766	-12.99281113	-9.165946207	-9.69035	-5.965578195
+2.2	192.5897971	157.7936838	196.8371689	104.3871052	111.7287559	104.9255012	125.7221882	120.1400316	127.0136	55.16861326
-2.25	-20.6245824	-20.10736877	-18.57371324	-16.60451976	-17.28657731	-15.93332285	-18.06948973	-12.28081719	-12.9989	-8.193014063

+2.25	**180.5514089**	***148.1605097***	***178.6812093***	**99.51392184**	**106.4419882**	**99.91679073**	**119.5699674**	**113.0316778**	**119.4795**	**52.49098278**
-2.3	**-28.89095849**	***-26.74020916***	***-26.02582467***	**-22.06262164**	**-23.11247917**	**-21.39472457**	**-24.57885297**	**-17.07593388**	**-17.9747**	**-11.04865852**
+2.3	**166.1718527**	***136.734174***	***163.4878349***	**93.39728377**	**99.81237218**	**93.63959513**	**111.8724059**	**104.2347437**	**110.1569**	**49.13800023**
-2.35	**-36.60651846**	***-32.91162314***	***-32.98161955***	**-27.00120434**	**-28.38969687**	**-26.34537299**	**-30.49200804**	**-22.19849231**	**-23.3688**	**-13.64241073**
+2.35	**153.9202054**	***127.0663931***	***152.4655824***	**87.94035088**	**93.90253079**	**88.04682**	**105.0239974**	**96.48363606**	**101.9436**	**46.15279437**
-2.4	**-46.56056177**	***-40.8601867***	***-41.95560752***	**-33.18973957**	**-35.0088133**	**-32.55873494**	**-37.926746**	**-29.18639806**	**-30.7544**	**-16.90317415**
+2.4	**139.3011013**	***115.6850114***	***139.4002903***	**81.18516501**	**86.59184245**	**81.13149294**	**96.5668517**	**86.99422812**	**91.88938**	**42.4641146**
-2.45	**-55.67611395**	***-48.13464198***	***-50.17362342***	**-38.70294419**	**-40.91043443**	**-38.10155038**	**-44.56944871**	**-35.52165057**	**-37.4518**	**-19.81621735**
+2.45	**127.0174736**	***106.1256381***	***128.3500235***	**75.23136107**	**80.15248922**	**75.042871**	**89.12918532**	**78.7139942**	**83.11719**	**39.21835701**
-2.5	**-67.24868164**	***-57.37181943***	***-60.60659105***	**-45.51924143**	**-48.21219708**	**-44.96261479**	**-52.80318963**	**-43.47345745**	**-45.8596**	**-23.42652261**
+2.5	**112.5575429**	***94.95269067***	***115.3426445***	**67.94029678**	**72.27129484**	**67.59368995**	**80.03885285**	**68.66644828**	**72.47364**	**35.2495537**
-2.55	**-77.70102172**	***-65.72169176***	***-70.02938961***	**-51.52018975**	**-54.64466064**	**-51.0093758**	**-60.06850447**	**-50.56747715**	**-53.3617**	**-26.61180818**
+2.55	**100.4105278**	***85.63536299***	***104.4163709***	**61.57649159**	**65.39598187**	**61.09741631**	**72.11883224**	**59.97077427**	**63.26294**	**31.79028324**
-2.6	**-90.81192079**	***-76.20930763***	***-81.83560144***	**-58.86157943**	**-62.51850152**	**-58.4138691**	**-68.97485555**	**-59.3488406**	**-62.6495**	**-30.51608414**
+2.6	**86.20790476**	***74.82325486***	***91.64159155***	**53.85222101**	**57.05485197**	**53.21862164**	**62.52166472**	**49.49944764**	**52.1723**	**27.59693891**
-2.65	**-102.5284565**	***-85.5976117***	***-92.34830007***	**-65.2633988**	**-69.3882517**	**-64.87637809**	**-76.75587558**	**-67.08795617**	**-70.836**	**-33.92658888**
+2.65	**74.35737832**	***65.87225191***	***80.98288377***	**47.16529439**	**49.83714192**	**46.40295533**	**54.22627056**	**40.50200457**	**42.64344**	**23.97119789**
-2.7	**-117.0863627**	***-97.28640923***	***-108.0145304***	**-73.02720653**	**-77.72359886**	**-72.72005845**	**-86.20848414**	**-76.5645148**	**-80.8616**	**-38.06924107**
+2.7	**60.59541841**	***55.56231202***	***68.60544645***	**39.1104852**	**41.146642**	**38.19878142**	**44.24861277**	**30.74358429**	**32.36167**	**19.60888615**
-2.75	**-129.9852016**	***-107.6667809***	***-123.0206992***	**-79.74302173**	**-84.93707889**	**-79.51005963**	**-94.39823375**	**-84.83505724**	**-89.6121**	**-41.65793317**
+2.75	**49.19186372**	***47.09253787***	***58.34948862***	**32.18731192**	**33.68009224**	**31.15192112**	**35.68475225**	**23.70858434**	**25.11311**	**15.86369721**
-2.8	**-145.8877138**	***-120.4964382***	***-142.0688157***	**-87.826579**	**-93.62336596**	**-87.68868902**	**-104.2707498**	**-94.87252373**	**-100.233**	**-45.98337984**
+2.8	**36.92633636**	***37.41502824***	***47.31796609***	**23.90463636**	**24.75079217**	**22.72664567**	**25.45300143**	**17.72260013**	**18.744**	**11.38801019**
-2.85	**-159.8775323**	***-131.8131509***	***-159.2079616***	**-94.76951424**	**-101.0870164**	**-94.71798464**	**-112.7623219**	**-103.5608272**	**-109.427**	**-49.70322832**
+2.85	**27.16955667**	***29.53199791***	***38.5434925***	**16.83209012**	**17.12895906**	**15.54539491**	**16.74191542**	**14.64974187**	**15.50154**	**8.257016467**
-2.9	**-177.0112562**	***-145.7122696***	***-180.4454455***	**-103.0701509**	**-110.0136757**	**-103.1272871**	**-122.9283504**	**-114.0248436**	**-120.502**	**-54.1558756**
+2.9	**24.80070094**	***20.60612411***	***30.28918022***	**11.89556135**	**12.79288658**	**12.05634975**	**14.58659324**	**14.64974187**	**15.50154**	**6.288126623**
-2.95	**-191.991344**	***-157.9002234***	***-199.2007678***	**-110.1533307**	**-117.6339387**	**-110.3076588**	**-131.6148142**	**-123.0172156**	**-130.019**	**-57.95985836**
+2.95	**24.22528869**	***19.72951743***	***25.98069438***	**11.89556135**	**12.79288658**	**12.05634975**	**14.58659324**	**14.64974187**	**15.50154**	**6.288126623**
-3	**-210.2317374**	***-172.7863517***	***-222.2354082***	**-118.5683761**	**-126.6904017**	**-118.8433774**	**-141.9479829**	**-133.773447**	**-141.405**	**-62.48413377**
+3	**23.99844437**	***19.5026731***	***25.77653449***	**11.89556135**	**12.79288658**	**12.05634975**	**14.58659324**	**14.64974187**	**15.50154**	**6.288126623**

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.066723474	-12.60146363	-13.17162806	-12.91868979	-7.283397953	-9.846441897	-11.24699642	-12.58395591	-13.97760928
End Shear	89.40542178	116.6686782	116.8263819	112.7991608	72.10253548	97.18465887	109.7453941	119.5288671	129.4344051
-0.05	-9.066723474	-12.60146363	-13.17162806	-12.96839123	-7.283397953	-9.846441897	-11.24699642	-12.58395591	-13.97760928
+0.05	83.23256807	107.8503051	107.4048125	101.5924651	67.15148574	90.50805613	102.1026196	110.9936503	119.9596274
-0.1	-9.066723474	-12.60146363	-13.17162806	-13.14446457	-7.283397953	-9.846441897	-11.24699642	-12.58395591	-13.97760928
+0.1	76.81766199	98.68368341	97.62219535	90.11059077	62.01177214	83.56938855	94.15729045	102.123065	110.1157263
-0.15	-10.87520042	-12.60146363	-13.17162806	-13.3923455	-8.920073597	-12.02015671	-12.89652679	-12.88956795	-13.97760928
+0.15	71.44067558	91.04226516	89.5013551	80.99451254	57.70197336	77.75153281	87.50067981	94.7013498	101.8909501
-0.2	-16.85700316	-15.39096289	-13.51282388	-16.34436701	-14.06807117	-18.84403212	-19.7965603	-19.76869708	-19.76065597
+0.2	65.16663165	82.17708101	80.1217486	71.05319124	52.67112796	70.96082191	79.73737292	86.05790531	92.32593169
-0.25	-22.26002798	-20.20609131	-18.27661195	-19.92287056	-18.38787741	-24.67822182	-26.5062237	-26.42366946	-26.41587688
+0.25	59.9422548	74.83966817	72.3954189	63.02402905	48.48017827	65.30425414	73.27622686	78.87484773	84.38893697
-0.3	-28.57406607	-28.34066761	-24.07382277	-23.98753415	-23.4340943	-31.49402383	-34.35103183	-35.09151909	-35.32135471
+0.3	53.88806206	66.39160978	63.5452833	54.42162339	43.62137859	58.74680366	65.79290022	70.56836356	75.22525386
-0.35	-33.84009014	-35.35779518	-30.62791172	-28.64054135	-27.64104893	-37.17671765	-40.89705882	-42.47401296	-43.59621372
+0.35	48.88312855	59.45609082	56.32047166	48.03672937	39.60273827	53.32369497	59.61009089	63.71687605	67.67965676
-0.4	-39.95272983	-44.49463833	-39.14401657	-36.33736273	-32.52230839	-43.77083198	-48.49950946	-51.06039196	-53.23407837
+0.4	43.12776874	51.54084267	48.1262715	40.85809802	34.97916758	47.08481184	52.50468905	55.85715627	59.03976218
-0.45	-45.01492625	-52.10502995	-46.24406255	-43.13192049	-36.56295229	-49.22985885	-54.799023	-58.18611654	-61.24426992
+0.45	38.4091148	45.10510568	41.50997535	35.01424203	31.18629907	41.96734849	46.6831083	49.43015174	51.98917863
-0.5	-50.84718468	-60.92667339	-55.89983182	-52.40501826	-41.21607228	-55.51697849	-62.06116429	-66.4141321	-70.50812329
+0.5	33.03157305	37.83835017	34.09817084	28.63821522	26.86113338	36.13232066	40.05356713	42.12698587	43.99552623
-0.55	-55.63872268	-68.22141986	-64.0358898	-60.35926886	-45.03694559	-60.68015237	-68.03128002	-73.19016656	-78.15002628
+0.55	28.66602288	32.00028388	28.20184187	23.61293334	23.34749433	31.39267767	34.67608619	36.21737719	37.54357299
-0.6	-61.11161641	-76.61217281	-73.43631452	-69.53893864	-49.39874147	-66.57498799	-74.85516158	-80.95001034	-86.91740322
+0.6	23.74528974	25.49769991	22.27193786	18.54547897	19.38391741	26.04682092	28.62037004	29.58058174	30.3186195
-0.65	-65.56565175	-83.49337961	-81.18265812	-77.5344017	-52.94638452	-71.37013457	-80.41301406	-87.28344698	-94.08741381
+0.65	19.79968214	20.35519918	17.59479637	14.59157691	16.20296792	21.75717	23.76985939	24.28128102	24.56891186
-0.7	-70.60019593	-91.33757005	-90.05928499	-86.82547334	-56.95368074	-76.78737101	-86.70069179	-94.46532597	-102.2358648
+0.7	15.41473294	15.0627248	12.82105541	10.57591706	12.66416558	16.98578082	18.38590952	18.42066814	18.41801237
-0.75	-74.64990183	-97.70734048	-97.30891356	-94.30519581	-60.17463118	-81.14231747	-91.76339312	-100.2632513	-108.8303607
+0.75	11.95590622	10.9926958	9.78944883	8.004780033	9.869362843	13.21831184	14.14525533	14.1077722	14.10548032
-0.8	-79.16711119	-104.8892737	-105.5352837	-103.071569	-63.76424622	-85.99666024	-97.41692047	-106.7573448	-116.2374318
+0.8	8.185729464	7.63340161	6.428036552	5.294621541	6.81850989	9.106685375	9.531017909	9.522713965	9.520510554
-0.85	-82.74566073	-110.649738	-112.1811899	-110.1233575	-66.60504308	-89.83921663	-101.9015861	-111.9268551	-122.1527973
+0.85	5.399874664	5.382530851	4.279001949	3.446020136	4.463317831	5.935281631	6.350395362	6.348530722	6.346718325
-0.9	-86.66654393	-117.0537196	-119.6308388	-118.2385847	-69.71379647	-94.04536861	-106.8230207	-117.6233648	-128.6960402
+0.9	3.010658436	2.994830402	2.379826981	1.881118754	2.31500874	3.142108689	3.143678904	3.142170266	3.140717048
-0.95	-89.70709866	-122.1069799	-125.5660176	-127.7927664	-72.12098014	-97.30336332	-110.6467798	-122.0715331	-133.8286593
+0.95	1.194331481	1.188851272	0.943406584	0.736305349	1.089226657	1.153877458	1.152841549	1.154073257	1.086306558
-1	-92.95267808	-127.6173341	-132.1124817	-138.8947824	-74.68569202	-100.7760133	-114.738167	-126.8606601	-139.3856037
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.27E+01	1.27E+02	1.32E+02	1.38E+02	7.45E+01	1.01E+02	114.4399237	126.5102741	1.39E+02
-2.05	-1.04E+00	-1.04E+00	-8.21E-01	-6.41E-01	-1.03E+00	-1.01E+00	-1.004282288	-1.005489016	-1.01E+00
+2.05	9.00E+01	1.23E+02	1.26E+02	1.29E+02	7.23E+01	9.76E+01	110.9776336	122.4575507	1.34E+02
-2.1	-3.185217616	-3.169239907	-2.518541006	-1.993503007	-2.428171457	-3.345833451	-3.347412792	-3.345901848	-3.344428211
+2.1	8.64E+01	1.17E+02	1.19E+02	1.17E+02	6.95E+01	9.37E+01	106.4589183	117.200939	1.28E+02
-2.15	-5.207059295	-5.189798152	-4.125688931	-3.317687181	-4.260313663	-5.709523487	-6.088081798	-6.086225105	-6.084416223
+2.15	83.0587749	111.157355	112.7692181	110.7902947	66.85345566	90.17527661	102.2942873	112.380433	122.6727708
-2.2	-8.463579554	-7.844939755	-6.665613331	-5.491936929	-7.043541749	-9.409921573	-9.870712471	-9.860300209	-9.858084234
+2.2	78.82980673	104.3498761	104.9153485	102.4130115	63.49633232	85.63431194	96.99450861	106.2713284	115.6822434
-2.25	-11.65400595	-10.69951908	-9.529261291	-7.785260343	-9.625259997	-12.88928292	-13.77541349	-13.74030623	-13.73801333
+2.25	75.00728377	98.27247442	97.95414321	94.96687532	60.45874947	81.5264999	92.21041656	100.7759522	109.4143097

-2.3	-15.7414905	-15.44998788	-13.15240764	-10.85484067	-12.92802225	-17.34151063	-18.78681102	-18.85615743	-18.85349798
+2.3	70.22150302	90.74490191	89.38678862	86.1272538	56.652356	76.37999442	86.22751817	93.92418881	101.6211817
-2.35	-19.45209394	-19.90561073	-17.18648256	-14.24813208	-15.92260932	-21.37913164	-23.34280158	-23.81551728	-24.06448983
+2.35	65.96124149	84.10715311	81.87539279	78.26543994	53.2613548	71.79589407	80.90685864	87.8468538	94.72593462
-2.4	-24.11485362	-25.9827744	-22.71370302	-18.92073603	-19.68173394	-26.44846994	-29.07493188	-30.07800446	-30.8592434
+2.4	60.69761286	75.97517521	72.72101994	68.81178768	49.06887766	66.12915154	74.33877565	80.36222363	86.25266428
-2.45	-28.27882112	-31.48534761	-27.73167338	-23.2087916	-23.03573832	-30.9721743	-34.19933343	-35.69412045	-36.97307956
+2.45	56.06644274	68.8749326	64.7664193	61.07108432	45.37791913	61.14094074	68.56441314	73.7958425	78.8337178
-2.5	-33.43787079	-38.38453732	-34.65280218	-29.11295672	-27.18803456	-36.57332152	-40.55424667	-42.67788735	-44.59774864
+2.5	50.40396359	60.25423617	55.15149296	51.67075474	40.86253604	55.03927924	61.50912567	65.78813337	69.80275993
-2.55	-37.98835732	-44.53371982	-40.92474782	-34.5083436	-30.84799436	-41.51092721	-46.16418027	-48.85784923	-51.36201659
+2.55	45.46871814	52.78940339	46.88289868	43.74317742	36.92507982	49.71911816	55.36391827	58.82561422	61.96372888
-2.6	-43.56470025	-52.13924099	-48.74361557	-41.39625435	-35.3302867	-47.55856883	-53.04392948	-56.4530568	-59.69414594
+2.6	39.48638567	43.79569381	38.49229004	35.71343751	32.14997179	43.26782496	47.9193572	50.40466848	52.49753764
-2.65	-48.43487628	-58.83714235	-55.67758407	-47.47074806	-39.24274026	-52.83791488	-59.05651821	-63.1039504	-67.0052265
+2.65	34.31390032	36.0641619	31.28602716	29.1021841	28.0194786	37.68792538	41.48620306	43.13892819	44.3420405
-2.7	-54.34955132	-67.03328571	-64.21560612	-55.01626792	-43.99184606	-59.24676143	-66.36315606	-71.20081218	-75.92236457
+2.7	28.09066932	27.70410616	23.52701083	23.68072735	23.04782565	30.97228311	33.75031301	34.41453017	34.56306979
-2.75	-59.47258131	-74.18201664	-71.70458776	-62.31311825	-48.10333357	-64.79563847	-72.69549988	-78.22972421	-83.67664213
+2.75	22.74777722	20.69651546	18.70692343	20.24143656	18.77775633	25.20480766	27.11209076	27.02459579	27.01684699
-2.8	-65.64659136	-82.85313737	-80.83530423	-71.80172917	-53.056071	-71.48040491	-80.33109827	-86.71843275	-93.05633111
+2.8	16.3626478	15.04478572	13.17162721	16.01219326	13.67273922	18.31013467	19.18282057	19.15996269	19.15189563
-2.85	-70.95564341	-90.35481156	-88.77229152	-80.21399898	-57.31313441	-77.22665088	-86.90033819	-94.03245247	-101.1501911
+2.85	11.22319867	12.60146318	13.17162721	13.41935424	9.316553507	12.43584734	13.39200361	13.38508244	13.97760977
-2.9	-77.30999054	-99.3852038	-98.36924005	-90.97671098	-62.40632351	-84.10202037	-94.76691212	-102.8032234	-110.8699766
+2.9	9.066722095	12.60146318	13.17162721	13.12641559	7.283398521	9.846440667	11.24699753	12.58395698	13.97760977
-2.95	-82.73822999	-107.1419118	-106.6472289	-100.6926145	-66.75549991	-89.97345687	-101.4901876	-110.3094391	-119.1998027
+2.95	9.066722095	12.60146318	13.17162721	12.97742492	7.283398521	9.846440667	11.24699753	12.58395698	13.97760977
-3	-89.1939588	-116.4158895	-116.5839468	-112.688436	-71.92596045	-96.95412804	-109.4898096	-119.2524275	-129.1372299
+3	9.066722095	12.60146318	13.17162721	12.91868844	7.283398521	9.846440667	11.24699753	12.58395698	13.97760977

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-23.97897812	-26.35852007	-15.1892	-18.3669	-19.7016
End Shear	208.2870482	221.958433	138.0582	166.7037	176.0191
-0.05	-23.97897812	-26.35852007	-15.1892	-18.3669	-19.7016
+0.05	191.3635168	203.5856011	127.3403	153.8176	162.1438
-0.1	-23.97897812	-26.35852007	-15.1892	-18.3669	-19.7016
+0.1	173.8029236	184.2613325	116.2093	140.4308	147.733
-0.15	-23.97897812	-26.35852007	-15.1892	-18.3669	-19.7016
+0.15	159.2280223	168.2532382	106.9454	129.2861	135.7502
-0.2	-23.97897812	-26.35852007	-19.3764	-21.3965	-22.4026
+0.2	142.3971238	149.8051916	96.21638	116.3746	121.8855
-0.25	-29.73488324	-30.91047126	-24.6889	-27.1929	-29.1834
+0.25	128.5355898	134.6455465	87.35266	105.704	110.4429
-0.3	-41.15290873	-43.58531738	-30.8878	-37.349	-37.1034
+0.3	112.6611385	117.3266463	77.16745	93.43799	97.30858
-0.35	-52.47588698	-55.34185564	-38.8306	-47.7056	-47.5856
+0.35	99.70484068	103.2294106	68.82378	83.38553	86.5619
-0.4	-68.11114516	-69.05624852	-49.6056	-60.6345	-61.2429
+0.4	85.01359528	87.29257339	59.32404	71.93494	74.34224
-0.45	-81.78644323	-82.32740451	-58.9798	-71.8795	-73.2886
+0.45	73.15441234	74.47178031	51.62035	62.64444	64.44739
-0.5	-99.41176872	-101.2551252	-69.8635	-84.9318	-87.5032
+0.5	59.87312985	60.16992499	42.94778	52.17935	53.32658
-0.55	-114.0517095	-117.6741612	-78.8789	-95.7403	-99.2887
+0.55	49.302921	49.57890335	36.00394	43.79467	44.43946
-0.6	-130.971648	-136.6846912	-89.2678	-108.192	-112.883
+0.6	38.27431233	38.87648739	28.30023	34.48514	34.64041
-0.65	-144.9187641	-152.3852969	-97.8045	-118.42	-124.066
+0.65	29.82672483	31.03155003	22.37903	27.32161	27.27925
-0.7	-160.9065446	-170.4203366	-107.557	-130.1	-136.857
+0.7	21.63630535	22.43588362	16.90277	19.82234	20.03348
-0.75	-173.9689764	-185.1885424	-115.495	-139.604	-147.282
+0.75	15.91503521	16.23426482	13.36314	14.67597	15.62772
-0.8	-188.7978489	-201.995175	-124.469	-150.343	-159.084
+0.8	10.31811394	10.2825041	9.484013	10.42665	10.81544
-0.85	-200.7837301	-215.6169524	-131.689	-158.979	-168.595
+0.85	7.029223124	6.395371705	6.475003	7.092395	7.120572
-0.9	-214.2269069	-230.9422505	-139.743	-168.607	-179.225
+0.9	3.41343211	3.153489584	3.418159	3.646036	3.479017
-0.95	-224.9443821	-243.2035763	-146.124	-176.231	-187.665
+0.95	1.1575765	1.126793426	1.368047	1.45925	1.217237
-1	-236.7751418	-256.794625	-153.116	-184.578	-196.938
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.36E+02	2.56E+02	1.53E+02	1.84E+02	1.96E+02
-2.05	-1.01E+00	-9.65E-01	-1.19E+00	-1.27E+00	-1.06E+00
+2.05	2.26E+02	2.44E+02	1.47E+02	176.8975	1.88E+02
-2.1	-3.66814259	-3.507699445	-3.63864	-3.88121	-3.83587
+2.1	2.13E+02	2.30E+02	1.39E+02	167.8884	1.78E+02
-2.15	-6.629774661	-6.263654416	-6.21486	-6.80746	-6.83539
+2.15	201.8445087	216.8260521	132.3259	159.7408	169.435
-2.2	-10.61389819	-10.69990414	-9.77073	-10.7408	-11.1705
+2.2	187.6800557	200.7284771	123.794	149.5357	158.1958
-2.25	-15.41851658	-15.70563483	-13.0533	-14.3367	-15.2427
+2.25	175.1318171	186.5067218	116.2001	140.4479	148.2086

-2.3	-22.17960805	-23.07019086	-17.2363	-20.3762	-20.4492
+2.3	159.6950815	169.0542354	106.8192	129.2168	135.889
-2.35	-29.14190626	-30.34397246	-21.8841	-26.7223	-26.6369
+2.35	146.1662412	153.7930601	98.56675	119.3328	125.0655
-2.4	-39.07340123	-39.61468039	-28.8736	-35.1784	-35.336
+2.4	129.6839911	135.238667	88.47837	107.2456	111.8498
-2.45	-48.37545922	-48.692708	-35.3926	-43.0562	-43.6579
+2.45	115.3664181	119.152081	79.68731	96.70933	100.346
-2.5	-60.86685196	-61.23611539	-43.5985	-52.9649	-54.1603
+2.5	98.06540181	99.74866472	69.03324	83.93622	86.41828
-2.55	-72.10559216	-73.33845068	-50.9374	-61.8205	-63.5708
+2.55	83.15095732	84.03202027	59.82344	72.89142	74.38997
-2.6	-86.12033268	-88.48941298	-60.0413	-72.7997	-75.2642
+2.6	66.90290229	68.00901772	48.74534	59.60237	60.21088
-2.65	-98.55210263	-101.9751924	-68.08	-82.4892	-85.6045
+2.65	53.54962856	56.40400678	39.60927	48.64004	48.6276
-2.7	-113.8634168	-118.634673	-77.9402	-94.3689	-98.3046
+2.7	40.27759144	42.5105063	30.41371	36.40095	36.49732
-2.75	-127.2963413	-133.2898829	-86.559	-104.748	-109.419
+2.75	30.6157273	31.85635583	25.16824	27.71588	29.79549
-2.8	-143.6774278	-151.2050092	-97.0338	-117.358	-122.941
+2.8	23.97897832	26.35851975	18.8901	20.8658	21.78215
-2.85	-157.9196808	-166.8156064	-106.113	-128.284	-134.674
+2.85	23.97897832	26.35851975	15.18915	18.36695	19.70163
-2.9	-175.1438217	-185.733411	-117.06	-141.455	-148.834
+2.9	23.97897832	26.35851975	15.18915	18.36695	19.70163
-2.95	-190.0034924	-202.0854685	-126.479	-152.782	-161.029
+2.95	23.97897832	26.35851975	15.18915	18.36695	19.70163
-3	-207.8439381	-221.75299	-137.758	-166.343	-175.644
+3	23.97897832	26.35851975	15.18915	18.36695	19.70163

2-Span: Moment (Max and Min) Raw Data Results – 120' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	**HL93 (Variable) + Lane Load**	***HL-93 Design Tandem (with Lane Load)***	***HL-93 Truck Train (with Lane Load)***	**SC SHV1A**	**SC SHV1B**	**SC SHV2A**	**SC SHV2B**	**SC SHV3A**	**SC SHV3B**	***SC School Bus***
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***
-0	**-9.53E-13**	***-5.35E-13***	***-8.78E-13***	**-4.97E-13**	**-4.97E-13**	**-4.34E-13**	**-5.26E-13**	**-4.08E-13**	**-4.31E-13**	***-3.11E-13***
End Shear	**5.72E-13**	***4.04E-13***	***6.22E-13***	**3.62E-13**	**3.90E-13**	**2.86E-13**	**3.40E-13**	**2.84E-13**	**3.02E-13**	***1.72E-13***
-0.05	**-143.990883**	***-117.0160321***	***-154.6592069***	**-71.3733708**	**-76.7573137**	**-72.3380951**	**-87.5195673**	**-87.8984606**	**-93.0092356**	***-37.72875988***
+0.05	**1177.275264**	***972.1012038***	***1221.23529***	**664.7880797**	**710.0740626**	**665.9469481**	**795.0274274**	**743.0318755**	**785.3322545**	***349.8403166***
-0.1	**-287.9817659**	***-234.0320641***	***-309.3184139***	**-142.746742**	**-153.514627**	**-144.67619**	**-175.039135**	**-175.796921**	**-186.018471**	***-75.45751976***
+0.1	**2191.196239**	***1817.877983***	***2226.233046***	**1238.135173**	**1321.747628**	**1239.181099**	**1477.607781**	**1369.71155**	**1447.536021**	***649.8677843***
-0.15	**-431.9726489**	***-351.0480962***	***-463.9776208***	**-214.120112**	**-230.271941**	**-217.014285**	**-262.558702**	**-263.695382**	**-279.027707**	***-113.1862796***
+0.15	**3046.029036**	***2537.705745***	***3078.106523***	**1719.874503**	**1834.878084**	**1719.593072**	**2048.00831**	**1881.785272**	**1988.436217**	***900.7832607***
-0.2	**-575.9635318**	***-468.0641283***	***-618.6368278***	**-285.493483**	**-307.029255**	**-289.35238**	**-350.078269**	**-351.593843**	**-372.036943**	***-150.9150395***
+0.2	**3740.643752**	***3132.962575***	***3749.114203***	**2111.663966**	**2251.347792**	**2108.991018**	**2508.53629**	**2298.715771**	**2429.539061**	***1103.59563***
-0.25	**-719.9544148**	***-585.0801603***	***-773.2960347***	**-356.866854**	**-383.786568**	**-361.690475**	**-437.597837**	**-439.492303**	**-465.046178**	***-188.6437994***
+0.25	**4280.671846**	***3605.554258***	***4225.338093***	**2415.76897**	**2573.651213**	**2409.7606**	**2888.405089**	**2637.509918**	**2789.552073**	***1259.621253***
-0.3	**-863.9452977**	***-702.0961924***	***-927.9552416***	**-428.240225**	**-460.543882**	**-434.02857**	**-525.117404**	**-527.390764**	**-558.055414**	***-226.3725593***
+0.3	**4676.632836**	***3957.914508***	***4528.252844***	**2635.023864**	**2804.895495**	**2646.815705**	**3169.041671**	**2875.59952**	**3040.422572**	***1371.001059***
-0.35	**-1007.936181**	***-819.1122245***	***-1082.614449***	**-499.613595**	**-537.301196**	**-506.366665**	**-612.636971**	**-615.289225**	**-651.064649**	***-264.1013192***
+0.35	**4955.996057**	***4193.00474***	***4775.715376***	**2780.059305**	**2969.833629**	**2803.073387**	**3350.119458**	**3035.388406**	**3210.778034**	***1439.265895***
-0.4	**-1151.927064**	***-936.1282565***	***-1237.273656***	**-570.986966**	**-614.058509**	**-578.704761**	**-700.156539**	**-703.187685**	**-744.073885**	***-301.8300791***
+0.4	**5091.506201**	***4314.314269***	***4860.020313***	**2861.633176**	**3053.424804**	**2879.333941**	**3434.933742**	**3097.285527**	**3277.388875**	***1466.467158***
-0.45	**-1295.917947**	***-1053.144289***	***-1391.932862***	**-642.360337**	**-690.815823**	**-651.042856**	**-787.676106**	**-791.086146**	**-837.083121**	***-339.5588389***
+0.45	**5089.204722**	***4325.859886***	***4778.093531***	**2868.079183**	**3056.568492**	**2880.831728**	**3428.940937**	**3067.986016**	**3247.208148**	***1455.143141***
-0.5	**-1439.90883**	***-1170.160321***	***-1546.592069***	**-713.733708**	**-767.573137**	**-723.380951**	**-875.195673**	**-878.984606**	**-930.092356**	***-377.2875988***
+0.5	**5001.667874**	***4245.929346***	***4607.987875***	**2812.272634**	**2999.06441**	**2827.332246**	**3369.429445**	**3022.473448**	**3198.552087**	***1435.327591***
-0.55	**-1583.899712**	***-1287.176353***	***-1701.251276***	**-785.107078**	**-844.33045**	**-795.719046**	**-962.715241**	**-966.883067**	**-1023.10159**	***-415.0163587***
+0.55	**4793.008253**	***4065.88224***	***4471.697234***	**2692.024899**	**2872.849035**	**2710.055277**	**3233.673**	**2915.009874**	**3084.139086**	***1385.797035***
-0.6	**-1727.890595**	***-1404.192385***	***-1855.910483***	**-856.480449**	**-921.087764**	**-868.057141**	**-1050.23481**	**-1054.78153**	**-1116.11083**	***-452.7451186***
+0.6	**4459.805083**	***3788.594563***	***4254.680953***	**2511.148565**	**2680.771948**	**2530.539382**	**3021.254694**	**2722.882246**	**2880.100133**	***1301.247294***
-0.65	**-1871.881478**	***-1521.208417***	***-2010.56969***	**-927.85382**	**-997.845078**	**-940.395236**	**-1137.75438**	**-1142.67999**	**-1209.12006**	***-490.4738785***
+0.65	**4010.277846**	***3419.94606***	***3852.470356***	**2279.037211**	**2429.658598**	**2294.974188**	**2739.840587**	**2453.104158**	**2594.000302**	***1184.899616***
-0.7	**-2015.872361**	***-1638.224449***	***-2165.228897***	**-999.227191**	**-1074.60239**	**-1012.73333**	**-1225.27394**	**-1230.57845**	**-1302.1293**	***-528.2026384***
+0.7	**3453.405668**	***2966.345743***	***3338.093989***	**2003.111099**	**2126.947322**	**2010.339728**	**2397.797001**	**2114.101673**	**2236.154962**	***1040.284181***
-0.75	**-2159.863244**	***-1755.240481***	***-2319.888104***	**-1070.60056**	**-1151.35971**	**-1085.07143**	**-1312.79351**	**-1318.47691**	**-1395.13853**	***-565.9313982***
+0.75	**2798.930086**	***2434.729257***	***2701.675865***	**1683.814621**	**1782.449892**	**1684.192823**	**2004.190437**	**1721.768554**	**1821.215035**	***871.2388904***
-0.8	**-2303.854127**	***-1872.256513***	***-2474.547311***	**-1141.97393**	**-1228.11702**	**-1157.40952**	**-1400.31308**	**-1406.37537**	**-1488.14777**	***-603.6601581***
+0.8	**2057.351262**	***1832.561016***	***1895.152552***	**1328.976431**	**1400.544023**	**1324.66813**	**1568.787192**	**1275.11249**	**1348.300292**	***681.9086718***
-0.85	**-2518.976581**	***-2060.404115***	***-2693.22493***	**-1213.3473**	**-1304.87433**	**-1229.74762**	**-1487.83264**	**-1494.27383**	**-1581.15701**	***-641.388918***
+0.85	**1311.062949**	***1238.964056***	***1181.299744***	**946.9930749**	**992.7898583**	**941.1331737**	**1102.053427**	**783.8311623**	**828.3405798**	***476.7469266***
-0.9	**-2867.824461**	***-2382.277145***	***-3191.717544***	**-1284.72067**	**-1381.63165**	**-1302.08571**	**-1575.35221**	**-1582.17229**	**-1674.16624**	***-679.1176779***
+0.9	**651.2964885**	***725.0516173***	***586.8472712***	**550.2729953**	**570.4024197**	**542.6828776**	**615.1546742**	**411.1643377**	**433.7802715**	***273.1228228***
-0.95	**-3328.215643**	***-2815.693476***	***-4109.935361***	**-1356.09404**	**-1458.38896**	**-1374.42381**	**-1662.87178**	**-1670.07075**	**-1767.17548**	***-716.8464378***
+0.95	**250.3108111**	***277.6891681***	***225.2797296***	**211.664768**	**211.664768**	**195.6038754**	**206.8570427**	**160.8842614**	**169.3518541**	***134.3202926***
-1	**-3883.092801**	***-3343.595941***	***-5183.688447***	**-1427.46741**	**-1535.1464**	**-1446.76196**	**-1750.39138**	**-1757.96921**	**-1860.18464**	***-754.5751645***
+1	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
(Span 2) -2	**-3883.092801**	***-3343.595941***	***-5183.688447***	**-1427.46741**	**-1535.1464**	**-1446.76196**	**-1750.39138**	**-1757.96921**	**-1860.18464**	***-754.5751645***
+2	**0**	***0***	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
-2.05	**-3328.211471**	***-2815.693575***	***-4109.934346***	**-1356.09399**	**-1458.38908**	**-1374.42386**	**-1662.87166**	**-1670.07057**	**-1767.17541**	***-716.8464048***
+2.05	**250.3108244**	***277.696732***	***225.2797415***	**211.6707044**	**211.6707044**	**195.621418**	**206.8801008**	**160.8883419**	**169.3561494**	***133.8479733***
-2.1	**-2867.820509**	***-2382.277241***	***-3191.721937***	**-1284.72062**	**-1381.63176**	**-1302.08576**	**-1575.3521**	**-1582.17212**	**-1674.16618**	***-679.1176451***
+2.1	**651.9125103**	***725.0631687***	***586.8472339***	**550.2700127**	**570.4429231**	**542.7078473**	**615.1709249**	**411.1663745**	**433.782166**	***272.2509717***
-2.15	**-2518.972848**	***-2060.404207***	***-2693.224894***	**-1213.34725**	**-1304.87444**	**-1229.74766**	**-1487.83254**	**-1494.27367**	**-1581.15694**	***-641.3888853***
+2.15	**1312.00081**	***1238.978254***	***1181.299602***	**946.9964329**	**992.7866373**	**941.1607971**	**1102.072733**	**783.8346241**	**828.3446649**	***476.7392009***
-2.2	**-2303.850629**	***-1872.256616***	***-2474.547292***	**-1141.97388**	**-1228.11712**	**-1157.40956**	**-1400.31298**	**-1406.37521**	**-1488.14771**	***-603.6601256***
+2.2	**2058.337135**	***1832.576661***	***1895.152411***	**1328.980997**	**1400.545986**	**1324.660427**	**1568.808436**	**1275.116427**	**1348.304899**	***681.9010046***
-2.25	**-2159.859963**	***-1755.240577***	***-2319.888085***	**-1070.60052**	**-1151.3598**	**-1085.07146**	**-1312.79342**	**-1318.47676**	**-1395.13848**	***-565.9313658***

+2.25	2799.921302	2434.745568	2701.675923	1683.819446	1782.452058	1684.185582	2004.212127	1721.771681	1821.218809	871.2314178
-2.3	-2015.869297	-1638.224538	-2165.228878	-999.227148	-1074.60248	-1012.73336	-1225.27386	-1230.57831	-1302.12925	-528.2026061
+2.3	3454.362567	2966.361127	3338.094269	2003.114844	2126.945616	2010.331791	2397.817663	2114.100404	2236.156836	1040.276804
-2.35	-1871.87863	-1521.2085	-2010.569671	-927.85378	-997.845164	-940.395266	-1137.7543	-1142.67986	-1209.12002	-490.4738464
+2.35	4011.162692	3419.960068	3852.470541	2279.039139	2429.655129	2294.964521	2739.858954	2453.100143	2593.996541	1184.891354
-2.4	-1727.887964	-1404.192461	-1855.910464	-856.480412	-921.087844	-868.057168	-1050.23474	-1054.78141	-1116.11078	-452.7450866
+2.4	4460.584863	3788.606029	4254.680765	2511.145824	2680.765778	2530.527167	3021.270151	2722.87472	2880.092672	1301.238503
-2.45	-1583.897298	-1287.176423	-1701.251257	-785.107044	-844.330525	-795.719069	-962.715182	-966.882959	-1023.10155	-415.0163269
+2.45	4793.650502	4065.890711	4471.697389	2692.018807	2872.839174	2710.039615	3233.684096	2914.997536	3084.126548	1385.787443
-2.5	-1439.906632	-1170.160384	-1546.59205	-713.733676	-767.573205	-723.380971	-875.195623	-878.984508	-930.092318	-377.2875671
+2.5	5002.144243	4245.93381	4607.987975	2812.262723	2999.050374	2827.349915	3369.435588	3022.488327	3198.568179	1435.317464
-2.55	-1295.915966	-1053.144345	-1391.932843	-642.360308	-690.815886	-651.042872	-787.676063	-791.086056	-837.083086	-339.5588074
+2.55	5088.842444	4325.858743	4778.093527	2868.092283	3056.585974	2880.817198	3428.938767	3067.973811	3247.194877	1455.139109
-2.6	-1151.925299	-936.1283067	-1237.273636	-570.98694	-614.058566	-578.704774	-700.156504	-703.187605	-744.073854	-301.8300477
+2.6	5090.951495	4314.308184	4860.020266	2861.641078	3053.436732	2879.351621	3434.925311	3097.300006	3277.403646	1466.462168
-2.65	-1007.934633	-819.1122681	-1082.614429	-499.613572	-537.301247	-506.366675	-612.636944	-615.289154	-651.064622	-264.1012879
+2.65	4955.226344	4192.993295	4775.715586	2780.061643	2969.839619	2803.085606	3350.104614	3035.39698	3210.786537	1439.25989
-2.7	-863.9439671	-702.0962295	-927.9552221	-428.240204	-460.543927	-434.028577	-525.117385	-527.390703	-558.055389	-226.3725282
+2.7	4675.625956	3957.896942	4528.252677	2635.019485	2804.894274	2646.821525	3169.019204	2875.600991	3040.423557	1370.994004
-2.75	-719.9533008	-585.0801908	-773.2960152	-356.866835	-383.786608	-361.690478	-437.597825	-439.492252	-465.046157	-188.6437684
+2.75	4279.92992	3605.530395	4225.338154	2415.758061	2573.642987	2409.759676	2888.411956	2637.503918	2789.545135	1259.627893
-2.8	-575.9626346	-468.0641522	-618.6368083	-285.493467	-307.029288	-289.35238	-350.078266	-351.5938	-372.036925	-150.9150087
+2.8	3739.640431	3132.931947	3749.114542	2111.646414	2251.33246	2108.983268	2508.534638	2298.701791	2429.523667	1103.601142
-2.85	-431.9719684	-351.0481136	-463.9776013	-214.120099	-230.271969	-217.014281	-262.558707	-263.695349	-279.027692	-113.186249
+2.85	3044.583322	2537.668369	3078.10666	1719.849867	1834.855153	1719.578241	2047.998178	1881.778327	1988.429053	900.7874577
-2.9	-287.9813022	-234.032075	-309.3183944	-142.746731	-153.51465	-144.676183	-175.039147	-175.796898	-186.01846	-75.45748922
+2.9	2191.787938	1817.833104	2226.233541	1238.103005	1321.716568	1239.158766	1477.588593	1369.696492	1447.520271	649.8704066
-2.95	-143.990636	-117.0160364	-154.6591875	-71.3733631	-76.7573301	-72.3380843	-87.5195877	-87.8984468	-93.009228	-37.72872948
+2.95	1177.573547	972.0488239	1221.235339	664.7957331	710.0351969	665.917278	794.9993926	743.040648	785.3415408	349.8416354
-3	-6.73E-13	-4.79E-13	-6.87E-13	-4.03E-13	-4.32E-13	-3.99E-13	-4.63E-13	-5.11E-13	-5.41E-13	-2.13E-13
+3	6.89E-13	4.62E-13	7.51E-13	3.05E-13	3.05E-13	3.09E-13	3.52E-13	3.15E-13	3.35E-13	2.13E-13

2-Span: Moment (Max and Min) Raw Data Results - 120' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.53E-13	-3.77E-13	-3.15E-13	-2.69E-13	-4.11E-13	-3.56E-13	-3.38E-13	-3.31E-13	-3.26E-13
End Shear	2.07E-13	2.31E-13	2.48E-13	2.19E-13	2.73E-13	2.55E-13	2.00E-13	1.97E-13	1.94E-13
-0.05	-54.40034084	-75.60878179	-79.02976835	-77.51213877	-43.70038772	-59.07865138	-67.4819785	-75.5037355	-83.8656557
+0.05	499.3954084	647.1018304	644.428875	614.0415824	402.9089144	543.1367872	612.711939	667.0947356	721.0178253
-0.1	-108.8006817	-151.2175636	-158.0595367	-155.0242775	-87.40077543	-118.1573028	-134.963957	-151.007471	-167.731311
+0.1	928.6349097	1193.623083	1181.875461	1109.660996	749.0674584	1010.504111	1138.722749	1240.209741	1344.077303
-0.15	-163.2010225	-226.8263454	-237.0893051	-232.5364163	-131.1011631	-177.2359542	-202.445936	-226.511206	-251.596967
+0.15	1287.89371	1641.414953	1614.31143	1515.281343	1039.482001	1401.985377	1577.936198	1742.608752	1884.050916
-0.2	-217.6013634	-302.4351272	-316.1190734	-310.0485551	-174.8015509	-236.3146055	-269.927914	-302.014942	-335.462623
+0.2	1578.442815	1992.644005	1973.484195	1828.959856	1274.780643	1719.075522	1932.169761	2150.761613	2336.804668
-0.25	-272.0017042	-378.0439089	-395.1488418	-387.5606938	-218.5019386	-295.3932569	-337.409893	-377.518677	-419.328278
+0.25	1802.135859	2273.474325	2235.120091	2078.734668	1456.414608	1963.741989	2212.988961	2466.01455	2699.259648
-0.3	-326.4020451	-453.6526907	-474.1786101	-465.0728326	-262.2023263	-354.4719083	-404.891871	-453.022413	-503.193934
+0.3	1961.264262	2467.982329	2422.669544	2265.272352	1586.185091	2151.627697	2428.05266	2691.29339	2962.264946
-0.35	-380.8023859	-529.2614725	-553.2083785	-542.5849714	-305.902714	-413.5505597	-472.37385	-528.526148	-587.05959
+0.35	2074.473149	2576.215912	2557.980754	2394.344425	1666.243073	2278.234733	2565.178316	2849.043234	3128.352135
-0.4	-435.2027268	-604.8702543	-632.2381468	-620.0971101	-349.6031017	-472.6292111	-539.855828	-604.029884	-670.925245
+0.4	2129.049186	2620.56775	2642.701267	2461.223972	1699.089682	2339.520159	2629.01417	2928.542297	3212.645038
-0.45	-489.6030676	-680.4790361	-711.2679152	-697.6092489	-393.3034894	-531.7078625	-607.337807	-679.533619	-754.790901
+0.45	2126.826419	2591.805821	2646.896888	2450.860158	1687.575672	2339.29332	2622.826456	2928.750182	3222.43019
-0.5	-544.0034084	-756.0878179	-790.2976835	-775.1213877	-437.0038772	-590.7865138	-674.819785	-755.037355	-838.656557
+0.5	2088.930773	2555.332637	2592.445666	2395.042265	1663.465874	2296.591013	2577.86195	2874.094986	3156.744958
-0.55	-598.4037493	-831.6965997	-869.3274519	-852.6335264	-480.7042649	-649.8651652	-742.301764	-830.54109	-922.522212
+0.55	2003.757959	2466.964174	2474.384876	2277.943312	1603.190342	2201.925549	2475.103189	2753.393243	3015.601892
-0.6	-652.8040901	-907.3053815	-948.3572203	-930.1456652	-524.4046526	-708.9438166	-809.783742	-906.044826	-1006.38787
+0.6	1870.853498	2312.748443	2290.538672	2130.888952	1503.325194	2056.01804	2312.686387	2566.82045	2816.428683
-0.65	-707.204431	-982.9141633	-1027.386989	-1007.657804	-568.1050403	-768.022468	-877.265721	-981.548561	-1090.25352
+0.65	1695.020912	2097.210444	2055.194252	1913.77128	1367.580888	1864.090822	2096.606723	2321.097183	2550.439351
-0.7	-761.6047718	-1058.522945	-1106.416757	-1085.169943	-611.805428	-827.1011194	-944.747699	-1057.0523	-1174.11918
+0.7	1481.501713	1818.23088	1753.996346	1626.178464	1200.017662	1631.839226	1833.214411	2024.833032	2224.331141
-0.75	-816.0051127	-1134.131727	-1185.446525	-1162.682081	-655.5058157	-886.1797708	-1012.22968	-1132.55603	-1257.98483
+0.75	1238.185439	1482.821108	1413.784463	1289.926836	1005.046396	1365.430682	1529.322088	1687.067457	1846.763772
-0.8	-870.4054535	-1209.740509	-1264.476294	-1240.19422	-699.2062035	-945.2584221	-1079.71166	-1208.05977	-1341.85049
+0.8	966.6485772	1099.145338	1013.7829	889.1115759	787.4270314	1071.505159	1192.820936	1309.860306	1427.075821
-0.85	-924.8057944	-1285.34929	-1343.506062	-1336.124356	-742.9065912	-1004.337074	-1147.19363	-1283.5635	-1425.71615
+0.85	673.7963231	676.0096168	588.9760378	506.4077331	552.2697072	757.296749	831.6487101	902.4106656	975.2835335
-0.9	-979.2061352	-1360.958072	-1422.53583	-1569.908879	-786.6069789	-1063.415725	-1214.67561	-1359.06724	-1509.5818
+0.9	370.6897887	365.2869362	293.8854718	246.676717	305.0345318	431.0678981	454.4299089	491.2956538	519.6456535
-0.95	-1033.606476	-1436.566854	-1501.565599	-2105.253804	-830.3073666	-1122.494376	-1282.15759	-1434.57097	-1593.44746
+0.95	149.0291658	148.8285928	118.3553871	94.60512821	129.846542	158.9487353	158.9479711	158.9496402	158.9062055
-1	-1088.006814	-1512.175573	-1580.595378	-2778.708453	-874.0078163	-1181.573001	-1349.63971	-1510.07482	-1677.31316
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1088.006814	-1512.175573	-1580.595378	-2778.708453	-874.0078163	-1181.573001	-1349.63971	-1510.07482	-1677.31316
+2	0	0	0	0	0	0	0	0	0
-2.05	-1033.606316	-1436.566794	-1501.565513	-2105.253377	-830.3074251	-1122.49421	-1282.15772	-1434.57108	-1593.44751
+2.05	149.0332118	148.8323739	118.3582626	94.60678809	129.827806	158.9600616	158.9285315	158.9606045	158.9171699
-2.1	-979.2059836	-1360.958015	-1422.53575	-1569.908375	-786.607034	-1063.415566	-1214.67573	-1359.06734	-1509.58185
+2.1	370.6863762	365.2630375	293.8814125	246.6744353	305.048442	431.0909389	454.4484082	491.3116638	519.6568643
-2.15	-924.805651	-1285.349236	-1343.505986	-1336.124244	-742.9066429	-1004.336922	-1147.19375	-1283.56359	-1425.71619
+2.15	673.794463	676.0025795	588.9901402	506.4028914	552.2848426	757.3219239	831.6691817	902.4085884	975.2927014
-2.2	-870.4053185	-1209.740457	-1264.476223	-1240.194121	-699.2062518	-945.2582776	-1079.71176	-1208.05985	-1341.85053
+2.2	966.65042	1099.138603	1013.794973	889.1182631	787.4428202	1071.500213	1192.842848	1309.863108	1427.08638
-2.25	-816.0049859	-1134.131678	-1185.44646	-1162.681991	-655.5058606	-886.1796336	-1012.22978	-1132.55611	-1257.98487

+2.25	1238.187222	1482.813459	1413.795091	1289.923043	1005.06228	1365.426089	1529.343948	1687.070301	1846.774677
-2.3	-761.6046533	-1058.522899	-1106.416696	-1085.16986	-611.8054695	-827.1009896	-944.747794	-1057.05237	-1174.11921
+2.3	1481.500747	1818.221861	1754.004461	1626.173524	1200.032972	1631.834088	1833.204907	2024.834635	2224.340785
-2.35	-707.2043208	-982.9141194	-1027.386933	-1007.65773	-568.1050784	-768.0223456	-877.265809	-981.548626	-1090.25355
+2.35	1695.018603	2097.198554	2055.187948	1913.778615	1367.594713	1864.084211	2096.595477	2321.094566	2550.446974
-2.4	-652.8039882	-907.3053403	-948.3571699	-930.145599	-524.4046872	-708.9437016	-809.783824	-906.044884	-1006.3879
+2.4	1870.849162	2312.762802	2290.548066	2130.896058	1503.337399	2056.009345	2312.703355	2566.815242	2816.433165
-2.45	-598.4036556	-831.6965612	-869.3274066	-852.6334683	-480.7042961	-649.8650576	-742.301838	-830.541142	-922.522237
+2.45	2003.750997	2466.977398	2474.384653	2277.950178	1603.200325	2201.913996	2475.117261	2753.384622	3015.60066
-2.5	-544.0033231	-756.0877821	-790.2976433	-775.1213377	-437.003905	-590.7864136	-674.819853	-755.0374	-838.656579
+2.5	2088.920726	2555.341488	2592.456704	2395.047661	1663.473325	2296.576169	2577.872142	2874.082202	3156.73934
-2.55	-489.6029905	-680.479003	-711.26788	-697.6092071	-393.3035139	-531.7077696	-607.337868	-679.533658	-754.79092
+2.55	2126.838833	2591.79922	2646.887484	2450.865295	1687.570307	2339.278958	2622.819138	2928.765983	3222.439123
-2.6	-435.2026579	-604.870224	-632.2381167	-620.0970765	-349.6031227	-472.6291256	-539.855883	-604.029917	-670.925262
+2.6	2129.057583	2620.55621	2642.712579	2461.232475	1699.081314	2339.533358	2629.002281	2928.553074	3212.648109
-2.65	-380.8023253	-529.2614449	-553.2083535	-542.5849458	-305.9027316	-413.5504816	-472.373898	-528.526175	-587.059603
+2.65	2074.477448	2576.203174	2557.971524	2394.35357	1666.23159	2278.24349	2565.192364	2849.048343	3128.348116
-2.7	-326.4019928	-453.6526658	-474.1785902	-465.0728152	-262.2023405	-354.4718376	-404.891913	-453.022433	-503.193944
+2.7	1961.263709	2467.993974	2422.6739	2265.277331	1586.169593	2151.631189	2428.061017	2691.291689	2962.254117
-2.75	-272.0016602	-378.0438867	-395.1488269	-387.5606846	-218.5019493	-295.3931936	-337.409927	-377.518691	-419.328286
+2.75	1802.130391	2273.480008	2235.110438	2078.739182	1456.395418	1963.740012	2212.991509	2466.006322	2699.241638
-2.8	-217.6013276	-302.4351076	-316.1190636	-310.048554	-174.8015582	-236.3145496	-269.927942	-302.014949	-335.462627
+2.8	1578.432388	1992.642698	1973.491037	1828.967403	1274.757493	1719.067945	1932.165797	2150.746526	2336.809364
-2.85	-163.2009951	-226.8263285	-237.0893003	-232.5364233	-131.1011671	-177.2359056	-202.445957	-226.511207	-251.596969
+2.85	1287.878027	1641.406902	1614.310933	1515.285139	1039.454426	1401.972004	1577.925802	1742.617271	1884.047477
-2.9	-108.8006625	-151.2175494	-158.059537	-155.0242927	-87.40077596	-118.1572616	-134.963972	-151.007465	-167.73131
+2.9	928.6136443	1193.608051	1181.867803	1109.65945	749.0353492	1010.484659	1138.705565	1240.210555	1344.079896
-2.95	-54.40032994	-75.60877031	-79.02977373	-77.51216209	-43.70038483	-59.07861759	-67.4819866	-75.5037235	-83.8656513
+2.95	499.401256	647.1094023	644.4367422	614.0478064	402.9134475	543.1113287	612.6878529	667.0881218	721.0120917
-3	-2.82E-13	-4.36E-13	-3.28E-13	-3.09E-13	-2.64E-13	-3.20E-13	-3.49E-13	-3.60E-13	-4.02E-13
+3	2.47E-13	2.45E-13	2.50E-13	2.64E-13	2.49E-13	2.73E-13	2.80E-13	2.76E-13	2.76E-13

2-Span: Moment (Max and Min) Raw Data Results - 120' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-4.37E-13**	**-4.66E-13**	**-4.75E-13**	**-5.15E-13**	**-4.87E-13**
End Shear	**3.67E-13**	**3.78E-13**	**2.45E-13**	**3.07E-13**	**3.06E-13**
-0.05	**-143.8738687**	**-158.1511204**	**-91.1349288**	**-110.201682**	**-118.20977**
+0.05	**1148.849668**	**1221.513606**	**764.0418566**	**922.9858377**	**972.9858732**
-0.1	**-287.7477374**	**-316.3022408**	**-182.269858**	**-220.403363**	**-236.41954**
+0.1	**2105.963805**	**2245.303609**	**1405.987693**	**1700.173701**	**1789.004138**
-0.15	**-431.6216061**	**-474.4533612**	**-273.404786**	**-330.605045**	**-354.62931**
+0.15	**2926.172434**	**3113.482467**	**1928.301833**	**2339.509591**	**2466.595972**
-0.2	**-575.4954749**	**-632.6044816**	**-364.539715**	**-440.806727**	**-472.83908**
+0.2	**3568.98058**	**3870.959553**	**2374.035808**	**2873.178363**	**3021.154705**
-0.25	**-719.3693436**	**-790.755602**	**-455.674644**	**-551.008408**	**-591.048851**
+0.25	**4068.011709**	**4457.683354**	**2714.608725**	**3271.017815**	**3470.977583**
-0.3	**-863.2432123**	**-948.9067223**	**-546.809573**	**-661.21009**	**-709.258621**
+0.3	**4464.634891**	**4897.228963**	**2950.899597**	**3537.547824**	**3786.164696**
-0.35	**-1007.117081**	**-1107.057843**	**-637.944502**	**-771.411772**	**-827.468391**
+0.35	**4716.33677**	**5180.704555**	**3105.288441**	**3713.398858**	**3964.590471**
-0.4	**-1150.99095**	**-1265.208963**	**-729.07943**	**-881.613453**	**-945.678161**
+0.4	**4877.52137**	**5292.21606**	**3158.308217**	**3768.310198**	**4045.486172**
-0.45	**-1294.864818**	**-1423.360084**	**-820.214359**	**-991.815135**	**-1063.88793**
+0.45	**4879.167876**	**5342.891614**	**3116.847316**	**3711.530672**	**4004.09472**
-0.5	**-1438.738687**	**-1581.511204**	**-911.349288**	**-1102.01682**	**-1182.0977**
+0.5	**4786.681093**	**5225.600637**	**3071.935689**	**3660.376145**	**3941.499672**
-0.55	**-1582.612556**	**-1739.662324**	**-1002.48422**	**-1212.2185**	**-1300.30747**
+0.55	**4573.911606**	**4964.956292**	**2974.558262**	**3548.591291**	**3803.527339**
-0.6	**-1726.486425**	**-1897.813445**	**-1093.61915**	**-1322.42018**	**-1418.51724**
+0.6	**4222.980351**	**4634.017202**	**2786.053546**	**3326.800352**	**3556.096958**
-0.65	**-1870.360293**	**-2055.964565**	**-1184.75407**	**-1432.62186**	**-1536.72701**
+0.65	**3779.423376**	**4156.921434**	**2513.750793**	**3003.185832**	**3216.038334**
-0.7	**-2014.234162**	**-2214.115685**	**-1275.889**	**-1542.82354**	**-1654.93678**
+0.7	**3237.416447**	**3545.076257**	**2168.587286**	**2601.461867**	**2775.084415**
-0.75	**-2158.108031**	**-2372.266806**	**-1367.02393**	**-1653.02522**	**-1773.14655**
+0.75	**2587.402724**	**2820.834211**	**1764.310847**	**2117.262209**	**2245.265864**
-0.8	**-2301.981899**	**-2530.417926**	**-1458.15886**	**-1763.22691**	**-1891.35632**
+0.8	**1845.530682**	**2001.878542**	**1299.676671**	**1559.096374**	**1639.632913**
-0.85	**-2445.855768**	**-2688.569047**	**-1549.29379**	**-1873.42859**	**-2009.56609**
+0.85	**1036.691513**	**1123.766726**	**785.3582964**	**946.0582424**	**972.2573076**
-0.9	**-2589.729637**	**-2846.720167**	**-1640.42872**	**-1983.63027**	**-2127.77586**
+0.9	**504.4535383**	**499.3371359**	**440.3632863**	**508.9900156**	**530.472074**
-0.95	**-2733.603506**	**-3004.871287**	**-1731.56365**	**-2093.83195**	**-2245.98563**
+0.95	**180.3512728**	**167.8358328**	**170.7157636**	**185.2543115**	**185.4296186**
-1	**-2877.477359**	**-3163.02244**	**-1822.69853**	**-2204.03367**	**-2364.19539**
+1	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-2877.477359**	**-3163.02244**	**-1822.69853**	**-2204.03367**	**-2364.19539**
+2	**0**	**0**	**0**	**0**	**0**
-2.05	**-2733.603489**	**-3004.871283**	**-1731.5636**	**-2093.83203**	**-2245.98542**
+2.05	**180.3405906**	**167.8344826**	**170.68605**	**185.2434435**	**185.4187504**
-2.1	**-2589.729619**	**-2846.720165**	**-1640.42868**	**-1983.63034**	**-2127.77566**
+2.1	**504.4460986**	**499.0907066**	**440.3654314**	**508.9823423**	**530.4895843**
-2.15	**-2445.855749**	**-2688.569046**	**-1549.29375**	**-1873.42866**	**-2009.5659**
+2.15	**1036.748916**	**1123.768154**	**785.3633144**	**946.0690937**	**972.2731628**
-2.2	**-2301.981879**	**-2530.417928**	**-1458.15882**	**-1763.22697**	**-1891.35614**
+2.2	**1845.547503**	**2001.879364**	**1299.681935**	**1559.105539**	**1639.649515**
-2.25	**-2158.10801**	**-2372.266809**	**-1367.02389**	**-1653.02529**	**-1773.14638**

+2.25	2587.418588	2822.382035	1764.315125	2117.269813	2245.281016
-2.3	-2014.23414	-2214.115691	-1275.88897	-1542.82361	-1654.93662
+2.3	3237.428966	3547.523366	2168.589245	2601.466737	2775.097093
-2.35	-1870.36027	-2055.964572	-1184.75404	-1432.62192	-1536.72686
+2.35	3779.431059	4156.919743	2513.747002	3003.183753	3216.046811
-2.4	-1726.4864	-1897.813454	-1093.61911	-1322.42024	-1418.5171
+2.4	4224.788112	4634.019377	2786.045955	3326.793489	3556.100263
-2.45	-1582.61253	-1739.662335	-1002.48419	-1212.21856	-1300.30734
+2.45	4573.927893	4964.957161	2974.545681	3548.578404	3803.521631
-2.5	-1438.73866	-1581.511217	-911.34926	-1102.01687	-1182.09758
+2.5	4786.689636	5226.940952	3071.951241	3660.386395	3941.48706
-2.55	-1294.86479	-1423.360098	-820.214333	-991.815189	-1063.88782
+2.55	4879.162532	5342.890499	3116.833988	3711.523355	4004.110489
-2.6	-1150.99092	-1265.20898	-729.079406	-881.613505	-945.678063
+2.6	4877.506875	5292.216834	3158.32298	3768.326123	4045.494395
-2.65	-1007.11705	-1107.057861	-637.944479	-771.411822	-827.468303
+2.65	4716.341041	5180.70268	3105.297219	3713.407594	3964.589504
-2.7	-863.2431805	-948.9067427	-546.809552	-661.210138	-709.258543
+2.7	4464.625221	4898.734209	2950.90112	3537.548169	3786.154705
-2.75	-719.3693106	-790.7556242	-455.674625	-551.008454	-591.048783
+2.75	4068.020141	4457.682877	2714.602454	3271.008861	3470.988174
-2.8	-575.4954407	-632.6045057	-364.539698	-440.806771	-472.839023
+2.8	3569.109373	3870.957098	2374.02188	2873.189936	3021.13939
-2.85	-431.6215708	-474.4533872	-273.404771	-330.605087	-354.629263
+2.85	2926.183937	3113.48061	1928.294185	2339.511529	2466.600275
-2.9	-287.7477009	-316.3022687	-182.269844	-220.403403	-236.419503
+2.9	2105.96187	2245.304041	1405.971545	1700.164874	1788.996749
-2.95	-143.873831	-158.1511502	-91.1349175	-110.20172	-118.209743
+2.95	1148.834232	1221.515814	764.0510068	922.9664782	972.9674213
-3	-5.83E-13	-5.99E-13	-4.13E-13	-4.78E-13	-4.28E-13
+3	3.88E-13	5.31E-13	3.40E-13	3.01E-13	3.00E-13

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.71873	-4.70144	-6.534334266	-6.82999	-7.06926	-3.776716595	-5.10575	-5.83199	-6.525255854	-7.24792
End Shear	65.05216	46.36008	60.4971108	60.57889	61.11003	37.38788462	50.39391	56.90713	61.98022667	67.11662
-0.05	-6.71873	-4.70144	-6.534334266	-6.82999	-7.10354	-3.776716595	-5.10575	-5.83199	-6.525255854	-7.24792
+0.05	60.46538	43.15923	55.92445168	55.69345	55.0097	34.82057855	46.93184	52.94406	57.55439478	62.20359
-0.1	-6.71873	-4.70144	-6.534334266	-6.82999	-7.22497	-3.776716595	-5.10575	-5.83199	-6.525255854	-7.24792
+0.1	55.6951	39.83286	51.17121256	50.62079	48.76349	32.15544316	43.33388	48.82411	52.95466166	57.09916
-0.15	-6.93969	-5.6392	-6.534334266	-6.82999	-7.39592	-4.625394658	-6.2329	-6.68734	-6.683727225	-7.24792
+0.15	51.75702	37.04469	47.20884893	46.40983	43.80594	29.92064991	40.3171	45.3724	49.10622235	52.8343
-0.2	-11.2149	-8.74099	-7.98079486	-7.00691	-8.99664	-7.294825601	-9.77134	-10.2653	-10.25081518	-10.2466
+0.2	47.09892	33.79136	42.61191652	41.54615	38.39842	27.31196679	36.79586	41.34684	44.62427032	47.87448
-0.25	-14.9239	-11.5427	-10.47762059	-9.47711	-10.9281	-9.534808096	-12.7966	-13.7445	-13.70166941	-13.6976
+0.25	43.22521	31.08232	38.80719117	37.53976	34.03791	25.13880128	33.86272	37.99649	40.89958399	43.75885
-0.3	-19.6565	-14.8167	-14.69570527	-12.4832	-13.1448	-12.15146191	-16.3308	-17.8123	-18.19627643	-18.3155
+0.3	38.74249	27.94299	34.4265542	32.95063	29.3637	22.61933036	30.46243	34.1161	36.5923586	39.00713
-0.35	-23.6086	-17.5474	-18.33435063	-15.8817	-15.6659	-14.33292659	-19.2775	-21.2067	-22.02437799	-22.6063
+0.35	35.04221	25.34775	30.83022599	29.20429	25.88835	20.53551375	27.65035	30.91008	33.03960386	35.09446
-0.4	-28.202	-20.717	-23.07214848	-20.2976	-19.8038	-16.86404376	-22.6968	-25.1488	-26.47673941	-27.6039
+0.4	30.79402	22.36338	26.72587123	24.95529	21.99016	18.13801793	24.41525	27.22566	28.96404266	30.61434
-0.45	-32.0114	-23.3419	-27.01842362	-23.9793	-23.4666	-18.95927005	-25.5275	-28.4154	-30.17169642	-31.7575
+0.45	27.31721	19.91657	23.38869882	21.52449	18.82657	16.17127253	21.76165	24.20695	25.63139836	26.95835
-0.5	-36.4067	-26.3662	-31.59277853	-28.9862	-28.4578	-21.3720883	-28.7876	-32.1811	-34.43823287	-36.5611
+0.5	23.36268	17.12812	19.62061196	17.68119	15.38051	13.92851096	18.73597	20.76929	21.84443136	22.81334
-0.55	-40.0235	-28.8508	-35.37537976	-33.205	-32.7515	-23.35335525	-31.4649	-35.2768	-37.95186236	-40.5237
+0.55	20.15939	14.86441	16.59335436	14.62372	12.67088	12.10655656	16.27829	17.98086	18.78007632	19.46776
-0.6	-44.1617	-31.6887	-39.72630169	-38.0795	-37.7278	-25.61511095	-34.5216	-38.8152	-41.97563409	-45.07
+0.6	16.55769	12.31283	13.22151927	11.54884	9.937016	10.05129241	13.50626	14.84074	15.33864752	15.72135
-0.65	-47.5359	-33.9983	-43.294467	-42.0963	-42.0702	-27.4546977	-37.0081	-41.6972	-45.2597599	-48.7879
+0.65	13.67796	10.26688	10.55493865	9.123566	7.8103	8.401850101	11.28191	12.32557	12.59076019	12.73991
-0.7	-51.3579	-36.6089	-47.36197565	-46.6991	-47.1352	-29.53263196	-39.8171	-44.9576	-48.98383509	-53.0132
+0.7	10.48822	7.993121	7.810591028	6.648201	5.652709	6.566847589	8.807768	9.533788	9.551811326	9.550434
-0.75	-54.4397	-38.7088	-50.66494191	-50.4583	-51.235	-31.20281627	-42.0754	-47.5828	-51.9902781	-56.4326
+0.75	7.982102	6.199588	5.700127454	5.076199	4.26781	5.117636942	6.854193	7.334849	7.315412079	7.314224
-0.8	-57.8865	-41.0511	-54.38904524	-54.724	-56.0556	-33.06416708	-44.5925	-50.5143	-55.35771054	-60.2735
+0.8	5.405806	4.24461	3.958206694	3.333179	2.814784	3.535654597	4.72216	4.942192	4.937886422	4.936744
-0.85	-60.6259	-42.9067	-57.37606328	-58.1702	-59.9553	-34.53722742	-46.585	-52.8398	-58.03829663	-63.3408
+0.85	3.471837	2.800039	2.791045295	2.218824	1.826376	2.314398668	3.077667	3.29292	3.291952669	3.291013
-0.9	-63.6386	-44.9399	-60.69676931	-62.0331	-64.462	-36.14923333	-48.7661	-55.3918	-60.99215184	-66.7338
+0.9	1.74764	1.56114	1.552932539	1.23403	0.991067	1.200419362	1.629302	1.630116	1.629333817	1.62858
-0.95	-65.9856	-46.5165	-63.31707539	-65.1107	-69.6778	-37.39744887	-50.4555	-57.3745	-63.29869489	-69.3952
+0.95	0.859266	0.619306	0.616464232	0.489192	0.386042	0.564805111	0.598329	0.597792	0.598430519	0.563291
-1	-68.5051	-48.1995	-66.17440191	-68.5053	-75.7529	-38.72734873	-52.2562	-59.4961	-65.78203789	-72.2767
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	68.34312	48.07696	65.96380851	68.25349	75.25148	38.63064804	52.1252	59.34142	65.60034953	72.06518
-2.05	-7.83E-01	-0.53955	-0.536718304	-0.42576	-3.36E-01	-0.535967955	-0.52129	-0.52076	-0.521383985	-0.52199
+2.05	66.21274	46.65278	63.54586134	65.38093	70.1453	37.50523096	50.60137	57.54609	63.4988596	69.62678
-2.1	-1.83301	-1.65166	-1.643370447	-1.30596	-1.05076	-1.2590985	-1.73494	-1.73576	-1.734976328	-1.73421
+2.1	63.44065	44.78959	60.44931623	61.74394	64.03787	36.03015865	48.60494	55.20297	60.77310813	66.48161
-2.15	-3.30258	-2.70006	-2.69110612	-2.13933	-1.75757	-2.209133349	-2.9606	-3.1569	-3.155937311	-3.155
+2.15	60.89196	43.06911	57.63928182	58.47509	60.32366	34.66603872	46.75928	53.04345	58.27349391	63.61046
-2.2	-5.59454	-4.38869	-4.067897202	-3.45637	-2.92028	-3.652342105	-4.8794	-5.11834	-5.112937625	-5.11179
+2.2	57.65508	40.87623	54.1093472	54.40257	55.69244	32.92524362	44.40462	50.29531	55.10569273	59.98561
-2.25	-7.76688	-6.04304	-5.548104268	-4.94128	-4.14981	-4.991060408	-6.68358	-7.14307	-7.124867113	-7.12368
+2.25	54.73813	38.89411	50.95798518	50.79292	51.59876	31.35014232	42.27457	47.81458	52.25613283	56.73545

-2.3	-10.7263	-8.16256	-8.011401547	-6.82002	-5.80258	-6.703667228	-8.99223	-9.74167	-9.777628949	-9.77625
+2.3	51.0956	36.4125	47.05465487	46.35042	46.75361	29.37638372	39.60591	44.71222	48.70323506	52.69442
-2.35	-13.4233	-10.0866	-10.32181008	-8.91184	-7.62585	-8.256473589	-11.0859	-12.1041	-12.34924412	-12.4783
+2.35	47.86043	34.20339	43.61273171	42.45548	42.46775	27.61802167	37.22888	41.95326	45.5519076	49.11897
-2.4	-16.8236	-12.5045	-13.47304869	-11.7779	-10.1392	-10.20572151	-13.7145	-15.0764	-15.59657996	-16.0017
+2.4	43.83078	31.474	39.3959944	37.70859	37.3335	25.44406412	34.29046	38.54746	41.67084451	44.72526
-2.45	-19.8687	-14.6636	-16.32634047	-14.3799	-12.4525	-11.94489931	-16.0602	-17.7336	-18.50874797	-19.1719
+2.45	40.32849	29.07257	35.71425077	33.58383	33.13657	23.53016289	31.70388	35.55323	38.26592818	40.87826
-2.5	-23.6509	-17.3388	-19.9038306	-17.9688	-15.6368	-14.09802155	-18.9646	-21.0289	-22.13009456	-23.1256
+2.5	36.05373	26.13636	31.24409446	28.59813	28.0623	21.18876642	28.53994	31.8948	34.11362892	36.19536
-2.55	-26.9942	-19.6984	-23.0924137	-21.221	-18.5528	-15.99584878	-21.525	-23.9379	-25.33463792	-26.6331
+2.55	32.33396	23.57725	27.37329706	24.31055	23.79696	19.14704684	25.78124	28.70828	30.50330009	32.13053
-2.6	-31.0993	-22.5899	-27.03616334	-25.2754	-22.282	-18.32008644	-24.6609	-27.5053	-29.27303956	-30.9537
+2.6	27.83171	20.47518	22.70971937	19.9597	19.46825	16.67097319	22.436	24.84799	26.13672206	27.22195
-2.65	-34.6908	-25.1153	-30.50927786	-28.8709	-25.5806	-20.3488412	-27.3985	-30.623	-32.72177879	-34.7447
+2.65	23.94441	17.79305	18.70062842	16.22299	15.91588	14.52915665	19.54261	21.51216	22.36916162	22.99302
-2.7	-39.0598	-28.1823	-34.75928738	-33.2982	-29.6877	-22.81143171	-30.7217	-34.4118	-36.92030707	-39.3686
+2.7	19.27367	14.56607	14.36562414	12.19964	12.97657	11.95116705	16.0603	17.50081	17.84523213	17.92226
-2.75	-42.8497	-30.8388	-38.46617404	-37.1815	-33.6521	-24.94339309	-33.599	-37.6954	-40.56506311	-43.3895
+2.75	15.26877	11.79558	10.73192402	9.700245	11.10091	9.736975023	13.06964	14.05864	14.01327238	14.00925
-2.8	-47.4235	-34.0402	-42.96247725	-41.9162	-38.8052	-27.51157428	-37.0653	-41.6547	-44.96677871	-48.2532
+2.8	10.86813	8.48465	7.80128894	6.829986	8.818253	7.089831073	9.494496	9.947016	9.935163438	9.93098
-2.85	-51.3618	-36.7932	-46.85237831	-46.0318	-43.381	-29.71902225	-40.0449	-45.0611	-48.75937385	-52.4502
+2.85	7.250408	5.819652	6.534334033	6.829986	7.41455	4.830984447	6.448456	6.944259	6.940670178	7.247918
-2.9	-56.0815	-40.0881	-51.53497734	-51.0082	-49.2343	-32.36003293	-43.6101	-49.1402	-53.30734945	-57.4903
+2.9	6.718719	4.701437	6.534334033	6.829986	7.212523	3.776716889	5.105751	5.831992	6.525256405	7.247918
-2.95	-60.1182	-42.9029	-55.55712305	-55.3006	-54.5198	-34.61524496	-46.6546	-52.6265	-57.19960546	-61.8096
+2.95	6.718719	4.701437	6.534334033	6.829986	7.109771	3.776716889	5.105751	5.831992	6.525256405	7.247918
-3	-64.9248	-46.2504	-60.36603033	-60.4532	-61.0526	-37.2963238	-50.2744	-56.7746	-61.83688228	-66.9625
+3	6.718719	4.701437	6.534334033	6.829986	7.069263	3.776716889	5.105751	5.831992	6.525256405	7.247918

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.71873	-6.1683	-6.633593783	-6.25167	-7.5637	-7.596444616	-8.03813	-3.26063
End Shear	65.05216	61.62989	65.85276216	61.77093	73.78238	69.51864541	73.48458	32.45576
-0.05	-6.71873	-6.1683	-6.633593783	-6.25167	-7.5637	-7.596444616	-8.03813	-3.26063
+0.05	60.46538	57.45295	61.35734158	57.53767	68.65748	64.21500955	67.87073	30.23423
-0.1	-6.71873	-6.1683	-6.633593783	-6.25167	-7.5637	-7.596444616	-8.03813	-3.26063
+0.1	55.6951	53.11244	56.6877177	53.1376	63.33449	58.7045677	62.03845	27.90319
-0.15	-6.93969	-8.39417	-8.522246717	-7.78362	-8.37312	-7.596444616	-8.03813	-4.16367
+0.15	51.75702	49.47028	52.77087028	49.44777	58.87384	54.11315711	57.17926	25.94945
-0.2	-11.2149	-12.7282	-13.19283345	-12.123	-13.6091	-9.430274726	-9.97529	-6.08457
+0.2	47.09892	45.21573	48.19722597	45.14029	53.67029	48.78907409	51.54514	23.66996
-0.25	-14.9239	-16.3624	-17.11083942	-15.8198	-18.0986	-12.05680921	-12.7699	-8.04842
+0.25	43.22521	41.66882	44.38584952	41.55167	49.33843	44.38482156	46.88483	21.77204
-0.3	-19.6565	-20.6049	-21.6862613	-20.138	-23.3464	-16.3271444	-17.1865	-10.3434
+0.3	38.74249	37.55345	39.96551712	37.39083	44.31985	39.31675637	41.52262	19.57293
-0.35	-23.6086	-24.1392	-25.49948545	-23.7379	-27.7244	-20.57566692	-21.6609	-12.2575
+0.35	35.04221	34.14683	36.30812379	33.94917	40.17221	35.15860324	37.12359	17.7552
-0.4	-28.202	-28.2368	-29.92240965	-27.9144	-32.8077	-26.08920215	-27.5001	-14.4793
+0.4	30.79402	30.22389	32.09844074	29.98905	35.40413	30.41621261	32.10705	15.66529
-0.45	-32.0114	-31.6261	-33.58234096	-31.3715	-37.0188	-30.68382827	-32.3665	-16.3193
+0.45	27.31721	27.00263	28.64354419	26.74009	31.49618	26.56309992	28.03171	13.95216
-0.5	-36.4067	-35.5258	-37.79543139	-35.3523	-41.8721	-36.0124284	-38.0107	-18.4391
+0.5	23.36268	23.32535	24.70184109	23.03473	27.04412	22.21603948	23.43459	12.00027
-0.55	-40.0235	-38.7249	-41.25355598	-38.6209	-45.8607	-40.4211042	-42.6809	-20.1806
+0.55	20.15939	20.33448	21.49795548	20.02422	23.4313	18.72690868	19.74536	10.41612
-0.6	-44.1617	-42.3733	-45.19948072	-42.3519	-50.4184	-45.49510857	-48.0563	-22.1695
+0.6	16.55769	16.9561	17.88156708	16.6277	19.3608	14.84483186	15.64141	8.631061
-0.65	-47.5359	-45.3374	-48.40728428	-45.3862	-54.1293	-49.65888909	-52.4679	-23.788
+0.65	13.67796	14.24067	14.97720434	13.90138	16.09855	11.77862811	12.40069	7.200279
-0.7	-51.3579	-48.6813	-52.02870891	-48.8133	-58.3258	-54.40864841	-57.5009	-25.6173
+0.7	10.48822	11.21444	11.7434659	10.86775	12.47514	8.623846785	9.077733	5.610888
-0.75	-54.4397	-51.3652	-54.93767855	-51.5677	-61.7034	-58.26858742	-61.5915	-27.0886
+0.75	7.982102	8.819495	9.187139871	8.471368	9.618918	6.520542903	6.902373	4.357859
-0.8	-57.8865	-54.3513	-58.17726929	-54.6369	-65.4733	-62.62443883	-66.2083	-28.7294
+0.8	5.405806	6.198642	6.393384221	5.854694	6.508107	4.611853769	4.875029	2.992953
-0.85	-60.6259	-56.71	-60.73889177	-57.0655	-68.4621	-66.12160631	-69.9155	-30.0289
+0.85	3.471837	4.16924	4.233607943	3.834876	4.11484	3.132304752	3.303889	2.087149
-0.9	-63.6386	-59.2852	-63.53931424	-59.7227	-71.7399	-70.01388696	-74.0422	-31.4524
+0.9	1.74764	2.216516	2.216515704	1.98654	2.077705	1.685388035	1.774093	1.249333
-0.95	-65.9856	-61.2736	-65.70507659	-61.7798	-74.2846	-73.08933584	-77.3036	-32.5559
+0.95	0.859266	0.828616	0.828615545	0.703916	0.707432	0.668875013	0.704079	0.611883
-1	-68.5051	-63.3845	-68.00899723	-63.971	-77.0046	-76.44839434	-80.8666	-33.7332
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	68.34312	63.23136	67.84162733	63.81168	76.80644	76.20059023	80.60367	33.64767
-2.05	-7.83E-01	-0.76721	-0.767214988	-0.61329	-0.61676	-0.582746763	-0.61342	-0.55428
+2.05	66.21274	61.44496	65.89195135	61.95742	74.50462	73.35806718	77.58857	32.65136
-2.1	-1.83301	-2.34508	-2.345081272	-2.12126	-2.22609	-1.783102791	-1.87695	-1.30715
+2.1	63.44065	59.09519	63.33257278	59.52644	71.49748	69.72365551	73.73445	31.34733
-2.15	-3.30258	-3.994	-4.047290353	-3.6854	-3.94999	-3.004439611	-3.16813	-2.0158
+2.15	60.89196	56.91601	60.96278326	57.27784	68.72377	66.42994808	70.24234	30.14275
-2.2	-5.59454	-6.39224	-6.599595107	-6.04774	-6.73726	-4.752888881	-5.02481	-3.09338
+2.2	57.65508	54.12865	57.93557476	54.40783	65.1917	62.29713849	65.86133	28.60701
-2.25	-7.76688	-8.61007	-8.96374245	-8.26203	-9.36971	-6.368066989	-6.7404	-4.24839
+2.25	54.73813	51.60172	55.19418626	51.81063	62.00154	58.61118889	61.95461	27.21855

-2.3	**-10.7263**	**-11.4403**	**-11.98469234**	**-11.094**	**-12.7451**	**-8.854515883**	**-9.32054**	**-5.72915**
+2.3	**51.0956**	**48.43001**	**51.75648026**	**48.55566**	**58.01006**	**54.0496467**	**57.1205**	**25.47991**
-2.35	**-13.4233**	**-14.0011**	**-14.72112879**	**-13.6611**	**-15.8113**	**-11.51075567**	**-12.1176**	**-7.0741**
+2.35	**47.86043**	**45.60039**	**48.69200456**	**45.6556**	**54.4589**	**50.03040501**	**52.86159**	**23.93196**
-2.4	**-16.8236**	**-17.2101**	**-18.15339035**	**-16.8829**	**-19.6664**	**-15.13424841**	**-15.9473**	**-8.76493**
+2.4	**43.83078**	**42.09757**	**44.90113687**	**42.06974**	**50.07356**	**45.10978902**	**47.64811**	**22.01925**
-2.45	**-19.8687**	**-20.0689**	**-21.21360354**	**-19.7571**	**-23.1109**	**-18.41931582**	**-19.4202**	**-10.2755**
+2.45	**40.32849**	**39.0103**	**41.5620893**	**38.91256**	**46.21684**	**40.81617537**	**43.0994**	**20.3362**
-2.5	**-23.6509**	**-23.6034**	**-24.99984292**	**-23.3148**	**-27.3804**	**-22.54262767**	**-23.7799**	**-12.1475**
+2.5	**36.05373**	**35.22961**	**37.47539271**	**35.04988**	**41.50316**	**35.60614378**	**37.58032**	**18.27822**
-2.55	**-26.9942**	**-26.7152**	**-28.33531794**	**-26.4503**	**-31.1478**	**-26.22114449**	**-27.6701**	**-13.7992**
+2.55	**32.33396**	**31.92973**	**33.91028357**	**31.68132**	**37.39634**	**31.09710877**	**32.80422**	**16.48446**
-2.6	**-31.0993**	**-30.5219**	**-32.41820146**	**-30.2898**	**-35.7661**	**-30.77461271**	**-32.4861**	**-15.8237**
+2.6	**27.83171**	**27.92441**	**29.58509306**	**27.59586**	**32.41984**	**25.6673309**	**27.0533**	**14.31005**
-2.65	**-34.6908**	**-33.8415**	**-35.98042608**	**-33.6408**	**-39.8008**	**-34.78763608**	**-36.7312**	**-17.5922**
+2.65	**23.94441**	**24.45698**	**25.84243812**	**24.06168**	**28.11837**	**21.00181725**	**22.11223**	**12.42997**
-2.7	**-39.0598**	**-37.8674**	**-40.30261803**	**-37.7081**	**-44.7024**	**-39.70158921**	**-41.9298**	**-19.7403**
+2.7	**19.27367**	**20.28026**	**21.33608608**	**19.80751**	**22.94457**	**15.94170821**	**16.78075**	**10.16795**
-2.75	**-42.8497**	**-41.3498**	**-44.04307954**	**-41.229**	**-48.949**	**-43.99017747**	**-46.4673**	**-21.6012**
+2.75	**15.26877**	**16.69034**	**17.46439836**	**16.15345**	**18.50389**	**12.29379535**	**13.0221**	**8.225925**
-2.8	**-47.4235**	**-45.5414**	**-48.54724706**	**-45.4699**	**-54.0683**	**-49.19498249**	**-51.9747**	**-23.8441**
+2.8	**10.86813**	**12.39546**	**12.83421943**	**11.78462**	**13.19834**	**9.189836728**	**9.71947**	**5.905113**
-2.85	**-51.3618**	**-49.1416**	**-52.41743138**	**-49.1148**	**-58.4715**	**-53.7001956**	**-56.7422**	**-25.773**
+2.85	**7.250408**	**8.728074**	**8.88201144**	**8.060874**	**8.681315**	**7.5964438**	**8.038133**	**4.281575**
-2.9	**-56.0815**	**-53.4458**	**-57.04624099**	**-53.4754**	**-63.743**	**-59.12618283**	**-62.4847**	**-28.0819**
+2.9	**6.718719**	**6.168297**	**6.633594285**	**6.251672**	**7.563699**	**7.5964438**	**8.038133**	**3.260631**
-2.95	**-60.1182**	**-57.1187**	**-60.9976348**	**-57.1987**	**-68.2472**	**-63.78906695**	**-67.4199**	**-30.0544**
+2.95	**6.718719**	**6.168297**	**6.633594285**	**6.251672**	**7.563699**	**7.5964438**	**8.038133**	**3.260631**
-3	**-64.9248**	**-61.4822**	**-65.69375249**	**-61.6248**	**-73.6054**	**-69.3665787**	**-73.3236**	**-32.4004**
+3	**6.718719**	**6.168297**	**6.633594285**	**6.251672**	**7.563699**	**7.5964438**	**8.038133**	**3.260631**

2-Span: Shear (Max and Min) Raw Data Results - 120' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.71873	-13.8687	-15.245	-8.78494	-10.6229	-11.3948
End Shear	65.05216	120.4668	128.3739	79.84861	96.41626	101.804
-0.05	-6.71873	-13.8687	-15.245	-8.78494	-10.6229	-11.3948
+0.05	60.46538	110.6787	117.7476	73.64969	88.96336	93.77895
-0.1	-6.71873	-13.8687	-15.245	-8.78494	-10.6229	-11.3948
+0.1	55.6951	100.5222	106.571	67.21183	81.22081	85.44416
-0.15	-6.93969	-13.8687	-15.245	-8.78494	-10.6229	-11.3948
+0.15	51.75702	92.09255	97.31246	61.85389	74.77505	78.51371
-0.2	-11.2149	-13.8687	-15.245	-11.2067	-12.3751	-12.957
+0.2	47.09892	82.35808	86.64268	55.64857	67.30744	70.49481
-0.25	-14.9239	-17.1977	-17.8777	-14.2793	-15.7276	-16.8788
+0.25	43.22521	74.341	77.87481	50.52207	61.13594	63.87673
-0.3	-19.6565	-23.8016	-25.2084	-17.8646	-21.6015	-21.4595
+0.3	38.74249	65.15971	67.85809	44.63126	54.04164	56.28027
-0.35	-23.6086	-30.3504	-32.008	-22.4584	-27.5915	-27.522
+0.35	35.04221	57.66619	59.70469	39.80554	48.2276	50.06472
-0.4	-28.202	-39.3934	-39.94	-28.6903	-35.0691	-35.421
+0.4	30.79402	49.16923	50.48732	34.31119	41.60494	42.99725
-0.45	-32.0114	-47.3027	-47.6156	-34.1121	-41.5729	-42.3879
+0.45	27.31721	42.31024	43.07217	29.85561	36.2316	37.27437
-0.5	-36.4067	-57.4967	-58.5628	-40.4069	-49.1219	-50.6091
+0.5	23.36268	34.62876	34.80042	24.83966	30.17892	30.84244
-0.55	-40.0235	-65.964	-68.0591	-45.6211	-55.3732	-57.4255
+0.55	20.15939	28.51528	28.6749	20.82356	25.32948	25.70241
-0.6	-44.1617	-75.7499	-79.0542	-51.6297	-62.5747	-65.2882
+0.6	16.55769	22.13668	22.48496	16.36798	19.94513	20.03494
-0.65	-47.5359	-83.8165	-88.1349	-56.5671	-68.4903	-71.7562
+0.65	13.67796	17.25085	17.94769	12.94334	15.80197	15.77747
-0.7	-51.3579	-93.0634	-98.5658	-62.2075	-75.2459	-79.1539
+0.7	10.48822	12.51377	12.97622	9.776039	11.46463	11.58674
-0.75	-54.4397	-100.618	-107.107	-66.7987	-80.7425	-85.1832
+0.75	7.982102	9.204763	9.389395	7.728826	8.488126	9.038587
-0.8	-57.8865	-109.195	-116.828	-71.989	-86.9538	-92.0094
+0.8	5.405806	5.967677	5.947082	5.485259	6.030453	6.255317
-0.85	-60.6259	-116.127	-124.706	-76.1646	-91.9484	-97.51
+0.85	3.471837	4.065485	3.698885	3.744941	4.102021	4.118318
-0.9	-63.6386	-123.902	-133.57	-80.8228	-97.5171	-103.658
+0.9	1.74764	1.974223	1.823881	1.976957	2.108754	2.012155
-0.95	-65.9856	-130.101	-140.661	-84.5135	-101.926	-108.54
+0.95	0.859266	0.669506	0.651702	0.791236	0.843985	0.704012
-1	-68.5051	-136.943	-148.522	-88.5577	-106.754	-113.903
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	68.34312	136.4356	147.9381	88.25883	106.3974	113.506
-2.05	-7.83E-01	-0.58644	-0.5581	-0.68925	-0.73519	-0.61335
+2.05	66.21274	130.6453	141.2864	84.83654	102.312	108.9674
-2.1	-1.83301	-2.12154	-2.02874	-2.10447	-2.24477	-2.21855
+2.1	63.44065	123.32	132.9059	80.47504	97.10144	103.1984
-2.15	-3.30258	-3.83446	-3.6227	-3.59448	-3.93722	-3.95338
+2.15	60.89196	116.7406	125.4055	76.53318	92.38912	97.99596
-2.2	-5.59454	-6.13875	-6.18849	-5.65109	-6.21216	-6.46065
+2.2	57.65508	108.5483	116.0951	71.59863	86.48679	91.49555
-2.25	-7.76688	-8.91759	-9.08365	-7.54965	-8.29189	-8.81591
+2.25	54.73813	101.2908	107.8697	67.20655	81.23074	85.71925

-2.3	**-10.7263**	**-12.828**	**-13.3431**	**-9.96895**	**-11.785**	**-11.8272**
+2.3	**51.0956**	**92.36268**	**97.77573**	**61.78089**	**74.73496**	**78.59397**
-2.35	**-13.4233**	**-16.8548**	**-17.55**	**-12.6571**	**-15.4553**	**-15.406**
+2.35	**47.86043**	**84.53802**	**88.94914**	**57.00795**	**69.01841**	**72.33403**
-2.4	**-16.8236**	**-22.5988**	**-22.9119**	**-16.6996**	**-20.3461**	**-20.4372**
+2.4	**43.83078**	**75.0052**	**78.21785**	**51.17315**	**62.02755**	**64.69044**
-2.45	**-19.8687**	**-27.9789**	**-28.1624**	**-20.47**	**-24.9024**	**-25.2504**
+2.45	**40.32849**	**66.72436**	**68.91387**	**46.08867**	**55.93368**	**58.03701**
-2.5	**-23.6509**	**-35.2035**	**-35.4171**	**-25.216**	**-30.6332**	**-31.3246**
+2.5	**36.05373**	**56.71799**	**57.69154**	**39.92669**	**48.54611**	**49.98165**
-2.55	**-26.9942**	**-41.7036**	**-42.4167**	**-29.4606**	**-35.7551**	**-36.7674**
+2.55	**32.33396**	**48.09194**	**48.60152**	**34.60003**	**42.15814**	**43.02485**
-2.6	**-31.0993**	**-49.8093**	**-51.1795**	**-34.726**	**-42.1051**	**-43.5305**
+2.6	**27.83171**	**38.69456**	**39.33431**	**28.1928**	**34.47216**	**34.82411**
-2.65	**-34.6908**	**-56.9995**	**-58.9793**	**-39.3754**	**-47.7092**	**-49.511**
+2.65	**23.94441**	**30.97145**	**32.62233**	**22.90878**	**28.13189**	**28.1247**
-2.7	**-39.0598**	**-65.8551**	**-68.6146**	**-45.0782**	**-54.58**	**-56.8563**
+2.7	**19.27367**	**23.29531**	**24.58676**	**17.59034**	**21.05318**	**21.10892**
-2.75	**-42.8497**	**-73.6243**	**-77.0907**	**-50.063**	**-60.5832**	**-63.2844**
+2.75	**15.26877**	**17.70719**	**18.42473**	**14.55653**	**16.03001**	**17.23279**
-2.8	**-47.4235**	**-83.0986**	**-87.4523**	**-56.1213**	**-67.8765**	**-71.1055**
+2.8	**10.86813**	**13.8687**	**15.24495**	**10.92545**	**12.06813**	**12.59812**
-2.85	**-51.3618**	**-91.3358**	**-96.481**	**-61.3723**	**-74.1955**	**-77.891**
+2.85	**7.250408**	**13.8687**	**15.24495**	**8.784936**	**10.62287**	**11.39481**
-2.9	**-56.0815**	**-101.298**	**-107.422**	**-67.7041**	**-81.8129**	**-86.0812**
+2.9	**6.718719**	**13.8687**	**15.24495**	**8.784936**	**10.62287**	**11.39481**
-2.95	**-60.1182**	**-109.892**	**-116.88**	**-73.1518**	**-88.3646**	**-93.1341**
+2.95	**6.718719**	**13.8687**	**15.24495**	**8.784936**	**10.62287**	**11.39481**
-3	**-64.9248**	**-120.21**	**-128.255**	**-79.6752**	**-96.2078**	**-101.587**
+3	**6.718719**	**13.8687**	**15.24495**	**8.784936**	**10.62287**	**11.39481**

2-Span: Moment (Max and Min) Raw Data Results - 120' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.88E-13	-1.8E-13	-1.95249E-13	-1.6E-13	-1.42E-13	-2.13027E-13	-1.8E-13	-1.8E-13	-1.71847E-13	-1.7E-13
End Shear	2.23E-13	1.07E-13	1.20006E-13	1.29E-13	1.16E-13	1.41452E-13	1.32E-13	1.04E-13	1.02244E-13	1.01E-13
-0.05	-40.3124	-28.2086	-39.20600559	-40.9799	-42.4156	-22.66029957	-30.6345	-34.992	-39.15153512	-43.4875
+0.05	362.7923	258.9554	335.5467101	334.1607	333.1525	208.9234713	281.6369	317.7143	345.9137856	373.8749
-0.1	-80.6248	-56.4173	-78.41201119	-81.9598	-84.8312	-45.32059914	-61.269	-69.9839	-78.30307024	-86.975
+0.1	672.7234	481.5322	618.9385961	612.847	603.1122	388.4197347	523.9845	590.4707	643.0955359	696.9548
-0.15	-120.937	-84.6259	-117.6180168	-122.94	-127.247	-67.9808987	-91.9035	-104.976	-117.4546054	-130.463
+0.15	931.6264	667.8215	851.135573	837.0814	824.6176	539.0106304	726.9823	818.2194	903.6083752	976.9515
-0.2	-161.25	-112.835	-156.8240224	-163.92	-169.662	-90.64119827	-122.538	-139.968	-156.6061405	-173.95
+0.2	1139.016	818.4821	1033.261087	1023.326	996.6611	661.0218526	891.4055	1001.903	1115.251031	1211.721
-0.25	-201.562	-141.043	-196.030028	-204.9	-212.078	-113.3014978	-153.173	-174.96	-195.7576756	-217.438
+0.25	1297.311	934.4754	1178.882201	1158.994	1133.782	755.2059153	1018.274	1147.518	1278.721571	1399.668
-0.3	-241.874	-169.252	-235.2360336	-245.879	-254.494	-135.9617974	-183.807	-209.952	-234.9092107	-260.925
+0.3	1411.031	1016.99	1279.741939	1256.246	1236.325	822.4968061	1115.7	1259.037	1395.537148	1536.046
-0.35	-282.187	-197.46	-274.4420392	-286.859	-296.909	-158.622097	-214.442	-244.944	-274.0607459	-304.413
+0.35	1491.98	1075.693	1335.865135	1326.41	1307.284	864.0098903	1181.351	1330.142	1477.336393	1622.169
-0.4	-322.499	-225.669	-313.6480448	-327.839	-339.325	-181.2823965	-245.076	-279.936	-313.212281	-347.9
+0.4	1528.445	1103.992	1358.863236	1370.34	1344.207	881.042096	1213.129	1363.243	1518.559656	1665.878
-0.45	-362.812	-253.878	-352.8540504	-368.819	-381.74	-203.9426961	-275.711	-314.928	-352.3638161	-391.388
+0.45	1523.024	1102.84	1343.949091	1372.516	1339.29	875.0716475	1213.012	1360.034	1518.667452	1670.952
-0.5	-403.124	-282.086	-392.0600559	-409.799	-424.156	-226.6029957	-306.345	-349.92	-391.5153512	-434.875
+0.5	1498.305	1083.189	1325.036369	1344.281	1309.017	862.5698075	1190.869	1336.719	1490.326672	1636.891
-0.55	-443.436	-310.295	-431.2660615	-450.779	-466.571	-249.2632952	-336.98	-384.911	-430.6668863	-478.363
+0.55	1438.87	1039.024	1279.213987	1283.062	1245.181	831.3146707	1141.781	1283.434	1427.738264	1563.703
-0.6	-483.749	-338.504	-470.4720671	-491.759	-508.987	-271.9235948	-367.614	-419.903	-469.8184215	-521.85
+0.6	1343.248	970.1081	1199.247313	1187.731	1164.025	779.5308239	1066.123	1199.215	1330.993233	1460.425
-0.65	-524.061	-366.712	-509.6780727	-532.739	-551.403	-294.5838944	-398.249	-454.895	-508.9699566	-565.338
+0.65	1214.972	878.9323	1087.48273	1065.696	1044.753	709.1422805	966.6014	1087.17	1203.57645	1322.499
-0.7	-564.374	-394.921	-548.8840783	-573.719	-593.818	-317.2441939	-428.883	-489.887	-548.1214917	-608.825
+0.7	1057.898	768.2145	942.8213013	909.5133	887.1498	622.2544269	846.1702	950.5908	1049.952311	1153.4
-0.75	-604.686	-423.129	-588.0900839	-614.699	-636.234	-339.9044935	-459.518	-524.879	-587.2730268	-652.313
+0.75	876.2133	642.0459	768.8986817	733.1006	702.529	521.1544705	708.0273	793.0112	874.8081189	957.6167
-0.8	-644.998	-451.338	-627.2960895	-655.679	-678.649	-362.5647931	-490.152	-559.871	-626.4245619	-695.8
+0.8	674.4281	501.2438	569.9483215	525.6847	482.643	408.3106204	555.6158	618.5227	679.2119812	739.9926
-0.85	-685.311	-479.547	-666.5020951	-696.659	-733.767	-385.2250926	-520.787	-594.863	-665.5760971	-739.288
+0.85	457.3814	349.3888	350.5364878	305.4063	273.5136	286.3726768	392.6869	431.2412	467.9339723	505.7213
-0.9	-725.623	-507.755	-705.7081007	-737.638	-866.292	-407.8853922	-551.421	-629.855	-704.7276322	-782.775
+0.9	237.3773	192.2166	189.4150564	152.3907	132.2888	158.1719117	223.525	235.6391	254.75533	269.4559
-0.95	-765.936	-535.964	-744.9141063	-778.618	-1160.13	-430.5456918	-582.056	-664.847	-743.8791673	-826.263
+0.95	97.95634	77.27724	77.17323971	61.37173	50.04515	67.3303303	82.42092	82.42052	82.4213846	82.39886
-1	-806.248	-564.173	-784.1200794	-819.598	-1529.77	-453.2060235	-612.69	-699.839	-783.0307591	-869.75
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-806.248	-564.173	-784.1200794	-819.598	-1529.77	-453.2060235	-612.69	-699.839	-783.0307591	-869.75
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-765.934	-535.964	-744.9140752	-778.618	-1160.13	-430.5457221	-582.056	-664.847	-743.8792207	-826.263
+2.05	97.95635	77.27934	77.17520037	61.37322	50.04601	67.32061501	82.42679	82.41044	82.42707001	82.40455
-2.1	-725.622	-507.755	-705.708071	-737.638	-866.292	-407.8854208	-551.421	-629.855	-704.7276822	-782.775
+2.1	237.6419	192.2149	189.402664	152.3886	132.2876	158.1791247	223.5369	235.6486	254.7636317	269.4617
-2.15	-685.309	-479.547	-666.5020668	-696.659	-733.767	-385.2251195	-520.787	-594.863	-665.5761438	-739.288
+2.15	457.7844	349.3878	350.5328387	305.4136	273.5111	286.3805251	392.7	431.2518	467.9328952	505.7261
-2.2	-644.997	-451.338	-627.2960626	-655.679	-678.649	-362.5648181	-490.152	-559.871	-626.4246054	-695.8
+2.2	674.8517	501.2447	569.9448289	525.6909	482.6464	408.3188075	555.6133	618.534	679.2134343	739.9981
-2.25	-604.685	-423.129	-588.0900584	-614.699	-636.234	-339.9045168	-459.518	-524.879	-587.2730669	-652.313

+2.25	876.6392	642.0468	768.8947154	733.1061	702.527	521.1627067	708.0249	793.0225	874.8095932	957.6223
-2.3	-564.372	-394.921	-548.8840542	-573.719	-593.818	-317.2442154	-428.883	-489.887	-548.1215285	-608.825
+2.3	1058.309	768.214	942.8166246	909.5175	887.1473	622.2623655	846.1675	950.5859	1049.953142	1153.405
-2.35	-524.06	-366.712	-509.67805	-532.739	-551.403	-294.5839141	-398.249	-454.895	-508.9699901	-565.338
+2.35	1215.352	878.9311	1087.476564	1065.692	1044.757	709.1494496	966.598	1087.164	1203.575092	1322.503
-2.4	-483.748	-338.503	-470.4720458	-491.759	-508.987	-271.9236128	-367.614	-419.903	-469.8184516	-521.85
+2.4	1343.583	970.1059	1199.254759	1187.736	1164.029	779.5371529	1066.118	1199.224	1330.990533	1460.427
-2.45	-443.435	-310.295	-431.2660416	-450.779	-466.571	-249.2633114	-336.98	-384.912	-430.6669132	-478.363
+2.45	1439.146	1039.02	1279.220844	1283.062	1245.184	831.3198472	1141.775	1283.442	1427.733794	1563.703
-2.5	-403.123	-282.086	-392.0600374	-409.799	-424.156	-226.6030101	-306.345	-349.92	-391.5153748	-434.875
+2.5	1498.51	1083.184	1325.040958	1344.287	1309.02	862.5736712	1190.861	1336.724	1490.320043	1636.888
-2.55	-362.811	-253.878	-352.8540332	-368.819	-381.74	-203.9427088	-275.711	-314.928	-352.3638364	-391.388
+2.55	1522.868	1102.846	1343.945667	1372.511	1339.293	875.0688654	1213.004	1360.031	1518.675646	1670.956
-2.6	-322.498	-225.669	-313.648029	-327.839	-339.325	-181.2824074	-245.076	-279.936	-313.2122979	-347.9
+2.6	1528.207	1103.997	1358.857252	1370.346	1344.211	881.0377567	1213.136	1363.237	1518.565245	1665.879
-2.65	-282.186	-197.46	-274.4420248	-286.859	-296.909	-158.6221061	-214.442	-244.944	-274.0607595	-304.413
+2.65	1491.649	1075.695	1335.858529	1326.405	1307.289	864.0039359	1181.355	1330.149	1477.339042	1622.167
-2.7	-241.874	-169.252	-235.2360206	-245.879	-254.493	-135.9618048	-183.807	-209.952	-234.9092211	-260.925
+2.7	1410.599	1016.989	1279.747977	1256.248	1236.328	822.4887703	1115.702	1259.041	1395.536266	1536.041
-2.75	-201.562	-141.043	-196.0300164	-204.9	-212.078	-113.3015034	-153.173	-174.96	-195.7576826	-217.438
+2.75	1296.992	934.4726	1178.885148	1158.989	1133.784	755.1959648	1018.273	1147.52	1278.717305	1399.659
-2.8	-161.249	-112.834	-156.8240122	-163.92	-169.662	-90.64120208	-122.538	-139.968	-156.6061442	-173.95
+2.8	1138.585	818.4767	1033.260409	1023.33	996.665	661.0098487	891.4016	1001.901	1115.243208	1211.724
-2.85	-120.937	-84.6259	-117.618008	-122.94	-127.247	-67.98090074	-91.9035	-104.976	-117.4546058	-130.463
+2.85	931.0052	667.8133	851.1313987	837.0811	824.6195	538.9963317	726.9754	818.2141	903.612793	976.9497
-2.9	-80.6246	-56.4172	-78.41200384	-81.9598	-84.8312	-45.32059941	-61.269	-69.9839	-78.30306735	-86.975
+2.9	672.9776	481.5212	618.9308015	612.843	603.1114	388.4030849	523.9744	590.4618	643.0959577	696.9561
-2.95	-40.3123	-28.2086	-39.20599964	-40.9799	-42.4156	-22.66029807	-30.6345	-34.992	-39.15152892	-43.4875
+2.95	362.9204	258.9584	335.5506364	334.1648	333.1558	208.9258219	281.6237	317.7018	345.9103561	373.872
-3	-2.52E-13	-1.5E-13	-2.26078E-13	-1.7E-13	-1.64E-13	-1.36968E-13	-1.7E-13	-1.8E-13	-1.86546E-13	-2.1E-13
+3	2.55E-13	1.28E-13	1.26956E-13	1.3E-13	1.41E-13	1.29195E-13	1.41E-13	1.45E-13	1.42974E-13	1.43E-13

2-Span: Moment (Max and Min) Raw Data Results - 120’ Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.88E-13	-2.6E-13	-2.6E-13	-2.2E-13	-2.7E-13	-2.1E-13	-2.2E-13	-1.6E-13
End Shear	2.23E-13	1.88E-13	2.02E-13	1.48E-13	1.76E-13	1.47E-13	1.56E-13	8.93E-14
-0.05	-40.3124	-37.0098	-39.8016	-37.51	-45.3822	-45.5787	-48.2288	-19.5638
+0.05	362.7923	344.7177	368.2002	345.3186	412.2517	385.2901	407.2244	181.4054
-0.1	-80.6248	-74.0196	-79.6031	-75.0201	-90.7644	-91.1573	-96.4576	-39.1276
+0.1	672.7234	642.0198	685.376	642.5621	766.1954	710.2471	750.602	336.981
-0.15	-120.937	-111.029	-119.405	-112.53	-136.147	-136.736	-144.686	-58.6914
+0.15	931.6264	891.8198	951.4535	891.6739	1061.97	975.7767	1031.079	467.0901
-0.2	-161.25	-148.039	-159.206	-150.04	-181.529	-182.315	-192.915	-78.2551
+0.2	1139.016	1094.977	1167.409	1093.591	1300.771	1191.971	1259.808	572.256
-0.25	-201.562	-185.049	-199.008	-187.55	-226.911	-227.893	-241.144	-97.8189
+0.25	1297.311	1252.667	1334.535	1249.552	1497.747	1367.648	1446.488	653.1611
-0.3	-241.874	-222.059	-238.809	-225.06	-272.293	-273.472	-289.373	-117.383
+0.3	1411.031	1366.359	1454.444	1372.474	1643.268	1491.107	1576.574	710.9158
-0.35	-282.187	-259.068	-278.611	-262.57	-317.675	-319.051	-337.602	-136.946
+0.35	1491.98	1441.566	1539.971	1453.499	1737.163	1573.963	1664.91	746.3137
-0.4	-322.499	-296.078	-318.413	-300.08	-363.058	-364.629	-385.83	-156.51
+0.4	1528.445	1483.865	1583.316	1493.043	1781.143	1606.059	1699.45	760.4185
-0.45	-362.812	-333.088	-358.214	-337.59	-408.44	-410.208	-434.059	-176.074
+0.45	1523.024	1487.207	1584.946	1493.82	1778.035	1590.866	1683.8	754.5466
-0.5	-403.124	-370.098	-398.016	-375.1	-453.822	-455.787	-482.288	-195.638
+0.5	1498.305	1458.269	1555.128	1466.078	1747.176	1567.267	1658.57	744.2715
-0.55	-443.436	-407.108	-437.817	-412.61	-499.204	-501.365	-530.517	-215.202
+0.55	1438.87	1395.916	1489.681	1405.266	1676.781	1511.543	1599.242	718.588
-0.6	-483.749	-444.117	-477.619	-450.12	-544.586	-546.944	-578.746	-234.765
+0.6	1343.248	1302.125	1390.081	1312.18	1566.635	1411.917	1493.441	674.7458
-0.65	-524.061	-481.127	-517.42	-487.63	-589.969	-592.523	-626.974	-254.329
+0.65	1214.972	1181.767	1259.87	1190.031	1420.711	1272.027	1345.087	614.4151
-0.7	-564.374	-518.137	-557.222	-525.14	-635.351	-638.101	-675.203	-273.893
+0.7	1057.898	1038.689	1102.902	1042.437	1243.348	1096.241	1159.531	539.4266
-0.75	-604.686	-555.147	-597.023	-562.65	-680.733	-683.68	-723.432	-293.457
+0.75	876.2133	873.1214	924.2675	873.3175	1039.248	892.8019	944.3687	451.7702
-0.8	-644.998	-592.157	-636.825	-600.16	-726.115	-729.259	-771.661	-313.021
+0.8	674.4281	689.1244	726.2349	686.8904	813.4753	661.1939	699.1446	353.5954
-0.85	-685.311	-629.166	-676.627	-637.671	-771.497	-774.837	-819.89	-332.584
+0.85	457.3814	491.0516	514.799	488.0131	571.4563	406.446	429.5258	247.2113
-0.9	-725.623	-666.176	-716.428	-675.181	-816.88	-820.416	-868.118	-352.148
+0.9	237.3773	285.3373	295.7752	281.4015	318.9809	213.2042	224.9314	141.6245
-0.95	-765.936	-703.186	-756.23	-712.691	-862.262	-865.995	-916.347	-371.712
+0.95	97.95634	109.7562	109.7562	101.428	107.2632	83.42456	87.81532	69.65014
-1	-806.248	-740.196	-796.031	-750.201	-907.644	-911.573	-964.576	-391.276
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-806.248	-740.196	-796.031	-750.201	-907.644	-911.573	-964.576	-391.276
+2	0	0	0	0	0	0	0	0
-2.05	-765.934	-703.186	-756.23	-712.691	-862.262	-865.995	-916.347	-371.712
+2.05	97.95635	109.7592	109.7592	101.4371	107.2751	83.42667	87.81755	69.40522
-2.1	-725.622	-666.176	-716.428	-675.181	-816.879	-820.416	-868.118	-352.148
+2.1	237.6419	285.3358	295.7962	281.4145	318.9893	213.2053	224.9324	141.1724
-2.15	-685.309	-629.166	-676.627	-637.671	-771.497	-774.837	-819.89	-332.584
+2.15	457.7844	491.0534	514.7973	488.0274	571.4663	406.4478	429.528	247.2073
-2.2	-644.997	-592.157	-636.825	-600.161	-726.115	-729.259	-771.661	-313.021
+2.2	674.8517	689.1268	726.2359	686.8864	813.4864	661.196	699.147	353.5914
-2.25	-604.685	-555.147	-597.023	-562.65	-680.733	-683.68	-723.432	-293.457

+2.25	**876.6392**	**873.1239**	**924.2686**	**873.3138**	**1039.26**	**892.8036**	**944.3707**	**451.7664**
-2.3	**-564.372**	**-518.137**	**-557.222**	**-525.14**	**-635.351**	**-638.101**	**-675.203**	**-273.893**
+2.3	**1058.309**	**1038.691**	**1102.902**	**1042.433**	**1243.359**	**1096.241**	**1159.532**	**539.4228**
-2.35	**-524.06**	**-481.127**	**-517.42**	**-487.63**	**-589.969**	**-592.523**	**-626.974**	**-254.329**
+2.35	**1215.352**	**1181.768**	**1259.868**	**1190.026**	**1420.72**	**1272.025**	**1345.085**	**614.4109**
-2.4	**-483.748**	**-444.117**	**-477.619**	**-450.12**	**-544.586**	**-546.944**	**-578.746**	**-234.765**
+2.4	**1343.583**	**1302.124**	**1390.078**	**1312.174**	**1566.643**	**1411.913**	**1493.437**	**674.7413**
-2.45	**-443.435**	**-407.108**	**-437.817**	**-412.61**	**-499.204**	**-501.365**	**-530.517**	**-215.202**
+2.45	**1439.146**	**1395.913**	**1489.675**	**1405.258**	**1676.787**	**1511.536**	**1599.236**	**718.5831**
-2.5	**-403.123**	**-370.098**	**-398.016**	**-375.1**	**-453.822**	**-455.787**	**-482.288**	**-195.638**
+2.5	**1498.51**	**1458.264**	**1555.121**	**1466.088**	**1747.179**	**1567.274**	**1658.578**	**744.2663**
-2.55	**-362.811**	**-333.088**	**-358.214**	**-337.59**	**-408.44**	**-410.208**	**-434.059**	**-176.074**
+2.55	**1522.868**	**1487.214**	**1584.955**	**1493.812**	**1778.034**	**1590.86**	**1683.793**	**754.5445**
-2.6	**-322.498**	**-296.078**	**-318.413**	**-300.08**	**-363.058**	**-364.629**	**-385.83**	**-156.51**
+2.6	**1528.207**	**1483.869**	**1583.322**	**1493.052**	**1781.138**	**1606.067**	**1699.457**	**760.416**
-2.65	**-282.186**	**-259.068**	**-278.611**	**-262.57**	**-317.675**	**-319.051**	**-337.602**	**-136.946**
+2.65	**1491.649**	**1441.567**	**1539.974**	**1453.506**	**1737.156**	**1573.968**	**1664.914**	**746.3105**
-2.7	**-241.874**	**-222.059**	**-238.809**	**-225.06**	**-272.293**	**-273.472**	**-289.373**	**-117.383**
+2.7	**1410.599**	**1366.357**	**1454.443**	**1372.477**	**1643.256**	**1491.108**	**1576.574**	**710.9121**
-2.75	**-201.562**	**-185.049**	**-199.008**	**-187.55**	**-226.911**	**-227.893**	**-241.144**	**-97.8189**
+2.75	**1296.992**	**1252.662**	**1334.531**	**1249.551**	**1497.751**	**1367.645**	**1446.484**	**653.1646**
-2.8	**-161.249**	**-148.039**	**-159.206**	**-150.04**	**-181.529**	**-182.315**	**-192.915**	**-78.2551**
+2.8	**1138.585**	**1094.968**	**1167.401**	**1093.587**	**1300.77**	**1191.964**	**1259.8**	**572.2588**
-2.85	**-120.937**	**-111.029**	**-119.405**	**-112.53**	**-136.147**	**-136.736**	**-144.686**	**-58.6913**
+2.85	**931.0052**	**891.807**	**951.4416**	**891.6662**	**1061.964**	**975.773**	**1031.075**	**467.0923**
-2.9	**-80.6246**	**-74.0196**	**-79.6031**	**-75.0201**	**-90.7644**	**-91.1573**	**-96.4576**	**-39.1276**
+2.9	**672.9776**	**642.0031**	**685.3599**	**642.5506**	**766.1854**	**710.2393**	**750.5939**	**336.9823**
-2.95	**-40.3123**	**-37.0098**	**-39.8016**	**-37.51**	**-45.3822**	**-45.5787**	**-48.2288**	**-19.5638**
+2.95	**362.9204**	**344.7217**	**368.18**	**345.3032**	**412.2372**	**385.2946**	**407.2292**	**181.4061**
-3	**-2.52E-13**	**-2.1E-13**	**-2.2E-13**	**-2.1E-13**	**-2.4E-13**	**-2.6E-13**	**-2.8E-13**	**-1.1E-13**
+3	**2.55E-13**	**1.58E-13**	**1.58E-13**	**1.6E-13**	**1.83E-13**	**1.63E-13**	**1.73E-13**	**1.1E-13**

2-Span: Moment (Max and Min) Raw Data Results - 120' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.88E-13	-2.5E-13	-2.7E-13	-2.7E-13	-3E-13	-2.8E-13
End Shear	2.23E-13	2.12E-13	2.19E-13	1.42E-13	1.78E-13	1.77E-13
-0.05	-40.3124	-83.2122	-91.4697	-52.7096	-63.7372	-68.3689
+0.05	362.7923	664.459	706.4856	441.8981	533.8264	562.7449
-0.1	-80.6248	-166.424	-182.939	-105.419	-127.474	-136.738
+0.1	672.7234	1218.024	1298.614	813.1797	983.3278	1034.705
-0.15	-120.937	-249.637	-274.409	-158.129	-191.212	-205.107
+0.15	931.6264	1692.407	1800.742	1115.27	1353.1	1426.603
-0.2	-161.25	-332.849	-365.879	-210.838	-254.949	-273.475
+0.2	1139.016	2064.188	2238.843	1373.069	1661.757	1747.342
-0.25	-201.562	-416.061	-457.349	-263.548	-318.686	-341.844
+0.25	1297.311	2352.812	2578.186	1570.046	1891.855	2007.506
-0.3	-241.874	-499.273	-548.818	-316.258	-382.423	-410.213
+0.3	1411.031	2582.206	2832.405	1706.709	2046.008	2189.8
-0.35	-282.187	-582.485	-640.288	-368.967	-446.161	-478.582
+0.35	1491.98	2727.783	2996.359	1796.003	2147.715	2292.996
-0.4	-322.499	-665.697	-731.758	-421.677	-509.898	-546.951
+0.4	1528.445	2821.007	3060.854	1826.668	2179.474	2339.784
-0.45	-362.812	-748.91	-823.227	-474.387	-573.635	-615.32
+0.45	1523.024	2821.959	3090.163	1802.688	2146.634	2315.844
-0.5	-403.124	-832.122	-914.697	-527.096	-637.372	-683.689
+0.5	1498.305	2768.468	3022.325	1776.712	2117.048	2279.641
-0.55	-443.436	-915.334	-1006.17	-579.806	-701.11	-752.058
+0.55	1438.87	2645.409	2871.577	1720.392	2052.395	2199.842
-0.6	-483.749	-998.546	-1097.64	-632.515	-764.847	-820.426
+0.6	1343.248	2442.441	2680.172	1611.367	1924.118	2056.736
-0.65	-524.061	-1081.76	-1189.11	-685.225	-828.584	-888.795
+0.65	1214.972	2185.901	2404.234	1453.876	1736.95	1860.057
-0.7	-564.374	-1164.97	-1280.58	-737.935	-892.321	-957.164
+0.7	1057.898	1872.421	2050.362	1254.244	1504.605	1605.023
-0.75	-604.686	-1248.18	-1372.05	-790.644	-956.059	-1025.53
+0.75	876.2133	1496.474	1631.483	1020.423	1224.559	1298.592
-0.8	-644.998	-1331.39	-1463.52	-843.354	-1019.8	-1093.9
+0.8	674.4281	1067.398	1157.824	751.6927	901.733	948.3128
-0.85	-685.311	-1414.61	-1554.98	-896.063	-1083.53	-1162.27
+0.85	457.3814	599.5902	649.9518	454.2269	547.1708	562.3235
-0.9	-725.623	-1497.82	-1646.45	-948.773	-1147.27	-1230.64
+0.9	237.3773	291.7603	288.8011	254.6925	294.384	306.8086
-0.95	-765.936	-1581.03	-1737.92	-1001.48	-1211.01	-1299.01
+0.95	97.95634	104.3096	97.07104	98.73671	107.1454	107.2467
-1	-806.248	-1664.24	-1829.39	-1054.19	-1274.74	-1367.38
+1	0	0	0	0	0	0
(Span 2) -2	-806.248	-1664.24	-1829.39	-1054.19	-1274.74	-1367.38
+2	0	0	0	0	0	0
-2.05	-765.934	-1581.03	-1737.92	-1001.48	-1211.01	-1299.01
+2.05	97.95635	104.3034	97.07026	98.71952	107.1391	107.2405
-2.1	-725.622	-1497.82	-1646.45	-948.773	-1147.27	-1230.64
+2.1	237.6419	291.756	288.6586	254.6937	294.3796	306.8187
-2.15	-685.309	-1414.61	-1554.98	-896.063	-1083.53	-1162.27
+2.15	457.7844	599.6234	649.9527	454.2298	547.177	562.3327
-2.2	-644.997	-1331.39	-1463.52	-843.354	-1019.8	-1093.9
+2.2	674.8517	1067.407	1157.825	751.6957	901.7383	948.3224
-2.25	-604.685	-1248.18	-1372.05	-790.644	-956.059	-1025.53

+2.25	876.6392	1496.483	1632.378	1020.425	1224.563	1298.601
-2.3	-564.372	-1164.97	-1280.58	-737.935	-892.321	-957.164
+2.3	1058.309	1872.429	2051.778	1254.245	1504.608	1605.03
-2.35	-524.06	-1081.76	-1189.11	-685.225	-828.584	-888.795
+2.35	1215.352	2185.906	2404.234	1453.873	1736.948	1860.062
-2.4	-483.748	-998.546	-1097.64	-632.515	-764.847	-820.426
+2.4	1343.583	2443.486	2680.173	1611.363	1924.114	2056.738
-2.45	-443.435	-915.334	-1006.17	-579.806	-701.11	-752.057
+2.45	1439.146	2645.418	2871.577	1720.385	2052.388	2199.839
-2.5	-403.123	-832.122	-914.697	-527.096	-637.372	-683.689
+2.5	1498.51	2768.473	3023.101	1776.721	2117.054	2279.634
-2.55	-362.811	-748.91	-823.227	-474.387	-573.635	-615.32
+2.55	1522.868	2821.956	3090.162	1802.68	2146.63	2315.853
-2.6	-322.498	-665.697	-731.758	-421.677	-509.898	-546.951
+2.6	1528.207	2820.999	3060.854	1826.676	2179.483	2339.789
-2.65	-282.186	-582.485	-640.288	-368.967	-446.161	-478.582
+2.65	1491.649	2727.785	2996.358	1796.008	2147.72	2292.996
-2.7	-241.874	-499.273	-548.818	-316.258	-382.423	-410.213
+2.7	1410.599	2582.201	2833.276	1706.71	2046.008	2189.795
-2.75	-201.562	-416.061	-457.349	-263.548	-318.686	-341.844
+2.75	1296.992	2352.817	2578.186	1570.042	1891.85	2007.512
-2.8	-161.249	-332.849	-365.879	-210.838	-254.949	-273.475
+2.8	1138.585	2064.262	2238.842	1373.061	1661.764	1747.333
-2.85	-120.937	-249.637	-274.409	-158.129	-191.212	-205.107
+2.85	931.0052	1692.414	1800.741	1115.266	1353.101	1426.605
-2.9	-80.6246	-166.424	-182.939	-105.419	-127.474	-136.738
+2.9	672.9776	1218.023	1298.614	813.1704	983.3227	1034.7
-2.95	-40.3123	-83.2122	-91.4697	-52.7096	-63.7373	-68.3689
+2.95	362.9204	664.4501	706.4869	441.9034	533.8152	562.7342
-3	-2.52E-13	-3.4E-13	-3.5E-13	-2.4E-13	-2.8E-13	-2.5E-13
+3	2.55E-13	2.24E-13	3.07E-13	1.96E-13	1.74E-13	1.73E-13

2-Span: Shear (Max and Min) Raw Data Results - 130' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-24.77253529	-20.21397329	-27.89271331	-11.91986698	-12.82176793	-12.08431881	-14.62448375	-14.81414719	-15.6772	-6.319476879
End Shear	216.6533497	178.1588345	234.318258	119.3493615	127.6074199	119.7473601	143.2035729	136.3027282	144.0998	62.970554
-0.05	-24.98201672	-20.42345471	-28.08124659	-11.91986698	-12.82176793	-12.08431881	-14.62448375	-14.81414719	-15.6772	-6.319476879
+0.05	198.9113003	163.5827564	212.1969605	111.3063654	118.9505077	111.593947	133.331306	126.0490346	133.2459	58.68804042
-0.1	-25.71459135	-22.24342358	-31.48924338	-11.91986698	-12.82176793	-12.08431881	-14.62448375	-14.81414719	-15.6772	-6.319476879
+0.1	180.7447639	148.713082	189.2744948	102.9763758	109.9879086	103.1481742	123.1118281	115.4343803	122.0107	54.21184208
-0.15	-28.10302785	-29.93158788	-39.47064491	-16.74607924	-17.11285906	-15.56836645	-16.92720933	-14.81414719	-15.6772	-8.049942386
+0.15	165.8088412	136.429277	170.4182928	95.89474519	102.3711192	95.9722255	114.4344455	106.4684198	112.5213	50.41048596
-0.2	-39.6965891	-39.32445812	-49.91912872	-25.05518853	-26.06722431	-24.01512008	-27.17793171	-18.5227992	-19.6038	-12.12493639
+0.2	148.8642182	122.6574193	149.3994301	87.72705962	93.58934973	87.70064651	104.4388527	96.19668629	101.6507	46.03099531
-0.25	-50.67811315	-47.7144592	-59.82281184	-32.11132761	-33.67395517	-31.19225894	-35.89343998	-23.6223146	-25.0297	-15.93841689
+0.25	134.9055468	111.3479264	132.2681853	80.82822611	86.17459628	80.7183569	96.00712817	87.58179703	92.53421	42.33616922
-0.3	-64.2715401	-57.8673771	-72.07201063	-40.24041568	-42.4404917	-39.46563252	-45.94674519	-33.24884865	-34.9988	-20.33626381
+0.3	119.3083378	98.74858086	113.4628704	72.92474755	77.68339775	72.72445214	86.36085052	77.78630091	82.16932	38.10854182
-0.35	-76.19315561	-66.8559981	-82.81379231	-47.09857537	-49.83919147	-46.44981218	-54.43928344	-42.06730668	-44.3196	-24.05043897
+0.35	106.5508184	88.47231218	98.58183378	66.29604513	70.56473245	66.02450767	78.28228335	69.63674674	73.54685	34.56752056
-0.4	-90.37220916	-77.64259369	-95.58843261	-54.94574313	-58.30816192	-54.44633599	-64.16975355	-52.62046215	-55.4961	-28.30485908
+0.4	92.4058293	77.10826892	83.24369345	58.75866876	62.47383821	58.41174187	69.11073273	60.45080369	63.82884	30.54690089
-0.45	-102.7199533	-87.11641581	-106.7120884	-61.51858508	-65.40477424	-61.14886849	-72.33182216	-61.52160193	-64.9237	-31.87245813
+0.45	80.93419458	67.91394888	72.90998535	52.48744337	55.74532561	52.08283341	61.49282635	52.88087046	55.82136	27.20694823
-0.5	-117.3046426	-98.39841769	-119.8495768	-68.9819345	-73.46644246	-68.76506432	-81.61402904	-71.70358528	-75.7087	-35.9282992
+0.5	68.33433509	57.8360984	61.55969437	45.4180756	48.16448143	44.9546891	52.92143627	44.43779357	46.8914	23.44849277
-0.55	-129.9191516	-108.2338215	-131.2111423	-75.18211693	-80.16690658	-75.09725429	-89.33811773	-80.22944825	-84.7402	-39.30205165
+0.55	58.22311593	49.76223603	52.45105455	39.59166632	41.92017923	39.08551009	45.87169857	37.56172632	39.61986	20.3568823
-0.6	-144.7175891	-119.8610661	-144.5381658	-82.15974391	-87.71152957	-82.22965355	-98.04664522	-89.90695874	-94.9925	-43.10416565
+0.6	47.24938314	41.00956278	42.56526043	33.09220241	34.95911797	32.54544611	38.02587341	29.99483227	31.6191	16.91573075
-0.65	-157.4292731	-129.9242361	-155.9845057	-87.89992411	-93.92178434	-88.10282046	-105.2252628	-97.94327488	-103.507	-46.23680201
+0.65	38.5629157	34.08449493	34.73988024	27.79795519	29.29309098	27.22469608	31.65181805	23.92691575	25.20452	14.11973873
-0.7	-172.2376719	-141.7346467	-171.0829407	-94.2899317	-100.8396269	-94.64794029	-113.2346767	-106.9829881	-113.085	-49.73003958
+0.7	29.28441675	26.68408994	26.38111185	21.97029389	23.06154993	21.37619278	24.65698874	17.53343135	18.45624	11.05104388
-0.75	-184.8667723	-151.8815649	-190.0052005	-99.48276788	-106.4656119	-99.97338674	-119.7603114	-114.4154873	-120.962	-52.57429061
+0.75	22.07683435	20.92592377	19.88799641	17.29554586	18.06785346	16.69254626	19.0661009	12.76427403	13.51728	8.597935805
-0.8	-199.4694434	-163.7011708	-212.0754945	-105.1832582	-112.646938	-105.8277695	-126.9452089	-122.6840908	-129.725	-55.70349763
+0.8	14.72675965	14.89297424	13.26451245	12.2415857	12.67556963	11.63908101	13.04769443	9.085919368	9.609719	5.956847319
-0.85	-211.8259766	-173.777621	-230.7615098	-109.7414098	-117.5945939	-110.516799	-132.7103491	-129.3985036	-136.843	-58.21209415
+0.85	9.414751622	10.30963053	8.479779248	8.273681741	8.4482674	7.68124245	8.347493969	6.195172228	6.539527	4.025929864
-0.9	-225.9953321	-185.4205501	-252.2734779	-114.6504838	-122.929666	-115.576965	-138.9453001	-136.7626807	-144.65	-60.92212783
+0.9	4.466144195	5.647424623	4.019529768	4.366352917	4.366352917	3.984701567	4.194959624	3.319853825	3.494583	2.41929639
-0.95	-237.8791141	-195.2621154	-270.6394488	-118.4866076	-127.1049312	-119.5408929	-143.8424497	-142.6447358	-150.887	-63.04779158
+0.95	2.102892678	2.236619752	1.892603409	1.670543435	1.670543435	1.410323332	1.416155988	1.340047669	1.410576	1.180894745
-1	-251.3756653	-206.53059	-291.486013	-122.5023692	-131.4840152	-123.703373	-149.0020372	-148.9711645	-157.597	-65.28350253
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.50E+02	2.06E+02	290.0195381	1.22E+02	1.31E+02	123.4226448	148.6533639	1.49E+02	1.57E+02	6.51E+01
-2.05	-1.92E+00	-1.98E+00	-1.7319498	-1.56E+00	-1.56E+00	-1.248309377	-1.254082298	-1.19E+00	-1.25E+00	-1.08E+00
+2.05	2.39E+02	1.96E+02	2.72E+02	118.7896228	127.4350275	1.20E+02	1.44E+02	1.43E+02	151.3863	6.32E+01
-2.1	-4.68E+00	-5.96E+00	-4.213504008	-4.595934779	-4.595934779	-4.225895927	-4.460805432	-3.494353735	-3.67827	-2.522044762
+2.1	2.25E+02	1.85E+02	2.51E+02	114.3144165	122.5641776	1.15E+02	1.39E+02	1.36E+02	144.1099	6.07E+01
-2.15	-9.00E+00	-9.95E+00	-8.107493761	-7.959383578	-8.11371211	-7.368186938	-7.976343225	-5.966033166	-6.2962	-3.89865723
+2.15	212.9047108	174.6132519	232.3070642	110.1063063	117.9909008	110.8925289	133.172783	129.940775	137.4174	58.41344988
-2.2	-15.20575268	-15.30004326	-13.68961149	-12.58833913	-13.04527872	-11.98540126	-13.45959188	-9.338370157	-9.87787	-6.137400501
+2.2	198.4902064	162.8579561	210.507738	104.7887316	112.2189256	105.4222769	126.4471294	122.1076701	129.1143	55.48692147
-2.25	-21.51286255	-20.47119538	-19.37517899	-16.92063614	-17.66759336	-16.31727468	-18.61862849	-12.49147946	-13.2275	-8.401347784

+2.25	**185.972664**	***152.7263114***	***191.5894804***	**99.90226898**	**106.9202932**	**100.4038988**	**120.2882399**	**115.0198847**	**121.6023**	**52.80458191**
-2.3	**-29.91655943**	***-27.18908797***	***-26.95033177***	**-22.37424166**	**-23.49328498**	**-21.78125429**	**-25.14099891**	**-17.95156389**	**-18.8964**	**-11.26314766**
+2.3	**171.2379922**	***140.8887728***	***169.5680745***	**93.84423598**	**100.3569417**	**94.19116371**	**112.6753469**	**106.3490047**	**112.4136**	**49.48646279**
-2.35	**-37.86483721**	***-33.53237288***	***-34.11513045***	**-27.36969398**	**-28.83494462**	**-26.79458089**	**-31.13696056**	**-23.44030187**	**-24.6902**	**-13.89361382**
+2.35	**158.5424328**	***130.7650371***	***156.7049806***	**88.36677897**	**94.42703145**	**88.58073856**	**105.8097446**	**98.60027489**	**104.2031**	**46.49209531**
-2.4	**-47.99251816**	***-41.61159303***	***-43.24456321***	**-33.54604192**	**-35.44501506**	**-33.00184659**	**-38.57302408**	**-30.51916715**	**-32.1734**	**-17.15543657**
+2.4	**143.7095241**	***119.0251716***	***143.3612582***	**81.67018207**	**87.18203617**	**81.72900182**	**97.43504518**	**89.22496828**	**94.26999**	**42.83752311**
-2.45	**-57.39284539**	***-49.11398961***	***-51.71827251***	**-39.11733081**	**-41.41198397**	**-38.60792963**	**-45.29839852**	**-37.00549164**	**-39.0317**	**-20.1051517**
+2.45	**130.9363381**	***109.0584879***	***131.9479876***	**75.68904452**	**80.7148782**	**75.61520771**	**89.97021875**	**80.92956371**	**85.48186**	**39.57841389**
-2.5	**-69.18164294**	***-58.53342613***	***-62.3447989***	**-45.91452235**	**-48.69669543**	**-45.45501177**	**-53.52273812**	**-45.02720798**	**-47.5148**	**-23.71186241**
+2.5	**116.21879**	***97.58430704***	***118.7076891***	**68.45578735**	**72.89798156**	**68.22794403**	**80.95913584**	**70.98310732**	**74.94552**	**35.64253417**
-2.55	**-79.97505916**	***-67.17171895***	***-72.07381869***	**-51.97427933**	**-55.1948844**	**-51.56516529**	**-60.87002775**	**-52.26454041**	**-55.1694**	**-26.93355356**
+2.55	**103.716154**	***87.91357971***	***107.4604332***	**62.05834057**	**65.98766819**	**61.69947363**	**73.00259245**	**62.25529812**	**65.70082**	**32.16594533**
-2.6	**-93.35022838**	***-77.89830802***	***-84.12956296***	**-59.29041988**	**-63.04450474**	**-58.94859242**	**-69.75722258**	**-61.09575407**	**-64.5111**	**-30.82998944**
+2.6	**89.31006826**	***76.86123081***	***94.50133665***	**54.39032065**	**57.7086061**	**53.88015422**	**63.48054604**	**51.87105055**	**54.70241**	**28.00392017**
-2.65	**-105.467582**	***-87.63907868***	***-97.38102203***	**-65.75133497**	**-69.97988738**	**-65.47414139**	**-77.61894157**	**-68.9698231**	**-72.8413**	**-34.27639735**
+2.65	**77.15537489**	***67.61517667***	***83.56789326***	**47.663873**	**50.44916164**	**47.02569535**	**55.13978542**	**42.82510633**	**45.12213**	**24.35712213**
-2.7	**-120.3424396**	***-99.62790882***	***-114.7416417***	**-73.48452357**	**-78.28467713**	**-73.29042151**	**-87.04354731**	**-78.47725532**	**-82.9004**	**-38.40741664**
+2.7	**63.2466903**	***57.12884829***	***71.0570736***	**39.66298811**	**41.81767024**	**38.87779279**	**45.23219701**	**32.56323821**	**34.27709**	**20.02408553**
-2.75	**-133.7043282**	***-110.4275354***	***-130.8787548***	**-80.25922032**	**-85.56315619**	**-80.14265819**	**-95.31217196**	**-86.87376927**	**-91.785**	**-42.03125105**
+2.75	**51.59425901**	***48.42598588***	***60.57605702***	**32.69491717**	**34.30319358**	**31.78603837**	**36.61472587**	**24.3091149**	**25.58854**	**16.2543492**
-2.8	**-149.9803657**	***-123.6217364***	***-150.8645367***	**-88.30755689**	**-94.21337629**	**-88.28835579**	**-105.1488124**	**-96.92408951**	**-102.42**	**-46.34171231**
+2.8	**38.81575645**	***38.63803286***	***49.08158444***	**24.46306872**	**25.42901259**	**23.41302726**	**26.4470188**	**18.09487968**	**19.14854**	**11.80546864**
-2.85	**-164.4971934**	***-135.4264161***	***-168.8812941***	**-95.30872799**	**-101.7409283**	**-95.37857084**	**-113.716816**	**-105.7288219**	**-111.739**	**-50.09571263**
+2.85	**28.8777761**	***30.58667827***	***40.14307528***	**17.34068054**	**17.75352568**	**16.17266708**	**17.66033986**	**14.81414521**	**15.6772**	**8.259891251**
-2.9	**-182.0639279**	***-149.7572642***	***-190.8794959***	**-103.570316**	**-110.6268445**	**-103.750194**	**-123.8400459**	**-116.1886908**	**-122.809**	**-54.53044972**
+2.9	**25.64487252**	***21.61748338***	***31.08043673***	**11.91986536**	**12.82176735**	**12.084318**	**14.62448475**	**14.81414521**	**15.6772**	**6.319476809**
-2.95	**-197.6359375**	***-162.5029428***	***-210.5279431***	**-110.7105835**	**-118.3093704**	**-110.9897141**	**-132.5999459**	**-125.2873482**	**-132.44**	**-58.36734433**
+2.95	**25.0169295**	***20.45836124***	***28.11266288***	**11.91986536**	**12.82176735**	**12.084318**	**14.62448475**	**14.81414521**	**15.6772**	**6.319476809**
-3	**-216.3710382**	***-177.8898145***	***-234.318258***	**-119.0835417**	**-127.3212641**	**-119.4837908**	**-142.8843443**	**-136.0234961**	**-143.804**	**-62.87122681**
+3	**24.77254108**	***20.21397282***	***27.89271331***	**11.91986536**	**12.82176735**	**12.084318**	**14.62448475**	**14.81414521**	**15.6772**	**6.319476809**

2-Span: Shear (Max and Min) Raw Data Results - 130' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.097578709	-12.74462924	-13.41338121	-13.97117646	-7.303924123	-9.871874859	-11.28462873	-12.629551	-14.03653791
End Shear	89.93972304	118.5027854	119.5797185	120.5090361	72.48682333	97.71486758	110.492827	120.6310023	130.9531721
-0.05	-9.097578709	-12.74462924	-13.41338121	-14.02541719	-7.303924123	-9.871874859	-11.28462873	-12.629551	-14.03653791
+0.05	83.77312634	109.6636965	110.1054719	107.9725043	67.54253058	91.046405	102.8563223	112.0986377	121.4758536
-0.1	-9.097578709	-12.74462924	-13.41338121	-14.2151017	-7.303924123	-9.871874859	-11.28462873	-12.629551	-14.03653791
+0.1	77.38657544	100.5094516	100.3043098	95.76810026	62.42647985	84.13974759	94.94517126	103.2621827	111.6641433
-0.15	-11.03681166	-12.74462924	-13.41338121	-14.48560252	-9.343787829	-12.47495023	-13.29152445	-13.28555328	-14.03653791
+0.15	71.96252619	92.77373693	92.05326154	85.99784892	58.07990351	78.27226884	88.22924456	95.77007652	103.3555827
-0.2	-17.40502691	-15.50402424	-14.09696889	-15.30499658	-14.46182159	-19.38645194	-20.56125702	-20.51757519	-20.51066201
+0.2	65.71306901	83.9074216	82.63416419	75.14972761	53.07002113	71.50984716	80.49482736	87.1529006	93.81182918
-0.25	-22.84474649	-21.49940569	-18.89299535	-18.87709163	-18.81081441	-25.25983795	-27.31604374	-27.43239498	-27.42468046
+0.25	60.44013095	76.4677107	74.76439999	66.75913287	48.84132249	65.80228509	73.97205411	79.89545543	85.78503839
-0.3	-29.11792975	-29.74822853	-25.30213471	-23.45822683	-23.82434898	-32.03119656	-35.10929154	-36.2077998	-36.86404756
+0.3	54.40615665	68.00413426	65.85287064	57.44402655	44.00031722	59.26876484	66.5115844	71.60653541	76.63076446
-0.35	-34.41586696	-37.31981496	-32.62405352	-29.64465425	-28.05689704	-37.74817545	-41.69405844	-43.63197885	-45.18444365
+0.35	49.35151361	60.95882836	58.4719411	50.15353115	39.9432414	53.79368132	60.26527633	64.67715345	68.98990596
-0.4	-40.48444348	-46.38892403	-41.07691761	-37.3784094	-32.90322955	-44.29473421	-49.24034891	-52.15172924	-54.74518753
+0.4	43.61141475	53.012799	50.19348855	42.79591446	35.33381709	47.57371528	53.17596372	56.82547082	60.34664848
-0.45	-45.57341155	-54.03490779	-49.07708704	-45.04771547	-36.96558346	-49.78274292	-55.57177677	-59.31007986	-62.78925838
+0.45	38.84226502	46.46031849	43.40897281	36.85340059	31.50211663	42.40367521	47.28945976	50.31756556	53.19587865
-0.5	-51.35898885	-62.77698642	-58.78880755	-54.25673458	-41.58200523	-56.01983742	-62.77389379	-67.46520099	-71.96684372
+0.5	33.47443113	39.14664228	35.88908529	30.24611951	27.18697943	36.58193122	40.66851063	43.01208158	45.18517406
-0.55	-56.1717948	-70.09346014	-66.94887856	-62.40140729	-45.42041952	-61.20630721	-68.76866464	-74.26430842	-79.63041505
+0.55	29.05795363	33.18537222	29.8085545	25.02419363	23.63439823	31.78950182	35.2251153	37.0190595	38.62866968
-0.6	-61.5959918	-78.39371292	-76.24513157	-71.74039826	-49.74422498	-67.04928158	-75.52940921	-81.9458318	-88.30333004
+0.6	24.14078104	26.61885846	23.3920353	19.54702687	19.67625553	26.45062782	29.16974086	30.36876788	31.37203771
-0.65	-66.06543685	-85.28226985	-83.99528149	-79.665986	-53.30495241	-71.86165577	-81.10418809	-88.29227971	-95.48222459
+0.65	20.14417657	21.3472183	18.58628134	15.45592269	16.45654362	22.10838169	24.25279235	24.98403759	25.51396641
-0.7	-71.04985894	-93.02588106	-92.75055777	-89.14480781	-57.27343571	-77.22584208	-87.32634681	-95.39122055	-103.5289284
+0.7	15.75604838	15.78837407	13.44635797	11.13132597	12.9181032	17.33704337	18.86020108	19.09790124	19.13293044
-0.75	-75.1087625	-99.38811437	-99.98323793	-96.9403078	-60.50272686	-81.59154994	-92.3978259	-101.1916172	-110.1189964
+0.75	12.24650569	11.61364009	10.0902936	8.289003768	10.08500309	13.51753251	14.55300566	14.50760736	14.50563543
-0.8	-79.57501344	-106.4602783	-108.0720285	-105.8001056	-64.05318211	-86.39230122	-97.98418967	-107.598994	-117.417953
+0.8	8.465807358	7.710977604	6.723913843	5.545279549	7.028966972	9.398393225	9.920411161	9.905061554	9.903157672
-0.85	-83.15618101	-112.1977821	-114.6796587	-114.6195015	-66.89729029	-90.23877286	-102.4690357	-112.7599246	-123.3150181
+0.85	5.510519858	5.380442922	4.32693917	3.508914555	4.636231477	6.174193764	6.523619768	6.522022005	6.520461573
-0.9	-87.02588106	-118.4836896	-121.9764832	-126.167332	-69.9670088	-94.39142382	-107.3223955	-118.3667744	-129.7447068
+0.9	3.075096069	3.061438027	2.433114447	1.92836433	2.323418489	3.250328595	3.281346228	3.279848294	3.278396757
-0.95	-90.06211537	-123.498056	-127.8514848	-136.4375966	-72.37218899	-97.64609902	-111.1372969	-122.794829	-134.8446009
+0.95	1.240848645	1.236093764	0.981268833	0.766042192	1.100443667	1.198774832	1.197880326	1.198939388	1.176702808
-1	-93.25686606	-128.8828934	-134.230828	-149.6152024	-74.89847108	-101.0659929	-115.1604386	-127.4921634	-140.2834929
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.30E+01	1.29E+02	1.34E+02	1.49E+02	7.47E+01	1.01E+02	114.8884234	127.1734559	1.40E+02
-2.05	-1.10E+00	-1.09E+00	-8.68E-01	-6.77E-01	-1.04E+00	-1.06E+00	-1.060173449	-1.061209136	-1.06E+00
+2.05	9.03E+01	1.24E+02	1.28E+02	1.37E+02	7.26E+01	9.79E+01	111.4396875	123.1468108	1.35E+02
-2.1	-3.236741837	-3.222957886	-2.561577755	-2.033054881	-2.427902663	-3.43932036	-3.500530047	-3.499024896	-3.497553193
+2.1	8.68E+01	1.18E+02	1.21E+02	1.25E+02	6.98E+01	9.41E+01	106.9892324	117.9810342	1.29E+02
-2.15	-5.278842925	-5.263953567	-4.184999156	-3.380034103	-4.447016938	-5.919255292	-6.279879356	-6.278286648	-6.27673098
+2.15	83.44332001	112.6609155	115.2151168	115.4536492	67.1252015	90.54704984	102.8289005	113.1748183	123.7899087
-2.2	-8.724664728	-7.906672867	-6.946671765	-5.730791274	-7.23837628	-9.680605267	-10.23729363	-10.21991299	-10.21800965
+2.2	79.26550158	105.967485	107.5065691	105.1703329	63.80723968	86.05973104	97.59683142	107.1540239	116.9103274
-2.25	-11.96551669	-11.28157169	-9.847660072	-8.082654248	-9.858039999	-13.21156772	-14.20840271	-14.16526393	-14.16329391
+2.25	75.43703253	99.9052758	100.5729292	97.57242715	60.76379506	81.9445269	92.80821631	101.6616405	110.6537012

-2.3	-16.05977467	-16.15182811	-13.75745909	-11.3951022	-13.16315416	-17.66743941	-19.23320883	-19.50428031	-19.57259388
+2.3	70.70186027	92.48298759	92.13516483	88.47773704	56.99645853	76.8514349	86.8917683	94.89481209	102.9656273
-2.35	-19.82128071	-20.92419151	-18.20111538	-15.12985686	-16.19630388	-21.75742282	-23.85573566	-24.54988461	-25.04243129
+2.35	66.42925564	85.8452581	84.63026691	80.33056912	53.59470741	72.25329718	81.55817946	88.80968797	96.06809075
-2.4	-24.48377208	-27.07411879	-23.80753579	-19.90263849	-19.95246755	-26.8231507	-29.59190843	-30.83176121	-31.87651888
+2.4	61.21512822	77.8089484	75.58878153	71.08325823	49.44069921	66.63909898	75.05454774	81.40579671	87.69305038
-2.45	-28.6987406	-32.70291638	-29.3186031	-24.60526805	-23.34535537	-31.39958553	-34.78254006	-36.5323529	-38.09686721
+2.45	56.56557743	70.69410499	67.62021572	63.07819632	45.73439057	61.6305826	69.25931783	74.8213079	80.25876856
-2.5	-33.85106535	-39.65741896	-36.41220406	-30.69727769	-27.48985765	-36.99051309	-41.13288478	-43.52390982	-45.74578503
+2.5	50.95086408	62.1585491	58.10051149	53.60438286	41.25642018	55.57993947	62.26571283	66.88933048	71.31828947
-2.55	-38.45230465	-45.92663637	-42.85819787	-36.37303371	-31.18873624	-41.98083773	-46.80827522	-49.78608352	-52.61247309
+2.55	45.9915586	54.66499839	49.77580797	45.71070962	37.29930069	50.23361102	56.09218082	59.89890187	63.45141167
-2.6	-44.01609545	-53.57087344	-50.77311196	-43.30573738	-35.65887684	-48.0123061	-53.67559672	-57.37833129	-60.95469298
+2.6	40.05466003	45.74504124	40.47658981	36.78637354	32.56006959	43.83118127	48.70579395	51.54781533	54.06704477
-2.65	-48.93641578	-60.38210305	-57.86931743	-49.58028221	-39.60999948	-53.34396847	-59.75243887	-64.10867836	-68.36355445
+2.65	34.8527911	37.97118954	33.23096929	30.16192942	28.40588821	38.2196035	42.23726679	44.24485408	45.87175753
-2.7	-54.83327096	-68.60129805	-66.48003814	-58.09248066	-44.34306923	-59.73130299	-67.03951343	-72.19263685	-77.27754414
+2.7	28.67210985	29.1610676	24.79775267	23.02659307	23.46810397	31.55004629	34.55533864	35.58365255	36.16501105
-2.75	-60.00548015	-75.85611423	-74.11886801	-66.07721385	-48.49268552	-65.33172382	-73.43448359	-79.29774864	-85.12441289
+2.75	23.29486944	22.09037502	19.29009133	19.20072452	19.170608	25.74578624	27.87512178	28.06156738	28.0538803
-2.8	-66.15699691	-84.53544592	-83.29989759	-75.86588754	-53.42598038	-71.99029502	-81.04408777	-87.76442717	-94.4886466
+2.8	16.94877023	15.1845226	13.69494089	15.01696486	14.09697679	18.89376274	19.99484738	19.95579774	19.94886749
-2.85	-71.51390298	-92.13547958	-91.37375819	-85.20203146	-57.72034489	-77.78689399	-87.6738795	-95.15089493	-102.6693748
+2.85	11.46336343	12.74462826	13.41338043	14.51262096	9.70991457	12.96938477	13.74899608	13.74305582	14.03653706
-2.9	-77.84171822	-101.1601193	-100.9996015	-96.60026031	-62.7911579	-84.63202682	-95.50881916	-103.8913522	-112.3623008
+2.9	9.097578931	12.74462826	13.41338043	14.19704824	7.303923824	9.871875264	11.28462852	12.62955067	14.03653706
-2.95	-83.31612945	-109.0069437	-109.4009627	-107.0446925	-67.17652147	-90.55225304	-102.290078	-111.4657675	-120.7726997
+2.95	9.097578931	12.74462826	13.41338043	14.03445585	7.303923824	9.871875264	11.28462852	12.62955067	14.03653706
-3	-89.74184049	-118.2621229	-119.3460975	-120.3828385	-72.32214731	-97.49928838	-110.2531626	-120.3710102	-130.6728105
+3	9.097578931	12.74462826	13.41338043	13.9711767	7.303923824	9.871875264	11.28462852	12.62955067	14.03653706

2-Span: Shear (Max and Min) Raw Data Results - 130' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-24.36313491	-26.82412568	-15.4003	-18.5997	-19.9829
End Shear	213.3331562	228.2166996	140.6536	169.7448	179.6418
-0.05	-24.36313491	-26.82412568	-15.4003	-18.5997	-19.9829
+0.05	196.3195426	209.7151405	129.8988	156.818	165.7107
-0.1	-24.36313491	-26.82412568	-15.4003	-18.5997	-19.9829
+0.1	178.7291062	190.3309631	118.7699	143.438	151.2949
-0.15	-24.36313491	-26.82412568	-15.4003	-18.5997	-19.9829
+0.15	163.9232313	174.0433178	109.3795	132.1449	139.1409
-0.2	-24.36313491	-26.82412568	-19.7069	-21.7334	-22.9975
+0.2	147.0243445	155.4873056	98.63344	119.2176	125.2443
-0.25	-31.57282644	-32.94590753	-25.0553	-28.3439	-29.8234
+0.25	132.9076702	140.0170574	89.6314	108.385	113.6136
-0.3	-43.72490704	-46.26602088	-32.3233	-39.8071	-39.1994
+0.3	116.925367	122.5401389	79.40873	96.07936	100.4188
-0.35	-56.34471935	-58.08838457	-41.1598	-50.4113	-50.8133
+0.35	103.6907675	108.1023635	70.91556	85.85181	89.46815
-0.4	-72.19146983	-72.62229139	-52.3156	-63.7954	-64.8483
+0.4	88.85006809	91.95546087	61.3569	74.33647	77.15816
-0.45	-87.19363313	-88.27335698	-61.7343	-75.0926	-77.1379
+0.45	76.6904379	78.76523805	53.49315	64.85866	67.0442
-0.5	-104.6582812	-107.8273497	-72.5197	-88.0257	-91.2224
+0.5	63.21637995	64.19927584	44.73914	54.30239	55.80179
-0.55	-119.336206	-124.2877755	-81.5607	-98.864	-103.039
+0.55	52.32459066	52.19145365	37.62535	45.71895	46.68123
-0.6	-136.0623223	-143.0771205	-91.835	-111.177	-116.481
+0.6	40.51366787	40.88276515	29.81659	36.29049	36.68922
-0.65	-150.0107777	-158.774589	-100.378	-121.412	-127.669
+0.65	31.81296478	32.56325134	23.57329	28.74608	28.88238
-0.7	-165.7733331	-176.5483471	-110	-132.937	-140.285
+0.7	22.88058192	23.86456109	17.19411	21.0266	20.72172
-0.75	-178.7994396	-191.2677769	-117.924	-142.424	-150.686
+0.75	16.76006934	17.20771535	13.55111	15.28414	15.96285
-0.8	-193.3734115	-207.7750248	-126.754	-152.991	-162.294
+0.8	10.87455016	11.04520098	9.676231	10.63391	11.145
-0.85	-205.2842821	-221.3013409	-133.939	-161.585	-171.752
+0.85	7.205743677	6.599660184	6.629154	7.163238	7.370368
-0.9	-218.4446317	-236.291155	-141.836	-171.026	-182.169
+0.9	3.593514908	3.321566473	3.526239	3.761322	3.654854
-0.95	-229.0473925	-248.4092763	-148.161	-178.583	-190.528
+0.95	1.209673652	1.186975962	1.42146	1.516224	1.264552
-1	-240.5691014	-261.6307304	-154.985	-186.73	-199.57
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.40E+02	2.61E+02	1.55E+02	1.86E+02	1.99E+02
-2.05	-1.07E+00	-1.02E+00	-1.26E+00	-1.34E+00	-1.12E+00
+2.05	2.30E+02	2.49E+02	1.49E+02	179.1882	1.91E+02
-2.1	-3.830288778	-3.650799879	-3.71151	-3.98164	-3.98808
+2.1	2.18E+02	2.35E+02	1.41E+02	170.3729	1.81E+02
-2.15	-6.832269384	-6.443071172	-6.38753	-6.99994	-7.07169
+2.15	206.2497241	222.4007602	134.5198	162.2796	172.5179
-2.2	-11.23606111	-11.33637037	-9.94225	-10.9252	-11.4752
+2.2	192.354353	206.6208607	126.1383	152.2539	161.4831
-2.25	-16.29398333	-16.711281	-13.2638	-14.886	-15.6051
+2.25	179.8616833	192.4710754	118.569	143.1955	151.5333

-2.3	**-23.45923632**	**-24.4613959**	**-17.6251**	**-21.5485**	**-21.2807**
+2.3	**164.6651838**	**175.2992135**	**109.3249**	**132.1282**	**139.3987**
-2.35	**-31.11662775**	**-31.91790649**	**-23.0734**	**-28.1418**	**-28.2761**
+2.35	**151.1537752**	**160.0638528**	**101.0765**	**122.2493**	**128.5844**
-2.4	**-41.26693192**	**-41.27846446**	**-30.3569**	**-36.9431**	**-37.3798**
+2.4	**134.8812147**	**141.7509443**	**91.11047**	**110.3092**	**115.5327**
-2.45	**-51.44712292**	**-51.52773377**	**-37.0506**	**-45.0252**	**-45.945**
+2.45	**120.5439091**	**125.6450835**	**82.30353**	**99.75445**	**104.0108**
-2.5	**-64.1535773**	**-65.20913023**	**-45.3496**	**-55.0387**	**-56.5851**
+2.5	**103.4203151**	**106.4420612**	**71.75611**	**87.11017**	**90.22485**
-2.55	**-75.70347364**	**-77.6949521**	**-52.8535**	**-64.0875**	**-66.222**
+2.55	**88.44999245**	**89.68082176**	**62.51114**	**76.02424**	**78.15194**
-2.6	**-89.88905935**	**-93.08275083**	**-62.0274**	**-75.1445**	**-78.0212**
+2.6	**71.07879825**	**72.03740968**	**51.523**	**62.84459**	**63.81458**
-2.65	**-102.610351**	**-106.9236637**	**-70.221**	**-85.0153**	**-88.5731**
+2.65	**57.46868292**	**59.06712756**	**41.96052**	**51.37207**	**51.77425**
-2.7	**-118.0500537**	**-123.766934**	**-80.1293**	**-96.9469**	**-101.348**
+2.7	**42.75192788**	**45.27492462**	**31.59454**	**38.93252**	**38.22515**
-2.75	**-131.7498536**	**-138.7478608**	**-88.892**	**-107.495**	**-112.659**
+2.75	**32.38578376**	**33.81853352**	**25.49763**	**29.02482**	**30.38817**
-2.8	**-148.2186349**	**-156.7956821**	**-99.394**	**-120.133**	**-126.227**
+2.8	**24.36313455**	**26.82412538**	**19.25806**	**21.24366**	**22.425**
-2.85	**-162.7040627**	**-172.701541**	**-108.605**	**-131.214**	**-138.139**
+2.85	**24.36313455**	**26.82412538**	**15.40026**	**18.59971**	**19.98291**
-2.9	**-179.9768927**	**-191.7029858**	**-119.56**	**-144.388**	**-152.318**
+2.9	**24.36313455**	**26.82412538**	**15.40026**	**18.59971**	**19.98291**
-2.95	**-195.0550683**	**-208.3187057**	**-129.1**	**-155.857**	**-164.675**
+2.95	**24.36313455**	**26.82412538**	**15.40026**	**18.59971**	**19.98291**
-3	**-212.9069247**	**-228.0228535**	**-140.367**	**-169.401**	**-179.282**
+3	**24.36313455**	**26.82412538**	**15.40026**	**18.59971**	**19.98291**

2-Span: Moment (Max and Min) Raw Data Results – 130' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.06E-13	-3.54E-13	-5.16E-13	-2.94E-13	-3.06E-13	-2.68E-13	-3.10E-13	-2.36E-13	-2.49E-13	-2.36E-13
End Shear	7.30E-13	4.19E-13	7.01E-13	2.99E-13	4.66E-13	2.45E-13	3.40E-13	3.49E-13	3.69E-13	2.83E-13
-0.05	-161.0214794	-131.3908264	-181.3026365	-77.4791353	-83.3414915	-78.5480722	-95.0591444	-96.2919567	-101.901796	-41.07659971
+0.05	1313.401823	1084.42005	1397.710776	723.5537035	773.3883624	725.6349273	867.3418349	819.3187251	866.0983715	381.4722627
-0.1	-322.0429588	-262.7816527	-362.605273	-154.958271	-166.682983	-157.096144	-190.118289	-192.583913	-203.803593	-82.15319942
+0.1	2446.044126	2028.218728	2553.127155	1347.80972	1439.835664	1350.503425	1612.487845	1512.059709	1598.237756	708.8933788
-0.15	-483.0644382	-394.1724791	-543.9079095	-232.437406	-250.024475	-235.644217	-285.177433	-288.87587	-305.705389	-123.2297991
+0.15	3402.010803	2831.877151	3549.952631	1872.661336	1999.382438	1874.668199	2235.893327	2079.694082	2197.95348	983.0044763
-0.2	-644.0859177	-525.5633055	-725.2105461	-309.916541	-333.365966	-314.192289	-380.236578	-385.167827	-407.607185	-164.3063988
+0.2	4180.764704	3496.886561	4324.577107	2299.926953	2454.041666	2300.060745	2740.014837	2543.21049	2688.42888	1204.87959
-0.25	-805.1073971	-656.9541319	-906.5131826	-387.395677	-416.707458	-392.740361	-475.295722	-481.459784	-509.508981	-205.3829986
+0.25	4787.716676	4025.308906	4874.061448	2632.040032	2806.488694	2629.237036	3154.555744	2917.902869	3086.455561	1375.9255
-0.3	-966.1288765	-788.3449582	-1087.815819	-464.874812	-500.048949	-471.288433	-570.354866	-577.75174	-611.410778	-246.4595983
+0.3	5234.659322	4419.777156	5266.914601	2872.04919	3060.061309	2887.566342	3460.812446	3183.283985	3366.218262	1498.449978
-0.35	-1127.150356	-919.7357846	-1269.118456	-542.353947	-583.390441	-549.836506	-665.414011	-674.043697	-713.312574	-287.536198
+0.35	5548.037142	4683.494768	5548.794505	3031.060136	3240.07961	3057.822117	3658.827399	3360.369325	3554.88942	1574.024498
-0.4	-1288.171835	-1051.126611	-1450.421092	-619.833083	-666.731932	-628.384578	-760.473155	-770.335654	-815.21437	-328.6127977
+0.4	5701.602212	4820.236672	5625.185809	3119.761062	3331.331299	3141.31618	3752.349258	3430.727851	3630.461305	1604.914479
-0.45	-1449.193315	-1182.517437	-1631.723729	-697.312218	-750.073424	-706.93265	-855.532299	-866.627611	-917.116166	-369.6893974
+0.45	5701.868797	4834.348263	5533.997736	3127.007609	3335.320337	3143.64697	3747.269967	3401.692168	3600.560318	1593.848894
-0.5	-1610.214794	-1313.908264	-1813.026365	-774.791353	-833.414915	-785.480722	-950.591444	-962.919567	-1019.01796	-410.7659971
+0.5	5602.225562	4744.471216	5284.146967	3066.171904	3272.399637	3085.025944	3681.57531	3350.738939	3546.122967	1571.530669
-0.55	-1771.236274	-1445.29909	-1994.329002	-852.270489	-916.756407	-864.028795	-1045.65059	-1059.21152	-1120.91976	-451.8425968
+0.55	5366.832323	4542.408449	5219.909778	2935.323885	3134.745582	2956.93642	3532.688272	3228.424717	3415.98808	1516.101785
-0.6	-1932.257753	-1576.689916	-2175.631638	-929.749624	-1000.0979	-942.576867	-1140.70973	-1155.50348	-1222.82156	-492.9191965
+0.6	4993.199946	4231.482251	4940.499559	2738.86025	2925.857217	2761.557537	3300.993135	3014.840831	3189.231975	1422.945998
-0.65	-2093.279232	-1708.080743	-2356.934275	-1007.22876	-1083.43939	-1021.12494	-1235.76888	-1251.79544	-1324.72335	-533.9957962
+0.65	4490.268837	3818.073866	4479.0228	2486.190987	2653.14101	2505.610478	2994.820609	2717.690132	2874.150734	1295.575922
-0.7	-2254.300712	-1839.471569	-2538.236911	-1084.70789	-1166.78088	-1099.67301	-1330.82802	-1348.08739	-1426.62515	-575.0723959
+0.7	3867.80303	3309.136629	3837.506029	2186.277617	2324.666202	2196.670286	2623.259167	2346.16637	2480.492308	1137.837934
-0.75	-2415.322191	-1970.862396	-2719.539548	-1162.18703	-1250.12237	-1178.22108	-1425.88717	-1444.37935	-1528.52694	-616.1489957
+0.75	3136.389057	2712.194057	3091.175396	1839.759631	1949.991446	1842.936703	2196.153918	1914.67118	2025.513086	953.9115508
-0.8	-2576.343671	-2102.253222	-2900.842184	-1239.66617	-1333.46386	-1256.76916	-1520.94631	-1540.67131	-1630.42874	-657.2255954
+0.8	2307.435394	2035.340393	2149.580855	1455.144787	1536.029992	1453.233182	1724.106464	1427.340516	1509.539139	748.3083549
-0.85	-2821.360977	-2317.639875	-3157.741063	-1317.1453	-1416.80536	-1335.31723	-1616.00545	-1636.96326	-1732.33054	-698.3021951
+0.85	1477.169229	1371.236299	1330.761909	1041.5552	1095.318646	1037.730349	1218.475685	892.8736931	943.8620971	525.8734224
-0.9	-3222.984516	-2689.632761	-3568.279005	-1394.62444	-1500.14685	-1413.8653	-1711.0646	-1733.25522	-1834.23233	-739.3787948
+0.9	739.8206385	801.7280399	666.4838157	613.19841	637.9018084	606.1819426	691.3776394	456.1900929	481.6159965	295.9564303
-0.95	-3755.4035	-3192.421092	-4594.552882	-1472.10357	-1583.48834	-1492.41337	-1806.12374	-1829.54718	-1936.13413	-780.4553945
+0.95	273.1586454	310.8131768	245.8427803	235.9055585	235.9055585	221.679461	235.7973121	179.3057568	188.7429019	145.6182176
-1	-4398.702286	-3806.088437	-5796.812893	-1549.58272	-1666.82975	-1570.96144	-1901.183	-1925.83917	-2038.03581	-821.5319771
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-4398.702286	-3806.088437	-5796.812893	-1549.58272	-1666.82975	-1570.96144	-1901.183	-1925.83917	-2038.03581	-821.5319771
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-3755.40427	-3192.421055	-4594.563622	-1472.10338	-1583.48826	-1492.41327	-1806.12385	-1829.54697	-1936.13402	-780.4553778
+2.05	273.1586744	310.8201519	245.8428065	235.9110595	235.9110595	221.6957283	235.8186967	179.3096574	188.7470078	145.1432014
-2.1	-3222.985241	-2689.63272	-3568.28868	-1394.62426	-1500.14677	-1413.8652	-1711.0647	-1733.25503	-1834.23223	-739.3787786
+2.1	740.3775153	801.7388199	666.4841903	613.195508	637.9387396	606.205075	691.3927169	456.1918343	481.6175835	295.0791282
-2.15	-2821.361676	-2317.639848	-3157.74105	-1317.14513	-1416.80528	-1335.31713	-1616.00555	-1636.96308	-1732.33044	-698.3021793
+2.15	1478.034461	1371.24886	1330.762147	1041.557789	1095.315538	1037.755682	1218.493259	892.8761822	943.8651353	525.8665265
-2.2	-2576.344319	-2102.253185	-2900.842159	-1239.66601	-1333.4638	-1256.76907	-1520.9464	-1540.67114	-1630.42865	-657.2255801
+2.2	2308.346585	2035.354474	2149.580613	1455.14854	1536.028449	1453.22583	1724.125259	1427.343269	1509.542479	748.3016382

-2.25	-2415.322802	-1970.862361	-2719.539522	-1162.18688	-1250.12231	-1178.221	-1425.88725	-1444.3792	-1528.52687	-616.1489808
+2.25	3137.30624	2712.208639	3091.175049	1839.763656	1949.993015	1842.929859	2196.173242	1914.673357	2025.515833	953.9046465
-2.3	-2254.301285	-1839.471538	-2538.236886	-1084.70776	-1166.78082	-1099.67293	-1330.8281	-1348.08725	-1426.62508	-575.0723816
+2.3	3868.689682	3309.15081	3837.506234	2186.28086	2324.664615	2196.663024	2623.27778	2346.164902	2480.491203	1137.83093
-2.35	-2093.279768	-1708.080715	-2356.934249	-1007.22863	-1083.43933	-1021.12486	-1235.76895	-1251.79531	-1324.72329	-533.9957823
+2.35	4491.089975	3818.086593	4479.022872	2486.192553	2653.137641	2505.601462	2994.837424	2717.686055	2874.146884	1295.568292
-2.4	-1932.258251	-1576.689891	-2175.631613	-929.74951	-1000.09784	-942.576797	-1140.70979	-1155.50336	-1222.8215	-492.919183
+2.4	4993.922758	4231.492623	4940.499448	2738.857643	2925.851453	2761.546162	3301.006961	3014.833439	3189.22463	1422.938176
-2.45	-1771.236734	-1445.299068	-1994.328976	-852.270385	-916.756357	-864.02873	-1045.65064	-1059.21142	-1120.91971	-451.8425838
+2.45	5367.428217	4542.415989	5219.909622	2935.31842	3134.736636	2956.922089	3532.69826	3228.41319	3415.976374	1516.093514
-2.5	-1610.215217	-1313.908245	-1813.02634	-774.79126	-833.414869	-785.480663	-950.591492	-962.919476	-1019.01792	-410.7659845
+2.5	5602.667321	4744.475232	5284.146973	3066.162803	3272.386715	3085.042142	3681.580815	3350.752703	3546.137865	1571.521373
-2.55	-1449.1937	-1182.517421	-1631.723703	-697.312136	-750.073381	-706.932596	-855.532342	-866.627532	-917.116136	-369.6893853
+2.55	5701.535417	4834.347362	5533.997719	3127.019636	3335.336411	3143.633868	3747.26812	3401.680867	3600.548021	1593.845334
-2.6	-1288.172183	-1051.126598	-1450.421067	-619.833011	-666.731894	-628.384529	-760.473191	-770.335589	-815.214347	-328.612786
+2.6	5701.088454	4820.231485	5625.186135	3119.768414	3331.342346	3141.311095	3752.341916	3430.74185	3630.475596	1604.910186
-2.65	-1127.150666	-919.7357746	-1269.11843	-542.353886	-583.390406	-549.836462	-665.41404	-674.043645	-713.312559	-287.5361868
+2.65	5547.320863	4683.483849	5548.794477	3031.062298	3240.085162	3057.833263	3658.813424	3360.377322	3554.897357	1574.019013
-2.7	-966.1291487	-788.3449512	-1087.815794	-464.874761	-500.048918	-471.288395	-570.354889	-577.751701	-611.410771	-246.4595875
+2.7	5233.722021	4419.760765	5266.914134	2872.045082	3060.06012	2887.571675	3460.791821	3183.285559	3366.219389	1498.443639
-2.75	-805.1076316	-656.9541279	-906.5131572	-387.395636	-416.70743	-392.740328	-475.295738	-481.459757	-509.508982	-205.3829882
+2.75	4787.027378	4025.286899	4874.061555	2632.030124	2806.481239	2629.236262	3154.562087	2917.897443	3086.449265	1375.931476
-2.8	-644.0861146	-525.5633045	-725.2105207	-309.916511	-333.365943	-314.192261	-380.236587	-385.167813	-407.607194	-164.306389
+2.8	4179.830111	3496.858283	4324.577523	2299.910843	2454.027603	2300.053853	2740.013634	2543.198204	2688.415322	1204.884586
-2.85	-483.0645976	-394.1724812	-543.9078842	-232.437386	-250.024455	-235.644194	-285.177436	-288.875869	-305.705405	-123.2297897
+2.85	3400.469303	2831.842564	3549.952338	1872.638762	1999.361415	1874.654637	2235.884113	2079.687615	2197.946811	983.0081487
-2.9	-322.0430805	-262.7816579	-362.6052477	-154.958261	-166.682967	-157.096127	-190.118286	-192.583925	-203.803617	-82.15319046
+2.9	2446.490652	2028.177053	2553.126773	1347.780185	1439.807194	1350.482758	1612.470023	1512.045542	1598.222937	708.8958286
-2.95	-161.0215635	-131.3908345	-181.3026112	-77.4791366	-83.3414793	-78.54806	-95.0591347	-96.2919816	-101.901829	-41.0765912
+2.95	1313.681036	1084.372109	1397.710712	723.5177609	773.3529827	725.6074974	867.3158807	819.3267409	866.1068567	381.4735575
-3	-5.11E-13	-3.39E-13	-6.49E-13	-2.44E-13	-2.82E-13	-2.15E-13	-2.56E-13	-2.84E-13	-3.00E-13	-1.46E-13
+3	1.33E-12	7.93E-13	1.18E-12	5.83E-13	6.17E-13	5.21E-13	6.32E-13	6.95E-13	7.35E-13	4.48E-13

2-Span: Moment (Max and Min) Raw Data Results - 130' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.02E-13	-2.14E-13	-2.87E-13	-2.28E-13	-2.26E-13	-2.37E-13	-2.36E-13	-2.46E-13	-2.45E-13
End Shear	2.84E-13	3.08E-13	2.47E-13	2.12E-13	3.59E-13	2.09E-13	2.20E-13	2.20E-13	2.27E-13
-0.05	-59.13426161	-82.84009006	-87.18697787	-90.81264701	-47.4755068	-64.16718658	-73.3500867	-82.0920815	-91.2374964
+0.05	544.5253212	712.8140271	715.6855676	707.1237137	439.0264488	591.9714451	668.7593428	729.8287337	790.9156645
-0.1	-118.2685232	-165.6801801	-174.3739557	-181.625294	-94.9510136	-128.3343732	-146.700173	-164.184163	-182.474993
+0.1	1012.946606	1316.258688	1314.626096	1277.174952	816.5606166	1101.578918	1243.233485	1357.323263	1474.57228
-0.15	-177.4027848	-248.5202702	-261.5609336	-272.437941	-142.4265204	-192.5015597	-220.05026	-246.276244	-273.712489
+0.15	1405.320436	1811.927373	1798.532256	1748.111341	1133.488094	1528.849655	1723.494284	1905.751125	2065.860465
-0.2	-236.5370464	-331.3603602	-348.7479115	-363.250588	-189.9020272	-256.6687463	-293.400347	-328.368326	-364.949986
+0.2	1723.099263	2202.289965	2200.698092	2102.009074	1390.59546	1875.379474	2111.474873	2351.849872	2561.007888
-0.25	-295.6713081	-414.2004503	-435.9348894	-454.063235	-237.377534	-320.8359329	-366.750434	-410.460407	-456.187482
+0.25	1968.265852	2514.622738	2495.275748	2398.051056	1589.437211	2143.275131	2419.149243	2696.952895	2956.851468
-0.3	-354.8055697	-497.0405403	-523.1218672	-544.875882	-284.8530408	-385.0031195	-440.10052	-492.552489	-547.424979
+0.3	2143.27624	2731.687368	2710.188788	2630.746608	1731.946313	2348.567432	2653.966885	2944.310304	3244.487185
-0.35	-413.9398313	-579.8806304	-610.3088451	-635.6885291	-332.3285476	-449.1703061	-513.450607	-574.64457	-638.662475
+0.35	2267.271374	2854.697909	2861.339545	2772.147798	1820.433934	2486.614764	2804.204215	3117.02245	3426.850141
-0.4	-473.0740929	-662.7207205	-697.495823	-726.5011761	-379.8040544	-513.3374927	-586.800694	-656.736652	-729.899972
+0.4	2327.255821	2907.575401	2955.588729	2845.153013	1857.590116	2553.786452	2874.782147	3204.033243	3519.824545
-0.45	-532.2083545	-745.5608105	-784.6828009	-817.3138231	-427.2795612	-577.5046792	-660.150781	-738.828733	-821.137468
+0.45	2325.566429	2878.83794	2959.731481	2839.118244	1846.483289	2554.246048	2869.243694	3204.975729	3530.408388
-0.5	-591.3426161	-828.4009006	-871.8697787	-908.1264701	-474.755068	-641.6718658	-733.500867	-820.920815	-912.374964
+0.5	2283.87166	2837.774548	2899.656343	2777.555972	1819.304488	2507.342744	2819.562994	3145.040938	3458.718867
-0.55	-650.4768777	-911.2409906	-959.0567566	-998.9391171	-522.2305748	-705.8390524	-806.850954	-903.012896	-1003.61246
+0.55	2190.454532	2736.580582	2767.327979	2638.705173	1752.405559	2403.826112	2706.573613	3012.873585	3304.762682
-0.6	-709.6111393	-994.0810807	-1046.243734	-1089.751764	-569.7060816	-770.006239	-880.201041	-985.104978	-1094.84996
+0.6	2045.460554	2562.859028	2561.652618	2473.285187	1642.838417	2244.919955	2529.156963	2809.489844	3086.422677
-0.65	-768.7454009	-1076.921171	-1133.430712	-1180.564411	-617.1815884	-834.1734256	-953.551127	-1067.19706	-1186.08745
+0.65	1854.108431	2323.30704	2299.727718	2212.598368	1494.64555	2036.295027	2293.769315	2542.187436	2796.247428
-0.7	-827.8796625	-1159.761261	-1220.61769	-1271.377058	-664.6570952	-898.3406122	-1026.90121	-1149.28914	-1277.32495
+0.7	1622.090337	2015.874706	1966.172573	1891.590216	1312.248696	1784.133533	2007.418232	2219.326396	2441.325639
-0.75	-887.0139242	-1242.601351	-1307.804668	-1362.189705	-712.132602	-962.5077987	-1100.2513	-1231.38122	-1368.56245
+0.75	1356.937558	1648.304888	1585.274501	1485.899566	1100.44806	1495.128882	1677.550406	1852.229951	2031.07169
-0.8	-946.1481858	-1325.441441	-1394.991646	-1453.002352	-759.6081088	-1026.674985	-1173.60139	-1313.4733	-1459.79994
+0.8	1062.312913	1229.479122	1145.144444	1013.524495	864.4215512	1176.484726	1312.566021	1442.943612	1575.633399
-0.85	-1005.282447	-1408.281531	-1482.178624	-1565.563919	-807.0836156	-1090.842172	-1246.95147	-1395.56539	-1551.03744
+0.85	746.0591138	769.2062203	673.6882131	580.9002279	609.7260771	836.0963495	921.1588823	1002.78172	1085.892168
-0.9	-1064.416709	-1491.121621	-1569.365602	-1718.675316	-854.5591224	-1155.009358	-1320.30156	-1477.65747	-1642.27494
+0.9	417.761393	400.0843915	334.5104382	281.6279616	342.2972559	482.7576586	512.6898739	548.6719425	583.2817793
-0.95	-1123.550971	-1573.961711	-1656.55258	-2283.282247	-902.0346292	-1219.176545	-1393.65165	-1559.74955	-1733.51243
+0.95	166.093104	165.9105288	131.9456568	105.791321	140.6824914	179.2509386	179.2788182	179.2860086	179.2656662
-1	-1182.685249	-1656.801771	-1743.739565	-3035.903676	-949.5100719	-1283.343761	-1467.00172	-1641.84161	-1824.7499
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1182.685249	-1656.801771	-1743.739565	-3035.903676	-949.5100719	-1283.343761	-1467.00172	-1641.84161	-1824.7499
+2	0	0	0	0	0	0	0	0	0
-2.05	-1123.550986	-1573.96156	-1656.55249	-2283.282146	-902.0345671	-1219.176572	-1393.65163	-1559.74949	-1733.5123
+2.05	166.0969122	165.9140401	131.9483458	105.7929331	140.6652162	179.2614397	179.2606771	179.2912818	179.2708472
-2.1	-1064.416722	-1491.121476	-1569.365518	-1718.675319	-854.5590622	-1155.009383	-1320.30155	-1477.65741	-1642.27481
+2.1	417.7578449	400.0621935	334.5063396	281.6256123	342.3103151	482.7789738	512.7067663	548.6954028	583.29224
-2.15	-1005.282459	-1408.281393	-1482.178545	-1565.563923	-807.0835574	-1090.842194	-1246.95146	-1395.56533	-1551.03732
+2.15	746.0572972	769.2266817	673.7004971	580.9077001	609.7401891	836.1194841	921.1774462	1002.77958	1085.900195
-2.2	-946.1481964	-1325.441309	-1394.991572	-1453.002351	-759.6080525	-1026.675004	-1173.60137	-1313.47325	-1459.79983
+2.2	1062.314146	1229.472127	1145.154598	1013.530244	864.4361908	1176.479964	1312.585985	1442.945577	1575.642642
-2.25	-887.0139333	-1242.601225	-1307.804599	-1362.189702	-712.1325476	-962.5078151	-1100.25129	-1231.38117	-1368.56234

+2.25	1356.938815	1648.297284	1585.283446	1485.895555	1100.462545	1495.124501	1677.570434	1852.23199	2031.081193
-2.3	-827.8796703	-1159.761142	-1220.617626	-1271.377054	-664.6570428	-898.3406259	-1026.9012	-1149.2891	-1277.32485
+2.3	1622.089277	2015.865721	1966.168736	1891.59757	1312.262941	1784.128802	2007.409344	2219.327706	2441.334453
-2.35	-768.7454072	-1076.921058	-1133.430654	-1180.564405	-617.1815379	-834.1734367	-953.551118	-1067.19702	-1186.08735
+2.35	1854.106046	2323.323376	2299.739305	2212.605406	1494.658504	2036.288837	2293.758771	2542.184872	2796.254331
-2.4	-709.6111442	-994.0809741	-1046.243681	-1089.751757	-569.7060331	-770.0062475	-880.201033	-985.104937	-1094.84986
+2.4	2045.456347	2562.87212	2561.661211	2473.292019	1642.84968	2244.911817	2529.172599	2809.484769	3086.426541
-2.45	-650.4768811	-911.2408904	-959.0567079	-998.9391079	-522.2305282	-705.8390583	-806.850947	-903.012857	-1003.61237
+2.45	2190.448119	2736.593044	2767.318117	2638.707701	1752.41485	2403.815556	2706.586599	3012.865532	3304.761597
-2.5	-591.3426181	-828.4008067	-871.8697351	-908.1264594	-474.7550234	-641.671869	-733.500862	-820.920778	-912.374882
+2.5	2283.86223	2837.782655	2899.666474	2777.561773	1819.311318	2507.329249	2819.572357	3145.029251	3458.713646
-2.55	-532.208355	-745.560723	-784.6827623	-817.3138108	-427.2795185	-577.5046798	-660.150777	-738.828698	-821.137391
+2.55	2325.578003	2878.831899	2959.722728	2839.12399	1846.478411	2554.23308	2869.237034	3204.990536	3530.416653
-2.6	-473.074092	-662.7206393	-697.4957895	-726.5011622	-379.8040136	-513.3374906	-586.800691	-656.736619	-729.8999
+2.6	2327.263967	2907.565244	2955.599426	2845.161983	1857.582485	2553.798712	2874.771273	3204.043255	3519.827605
-2.65	-413.9398289	-579.8805556	-610.3088167	-635.6885137	-332.3285088	-449.1703014	-513.450606	-574.64454	-638.662409
+2.65	2267.275516	2854.686175	2861.331224	2772.155388	1820.423143	2486.622757	2804.18837	3117.027043	3426.846293
-2.7	-354.8055659	-497.0404718	-523.1218439	-544.8758651	-284.8530039	-385.0031122	-440.100521	-492.55246	-547.424918
+2.7	2143.275733	2731.698257	2710.193182	2630.75448	1731.931908	2348.570658	2653.974686	2944.308758	3244.477239
-2.75	-295.6713028	-414.2003881	-435.9348711	-454.0632166	-237.3774991	-320.835923	-366.750435	-410.460381	-456.187427
+2.75	1968.26081	2514.628149	2495.266978	2398.055892	1589.419444	2143.273373	2419.151567	2696.945399	2956.834875
-2.8	-236.5370398	-331.3603044	-348.7478983	-363.250568	-189.9019942	-256.6687337	-293.40035	-328.368302	-364.949937
+2.8	1723.089639	2202.289271	2200.704561	2102.018382	1390.573777	1875.372722	2111.471428	2351.836229	2561.012358
-2.85	-177.4027767	-248.5202207	-261.5609255	-272.4379194	-142.4264894	-192.5015445	-220.050264	-246.276222	-273.712446
+2.85	1405.305958	1811.919885	1798.531997	1748.115596	1133.462391	1528.837417	1723.484718	1905.759065	2065.857408
-2.9	-118.2685137	-165.680137	-174.3739527	-181.6252709	-94.95098449	-128.3343553	-146.700179	-164.184143	-182.474955
+2.9	1012.926565	1316.244542	1314.619068	1277.173765	816.5304104	1101.560913	1243.217335	1357.324063	1474.574619
-2.95	-59.13425063	-82.84005327	-87.18697993	-90.81262229	-47.47547964	-64.16716608	-73.3500937	-82.0920634	-91.2374639
+2.95	544.5306165	712.8209364	715.6926456	707.1301706	439.0306657	591.9479098	668.7367777	729.8225007	790.9102368
-3	-1.71E-13	-2.73E-13	-2.51E-13	-2.38E-13	-1.74E-13	-1.82E-13	-2.01E-13	-2.18E-13	-2.36E-13
+3	4.56E-13	5.97E-13	5.67E-13	5.27E-13	3.74E-13	4.10E-13	5.40E-13	5.63E-13	6.18E-13

2-Span: Moment (Max and Min) Raw Data Results - 130' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.92E-13	-3.34E-13	-2.77E-13	-3.44E-13	-3.07E-13
End Shear	4.22E-13	4.46E-13	3.62E-13	4.01E-13	3.60E-13
-0.05	-158.3603769	-174.3568169	-100.101711	-120.898103	-129.888944
+0.05	1276.965174	1363.148413	844.3418919	1019.582889	1077.442744
-0.1	-316.7207538	-348.7136338	-200.203423	-241.796206	-259.777888
+0.1	2344.189858	2509.908082	1555.766295	1879.970857	1983.351781
-0.15	-475.0811307	-523.0704507	-300.305134	-362.69431	-389.666832
+0.15	3258.415615	3481.015351	2136.419497	2590.188526	2737.566799
-0.2	-633.4415076	-697.4272676	-400.406846	-483.592413	-519.555776
+0.2	3975.863298	4326.235246	2631.138452	3181.441068	3354.450099
-0.25	-791.8018845	-871.7840845	-500.508557	-604.490516	-649.44472
+0.25	4539.740161	4979.147547	3009.267177	3624.530615	3854.421791
-0.3	-950.1622614	-1046.140901	-600.610268	-725.388619	-779.333664
+0.3	4980.506277	5470.586734	3274.253128	3925.523532	4205.565741
-0.35	-1108.522638	-1220.497718	-700.71198	-846.286722	-909.222608
+0.35	5264.812808	5785.530248	3446.555683	4122.86438	4407.007165
-0.4	-1266.883015	-1394.854535	-800.813691	-967.184825	-1039.11155
+0.4	5440.178733	5917.68527	3508.132114	4188.039948	4501.108579
-0.45	-1425.243392	-1569.211352	-900.915403	-1088.08293	-1169.0005
+0.45	5441.801774	5968.46251	3466.587539	4131.162548	4459.46508
-0.5	-1583.603769	-1743.568169	-1001.01711	-1208.98103	-1298.88944
+0.5	5338.505523	5836.412964	3417.160695	4074.853669	4390.384528
-0.55	-1741.964146	-1917.924986	-1101.11883	-1329.87913	-1428.77838
+0.55	5100.358528	5547.961649	3303.782303	3943.857728	4231.742436
-0.6	-1900.324523	-2092.281803	-1201.22054	-1450.77724	-1558.66733
+0.6	4712.872199	5175.694698	3092.283429	3694.5043	3952.88672
-0.65	-2058.6849	-2266.63862	-1301.32225	-1571.67534	-1688.55627
+0.65	4219.520771	4645.91411	2790.707523	3335.79351	3574.455868
-0.7	-2217.045277	-2440.995437	-1401.42396	-1692.57344	-1818.44522
+0.7	3621.317701	3971.533041	2408.551268	2889.303103	3087.990503
-0.75	-2375.405653	-2615.352254	-1501.52567	-1813.47155	-1948.33416
+0.75	2907.704088	3176.691511	1964.402808	2357.330017	2506.656907
-0.8	-2533.76603	-2789.70907	-1601.62738	-1934.36965	-2078.2231
+0.8	2096.32825	2277.263346	1456.275653	1746.955952	1844.725683
-0.85	-2692.126407	-2964.065887	-1701.72909	-2055.26775	-2208.11205
+0.85	1206.197371	1295.956996	895.7717337	1072.086374	1117.569463
-0.9	-2850.486784	-3138.422704	-1801.83081	-2176.16586	-2338.00099
+0.9	567.6262463	575.2317105	487.8447276	561.9999348	591.0996966
-0.95	-3008.847161	-3312.779521	-1901.93252	-2297.06396	-2467.88994
+0.95	206.3111931	191.8252073	190.3108602	211.2428464	211.4066725
-1	-3167.207555	-3487.136312	-2002.03414	-2417.96196	-2597.77885
+1	0	0	0	0	0
(Span 2) -2	-3167.207555	-3487.136312	-2002.03414	-2417.96196	-2597.77885
+2	0	0	0	0	0
-2.05	-3008.847133	-3312.779458	-1901.93244	-2297.06386	-2467.88967
+2.05	206.3015703	191.8239674	190.2837161	211.2328502	211.3968609
-2.1	-2850.486759	-3138.422643	-1801.83073	-2176.16576	-2338.00074
+2.1	567.3672904	575.1218371	487.8467813	561.992952	591.1158338
-2.15	-2692.126384	-2964.065828	-1701.72903	-2055.26766	-2208.11181
+2.15	1206.210966	1296.628013	895.7755558	1072.093691	1117.58311
-2.2	-2533.76601	-2789.709013	-1601.62732	-1934.36956	-2078.22287
+2.2	2096.342683	2278.798656	1456.279504	1746.963054	1844.73968
-2.25	-2375.405635	-2615.352198	-1501.52561	-1813.47146	-1948.33394

+2.25	2907.717302	3178.478639	1964.405891	2357.336012	2506.669999
-2.3	-2217.045261	-2440.995383	-1401.42391	-1692.57336	-1818.44501
+2.3	3621.328527	3974.175982	2408.55025	2889.306855	3088.001476
-2.35	-2058.684886	-2266.638568	-1301.3222	-1571.67526	-1688.55608
+2.35	4219.527259	4645.912117	2790.703637	3335.791093	3574.46332
-2.4	-1900.324512	-2092.281753	-1201.22049	-1450.77716	-1558.66715
+2.4	4714.650772	5175.696464	3092.275784	3694.497393	3952.88898
-2.45	-1741.964137	-1917.924938	-1101.11879	-1329.87906	-1428.77822
+2.45	5100.373725	5547.9624	3303.770468	3943.845455	4231.737054
-2.5	-1583.603762	-1743.568123	-1001.01708	-1208.98096	-1298.88929
+2.5	5338.513239	5838.16907	3417.175084	4074.862768	4390.372762
-2.55	-1425.243388	-1569.211308	-900.915375	-1088.08286	-1169.00036
+2.55	5441.797104	5968.460027	3466.575189	4131.156154	4459.479758
-2.6	-1266.883013	-1394.854493	-800.813669	-967.184762	-1039.11142
+2.6	5440.165112	5917.685844	3508.146393	4188.055444	4501.116626
-2.65	-1108.522639	-1220.497678	-700.711962	-846.286662	-909.222492
+2.65	5264.789806	5785.528524	3446.564095	4122.87267	4407.006407
-2.7	-950.1622642	-1046.140863	-600.610256	-725.388562	-779.333561
+2.7	4980.497957	5471.924108	3274.254939	3925.524195	4205.556972
-2.75	-791.8018897	-871.7840485	-500.508549	-604.490462	-649.44463
+2.75	4539.748559	4979.147031	3009.261602	3624.522655	3854.431854
-2.8	-633.4415151	-697.4272335	-400.406843	-483.592362	-519.555698
+2.8	3977.334119	4326.233247	2631.125771	3181.452603	3354.436693
-2.85	-475.0811406	-523.0704186	-300.305137	-362.694262	-389.666767
+2.85	3258.426815	3481.014017	2136.412276	2590.190368	2737.570755
-2.9	-316.720766	-348.7136037	-200.20343	-241.796161	-259.777836
+2.9	2344.187776	2509.90859	1555.751294	1879.962669	1983.345221
-2.95	-158.3603915	-174.3567887	-100.101724	-120.898061	-129.888904
+2.95	1276.951205	1363.150349	844.3503059	1019.564954	1077.425847
-3	-4.11E-13	-4.29E-13	-3.34E-13	-3.97E-13	-3.70E-13
+3	1.08E-12	1.08E-12	6.31E-13	7.39E-13	7.98E-13

2-Span: Shear (Max and Min) Raw Data Results - 130’ Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.74926	-4.71744	-6.608571034	-6.95534	-7.64617	-3.787360188	-5.11894	-5.85151	-6.548898626	-7.27847
End Shear	65.5798	46.63714	61.44816458	62.0066	65.32487	37.58715236	50.66884	57.2947	62.55172533	67.90416
-0.05	-6.74926	-4.71744	-6.608571034	-6.95534	-7.68357	-3.787360188	-5.11894	-5.85151	-6.548898626	-7.27847
+0.05	60.99482	43.43953	56.86476354	57.09384	58.51093	35.02335005	47.211	53.33488	58.12737243	62.98981
-0.1	-6.74926	-4.71744	-6.608571034	-6.95534	-7.81439	-3.787360188	-5.11894	-5.85151	-6.548898626	-7.27847
+0.1	56.24333	40.12786	52.11794223	52.01157	51.86757	32.37048476	43.62963	49.23265	53.54533713	57.90207
-0.15	-7.32659	-5.723	-6.608571034	-6.95534	-8.00094	-4.845106471	-6.46873	-6.89216	-6.889060556	-7.27847
+0.15	52.26454	37.31528	48.10668236	47.73309	46.54987	30.11662095	40.58712	45.75019	49.66039747	53.59377
-0.2	-11.5767	-9.02516	-8.039421436	-7.30981	-8.50122	-7.499000049	-10.0526	-10.6618	-10.63913674	-10.6356
+0.2	47.62175	34.07471	43.50916339	42.84893	40.65273	27.51880795	37.08055	41.7396	45.19206668	48.64497
-0.25	-15.4923	-11.8459	-11.14825289	-9.79673	-10.4362	-9.754116882	-13.0982	-14.1644	-14.22473165	-14.2207
+0.25	43.70913	31.34049	39.65139263	38.76816	36.08691	25.32606818	34.12097	38.3573	41.42880759	44.48278
-0.3	-20.1939	-15.0987	-15.4255787	-13.1201	-12.9292	-12.35382369	-16.6094	-18.2055	-18.77511009	-19.1154
+0.3	39.23752	28.21164	35.26270897	34.1472	31.02674	22.81582433	30.73309	34.48877	37.13068987	39.73594
-0.35	-24.1692	-17.8459	-19.3517319	-16.9168	-16.2553	-14.54855952	-19.5739	-21.6199	-22.62482699	-23.4298
+0.35	35.49677	25.59062	31.60945209	30.31991	27.06686	20.71207747	27.89405	31.24982	33.53754392	35.77387
-0.4	-28.7283	-20.9927	-24.05440707	-21.2999	-20.4236	-17.06156575	-22.9685	-25.533	-27.04263896	-28.3874
+0.4	31.25502	22.61416	27.48913612	26.02722	23.06237	18.32191708	24.66877	27.57374	29.46615028	31.29201
-0.45	-32.5564	-23.6315	-28.01913808	-25.4483	-24.5528	-19.1680495	-25.8142	-28.8161	-30.7545138	-32.5586
+0.45	27.73645	20.14118	24.09142779	22.50919	19.83552	16.33503584	21.98791	24.52137	26.09155591	27.58407
-0.5	-36.9145	-26.6316	-32.55223563	-30.4842	-29.5248	-21.56183834	-29.0484	-32.5506	-34.98325175	-37.3175
+0.5	23.78325	17.35776	20.29901078	18.60984	16.25881	14.09747442	18.96911	21.08816	22.30338687	23.43022
-0.55	-40.5452	-29.1272	-36.34610326	-34.7155	-33.9326	-23.55220095	-31.7378	-35.6591	-38.50884544	-41.2914
+0.55	20.53716	15.06765	17.20786737	15.45686	13.4378	12.25532706	16.48406	18.26555	19.19577884	20.03042
-0.6	-44.6437	-31.9398	-40.65009744	-39.536	-39.0082	-25.79425718	-34.7676	-39.1648	-42.49200508	-45.7886
+0.6	16.9312	12.51791	13.80288227	12.12965	10.48333	10.20288075	13.71565	15.12561	15.74735177	16.26759
-0.65	-48.0268	-34.2574	-44.22207407	-43.5547	-43.3323	-27.64062868	-37.263	-42.0556	-45.78287774	-49.5111
+0.65	14.00789	10.44552	11.06933798	9.637688	8.27853	8.533338669	11.46403	12.57599	12.95516598	13.22995
-0.7	-51.8072	-36.842	-48.2374286	-48.0947	-48.5137	-29.69843698	-40.0445	-45.282	-49.46394636	-53.6837
+0.7	10.80786	8.170105	8.186867552	6.972444	5.954963	6.698523829	8.989911	9.779726	9.902982237	9.921146
-0.75	-54.8925	-38.9467	-51.53648658	-51.8451	-52.7973	-31.37294626	-42.3083	-47.9118	-52.47167085	-57.1009
+0.75	8.257642	6.350275	6.022110494	5.232198	4.424754	5.229454546	7.009351	7.546282	7.522741694	7.521719
-0.8	-58.2962	-41.2626	-55.20367038	-56.0394	-57.6875	-33.21399124	-44.7977	-50.8085	-55.79413742	-60.8856
+0.8	5.597831	4.38984	3.998432774	3.486603	2.950662	3.644784533	4.873421	5.144107	5.13614807	5.135161
-0.85	-61.0335	-43.1196	-58.17878251	-59.4657	-62.5259	-34.68876862	-46.7922	-53.1341	-58.47027461	-63.9435
+0.85	3.631163	2.857412	2.789962625	2.243681	1.862182	2.404060916	3.201552	3.382743	3.381914444	3.381105
-0.9	-64.0019	-45.1262	-61.43826271	-63.2494	-68.8355	-36.28053347	-48.9455	-55.6507	-61.37763775	-67.2775
+0.9	1.754042	1.594553	1.587471106	1.261662	1.016926	1.204780134	1.685418	1.701502	1.700725068	1.699972
-0.95	-66.3411	-46.7006	-64.03840083	-66.2958	-74.4464	-37.52771013	-50.6332	-57.6289	-63.6737511	-69.922
+0.95	0.859227	0.643427	0.640961247	0.508825	0.401787	0.570621554	0.62161	0.621146	0.621695301	0.610165
-1	-68.8156	-48.3572	-66.83064216	-69.6037	-81.6223	-38.8376827	-52.4065	-59.715	-66.10949617	-72.7423
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	68.66917	48.24534	66.63984187	69.37628	81.11516	38.74931876	52.28688	59.57398	65.94423431	72.55033
-2.05	-7.89E-01	-0.5695	-0.567039589	-0.45003	-3.55E-01	-0.540216604	-0.5502	-0.54974	-0.55027697	-0.5508
+2.05	66.54958	46.82527	64.24629876	66.5407	74.95267	37.62637841	50.76673	57.78568	63.85626696	70.13275
-2.1	-1.83286	-1.67837	-1.671225246	-1.32827	-1.07263	-1.25895912	-1.78342	-1.81516	-1.814376405	-1.81361
+2.1	63.82211	44.98857	61.21296202	62.98673	68.38953	36.17142539	48.7979	55.47795	61.17761692	67.04768
-2.15	-3.47301	-2.73728	-2.7295585	-2.17008	-1.79309	-2.30594604	-3.06936	-3.25635	-3.255528467	-3.25472
+2.15	61.2783	43.26851	58.41893466	59.74338	62.98096	34.80694918	46.95206	53.32066	58.68541263	64.18974
-2.2	-5.77281	-4.52407	-4.09990815	-3.60211	-3.05003	-3.753371159	-5.01976	-5.30842	-5.299410419	-5.29842
+2.2	58.08524	41.10215	54.94813847	55.74621	57.33929	33.08646081	44.62522	50.60764	55.56340363	60.62242
-2.25	-8.05578	-6.20457	-5.849920505	-5.10638	-4.31358	-5.111765621	-6.8507	-7.36759	-7.345223715	-7.3442
+2.25	55.16751	39.11695	51.80465429	52.15086	53.14576	31.50831997	42.49133	48.12456	52.71539562	57.37812

-2.3	-11.0287	-8.3276	-8.375332181	-7.13376	-6.09697	-6.825591992	-9.16123	-9.97314	-10.11370511	-10.1491
+2.3	51.56755	36.66158	47.95591786	47.77556	48.14822	29.55481386	39.85037	45.05666	49.20653984	53.39156
-2.35	-13.7697	-10.2781	-10.84998263	-9.43796	-8.10309	-8.398394546	-11.282	-12.3701	-12.73004128	-12.9854
+2.35	48.32619	34.44608	44.51400472	43.88399	43.69536	27.79087758	37.46606	42.29099	46.05117343	49.81493
-2.4	-17.1773	-12.6958	-14.03895192	-12.3451	-10.6753	-10.3461071	-13.9088	-15.3445	-15.98743127	-16.5292
+2.4	44.37802	31.74235	40.34687498	39.19563	38.65023	25.63686762	34.55489	38.91861	42.21197652	45.47215
-2.45	-20.2657	-14.8814	-16.95769582	-15.2028	-13.2118	-12.10544743	-16.2819	-18.0361	-18.94340311	-19.7547
+2.45	40.82693	29.33139	36.65756027	35.06363	34.29957	23.71500678	31.95778	35.91357	38.79767068	41.6172
-2.5	-24.0495	-17.5531	-20.56386775	-18.8811	-16.5028	-14.25452821	-19.181	-21.329	-22.56878912	-23.7209
+2.5	36.59076	26.41995	32.23155256	30.12731	29.1718	21.39301021	28.8203	32.28712	34.68464116	36.98122
-2.55	-27.4352	-19.939	-23.81469347	-22.2236	-19.575	-16.17253629	-21.7686	-24.2719	-25.81596241	-27.2816
+2.55	32.85468	23.84836	28.34586383	25.81063	24.90996	19.34109447	26.04802	29.08591	31.05984022	32.90195
-2.6	-31.5365	-22.824	-27.77851877	-26.3278	-23.3395	-18.49047282	-24.8962	-27.8328	-29.75282929	-31.6073
+2.6	28.38833	20.76985	23.72052955	20.98864	20.10465	16.88362436	22.72812	25.25579	26.72948682	28.0358
-2.65	-35.1694	-25.3754	-31.31039826	-30.0074	-26.7554	-20.53927896	-27.6609	-30.9839	-33.24276814	-35.4491
+2.65	24.48003	18.07249	19.68949419	17.23151	16.53413	14.72952461	19.81831	21.90162	22.94262591	23.78624
-2.7	-39.5297	-28.4331	-35.57236093	-34.4724	-31.3787	-22.99355418	-30.9729	-34.7625	-37.43460557	-40.0713
+2.7	19.84206	14.86757	15.12111361	12.85857	12.69623	12.16909721	16.35989	17.91825	18.45146619	18.75292
-2.75	-43.3595	-31.1151	-39.33425679	-38.4334	-35.7161	-25.14528676	-33.877	-38.0785	-41.11887407	-44.1402
+2.75	15.81176	12.07927	11.45469278	10.00264	10.61171	9.940683431	13.35016	14.4543	14.55098127	14.547
-2.8	-47.9203	-34.3049	-43.83481769	-43.1941	-41.0428	-27.70338625	-37.3297	-42.0244	-45.50916628	-48.9959
+2.8	11.25782	8.788577	7.873747785	7.101343	8.345717	7.309814252	9.797129	10.36808	10.34783393	10.34424
-2.85	-51.8968	-37.0827	-47.77572185	-47.3807	-46.117	-29.93017625	-40.3354	-45.4622	-49.33932846	-53.2379
+2.85	7.61463	5.944186	6.608570528	6.955344	8.019576	5.034956998	6.725115	7.129373	7.126292878	7.278474
-2.9	-56.5995	-40.3639	-52.45533799	-52.3721	-52.3208	-32.55958408	-43.8849	-49.5249	-53.87158528	-58.2641
+2.9	6.749264	4.717438	6.608570528	6.955344	7.80194	3.787360033	5.11894	5.851506	6.548898456	7.278474
-2.95	-60.6725	-43.2026	-56.52421246	-56.7285	-58.0066	-34.83356053	-46.9548	-53.0413	-57.79920535	-62.6252
+2.95	6.749264	4.717438	6.608570528	6.955344	7.689807	3.787360033	5.11894	5.851506	6.548898456	7.278474
-3	-65.4585	-46.5345	-61.323372	-61.8855	-65.2594	-37.50176164	-50.5571	-57.1704	-62.41690959	-67.7588
+3	6.749264	4.717438	6.608570528	6.955344	7.646166	3.787360033	5.11894	5.851506	6.548898456	7.278474

2-Span: Shear (Max and Min) Raw Data Results - 130' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.74926	-6.1809	-6.648570354	-6.26618	-7.58335	-7.681694162	-8.12922	-3.27689
End Shear	65.5798	61.88715	66.16926104	62.09352	74.25645	70.67810643	74.72119	32.65261
-0.05	-6.74926	-6.1809	-6.648570354	-6.26618	-7.58335	-7.681694162	-8.12922	-3.27689
+0.05	60.99482	57.71655	61.68032548	57.86567	69.13731	65.36117948	69.09303	30.43196
-0.1	-6.74926	-6.1809	-6.648570354	-6.26618	-7.58335	-7.681694162	-8.12922	-3.27689
+0.1	56.24333	53.39714	57.03287975	53.48622	63.83813	59.85708077	63.26716	28.11089
-0.15	-7.32659	-8.68347	-8.87366298	-8.07279	-8.7774	-7.681694162	-8.12922	-4.1742
+0.15	52.26454	49.72504	53.08328712	49.76522	59.33858	55.20789204	58.34653	26.13974
-0.2	-11.5767	-12.9921	-13.51683916	-12.4527	-14.0928	-9.604770134	-10.1653	-6.28724
+0.2	47.62175	45.48979	48.52960836	45.47609	54.15548	49.88161073	52.7097	23.86881
-0.25	-15.4923	-16.6509	-17.46121606	-16.1744	-18.6121	-12.24906124	-12.9789	-8.26467
+0.25	43.70913	41.91248	44.68477899	41.85551	49.78332	45.41446566	47.98248	21.9529
-0.3	-20.1939	-20.8662	-22.00699596	-20.4644	-23.8251	-17.24078229	-18.1482	-10.5451
+0.3	39.23752	37.81423	40.28177223	37.71037	44.78136	40.3351314	42.60789	19.76072
-0.35	-24.1692	-24.4224	-25.84350089	-24.086	-28.2288	-21.81348545	-22.9814	-12.4711
+0.35	35.49677	34.377	36.59047573	34.2362	40.59232	36.10928014	38.13682	17.92456
-0.4	-28.7283	-28.4914	-30.23498155	-28.2325	-33.2744	-27.28569466	-28.7768	-14.6771
+0.4	31.25502	30.46859	32.39504185	30.28869	35.83652	31.34602214	33.09766	15.83972
-0.45	-32.5564	-31.8997	-33.91484275	-31.708	-37.5068	-31.90127142	-33.6654	-16.5271
+0.45	27.73645	27.21672	28.90605425	27.00691	31.88635	27.42072619	28.94548	14.10783
-0.5	-36.9145	-35.7697	-38.09512184	-35.6573	-42.32	-37.18101388	-39.2578	-18.6302
+0.5	23.78325	23.55099	24.97510056	23.3107	27.44176	23.04267232	24.31496	12.15893
-0.55	-40.5452	-38.9848	-41.56956525	-38.9408	-46.3252	-41.60199546	-43.941	-20.3796
+0.55	20.53716	20.52977	21.73719431	20.26731	23.78621	19.47717206	20.54439	10.55581
-0.6	-44.6437	-42.6029	-45.48173688	-42.6392	-50.8409	-46.62014972	-49.2572	-22.3511
+0.6	16.9312	17.15956	18.12762145	16.87604	19.71785	15.55345204	16.3957	8.771445
-0.65	-48.0268	-45.5794	-48.70198825	-45.6846	-54.5633	-50.7872828	-53.6723	-23.9755
+0.65	14.00789	14.41429	15.18957271	14.11703	16.41266	12.40700843	13.06949	7.321617
-0.7	-51.8072	-48.8929	-52.28915061	-49.0785	-58.7165	-55.47471514	-58.6391	-25.7869
+0.7	10.80786	11.39243	11.95828361	11.08436	12.78558	9.09174558	9.570259	5.730383
-0.75	-54.8925	-51.5856	-55.20643605	-51.84	-62.1002	-59.32874632	-62.7233	-27.2618
+0.75	8.257642	8.968393	9.368863606	8.655715	9.886493	6.618757599	7.009219	4.458354
-0.8	-58.2962	-54.5415	-58.4116868	-54.8757	-65.8259	-63.61632918	-67.2675	-28.8844
+0.8	5.597831	6.347724	6.572761021	6.035303	6.765722	4.711391946	4.983002	3.08885
-0.85	-61.0335	-56.9051	-60.97723302	-57.3071	-68.8153	-67.09800548	-70.958	-30.1852
+0.85	3.631163	4.290216	4.380745346	3.983014	4.328491	3.212430504	3.390992	2.087597
-0.9	-64.0019	-59.4506	-63.74366918	-59.931	-72.0484	-70.91660913	-75.0064	-31.5904
+0.9	1.754042	2.264119	2.264118702	2.066218	2.175245	1.721469445	1.812073	1.254496
-0.95	-66.3411	-61.4398	-65.90870167	-61.9865	-74.5877	-73.96667658	-78.2407	-32.6927
+0.95	0.859227	0.86624	0.86623979	0.731306	0.73433	0.694865268	0.731437	0.612338
-1	-68.8156	-63.5221	-68.17942195	-64.1449	-77.2632	-77.24716854	-81.7201	-33.852
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	68.66917	63.38192	68.02638796	63.9993	77.08238	77.02280287	81.4821	33.77379
-2.05	-7.89E-01	-0.80964	-0.809644829	-0.6473	-0.65029	-0.615032378	-0.6474	-0.55904
+2.05	66.54958	61.5969	66.07986907	62.14907	74.78893	74.21072827	78.49951	32.78002
-2.1	-1.83286	-2.38317	-2.383165558	-2.19129	-2.3131	-1.811954231	-1.90732	-1.30778
+2.1	63.82211	59.27634	63.55414967	59.75118	71.82652	70.65249965	74.72642	31.49416
-2.15	-3.47301	-4.12724	-4.207265807	-3.82068	-4.13603	-3.093613257	-3.26482	-2.0216
+2.15	61.2783	57.09427	61.18273311	57.50196	69.05511	67.37919368	71.25613	30.28958
-2.2	-5.77281	-6.52753	-6.764469134	-6.21488	-6.97931	-4.842297204	-5.12205	-3.18247
+2.2	58.08524	54.33691	58.1897462	54.66543	65.56761	63.31743331	66.95065	28.77206
-2.25	-8.05578	-8.77399	-9.161313645	-8.46112	-9.65446	-6.477303326	-6.85894	-4.35642
+2.25	55.16751	51.8031	55.44220546	52.06321	62.37399	59.64214918	63.05539	27.38117

-2.3	-11.0287	-11.6019	-12.18215451	-11.2944	-13.0366	-9.308563074	-9.79849	-5.84037
+2.3	51.56755	48.66178	52.03886012	48.84167	58.42642	55.1459708	58.29071	25.6606
-2.35	-13.7697	-14.1922	-14.95200654	-13.894	-16.1457	-12.15468077	-12.8028	-7.20436
+2.35	48.32619	45.82151	48.96397794	45.93245	54.86634	51.12796209	54.03322	24.10791
-2.4	-17.1773	-17.3949	-18.37957742	-17.1127	-20.0016	-15.82533946	-16.6831	-8.89574
+2.4	44.37802	42.34907	45.20717458	42.37957	50.52375	46.26651194	48.88254	22.21287
-2.45	-20.2657	-20.2838	-21.4736759	-20.0197	-23.4889	-19.1887434	-20.2394	-10.4253
+2.45	40.82693	39.24762	41.8537092	39.20934	46.65295	41.96503174	44.32557	20.5229
-2.5	-24.0495	-23.8084	-25.2510736	-23.5701	-27.7536	-23.34830593	-24.6382	-12.2955
+2.5	36.59076	35.49691	37.80035342	35.37876	41.98037	36.80741888	38.86208	18.482
-2.55	-27.4352	-26.9506	-28.62062971	-26.7385	-31.5634	-27.10113581	-28.6074	-13.9661
+2.55	32.85468	32.17959	34.21709525	31.9935	37.8546	32.28172057	34.06835	16.67926
-2.6	-31.5365	-30.7443	-32.69095397	-30.5671	-36.1718	-31.68045324	-33.4514	-15.9865
+2.6	28.38833	28.20343	29.92408924	27.93889	32.91706	26.89709647	28.36526	14.52109
-2.65	-35.1694	-34.0945	-36.2872115	-33.9508	-40.2483	-35.76345507	-37.7709	-17.7736
+2.65	24.48003	24.71552	26.15979344	24.3846	28.59206	22.20643315	23.39753	12.63009
-2.7	-39.5297	-38.1045	-40.59355827	-38.0038	-45.1354	-40.69341733	-42.987	-19.9157
+2.7	19.84206	20.56676	21.68403953	20.1596	23.4546	16.88526742	17.77397	10.38324
-2.75	-43.3595	-41.6174	-44.36772424	-41.557	-49.423	-45.04732656	-47.594	-21.7948
+2.75	15.81176	16.95355	17.78749991	16.48226	18.98612	12.6051931	13.26862	8.428493
-2.8	-47.9203	-45.7908	-48.85318967	-45.7808	-54.5236	-50.25879674	-53.1089	-24.0299
+2.8	11.25782	12.68502	13.1859023	12.14054	13.71378	9.382877717	9.929241	6.121581
-2.85	-51.8968	-49.4212	-52.75650938	-49.4574	-58.9665	-54.82438262	-57.9406	-25.9765
+2.85	7.61463	8.991797	9.20587279	8.386138	9.157552	7.681693133	8.129219	4.283065
-2.9	-56.5995	-53.7051	-57.36419213	-53.7984	-64.2157	-60.24821923	-63.6811	-28.2761
+2.9	6.749264	6.1809	6.648570052	6.266175	7.583347	7.681693133	8.129219	3.276887
-2.95	-60.6725	-57.4076	-61.3478716	-57.5524	-68.7581	-64.96621632	-68.675	-30.2657
+2.95	6.749264	6.1809	6.648570052	6.266175	7.583347	7.681693133	8.129219	3.276887
-3	-65.4585	-61.7493	-66.02087844	-61.9569	-74.0909	-70.53331405	-74.5679	-32.6011
+3	6.749264	6.1809	6.648570052	6.266175	7.583347	7.681693133	8.129219	3.276887

2-Span: Shear (Max and Min) Raw Data Results - 130' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	-6.74926	-14.0909	-15.5142	-8.90703	-10.7575	-11.5575
End Shear	65.5798	123.3853	131.9935	81.34967	98.17514	103.8992
-0.05	-6.74926	-14.0909	-15.5142	-8.90703	-10.7575	-11.5575
+0.05	60.99482	113.5451	121.2927	75.12941	90.69867	95.84193
-0.1	-6.74926	-14.0909	-15.5142	-8.90703	-10.7575	-11.5575
+0.1	56.24333	103.3714	110.0815	68.69284	82.96007	87.50429
-0.15	-7.32659	-14.0909	-15.5142	-8.90703	-10.7575	-11.5575
+0.15	52.26454	94.80812	100.6613	63.26172	76.4285	80.47479
-0.2	-11.5767	-14.0909	-15.5142	-11.3979	-12.5699	-13.3011
+0.2	47.62175	85.03432	89.92904	57.04653	68.95179	72.4374
-0.25	-15.4923	-18.2607	-19.0549	-14.4912	-16.3932	-17.2489
+0.25	43.70913	76.86968	80.98153	51.84002	62.68653	65.71057
-0.3	-20.1939	-25.2891	-26.7588	-18.6948	-23.0232	-22.6717
+0.3	39.23752	67.62601	70.87342	45.92755	55.56932	58.07914
-0.35	-24.1692	-32.588	-33.5965	-23.8056	-29.1563	-29.3889
+0.35	35.49677	59.97153	62.52306	41.01536	49.65403	51.74561
-0.4	-28.7283	-41.7533	-42.0025	-30.2577	-36.8973	-37.5062
+0.4	31.25502	51.38812	53.18419	35.48693	42.99391	44.62589
-0.45	-32.5564	-50.4301	-51.0546	-35.7052	-43.4312	-44.6142
+0.45	27.73645	44.35537	45.55537	30.93878	37.51224	38.77628
-0.5	-36.9145	-60.5311	-62.364	-41.9431	-50.9113	-52.7602
+0.5	23.78325	36.56239	37.13087	25.87573	31.40682	32.27403
-0.55	-40.5452	-69.0204	-71.8842	-47.1722	-57.1799	-59.5948
+0.55	20.53716	30.26292	30.18592	21.76133	26.44243	26.99897
-0.6	-44.6437	-78.6942	-82.7514	-53.1145	-64.3015	-67.369
+0.6	16.9312	23.43185	23.64532	17.24499	20.98929	21.21991
-0.65	-48.0268	-86.7616	-91.8303	-58.0553	-70.221	-73.8396
+0.65	14.00789	18.39963	18.83358	13.63406	16.62584	16.70467
-0.7	-51.8072	-95.8782	-102.11	-63.6207	-76.8866	-81.1363
+0.7	10.80786	13.23342	13.80252	9.94454	12.16113	11.9848
-0.75	-54.8925	-103.412	-110.623	-68.2037	-82.3734	-87.1522
+0.75	8.257642	9.693505	9.952409	7.837543	8.839872	9.232415
-0.8	-58.2962	-111.841	-120.171	-73.3109	-88.4853	-93.8656
+0.8	5.597831	6.289503	6.388202	5.596432	6.150321	6.445921
-0.85	-61.0335	-118.73	-127.994	-77.4661	-93.4557	-99.3363
+0.85	3.631163	4.167579	3.817039	3.834097	4.142995	4.262793
-0.9	-64.0019	-126.342	-136.663	-82.0338	-98.9164	-105.361
+0.9	1.754042	2.078378	1.921091	2.039467	2.175432	2.113854
-0.95	-66.3411	-132.474	-143.672	-85.6917	-103.287	-110.195
+0.95	0.859227	0.699638	0.68651	0.822128	0.876937	0.731378
-1	-68.8156	-139.138	-151.319	-89.6384	-107.999	-115.425
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	68.66917	138.6793	150.7925	89.36801	107.6759	115.0662
-2.05	-7.89E-01	-0.62174	-0.59187	-0.72759	-0.7761	-0.64734
+2.05	66.54958	132.967	144.2376	85.98484	103.6369	110.5834
-2.1	-1.83286	-2.21532	-2.11151	-2.14662	-2.30286	-2.30658
+2.1	63.82211	125.813	136.0612	81.71746	98.53839	104.9431
-2.15	-3.47301	-3.95157	-3.72647	-3.69435	-4.04855	-4.09004
+2.15	61.2783	119.2884	128.6297	77.8021	93.8575	99.77899
-2.2	-5.77281	-6.49859	-6.55661	-5.75029	-6.31882	-6.63688
+2.2	58.08524	111.2518	119.5031	72.9545	88.05895	93.39684
-2.25	-8.05578	-9.42393	-9.66529	-7.67138	-8.60961	-9.02548
+2.25	55.16751	104.0264	111.3193	68.57666	82.81986	87.64216

-2.3	**-11.0287**	**-13.5681**	**-14.1477**	**-10.1938**	**-12.463**	**-12.3081**
+2.3	**51.56755**	**95.23724**	**101.3876**	**63.23015**	**76.41887**	**80.62386**
-2.35	**-13.7697**	**-17.9969**	**-18.4603**	**-13.345**	**-16.2763**	**-16.354**
+2.35	**48.32619**	**87.42266**	**92.57597**	**58.45954**	**70.70522**	**74.36924**
-2.4	**-17.1773**	**-23.8675**	**-23.8742**	**-17.5575**	**-21.3668**	**-21.6193**
+2.4	**44.37802**	**78.01111**	**81.98435**	**52.69547**	**63.7994**	**66.82055**
-2.45	**-20.2657**	**-29.7554**	**-29.802**	**-21.4289**	**-26.0412**	**-26.5732**
+2.45	**40.82693**	**69.71886**	**72.66922**	**47.60181**	**57.69488**	**60.15662**
-2.5	**-24.0495**	**-37.1044**	**-37.7149**	**-26.2288**	**-31.8327**	**-32.7271**
+2.5	**36.59076**	**59.8151**	**61.56279**	**41.50151**	**50.38182**	**52.18326**
-2.55	**-27.4352**	**-43.7845**	**-44.9364**	**-30.5688**	**-37.0662**	**-38.3008**
+2.55	**32.85468**	**51.15673**	**51.86861**	**36.15451**	**43.97006**	**45.20066**
-2.6	**-31.5365**	**-51.989**	**-53.8362**	**-35.8747**	**-43.4612**	**-45.125**
+2.6	**28.38833**	**41.10977**	**41.6642**	**29.79931**	**36.34737**	**36.90837**
-2.65	**-35.1694**	**-59.3466**	**-61.8413**	**-40.6137**	**-49.1702**	**-51.2279**
+2.65	**24.48003**	**33.2381**	**34.1626**	**24.26866**	**29.71201**	**29.94462**
-2.7	**-39.5297**	**-68.2765**	**-71.583**	**-46.3443**	**-56.0711**	**-58.6168**
+2.7	**19.84206**	**24.72639**	**26.18561**	**18.2733**	**22.51736**	**22.10824**
-2.75	**-43.3595**	**-76.2**	**-80.2475**	**-51.4124**	**-62.1718**	**-65.1583**
+2.75	**15.81176**	**18.73093**	**19.55959**	**14.74704**	**16.78706**	**17.57557**
-2.8	**-47.9203**	**-85.7251**	**-90.6858**	**-57.4864**	**-69.481**	**-73.006**
+2.8	**11.25782**	**14.09088**	**15.51424**	**11.13827**	**12.28667**	**12.96992**
-2.85	**-51.8968**	**-94.103**	**-99.8852**	**-62.8139**	**-75.8899**	**-79.8955**
+2.85	**7.61463**	**14.09088**	**15.51424**	**8.907034**	**10.75749**	**11.5575**
-2.9	**-56.5995**	**-104.093**	**-110.875**	**-69.15**	**-83.5098**	**-88.0962**
+2.9	**6.749264**	**14.09088**	**15.51424**	**8.907034**	**10.75749**	**11.5575**
-2.95	**-60.6725**	**-112.814**	**-120.485**	**-74.6673**	**-90.1431**	**-95.2431**
+2.95	**6.749264**	**14.09088**	**15.51424**	**8.907034**	**10.75749**	**11.5575**
-3	**-65.4585**	**-123.139**	**-131.881**	**-81.1841**	**-97.9761**	**-103.691**
+3	**6.749264**	**14.09088**	**15.51424**	**8.907034**	**10.75749**	**11.5575**

2-Span: Moment (Max and Min) Raw Data Results - 130’ Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.84E-13	-1E-13	-1.11024E-13	-1.5E-13	-1.20E-13	-1.1724E-13	-1.2E-13	-1.2E-13	-1.27557E-13	-1.3E-13
End Shear	2.91E-13	1.47E-13	1.595E-13	1.28E-13	1.12E-13	1.85993E-13	1.08E-13	1.14E-13	1.13829E-13	1.18E-13
-0.05	-43.8702	-30.6633	-42.95571172	-45.2097	-49.7001	-24.61784122	-33.2731	-38.0348	-42.56784107	-47.3101
+0.05	396.4663	282.3569	369.620963	371.11	383.9779	227.6517753	306.9595	346.7769	378.4437302	410.1196
-0.1	-87.7404	-61.3267	-85.91142345	-90.4195	-99.4002	-49.23568245	-66.5462	-76.0696	-85.13568213	-94.6202
+0.1	735.601	525.251	682.5297838	681.6832	694.7819	423.4174833	571.2102	644.6635	703.823315	764.6214
-0.15	-131.611	-91.99	-128.8671352	-135.629	-149.1	-73.85352367	-99.8193	-114.104	-127.7035232	-141.93
+0.15	1019.159	728.7117	939.5526952	932.6068	952.0945	587.7563362	792.7662	893.6968	988.20385	1071.227
-0.2	-175.481	-122.653	-171.8228469	-180.839	-198.8	-98.47136489	-133.092	-152.139	-170.2713643	-189.24
+0.2	1246.908	893.492	1141.970425	1141.145	1146.622	721.0762043	972.455	1094.879	1219.522879	1327.979
-0.25	-219.351	-153.317	-214.7785586	-226.049	-248.5	-123.0892061	-166.366	-190.174	-212.8392053	-236.55
+0.25	1421.175	1020.62	1303.92675	1293.895	1309.052	824.1831534	1111.369	1254.42	1398.471815	1533.239
-0.3	-263.221	-183.98	-257.7342703	-271.258	-298.2	-147.7070473	-199.639	-228.209	-255.4070464	-283.861
+0.3	1547.025	1111.37	1416.482949	1405.335	1436.537	898.0794986	1217.821	1376.182	1526.735963	1682.389
-0.35	-307.091	-214.643	-300.6899821	-316.468	-347.901	-172.3248886	-232.912	-266.244	-297.9748875	-331.171
+0.35	1635.821	1175.666	1480.268555	1483.712	1514.587	943.9636682	1289.404	1454.086	1616.293726	1776.951
-0.4	-350.962	-245.307	-343.6456938	-361.678	-397.601	-196.9427298	-266.185	-304.278	-340.5427285	-378.481
+0.4	1676.284	1206.77	1507.68753	1532.584	1555.074	963.2305501	1324.235	1490.683	1661.412104	1825.162
-0.45	-394.832	-275.97	-386.6014055	-406.888	-447.301	-221.560571	-299.458	-342.313	-383.1105696	-425.791
+0.45	1671.214	1205.894	1492.786072	1534.732	1552.48	957.4712416	1324.473	1487.811	1661.900819	1830.65
-0.5	-438.702	-306.633	-429.5571172	-452.097	-497.001	-246.1784122	-332.731	-380.348	-425.6784107	-473.101
+0.5	1643.55	1184.274	1471.493154	1503.581	1518.995	943.3780079	1300.152	1462.05	1630.822368	1793.476
-0.55	-482.572	-337.297	-472.5128289	-497.307	-546.701	-270.7962535	-366.004	-418.383	-468.2462517	-520.411
+0.55	1577.891	1135.833	1419.020265	1434.964	1443.337	908.6883894	1246.475	1403.461	1562.288611	1713.644
-0.6	-526.442	-367.96	-515.4685407	-542.517	-596.401	-295.4140947	-399.277	-456.417	-510.8140928	-567.721
+0.6	1473.17	1060.648	1328.939087	1328.314	1351.806	851.873693	1164.076	1311.463	1456.826468	1600.427
-0.65	-570.313	-398.623	-558.4242524	-587.727	-646.101	-320.0319359	-432.55	-494.452	-553.3819339	-615.031
+0.65	1333.227	961.4252	1204.722344	1192.496	1208.778	775.0301013	1055.896	1189.406	1318.220086	1449.96
-0.7	-614.183	-429.287	-601.3799641	-632.936	-695.801	-344.6497771	-465.823	-532.487	-595.9497749	-662.341
+0.7	1162.257	841.115	1045.307081	1019.535	1032.375	680.4504517	925.1405	1040.922	1150.804457	1265.919
-0.75	-658.053	-459.95	-644.3356758	-678.146	-745.501	-369.2676183	-499.097	-570.522	-638.517616	-709.651
+0.75	964.809	703.6233	854.7082647	822.0246	809.9637	570.6238321	775.2807	869.8732	960.4511025	1053.187
-0.8	-701.923	-490.614	-687.2913876	-723.356	-795.201	-393.8854596	-532.37	-608.557	-681.0854571	-756.961
+0.8	745.7843	550.8493	637.5313052	593.8006	550.8777	448.2351834	610.0517	680.615	748.2206961	817.0254
-0.85	-745.793	-521.277	-730.2470993	-768.566	-859.901	-418.5033008	-565.643	-646.591	-723.6532981	-804.271
+0.85	510.438	386.8598	398.8624425	349.3328	314.029	316.1659721	433.5475	477.6556	519.9801505	563.0761
-0.9	-789.664	-551.94	-773.202811	-813.775	-952.565	-443.121142	-598.916	-684.626	-766.2211392	-851.582
+0.9	268.0591	216.625	207.4588496	173.4563	151.1705	177.4940399	250.3281	265.849	284.5071001	302.4536
-0.95	-833.534	-582.604	-816.1585227	-858.985	-1264.4	-467.7389832	-632.189	-722.661	-808.7889803	-898.892
+0.95	106.1145	86.12554	86.03086793	68.4188	56.01662	72.94917884	92.94837	92.96283	92.96655878	92.95601
-1	-877.404	-613.267	-859.1142187	-904.195	-1678.64	-492.3567913	-665.462	-760.696	-851.3568131	-946.202
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-877.404	-613.267	-859.1142187	-904.195	-1678.64	-492.3567913	-665.462	-760.696	-851.3568131	-946.202
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-833.534	-582.604	-816.1584444	-858.985	-1264.4	-467.738951	-632.189	-722.661	-808.7889511	-898.892
+2.05	106.1145	86.12751	86.03268866	68.42019	56.01746	72.94022101	92.95382	92.95342	92.96929312	92.9587
-2.1	-789.664	-551.94	-773.202736	-813.775	-952.565	-443.1211108	-598.916	-684.626	-766.2211111	-851.581
+2.1	268.2983	216.6232	207.4473391	173.4542	151.1693	177.5008116	250.3391	265.8578	284.5192651	302.459
-2.15	-745.794	-521.277	-730.2470276	-768.565	-859.901	-418.5032706	-565.643	-646.591	-723.6532712	-804.271
+2.15	510.8098	386.8589	398.8730525	349.3391	314.0329	316.1732896	433.5595	477.6653	519.9790406	563.0802
-2.2	-701.923	-490.614	-687.2913191	-723.356	-795.201	-393.8854304	-532.37	-608.557	-681.0854312	-756.961
+2.2	746.1758	550.85	637.5276782	593.8059	550.8807	448.2427746	610.0492	680.6253	748.2217147	817.0301
-2.25	-658.053	-459.95	-644.3356107	-678.146	-745.501	-369.2675902	-499.097	-570.522	-638.5175912	-709.651

+2.25	965.2031	703.624	854.7043215	822.0293	809.9616	570.6313431	775.2785	869.8836	960.4521596	1053.192
-2.3	-614.183	-429.287	-601.3799023	-632.936	-695.801	-344.64975	-465.824	-532.487	-595.9497513	-662.341
+2.3	1162.638	841.1145	1045.302422	1019.533	1032.378	680.4578383	925.1381	1040.917	1150.805137	1265.924
-2.35	-570.313	-398.623	-558.4241938	-587.727	-646.101	-320.0319097	-432.55	-494.452	-553.3819113	-615.031
+2.35	1333.58	961.4239	1204.730814	1192.502	1208.782	775.0368184	1055.893	1189.4	1318.218757	1449.963
-2.4	-526.443	-367.96	-515.4684854	-542.517	-596.401	-295.4140695	-399.277	-456.417	-510.8140713	-567.721
+2.4	1473.481	1060.646	1328.945875	1328.318	1351.809	851.8795334	1164.071	1311.471	1456.823837	1600.429
-2.45	-482.572	-337.297	-472.512777	-497.307	-546.701	-270.7962293	-366.004	-418.383	-468.2462314	-520.411
+2.45	1578.147	1135.83	1419.026728	1434.959	1443.339	908.693207	1246.469	1403.467	1562.284435	1713.644
-2.5	-438.702	-306.633	-429.5570685	-452.097	-497.001	-246.1783891	-332.731	-380.348	-425.6783914	-473.101
+2.5	1643.739	1184.269	1471.497358	1503.586	1518.998	943.3815495	1300.145	1462.055	1630.816308	1793.474
-2.55	-394.832	-275.97	-386.6013601	-406.888	-447.301	-221.5605489	-299.458	-342.313	-383.1105514	-425.791
+2.55	1671.071	1205.9	1492.78294	1534.728	1552.483	957.4687122	1324.466	1487.808	1661.908497	1830.654
-2.6	-350.962	-245.307	-343.6456517	-361.678	-397.601	-196.9427087	-266.185	-304.278	-340.5427115	-378.481
+2.6	1676.063	1206.774	1507.682263	1532.59	1555.079	963.2265932	1324.241	1490.677	1661.417296	1825.163
-2.65	-307.092	-214.643	-300.6899432	-316.468	-347.901	-172.3248684	-232.912	-266.244	-297.9748715	-331.171
+2.65	1635.513	1175.668	1480.262471	1483.708	1514.591	943.9580727	1289.408	1454.077	1616.296107	1776.949
-2.7	-263.221	-183.98	-257.7342348	-271.258	-298.2	-147.7070282	-199.639	-228.209	-255.4070315	-283.86
+2.7	1546.622	1111.369	1416.488596	1405.337	1436.542	898.0720292	1217.822	1376.186	1526.735161	1682.384
-2.75	-219.351	-153.317	-214.7785264	-226.049	-248.5	-123.089188	-166.366	-190.174	-212.8391916	-236.55
+2.75	1420.879	1020.617	1303.929556	1293.89	1309.054	824.1739405	1111.368	1254.421	1398.467928	1533.23
-2.8	-175.481	-122.653	-171.8228179	-180.839	-198.8	-98.47134779	-133.092	-152.139	-170.2713516	-189.24
+2.8	1246.507	893.487	1141.970065	1141.148	1146.626	721.0649609	972.4515	1094.878	1219.515804	1327.982
-2.85	-131.611	-91.99	-128.8671095	-135.629	-149.1	-73.85350757	-99.8193	-114.104	-127.7035116	-141.93
+2.85	1018.496	728.7042	939.5488124	932.6067	952.0967	587.743008	792.7599	893.6918	988.2079675	1071.225
-2.9	-87.7404	-61.3267	-85.91140108	-90.4195	-99.4001	-49.23566735	-66.5462	-76.0696	-85.13567167	-94.6201
+2.9	735.7928	525.2406	682.5224484	681.6796	694.7813	423.4018203	571.2009	644.6551	703.8237296	764.6226
-2.95	-43.8702	-30.6633	-42.95569265	-45.2097	-49.7001	-24.61782714	-33.2731	-38.0348	-42.56783171	-47.3101
+2.95	396.5863	282.3597	369.6245457	371.1136	383.9812	227.653962	306.9473	346.7652	378.4404982	410.1168
-3	-1.75E-13	-8.9E-14	-1.41818E-13	-1.3E-13	-1.28E-13	-9.04609E-14	-9.4E-14	-1E-13	-1.12906E-13	-1.2E-13
+3	4.83E-13	2.37E-13	3.09698E-13	2.94E-13	2.82E-13	1.93835E-13	2.13E-13	2.8E-13	2.92101E-13	3.21E-13

2-Span: Moment (Max and Min) Raw Data Results - 130' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.84E-13	-1.5E-13	-1.6E-13	-1.4E-13	-1.6E-13	-1.2E-13	-1.3E-13	-1.2E-13
End Shear	2.91E-13	1.55E-13	2.42E-13	1.27E-13	1.76E-13	1.81E-13	1.91E-13	1.47E-13
-0.05	-43.8702	-40.1759	-43.2157	-40.7301	-49.2918	-49.931	-52.8399	-21.2998
+0.05	396.4663	375.1899	401.031	376.2691	449.7495	424.8477	449.1047	197.8078
-0.1	-87.7404	-80.3517	-86.4314	-81.4603	-98.5835	-99.862	-105.68	-42.5995
+0.1	735.601	698.8902	746.6091	700.287	836.1358	784.06	828.7466	367.588
-0.15	-131.611	-120.528	-129.647	-122.19	-147.875	-149.793	-158.52	-63.8993
+0.15	1019.159	971.0455	1036.755	972.0862	1159.395	1078.4	1139.722	509.7249
-0.2	-175.481	-160.703	-172.863	-162.921	-197.167	-199.724	-211.36	-85.1991
+0.2	1246.908	1192.599	1272.513	1192.668	1420.801	1318.751	1394.052	624.7755
-0.25	-219.351	-200.879	-216.079	-203.651	-246.459	-249.655	-264.2	-106.499
+0.25	1421.175	1364.812	1455.27	1363.359	1635.756	1513.043	1600.444	713.4693
-0.3	-263.221	-241.055	-259.294	-244.381	-295.751	-299.586	-317.04	-127.799
+0.3	1547.025	1489.266	1586.757	1497.312	1794.562	1650.653	1745.511	777.0028
-0.35	-307.091	-281.231	-302.51	-285.111	-345.042	-349.517	-369.879	-149.098
+0.35	1635.821	1571.719	1680.104	1585.596	1897.24	1742.478	1843.344	816.1911
-0.4	-350.962	-321.407	-345.726	-325.841	-394.334	-399.448	-422.719	-170.398
+0.4	1676.284	1617.714	1727.421	1628.891	1945.735	1778.962	1882.531	832.2087
-0.45	-394.832	-361.583	-388.941	-366.571	-443.626	-449.379	-475.559	-191.698
+0.45	1671.214	1621.471	1729.489	1630.1	1943.101	1763.906	1867.026	826.4708
-0.5	-438.702	-401.759	-432.157	-407.301	-492.918	-499.31	-528.399	-212.998
+0.5	1643.55	1589.926	1696.863	1599.702	1909.036	1737.485	1838.799	814.8979
-0.55	-482.572	-441.934	-475.373	-448.032	-542.209	-549.241	-581.239	-234.297
+0.55	1577.891	1522.076	1625.484	1533.283	1831.832	1674.06	1771.319	786.156
-0.6	-526.442	-482.11	-518.588	-488.762	-591.501	-599.172	-634.079	-255.597
+0.6	1473.17	1420.202	1517.167	1431.972	1711.689	1563.309	1653.737	737.8512
-0.65	-570.313	-522.286	-561.804	-529.492	-640.793	-649.103	-686.919	-276.897
+0.65	1333.227	1289.184	1375.754	1299.254	1552.927	1409.225	1490.356	671.805
-0.7	-614.183	-562.462	-605.02	-570.222	-690.085	-699.034	-739.759	-298.197
+0.7	1162.257	1133.667	1205.427	1139.056	1360.259	1216.576	1286.229	590.0119
-0.75	-658.053	-602.638	-648.236	-610.952	-739.376	-748.965	-792.599	-319.496
+0.75	964.809	953.9848	1011.144	955.6322	1138.789	992.8292	1050.305	494.6391
-0.8	-701.923	-642.814	-691.451	-651.682	-788.668	-798.896	-845.439	-340.796
+0.8	745.7843	754.5475	796.4895	753.5562	894.0142	740.1299	782.753	388.0261
-0.85	-745.793	-682.99	-734.667	-692.412	-837.96	-848.827	-898.279	-362.096
+0.85	510.438	540.0857	567.964	538.1023	631.8256	462.9887	489.4281	272.6852
-0.9	-789.664	-723.165	-777.883	-733.142	-887.252	-898.758	-951.119	-383.396
+0.9	268.0591	317.9665	330.7762	314.3282	358.5054	236.5518	249.7361	153.4646
-0.95	-833.534	-763.341	-821.098	-773.873	-936.543	-948.689	-1003.96	-404.696
+0.95	106.1145	122.3259	122.3259	114.9492	122.2698	92.9768	97.87031	75.50854
-1	-877.404	-803.517	-864.314	-814.603	-985.835	-998.62	-1056.8	-425.995
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-877.404	-803.517	-864.314	-814.603	-985.835	-998.62	-1056.8	-425.995
+2	0	0	0	0	0	0	0	0
-2.05	-833.534	-763.341	-821.098	-773.873	-936.543	-948.689	-1003.96	-404.696
+2.05	106.1145	122.3288	122.3288	114.9576	122.2809	92.97882	97.87244	75.26223
-2.1	-789.664	-723.165	-777.883	-733.142	-887.252	-898.758	-951.119	-383.396
+2.1	268.2983	317.965	330.7953	314.3402	358.5132	236.5527	249.7369	153.0097
-2.15	-745.794	-682.989	-734.667	-692.412	-837.96	-848.827	-898.279	-362.096
+2.15	510.8098	540.087	567.9624	538.1155	631.8347	462.99	489.4297	272.6816
-2.2	-701.923	-642.814	-691.451	-651.682	-788.668	-798.896	-845.439	-340.796
+2.2	746.1758	754.5494	796.4887	753.5524	894.024	740.1313	782.7547	388.0226
-2.25	-658.053	-602.638	-648.236	-610.952	-739.376	-748.965	-792.599	-319.496

+2.25	965.2031	953.9869	1011.145	955.6287	1138.799	992.8304	1050.306	494.6355
-2.3	-614.183	-562.462	-605.02	-570.222	-690.085	-699.034	-739.759	-298.197
+2.3	1162.638	1133.669	1205.426	1139.053	1360.268	1216.575	1286.228	590.0083
-2.35	-570.313	-522.286	-561.804	-529.492	-640.793	-649.103	-686.919	-276.897
+2.35	1333.58	1289.185	1375.752	1299.249	1552.936	1409.223	1490.354	671.801
-2.4	-526.443	-482.11	-518.588	-488.762	-591.501	-599.172	-634.079	-255.597
+2.4	1473.481	1420.201	1517.164	1431.966	1711.697	1563.305	1653.733	737.8471
-2.45	-482.572	-441.934	-475.373	-448.031	-542.209	-549.241	-581.239	-234.297
+2.45	1578.147	1522.073	1625.479	1533.276	1831.837	1674.054	1771.313	786.1517
-2.5	-438.702	-401.758	-432.157	-407.301	-492.918	-499.31	-528.399	-212.998
+2.5	1643.739	1589.921	1696.856	1599.711	1909.039	1737.492	1838.806	814.8931
-2.55	-394.832	-361.583	-388.941	-366.571	-443.626	-449.379	-475.559	-191.698
+2.55	1671.071	1621.478	1729.498	1630.093	1943.1	1763.9	1867.02	826.4689
-2.6	-350.962	-321.407	-345.726	-325.841	-394.334	-399.448	-422.719	-170.398
+2.6	1676.063	1617.718	1727.427	1628.888	1945.731	1778.969	1882.539	832.2065
-2.65	-307.092	-281.231	-302.51	-285.111	-345.042	-349.517	-369.879	-149.098
+2.65	1635.513	1571.72	1680.106	1585.602	1897.233	1742.482	1843.348	816.1882
-2.7	-263.221	-241.055	-259.294	-244.381	-295.751	-299.586	-317.04	-127.799
+2.7	1546.622	1489.264	1586.757	1497.315	1794.551	1650.654	1745.512	776.9996
-2.75	-219.351	-200.879	-216.079	-203.651	-246.459	-249.655	-264.2	-106.499
+2.75	1420.879	1364.807	1455.266	1363.358	1635.759	1513.04	1600.44	713.4724
-2.8	-175.481	-160.703	-172.863	-162.921	-197.167	-199.724	-211.36	-85.1991
+2.8	1246.507	1192.591	1272.506	1192.665	1420.8	1318.744	1394.045	624.7781
-2.85	-131.611	-120.528	-129.647	-122.19	-147.875	-149.793	-158.52	-63.8993
+2.85	1018.496	971.0338	1036.744	972.0791	1159.39	1078.396	1139.718	509.7268
-2.9	-87.7404	-80.3517	-86.4314	-81.4603	-98.5835	-99.862	-105.68	-42.5995
+2.9	735.7928	698.8749	746.5943	700.2763	836.1265	784.0527	828.7389	367.5892
-2.95	-43.8702	-40.1759	-43.2157	-40.7301	-49.2917	-49.931	-52.8399	-21.2998
+2.95	396.5863	375.1713	401.0127	376.2549	449.736	424.8518	449.1091	197.8084
-3	-1.75E-13	-1.3E-13	-1.5E-13	-1.1E-13	-1.3E-13	-1.5E-13	-1.6E-13	-7.6E-14
+3	4.83E-13	3.02E-13	3.2E-13	2.7E-13	3.28E-13	3.6E-13	3.81E-13	2.32E-13

2-Span: Moment (Max and Min) Raw Data Results - 130’ Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.84E-13	-2.3E-13	-1.9E-13	-1.6E-13	-2E-13	-1.8E-13
End Shear	2.91E-13	2.44E-13	2.58E-13	2.09E-13	2.32E-13	2.08E-13
-0.05	-43.8702	-91.5907	-100.843	-57.8957	-69.9237	-75.1237
+0.05	396.4663	738.5571	788.4028	488.3412	589.6951	623.1595
-0.1	-87.7404	-183.181	-201.685	-115.791	-139.847	-150.247
+0.1	735.601	1355.807	1451.653	899.807	1087.317	1147.109
-0.15	-131.611	-274.772	-302.528	-173.687	-209.771	-225.371
+0.15	1019.159	1884.567	2013.311	1235.639	1498.085	1583.324
-0.2	-175.481	-366.363	-403.37	-231.583	-279.695	-300.495
+0.2	1246.908	2299.516	2502.16	1521.769	1840.047	1940.11
-0.25	-219.351	-457.954	-504.213	-289.479	-349.619	-375.619
+0.25	1421.175	2625.645	2879.785	1740.467	2096.316	2229.278
-0.3	-263.221	-549.544	-605.055	-347.374	-419.542	-450.742
+0.3	1547.025	2880.57	3164.018	1893.727	2270.401	2432.369
-0.35	-307.091	-641.135	-705.898	-405.27	-489.466	-525.866
+0.35	1635.821	3045.005	3346.171	1993.381	2384.537	2548.876
-0.4	-350.962	-732.726	-806.741	-463.166	-559.39	-600.99
+0.4	1676.284	3146.431	3422.606	2028.995	2422.232	2603.302
-0.45	-394.832	-824.317	-907.583	-521.062	-629.313	-676.114
+0.45	1671.214	3147.369	3451.974	2004.967	2389.336	2579.216
-0.5	-438.702	-915.907	-1008.43	-578.957	-699.237	-751.237
+0.5	1643.55	3087.626	3375.6	1976.38	2356.769	2539.262
-0.55	-482.572	-1007.5	-1109.27	-636.853	-769.161	-826.361
+0.55	1577.891	2949.889	3208.769	1910.805	2281.005	2447.509
-0.6	-526.442	-1099.09	-1210.11	-694.749	-839.085	-901.485
+0.6	1473.17	2725.779	2993.461	1788.481	2136.787	2286.227
-0.65	-570.313	-1190.68	-1310.95	-752.644	-909.008	-976.609
+0.65	1333.227	2440.44	2687.053	1614.059	1929.32	2067.354
-0.7	-614.183	-1282.27	-1411.8	-810.54	-978.932	-1051.73
+0.7	1162.257	2094.458	2297.012	1393.031	1671.083	1785.998
-0.75	-658.053	-1373.86	-1512.64	-868.436	-1048.86	-1126.86
+0.75	964.809	1681.726	1837.3	1136.15	1363.407	1449.773
-0.8	-701.923	-1465.45	-1613.48	-926.332	-1118.78	-1201.98
+0.8	745.7843	1212.451	1317.099	842.2647	1010.385	1066.932
-0.85	-745.793	-1557.04	-1714.32	-984.227	-1188.7	-1277.1
+0.85	510.438	697.6272	749.5414	518.0866	620.0615	646.3675
-0.9	-789.664	-1648.63	-1815.17	-1042.12	-1258.63	-1352.23
+0.9	268.0591	328.2974	332.6962	282.1543	325.0433	341.8737
-0.95	-833.534	-1740.22	-1916.01	-1100.02	-1328.55	-1427.35
+0.95	106.1145	119.324	110.9458	110.0699	122.1763	122.2711
-1	-877.404	-1831.81	-2016.85	-1157.91	-1398.47	-1502.47
+1	0	0	0	0	0	0
(Span 2) -2	-877.404	-1831.81	-2016.85	-1157.91	-1398.47	-1502.47
+2	0	0	0	0	0	0
-2.05	-833.534	-1740.22	-1916.01	-1100.02	-1328.55	-1427.35
+2.05	106.1145	119.3184	110.945	110.0542	122.1705	122.2654
-2.1	-789.664	-1648.63	-1815.17	-1042.12	-1258.63	-1352.23
+2.1	268.2983	328.1477	332.6326	282.1555	325.0393	341.8831
-2.15	-745.794	-1557.04	-1714.32	-984.227	-1188.7	-1277.1
+2.15	510.8098	697.635	749.9294	518.0888	620.0658	646.3754
-2.2	-701.923	-1465.45	-1613.48	-926.332	-1118.78	-1201.98
+2.2	746.1758	1212.46	1317.986	842.2669	1010.389	1066.94
-2.25	-658.053	-1373.86	-1512.64	-868.436	-1048.86	-1126.86

+2.25	965.2031	1681.734	1838.334	1136.151	1363.41	1449.78
-2.3	-614.183	-1282.27	-1411.8	-810.54	-978.932	-1051.73
+2.3	1162.638	2094.464	2298.54	1393.031	1671.086	1786.004
-2.35	-570.313	-1190.68	-1310.95	-752.644	-909.008	-976.608
+2.35	1333.58	2440.444	2687.052	1614.056	1929.318	2067.359
-2.4	-526.443	-1099.09	-1210.11	-694.749	-839.085	-901.485
+2.4	1473.481	2726.808	2993.462	1788.476	2136.783	2286.228
-2.45	-482.572	-1007.5	-1109.27	-636.853	-769.161	-826.361
+2.45	1578.147	2949.898	3208.769	1910.798	2280.998	2447.506
-2.5	-438.702	-915.907	-1008.43	-578.957	-699.237	-751.237
+2.5	1643.739	3087.631	3376.616	1976.388	2356.774	2539.256
-2.55	-394.832	-824.317	-907.583	-521.062	-629.313	-676.114
+2.55	1671.071	3147.367	3451.972	2004.96	2389.333	2579.225
-2.6	-350.962	-732.726	-806.741	-463.166	-559.39	-600.99
+2.6	1676.063	3146.423	3422.606	2029.003	2422.241	2603.306
-2.65	-307.092	-641.135	-705.898	-405.27	-489.466	-525.866
+2.65	1635.513	3044.991	3346.17	1993.386	2384.542	2548.876
-2.7	-263.221	-549.544	-605.055	-347.374	-419.542	-450.742
+2.7	1546.622	2880.566	3164.791	1893.728	2270.402	2432.364
-2.75	-219.351	-457.954	-504.213	-289.479	-349.619	-375.619
+2.75	1420.879	2625.65	2879.784	1740.464	2096.312	2229.284
-2.8	-175.481	-366.363	-403.37	-231.583	-279.695	-300.495
+2.8	1246.507	2300.367	2502.159	1521.762	1840.054	1940.102
-2.85	-131.611	-274.772	-302.528	-173.687	-209.771	-225.371
+2.85	1018.496	1884.573	2013.311	1235.635	1498.086	1583.326
-2.9	-87.7404	-183.181	-201.685	-115.791	-139.847	-150.247
+2.9	735.7928	1355.806	1451.653	899.7983	1087.312	1147.105
-2.95	-43.8702	-91.5907	-100.843	-57.8957	-69.9237	-75.1237
+2.95	396.5863	738.549	788.4039	488.346	589.6848	623.1497
-3	-1.75E-13	-2.4E-13	-2.5E-13	-1.9E-13	-2.3E-13	-2.1E-13
+3	4.83E-13	6.23E-13	6.24E-13	3.65E-13	4.27E-13	4.61E-13

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-25.53176735	-20.92308656	-29.73103926	-11.93923385	-12.84467293	-12.10651817	-14.65470102	-14.94512638	-15.8169	-6.344548193
End Shear	222.6063345	183.2150454	245.5411277	119.7752968	128.1314773	120.281566	143.9886992	138.2306248	146.1561	63.29690765
-0.05	-25.75877518	-21.15009439	-29.9353463	-11.93923385	-12.84467293	-12.10651817	-14.65470102	-14.94512638	-15.8169	-6.344548193
+0.05	204.3268312	168.1116435	222.6628833	111.7434296	119.4860012	112.1378346	134.1269267	127.9580653	135.2818	59.01623694
-0.1	-26.54389704	-23.18048875	-32.23775948	-11.93923385	-12.84467293	-12.10651817	-14.65470102	-14.94512638	-15.8169	-6.344548193
+0.1	185.6913149	152.7701557	199.0516826	103.4486496	110.5604779	103.726553	123.9473927	117.3566291	124.0602	54.55687451
-0.15	-29.73487654	-30.9968584	-40.98783261	-17.22413936	-17.69363426	-16.15630581	-17.77888113	-14.94512638	-15.8169	-8.067207848
+0.15	170.2017109	139.970765	179.3911905	96.31764916	102.889695	96.49922496	115.2059194	108.2965525	114.4707	50.72691643
-0.2	-41.45609905	-40.47295562	-51.49949221	-25.49088249	-26.6022264	-24.55976707	-27.97690437	-18.81058674	-19.9173	-12.45979661
+0.2	152.8506122	125.7954076	157.6877592	88.18219489	94.14132579	88.25838387	105.2447325	98.02402496	103.5986	46.36194024
-0.25	-52.94887461	-49.05741862	-61.91285851	-32.58736996	-34.25216541	-31.77746029	-36.74112575	-25.18147585	-26.5068	-16.29540762
+0.25	138.4106922	114.0395161	139.7738135	81.23314748	86.67132174	81.22332448	96.74649887	89.30640653	94.3729	42.63752263
-0.3	-66.66932609	-59.36046563	-74.27533142	-40.67122253	-42.96937075	-40.00389979	-46.73633051	-34.90181947	-36.7472	-20.66884557
+0.3	122.466515	101.1028491	120.1901629	73.35826215	78.20913838	73.25573478	87.12828088	79.49525617	83.99074	38.4217118
-0.35	-78.85924002	-68.60750762	-85.25784317	-47.56532586	-50.40618739	-47.02361907	-55.27076962	-44.10989842	-46.4986	-24.40226568
+0.35	109.291349	90.44783929	104.2607499	66.67892628	71.03442291	66.50205093	78.98129444	71.23489415	75.25035	34.85031412
-0.4	-93.22435829	-79.60936966	-98.19897895	-55.36502584	-58.82295509	-54.97021821	-64.93852839	-54.59221482	-57.6001	-28.63039857
+0.4	94.85566362	78.80970607	87.39952969	59.1658727	62.96747715	58.91053322	69.83067506	62.01756996	65.49831	30.83845473
-0.45	-105.8954124	-89.402434	-109.61293	-61.96899423	-65.95214817	-61.70285794	-73.13517866	-63.52546743	-67.0617	-32.21415212
+0.45	83.02775487	69.30192037	74.79087284	52.84399445	56.18254553	52.52733413	62.14294794	54.32926248	57.36481	27.4675578
-0.5	-120.7229089	-100.9622598	-122.9680927	-69.3832995	-73.95944833	-69.26679831	-82.35086262	-73.62443262	-77.7587	-36.24219505
+0.5	70.18938918	59.00943914	63.22658477	45.79402125	48.61987446	45.41470214	53.5845496	45.83824165	48.38316	23.71444041
-0.55	-133.7115894	-111.1737586	-134.6658413	-75.60937216	-80.68650632	-75.62324729	-90.10171073	-82.16804873	-86.8089	-39.62879815
+0.55	59.78020881	50.6841924	53.85022184	39.91735241	42.31922897	39.49108819	46.46408208	38.83678832	40.9781	20.5915226
-0.6	-148.806437	-123.1379699	-148.2589463	-82.53702827	-88.17529567	-82.70171816	-98.74070021	-91.75120218	-96.961	-43.40196974
+0.6	48.61525887	41.77173248	43.79289918	33.43170288	35.36986379	32.96015617	38.62252852	31.20451454	32.90707	17.15193184
-0.65	-161.9382104	-133.6292706	-160.1026531	-88.29746733	-94.40573184	-88.59287959	-105.9377502	-99.79038104	-105.478	-46.54394124
+0.65	39.68525206	34.6533034	35.74869651	28.08799676	29.64800793	27.58522903	32.17732274	25.00472235	26.35202	14.32447585
-0.7	-177.0926494	-145.8315596	-182.476415	-94.63721356	-101.26696	-95.08306597	-113.8754215	-108.7252752	-114.945	-50.00745491
+0.7	30.25708462	27.1425295	27.25568705	22.26793751	23.42100495	21.73881322	25.17723944	18.36366553	19.33188	11.2531915
-0.75	-190.1819529	-156.4530137	-201.9597475	-99.84425944	-106.9062641	-100.4198194	-120.4106485	-116.1452195	-122.808	-52.85731302
+0.75	22.8556503	21.24416142	20.58838007	17.54494615	18.37244084	17.00169225	19.51531865	13.42912718	14.13592	8.768677518
-0.8	-205.1755097	-168.7143243	-224.2432979	-105.4948508	-113.0308984	-106.2189052	-127.5223761	-124.2993737	-131.45	-55.95637796
+0.8	15.25017091	15.14398616	13.73533829	12.49172001	12.97683092	11.94260066	13.48132183	9.252691242	9.79066	6.120487922
-0.85	-218.025733	-179.3052522	-243.3172513	-110.0607532	-117.98457	-110.9121525	-133.2877822	-130.9852936	-138.537	-58.46664706
+0.85	9.811608609	10.46790607	8.836861605	8.477196076	8.696061417	7.932391162	8.710692223	6.32974852	6.685857	4.026399272
-0.9	-232.6251946	-191.4338187	-264.9673301	-114.9209425	-123.2635747	-115.9173236	-139.4489426	-138.2262567	-146.213	-61.14648396
+0.9	4.509661145	5.774518018	4.058695023	4.445562661	4.445562661	4.117774358	4.357960174	3.379906649	3.557796	2.427836571
-0.95	-245.0287038	-201.8224937	-283.7124814	-118.7579487	-127.4371108	-119.877962	-144.3365247	-144.0633363	-152.402	-63.26967971
+0.95	2.11016343	2.311905808	1.899147085	1.786569031	1.786569031	1.387327027	1.460944652	1.383280074	1.456084	1.181642655
-1	-258.9881322	-213.6138086	-304.7520818	-122.7264771	-131.7614383	-123.9864013	-149.4224912	-150.2586525	-158.973	-65.47549984
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.58E+02	2.13E+02	303.370847	1.22E+02	1.31E+02	123.7280069	149.1020085	1.50E+02	1.59E+02	6.53E+01
-2.05	-1.94E+00	-2.07E+00	-1.748963194	-1.63E+00	-1.63E+00	-1.304898883	-1.309919421	-1.24E+00	-1.31E+00	-1.09E+00
+2.05	2.46E+02	2.03E+02	2.85E+02	119.0376152	127.7415602	1.20E+02	1.45E+02	1.44E+02	152.8592	6.34E+01
-2.1	-4.71E+00	-6.06E+00	-4.240902154	-4.65932691	-4.65932691	-4.342828072	-4.606174061	-3.542372763	-3.72881	-2.523106444
+2.1	2.32E+02	1.91E+02	2.64E+02	114.6105563	122.9262175	1.16E+02	1.39E+02	1.38E+02	145.7181	6.10E+01
-2.15	-9.42E+00	-1.01E+01	-8.485184939	-8.183493053	-8.383127112	-7.639384358	-8.362657343	-6.115763077	-6.45859	-3.908287074
+2.15	219.0621578	180.116913	244.7734444	110.3980839	118.3507485	111.2592116	133.7145397	131.4834142	139.0649	58.65256742
-2.2	-15.70139937	-15.52770011	-14.13723033	-12.81539102	-13.32221314	-12.26630471	-13.86693401	-9.488209087	-10.0409	-6.289552478
+2.2	204.2364139	167.8971568	222.7660005	105.1299879	112.6352462	105.8441849	127.0624618	123.769243	130.8883	55.75626122
-2.25	-22.31931581	-20.81455392	-20.10241755	-17.19516491	-17.99874366	-16.65114774	-19.09675853	-13.06886989	-13.7567	-8.584796435

+2.25	191.2411213	157.2701486	203.4527694	100.2325106	107.3269091	100.8180019	120.8985912	116.7019138	123.3982	53.0702539
-2.3	-30.85446038	-27.62039781	-27.79534531	-22.64450619	-23.82372599	-22.11680966	-25.62944559	-18.78925416	-19.7817	-11.45139318
+2.3	176.1374742	145.0151386	180.9729362	94.22463609	100.8202951	94.6604707	113.3582621	108.1408022	114.3262	49.7821098
-2.35	-39.02089249	-34.12978655	-35.15607026	-27.68886418	-29.2207924	-27.18399868	-31.69654323	-24.54523309	-25.8662	-14.11331523
+2.35	163.0011534	134.4393255	161.5367563	88.72989827	94.87358438	89.03535275	106.4785968	100.3968461	106.1209	46.78025653
-2.4	-49.31850111	-42.3433549	-44.43768841	-33.85441861	-35.82265364	-33.3855659	-39.13299073	-31.69849737	-33.4294	-17.37561289
+2.4	147.846733	122.3344524	147.1471732	82.0835022	87.68490445	82.23813757	98.17464669	91.12122535	96.29363	43.15505648
-2.45	-58.98924835	-50.0675736	-53.15418018	-39.47560046	-41.84574496	-39.0460085	-45.92936959	-38.31352353	-40.4247	-20.35673745
+2.45	134.7607343	111.9650185	135.3754001	76.07925339	81.19431889	76.10316333	90.68715975	82.81546196	87.49469	39.88483266
-2.5	-70.99259691	-59.67356885	-63.97287141	-46.25610621	-49.11543409	-45.8806783	-54.14496794	-46.39178105	-48.9686	-23.95994542
+2.5	119.6948211	100.1829686	121.8913779	68.89558524	73.43261113	68.7690761	81.74420996	72.95780852	77.05254	35.97736779
-2.55	-82.11294847	-68.59383954	-73.99543185	-52.36636846	-55.67005692	-52.04525791	-61.56260892	-53.75104156	-56.7531	-27.21279618
+2.55	106.8429653	90.16402465	110.3291215	62.46956249	66.49263732	62.21336548	73.7569263	64.20499566	67.78142	32.48625488
-2.6	-95.75258112	-79.56427294	-88.48543447	-59.66057548	-63.49853562	-59.4102143	-70.43273215	-62.62181715	-66.1376	-31.10213557
+2.6	92.22223841	78.86476269	97.17589069	54.84989175	58.26696104	54.44522154	64.29960056	53.89779267	56.86464	28.35131709
-2.65	-108.2568621	-89.65078377	-103.0989411	-66.17216705	-70.49018926	-65.98980698	-78.36360623	-70.61054211	-74.5898	-34.57922632
+2.65	79.77135711	69.32942714	85.9750708	48.08986065	50.97211572	47.55789761	55.92054838	44.81277325	47.24297	24.68678623
-2.7	-123.4505908	-101.9448914	-121.4584512	-73.87881839	-78.76841157	-73.78223386	-87.76362998	-80.1413546	-84.6744	-38.69990938
+2.7	65.7059698	58.66014026	73.32219511	40.13542215	42.39149306	39.45851172	46.0734713	34.18841608	35.99174	20.37914411
-2.75	-137.2620154	-113.1568277	-138.4314602	-80.70398639	-86.10259224	-80.68776354	-96.09976536	-88.64473013	-93.6727	-42.35375985
+2.75	53.81407208	49.7305043	62.62480074	33.1291369	34.83628047	32.32865002	37.41062015	25.8218664	27.18091	16.58869538
-2.8	-153.9149229	-126.721137	-159.1007869	-88.72183327	-94.72152098	-88.80484736	-105.9050663	-98.70315685	-104.317	-46.65100289
+2.8	40.66282604	39.82568147	50.78554837	24.94116736	26.00973554	24.00083777	27.29841638	18.41333365	19.49461	12.163153
-2.85	-168.9457568	-139.006653	-177.910971	-95.77284537	-102.3037482	-95.94717738	-114.5384192	-107.6063634	-113.74	-50.4341315
+2.85	30.46402606	31.61276625	41.61988304	17.77639351	18.28867285	16.71755759	18.45979032	14.94512683	15.81694	8.294260925
-2.9	-186.950199	-153.7749579	-200.5955101	-104.0006348	-111.1543417	-104.2861025	-124.6243725	-118.0599029	-124.805	-54.85314918
+2.9	26.47415299	22.59419665	31.87786876	11.93923385	12.84467387	12.10651884	14.65470061	14.94512683	15.81694	6.344548332
-2.95	-203.1015895	-167.0711272	-221.0591247	-111.1897039	-118.8900753	-111.5761592	-133.4469748	-127.2482014	-134.53	-58.71806696
+2.95	25.79369165	21.18501263	29.96677198	11.93923385	12.84467387	12.10651884	14.65470061	14.94512683	15.81694	6.344548332
-3	-222.3371903	-182.9644906	-245.5411277	-119.5261829	-127.8632919	-120.0341103	-143.6889561	-137.9644158	-145.874	-63.2040699
+3	25.5317664	20.92308737	29.73103926	11.93923385	12.84467387	12.10651884	14.65470061	14.94512683	15.81694	6.344548332

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**-9.122195259**	**-12.85865537**	**-13.60660349**	**-15.0847366**	**-7.320191313**	**-9.892169578**	**-11.31460946**	**-12.66585959**	**-14.08337548**
End Shear	**90.39873508**	**120.0842728**	**121.9637929**	**128.0518663**	**72.81679846**	**98.17020106**	**111.1349669**	**121.5781565**	**132.2589557**
-0.05	**-9.122195259**	**-12.85865537**	**-13.60660349**	**-15.14351542**	**-7.320191313**	**-9.892169578**	**-11.31460946**	**-12.66585959**	**-14.08337548**
+0.05	**84.2381572**	**111.2300275**	**112.4489407**	**114.8696063**	**67.87872862**	**91.50934109**	**103.5047188**	**113.0494284**	**122.7810863**
-0.1	**-9.122195259**	**-12.85865537**	**-13.60660349**	**-15.3468059**	**-7.320191313**	**-9.892169578**	**-11.31460946**	**-12.66585959**	**-14.08337548**
+0.1	**77.87632497**	**102.0886506**	**102.6363214**	**101.5920582**	**62.78323915**	**84.630492**	**95.62341063**	**104.2430358**	**112.9981649**
-0.15	**-11.50728405**	**-12.85865537**	**-13.60660349**	**-15.6399218**	**-9.70692146**	**-12.97477252**	**-13.62990201**	**-13.62472216**	**-14.08337548**
+0.15	**72.41209775**	**94.27325961**	**94.27607031**	**90.83958225**	**58.40523707**	**78.7206025**	**88.85685077**	**96.69092257**	**104.6183139**
-0.2	**-17.87445453**	**-16.10498829**	**-14.59748315**	**-16.11205543**	**-14.79895965**	**-19.85098454**	**-21.21638995**	**-21.15907979**	**-21.15307182**
+0.2	**66.18412038**	**85.40831778**	**84.82774901**	**79.59313854**	**53.41359258**	**71.98278564**	**81.14774124**	**88.09708188**	**95.09403419**
-0.25	**-23.34524544**	**-22.75019028**	**-19.42071779**	**-18.65141267**	**-19.17271115**	**-25.75762039**	**-28.00932662**	**-28.43930098**	**-28.43260558**
+0.25	**60.86965488**	**77.88193872**	**76.83725023**	**70.3006592**	**49.15259037**	**66.23157704**	**74.5722738**	**80.77610289**	**86.99067079**
-0.3	**-29.58304331**	**-31.08171268**	**-26.95968734**	**-25.04610726**	**-24.1579999**	**-32.49057686**	**-35.75787951**	**-37.16289524**	**-38.18423771**
+0.3	**54.853419**	**69.40751039**	**67.87789604**	**60.63975929**	**44.32709953**	**59.71891**	**67.13195194**	**72.50309325**	**77.84577895**
-0.35	**-34.90795472**	**-38.99871287**	**-34.33261374**	**-31.32614181**	**-28.4122294**	**-38.23660406**	**-42.37532991**	**-44.62200228**	**-46.54246928**
+0.35	**49.75621612**	**62.26900499**	**60.36522746**	**52.76581649**	**40.23709848**	**54.19928774**	**60.83129069**	**65.50709751**	**70.12355195**
-0.4	**-40.93848645**	**-48.00768347**	**-43.12423073**	**-38.91402057**	**-33.22845509**	**-44.74218088**	**-49.87310314**	**-53.08402182**	**-56.03610615**
+0.4	**44.02961937**	**54.29915222**	**52.01954881**	**44.55373082**	**35.64007071**	**47.99589641**	**53.75634257**	**57.66320489**	**61.47881913**
-0.45	**-46.05001621**	**-55.68210467**	**-51.62018226**	**-46.74505394**	**-37.30916702**	**-50.25469478**	**-56.23135665**	**-60.26950725**	**-64.10797198**
+0.45	**39.21718964**	**47.64738175**	**45.0927629**	**38.43424301**	**31.77506884**	**42.78076788**	**47.81419689**	**51.08602234**	**54.24237116**
-0.5	**-51.79538844**	**-64.35412861**	**-61.25422268**	**-56.10818813**	**-41.89402391**	**-56.44876797**	**-63.38175798**	**-68.36166784**	**-73.21081078**
+0.5	**33.85811553**	**40.29619107**	**37.48545141**	**31.7815128**	**27.46880958**	**36.97077308**	**41.20121684**	**43.77952649**	**46.21853999**
-0.55	**-56.62603008**	**-71.68709892**	**-69.43089891**	**-64.08951701**	**-45.74721743**	**-61.65485934**	**-69.39710182**	**-75.17969733**	**-80.89165863**
+0.55	**29.39796129**	**34.23001808**	**31.25260733**	**26.31608438**	**23.88280681**	**32.13303856**	**35.70129726**	**37.71501706**	**39.57253278**
-0.6	**-62.00835522**	**-79.90810458**	**-78.63420488**	**-73.63251772**	**-50.03839678**	**-67.45331079**	**-76.10354295**	**-82.7937215**	**-89.48295199**
+0.6	**24.48431043**	**27.61154663**	**24.50836148**	**20.54249494**	**19.92962491**	**26.80056091**	**29.64687444**	**31.05419876**	**32.29035519**
-0.65	**-66.49060116**	**-86.8007606**	**-86.38354583**	**-81.6339219**	**-53.61007042**	**-72.2800824**	**-81.69226548**	**-89.1504334**	**-96.66812932**
+0.65	**20.44393376**	**22.2298404**	**19.4707382**	**16.23942716**	**16.6766234**	**22.41312188**	**24.67289364**	**25.59619241**	**26.33945012**
-0.7	**-71.43198723**	**-94.4566871**	**-95.03142863**	**-91.09725668**	**-57.54526544**	**-77.59879091**	**-87.85815674**	**-96.17803888**	**-104.6271209**
+0.7	**16.05359326**	**16.45816827**	**14.21245425**	**11.78884808**	**13.1388266**	**17.64228356**	**19.27361963**	**19.68933516**	**19.91968011**
-0.75	**-75.49833064**	**-100.8101677**	**-102.2453672**	**-99.32807345**	**-60.78141813**	**-81.97332569**	**-92.93654575**	**-101.9796058**	**-111.211976**
+0.75	**12.50050997**	**12.16983023**	**10.35400579**	**8.544910583**	**10.27282624**	**13.77805598**	**14.90928911**	**14.93168847**	**14.92975396**
-0.8	**-79.92087985**	**-107.7869259**	**-110.2131318**	**-111.3667207**	**-64.29831711**	**-86.72816908**	**-98.46529574**	**-108.3125093**	**-118.4179099**
+0.8	**8.711369736**	**7.934186807**	**7.081709725**	**5.769857972**	**7.212722331**	**9.652972617**	**10.26174794**	**10.24010842**	**10.23846265**
-0.85	**-83.50381688**	**-113.5023771**	**-116.7836094**	**-121.5926759**	**-67.14494958**	**-90.57756883**	**-102.9496412**	**-113.465074**	**-124.2977898**
+0.85	**5.713081161**	**5.513061259**	**4.406140676**	**3.628632671**	**4.787723078**	**6.384860721**	**6.673900679**	**6.672513599**	**6.671168342**
-0.9	**-87.32964712**	**-119.6859031**	**-123.9465571**	**-134.6080456**	**-70.18125181**	**-94.68442625**	**-107.7446604**	**-118.9949956**	**-130.6299079**
+0.9	**3.130715076**	**3.118803458**	**2.478992381**	**1.970188577**	**2.330670498**	**3.343987424**	**3.4288927**	**3.427597184**	**3.426332662**
-0.95	**-90.36166715**	**-124.664448**	**-129.7654934**	**-146.3103229**	**-72.58436392**	**-97.93578865**	**-111.5512494**	**-123.4047252**	**-135.7001604**
+0.95	**1.280963495**	**1.276796254**	**1.013878843**	**0.791950573**	**1.139085513**	**1.179227973**	**1.236712521**	**1.179204388**	**1.242667738**
-1	**-93.51288152**	**-129.940674**	**-135.9989524**	**-159.7148576**	**-75.07775769**	**-101.3105372**	**-115.5159469**	**-128.0233771**	**-141.0377213**
+1	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**
(Span 2) -2	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**
+2	**9.33E+01**	**1.30E+02**	**1.36E+02**	**1.59E+02**	**7.49E+01**	**1.01E+02**	**115.2659884**	**127.7312187**	**1.41E+02**
-2.05	**-1.15E+00**	**-1.14E+00**	**-9.08E-01**	**-7.13E-01**	**-1.05E+00**	**-1.11E+00**	**-1.108385317**	**-1.109292541**	**-1.11E+00**
+2.05	**9.06E+01**	**1.25E+02**	**1.30E+02**	**1.47E+02**	**7.28E+01**	**9.82E+01**	**111.8296142**	**123.7280466**	**1.36E+02**
-2.1	**-3.281213428**	**-3.269201817**	**-2.598616084**	**-2.068237563**	**-2.427709039**	**-3.520228969**	**-3.633733379**	**-3.632420557**	**-3.631145244**
+2.1	**8.71E+01**	**1.19E+02**	**1.23E+02**	**1.34E+02**	**7.00E+01**	**9.44E+01**	**107.4376426**	**118.6401741**	**1.30E+02**
-2.15	**-5.494239228**	**-5.327784854**	**-4.236036511**	**-3.474380081**	**-4.610576592**	**-6.146150397**	**-6.446309448**	**-6.444925404**	**-6.44356904**
+2.15	**83.76892119**	**113.9279842**	**117.2746943**	**122.3695814**	**67.35546169**	**90.86227983**	**103.2816712**	**113.8472551**	**124.7346408**
-2.2	**-8.953614037**	**-8.169824708**	**-7.290568199**	**-5.944968295**	**-7.408501335**	**-9.916848392**	**-10.55862505**	**-10.53504476**	**-10.53337899**
+2.2	**79.63496636**	**107.3335353**	**109.6937133**	**110.5708708**	**64.07104137**	**86.4208764**	**98.1076696**	**107.902255**	**117.9504676**
-2.25	**-12.23777216**	**-11.85648522**	**-10.12676739**	**-8.350099857**	**-10.06077869**	**-13.49216382**	**-14.58677873**	**-14.58082099**	**-14.57887682**
+2.25	**75.80185936**	**101.2866708**	**102.7879672**	**100.1369082**	**61.02287505**	**82.29975971**	**93.31580316**	**102.4134222**	**111.7049767**

-2.3	-16.33728084	-16.82829778	-14.54916826	-12.07182172	-13.36754631	-17.95068619	-19.62230477	-20.07014949	-20.33279453
+2.3	71.11012162	93.95604314	94.46451226	90.4581594	57.28901211	77.25243341	87.45637082	95.71958424	104.1073768
-2.35	-20.14247386	-21.83075452	-19.10665139	-15.92916056	-16.43381995	-22.08565434	-24.30195862	-25.18974376	-25.89695385
+2.35	66.82736271	87.32057835	86.96933589	82.23811308	53.87832763	72.64264905	82.11231996	89.62868363	97.20924279
-2.4	-24.80424135	-28.04012039	-24.94304295	-20.9124694	-20.18712293	-27.14786146	-30.04091984	-31.48715636	-32.76306466
+2.4	61.65574461	79.36781905	78.02813463	73.0058881	49.75733132	67.07352528	75.66404904	82.29430793	88.91897099
-2.45	-29.06296699	-33.77646365	-30.78842189	-25.91646357	-23.61339369	-31.7695892	-35.28836467	-37.26018955	-39.07465236
+2.45	56.99084313	72.24263394	70.05159558	64.735087	46.03813024	62.0479558	69.85152657	75.6951837	81.47284657
-2.5	-34.20909668	-40.7755987	-37.97982893	-32.21143077	-27.75092454	-37.35137001	-41.6341745	-44.25741319	-46.74278765
+2.5	51.41723392	63.78182823	60.61732134	55.48923334	41.59231578	56.04115398	62.91100453	67.82851933	72.61067277
-2.55	-38.85384743	-47.14695382	-44.57318613	-37.97736305	-31.48319343	-42.38694316	-47.36569621	-50.59001614	-53.69713815
+2.55	46.43769324	56.26574974	52.26748679	47.37431969	37.61859846	50.67271547	56.71372214	60.81501428	64.72119451
-2.6	-44.40644499	-54.82177345	-52.56531579	-45.03808783	-35.94264528	-48.40417587	-54.22176322	-58.17878608	-62.04654199
+2.6	40.53998594	47.4109891	42.46479146	38.34935778	32.91025476	44.31235722	49.37754117	52.52435906	55.40785458
-2.65	-49.36971521	-61.72930372	-59.79858259	-52.17791874	-39.92691138	-53.78067502	-60.3536527	-64.97712607	-69.53898567
+2.65	35.31331269	39.60291697	34.89551858	31.81040847	28.73602176	38.67396855	42.8792093	45.19031773	47.17969068
-2.7	-55.25088885	-69.96571787	-68.46670799	-61.26291385	-44.64597458	-60.14923688	-67.62338377	-73.04914532	-78.4489247
+2.7	29.16939751	30.46821724	26.38860782	24.56447037	23.82746623	32.04417482	35.24395896	36.58395229	37.53591825
-2.75	-60.46517292	-77.31054803	-76.23182052	-69.6048338	-48.82823725	-65.79378174	-74.07192841	-80.2193803	-86.37482348
+2.75	23.76309888	23.29890538	19.78931413	18.97271397	19.50670723	26.20871609	28.52827504	29.02321997	29.07376386
-2.8	-66.59703226	-85.99451789	-85.45128533	-80.32653389	-53.7446038	-72.4295526	-81.65873618	-88.66635092	-95.72452631
+2.8	17.4508818	15.67947901	14.22424469	16.07614222	14.46025905	19.39360862	20.69056181	20.63753299	20.63151354
-2.85	-71.99482397	-93.67776805	-93.64017764	-90.07385529	-58.07085286	-78.26921319	-88.34022437	-96.1146362	-103.9792485
+2.85	11.93246144	12.85865402	13.6066026	15.66694544	10.04699307	13.43399568	14.05475894	14.04960757	14.08337638
-2.9	-78.29946435	-102.6951862	-103.2862529	-102.45895	-63.1222261	-85.08807126	-96.14750216	-104.8283102	-113.6479635
+2.9	9.122194711	12.85865402	13.6066026	15.32874638	7.320191141	9.892169089	11.31460839	12.66585835	14.08337638
-2.95	-83.8132572	-110.618046	-111.790857	-113.9666275	-67.53848201	-91.04996903	-102.9782382	-112.4608016	-122.1267955
+2.95	9.122194711	12.85865402	13.6066026	15.15255549	7.320191141	9.892169089	11.31460839	12.66585835	14.08337638
-3	-90.21282527	-119.8548599	-121.7388708	-127.9121468	-72.66252256	-97.9677928	-110.9094111	-121.3328805	-131.9937692
+3	9.122194711	12.85865402	13.6066026	15.08473555	7.320191141	9.892169089	11.31460839	12.66585835	14.08337638

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-24.6695024	-27.19565538	-15.5685	-18.7853	-20.207
End Shear	217.6982504	233.6378993	142.894	172.3694	182.7708
-0.05	-24.6695024	-27.19565538	-15.5685	-18.7853	-20.207
+0.05	200.6153233	215.0345923	132.1114	159.412	168.7973
-0.1	-24.6695024	-27.19565538	-15.5685	-18.7853	-20.207
+0.1	183.0069761	195.6094303	120.988	146.0418	154.3824
-0.15	-24.6695024	-27.19565538	-15.5685	-18.7853	-20.207
+0.15	168.007246	179.0878776	111.491	134.6236	142.0843
-0.2	-24.6695024	-27.19565538	-19.9894	-22.0217	-23.5066
+0.2	151.0580681	160.4501433	100.734	121.687	128.1655
-0.25	-33.14750866	-34.70558143	-25.3684	-29.6994	-30.3707
+0.25	136.7265045	144.7190197	91.61509	110.7173	116.376
-0.3	-46.13236662	-48.56074052	-34.1405	-41.9126	-41.9031
+0.3	120.6600743	127.1179499	81.36414	98.38205	103.135
-0.35	-59.78090561	-60.43706231	-43.5493	-53.2022	-53.6416
+0.35	107.1904472	112.3932785	72.74435	88.00611	92.01166
-0.4	-76.54329806	-77.07433725	-54.6322	-66.4975	-68.0907
+0.4	92.23036455	96.0781206	63.13921	76.4398	79.63001
-0.45	-91.81410767	-94.04492138	-64.086	-77.836	-80.4252
+0.45	79.81644694	82.57590319	55.13966	66.80294	69.33021
-0.5	-109.1342647	-113.4361563	-74.7839	-90.6634	-94.3937
+0.5	66.1862701	67.79592667	46.32005	56.17327	57.98962
-0.55	-123.8377432	-129.9228464	-83.8436	-101.524	-106.233
+0.55	55.02184263	55.73220983	39.06183	47.42082	48.6708
-0.6	-140.3915031	-148.5140381	-94.0169	-113.715	-119.539
+0.6	42.94515671	43.05448739	31.16746	37.89543	38.55293
-0.65	-154.3339068	-164.1993632	-102.561	-123.952	-130.726
+0.65	33.58642142	33.91110123	24.77165	30.17269	30.37249
-0.7	-169.8976977	-181.741233	-112.07	-135.341	-143.189
+0.7	24.11708716	25.12782239	18.09423	22.10164	22.03326
-0.75	-182.8852438	-196.4091553	-119.978	-144.809	-153.566
+0.75	17.50752832	18.1162851	13.71397	15.97374	16.25372
-0.8	-197.2354791	-212.652491	-128.683	-155.227	-165.003
+0.8	11.32569271	11.52720407	9.842976	10.81312	11.4316
-0.85	-209.0743913	-226.0869799	-135.834	-163.781	-174.412
+0.85	7.358300833	7.073687898	6.763154	7.360424	7.607999
-0.9	-221.9874912	-240.782513	-143.595	-173.06	-184.642
+0.9	3.749729675	3.467237984	3.589799	3.891793	3.884427
-0.95	-232.4840016	-252.7675765	-149.867	-180.555	-192.926
+0.95	1.254568404	1.250222706	1.467513	1.565347	1.30536
-1	-243.736389	-265.666044	-156.545	-188.528	-201.768
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.43E+02	2.65E+02	1.56E+02	1.88E+02	2.01E+02
-2.05	-1.13E+00	-1.10E+00	-1.32E+00	-1.40E+00	-1.17E+00
+2.05	2.33E+02	2.54E+02	1.50E+02	181.1082	1.94E+02
-2.1	-3.970918651	-3.774748349	-3.76231	-4.11421	-4.11985
+2.1	2.21E+02	2.40E+02	1.43E+02	172.461	1.84E+02
-2.15	-7.007651691	-6.777487036	-6.53761	-7.16632	-7.32854
+2.15	209.9594546	227.0939984	136.3674	164.4185	175.1143
-2.2	-11.66478071	-11.89508598	-10.0911	-11.0847	-11.7401
+2.2	196.2997676	211.5934078	128.1169	154.549	164.2579
-2.25	-17.06866039	-17.60113878	-13.4461	-15.5244	-15.9196
+2.25	183.8622673	197.5151839	120.5722	145.5198	154.3452

-2.3	**-24.68149019**	**-25.6908796**	**-18.5018**	**-22.5947**	**-22.5632**
+2.3	**168.8772386**	**180.5913825**	**111.4478**	**134.5956**	**142.3725**
-2.35	**-32.92683936**	**-33.30349935**	**-24.2984**	**-29.601**	**-29.7678**
+2.35	**155.3879745**	**165.3877857**	**103.2063**	**124.7249**	**131.5711**
-2.4	**-43.72339493**	**-43.61475496**	**-31.6778**	**-38.5114**	**-39.2063**
+2.4	**139.301201**	**147.2900636**	**93.34771**	**112.9137**	**118.6638**
-2.45	**-54.19049985**	**-54.83453685**	**-38.52**	**-46.7672**	**-47.9757**
+2.45	**124.9540074**	**131.1770751**	**84.53046**	**102.3469**	**107.1311**
-2.5	**-67.07196196**	**-68.75350852**	**-46.8945**	**-56.8658**	**-58.7277**
+2.5	**107.9890642**	**112.1547141**	**74.07736**	**89.81629**	**93.47086**
-2.55	**-78.8854159**	**-81.56346781**	**-54.5385**	**-66.0786**	**-68.5567**
+2.55	**92.9776704**	**95.34827084**	**64.80546**	**78.69877**	**81.36428**
-2.6	**-93.20857117**	**-97.14222545**	**-63.7684**	**-77.1976**	**-80.4406**
+2.6	**75.35813879**	**75.86981841**	**53.89761**	**65.61644**	**67.13269**
-2.65	**-106.1746393**	**-111.2826601**	**-72.0933**	**-87.2222**	**-91.1719**
+2.65	**60.82338266**	**61.6063578**	**44.29214**	**54.09343**	**54.60968**
-2.7	**-121.7159082**	**-128.2719574**	**-82.0388**	**-99.194**	**-104.006**
+2.7	**45.19776531**	**47.64140741**	**33.46429**	**41.10111**	**40.99896**
-2.75	**-135.6407545**	**-143.5268459**	**-90.9233**	**-109.885**	**-115.482**
+2.75	**33.90212488**	**35.63318774**	**25.77905**	**30.51587**	**30.89491**
-2.8	**-152.1765559**	**-161.6774348**	**-101.445**	**-122.542**	**-129.085**
+2.8	**24.6695014**	**27.19565502**	**19.57273**	**21.56705**	**22.97507**
-2.85	**-166.8664412**	**-177.8307641**	**-110.768**	**-133.754**	**-141.148**
+2.85	**24.6695014**	**27.19565502**	**15.5685**	**18.78527**	**20.20698**
-2.9	**-184.1731955**	**-196.8933487**	**-121.726**	**-146.928**	**-155.338**
+2.9	**24.6695014**	**27.19565502**	**15.5685**	**18.78527**	**20.20698**
-2.95	**-199.4343534**	**-213.7291743**	**-131.366**	**-158.516**	**-167.831**
+2.95	**24.6695014**	**27.19565502**	**15.5685**	**18.78527**	**20.20698**
-3	**-217.2884712**	**-233.4545487**	**-142.62**	**-172.041**	**-182.426**
+3	**24.6695014**	**27.19565502**	**15.5685**	**18.78527**	**20.20698**

2-Span: Moment (Max and Min) Raw Data Results – 140' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.77E-13	-4.32E-13	-5.71E-13	-3.19E-13	-3.19E-13	-2.61E-13	-3.09E-13	-2.44E-13	-2.57E-13	-1.70E-13
End Shear	8.73E-13	4.21E-13	7.08E-13	3.05E-13	3.05E-13	3.27E-13	3.82E-13	3.88E-13	4.08E-13	2.97E-13
-0.05	-178.7223715	-146.4616059	-208.1172748	-83.5746369	-89.9127105	-84.7456272	-102.582907	-104.615885	-110.718591	-44.41183735
+0.05	1454.178764	1201.356944	1580.142034	782.3540343	836.7000431	785.3219048	939.6603529	895.7064569	946.9728855	413.1136586
-0.1	-357.444743	-292.9232118	-416.2345496	-167.149274	-179.825421	-169.491254	-205.165814	-209.231769	-221.437182	-88.82367471
+0.1	2709.738174	2247.242261	2891.719033	1457.492612	1557.936319	1461.840587	1747.394782	1654.613278	1749.160604	767.941732
-0.15	-536.1671144	-439.3848177	-624.3518244	-250.723911	-269.738131	-254.236882	-307.748721	-313.847654	-332.155773	-133.2355121
+0.15	3770.288496	3138.237202	4039.025349	2025.471822	2163.917826	2029.77732	2423.832988	2277.964246	2407.859291	1065.265245
-0.2	-714.8894859	-585.8464236	-832.4690992	-334.298548	-359.650842	-338.982509	-410.331629	-418.463539	-442.874364	-177.6473494
+0.2	4636.156282	3875.945659	4922.588345	2488.231322	2656.788019	2491.18664	2971.580416	2788.044472	2947.675705	1306.223437
-0.25	-893.6118574	-732.3080296	-1040.586374	-417.873185	-449.563552	-423.728136	-512.914536	-523.079423	-553.592955	-222.0591868
+0.25	5312.479537	4462.5852	5554.530487	2848.371933	3039.402415	2848.794223	3420.784354	3198.774811	3383.86338	1492.313292
-0.3	-1072.334229	-878.7696355	-1248.703649	-501.447822	-539.476263	-508.473763	-615.497443	-627.695308	-664.311546	-266.4710241
+0.3	5812.163601	4900.987452	6031.776623	3109.156137	3315.329054	3128.387025	3752.676251	3491.435493	3692.506275	1626.001434
-0.35	-1251.0566	-1025.231241	-1456.820924	-585.022459	-629.388973	-593.21939	-718.08035	-732.311193	-775.030137	-310.8828615
+0.35	6160.864831	5194.598461	6351.383491	3282.131443	3510.410758	3312.659833	3967.655784	3685.952714	3899.636204	1708.914707
-0.4	-1429.778972	-1171.692847	-1664.938198	-668.597096	-719.301684	-677.965017	-820.663257	-836.927077	-885.748728	-355.2946988
+0.4	6333.238372	5347.47775	6441.439252	3377.975545	3609.34241	3403.445017	4069.914026	3764.922839	3984.327833	1743.525464
-0.45	-1608.501343	-1318.154453	-1873.055473	-752.171732	-809.214394	-762.710645	-923.246164	-941.542962	-996.467319	-399.7065362
+0.45	6336.270134	5364.299109	6321.796084	3386.038293	3614.196046	3406.581396	4065.777973	3736.289513	3954.853145	1732.752712
-0.5	-1787.223715	-1464.616059	-2081.172748	-835.746369	-899.127105	-847.456272	-1025.82907	-1046.15885	-1107.18591	-444.1183735
+0.5	6224.103395	5264.062402	6095.894902	3320.170624	3545.85479	3342.834697	3993.888588	3679.588231	3894.313345	1707.871616
-0.55	-1965.946086	-1611.077665	-2289.290023	-919.321006	-989.039815	-932.201899	-1128.41198	-1150.77473	-1217.9045	-488.5302109
+0.55	5961.061358	5039.006871	5988.2022	3178.737428	3396.781728	3203.954607	3831.901154	3542.576267	3748.618198	1646.578013
-0.6	-2144.668458	-1757.539271	-2497.407298	-1002.89564	-1078.95253	-1016.94753	-1230.99489	-1255.39062	-1328.62309	-532.9420482
+0.6	5545.529066	4692.904805	5671.540695	2966.701339	3171.101639	2992.733143	3580.961262	3307.703855	3499.322422	1544.851976
-0.65	-2323.390829	-1904.000877	-2705.524572	-1086.47028	-1168.86524	-1101.69315	-1333.57779	-1360.0065	-1439.34168	-577.3538856
+0.65	4987.167466	4232.637727	5125.121494	2693.559757	2876.8026	2716.424934	3250.063375	2983.363066	3155.452896	1406.49785
-0.7	-2502.113201	-2050.462483	-2913.641847	-1170.04492	-1258.77795	-1186.43878	-1436.1607	-1464.62239	-1550.06027	-621.765723
+0.7	4296.526151	3665.704429	4366.815346	2369.687695	2522.585399	2383.201177	2849.018526	2579.516015	2727.571118	1235.67882
-0.75	-2680.835572	-2196.924089	-3121.759122	-1253.61955	-1348.69066	-1271.18441	-1538.74361	-1569.23827	-1660.77886	-666.1775603
+0.75	3485.036204	3000.215576	3499.49968	1995.978181	2117.882336	2001.90316	2388.449995	2109.328978	2231.663951	1036.91547
-0.8	-2859.557944	-2343.385695	-3329.876397	-1337.19419	-1438.60337	-1355.93003	-1641.32651	-1673.85415	-1771.49746	-710.5893977
+0.8	2565.015868	2244.895939	2420.150754	1581.617976	1672.761638	1582.045052	1879.796833	1581.604169	1672.9267	815.0864388
-0.85	-3136.170088	-2587.737073	-3626.094465	-1420.76883	-1528.51608	-1440.67566	-1743.90942	-1778.47004	-1882.21605	-755.001235
+0.85	1647.556305	1506.974468	1484.081528	1136.455536	1198.118276	1134.591639	1335.310685	1004.252413	1061.849448	575.428434
-0.9	-3594.09894	-3013.40516	-4085.497568	-1504.34346	-1618.42879	-1525.42129	-1846.49233	-1883.08592	-1992.93464	-799.4130724
+0.9	830.4564091	879.830909	748.0260424	676.3579803	705.6910529	669.9732036	768.0583412	501.4502751	529.7099703	323.5357243
-0.95	-4203.634968	-3590.680422	-5097.600372	-1587.9181	-1708.3415	-1610.16692	-1949.07524	-1987.70181	-2103.65323	-843.8249097
+0.95	296.3345855	344.3242724	266.7011263	260.1969968	260.1969968	247.824405	264.8192303	197.7659911	208.1747275	156.918166
-1	-4941.716584	-4296.501598	-6434.005821	-1671.49272	-1798.25434	-1694.91269	-2051.6582	-2092.31772	-2214.3718	-888.2367475
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-4941.716584	-4296.501598	-6434.005821	-1671.49272	-1798.25434	-1694.91269	-2051.6582	-2092.31772	-2214.3718	-888.2367475
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-4203.634836	-3590.680602	-5097.599049	-1587.91808	-1708.34162	-1610.16706	-1949.07524	-1987.70183	-2103.65299	-843.8249091
+2.05	296.3345809	344.3305288	266.7011222	260.2020047	260.2020047	247.8395249	264.839144	197.769523	208.1784453	156.4405981
-2.1	-3594.098813	-3013.405333	-4085.497516	-1504.34344	-1618.4289	-1525.42142	-1846.49233	-1883.08594	-1992.93441	-799.4130708
+2.1	830.9633068	879.8407449	748.0260684	676.3551095	705.7256108	669.994354	768.0718603	501.4516875	529.7112198	323.528934
-2.15	-3136.169968	-2587.737241	-3626.094414	-1420.76881	-1528.51618	-1440.67579	-1743.90943	-1778.47005	-1882.21583	-755.0012325
+2.15	1648.359266	1506.986014	1484.081463	1136.457689	1198.115152	1134.615015	1335.326663	1004.253905	1061.851415	575.4216409
-2.2	-2859.557818	-2343.385844	-3329.876335	-1337.19417	-1438.60347	-1355.93016	-1641.32652	-1673.85417	-1771.49725	-710.5893942
+2.2	2565.863192	2244.908676	2420.150775	1581.621183	1672.759995	1582.038141	1879.814313	1581.606253	1672.929311	815.0800207

-2.25	**-2680.835453**	***-2196.924233***	***-3121.75906***	**-1253.61942**	**-1348.69075**	**-1271.18453**	**-1538.74362**	**-1569.23828**	**-1660.77867**	**-666.1775559**
+2.25	**3485.890586**	***3000.228688***	***3499.499742***	**1995.981637**	**2117.883385**	**2001.896671**	**2388.467812**	**2109.330727**	**2231.666223**	**1036.908782**
-2.3	**-2502.113089**	***-2050.462621***	***-2913.641785***	**-1170.04479**	**-1258.77803**	**-1186.4389**	**-1436.16071**	**-1464.62239**	**-1550.06009**	**-621.7657175**
+2.3	**4297.352165**	***3665.717489***	***4366.815109***	**2369.690589**	**2522.583723**	**2383.194049**	**2849.035549**	**2579.51392**	**2727.569331**	**1235.672061**
-2.35	**-2323.390724**	***-1904.001009***	***-2705.52451***	**-1086.47026**	**-1168.86532**	**-1101.69327**	**-1333.57781**	**-1360.0065**	**-1439.34151**	**-577.3538792**
+2.35	**4987.932814**	***4232.649537***	***5125.121328***	**2693.561051**	**2876.799251**	**2716.416393**	**3250.078739**	**2983.358935**	**3155.448971**	**1406.490902**
-2.4	**-2144.668359**	***-1757.539398***	***-2497.407236***	**-1002.89562**	**-1078.9526**	**-1016.94763**	**-1230.99491**	**-1255.39061**	**-1328.62293**	**-532.9420409**
+2.4	**5546.203641**	***4692.914112***	***5671.540416***	**2966.698874**	**3171.096166**	**2992.722303**	**3580.973804**	**3307.69679**	**3499.315392**	**1544.844359**
-2.45	**-1965.945994**	***-1611.077786***	***-2289.289961***	**-919.320984**	**-989.039882**	**-932.202001**	**-1128.412**	**-1150.77473**	**-1217.90435**	**-488.5302026**
+2.45	**5961.617511**	***5039.013775***	***5988.201846***	**3178.732193**	**3396.773207**	**3203.941298**	**3831.910487**	**3542.56547**	**3748.607233**	**1646.570057**
-2.5	**-1787.223629**	***-1464.616175***	***-2081.172686***	**-835.746347**	**-899.127165**	**-847.456369**	**-1025.8291**	**-1046.15884**	**-1107.18578**	**-444.1183643**
+2.5	**6224.515373**	***5264.065944***	***6095.894754***	**3320.162142**	**3545.842738**	**3342.849719**	**3993.893587**	**3679.600863**	**3894.327022**	**1707.862792**
-2.55	**-1608.501265**	***-1318.154563***	***-1873.055411***	**-752.17171**	**-809.214448**	**-762.710738**	**-923.246194**	**-941.542951**	**-996.467196**	**-399.7065259**
+2.55	**6335.961301**	***5364.298208***	***6321.795889***	**3386.049592**	**3614.211177**	**3406.569031**	**4065.776187**	**3736.279357**	**3954.842086**	**1732.749302**
-2.6	**-1429.7789**	***-1171.692951***	***-1664.938136***	**-668.597073**	**-719.301731**	**-677.965106**	**-820.663289**	**-836.927063**	**-885.748617**	**-355.2946876**
+2.6	**6332.759592**	***5347.472777***	***6441.439398***	**3377.982482**	**3609.352858**	**3403.428431**	**4069.907232**	**3764.936111**	**3984.341388**	**1743.521454**
-2.65	**-1251.056535**	***-1025.23134***	***-1456.820862***	**-585.022384**	**-629.389014**	**-593.219474**	**-718.080385**	**-732.311175**	**-775.030038**	**-310.8828493**
+2.65	**6160.19515**	***5194.588371***	***6351.383358***	**3282.133455**	**3510.415952**	**3312.670198**	**3967.642839**	**3685.960306**	**3899.643748**	**1708.909683**
-2.7	**-1072.33417**	***-878.7697281***	***-1248.703587***	**-501.447799**	**-539.476297**	**-508.473842**	**-615.497481**	**-627.695287**	**-664.311459**	**-266.471011**
+2.7	**5811.285956**	***4900.972448***	***6031.776472***	**3109.152317**	**3315.327954**	**3128.392209**	**3752.657057**	**3491.437444**	**3692.507833**	**1625.995407**
-2.75	**-893.6118056**	***-732.3081164***	***-1040.586312***	**-417.873163**	**-449.56358**	**-423.72821**	**-512.914576**	**-523.0794**	**-553.59288**	**-222.0591726**
+2.75	**5311.835049**	***4462.564967***	***5554.530157***	**2848.362815**	**3039.395619**	**2848.793549**	**3420.790316**	**3198.769536**	**3383.857281**	**1492.318816**
-2.8	**-714.8894408**	***-585.8465048***	***-832.4690372***	**-334.298526**	**-359.650863**	**-338.982578**	**-410.331672**	**-418.463512**	**-442.874301**	**-177.6473343**
+2.8	**4635.281203**	***3875.919951***	***4922.588345***	**2488.216549**	**2656.77517**	**2491.180202**	**2971.579342**	**2788.033055**	**2947.66311**	**1306.228054**
-2.85	**-536.167076**	***-439.3848932***	***-624.3517624***	**-250.723865**	**-269.738146**	**-254.236946**	**-307.748768**	**-313.847624**	**-332.155722**	**-133.235496**
+2.85	**3768.754256**	***3138.205056***	***4039.02551***	**2025.45095**	**2163.898427**	**2029.765007**	**2423.824727**	**2277.958633**	**2407.853511**	**1065.268845**
-2.9	**-357.4447113**	***-292.9232816***	***-416.2344876***	**-167.149252**	**-179.825429**	**-169.491314**	**-205.165864**	**-209.231736**	**-221.437143**	**-88.82365768**
+2.9	**2709.949341**	***2247.204188***	***2891.718703***	**1457.464594**	**1557.909328**	**1461.821106**	**1747.378063**	**1654.600077**	**1749.146799**	**767.9440332**
-2.95	**-178.7223465**	***-146.46167***	***-208.1172128***	**-83.5746147**	**-89.9127117**	**-84.7456824**	**-102.582959**	**-104.615849**	**-110.718565**	**-44.41181936**
+2.95	**1454.441645**	***1201.312345***	***1580.142408***	**782.3202955**	**836.6667797**	**785.2965829**	**939.6364462**	**895.7140666**	**946.9809423**	**413.1149382**
-3	**-6.56E-13**	***-4.33E-13***	***-7.39E-13***	**-2.98E-13**	**-3.20E-13**	**-2.42E-13**	**-3.01E-13**	**-2.91E-13**	**-3.08E-13**	**-1.91E-13**
+3	**1.28E-12**	***7.22E-13***	***1.25E-12***	**5.85E-13**	**6.50E-13**	**4.83E-13**	**5.69E-13**	**6.10E-13**	**6.48E-13**	**3.19E-13**

2-Span: Moment (Max and Min) Raw Data Results - 140' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.25E-13	-2.26E-13	-2.49E-13	-2.31E-13	-2.03E-13	-2.23E-13	-3.06E-13	-3.02E-13	-3.00E-13
End Shear	2.15E-13	3.37E-13	2.54E-13	2.12E-13	2.74E-13	2.90E-13	3.34E-13	3.32E-13	3.34E-13
-0.05	-63.85536681	-90.0105876	-95.24622441	-105.5931562	-51.24133919	-69.24518704	-79.2022662	-88.6610171	-98.5836284
+0.05	589.6862839	778.6101922	787.1425852	810.2732924	475.1511003	640.8055976	724.8103786	792.5810485	860.8444264
-0.1	-127.7107336	-180.0211752	-190.4924488	-211.1863124	-102.4826784	-138.4903741	-158.404532	-177.322034	-197.167257
+0.1	1097.274166	1439.063188	1447.800739	1462.730246	884.0592639	1192.667201	1347.76957	1474.469541	1605.121031
-0.15	-191.5661004	-270.0317628	-285.7386732	-316.7794686	-153.7240176	-207.7355611	-237.606799	-265.983051	-295.750885
+0.15	1522.782502	1982.738199	1983.469147	1994.25341	1227.511869	1655.744391	1869.104352	2068.953533	2247.757641
-0.2	-255.4214672	-360.0423504	-380.9848976	-422.3726248	-204.9653568	-276.9807482	-316.809065	-354.644068	-394.334513
+0.2	1867.81396	2412.387091	2428.745304	2411.831036	1506.442286	2031.733663	2290.863125	2553.016927	2785.301503
-0.25	-319.2768341	-450.052938	-476.2311221	-527.965781	-256.206696	-346.2259352	-396.011331	-443.305086	-492.918142
+0.25	2134.48002	2756.238126	2756.542007	2761.516142	1722.508029	2322.8806	2625.387293	2928.005612	3214.55924
-0.3	-383.1322009	-540.0635256	-571.4773465	-633.5589373	-307.4480352	-415.4711223	-475.213597	-531.966103	-591.50177
+0.3	2325.400983	2996.010369	2998.48704	3009.414807	1877.773351	2545.570361	2879.985292	3197.480991	3526.867764
-0.35	-446.9875677	-630.0741132	-666.7235709	-739.1520935	-358.6893743	-484.7163093	-554.415863	-620.62712	-690.085399
+0.35	2460.16677	3133.936893	3165.673751	3188.07329	1974.710098	2695.07535	3043.398641	3385.138052	3725.552852
-0.4	-510.8429345	-720.0847008	-761.9697953	-844.7452497	-409.9307135	-553.9614963	-633.618129	-709.288137	-788.669027
+0.4	2525.583004	3195.254767	3269.310054	3258.422092	2016.196844	2768.151626	3120.70209	3479.693601	3827.193871
-0.45	-574.6983013	-810.0952884	-857.2160197	-950.3384059	-461.1720527	-623.2066834	-712.820396	-797.949154	-887.252655
+0.45	2524.451114	3166.691127	3273.573178	3275.524929	2005.519164	2769.308054	3115.844761	3481.405558	3838.618096
-0.5	-638.5536681	-900.105876	-952.4622441	-1055.931562	-512.4133919	-692.4518704	-792.022662	-886.610171	-985.836284
+0.5	2478.935412	3120.74961	3207.669005	3181.026516	1975.25702	2718.200149	3061.418562	3416.160798	3760.911942
-0.55	-702.4090349	-990.1164636	-1047.708469	-1161.524718	-563.6547311	-761.6970575	-871.224928	-975.271188	-1084.41991
+0.55	2377.29819	3006.86947	3061.258416	3050.083545	1901.758323	2605.85105	2938.229607	3272.562154	3594.185052
-0.6	-766.2644017	-1080.127051	-1142.954693	-1267.117875	-614.8960703	-830.9422445	-950.427194	-1063.93221	-1183.00354
+0.6	2220.24001	2813.863086	2834.042061	2824.535651	1782.514075	2433.965722	2745.846287	3052.403791	3356.766246
-0.65	-830.1197685	-1170.137639	-1238.200917	-1372.711031	-666.1374095	-900.1874316	-1029.62946	-1152.59322	-1281.58717
+0.65	2013.395122	2550.604021	2545.846217	2551.256731	1621.898973	2208.663091	2491.210089	2763.560503	3042.464998
-0.7	-893.9751354	-1260.148226	-1333.447142	-1478.304187	-717.3787487	-969.4326186	-1108.83173	-1241.25424	-1380.1708
+0.7	1762.906732	2214.850713	2181.029957	2163.884716	1424.696319	1936.613137	2181.920737	2414.616022	2658.793483
-0.75	-957.8305022	-1350.158814	-1428.693366	-1583.897343	-768.6200879	-1038.677806	-1188.03399	-1329.91526	-1478.75443
+0.75	1476.058648	1815.359683	1759.454596	1699.468712	1196.095204	1625.034152	1826.107421	2017.891167	2215.920367
-0.8	-1021.685869	-1440.169402	-1523.939591	-1689.490499	-819.8614271	-1107.922993	-1267.23626	-1418.57627	-1577.33805
+0.8	1158.395674	1361.640717	1279.70082	1147.817076	941.6928958	1281.695018	1432.681176	1576.592833	1724.803968
-0.85	-1085.541236	-1530.179989	-1619.185815	-1820.430115	-871.1027663	-1177.16818	-1346.43853	-1507.23729	-1675.92168
+0.85	818.6469334	864.5726823	760.557477	657.8892464	667.4926448	915.1443852	1011.083576	1103.615056	1197.191252
-0.9	-1149.396603	-1620.190577	-1714.432039	-1998.31781	-922.3441055	-1246.413367	-1425.64079	-1595.89831	-1774.50531
+0.9	465.1950429	434.9098434	375.5619585	317.2482731	379.9054545	534.7230123	571.4122554	614.5939336	647.1951926
-0.95	-1213.251969	-1710.201164	-1809.678264	-2448.704715	-973.5854447	-1315.658554	-1504.84306	-1684.55933	-1873.08894
+0.95	183.1929333	183.0254607	145.5618216	117.0827089	151.4983732	199.6041078	199.6434849	203.2169522	203.1982749
-1	-1277.107338	-1800.211711	-1904.924336	-3281.030505	-1024.826794	-1384.903778	-1584.04535	-1773.22038	-1971.67268
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1277.107338	-1800.211711	-1904.924336	-3281.030505	-1024.826794	-1384.903778	-1584.04535	-1773.22038	-1971.67268
+2	0	0	0	0	0	0	0	0	0
-2.05	-1213.251898	-1710.200943	-1809.678117	-2448.704222	-973.585436	-1315.658526	-1504.84295	-1684.55919	-1873.08904
+2.05	183.1963958	183.0287266	145.5642668	117.0842021	151.4999926	199.6138438	199.6398754	203.2217543	203.2030763
-2.1	-1149.396535	-1620.190365	-1714.431899	-1998.317659	-922.344098	-1246.413342	-1425.64069	-1595.89818	-1774.50541
+2.1	465.1915007	434.8888228	375.5578993	317.246003	379.9171517	534.7424889	571.4278217	614.6161396	647.204833
-2.15	-1085.541172	-1530.179787	-1619.185681	-1820.429972	-871.10276	-1177.168158	-1346.43843	-1507.23718	-1675.92177
+2.15	818.6450321	864.5910233	760.5680514	657.8956618	667.5055519	915.1657198	1011.100827	1103.612837	1197.198388
-2.2	-1021.685809	-1440.169209	-1523.939463	-1689.49036	-819.861422	-1107.922975	-1267.23617	-1418.57617	-1577.33814
+2.2	1158.396477	1361.633735	1279.70975	1147.814303	941.7062468	1281.690511	1432.69959	1576.594402	1724.812464
-2.25	-957.8304464	-1350.158631	-1428.693245	-1583.897211	-768.620084	-1038.677791	-1188.03391	-1329.91516	-1478.7545

+2.25	1476.059533	1815.352094	1759.462331	1699.476348	1196.108617	1625.029987	1826.126161	2017.892879	2215.929053
-2.3	-893.9750835	-1260.148053	-1333.447026	-1478.304062	-717.3787461	-969.4326075	-1108.83165	-1241.25415	-1380.17087
+2.3	1762.905606	2214.841714	2181.026044	2163.89127	1424.709212	1936.608428	2181.913896	2414.614892	2658.801545
-2.35	-830.1197205	-1170.137475	-1238.200808	-1372.710913	-666.1374081	-900.1874239	-1029.62939	-1152.59314	-1281.58723
+2.35	2013.392796	2550.618953	2545.856913	2551.263245	1621.910747	2208.657203	2491.226932	2763.5579	3042.471314
-2.4	-766.2643575	-1080.126896	-1142.95459	-1267.117765	-614.8960701	-830.9422403	-950.427136	-1063.93213	-1183.0036
+2.4	2220.236083	2813.874843	2834.04998	2824.538801	1782.52441	2433.957976	2745.860834	3052.398928	3356.769564
-2.45	-702.4089945	-990.1163182	-1047.708372	-1161.524616	-563.6547321	-761.6970566	-871.224877	-975.271126	-1084.41996
+2.45	2377.292078	3006.880765	3061.249011	3050.08977	1901.766818	2605.841241	2938.241697	3272.554493	3594.183965
-2.5	-638.5536315	-900.1057401	-952.4621535	-1055.931467	-512.4133941	-692.451873	-792.022618	-886.610117	-985.836329
+2.5	2478.926797	3120.757002	3207.678549	3181.024013	1975.263342	2718.187485	3061.427335	3416.149523	3760.907082
-2.55	-574.6982686	-810.0951619	-857.2159353	-950.338318	-461.1720561	-623.2066894	-712.820359	-797.949109	-887.252694
+2.55	2524.461942	3166.685788	3273.565162	3275.531085	2005.514475	2769.295821	3115.838492	3481.419653	3838.625792
-2.6	-510.8429056	-720.0845838	-761.9697171	-844.7451691	-409.9307181	-553.9615058	-633.618101	-709.288101	-788.66906
+2.6	2525.59051	3195.245466	3269.320076	3258.427493	2016.189802	2768.16302	3120.691947	3479.703314	3827.196764
-2.65	-446.9875426	-630.0740056	-666.7234988	-739.1520202	-358.6893801	-484.7163221	-554.415842	-620.627092	-690.085425
+2.65	2460.170682	3133.926364	3165.666394	3188.081296	1974.700119	2695.082791	3043.383743	3385.142598	3725.549358
-2.7	-383.1321796	-540.0634275	-571.4772806	-633.5588714	-307.4480422	-415.4711385	-475.213583	-531.966084	-591.50179
+2.7	2325.400462	2996.020945	2998.491182	3009.418399	1877.760152	2545.573557	2879.992803	3197.479694	3526.858592
-2.75	-319.2768166	-450.0528493	-476.2310624	-527.9657225	-256.2067042	-346.2259549	-396.011324	-443.305075	-492.918155
+2.75	2134.475497	2756.243178	2756.534153	2761.522618	1722.491368	2322.878981	2625.389499	2927.998543	3214.543883
-2.8	-255.4214537	-360.0422712	-380.9848442	-422.3725736	-204.9653662	-276.9807713	-316.809066	-354.644067	-394.334521
+2.8	1867.805162	2412.386383	2428.751692	2411.833425	1506.42205	2031.727347	2290.859827	2553.004092	2785.305816
-2.85	-191.5660907	-270.031693	-285.738626	-316.7794248	-153.7240282	-207.7355876	-237.606807	-265.983059	-295.750886
+2.85	1522.768963	1982.731559	1983.469062	1994.258506	1227.487579	1655.733291	1869.095567	2068.96111	2247.754889
-2.9	-127.7107277	-180.0211149	-190.4924078	-211.1862759	-102.4826902	-138.490404	-158.404548	-177.32205	-197.167251
+2.9	1097.25532	1439.049954	1447.794004	1462.730498	884.0311786	1192.650237	1347.754235	1474.470315	1605.123294
-2.95	-63.85536472	-90.01053671	-95.24618954	-105.593127	-51.24135222	-69.2452204	-79.2022893	-88.6610417	-98.5836167
+2.95	589.672158	778.6167612	787.1494718	810.2793941	475.1552834	640.7838749	724.7895825	792.5751944	860.8391844
-3	-2.24E-13	-2.51E-13	-2.46E-13	-2.96E-13	-2.12E-13	-2.22E-13	-2.65E-13	-2.64E-13	-2.89E-13
+3	4.52E-13	5.31E-13	4.62E-13	4.90E-13	3.67E-13	3.94E-13	4.04E-13	4.60E-13	4.35E-13

2-Span: Moment (Max and Min) Raw Data Results - 140' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.73E-13	-3.59E-13	-2.94E-13	-3.03E-13	-2.88E-13
End Shear	4.52E-13	4.55E-13	4.33E-13	4.77E-13	4.48E-13
-0.05	-172.6865168	-190.3695877	-108.979488	-131.49687	-141.448879
+0.05	1405.386566	1505.242146	924.7799511	1116.311983	1182.079125
-0.1	-345.3730336	-380.7391753	-217.958975	-262.99374	-282.897757
+0.1	2583.132607	2775.304436	1705.830287	2060.095586	2178.134395
-0.15	-518.0595504	-571.108763	-326.938463	-394.49061	-424.346636
+0.15	3591.582593	3849.85079	2345.033004	2841.290073	3009.102223
-0.2	-690.7460672	-761.4783507	-435.91795	-525.987479	-565.795515
+0.2	4385.651971	4782.673622	2888.737414	3490.339829	3688.557008
-0.25	-863.432584	-951.8479383	-544.897438	-657.484349	-707.244394
+0.25	5012.521003	5502.219751	3304.62001	3978.891787	4238.695459
-0.3	-1036.119101	-1142.217526	-653.876925	-788.981219	-848.693272
+0.3	5497.736676	6045.378889	3598.298819	4314.341749	4626.032217
-0.35	-1208.805618	-1332.587114	-762.856413	-920.478089	-990.142151
+0.35	5814.298542	6392.195516	3788.71016	4533.40788	4851.977291
-0.4	-1381.492134	-1522.956701	-871.835901	-1051.97496	-1131.59103
+0.4	6004.071088	6544.382199	3859.059846	4609.108175	4958.018809
-0.45	-1554.178651	-1713.326289	-980.815388	-1183.47183	-1273.03991
+0.45	6005.969348	6595.563433	3817.63442	4552.376606	4916.406728
-0.5	-1726.865168	-1903.695877	-1089.79488	-1314.9687	-1414.48879
+0.5	5891.669868	6449.111815	3763.088382	4490.136916	4840.199393
-0.55	-1899.551685	-2094.065464	-1198.77436	-1446.46557	-1555.93767
+0.55	5628.457434	6132.809561	3633.912257	4340.174557	4661.141155
-0.6	-2072.238202	-2284.435052	-1307.75385	-1577.96244	-1697.38654
+0.6	5204.748928	5719.676069	3399.643439	4063.522323	4351.27187
-0.65	-2244.924718	-2474.80464	-1416.73334	-1709.45931	-1838.83542
+0.65	4662.161409	5137.728337	3069.039702	3670.004517	3934.82915
-0.7	-2417.611235	-2665.174227	-1525.71283	-1840.95618	-1980.2843
+0.7	4008.270554	4401.383761	2652.408279	3179.390478	3403.244491
-0.75	-2590.297752	-2855.543815	-1634.69231	-1972.45305	-2121.73318
+0.75	3231.605932	3536.549867	2166.720437	2600.062034	2770.81948
-0.8	-2762.984269	-3045.913403	-1743.6718	-2103.94992	-2263.18206
+0.8	2351.31828	2560.623464	1615.474336	1937.930251	2053.045056
-0.85	-2935.670786	-3236.28299	-1852.65129	-2235.44679	-2404.63094
+0.85	1388.016923	1496.834782	1009.18688	1208.103103	1266.597319
-0.9	-3108.357302	-3426.652578	-1961.63078	-2366.94366	-2546.07982
+0.9	634.6536643	658.4650223	535.5395208	615.0742661	651.9704868
-0.95	-3281.043819	-3617.022166	-2070.61026	-2498.44053	-2687.5287
+0.95	232.3440652	215.8844302	209.9431723	237.2995443	237.4533246
-1	-3453.730361	-3807.391635	-2179.58972	-2629.93722	-2828.97778
+1	0	0	0	0	0
(Span 2) -2	-3453.730361	-3807.391635	-2179.58972	-2629.93722	-2828.97778
+2	0	0	0	0	0
-2.05	-3281.043711	-3617.022049	-2070.61007	-2498.44036	-2687.52889
+2.05	232.3346787	215.8827454	209.9174522	237.2900705	237.4438575
-2.1	-3108.357201	-3426.652464	-1961.63059	-2366.9435	-2546.08
+2.1	634.549328	660.483111	535.5412154	615.0675526	651.9858345
-2.15	-2935.670692	-3236.282879	-1852.65111	-2235.44664	-2404.63111
+2.15	1388.028504	1499.068833	1009.18942	1208.108772	1266.609321
-2.2	-2762.984182	-3045.913294	-1743.67164	-2103.94977	-2263.18222
+2.2	2351.330832	2562.417965	1615.477357	1937.936156	2053.057671
-2.25	-2590.297672	-2855.543709	-1634.69216	-1972.45291	-2121.73334

+2.25	**3231.61798**	**3538.555101**	**2166.722969**	**2600.067255**	**2770.831542**
-2.3	**-2417.611162**	**-2665.174124**	**-1525.71268**	**-1840.95605**	**-1980.28445**
+2.3	**4008.279906**	**4404.206242**	**2652.406625**	**3179.393237**	**3403.254237**
-2.35	**-2244.924653**	**-2474.804538**	**-1416.7332**	**-1709.45919**	**-1838.83556**
+2.35	**4662.167224**	**5137.726176**	**3069.035701**	**3670.001751**	**3934.835821**
-2.4	**-2072.238143**	**-2284.434953**	**-1307.75372**	**-1577.96233**	**-1697.38667**
+2.4	**5206.508192**	**5719.678055**	**3399.636152**	**4063.515534**	**4351.273678**
-2.45	**-1899.551633**	**-2094.065368**	**-1198.77424**	**-1446.46547**	**-1555.93778**
+2.45	**5628.471559**	**6132.810271**	**3633.900752**	**4340.162592**	**4661.135972**
-2.5	**-1726.865123**	**-1903.695783**	**-1089.79476**	**-1314.9686**	**-1414.48889**
+2.5	**5891.67737**	**6451.196324**	**3763.101781**	**4490.145477**	**4840.187822**
-2.55	**-1554.178613**	**-1713.326198**	**-980.815281**	**-1183.47174**	**-1273.04001**
+2.55	**6005.965498**	**6595.5612**	**3817.623146**	**4552.370855**	**4916.421174**
-2.6	**-1381.492104**	**-1522.956613**	**-871.835802**	**-1051.97488**	**-1131.59112**
+2.6	**6004.059106**	**6544.383096**	**3859.073833**	**4609.123258**	**4958.026786**
-2.65	**-1208.805594**	**-1332.587028**	**-762.856323**	**-920.478019**	**-990.142228**
+2.65	**5814.276877**	**6392.19406**	**3788.718198**	**4533.416131**	**4851.977852**
-2.7	**-1036.119084**	**-1142.217442**	**-653.876844**	**-788.981157**	**-848.69334**
+2.7	**5497.729087**	**6046.577491**	**3598.300901**	**4314.343009**	**4626.02415**
-2.75	**-863.4325742**	**-951.8478572**	**-544.897365**	**-657.484295**	**-707.244451**
+2.75	**5012.52901**	**5502.219671**	**3304.614817**	**3978.884111**	**4238.705201**
-2.8	**-690.7460644**	**-761.478272**	**-435.917886**	**-525.987434**	**-565.795563**
+2.8	**4387.020148**	**4782.670729**	**2888.725316**	**3490.350624**	**3688.543933**
-2.85	**-518.0595546**	**-571.1086869**	**-326.938407**	**-394.490572**	**-424.346674**
+2.85	**3591.593045**	**3849.849828**	**2345.02666**	**2841.291968**	**3009.10625**
-2.9	**-345.3730448**	**-380.7391017**	**-217.958927**	**-262.99371**	**-282.897786**
+2.9	**2583.131006**	**2775.304495**	**1705.816243**	**2060.08804**	**2178.12821**
-2.95	**-172.686535**	**-190.3695166**	**-108.979448**	**-131.496848**	**-141.448897**
+2.95	**1405.373066**	**1505.244535**	**924.7878609**	**1116.294851**	**1182.062549**
-3	**-4.32E-13**	**-5.49E-13**	**-3.04E-13**	**-3.46E-13**	**-3.48E-13**
+3	**9.09E-13**	**8.22E-13**	**5.92E-13**	**7.32E-13**	**7.77E-13**

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.7736	-4.7302	-6.667697885	-7.05554	-8.25472	-3.79579534	-5.12946	-5.86705	-6.567725998	-7.30276
End Shear	66.03332	46.87515	62.26822546	63.24283	69.4531	37.75825691	50.90495	57.62767	63.04286051	68.58126
-0.05	-6.7736	-4.7302	-6.667697885	-7.05554	-8.29526	-3.79579534	-5.12946	-5.86705	-6.567725998	-7.30276
+0.05	61.4505	43.68066	57.67696524	58.30902	62.28029	35.19768142	47.45105	53.6711	58.62039323	63.66662
-0.1	-6.7736	-4.7302	-6.667697885	-7.05554	-8.43546	-3.79579534	-5.12946	-5.86705	-6.567725998	-7.30276
+0.1	56.71553	40.38181	52.93681647	53.2208	55.05799	32.55547791	43.8841	49.58435	54.05394646	58.59381
-0.15	-7.65822	-5.96696	-6.667697885	-7.05554	-8.6376	-5.033404957	-6.72791	-7.06762	-7.064932413	-7.30276
+0.15	52.70194	37.5484	48.88424143	48.8857	49.21002	30.28531868	40.8196	46.07563	50.13789089	54.24854
-0.2	-11.9108	-9.26858	-8.351043966	-7.56935	-8.96321	-7.673818847	-10.2935	-11.0015	-10.97178107	-10.9687
+0.2	48.07272	34.31896	44.28743468	43.98639	43.08693	27.69696271	37.32579	42.07817	45.68166029	49.30984
-0.25	-15.979	-12.1054	-11.79683188	-10.0704	-10.3696	-9.941773993	-13.3563	-14.5239	-14.74685039	-14.7434
+0.25	44.12688	31.56321	40.38472321	39.84301	38.03555	25.48747232	34.34357	38.66854	41.88545651	45.10794
-0.3	-20.6536	-15.3399	-16.11704054	-13.9796	-13.8114	-12.52683428	-16.8476	-18.5418	-19.2703631	-19.8
+0.3	39.66524	28.44357	35.99041244	35.19725	32.77967	22.98527328	30.96651	34.81045	37.59558893	40.36597
-0.35	-24.6484	-18.1011	-20.2223038	-17.8028	-17.1959	-14.73281276	-19.8271	-21.9732	-23.13819149	-24.134
+0.35	35.8899	25.80048	32.2888281	31.30165	28.50231	20.86445345	28.10438	31.54332	33.96790122	36.36171
-0.4	-29.1778	-21.2281	-24.8937949	-22.3615	-21.2999	-17.23020746	-23.2005	-25.8611	-27.52606783	-29.0568
+0.4	31.65415	22.83102	28.15615879	26.9741	24.04124	18.48072114	24.88768	27.87469	29.900547	31.87909
-0.45	-33.0215	-23.8787	-28.8732718	-26.767	-25.5257	-19.34621054	-26.059	-29.1581	-31.2520131	-33.2424
+0.45	28.09984	20.33559	24.70696487	23.3823	20.71054	16.47657186	22.18344	24.79346	26.49002973	28.12672
-0.5	-37.3475	-26.8579	-33.37004335	-31.7626	-30.5916	-21.72363179	-29.2708	-32.8658	-35.44810362	-37.9626
+0.5	24.14828	17.55671	20.89509519	19.43762	17.09952	14.24361399	19.17074	21.36439	22.70133601	23.96606
-0.55	-40.9897	-29.3627	-37.17246508	-36.0025	-34.9302	-23.72165799	-31.9704	-35.985	-38.98350911	-41.9454
+0.55	20.86553	15.24395	17.74955565	16.20566	14.14282	12.38413628	16.66219	18.51247	19.55665909	20.51985
-0.6	-45.054	-32.1537	-41.43536665	-40.7748	-40.1282	-25.94679636	-34.9771	-39.4626	-42.93166788	-46.4003
+0.6	17.25646	12.69604	14.31762853	12.70851	11.02649	10.33426233	13.8971	15.37302	16.10277353	16.74377
-0.65	-48.4443	-34.4779	-45.00946881	-44.7931	-44.5095	-27.79884388	-37.4799	-42.3605	-46.22786279	-50.1261
+0.65	14.29581	10.60095	11.52701084	10.09631	8.704842	8.647458334	11.62205	12.79383	13.27259134	13.658
-0.7	-52.1888	-37.0402	-48.97935551	-49.2774	-49.7019	-29.83939095	-40.2379	-45.5578	-49.87194135	-54.2531
+0.7	11.08754	8.324394	8.534181108	7.369694	6.310167	6.812977237	9.14819	9.994099	10.20966303	10.32911
-0.75	-55.2767	-39.1487	-52.27387489	-53.0181	-54.2314	-31.5174582	-42.5063	-48.1911	-52.88027266	-57.6676
+0.75	8.499507	6.481986	6.310516062	5.368943	4.567017	5.326847933	7.144442	7.731029	7.742643747	7.741641
-0.8	-58.6432	-41.442	-55.89158719	-57.1497	-60.791	-33.34110299	-44.9718	-51.058	-56.16412203	-61.4042
+0.8	5.765479	4.517174	4.114175166	3.672134	3.073016	3.740068619	5.00543	5.321103	5.309882512	5.309029
-0.85	-61.3783	-43.2999	-58.85526425	-60.5567	-66.3809	-34.81718931	-46.9679	-53.3833	-58.8359212	-64.4531
+0.85	3.770711	2.962448	2.858730235	2.28475	1.927453	2.482615026	3.310791	3.460669	3.459950013	3.459252
-0.9	-64.3087	-45.2837	-62.06165573	-64.271	-73.4745	-36.39162656	-49.0974	-55.8697	-61.70339416	-67.7365
+0.9	1.75954	1.623394	1.617217246	1.285451	1.039975	1.208540574	1.733984	1.77801	1.777338442	1.776683
-0.95	-66.6406	-46.8559	-64.64321907	-67.2883	-79.8516	-37.63773084	-50.7834	-57.8435	-63.99000528	-70.3657
+0.95	0.859196	0.664228	0.662067023	0.525734	0.415547	0.590658809	0.611474	0.641282	0.611461959	0.64437
-1	-69.0766	-48.49	-67.37914131	-70.5206	-87.1697	-38.93064957	-52.5333	-59.8994	-66.38495054	-73.1334
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	68.94299	48.38707	67.20488542	70.31345	86.65793	38.84931997	52.42324	59.76976	66.23345539	72.95778
-2.05	-7.94E-01	-0.59534	-0.593180906	-0.47094	-3.74E-01	-0.543851269	-0.57514	-0.57474	-0.575210029	-0.57566
+2.05	66.83321	46.97079	64.83358008	67.51195	80.33581	37.72869078	50.90649	57.98787	64.15765963	70.55889
-2.1	-1.83274	-1.70143	-1.695204468	-1.34748	-1.09224	-1.258858719	-1.82537	-1.88423	-1.883547087	-1.88289
+2.1	64.14404	45.15679	61.85500241	64.03057	72.97785	36.29095764	48.96127	55.71047	61.51940579	67.52545
-2.15	-3.62234	-2.84897	-2.76265743	-2.19654	-1.84521	-2.390757891	-3.18701	-3.34265	-3.341936948	-3.34123
+2.15	61.60493	43.43735	59.07595756	60.81135	66.80627	34.92634778	47.11552	53.55544	59.03409651	64.67962
-2.2	-5.92853	-4.64279	-4.236362306	-3.78043	-3.167	-3.841587418	-5.14226	-5.47505	-5.462818126	-5.46195
+2.2	58.44952	41.29373	55.65648708	56.88033	60.3567	33.22325194	44.81248	50.87253	55.95138966	61.16177
-2.25	-8.30952	-6.34575	-6.148034854	-5.25111	-4.46183	-5.216893282	-6.9962	-7.5638	-7.560705723	-7.5597
+2.25	55.53159	39.30612	52.52095971	53.29944	54.67143	31.64266272	42.67553	48.38776	53.10522284	57.92324

-2.3	-11.2934	-8.4715	-8.726107223	-7.54429	-6.46213	-6.931577032	-9.30811	-10.1749	-10.40712963	-10.5433
+2.3	51.96825	36.87328	48.71975273	48.98341	49.3509	29.70651393	40.0583	45.34943	49.63421532	53.9836
-2.35	-14.0721	-10.4446	-11.32006975	-9.90752	-8.5376	-8.52155559	-11.4522	-12.6015	-13.06183239	-13.4285
+2.35	48.72204	34.65251	45.27901392	45.09688	44.84123	27.93794536	37.66795	42.57834	46.47585358	50.40666
-2.4	-17.4854	-12.8619	-14.5398602	-12.9339	-11.2259	-10.46778477	-14.0772	-15.5774	-16.32727838	-16.9889
+2.4	44.80906	31.97083	41.15520822	40.46053	39.78605	25.80105332	34.78015	39.23466	42.6727031	46.10784
-2.45	-20.611	-15.0702	-17.51437057	-15.965	-13.9268	-12.24443541	-16.4737	-18.2983	-19.32081387	-20.2617
+2.45	41.28511	29.5519	37.46053095	36.32439	35.28093	23.87250726	32.17421	36.22065	39.25080825	42.24674
-2.5	-24.3955	-17.7387	-21.14368613	-19.694	-17.3325	-14.38990124	-19.3681	-21.5889	-22.94913829	-24.2379
+2.5	37.04853	26.66178	33.07328402	31.43237	30.25597	21.56718475	29.05945	32.62173	35.17164601	37.65137
-2.55	-27.8176	-20.1472	-24.44747411	-23.1129	-20.4622	-16.32522345	-21.9792	-24.5609	-26.23283181	-27.844
+2.55	33.29887	24.0797	29.17591379	27.10266	25.86534	19.50666241	26.27571	29.4082	31.53487907	33.56038
-2.6	-31.9153	-23.0264	-28.42715761	-27.2571	-24.3052	-18.63761747	-25.0994	-28.116	-30.16789529	-32.1735
+2.6	28.86359	21.02151	24.58438636	22.0196	20.99514	17.06520859	22.97763	25.60412	27.23586158	28.73106
-2.65	-35.5834	-25.6001	-32.00897263	-31.0078	-28.1832	-20.70360974	-27.8873	-31.2956	-33.69309104	-36.0586
+2.65	24.93772	18.31128	20.53560642	18.09464	17.45764	14.90071131	20.05391	22.23449	23.43288448	24.46445
-2.7	-39.9359	-28.6497	-36.27986408	-35.5026	-33.1185	-23.15062203	-31.1896	-35.0653	-37.87873753	-40.6787
+2.7	20.3282	15.12543	15.79892001	13.68349	13.55251	12.3554401	16.61611	18.27532	18.97015934	19.46379
-2.75	-43.7998	-31.3535	-40.08843559	-39.5291	-37.6576	-25.31928299	-34.1166	-38.4091	-41.59677485	-44.7886
+2.75	16.27654	12.32206	12.08136136	10.26151	10.5439	10.11496356	13.59021	14.79299	15.04963442	15.07584
-2.8	-48.349	-34.5331	-44.59140155	-44.3097	-43.4859	-27.86860451	-37.5575	-42.3431	-45.97684777	-49.6368
+2.8	11.62953	9.048941	8.130401352	7.375807	8.938447	7.498189813	10.05632	10.72884	10.70133938	10.69822
-2.85	-52.3581	-37.332	-48.5754566	-48.556	-48.7928	-30.11192785	-40.5855	-45.8077	-49.83906466	-53.9172
+2.85	7.926652	6.187431	6.667697185	7.055537	8.656242	5.209744915	6.966034	7.287923	7.285251527	7.302762
-2.9	-57.0458	-40.6012	-53.25132809	-53.5578	-55.5292	-32.73125543	-44.1214	-49.8561	-54.35743332	-58.9308
+2.9	6.773601	4.730202	6.667697185	7.055537	8.423001	3.795795251	5.129463	5.867051	6.567725354	7.302762
-2.95	-61.1497	-43.4603	-57.35962975	-57.9678	-61.7888	-35.02125072	-47.2128	-53.3981	-58.31516806	-63.3274
+2.95	6.773601	4.730202	6.667697185	7.055537	8.30149	3.795795251	5.129463	5.867051	6.567725354	7.302762
-3	-65.9177	-46.7788	-62.14926624	-63.1262	-69.3807	-37.67825904	-50.8	-57.5107	-62.91567567	-68.4437
+3	6.773601	4.730202	6.667697185	7.055537	8.254718	3.795795251	5.129463	5.867051	6.567725354	7.302762

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.7736	-6.19094	-6.66044746	-6.27769	-7.59902	-7.749611813	-8.20168	-3.28989
End Shear	66.03332	62.10801	66.44100457	62.37053	74.66357	71.6777935	75.78746	32.82183
-0.05	-6.7736	-6.19094	-6.66044746	-6.27769	-7.59902	-7.749611813	-8.20168	-3.28989
+0.05	61.4505	57.94318	61.95799904	58.1477	69.54987	66.35108388	70.14874	30.60215
-0.1	-6.7736	-6.19094	-6.66044746	-6.27769	-7.59902	-7.749611813	-8.20168	-3.28989
+0.1	56.71553	53.64203	57.32977851	53.78613	64.2714	60.85383933	64.32988	28.2898
-0.15	-7.65822	-8.93137	-9.174816829	-8.37765	-9.21902	-7.749611813	-8.20168	-4.18315
+0.15	52.70194	49.94433	53.35218823	50.03849	59.73862	56.15584781	59.35736	26.30382
-0.2	-11.9108	-13.218	-13.79425792	-12.7352	-14.5071	-9.753998827	-10.3279	-6.46087
+0.2	48.07272	45.72579	48.81582877	45.7653	54.57336	50.82915476	53.71979	24.04041
-0.25	-15.979	-16.8978	-17.76103988	-16.4778	-19.0517	-13.05754516	-13.7448	-8.44978
+0.25	44.12688	42.12245	44.94234988	42.11736	50.16671	46.30874075	48.93591	22.10916
-0.3	-20.6536	-21.0896	-22.2812397	-20.7435	-24.2346	-18.09791002	-19.0548	-10.7176
+0.3	39.66524	38.03903	40.55438858	37.98586	45.1793	41.22128917	43.55236	19.92311
-0.35	-24.6484	-24.6644	-26.13750966	-24.3835	-28.66	-22.87264631	-24.1113	-12.6535
+0.35	35.8899	34.57554	36.83402795	34.48382	40.95478	36.93797985	39.02015	18.0712
-0.4	-29.1778	-28.7089	-30.50192123	-28.5041	-33.6731	-28.3081228	-29.8678	-14.8459
+0.4	31.65415	30.67974	32.65101227	30.54733	36.20984	32.15844955	33.96334	15.9909
-0.45	-33.0215	-32.1333	-34.19867678	-31.9953	-37.9233	-32.94035127	-34.774	-16.7043
+0.45	28.09984	27.4016	29.13276927	27.2374	32.22346	28.17177209	29.74582	14.24296
-0.5	-37.3475	-35.9779	-38.35076398	-35.9174	-42.702	-38.17704569	-40.3208	-18.7929
+0.5	24.14828	23.74593	25.21123902	23.54924	27.78561	23.76885748	25.08849	12.29683
-0.55	-40.9897	-39.2063	-41.83899732	-39.2135	-46.7211	-42.60723294	-45.0137	-20.549
+0.55	20.86553	20.69865	21.94411666	20.47762	24.09338	20.13833981	21.24869	10.67748
-0.6	-45.054	-42.7986	-45.7222171	-42.884	-51.2008	-47.57645952	-50.278	-22.5056
+0.6	17.25646	17.3356	18.34060866	17.09108	20.02724	16.18071794	17.06356	8.893924
-0.65	-48.4443	-45.7856	-48.95293329	-45.9388	-54.9327	-51.74507703	-54.6945	-24.1348
+0.65	14.29581	14.56469	15.37361054	14.30398	16.68516	12.96589181	13.66452	7.427781
-0.7	-52.1888	-49.073	-52.51073893	-49.3042	-59.0487	-56.37815672	-59.6036	-25.9308
+0.7	11.08754	11.54677	12.14467459	11.27239	13.05535	9.522253322	10.02431	5.835204
-0.75	-55.2767	-51.773	-55.43493085	-52.0715	-62.4375	-60.22567771	-63.6807	-27.4085
+0.75	8.499507	9.097716	9.526803652	8.816019	10.11943	6.963509039	7.33001	4.54689
-0.8	-58.6432	-54.7031	-58.61078476	-55.0785	-66.1252	-64.45391428	-68.1619	-29.0155
+0.8	5.765479	6.477428	6.728976362	6.192689	6.990574	4.797869454	5.076827	3.173704
-0.85	-61.3783	-57.0707	-61.17945032	-57.5121	-69.1147	-67.92081599	-71.8366	-30.3172
+0.85	3.770711	4.395746	4.509235892	4.113244	4.516823	3.282213389	3.466869	2.08784
-0.9	-64.3087	-59.5908	-63.91681343	-60.1075	-72.3095	-71.67552847	-75.8171	-31.7068
+0.9	1.75954	2.305192	2.305191943	2.135221	2.259767	1.7526091	1.844852	1.258925
-0.95	-66.6406	-61.5805	-66.08094936	-62.1612	-74.8439	-74.70227446	-79.0264	-32.8077
+0.95	0.859196	0.926403	0.926403438	0.719381	0.757555	0.717282901	0.755035	0.612726
-1	-69.0766	-63.6383	-68.32327627	-64.2916	-77.4812	-77.91477962	-82.4335	-33.9515
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	68.94299	63.50911	68.18234374	64.15764	77.31502	77.70999139	82.21624	33.87959
-2.05	-7.94E-01	-0.84626	-0.846256367	-0.67664	-0.67924	-0.642890823	-0.67673	-0.56313
+2.05	66.83321	61.72549	66.23881783	62.31115	75.02919	74.92561999	79.26324	32.88822
-2.1	-1.83274	-2.41604	-2.416036769	-2.25192	-2.38848	-1.836853908	-1.93353	-1.30833
+2.1	64.14404	59.4299	63.74188101	59.94158	72.10505	71.43339425	75.56035	31.61797
-2.15	-3.62234	-4.24345	-4.346967649	-3.96131	-4.33635	-3.171253864	-3.34902	-2.02659
+2.15	61.60493	57.24557	61.36932772	57.6921	69.33603	68.1791103	72.11041	30.41357
-2.2	-5.92853	-6.64526	-6.908070075	-6.36054	-7.19053	-4.919994341	-5.20656	-3.26137
+2.2	58.44952	54.51386	58.40562419	54.8842	65.88668	64.17902153	67.8705	28.91172
-2.25	-8.30952	-8.91634	-9.333027567	-8.63425	-9.90239	-6.776702045	-7.13337	-4.45154
+2.25	55.53159	51.97434	55.65305113	52.27794	62.69048	60.51434475	63.98663	27.51893

-2.3	**-11.2934**	**-11.742**	**-12.35350064**	**-11.4684**	**-13.2898**	**-9.742937082**	**-10.2576**	**-5.93798**
+2.3	**51.96825**	**48.85903**	**52.27912632**	**49.08502**	**58.78054**	**56.07508539**	**59.28242**	**25.8139**
-2.35	**-14.0721**	**-14.3577**	**-15.15208317**	**-14.0959**	**-16.4359**	**-12.72762929**	**-13.4126**	**-7.31829**
+2.35	**48.72204**	**46.0098**	**49.19553248**	**46.16819**	**55.21317**	**52.05955202**	**55.02768**	**24.25733**
-2.4	**-17.4854**	**-17.5548**	**-18.57539727**	**-17.3117**	**-20.2919**	**-16.43686667**	**-17.3344**	**-9.00991**
+2.4	**44.80906**	**42.56339**	**45.46793075**	**42.64358**	**50.90726**	**47.24979277**	**49.93188**	**22.37752**
-2.45	**-20.611**	**-20.4696**	**-21.69859734**	**-20.2468**	**-23.8161**	**-19.86700728**	**-20.9617**	**-10.5557**
+2.45	**41.28511**	**39.44996**	**42.10231729**	**39.46236**	**47.02471**	**42.94294113**	**45.3693**	**20.68179**
-2.5	**-24.3955**	**-23.9855**	**-25.46820539**	**-23.7909**	**-28.0762**	**-24.05588854**	**-25.3921**	**-12.4241**
+2.5	**37.04853**	**35.72496**	**38.07757901**	**35.65936**	**42.38746**	**37.83137595**	**39.95465**	**18.65562**
-2.55	**-27.8176**	**-27.1539**	**-28.86702459**	**-26.9874**	**-31.9225**	**-27.87194273**	**-29.4286**	**-14.1109**
+2.55	**33.29887**	**32.39282**	**34.47894079**	**32.25998**	**38.24575**	**33.29271229**	**35.14723**	**16.84535**
-2.6	**-31.9153**	**-30.9363**	**-32.92638612**	**-30.8064**	**-36.522**	**-32.47177451**	**-34.2948**	**-16.1276**
+2.6	**28.86359**	**28.44174**	**30.21361734**	**28.2319**	**33.34177**	**27.94803872**	**29.48646**	**14.70123**
-2.65	**-35.5834**	**-34.3128**	**-36.55182227**	**-34.2182**	**-40.6345**	**-36.61422977**	**-38.6776**	**-17.9306**
+2.65	**24.93772**	**24.93641**	**26.43096485**	**24.66056**	**28.99691**	**23.23711343**	**24.49726**	**12.80103**
-2.7	**-39.9359**	**-38.309**	**-40.84439283**	**-38.2589**	**-45.5088**	**-41.55631558**	**-43.9069**	**-20.0674**
+2.7	**20.3282**	**20.81173**	**21.98158831**	**20.46073**	**23.89083**	**17.72798345**	**18.66307**	**10.56735**
-2.75	**-43.7998**	**-41.8481**	**-44.64744218**	**-41.8396**	**-49.8314**	**-45.96563657**	**-48.5728**	**-21.962**
+2.75	**16.27654**	**17.17871**	**18.06392557**	**16.76362**	**19.39882**	**13.38961182**	**14.09433**	**8.601864**
-2.8	**-48.349**	**-46.0056**	**-49.11668187**	**-46.0487**	**-54.9158**	**-51.18131027**	**-54.0925**	**-24.1903**
+2.8	**11.62953**	**12.93294**	**13.48702906**	**12.44534**	**14.15526**	**9.548008113**	**10.10869**	**6.307054**
-2.85	**-52.3581**	**-49.6618**	**-53.0483527**	**-49.7522**	**-59.3925**	**-55.79795873**	**-58.9786**	**-26.152**
+2.85	**7.926652**	**9.217731**	**9.483366788**	**8.668684**	**9.572098**	**7.749612044**	**8.20168**	**4.300887**
-2.9	**-57.0458**	**-53.9283**	**-57.63771929**	**-54.0763**	**-64.6224**	**-61.21851331**	**-64.7159**	**-28.4434**
+2.9	**6.773601**	**6.190943**	**6.660447947**	**6.277687**	**7.599015**	**7.749612044**	**8.20168**	**3.289888**
-2.95	**-61.1497**	**-57.6561**	**-61.64898901**	**-57.8564**	**-69.1973**	**-65.9829927**	**-69.7591**	**-30.4475**
+2.95	**6.773601**	**6.190943**	**6.660447947**	**6.277687**	**7.599015**	**7.749612044**	**8.20168**	**3.289888**
-3	**-65.9177**	**-61.9788**	**-66.30194029**	**-62.2422**	**-74.5081**	**-71.53975411**	**-75.6413**	**-32.7737**
+3	**6.773601**	**6.190943**	**6.660447947**	**6.277687**	**7.599015**	**7.749612044**	**8.20168**	**3.289888**

2-Span: Shear (Max and Min) Raw Data Results - 140' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.7736	-14.2681	-15.7291	-9.00434	-10.8648	-11.6871
End Shear	66.03332	125.9099	135.1289	82.64548	99.6931	105.709
-0.05	-6.7736	-14.2681	-15.7291	-9.00434	-10.8648	-11.6871
+0.05	61.4505	116.0297	124.3693	76.40915	92.19897	97.62713
-0.1	-6.7736	-14.2681	-15.7291	-9.00434	-10.8648	-11.6871
+0.1	56.71553	105.8456	113.1344	69.97574	84.46606	89.28998
-0.15	-7.65822	-14.2681	-15.7291	-9.00434	-10.8648	-11.6871
+0.15	52.70194	97.17018	103.5789	64.48297	77.86213	82.17714
-0.2	-11.9108	-14.2681	-15.7291	-11.5613	-12.7367	-13.5955
+0.2	48.07272	87.3673	92.79939	58.26144	70.38002	74.12693
-0.25	-15.979	-19.1715	-20.0726	-14.6723	-17.1772	-17.5655
+0.25	44.12688	79.07837	83.70099	52.98733	64.03547	67.30829
-0.3	-20.6536	-26.6815	-28.086	-19.7458	-24.241	-24.2354
+0.3	39.66524	69.78605	73.52108	47.0585	56.90113	59.65007
-0.35	-24.6484	-34.5754	-34.9549	-25.1876	-30.7705	-31.0246
+0.35	35.8899	61.99563	65.00479	42.07308	50.9	53.21669
-0.4	-29.1778	-44.2703	-44.5774	-31.5975	-38.4601	-39.3816
+0.4	31.65415	53.34318	55.56861	36.51776	44.21041	46.05553
-0.45	-33.0215	-53.1024	-54.3927	-37.0653	-45.0179	-46.5154
+0.45	28.09984	46.16336	47.75934	31.89107	38.63675	40.09845
-0.5	-37.3475	-63.1199	-65.608	-43.2527	-52.4369	-54.5944
+0.5	24.14828	38.28009	39.21106	26.79008	32.48888	33.5394
-0.55	-40.9897	-71.6239	-75.1433	-48.4925	-58.7181	-61.4419
+0.55	20.86553	31.82293	32.23378	22.59215	27.42673	28.14968
-0.6	-45.054	-81.1981	-85.8959	-54.3764	-65.7695	-69.1379
+0.6	17.25646	24.83815	24.90138	18.02629	21.91754	22.29782
-0.65	-48.4443	-89.2619	-94.9678	-59.3183	-71.6902	-75.608
+0.65	14.29581	19.42534	19.61313	14.32716	17.45095	17.56651
-0.7	-52.1888	-98.2636	-105.113	-64.818	-78.277	-82.816
+0.7	11.08754	13.94858	14.53315	10.46514	12.7829	12.74336
-0.75	-55.2767	-105.775	-113.597	-69.3918	-83.753	-88.8175
+0.75	8.499507	10.12581	10.4779	7.931735	9.238714	9.400647
-0.8	-58.6432	-114.075	-122.992	-74.4264	-89.7784	-95.4324
+0.8	5.765479	6.55043	6.666977	5.692872	6.253974	6.611682
-0.85	-61.3783	-120.922	-130.762	-78.5622	-94.7257	-100.874
+0.85	3.770711	4.255813	4.091202	3.911598	4.257041	4.400231
-0.9	-64.3087	-128.391	-139.261	-83.051	-100.093	-106.791
+0.9	1.75954	2.168727	2.005343	2.076228	2.250892	2.246632
-0.95	-66.6406	-134.462	-146.193	-86.6787	-104.427	-111.583
+0.95	0.859196	0.725603	0.72309	0.848764	0.905348	0.754979
-1	-69.0766	-140.97	-153.653	-90.5408	-109.039	-116.696
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	68.94299	140.5523	153.1743	90.29415	108.7441	116.3691
-2.05	-7.94E-01	-0.65228	-0.63479	-0.76067	-0.81139	-0.67667
+2.05	66.83321	134.9116	146.7085	86.94676	104.7474	111.9371
-2.1	-1.83274	-2.29666	-2.1832	-2.176	-2.37953	-2.38279
+2.1	64.14404	127.9071	138.7107	82.76118	99.74611	106.4088
-2.15	-3.62234	-4.05301	-3.91989	-3.78115	-4.14478	-4.2386
+2.15	61.60493	121.434	131.3441	78.87066	95.09458	101.2807
-2.2	-5.92853	-6.74655	-6.87975	-5.83636	-6.41105	-6.79014
+2.2	58.44952	113.5337	122.3791	74.09883	89.38636	95.00167
-2.25	-8.30952	-9.87198	-10.18	-7.77683	-8.97882	-9.2074
+2.25	55.53159	106.3402	114.2367	69.73524	84.16413	89.26846

-2.3	**-11.2934**	**-14.275**	**-14.8588**	**-10.7008**	**-13.068**	**-13.0499**
+2.3	**51.96825**	**97.67336**	**104.4485**	**64.45796**	**77.8459**	**82.34385**
-2.35	**-14.0721**	**-19.0439**	**-19.2617**	**-14.0534**	**-17.1203**	**-17.2168**
+2.35	**48.72204**	**89.87159**	**95.65517**	**59.69133**	**72.13702**	**76.09663**
-2.4	**-17.4854**	**-25.2883**	**-25.2254**	**-18.3214**	**-22.2738**	**-22.6757**
+2.4	**44.80906**	**80.5675**	**85.18801**	**53.98942**	**65.30577**	**68.63147**
-2.45	**-20.611**	**-31.3421**	**-31.7146**	**-22.2788**	**-27.0487**	**-27.7477**
+2.45	**41.28511**	**72.26952**	**75.86875**	**48.8898**	**59.19429**	**61.9613**
-2.5	**-24.3955**	**-38.7923**	**-39.7649**	**-27.1223**	**-32.8894**	**-33.9663**
+2.5	**37.04853**	**62.45753**	**64.86681**	**42.84405**	**51.94696**	**54.06065**
-2.55	**-27.8176**	**-45.6249**	**-47.1738**	**-31.5434**	**-38.2178**	**-39.6511**
+2.55	**33.29887**	**53.7754**	**55.14648**	**37.48147**	**45.51693**	**47.05858**
-2.6	**-31.9153**	**-53.9089**	**-56.1841**	**-36.8817**	**-44.6487**	**-46.5244**
+2.6	**28.86359**	**43.58481**	**43.88075**	**31.1727**	**37.95051**	**38.82747**
-2.65	**-35.5834**	**-61.4081**	**-64.3624**	**-41.6965**	**-50.4466**	**-52.731**
+2.65	**24.93772**	**35.17836**	**35.63121**	**25.6172**	**31.28596**	**31.58454**
-2.7	**-39.9359**	**-70.3967**	**-74.1885**	**-47.4487**	**-57.3708**	**-60.1538**
+2.7	**20.3282**	**26.14099**	**27.55431**	**19.35471**	**23.77161**	**23.71253**
-2.75	**-43.7998**	**-78.4504**	**-83.0115**	**-52.5872**	**-63.5541**	**-66.7913**
+2.75	**16.27654**	**19.60794**	**20.60913**	**14.9098**	**17.64943**	**17.86866**
-2.8	**-48.349**	**-88.0142**	**-93.5092**	**-58.6725**	**-70.8745**	**-74.6586**
+2.8	**11.62953**	**14.26807**	**15.72912**	**11.32026**	**12.47371**	**13.28807**
-2.85	**-52.3581**	**-96.5104**	**-102.852**	**-64.0647**	**-77.3592**	**-81.6358**
+2.85	**7.926652**	**14.26807**	**15.72912**	**9.004336**	**10.86482**	**11.68709**
-2.9	**-57.0458**	**-106.52**	**-113.877**	**-70.4023**	**-84.9789**	**-89.8426**
+2.9	**6.773601**	**14.26807**	**15.72912**	**9.004336**	**10.86482**	**11.68709**
-2.95	**-61.1497**	**-115.347**	**-123.614**	**-75.9782**	**-91.681**	**-97.0684**
+2.95	**6.773601**	**14.26807**	**15.72912**	**9.004336**	**10.86482**	**11.68709**
-3	**-65.9177**	**-125.673**	**-135.023**	**-82.4872**	**-99.503**	**-105.51**
+3	**6.773601**	**14.26807**	**15.72912**	**9.004336**	**10.86482**	**11.68709**

2-Span: Moment (Max and Min) Raw Data Results - 140' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.27E-13	-1.2E-13	-1.17191E-13	-1.3E-13	-1.22E-13	-1.05141E-13	-1.2E-13	-1.6E-13	-1.56768E-13	-1.6E-13
End Shear	3.52E-13	1.12E-13	1.74675E-13	1.32E-13	1.12E-13	1.42109E-13	1.5E-13	1.73E-13	1.72369E-13	1.73E-13
-0.05	-47.4152	-33.1114	-46.6738852	-49.3888	-57.783	-26.57056738	-35.9062	-41.0694	-45.97408199	-51.1193
+0.05	430.1535	305.7746	403.7387567	408.1631	440.2283	246.3837699	332.2819	375.8415	410.9831727	446.3803
-0.1	-94.8304	-66.2228	-93.34777039	-98.7775	-115.566	-53.14113476	-71.8125	-82.1387	-91.94816398	-102.239
+0.1	798.55	568.978	746.2085495	750.7393	796.1912	458.4180782	618.4429	698.8694	764.5680792	832.3158
-0.15	-142.246	-99.3342	-140.0216556	-148.166	-173.349	-79.71170214	-107.719	-123.208	-137.922246	-153.358
+0.15	1106.741	789.6202	1028.124552	1028.504	1087.014	636.5112104	858.5659	969.2011	1072.830455	1165.547
-0.2	-189.661	-132.446	-186.6955408	-197.555	-231.132	-106.2822695	-143.625	-164.277	-183.896328	-204.477
+0.2	1354.866	968.532	1250.913711	1259.396	1316.32	781.1471539	1053.531	1187.899	1323.835586	1444.284
-0.25	-237.076	-165.557	-233.369426	-246.944	-288.915	-132.8528369	-179.531	-205.347	-229.8704099	-255.597
+0.25	1545.133	1106.808	1429.213443	1429.371	1507.99	893.1853922	1204.501	1361.362	1518.281365	1666.87
-0.3	-284.491	-198.668	-280.0433112	-296.333	-346.698	-159.4234043	-215.437	-246.416	-275.8444919	-306.716
+0.3	1683.087	1205.808	1553.544396	1554.829	1644.447	973.6963188	1319.974	1493.381	1658.014514	1828.814
-0.35	-331.906	-231.78	-326.7171964	-345.721	-404.481	-185.9939717	-251.344	-287.486	-321.8185739	-357.835
+0.35	1779.75	1275.689	1625.064502	1641.521	1742.57	1023.961679	1397.498	1578.117	1755.32178	1931.84
-0.4	-379.322	-264.891	-373.3910816	-395.11	-462.264	-212.564539	-287.25	-328.555	-367.7926559	-408.955
+0.4	1824.235	1309.61	1656.860133	1695.261	1782.099	1045.474122	1435.391	1618.202	1804.352399	1984.544
-0.45	-426.737	-298.003	-420.0649668	-444.499	-520.047	-239.1351064	-323.156	-369.624	-413.7667379	-460.074
+0.45	1819.541	1309.023	1642.048808	1697.471	1791.585	1039.937342	1435.991	1615.683	1805.240113	1990.468
-0.5	-474.152	-331.114	-466.738852	-493.888	-577.83	-265.7056738	-359.062	-410.694	-459.7408199	-511.193
+0.5	1788.932	1285.422	1618.226399	1663.297	1740.771	1024.245278	1409.489	1587.461	1771.408244	1950.175
-0.55	-521.567	-364.226	-513.4127372	-543.276	-635.613	-292.2762412	-394.969	-451.763	-505.7149019	-562.313
+0.55	1717.078	1232.719	1559.17525	1587.378	1668.628	986.1334318	1351.232	1523.583	1696.94693	1863.721
-0.6	-568.983	-397.337	-560.0866224	-592.665	-693.396	-318.8468086	-430.875	-492.832	-551.6889839	-613.432
+0.6	1603.287	1151.278	1459.094159	1469.558	1544.996	924.3007907	1262.103	1423.825	1582.786513	1740.61
-0.65	-616.398	-430.448	-606.7605076	-642.054	-751.179	-345.4173759	-466.781	-533.902	-597.6630659	-664.551
+0.65	1451.709	1044.021	1322.584403	1320.117	1394.183	841.0158013	1145.275	1291.786	1433.010372	1577.633
-0.7	-663.813	-463.56	-653.4343928	-691.443	-808.962	-371.9879433	-502.687	-574.971	-643.6371478	-715.671
+0.7	1266.876	914.1336	1148.483647	1130.946	1181.776	738.7587859	1004.207	1131.408	1252.069495	1378.685
-0.75	-711.228	-496.671	-700.108278	-740.831	-866.745	-398.5585107	-538.594	-616.04	-689.6112298	-766.79
+0.75	1053.701	765.3921	941.3324773	912.3436	926.9879	620.2204842	842.6415	946.9056	1046.352692	1149.038
-0.8	-758.643	-529.783	-746.7821632	-790.22	-924.528	-425.1290781	-574.5	-657.11	-735.5853118	-817.909
+0.8	817.4743	600.6719	706.0620778	663.5731	624.5331	488.3032905	664.6072	742.8992	817.5228588	894.3759
-0.85	-806.059	-562.894	-793.4560483	-839.609	-999.792	-451.6996455	-610.406	-698.179	-781.5593938	-869.029
+0.85	563.8692	424.4993	448.3135506	394.3777	355.99	346.1201166	474.5369	524.285	572.2660387	620.7888
-0.9	-853.474	-596.005	-840.1299335	-888.998	-1107.43	-478.2702128	-646.312	-739.249	-827.5334758	-920.148
+0.9	299.0602	241.2212	225.5171602	194.743	170.4598	196.9953095	277.2741	296.2988	318.6901393	335.5951
-0.95	-900.889	-629.117	-886.8038187	-938.386	-1363.09	-504.8407802	-682.219	-780.318	-873.5075578	-971.267
+0.95	114.273	94.99245	94.90560576	75.4793	62.05715	78.55762157	103.5023	103.5227	105.3756558	105.366
-1	-948.304	-662.228	-933.4776825	-987.775	-1822.5	-531.411353	-718.125	-821.387	-919.4816571	-1022.39
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-948.304	-662.228	-933.4776825	-987.775	-1822.5	-531.411353	-718.125	-821.387	-919.4816571	-1022.39
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-900.889	-629.117	-886.8037041	-938.386	-1363.09	-504.8407757	-682.219	-780.318	-873.5074893	-971.267
+2.05	114.273	94.99424	94.90729923	75.48056	62.05792	78.55846132	103.5073	103.5208	105.3781459	105.3685
-2.1	-853.474	-596.005	-840.1298238	-888.998	-1107.43	-478.270209	-646.312	-739.248	-827.5334119	-920.148
+2.1	299.278	241.2193	225.5062602	194.7409	170.4586	197.001375	277.2842	296.3069	318.7016539	335.6001
-2.15	-806.059	-562.894	-793.4559435	-839.609	-999.792	-451.6996422	-610.406	-698.179	-781.5593344	-869.029
+2.15	564.2141	424.4983	448.3230611	394.3832	355.9933	346.1268094	474.5479	524.2939	572.2648881	620.7925
-2.2	-758.643	-529.783	-746.7820632	-790.22	-924.528	-425.1290755	-574.5	-657.11	-735.5852569	-817.909
+2.2	817.8383	600.6723	706.0584575	663.5778	624.5316	488.3102135	664.6049	742.9088	817.5236725	894.3803
-2.25	-711.228	-496.671	-700.1081829	-740.831	-866.745	-398.5585087	-538.594	-616.04	-689.6111794	-766.79

+2.25	1054.068	765.3926	941.3285424	912.3476	926.9919	620.2274394	842.6394	946.9153	1046.35358	1149.043
-2.3	-663.813	-463.56	-653.4343026	-691.443	-808.962	-371.987942	-502.687	-574.971	-643.637102	-715.671
+2.3	1267.231	914.1331	1148.47898	1130.944	1181.78	738.7654714	1004.205	1131.405	1252.068909	1378.689
-2.35	-616.398	-430.448	-606.7604223	-642.054	-751.179	-345.4173752	-466.781	-533.902	-597.6630245	-664.551
+2.35	1452.038	1044.02	1322.592146	1320.123	1394.186	841.0219066	1145.272	1291.795	1433.009023	1577.636
-2.4	-568.983	-397.337	-560.0865421	-592.665	-693.396	-318.8468084	-430.875	-492.832	-551.688947	-613.432
+2.4	1603.577	1151.276	1459.100255	1469.562	1544.998	924.3061497	1262.099	1423.832	1582.783992	1740.612
-2.45	-521.567	-364.226	-513.4126618	-543.276	-635.613	-292.2762417	-394.969	-451.763	-505.7148695	-562.313
+2.45	1717.317	1232.716	1559.181107	1587.373	1668.631	986.1378366	1351.227	1523.589	1696.942957	1863.72
-2.5	-474.152	-331.114	-466.7387815	-493.888	-577.83	-265.7056749	-359.062	-410.694	-459.740792	-511.193
+2.5	1789.109	1285.417	1618.230232	1663.302	1740.77	1024.248557	1409.483	1587.466	1771.402397	1950.172
-2.55	-426.737	-298.003	-420.0649012	-444.499	-520.047	-239.1351082	-323.156	-369.624	-413.7667146	-460.074
+2.55	1819.408	1309.029	1642.04604	1697.467	1791.589	1039.934911	1435.984	1615.68	1805.247422	1990.472
-2.6	-379.322	-264.891	-373.3910209	-395.11	-462.264	-212.5645414	-287.25	-328.555	-367.7926371	-408.955
+2.6	1824.029	1309.614	1656.85531	1695.266	1782.101	1045.470471	1435.397	1618.196	1804.357435	1984.546
-2.65	-331.906	-231.78	-326.7171406	-345.721	-404.481	-185.9939747	-251.344	-287.486	-321.8185596	-357.835
+2.65	1779.463	1275.691	1625.059043	1641.517	1742.574	1023.956505	1397.502	1578.109	1755.324137	1931.838
-2.7	-284.491	-198.668	-280.0432603	-296.333	-346.698	-159.4234079	-215.437	-246.416	-275.8444821	-306.716
+2.7	1682.71	1205.808	1553.549881	1554.831	1644.449	973.6894748	1319.976	1493.385	1658.013842	1828.809
-2.75	-237.076	-165.557	-233.36938	-246.944	-288.915	-132.8528412	-179.531	-205.347	-229.8704047	-255.597
+2.75	1544.856	1106.806	1429.216063	1429.367	1507.993	893.1767529	1204.5	1361.363	1518.277699	1666.862
-2.8	-189.661	-132.446	-186.6954997	-197.555	-231.132	-106.2822744	-143.625	-164.277	-183.8963272	-204.477
+2.8	1354.49	968.5274	1250.913343	1259.399	1316.321	781.1366605	1053.527	1187.897	1323.82893	1444.286
-2.85	-142.246	-99.3342	-140.0216194	-148.166	-173.349	-79.71170764	-107.719	-123.208	-137.9222497	-153.358
+2.85	1106.082	789.6132	1028.121109	1028.504	1087.017	636.4986152	858.5602	969.1966	1072.834384	1165.546
-2.9	-94.8304	-66.2228	-93.3477391	-98.7775	-115.566	-53.14114089	-71.8125	-82.1387	-91.94817222	-102.239
+2.9	798.6407	568.9683	746.2016873	750.7358	796.1914	458.403515	618.4341	698.8614	764.5684807	832.317
-2.95	-47.4152	-33.1114	-46.67385881	-49.3887	-57.783	-26.57057413	-35.9063	-41.0694	-45.97409475	-51.1193
+2.95	430.2664	305.7673	403.7421629	408.1667	440.2314	246.385939	332.2706	375.8307	410.9801371	446.3776
-3	-2.26E-13	-1.2E-13	-1.30029E-13	-1.3E-13	-1.59E-13	-1.09985E-13	-1.1E-13	-1.4E-13	-1.36867E-13	-1.5E-13
+3	4.77E-13	2.35E-13	2.75292E-13	2.39E-13	2.61E-13	1.90329E-13	2.04E-13	2.09E-13	2.38317E-13	2.26E-13

2-Span: Moment (Max and Min) Raw Data Results - 140’ Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.27E-13	-1.7E-13	-1.7E-13	-1.4E-13	-1.6E-13	-1.3E-13	-1.3E-13	-8.8E-14
End Shear	3.52E-13	1.58E-13	1.58E-13	1.69E-13	1.98E-13	2.01E-13	2.12E-13	1.54E-13
-0.05	-47.4152	-43.3366	-46.6231	-43.9438	-53.1931	-54.2473	-57.4118	-23.0292
+0.05	430.1535	405.6801	433.8605	407.219	487.2493	464.4576	491.0412	214.215
-0.1	-94.8304	-86.6732	-93.2463	-87.8876	-106.386	-108.495	-114.824	-46.0584
+0.1	798.55	755.7649	807.8488	758.0195	906.0901	857.9794	907.0058	398.2068
-0.15	-142.246	-130.01	-139.869	-131.831	-159.579	-162.742	-172.235	-69.0876
+0.15	1106.741	1050.284	1122.073	1052.516	1256.849	1181.21	1248.566	552.3802
-0.2	-189.661	-173.346	-186.493	-175.775	-212.772	-216.989	-229.647	-92.1169
+0.2	1354.866	1290.242	1377.645	1291.774	1540.877	1445.706	1528.481	677.3261
-0.25	-237.076	-216.683	-233.116	-219.719	-265.966	-271.236	-287.059	-115.146
+0.25	1545.133	1476.988	1576.045	1477.207	1773.806	1658.685	1754.661	773.8207
-0.3	-284.491	-260.02	-279.739	-263.663	-319.159	-325.484	-344.471	-138.175
+0.3	1683.087	1612.215	1719.123	1622.187	1945.904	1810.441	1914.704	843.1431
-0.35	-331.906	-303.356	-326.362	-307.607	-372.352	-379.731	-401.882	-161.204
+0.35	1779.75	1701.909	1820.28	1717.739	2057.379	1911.306	2022.108	886.1367
-0.4	-379.322	-346.693	-372.985	-351.55	-425.545	-433.978	-459.294	-184.234
+0.4	1824.235	1751.608	1871.58	1764.815	2110.404	1952.255	2066.024	904.0837
-0.45	-426.737	-390.029	-419.608	-395.494	-478.738	-488.226	-516.706	-207.263
+0.45	1819.541	1755.789	1874.097	1766.441	2108.259	1937.407	2050.741	898.4976
-0.5	-474.152	-433.366	-466.231	-439.438	-531.931	-542.473	-574.118	-230.292
+0.5	1788.932	1721.634	1838.659	1733.386	2070.982	1908.005	2019.348	885.5959
-0.55	-521.567	-476.703	-512.854	-483.382	-585.124	-596.72	-631.529	-253.321
+0.55	1717.078	1648.295	1761.359	1661.371	1986.985	1836.959	1943.8	853.8128
-0.6	-568.983	-520.039	-559.478	-527.326	-638.317	-650.967	-688.941	-276.351
+0.6	1603.287	1538.347	1644.336	1551.845	1856.864	1715.169	1814.531	801.064
-0.65	-616.398	-563.376	-606.101	-571.269	-691.51	-705.215	-746.353	-299.38
+0.65	1451.709	1396.712	1491.731	1408.569	1685.28	1546.986	1636.221	729.3222
-0.7	-663.813	-606.712	-652.724	-615.213	-744.704	-759.462	-803.765	-322.409
+0.7	1266.876	1228.772	1308.056	1235.78	1477.324	1337.576	1414.349	640.7461
-0.75	-711.228	-650.049	-699.347	-659.157	-797.897	-813.709	-861.176	-345.438
+0.75	1053.701	1034.99	1098.202	1038.062	1238.501	1093.767	1157.202	537.6798
-0.8	-758.643	-693.386	-745.97	-703.101	-851.09	-867.957	-918.588	-368.467
+0.8	817.4743	820.1286	867.39	820.35	974.7456	820.1214	867.4756	422.6531
-0.85	-806.059	-736.722	-792.593	-747.045	-904.283	-922.204	-976	-391.497
+0.85	563.8692	589.2951	621.2695	588.3286	692.409	520.7428	550.609	298.3814
-0.9	-853.474	-780.059	-839.216	-790.988	-957.476	-976.451	-1033.41	-414.526
+0.9	299.0602	350.7171	365.9274	347.4064	398.2672	260.0209	274.6746	167.7655
-0.95	-900.889	-823.395	-885.84	-834.932	-1010.67	-1030.7	-1090.82	-437.555
+0.95	114.273	134.922	134.922	128.5063	137.3188	102.5491	107.9464	81.36799
-1	-948.304	-866.732	-932.463	-878.876	-1063.86	-1084.95	-1148.24	-460.584
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-948.304	-866.732	-932.463	-878.876	-1063.86	-1084.95	-1148.24	-460.584
+2	0	0	0	0	0	0	0	0
-2.05	-900.889	-823.395	-885.84	-834.932	-1010.67	-1030.7	-1090.82	-437.555
+2.05	114.273	134.9246	134.9246	128.5141	137.3291	102.551	107.9484	81.12035
-2.1	-853.474	-780.059	-839.216	-790.989	-957.476	-976.451	-1033.41	-414.526
+2.1	299.278	350.7156	365.9454	347.4173	398.2742	260.0216	274.6753	167.762
-2.15	-806.059	-736.722	-792.593	-747.045	-904.283	-922.204	-976	-391.497
+2.15	564.2141	589.2962	621.2679	588.3407	692.4172	520.7435	550.61	298.3778
-2.2	-758.643	-693.386	-745.97	-703.101	-851.09	-867.957	-918.588	-368.467
+2.2	817.8383	820.1302	867.3892	820.3465	974.7546	820.1225	867.477	422.6497
-2.25	-711.228	-650.049	-699.347	-659.157	-797.897	-813.709	-861.176	-345.438

+2.25	1054.068	1034.992	1098.202	1038.059	1238.511	1093.768	1157.203	537.6763
-2.3	-663.813	-606.712	-652.724	-615.213	-744.704	-759.462	-803.765	-322.409
+2.3	1267.231	1228.774	1308.055	1235.776	1477.332	1337.575	1414.348	640.7426
-2.35	-616.398	-563.376	-606.101	-571.27	-691.51	-705.215	-746.353	-299.38
+2.35	1452.038	1396.713	1491.729	1408.564	1685.288	1546.984	1636.219	729.3186
-2.4	-568.983	-520.039	-559.478	-527.326	-638.317	-650.967	-688.941	-276.351
+2.4	1603.577	1538.345	1644.333	1551.839	1856.87	1715.166	1814.527	801.0601
-2.45	-521.567	-476.703	-512.854	-483.382	-585.124	-596.72	-631.529	-253.321
+2.45	1717.317	1648.293	1761.355	1661.364	1986.99	1836.954	1943.794	853.8087
-2.5	-474.152	-433.366	-466.231	-439.438	-531.931	-542.473	-574.118	-230.292
+2.5	1789.109	1721.629	1838.653	1733.394	2070.984	1908.012	2019.355	885.5913
-2.55	-426.737	-390.029	-419.608	-395.494	-478.738	-488.226	-516.706	-207.263
+2.55	1819.408	1755.794	1874.105	1766.435	2108.258	1937.402	2050.735	898.4959
-2.6	-379.322	-346.693	-372.985	-351.55	-425.545	-433.978	-459.294	-184.234
+2.6	1824.029	1751.611	1871.586	1764.806	2110.4	1952.261	2066.031	904.0816
-2.65	-331.906	-303.356	-326.362	-307.607	-372.352	-379.731	-401.882	-161.204
+2.65	1779.463	1701.91	1820.283	1717.744	2057.372	1911.309	2022.112	886.1341
-2.7	-284.491	-260.02	-279.739	-263.663	-319.159	-325.484	-344.471	-138.175
+2.7	1682.71	1612.213	1719.123	1622.189	1945.894	1810.442	1914.705	843.14
-2.75	-237.076	-216.683	-233.116	-219.719	-265.966	-271.236	-287.059	-115.146
+2.75	1544.856	1476.984	1576.041	1477.207	1773.809	1658.683	1754.658	773.8236
-2.8	-189.661	-173.346	-186.493	-175.775	-212.772	-216.989	-229.647	-92.1168
+2.8	1354.49	1290.234	1377.638	1291.771	1540.876	1445.7	1528.475	677.3285
-2.85	-142.246	-130.01	-139.869	-131.831	-159.579	-162.742	-172.235	-69.0876
+2.85	1106.082	1050.273	1122.063	1052.51	1256.845	1181.207	1248.563	552.3821
-2.9	-94.8304	-86.6732	-93.2463	-87.8876	-106.386	-108.495	-114.824	-46.0584
+2.9	798.6407	755.7504	807.8348	758.0094	906.0814	857.9726	906.9986	398.208
-2.95	-47.4152	-43.3366	-46.6231	-43.9438	-53.1931	-54.2473	-57.4118	-23.0292
+2.95	430.2664	405.6626	433.8433	407.2059	487.2369	464.4615	491.0453	214.2157
-3	-2.26E-13	-1.5E-13	-1.7E-13	-1.3E-13	-1.6E-13	-1.5E-13	-1.6E-13	-9.9E-14
+3	4.77E-13	3.04E-13	3.37E-13	2.5E-13	2.95E-13	3.16E-13	3.36E-13	1.65E-13

2-Span: Moment (Max and Min) Raw Data Results - 140' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	-2.27E-13	-2.2E-13	-2.1E-13	-1.7E-13	-1.8E-13	-1.7E-13
End Shear	3.52E-13	2.61E-13	2.63E-13	2.51E-13	2.76E-13	2.59E-13
-0.05	-47.4152	-99.8765	-110.104	-63.0304	-76.0537	-81.8096
+0.05	430.1535	812.832	870.5854	534.8641	645.6402	683.6779
-0.1	-94.8304	-199.753	-220.208	-126.061	-152.107	-163.619
+0.1	798.55	1494.004	1605.15	986.5994	1191.495	1259.765
-0.15	-142.246	-299.63	-330.312	-189.091	-228.161	-245.429
+0.15	1106.741	2077.26	2226.634	1356.294	1643.314	1740.371
-0.2	-189.661	-399.506	-440.415	-252.121	-304.215	-327.239
+0.2	1354.866	2536.525	2766.15	1670.756	2018.704	2133.347
-0.25	-237.076	-499.383	-550.519	-315.152	-380.269	-409.048
+0.25	1545.133	2899.087	3182.313	1911.29	2301.268	2451.53
-0.3	-284.491	-599.259	-660.623	-378.182	-456.322	-490.858
+0.3	1683.087	3179.72	3496.46	2081.144	2495.282	2675.554
-0.35	-331.906	-699.136	-770.727	-441.213	-532.376	-572.668
+0.35	1779.75	3362.81	3697.048	2191.273	2621.983	2806.233
-0.4	-379.322	-799.012	-880.831	-504.243	-608.43	-654.477
+0.4	1824.235	3472.569	3785.068	2231.961	2665.765	2867.564
-0.45	-426.737	-898.889	-990.935	-567.273	-684.483	-736.287
+0.45	1819.541	3473.666	3814.669	2208.001	2632.954	2843.497
-0.5	-474.152	-998.765	-1101.04	-630.304	-760.537	-818.096
+0.5	1788.932	3407.559	3729.966	2176.454	2596.956	2799.421
-0.55	-521.567	-1098.64	-1211.14	-693.334	-836.591	-899.906
+0.55	1717.078	3255.325	3547.027	2101.742	2510.222	2695.86
-0.6	-568.983	-1198.52	-1321.25	-756.364	-912.645	-981.716
+0.6	1603.287	3010.265	3308.083	1966.248	2350.215	2516.641
-0.65	-616.398	-1298.39	-1431.35	-819.395	-988.698	-1063.53
+0.65	1451.709	2696.45	2971.503	1775.037	2122.617	2275.783
-0.7	-663.813	-1398.27	-1541.45	-882.425	-1064.75	-1145.34
+0.7	1266.876	2318.259	2545.624	1534.071	1838.861	1968.331
-0.75	-711.228	-1498.15	-1651.56	-945.455	-1140.81	-1227.14
+0.75	1053.701	1869.061	2045.431	1253.164	1503.795	1602.556
-0.8	-758.643	-1598.02	-1761.66	-1008.49	-1216.86	-1308.95
+0.8	817.4743	1359.93	1480.985	934.3403	1120.839	1187.418
-0.85	-806.059	-1697.9	-1871.77	-1071.52	-1292.91	-1390.76
+0.85	563.8692	802.786	865.7228	583.6824	698.7294	732.5606
-0.9	-853.474	-1797.78	-1981.87	-1134.55	-1368.97	-1472.57
+0.9	299.0602	367.064	380.8358	309.7395	355.7399	377.0795
-0.95	-900.889	-1897.65	-2091.97	-1197.58	-1445.02	-1554.38
+0.95	114.273	134.3806	124.8609	121.4246	137.2467	137.3356
-1	-948.304	-1997.53	-2202.08	-1260.61	-1521.07	-1636.19
+1	0	0	0	0	0	0
(Span 2) -2	-948.304	-1997.53	-2202.08	-1260.61	-1521.07	-1636.19
+2	0	0	0	0	0	0
-2.05	-900.889	-1897.65	-2091.97	-1197.58	-1445.02	-1554.38
+2.05	114.273	134.3752	124.8599	121.4097	137.2412	137.3302
-2.1	-853.474	-1797.78	-1981.87	-1134.55	-1368.97	-1472.57
+2.1	299.278	367.0037	382.003	309.7404	355.736	377.0884
-2.15	-806.059	-1697.9	-1871.77	-1071.52	-1292.91	-1390.76
+2.15	564.2141	802.7927	867.0149	583.6839	698.7327	732.5676
-2.2	-758.643	-1598.02	-1761.66	-1008.49	-1216.86	-1308.95
+2.2	817.8383	1359.937	1482.023	934.342	1120.842	1187.425
-2.25	-711.228	-1498.15	-1651.56	-945.455	-1140.81	-1227.14

+2.25	1054.068	1869.068	2046.591	1253.165	1503.798	1602.563
-2.3	-663.813	-1398.27	-1541.45	-882.425	-1064.75	-1145.34
+2.3	1267.231	2318.265	2547.256	1534.07	1838.862	1968.337
-2.35	-616.398	-1298.39	-1431.35	-819.395	-988.698	-1063.53
+2.35	1452.038	2696.453	2971.502	1775.035	2122.615	2275.787
-2.4	-568.983	-1198.52	-1321.25	-756.364	-912.644	-981.716
+2.4	1603.577	3011.283	3308.084	1966.244	2350.211	2516.642
-2.45	-521.567	-1098.64	-1211.14	-693.334	-836.591	-899.906
+2.45	1717.317	3255.333	3547.027	2101.736	2510.215	2695.857
-2.5	-474.152	-998.765	-1101.04	-630.304	-760.537	-818.097
+2.5	1789.109	3407.564	3731.172	2176.461	2596.961	2799.415
-2.55	-426.737	-898.889	-990.935	-567.273	-684.483	-736.287
+2.55	1819.408	3473.664	3814.668	2207.995	2632.95	2843.506
-2.6	-379.322	-799.012	-880.831	-504.243	-608.43	-654.477
+2.6	1824.029	3472.562	3785.068	2231.969	2665.774	2867.569
-2.65	-331.906	-699.136	-770.727	-441.212	-532.376	-572.668
+2.65	1779.463	3362.797	3697.047	2191.277	2621.987	2806.234
-2.7	-284.491	-599.259	-660.623	-378.182	-456.322	-490.858
+2.7	1682.71	3179.716	3497.153	2081.146	2495.282	2675.549
-2.75	-237.076	-499.383	-550.519	-315.152	-380.269	-409.048
+2.75	1544.856	2899.091	3182.313	1911.287	2301.263	2451.536
-2.8	-189.661	-399.506	-440.415	-252.121	-304.215	-327.239
+2.8	1354.49	2537.316	2766.148	1670.749	2018.711	2133.339
-2.85	-142.246	-299.63	-330.312	-189.091	-228.161	-245.429
+2.85	1106.082	2077.266	2226.634	1356.291	1643.315	1740.374
-2.9	-94.8304	-199.753	-220.208	-126.061	-152.107	-163.619
+2.9	798.6407	1494.003	1605.15	986.5912	1191.491	1259.762
-2.95	-47.4152	-99.8765	-110.104	-63.0303	-76.0537	-81.8097
+2.95	430.2664	812.8242	870.5868	534.8686	645.6303	683.6683
-3	-2.26E-13	-2.5E-13	-3.2E-13	-1.8E-13	-2E-13	-2E-13
+3	4.77E-13	5.26E-13	4.76E-13	3.43E-13	4.23E-13	4.49E-13

2-Span: Shear (Max and Min) Raw Data Results - 150’ Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-26.27993905	-21.63065062	-31.35413446	-11.95494526	-12.86324773	-12.12452751	-14.67906754	-15.05107023	-15.9301	-6.364800116
End Shear	228.4209621	188.2505444	256.0193127	120.1449371	128.5862892	120.7452194	144.6701842	139.9093623	147.9467	63.58042098
-0.05	-26.52446964	-21.87518122	-31.57421199	-11.95494526	-12.86324773	-12.12452751	-14.67906754	-15.05107023	-15.9301	-6.364800116
+0.05	209.6044212	172.6179966	232.4353317	112.1231877	119.9512567	112.6104391	134.8182435	129.6227891	137.0573	59.30163837
-0.1	-27.362123	-24.09511561	-33.53359831	-11.95494526	-12.86324773	-12.12452751	-14.67906754	-15.05107023	-15.9301	-6.364800116
+0.1	190.4955292	156.8000647	208.1855047	103.8591863	111.0581818	104.2293603	124.673776	119.034829	125.8495	54.85714793
-0.15	-31.26331427	-32.03412298	-42.40268631	-17.63828667	-18.19681312	-16.66574714	-18.51694086	-15.05107023	-15.9301	-8.305384582
+0.15	174.463179	143.4908298	187.7829094	96.6854849	103.3407116	96.95761532	115.8769269	109.8942518	116.1744	51.00253242
-0.2	-43.30872251	-41.59847846	-53.26208584	-25.86804502	-27.06540522	-25.03135827	-28.66879786	-19.05947767	-20.1884	-12.749826
+0.2	156.7021238	128.9074207	165.4533013	88.5781943	94.62157397	88.74370176	105.9459927	99.62313892	105.3034	46.65040355
-0.25	-55.06712731	-50.37219136	-63.85663273	-32.9992713	-34.75250446	-32.28390525	-37.47479447	-26.53479859	-27.9314	-16.60437367
+0.25	141.7914944	116.7107721	146.8238441	81.58567536	87.10374902	81.66296687	97.3902167	90.8174332	95.98401	42.90044021
-0.3	-68.92224075	-60.83056937	-76.33939256	-41.04373023	-43.42671609	-40.46942318	-47.41926624	-36.63069654	-38.5918	-20.95641067
+0.3	125.4980004	103.4324257	126.6237684	73.73579463	78.66699515	73.71847384	87.79676327	80.99489505	85.5892	38.69514157
-0.35	-81.37367195	-70.33121625	-87.55661817	-47.96876035	-50.89628326	-47.51965827	-55.98958193	-45.87675026	-48.3835	-24.70627488
+0.35	111.9160744	92.4041571	109.9452597	67.01256688	71.44370209	66.91821856	79.59050834	72.63933987	76.74753	35.09749231
-0.4	-95.93350607	-81.5536571	-100.6721685	-55.72721591	-59.26766358	-55.42282706	-65.60272114	-56.29584596	-59.418	-28.91143346
+0.4	97.18860846	80.48786862	92.20797411	59.52080312	63.39778458	59.34540918	70.45848924	63.3971199	66.96845	31.09351234
-0.45	-108.922266	-91.66158334	-112.3714762	-62.3579424	-66.42481426	-62.18126782	-73.82889181	-65.25503118	-68.907	-32.50894445
+0.45	85.01561451	70.67191282	77.99045812	53.15498344	56.5639185	52.91510963	62.71021111	55.60696569	58.72655	27.69584166
-0.5	-124.0020801	-103.5045623	-125.95302	-69.72969056	-74.38491318	-69.69983684	-82.98676	-75.2804093	-79.526	-36.51274349
+0.5	71.93905452	60.16110186	64.79881289	46.1220344	49.01728188	45.8162269	54.16355878	47.07679436	49.70267	23.94764748
-0.55	-137.3605893	-114.088256	-137.9831311	-75.97798781	-81.13474294	-76.07700767	-90.76033112	-83.83746316	-88.5903	-39.91023374
+0.55	61.24333732	51.58952653	55.16496254	40.20173245	42.66772983	39.84536608	46.98172155	39.96732814	42.1826	20.79762387
-0.6	-152.7621134	-126.3946942	-151.8516825	-82.86232853	-88.57511373	-83.10871669	-99.33897501	-93.33739242	-98.6541	-43.65820552
+0.6	49.88903066	42.51406277	44.93772726	33.72830975	35.72883229	33.32267466	39.14439209	32.28093681	34.0534	17.35969381
-0.65	-166.310941	-137.310771	-170.0941378	-88.64008493	-94.82273317	-89.01515386	-106.5515061	-101.3770324	-107.172	-46.80800862
+0.65	40.72707035	35.20706943	36.68510214	28.34164396	29.95849119	27.90071098	32.63743065	25.9674172	27.37721	14.50498732
-0.7	-181.8223071	-149.9100248	-192.9177152	-94.9363168	-101.6349284	-95.45774092	-114.426972	-110.2197754	-116.541	-50.24567475
+0.7	31.15278255	27.58325594	28.06099546	22.52843698	23.73576774	22.05647301	25.63337857	19.25654852	20.28218	11.4317933
-0.75	-195.3701541	-161.0032409	-212.786498	-100.1554192	-107.2854462	-100.8039644	-120.9700018	-117.6267517	-124.39	-53.10012639
+0.75	23.5691964	21.54916772	21.23000846	17.76352832	18.63953724	17.27288691	19.90975393	14.05092074	14.79044	8.920064269
-0.8	-210.7659669	-173.7111035	-235.2960842	-105.7628375	-113.3610147	-106.5551837	-128.0183559	-125.6805719	-132.925	-56.17300601
+0.8	15.8191341	15.37974925	14.24911588	12.7112502	13.24144805	12.20935219	13.86291835	9.398885387	9.949304	6.266089151
-0.85	-224.1096678	-184.8143476	-254.7498269	-110.3351722	-118.3195395	-111.251714	-133.7834244	-132.3396066	-139.983	-58.68443906
+0.85	10.17031084	10.61504138	9.159576995	8.656207353	8.914214225	8.153619214	9.031085612	6.44795422	6.814412	4.14501021
-0.9	-239.1509489	-197.433055	-276.6216116	-115.1530747	-123.5500326	-116.2092998	-139.8807079	-139.4727619	-147.545	-61.33806125
+0.9	4.673083803	5.889198374	4.208622839	4.514607739	4.514607739	4.234123323	4.500545572	3.432248445	3.612893	2.435244944
-0.95	-252.0754676	-208.3673494	-295.6868895	-118.9905269	-127.7216712	-120.1666732	-144.7593745	-145.2685936	-153.69	-63.45880918
+0.95	2.117448397	2.378472917	1.905703555	1.876391133	1.876391133	1.43097527	1.500004833	1.363916804	1.435702	1.182282105
-1	-266.5096829	-220.6855713	-316.9452555	-122.9182139	-131.9986433	-124.2283806	-149.7816545	-151.3493547	-160.138	-65.63869274
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.66E+02	2.20E+02	315.6368768	1.23E+02	1.32E+02	123.9890699	149.4852131	1.51E+02	1.60E+02	6.55E+01
-2.05	-1.96E+00	-2.15E+00	-1.764598438	-1.69E+00	-1.69E+00	-1.354214294	-1.358620532	-1.29E+00	-1.35E+00	-1.09E+00
+2.05	2.53E+02	2.09E+02	2.97E+02	119.2501667	128.0041453	1.20E+02	1.45E+02	1.46E+02	154.1104	6.36E+01
-2.1	-4.99E+00	-6.16E+00	-4.494026968	-4.714584734	-4.714584734	-4.445049743	-4.733305076	-3.584239494	-3.77288	-2.52404782
+2.1	2.38E+02	1.97E+02	2.75E+02	114.8647437	123.2368132	1.16E+02	1.40E+02	1.39E+02	147.0878	6.12E+01
-2.15	-9.79E+00	-1.03E+01	-8.826113881	-8.380593588	-8.62031378	-7.878287036	-8.703525311	-6.247268578	-6.60124	-4.001058791
+2.15	225.1096217	185.6053062	256.1289668	110.6487976	118.6598288	111.5741397	134.1795699	132.8000086	140.471	58.85711028
-2.2	-16.2796623	-15.74314508	-14.65946297	-13.01470052	-13.56547901	-12.51316921	-14.22532815	-9.61958777	-10.1838	-6.425005927
+2.2	209.8610861	172.9164157	233.8970347	105.4235016	112.9931908	106.2069171	127.5912127	125.1899965	132.405	55.98703812
-2.25	-23.05751352	-21.1413959	-20.76781407	-17.43572865	-18.28911368	-16.94405148	-19.51666043	-13.7096952	-14.4313	-8.747375012

+2.25	196.3889575	*161.7965205*	*214.2003582*	100.5167339	107.6767708	101.174318	121.4235609	118.1425529	124.9364	53.29813162
-2.3	-31.71966736	*-28.03755035*	*-28.5745597*	-22.88109737	-24.11311773	-22.41076032	-26.05764686	-19.66015142	-20.7088	-11.61777503
+2.3	180.9051859	*149.1190587*	*191.4940595*	94.5522891	101.2192986	95.06460088	113.9461201	109.6777744	115.9667	50.03604532
-2.35	-40.09263718	*-34.70842137*	*-36.1207473*	-27.96793794	-29.55830768	-27.52475049	-32.18653526	-25.53251252	-26.9174	-14.30695927
+2.35	167.3304278	*138.094238*	*171.5226758*	89.04281786	95.25833893	89.4270579	107.0547486	101.9400151	107.7682	47.02795562
-2.4	-50.55747536	*-43.05927891*	*-45.55219323*	-34.12387446	-36.15271093	-33.72104152	-39.62277335	-32.74764488	-34.547	-17.56933673
+2.4	151.8438661	*125.619175*	*150.7955988*	82.43990429	88.11845782	82.67708584	98.81215025	92.7521875	98.03415	43.4283233
-2.45	-60.48711533	*-51.00037645*	*-54.50115129*	-39.78839443	-42.22454239	-39.42867148	-46.48077027	-39.47360254	-41.6604	-20.57766481
+2.45	138.3639612	*114.8506024*	*138.6687613*	76.41583927	81.60784609	76.52408448	91.30552707	84.43941173	89.22793	40.14870755
-2.5	-72.70392137	*-60.79643127*	*-65.51110692*	-46.55420642	-49.48090727	-46.25226269	-54.68828201	-47.5983789	-50.2544	-24.17754118
+2.5	123.0935081	*102.7553925*	*124.9322321*	69.27518852	73.89403541	69.23613177	82.42173969	74.66025762	78.86907	36.26600959
-2.55	-84.13990616	*-69.99348432*	*-77.012221*	-52.70830196	-56.08450034	-52.46405445	-62.1669302	-55.06264196	-58.1507	-27.45734844
+2.55	109.8275694	*92.39238063*	*113.0595772*	62.82463039	66.92864941	62.65711704	74.40828266	65.88769675	69.57712	32.76254766
-2.6	-98.04435226	*-81.21163164*	*-93.26034856*	-59.98326454	-63.89435349	-59.81270447	-71.02178642	-63.96533097	-67.5696	-31.34025766
+2.6	94.98304725	*80.84085412*	*99.70422093*	55.24692632	58.74933866	54.93346513	65.00728513	55.64900183	58.73295	28.65125628
-2.65	-110.9244968	*-91.63850995*	*-108.7905664*	-66.53882058	-70.93481426	-66.43918461	-79.01263251	-72.05261834	-76.1267	-34.84387764
+2.65	82.24215648	*71.02085411*	*88.24176428*	48.45802094	51.42410446	48.01791286	56.59544926	46.53194639	49.07735	24.97161034
-2.7	-126.4387523	*-104.242128*	*-127.8511855*	-74.22225782	-79.18973559	-74.21063585	-88.39088442	-81.60150225	-86.2311	-38.95532851
+2.7	68.01189965	*60.16334382*	*75.43967335*	40.54396862	42.88774483	39.96077594	46.80113663	35.96537148	37.88728	20.68620338
-2.75	-140.6890232	*-115.860818*	*-145.5267291*	-81.0911596	-86.57217162	-81.16231498	-96.7854571	-90.19657687	-95.327	-42.63510296
+2.75	55.88789695	*51.01193508*	*64.53269641*	33.50481439	35.29753781	32.79820396	38.09942891	27.13236742	28.56039	16.87804358
-2.8	-157.7216738	*-129.7996998*	*-166.8169775*	-89.08233895	-95.16368014	-89.25434028	-106.5631929	-100.2598633	-105.977	-46.92062653
+2.8	42.44984941	*40.98516891*	*52.44385668*	25.35508466	26.51254413	24.50982169	28.03572832	18.68877049	19.79394	12.47299546
-2.85	-173.2560913	*-142.5603377*	*-186.3558968*	-96.17647175	-102.7931985	-96.44175967	-115.2530574	-109.2474411	-115.49	-50.72887164
+2.85	31.9527088	*32.61606825*	*42.99974549*	18.15379659	18.7522574	17.18967425	19.15256581	15.05106996	15.93006	8.583961005
-2.9	-191.7021646	*-157.7707041*	*-209.6725409*	-104.3747067	-111.6128623	-104.7520437	-125.3062588	-119.6934725	-126.547	-55.13399166
+2.9	27.29233374	*23.5431971*	*32.86888646*	11.95494442	12.8632476	12.12452723	14.67906623	15.05106996	15.93006	6.364800005
-2.95	-208.4230259	*-171.6116037*	*-230.8916807*	-111.6059876	-119.3946045	-112.0857595	-134.1829977	-128.9582429	-136.354	-59.02305316
+2.95	26.55936429	*21.91010678*	*31.60564516*	11.95494442	12.8632476	12.12452723	14.67906623	15.05106996	15.93006	6.364800005
-3	-228.1639898	*-188.0160973*	*-256.0193127*	-119.9105779	-128.3339774	-120.5120773	-144.3877555	-139.6552442	-147.678	-63.49329439
+3	26.27990795	*21.63065044*	*31.35413446*	11.95494442	12.8632476	12.12452723	14.67906623	15.05106996	15.93006	6.364800005

2-Span: Shear (Max and Min) Raw Data Results - 150' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.142070955	-12.95104637	-13.76336615	-16.22014396	-7.33336284	-9.908540204	-11.33886383	-12.69525362	-14.12135385
End Shear	90.79727476	121.4614539	124.0467479	135.6071583	73.10318685	98.56543283	111.6925299	122.4007546	133.3934257
-0.05	-9.142070955	-12.95104637	-13.76336615	-16.28345992	-7.33336284	-9.908540204	-11.33886383	-12.69525362	-14.12135385
+0.05	84.64240595	112.5960293	114.500137	121.5967186	68.1708361	91.91163769	104.068369	113.8760825	123.9163147
-0.1	-9.142070955	-12.95104637	-13.76336615	-16.50035232	-7.33336284	-9.908540204	-11.33886383	-12.69525362	-14.12135385
+0.1	78.30230843	103.4674749	104.6808621	107.6253468	63.09337741	85.05716372	96.21334364	105.0963492	114.1592386
-0.15	-11.94208513	-12.95104637	-13.76336615	-16.81607936	-10.02155169	-13.40789106	-13.95009454	-13.95009454	-14.12135385
+0.15	72.80339019	95.58391257	96.22781236	96.13383136	58.68821609	79.11062192	89.40306292	97.49248076	105.7180068
-0.2	-18.28098894	-16.63619663	-15.03103854	-17.31978038	-15.09083682	-20.25322456	-21.78382516	-21.7146559	-21.70938783
+0.2	66.5943253	86.72189579	86.75753608	83.8135679	53.71257999	72.39438697	81.71629312	88.91947899	96.21153034
-0.25	-23.77842311	-23.83380052	-20.25251774	-19.57068654	-19.48585555	-26.18841852	-28.60943621	-29.31107528	-29.61462872
+0.25	61.24395102	79.12118355	78.66412	74.13239063	49.42362688	66.60540994	75.09526595	81.543623	88.04211825
-0.3	-29.98528893	-32.50092398	-28.4072152	-26.47437227	-24.44648877	-32.8878704	-36.31888892	-37.9892081	-39.326579
+0.3	55.24339006	70.63914486	69.66685147	63.64748038	44.61177771	60.11107655	67.67281083	73.2850447	78.90633659
-0.35	-35.33329845	-40.4510076	-35.81085111	-32.83498264	-28.71932628	-38.65882002	-42.9642783	-45.47797988	-47.71669468
+0.35	50.10934232	63.42055817	62.0415688	55.45361912	40.49325265	54.55286656	61.32509482	66.23142101	71.11381826
-0.4	-41.33065881	-49.40635415	-45.29536253	-41.00819315	-33.50934179	-45.12872613	-50.41972559	-53.8895154	-57.15145221
+0.4	44.39475173	55.43195219	53.64131916	46.64985882	35.90716446	48.36410558	54.26302426	58.39495288	62.46882406
-0.45	-46.46146398	-57.1038604	-53.81747538	-48.43998767	-37.60577457	-50.66221889	-56.8008339	-61.09790294	-65.24648519
+0.45	39.54481988	48.69474217	46.59267909	39.87781739	32.01329001	43.10987021	48.27266549	51.75779508	55.15828766
-0.5	-52.17184647	-65.71382274	-63.38132119	-57.69719025	-42.16320104	-56.81891937	-63.9062178	-69.13516048	-74.283958
+0.5	34.19366415	41.31301177	38.91345731	33.10887564	27.71493475	37.31033437	41.66704206	44.45113318	47.12417619
-0.55	-57.01765808	-73.0594894	-71.5694185	-65.85529365	-46.0290081	-62.04174776	-69.9389805	-75.96893428	-81.97881913
+0.55	29.69563319	35.15646107	32.54996563	27.50335915	24.09993693	32.4332872	36.11811094	38.32467178	40.40070314
-0.6	-62.36359961	-81.21062368	-80.68952519	-75.25475727	-50.29187161	-67.80157544	-76.59823175	-83.52421816	-90.49891254
+0.6	24.78537811	28.49505031	25.71575949	21.60855219	20.15128192	27.10664786	30.06499934	31.65550695	33.09756712
-0.65	-66.85663091	-88.10517229	-88.43509539	-83.66383803	-53.87282647	-72.64054174	-82.19860624	-89.88914953	-97.6885255
+0.65	20.70703533	23.01841671	20.26258363	16.95299936	16.86938298	22.67998207	25.04153894	26.13397056	27.06624039
-0.7	-71.7606646	-95.68402958	-96.98745756	-94.70408219	-57.77916125	-77.91982788	-88.31566037	-96.85476682	-105.571143
+0.7	16.31515272	17.19077924	14.94382075	12.42309151	13.33239739	17.90990801	19.63700428	20.20999494	20.61417499
-0.75	-75.83313234	-102.0282097	-104.1819967	-105.4175305	-61.02104169	-82.30172115	-93.39957899	-102.6566259	-112.1504246
+0.75	12.72427772	12.66815302	10.78332325	8.921927801	10.43782061	14.00683504	15.22307633	15.387618	15.38591778
-0.8	-80.21778884	-108.9213413	-112.0426052	-117.57856	-64.50887696	-87.01680984	-98.87837113	-108.92488	-119.2754739
+0.8	8.928236241	8.184138711	7.303767451	5.972620433	7.374474625	9.876985257	10.56318789	10.53591581	10.5344601
-0.85	-83.80190901	-114.6158785	-118.5776094	-129.4578169	-67.35745992	-90.86841974	-103.3617881	-114.069437	-125.1393417
+0.85	5.892614152	5.55555561	4.596917139	3.787922503	4.921445116	6.570712191	6.842849675	6.839866802	6.838478655
-0.9	-87.58972035	-120.7098314	-125.6224581	-143.2530082	-70.36482666	-94.93563904	-108.1062497	-119.5326479	-131.3867338
+0.9	3.179196639	3.168720868	2.51891089	2.007634015	2.393705858	3.425830363	3.558341471	3.557200584	3.556088801
-0.95	-90.61770492	-125.655465	-131.3894201	-155.5732913	-72.76588687	-98.18376796	-111.9051025	-123.9256771	-136.4301049
+0.95	1.259452497	1.312226264	1.042258983	0.814768106	1.138933866	1.216328979	1.270537616	1.216314263	1.275769371
-1	-93.73120539	-130.8367969	-137.4944965	-169.7719994	-75.2308187	-101.5194628	-115.8191809	-128.4761422	-141.6797325
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.35E+01	1.31E+02	1.37E+02	1.69E+02	7.51E+01	1.01E+02	115.5880348	128.2065595	1.41E+02
-2.05	-1.19E+00	-1.19E+00	-9.43E-01	-7.37E-01	-1.05E+00	-1.15E+00	-1.150396544	-1.151191555	-1.15E+00
+2.05	9.08E+01	1.26E+02	1.32E+02	1.56E+02	7.29E+01	9.84E+01	112.1629442	124.2245884	1.37E+02
-2.1	-3.319991535	-3.309433499	-2.6308256	-2.099903277	-2.542995034	-3.590926315	-3.750566635	-3.749416744	-3.748296187
+2.1	8.74E+01	1.20E+02	1.25E+02	1.42E+02	7.02E+01	9.47E+01	107.8216195	119.2042447	1.31E+02
-2.15	-5.68673754	-5.40007098	-4.420269572	-3.641770171	-4.754941516	-6.34632319	-6.592043952	-6.590836398	-6.58964832
+2.15	84.04809116	115.0094095	119.0308359	130.3290319	67.55302912	91.13288692	103.6699519	114.423632	125.5436921
-2.2	-9.155841796	-8.406123017	-7.500322243	-6.138525414	-7.558260036	-10.12472365	-10.8423617	-10.81323093	-10.81176628
+2.2	79.95214567	108.5016366	111.5625748	116.7607153	64.29765277	86.73124385	98.54627197	108.5443993	118.8424164
-2.25	-12.47759499	-12.37171954	-10.52950333	-8.707202433	-10.23886558	-13.73857898	-14.92003911	-15.05714029	-15.05543944
+2.25	76.11534858	102.4698438	104.6842088	106.1759818	61.24563003	82.60531046	93.75206241	103.0593716	112.6076697

-2.3	-16.58127193	-17.54148074	-15.26345766	-12.69328137	-13.5468047	-18.19903176	-19.96429515	-20.56818831	-21.00363752
+2.3	71.4612964	95.21964228	96.46218323	93.9325042	57.54077326	77.59763897	87.94210339	96.42894264	105.0887872
-2.35	-20.42437771	-22.64096538	-19.91765996	-16.65710852	-16.64183248	-22.37307725	-24.69352597	-25.75195598	-26.64952513
+2.35	67.17004828	88.58783274	88.97853986	84.34696871	54.12256003	72.97803563	82.58942103	90.33373179	98.19117232
-2.4	-25.085159	-28.89970066	-26.12915673	-21.96259654	-20.39242485	-27.43192884	-30.43438527	-32.06201846	-33.54217979
+2.4	62.03535723	80.70863443	80.12676806	74.65537321	50.0301908	67.44798622	76.18923747	83.0597966	89.97477338
-2.45	-29.38183915	-34.72874923	-32.10942323	-27.11553939	-23.84766933	-32.09296326	-35.73112003	-37.89783586	-39.93275252
+2.45	57.35744019	73.5761008	72.14635013	66.43120788	46.30001751	62.40792742	70.36213713	76.44864885	82.51937554
-2.5	-34.52225335	-41.76452452	-39.38167086	-33.51915933	-27.97894337	-37.66652693	-42.07252892	-44.89923517	-47.61642425
+2.5	51.81958064	65.18134239	62.7888797	57.10787747	41.88211769	56.4391795	63.46778245	68.63888539	73.72555508
-2.55	-39.20472077	-48.22385116	-46.1013303	-39.44219242	-31.74017214	-42.74134119	-47.8526931	-51.29285688	-54.64659192
+2.55	46.82277976	57.64731928	54.42019273	48.97206549	37.89420627	51.05184814	57.25033214	61.60601379	65.81745326
-2.6	-44.74730191	-55.92322281	-54.15661333	-47.18381194	-36.19014824	-48.74596603	-54.69857929	-58.87790238	-63.00118713
+2.6	40.95921562	48.85049117	44.68095445	40.47724387	33.21272586	44.72808596	49.9578949	53.3681419	56.56630601
-2.65	-49.74777364	-62.91354985	-61.50716324	-54.88739365	-40.20313843	-54.1613546	-60.87814449	-65.73509975	-70.5658736
+2.65	35.7113169	41.01426416	36.33561261	33.2905896	29.02131031	39.06668949	43.43412714	46.00774659	48.31056656
-2.7	-55.61505445	-71.16308549	-70.22144302	-64.285561	-44.90986621	-60.51337456	-68.13242779	-73.79610137	-79.47129842
+2.7	29.59951883	31.92874976	27.87459233	26.02155121	24.13822969	32.4715431	35.83963002	37.44944262	38.72218577
-2.75	-60.86574522	-78.58517371	-78.09439529	-73.46021952	-49.12038544	-66.19611863	-74.62731026	-81.02262911	-87.46541948
+2.75	24.16830543	24.34583074	20.69238019	19.94544631	19.79751482	26.60932341	29.09364205	29.85581634	30.2239452
-2.8	-66.9802438	-87.27137679	-87.34366367	-84.54970488	-54.02188485	-72.81189361	-82.19396727	-89.45192476	-96.80157857
+2.8	17.88574028	16.23906733	14.68276539	17.28386217	14.77480138	19.82644347	21.29317821	21.22800409	21.22274418
-2.85	-72.41338109	-95.0259461	-95.63047615	-95.33258196	-58.37572762	-78.68880002	-88.92013846	-96.95356739	-105.1200683
+2.85	12.33899741	12.95104666	13.76336511	16.84310935	10.33902067	13.83658206	14.40896806	14.39967983	14.39423611
-2.9	-78.69764219	-104.0354364	-105.2907817	-108.4652809	-63.41003004	-85.48461746	-96.7030484	-105.6434031	-114.7668687
+2.9	9.142071352	12.95104666	13.76336511	16.48229006	7.333362816	9.908540685	11.338864	12.69525377	14.12135372
-2.95	-84.24542942	-112.0231841	-113.882968	-120.6927781	-67.85296315	-91.48250461	-103.5764373	-113.3259303	-123.3045911
+2.95	9.142071352	12.95104666	13.76336511	16.29250332	7.333362816	9.908540685	11.338864	12.69525377	14.12135372
-3	-90.62198601	-121.2424801	-123.8302682	-135.4606065	-72.95809908	-98.37472582	-111.4795647	-122.168647	-133.1419384
+3	9.142071352	12.95104666	13.76336511	16.22014409	7.333362816	9.908540685	11.338864	12.69525377	14.12135372

2-Span: Shear (Max and Min) Raw Data Results - 150' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-24.9177598	-27.49666537	-15.7046	-18.9354	-20.3885
End Shear	221.5091014	238.3759319	144.8468	174.6565	185.4994
-0.05	-24.9177598	-27.49666537	-15.7046	-18.9354	-20.3885
+0.05	204.372054	219.6908508	134.0431	161.676	171.4931
-0.1	-24.9177598	-27.49666537	-15.7046	-18.9354	-20.3885
+0.1	186.753841	200.2378362	122.927	148.3172	157.0827
-0.15	-24.9177598	-27.49666537	-15.7046	-18.9354	-20.3885
+0.15	171.5892602	183.5179321	113.3391	136.7922	144.6617
-0.2	-24.9177598	-27.49666537	-20.2337	-22.2712	-23.947
+0.2	154.6023803	164.8173137	102.5753	123.8506	130.7276
-0.25	-34.64007574	-36.76416737	-25.6391	-31.5823	-31.0142
+0.25	140.0874968	148.8641939	93.3563	112.7635	118.8024
-0.3	-49.04958038	-50.54660645	-35.8484	-43.8969	-44.2447
+0.3	123.954297	131.1638093	83.0837	100.4057	105.5253
-0.35	-62.89781453	-63.2641372	-45.617	-55.6172	-56.5306
+0.35	110.283645	116.1943134	74.35533	89.90245	94.25404
-0.4	-80.4907881	-81.91131569	-56.6342	-68.8329	-70.8935
+0.4	95.226496	99.74199504	64.71286	78.2953	81.81451
-0.45	-95.80530113	-99.03185951	-66.116	-80.2043	-83.2635
+0.45	82.59465633	85.9729778	56.59666	68.52176	71.35523
-0.5	-112.9952957	-118.2753246	-76.7359	-92.9377	-97.1284
+0.5	68.8358949	71.01656279	47.7233	57.83197	59.93398
-0.55	-127.7157033	-134.7778544	-85.8093	-103.814	-108.984
+0.55	57.43743992	58.66486478	40.34086	48.93407	50.44472
-0.6	-144.1155542	-153.1911015	-95.8931	-115.899	-122.17
+0.6	45.19939409	45.45215607	32.37556	39.32839	40.2224
-0.65	-158.0473109	-168.8587607	-104.437	-126.134	-133.352
+0.65	35.22886184	35.53685697	25.84845	31.45201	31.86126
-0.7	-173.4346729	-186.1939633	-113.845	-137.403	-145.679
+0.7	25.53487368	26.25101056	18.93016	23.09718	23.21469
-0.75	-186.3832189	-200.8099086	-121.737	-146.852	-156.031
+0.75	18.28684447	19.10173185	13.85641	16.80943	16.54392
-0.8	-200.5357333	-216.8192289	-130.332	-157.138	-167.318
+0.8	11.82659317	12.07362764	9.988967	10.96962	11.68306
-0.85	-212.3065223	-230.1666063	-137.45	-165.654	-176.68
+0.85	7.491454044	7.371279191	6.880672	7.567154	7.816897
-0.9	-225.0018212	-244.6022145	-145.092	-174.791	-186.747
+0.9	3.975766719	3.594683104	3.662984	4.02144	4.038252
-0.95	-235.4002725	-256.4641768	-151.316	-182.229	-194.962
+0.95	1.293658309	1.305480853	1.507636	1.608145	1.340916
-1	-246.4160495	-269.078277	-157.865	-190.05	-203.628
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.46E+02	2.68E+02	1.57E+02	1.90E+02	2.03E+02
-2.05	-1.17E+00	-1.16E+00	-1.37E+00	-1.46E+00	-1.21E+00
+2.05	2.36E+02	2.57E+02	1.52E+02	182.7388	1.96E+02
-2.1	-4.094020818	-3.883130572	-3.85352	-4.23002	-4.24697
+2.1	2.24E+02	2.44E+02	1.45E+02	174.2389	1.86E+02
-2.15	-7.161018875	-7.092279777	-6.66922	-7.31155	-7.55436
+2.15	213.1230506	231.0948721	137.9431	166.2436	177.3288
-2.2	-12.20496012	-12.47551841	-10.2214	-11.224	-11.9726
+2.2	199.6712908	215.841396	129.8077	156.5111	166.6293
-2.25	-17.81406124	-18.61343757	-13.6056	-16.383	-16.1951
+2.25	187.2872497	201.8326196	122.2871	147.5102	156.7526

-2.3	**-26.11342153**	**-26.78358364**	**-19.3455**	**-23.599**	**-23.718**
+2.3	**172.4894459**	**185.1293857**	**113.2681**	**136.7119**	**144.9228**
-2.35	**-34.54937479**	**-34.56199298**	**-25.3994**	**-30.91**	**-31.2867**
+2.35	**159.0249291**	**169.9604348**	**105.0352**	**126.8513**	**134.1362**
-2.4	**-45.93955056**	**-46.24863546**	**-32.8586**	**-39.9111**	**-40.8418**
+2.4	**143.1034952**	**152.0552713**	**95.27162**	**115.1539**	**121.3568**
-2.45	**-56.64843288**	**-57.81036528**	**-39.8287**	**-48.3166**	**-49.7868**
+2.45	**128.7530531**	**135.943028**	**86.44794**	**104.5795**	**109.8183**
-2.5	**-69.67468659**	**-71.92589637**	**-48.2654**	**-58.4852**	**-60.6313**
+2.5	**111.9302833**	**117.0836738**	**76.07868**	**92.14975**	**96.27004**
-2.55	**-81.7142285**	**-85.01337445**	**-56.03**	**-67.8392**	**-70.6253**
+2.55	**96.88848488**	**100.2450694**	**66.78588**	**81.00761**	**84.13775**
-2.6	**-96.15004003**	**-100.7487379**	**-65.3053**	**-79.0085**	**-82.5784**
+2.6	**79.38675721**	**80.67940601**	**55.94992**	**68.0122**	**70.00116**
-2.65	**-109.3256451**	**-115.1451224**	**-73.7428**	**-89.1652**	**-93.4634**
+2.65	**63.8481465**	**64.79892765**	**46.3095**	**56.44805**	**57.43316**
-2.7	**-124.9486846**	**-132.2524294**	**-83.7177**	**-101.169**	**-106.344**
+2.7	**48.06406844**	**49.68955171**	**35.14579**	**43.05377**	**43.40149**
-2.75	**-139.0658074**	**-147.7409004**	**-92.7066**	**-111.982**	**-117.962**
+2.75	**35.48753503**	**37.62947484**	**26.22169**	**32.34433**	**31.79579**
-2.8	**-155.6536981**	**-165.972321**	**-103.242**	**-124.653**	**-131.591**
+2.8	**24.91775964**	**27.49687923**	**19.84488**	**21.84703**	**23.45111**
-2.85	**-170.5177807**	**-182.3359963**	**-112.661**	**-135.977**	**-143.783**
+2.85	**24.91775964**	**27.49687923**	**15.70465**	**18.93542**	**20.38847**
-2.9	**-187.8481047**	**-201.4438032**	**-123.618**	**-149.148**	**-157.978**
+2.9	**24.91775964**	**27.49687923**	**15.70465**	**18.93542**	**20.38847**
-2.95	**-203.2645922**	**-218.4657596**	**-133.345**	**-160.837**	**-170.588**
+2.95	**24.91775964**	**27.49687923**	**15.70465**	**18.93542**	**20.38847**
-3	**-221.1151242**	**-238.202052**	**-144.585**	**-174.342**	**-185.169**
+3	**24.91775964**	**27.49687923**	**15.70465**	**18.93542**	**20.38847**

2-Span: Moment (Max and Min) Raw Data Results – 150' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.95E-13	*-3.37E-13*	*-6.36E-13*	-2.44E-13	-2.44E-13	-2.73E-13	-3.27E-13	-2.21E-13	-2.34E-13	-1.54E-13
End Shear	5.90E-13	*3.50E-13*	*7.02E-13*	2.70E-13	3.03E-13	2.72E-13	3.45E-13	3.19E-13	3.40E-13	2.08E-13
-0.05	-197.0995429	*-162.2298797*	*-235.1560085*	-89.6620895	-96.474358	-90.9339563	-110.093007	-112.883027	-119.475475	-47.73600087
+0.05	1599.599179	*1322.912179*	*1768.074405*	841.1505038	900.0092572	845.0077556	1011.981701	972.1709182	1027.929832	444.7622878
-0.1	-394.1990857	*-324.4597594*	*-470.3120169*	-179.324179	-192.948716	-181.867913	-220.186013	-225.766053	-238.95095	-95.47200174
+0.1	2982.143121	*2474.947951*	*3255.707419*	1567.181559	1676.046356	1573.189018	1882.322312	1797.323018	1900.251562	827.0076756
-0.15	-591.2986286	*-486.6896391*	*-705.4680254*	-268.986268	-289.423074	-272.801869	-330.27902	-338.64908	-358.426425	-143.2080026
+0.15	4150.836793	*3456.784096*	*4543.783991*	2178.300828	2328.477513	2184.91306	2611.815358	2476.511978	2618.063524	1147.556979
-0.2	-788.3981714	*-648.9195187*	*-940.6240338*	-358.648358	-385.897432	-363.735825	-440.372026	-451.532107	-477.9019	-190.9440035
+0.2	5106.785329	*4270.136686*	*5540.973667*	2676.56829	2859.575706	2682.356642	3203.214371	3033.141489	3207.199335	1407.614248
-0.25	-985.4977143	*-811.1493984*	*-1175.780042*	-448.310447	-482.37179	-454.669782	-550.465033	-564.415134	-597.377375	-238.6800043
+0.25	5854.912973	*4917.378846*	*6259.792965*	3064.752112	3272.376584	3068.415282	3687.074952	3480.019593	3681.663792	1608.766508
-0.3	-1182.597257	*-973.3792781*	*-1410.936051*	-537.972537	-578.846148	-545.603738	-660.558039	-677.29816	-716.85285	-286.4160052
+0.3	6409.114159	*5401.540476*	*6820.770928*	3346.328242	3570.678064	3369.263673	4044.614301	3799.953547	4019.18073	1753.633766
-0.35	-1379.6968	*-1135.609158*	*-1646.092059*	-627.634626	-675.320506	-636.537694	-770.651046	-790.181187	-836.328325	-334.1520061
+0.35	6794.43724	*5726.309094*	*7180.923404*	3533.259209	3780.81009	3567.568432	4276.579967	4012.009381	4244.882207	1843.908506
-0.4	-1576.796343	*-1297.839037*	*-1881.248068*	-717.296716	-771.794864	-727.47165	-880.744053	-903.064214	-955.8038	-381.888007
+0.4	6986.36146	*5896.02982*	*7287.121412*	3636.259141	3887.436982	3665.652904	4387.597602	4099.710292	4338.819517	1882.265057
-0.45	-1773.895886	*-1460.068917*	*-2116.404076*	-806.958805	-868.269222	-818.405607	-990.837059	-1015.94724	-1075.27928	-429.6240078
+0.45	6992.344843	*5915.704267*	*7156.331449*	3645.15103	3893.171075	3669.610914	4384.428779	4071.589106	4309.887287	1868.805108
-0.5	-1970.995429	*-1622.298797*	*-2351.560085*	-896.620895	-964.74358	-909.339563	-1100.93007	-1128.83027	-1194.75475	-477.3600087
+0.5	6867.240207	*5804.692801*	*6927.795888*	3574.24975	3819.406994	3600.736646	4306.337583	4008.921837	4243.017464	1844.326826
-0.55	-2168.094971	*-1784.528677*	*-2586.716093*	-986.282984	-1061.21794	-1000.27352	-1211.02307	-1241.71329	-1314.23023	-525.0960096
+0.55	6575.621829	*5555.667193*	*6800.309843*	3422.243054	3658.930088	3451.083527	4131.274132	3857.336414	4081.893416	1777.195053
-0.6	-2365.194514	*-1946.758556*	*-2821.872101*	-1075.94507	-1157.6923	-1091.20748	-1321.11608	-1354.59632	-1433.7057	-572.8320104
+0.6	6116.703744	*5172.85057*	*6422.442063*	3194.646358	3416.473915	3224.035345	3861.114193	3601.310251	3810.200567	1666.927517
-0.65	-2562.294057	*-2108.988436*	*-3057.02811*	-1165.60716	-1254.16665	-1182.14143	-1431.20909	-1467.47935	-1553.18118	-620.5680113
+0.65	5500.871286	*4663.626749*	*5790.534829*	2901.102506	3100.608315	2927.383152	3505.51786	3249.926375	3437.698296	1517.620385
-0.7	-2759.3936	*-2271.218316*	*-3292.184118*	-1255.26925	-1350.64101	-1273.07539	-1541.30209	-1580.36237	-1672.65665	-668.3040122
+0.7	4739.456183	*4036.037601*	*4921.555419*	2553.294606	2720.665524	2569.892854	3075.016971	2813.913969	2975.76027	1333.75346
-0.75	-2956.493143	*-2433.448195*	*-3527.340127*	-1344.93134	-1447.11537	-1364.00934	-1651.3951	-1693.2454	-1792.13213	-716.040013
+0.75	3844.737462	*3298.782256*	*3924.572428*	2152.416975	2286.74059	2161.049217	2581.014961	2305.427743	2439.335811	1120.188814
-0.8	-3153.592686	*-2595.678075*	*-3762.496135*	-1434.59343	-1543.58973	-1454.9433	-1761.48811	-1806.12843	-1911.6076	-763.7760139
+0.8	2829.940204	*2461.216292*	*2706.478649*	1708.336269	1809.690713	1711.055574	2035.785926	1737.534191	1838.073053	882.1720286
-0.85	-3463.505366	*-2870.721092*	*-4099.183965*	-1524.25552	-1640.06409	-1545.87726	-1871.58111	-1919.01145	-2031.08308	-811.5120148
+0.85	1822.05092	*1646.166769*	*1641.101736*	1231.627893	1301.135163	1231.665154	1452.477225	1119.285954	1181.849821	625.3308584
-0.9	-3981.275242	*-3353.621305*	*-4622.943268*	-1613.91761	-1736.53844	-1636.81121	-1981.67412	-2031.89448	-2150.55855	-859.2480156
+0.9	931.2338814	*959.348308*	*838.9579521*	739.7051154	773.7129924	733.9982725	845.1060816	546.898951	578.2823447	355.6776722
-0.95	-4673.000259	*-4010.476658*	*-5619.312403*	-1703.5797	-1833.0128	-1727.74517	-2091.76712	-2144.77751	-2270.03403	-906.9840165
+0.95	319.8151629	*378.1870081*	*287.833646*	284.5287546	284.5287546	274.0247576	293.9063889	216.2570189	227.6389673	168.2194137
-1	-5512.258104	*-4814.864717*	*-7095.606627*	-1793.2417	-1929.48716	-1818.67906	-2201.86011	-2257.66051	-2389.50953	-954.7199992
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-5512.258104	*-4814.864717*	*-7095.606627*	-1793.2417	-1929.48716	-1818.67906	-2201.86011	-2257.66051	-2389.50953	-954.7199992
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-4672.995875	*-4010.476588*	*-5619.316384*	-1703.57962	-1833.0128	-1727.74511	-2091.76691	-2144.77749	-2270.03405	-906.9839991
+2.05	319.8151404	*378.1925203*	*287.8336257*	284.5332353	284.5332353	274.0388908	293.9250734	216.2601543	227.6422677	167.7395159
-2.1	-3981.271099	*-3353.621243*	*-4622.943268*	-1613.91754	-1736.53845	-1636.81116	-1981.67391	-2031.89446	-2150.55858	-859.2479991
+2.1	931.9023029	*959.3571785*	*838.9580983*	739.7025541	773.7457285	734.0180499	845.1185208	546.9000584	578.3093743	355.6710306
-2.15	-3463.50144	*-2870.721015*	*-4099.183951*	-1524.25545	-1640.06409	-1545.8772	-1871.58092	-1919.01144	-2031.0831	-811.5119991
+2.15	1822.799701	*1646.1777*	*1641.101897*	1231.629986	1301.132267	1231.687154	1452.492279	1119.284102	1181.851368	625.3246756
-2.2	-3153.588993	*-2595.678*	*-3762.496121*	-1434.59337	-1543.58973	-1454.94325	-1761.48792	-1806.12841	-1911.60762	-763.775999
+2.2	2830.73153	*2461.228583*	*2706.478295*	1708.339423	1809.688827	1711.06963	2035.802229	1737.535802	1838.07515	882.1657506

-2.25	-2956.489684	-2433.448122	-3527.340113	-1344.93129	-1447.11538	-1364.00929	-1651.39492	-1693.24539	-1792.13214	-716.039999
+2.25	3845.536103	3298.794498	3924.572403	2152.42005	2286.739322	2161.042864	2581.031279	2305.428695	2439.337225	1120.182427
-2.3	-2759.390374	-2271.218244	-3292.184104	-1255.26921	-1350.64102	-1273.07534	-1541.30193	-1580.36236	-1672.65667	-668.3039989
+2.3	4740.229077	4036.049514	4921.555121	2553.297009	2720.663909	2569.886082	3075.032674	2813.911946	2975.758546	1333.747037
-2.35	-2562.291064	-2108.988365	-3057.028096	-1165.60712	-1254.16666	-1182.14138	-1431.20893	-1467.47934	-1553.18119	-620.5679989
+2.35	5501.588068	4663.637431	5790.534771	2901.10343	3100.605284	2927.375176	3505.532141	3249.922338	3437.694448	1517.613855
-2.4	-2365.191755	-1946.758487	-2821.872088	-1075.94504	-1157.69231	-1091.20743	-1321.11593	-1354.59631	-1433.70571	-572.8319989
+2.4	6117.335843	5172.85967	6422.442187	3194.644036	3416.468795	3224.025301	3861.125992	3601.303234	3810.193571	1666.920464
-2.45	-2168.092445	-1784.528609	-2586.716079	-986.282956	-1061.21795	-1000.27348	-1211.02294	-1241.71329	-1314.23023	-525.0959988
+2.45	6576.142427	5555.673734	6800.309386	3422.238174	3658.922094	3451.071081	4131.282827	3857.325768	4081.882594	1777.187079
-2.5	-1970.993135	-1622.29873	-2351.560071	-896.620873	-964.743591	-909.339522	-1100.92994	-1128.83026	-1194.75476	-477.3599988
+2.5	6867.626162	5804.696164	6927.79564	3574.241573	3819.395422	3600.750732	4306.342311	4008.933886	4243.030513	1844.31838
-2.55	-1773.893826	-1460.068852	-2116.404062	-806.95879	-868.269234	-818.405567	-990.836944	-1015.94724	-1075.27928	-429.6239988
+2.55	6992.057476	5915.703252	7156.331532	3645.16152	3893.18514	3669.599302	4384.427083	4071.579644	4309.876976	1871.809523
-2.6	-1576.794516	-1297.838974	-1881.248054	-717.296707	-771.794877	-727.471613	-880.743948	-903.064214	-955.803802	-381.8879987
+2.6	6985.913199	5896.025111	7287.121622	3636.265584	3887.44666	3665.637431	4387.591153	4099.72309	4338.832594	1882.261342
-2.65	-1379.695207	-1135.609095	-1646.092045	-627.634623	-675.32052	-636.537659	-770.650951	-790.181189	-836.328325	-334.1519987
+2.65	6793.808484	5726.29984	7180.923258	3533.261143	3780.815024	3567.578408	4276.568137	4012.016994	4244.889779	1843.903856
-2.7	-1182.595897	-973.3792171	-1410.936037	-537.97254	-578.846163	-545.603705	-660.557954	-677.298165	-716.852847	-286.4159986
+2.7	6408.289641	5401.526349	6820.770348	3346.324791	3570.677264	3369.26846	4044.596259	3799.955035	4019.181831	1753.628176
-2.75	-985.4965874	-811.1493388	-1175.780028	-448.310457	-482.371806	-454.66975	-550.464958	-564.41514	-597.37737	-238.6799986
+2.75	5854.308966	4917.359976	6259.793284	3064.743405	3272.370058	3068.414619	3687.080733	3480.014899	3681.658331	1608.771796
-2.8	-788.3972778	-648.9194605	-940.6240199	-358.648374	-385.897449	-363.735796	-440.371961	-451.532115	-477.901892	-190.9439986
+2.8	5105.962577	4270.112412	5540.973278	2676.553996	2859.563189	2682.350466	3203.213233	3033.130625	3207.187348	1407.619017
-2.85	-591.2979682	-486.6895822	-705.4680115	-268.986291	-289.423092	-272.801842	-330.278964	-338.64909	-358.426415	-143.2079985
+2.85	4149.513779	3456.754319	4543.783998	2178.280905	2328.458951	2184.901093	2611.807323	2476.506376	2618.057749	1147.560154
-2.9	-394.1986585	-324.4597039	-470.312003	-179.324208	-192.948735	-181.867888	-220.185968	-225.766066	-238.950937	-95.47199848
+2.9	2982.145848	2474.912493	3255.70732	1567.155952	1676.021695	1573.171353	1882.307149	1797.310374	1900.238339	827.0096881
-2.95	-197.0993489	-162.2298256	-235.1559946	-89.6621245	-96.4743779	-90.9339335	-110.092971	-112.883041	-119.47546	-47.73599844
+2.95	1599.846865	1322.871503	1768.074278	841.1181029	899.9773638	844.9840396	1011.959203	972.178083	1027.937418	444.7633238
-3	-1.02E-12	-7.22E-13	-1.23E-12	-5.25E-13	-5.59E-13	-5.68E-13	-6.61E-13	-5.03E-13	-5.30E-13	-2.77E-13
+3	6.60E-13	4.40E-13	9.45E-13	2.57E-13	3.02E-13	2.32E-13	2.56E-13	2.33E-13	2.46E-13	1.78E-13

2-Span: Moment (Max and Min) Raw Data Results - 150' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.72E-13	-1.95E-13	-1.70E-13	-1.82E-13	-2.42E-13	-2.40E-13	-1.91E-13	-1.87E-13	-1.85E-13
End Shear	2.75E-13	2.76E-13	2.42E-13	2.06E-13	2.51E-13	2.20E-13	2.21E-13	2.18E-13	2.19E-13
-0.05	-68.56553216	-97.13284778	-103.2252461	-121.6510797	-55.0002213	-74.31405153	-85.0414787	-95.2144022	-105.910154
+0.05	634.90404	844.47022	858.7510275	919.1130196	511.2812707	689.6390531	780.8637068	855.3471517	930.7966479
-0.1	-137.1310643	-194.2656956	-206.4504922	-243.3021595	-110.0004426	-148.6281031	-170.082957	-190.428804	-211.820308
+0.1	1181.613778	1561.995955	1581.296517	1662.408463	951.5620302	1283.765723	1452.325031	1591.641184	1735.711336
-0.15	-205.6965965	-291.3985433	-309.6757383	-364.9532392	-165.0006639	-222.9421546	-255.124436	-285.643207	-317.730462
+0.15	1640.272122	2153.778145	2169.40397	2266.526062	1321.549409	1782.662971	2014.754882	2232.237471	2429.722847
-0.2	-274.2621287	-388.5313911	-412.9009845	-486.6043189	-220.0008852	-297.2562061	-340.165915	-380.857609	-423.640615
+0.2	2012.574345	2622.832376	2657.432506	2743.825573	1622.314273	2188.127285	2470.31642	2754.245509	3009.666126
-0.25	-342.8276608	-485.6642389	-516.1262306	-608.2553987	-275.0011065	-371.5702576	-425.207394	-476.072011	-529.550769
+0.25	2300.760444	2998.216456	3018.663336	3155.195792	1855.616822	2502.543188	2831.686823	3159.148338	3472.358486
-0.3	-411.393193	-582.7970867	-619.3514767	-729.9064784	-330.0013278	-445.8843092	-510.248872	-571.286413	-635.460923
+0.3	2507.614848	3260.815006	3287.393644	3436.420644	2023.652895	2742.623701	3106.086448	3450.773136	3809.373563
-0.35	-479.9587251	-679.9299345	-722.5767228	-851.5575582	-385.0015491	-520.1983607	-595.290351	-666.500815	-741.371077
+0.35	2653.13935	3413.766649	3470.770862	3640.572457	2129.053894	2903.600055	3282.689221	3653.362092	4024.417342
-0.4	-548.5242573	-777.0627822	-825.8019689	-973.2086379	-440.0017704	-594.5124122	-680.33183	-761.715217	-847.281231
+0.4	2724.005736	3483.462666	3583.690659	3729.934214	2174.887719	2982.595463	3366.742391	3755.488721	4134.714453
-0.45	-617.0897895	-874.19563	-929.027215	-1094.859718	-495.0019917	-668.8264638	-765.373309	-856.92962	-953.191385
+0.45	2723.450964	3455.191185	3588.212384	3722.473796	2164.657036	2984.457149	3362.591658	3758.013901	4147.012485
-0.5	-685.6553216	-971.3284778	-1032.252461	-1216.510797	-550.002213	-743.1405153	-850.414787	-952.144022	-1059.10154
+0.5	2674.099356	3404.167219	3516.339231	3614.451967	2131.302277	2929.143184	3303.400468	3687.422239	4063.282753
-0.55	-754.2208538	-1068.461326	-1135.477707	-1338.161877	-605.0024343	-817.4545668	-935.456266	-1047.35842	-1165.01169
+0.55	2564.261216	3277.712998	3355.995798	3472.240942	2051.222649	2807.976634	3170.036744	3532.419856	3883.819091
-0.6	-822.786386	-1165.594173	-1238.702953	-1459.812957	-660.0026556	-891.7686183	-1020.49774	-1142.57283	-1270.92185
+0.6	2395.159353	3065.613175	3107.490333	3239.079864	1922.320856	2623.12735	2962.712483	3295.515644	3627.39395
-0.65	-891.3519181	-1262.727021	-1341.928199	-1581.464037	-715.0028769	-966.0826699	-1105.53922	-1237.78723	-1376.832
+0.65	2172.843188	2778.808863	2793.247551	2906.848599	1749.304838	2381.163473	2688.885224	2985.162334	3289.015312
-0.7	-959.9174503	-1359.859869	-1445.153446	-1703.115116	-770.0030982	-1040.396721	-1190.5807	-1333.00163	-1482.74215
+0.7	1903.907374	2414.927303	2397.422544	2467.042902	1537.318438	2089.241631	2356.688157	2610.570371	2876.644896
-0.75	-1028.482982	-1456.992717	-1548.378692	-1824.766196	-825.0033195	-1114.710773	-1275.62218	-1428.21603	-1588.65231
+0.75	1595.490888	1983.708741	1935.897264	1936.829431	1291.940932	1755.106567	1974.930107	2183.957141	2401.207234
-0.8	-1097.048515	-1554.125564	-1651.603938	-1946.417276	-880.0035408	-1189.024824	-1360.66366	-1523.43043	-1694.56246
+0.8	1255.277876	1495.455545	1416.929414	1296.574488	1019.187441	1387.091105	1553.0951	1710.700267	1874.470197
-0.85	-1165.614047	-1651.258412	-1754.829184	-2097.278901	-935.0037621	-1263.338876	-1445.70514	-1618.64484	-1800.47262
+0.85	891.4965957	961.6333842	849.1970237	737.1010127	725.5086623	994.392136	1101.342633	1204.820965	1309.047749
-0.9	-1234.179579	-1748.39126	-1858.05443	-2301.960695	-990.0039834	-1337.652928	-1530.74662	-1713.85924	-1906.38277
+0.9	512.9202419	469.7570081	416.9576422	353.476741	417.7914208	586.9089666	630.5074506	680.9242489	718.39701
-0.95	-1302.745111	-1845.524108	-1961.279676	-2604.328641	-1045.004205	-1411.966979	-1615.7881	-1809.07364	-2012.29292
+0.95	200.3213547	200.1667644	159.1986806	128.4690997	162.2980759	219.9979836	220.5824574	227.2358836	227.2187718
-1	-1371.310691	-1942.657028	-2064.504879	-3517.102882	-1100.004437	-1486.28109	-1700.8296	-1904.28806	-2118.20309
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1371.310691	-1942.657028	-2064.504879	-3517.102882	-1100.004437	-1486.28109	-1700.8296	-1904.28806	-2118.20309
+2	0	0	0	0	0	0	0	0	0
-2.05	-1302.745156	-1845.524178	-1961.279484	-2604.328154	-1045.004216	-1411.967035	-1615.78812	-1809.07365	-2012.29294
+2.05	200.3245088	200.1696719	159.2008946	128.4704603	162.3163247	220.0070385	220.5991465	227.2403378	227.2230498
-2.1	-1234.179621	-1748.391328	-1858.054246	-2301.96072	-990.003995	-1337.65298	-1530.74664	-1713.85925	-1906.38278
+2.1	512.9382495	469.7370409	416.9619988	353.4742679	417.8020236	586.9272164	630.5216475	680.9446545	718.4015724
-2.15	-1165.614086	-1651.258478	-1754.829007	-2097.278921	-935.0037739	-1263.338924	-1445.70516	-1618.64485	-1800.47263
+2.15	891.4947036	961.6503156	849.2066788	737.1069898	725.5204831	994.4121806	1101.358849	1204.818702	1309.054648
-2.2	-1097.048551	-1554.125628	-1651.603769	-1946.417295	-880.0035528	-1189.024869	-1360.66368	-1523.43044	-1694.56248
+2.2	1255.276876	1495.473166	1416.937331	1296.571081	1019.199725	1387.086879	1553.112423	1710.701713	1874.47824
-2.25	-1028.483016	-1456.992778	-1548.378531	-1824.766214	-825.0033316	-1114.710814	-1275.6222	-1428.21604	-1588.65232

+2.25	1595.490206	1983.701051	1935.90426	1936.836514	1291.953076	1755.102461	1974.947594	2183.958303	2401.21513
-2.3	-959.9174805	-1359.859928	-1445.153293	-1703.115133	-770.0031105	-1040.396759	-1190.58072	-1333.00164	-1482.74217
+2.3	1903.906176	2414.940822	2397.418327	2467.049065	1537.330188	2089.237142	2356.705122	2610.569381	2876.652184
-2.35	-891.3519454	-1262.727078	-1341.928054	-1581.464053	-715.0028894	-966.0827039	-1105.53924	-1237.78723	-1376.83202
+2.35	2172.84091	2778.822664	2793.257614	2906.85317	1749.315781	2381.157971	2688.900816	2985.159971	3289.020957
-2.4	-822.7864102	-1165.594229	-1238.702816	-1459.812972	-660.0026683	-891.7686488	-1020.49776	-1142.57283	-1270.92187
+2.4	2395.155509	3065.624046	3107.4974	3239.083333	1922.33043	2623.12014	2962.726172	3295.511055	3627.397221
-2.45	-754.2208751	-1068.461379	-1135.477578	-1338.161891	-605.0024472	-817.4545937	-935.456283	-1047.35843	-1165.01171
+2.45	2564.255492	3277.723755	3355.987035	3472.247461	2051.230467	2807.967437	3170.047898	3532.412612	3883.818093
-2.5	-685.6553399	-971.3285286	-1032.252339	-1216.510811	-550.002226	-743.1405385	-850.414803	-952.144025	-1059.10156
+2.5	2674.091003	3404.174283	3516.34826	3614.454714	2131.308048	2929.131193	3303.408533	3687.411425	4063.278052
-2.55	-617.0898048	-874.1956786	-929.0271011	-1094.85973	-495.0020049	-668.8264834	-765.373323	-856.929622	-953.191407
+2.55	2723.461051	3455.186289	3588.204904	3722.480327	2164.652825	2984.445704	3362.585807	3758.011168	4147.019774
-2.6	-548.5242697	-777.0628287	-825.8018628	-973.2086494	-440.0017838	-594.5124283	-680.331843	-761.715219	-847.281254
+2.6	2724.012959	3483.453944	3583.700696	3729.942041	2174.881239	2982.606254	3366.732786	3755.497876	4134.71718
-2.65	-479.9587345	-679.9299787	-722.5766245	-851.5575688	-385.0015627	-520.1983731	-595.290363	-666.500815	-741.371101
+2.65	2653.143136	3413.756761	3470.764182	3640.578558	2129.044699	2903.607222	3282.675533	3653.366408	4024.414345
-2.7	-411.3931994	-582.7971288	-619.3513862	-729.9064881	-330.0013415	-445.884318	-510.248883	-571.286412	-635.460948
+2.7	2507.614415	3260.824807	3287.398055	3436.428489	2023.640649	2742.626619	3106.093244	3450.771846	3809.364825
-2.75	-342.8276642	-485.6642788	-516.1261479	-608.2554075	-275.0011204	-371.5702628	-425.207403	-476.072009	-529.550795
+2.75	2300.756147	2998.221521	3018.656049	3155.203061	1855.601815	2502.541669	2831.688949	3159.141982	3472.343977
-2.8	-274.2621291	-388.5314289	-412.9009096	-486.6043268	-220.0008993	-297.2562077	-340.165923	-380.857606	-423.640642
+2.8	2012.565707	2622.831695	2657.438681	2743.830823	1622.29581	2188.121263	2470.31318	2754.232974	3009.669962
-2.85	-205.6965939	-291.3985789	-309.6756713	-364.9532462	-165.0006782	-222.9421526	-255.124443	-285.643202	-317.73049
+2.85	1640.259089	2153.771602	2169.404118	2266.532432	1321.527377	1782.652184	2014.746182	2232.219029	2429.720095
-2.9	-137.1310588	-194.265729	-206.450433	-243.3021655	-110.0004571	-148.6280974	-170.082963	-190.428799	-211.820337
+2.9	1181.595871	1561.983314	1581.290198	1662.409693	951.5361566	1283.750271	1452.311019	1591.641909	1735.713634
-2.95	-68.56552365	-97.13287902	-103.2251947	-121.6510849	-55.00023594	-74.31404231	-85.041483	-95.2143959	-105.910184
+2.95	634.8816725	844.4764136	858.7574145	919.1193215	511.285098	689.6187097	780.8439555	855.3414446	930.791832
-3	-4.30E-13	-4.48E-13	-4.70E-13	-5.13E-13	-4.07E-13	-4.68E-13	-5.03E-13	-5.51E-13	-5.53E-13
+3	2.72E-13	1.98E-13	2.47E-13	2.62E-13	2.17E-13	2.01E-13	2.55E-13	2.44E-13	2.58E-13

2-Span: Moment (Max and Min) Raw Data Results - 150' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.64E-13	-3.20E-13	-2.32E-13	-2.30E-13	-2.45E-13
End Shear	4.09E-13	3.67E-13	2.75E-13	2.79E-13	2.79E-13
-0.05	-186.8831985	-206.2249903	-117.784871	-142.015638	-152.913498
+0.05	1534.037553	1647.681381	1005.322919	1213.140003	1286.849982
-0.1	-373.7663969	-412.4499806	-235.569741	-284.031276	-305.826995
+0.1	2822.619522	3041.301875	1856.110938	2240.469496	2373.247692
-0.15	-560.6495954	-618.6749708	-353.354612	-426.046913	-458.740493
+0.15	3925.456941	4219.68061	2554.026326	3092.716537	3281.071139
-0.2	-747.5327939	-824.8999611	-471.139483	-568.062551	-611.65399
+0.2	4796.443781	5240.007134	3146.719402	3799.74263	4023.288764
-0.25	-934.4159923	-1031.124951	-588.924353	-710.078189	-764.567488
+0.25	5486.119686	6026.534941	3600.511191	4333.91031	4623.613626
-0.3	-1121.299191	-1237.349942	-706.709224	-852.093827	-917.480985
+0.3	6016.025997	6621.290075	3922.885096	4703.817124	5047.32866
-0.35	-1308.182389	-1443.574932	-824.494094	-994.109464	-1070.39448
+0.35	6364.550419	7000.298126	4131.558713	4944.793768	5298.17108
-0.4	-1495.065588	-1649.799922	-942.278965	-1136.1251	-1223.30798
+0.4	6568.943776	7172.065033	4210.852415	5031.384133	5415.940474
-0.45	-1681.948786	-1856.024913	-1060.06384	-1278.14074	-1376.22148
+0.45	6571.35527	7223.892625	4169.706415	4974.830795	5374.622076
-0.5	-1868.831985	-2062.249903	-1177.84871	-1420.15638	-1529.13498
+0.5	6445.92766	7063.322677	4109.607967	4906.102273	5290.791124
-0.55	-2055.715183	-2268.474893	-1295.63358	-1562.17202	-1682.04847
+0.55	6157.899953	6719.200615	3964.799834	4737.37242	5091.522107
-0.6	-2242.598382	-2474.699883	-1413.41845	-1704.18765	-1834.96197
+0.6	5698.235295	6265.574238	3707.941955	4433.634864	4750.989814
-0.65	-2429.48158	-2680.924874	-1531.20332	-1846.20329	-1987.87547
+0.65	5106.912999	5631.877737	3348.508435	4005.54339	4296.827015
-0.7	-2616.364779	-2887.149864	-1648.98819	-1988.21893	-2140.78897
+0.7	4397.743412	4837.022027	2897.616086	3471.344019	3720.43875
-0.75	-2803.247977	-3093.374854	-1766.77306	-2130.23457	-2293.70246
+0.75	3558.471512	3899.696339	2370.877833	2844.999254	3037.264856
-0.8	-2990.131175	-3299.599845	-1884.55793	-2272.2502	-2446.61596
+0.8	2609.747068	2847.797867	1776.814687	2131.472932	2264.014513
-0.85	-3177.014374	-3505.824835	-2002.3428	-2414.26584	-2599.52946
+0.85	1573.785678	1703.349252	1125.066375	1347.077344	1418.667578
-0.9	-3363.897572	-3712.049825	-2120.12767	-2556.28148	-2752.44296
+0.9	702.2450706	748.106299	583.4054414	668.1997534	713.0366041
-0.95	-3550.780771	-3918.274815	-2237.91254	-2698.29712	-2905.35645
+0.95	258.433937	239.998429	229.6044274	263.4103119	263.5553461
-1	-3737.663894	-4124.531821	-2355.69755	-2840.31275	-3058.27006
+1	0	0	0	0	0
(Span 2) -2	-3737.663894	-4124.531821	-2355.69755	-2840.31275	-3058.27006
+2	0	0	0	0	0
-2.05	-3550.780697	-3918.305227	-2237.91267	-2698.29687	-2905.35656
+2.05	258.4250969	239.9970671	229.5800339	263.40128	263.5463132
-2.1	-3363.8975	-3712.078632	-2120.1278	-2556.28125	-2752.44306
+2.1	702.2561303	750.1729979	583.4067753	668.1932716	713.0508216
-2.15	-3177.014302	-3505.852038	-2002.34292	-2414.26562	-2599.52956
+2.15	1573.795677	1705.856724	1125.068456	1347.082035	1418.678184
-2.2	-2990.131105	-3299.625444	-1884.55804	-2272.25	-2446.61606
+2.2	2609.75867	2849.826746	1776.817106	2131.477871	2264.025827
-2.25	-2803.247908	-3093.39885	-1766.77317	-2130.23437	-2293.70256

+2.25	3558.481988	3901.900116	2370.879401	2845.003139	3037.275442
-2.3	-2616.364711	-2887.172256	-1648.98829	-1988.21875	-2140.78905
+2.3	4397.751914	4837.020839	2897.614522	3471.346242	3720.447687
-2.35	-2429.481513	-2680.945661	-1531.20341	-1846.20312	-1987.87555
+2.35	5106.917549	5630.764297	3348.504547	4005.540488	4296.832574
-2.4	-2242.598316	-2474.719067	-1413.41854	-1704.1875	-1834.96205
+2.4	5699.982331	6265.575696	3707.934795	4433.627996	4750.991277
-2.45	-2055.715119	-2268.492473	-1295.63366	-1562.17187	-1682.04855
+2.45	6157.913573	6719.201311	3964.788959	4737.360996	5091.517086
-2.5	-1868.831921	-2062.265879	-1177.84878	-1420.15625	-1529.13505
+2.5	6445.934619	7065.671815	4109.620294	4906.110149	5290.78018
-2.55	-1681.948724	-1856.039285	-1060.0639	-1278.14062	-1376.22155
+2.55	6571.351486	7223.890628	4169.696135	4974.82557	5374.611201
-2.6	-1495.065527	-1649.81269	-942.279028	-1136.125	-1223.30805
+2.6	6568.932497	7172.065728	4210.865741	5031.373826	5415.948429
-2.65	-1308.182329	-1443.586096	-824.494151	-994.10937	-1070.39455
+2.65	6364.529886	7000.296902	4131.566378	4944.801877	5298.171903
-2.7	-1121.299132	-1237.359502	-706.709274	-852.093745	-917.481048
+2.7	6016.018749	6622.371004	3922.886682	4703.817854	5047.321013
-2.75	-934.4159349	-1031.132908	-588.924397	-710.078119	-764.567547
+2.75	5486.127122	6026.533799	3600.506638	4333.903563	4623.623142
-2.8	-747.5327376	-824.9063135	-471.13952	-568.062494	-611.654047
+2.8	4797.725201	5240.004636	3146.708286	3799.740392	4023.276575
-2.85	-560.6495403	-618.6797193	-353.354644	-426.046868	-458.740546
+2.85	3925.467044	4219.67978	2554.020051	3092.718265	3281.074968
-2.9	-373.7663431	-412.4531251	-235.569767	-284.031243	-305.827045
+2.9	2822.618579	3041.302031	1856.097469	2240.462462	2373.241999
-2.95	-186.8831458	-206.2265309	-117.78489	-142.015618	-152.913544
+2.95	1534.024944	1647.683228	1005.330675	1213.124657	1286.835005
-3	-7.65E-13	-7.84E-13	-5.66E-13	-6.19E-13	-6.59E-13
+3	3.75E-13	3.89E-13	2.56E-13	2.83E-13	3.55E-13

2-Span: Shear (Max and Min) Raw Data Results - 150' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.79334	-4.74051	-6.715606104	-7.13682	-8.87458	-3.802625273	-5.13795	-5.87963	-6.582967915	-7.32245
End Shear	66.42724	47.08181	62.98234581	64.32292	73.58781	37.9067601	51.1099	57.91679	63.46940866	69.16952
-0.05	-6.79334	-4.74051	-6.715606104	-7.13682	-8.91825	-3.802625273	-5.13795	-5.87963	-6.582967915	-7.32245
+0.05	61.84676	43.89028	58.38528874	59.37264	65.96152	35.34915017	47.65965	53.96338	59.04904459	64.25528
-0.1	-6.79334	-4.74051	-6.715606104	-7.13682	-9.06783	-3.802625273	-5.13795	-5.87963	-6.582967915	-7.32245
+0.1	57.12644	40.6027	53.65178893	54.28098	58.35696	32.7162963	44.10535	49.89025	54.49642169	59.19587
-0.15	-7.94557	-6.19242	-6.715606104	-7.13682	-9.28557	-5.196552598	-6.9525	-7.23365	-7.233650267	-7.32245
+0.15	53.08274	37.7513	49.56386444	49.89775	52.10483	30.43205398	41.02184	46.35886	50.55352904	54.81877
-0.2	-12.285	-9.47938	-8.626495529	-7.79416	-9.63295	-7.825168175	-10.5021	-11.2957	-11.25986824	-11.2571
+0.2	48.46561	34.53167	44.96857443	44.98706	45.40551	27.85199896	37.53922	42.37298	46.10810422	49.88931
-0.25	-16.4003	-12.33	-12.35872467	-10.5017	-10.8967	-10.10415118	-13.5797	-14.8351	-15.19889825	-15.3563
+0.25	44.49109	31.7573	41.02731841	40.79031	40.13468	25.62801497	34.53742	38.93973	42.28344464	45.65316
-0.3	-21.0513	-15.5485	-16.85295513	-14.7302	-14.6108	-12.67642664	-17.0536	-18.8327	-19.69883749	-20.3923
+0.3	40.03843	28.64578	36.62906137	36.12489	34.43512	23.13288966	31.16986	35.09091	38.00106025	40.91591
-0.35	-25.0627	-18.3216	-20.9753734	-18.5693	-18.047	-14.89205407	-20.0461	-22.2786	-23.58204816	-24.7429
+0.35	36.23319	25.98358	32.88595186	32.17089	29.97693	20.99727905	28.28772	31.79938	34.34349028	36.8752
-0.4	-29.566	-21.4315	-25.61905841	-23.4874	-22.4658	-17.37585781	-23.4009	-26.1445	-27.94374664	-29.6352
+0.4	32.00298	23.02035	28.7435583	27.81505	25.19556	18.61921932	25.07861	28.13743	30.27998594	32.39244
-0.45	-33.423	-24.092	-29.61050578	-27.9064	-26.4973	-19.50001274	-26.2703	-29.4534	-31.68156751	-33.8328
+0.45	28.41776	20.50548	25.25006076	24.16006	21.51437	16.60009853	22.35409	25.0312	26.83836924	28.60165
-0.5	-37.7209	-27.0531	-34.07509605	-32.8656	-31.5224	-21.86321029	-29.4628	-33.1378	-35.84918874	-38.519
+0.5	24.46798	17.7307	21.42235508	20.1781	17.83236	14.37123917	19.34682	21.60593	23.04958941	24.43566
-0.55	-41.3728	-29.5658	-37.88410132	-37.1114	-35.9679	-23.86777708	-32.171	-36.266	-39.39275825	-42.5091
+0.55	21.1535	15.39831	18.22995129	16.87839	14.7936	12.49672644	16.81788	18.7286	19.87278806	20.94929
-0.6	-45.4073	-32.3379	-42.11077194	-41.8406	-41.1083	-26.07823262	-35.1577	-39.7191	-43.31045795	-46.9271
+0.6	17.54213	12.85215	14.77575852	13.33459	11.60626	10.44919986	14.05582	15.58984	16.41457451	17.16234
-0.65	-48.8035	-34.6677	-45.68585548	-45.8569	-45.7188	-27.9350928	-37.6669	-42.6231	-46.61091498	-50.6552
+0.65	14.54912	10.73738	11.9359174	10.50691	9.094894	8.747411447	11.76043	12.98498	13.5514496	14.03487
-0.7	-52.5168	-37.2106	-49.61577889	-50.2917	-51.7479	-29.96067475	-40.4044	-45.795	-50.22285031	-54.7426
+0.7	11.33413	8.460022	8.914067536	7.748935	6.653302	6.913350992	9.286963	10.18253	10.47964477	10.68923
-0.75	-55.6066	-39.3223	-52.90547559	-54.0223	-57.5848	-31.64171205	-42.6765	-48.4312	-53.23133311	-58.1542
+0.75	8.713321	6.598018	6.568915228	5.59156	4.77208	5.412403737	7.263072	7.893739	7.979060407	7.978179
-0.8	-58.9409	-41.5959	-56.47982436	-58.0983	-64.2291	-33.45028621	-45.1215	-51.2722	-56.48165931	-61.8488
+0.8	5.952695	4.629627	4.243784657	3.787279	3.184059	3.823943285	5.121589	5.477411	5.463269802	5.462515
-0.85	-61.6737	-43.4545	-59.43265672	-61.487	-70.6983	-34.92738394	-47.1187	-53.597	-59.1493062	-64.8895
+0.85	3.893863	3.055543	2.880765159	2.383675	2.013244	2.551954948	3.407162	3.548276	3.546728961	3.546009
-0.9	-64.571	-45.4186	-62.59260118	-65.14	-78.2193	-36.48681704	-49.2277	-56.0572	-61.98218712	-68.129
+0.9	1.816555	1.648533	1.643101306	1.30615	1.060753	1.241226787	1.776422	1.845134	1.844542693	1.843966
-0.95	-66.8962	-46.9887	-65.15709879	-68.1304	-84.9407	-37.73185733	-50.912	-58.027	-64.26013849	-70.7442
+0.95	0.859171	0.653074	0.68043882	0.540451	0.427704	0.590580174	0.630712	0.658822	0.630704829	0.661535
-1	-69.2987	-48.6032	-67.84381483	-71.2961	-92.6951	-39.01001748	-52.6417	-60.0566	-66.61972633	-73.4663
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.17604	48.50794	67.68358546	71.10615	92.21673	38.93469927	52.53972	59.93676	66.4799375	73.30455
-2.05	-7.98E-01	-0.61785	-0.615946975	-0.48915	-3.87E-01	-0.546996987	-0.59688	-0.59652	-0.596936248	-0.59734
+2.05	67.07519	47.09517	65.33254287	68.33598	85.43137	37.81621801	51.02613	58.16072	64.41513531	70.92251
-2.1	-1.93799	-1.72154	-1.716066113	-1.36418	-1.11002	-1.318638856	-1.86203	-1.94481	-1.944214024	-1.94363
+2.1	64.41924	45.30083	62.40183062	64.91855	77.75376	36.39338933	49.10134	55.90958	61.81189767	67.93388
-2.15	-3.75416	-2.94879	-2.800140513	-2.29208	-1.9352	-2.46561655	-3.29081	-3.41822	-3.417597302	-3.41698
+2.15	61.88459	43.58211	59.63671739	61.72198	71.17265	35.02879394	47.25584	53.75678	59.33296968	65.09914
-2.2	-6.11974	-4.74765	-4.358891894	-3.8892	-3.27326	-3.919242954	-5.25005	-5.62217	-5.607068152	-5.60631
+2.2	58.76186	41.4582	56.26219163	57.8494	63.78338	33.3407585	44.97342	51.09996	56.28436572	61.62428
-2.25	-8.53392	-6.4701	-6.415203285	-5.45994	-4.65657	-5.309238048	-7.12397	-7.7366	-7.807695252	-7.80681
+2.25	55.84414	39.46868	53.13447955	54.28271	57.99877	31.75816958	42.83397	48.61398	53.44017194	58.39132

-2.3	-11.527	-8.59802	-9.095919494	-7.91468	-6.79864	-7.024529269	-9.43688	-10.3522	-10.66538155	-10.8912
+2.3	52.31261	37.05538	49.37497655	50.01928	51.32821	29.83706158	40.2373	45.6013	50.00204441	54.4925
-2.35	-14.3382	-10.5908	-11.74019465	-10.3281	-8.9351	-8.629417932	-11.6013	-12.8045	-13.35336063	-13.8188
+2.35	49.06255	34.8302	45.93613313	46.13873	46.09145	28.06458908	37.84186	42.82573	46.84144765	50.91583
-2.4	-17.7561	-13.0076	-14.98558499	-13.549	-11.7974	-10.57424156	-14.2245	-15.7814	-16.62536607	-17.3929
+2.4	45.18019	32.16767	41.85047157	41.54875	40.7802	25.94254125	34.97433	39.50699	43.06963785	46.65531
-2.45	-20.9138	-15.2356	-18.00816657	-16.6499	-14.5837	-12.36591617	-16.6414	-18.5279	-19.65145754	-20.7066
+2.45	41.64852	29.742	38.15198382	37.4106	36.2826	24.00830568	32.36086	36.48542	39.64150835	42.78941
-2.5	-24.6988	-17.9011	-21.65648147	-20.4209	-18.0552	-14.50813761	-19.5315	-21.8162	-23.2819472	-24.6909
+2.5	37.47331	26.87041	33.79898491	32.5584	31.20208	21.71745796	29.26584	32.91044	35.59185138	38.22948
-2.55	-28.1523	-20.3291	-25.00588601	-23.9053	-21.2771	-16.45847661	-22.163	-24.8134	-26.59728125	-28.3363
+2.55	33.6822	24.27938	29.89230971	28.21892	26.78654	19.64957546	26.47231	29.68646	31.94504215	34.12883
-2.6	-32.2464	-23.2032	-28.99830065	-28.0822	-25.4852	-18.76595709	-25.2766	-28.3633	-30.53041347	-32.6685
+2.6	29.27405	21.2389	25.33082249	23.16876	22.17852	17.22205126	23.1932	25.90505	27.67339482	29.33176
-2.65	-35.9452	-25.7961	-32.62304892	-31.8938	-29.6691	-20.84684388	-28.0847	-31.5676	-34.08612899	-36.5911
+2.65	25.33324	18.51766	21.26744317	18.84139	18.29386	15.04864418	20.25755	22.52223	23.85675219	25.05085
-2.7	-40.2905	-28.8385	-36.90074435	-36.4125	-34.7817	-23.28745979	-31.3785	-35.3292	-38.26606241	-41.2089
+2.7	20.74865	15.34847	16.55626122	14.45403	14.36687	12.51658267	16.83772	18.5842	19.41894873	20.07891
-2.75	-44.1838	-31.5612	-40.74937709	-40.4949	-39.769	-25.47077285	-34.3252	-38.6971	-42.01328966	-45.3541
+2.75	16.67879	12.53218	12.62423165	10.72978	11.0987	10.26575827	13.79794	15.08615	15.48136704	15.67226
-2.8	-48.7227	-34.7318	-45.25350106	-45.291	-45.8059	-28.01238519	-37.7557	-42.6207	-46.38419744	-50.1953
+2.8	11.97562	9.274431	8.420569009	7.613568	9.608183	7.661291872	10.28076	11.04132	11.00752092	11.00479
-2.85	-52.7599	-37.5491	-49.27453777	-49.588	-51.6692	-30.27001692	-40.8031	-46.1084	-50.27408213	-54.5087
+2.85	8.196918	6.398236	6.715606254	7.136824	9.304215	5.361172245	7.17479	7.471593	7.466777201	7.463954
-2.9	-57.4342	-40.8077	-53.94629838	-54.5972	-58.8142	-32.88049263	-44.327	-50.1442	-54.78008974	-59.511
+2.9	6.793323	4.740509	6.715606254	7.136824	9.055375	3.802625261	5.137952	5.879629	6.582967988	7.322455
-2.95	-61.5648	-43.6844	-58.08824688	-59.0526	-65.4695	-35.18432105	-47.4371	-53.7083	-58.76376991	-63.9381
+2.95	6.793323	4.740509	6.715606254	7.136824	8.924487	3.802625261	5.137952	5.879629	6.582967988	7.322455
-3	-66.3168	-46.9909	-62.86879964	-64.2107	-73.5118	-37.83152662	-51.011	-57.8064	-63.34905211	-69.0391
+3	6.793323	4.740509	6.715606254	7.136824	8.874584	3.802625261	5.137952	5.879629	6.582967988	7.322455

HDR

2-Span: Shear (Max and Min) Raw Data Results - 150' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.79334	-6.19909	-6.670079196	-6.28702	-7.61165	-7.804547695	-8.26034	-3.30039
End Shear	66.42724	62.29968	66.67684168	62.61095	75.01695	72.54828227	76.71596	32.96885
-0.05	-6.79334	-6.19909	-6.670079196	-6.28702	-7.61165	-7.804547695	-8.26034	-3.30039
+0.05	61.84676	58.1401	62.19925159	58.39276	69.90835	67.21430598	71.06939	30.75014
-0.1	-6.79334	-6.19909	-6.670079196	-6.28702	-7.61165	-7.804547695	-8.26034	-3.30039
+0.1	57.12644	53.85491	57.58785677	54.04686	64.64806	61.72404925	65.25773	28.4455
-0.15	-7.94557	-9.14612	-9.435734051	-8.64182	-9.60173	-7.804547695	-8.26034	-4.30666
+0.15	53.08274	50.13507	53.58605736	50.27618	60.08656	56.98431516	60.24083	26.44674
-0.2	-12.285	-13.4136	-14.03443361	-12.9797	-14.8659	-9.883058164	-10.4684	-6.61127
+0.2	48.46561	45.93114	49.06485557	46.01696	54.93699	51.65835568	54.60379	24.18999
-0.25	-16.4003	-17.1114	-18.02048455	-16.7404	-19.4321	-13.75929406	-14.4835	-8.60999
+0.25	44.49109	42.30525	45.16657973	42.34533	50.5005	47.09226508	49.77133	22.2455
-0.3	-21.0513	-21.2827	-22.5183905	-20.9849	-24.5887	-18.994398	-20.0113	-10.8667
+0.3	40.03843	38.23479	40.79180459	38.22581	45.52593	41.99890851	44.38123	20.06489
-0.35	-25.0627	-24.8736	-26.39164286	-24.6407	-29.0327	-23.78882565	-25.0887	-12.8111
+0.35	36.23319	34.74854	37.04625465	34.69962	41.27068	37.66623794	39.79649	18.19937
-0.4	-29.566	-28.8967	-30.73251936	-28.7388	-34.0175	-29.19151981	-30.8105	-14.9917
+0.4	32.00298	30.86378	32.8741429	30.77283	36.53538	32.87379824	34.72567	16.12316
-0.45	-33.423	-32.3349	-34.44377198	-32.2433	-38.2831	-33.83719532	-35.7309	-16.8571
+0.45	28.41776	27.56286	29.33052554	27.43848	32.51761	28.83430941	30.45193	14.36134
-0.5	-37.7209	-36.1575	-38.57138355	-36.142	-43.0318	-39.03573207	-41.2372	-18.9332
+0.5	24.46798	23.91601	25.41730976	23.75744	28.08585	24.41109378	25.77271	12.41776
-0.55	-41.3728	-39.3975	-42.07142491	-39.4488	-47.0627	-43.4728873	-45.9374	-20.695
+0.55	21.1535	20.84611	22.1248275	20.66133	24.36179	20.72456735	21.87327	10.78435
-0.6	-45.4073	-42.9672	-45.92953784	-43.095	-51.511	-48.398959	-51.1559	-22.6384
+0.6	17.54213	17.4894	18.52674736	17.27906	20.29784	16.73888349	17.65797	9.001656
-0.65	-48.8035	-45.9632	-49.16916421	-46.1577	-55.251	-52.56781561	-55.5726	-24.2717
+0.65	14.54912	14.69621	15.53460783	14.46757	16.92374	13.4650854	14.19612	7.521383
-0.7	-52.5168	-49.2281	-52.70154441	-49.4984	-59.3347	-57.15311145	-60.4309	-26.0543
+0.7	11.33413	11.68184	12.30789097	11.43711	13.29187	9.985246834	10.51707	5.927816
-0.75	-55.6066	-51.9344	-55.63155106	-52.2707	-62.7275	-60.99390804	-64.5008	-27.5344
+0.75	8.713321	9.21106	9.66530321	8.956643	10.32396	7.285932453	7.669403	4.62539
-0.8	-58.9409	-54.842	-58.78196252	-55.2529	-66.3823	-65.17011763	-68.9266	-29.1278
+0.8	5.952695	6.591263	6.866190328	6.33101	7.188446	4.873676633	5.159089	3.249204
-0.85	-61.6737	-57.2129	-61.35314465	-57.6882	-69.3718	-68.62307835	-72.5864	-30.4301
+0.85	3.893863	4.48857	4.622356352	4.227959	4.682959	3.343507503	3.53353	2.149344
-0.9	-64.571	-59.7112	-64.06535263	-60.2589	-72.5334	-72.32188846	-76.5074	-31.8061
+0.9	1.816555	2.340994	2.34099442	2.195553	2.333703	1.779750295	1.873421	1.262766
-0.95	-66.8962	-61.7011	-66.22850462	-62.311	-75.0632	-75.32724586	-79.6939	-32.9058
+0.95	0.859171	0.97298	0.972979587	0.742015	0.777809	0.707242315	0.744466	0.613058
-1	-69.2987	-63.7377	-68.446276	-64.4171	-77.6674	-78.48034985	-83.0378	-34.0361
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.17604	63.61793	68.3156877	64.29301	77.51372	78.29214833	82.83814	33.96955
-2.05	-7.98E-01	-0.87816	-0.878164448	-0.70221	-0.7045	-0.667170383	-0.70228	-0.56669
+2.05	67.07519	61.83571	66.37497811	62.44998	75.23483	75.53298971	79.91207	32.98042
-2.1	-1.93799	-2.44469	-2.444690036	-2.30493	-2.4544	-1.858563388	-1.95638	-1.30881
+2.1	64.41924	59.5617	63.90293656	60.10491	72.34381	72.09846071	76.27057	31.72371
-2.15	-3.75416	-4.34565	-4.469957885	-4.08519	-4.51311	-3.239444427	-3.42299	-2.0747
+2.15	61.88459	57.37558	61.52959751	57.8554	69.57717	68.86181417	72.83949	30.51963
-2.2	-6.11974	-6.74861	-7.034212603	-6.48855	-7.37637	-4.988119144	-5.28068	-3.33161
+2.2	58.76186	54.66606	58.59123192	55.07229	66.16086	64.91573578	68.65701	29.03139
-2.25	-8.53392	-9.04108	-9.483595373	-8.78613	-10.1201	-7.108994142	-7.48315	-4.53584
+2.25	55.84414	52.12172	55.83446761	52.4627	62.9627	61.26137043	64.78422	27.63709

-2.3	-11.527	-11.8647	-12.50356118	-11.6208	-13.5119	-10.19453016	-10.7383	-6.02425
+2.3	52.31261	49.02893	52.48602466	49.29458	59.08536	56.87206347	60.13309	25.94558
-2.35	-14.3382	-14.5024	-15.32709758	-14.2726	-16.6899	-13.23957092	-13.9577	-7.4187
+2.35	49.06255	46.17206	49.39504222	46.3713	55.51193	52.85974338	55.88186	24.38577
-2.4	-17.7561	-17.6945	-18.74654443	-17.4856	-20.5459	-16.98088923	-17.9139	-9.11036
+2.4	45.18019	42.7482	45.69274453	42.87119	51.23783	48.09550817	50.83441	22.51922
-2.45	-20.9138	-20.6318	-21.89501809	-20.4453	-24.102	-20.468552	-21.6025	-10.6703
+2.45	41.64852	39.6245	42.31674674	39.68062	47.34536	43.78502034	46.26805	20.81862
-2.5	-24.6988	-24.1401	-25.65771702	-23.9835	-28.3579	-24.68155504	-26.0588	-12.537
+2.5	37.47331	35.9218	38.31684491	35.90155	42.73878	38.71416003	40.89659	18.80529
-2.55	-28.1523	-27.3312	-29.08192914	-27.2046	-32.2359	-28.55205702	-30.1533	-14.2377
+2.55	33.6822	32.57694	34.70502951	32.49008	38.5835	34.16525629	36.07836	16.98862
-2.6	-32.2464	-31.1036	-33.13163261	-31.0151	-36.8275	-33.16843711	-35.0374	-16.2511
+2.6	29.27405	28.64762	30.46374833	28.48507	33.70873	28.85610673	30.45525	14.85676
-2.65	-35.9452	-34.5029	-36.78237711	-34.4512	-40.971	-37.36200069	-39.4746	-18.0679
+2.65	25.33324	25.12731	26.66533807	24.8991	29.34688	24.12856955	25.44846	12.94872
-2.7	-40.2905	-38.487	-41.06286523	-38.481	-45.834	-42.31345722	-44.7141	-20.1998
+2.7	20.74865	21.02358	22.23891358	20.72117	24.26815	18.64940185	19.64598	10.72658
-2.75	-44.1838	-42.0488	-44.8909368	-42.0857	-50.1869	-46.77032765	-49.4306	-22.1079
+2.75	16.67879	17.37351	18.30310491	17.00711	19.75599	14.06915604	14.80964	8.751902
-2.8	-48.7227	-46.1926	-49.34595807	-46.2817	-55.257	-51.98852128	-54.9532	-24.3301
+2.8	11.97562	13.14757	13.74775428	12.70927	14.53758	9.690832507	10.2639	6.467719
-2.85	-52.7599	-49.8711	-53.30215114	-50.0087	-59.7631	-56.64891941	-59.8858	-26.3048
+2.85	8.196918	9.413428	9.723752864	8.913495	9.931328	7.804547557	8.260339	4.451108
-2.9	-57.4342	-54.1222	-57.87547953	-54.3179	-64.976	-62.06558078	-65.6192	-28.5891
+2.9	6.793323	6.19909	6.67007913	6.287025	7.61165	7.804547557	8.260339	3.300389
-2.95	-61.5648	-57.8719	-61.91060644	-58.1207	-69.5789	-66.86971372	-70.7046	-30.6057
+2.95	6.793323	6.19909	6.67007913	6.287025	7.61165	7.804547557	8.260339	3.300389
-3	-66.3168	-62.1782	-66.54600848	-62.4901	-74.8705	-72.41651243	-76.5765	-32.9237
+3	6.793323	6.19909	6.67007913	6.287025	7.61165	7.804547557	8.260339	3.300389

2-Span: Shear (Max and Min) Raw Data Results - 150' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.79334	-14.4117	-15.9032	-9.08308	-10.9517	-11.7921
End Shear	66.42724	128.114	137.8692	83.77493	101.0159	107.2871
-0.05	-6.79334	-14.4117	-15.9032	-9.08308	-10.9517	-11.7921
+0.05	61.84676	118.2025	127.0624	77.52635	93.50837	99.18632
-0.1	-6.79334	-14.4117	-15.9032	-9.08308	-10.9517	-11.7921
+0.1	57.12644	108.0126	115.8114	71.09718	85.78209	90.85175
-0.15	-7.94557	-14.4117	-15.9032	-9.08308	-10.9517	-11.7921
+0.15	53.08274	99.24191	106.1411	65.5518	79.11637	83.66786
-0.2	-12.285	-14.4117	-15.9032	-11.7025	-12.881	-13.8502
+0.2	48.46561	89.41722	95.32522	59.32636	71.63134	75.60878
-0.25	-16.4003	-20.0347	-21.2633	-14.8288	-18.2662	-17.9376
+0.25	44.49109	81.02227	86.09843	53.99439	65.2189	68.71165
-0.3	-21.0513	-28.3688	-29.2346	-20.7336	-25.3886	-25.5898
+0.3	40.03843	71.69132	75.86108	48.05304	58.07156	61.03255
-0.35	-25.0627	-36.3781	-36.59	-26.3834	-32.1673	-32.6956
+0.35	36.23319	63.78464	67.20319	43.00482	51.99679	54.51362
-0.4	-29.566	-46.5534	-47.375	-32.7555	-39.8108	-41.0026
+0.4	32.00298	55.07605	57.68768	37.42791	45.28357	47.31898
-0.45	-33.423	-55.4108	-57.277	-38.2394	-46.3877	-48.157
+0.45	28.41776	47.77019	49.72411	32.73375	39.63086	41.26965
-0.5	-37.7209	-65.353	-68.4068	-44.3817	-53.7523	-56.1761
+0.5	24.46798	39.81255	41.07378	27.60168	33.44822	34.66396
-0.55	-41.3728	-73.8668	-77.9513	-49.6295	-60.0429	-63.0327
+0.55	21.1535	33.22003	33.92994	23.3319	28.30195	29.17566
-0.6	-45.4073	-83.352	-88.601	-55.4616	-67.0322	-70.6593
+0.6	17.54213	26.14193	26.28812	18.72502	22.74632	23.26339
-0.65	-48.8035	-91.4097	-97.6627	-60.4029	-72.9521	-77.1268
+0.65	14.54912	20.37528	20.55342	14.94994	18.19087	18.42757
-0.7	-52.5168	-100.309	-107.689	-65.8445	-79.4696	-84.2564
+0.7	11.33413	14.76858	15.18277	10.94862	13.35869	13.42666
-0.75	-55.6066	-107.798	-116.142	-70.409	-84.9345	-90.2433
+0.75	8.713321	10.57654	11.04785	8.014115	9.722052	9.568491
-0.8	-58.9409	-115.984	-125.402	-75.3798	-90.8838	-96.7715
+0.8	5.952695	6.840135	6.983012	5.777309	6.344489	6.757121
-0.85	-61.6737	-122.792	-133.121	-79.4971	-95.8093	-102.186
+0.85	3.893863	4.332825	4.263319	3.979568	4.376607	4.521051
-0.9	-64.571	-130.134	-141.47	-83.9167	-101.094	-108.009
+0.9	1.816555	2.29946	2.079053	2.118556	2.325876	2.3356
-0.95	-66.8962	-136.148	-148.331	-87.5165	-105.396	-112.76
+0.95	0.859171	0.748212	0.75505	0.87197	0.930101	0.775544
-1	-69.2987	-142.519	-155.627	-91.3045	-109.919	-117.772
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.17604	142.137	155.1882	91.078	109.6487	117.4719
-2.05	-7.98E-01	-0.67895	-0.67231	-0.7895	-0.84214	-0.70223
+2.05	67.07519	136.5619	148.8042	87.76327	105.6904	113.0863
-2.1	-1.93799	-2.36785	-2.24588	-2.22876	-2.44651	-2.45632
+2.1	64.41924	129.6889	140.9639	83.6494	100.7744	107.6562
-2.15	-3.75416	-4.14171	-4.10195	-3.85727	-4.22877	-4.36921
+2.15	61.88459	123.2638	133.6581	79.78204	96.15013	102.5615
-2.2	-6.11974	-7.05897	-7.21545	-5.91172	-6.49159	-6.92458
+2.2	58.76186	115.4837	124.836	75.07677	90.52117	96.37323
-2.25	-8.53392	-10.3031	-10.7654	-7.86905	-9.47539	-9.36676
+2.25	55.84414	108.3211	116.7337	70.72708	85.31533	90.66082

-2.3	**-11.527**	**-15.1032**	**-15.4908**	**-11.1889**	**-13.649**	**-13.7178**
+2.3	**52.31261**	**99.76255**	**107.0731**	**65.51078**	**79.06991**	**83.81887**
-2.35	**-14.3382**	**-19.9823**	**-19.9896**	**-14.6902**	**-17.8774**	**-18.0952**
+2.35	**49.06255**	**91.97509**	**98.29985**	**60.74912**	**73.36687**	**77.5802**
-2.4	**-17.7561**	**-26.57**	**-26.7488**	**-19.0044**	**-23.0834**	**-23.6216**
+2.4	**45.18019**	**82.76663**	**87.94406**	**55.10215**	**66.60143**	**70.18903**
-2.45	**-20.9138**	**-32.7637**	**-33.4357**	**-23.0357**	**-27.9448**	**-28.7952**
+2.45	**41.64852**	**74.46677**	**78.62523**	**49.99881**	**60.48557**	**63.51549**
-2.5	**-24.6988**	**-40.2977**	**-41.5997**	**-27.9152**	**-33.826**	**-35.0672**
+2.5	**37.47331**	**64.73701**	**67.71757**	**44.00155**	**53.29656**	**55.67961**
-2.55	**-28.1523**	**-47.261**	**-49.1691**	**-32.406**	**-39.2361**	**-40.8475**
+2.55	**33.6822**	**56.0373**	**57.97864**	**38.62688**	**46.85229**	**48.66266**
-2.6	**-32.2464**	**-55.6102**	**-58.2699**	**-37.7705**	**-45.6961**	**-47.7608**
+2.6	**29.27405**	**45.91484**	**46.66247**	**32.3597**	**39.33615**	**40.4865**
-2.65	**-35.9452**	**-63.2306**	**-66.5964**	**-42.6505**	**-51.5704**	**-54.0564**
+2.65	**25.33324**	**36.92779**	**37.47769**	**26.78398**	**32.6478**	**33.21756**
-2.7	**-40.2905**	**-72.2664**	**-76.4907**	**-48.4197**	**-58.5128**	**-61.5063**
+2.7	**20.74865**	**27.79877**	**28.7389**	**20.32723**	**24.90097**	**25.10208**
-2.75	**-44.1838**	**-80.4314**	**-85.4488**	**-53.6186**	**-64.7669**	**-68.2258**
+2.75	**16.67879**	**20.52489**	**21.76372**	**15.16581**	**18.70696**	**18.3897**
-2.8	**-48.7227**	**-90.0253**	**-95.9932**	**-59.7121**	**-72.0952**	**-76.1079**
+2.8	**11.97562**	**14.41166**	**15.90334**	**11.47767**	**12.63564**	**13.5634**
-2.85	**-52.7599**	**-98.6222**	**-105.457**	**-65.1596**	**-78.6448**	**-83.1599**
+2.85	**8.196918**	**14.41166**	**15.90334**	**9.083083**	**10.95166**	**11.79206**
-2.9	**-57.4342**	**-108.646**	**-116.509**	**-71.4969**	**-86.2625**	**-91.3698**
+2.9	**6.793323**	**14.41166**	**15.90334**	**9.083083**	**10.95166**	**11.79206**
-2.95	**-61.5648**	**-117.562**	**-126.354**	**-77.1227**	**-93.0233**	**-98.6628**
+2.95	**6.793323**	**14.41166**	**15.90334**	**9.083083**	**10.95166**	**11.79206**
-3	**-66.3168**	**-127.886**	**-137.769**	**-83.6235**	**-100.834**	**-107.096**
+3	**6.793323**	**14.41166**	**15.90334**	**9.083083**	**10.95166**	**11.79206**

2-Span: Moment (Max and Min) Raw Data Results - 150' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-2.38E-13	-8.9E-14	-1.01088E-13	-8.8E-14	-9.60E-14	-1.25416E-13	-1.2E-13	-9.9E-14	-9.70236E-14	-9.6E-14
End Shear	2.30E-13	1.43E-13	1.43027E-13	1.25E-13	1.09E-13	1.30029E-13	1.14E-13	1.14E-13	1.13255E-13	1.13E-13
-0.05	-50.95	-35.5538	-50.36704578	-53.5262	-66.5594	-28.51968955	-38.5346	-44.0972	-49.37225937	-54.9184
+0.05	463.8507	329.2217	437.8896656	445.2948	499.6339	265.1186263	357.6039	404.9073	443.5297649	482.6532
-0.1	-101.9	-71.1076	-100.7340916	-107.052	-133.119	-57.0393791	-77.0693	-88.1944	-98.74451873	-109.837
+0.1	861.5123	612.7113	809.9538269	819.9619	905.3084	493.420809	665.681	753.0853	825.3259965	900.0318
-0.15	-152.85	-106.661	-151.1011373	-160.579	-199.678	-85.55906865	-115.604	-132.292	-148.1167781	-164.755
+0.15	1194.362	850.543	1116.815216	1124.918	1236.023	685.2732223	924.378	1044.726	1157.499337	1259.903
-0.2	-203.8	-142.215	-201.4681831	-214.105	-266.238	-114.0787582	-154.139	-176.389	-197.4890375	-219.674
+0.2	1462.874	1043.596	1360.03753	1377.979	1498.186	841.2311502	1134.627	1280.952	1428.180196	1560.625
-0.25	-254.75	-177.769	-251.8352289	-267.631	-332.797	-142.5984478	-192.673	-220.486	-246.8612968	-274.592
+0.25	1669.164	1193.031	1554.688336	1565.291	1723.37	962.2073229	1297.663	1468.336	1638.137588	1800.549
-0.3	-305.7	-213.323	-302.2022747	-321.157	-399.356	-171.1181373	-231.208	-264.583	-296.2335562	-329.51
+0.3	1819.203	1300.293	1690.85559	1704.638	1878.278	1049.340366	1422.154	1610.623	1789.356046	1975.304
-0.35	-356.65	-248.877	-352.5693204	-374.683	-465.916	-199.6378269	-269.742	-308.681	-345.6058156	-384.429
+0.35	1923.751	1375.753	1770.166787	1799.726	1990.43	1103.99476	1505.626	1702.198	1894.406063	2086.812
-0.4	-407.6	-284.431	-402.9363662	-428.209	-532.475	-228.1575164	-308.277	-352.778	-394.9780749	-439.347
+0.4	1972.274	1412.5	1806.306801	1858.279	2040.267	1127.761327	1546.588	1745.783	1947.362573	2144.005
-0.45	-458.55	-319.984	-453.303412	-481.736	-599.034	-256.677206	-346.812	-396.875	-444.3503343	-494.266
+0.45	1967.976	1412.212	1791.646972	1860.623	2037.107	1122.456332	1547.554	1743.631	1948.671974	2150.382
-0.5	-509.5	-355.538	-503.6704578	-535.262	-665.594	-285.1968955	-385.346	-440.972	-493.7225937	-549.184
+0.5	1934.425	1386.621	1765.18912	1823.355	1979.01	1105.160631	1518.871	1712.938	1912.067534	2106.965
-0.55	-560.45	-391.092	-554.0375035	-588.788	-732.153	-313.7165851	-423.881	-485.069	-543.094853	-604.103
+0.55	1856.399	1329.666	1699.617837	1740.21	1900.394	1063.636323	1456.042	1643.784	1831.692951	2013.907
-0.6	-611.4	-426.646	-604.4045493	-642.314	-798.713	-342.2362746	-462.416	-529.167	-592.4671124	-659.021
+0.6	1733.561	1241.98	1589.636077	1611.351	1771.826	996.7958806	1360.19	1536.278	1708.84918	1880.941
-0.65	-662.35	-462.2	-654.7715951	-695.84	-865.272	-370.7559642	-500.95	-573.264	-641.8393718	-713.939
+0.65	1570.374	1126.701	1440.917222	1448.404	1589.094	907.0805485	1234.723	1394.288	1547.919281	1705.479
-0.7	-713.3	-497.753	-705.1386409	-749.367	-931.831	-399.2756537	-539.485	-617.361	-691.2116311	-768.858
+0.7	1371.705	987.2478	1252.230906	1243.154	1347.79	797.1576033	1083.351	1222.032	1353.679217	1491.649
-0.75	-764.25	-533.307	-755.5056866	-802.893	-998.391	-427.7953433	-578.02	-661.458	-740.5838905	-823.776
+0.75	1142.83	827.3222	1028.627815	1003.836	1056.814	669.9201101	910.089	1024.076	1132.464165	1245.117
-0.8	-815.2	-568.861	-805.8727324	-856.419	-1064.95	-456.3150328	-616.554	-705.555	-789.9561499	-878.695
+0.8	889.4324	650.9089	775.4501141	734.7314	705.9868	528.4871355	719.2591	805.3384	887.0626222	971.9835
-0.85	-866.15	-604.415	-856.2397782	-909.945	-1151.65	-484.8347224	-655.089	-749.653	-839.3284092	-933.613
+0.85	617.6004	462.2746	498.643186	440.3407	399.2546	376.2036102	515.6298	571.0877	624.7451206	678.7906
-0.9	-917.1	-639.969	-906.606824	-963.471	-1275.48	-513.3544119	-693.624	-793.75	-888.7006686	-988.531
+0.9	333.8307	265.9685	243.5867297	216.2083	190.1251	216.6406123	304.3344	326.9419	353.08491	372.516
-0.95	-968.05	-675.522	-956.9738697	-1017	-1457.66	-541.8741015	-732.158	-837.847	-938.0729279	-1043.45
+0.95	122.4318	103.8742	103.7940184	82.55052	68.16041	84.15767481	114.0773	114.3803	117.8303778	117.8215
-1	-1019	-711.076	-1007.340953	-1070.52	-1962.9	-570.3937969	-770.693	-881.944	-987.4451944	-1098.37
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1019	-711.076	-1007.340953	-1070.52	-1962.9	-570.3937969	-770.693	-881.944	-987.4451944	-1098.37
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-968.049	-675.523	-956.9739062	-1017	-1457.66	-541.8741074	-732.158	-837.847	-938.0729345	-1043.45
+2.05	122.4318	103.8758	103.795526	82.55167	68.16111	84.16713751	114.0819	114.389	117.8326875	117.8237
-2.1	-917.099	-639.969	-906.6068593	-963.471	-1275.48	-513.3544179	-693.624	-793.75	-888.7006746	-988.531
+2.1	334.1179	265.9778	243.5763759	216.2105	190.1238	216.6461102	304.3439	326.9493	353.095491	372.5183
-2.15	-866.149	-604.415	-856.2398124	-909.945	-1151.65	-484.8347285	-655.089	-749.653	-839.3284147	-933.613
+2.15	617.9221	462.2736	498.6519656	440.3457	399.2577	376.2097397	515.6402	571.0961	624.743947	678.7942
-2.2	-815.199	-568.861	-805.8727655	-856.419	-1064.95	-456.315039	-616.554	-705.555	-789.9561548	-878.695
+2.2	889.7724	650.9084	775.4592514	734.7355	705.985	528.4935053	719.2569	805.3474	887.0633723	971.9877
-2.25	-764.249	-533.307	-755.5057186	-802.893	-998.391	-427.7953496	-578.02	-661.458	-740.5838949	-823.776

+2.25	1143.174	827.3219	1028.623828	1003.839	1056.818	669.9264073	910.0868	1024.085	1132.464767	1245.121
-2.3	-713.299	-497.753	-705.1386717	-749.366	-931.831	-399.2756601	-539.485	-617.361	-691.211635	-768.858
+2.3	1372.037	987.2472	1252.237916	1243.152	1347.793	797.1636961	1083.348	1222.041	1353.678704	1491.653
-2.35	-662.349	-462.2	-654.7716248	-695.84	-865.272	-370.7559706	-500.95	-573.264	-641.839375	-713.939
+2.35	1570.682	1126.7	1440.924378	1448.409	1589.096	907.0862229	1234.72	1394.297	1547.918056	1705.481
-2.4	-611.399	-426.646	-604.4045779	-642.314	-798.713	-342.2362812	-462.416	-529.167	-592.4671151	-659.021
+2.4	1733.833	1241.978	1589.641714	1611.355	1771.827	996.8008451	1360.187	1536.285	1708.846801	1880.942
-2.45	-560.449	-391.092	-554.037531	-588.788	-732.153	-313.7165917	-423.881	-485.069	-543.0948552	-604.103
+2.45	1856.623	1329.663	1699.623414	1740.206	1900.398	1063.640377	1456.037	1643.789	1831.689195	2013.906
-2.5	-509.499	-355.538	-503.6704841	-535.262	-665.594	-285.1969023	-385.346	-440.972	-493.7225953	-549.184
+2.5	1934.591	1386.617	1765.192784	1823.359	1979.012	1105.163623	1518.865	1712.942	1912.061927	2106.963
-2.55	-458.549	-319.984	-453.3034372	-481.736	-599.034	-256.6772128	-346.812	-396.875	-444.3503354	-494.266
+2.55	1967.853	1412.217	1791.644433	1860.62	2037.11	1122.454148	1547.548	1743.628	1948.670556	2150.386
-2.6	-407.599	-284.431	-402.9363903	-428.209	-532.475	-228.1575234	-308.277	-352.778	-394.9780755	-439.347
+2.6	1972.082	1412.503	1806.302278	1858.284	2040.271	1127.757967	1546.594	1745.778	1947.36732	2144.007
-2.65	-356.649	-248.877	-352.5693434	-374.683	-465.916	-199.6378339	-269.742	-308.681	-345.6058156	-384.429
+2.65	1923.481	1375.755	1770.16166	1799.722	1990.433	1103.989992	1505.63	1702.191	1894.408301	2086.811
-2.7	-305.7	-213.323	-302.2022965	-321.157	-399.356	-171.1181444	-231.208	-264.583	-296.2335557	-329.51
+2.7	1818.848	1300.293	1690.860673	1704.64	1878.282	1049.334016	1422.155	1610.627	1789.355378	1975.299
-2.75	-254.75	-177.769	-251.8352496	-267.631	-332.797	-142.598455	-192.673	-220.486	-246.8612957	-274.592
+2.75	1668.905	1193.029	1554.690962	1565.287	1723.374	962.199541	1297.662	1468.338	1638.134292	1800.541
-2.8	-203.8	-142.215	-201.4682027	-214.105	-266.238	-114.0787655	-154.139	-176.389	-197.4890358	-219.674
+2.8	1462.52	1043.591	1360.037176	1377.982	1498.188	841.2215763	1134.623	1280.951	1428.173697	1560.627
-2.85	-152.85	-106.661	-151.1011558	-160.579	-199.678	-85.55907606	-115.604	-132.292	-148.1167759	-164.755
+2.85	1193.793	850.5362	1116.811824	1124.918	1236.026	685.261798	924.3724	1044.722	1157.489774	1259.902
-2.9	-101.9	-71.1076	-100.7341089	-107.052	-133.119	-57.0393866	-77.0693	-88.1944	-98.74451601	-109.837
+2.9	861.5135	612.702	809.9472718	819.9586	905.3091	493.4073926	665.6729	753.078	825.3263722	900.033
-2.95	-50.9499	-35.5538	-50.36706197	-53.5262	-66.5594	-28.51969714	-38.5346	-44.0972	-49.3722561	-54.9184
+2.95	463.9571	329.2101	437.8928772	445.2981	499.6372	265.1206108	357.5933	404.897	443.5268056	482.6507
-3	-3.69E-13	-2.2E-13	-2.32048E-13	-2.4E-13	-2.73E-13	-2.11304E-13	-2.4E-13	-2.6E-13	-2.85877E-13	-2.9E-13
+3	2.28E-13	1.41E-13	1.02566E-13	1.28E-13	1.42E-13	1.12562E-13	1.04E-13	1.32E-13	1.26276E-13	1.34E-13

2-Span: Moment (Max and Min) Raw Data Results - 150' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.38E-13	-1.3E-13	-1.3E-13	-1.4E-13	-1.7E-13	-1.1E-13	-1.2E-13	-7.97639E-14
End Shear	2.30E-13	1.4E-13	1.57E-13	1.41E-13	1.79E-13	1.66E-13	1.76E-13	1.07772E-13
-0.05	-50.95	-46.4932	-50.0256	-47.1527	-57.0874	-58.5341	-61.9525	-24.75291723
+0.05	463.8507	436.1683	466.6888	438.1684	524.7507	504.1073	533.0204	230.6260243
-0.1	-101.9	-92.9864	-100.051	-94.3054	-114.175	-117.068	-123.905	-49.50583445
+0.1	861.5123	812.6428	869.0933	815.7579	976.0551	931.9798	985.3521	428.8346775
-0.15	-152.85	-139.48	-150.077	-141.458	-171.262	-175.602	-185.858	-74.25875168
+0.15	1194.362	1129.531	1207.403	1132.96	1354.325	1284.165	1357.565	595.0515838
-0.2	-203.8	-185.973	-200.102	-188.611	-228.35	-234.136	-247.81	-99.0116689
+0.2	1462.874	1387.902	1482.798	1390.903	1660.987	1572.798	1663.054	729.901088
-0.25	-254.75	-232.466	-250.128	-235.763	-285.437	-292.671	-309.763	-123.7645861
+0.25	1669.164	1589.19	1696.851	1591.089	1911.887	1804.521	1909.082	834.2061228
-0.3	-305.7	-278.959	-300.154	-282.916	-342.524	-351.205	-371.715	-148.5175034
+0.3	1819.203	1735.197	1851.531	1747.09	2097.285	1970.419	2084.097	909.3252612
-0.35	-356.65	-325.452	-350.179	-330.069	-399.612	-409.739	-433.668	-173.2704206
+0.35	1923.751	1832.128	1960.493	1849.919	2217.568	2080.378	2201.132	956.1361193
-0.4	-407.6	-371.945	-400.205	-377.221	-456.699	-468.273	-495.62	-198.0233378
+0.4	1972.274	1885.538	2015.783	1900.779	2275.135	2125.854	2249.842	976.0254377
-0.45	-458.55	-418.439	-450.23	-424.374	-513.786	-526.807	-557.573	-222.776255
+0.45	1967.976	1890.148	2018.756	1902.832	2273.492	2111.273	2234.839	969.0459467
-0.5	-509.5	-464.932	-500.256	-471.527	-570.874	-585.341	-619.525	-247.5291723
+0.5	1934.425	1853.383	1980.507	1867.118	2232.998	2078.777	2200.165	956.353034
-0.55	-560.45	-511.425	-550.282	-518.68	-627.961	-643.875	-681.478	-272.2820895
+0.55	1856.399	1774.562	1897.293	1789.517	2142.221	2000.174	2116.616	921.5426774
-0.6	-611.4	-557.918	-600.307	-565.832	-685.049	-702.409	-743.43	-297.0350067
+0.6	1733.561	1656.545	1771.571	1671.784	2002.133	1867.415	1975.733	864.3647999
-0.65	-662.35	-604.411	-650.333	-612.985	-742.136	-760.943	-805.383	-321.7879239
+0.65	1570.374	1504.331	1607.782	1517.959	1817.743	1685.209	1782.576	786.9434195
-0.7	-713.3	-650.904	-700.358	-660.138	-799.223	-819.478	-867.336	-346.5408412
+0.7	1371.705	1323.98	1410.768	1332.586	1594.512	1459.121	1543.044	691.6014833
-0.75	-764.25	-697.398	-750.384	-707.29	-856.311	-878.012	-929.288	-371.2937584
+0.75	1142.83	1116.109	1185.761	1120.586	1338.354	1195.451	1264.888	580.8601575
-0.8	-815.2	-743.891	-800.41	-754.443	-913.398	-936.546	-991.241	-396.0466756
+0.8	889.4324	885.8368	938.3929	887.2469	1055.632	900.977	953.1102	457.4394756
-0.85	-866.15	-790.384	-850.435	-801.596	-970.485	-995.08	-1053.19	-420.7995928
+0.85	617.6004	638.6455	674.6877	638.6648	753.1642	580.392	612.8337	324.2576398
-0.9	-917.1	-836.877	-900.461	-848.748	-1027.57	-1053.61	-1115.15	-445.5525101
+0.9	333.8307	383.565	401.1994	380.6058	438.2194	283.5877	299.8612	184.4322905
-0.95	-968.05	-883.37	-950.486	-895.901	-1084.66	-1112.15	-1177.1	-470.3054273
+0.95	122.4318	147.5389	147.5389	142.0922	152.4015	112.1374	118.0394	87.22811184
-1	-1019	-929.863	-1000.51	-943.054	-1141.75	-1170.68	-1239.05	-495.0583351
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1019	-929.863	-1000.51	-943.054	-1141.75	-1170.68	-1239.05	-495.0583351
+2	0	0	0	0	0	0	0	0
-2.05	-968.049	-883.37	-950.486	-895.901	-1084.66	-1112.15	-1177.1	-470.3054183
+2.05	122.4318	147.5412	147.5412	142.0995	152.4112	112.139	118.0411	86.97926674
-2.1	-917.099	-836.877	-900.461	-848.748	-1027.57	-1053.61	-1115.15	-445.5525015
+2.1	334.1179	383.5637	401.2163	380.616	438.2258	283.5883	299.8752	184.4288466
-2.15	-866.149	-790.384	-850.435	-801.596	-970.485	-995.08	-1053.19	-420.7995847
+2.15	617.9221	638.6466	674.6862	638.6763	753.172	580.391	612.8345	324.2544338
-2.2	-815.199	-743.891	-800.41	-754.443	-913.398	-936.546	-991.241	-396.0466679
+2.2	889.7724	885.8384	938.3919	887.2542	1055.64	900.9779	953.1113	457.4362201
-2.25	-764.249	-697.398	-750.384	-707.29	-856.311	-878.012	-929.288	-371.2937511

+2.25	**1143.174**	**1116.111**	**1185.761**	**1120.582**	**1338.362**	**1195.452**	**1264.888**	**580.8568457**
-2.3	**-713.299**	**-650.904**	**-700.358**	**-660.138**	**-799.223**	**-819.478**	**-867.336**	**-346.5408343**
+2.3	**1372.037**	**1323.981**	**1410.767**	**1332.583**	**1594.52**	**1459.119**	**1543.043**	**691.5981525**
-2.35	**-662.349**	**-604.411**	**-650.333**	**-612.985**	**-742.136**	**-760.943**	**-805.383**	**-321.7879175**
+2.35	**1570.682**	**1504.332**	**1607.781**	**1517.954**	**1817.751**	**1685.207**	**1782.574**	**786.9400339**
-2.4	**-611.399**	**-557.918**	**-600.307**	**-565.832**	**-685.048**	**-702.409**	**-743.43**	**-297.0350007**
+2.4	**1733.833**	**1656.543**	**1771.568**	**1671.779**	**2002.139**	**1867.412**	**1975.729**	**864.3611428**
-2.45	**-560.449**	**-511.425**	**-550.282**	**-518.68**	**-627.961**	**-643.875**	**-681.478**	**-272.2820839**
+2.45	**1856.623**	**1774.56**	**1897.289**	**1789.511**	**2142.226**	**2000.169**	**2116.61**	**921.5385426**
-2.5	**-509.499**	**-464.932**	**-500.256**	**-471.527**	**-570.874**	**-585.341**	**-619.525**	**-247.5291671**
+2.5	**1934.591**	**1853.379**	**1980.501**	**1867.125**	**2233.001**	**2078.783**	**2200.171**	**956.3486543**
-2.55	**-458.549**	**-418.439**	**-450.23**	**-424.374**	**-513.786**	**-526.807**	**-557.573**	**-222.7762503**
+2.55	**1967.853**	**1890.154**	**2018.763**	**1902.826**	**2273.491**	**2111.268**	**2234.834**	**970.603849**
-2.6	**-407.599**	**-371.945**	**-400.205**	**-377.221**	**-456.699**	**-468.273**	**-495.62**	**-198.0233335**
+2.6	**1972.082**	**1885.541**	**2015.788**	**1900.771**	**2275.132**	**2125.861**	**2249.848**	**976.0235116**
-2.65	**-356.649**	**-325.452**	**-350.179**	**-330.069**	**-399.612**	**-409.739**	**-433.668**	**-173.2704167**
+2.65	**1923.481**	**1832.129**	**1960.495**	**1849.924**	**2217.562**	**2080.382**	**2201.135**	**956.1337082**
-2.7	**-305.7**	**-278.959**	**-300.154**	**-282.916**	**-342.524**	**-351.205**	**-371.715**	**-148.5174999**
+2.7	**1818.848**	**1735.196**	**1851.531**	**1747.093**	**2097.276**	**1970.42**	**2084.097**	**909.3223624**
-2.75	**-254.75**	**-232.466**	**-250.128**	**-235.763**	**-285.437**	**-292.671**	**-309.763**	**-123.7645831**
+2.75	**1668.905**	**1589.185**	**1696.847**	**1591.089**	**1911.89**	**1804.519**	**1909.079**	**834.208865**
-2.8	**-203.8**	**-185.973**	**-200.102**	**-188.611**	**-228.349**	**-234.136**	**-247.81**	**-99.01166635**
+2.8	**1462.52**	**1387.894**	**1482.791**	**1390.9**	**1660.987**	**1572.793**	**1663.048**	**729.903561**
-2.85	**-152.85**	**-139.48**	**-150.077**	**-141.458**	**-171.262**	**-175.602**	**-185.858**	**-74.25874956**
+2.85	**1193.793**	**1129.521**	**1207.394**	**1132.954**	**1354.321**	**1284.162**	**1357.562**	**595.0532299**
-2.9	**-101.9**	**-92.9864**	**-100.051**	**-94.3054**	**-114.175**	**-117.068**	**-123.905**	**-49.50583276**
+2.9	**861.5135**	**812.6295**	**869.0805**	**815.7487**	**976.0473**	**931.9732**	**985.3453**	**428.8357211**
-2.95	**-50.9499**	**-46.4932**	**-50.0256**	**-47.1527**	**-57.0874**	**-58.5341**	**-61.9525**	**-24.75291597**
+2.95	**463.9571**	**436.1515**	**466.6722**	**438.1561**	**524.739**	**504.111**	**533.0243**	**230.6265615**
-3	**-3.69E-13**	**-2.7E-13**	**-2.9E-13**	**-2.9E-13**	**-3.4E-13**	**-2.6E-13**	**-2.8E-13**	**-1.43549E-13**
+3	**2.28E-13**	**1.33E-13**	**1.57E-13**	**1.2E-13**	**1.33E-13**	**1.21E-13**	**1.28E-13**	**9.22704E-14**

2-Span: Moment (Max and Min) Raw Data Results - 150' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.38E-13	-2.1E-13	-1.8E-13	-1.3E-13	-1.3E-13	-1.4E-13
End Shear	2.30E-13	2.37E-13	2.12E-13	1.59E-13	1.62E-13	1.61E-13
-0.05	-50.95	-108.087	-119.274	-68.1231	-82.1374	-88.4404
+0.05	463.8507	887.2398	952.9678	581.4476	701.6426	744.2741
-0.1	-101.9	-216.175	-238.548	-136.246	-164.275	-176.881
+0.1	861.5123	1632.516	1758.995	1073.517	1295.818	1372.613
-0.15	-152.85	-324.262	-357.822	-204.369	-246.412	-265.321
+0.15	1194.362	2270.363	2440.532	1477.17	1788.731	1897.67
-0.2	-203.8	-432.35	-477.097	-272.492	-328.55	-353.762
+0.2	1462.874	2774.114	3030.658	1819.965	2197.653	2326.945
-0.25	-254.75	-540.437	-596.371	-340.616	-410.687	-442.202
+0.25	1669.164	3173.002	3485.561	2082.424	2506.599	2674.155
-0.3	-305.7	-648.525	-715.645	-408.739	-492.825	-530.643
+0.3	1819.203	3479.483	3829.549	2268.875	2720.542	2919.218
-0.35	-356.65	-756.612	-834.919	-476.862	-574.962	-619.083
+0.35	1923.751	3681.059	4048.755	2389.565	2859.915	3064.298
-0.4	-407.6	-864.7	-954.193	-544.985	-657.1	-707.523
+0.4	1972.274	3799.273	4148.1	2435.426	2909.997	3132.412
-0.45	-458.55	-972.787	-1073.47	-613.108	-739.237	-795.964
+0.45	1967.976	3800.668	4178.076	2411.629	2877.288	3108.515
-0.5	-509.5	-1080.87	-1192.74	-681.231	-821.374	-884.404
+0.5	1934.425	3728.125	4085.207	2376.87	2837.537	3060.03
-0.55	-560.45	-1188.96	-1312.02	-749.354	-903.512	-972.845
+0.55	1856.399	3561.538	3886.177	2293.117	2739.949	2944.779
-0.6	-611.4	-1297.05	-1431.29	-817.477	-985.649	-1061.29
+0.6	1733.561	3295.683	3623.814	2144.559	2564.277	2747.825
-0.65	-662.35	-1405.14	-1550.56	-885.601	-1067.79	-1149.73
+0.65	1570.374	2953.68	3257.303	1936.673	2316.682	2485.152
-0.7	-713.3	-1513.22	-1669.84	-953.724	-1149.92	-1238.17
+0.7	1371.705	2543.518	2797.584	1675.891	2007.718	2151.786
-0.75	-764.25	-1621.31	-1789.11	-1021.85	-1232.06	-1326.61
+0.75	1142.83	2058.11	2255.463	1371.242	1645.459	1756.66
-0.8	-815.2	-1729.4	-1908.39	-1089.97	-1314.2	-1415.05
+0.8	889.4324	1509.397	1647.078	1027.655	1232.778	1309.436
-0.85	-866.15	-1837.49	-2027.66	-1158.09	-1396.34	-1503.49
+0.85	617.6004	910.2288	985.1644	650.7035	779.1078	820.5133
-0.9	-917.1	-1945.57	-2146.93	-1226.22	-1478.47	-1591.93
+0.9	333.8307	406.1568	432.6815	337.4236	386.466	412.3983
-0.95	-968.05	-2053.66	-2266.21	-1294.34	-1560.61	-1680.37
+0.95	122.4318	149.4702	138.8077	132.7961	152.3484	152.4322
-1	-1019	-2161.75	-2385.5	-1362.46	-1642.75	-1768.81
+1	0	0	0	0	0	0
(Span 2) -2	-1019	-2161.75	-2385.5	-1362.46	-1642.75	-1768.81
+2	0	0	0	0	0	0
-2.05	-968.049	-2053.66	-2266.23	-1294.34	-1560.61	-1680.37
+2.05	122.4318	149.4651	138.8069	132.782	152.3431	152.427
-2.1	-917.099	-1945.57	-2146.95	-1226.22	-1478.47	-1591.93
+2.1	334.1179	406.1632	433.8768	337.4244	386.4623	412.4065
-2.15	-866.149	-1837.49	-2027.68	-1158.09	-1396.34	-1503.49
+2.15	617.9221	910.2346	986.6146	650.7047	779.1105	820.5195
-2.2	-815.199	-1729.4	-1908.4	-1089.97	-1314.2	-1415.05
+2.2	889.7724	1509.404	1648.251	1027.656	1232.781	1309.442
-2.25	-764.249	-1621.31	-1789.13	-1021.85	-1232.06	-1326.61

+2.25	**1143.174**	**2058.116**	**2256.738**	**1371.243**	**1645.462**	**1756.666**
-2.3	**-713.299**	**-1513.22**	**-1669.85**	**-953.724**	**-1149.92**	**-1238.17**
+2.3	**1372.037**	**2543.523**	**2797.583**	**1675.89**	**2007.719**	**2151.792**
-2.35	**-662.349**	**-1405.14**	**-1550.58**	**-885.601**	**-1067.79**	**-1149.73**
+2.35	**1570.682**	**2953.683**	**3256.66**	**1936.671**	**2316.68**	**2485.155**
-2.4	**-611.399**	**-1297.05**	**-1431.3**	**-817.477**	**-985.649**	**-1061.29**
+2.4	**1733.833**	**3296.693**	**3623.815**	**2144.555**	**2564.273**	**2747.826**
-2.45	**-560.449**	**-1188.96**	**-1312.03**	**-749.354**	**-903.512**	**-972.845**
+2.45	**1856.623**	**3561.546**	**3886.178**	**2293.111**	**2739.943**	**2944.776**
-2.5	**-509.499**	**-1080.87**	**-1192.75**	**-681.231**	**-821.374**	**-884.404**
+2.5	**1934.591**	**3728.129**	**4086.566**	**2376.877**	**2837.542**	**3060.023**
-2.55	**-458.549**	**-972.787**	**-1073.48**	**-613.108**	**-739.237**	**-795.964**
+2.55	**1967.853**	**3800.666**	**4178.074**	**2411.623**	**2877.285**	**3108.509**
-2.6	**-407.599**	**-864.7**	**-954.201**	**-544.985**	**-657.099**	**-707.523**
+2.6	**1972.082**	**3799.267**	**4148.1**	**2435.434**	**2909.991**	**3132.417**
-2.65	**-356.649**	**-756.612**	**-834.925**	**-476.862**	**-574.962**	**-619.083**
+2.65	**1923.481**	**3681.047**	**4048.755**	**2389.57**	**2859.92**	**3064.298**
-2.7	**-305.7**	**-648.525**	**-715.65**	**-408.739**	**-492.825**	**-530.643**
+2.7	**1818.848**	**3479.479**	**3830.174**	**2268.876**	**2720.542**	**2919.214**
-2.75	**-254.75**	**-540.437**	**-596.375**	**-340.616**	**-410.687**	**-442.202**
+2.75	**1668.905**	**3173.006**	**3485.56**	**2082.421**	**2506.595**	**2674.16**
-2.8	**-203.8**	**-432.35**	**-477.1**	**-272.492**	**-328.55**	**-353.762**
+2.8	**1462.52**	**2774.856**	**3030.656**	**1819.959**	**2197.652**	**2326.938**
-2.85	**-152.85**	**-324.262**	**-357.825**	**-204.369**	**-246.412**	**-265.321**
+2.85	**1193.793**	**2270.368**	**2440.532**	**1477.166**	**1788.732**	**1897.672**
-2.9	**-101.9**	**-216.175**	**-238.55**	**-136.246**	**-164.275**	**-176.881**
+2.9	**861.5135**	**1632.515**	**1758.995**	**1073.509**	**1295.814**	**1372.61**
-2.95	**-50.9499**	**-108.087**	**-119.275**	**-68.1231**	**-82.1374**	**-88.4405**
+2.95	**463.9571**	**887.2325**	**952.9689**	**581.4521**	**701.6337**	**744.2655**
-3	**-3.69E-13**	**-4.4E-13**	**-4.5E-13**	**-3.3E-13**	**-3.6E-13**	**-3.8E-13**
+3	**2.28E-13**	**2.17E-13**	**2.25E-13**	**1.48E-13**	**1.64E-13**	**2.06E-13**

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-27.01947304**	***-22.33693894***	***-32.80849936***	**-11.96778244**	**-12.87847333**	**-12.13925236**	**-14.69908253**	**-15.13796384**	**-16.0229**	**-6.38144296**
End Shear	**234.1227268**	***193.2691877***	***265.8553857***	**120.4687249**	**128.9846963**	**121.1514024**	**145.2672356**	**141.3839149**	**149.5196**	**63.82897856**
-0.05	**-27.28152325**	***-22.59898916***	***-33.04434455***	**-11.96778244**	**-12.87847333**	**-12.13925236**	**-14.69908253**	**-15.13796384**	**-16.0229**	**-6.38144296**
+0.05	**214.7693047**	***177.1059806***	***241.6045393***	**112.4561971**	**120.3592187**	**113.0248827**	**135.4244596**	**131.0868812**	**138.6189**	**59.55207389**
-0.1	**-28.17169548**	***-24.99153299***	***-34.7517652***	**-11.96778244**	**-12.87847333**	**-12.13925236**	**-14.69908253**	**-15.13796384**	**-16.0229**	**-6.38144296**
+0.1	**195.2922937**	***160.8078149***	***216.753213***	**104.2193275**	**111.4947759**	**104.6704696**	**125.3110204**	**120.5122415**	**127.4249**	**55.12080354**
-0.15	**-32.70769343**	***-33.04867393***	***-43.73450278***	**-18.00049959**	**-18.6369272**	**-17.11138615**	**-19.16263407**	**-15.13796384**	**-16.0229**	**-8.576265548**
+0.15	**178.6171016**	***146.9933978***	***195.6571212***	**97.00833588**	**103.7365441**	**97.35994989**	**116.465853**	**111.3020637**	**117.6758**	**51.24472019**
-0.2	**-45.10733001**	***-42.70538969***	***-54.91163631***	**-26.19769444**	**-27.47027174**	**-25.44362403**	**-29.27371818**	**-19.27683281**	**-20.4251**	**-13.00341315**
+0.2	**160.4431218**	***131.9982268***	***172.7450919***	**88.92586937**	**95.0432075**	**89.16982064**	**106.5617243**	**101.0337625**	**106.8073**	**46.90403679**
-0.25	**-57.06151097**	***-51.66413549***	***-65.68175408***	**-33.3591458**	**-35.18967095**	**-32.72645284**	**-38.11594038**	**-27.71827077**	**-29.1771**	**-16.87434636**
+0.25	**145.0703078**	***119.3653998***	***153.4528453***	**81.89533744**	**87.48357518**	**82.04916134**	**97.95567177**	**92.15172311**	**97.40676**	**43.13179882**
-0.3	**-71.05765429**	***-62.28209249***	***-78.29064114***	**-41.36900208**	**-43.82609282**	**-40.87598257**	**-48.01573863**	**-38.14177599**	**-40.2041**	**-21.20748285**
+0.3	**128.4254438**	***105.7418293***	***132.6869212***	**74.06750431**	**79.0692852**	**74.12509704**	**88.38422442**	**82.32087527**	**87.00267**	**38.9359111**
-0.35	**-83.76519898**	***-72.03243288***	***-89.73777785***	**-48.32092895**	**-51.32410866**	**-47.95269824**	**-56.61710899**	**-47.41964665**	**-50.0295**	**-24.9715456**
+0.35	**114.4455953**	***94.34477086***	***115.3752946***	**67.30586711**	**71.80348992**	**67.28409956**	**80.12613725**	**73.8826744**	**78.07307**	**35.3153501**
-0.4	**-98.52688658**	***-83.4797668***	***-103.034258***	**-56.04320651**	**-59.65565567**	**-55.81775047**	**-66.18226436**	**-57.78207023**	**-61.004**	**-29.15645816**
+0.4	**99.42530937**	***82.14700129***	***96.94934647***	**59.83289836**	**63.77618753**	**59.7278719**	**71.01073141**	**64.6203896**	**68.27217**	**31.31846492**
-0.45	**-111.8289188**	***-93.89900874***	***-115.0149911***	**-62.69717787**	**-66.83705458**	**-62.5985577**	**-74.43393803**	**-66.76251071**	**-70.5154**	**-32.7658204**
+0.45	**86.91629513**	***72.02719762***	***81.98520904***	**53.42859533**	**56.89947184**	**53.25633871**	**63.20946063**	**56.74170675**	**59.93605**	**27.89741185**
-0.5	**-127.1688884**	***-106.0294592***	***-128.8300504***	**-70.03165186**	**-74.75579316**	**-70.07734669**	**-83.54107457**	**-76.72228717**	**-81.0648**	**-36.74829797**
+0.5	**73.6016588**	***61.29505501***	***66.61149062***	**46.41072025**	**49.36709615**	**46.16972686**	**54.67346476**	**48.17909876**	**50.87716**	**24.15374373**
-0.55	**-140.8938358**	***-116.9821992***	***-141.1895194***	**-76.29922434**	**-81.52532846**	**-76.47243381**	**-91.33418995**	**-85.2896028**	**-90.1398**	**-40.15512982**
+0.55	**62.62865608**	***52.48127757***	***56.40982257***	**40.45218839**	**42.97470011**	**40.15745966**	**47.43786133**	**40.97561963**	**43.25701**	**20.98003184**
-0.6	**-156.610433**	***-129.6351175***	***-159.0211572***	**-83.14567287**	**-88.9233271**	**-83.46319811**	**-99.85995997**	**-94.71562029**	**-100.125**	**-43.88096283**
+0.6	**51.08634187**	***43.24018286***	***46.01383567***	**33.98963177**	**36.04518559**	**33.64224382**	**39.60464481**	**33.24379404**	**35.07895**	**17.54378615**
-0.65	**-170.5739944**	***-140.9732474***	***-179.3970614***	**-88.93840882**	**-95.18575803**	**-89.38276749**	**-107.0856712**	**-102.7541323**	**-108.641**	**-47.0374262**
+0.65	**41.70184472**	***35.74852134***	***37.56123265***	**28.56530907**	**30.23234986**	**28.17903943**	**33.04355344**	**26.83120562**	**28.29725**	**14.66524683**
-0.7	**-186.4511707**	***-153.9735888***	***-202.4541237***	**-95.19658879**	**-101.9550626**	**-95.78372367**	**-114.9067011**	**-111.5152877**	**-117.924**	**-50.45241211**
+0.7	**31.984129**	***28.00950268***	***28.80841536***	**22.75830956**	**24.01364582**	**22.33698285**	**26.03646625**	**20.06128001**	**21.13886**	**11.59063744**
-0.75	**-200.4563768**	***-165.5363193***	***-222.6989848***	**-100.4260514**	**-107.6151497**	**-101.1379734**	**-121.4561576**	**-118.9093063**	**-125.759**	**-53.31067691**
+0.75	**24.22790281**	***21.84334605***	***21.82229418***	**17.95663485**	**18.87561218**	**17.5126552**	**20.25875183**	**14.6104439**	**15.37941**	**9.055103587**
-0.8	**-216.2636923**	***-178.6946475***	***-245.4480912***	**-105.9957404**	**-113.6478285**	**-106.8473462**	**-128.449083**	**-126.8744729**	**-134.2**	**-56.36059621**
+0.8	**16.37267676**	***15.60303784***	***14.74702478***	**12.90541747**	**13.47565335**	**12.44554464**	**14.20117173**	**9.528053849**	**10.08949**	**6.396336807**
-0.85	**-230.1008664**	***-190.3084692***	***-265.277749***	**-110.5734957**	**-118.6103351**	**-111.5464789**	**-134.2134395**	**-133.5083181**	**-141.231**	**-58.87283139**
+0.85	**10.49707312**	***10.75306755***	***9.453535396***	**8.81482403**	**9.107657763**	**8.349889174**	**9.315677408**	**6.552579988**	**6.928218**	**4.251640219**
-0.9	**-245.5934862**	***-203.4209544***	***-287.3903753***	**-115.3544628**	**-123.7984468**	**-116.4624877**	**-140.2548903**	**-140.5463854**	**-148.691**	**-61.50347811**
+0.9	**4.942798952**	***5.993722707***	***4.451384573***	**4.619618158**	**4.634383431**	**4.336696147**	**4.626301504**	**3.498049236**	**3.683657**	**2.441728862**
-0.95	**-259.0402324**	***-214.8996766***	***-306.7825512***	**-119.1920602**	**-127.9681185**	**-120.4166919**	**-145.125284**	**-146.304358**	**-154.796**	**-63.62185133**
+0.95	**2.124744186**	***2.437911615***	***1.912269765***	**1.91918472**	**1.91918472**	**1.469391177**	**1.534367417**	**1.399921361**	**1.473601**	**1.18284139**
-1	**-273.9589307**	***-227.7480979***	***-328.5638359***	**-123.0840775**	**-132.2037255**	**-124.4375673**	**-150.0919028**	**-152.2842345**	**-161.137**	**-65.77901579**
+1	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
(Span 2) -2	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+2	**2.73E+02**	***2.27E+02***	***327.2685073***	**1.23E+02**	**1.32E+02**	**124.2147435**	**149.8161947**	**1.52E+02**	**1.61E+02**	**6.57E+01**
-2.05	**-1.98E+00**	***-2.22E+00***	***-1.779111059***	**-1.75E+00**	**-1.75E+00**	**-1.397571822**	**-1.401473213**	**-1.33E+00**	**-1.40E+00**	**-1.10E+00**
+2.05	**2.60E+02**	***2.16E+02***	***3.08E+02***	**119.4343408**	**128.2315614**	**1.21E+02**	**1.45E+02**	**1.47E+02**	**155.1857**	**6.38E+01**
-2.1	**-5.24E+00**	***-6.25E+00***	***-4.722629135***	**-4.85330287**	**-4.883343219**	**-4.535169483**	**-4.845421849**	**-3.668275258**	**-3.86445**	**-2.524885098**
+2.1	**2.45E+02**	***2.03E+02***	***2.86E+02***	**115.0852701**	**123.506156**	**1.16E+02**	**1.40E+02**	**1.40E+02**	**148.2674**	**6.14E+01**
-2.15	**-1.02E+01**	***-1.05E+01***	***-9.136277048***	**-8.555225737**	**-8.830641548**	**-8.090255162**	**-9.006373627**	**-6.363643572**	**-6.7275**	**-4.115710236**
+2.15	**231.0690305**	***191.0813776***	***266.5899395***	**110.8665095**	**118.9281302**	**111.8475073**	**134.5830273**	**133.9361716**	**141.6843**	**59.0339998**
-2.2	**-16.81067705**	***-15.9486209***	***-15.13833488***	**-13.19100712**	**-13.78079473**	**-12.73177153**	**-14.542993**	**-9.735683124**	**-10.3101**	**-6.546233261**
+2.2	**215.3882869**	***177.9195554***	***244.1172003***	**105.6786148**	**113.3042019**	**106.5220503**	**128.0503656**	**126.4181292**	**133.7162**	**56.18693398**
-2.25	**-23.73835356**	***-21.45475501***	***-21.38126645***	**-17.6482319**	**-18.54575338**	**-17.20302218**	**-19.88824505**	**-14.28650229**	**-15.0384**	**-8.892332472**

+2.25	201.4399172	166.3087742	224.0437017	100.7639183	107.980965	101.4841048	121.8798179	119.3896926	126.2679	53.49569777
-2.3	-32.52412229	-28.44312758	-29.2987993	-23.08990386	-24.36861533	-22.67037036	-26.4360517	-20.44477958	-21.5443	-11.7658016
+2.3	185.5669152	153.2048316	201.1003652	94.8374242	101.5664476	95.41619304	114.4573892	111.010121	117.3887	50.25646201
-2.35	-41.09415098	-35.27169526	-37.02195073	-28.21398138	-29.85598126	-27.82538905	-32.61909465	-26.4185785	-27.8609	-14.4788217
+2.35	171.5554805	141.7334771	180.7551769	89.31524844	95.59326056	89.76803267	107.5561693	103.2793507	109.1979	47.24311341
-2.4	-51.72420455	-43.76226002	-46.60146035	-34.36131469	-36.4436115	-34.01677575	-40.05470216	-33.68588529	-35.5465	-17.74103552
+2.4	155.7280939	128.884041	157.6632875	82.75038157	88.49609085	83.05941717	99.36730857	94.16935816	99.5465	43.66592525
-2.45	-61.90339765	-51.91621825	-55.7744987	-40.0638275	-42.55816612	-39.7657583	-46.96668221	-40.50841134	-42.7628	-20.77314426
+2.45	141.8571223	117.7192757	141.8538978	76.70914516	81.96817329	76.8908415	91.84426221	85.85197795	90.73555	40.37829635
-2.5	-74.33290071	-61.90514025	-67.4019312	-46.81659598	-49.80262966	-46.57941831	-55.16673898	-48.67205949	-51.3987	-24.36988107
+2.5	126.2988539	105.3065856	127.8576724	69.60613332	74.2962889	69.64330828	83.01234688	76.14264219	80.45078	36.51735936
-2.55	-86.07533371	-71.37475899	-81.03553575	-53.00909643	-56.44912097	-52.83256634	-62.69880995	-56.22763051	-59.3922	-27.67324797
+2.55	112.6971322	94.6028578	115.6782853	63.13429732	67.3089069	63.04413468	74.97634501	67.35430559	71.14222	33.0032809
-2.6	-100.2450521	-82.84380817	-97.99724535	-60.26706626	-64.24247355	-60.16673566	-71.53996586	-65.15648612	-68.8394	-31.55030206
+2.6	97.62133508	82.79477817	102.1141419	55.59336051	59.17023683	55.35947762	65.62476132	57.17677308	60.36289	28.91281418
-2.65	-113.4920935	-93.60665126	-114.2558479	-66.8611019	-71.32564599	-66.83424265	-79.58327104	-73.3294306	-77.4876	-35.0770906
+2.65	84.59534555	72.69383871	90.39456219	48.77935	51.81861744	48.41946557	57.18460277	48.03316551	50.67919	25.22012007
-2.7	-129.3284211	-106.5231986	-133.8752077	-74.52406023	-79.55996572	-74.58712105	-88.94213157	-82.89240077	-87.6075	-39.18025603
+2.7	70.19344962	61.64378278	77.43733503	40.90072825	43.32111282	40.399443	47.43669407	37.51858521	39.54417	20.95431881
-2.75	-144.0087722	-118.5441357	-152.1985249	-81.4312057	-86.98459132	-81.57920301	-97.37784239	-91.56701818	-96.7879	-42.88263348
+2.75	57.84318289	52.27468278	66.3261526	33.83298066	35.70049616	33.20845206	38.70130005	28.27830822	29.76664	17.13084059
-2.8	-161.4236371	-132.8612062	-174.0625464	-89.39888044	-95.55189329	-89.64902654	-107.1410571	-101.6329898	-107.442	-47.15769754
+2.8	44.29521988	42.12176788	54.13773276	25.71693504	26.95213004	24.95481314	28.68039834	18.92937958	20.05543	12.74392222
-2.85	-177.4533271	-146.0924057	-194.279522	-96.53072727	-103.2227632	-96.87583642	-115.880268	-110.6935518	-117.032	-50.98783746
+2.85	33.36205768	33.60085946	44.30076549	18.48385926	19.15772591	17.60261594	19.75858397	15.13796306	16.02285	8.837490788
-2.9	-196.3443586	-161.74854	-218.1878678	-104.7029152	-112.0151361	-105.1608596	-125.9045094	-121.1314517	-128.08	-55.38059069
+2.9	28.10193712	24.46969858	34.12478882	11.96778262	12.87847247	12.13925303	14.69908251	15.13796306	16.02285	6.381443034
-2.95	-213.6266371	-176.1294713	-240.1160155	-111.9709976	-119.8369794	-112.5326245	-134.8284044	-130.4623083	-137.958	-59.29065895
+2.95	27.31646803	22.63392086	33.07578386	11.96778262	12.87847247	12.13925303	14.69908251	15.13796306	16.02285	6.381443034
-3	-233.8770311	-193.0489272	-265.8553857	-120.2474701	-128.7464845	-120.931013	-145.000237	-141.1409905	-149.262	-63.74689148
+3	27.01948524	22.33693807	32.80849936	11.96778262	12.87847247	12.13925303	14.69908251	15.13796306	16.02285	6.381443034

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.158414677	-13.02688954	-13.89228294	-17.36107798	-7.344167416	-9.922006871	-11.35881012	-12.71942988	-14.15253624
End Shear	91.14652218	122.6711866	125.8812967	142.6818766	73.3540723	98.91170017	112.181146	123.1217722	134.3880925
-0.05	-9.158414677	-13.02688954	-13.89228294	-17.42893027	-7.344167416	-9.922006871	-11.35881012	-12.71942988	-14.15253624
+0.05	84.99703189	113.7974899	116.3095351	128.2114992	68.42697409	92.26445046	104.562827	114.6013446	124.912596
-0.1	-9.158414677	-13.02688954	-13.89228294	-17.6594213	-7.344167416	-9.922006871	-11.35881012	-12.71942988	-14.15253624
+0.1	78.67619011	104.681419	106.4868992	113.5951707	63.36545158	85.4315152	96.7311085	105.8453969	115.1788179
-0.15	-12.32250838	-13.02688954	-13.89228294	-17.9977562	-10.2967594	-13.78678439	-14.44387259	-14.42791486	-14.42309202
+0.15	73.14701101	96.73889858	97.95407006	101.3594146	58.93659296	79.45298538	89.88271001	98.1964524	106.684196
-0.2	-18.63642837	-17.54222082	-15.41016912	-18.53301846	-15.34596718	-20.6048742	-22.28000199	-22.36710623	-22.36176246
+0.2	66.95472677	87.8807393	88.46714962	88.44224754	53.97511217	72.75583317	82.2157899	89.64214939	97.19400045
-0.25	-24.1569602	-24.78139259	-21.16027757	-20.54664828	-19.75944738	-26.5648659	-29.13390126	-30.07310742	-30.65852401
+0.25	61.57299743	80.2155978	80.28499987	77.77085266	49.66173532	66.93385129	75.55498532	82.21841225	88.96703806
-0.3	-30.33656738	-33.74137347	-29.6726428	-27.76611282	-24.6983889	-33.23483614	-36.80888331	-38.71104623	-40.32457259
+0.3	55.58637507	71.72826317	71.25720482	66.95191261	44.86197395	60.45575743	68.14847937	73.97294425	79.83995657
-0.35	-35.70457173	-41.71924456	-37.35934785	-34.39842028	-28.98736366	-39.02739749	-43.47841397	-46.22531013	-48.74189558
+0.35	50.42012607	64.44013913	63.53462105	57.96175861	40.71850404	54.8637977	61.75963128	66.8689904	71.9861276
-0.4	-41.67276463	-50.6265553	-47.19119482	-42.8960211	-33.75435752	-45.4659823	-50.89663683	-54.59235052	-58.1246079
+0.4	44.71627072	56.43653744	55.08937602	48.94235534	36.14214089	48.68802997	54.70914784	59.0395347	63.34168619
-0.45	-46.82020815	-58.34308078	-55.73397748	-50.41744633	-37.86440159	-51.0176446	-57.29743126	-61.82030263	-66.23919458
+0.45	39.83353625	49.62505124	47.93525618	41.4650968	32.22299795	43.39956698	48.676621	52.34994024	55.96644043
-0.5	-52.49988251	-66.89774124	-65.23428621	-59.09797521	-42.39776931	-57.14156434	-64.36328298	-69.80926846	-75.21904486
+0.5	34.48955035	42.21809481	40.19598657	34.32764439	27.93171402	37.60939917	42.07777536	45.04368302	47.92416773
-0.55	-57.35873368	-74.25328735	-73.43008286	-67.43544834	-46.27446484	-62.37884541	-70.41098136	-76.65633012	-82.92543469
+0.55	29.95836438	35.98287218	33.7192207	28.63989303	24.29132144	32.69790691	36.48593831	38.86302006	41.13298621
-0.6	-62.67278511	-82.34238731	-82.4754217	-77.99951573	-50.51252769	-68.10484108	-77.02884925	-84.16003293	-91.38289283
+0.6	25.05135215	29.28546597	26.80933648	22.58885137	20.34679525	27.37661395	30.43434208	32.18713812	33.81240839
-0.65	-67.17501089	-89.23733414	-90.21534235	-87.72818952	-54.10144843	-72.95426986	-82.63908674	-90.53163604	-98.57561079
+0.65	20.93974684	23.72613393	21.11882979	17.71233523	17.03957959	22.91556279	25.36754799	26.60998723	27.71074283
-0.7	-72.04633508	-96.74797034	-98.68230553	-100.0445832	-57.98252778	-78.19906444	-88.71335753	-97.4428905	-106.3911504
+0.7	16.54680665	17.85119327	15.60444841	13.00394549	13.50348515	18.14640523	19.95880836	20.67167639	21.23138236
-0.75	-76.12390363	-103.0826887	-105.8574433	-110.9082173	-61.22925198	-82.58716679	-93.80176867	-103.2444593	-112.9647428
+0.75	12.92281938	13.11642278	11.24263812	9.321749087	10.58386535	14.20927925	15.50143212	15.79260004	15.924716
-0.8	-80.47539702	-109.9019382	-113.6226119	-124.7554059	-64.69166931	-87.26748904	-99.23683127	-109.4560842	-120.0188368
+0.8	9.121060241	8.544737285	7.501696457	6.157024265	7.517886365	10.07553722	10.83117107	10.79882755	10.7975329
-0.85	-84.06027496	-115.5768072	-120.1240702	-137.1757042	-67.54177355	-91.12079437	-103.719053	-114.5930453	-125.8678267
+0.85	6.052719035	5.592958957	4.767541713	3.932277906	5.040284881	6.735805384	7.067562969	7.060223263	7.058991802
-0.9	-87.8148333	-121.5917605	-127.0640274	-151.7291961	-70.523847	-95.15336957	-108.4192936	-119.99786	-132.0409527
+0.9	3.221836721	3.212552149	2.55395	2.041502699	2.506099922	3.497948243	3.672785055	3.671781114	3.670793631
-0.95	-90.8389883	-126.5071428	-132.7829087	-164.5640761	-72.92291181	-98.39839568	-112.2109585	-124.3756353	-137.0598855
+0.95	1.293232484	1.34334876	1.067177594	0.835053156	1.138816827	1.248982501	1.300260156	1.248975585	1.304893471
-1	-93.91950904	-131.6049069	-138.7742376	-178.6885847	-75.36296572	-101.6999578	-116.0807667	-128.8664513	-142.2325017
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.37E+01	1.31E+02	1.38E+02	1.78E+02	7.52E+01	1.02E+02	115.8658476	128.6162767	1.42E+02
-2.05	-1.23E+00	-1.23E+00	-9.74E-01	-7.61E-01	-1.06E+00	-1.19E+00	-1.187325625	-1.188028642	-1.19E+00
+2.05	9.10E+01	1.27E+02	1.33E+02	1.65E+02	7.31E+01	9.86E+01	112.4510544	124.6535106	1.37E+02
-2.1	-3.354099456	-3.344746403	-2.659094185	-2.12868202	-2.647036582	-3.653230023	-3.853851176	-3.852834349	-3.851845153
+2.1	8.76E+01	1.21E+02	1.27E+02	1.51E+02	7.04E+01	9.49E+01	108.1540406	119.6922648	1.32E+02
-2.15	-5.858379056	-5.446918726	-4.600476845	-3.79337251	-4.883241802	-6.524146866	-6.829389124	-6.823601464	-6.822370964
+2.15	84.29004592	115.9426454	120.544649	137.9942519	67.72436916	91.3676804	104.0065228	114.923033	126.2441159
-2.2	-9.335665841	-8.801181906	-7.687281462	-6.314706545	-7.691059784	-10.30899158	-11.09459556	-11.06047107	-11.059185
+2.2	80.227361	109.5113985	113.1766251	123.9184055	64.49438652	87.00078654	98.92688634	109.1013873	119.6155219
-2.25	-12.69036124	-12.83528948	-10.96529232	-9.089369972	-10.39649214	-13.95663229	-15.21566964	-15.4803366	-15.58569969
+2.25	76.387603	103.4941134	106.3246862	111.6901188	61.43915354	82.8708745	94.13100074	103.620265	113.3910119

-2.3	-16.79737506	-18.18418217	-15.90844339	-13.26242236	-13.70526149	-18.41852571	-20.26715157	-21.00970829	-21.59966964
+2.3	71.76654145	96.31503791	98.19316504	99.31754739	57.75967453	77.89788691	88.36435624	97.0454024	105.9412263
-2.35	-20.6736963	-23.36824177	-20.75411744	-17.40159895	-16.82549889	-22.62682107	-25.03980744	-26.24967845	-27.31706115
+2.35	67.46811085	89.6877137	90.72201552	88.372701	54.33503671	73.26991608	83.00445602	90.9469637	99.04485775
-2.4	-25.33333678	-29.66856512	-27.2030651	-22.92817057	-20.57354077	-27.68247892	-30.78195355	-32.57020178	-34.2319993
+2.4	62.36577397	81.87371685	81.95039864	77.34722613	50.26773491	67.77408495	76.64641169	83.72606657	90.89339604
-2.45	-29.66325157	-35.57832265	-33.3003471	-28.27407388	-24.05415967	-32.37795229	-36.12184612	-38.46095925	-40.69163955
+2.45	57.67670516	74.73601205	73.96892219	67.98562814	46.52811539	62.72152763	70.80688441	77.10489772	83.43063324
-2.5	-34.79841391	-42.64465397	-40.64038507	-34.72001466	-28.17979581	-37.94411174	-42.45904391	-45.46545205	-48.38803201
+2.5	52.17019695	66.39997487	64.68063903	58.56705221	42.13467187	56.78613267	63.95305273	69.34513725	74.69702263
-2.55	-39.5138908	-49.18048682	-47.46947263	-41.01492671	-31.96637561	-43.05329221	-48.28178932	-51.91242582	-55.48445804
+2.55	47.15852214	58.85148756	56.29773184	50.91865251	38.13448291	51.38247577	57.71823726	62.29578712	66.77333079
-2.6	-45.04746936	-56.89989664	-55.57718218	-49.45766771	-36.40792586	-49.04669115	-55.11842378	-59.49370377	-63.8427913
+2.6	41.32494695	50.10635041	46.61620219	42.39465732	33.47658684	45.09080282	50.46423291	54.10435942	57.57709912
-2.65	-50.08048437	-63.96219099	-63.02916191	-57.41622553	-40.44603442	-54.49610047	-61.33966747	-66.40233243	-71.47053725
+2.65	36.05869966	42.24670623	37.94076125	34.89650584	29.27026873	39.40948597	43.91850457	46.72141328	49.2979443
-2.7	-55.93536723	-72.22178547	-71.78113986	-67.56925727	-45.14182866	-60.83344882	-68.58012925	-74.45319565	-80.37125247
+2.7	29.97515939	33.20541123	29.17371995	27.33857533	24.40958776	32.84479191	36.35993799	38.20553343	39.75858345
-2.75	-61.2178787	-79.71090265	-79.74713092	-77.09437363	-49.37705878	-66.54962712	-75.11552088	-81.72887849	-88.42485427
+2.75	24.52237157	25.26127334	21.66257036	20.96823731	20.05153783	26.95933649	29.5876884	30.58356591	31.22943029
-2.8	-67.31697165	-88.39777021	-89.01994664	-89.1843334	-54.26539256	-73.14766306	-82.66419692	-90.14218807	-97.74844019
+2.8	18.26597275	17.05714516	15.08373905	18.49709401	15.04975298	20.20487059	21.82017456	21.85035769	21.84499358
-2.85	-72.78094546	-96.21404789	-97.39105073	-100.5822342	-58.64331483	-79.05709937	-89.42935974	-97.69036347	-106.1224303
+2.85	12.69467711	13.0268893	13.89228343	18.02478924	10.5944277	14.18872698	14.90571287	14.88603167	14.88120877
-2.9	-79.04714352	-105.2153113	-107.0612875	-114.437821	-63.66254507	-85.83257637	-97.19063745	-106.3588763	-115.7493602
+2.9	9.158414498	13.0268893	13.89228343	17.64135463	7.34416698	9.922006707	11.35880964	12.71942932	14.15253539
-2.95	-84.62454842	-113.2591545	-115.7286062	-127.3350195	-68.12873594	-91.86182006	-104.1011803	-114.0849704	-124.338274
+2.95	9.158414498	13.0268893	13.89228343	17.43797424	7.34416698	9.922006707	11.35880964	12.71942932	14.15253539
-3	-90.98074958	-122.4618738	-125.6728458	-142.5304245	-73.21714683	-98.73141959	-111.9794465	-122.901564	-134.1490201
+3	9.158414498	13.0268893	13.89228343	17.3610769	7.34416698	9.922006707	11.35880964	12.71942932	14.15253539

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.12160382	-27.74425774	-15.8165	-19.0588	-20.5374
End Shear	224.8634209	242.5500068	146.5635	176.6666	187.8987
-0.05	-25.12160382	-27.74425774	-15.8165	-19.0588	-20.5374
+0.05	207.6835855	223.7982714	135.7434	163.6684	173.867
-0.1	-25.12160382	-27.74425774	-15.8165	-19.0588	-20.5374
+0.1	190.0610293	204.3266313	124.6358	150.3219	159.4633
-0.15	-25.12160382	-27.74425774	-15.8165	-19.0588	-20.5374
+0.15	174.7546343	187.4365573	114.9693	138.7046	146.9364
-0.2	-25.74912565	-27.74425774	-20.447	-23.1225	-24.3318
+0.2	157.7392113	168.6869265	104.2016	125.7609	132.9918
-0.25	-36.49862272	-38.56423543	-27.0061	-33.2295	-32.8174
+0.25	143.0661676	152.5426965	94.89616	114.5722	120.9494
-0.3	-51.60004759	-52.28163506	-37.6197	-45.9654	-46.3944
+0.3	126.8791618	134.7616931	84.60672	102.1972	107.6437
-0.35	-66.27522784	-66.69660842	-47.423	-57.7267	-59.0546
+0.35	113.0347143	119.5809151	75.78425	91.58349	96.24432
-0.4	-83.93701348	-86.22377069	-58.381	-70.8707	-73.3395
+0.4	97.89743077	103.0151079	66.11135	79.94313	83.75734
-0.45	-99.28585341	-103.3815468	-67.8854	-82.2688	-85.7378
+0.45	85.07684127	89.0153887	57.89389	70.05087	73.15968
-0.5	-116.3583087	-122.4907473	-78.4355	-94.9182	-99.5098
+0.5	71.21058613	73.91140355	48.97584	59.31112	61.67119
-0.55	-131.0895153	-139.0018203	-87.5191	-105.807	-111.376
+0.55	59.60912287	61.31032069	41.48544	50.28675	52.03389
-0.6	-147.3513261	-157.2547546	-97.5231	-117.795	-124.455
+0.6	47.23519503	47.91475706	33.46053	40.61358	41.72371
-0.65	-161.2696512	-172.9015188	-106.064	-128.028	-135.631
+0.65	37.0481066	37.10083318	26.81919	32.6035	33.2054
-0.7	-176.4995316	-190.0516226	-115.383	-139.19	-147.837
+0.7	26.85617056	27.2550929	19.82571	24.16285	24.28191
-0.75	-189.4096925	-204.6164705	-123.259	-148.62	-158.164
+0.75	19.15532634	19.98554593	14.36465	17.56452	17.41284
-0.8	-203.386364	-220.4171194	-131.756	-158.79	-169.318
+0.8	12.37732883	12.7029666	10.11782	11.30292	11.90542
-0.85	-215.0931024	-233.6824861	-138.844	-167.271	-178.637
+0.85	7.608667303	7.689837411	6.984552	7.678672	8.001905
-0.9	-227.5952414	-247.8870746	-146.38	-176.282	-188.558
+0.9	4.092631063	3.707096153	3.766102	4.135706	4.150677
-0.95	-237.9033059	-259.6353485	-152.56	-183.667	-196.71
+0.95	1.327992577	1.354159828	1.542897	1.645757	1.322214
-1	-248.7096492	-271.9972744	-158.996	-191.354	-205.22
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.48E+02	2.71E+02	1.59E+02	1.91E+02	2.05E+02
-2.05	-1.21E+00	-1.22E+00	-1.41E+00	-1.50E+00	-1.25E+00
+2.05	2.39E+02	2.60E+02	1.53E+02	184.1395	1.97E+02
-2.1	-4.202672841	-3.978701958	-3.94553	-4.33207	-4.34715
+2.1	2.27E+02	2.47E+02	1.46E+02	175.7696	1.88E+02
-2.15	-7.323822605	-7.378099841	-6.78554	-7.46084	-7.75438
+2.15	215.8505832	234.5428698	139.302	167.818	179.2386
-2.2	-12.73617677	-13.08431816	-10.3364	-11.609	-12.1781
+2.2	202.5834651	219.5094412	131.2684	158.2067	168.678
-2.25	-18.70568847	-19.5217137	-14.0293	-17.159	-16.9762
+2.25	190.2505581	205.5671038	123.7709	149.233	158.8357

-2.3	**-27.40732806**	**-27.76009273**	**-20.2213**	**-24.6405**	**-24.7608**
+2.3	**175.6195731**	**189.0609235**	**114.8455**	**138.5462**	**147.1328**
-2.35	**-36.39531335**	**-36.30575567**	**-26.3924**	**-32.0885**	**-32.6585**
+2.35	**162.1808566**	**173.9278837**	**106.622**	**128.6967**	**136.3619**
-2.4	**-47.94016616**	**-48.67566137**	**-33.9189**	**-41.1662**	**-42.3121**
+2.4	**146.4072757**	**156.1955625**	**96.943**	**117.1004**	**123.6966**
-2.45	**-58.8589062**	**-60.49584131**	**-41.0001**	**-49.7018**	**-51.4098**
+2.45	**132.058109**	**140.0894292**	**88.11561**	**106.5216**	**112.1557**
-2.5	**-72.00674196**	**-74.77645054**	**-49.4889**	**-59.9291**	**-62.3317**
+2.5	**115.3632569**	**121.377553**	**77.82127**	**94.18179**	**98.70767**
-2.55	**-84.24222315**	**-88.10406354**	**-57.3581**	**-69.4058**	**-72.469**
+2.55	**100.2988344**	**104.5159065**	**68.51197**	**83.02014**	**86.55551**
-2.6	**-98.77169885**	**-103.9697911**	**-66.6709**	**-80.6166**	**-84.4793**
+2.6	**82.90401224**	**85.07101995**	**57.74063**	**70.10271**	**72.50453**
-2.65	**-112.1286965**	**-118.5872357**	**-75.2061**	**-90.8879**	**-95.4976**
+2.65	**67.31959198**	**67.76007241**	**48.0715**	**58.50467**	**59.8997**
-2.7	**-127.8185083**	**-135.791515**	**-85.2046**	**-102.916**	**-108.417**
+2.7	**50.67690353**	**51.47897007**	**36.96141**	**45.17555**	**45.60465**
-2.75	**-142.1017236**	**-151.4811813**	**-94.2839**	**-113.836**	**-120.157**
+2.75	**37.29287852**	**39.37497925**	**27.60126**	**33.94371**	**33.6124**
-2.8	**-158.7306014**	**-169.7773683**	**-104.83**	**-126.516**	**-133.805**
+2.8	**25.12160297**	**27.74411762**	**20.08253**	**22.56306**	**23.86703**
-2.85	**-173.7447794**	**-186.3216771**	**-114.331**	**-137.937**	**-146.109**
+2.85	**25.12160297**	**27.74411762**	**15.81649**	**19.05878**	**20.53738**
-2.9	**-191.0914813**	**-205.4631782**	**-125.286**	**-151.103**	**-160.306**
+2.9	**25.12160297**	**27.74411762**	**15.81649**	**19.05878**	**20.53738**
-2.95	**-206.6412954**	**-222.6445533**	**-135.087**	**-162.88**	**-173.016**
+2.95	**25.12160297**	**27.74411762**	**15.81649**	**19.05878**	**20.53738**
-3	**-224.4844839**	**-242.384757**	**-146.313**	**-176.366**	**-187.582**
+3	**25.12160297**	**27.74411762**	**15.81649**	**19.05878**	**20.53738**

2-Span: Moment (Max and Min) Raw Data Results – 160' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.71E-13	-3.81E-13	-8.61E-13	-2.55E-13	-2.77E-13	-2.67E-13	-5.36E-13	-2.35E-13	-2.48E-13	-2.78E-13
End Shear	9.31E-13	4.40E-13	9.53E-13	3.86E-13	4.13E-13	3.03E-13	4.24E-13	3.49E-13	3.70E-13	3.05E-13
-0.05	-216.1557843	-178.6955115	-262.4679948	-95.7422595	-103.027787	-97.1140189	-117.59266	-121.103711	-128.182822	-51.05154368
+0.05	1749.658036	1449.086013	1961.189552	899.9435797	963.3161824	904.6923237	1084.304863	1048.71784	1108.989803	476.4165911
-0.1	-432.3115686	-357.391023	-524.9359897	-191.484519	-206.055573	-194.228038	-235.18532	-242.207421	-256.365644	-102.1030874
+0.1	3266.500927	2711.33524	3629.743674	1676.875226	1794.163763	1684.546164	2017.265974	1940.154066	2051.473098	886.0875454
-0.15	-648.4673529	-536.0865345	-787.4039845	-287.226779	-309.08336	-291.342057	-352.777981	-363.311132	-384.548466	-153.154631
+0.15	4543.636947	3787.516593	5063.141667	2331.144386	2493.056362	2340.069887	2799.831681	2675.276877	2828.501227	1229.873285
-0.2	-864.6231372	-714.782046	-1049.871979	-382.969038	-412.111147	-388.456076	-470.370641	-484.414843	-512.731288	-204.2061747
+0.2	5592.627132	4679.457744	6178.194801	2864.931436	3062.396556	2873.562078	3434.903092	3278.446111	3466.941438	1509.042557
-0.25	-1080.778921	-893.4775575	-1312.339974	-478.711298	-515.138933	-485.570094	-587.963301	-605.518554	-640.914111	-255.2577184
+0.25	6414.981845	5389.686561	6987.813774	3281.170863	3505.399091	3288.087432	3953.41539	3761.559872	3979.775364	1725.271953
-0.3	-1296.934706	-1072.173069	-1574.807969	-574.453557	-618.16672	-582.684113	-705.555961	-726.622264	-769.096933	-306.3092621
+0.3	7025.486407	5921.431677	7632.418859	3583.55251	3826.092143	3610.185273	4336.611997	4108.764217	4346.163717	1881.330214
-0.35	-1513.09049	-1250.868581	-1837.275964	-670.195817	-721.194507	-679.798088	-823.148622	-847.725975	-897.279755	-357.3608058
+0.35	7448.723387	6278.622074	8035.582904	3784.433035	4051.264956	3822.534799	4585.581894	4338.445058	4590.528025	1978.98523
-0.4	-1729.246274	-1429.564092	-2099.743959	-765.938076	-824.222293	-776.912151	-940.741282	-968.829686	-1025.46258	-408.4123494
+0.4	7660.932569	6465.887278	8160.014709	3894.598687	4165.599112	3927.924678	4705.377158	4434.971776	4693.811441	2021.107909
-0.45	-1945.402059	-1608.259604	-2362.211954	-861.680336	-927.25008	-874.02617	-1058.33394	-1089.9334	-1153.6454	-459.4638931
+0.45	7670.044785	6488.557527	8023.527382	3904.329923	4172.226215	3932.717374	4703.194942	4407.451318	4665.515409	2008.009139
-0.5	-2161.557843	-1786.955115	-2624.679948	-957.422595	-1030.27787	-971.140189	-1175.9266	-1211.03711	-1281.82822	-510.5154368
+0.5	7531.589609	6366.355287	7792.526415	3828.39457	4093.038481	3858.715185	4618.898364	4338.661485	4592.152174	1980.87698
-0.55	-2377.713627	-1965.650627	-2887.147943	-1053.16485	-1133.30565	-1068.25421	-1293.51926	-1332.14082	-1410.01104	-561.5669805
+0.55	7210.456216	6092.381683	7637.796936	3665.823987	3921.170274	3698.303353	4430.77852	4172.603269	4415.705625	1907.928712
-0.6	-2593.869412	-2144.346138	-3149.615938	-1148.90711	-1236.33344	-1165.36823	-1411.11192	-1453.24453	-1538.19387	-612.6185241
+0.6	6706.658026	5671.31227	7193.072683	3422.676789	3661.951276	3455.441757	4141.419255	3895.534144	4121.732907	1789.143709
-0.65	-2810.025196	-2323.04165	-3412.083933	-1244.64937	-1339.36123	-1262.48225	-1528.70458	-1574.34824	-1666.37669	-663.6700678
+0.65	6031.30134	5111.031738	6474.911249	3108.787006	3324.532211	3138.458877	3761.145305	3517.227334	3720.725008	1628.908955
-0.7	-3026.18098	-2501.737161	-3674.551928	-1340.39163	-1442.38901	-1359.59618	-1646.29724	-1695.45195	-1794.55951	-714.7216115
+0.7	5196.503472	4420.1272	5501.697326	2737.061879	2918.877246	2756.716236	3301.210777	3049.179337	3224.86802	1432.021183
-0.75	-3242.336764	-2680.432673	-3937.019923	-1436.13389	-1545.4168	-1456.71028	-1763.8899	-1816.55566	-1922.74233	-765.7731552
+0.75	4215.388797	3607.885376	4366.098735	2309.035837	2455.763348	2320.341485	2773.79833	2503.87365	2648.268857	1203.683918
-0.8	-3458.492549	-2859.128184	-4199.487918	-1531.87615	-1648.44459	-1553.8243	-1881.48256	-1937.65937	-2050.92515	-816.8246989
+0.8	3102.092234	2684.293347	3007.877419	1835.255575	1946.78001	1840.257983	2192.019055	1894.8443	2004.675956	949.5098299
-0.85	-3803.414078	-3166.589441	-4577.845081	-1627.61841	-1751.47237	-1650.93821	-1999.07522	-2058.76308	-2179.10798	-867.8762425
+0.85	2000.523962	1788.805046	1801.705473	1327.023204	1404.329441	1328.91195	1569.91474	1236.359018	1305.740324	675.5189241
-0.9	-4384.563556	-3710.278645	-5168.807392	-1723.36067	-1854.50016	-1748.05234	-2116.66788	-2179.86679	-2307.2908	-918.9277862
+0.9	1034.299371	1040.2711	931.6954701	803.2058373	841.9244609	798.2145254	922.4535695	592.5011169	627.189964	388.1399128
-0.95	-5163.552269	-4451.807086	-6159.783757	-1819.10293	-1957.52795	-1845.16636	-2234.26054	-2300.9705	-2435.47362	-969.9793299
+0.95	343.6002394	412.3919464	309.2402147	308.8930219	308.8930219	300.2697747	323.0461861	234.772883	247.1293506	179.5216618
-1	-6110.383134	-5361.17568	-7781.619155	-1914.84522	-2060.55573	-1942.28046	-2351.85318	-2422.07409	-2563.65644	-1021.030882
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-6110.383134	-5361.17568	-7781.619155	-1914.84522	-2060.55573	-1942.28046	-2351.85318	-2422.07409	-2563.65644	-1021.030882
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-5163.554125	-4451.806909	-6159.793877	-1819.10296	-1957.52781	-1845.16643	-2234.26052	-2300.97038	-2435.47357	-969.9793375
+2.05	343.6002314	412.3971921	309.2402075	308.8971961	308.8971961	300.2830932	323.0638111	234.7757905	247.1324111	179.0402649
-2.1	-4384.56531	-3710.278472	-5168.80742	-1723.3607	-1854.50003	-1748.05241	-2116.66786	-2179.86668	-2307.29075	-918.9277932
+2.1	1034.924438	1040.279396	931.6957118	803.2032151	841.9551462	798.2331298	922.4651898	592.5021473	627.2152751	388.1338744
-2.15	-3803.415736	-3166.589275	-4577.84511	-1627.61843	-1751.47225	-1650.93838	-1999.0752	-2058.76297	-2179.10793	-867.8762489
+2.15	2001.225686	1788.815502	1801.705591	1327.02483	1404.326536	1328.932557	1569.928729	1236.356896	1305.738444	675.5131405
-2.2	-3458.494123	-2859.12804	-4199.487959	-1531.87617	-1648.44447	-1553.82436	-1881.48254	-1937.65927	-2050.92511	-816.8247047
+2.2	3102.835077	2684.304741	3007.877494	1835.258262	1946.778445	1840.28025	2192.034764	1894.845319	2004.677408	949.5041262

-2.25	**-3242.338241**	***-2680.432535***	***-3937.019964***	**-1436.13391**	**-1545.41669**	**-1456.71033**	**-1763.88988**	**-1816.55556**	**-1922.74229**	**-765.7731604**
+2.25	**4216.139148**	***3607.8971***	***4366.098531***	**2309.038556**	**2455.762223**	**2320.335429**	**2773.814004**	**2503.872408**	**2648.270113**	**1203.678327**
-2.3	**-3026.18236**	***-2501.73703***	***-3674.55197***	**-1340.39165**	**-1442.38891**	**-1359.59631**	**-1646.29722**	**-1695.45186**	**-1794.55947**	**-714.7216161**
+2.3	**5197.230423**	***4420.138509***	***5501.697578***	**2737.064091**	**2918.875674**	**2756.709811**	**3301.225752**	**3049.177261**	**3224.866214**	**1432.01513**
-2.35	**-2810.026478**	***-2323.041526***	***-3412.083975***	**-1244.64939**	**-1339.36113**	**-1262.48229**	**-1528.70456**	**-1574.34816**	**-1666.37665**	**-663.6700718**
+2.35	**6031.975997**	***5111.041896***	***6474.911199***	**3108.78807**	**3324.529117**	**3138.451163**	**3761.158844**	**3517.223231**	**3720.72107**	**1628.90271**
-2.4	**-2593.870596**	***-2144.346021***	***-3149.61598***	**-1148.90713**	**-1236.33335**	**-1165.36826**	**-1411.1119**	**-1453.24445**	**-1538.19383**	**-612.6185276**
+2.4	**6707.252438**	***5671.32056***	***7193.072575***	**3422.67458**	**3661.946385**	**3455.432179**	**4141.430556**	**3895.527466**	**4121.726255**	**1789.13698**
-2.45	**-2377.714714**	***-1965.650517***	***-2887.147985***	**-1053.16487**	**-1133.30557**	**-1068.25424**	**-1293.51924**	**-1332.14075**	**-1410.01101**	**-561.5669833**
+2.45	**7210.946503**	***6092.38808***	***7637.797516***	**3665.819496**	**3921.162869**	**3698.291418**	**4430.786795**	**4172.593443**	**4415.695636**	**1907.921813**
-2.5	**-2161.558832**	***-1786.955012***	***-2624.67999***	**-957.422607**	**-1030.27779**	**-971.140213**	**-1175.92658**	**-1211.03704**	**-1281.82819**	**-510.515439**
+2.5	**7531.952771**	***6366.358516***	***7792.526456***	**3828.386946**	**4093.027647**	**3858.728498**	**4618.902706**	**4338.672928**	**4592.164569**	**1980.869588**
-2.55	**-1945.40295**	***-1608.259508***	***-2362.211995***	**-861.680346**	**-927.250013**	**-874.026189**	**-1058.33392**	**-1089.93334**	**-1153.64537**	**-459.4638947**
+2.55	**7669.775884**	***6488.556348***	***8023.52741***	**3904.339871**	**4172.239559**	**3932.706463**	**4703.193404**	**4407.442425**	**4665.505714**	**2010.994928**
-2.6	**-1729.247068**	***-1429.564003***	***-2099.744***	**-765.938085**	**-824.222233**	**-776.912165**	**-940.741259**	**-968.829633**	**-1025.46255**	**-408.4123505**
+2.6	**7660.511103**	***6465.883015***	***8160.014663***	**3894.604864**	**4165.60843**	**3927.909935**	**4705.371148**	**4434.983775**	**4693.823705**	**2021.104423**
-2.65	**-1513.091186**	***-1250.868499***	***-1837.276006***	**-670.195824**	**-721.194453**	**-679.798141**	**-823.148599**	**-847.725928**	**-897.279733**	**-357.3608062**
+2.65	**7448.130982**	***6278.613301***	***8035.582898***	**3784.435085**	**4051.269886**	**3822.543991**	**4585.570744**	**4338.452274**	**4590.535217**	**1978.981068**
-2.7	**-1296.935304**	***-1072.172994***	***-1574.808011***	**-574.453563**	**-618.166674**	**-582.684116**	**-705.555939**	**-726.622224**	**-769.096913**	**-306.3092619**
+2.7	**7024.70768**	***5921.418406***	***7632.418556***	**3583.549387**	**3826.091414**	**3610.18992**	**4336.594962**	**4108.765978**	**4346.16513**	**1881.325083**
-2.75	**-1080.779422**	***-893.4774895***	***-1312.340016***	**-478.711302**	**-515.138894**	**-485.570092**	**-587.963279**	**-605.518519**	**-640.914094**	**-255.2577176**
+2.75	**6414.412907**	***5389.669074***	***6987.813994***	**3281.162963**	**3505.39325**	**3288.086939**	**3953.421086**	**3761.555471**	**3979.77024**	**1725.276615**
-2.8	**-864.6235403**	***-714.7819849***	***-1049.872021***	**-382.969041**	**-412.111114**	**-388.456068**	**-470.370619**	**-484.414815**	**-512.731274**	**-204.2061734**
+2.8	**5591.850796**	***4679.434622***	***6178.19486***	**2864.918089**	**3062.38493**	**2873.556126**	**3434.901981**	**3278.435504**	**3466.92974**	**1509.046328**
-2.85	**-648.4676583**	***-536.0864804***	***-787.4040262***	**-287.226781**	**-309.083334**	**-291.342044**	**-352.777959**	**-363.31111**	**-384.548455**	**-153.1546291**
+2.85	**4542.501706**	***3787.488057***	***5063.141716***	**2331.125765**	**2493.039053**	**2340.058767**	**2799.824233**	**2675.27214**	**2828.496357**	**1229.87621**
-2.9	**-432.3117764**	***-357.3909758***	***-524.9360314***	**-191.48452**	**-206.055555**	**-194.22802**	**-235.185298**	**-242.207406**	**-256.365635**	**-102.1030848**
+2.9	**3263.070415**	***2711.300718***	***3629.743469***	**1676.850667**	**1794.140048**	**1684.529718**	**2017.252043**	**1940.142664**	**2051.461176**	**886.0894712**
-2.95	**-216.1558945**	***-178.6954712***	***-262.4680365***	**-95.7422586**	**-103.027775**	**-97.1139954**	**-117.592638**	**-121.103701**	**-128.182816**	**-51.05154055**
+2.95	**1749.892393**	***1449.047173***	***1961.189967***	**899.9133879**	**963.2864178**	**904.6693349**	**1084.283015**	**1048.702223**	**1108.971059**	**476.4175561**
-3	**-9.11E-13**	***-4.40E-13***	***-8.42E-13***	**-3.07E-13**	**-3.25E-13**	**-2.15E-13**	**-2.74E-13**	**-3.41E-13**	**-3.60E-13**	**-2.39E-13**
+3	**1.27E-12**	***7.98E-13***	***1.28E-12***	**6.12E-13**	**6.57E-13**	**5.16E-13**	**6.30E-13**	**6.54E-13**	**6.94E-13**	**4.13E-13**

2-Span: Moment (Max and Min) Raw Data Results - 160' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.37E-13	-2.11E-13	-3.20E-13	-2.73E-13	-4.13E-13	-3.29E-13	-1.94E-13	-1.85E-13	-2.64E-13
End Shear	3.18E-13	3.74E-13	3.88E-13	3.14E-13	3.57E-13	2.67E-13	2.30E-13	2.28E-13	3.58E-13
-0.05	-73.26731741	-104.2151163	-111.1382635	-138.8886238	-58.75333933	-79.37605497	-90.8704809	-101.755439	-113.22029
+0.05	680.1210898	910.3799193	930.572284	1033.849175	547.4157927	738.4716206	836.9184838	918.1238908	1000.766902
-0.1	-146.5346348	-208.4302327	-222.276527	-277.7772477	-117.5066787	-158.7521099	-181.740962	-203.510878	-226.44058
+0.1	1265.962722	1685.028274	1715.04056	1875.712575	1019.067776	1374.872153	1556.895541	1708.832896	1866.334444
-0.15	-219.8019522	-312.645349	-333.4147906	-416.6658715	-176.260018	-238.1281649	-272.611443	-305.266317	-339.66087
+0.15	1757.783487	2324.997228	2355.784784	2550.352524	1415.597886	1909.600413	2160.437392	2395.587881	2611.741959
-0.2	-293.0692697	-416.8604653	-444.5530541	-555.5544953	-235.0133573	-317.5042199	-363.481924	-407.021756	-452.88116
+0.2	2157.371115	2833.551513	2886.620951	3110.206144	1738.206493	2344.552523	2649.821565	2955.523145	3234.087791
-0.25	-366.3365871	-521.0755816	-555.6913176	-694.4431192	-293.7666966	-396.8802749	-454.352405	-508.777195	-566.10145
+0.25	2467.093711	3240.482159	3281.455977	3564.333381	1988.756197	2682.251425	3038.035782	3390.362831	3730.230668
-0.3	-439.6039045	-625.290698	-666.8295811	-833.331743	-352.520036	-476.2563298	-545.222886	-610.532634	-679.32174
+0.3	2689.899996	3526.002024	3576.783885	3901.326314	2169.574386	2939.717527	3332.253928	3704.162483	4091.979503
-0.35	-512.8712219	-729.5058143	-777.9678446	-972.2203668	-411.2733753	-555.6323848	-636.093367	-712.288073	-792.542029
+0.35	2846.174447	3694.065959	3776.475942	4122.397799	2283.452511	3112.176925	3522.05748	3921.673811	4323.412158
-0.4	-586.1385393	-833.7209306	-889.1061082	-1111.108991	-470.0267146	-635.0084398	-726.963848	-814.043512	-905.762319
+0.4	2922.50558	3772.09326	3898.60249	4244.116683	2333.646646	3197.102963	3612.879588	4031.392638	4442.357541
-0.45	-659.4058567	-937.9360469	-1000.244372	-1249.997614	-528.780054	-714.3844947	-817.834328	-915.798951	-1018.98261
+0.45	2922.543525	3744.209482	3903.493213	4207.916847	2323.877183	3199.676664	3609.456237	4034.786194	4455.556174
-0.5	-732.6731741	-1042.151163	-1111.382635	-1388.886238	-587.5333933	-793.7605497	-908.704809	-1017.55439	-1132.2029
+0.5	2869.345792	3687.95594	3825.554535	4068.757893	2287.424057	3140.156732	3545.486688	3958.800357	4365.799529
-0.55	-805.9404915	-1146.36628	-1222.520899	-1527.774862	-646.2867326	-873.1366047	-999.57529	-1119.30983	-1245.42319
+0.55	2751.32253	3549.018863	3651.400752	3936.296368	2200.778462	3010.184799	3401.96831	3792.416442	4173.626489
-0.6	-879.207809	-1250.581396	-1333.659162	-1666.663486	-705.0400719	-952.5126596	-1090.44577	-1221.06527	-1358.64348
+0.6	2570.193611	3317.991118	3381.824928	3695.551276	2062.235643	2812.384323	3179.724956	3538.790439	3898.25637
-0.65	-952.4751264	-1354.796512	-1444.797426	-1805.55211	-763.7934113	-1031.888715	-1181.31625	-1322.82071	-1471.86377
+0.65	2332.423601	3007.773875	3041.719074	3292.278534	1876.835566	2553.772112	2886.728783	3206.952296	3535.838858
-0.7	-1025.742444	-1459.011629	-1555.935689	-1944.440734	-822.5467506	-1111.26477	-1272.18673	-1424.57615	-1585.08406
+0.7	2045.058738	2616.052464	2615.091634	2801.749831	1650.083555	2241.99214	2531.672991	2806.739148	3094.811289
-0.75	-1099.009761	-1563.226745	-1667.073953	-2083.329357	-881.3000899	-1190.640825	-1363.05721	-1526.33159	-1698.30435
+0.75	1715.725371	2153.224921	2114.255674	2183.762929	1387.948527	1885.315222	2123.970524	2350.355118	2586.853234
-0.8	-1172.277079	-1667.441861	-1778.212216	-2222.217981	-940.0534292	-1270.01688	-1453.9277	-1628.08702	-1811.52464
+0.8	1352.630147	1630.540583	1556.410526	1453.276011	1096.864124	1492.639077	1673.754058	1845.184232	2024.543447
-0.85	-1245.544396	-1771.656978	-1889.35048	-2394.447737	-998.8067686	-1349.392935	-1544.79818	-1729.84246	-1924.74493
+0.85	964.5604334	1060.098104	939.3064412	818.307764	783.728452	1073.802943	1191.875516	1306.33122	1421.36155
-0.9	-1318.811713	-1875.872094	-2000.488743	-2627.84366	-1057.560108	-1428.768989	-1635.66866	-1831.5979	-2037.96522
+0.9	560.9273522	504.621482	458.7097106	390.2667541	455.9040889	639.2754351	689.9075382	747.5877759	791.6870049
-0.95	-1392.079031	-1980.08721	-2111.627007	-2912.465815	-1116.313447	-1508.145044	-1726.53914	-1933.35334	-2151.18551
+0.95	217.472846	217.329338	172.8522612	139.9473293	173.1001578	240.4246411	244.6888369	251.3262355	251.3103506
-1	-1465.346327	-2084.302361	-2222.765322	-3746.585212	-1175.066716	-1587.521066	-1817.40955	-2035.10876	-2264.40567
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1465.346327	-2084.302361	-2222.765322	-3746.585212	-1175.066716	-1587.521066	-1817.40955	-2035.10876	-2264.40567
+2	0	0	0	0	0	0	0	0	0
-2.05	-1392.079011	-1980.087207	-2111.627054	-2912.465647	-1116.313381	-1508.144986	-1726.53907	-1933.35323	-2151.18538
+2.05	217.4757234	217.3320282	172.8543029	139.9485681	173.1170125	240.4331625	244.704876	251.3303063	251.314421
-2.1	-1318.811695	-1875.872093	-2000.488787	-2627.843499	-1057.560045	-1428.768932	-1635.66859	-1831.5978	-2037.9651
+2.1	560.9489157	504.6027275	458.7233781	390.2643599	455.9139651	639.2926025	689.920662	747.6063895	791.6911285
-2.15	-1245.544379	-1771.656978	-1889.350519	-2394.447585	-998.8067089	-1349.392878	-1544.79812	-1729.84236	-1924.74482
+2.15	964.558474	1060.114012	939.3152246	818.3131454	783.7395325	1073.821715	1191.890351	1306.329113	1421.367732
-2.2	-1172.277063	-1667.441864	-1778.212252	-2222.217842	-940.0533731	-1270.016825	-1453.92764	-1628.08693	-1811.52453
+2.2	1352.629072	1630.556378	1556.417315	1453.281294	1096.875474	1492.634839	1673.769895	1845.185252	2024.550743
-2.25	-1099.009747	-1563.22675	-1667.073985	-2083.329226	-881.3000373	-1190.640771	-1363.05716	-1526.3315	-1698.30425

+2.25	1715.724638	2153.240487	2114.261713	2183.7684	1387.959941	1885.311266	2123.986627	2350.35605	2586.860546
-2.3	-1025.742431	-1459.011635	-1555.935717	-1944.440611	-822.5467014	-1111.264717	-1272.18668	-1424.57606	-1585.08397
+2.3	2045.057752	2616.067021	2615.087737	2801.755196	1650.094486	2241.987875	2531.688833	2806.738203	3094.818189
-2.35	-952.4751154	-1354.796521	-1444.79745	-1805.551996	-763.7933656	-1031.888664	-1181.31621	-1322.82063	-1471.86368
+2.35	2332.42146	3007.786674	3041.728395	3292.281069	1876.845832	2553.766772	2886.743281	3206.949831	3535.844154
-2.4	-879.2077994	-1250.581407	-1333.659182	-1666.663381	-705.0400297	-952.5126101	-1090.44573	-1221.06519	-1358.6434
+2.4	2570.189961	3318.001294	3381.831497	3695.554718	2062.244452	2812.377461	3179.737644	3538.786163	3898.259325
-2.45	-805.9404835	-1146.366292	-1222.520915	-1527.774765	-646.2866939	-873.1365565	-999.575253	-1119.30976	-1245.42312
+2.45	2751.317063	3549.029023	3651.392582	3936.29476	2200.785922	3010.175983	3401.978742	3792.40982	4173.625659
-2.5	-732.6731675	-1042.151178	-1111.382647	-1388.88615	-587.5333581	-793.7605028	-908.704775	-1017.55432	-1132.20284
+2.5	2869.337959	3687.96261	3825.563353	4068.760801	2287.42943	3140.145311	3545.494206	3958.790634	4365.795095
-2.55	-659.4058515	-937.9360635	-1000.24438	-1249.997535	-528.7800222	-714.3844491	-817.834298	-915.798888	-1018.98255
+2.55	2922.553193	3744.204916	3903.486347	4207.918853	2323.873255	3199.665935	3609.450888	4034.775086	4455.562976
-2.6	-586.1385355	-833.7209491	-889.1061124	-1111.10892	-470.0266864	-635.0083955	-726.963821	-814.043453	-905.762269
+2.6	2922.512472	3772.085301	3898.611738	4244.11378	2333.640577	3197.113164	3612.870688	4031.401085	4442.360171
-2.65	-512.8712195	-729.5058348	-777.9678449	-972.2203045	-411.2733505	-555.6323418	-636.093344	-712.288019	-792.541986
+2.65	2846.178001	3694.056825	3776.469767	4122.401343	2283.443683	3112.183533	3522.045065	3921.678013	4323.409322
-2.7	-439.6039036	-625.2907204	-666.8295774	-833.3316892	-352.5200147	-476.2562882	-545.222867	-610.532584	-679.321703
+2.7	2689.899853	3526.011675	3576.78799	3901.333948	2169.562618	2939.720371	3332.260331	3704.161366	4091.971329
-2.75	-366.3365876	-521.0756061	-555.69131	-694.443074	-293.7666788	-396.8802345	-454.35239	-508.77715	-566.10142
+2.75	2467.0899	3240.487027	3281.448985	3564.341512	1988.742019	2682.250121	3038.03775	3390.356906	3730.217337
-2.8	-293.0692716	-416.8604917	-444.5530425	-555.5544588	-235.013343	-317.5041809	-363.481913	-407.021715	-452.881136
+2.8	2157.36286	2833.550873	2886.626748	3110.209753	1738.188846	2344.546721	2649.818674	2955.511862	3234.091667
-2.85	-219.8019556	-312.6453773	-333.4147751	-416.6658435	-176.2600072	-238.1281272	-272.611436	-305.266281	-339.660853
+2.85	1757.771468	2324.991557	2355.785246	2550.359531	1415.576752	1909.590401	2160.429357	2395.571165	2611.739438
-2.9	-146.5346396	-208.430263	-222.2765076	-277.7772283	-117.5066713	-158.7520736	-181.740959	-203.510846	-226.44057
+2.9	1265.946202	1685.016839	1715.034608	1875.714468	1019.043779	1374.857794	1556.882301	1708.833575	1866.336673
-2.95	-73.26732366	-104.2151486	-111.1382402	-138.8886131	-58.75333548	-79.3760199	-90.8704815	-101.755411	-113.220287
+2.95	680.100779	910.3860957	930.5609614	1033.855403	547.4192467	738.4519025	836.8999225	918.1188742	1000.762446
-3	-2.39E-13	-2.89E-13	-2.34E-13	-2.82E-13	-2.35E-13	-1.82E-13	-2.29E-13	-2.30E-13	-2.32E-13
+3	4.93E-13	5.53E-13	5.24E-13	5.19E-13	3.75E-13	4.28E-13	5.39E-13	4.73E-13	5.91E-13

2-Span: Moment (Max and Min) Raw Data Results - 160' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.75E-13	-5.94E-13	-4.44E-13	-5.37E-13	-4.61E-13
End Shear	6.55E-13	6.60E-13	2.84E-13	3.50E-13	4.23E-13
-0.05	-200.9728305	-221.9540619	-126.531952	-152.470201	-164.299056
+0.05	1662.864579	1790.386171	1085.947048	1310.043652	1391.723938
-0.1	-401.9456611	-443.9081238	-253.063904	-304.940402	-328.598113
+0.1	3062.528037	3307.764981	2006.559542	2421.036899	2568.617548
-0.15	-602.9184916	-665.8621857	-379.595856	-457.410603	-492.897169
+0.15	4259.883836	4587.828345	2763.316316	3344.397767	3553.379441
-0.2	-803.8913222	-887.8162476	-506.127808	-609.880804	-657.196226
+0.2	5208.021631	5698.044019	3405.003095	4109.657512	4358.511518
-0.25	-1004.864153	-1109.77031	-632.65976	-762.351005	-821.495282
+0.25	5960.36605	6551.829509	3896.827469	4689.447757	5009.041964
-0.3	-1205.836983	-1331.724371	-759.191712	-914.821206	-985.794338
+0.3	6535.155613	7198.09088	4247.900931	5093.814302	5469.283174
-0.35	-1406.809814	-1553.678433	-885.723664	-1067.29141	-1150.09339
+0.35	6915.420768	7609.545282	4474.960507	5356.850474	5745.01009
-0.4	-1607.782644	-1775.632495	-1012.25562	-1219.76161	-1314.39245
+0.4	7134.60764	7800.551203	4563.3345	5454.497682	5874.670765
-0.45	-1808.755475	-1997.586557	-1138.78757	-1372.23181	-1478.69151
+0.45	7137.723447	7853.222312	4522.596781	5398.274319	5833.935459
-0.5	-2009.728305	-2219.540619	-1265.31952	-1524.70201	-1642.99056
+0.5	7001.087464	7678.763956	4456.629232	5322.647914	5742.037391
-0.55	-2210.701136	-2441.494681	-1391.85147	-1677.17221	-1807.28962
+0.55	6688.448661	7306.893343	4296.325135	5135.31388	5522.724815
-0.6	-2411.673967	-2663.448743	-1518.38342	-1829.64241	-1971.58868
+0.6	6193.045889	6813.079497	4017.026786	4804.666012	5151.829795
-0.65	-2612.646797	-2885.402805	-1644.91538	-1982.11261	-2135.88773
+0.65	5553.430605	6127.979359	3628.925892	4342.192637	4660.185218
-0.7	-2813.619628	-3107.356867	-1771.44733	-2134.58281	-2300.18679
+0.7	4789.318736	5272.155498	3143.948458	3764.862572	4039.253216
-0.75	-3014.592458	-3329.310929	-1897.97928	-2287.05302	-2464.48585
+0.75	3887.801305	4265.575317	2576.570477	3091.77777	3305.609567
-0.8	-3215.565289	-3551.264991	-2024.51123	-2439.52322	-2628.7849
+0.8	2871.030641	3138.133809	1939.937656	2327.155381	2477.183582
-0.85	-3416.538119	-3773.219052	-2151.04318	-2591.99342	-2793.08396
+0.85	1762.824781	1913.485457	1242.993732	1488.510754	1573.259223
-0.9	-3617.51095	-3995.173114	-2277.57514	-2744.46362	-2957.38302
+0.9	776.3165229	845.0797965	631.4105897	721.3664441	774.2619345
-0.95	-3818.48378	-4217.127176	-2404.10709	-2896.93382	-3121.68207
+0.95	284.5703423	264.1575216	249.2756824	289.5649412	289.7019468
-1	-4019.456524	-4439.058834	-2530.63904	-3049.40407	-3285.98113
+1	0	0	0	0	0
(Span 2) -2	-4019.456524	-4439.058834	-2530.63904	-3049.40407	-3285.98113
+2	0	0	0	0	0
-2.05	-3818.4837	-4217.105893	-2404.10709	-2896.93387	-3121.68207
+2.05	284.561962	264.1562325	249.2653013	289.5561241	289.6933158
-2.1	-3617.510876	-3995.152952	-2277.57514	-2744.46367	-2957.38302
+2.1	776.3207722	845.0802124	631.4118012	721.3604076	774.2755449
-2.15	-3416.538053	-3773.200011	-2151.04318	-2591.99346	-2793.08397
+2.15	1762.833779	1916.240123	1242.995086	1488.514162	1573.268628
-2.2	-3215.565229	-3551.24707	-2024.51123	-2439.52326	-2628.78491
+2.2	2871.040661	3140.375918	1939.939539	2327.159385	2477.193892
-2.25	-3014.592405	-3329.294129	-1897.97928	-2287.05306	-2464.48586

+2.25	3887.810954	4267.960181	2576.571617	3091.781285	3305.619047
-2.3	-2813.619581	-3107.341188	-1771.44732	-2134.58285	-2300.1868
+2.3	4789.326309	5272.154443	3143.946648	3764.864172	4039.261146
-2.35	-2612.646758	-2885.388247	-1644.91537	-1982.11265	-2135.88775
+2.35	5553.434637	6126.985796	3628.92166	4342.189447	4660.190189
-2.4	-2411.673934	-2663.435306	-1518.38342	-1829.64244	-1971.5887
+2.4	6194.785747	6813.081164	4017.019699	4804.659275	5151.830827
-2.45	-2210.70111	-2441.482365	-1391.85146	-1677.17224	-1807.28964
+2.45	6688.460953	7306.893873	4296.314717	5135.302721	5522.719842
-2.5	-2009.728286	-2219.529424	-1265.31951	-1524.70204	-1642.99059
+2.5	7001.09389	7681.328953	4456.641157	5322.655456	5742.026863
-2.55	-1808.755463	-1997.576483	-1138.78756	-1372.23183	-1478.69153
+2.55	7137.719948	7853.220377	4522.58714	5398.269467	5833.925381
-2.6	-1607.782639	-1775.623543	-1012.2556	-1219.76163	-1314.39248
+2.6	7134.597273	7800.551937	4563.347252	5454.488256	5874.67855
-2.65	-1406.809815	-1553.670602	-885.723648	-1067.29143	-1150.09343
+2.65	6915.40234	7609.543705	4474.968488	5356.858614	5745.011348
-2.7	-1205.836991	-1331.717661	-759.191695	-914.821223	-985.794371
+2.7	6535.148844	7199.07095	4247.902989	5093.815505	5469.276613
-2.75	-1004.864167	-1109.76472	-632.659742	-762.351019	-821.495317
+2.75	5960.372856	6551.828251	3896.823424	4689.441234	5009.051119
-2.8	-803.8913437	-887.8117786	-506.127788	-609.880815	-657.196263
+2.8	5209.230814	5698.040965	3404.992329	4109.643057	4358.499943
-2.85	-602.9185199	-665.8588376	-379.595835	-457.410612	-492.897209
+2.85	4259.893255	4590.283888	2763.310795	3344.399813	3553.383343
-2.9	-401.9456962	-443.9058966	-253.063881	-304.940408	-328.598155
+2.9	3062.527325	3307.765397	2006.54691	2421.030312	2568.612584
-2.95	-200.9728724	-221.9529556	-126.531928	-152.470204	-164.2991
+2.95	1662.852889	1790.387919	1085.954309	1310.028457	1391.709413
-3	-3.89E-13	-3.84E-13	-3.65E-13	-4.17E-13	-4.16E-13
+3	9.40E-13	9.41E-13	6.48E-13	7.13E-13	6.81E-13

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.80948	-4.74898	-6.754933648	-7.20367	-9.4973	-3.808227854	-5.14493	-5.88997	-6.595504216	-7.33862
End Shear	66.77256	47.26291	63.60963787	65.2742	77.47334	38.03685367	51.28945	58.17016	63.8432835	69.6853
-0.05	-6.80948	-4.74898	-6.754933648	-7.20367	-9.5441	-3.808227854	-5.14493	-5.88997	-6.595504216	-7.33862
+0.05	62.19449	44.07417	59.00829137	60.31088	69.58452	35.48196738	47.8426	54.21977	59.42512035	64.77189
-0.1	-6.80948	-4.74898	-6.754933648	-7.20367	-9.70306	-3.808227854	-5.14493	-5.88997	-6.595504216	-7.33862
+0.1	57.53404	40.79657	54.2812647	55.21747	61.62304	32.85737702	44.29946	50.15873	54.88483117	59.72456
-0.15	-8.19694	-6.38969	-6.754933648	-7.20367	-9.93639	-5.33925818	-7.14897	-7.48969	-7.481418127	-7.47892
+0.15	53.41724	37.92948	50.16276825	50.79288	54.96405	30.56084675	41.19937	46.60758	50.9185649	55.31978
-0.2	-12.6362	-9.66369	-9.09630325	-7.99075	-10.3055	-7.957462889	-10.6844	-11.553	-11.59818835	-11.5954
+0.2	48.81092	34.71855	45.56947851	45.87355	47.9358	27.9881318	37.72664	42.63199	46.48283609	50.39876
-0.25	-16.7686	-12.5263	-12.8500869	-10.9724	-11.4532	-10.24601887	-13.7749	-15.107	-15.59404067	-15.8976
+0.25	44.81139	31.92792	41.59481348	41.6308	42.1336	25.75148318	34.70773	39.17811	42.63334833	46.13277
-0.3	-21.3986	-15.7307	-17.49617499	-15.3864	-15.3394	-12.80704636	-17.2335	-19.0868	-20.07313779	-20.9098
+0.3	40.36684	28.82363	37.1938103	36.94955	36.24443	23.26262585	31.34859	35.33756	38.35776212	41.40003
-0.35	-25.4243	-18.5142	-21.63300211	-19.3722	-18.9264	-15.03104157	-20.2372	-22.5452	-23.96956709	-25.2745
+0.35	36.53551	26.14474	33.41464305	32.9451	31.3584	21.1140804	28.44895	32.0247	34.67409406	37.32752
-0.4	-29.9047	-21.6089	-26.25177874	-24.4704	-23.5247	-17.50290771	-23.5758	-26.3918	-28.30819317	-30.1398
+0.4	32.31041	23.18707	29.26447365	28.56592	26.4517	18.74106346	25.24658	28.36876	30.61422593	32.84505
-0.45	-33.7731	-24.278	-30.2530883	-28.9002	-27.6153	-19.6341206	-26.4546	-29.7109	-32.056159	-34.3475
+0.45	28.69817	20.65519	25.7324611	24.85624	22.39274	16.70884001	22.50431	25.24066	27.14541884	29.02071
-0.5	-38.0462	-27.2232	-34.68900246	-33.8264	-32.3555	-21.98484279	-29.6301	-33.3748	-36.19873916	-39.0039
+0.5	24.75024	17.88413	21.89167478	20.84314	18.50889	14.48364741	19.50189	21.81891	23.35684886	24.85049
-0.55	-41.7063	-29.7427	-38.5031306	-38.0763	-36.9095	-23.99505566	-32.3458	-36.5107	-39.74919892	-43
+0.55	21.408	15.53454	18.65847663	17.48469	15.41807	12.59596652	16.9551	18.91934	20.15194196	21.32901
-0.6	-45.7147	-32.4982	-42.69763407	-42.7666	-42.6703	-26.19265112	-35.3149	-39.9424	-43.6401519	-47.3855
+0.6	17.79492	12.99007	15.18561886	13.90165	12.14156	10.55058089	14.19581	15.78135	16.69024533	17.53301
-0.65	-49.1157	-34.8328	-46.27292411	-46.7801	-47.983	-28.05364191	-37.8295	-42.8515	-46.94406847	-51.1152
+0.65	14.7736	10.85805	12.30289548	10.95091	9.508678	8.835664813	11.88258	13.15403	13.7982822	14.36907
-0.7	-52.8017	-37.3587	-50.16747231	-51.1705	-54.6928	-30.06612797	-40.5492	-46.0012	-50.52781462	-55.1678
+0.7	11.55307	8.580143	9.256517123	8.091495	6.968753	7.002066449	9.409596	10.3494	10.71904402	11.00927
-0.75	-55.8929	-39.4731	-53.45226275	-54.8911	-60.6278	-31.74967694	-42.8246	-48.6398	-53.53614692	-58.5765
+0.75	8.903566	6.700969	6.80136001	5.829732	4.988969	5.488133446	7.368047	8.038077	8.189058874	8.257566
-0.8	-59.1989	-41.7295	-56.98830086	-58.9176	-68.1675	-33.54507094	-45.2515	-51.458	-56.75710874	-62.2343
+0.8	6.133282	4.729614	4.430768621	3.889913	3.285582	3.898307682	5.224546	5.616371	5.599599458	5.598928
-0.85	-61.9294	-43.5884	-59.93093451	-62.2889	-74.9394	-35.0229575	-47.2496	-53.7822	-59.42081685	-65.2672
+0.85	4.003291	3.138563	2.900160206	2.47215	2.091291	2.613577848	3.492769	3.664798	3.660992099	3.660354
-0.9	-64.7978	-45.5353	-63.04991472	-65.8875	-82.8766	-36.56927509	-49.3406	-56.2195	-62.22341717	-68.4682
+0.9	1.919237	1.670644	1.665829478	1.324319	1.079676	1.299507349	1.813818	1.904478	1.903957021	1.903445
-0.95	-67.1168	-47.1034	-65.59872583	-68.8529	-89.8886	-37.81328069	-51.0233	-58.1856	-64.49345879	-71.0707
+0.95	0.85915	0.67059	0.696577008	0.553372	0.438548	0.590519485	0.647645	0.674234	0.647640957	0.676636
-1	-69.4901	-48.7008	-68.24210886	-71.9597	-97.629	-39.07854069	-52.7353	-60.1923	-66.8221163	-73.7529
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.37668	48.61219	68.09390233	71.78447	97.17992	39.0084156	52.64036	60.08081	66.69239132	73.60308
-2.05	-8.02E-01	-0.63765	-0.635952051	-0.50515	-4.00E-01	-0.551374161	-0.61599	-0.61567	-0.616037667	-0.61805
+2.05	67.28396	47.20265	65.76135443	69.04308	90.34991	37.89192137	51.12967	58.31011	64.63754765	71.23627
-2.1	-2.03386	-1.73923	-1.734377186	-1.37884	-1.1263	-1.372588324	-1.89434	-1.99837	-1.997839953	-1.99733
+2.1	64.65711	45.42551	62.87283122	65.68237	82.40325	36.48212283	49.22274	56.08195	62.06495454	68.28691
-2.15	-3.87625	-3.03779	-2.824432837	-2.38552	-2.017	-2.532145088	-3.38302	-3.5413	-3.53829477	-3.53766
+2.15	62.12666	43.70757	60.1206354	62.50695	75.38643	35.11764022	47.37759	53.93131	59.59192792	65.46234
-2.2	-6.29065	-4.84089	-4.563744831	-3.98615	-3.37052	-3.988104633	-5.3456	-5.75297	-5.735271489	-5.7346
+2.2	59.03256	41.60091	56.78579127	58.68635	67.71189	33.44277237	45.11319	51.29732	56.57318504	62.02516
-2.25	-8.73367	-6.58043	-6.65558179	-5.68592	-4.8643	-5.390973367	-7.23704	-7.8899	-8.027138501	-8.08177
+2.25	56.1153	39.60985	53.66560198	55.13336	61.05389	31.85851882	42.97167	48.81047	53.73101636	58.79752

-2.3	-11.7343	-8.71007	-9.429184429	-8.24913	-7.10802	-7.106695095	-9.5507	-10.5093	-10.89432631	-11.2002
+2.3	52.61166	37.21366	49.94298051	50.91686	54.29627	29.95057015	40.39299	45.82025	50.32170205	54.93452
-2.35	-14.5742	-10.7201	-12.11731489	-10.7618	-9.34119	-8.724655891	-11.7329	-12.9841	-13.61144851	-14.1649
+2.35	49.3585	34.98476	46.5064629	47.04279	48.33563	28.17476625	37.99322	43.04094	47.15943152	51.3585
-2.4	-17.9958	-13.1363	-15.38427022	-14.1058	-12.3251	-10.668157	-14.3544	-15.9616	-16.88887829	-17.7506
+2.4	45.50302	32.33901	42.45461076	42.49437	42.31483	26.06571683	35.14342	39.74406	43.41512397	47.13165
-2.45	-21.1816	-15.3815	-18.44870244	-17.2675	-15.2196	-12.4729892	-16.7892	-18.7305	-19.94345826	-21.1002
+2.45	41.96485	29.90755	38.75344156	38.35568	37.21078	24.12658304	32.52348	36.71604	39.98179814	43.26193
-2.5	-24.9666	-18.0443	-22.11286179	-21.0736	-18.7224	-14.61228717	-19.6755	-22.0166	-23.57555201	-25.091
+2.5	37.81522	27.05222	34.43089182	33.53935	32.06548	21.84841684	29.44575	33.16207	35.95806962	38.73322
-2.55	-28.4477	-20.4894	-25.50193768	-24.6147	-22.1479	-16.57577164	-22.3248	-25.0359	-26.91855111	-28.7708
+2.55	34.01629	24.45347	30.51671639	29.1925	27.88861	19.77416796	26.64375	29.92908	32.30271564	34.62449
-2.6	-32.5384	-23.3588	-29.50474288	-28.8189	-26.7317	-18.878883	-25.4326	-28.581	-30.84972972	-33.1049
+2.6	29.63204	21.42854	25.98203288	24.17226	23.25275	17.35887314	23.38128	26.16761	28.05515137	29.8559
-2.65	-36.2638	-25.9686	-33.16680891	-32.683	-31.0613	-20.97279462	-28.2583	-31.8069	-34.4321143	-37.0602
+2.65	25.6784	18.6978	21.90651088	19.67372	19.19525	15.17773852	20.43531	22.7734	24.22681528	25.56284
-2.7	-40.6027	-29.0046	-37.44972023	-37.2212	-36.5802	-23.40774107	-31.5444	-35.5614	-38.60679059	-41.6755
+2.7	21.11582	15.54325	17.21825835	15.12767	15.10859	12.65729207	17.03126	18.854	19.81101033	20.61633
-2.75	-44.5217	-31.7438	-41.33311001	-41.3519	-41.7657	-25.60386766	-34.5085	-38.9502	-42.37950661	-45.8516
+2.75	17.03025	12.71577	13.09892317	11.23286	11.67945	10.39747878	13.97943	15.34233	15.85873265	16.19364
-2.8	-49.0512	-34.9064	-45.83757854	-46.1602	-48.3393	-28.13865313	-37.9298	-42.8645	-46.742125	-50.6863
+2.8	12.34691	9.471596	8.844773222	7.821488	10.28076	7.80386465	10.47699	11.31458	11.33023474	11.32745
-2.85	-53.113	-37.7397	-49.89061337	-50.5009	-54.5409	-30.40877098	-40.9941	-46.3725	-50.65613869	-55.0285
+2.85	8.433231	6.582669	6.754933521	7.203673	9.955035	5.493610423	7.35739	7.729174	7.718968974	7.716468
-2.9	-57.7754	-40.9889	-54.558108	-55.5153	-62.0817	-33.0114312	-44.5074	-50.397	-55.15108963	-60.0204
+2.9	6.809485	4.748983	6.754933521	7.203673	9.690598	3.808227628	5.144935	5.889971	6.595503925	7.338623
-2.95	-61.9291	-43.881	-58.72914414	-60.0096	-69.1068	-35.32731965	-47.6338	-53.9804	-59.15736086	-64.4741
+2.95	6.809485	4.748983	6.754933521	7.203673	9.550335	3.808227628	5.144935	5.889971	6.595503925	7.338623
-3	-66.667	-47.177	-63.50110127	-65.1661	-77.3948	-37.96585265	-51.196	-58.0656	-63.72909721	-69.5613
+3	6.809485	4.748983	6.754933521	7.203673	9.497303	3.808227628	5.144935	5.889971	6.595503925	7.338623

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.80948	-6.20575	-6.677974245	-6.29466	-7.62203	-7.849605309	-8.30845	-3.30902
End Shear	66.77256	62.46758	66.88343078	62.82157	75.32654	73.31289339	77.53156	33.09773
-0.05	-6.80948	-6.20575	-6.677974245	-6.29466	-7.62203	-7.849605309	-8.30845	-3.30902
+0.05	62.19449	58.31278	62.41079526	58.60767	70.22269	67.973493	71.87911	30.88
-0.1	-6.80948	-6.20575	-6.677974245	-6.29466	-7.62203	-7.849605309	-8.30845	-3.30902
+0.1	57.53404	54.04165	57.81424728	54.27559	64.97849	62.49014337	66.0746	28.58222
-0.15	-8.19694	-9.33394	-9.663949803	-8.8729	-9.93655	-7.849605309	-8.30845	-4.44712
+0.15	53.41724	50.30248	53.79131144	50.48481	60.39194	57.71431875	61.01934	26.57232
-0.2	-12.6362	-13.5845	-14.24437218	-13.1935	-15.1795	-9.995765003	-10.5912	-6.74276
+0.2	48.81092	46.11142	49.28348846	46.23792	55.25627	52.38981721	55.38363	24.32151
-0.25	-16.7686	-17.298	-18.24717187	-16.9699	-19.7646	-14.37296903	-15.1294	-8.74999
+0.25	44.81139	42.46582	45.36353393	42.54559	50.79371	47.78414473	50.50908	22.36546
-0.3	-21.3986	-21.4514	-22.7254824	-21.1957	-24.898	-19.7779497	-20.8474	-10.9969
+0.3	40.36684	38.4068	41.00040715	38.43666	45.83055	42.68647927	45.11416	20.18974
-0.35	-25.4243	-25.0562	-26.61348647	-24.8653	-29.3581	-24.58887563	-25.9422	-12.9487
+0.35	36.53551	34.90063	37.23281821	34.88934	41.54842	38.3109538	40.48383	18.31234
-0.4	-29.9047	-29.0605	-30.93370789	-28.9436	-34.318	-29.96218316	-31.6329	-15.1187
+0.4	32.31041	31.02561	33.0703591	30.97115	36.82174	33.50810972	35.4017	16.23981
-0.45	-33.7731	-32.5109	-34.65753414	-32.4597	-38.5968	-34.61888033	-36.5649	-16.9903
+0.45	28.69817	27.70474	29.5045226	27.61542	32.77649	29.42271545	31.0791	14.46586
-0.5	-38.0462	-36.3141	-38.76369881	-36.3377	-43.3192	-39.78340014	-42.0351	-19.0554
+0.5	24.75024	24.06571	25.59870166	23.94075	28.35025	24.9826802	26.38173	12.52463
-0.55	-41.7063	-39.564	-42.27395824	-39.6538	-47.3602	-44.22587648	-46.7409	-20.8219
+0.55	21.408	20.97599	22.28400317	20.82316	24.59832	21.24740453	22.43039	10.87894
-0.6	-45.7147	-43.1142	-46.11009961	-43.2788	-51.7812	-49.11362214	-51.9187	-22.7539
+0.6	17.79492	17.62491	18.69078848	17.44477	20.5365	17.23816128	18.18976	9.097115
-0.65	-49.1157	-46.1179	-49.35740629	-46.3483	-55.528	-53.28189385	-56.3347	-24.3907
+0.65	14.7736	14.81219	15.67661388	14.61189	17.13433	13.91299229	14.67319	7.604484
-0.7	-52.8017	-49.363	-52.86754606	-49.6675	-59.5835	-57.82488341	-61.148	-26.1615
+0.7	11.55307	11.80104	12.45198124	11.58257	13.50089	10.40253047	10.9613	6.010183
-0.75	-55.8929	-52.0747	-55.80251477	-52.4439	-62.9796	-61.65896098	-65.2107	-27.6436
+0.75	8.903566	9.311193	9.787716974	9.080972	10.50493	7.576066319	7.974807	4.695413
-0.8	-59.1989	-54.9628	-58.93068626	-55.4044	-66.6057	-65.78920037	-69.5876	-29.2251
+0.8	6.133282	6.691946	6.987634613	6.453484	7.363843	4.940655354	5.231782	3.316742
-0.85	-61.9294	-57.3365	-61.50393314	-57.8411	-69.5947	-69.22909935	-73.2335	-30.5278
+0.85	4.003291	4.570819	4.722664124	4.329733	4.83053	3.397759911	3.592542	2.204636
-0.9	-64.7978	-59.8156	-64.19416481	-60.3902	-72.7275	-72.87860276	-77.102	-31.8919
+0.9	1.919237	2.395446	2.403102635	2.248741	2.398912	1.813870488	1.910115	1.266129
-0.95	-67.1168	-61.8056	-66.35629684	-62.4406	-75.2529	-75.86432874	-80.2675	-32.9903
+0.95	0.85915	0.99517	0.995169676	0.761935	0.795627	0.725912036	0.764118	0.613348
-1	-69.4901	-63.8237	-68.55261888	-64.5256	-77.8283	-78.96512029	-83.5557	-34.1089
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.37668	63.71208	68.4309807	64.41003	77.68535	78.79112716	83.37116	34.04692
-2.05	-8.02E-01	-0.90622	-0.906222789	-0.72469	-0.72672	-0.688518649	-0.72476	-0.56981
+2.05	67.28396	61.93121	66.49290192	62.5702	75.41278	76.05495928	80.46965	33.05988
-2.1	-2.03386	-2.51662	-2.532197676	-2.35166	-2.51253	-1.902139102	-2.00386	-1.30925
+2.1	64.65711	59.67605	64.04260098	60.24653	72.55071	72.67128689	76.88226	31.81503
-2.15	-3.87625	-4.43621	-4.579020767	-4.1951	-4.67014	-3.299789252	-3.48846	-2.13415
+2.15	62.12666	57.48847	61.66872192	57.99715	69.78638	69.45095753	73.46864	30.61136
-2.2	-6.29065	-6.84003	-7.145861931	-6.6019	-7.54109	-5.048318965	-5.34618	-3.39447
+2.2	59.03256	54.79835	58.75250292	55.2357	66.39895	65.55256891	69.33687	29.13504
-2.25	-8.73367	-9.15127	-9.616672739	-8.92042	-10.3128	-7.408090376	-7.79799	-4.61101
+2.25	56.1153	52.24989	55.99220381	52.62334	63.19928	61.90805943	65.47466	27.73954

-2.3	-11.7343	-11.973	-12.63604632	-11.7554	-13.7081	-10.60138947	-11.1715	-6.10101
+2.3	52.61166	49.17678	52.66603453	49.4769	59.35047	57.56293543	60.87049	26.05987
-2.35	-14.5742	-14.63	-15.48145256	-14.4285	-16.9142	-13.69902956	-14.4469	-7.50782
+2.35	49.3585	46.31333	49.56871173	46.54811	55.77193	53.55423942	56.62321	24.49734
-2.4	-17.9958	-17.8176	-18.89738735	-17.639	-20.7699	-17.46740228	-18.4322	-9.1994
+2.4	45.50302	42.90919	45.8885615	43.06944	51.5257	48.83036462	51.61862	22.64243
-2.45	-21.1816	-20.7746	-22.06801458	-20.62	-24.354	-21.00513941	-22.1741	-10.7717
+2.45	41.96485	39.77659	42.50358999	39.8708	47.62471	44.51748922	47.04981	20.93767
-2.5	-24.9666	-24.2762	-25.82454222	-24.1532	-28.606	-25.23829893	-26.6521	-12.6367
+2.5	37.81522	36.09341	38.52542852	36.11268	43.04503	39.48283235	41.71677	18.93563
-2.55	-28.4477	-27.4872	-29.27099869	-27.3957	-32.5117	-29.15614753	-30.7971	-14.3496
+2.55	34.01629	32.73751	34.90220736	32.69076	38.87806	34.92574829	36.88992	17.11345
-2.6	-32.5384	-31.2507	-33.31214599	-31.1987	-37.0962	-33.78609599	-35.6958	-16.36
+2.6	29.63204	28.82725	30.68199991	28.70598	34.02891	29.64831376	31.30043	14.99238
-2.65	-36.2638	-34.67	-36.98503811	-34.6561	-41.2669	-38.02407602	-40.1803	-18.1888
+2.65	25.6784	25.29393	26.86990793	25.10732	29.65237	24.9070083	26.27907	13.07758
-2.7	-40.6027	-38.6435	-41.25484352	-38.6762	-46.1199	-42.9828368	-45.4278	-20.3164
+2.7	21.11582	21.20857	22.46363122	20.94864	24.59772	19.45480177	20.50515	10.8656
-2.75	-44.5217	-42.2252	-45.10479197	-42.3019	-50.4993	-47.48095316	-50.1882	-22.2363
+2.75	17.03025	17.54368	18.51205401	17.21984	20.06808	14.66336957	15.43513	8.882987
-2.8	-49.0512	-46.3567	-49.54726124	-46.4864	-55.5567	-52.70053917	-55.7125	-24.453
+2.8	12.34691	13.3352	13.97569616	12.94001	14.87187	9.815597395	10.3995	6.608204
-2.85	-53.113	-50.0548	-53.52489666	-50.2338	-60.0883	-57.39878238	-60.6854	-26.4391
+2.85	8.433231	9.584578	9.934003583	9.12762	10.24557	7.849604906	8.308453	4.582572
-2.9	-57.7754	-54.2924	-58.08407369	-54.5299	-65.2862	-62.8112272	-66.4145	-28.7169
+2.9	6.809485	6.205747	6.677973797	6.294661	7.622029	7.849604906	8.308453	3.309019
-2.95	-61.9291	-58.0612	-62.13999451	-58.3524	-69.9136	-67.64962836	-71.5363	-30.7444
+2.95	6.809485	6.205747	6.677973797	6.294661	7.622029	7.849604906	8.308453	3.309019
-3	-66.667	-62.3528	-66.75990901	-62.7073	-75.1881	-73.18692791	-77.3982	-33.0552
+3	6.809485	6.205747	6.677973797	6.294661	7.622029	7.849604906	8.308453	3.309019

2-Span: Shear (Max and Min) Raw Data Results - 160' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.80948	-14.5296	-16.0464	-9.14777	-11.023	-11.8782
End Shear	66.77256	130.054	140.2834	84.76777	102.1785	108.6748
-0.05	-6.80948	-14.5296	-16.0464	-9.14777	-11.023	-11.8782
+0.05	62.19449	120.1177	129.438	78.50976	94.66073	100.5593
-0.1	-6.80948	-14.5296	-16.0464	-9.14777	-11.023	-11.8782
+0.1	57.53404	109.9254	118.1762	72.08546	86.94155	92.22863
-0.15	-8.19694	-14.5296	-16.0464	-9.14777	-11.023	-11.8782
+0.15	53.41724	101.0727	108.4075	66.49468	80.22246	84.98348
-0.2	-12.6362	-14.8925	-16.0464	-11.8259	-13.3733	-14.0728
+0.2	48.81092	91.23147	97.56329	60.26699	72.73621	76.91835
-0.25	-16.7686	-21.1097	-22.3044	-15.6195	-19.2189	-18.9806
+0.25	44.81139	82.74504	88.22597	54.885	66.26501	69.95337
-0.3	-21.3986	-29.8439	-30.2381	-21.7581	-26.5849	-26.8331
+0.3	40.36684	73.38297	77.94199	48.93391	59.10769	62.25777
-0.35	-25.4243	-38.3315	-38.5753	-27.428	-33.3873	-34.1553
+0.35	36.53551	65.37577	69.16189	43.83126	52.96905	55.66473
-0.4	-29.9047	-48.5466	-49.8692	-33.7657	-40.9894	-42.4173
+0.4	32.31041	56.62084	59.58074	38.23676	46.23663	48.44265
-0.45	-33.7731	-57.4239	-59.7927	-39.2628	-47.5817	-49.5881
+0.45	28.69817	49.20581	51.48374	33.48403	40.51525	42.31329
-0.5	-38.0462	-67.298	-70.8449	-45.3647	-54.8977	-57.5534
+0.5	24.75024	41.186	42.74806	28.32611	34.30371	35.66871
-0.55	-41.7063	-75.8181	-80.3943	-50.6183	-61.1953	-64.4165
+0.55	21.408	34.47607	35.45999	23.99389	29.0843	30.09479
-0.6	-45.7147	-85.2234	-90.9513	-56.4043	-68.1292	-71.9811
+0.6	17.79492	27.31937	27.71241	19.35253	23.48963	24.1317
-0.65	-49.1157	-93.2734	-100.001	-61.3439	-74.0473	-78.4447
+0.65	14.7736	21.42748	21.45797	15.51139	18.85685	19.20498
-0.7	-52.8017	-102.082	-109.92	-66.7341	-80.5032	-85.5046
+0.7	11.55307	15.53278	15.7635	11.46657	13.97504	14.04391
-0.75	-55.8929	-109.549	-118.344	-71.2891	-85.9572	-91.4771
+0.75	8.903566	11.07885	11.55902	8.308066	10.15877	10.07105
-0.8	-59.1989	-117.632	-127.482	-76.2034	-91.8391	-97.9283
+0.8	6.133282	7.158663	7.347002	5.851831	6.537261	6.885724
-0.85	-61.9294	-124.403	-135.155	-80.3033	-96.7442	-103.318
+0.85	4.003291	4.400617	4.447564	4.039648	4.441106	4.628054
-0.9	-64.7978	-131.634	-143.37	-84.6617	-101.956	-109.056
+0.9	1.919237	2.367051	2.144069	2.178196	2.391964	2.400623
-0.95	-67.1168	-137.596	-150.165	-88.2359	-106.228	-113.771
+0.95	0.85915	0.76807	0.783204	0.892364	0.951855	0.764728
-1	-69.4901	-143.846	-157.315	-91.9584	-110.673	-118.693
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.37668	143.4933	156.911	91.74921	110.4237	118.4161
-2.05	-8.02E-01	-0.70245	-0.70536	-0.81485	-0.86917	-0.72471
+2.05	67.28396	137.9783	150.6021	88.46436	106.5006	114.073
-2.1	-2.03386	-2.4307	-2.30116	-2.28197	-2.50554	-2.51426
+2.1	64.65711	131.2218	142.9016	84.41383	101.6597	108.7297
-2.15	-3.87625	-4.23587	-4.26726	-3.92455	-4.31512	-4.48489
+2.15	62.12666	124.8413	135.6523	80.56795	97.06074	103.666
-2.2	-6.29065	-7.36621	-7.56756	-5.97826	-6.7143	-7.04346
+2.2	59.03256	117.168	126.9575	75.92159	91.50184	97.55814
-2.25	-8.73367	-10.8188	-11.2908	-8.11409	-9.92423	-9.81854
+2.25	56.1153	110.035	118.8936	71.58528	86.31172	91.86564

-2.3	**-11.7343**	**-15.8515**	**-16.0556**	**-11.6954**	**-14.2513**	**-14.3209**
+2.3	**52.61166**	**101.5729**	**109.347**	**66.42307**	**80.13081**	**85.09708**
-2.35	**-14.5742**	**-21.0499**	**-20.9981**	**-15.2645**	**-18.559**	**-18.8886**
+2.35	**49.3585**	**93.80038**	**100.5945**	**61.66688**	**74.43418**	**78.86751**
-2.4	**-17.9958**	**-27.7271**	**-28.1525**	**-19.6176**	**-23.8093**	**-24.472**
+2.4	**45.50302**	**84.67743**	**90.33867**	**56.06883**	**67.72725**	**71.54226**
-2.45	**-21.1816**	**-34.0422**	**-34.9889**	**-23.7132**	**-28.746**	**-29.7338**
+2.45	**41.96485**	**76.37832**	**81.02338**	**50.96333**	**61.60881**	**64.86738**
-2.5	**-24.9666**	**-41.6465**	**-43.2484**	**-28.6228**	**-34.6611**	**-36.0507**
+2.5	**37.81522**	**66.72253**	**70.20101**	**45.00941**	**54.47183**	**57.08946**
-2.55	**-28.4477**	**-48.7231**	**-50.9567**	**-33.1741**	**-40.1421**	**-41.9138**
+2.55	**34.01629**	**58.00974**	**60.44876**	**39.6252**	**48.01628**	**50.06102**
-2.6	**-32.5384**	**-57.1265**	**-60.1329**	**-38.5604**	**-46.6261**	**-48.8602**
+2.6	**29.63204**	**47.94911**	**49.20244**	**33.39539**	**40.54523**	**41.93437**
-2.65	**-36.2638**	**-64.8518**	**-68.5872**	**-43.4969**	**-52.5667**	**-55.2329**
+2.65	**25.6784**	**38.93557**	**39.19033**	**27.80306**	**33.83729**	**34.64413**
-2.7	**-40.6027**	**-73.9263**	**-78.5376**	**-49.2797**	**-59.5236**	**-62.7047**
+2.7	**21.11582**	**29.30995**	**29.77384**	**21.37733**	**26.12814**	**26.37631**
-2.75	**-44.5217**	**-82.1872**	**-87.612**	**-54.5309**	**-65.8392**	**-69.4952**
+2.75	**17.03025**	**21.56904**	**22.77327**	**15.96371**	**19.63199**	**19.44037**
-2.8	**-49.0512**	**-91.8049**	**-98.194**	**-60.6303**	**-73.1729**	**-77.3886**
+2.8	**12.34691**	**14.52956**	**16.04634**	**11.61512**	**13.04977**	**13.80395**
-2.85	**-53.113**	**-100.489**	**-107.763**	**-66.1255**	**-79.7787**	**-84.5052**
+2.85	**8.433231**	**14.52956**	**16.04634**	**9.14777**	**11.023**	**11.87818**
-2.9	**-57.7754**	**-110.521**	**-118.834**	**-72.4615**	**-87.3934**	**-92.7161**
+2.9	**6.809485**	**14.52956**	**16.04634**	**9.14777**	**11.023**	**11.87818**
-2.95	**-61.9291**	**-119.515**	**-128.771**	**-78.1302**	**-94.2047**	**-100.067**
+2.95	**6.809485**	**14.52956**	**16.04634**	**9.14777**	**11.023**	**11.87818**
-3	**-66.667**	**-129.835**	**-140.188**	**-84.6228**	**-102.004**	**-108.491**
+3	**6.809485**	**14.52956**	**16.04634**	**9.14777**	**11.023**	**11.87818**

2-Span: Moment (Max and Min) Raw Data Results - 160' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-3.47E-13**	**-1.7E-13**	**-1.09352E-13**	**-1.7E-13**	**-1.44E-13**	**-2.14269E-13**	**-1.7E-13**	**-1E-13**	**-9.61689E-14**	**-1.4E-13**
End Shear	**3.69E-13**	**1.65E-13**	**1.94014E-13**	**2.01E-13**	**1.66E-13**	**1.85058E-13**	**1.38E-13**	**1.19E-13**	**1.18468E-13**	**1.86E-13**
-0.05	**-54.4758**	**-37.9919**	**-54.03946919**	**-57.6294**	**-75.9784**	**-30.46582283**	**-41.1595**	**-47.1198**	**-52.76403373**	**-58.709**
+0.05	**497.5559**	**352.6684**	**472.066331**	**482.5368**	**562.3018**	**283.855739**	**382.9254**	**433.9738**	**476.0818724**	**518.9354**
-0.1	**-108.952**	**-75.9837**	**-108.0789384**	**-115.259**	**-151.957**	**-60.93164566**	**-82.319**	**-94.2395**	**-105.5280675**	**-117.418**
+0.1	**925.8808**	**656.4494**	**873.7507253**	**889.3132**	**1021.876**	**528.4250845**	**712.9231**	**807.3091**	**886.0943201**	**967.7648**
-0.15	**-163.428**	**-113.976**	**-162.1184076**	**-172.888**	**-227.935**	**-91.39746849**	**-123.478**	**-141.359**	**-158.2921012**	**-176.127**
+0.15	**1282.014**	**911.477**	**1205.59877**	**1221.563**	**1391.562**	**734.0409056**	**990.1999**	**1120.268**	**1242.202687**	**1354.287**
-0.2	**-217.903**	**-151.967**	**-216.1578767**	**-230.518**	**-303.914**	**-121.8632913**	**-164.638**	**-188.479**	**-211.0561349**	**-234.836**
+0.2	**1570.922**	**1118.678**	**1469.303351**	**1496.822**	**1698.552**	**901.325638**	**1215.739**	**1374.032**	**1532.550244**	**1676.997**
-0.25	**-272.379**	**-189.959**	**-270.1973459**	**-288.147**	**-379.892**	**-152.3291142**	**-205.797**	**-235.599**	**-263.8201686**	**-293.545**
+0.25	**1793.254**	**1279.281**	**1680.312242**	**1701.559**	**1947.542**	**1031.245111**	**1390.849**	**1575.336**	**1758.031025**	**1934.265**
-0.3	**-326.855**	**-227.951**	**-324.2368151**	**-345.776**	**-455.871**	**-182.794937**	**-246.957**	**-282.719**	**-316.5842024**	**-352.254**
+0.3	**1955.362**	**1394.815**	**1828.365063**	**1854.697**	**2132.618**	**1125.006163**	**1524.354**	**1727.899**	**1920.747982**	**2121.846**
-0.35	**-381.331**	**-265.943**	**-378.2762843**	**-403.406**	**-531.849**	**-213.2607598**	**-288.116**	**-329.838**	**-369.3482361**	**-410.963**
+0.35	**2067.809**	**1475.849**	**1915.512553**	**1958.245**	**2254.408**	**1184.056267**	**1613.781**	**1826.32**	**2033.535811**	**2241.852**
-0.4	**-435.807**	**-303.935**	**-432.3157535**	**-461.035**	**-607.827**	**-243.7265826**	**-329.276**	**-376.958**	**-422.1122698**	**-469.672**
+0.4	**2120.386**	**1515.429**	**1955.972652**	**2021.572**	**2321.504**	**1210.08382**	**1657.818**	**1873.414**	**2090.429161**	**2303.53**
-0.45	**-490.283**	**-341.927**	**-486.3552227**	**-518.664**	**-683.806**	**-274.1924055**	**-370.435**	**-424.078**	**-474.8763035**	**-528.381**
+0.45	**2116.5**	**1515.449**	**1941.513862**	**2024.108**	**2303.538**	**1205.017984**	**1659.153**	**1871.639**	**2092.188848**	**2310.374**
-0.5	**-544.758**	**-379.919**	**-540.3946919**	**-576.294**	**-759.784**	**-304.6582283**	**-411.595**	**-471.198**	**-527.6403373**	**-587.09**
+0.5	**2080.01**	**1487.864**	**1912.344278**	**1983.694**	**2229.007**	**1186.115663**	**1628.29**	**1838.469**	**2052.787325**	**2263.832**
-0.55	**-599.234**	**-417.911**	**-594.434161**	**-633.923**	**-835.763**	**-335.1240511**	**-452.754**	**-518.317**	**-580.404371**	**-645.799**
+0.55	**1995.829**	**1426.665**	**1840.300163**	**1893.389**	**2154.773**	**1141.186654**	**1560.894**	**1764.049**	**1966.510989**	**2164.183**
-0.6	**-653.71**	**-455.902**	**-648.4736302**	**-691.553**	**-911.741**	**-365.589874**	**-493.914**	**-565.437**	**-633.1684047**	**-704.508**
+0.6	**1863.965**	**1332.742**	**1720.503562**	**1753.604**	**2021.215**	**1069.346976**	**1458.327**	**1648.807**	**1834.996339**	**2021.393**
-0.65	**-708.186**	**-493.894**	**-702.5130994**	**-749.182**	**-987.72**	**-396.0556968**	**-535.073**	**-612.557**	**-685.9324384**	**-763.217**
+0.65	**1689.188**	**1209.45**	**1559.644218**	**1577.246**	**1800.203**	**973.2100418**	**1324.227**	**1496.878**	**1662.925744**	**1833.466**
-0.7	**-762.662**	**-531.886**	**-756.5525686**	**-806.811**	**-1063.7**	**-426.5215196**	**-576.233**	**-659.677**	**-738.6964722**	**-821.926**
+0.7	**1476.704**	**1060.44**	**1356.521889**	**1356.024**	**1530.77**	**855.6305703**	**1162.558**	**1312.768**	**1455.400129**	**1604.776**
-0.75	**-817.138**	**-569.878**	**-810.5920378**	**-864.441**	**-1139.68**	**-456.9873425**	**-617.392**	**-706.797**	**-791.4605059**	**-880.635**
+0.75	**1232.154**	**889.6683**	**1116.528349**	**1096.321**	**1192.07**	**719.7036697**	**977.6071**	**1101.359**	**1218.747793**	**1341.381**
-0.8	**-871.613**	**-607.87**	**-864.631507**	**-922.07**	**-1215.65**	**-487.4531653**	**-658.552**	**-753.916**	**-844.2245396**	**-939.344**
+0.8	**961.6089**	**701.3898**	**845.4968019**	**807.0576**	**791.8575**	**568.7654262**	**773.9897**	**867.9046**	**956.7976313**	**1049.802**
-0.85	**-926.089**	**-645.862**	**-918.6709762**	**-979.699**	**-1314.63**	**-517.9189881**	**-699.711**	**-801.036**	**-896.9885733**	**-998.053**
+0.85	**671.5763**	**500.161**	**549.7008578**	**487.0658**	**443.7047**	**406.3927674**	**556.8073**	**618.0324**	**677.382017**	**737.0296**
-0.9	**-980.565**	**-683.854**	**-972.7104453**	**-1037.33**	**-1455.78**	**-548.3848109**	**-740.871**	**-848.156**	**-949.7526071**	**-1056.76**
+0.9	**368.9963**	**290.862**	**261.6652746**	**237.8583**	**210.1422**	**236.4034685**	**331.4884**	**357.7431**	**387.6524635**	**410.5196**
-0.95	**-1035.04**	**-721.845**	**-1026.749915**	**-1094.96**	**-1632.27**	**-578.8506338**	**-782.03**	**-895.276**	**-1002.516641**	**-1115.47**
+0.95	**130.5908**	**112.7679**	**112.6934602**	**89.63042**	**74.32476**	**89.75896177**	**124.6692**	**126.8804**	**130.322134**	**130.3139**
-1	**-1089.52**	**-759.837**	**-1080.789401**	**-1152.59**	**-2101.12**	**-609.3164203**	**-823.19**	**-942.395**	**-1055.280662**	**-1174.18**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-1089.52**	**-759.837**	**-1080.789401**	**-1152.59**	**-2101.12**	**-609.3164203**	**-823.19**	**-942.395**	**-1055.280662**	**-1174.18**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-1035.04**	**-721.845**	**-1026.749913**	**-1094.96**	**-1632.27**	**-578.8505992**	**-782.03**	**-895.276**	**-1002.516585**	**-1115.47**
+2.05	**130.5908**	**112.7694**	**112.6948552**	**89.63148**	**74.3254**	**89.76770159**	**124.6737**	**126.8887**	**130.3242449**	**130.316**
-2.1	**-980.566**	**-683.854**	**-972.7104448**	**-1037.33**	**-1455.78**	**-548.3847782**	**-740.871**	**-848.156**	**-949.7525532**	**-1056.76**
+2.1	**369.2649**	**290.8732**	**261.6555497**	**237.8654**	**210.141**	**236.4085896**	**331.4973**	**357.7499**	**387.6621154**	**410.5217**
-2.15	**-926.09**	**-645.862**	**-918.6709766**	**-979.7**	**-1314.63**	**-517.9189572**	**-699.711**	**-801.036**	**-896.9885218**	**-998.053**
+2.15	**671.8778**	**500.16**	**549.7091064**	**487.0704**	**443.7075**	**406.3985131**	**556.8171**	**618.0401**	**677.3809247**	**737.0328**
-2.2	**-871.614**	**-607.87**	**-864.6315085**	**-922.07**	**-1215.65**	**-487.4531362**	**-658.552**	**-753.916**	**-844.2244904**	**-939.344**
+2.2	**961.928**	**701.3892**	**845.5049925**	**807.0611**	**791.8603**	**568.7713115**	**773.9875**	**867.9128**	**956.7981601**	**1049.806**
-2.25	**-817.138**	**-569.878**	**-810.5920403**	**-864.441**	**-1139.68**	**-456.9873151**	**-617.392**	**-706.797**	**-791.460459**	**-880.635**

+2.25	1232.476	889.6679	1116.536421	1096.324	1192.072	719.7095885	977.605	1101.367	1218.748276	1341.385
-2.3	-762.662	-531.886	-756.5525721	-806.811	-1063.7	-426.5214941	-576.233	-659.677	-738.6964276	-821.926
+2.3	1477.017	1060.44	1356.529438	1356.022	1530.773	855.6362385	1162.555	1312.776	1455.399638	1604.78
-2.35	-708.186	-493.894	-702.5131039	-749.182	-987.719	-396.0556731	-535.073	-612.557	-685.9323962	-763.217
+2.35	1689.477	1209.449	1559.650855	1577.251	1800.205	973.2153651	1324.224	1496.885	1662.924465	1833.469
-2.4	-653.711	-455.902	-648.4736358	-691.553	-911.741	-365.5898521	-493.914	-565.437	-633.1683648	-704.508
+2.4	1864.22	1332.74	1720.508838	1753.607	2021.216	1069.351544	1458.324	1648.814	1834.994121	2021.395
-2.45	-599.235	-417.911	-594.4341676	-633.923	-835.763	-335.1240311	-452.754	-518.317	-580.4043334	-645.799
+2.45	1996.04	1426.662	1840.305431	1893.385	2154.773	1141.190522	1560.89	1764.054	1966.507555	2164.182
-2.5	-544.759	-379.919	-540.3946994	-576.294	-759.784	-304.65821	-411.595	-471.198	-527.640302	-587.09
+2.5	2080.166	1487.86	1912.347736	1983.699	2229.009	1186.118449	1628.284	1838.472	2052.782284	2263.829
-2.55	-490.283	-341.927	-486.3552313	-518.664	-683.806	-274.192389	-370.435	-424.078	-474.8762706	-528.381
+2.55	2116.385	1515.454	1941.511494	2024.105	2303.539	1205.015948	1659.147	1871.636	2092.183088	2310.377
-2.6	-435.807	-303.935	-432.3157631	-461.035	-607.827	-243.726568	-329.276	-376.958	-422.1122392	-469.672
+2.6	2120.205	1515.433	1955.968525	2021.577	2321.503	1210.080672	1657.824	1873.41	2090.433542	2303.531
-2.65	-381.331	-265.943	-378.2762949	-403.406	-531.849	-213.260747	-288.116	-329.838	-369.3482078	-410.963
+2.65	2067.555	1475.851	1915.507817	1958.242	2254.41	1184.051689	1613.785	1826.313	2033.537989	2241.851
-2.7	-326.855	-227.951	-324.2368268	-345.776	-455.871	-182.7949259	-246.957	-282.719	-316.5841764	-352.254
+2.7	1955.028	1394.815	1828.370067	1854.7	2132.622	1125.000061	1524.356	1727.903	1920.747403	2121.841
-2.75	-272.379	-189.959	-270.1973586	-288.147	-379.892	-152.3291049	-205.797	-235.599	-263.820145	-293.545
+2.75	1793.009	1279.279	1680.314766	1701.555	1947.546	1031.237759	1390.848	1575.337	1758.027952	1934.258
-2.8	-217.904	-151.967	-216.1578904	-230.518	-303.914	-121.8632839	-164.638	-188.479	-211.0561136	-234.836
+2.8	1570.588	1118.674	1469.303019	1496.825	1698.553	901.3164875	1215.736	1374.031	1532.544393	1676.999
-2.85	-163.428	-113.976	-162.1184223	-172.888	-227.935	-91.39746288	-123.478	-141.359	-158.2920822	-176.127
+2.85	1281.526	911.4708	1205.59583	1221.564	1391.566	734.0299464	990.1947	1120.264	1242.194019	1354.285
-2.9	-108.952	-75.9837	-108.0789541	-115.259	-151.957	-60.93164186	-82.3189	-94.2395	-105.5280508	-117.418
+2.9	924.4069	656.4409	873.7447959	889.3101	1021.877	528.4126412	712.9156	807.3022	886.0946721	967.766
-2.95	-54.4759	-37.9919	-54.03948592	-57.6294	-75.9784	-30.46582084	-41.1595	-47.1198	-52.76401939	-58.709
+2.95	497.6566	352.6579	472.0695337	482.531	562.305	283.85753	382.9152	433.9642	476.079271	518.9331
-3	-3.40E-13	-1.2E-13	-1.49819E-13	-1.2E-13	-1.52E-13	-1.2202E-13	-9.5E-14	-1.2E-13	-1.19097E-13	-1.2E-13
+3	4.51E-13	2.56E-13	2.86793E-13	2.72E-13	2.79E-13	1.94603E-13	2.22E-13	2.79E-13	2.45227E-13	3.06E-13

2-Span: Moment (Max and Min) Raw Data Results - 160' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.47E-13	-1.3E-13	-1.4E-13	-1.4E-13	-2.8E-13	-1.2E-13	-1.3E-13	-1.44124E-13
End Shear	3.69E-13	2E-13	2.14E-13	1.57E-13	2.2E-13	1.81E-13	1.92E-13	1.57921E-13
-0.05	-54.4758	-49.646	-53.4238	-50.3573	-60.9762	-62.7968	-66.4676	-26.47215125
+0.05	497.5559	466.6547	499.5158	469.1171	562.253	543.7998	575.053	247.0399747
-0.1	-108.952	-99.2919	-106.848	-100.715	-121.952	-125.594	-132.935	-52.94430249
+0.1	925.8808	869.5231	930.3416	873.5007	1046.029	1006.043	1063.766	459.4698187
-0.15	-163.428	-148.938	-160.271	-151.072	-182.929	-188.391	-199.403	-79.41645374
+0.15	1282.014	1208.786	1292.744	1213.415	1451.818	1387.232	1466.685	637.7356933
-0.2	-217.903	-198.584	-213.695	-201.429	-243.905	-251.187	-265.871	-105.888605
+0.2	1570.922	1485.575	1587.968	1490.05	1781.127	1699.998	1797.74	782.4954923
-0.25	-272.379	-248.23	-267.119	-251.786	-304.881	-313.984	-332.338	-132.3607562
+0.25	1793.254	1701.411	1817.682	1704.997	2049.995	1950.511	2063.664	894.6185911
-0.3	-326.855	-297.876	-320.543	-302.144	-365.857	-376.781	-398.806	-158.8329075
+0.3	1955.362	1858.207	1983.973	1872.017	2248.697	2130.549	2253.65	975.5406867
-0.35	-381.331	-347.522	-373.967	-352.501	-426.834	-439.578	-465.273	-185.3050587
+0.35	2067.809	1962.371	2100.734	1982.128	2377.797	2249.647	2380.362	1026.178496
-0.4	-435.807	-397.168	-427.39	-402.858	-487.81	-502.375	-531.741	-211.77721
+0.4	2120.386	2019.496	2160.02	2036.777	2439.916	2299.7	2433.918	1048.020694
-0.45	-490.283	-446.814	-480.814	-453.216	-548.786	-565.172	-598.209	-238.2493612
+0.45	2116.5	2024.542	2163.457	2039.262	2438.784	2285.43	2419.246	1041.228488
-0.5	-544.758	-496.46	-534.238	-503.573	-609.762	-627.968	-664.676	-264.7215125
+0.5	2080.01	1985.167	2122.395	2000.889	2395.073	2249.76	2381.204	1027.15944
-0.55	-599.234	-546.106	-587.662	-553.93	-670.739	-690.765	-731.144	-291.1936637
+0.55	1995.829	1900.868	2033.275	1917.71	2297.526	2163.652	2289.71	989.3330109
-0.6	-653.71	-595.752	-641.086	-604.287	-731.715	-753.562	-797.612	-317.665815
+0.6	1863.965	1774.787	1898.86	1791.777	2147.482	2019.981	2137.274	927.7385059
-0.65	-708.186	-645.398	-694.509	-654.645	-792.691	-816.359	-864.079	-344.1379662
+0.65	1689.188	1612.023	1723.895	1627.409	1950.296	1823.815	1929.336	844.6507416
-0.7	-762.662	-695.044	-747.933	-705.002	-853.667	-879.156	-930.547	-370.6101175
+0.7	1476.704	1419.27	1513.548	1429.461	1711.802	1581.115	1672.216	742.5570044
-0.75	-817.138	-744.69	-801.357	-755.359	-914.643	-941.953	-997.014	-397.0822687
+0.75	1232.154	1197.322	1273.406	1203.185	1438.319	1298.353	1373.227	624.1555189
-0.8	-871.613	-794.336	-854.781	-805.717	-975.62	-1004.75	-1063.48	-423.5544199
+0.8	961.6089	951.6492	1009.479	954.2432	1136.645	982.5482	1039.5	492.3566658
-0.85	-926.089	-843.982	-908.204	-856.074	-1036.6	-1067.55	-1129.95	-450.0265712
+0.85	671.5763	688.1116	728.1978	689.091	814.06	641.0988	677.0756	350.2820451
-0.9	-980.565	-893.628	-961.628	-906.431	-1097.57	-1130.34	-1196.42	-476.4987224
+0.9	368.9963	416.4925	436.5696	413.9043	478.327	307.2342	325.2217	201.2651868
-0.95	-1035.04	-943.273	-1015.05	-956.788	-1158.55	-1193.14	-1262.88	-502.9708737
+0.95	130.5908	160.1727	160.1727	155.7012	167.5116	121.7386	128.1459	93.08875385
-1	-1089.52	-992.919	-1068.48	-1007.15	-1219.52	-1255.94	-1329.35	-529.4430292
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1089.52	-992.919	-1068.48	-1007.15	-1219.52	-1255.94	-1329.35	-529.4430292
+2	0	0	0	0	0	0	0	0
-2.05	-1035.04	-943.274	-1015.05	-956.788	-1158.55	-1193.14	-1262.88	-502.9708776
+2.05	130.5908	160.1748	160.1748	155.7081	167.5208	121.7401	128.1475	92.83913138
-2.1	-980.566	-893.628	-961.628	-906.431	-1097.57	-1130.34	-1196.42	-476.4987261
+2.1	369.2649	416.4912	436.5855	413.914	478.333	307.2347	325.2348	201.2620557
-2.15	-926.09	-843.982	-908.204	-856.074	-1036.6	-1067.55	-1129.95	-450.0265745
+2.15	671.8778	688.1124	728.1963	689.1017	814.0673	641.0977	677.0746	350.2790461
-2.2	-871.614	-794.336	-854.781	-805.717	-975.62	-1004.75	-1063.48	-423.554423
+2.2	961.928	951.6506	1009.478	954.2547	1136.653	982.5488	1039.501	492.3537082
-2.25	-817.138	-744.69	-801.357	-755.359	-914.643	-941.953	-997.014	-397.0822714

+2.25	1232.476	1197.324	1273.405	1203.181	1438.327	1298.352	1373.228	624.1526198
-2.3	-762.662	-695.044	-747.933	-705.002	-853.667	-879.156	-930.547	-370.6101198
+2.3	1477.017	1419.271	1513.547	1429.458	1711.81	1581.113	1672.215	742.5538658
-2.35	-708.186	-645.398	-694.509	-654.645	-792.691	-816.359	-864.079	-344.1379683
+2.35	1689.477	1612.024	1723.894	1627.405	1950.303	1823.813	1929.334	844.6475031
-2.4	-653.711	-595.752	-641.085	-604.287	-731.715	-753.562	-797.612	-317.6658167
+2.4	1864.22	1774.786	1898.857	1791.772	2147.488	2019.978	2137.271	927.735017
-2.45	-599.235	-546.106	-587.662	-553.93	-670.739	-690.765	-731.144	-291.1936652
+2.45	1996.04	1900.866	2033.271	1917.704	2297.53	2163.647	2289.705	989.3294337
-2.5	-544.759	-496.46	-534.238	-503.573	-609.762	-627.968	-664.676	-264.7215136
+2.5	2080.166	1985.163	2122.389	2000.896	2395.075	2249.766	2381.211	1027.155607
-2.55	-490.283	-446.814	-480.814	-453.216	-548.786	-565.172	-598.209	-238.2493621
+2.55	2116.385	2024.548	2163.464	2039.257	2438.783	2285.425	2419.241	1042.776732
-2.6	-435.807	-397.168	-427.39	-402.858	-487.81	-502.375	-531.741	-211.7772105
+2.6	2120.205	2019.5	2160.025	2036.769	2439.912	2299.706	2433.925	1048.018887
-2.65	-381.331	-347.522	-373.967	-352.501	-426.834	-439.578	-465.273	-185.305059
+2.65	2067.555	1962.372	2100.736	1982.133	2377.791	2249.651	2380.366	1026.176338
-2.7	-326.855	-297.876	-320.543	-302.144	-365.857	-376.781	-398.806	-158.8329074
+2.7	1955.028	1858.206	1983.973	1872.02	2248.688	2130.55	2253.651	975.5380259
-2.75	-272.379	-248.23	-267.119	-251.786	-304.881	-313.984	-332.338	-132.3607558
+2.75	1793.009	1701.407	1817.679	1704.997	2049.998	1950.508	2063.661	894.6210086
-2.8	-217.904	-198.584	-213.695	-201.429	-243.905	-251.187	-265.871	-105.8886043
+2.8	1570.588	1485.568	1587.962	1490.047	1781.126	1699.992	1797.734	782.4974477
-2.85	-163.428	-148.938	-160.271	-151.072	-182.929	-188.391	-199.403	-79.41645274
+2.85	1281.526	1208.777	1292.735	1213.409	1451.814	1387.23	1466.682	637.7372105
-2.9	-108.952	-99.2919	-106.848	-100.715	-121.952	-125.594	-132.935	-52.94430118
+2.9	924.4069	869.5103	930.3293	873.4922	1046.021	1006.037	1063.76	459.4708173
-2.95	-54.4759	-49.646	-53.4238	-50.3573	-60.9762	-62.7968	-66.4676	-26.47214962
+2.95	497.6566	466.639	499.5003	469.1052	562.2416	543.7917	575.0433	247.040475
-3	-3.40E-13	-1.6E-13	-1.7E-13	-1.1E-13	-1.4E-13	-1.8E-13	-1.9E-13	-1.24025E-13
+3	4.51E-13	3.17E-13	3.41E-13	2.68E-13	3.27E-13	3.39E-13	3.6E-13	2.14314E-13

2-Span: Moment (Max and Min) Raw Data Results - 160' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.47E-13	-3.3E-13	-3.4E-13	-2.6E-13	-3.1E-13	-2.7E-13
End Shear	3.69E-13	3.79E-13	3.81E-13	1.64E-13	2.03E-13	2.45E-13
-0.05	-54.4758	-116.236	-128.371	-73.1822	-88.184	-95.0255
+0.05	497.5559	961.7493	1035.504	628.0781	757.6886	804.93
-0.1	-108.952	-232.473	-256.743	-146.364	-176.368	-190.051
+0.1	925.8808	1771.271	1913.109	1160.532	1400.253	1485.609
-0.15	-163.428	-348.709	-385.114	-219.546	-264.552	-285.076
+0.15	1282.014	2463.785	2653.458	1598.216	1934.296	2055.165
-0.2	-217.903	-464.946	-513.485	-292.729	-352.736	-380.102
+0.2	1570.922	3012.158	3295.572	1969.348	2376.899	2520.828
-0.25	-272.379	-581.182	-641.857	-365.911	-440.92	-475.127
+0.25	1793.254	3447.291	3789.375	2253.804	2712.231	2897.075
-0.3	-326.855	-697.419	-770.228	-439.093	-529.104	-570.153
+0.3	1955.362	3779.731	4163.153	2456.854	2946.104	3163.264
-0.35	-381.331	-813.655	-898.599	-512.275	-617.288	-665.178
+0.35	2067.809	3999.665	4401.125	2588.178	3098.236	3322.736
-0.4	-435.807	-929.892	-1026.97	-585.457	-705.472	-760.204
+0.4	2120.386	4126.436	4511.597	2639.291	3154.712	3397.727
-0.45	-490.283	-1046.13	-1155.34	-658.639	-793.656	-855.229
+0.45	2116.5	4128.238	4542.06	2615.73	3122.195	3374.167
-0.5	-544.758	-1162.36	-1283.71	-731.822	-881.84	-950.255
+0.5	2080.01	4049.212	4441.159	2577.576	3078.455	3321.016
-0.55	-599.234	-1278.6	-1412.08	-805.004	-970.024	-1045.28
+0.55	1995.829	3868.391	4226.081	2484.861	2970.106	3194.173
-0.6	-653.71	-1394.84	-1540.46	-878.186	-1058.21	-1140.31
+0.6	1863.965	3581.866	3940.474	2323.324	2778.87	2979.659
-0.65	-708.186	-1511.07	-1668.83	-951.368	-1146.39	-1235.33
+0.65	1689.188	3211.932	3544.233	2098.858	2511.39	2695.307
-0.7	-762.662	-1627.31	-1797.2	-1024.55	-1234.58	-1330.36
+0.7	1476.704	2769.993	3049.251	1818.362	2177.48	2336.179
-0.75	-817.138	-1743.55	-1925.57	-1097.73	-1322.76	-1425.38
+0.75	1232.154	2248.584	2467.077	1490.208	1788.188	1911.862
-0.8	-871.613	-1859.78	-2053.94	-1170.91	-1410.94	-1520.41
+0.8	961.6089	1660.515	1814.999	1122	1345.955	1432.726
-0.85	-926.089	-1976.02	-2182.31	-1244.1	-1499.13	-1615.43
+0.85	671.5763	1019.563	1106.701	718.909	860.9085	909.9244
-0.9	-980.565	-2092.26	-2310.68	-1317.28	-1587.31	-1710.46
+0.9	368.9963	448.9974	488.768	365.1883	417.216	447.8091
-0.95	-1035.04	-2208.49	-2439.06	-1390.46	-1675.5	-1805.48
+0.95	130.5908	164.5867	152.7805	144.1733	167.4754	167.5546
-1	-1089.52	-2324.73	-2567.41	-1463.64	-1763.68	-1900.51
+1	0	0	0	0	0	0
(Span 2) -2	-1089.52	-2324.73	-2567.41	-1463.64	-1763.68	-1900.51
+2	0	0	0	0	0	0
-2.05	-1035.04	-2208.49	-2439.04	-1390.46	-1675.5	-1805.48
+2.05	130.5908	164.5818	152.7798	144.1673	167.4703	167.5496
-2.1	-980.566	-2092.26	-2310.67	-1317.28	-1587.31	-1710.46
+2.1	369.2649	448.9999	488.7682	365.189	417.2125	447.817
-2.15	-926.09	-1976.02	-2182.3	-1244.1	-1499.13	-1615.43
+2.15	671.8778	1019.568	1108.294	718.9098	860.9104	909.9298
-2.2	-871.614	-1859.78	-2053.93	-1170.91	-1410.94	-1520.41
+2.2	961.928	1660.521	1816.296	1122.001	1345.957	1432.732
-2.25	-817.138	-1743.55	-1925.56	-1097.73	-1322.76	-1425.38

+2.25	**1232.476**	**2248.589**	**2468.456**	**1490.209**	**1788.19**	**1911.868**
-2.3	**-762.662**	**-1627.31**	**-1797.19**	**-1024.55**	**-1234.58**	**-1330.36**
+2.3	**1477.017**	**2769.998**	**3049.251**	**1818.361**	**2177.481**	**2336.183**
-2.35	**-708.186**	**-1511.07**	**-1668.82**	**-951.368**	**-1146.39**	**-1235.33**
+2.35	**1689.477**	**3211.934**	**3543.659**	**2098.856**	**2511.388**	**2695.31**
-2.4	**-653.711**	**-1394.84**	**-1540.45**	**-878.186**	**-1058.21**	**-1140.31**
+2.4	**1864.22**	**3582.872**	**3940.475**	**2323.32**	**2778.866**	**2979.659**
-2.45	**-599.235**	**-1278.6**	**-1412.08**	**-805.004**	**-970.024**	**-1045.28**
+2.45	**1996.04**	**3868.398**	**4226.081**	**2484.855**	**2970.1**	**3194.17**
-2.5	**-544.759**	**-1162.36**	**-1283.71**	**-731.822**	**-881.84**	**-950.255**
+2.5	**2080.166**	**4049.216**	**4442.643**	**2577.583**	**3078.459**	**3321.01**
-2.55	**-490.283**	**-1046.13**	**-1155.34**	**-658.639**	**-793.656**	**-855.229**
+2.55	**2116.385**	**4128.236**	**4542.059**	**2615.724**	**3122.192**	**3374.162**
-2.6	**-435.807**	**-929.892**	**-1026.97**	**-585.457**	**-705.472**	**-760.204**
+2.6	**2120.205**	**4126.43**	**4511.597**	**2639.299**	**3154.707**	**3397.732**
-2.65	**-381.331**	**-813.655**	**-898.595**	**-512.275**	**-617.288**	**-665.178**
+2.65	**2067.555**	**3999.654**	**4401.124**	**2588.183**	**3098.241**	**3322.736**
-2.7	**-326.855**	**-697.419**	**-770.224**	**-439.093**	**-529.104**	**-570.153**
+2.7	**1955.028**	**3779.727**	**4163.719**	**2456.855**	**2946.105**	**3163.26**
-2.75	**-272.379**	**-581.182**	**-641.854**	**-365.911**	**-440.92**	**-475.127**
+2.75	**1793.009**	**3447.295**	**3789.374**	**2253.802**	**2712.227**	**2897.08**
-2.8	**-217.904**	**-464.946**	**-513.483**	**-292.729**	**-352.736**	**-380.102**
+2.8	**1570.588**	**3012.858**	**3295.57**	**1969.342**	**2376.89**	**2520.821**
-2.85	**-163.428**	**-348.709**	**-385.112**	**-219.546**	**-264.552**	**-285.076**
+2.85	**1281.526**	**2463.79**	**2654.878**	**1598.213**	**1934.297**	**2055.167**
-2.9	**-108.952**	**-232.473**	**-256.741**	**-146.364**	**-176.368**	**-190.051**
+2.9	**924.4069**	**1771.271**	**1913.109**	**1160.525**	**1400.249**	**1485.606**
-2.95	**-54.4759**	**-116.236**	**-128.371**	**-73.1821**	**-88.184**	**-95.0255**
+2.95	**497.6566**	**961.7426**	**1035.505**	**628.0823**	**757.6798**	**804.9216**
-3	**-3.40E-13**	**-2.3E-13**	**-2.2E-13**	**-2.1E-13**	**-2.4E-13**	**-2.4E-13**
+3	**4.51E-13**	**5.44E-13**	**5.44E-13**	**3.75E-13**	**4.12E-13**	**3.94E-13**

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-27.75249693	*-23.04227936*	*-34.12998878*	-11.97847846	-12.89109509	-12.15151947	-14.71573158	-15.21006397	-16.0999	-6.395310399
End Shear	239.7312435	*198.2739341*	*275.1377299*	120.7546828	129.3365651	121.5101558	145.7945966	142.689121	150.9119	64.0486495
-0.05	-28.03206407	*-23.3218465*	*-34.3815992*	-11.97847846	-12.89109509	-12.15151947	-14.71573158	-15.21006397	-16.0999	-6.395310399
+0.05	219.8409501	*181.5787976*	*250.2500761*	112.7505813	120.719844	113.3912657	135.9603546	132.3842705	140.0026	59.7735779
-0.1	-28.97474467	*-25.87296605*	*-35.90658288*	-11.97847846	-12.89109509	-12.15151947	-14.71573158	-15.21006397	-16.0999	-6.395310399
+0.1	199.878339	*164.7972632*	*224.8252997*	104.5378065	111.8808509	105.0605698	125.8745649	121.8225588	128.8221	55.35413553
-0.15	-34.08281906	*-34.04455103*	*-44.99860552*	-18.31995007	-19.02510606	-17.50446685	-19.73222233	-15.21006397	-16.0999	-8.815269086
+0.15	182.6819137	*150.481495*	*203.0743303*	97.29396664	104.0867214	97.715903	116.9868657	112.5516255	119.0084	51.45919079
-0.2	-46.80910628	*-43.79702355*	*-56.46876592*	-26.48826306	-27.82716595	-25.80707083	-29.80705233	-20.28398462	-21.3516	-13.2269954
+0.2	164.092475	*135.0715068*	*179.6133119*	89.23354582	95.41632481	89.54694121	107.1066567	102.2870251	108.1436	47.12876729
-0.25	-58.95394893	*-52.93731986*	*-67.40991717*	-33.67624571	-35.57489457	-33.11643942	-38.68097069	-28.88220421	-30.4094	-17.11224063
+0.25	148.2644764	*122.0062667*	*159.7003302*	82.16949712	87.81983737	82.3910858	98.45630024	93.33821868	98.67198	43.3369374
-0.3	-73.09644694	*-63.71836115*	*-80.14981719*	-41.6554608	-44.17783344	-41.23408804	-48.54115152	-39.47344827	-41.625	-21.42856403
+0.3	131.2664566	*108.0345426*	*138.4075321*	74.36124995	79.42553569	74.48521745	88.90453209	83.50130233	88.26105	39.14950714
-0.35	-86.05575366	*-73.71519011*	*-91.82301558*	-48.63099615	-51.70079315	-48.33400607	-57.16967087	-48.77829798	-51.4789	-25.20501437
+0.35	116.8959118	*96.27237*	*120.5082026*	67.56571977	72.12224228	67.6082781	80.60073493	74.99070049	79.25443	35.50877632
-0.4	-101.0252558	*-85.39096807*	*-105.3058886*	-56.321293	-59.99711292	-56.16532991	-66.69233173	-59.08969015	-62.3993	-29.37195552
+0.4	101.5818647	*83.79039783*	*101.5743917*	60.10946506	64.11153233	60.06685963	71.50026426	65.7120372	69.4357	31.51831692
-0.45	-114.6370151	*-96.11860796*	*-117.564904*	-62.99564994	-67.19974654	-62.96569799	-74.96623848	-68.08775558	-71.9294	-32.99163344
+0.45	88.7442847	*73.37029093*	*85.85219066*	53.67118021	57.19698537	53.55891827	63.65221741	57.75568374	61.01692	28.07666473
-0.5	-130.2436393	*-108.5400797*	*-131.6193921*	-70.29721054	-75.0819504	-70.40935271	-84.02853691	-77.98873074	-82.4163	-36.95521024
+0.5	75.19154189	*62.41434086*	*69.79921346*	46.66673151	49.67735871	46.48331146	55.12590664	49.16585239	51.92865	24.33715928
-0.55	-144.3323011	*-119.859274*	*-144.3058131*	-76.58165713	-81.86870134	-76.82006537	-91.83861483	-86.56395298	-91.4997	-40.37013639
+0.55	63.94889006	*53.36177963*	*57.59623463*	40.67442098	43.24711216	40.43447195	47.84282638	41.87981933	44.2206	21.14256218
-0.6	-160.3709477	*-132.8621665*	*-167.2119938*	-83.39466415	-89.22929348	-83.77468802	-100.3176868	-95.92394164	-101.415	-44.07637662
+0.6	52.21955749	*43.95288409*	*47.03233532*	34.22160743	36.32607731	33.92603277	40.01353148	34.10937414	36.00102	17.70798638
-0.65	-174.7474259	*-144.6201197*	*-187.947733*	-89.20048192	-95.50461859	-89.70566312	-107.5547444	-103.9602474	-109.929	-47.23856346
+0.65	42.62026141	*36.27979689*	*38.38670811*	28.76399805	30.47568333	28.4263962	33.40463157	27.60972285	29.1266	14.80842816
-0.7	-190.9977645	*-158.0249364*	*-211.2468188*	-95.42511532	-102.2361006	-96.06989536	-115.3277314	-112.6486762	-119.134	-50.63348602
+0.7	32.76120679	*28.42378192*	*29.50702294*	22.96262801	24.26072604	22.58647803	26.39520486	20.78924166	21.91397	11.73276073
-0.75	-205.4594471	*-170.055332*	*-231.8620093*	-100.6635661	-107.9044355	-101.4310307	-121.8825538	-120.0300186	-126.955	-53.49495497
+0.75	24.840184	*22.12857049*	*22.37280565*	18.12845244	19.0857427	17.72613943	20.5696913	15.19204469	15.99607	9.176225289
-0.8	-221.6859256	*-183.6673405*	*-254.8638899*	-106.2000114	-113.8993149	-107.103509	-128.8265908	-127.9163193	-135.312	-56.52458586
+0.8	16.8830618	*15.81601918*	*15.20608186*	13.07835003	13.68436589	12.65610582	14.50299777	9.809950443	10.32626	6.51344254
-0.85	-236.0166623	*-195.7903204*	*-275.0682891*	-110.7823681	-118.8651076	-111.8047088	-134.5899713	-134.5266274	-142.318	-59.03735731
+0.85	10.79687499	*10.88354261*	*9.723217284*	8.956322625	9.280331975	8.525147375	9.57006133	6.645817033	7.02965	4.347907141
-0.9	-251.9684872	*-209.3995651*	*-297.4395881*	-115.5308019	-124.0158823	-116.6840891	-140.5822173	-141.4802189	-149.689	-61.64771041
+0.9	5.187792838	*6.089818071*	*4.671874971*	4.757314072	4.800040816	4.427813807	4.738051501	3.589893461	3.783284	2.4474524
-0.95	-265.9385931	*-221.4217391*	*-317.9122522*	-119.3683416	-128.1835847	-120.6352495	-145.4449387	-147.203431	-155.756	-63.76380396
+0.95	2.132048383	*2.491425475*	*1.918843542*	1.957130223	1.957130223	1.579069947	1.596173397	1.431872303	1.507234	1.183327482
-1	-281.3497645	*-234.8030478*	*-340.4728405*	-123.2289457	-132.3827582	-124.6201649	-150.3625247	-153.0937678	-162.002	-65.90090516
+1	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.81E+02	*2.34E+02*	*339.2360533*	1.23E+02	1.32E+02	124.4117275	150.1048791	1.53E+02	1.62E+02	6.58E+01
-2.05	-1.99E+00	*-2.29E+00*	*-1.792700979*	-1.80E+00	-1.80E+00	-1.435987573	-1.43946369	-1.36E+00	-1.44E+00	-1.10E+00
+2.05	2.67E+02	*2.22E+02*	*3.19E+02*	119.5954256	128.4303819	1.21E+02	1.46E+02	1.48E+02	156.1191	6.39E+01
-2.1	-5.47E+00	*-6.34E+00*	*-4.930408232*	-4.978272782	-5.0356125	-4.615195217	-4.945010715	-3.750772487	-3.95417	-2.525636782
+2.1	2.51E+02	*2.09E+02*	*2.96E+02*	115.2784001	123.7419394	1.16E+02	1.40E+02	1.41E+02	149.2934	6.15E+01
-2.15	-1.05E+01	*-1.06E+01*	*-9.420464438*	-8.710982814	-9.018371581	-8.279527621	-9.27710947	-6.467330259	-6.84002	-4.219170933
+2.15	236.9568998	*196.5473526*	*276.3218964*	111.0573228	119.1632068	112.0870041	134.9363337	134.9261308	142.7414	59.18844864
-2.2	-17.30093445	*-16.14580744*	*-15.5802914*	-13.3480452	-13.97267482	-12.92664345	-14.82640569	-10.09099593	-10.6221	-6.655271876
+2.2	220.8361818	*182.9094996*	*253.5927839*	105.902373	113.5769075	106.7983756	128.4527996	127.4898216	134.8602	56.36170082
-2.25	-24.37057541	*-21.75693722*	*-21.95074354*	-17.83727055	-18.77416299	-17.43357961	-20.21931305	-14.85781539	-15.6427	-9.022310277

+2.25	206.4119719	170.8094573	233.1459388	100.9808532	108.2478726	101.7559199	122.280016	120.4794597	127.4314	53.66857626
-2.3	-33.27727539	-28.83912858	-29.97668439	-23.27551357	-24.59579909	-22.90125556	-26.7727677	-21.15439142	-22.3001	-11.89829148
+2.3	190.142206	157.2757275	209.9546408	95.08780446	101.8712205	95.72486801	114.9061147	112.1757427	118.6328	50.44954916
-2.35	-42.0365791	-35.82225881	-37.869802	-28.43252271	-30.12045976	-28.09253964	-33.00366696	-27.21736425	-28.7116	-14.63234001
+2.35	175.6954273	145.3598841	189.2436548	89.55455288	95.88741806	90.06752885	107.9964979	104.4523793	110.45	47.43171944
-2.4	-52.83030113	-44.45451183	-47.59604177	-34.5721215	-36.70192514	-34.27940817	-40.43840984	-34.52918509	-36.4451	-17.89421347
+2.4	159.520019	132.132621	165.9167116	83.02323921	88.82792668	83.39540325	99.85507665	95.41182683	100.8724	43.87438135
-2.45	-63.25133721	-52.81800191	-56.98626878	-40.30818801	-42.85420651	-40.06493302	-47.39808167	-41.43655035	-43.7517	-20.94729122
+2.45	145.2602334	120.5740829	145.2257366	76.96699051	82.28491724	77.21327207	92.31782782	87.09152629	92.05851	40.57982737
-2.5	-75.89305624	-63.00212556	-70.65221927	-47.04932438	-50.08800424	-46.86964576	-55.59126581	-49.63304924	-52.4229	-24.54108399
+2.5	129.4073583	107.8403848	130.6892755	69.89720481	74.6500559	70.00145123	83.53177065	77.44473688	81.84013	36.73816772
-2.55	-87.93436226	-72.74080975	-84.90499472	-53.27572356	-56.77235663	-53.15932869	-63.17051802	-57.26877533	-60.5017	-27.86521325
+2.55	115.5306531	96.79870292	118.2060175	63.40671596	67.64342379	63.38463072	75.47610552	68.64356622	72.51806	33.21487235
-2.6	-102.3698093	-84.46337966	-102.5920484	-60.5185732	-64.55098465	-60.48052162	-71.99927907	-66.21937188	-69.9725	-31.73694544
+2.6	100.1591254	84.73049096	104.4275937	55.89828834	59.54070191	55.73445955	66.16825429	58.52104414	61.79706	29.14286334
-2.65	-115.9764093	-95.55855703	-119.4224917	-67.14659111	-71.67186994	-67.18424137	-80.08887343	-74.46738179	-78.7006	-35.28413517
+2.65	86.85200872	74.35168652	92.45455896	49.06223588	52.16594468	48.77304278	57.7033761	49.35506295	52.08971	25.43880078
-2.7	-132.136079	-108.7908922	-139.558785	-74.79134077	-79.8878363	-74.92056337	-89.43036107	-84.04151605	-88.8328	-39.3798284
+2.7	72.2727841	63.10557604	79.3372169	41.21498577	43.70286033	40.78588141	47.99659215	38.88741257	41.00439	21.19042068
-2.75	-147.2394215	-121.2103507	-158.4861385	-81.73223782	-87.34968885	-81.94823768	-97.92110748	-92.78574675	-98.0872	-43.10210569
+2.75	59.70096514	53.52213533	68.02620222	34.12212077	36.05555611	33.56996527	39.23170986	29.47268013	31.03463	17.35357446
-2.8	-165.0386703	-135.9085912	-180.8877503	-89.67903695	-95.89546238	-89.99832615	-107.6524581	-102.8528432	-108.742	-47.36778198
+2.8	46.0381449	43.23958654	55.73383192	26.03589459	27.33963593	25.34716991	29.24884831	19.75146033	20.79101	12.98280305
-2.85	-181.5566954	-149.6065109	-201.7424385	-96.84408537	-103.6027293	-97.2598585	-116.4351485	-111.9772355	-118.4	-51.21716551
+2.85	34.70613189	34.57046184	45.53751345	18.77494495	19.51533816	17.96684909	20.2931677	15.21006438	16.09985	9.061152874
-2.9	-200.8955531	-165.7115813	-226.2117585	-104.993172	-112.3708738	-105.5223584	-126.433507	-122.4067275	-129.44	-55.59884617
+2.9	28.9049524	25.37771172	35.31291288	11.97847803	12.89109517	12.15151944	14.71573086	15.21006438	16.09985	6.395310361
-2.95	-218.7326262	-180.6286816	-248.8120325	-112.2936427	-120.2280004	-112.9276519	-135.3989332	-131.79518	-139.379	-59.52735505
+2.95	28.06699076	23.35678478	34.41304369	11.97847803	12.89109517	12.15151944	14.71573086	15.21006438	16.09985	6.395310361
-3	-239.4959321	-198.0662003	-275.1377299	-120.5451721	-129.1109909	-121.3012052	-145.5414414	-142.4564966	-150.666	-63.97106304
+3	27.7524853	23.04227932	34.12998878	11.97847803	12.89109517	12.15151944	14.71573086	15.21006438	16.09985	6.395310361

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.171961769	-13.08988123	-13.99955721	-18.37375968	-7.353105507	-9.93316307	-11.37533675	-12.73946264	-14.17840682
End Shear	91.45506855	123.7420288	127.5087401	149.2951353	73.57565993	99.21755228	112.6128293	123.7588764	135.267207
-0.05	-9.171961769	-13.08988123	-13.99955721	-18.44614761	-7.353105507	-9.93316307	-11.37533675	-12.73946264	-14.17840682
+0.05	85.31062321	114.8622166	117.9168461	134.4196085	68.65339416	92.57636679	105.0000636	115.2427462	125.7938883
-0.1	-9.171961769	-13.08988123	-13.99955721	-18.69023456	-7.353105507	-9.93316307	-11.37533675	-12.73946264	-14.17840682
+0.1	79.00695203	105.758132	108.093132	119.4142498	63.60605707	85.76260307	97.18915611	106.5081375	116.0811927
-0.15	-12.6581175	-13.08988123	-13.99955721	-19.05117458	-10.53949444	-14.12100438	-14.90922157	-14.88383652	-14.87954024
+0.15	73.45115368	97.76413177	99.4910532	106.6177901	59.15633606	79.75590932	90.30722374	98.81957739	107.5397143
-0.2	-18.94980535	-18.35094822	-15.74448788	-19.61799307	-15.57086435	-20.91488942	-22.71750731	-23.01174424	-23.00698918
+0.2	67.27385412	88.91038275	89.99140058	93.00512149	54.20746456	73.07575633	82.65806426	90.28213427	98.06443327
-0.25	-24.49054533	-25.72395095	-22.3095659	-21.70234765	-20.00052051	-26.89660301	-29.59614149	-30.74481783	-31.57877985
+0.25	61.86451049	81.18887548	81.73199061	81.77168568	49.87256843	67.22468509	75.96223044	82.81627601	89.78689383
-0.3	-30.64595738	-34.83456382	-30.78800373	-28.94534544	-24.92022885	-33.54044368	-37.24050766	-39.34698145	-41.20384307
+0.3	55.89036552	72.6979083	72.67930214	70.05520564	45.08358746	60.7610732	68.57003681	74.58273966	80.66805981
-0.35	-36.03143567	-42.83605263	-39.07584318	-36.08591794	-29.22332903	-39.35192956	-43.93111092	-46.88338355	-49.64463972
+0.35	50.69573034	65.34885732	64.87182616	60.76725422	40.9181182	55.13934629	62.14493482	67.4344553	72.76026628
-0.4	-41.97378377	-51.70013366	-48.860302	-44.61390633	-33.96994763	-45.76278737	-51.3163325	-55.21091308	-58.98103169
+0.4	45.00152872	57.3331148	56.38900737	51.08985381	36.35045059	48.97520376	55.10492554	59.61157397	64.11691412
-0.45	-47.13574497	-59.43251193	-57.4195997	-52.22186424	-38.091892	-51.33032745	-57.73427368	-62.45576632	-67.11232819
+0.45	40.08985934	50.45645423	49.14270597	43.38152768	32.40900872	43.65652482	49.03519713	52.87575268	56.68467735
-0.5	-52.78824334	-67.93762201	-66.86221665	-60.91951968	-42.60399207	-57.42528421	-64.76513724	-70.40193201	-76.04101137
+0.5	34.75238324	43.02838806	41.35265699	35.48135271	28.12408791	37.8747837	42.44259431	45.57025868	48.63584407
-0.55	-57.65843458	-75.30094237	-75.06303582	-70.42566987	-46.49017831	-62.67515542	-70.82576957	-77.26034105	-83.75699679
+0.55	30.19194006	36.72407644	34.77678036	29.63555031	24.46127338	32.932874	36.81288006	39.34178967	41.78497227
-0.6	-62.94429039	-83.33463792	-84.04092231	-81.57786117	-50.70634109	-68.37127834	-77.4070537	-84.71839438	-92.15893517
+0.6	25.28798103	29.99611668	27.8024234	23.49344954	20.52051859	27.61646208	30.76290198	32.66042562	34.44969186
-0.65	-67.45445301	-90.2289409	-91.77400728	-92.40651385	-54.3021666	-73.2297772	-83.02573963	-91.09548477	-99.35380073
+0.65	21.14700967	24.36410327	22.00620932	18.49699696	17.1909325	23.12504047	25.65784102	27.03419068	28.28600007
-0.7	-72.29688387	-97.6787754	-100.1642505	-104.8556338	-58.16095861	-78.44413637	-89.06222398	-97.9586833	-107.1099617
+0.7	16.75336278	18.44870057	16.20314799	13.53807046	13.65577623	18.35688321	20.24571222	21.08370567	21.78330762
-0.75	-76.37876339	-104.0041241	-107.320368	-117.259144	-61.41182711	-82.83754324	-94.15432442	-103.7595781	-113.6778972
+0.75	13.10012302	13.58894448	11.7655433	9.771509023	10.71401783	14.38966403	15.74994418	16.15458057	16.41258777
-0.8	-80.70098546	-110.7576551	-115.0000605	-131.5967049	-64.8518277	-87.48720468	-99.55078513	-109.9211729	-120.6692448
+0.8	9.293560804	8.916634144	7.679126429	6.32583173	7.645883108	10.25269532	11.07087096	11.04171752	11.04042971
-0.85	-84.2863257	-116.414092	-121.469948	-144.8424818	-67.70312914	-91.3418047	-104.0316597	-115.0509832	-126.504437
+0.85	6.19630826	5.626124987	4.920929985	4.06387584	5.146555682	6.883382089	7.269035459	7.257739733	7.256641774
-0.9	-88.0115409	-122.3588661	-128.3161908	-159.7224627	-70.66290719	-95.34385067	-108.6928904	-120.404238	-132.6119369
+0.9	3.259632479	3.251343566	2.584954467	2.07240285	2.606868725	3.561987235	3.774685283	3.773787884	3.772911234
-0.95	-91.03208707	-127.2464416	-133.9906051	-172.6093821	-73.06005124	-98.58592249	-112.4778994	-124.7680814	-137.6085916
+0.95	1.323195434	1.370894574	1.089227359	0.853239413	1.138725846	1.331092212	1.290078184	1.332088728	1.353402725
-1	-94.08352138	-132.2700361	-139.8804767	-186.6686718	-75.47818387	-101.8574165	-116.3086657	-129.2062606	-142.7132085
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.39E+01	1.32E+02	1.40E+02	1.86E+02	7.54E+01	1.02E+02	116.1078671	128.972937	1.42E+02
-2.05	-1.26E+00	-1.26E+00	-1.00E+00	-7.84E-01	-1.07E+00	-1.22E+00	-1.220048983	-1.22067358	-1.22E+00
+2.05	9.12E+01	1.28E+02	1.34E+02	1.73E+02	7.32E+01	9.88E+01	112.7024984	125.0276233	1.38E+02
-2.1	-3.384333329	-3.375990334	-2.684096552	-2.15507952	-2.740318596	-3.708535861	-3.94580895	-3.944905388	-3.944022718
+2.1	8.78E+01	1.22E+02	1.28E+02	1.59E+02	7.05E+01	9.51E+01	108.4445672	120.1185297	1.32E+02
-2.15	-6.012300183	-5.48845045	-4.762495427	-3.931480626	-4.997975873	-6.683097484	-7.043356683	-7.033555176	-7.032450343
+2.15	84.50172539	116.7557985	121.8620933	145.6780315	67.8743507	91.57330086	104.3010182	115.3598113	126.8562453
-2.2	-9.496540535	-9.160757114	-7.854878525	-6.47615011	-7.80958668	-10.47340117	-11.32021615	-11.31365185	-11.31234026
+2.2	80.46838077	110.3925541	114.5837384	130.8066409	64.66676584	87.23705708	99.26023446	109.5890098	120.2919061
-2.25	-12.8803417	-13.29856655	-11.5007337	-9.548532628	-10.5369673	-14.15090262	-15.47962591	-15.85867362	-16.09071041
+2.25	76.62621778	104.3891424	107.7570597	118.0616956	61.60883529	83.10381767	94.46314211	104.1117711	114.0770906

-2.3	-16.99007065	-18.76555907	-16.4928145	-13.78581485	-13.84631551	-18.61385655	-20.53716331	-21.40372499	-22.13250872
+2.3	72.0342764	97.27337721	99.70669481	104.1679653	57.95174425	78.1614196	88.73474167	97.58600446	106.6884257
-2.35	-20.89573001	-24.02397282	-21.65757523	-18.1983181	-16.98882524	-22.85241977	-25.34818338	-26.69329279	-27.91297661
+2.35	67.72970629	90.65103045	92.24841946	93.10166982	54.52155543	73.52623431	83.36874854	91.48512594	99.79376819
-2.4	-25.55415564	-30.35974066	-28.17803593	-23.81918548	-20.73447297	-27.90508669	-31.09116299	-33.0225921	-34.84687694
+2.4	62.6559444	82.8951903	83.54896131	80.96004525	50.47638744	68.06060409	77.04793394	84.31112642	91.69982643
-2.45	-29.91340519	-36.34040994	-34.377772	-29.28467088	-24.23751641	-32.63098742	-36.4691514	-38.96183507	-41.3674079
+2.45	57.95721906	75.75385995	75.56833915	71.04666204	46.72854829	62.99718402	71.19767588	77.68148907	84.23114694
-2.5	-35.04374053	-43.4325121	-41.77536365	-35.88758313	-28.35804604	-38.19044635	-42.80237465	-45.9686263	-49.07437335
+2.5	52.47843639	67.47041323	66.34269498	60.36951466	42.35672157	57.09126768	64.37967586	69.96602444	75.55092241
-2.55	-39.78834426	-50.03551329	-48.70014661	-42.91573505	-32.16700731	-43.32998005	-48.66268259	-52.46265601	-56.22917146
+2.55	47.45381427	59.9100536	57.94897488	52.69728105	38.34581772	51.673333	58.12981925	62.90251484	67.61406218
-2.6	-45.3137889	-57.77149696	-56.85194471	-51.5873538	-36.60099458	-49.31329682	-55.49091306	-60.04020306	-64.59017864
+2.6	41.64677069	51.21138757	48.32004813	44.13859632	33.70877995	45.41004944	50.90985318	54.75231232	58.46661465
-2.65	-50.37548284	-64.89686735	-64.39253974	-60.20370207	-40.66128975	-54.79272835	-61.74892182	-66.9941315	-72.27344609
+2.65	36.36452732	43.33194644	39.62248167	36.55793208	29.48942134	39.71131293	44.34498872	47.34981125	50.16731957
-2.7	-56.21928051	-73.16429736	-73.17565403	-70.65234369	-45.34729088	-61.11697908	-68.97694637	-75.03569645	-81.16942191
+2.7	30.30602894	34.33053436	30.31882188	28.54010807	24.64856726	33.17359304	36.81827582	38.87161648	40.67172001
-2.75	-61.52981108	-80.71208642	-81.2227962	-81.08845838	-49.60430852	-66.86260458	-75.54800758	-82.35464479	-89.27533673
+2.75	24.83437817	26.23195935	22.78217997	22.10167817	20.2753706	27.26777005	30.02306777	31.22500649	32.11583082
-2.8	-67.61513338	-89.39851418	-90.51432349	-93.72569473	-54.48092717	-73.44485631	-83.08057791	-90.75348239	-98.58727282
+2.8	18.6012338	17.89445744	15.43734108	19.58206498	15.29214394	20.53854177	22.28482669	22.5255599	22.52081001
-2.85	-73.10624382	-97.2687741	-98.958734	-105.8364831	-58.88006767	-79.38296075	-89.88004975	-98.34256613	-107.0100258
+2.85	13.00845046	13.08988062	13.99955732	19.07821167	10.81967589	14.49934609	15.34391355	15.31503318	15.31075817
-2.9	-79.35632472	-106.2617589	-108.6357999	-120.2320738	-63.8858445	-86.14028633	-97.62199951	-106.9919362	-116.6189207
+2.9	9.171961202	13.08988062	13.99955732	18.67216577	7.353105598	9.933162475	11.37533705	12.73946296	14.178407
-2.95	-84.95975949	-114.354506	-117.3682586	-133.5706217	-68.37250703	-92.19715402	-104.5652428	-114.7562729	-125.2526706
+2.95	9.171961202	13.08988062	13.99955732	18.45519355	7.353105598	9.933162475	11.37533705	12.73946296	14.178407
-3	-91.29783436	-123.5416031	-127.3079279	-149.1403683	-73.4460495	-99.0466245	-112.4213269	-123.5494314	-135.0394546
+3	9.171961202	13.08988062	13.99955732	18.3737591	7.353105598	9.933162475	11.37533705	12.73946296	14.178407

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.29099769	-27.94991888	-15.9094	-19.1613	-20.6611	-6.395310399
End Shear	227.8375838	246.2536554	148.0839	178.4467	190.0245	64.0486495
-0.05	-25.29099769	-27.94991888	-15.9094	-19.1613	-20.6611	-6.395310399
+0.05	210.6235711	227.4469154	137.2512	165.4349	175.9728	59.7735779
-0.1	-25.29099769	-27.94991888	-15.9094	-19.1613	-20.6611	-6.395310399
+0.1	193.0004367	207.9632594	126.1525	152.101	161.5772	55.35413553
-0.15	-25.29099769	-27.94991888	-15.9094	-19.1613	-20.6611	-8.815269086
+0.15	177.5708675	190.9256944	116.4177	140.4033	148.9581	51.45919079
-0.2	-26.76470014	-27.98016403	-20.6348	-23.8868	-24.6708	-13.2269954
+0.2	160.5336491	172.1374193	105.6482	127.4595	135.0065	47.12876729
-0.25	-38.16646055	-40.15130028	-28.258	-34.6823	-34.6754	-17.11224063
+0.25	145.7228345	155.8270802	96.26715	116.182	122.8617	43.3369374
-0.3	-53.84822789	-54.19373353	-39.181	-47.7887	-48.4684	-21.42856403
+0.3	129.4919029	137.9797008	85.9645	103.7936	109.5332	39.14950714
-0.35	-69.39654963	-70.40022682	-49.0135	-59.5846	-61.2778	-25.20501437
+0.35	115.4957336	122.614846	77.05971	93.08326	98.02181	35.50877632
-0.4	-86.97062355	-90.020562	-59.9179	-72.6639	-75.4921	-29.37195552
+0.4	100.291463	105.9538882	67.36167	81.41552	85.4954	31.51831692
-0.45	-102.3467241	-107.2071735	-69.4409	-84.084	-87.9134	-32.99163344
+0.45	87.30582582	91.75278457	59.05552	71.41922	74.77658	28.07666473
-0.5	-119.3127055	-126.1941116	-79.9282	-96.6578	-101.602	-36.95521024
+0.5	73.34858987	76.52382236	50.09981	60.63741	63.23134	24.33715928
-0.55	-134.0503157	-142.7085808	-89.0192	-107.555	-113.476	-40.37013639
+0.55	61.56938826	63.70470214	42.51473	51.50206	53.46426	21.14256218
-0.6	-150.1877906	-160.8165889	-98.9517	-119.458	-126.459	-44.07637662
+0.6	49.07959364	50.15322909	34.43909	41.77146	43.07922	17.70798638
-0.65	-164.0910136	-176.4406548	-107.488	-129.686	-137.626	-47.23856346
+0.65	38.70270838	38.93438802	27.69749	33.64398	34.42303	14.80842816
-0.7	-179.179619	-193.4242054	-116.728	-140.753	-149.725	-50.63348602
+0.7	28.05432509	28.28713934	20.63964	25.12985	25.37726	11.73276073
-0.75	-192.052573	-207.939616	-124.588	-150.165	-160.027	-53.49495497
+0.75	20.00730743	20.78188372	14.94054	18.24904	18.25814	9.176225289
-0.8	-205.8719174	-223.5531459	-132.998	-160.231	-171.062	-56.52458586
+0.8	12.8741075	13.2692835	10.23238	11.66811	12.10339	6.51344254
-0.85	-217.5187021	-236.7416401	-140.058	-168.679	-180.34	-59.03735731
+0.85	7.961856609	8.112468484	7.077028	7.777697	8.166863	4.347907141
-0.9	-229.8484419	-250.7396203	-147.5	-177.578	-190.133	-61.64771041
+0.9	4.196409809	3.806986355	3.858023	4.237164	4.250586	2.4474524
-0.95	-240.0731676	-262.3829427	-153.639	-184.916	-198.226	-63.76380396
+0.95	1.358387143	1.397371738	1.574132	1.679074	1.449	1.183327482
-1	-250.6929023	-274.5198379	-159.974	-192.483	-206.598	-65.90090516
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.50E+02	2.74E+02	1.60E+02	1.92E+02	2.06E+02	6.58E+01
-2.05	-1.25E+00	-1.27E+00	-1.45E+00	-1.54E+00	-1.29E+00	-1.10E+00
+2.05	2.41E+02	2.63E+02	1.54E+02	185.3549	1.99E+02	6.39E+01
-2.1	-4.299270986	-4.063593367	-4.02754	-4.42264	-4.43615	-2.525636782
+2.1	2.29E+02	2.50E+02	1.47E+02	177.1005	1.90E+02	6.15E+01
-2.15	-7.61617434	-7.744029424	-6.88907	-7.57203	-7.93274	-4.219170933
+2.15	218.2247779	237.543027	140.4852	169.1894	180.9015	59.18844864
-2.2	-13.21524136	-13.63195711	-10.4387	-11.9588	-12.3611	-6.655271876
+2.2	205.1226193	222.7065474	132.5424	159.686	170.4648	56.36170082
-2.25	-19.52778924	-20.34034812	-14.6208	-17.8626	-17.8411	-9.022310277
+2.25	192.8382414	208.8273008	125.0669	150.738	160.6551	53.66857626

-2.3	**-28.58025879**	**-28.63730623**	**-21.017**	**-25.5852**	**-25.8604**	**-11.89829148**
+2.3	**178.3566468**	**192.4980598**	**116.2249**	**140.1507**	**149.0656**	**50.44954916**
-2.35	**-38.07864937**	**-38.26033295**	**-27.291**	**-33.1537**	**-33.9015**	**-14.63234001**
+2.35	**164.9440091**	**177.4010402**	**108.0114**	**130.3128**	**138.3108**	**47.43171944**
-2.4	**-49.75217894**	**-50.88097669**	**-34.875**	**-42.2968**	**-43.6393**	**-17.89421347**
+2.4	**149.3034238**	**159.824565**	**98.408**	**118.8069**	**125.7476**	**43.87438135**
-2.45	**-60.85475942**	**-62.9272579**	**-42.0536**	**-50.9466**	**-52.8709**	**-20.94729122**
+2.45	**134.9584577**	**143.7280104**	**89.57883**	**108.2259**	**114.2068**	**40.57982737**
-2.5	**-74.1058879**	**-77.34817094**	**-50.5866**	**-61.2235**	**-63.8585**	**-24.54108399**
+2.5	**118.3791511**	**125.1498427**	**79.35174**	**95.96672**	**100.8488**	**36.73816772**
-2.55	**-86.51281636**	**-90.88557556**	**-58.5475**	**-70.8077**	**-74.1213**	**-27.86521325**
+2.55	**103.2978154**	**108.2720152**	**70.0294**	**84.78957**	**88.68122**	**33.21487235**
-2.6	**-101.1211751**	**-106.8612297**	**-67.8916**	**-82.0532**	**-86.1796**	**-31.73694544**
+2.6	**86.00020892**	**88.93768602**	**59.31633**	**71.94233**	**74.70764**	**29.14286334**
-2.65	**-114.6366271**	**-121.6715083**	**-76.5124**	**-92.4249**	**-97.3146**	**-35.28413517**
+2.65	**70.37833512**	**71.49684785**	**49.62325**	**60.31598**	**62.07236**	**25.43880078**
-2.7	**-130.3817804**	**-138.9563666**	**-86.53**	**-104.474**	**-110.264**	**-39.3798284**
+2.7	**52.98013045**	**53.73795578**	**38.56195**	**47.04599**	**47.66218**	**21.19042068**
-2.75	**-144.8098181**	**-154.8212505**	**-95.6882**	**-115.486**	**-122.112**	**-43.10210569**
+2.75	**39.04033009**	**40.91391931**	**28.818**	**35.35427**	**35.42344**	**17.35357446**
-2.8	**-161.4714795**	**-173.1697743**	**-106.242**	**-128.173**	**-135.775**	**-47.36778198**
+2.8	**26.13695573**	**27.94991881**	**20.29187**	**23.36039**	**24.23354**	**12.98280305**
-2.85	**-176.6161514**	**-189.8710145**	**-115.815**	**-139.679**	**-148.177**	**-51.21716551**
+2.85	**25.29099811**	**27.94991881**	**15.90944**	**19.16128**	**20.66107**	**9.061152874**
-2.9	**-193.9739069**	**-209.0376683**	**-126.766**	**-152.838**	**-162.373**	**-55.59884617**
+2.9	**25.29099811**	**27.94991881**	**15.90944**	**19.16128**	**20.66107**	**6.395310361**
-2.95	**-209.6393785**	**-226.3569998**	**-136.632**	**-164.691**	**-175.169**	**-59.52735505**
+2.95	**25.29099811**	**27.94991881**	**15.90944**	**19.16128**	**20.66107**	**6.395310361**
-3	**-227.4728503**	**-246.0962398**	**-147.844**	**-178.158**	**-189.72**	**-63.97106304**
+3	**25.29099811**	**27.94991881**	**15.90944**	**19.16128**	**20.66107**	**6.395310361**

2-Span: Moment (Max and Min) Raw Data Results – 170' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.92E-13	-5.10E-13	-9.03E-13	-4.17E-13	-4.42E-13	-3.56E-13	-3.76E-13	-3.20E-13	-3.39E-13	-2.40E-13
End Shear	9.50E-13	5.03E-13	1.03E-12	3.89E-13	4.23E-13	3.50E-13	4.11E-13	3.84E-13	4.07E-13	3.84E-13
-0.05	-235.8962239	-195.8593746	-290.1049047	-101.817067	-109.574308	-103.287916	-125.083718	-129.285544	-136.848734	-54.36013839
+0.05	1904.351756	1579.878653	2159.258958	958.7336254	1026.620952	964.3755772	1156.629193	1125.399917	1190.178193	508.0754122
-0.1	-471.7924478	-391.7187491	-580.2098093	-203.634134	-219.148617	-206.575831	-250.167437	-258.571087	-273.697468	-108.7202768
+0.1	3554.03911	2956.40395	4013.337793	1786.572605	1912.287014	1795.910294	2152.222592	2083.080837	2202.797669	945.178617
-0.15	-707.6886717	-587.5781237	-870.314714	-305.451201	-328.722925	-309.863747	-375.251155	-387.856631	-410.546202	-163.0804152
+0.15	4948.675116	4130.433618	5596.312715	2483.999747	2657.650741	2495.243654	2987.875324	2874.214736	3039.124853	1312.209365
-0.2	-943.5848956	-783.4374983	-1160.419619	-407.268268	-438.297233	-413.151662	-500.334874	-517.142175	-547.394936	-217.4405536
+0.2	6093.663512	5103.906735	6833.135957	3053.315614	3265.244107	3064.79612	3666.636207	3523.917429	3726.858977	1610.500934
-0.25	-1179.481119	-979.2968728	-1450.524523	-509.085334	-547.871541	-516.439578	-625.418592	-646.427719	-684.24367	-271.800692
+0.25	6992.660429	5879.505967	7737.11392	3497.621257	3738.461197	3507.801459	4219.796827	4043.338125	4278.137535	1841.827025
-0.3	-1415.377343	-1175.156247	-1740.629428	-610.902401	-657.44585	-619.727493	-750.50231	-775.713262	-821.092404	-326.1608303
+0.3	7661.2621	6460.657816	8465.638132	3820.81961	4081.55962	3851.144117	4628.658563	4417.812368	4673.397139	2009.079039
-0.35	-1651.273567	-1371.015622	-2030.734333	-712.719468	-767.020158	-723.015409	-875.586029	-904.998806	-957.941138	-380.5209687
+0.35	8123.698736	6851.533118	8914.017301	4035.644525	4321.765275	4077.5482	4894.646989	4665.188256	4936.498285	2114.129367
-0.4	-1887.169791	-1566.874997	-2320.839237	-814.536535	-876.594466	-826.303324	-1000.66975	-1034.28435	-1094.78987	-434.8811071
+0.4	8356.921671	7057.045724	9058.4895	4152.984456	4443.817009	4190.248983	5023.235585	4770.619037	5049.210507	2160.034527
-0.45	-2123.066015	-1762.734371	-2610.944142	-916.353602	-986.168774	-929.59124	-1125.75347	-1163.56989	-1231.63861	-489.2412455
+0.45	8369.333229	7082.853819	8917.714364	4163.563344	4451.347333	4195.886783	5022.055583	4743.771091	5021.626639	2147.312599
-0.5	-2358.962239	-1958.593746	-2901.049047	-1018.17067	-1095.74308	-1032.87916	-1250.83718	-1292.85544	-1368.48734	-543.6013839
+0.5	8217.115673	6949.04422	8696.377125	4082.593948	4366.735861	4116.75748	4931.551877	4668.743905	4941.650297	2117.507692
-0.55	-2594.858463	-2154.45312	-3191.153951	-1119.98774	-1205.31739	-1136.16707	-1375.9209	-1422.14098	-1505.33607	-597.9615223
+0.55	7865.521746	6649.144788	8495.346103	3909.467639	4183.48687	3945.598455	4730.392129	4488.29721	4749.970352	2038.761093
-0.6	-2830.754687	-2350.312495	-3481.258856	-1221.8048	-1314.8917	-1239.45499	-1501.00462	-1551.42652	-1642.18481	-652.3216607
+0.6	7315.34044	6188.283408	7983.222232	3650.777584	3907.515175	3686.934661	4421.850649	4190.276355	4433.814288	1911.47758
-0.65	-3066.650911	-2546.171869	-3771.363761	-1323.62187	-1424.46601	-1342.7429	-1626.08834	-1680.71207	-1779.03354	-706.6817991
+0.65	6578.398695	5574.846527	7177.866026	3316.589613	3548.55338	3349.631962	4016.916161	3785.145599	4004.405474	1740.336382
-0.7	-3302.547135	-2742.031244	-4061.468665	-1425.43894	-1534.04032	-1446.03082	-1751.17206	-1809.99761	-1915.88228	-761.0419375
+0.7	5667.598807	4817.966845	6099.078124	2920.96214	3117.197572	2943.648308	3527.566415	3285.168946	3474.74266	1530.449879
-0.75	-3538.443358	-2937.890619	-4351.57357	-1527.256	-1643.61462	-1549.31873	-1876.25578	-1939.28316	-2052.73101	-815.4020759
+0.75	4596.913441	3927.518782	4823.607705	2465.803544	2624.906642	2479.754812	2966.763238	2703.658796	2858.934647	1287.364052
-0.8	-3774.339582	-3133.749993	-4641.678475	-1629.07307	-1753.18893	-1652.60665	-2001.33949	-2068.5687	-2189.57974	-869.7622143
+0.8	3381.384874	2914.120724	3323.565709	1962.340925	2084.002423	1969.600233	2348.455012	2054.975262	2172.498421	1017.058405
-0.85	-4155.985697	-3475.359259	-5062.958278	-1730.89014	-1862.76324	-1755.89456	-2126.42321	-2197.85424	-2326.42848	-924.1223526
+0.85	2182.879394	1934.885263	1965.805242	1422.602554	1507.669804	1426.302442	1687.576701	1354.526101	1430.864942	725.9446769
-0.9	-4804.055985	-4083.392697	-5724.019833	-1832.7072	-1972.33755	-1859.18248	-2251.50693	-2327.13979	-2463.27721	-978.482491
+0.9	1139.256723	1122.59272	1026.138087	866.8325752	910.2921241	862.5885012	1000.048582	638.2304273	676.1871746	420.8688587
-0.95	-5675.388222	-4914.688085	-6719.145334	-1934.52427	-2081.91186	-1962.47039	-2376.59065	-2456.42533	-2600.12595	-1032.842629
+0.95	367.6897047	446.9324405	330.9207334	333.2838204	333.2838204	326.5516454	352.2294576	253.3090274	266.6410815	190.8251494
-1	-6736.188558	-5935.451619	-8492.273522	-2036.34125	-2191.48616	-2065.75831	-2501.67435	-2585.71099	-2736.97459	-1087.202799
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-6736.188558	-5935.451619	-8492.273522	-2036.34125	-2191.48616	-2065.75831	-2501.67435	-2585.71099	-2736.97459	-1087.202799
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-5675.386415	-4914.688212	-6719.149586	-1934.52418	-2081.91185	-1962.47039	-2376.59052	-2456.42544	-2600.12586	-1032.842661
+2.05	367.6897242	446.9374431	330.920751	333.2877899	333.2877899	326.5642854	352.2461535	253.3119143	266.6441203	190.3420363
-2.1	-4804.054258	-4083.392806	-5724.019843	-1832.70712	-1972.33754	-1859.18247	-2251.5068	-2327.1399	-2463.27713	-978.4825228
+2.1	1139.843065	1122.600749	1026.138542	866.8301144	910.3209531	862.6060926	1000.059651	638.2314125	676.2113984	420.8631989
-2.15	-4155.984072	-3475.359371	-5062.958291	-1730.89006	-1862.76324	-1755.89455	-2126.42309	-2197.85435	-2326.42841	-924.1223847
+2.15	2183.537891	1934.894701	1965.804916	1422.603751	1507.667239	1426.321484	1687.589322	1354.524007	1430.863073	725.9391923
-2.2	-3774.338017	-3133.750066	-4641.678452	-1629.07299	-1753.18893	-1652.60664	-2001.33938	-2068.5688	-2189.57968	-869.7622466
+2.2	3382.083471	2914.131085	3323.565219	1962.343186	2084.001074	1969.620442	2348.469004	2054.973777	2172.499021	1017.05269

-2.25	-3538.441892	-2937.890692	-4351.573547	-1527.25593	-1643.61462	-1549.31872	-1876.25567	-1939.28326	-2052.73095	-815.4021086
+2.25	4597.62027	3927.529583	4823.607782	2465.806073	2624.905518	2479.749208	2966.777678	2703.657447	2858.933583	1287.358621
-2.3	-3302.545767	-2742.031318	-4061.468642	-1425.43887	-1534.04031	-1446.03081	-1751.17196	-1809.99771	-1915.88222	-761.0419705
+2.3	5668.284403	4817.977796	6099.078471	2920.964374	3117.196179	2943.642645	3527.580704	3285.167076	3474.74105	1530.444449
-2.35	-3066.649641	-2546.171944	-3771.363738	-1323.6218	-1424.466	-1342.74289	-1626.08824	-1680.71216	-1779.0335	-706.6818324
+2.35	6579.03465	5574.856091	7177.865709	3316.590343	3548.550412	3349.624787	4016.928793	3785.141667	4004.401697	1740.330368
-2.4	-2830.753516	-2350.312569	-3481.258833	-1221.80474	-1314.89169	-1239.45498	-1501.00453	-1551.42661	-1642.18477	-652.3216944
+2.4	7315.900996	6188.291071	7983.221933	3650.775447	3907.51053	3686.92568	4421.860829	4190.270093	4433.808044	1911.471465
-2.45	-2594.857391	-2154.453195	-3191.153928	-1119.98768	-1205.31738	-1136.16706	-1375.92082	-1422.14107	-1505.33604	-597.9615563
+2.45	7865.983912	6649.150206	8495.346268	3909.463423	4183.479948	3945.58732	4730.399578	4488.287783	4749.960771	2038.754208
-2.5	-2358.961266	-1958.593821	-2901.049024	-1018.17061	-1095.74307	-1032.87915	-1250.83711	-1292.85552	-1368.48732	-543.6014182
+2.5	8217.458033	6949.046919	8696.376812	4082.586585	4366.725472	4116.769735	4931.555722	4668.754043	4941.661294	2117.500845
-2.55	-2123.065141	-1762.734447	-2610.944119	-916.353549	-986.168764	-929.591233	-1125.75339	-1163.56997	-1231.63859	-489.2412802
+2.55	8369.080717	7082.853166	8917.714343	4163.572483	4451.359576	4195.876594	5022.054332	4743.762809	5021.617599	2150.282588
-2.6	-1887.169016	-1566.875072	-2320.839214	-814.536486	-876.594455	-826.303318	-1000.66968	-1034.28443	-1094.78986	-434.8811421
+2.6	8356.524126	7057.041737	9058.489805	4152.99023	4443.825701	4190.235251	5023.230142	4770.630497	5049.222214	2160.03131
-2.65	-1651.272891	-1371.015698	-2030.73431	-712.719423	-767.020146	-723.015403	-875.585969	-904.998878	-957.941134	-380.521004
+2.65	8123.138862	6851.52481	8914.017428	4035.646279	4321.769657	4077.556753	4894.636325	4665.194959	4936.504959	2114.124915
-2.7	-1415.376766	-1175.156324	-1740.629405	-610.902359	-657.445837	-619.727488	-750.502257	-775.713331	-821.092406	-326.1608659
+2.7	7660.525587	6460.645037	8465.638167	3820.816509	4081.558797	3851.148037	4628.642639	4417.813863	4673.398284	2009.074152
-2.75	-1179.480641	-979.2969495	-1450.5245	-509.085296	-547.871528	-516.439572	-625.418544	-646.427783	-684.243679	-271.8007279
+2.75	6992.123099	5879.489152	7737.114302	3497.613662	3738.455494	3507.800988	4219.802105	4043.334263	4278.133007	1841.824548
-2.8	-943.584516	-783.4375753	-1160.419596	-407.268233	-438.297219	-413.151657	-500.334832	-517.142236	-547.394952	-217.4405898
+2.8	6092.929841	5103.885775	6833.13659	3053.30338	3265.233463	3064.791	3666.6356	3523.908175	3726.848746	1610.504605
-2.85	-707.6883909	-587.578201	-870.3146911	-305.45117	-328.722911	-309.863742	-375.25112	-387.856689	-410.546225	-163.0804517
+2.85	4947.707783	4130.40691	5596.312473	2483.98226	2657.634486	2495.23326	2987.868328	2874.209924	3039.119899	1312.212317
-2.9	-471.7922658	-391.7188268	-580.2097864	-203.634106	-219.148602	-206.575827	-250.167408	-258.571142	-273.697497	-108.7203137
+2.9	3552.712368	2956.371888	4013.336805	1786.550052	1912.265275	1795.894048	2152.208543	2083.069514	2202.78583	945.1804396
-2.95	-235.8961408	-195.8594525	-290.1048818	-101.817043	-109.574293	-103.287911	-125.083695	-129.285594	-136.84877	-54.36017558
+2.95	1904.573696	1579.842277	2159.258641	958.7060014	1026.593773	964.3543608	1156.609097	1125.382902	1190.160315	508.0764163
-3	-6.42E-13	-4.11E-13	-6.86E-13	-3.30E-13	-3.30E-13	-2.53E-13	-2.70E-13	-2.65E-13	-2.79E-13	-2.39E-13
+3	1.10E-12	7.57E-13	1.37E-12	5.28E-13	5.56E-13	4.34E-13	4.95E-13	5.41E-13	5.73E-13	3.84E-13

2-Span: Moment (Max and Min) Raw Data Results - 170' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.42E-13	-2.82E-13	-3.06E-13	-3.22E-13	-2.47E-13	-3.14E-13	-3.01E-13	-3.00E-13	-3.00E-13
End Shear	3.15E-13	3.40E-13	2.91E-13	2.97E-13	4.00E-13	3.05E-13	3.60E-13	3.56E-13	3.56E-13
-0.05	-77.96167504	-111.2639905	-118.9962363	-156.1769573	-62.50139681	-84.43188609	-96.6903623	-108.285432	-120.516458
+0.05	725.3373906	976.3288408	1002.492696	1151.811375	583.5538504	787.3032219	892.9741276	980.9089961	1070.751377
-0.1	-155.9233501	-222.527981	-237.9924726	-312.3539146	-125.0027936	-168.8637722	-193.380725	-216.570865	-241.032916
+0.1	1350.318967	1808.139066	1848.980085	2095.147545	1086.575889	1465.984917	1661.478077	1826.04076	1996.983791
-0.15	-233.8850251	-333.7919715	-356.988709	-468.5308719	-187.5041904	-253.2956583	-290.071087	-324.856297	-361.549374
+0.15	1875.312214	2496.358953	2542.431236	2851.74223	1509.655109	2036.552992	2306.145605	2558.961552	2793.804337
-0.2	-311.8467001	-445.055962	-475.9849453	-624.7078292	-250.0055872	-337.7275444	-386.761449	-433.14173	-482.065832
+0.2	2302.197211	3044.489628	3116.20864	3491.801374	1854.114938	2501.003276	2829.368675	3156.840518	3458.555681
-0.25	-389.8083752	-556.3199525	-594.9811816	-780.8847865	-312.506984	-422.1594305	-483.451812	-541.427162	-602.58229
+0.25	2633.469959	3482.978995	3544.784743	4000.788692	2121.920399	2861.997035	3244.425028	3621.635867	3988.162305
-0.3	-467.7700502	-667.583943	-713.9774179	-937.0617438	-375.0083808	-506.5913165	-580.142174	-649.712595	-723.098748
+0.3	2872.243212	3791.497305	3866.564904	4379.873546	2315.530126	3136.844826	3558.475802	3957.630965	4374.66725
-0.35	-545.7317253	-778.8479335	-832.9736542	-1093.238701	-437.5097776	-591.0232026	-676.832536	-757.998027	-843.615206
+0.35	3039.26055	3974.744249	4082.672725	4640.459386	2437.895533	3320.79627	3761.489004	4190.057154	4622.512925
-0.4	-623.6934003	-890.111924	-951.9698906	-1249.415658	-500.0111745	-675.4550887	-773.522899	-866.28346	-964.131664
+0.4	3121.068812	4061.067804	4213.947429	4770.645301	2492.461212	3411.662897	3859.096348	4307.385666	4750.10132
-0.45	-701.6550753	-1001.375914	-1070.966127	-1405.592616	-562.5125713	-759.8869748	-870.213261	-974.568892	-1084.64812
+0.45	3121.712362	4033.649211	4219.298215	4732.938591	2483.164748	3414.953794	3856.416884	4311.66037	4764.222488
-0.5	-779.6167504	-1112.639905	-1189.962363	-1561.769573	-625.0139681	-844.3188609	-966.903623	-1082.85432	-1205.16458
+0.5	3064.660991	3972.058095	4135.226585	4556.194297	2443.609513	3351.228745	3787.659962	4230.275952	4668.437643
-0.55	-857.5784254	-1223.903895	-1308.9586	-1717.94653	-687.5153649	-928.750747	-1063.59399	-1191.13976	-1325.68104
+0.55	2938.465539	3820.713975	3947.364067	4442.37412	2350.410485	3212.461484	3634.003746	4052.529104	4463.578149
-0.6	-935.5401004	-1335.167886	-1427.954836	-1874.123488	-750.0167617	-1013.182633	-1160.28435	-1299.42519	-1446.1975
+0.6	2745.323121	3570.901552	3656.908133	4159.912604	2202.239906	3001.72047	3396.858497	3782.200677	4169.31453
-0.65	-1013.501775	-1446.431876	-1546.951072	-2030.300445	-812.5181585	-1097.614519	-1256.97471	-1407.71062	-1566.71395
+0.65	2492.114095	3237.381377	3291.09169	3702.768822	2004.46969	2726.470476	3084.711995	3428.897774	3782.890044
-0.7	-1091.463451	-1557.695867	-1665.947308	-2186.477402	-875.0195553	-1182.046405	-1353.66507	-1515.99605	-1687.23041
+0.7	2186.335558	2817.941487	2833.833735	3143.696557	1762.966905	2394.843442	2706.817376	3003.085521	3313.239814
-0.75	-1169.425126	-1668.959857	-1784.943545	-2342.65436	-937.5209521	-1266.478291	-1450.35544	-1624.28149	-1807.74687
+0.75	1836.101229	2323.694011	2297.361648	2443.943545	1484.09033	2015.636689	2273.191594	2517.029355	2772.797816
-0.8	-1247.386801	-1780.223848	-1903.939781	-2498.831317	-1000.022349	-1350.910177	-1547.0458	-1732.56692	-1928.26333
+0.8	1450.141035	1766.654051	1697.804144	1617.754094	1174.692142	1598.312572	1794.615532	1980.076887	2174.954246
-0.85	-1325.348476	-1891.487838	-2022.936017	-2692.747087	-1062.523746	-1435.342064	-1643.73616	-1840.85235	-2048.77979
+0.85	1037.801318	1159.738949	1040.316129	908.5784932	842.1173587	1153.349006	1282.635014	1408.093771	1534.05478
-0.9	-1403.310151	-2002.751829	-2141.932254	-2955.647689	-1125.025143	-1519.77395	-1740.42652	-1949.13778	-2169.29624
+0.9	609.1316516	552.5767591	500.6958804	427.5825806	494.2045983	691.7908843	749.5597828	814.525945	865.4004809
-0.95	-1481.271826	-2114.015819	-2260.92849	-3276.357192	-1187.526539	-1604.205836	-1837.11688	-2057.42322	-2289.8127
+0.95	234.6431232	234.5092347	186.5194433	151.5149645	183.9042242	260.8783206	268.8522318	279.117976	279.0837428
-1	-1559.233463	-2225.279727	-2379.924768	-3971.495327	-1250.027919	-1688.637655	-1933.8073	-2165.7087	-2410.32924
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1559.233463	-2225.279727	-2379.924768	-3971.495327	-1250.027919	-1688.637655	-1933.8073	-2165.7087	-2410.32924
+2	0	0	0	0	0	0	0	0	0
-2.05	-1481.271793	-2114.015741	-2260.928531	-3276.357088	-1187.526522	-1604.205774	-1837.11694	-2057.42326	-2289.81278
+2.05	234.6459183	234.5119026	186.5215163	151.5162341	183.9203906	260.8864282	268.8673062	279.1269866	279.0925548
-2.1	-1403.310123	-2002.751756	-2141.932294	-2955.647586	-1125.025124	-1519.773893	-1740.42657	-1949.13783	-2169.29632
+2.1	609.1521216	552.5919659	500.7090031	427.5803824	494.2140524	691.8070767	749.5725257	814.5443803	865.4044739
-2.15	-1325.348452	-1891.487771	-2022.936056	-2692.746988	-1062.523726	-1435.342012	-1643.73621	-1840.85239	-2048.77986
+2.15	1037.799646	1159.753303	1040.327122	908.5764351	842.1274363	1153.366388	1282.649226	1408.09168	1534.060156
-2.2	-1247.386782	-1780.223786	-1903.939819	-2498.831213	-1000.022329	-1350.910131	-1547.04584	-1732.56696	-1928.2634
+2.2	1450.140158	1766.668387	1697.810052	1617.758395	1174.702752	1598.308613	1794.63082	1980.075876	2174.960767
-2.25	-1169.425112	-1668.9598	-1784.943582	-2342.654261	-937.5209313	-1266.47825	-1450.35548	-1624.28152	-1807.74694

+2.25	1836.100458	2323.708175	2297.35861	2443.948461	1484.101103	2015.63302	2273.206891	2517.030185	2772.804651
-2.3	-1091.463442	-1557.695815	-1665.947345	-2186.477309	-875.0195337	-1182.046369	-1353.66511	-1515.99609	-1687.23048
+2.3	2186.334614	2817.954816	2833.829705	3143.701587	1762.977439	2394.839721	2706.832725	3003.084788	3313.246295
-2.35	-1013.501771	-1446.43183	-1546.951107	-2030.300356	-812.5181362	-1097.614488	-1256.97475	-1407.71065	-1566.71402
+2.35	2492.111905	3237.393235	3291.100482	3702.771167	2004.479473	2726.465492	3084.726038	3428.895491	3782.895028
-2.4	-935.5401012	-1335.167845	-1427.95487	-1874.123404	-750.0167386	-1013.182607	-1160.28438	-1299.42521	-1446.19756
+2.4	2745.319683	3570.910735	3656.914424	4159.916145	2202.248261	3001.714005	3396.870422	3782.196445	4169.317048
-2.45	-857.578431	-1223.903859	-1308.958633	-1717.946452	-687.515341	-928.7507258	-1063.59402	-1191.13978	-1325.6811
+2.45	2938.460446	3820.723508	3947.35598	4442.372867	2350.417528	3212.453285	3634.01373	4052.522403	4463.577145
-2.5	-779.6167608	-1112.639874	-1189.962396	-1561.769499	-625.0139434	-844.3188447	-966.903652	-1082.85434	-1205.16464
+2.5	3064.653595	3972.063884	4135.234643	4556.198942	2443.614409	3351.21814	3787.66693	4230.266322	4668.433298
-2.55	-701.6550906	-1001.375889	-1070.966159	-1405.592547	-562.5125458	-759.8869637	-870.213287	-974.568909	-1084.64818
+2.55	3121.721209	4033.645086	4219.291648	4732.941017	2483.161042	3414.9437	3856.411768	4311.649946	4764.228989
-2.6	-623.6934203	-890.1119038	-951.9699214	-1249.415595	-500.0111482	-675.4550827	-773.522922	-866.283474	-964.131725
+2.6	3121.075052	4061.060067	4213.956439	4770.64315	2492.455734	3411.672519	3859.087985	4307.393855	4750.103813
-2.65	-545.7317501	-778.8479186	-832.9736842	-1093.238642	-437.5097507	-591.0232016	-676.832557	-757.998039	-843.615266
+2.65	3039.264063	3974.735588	4082.666992	4640.463121	2437.887314	3320.802427	3761.476465	4190.060916	4622.509975
-2.7	-467.7700799	-667.5839333	-713.977447	-937.06169	-375.0083531	-506.5913206	-580.142192	-649.712604	-723.098806
+2.7	2872.242929	3791.506205	3866.568951	4379.877425	2315.519122	3136.847195	3558.481762	3957.629837	4374.659388
-2.75	-389.8084097	-556.3199481	-594.9812097	-780.8847377	-312.5069555	-422.1594396	-483.451828	-541.427169	-602.582347
+2.75	2633.466165	3482.983792	3544.778697	4000.792454	2121.906602	2861.995789	3244.42705	3621.63017	3988.14981
-2.8	-311.8467395	-445.0559629	-475.9849725	-624.7077853	-250.0055579	-337.7275585	-386.761463	-433.141734	-482.065887
+2.8	2302.189836	3044.489549	3116.2143	3491.805283	1854.098585	2500.998219	2829.366215	3156.830158	3458.559414
-2.85	-233.8850692	-333.7919777	-356.9887353	-468.530833	-187.5041603	-253.2956775	-290.071098	-324.856299	-361.549428
+2.85	1875.301044	2496.353353	2542.431652	2851.739279	1509.635384	2036.543589	2306.137999	2558.945406	2793.802179
-2.9	-155.923399	-222.5279924	-237.9924981	-312.3538806	-125.0027627	-168.8637964	-193.380733	-216.570863	-241.032968
+2.9	1350.303582	1808.127765	1848.974455	2095.149461	1086.552268	1465.970781	1661.465155	1826.041456	1996.985604
-2.95	-77.9617288	-111.2640072	-118.9962609	-156.1769283	-62.50136516	-84.4319154	-96.6903678	-108.285428	-120.516509
+2.95	725.3182742	976.3342422	1002.481406	1151.817326	583.5570454	787.2850206	892.9567386	980.9039204	1070.747221
-3	-2.34E-13	-2.33E-13	-2.37E-13	-2.75E-13	-1.95E-13	-2.10E-13	-2.79E-13	-2.76E-13	-2.77E-13
+3	3.71E-13	4.78E-13	4.44E-13	4.88E-13	3.66E-13	3.79E-13	3.33E-13	4.12E-13	3.66E-13

2-Span: Moment (Max and Min) Raw Data Results - 170' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.24E-13	-5.86E-13	-4.68E-13	-3.73E-13	-3.51E-13
End Shear	7.59E-13	6.85E-13	3.61E-13	3.93E-13	4.29E-13
-0.05	-214.9734804	-237.5743104	-135.230238	-162.870899	-175.619139
+0.05	1791.828916	1933.298781	1166.635247	1407.006062	1496.677982
-0.1	-429.9469608	-475.1486209	-270.460476	-325.741799	-351.238278
+0.1	3302.769004	3574.595121	2157.14057	2601.757139	2764.189928
-0.15	-644.9204411	-712.7229313	-405.690714	-488.612698	-526.857417
+0.15	4594.749571	4959.101785	2972.842016	3596.28203	3825.957969
-0.2	-859.8939215	-950.2972418	-540.920952	-651.483597	-702.476555
+0.2	5620.22612	6156.642194	3663.527849	4419.866173	4694.126185
-0.25	-1074.867402	-1187.871552	-676.15119	-814.354497	-878.095694
+0.25	6435.133676	7077.908618	4193.485142	5045.401567	5394.880731
-0.3	-1289.840882	-1425.445863	-811.381428	-977.225396	-1053.71483
+0.3	7054.962855	7775.608579	4573.263922	5484.232701	5891.768001
-0.35	-1504.814363	-1663.020173	-946.611666	-1140.0963	-1229.33397
+0.35	7466.796675	8219.71709	4818.809757	5769.449364	6192.372094
-0.4	-1719.787843	-1900.594484	-1081.8419	-1302.96719	-1404.95311
+0.4	7700.918708	8429.700481	4916.37598	5878.267953	6334.05764
-0.45	-1934.761323	-2138.168794	-1217.07214	-1465.83809	-1580.57225
+0.45	7704.896003	8483.377738	4876.150648	5822.519546	6294.033449
-0.5	-2149.734804	-2375.743104	-1352.30238	-1628.70899	-1756.19139
+0.5	7557.00026	8295.220158	4804.07876	5739.689796	6193.838758
-0.55	-2364.708284	-2613.317415	-1487.53262	-1791.57989	-1931.81053
+0.55	7219.918353	7895.691467	4628.391809	5533.913868	5954.621556
-0.6	-2579.681765	-2850.891725	-1622.76286	-1954.45079	-2107.42967
+0.6	6688.957876	7361.944056	4326.775843	5176.475097	5553.621842
-0.65	-2794.655245	-3088.466036	-1757.99309	-2117.32169	-2283.04881
+0.65	6001.439679	6625.726861	3910.141468	4679.777947	5024.692744
-0.7	-3009.628725	-3326.040346	-1893.22333	-2280.19259	-2458.66794
+0.7	5182.663873	5709.239423	3391.224787	4059.703843	4359.432012
-0.75	-3224.602206	-3563.614657	-2028.45357	-2443.06349	-2634.28708
+0.75	4219.202	4633.748744	2783.866869	3340.109753	3575.550785
-0.8	-3439.575686	-3801.188967	-2163.68381	-2605.93439	-2809.90622
+0.8	3134.707145	3431.119579	2104.55992	2524.638472	2692.198931
-0.85	-3654.549166	-4038.763277	-2298.91405	-2768.80529	-2985.52536
+0.85	1954.602365	2129.631631	1364.719413	1632.008052	1729.962349
-0.9	-3869.522647	-4276.337588	-2434.14428	-2931.67619	-3161.1445
+0.9	858.558018	946.664259	679.5307496	777.4452859	835.6187987
-0.95	-4084.496127	-4513.911898	-2569.37452	-3094.54709	-3336.76364
+0.95	310.7447129	288.3532476	268.9546204	315.7550041	315.8848984
-1	-4299.469662	-4751.486272	-2704.60474	-3257.41794	-3512.38267
+1	0	0	0	0	0
(Span 2) -2	-4299.469662	-4751.486272	-2704.60474	-3257.41794	-3512.38267
+2	0	0	0	0	0
-2.05	-4084.496178	-4513.911962	-2569.3745	-3094.54705	-3336.76354
+2.05	310.7368649	288.352105	268.9576167	315.7470906	315.8771708
-2.1	-3869.522694	-4276.337652	-2434.14427	-2931.67615	-3161.14441
+2.1	858.56203	946.6649292	679.532013	777.4550511	835.6313831
-2.15	-3654.54921	-4038.763342	-2298.91403	-2768.80525	-2985.52527
+2.15	1954.610058	2129.630137	1364.717994	1632.011107	1729.970715
-2.2	-3439.575726	-3801.189032	-2163.6838	-2605.93436	-2809.90614
+2.2	3134.71599	3433.555288	2104.560853	2524.64122	2692.207326
-2.25	-3224.602242	-3563.614722	-2028.45356	-2443.06346	-2634.28701

+2.25	**4219.210445**	**4636.298169**	**2783.865902**	**3340.112201**	**3575.559022**
-2.3	**-3009.628758**	**-3326.040412**	**-1893.22333**	**-2280.19256**	**-2458.66788**
+2.3	**5182.671237**	**5709.238178**	**3391.223053**	**4059.705064**	**4359.439055**
-2.35	**-2794.655274**	**-3088.466103**	**-1757.99309**	**-2117.32167**	**-2283.04875**
+2.35	**6001.443503**	**6624.84398**	**3910.137625**	**4679.774836**	**5024.697387**
-2.4	**-2579.681791**	**-2850.891793**	**-1622.76286**	**-1954.45077**	**-2107.42962**
+2.4	**6690.693715**	**7361.945643**	**4326.769131**	**5176.468682**	**5553.622562**
-2.45	**-2364.708307**	**-2613.317483**	**-1487.53262**	**-1791.57987**	**-1931.81048**
+2.45	**7219.930479**	**7895.69207**	**4628.381761**	**5533.925343**	**5954.616835**
-2.5	**-2149.734823**	**-2375.743173**	**-1352.30238**	**-1628.70898**	**-1756.19135**
+2.5	**7557.00635**	**8297.962332**	**4804.089514**	**5739.696011**	**6193.828734**
-2.55	**-1934.761339**	**-2138.168863**	**-1217.07215**	**-1465.83808**	**-1580.57222**
+2.55	**7704.893142**	**8483.375655**	**4876.142031**	**5822.515551**	**6294.024633**
-2.6	**-1719.787855**	**-1900.594553**	**-1081.84191**	**-1302.96718**	**-1404.95309**
+2.6	**7700.908676**	**8429.700502**	**4916.387834**	**5878.258913**	**6334.064886**
-2.65	**-1504.814371**	**-1663.020243**	**-946.611679**	**-1140.09629**	**-1229.33396**
+2.65	**7466.778038**	**8219.715278**	**4818.81659**	**5769.456648**	**6192.372845**
-2.7	**-1289.840887**	**-1425.445934**	**-811.381444**	**-977.22539**	**-1053.71482**
+2.7	**7054.956225**	**7776.50236**	**4573.265535**	**5484.233568**	**5891.76144**
-2.75	**-1074.867403**	**-1187.871624**	**-676.151208**	**-814.354493**	**-878.095692**
+2.75	**6435.140629**	**7077.907006**	**4193.481334**	**5045.396117**	**5394.889193**
-2.8	**-859.8939192**	**-950.2973138**	**-540.920973**	**-651.483596**	**-702.47656**
+2.8	**5621.373683**	**6156.639549**	**3663.518327**	**4419.853826**	**4694.116397**
-2.85	**-644.9204353**	**-712.723004**	**-405.690738**	**-488.6127**	**-526.857428**
+2.85	**4594.759031**	**4961.502307**	**2972.836577**	**3596.283729**	**3825.961544**
-2.9	**-429.9469514**	**-475.1486941**	**-270.460503**	**-325.741803**	**-351.238296**
+2.9	**3302.767747**	**3574.595703**	**2157.128582**	**2601.750509**	**2764.184697**
-2.95	**-214.9734675**	**-237.5743843**	**-135.230267**	**-162.870906**	**-175.619164**
+2.95	**1791.817492**	**1933.300298**	**1166.641863**	**1406.99226**	**1496.665188**
-3	**-5.29E-13**	**-4.88E-13**	**-4.06E-13**	**-4.00E-13**	**-4.20E-13**
+3	**8.77E-13**	**7.63E-13**	**5.39E-13**	**5.63E-13**	**5.99E-13**

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.82292	-4.75601	-6.787597218	-7.2593	-10.0535	-3.812862591	-5.15072	-5.89854	-6.605891958	-7.35204
End Shear	67.07772	47.4229	64.16490995	66.11809	81.11959	38.15175521	51.44804	58.394	64.17364606	70.14115
-0.05	-6.82292	-4.75601	-6.787597218	-7.2593	-10.1034	-3.812862591	-5.15072	-5.89854	-6.605891958	-7.35204
+0.05	62.50205	44.23678	59.56039231	61.14433	72.99665	35.59937473	48.00434	54.44649	59.75771125	65.22888
-0.1	-6.82292	-4.75601	-6.787597218	-7.2593	-10.2718	-3.812862591	-5.15072	-5.89854	-6.605891958	-7.35204
+0.1	57.85101	40.96809	54.83958101	56.05037	64.81096	32.98214004	44.47114	50.39624	55.22848717	60.19248
-0.15	-8.41867	-6.56371	-6.787597218	-7.2593	-10.5207	-5.465125456	-7.32227	-7.73099	-7.717830705	-7.7156
+0.15	53.71335	38.08719	50.69439034	51.58986	57.84028	30.67479184	41.35645	46.8277	51.24167871	55.7634
-0.2	-12.9459	-9.82619	-9.515658918	-8.16411	-10.9116	-8.074080557	-10.8452	-11.7799	-11.93245747	-11.93
+0.2	49.11678	34.88403	46.10338748	46.66394	50.43197	28.10861528	37.89254	42.86132	46.81469239	50.85011
-0.25	-17.0932	-12.6993	-13.33883897	-11.5684	-12.1028	-10.37102438	-13.9469	-15.3467	-15.94234785	-16.3748
+0.25	45.09526	32.07908	42.09949467	42.38112	44.32044	25.8608081	34.85854	39.38928	42.94336324	46.55789
-0.3	-21.7045	-15.8911	-18.06303543	-15.9647	-16.0097	-12.92207874	-17.392	-19.3106	-20.40289419	-21.3657
+0.3	40.65806	28.98126	37.69660788	37.68696	37.94945	23.37754081	31.50691	35.55615	38.67396405	41.82943
-0.35	-25.7428	-18.6837	-22.21210922	-20.2623	-19.8701	-15.15339851	-20.4055	-22.7799	-24.31080298	-25.7426
+0.35	36.80374	26.28765	33.88584772	33.63849	32.89406	21.21758787	28.59183	32.22449	34.96730895	37.72894
-0.4	-30.2027	-21.765	-26.80846962	-25.3359	-24.4955	-17.61469932	-23.7297	-26.6095	-28.62894119	-30.5839
+0.4	32.58336	23.33499	29.72938284	29.23983	27.63266	18.8490799	25.39549	28.57398	30.91084987	33.24704
-0.45	-34.0809	-24.4417	-30.81799944	-29.7742	-28.6437	-19.75208297	-26.6167	-29.9374	-32.38567089	-34.8003
+0.45	28.94732	20.7881	26.16357492	25.48235	23.44178	16.80529361	22.63755	25.4266	27.41807243	29.39314
-0.5	-38.3322	-27.3727	-35.22821987	-34.6706	-33.4068	-22.09177707	-29.7772	-33.5832	-36.50605756	-39.4301
+0.5	25.00123	18.02042	22.3118424	21.44291	19.15169	14.58340052	19.6395	22.00809	23.6298982	25.21952
-0.55	-41.9993	-29.8981	-39.04637924	-38.923	-38.5821	-24.10691123	-32.4994	-36.7258	-40.06240138	-43.4312
+0.55	21.63452	15.65566	19.042819	18.03307	15.96949	12.68409302	17.07694	19.08887	20.40020206	21.66708
-0.6	-45.9845	-32.639	-43.21215345	-43.5784	-44.6646	-26.29315068	-35.4531	-40.1385	-43.92968337	-47.7879
+0.6	18.02016	13.11277	15.55411806	14.41661	12.63761	10.640663	14.32018	15.95173	16.93566276	17.86346
-0.65	-49.3897	-34.9777	-46.78710962	-47.5883	-50.5655	-28.15772186	-37.9724	-43.052	-47.2364453	-51.5187
+0.65	14.97386	10.96552	12.63370665	11.41105	9.935596	8.914147008	11.99121	13.30456	14.0182477	14.66736
-0.7	-53.0515	-37.4887	-50.65012984	-51.9389	-57.3632	-30.15865108	-40.6762	-46.1821	-50.79527265	-55.5406
+0.7	11.74868	8.687251	9.566347198	8.401943	7.259974	7.081035123	9.518736	10.49817	10.93269674	11.29547
-0.75	-56.1437	-39.6053	-53.93006174	-55.6497	-64.1168	-31.84434903	-42.9544	-48.8226	-53.80325543	-58.9463
+0.75	9.07386	6.792908	7.046380335	6.100878	5.231753	5.555622417	7.461584	8.16694	8.376759436	8.510546
-0.8	-59.4247	-41.8465	-57.43202235	-59.6319	-71.932	-33.62811911	-45.3654	-51.6208	-56.9982748	-62.5716
+0.8	6.295323	4.819062	4.623611171	3.981917	3.379018	3.964678822	5.316409	5.740664	5.725547069	5.724879
-0.85	-62.1529	-43.7056	-60.36509824	-62.9868	-79.154	-35.10662647	-47.3642	-53.9443	-59.65827495	-65.5973
+0.85	4.101134	3.21302	2.917358044	2.551688	2.162723	2.668683268	3.569293	3.769269	3.76341184	3.762843
-0.9	-64.9958	-45.6373	-63.44768788	-66.5368	-87.2834	-36.64138304	-49.4394	-56.3614	-62.43413948	-68.7643
+0.9	2.011298	1.690242	1.685944291	1.340396	1.097061	1.351759774	1.847025	1.957317	1.956851379	1.956397
-0.95	-67.3091	-47.2036	-65.98208017	-69.4792	-94.3462	-37.88439266	-51.1205	-58.324	-64.69695691	-71.3552
+0.95	0.859133	0.686127	0.710860552	0.564805	0.448304	0.590472308	0.690222	0.668954	0.690738256	0.70179
-1	-69.6565	-48.7859	-68.58700342	-72.5333	-102.077	-39.13828565	-52.8169	-60.3104	-66.99832022	-74.0022
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.55116	48.70301	68.44921147	72.37082	101.6539	39.07268926	52.72815	60.20631	66.87733318	73.86266
-2.05	-8.05E-01	-0.65519	-0.65366867	-0.51931	-4.11E-01	-0.553617474	-0.63292	-0.63264	-0.632965299	-0.63476
+2.05	67.46586	47.29644	66.13358003	69.65589	94.78162	37.95803799	51.22014	58.4405	64.83153916	71.50968
-2.1	-2.11981	-1.7549	-1.750578343	-1.39181	-1.14135	-1.420958567	-1.92302	-2.04605	-2.04558226	-2.04512
+2.1	64.86469	45.53447	63.28251425	66.34583	86.83628	36.55972029	49.32895	56.2326	62.28598897	68.59499
-2.15	-3.98052	-3.1176	-2.845968603	-2.46953	-2.09181	-2.591639032	-3.46544	-3.65225	-3.64716369	-3.64659
+2.15	62.33819	43.81733	60.54228596	63.19009	79.60983	35.19541131	47.48421	54.08401	59.81841395	65.77975
-2.2	-6.44405	-4.92431	-4.750198141	-4.07305	-3.46014	-4.0495653	-5.43085	-5.86996	-5.866555274	-5.86588
+2.2	59.26938	41.72589	57.2427037	59.41599	71.50065	33.53215755	45.2357	51.47018	56.82603565	62.37589
-2.25	-8.91253	-6.67894	-6.895808426	-5.96356	-5.11196	-5.463815037	-7.33778	-8.02677	-8.223320521	-8.34364
+2.25	56.35275	39.73358	54.12970829	55.8761	64.5536	31.94650521	43.09246	48.9827	53.9858808	59.15327

-2.3	-11.9197	-8.80999	-9.730650282	-8.55215	-7.39367	-7.179836925	-9.65199	-10.6493	-11.09863884	-11.4765
+2.3	52.87377	37.35249	50.43991559	51.70168	56.98708	30.05016554	40.52964	46.01231	50.60202461	55.32197
-2.35	-14.7847	-10.8352	-12.45733618	-11.2303	-9.77436	-8.809346768	-11.8498	-13.144	-13.84147928	-14.4739
+2.35	49.61807	35.12041	47.00597897	47.83429	50.94444	28.27148324	38.12613	43.22984	47.43848895	51.74683
-2.4	-18.2094	-13.2508	-15.74267081	-14.6114	-12.8141	-10.75160641	-14.4698	-16.1219	-17.12345973	-18.0694
+2.4	45.78637	32.48947	42.98428328	43.32329	44.327	26.17391104	35.29199	39.95226	43.71849957	47.54982
-2.45	-21.4201	-15.5112	-18.84387345	-17.8262	-15.7788	-12.56806659	-16.9204	-18.9106	-20.20318127	-21.4506
+2.45	42.24266	30.053	39.2812341	39.18503	38.92017	24.23051506	32.66642	36.91868	40.28078251	43.67703
-2.5	-25.2048	-18.1715	-22.52139596	-21.6621	-19.3724	-14.70471664	-19.8032	-22.1946	-23.83646684	-25.4469
+2.5	38.11569	27.21205	34.98595449	34.40119	33.10687	21.96355798	29.60398	33.38329	36.28002304	39.176
-2.55	-28.7101	-20.6318	-25.94530116	-25.2529	-23.1888	-16.67980675	-22.4682	-25.2334	-27.20386622	-29.1569
+2.55	34.33506	24.60659	31.06562281	30.04873	28.90356	19.88375303	26.79457	30.1425	32.61732685	35.06044
-2.6	-32.7977	-23.4969	-29.95670053	-29.4799	-27.9034	-18.97899641	-25.5708	-28.7741	-31.13311022	-33.4924
+2.6	29.94701	21.59542	26.55503633	25.05577	24.23701	17.47927402	23.54682	26.39868	28.39113939	30.31715
-2.65	-36.5467	-26.1216	-33.65147387	-33.39	-32.5876	-21.08441263	-28.4121	-32.0191	-34.73898444	-37.4765
+2.65	25.98224	18.85638	22.46924887	20.54575	20.12542	15.29137742	20.59181	22.99455	24.55266334	26.01365
-2.7	-40.8796	-29.1518	-37.9384482	-37.9443	-38.2748	-23.51428098	-31.6915	-35.7671	-38.90883923	-42.0894
+2.7	21.4392	15.71482	17.80167714	15.72145	15.79041	12.78121196	17.20176	19.09166	20.15639952	21.08982
-2.75	-44.8213	-31.9055	-41.85226156	-42.1171	-43.949	-25.72170522	-34.6708	-39.1745	-42.70399004	-46.2926
+2.75	17.33995	12.87756	13.60226049	11.81342	12.31755	10.51354452	14.13937	15.56809	16.19134378	16.65327
-2.8	-49.3423	-35.061	-46.35650204	-46.9351	-50.8243	-28.25041596	-38.0839	-43.0804	-47.05910417	-51.1212
+2.8	12.6743	9.645441	9.278951226	8.004844	10.88682	7.92955351	10.65001	11.55552	11.68035256	11.67789
-2.85	-53.4256	-37.9083	-50.4375287	-51.3138	-57.415	-30.53153626	-41.1631	-46.6062	-50.99433038	-55.4887
+2.85	8.641609	6.745372	6.787596897	7.259299	10.53934	5.610410106	7.518458	7.956398	7.941422441	7.939206
-2.9	-58.0774	-41.1492	-55.10073056	-56.3318	-65.2567	-33.12722038	-44.667	-50.6207	-55.47935502	-60.4713
+2.9	6.822919	4.756008	6.787596897	7.259299	10.25931	3.812862638	5.150719	5.898541	6.605892122	7.352039
-2.95	-62.2515	-44.0548	-59.29712524	-60.8599	-72.5332	-35.45372415	-47.8077	-54.221	-59.50545651	-64.9482
+2.95	6.822919	4.756008	6.787596897	7.259299	10.10967	3.812862638	5.150719	5.898541	6.605892122	7.352039
-3	-66.9766	-47.3414	-64.06098165	-66.014	-81.0393	-38.08454732	-51.3594	-58.2947	-64.06504092	-70.0231
+3	6.822919	4.756008	6.787596897	7.259299	10.05351	3.812862638	5.150719	5.898541	6.605892122	7.352039

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.82292	-6.21129	-6.684519103	-6.30102	-7.63066	-7.886991945	-8.34838	-3.31621
End Shear	67.07772	62.61586	67.06588805	63.0076	75.6	73.98969197	78.25351	33.21164
-0.05	-6.82292	-6.21129	-6.684519103	-6.30102	-7.63066	-7.886991945	-8.34838	-3.31621
+0.05	62.50205	58.46543	62.5977931	58.79765	70.50057	68.64623826	72.59665	30.99486
-0.1	-6.82292	-6.21129	-6.684519103	-6.30102	-7.63066	-7.886991945	-8.34838	-3.31621
+0.1	57.85101	54.2068	58.01444177	54.47787	65.27071	63.1695923	66.79911	28.70321
-0.15	-8.41867	-9.49959	-9.865235186	-9.07673	-10.2319	-7.886991945	-8.34838	-4.57105
+0.15	53.71335	50.45059	53.97289156	50.66938	60.6621	58.36226369	61.71036	26.68353
-0.2	-12.9459	-13.7352	-14.42943529	-13.3819	-15.4561	-10.51801121	-11.0716	-6.8587
+0.2	49.11678	46.27096	49.47696386	46.43347	55.53884	53.03968115	56.07651	24.43804
-0.25	-17.0932	-17.4624	-18.44692485	-17.1721	-20.0575	-14.97651243	-15.7684	-8.87334
+0.25	45.09526	42.60798	45.53789856	42.72289	51.05331	48.39938744	51.16514	22.47184
-0.3	-21.7045	-21.5999	-22.90787319	-21.3814	-25.1704	-20.46847201	-21.5841	-11.1115
+0.3	40.65806	38.55911	41.18513647	38.6234	46.10035	43.29857523	45.76668	20.3005
-0.35	-25.7428	-25.217	-26.80881159	-25.063	-29.6446	-25.2933876	-26.6937	-13.0698
+0.35	36.80374	35.03537	37.39810333	35.05744	41.79452	38.88550713	41.09641	18.41264
-0.4	-30.2027	-29.2047	-31.11076636	-29.1238	-34.5825	-30.64023342	-32.3564	-15.2305
+0.4	32.58336	31.16903	33.24424803	31.14693	37.07558	34.07417018	36.00503	16.34344
-0.45	-34.0809	-32.6656	-34.8456036	-32.6501	-38.8728	-35.30606978	-37.2981	-17.1074
+0.45	28.94732	27.83053	29.65879459	27.77232	33.00608	29.94850077	31.63957	14.55881
-0.5	-38.3322	-36.4518	-38.93282364	-36.5099	-43.572	-40.4400989	-42.736	-19.1627
+0.5	25.00123	24.19846	25.7595845	24.10335	28.58486	25.49434918	26.92696	12.61974
-0.55	-41.9993	-39.7105	-42.45201003	-39.8341	-47.6218	-44.88667513	-47.446	-20.9334
+0.55	21.63452	21.09122	22.42525909	20.9668	24.80831	21.71626618	22.93005	10.96322
-0.6	-45.9845	-43.2433	-46.26875472	-43.4403	-52.0185	-49.74018234	-52.5875	-22.8553
+0.6	18.02016	17.74519	18.83644144	17.59193	20.74853	17.68699722	18.66789	9.182259
-0.65	-49.3897	-46.2538	-49.52274752	-46.5158	-55.7712	-53.90731005	-57.0021	-24.495
+0.65	14.97386	14.91522	15.80279146	14.74016	17.32156	14.31668283	15.10324	7.678729
-0.7	-53.0515	-49.4815	-53.01327487	-49.8159	-59.8018	-58.41258813	-61.7754	-26.2554
+0.7	11.74868	11.90699	12.58010165	11.71194	13.68691	10.78000605	11.36322	6.083879
-0.75	-56.1437	-52.1979	-55.95252037	-52.5958	-63.2007	-62.24009261	-65.831	-27.7392
+0.75	9.07386	9.400286	9.896677575	9.191672	10.66616	7.877648272	8.294568	4.758219
-0.8	-59.4247	-55.0687	-59.06109149	-55.5372	-66.8014	-66.32943704	-70.1645	-29.3101
+0.8	6.295323	6.781618	7.095859939	6.562668	7.520351	5.086829371	5.354557	3.377466
-0.85	-62.1529	-57.4448	-61.63604229	-57.975	-69.79	-69.75713116	-73.7972	-30.6131
+0.85	4.101134	4.644191	4.812202217	4.420611	4.962438	3.446106836	3.645138	2.254554
-0.9	-64.9958	-59.9071	-64.30691328	-60.5051	-72.8972	-73.36283062	-77.6192	-31.9667
+0.9	2.011298	2.466847	2.489002238	2.295988	2.456858	1.861495183	1.961775	1.269096
-0.95	-67.3091	-61.897	-66.46802421	-62.5539	-75.4187	-76.33053202	-80.7654	-33.0639
+0.95	0.859133	1.014846	1.014845851	0.818807	0.827676	0.742479804	0.781558	0.6136
-1	-69.6565	-63.8989	-68.64545408	-64.6203	-77.9686	-79.38489384	-84.0042	-34.1721
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.55116	63.79431	68.53163007	64.51217	77.83504	79.22320112	83.8327	34.11415
-2.05	-8.05E-01	-0.93358	-0.933582945	-0.74461	-0.74642	-0.707433681	-0.74467	-0.57257
+2.05	67.46586	62.01474	66.59599785	62.67531	75.56826	76.50804559	80.95363	33.12905
-2.1	-2.11981	-2.58142	-2.611155043	-2.39315	-2.56417	-1.944917027	-2.05039	-1.30964
+2.1	64.86469	59.7762	64.16486357	60.37049	72.7317	73.16952748	77.41428	31.89468
-2.15	-3.98052	-4.51697	-4.67636587	-4.29325	-4.81053	-3.353554711	-3.54681	-2.1878
+2.15	62.33819	57.58741	61.79061799	58.12134	69.96958	69.96428872	74.01681	30.69144
-2.2	-6.44405	-6.92146	-7.245358993	-6.70295	-7.68805	-5.232562059	-5.50796	-3.45101
+2.2	59.26938	54.91438	58.89391107	55.37899	66.60762	66.10828187	69.93011	29.22567
-2.25	-8.91253	-9.2493	-9.735111739	-9.03997	-10.4845	-7.704337771	-8.11135	-4.67841
+2.25	56.35275	52.36238	56.13060543	52.76428	63.4068	62.47314476	66.07796	27.82918

-2.3	-11.9197	-12.0692	-12.75384967	-11.8752	-13.8827	-10.96934997	-11.5634	-6.16971
+2.3	52.87377	49.30661	52.82407077	49.63696	59.58316	58.16735425	61.5156	26.15999
-2.35	-14.7847	-14.7433	-15.61859464	-14.567	-17.1136	-14.1132301	-14.8881	-7.58742
+2.35	49.61807	46.43741	49.72124348	46.70341	56.00026	54.162499	57.27249	24.59514
-2.4	-18.2094	-17.9269	-19.03133271	-17.7752	-20.9688	-17.90468504	-18.8981	-9.27882
+2.4	45.78637	43.05068	46.06063089	43.24366	51.77862	49.47463149	52.30615	22.75052
-2.45	-21.4201	-20.9013	-22.22152269	-20.7752	-24.5777	-21.48641449	-22.6869	-10.862
+2.45	42.24266	39.91029	42.66783368	40.03799	47.87028	45.16024179	47.73581	21.04217
-2.5	-25.2048	-24.3968	-25.9725197	-24.3037	-28.8262	-25.73660837	-27.1833	-12.7255
+2.5	38.11569	36.24434	38.70887006	36.29839	43.31437	40.15801757	42.43719	19.05013
-2.55	-28.7101	-27.6255	-29.43860857	-27.5651	-32.7563	-29.69602039	-31.3724	-14.4492
+2.55	34.33506	32.87877	35.07566699	32.86732	39.13721	35.59427857	37.60335	17.22316
-2.6	-32.7977	-31.3812	-33.47212064	-31.3614	-37.3343	-34.33724236	-36.2834	-16.4568
+2.6	29.94701	28.98537	30.87410003	28.90042	34.31074	30.34536901	32.04411	15.11167
-2.65	-36.5467	-34.818	-37.16456828	-34.8376	-41.5291	-38.61414664	-40.8092	-18.2962
+2.65	25.98224	25.44062	27.0500102	25.29066	29.92138	25.59246199	27.01048	13.19098
-2.7	-40.8796	-38.7821	-41.42485678	-38.8491	-46.373	-43.57869642	-46.0631	-20.4199
+2.7	21.4392	21.37152	22.66158171	21.14902	24.88804	20.16459039	21.26232	10.98803
-2.75	-44.8213	-42.3812	-45.29410881	-42.4933	-50.7758	-48.1129099	-50.8619	-22.3501
+2.75	17.33995	17.69361	18.69616599	17.40729	20.34312	15.28269647	16.09263	8.998483
-2.8	-49.3423	-46.502	-49.72541477	-46.6675	-55.8219	-53.33307918	-56.3871	-24.562
+2.8	12.6743	13.50059	14.17663258	13.14346	15.16663	10.24187728	10.78092	6.732073
-2.85	-53.4256	-50.2173	-53.7219234	-50.4329	-60.376	-58.06442077	-61.3951	-26.558
+2.85	8.641609	9.735517	10.11943903	9.316489	10.52277	7.886992161	8.34838	4.69855
-2.9	-58.0774	-54.4429	-58.26853708	-54.7173	-65.5605	-63.47250585	-67.1198	-28.8301
+2.9	6.822919	6.211293	6.684519144	6.301021	7.630662	7.886992161	8.34838	3.31621
-2.95	-62.2515	-58.2285	-62.34275365	-58.5572	-70.2095	-68.34077261	-72.2733	-30.8672
+2.95	6.822919	6.211293	6.684519144	6.301021	7.630662	7.886992161	8.34838	3.31621
-3	-66.9766	-62.5072	-66.94891932	-62.8993	-75.4687	-73.86906746	-78.1258	-33.1714
+3	6.822919	6.211293	6.684519144	6.301021	7.630662	7.886992161	8.34838	3.31621

2-Span: Shear (Max and Min) Raw Data Results - 170' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.82292	-14.6275	-16.1654	-9.20153	-11.0823	-11.9497
End Shear	67.07772	131.7742	142.4255	85.64716	103.2081	109.9043
-0.05	-6.82292	-14.6275	-16.1654	-9.20153	-11.0823	-11.9497
+0.05	62.50205	121.8181	131.5482	79.38184	95.68244	101.7772
-0.1	-6.82292	-14.6275	-16.1654	-9.20153	-11.0823	-11.9497
+0.1	57.85101	111.6255	120.2795	72.9627	87.97051	93.45123
-0.15	-8.41867	-14.6275	-16.1654	-9.20153	-11.0823	-11.9497
+0.15	53.71335	102.7015	110.4255	67.33239	81.20491	86.15276
-0.2	-12.9459	-15.4799	-16.1829	-11.9345	-13.8154	-14.2688
+0.2	49.11678	92.84769	99.55895	61.10362	73.71862	78.08358
-0.25	-17.0932	-22.0743	-23.2223	-16.3436	-20.0592	-20.0552
+0.25	45.09526	84.28157	90.12555	55.67793	67.19607	71.05941
-0.3	-21.7045	-31.1441	-31.344	-22.6611	-27.6395	-28.0326
+0.3	40.65806	74.8941	79.80318	49.7192	60.031	63.3506
-0.35	-25.7428	-40.1368	-40.7173	-28.3479	-34.4619	-35.4412
+0.35	36.80374	66.79915	70.91663	44.56895	53.83647	56.69278
-0.4	-30.2027	-50.3011	-52.0651	-34.6547	-42.0265	-43.6623
+0.4	32.58336	58.00547	61.28044	38.9599	47.08821	49.44789
-0.45	-34.0809	-59.1942	-62.0053	-40.1625	-48.6316	-50.8464
+0.45	28.94732	50.49498	53.06697	34.15588	41.30666	43.24846
-0.5	-38.3322	-69.0068	-72.9868	-46.228	-55.9039	-58.7632
+0.5	25.00123	42.42255	44.25901	28.97618	35.0708	36.57105
-0.55	-41.9993	-77.5305	-82.5382	-51.486	-62.2066	-65.6308
+0.55	21.63452	35.60983	36.84482	24.5892	29.7872	30.92207
-0.6	-45.9845	-86.864	-93.0113	-57.2306	-69.091	-73.1397
+0.6	18.02016	28.38612	29.00707	19.9185	24.15932	24.91569
-0.65	-49.3897	-94.9052	-102.048	-62.1679	-75.0065	-79.5987
+0.65	14.97386	22.38445	22.51844	16.01937	19.45863	19.90921
-0.7	-53.0515	-103.632	-111.871	-67.5119	-81.4074	-86.5962
+0.7	11.74868	16.22575	16.3604	11.93733	14.53433	14.67742
-0.75	-56.1437	-111.077	-120.266	-72.0578	-86.8506	-92.5546
+0.75	9.07386	11.57161	12.0196	8.641146	10.55468	10.55994
-0.8	-59.4247	-119.07	-129.296	-76.9216	-92.6725	-98.9372
+0.8	6.295323	7.445985	7.674542	5.918089	6.748471	7.000227
-0.85	-62.1529	-125.806	-136.924	-81.0053	-97.5584	-104.303
+0.85	4.101134	4.604891	4.692	4.093133	4.498379	4.72346
-0.9	-64.9958	-132.937	-145.02	-85.3092	-102.706	-109.967
+0.9	2.011298	2.427073	2.201843	2.231361	2.450644	2.458407
-0.95	-67.3091	-138.851	-151.754	-88.8598	-106.949	-114.648
+0.95	0.859133	0.785649	0.808196	0.910429	0.971124	0.838056
-1	-69.6565	-144.993	-158.774	-92.5242	-111.326	-119.49
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.55116	144.6661	158.3998	92.32989	111.0944	119.2329
-2.05	-8.05E-01	-0.72332	-0.73471	-0.8373	-0.89312	-0.74462
+2.05	67.46586	139.2061	152.1598	89.07241	107.2035	114.9287
-2.1	-2.11981	-2.48657	-2.35026	-2.32941	-2.55792	-2.56573
+2.1	64.86469	132.5535	144.5843	85.07822	102.4295	109.6627
-2.15	-3.98052	-4.40496	-4.47891	-3.98442	-4.37942	-4.58805
+2.15	62.33819	126.2144	137.3875	81.25228	97.85393	104.6278
-2.2	-6.44405	-7.64329	-7.8843	-6.03741	-6.91659	-7.14929
+2.2	59.26938	118.6366	128.8066	76.6584	92.35742	98.59154
-2.25	-8.91253	-11.2943	-11.7642	-8.45621	-10.3312	-10.3187
+2.25	56.35275	111.5317	120.7792	72.3348	87.1822	92.91792

-2.3	**-11.9197**	**-16.5299**	**-16.5629**	**-12.1556**	**-14.7977**	**-14.9568**
+2.3	**52.87377**	**103.156**	**111.3349**	**67.22088**	**81.05882**	**86.21492**
-2.35	**-14.7847**	**-22.0235**	**-22.1286**	**-15.7843**	**-19.1751**	**-19.6076**
+2.35	**49.61807**	**95.3985**	**102.6033**	**62.47044**	**75.36888**	**79.99467**
-2.4	**-18.2094**	**-28.7751**	**-29.428**	**-20.1706**	**-24.4632**	**-25.2396**
+2.4	**45.78637**	**86.35247**	**92.43757**	**56.91613**	**68.71424**	**72.72849**
-2.45	**-21.4201**	**-35.1965**	**-36.3952**	**-24.3225**	**-29.4659**	**-30.5789**
+2.45	**42.24266**	**78.05579**	**83.12783**	**51.80962**	**62.59451**	**66.05365**
-2.5	**-25.2048**	**-42.8605**	**-44.7358**	**-29.2577**	**-35.4098**	**-36.9338**
+2.5	**38.11569**	**68.46683**	**72.38279**	**45.89459**	**55.50417**	**58.32784**
-2.55	**-28.7101**	**-50.0363**	**-52.5654**	**-33.8621**	**-40.953**	**-42.8695**
+2.55	**34.33506**	**59.74425**	**62.62118**	**40.50283**	**49.03966**	**51.29047**
-2.6	**-32.7977**	**-58.4854**	**-61.8052**	**-39.2664**	**-47.457**	**-49.8436**
+2.6	**29.94701**	**49.73985**	**51.4388**	**34.30673**	**41.60922**	**43.20858**
-2.65	**-36.5467**	**-66.3023**	**-70.371**	**-44.2524**	**-53.4557**	**-56.2837**
+2.65	**25.98224**	**40.70465**	**41.35156**	**28.70055**	**34.88489**	**35.90073**
-2.7	**-40.8796**	**-75.4088**	**-80.3681**	**-50.0463**	**-60.4243**	**-63.7736**
+2.7	**21.4392**	**30.64207**	**31.08037**	**22.30303**	**27.20994**	**27.56633**
-2.75	**-44.8213**	**-83.7535**	**-89.5438**	**-55.3431**	**-66.7935**	**-70.6261**
+2.75	**17.33995**	**22.57972**	**23.66334**	**16.66744**	**20.44781**	**20.48782**
-2.8	**-49.3423**	**-93.3901**	**-100.156**	**-61.4468**	**-74.1312**	**-78.528**
+2.8	**12.6743**	**15.1168**	**16.16537**	**11.73619**	**13.51092**	**14.01593**
-2.85	**-53.4256**	**-102.149**	**-109.816**	**-66.9837**	**-80.7859**	**-85.7009**
+2.85	**8.641609**	**14.62753**	**16.16537**	**9.201527**	**11.08229**	**11.94972**
-2.9	**-58.0774**	**-112.188**	**-120.901**	**-73.3176**	**-88.3969**	**-93.9114**
+2.9	**6.822919**	**14.62753**	**16.16537**	**9.201527**	**11.08229**	**11.94972**
-2.95	**-62.2515**	**-121.249**	**-130.918**	**-79.0237**	**-95.2522**	**-101.313**
+2.95	**6.822919**	**14.62753**	**16.16537**	**9.201527**	**11.08229**	**11.94972**
-3	**-66.9766**	**-131.563**	**-142.334**	**-85.5081**	**-103.041**	**-109.728**
+3	**6.822919**	**14.62753**	**16.16537**	**9.201527**	**11.08229**	**11.94972**

2-Span: Moment (Max and Min) Raw Data Results - 170' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-2.56E-13**	**-1.8E-13**	**-1.46365E-13**	**-1.6E-13**	**-1.71E-13**	**-1.28328E-13**	**-1.6E-13**	**-1.6E-13**	**-1.55666E-13**	**-1.6E-13**
End Shear	**3.69E-13**	**1.64E-13**	**1.76182E-13**	**1.51E-13**	**1.58E-13**	**2.07498E-13**	**1.58E-13**	**1.87E-13**	**1.84759E-13**	**1.85E-13**
-0.05	**-57.9949**	**-40.4261**	**-57.69457635**	**-61.704**	**-85.4548**	**-32.40933202**	**-43.7811**	**-50.1376**	**-56.15008165**	**-62.4923**
+0.05	**531.2674**	**376.1148**	**506.2633346**	**519.8303**	**626.8472**	**302.5946852**	**408.2464**	**463.0408**	**508.6383179**	**555.225**
-0.1	**-115.99**	**-80.8521**	**-115.3891527**	**-123.408**	**-170.91**	**-64.81866405**	**-87.5622**	**-100.275**	**-112.3001633**	**-124.985**
+0.1	**987.8864**	**700.1913**	**937.5883152**	**958.7659**	**1142.007**	**563.4305878**	**760.1685**	**861.5391**	**946.8710187**	**1035.511**
-0.15	**-173.985**	**-121.278**	**-173.0837291**	**-185.112**	**-256.364**	**-97.22799607**	**-131.343**	**-150.413**	**-168.4502449**	**-187.477**
+0.15	**1369.691**	**972.4201**	**1294.456289**	**1318.347**	**1556.749**	**782.8131239**	**1056.03**	**1195.823**	**1326.918098**	**1448.693**
-0.2	**-231.979**	**-161.704**	**-230.7783054**	**-246.816**	**-341.819**	**-129.6373281**	**-175.124**	**-200.55**	**-224.6003266**	**-249.969**
+0.2	**1679.002**	**1193.776**	**1578.682721**	**1615.872**	**1907.477**	**961.4285395**	**1296.865**	**1467.134**	**1636.940896**	**1793.392**
-0.25	**-289.974**	**-202.13**	**-288.4728818**	**-308.52**	**-427.274**	**-162.0466601**	**-218.906**	**-250.688**	**-280.7504082**	**-312.462**
+0.25	**1917.391**	**1365.554**	**1806.055999**	**1838.105**	**2186.654**	**1100.295773**	**1484.053**	**1682.357**	**1877.954818**	**2068.013**
-0.3	**-347.969**	**-242.556**	**-346.1674581**	**-370.224**	**-512.729**	**-194.4559921**	**-262.687**	**-300.826**	**-336.9004899**	**-374.954**
+0.3	**2091.558**	**1489.366**	**1966.034382**	**2004.96**	**2394.887**	**1200.68972**	**1626.572**	**1845.204**	**2052.180951**	**2268.43**
-0.35	**-405.964**	**-282.982**	**-403.8620345**	**-431.928**	**-598.184**	**-226.8653242**	**-306.468**	**-350.963**	**-393.0505715**	**-437.446**
+0.35	**2211.915**	**1575.971**	**2061.054835**	**2117.02**	**2538.088**	**1264.1408**	**1721.958**	**1950.474**	**2172.702698**	**2396.947**
-0.4	**-463.959**	**-323.409**	**-461.5566108**	**-493.632**	**-683.639**	**-259.2746562**	**-350.249**	**-401.101**	**-449.2006532**	**-499.939**
+0.4	**2268.557**	**1618.392**	**2105.816855**	**2185.091**	**2610.086**	**1292.435163**	**1769.076**	**2001.087**	**2233.541958**	**2463.107**
-0.45	**-521.954**	**-363.835**	**-519.2511872**	**-555.336**	**-769.093**	**-291.6839882**	**-394.03**	**-451.238**	**-505.3507348**	**-562.431**
+0.45	**2265.096**	**1618.726**	**2091.59928**	**2187.865**	**2591.441**	**1287.614596**	**1770.782**	**1999.698**	**2235.758553**	**2470.429**
-0.5	**-579.949**	**-404.261**	**-576.9457635**	**-617.04**	**-854.548**	**-324.0933202**	**-437.811**	**-501.376**	**-561.5008165**	**-624.923**
+0.5	**2225.67**	**1589.142**	**2059.661963**	**2144.271**	**2497.114**	**1267.103715**	**1737.739**	**1964.045**	**2193.557663**	**2420.761**
-0.55	**-637.943**	**-444.687**	**-634.6403399**	**-678.744**	**-940.003**	**-356.5026523**	**-481.592**	**-551.514**	**-617.6508981**	**-687.416**
+0.55	**2135.35**	**1523.705**	**1981.184327**	**2046.857**	**2431.83**	**1218.776502**	**1665.782**	**1884.368**	**2101.389216**	**2314.534**
-0.6	**-695.938**	**-485.113**	**-692.3349162**	**-740.448**	**-1025.46**	**-388.9119843**	**-525.373**	**-601.651**	**-673.8009798**	**-749.908**
+0.6	**1994.474**	**1423.554**	**1851.647162**	**1896.245**	**2275.514**	**1141.944468**	**1556.505**	**1761.399**	**1961.213729**	**2161.947**
-0.65	**-753.933**	**-525.539**	**-750.0294926**	**-802.152**	**-1110.91**	**-421.3213163**	**-569.155**	**-651.789**	**-729.9510614**	**-812.4**
+0.65	**1808.125**	**1292.255**	**1678.70437**	**1706.555**	**2025.033**	**1039.39315**	**1413.778**	**1599.54**	**1778.012846**	**1961.571**
-0.7	**-811.928**	**-565.965**	**-807.7240689**	**-863.857**	**-1196.37**	**-453.7306483**	**-612.936**	**-701.926**	**-786.1011431**	**-874.893**
+0.7	**1581.845**	**1133.697**	**1461.208964**	**1469.45**	**1718.113**	**914.1648458**	**1241.817**	**1403.587**	**1557.21313**	**1718.04**
-0.75	**-869.923**	**-606.391**	**-865.4186453**	**-925.561**	**-1281.82**	**-486.1399803**	**-656.717**	**-752.064**	**-842.2512247**	**-937.385**
+0.75	**1321.638**	**952.0878**	**1204.923003**	**1191.269**	**1334.659**	**769.5568211**	**1045.184**	**1178.736**	**1305.174672**	**1437.8**
-0.8	**-927.918**	**-646.817**	**-923.1132216**	**-987.265**	**-1367.28**	**-518.5493124**	**-700.498**	**-802.202**	**-898.4013064**	**-999.877**
+0.8	**1033.966**	**751.9528**	**916.0767699**	**880.3755**	**882.0585**	**609.1221894**	**828.7854**	**930.5759**	**1026.744562**	**1127.796**
-0.85	**-985.913**	**-687.243**	**-980.807798**	**-1048.97**	**-1478.76**	**-550.9586444**	**-744.279**	**-852.339**	**-954.551388**	**-1062.37**
+0.85	**725.7546**	**538.1391**	**601.3683947**	**539.4432**	**493.006**	**436.6696182**	**598.055**	**665.0946**	**730.1497387**	**795.4653**
-0.9	**-1043.91**	**-727.669**	**-1038.502374**	**-1110.67**	**-1637.82**	**-583.3679764**	**-788.06**	**-902.477**	**-1010.70147**	**-1124.86**
+0.9	**404.3869**	**315.8577**	**286.5318948**	**259.6297**	**230.4926**	**256.2637274**	**358.7197**	**388.675**	**422.3624294**	**448.7428**
-0.95	**-1101.9**	**-768.095**	**-1096.196951**	**-1172.38**	**-1836.74**	**-615.7773084**	**-831.841**	**-952.614**	**-1066.851551**	**-1187.35**
+0.95	**138.75**	**121.6713**	**121.6018847**	**96.71737**	**80.54893**	**95.36127778**	**135.2753**	**139.41**	**144.7331999**	**144.7154**
-1	**-1159.9**	**-808.521**	**-1153.891484**	**-1234.08**	**-2238.22**	**-648.1866317**	**-875.622**	**-1002.75**	**-1123.001657**	**-1249.85**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-1159.9**	**-808.521**	**-1153.891484**	**-1234.08**	**-2238.22**	**-648.1866317**	**-875.622**	**-1002.75**	**-1123.001657**	**-1249.85**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-1101.9**	**-768.095**	**-1096.19691**	**-1172.38**	**-1836.74**	**-615.7772993**	**-831.841**	**-952.614**	**-1066.851574**	**-1187.35**
+2.05	**138.75**	**121.6728**	**121.6032682**	**96.71844**	**80.54959**	**95.36966069**	**135.2795**	**139.4178**	**144.7378723**	**144.72**
-2.1	**-1043.91**	**-727.669**	**-1038.502337**	**-1110.67**	**-1637.82**	**-583.3679668**	**-788.06**	**-902.477**	**-1010.701491**	**-1124.86**
+2.1	**404.6388**	**315.8684**	**286.5397801**	**259.6365**	**230.4914**	**256.2686297**	**358.7281**	**388.6816**	**422.3719888**	**448.7449**
-2.15	**-985.912**	**-687.243**	**-980.807763**	**-1048.97**	**-1478.76**	**-550.9586344**	**-744.279**	**-852.339**	**-954.5514081**	**-1062.37**
+2.15	**726.0376**	**538.1383**	**601.3758376**	**539.4489**	**493.005**	**436.6748438**	**598.064**	**665.102**	**730.1486543**	**795.4681**
-2.2	**-927.917**	**-646.817**	**-923.1131893**	**-987.265**	**-1367.28**	**-518.549302**	**-700.498**	**-802.202**	**-898.4013251**	**-999.877**
+2.2	**1034.266**	**751.9524**	**916.0842038**	**880.3786**	**882.0607**	**609.1276907**	**828.7833**	**930.5838**	**1026.744037**	**1127.799**
-2.25	**-869.922**	**-606.391**	**-865.4186157**	**-925.561**	**-1281.82**	**-486.1399696**	**-656.717**	**-752.064**	**-842.251242**	**-937.385**

+2.25	1321.941	952.0874	1204.930348	1191.267	1334.662	769.5624077	1045.182	1178.744	1305.175103	1437.804
-2.3	-811.927	-565.965	-807.7240421	-863.857	-1196.37	-453.7306371	-612.936	-701.926	-786.101159	-874.893
+2.3	1582.139	1133.697	1461.215875	1469.448	1718.116	914.1703082	1241.815	1403.595	1557.21275	1718.043
-2.35	-753.933	-525.539	-750.0294685	-802.153	-1110.91	-421.3213047	-569.155	-651.789	-729.951076	-812.4
+2.35	1808.398	1292.254	1678.710518	1706.56	2025.034	1039.398223	1413.775	1599.547	1778.011663	1961.574
-2.4	-695.938	-485.113	-692.3348949	-740.448	-1025.46	-388.9119723	-525.373	-601.651	-673.8009929	-749.908
+2.4	1994.715	1423.552	1851.651924	1896.248	2275.516	1141.9488	1556.502	1761.405	1961.211535	2161.948
-2.45	-637.943	-444.687	-634.6403212	-678.744	-940.003	-356.5026399	-481.592	-551.514	-617.6509099	-687.416
+2.45	2135.549	1523.703	1981.189271	2046.853	2431.829	1218.780155	1665.778	1884.373	2101.385742	2314.533
-2.5	-579.948	-404.261	-576.9457476	-617.04	-854.548	-324.0933074	-437.811	-501.376	-561.5008268	-624.923
+2.5	2225.817	1589.138	2059.664964	2144.275	2497.116	1267.106253	1737.733	1964.048	2193.552669	2420.759
-2.55	-521.953	-363.835	-519.251174	-555.336	-769.093	-291.683975	-394.03	-451.238	-505.3507438	-562.431
+2.55	2264.988	1618.73	2091.597141	2187.862	2591.442	1287.612674	1770.777	1999.695	2235.753148	2470.432
-2.6	-463.958	-323.409	-461.5566004	-493.632	-683.639	-259.2746426	-350.249	-401.101	-449.2006608	-499.939
+2.6	2268.387	1618.395	2105.812843	2185.095	2610.085	1292.432323	1769.081	2001.083	2233.546204	2463.108
-2.65	-405.964	-282.982	-403.8620267	-431.928	-598.184	-226.8653102	-306.468	-350.963	-393.0505777	-437.446
+2.65	2211.674	1575.973	2061.050344	2117.017	2538.09	1264.136538	1721.961	1950.467	2172.704649	2396.946
-2.7	-347.969	-242.556	-346.1674531	-370.224	-512.729	-194.4559777	-262.687	-300.826	-336.9004947	-374.954
+2.7	2091.242	1489.366	1966.038997	2004.962	2394.889	1200.684015	1626.574	1845.207	2052.180367	2268.426
-2.75	-289.974	-202.13	-288.4728795	-308.52	-427.274	-162.0466453	-218.906	-250.688	-280.7504117	-312.462
+2.75	1917.16	1365.552	1806.058487	1838.101	2186.656	1100.288619	1484.053	1682.358	1877.951864	2068.006
-2.8	-231.979	-161.704	-230.7783059	-246.816	-341.819	-129.6373129	-175.124	-200.55	-224.6003286	-249.969
+2.8	1678.686	1193.772	1578.68268	1615.875	1907.479	961.4200598	1296.862	1467.133	1636.935524	1793.394
-2.85	-173.984	-121.278	-173.0837323	-185.112	-256.364	-97.22798046	-131.343	-150.413	-168.4502456	-187.477
+2.85	1369.275	972.4143	1294.453385	1318.347	1556.747	782.8028958	1056.025	1195.82	1326.909726	1448.692
-2.9	-115.99	-80.8522	-115.3891586	-123.408	-170.91	-64.81864804	-87.5622	-100.275	-112.3001625	-124.985
+2.9	987.3163	700.1833	937.5824554	958.763	1142.008	563.4183394	760.1612	861.5324	946.8713796	1035.512
-2.95	-57.9948	-40.4261	-57.69458501	-61.7041	-85.4548	-32.40931561	-43.7811	-50.1376	-56.15007949	-62.4924
+2.95	531.3628	376.1049	506.2661354	519.8244	626.8503	302.5963419	408.237	463.0318	508.635686	555.2228
-3	-2.27E-13	-1.2E-13	-1.20742E-13	-1.2E-13	-1.48E-13	-1.00874E-13	-1.1E-13	-1.4E-13	-1.43233E-13	-1.4E-13
+3	3.83E-13	1.93E-13	2.47633E-13	2.3E-13	2.62E-13	1.89661E-13	1.97E-13	1.73E-13	2.13683E-13	1.9E-13

2-Span: Moment (Max and Min) Raw Data Results - 170' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.56E-13	-2.2E-13	-2.3E-13	-1.8E-13	-1.9E-13	-1.7E-13	-1.8E-13	-1.24523E-13
End Shear	3.69E-13	2.02E-13	2.19E-13	1.81E-13	2.13E-13	1.99E-13	2.11E-13	1.99002E-13
-0.05	-57.9949	-52.796	-56.8184	-53.5587	-64.8606	-67.0394	-70.9612	-28.18778242
+0.05	531.2674	497.1396	532.3417	500.0651	599.7559	583.5623	617.1523	263.4562676
-0.1	-115.99	-105.592	-113.637	-107.117	-129.721	-134.079	-141.922	-56.37556483
+0.1	987.8864	926.4053	991.593	931.2472	1116.009	1080.156	1142.234	490.1107685
-0.15	-173.985	-158.388	-170.455	-160.676	-194.582	-201.118	-212.884	-84.56334725
+0.15	1369.691	1288.048	1378.092	1293.878	1549.326	1490.389	1575.901	680.4300572
-0.2	-231.979	-211.184	-227.274	-214.235	-259.443	-268.158	-283.845	-112.7511297
+0.2	1679.002	1583.259	1693.152	1589.212	1901.289	1827.284	1932.517	835.1054883
-0.25	-289.974	-263.98	-284.092	-267.793	-324.303	-335.197	-354.806	-140.9389121
+0.25	1917.391	1813.649	1938.533	1818.927	2188.124	2096.623	2218.376	955.0567931
-0.3	-347.969	-316.776	-340.91	-321.352	-389.164	-402.237	-425.767	-169.1266945
+0.3	2091.558	1981.239	2116.443	1996.964	2400.134	2290.802	2423.333	1041.783271
-0.35	-405.964	-369.572	-397.729	-374.911	-454.024	-469.276	-496.729	-197.3144769
+0.35	2211.915	2092.634	2240.998	2114.363	2538.059	2419.076	2559.761	1096.255829
-0.4	-463.959	-422.368	-454.547	-428.469	-518.885	-536.315	-567.69	-225.5022593
+0.4	2268.557	2153.479	2304.287	2172.802	2604.737	2473.746	2618.206	1120.059387
-0.45	-521.954	-475.164	-511.366	-482.028	-583.746	-603.355	-638.651	-253.6900418
+0.45	2265.096	2158.965	2308.192	2175.726	2604.125	2459.824	2603.903	1113.462587
-0.5	-579.949	-527.96	-568.184	-535.587	-648.606	-670.394	-709.612	-281.8778242
+0.5	2225.67	2116.979	2264.317	2134.694	2557.196	2420.92	2562.432	1098.007618
-0.55	-637.943	-580.756	-625.003	-589.145	-713.467	-737.434	-780.574	-310.0656066
+0.55	2135.35	2027.206	2169.296	2045.942	2452.887	2327.351	2463.039	1057.174536
-0.6	-695.938	-633.552	-681.821	-642.704	-778.328	-804.473	-851.535	-338.253389
+0.6	1994.474	1893.066	2026.194	1911.815	2292.896	2172.816	2299.1	991.1732333
-0.65	-753.933	-686.348	-738.639	-696.263	-843.188	-871.513	-922.496	-366.4411714
+0.65	1808.125	1719.777	1840.059	1736.911	2082.923	1962.741	2076.435	902.430066
-0.7	-811.928	-739.144	-795.458	-749.822	-908.049	-938.552	-993.457	-394.6289538
+0.7	1581.845	1514.629	1616.385	1526.393	1829.176	1703.484	1801.785	793.5959965
-0.75	-869.923	-791.94	-852.276	-803.38	-972.909	-1005.59	-1064.42	-422.8167363
+0.75	1321.638	1278.612	1361.113	1285.846	1538.379	1401.949	1482.465	667.546825
-0.8	-927.918	-844.736	-909.095	-856.939	-1037.77	-1072.63	-1135.38	-451.0045187
+0.8	1033.966	1017.548	1080.634	1021.312	1217.763	1065.582	1126.522	527.38315
-0.85	-985.913	-897.532	-965.913	-910.498	-1102.63	-1139.67	-1206.34	-479.1923011
+0.85	725.7546	737.6731	781.7837	739.5916	875.0722	702.3729	741.9574	376.4297003
-0.9	-1043.91	-950.328	-1022.73	-964.056	-1167.49	-1206.71	-1277.3	-507.3800835
+0.9	404.3869	449.4854	472.0208	447.2847	518.5629	330.9466	350.6286	218.2363799
-0.95	-1101.9	-1003.12	-1079.55	-1017.61	-1232.35	-1273.75	-1348.26	-535.5678659
+0.95	138.75	172.8202	172.8202	169.3293	182.6443	131.3503	138.2635	98.95003859
-1	-1159.9	-1055.92	-1136.37	-1071.17	-1297.21	-1340.79	-1419.22	-563.7556645
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1159.9	-1055.92	-1136.37	-1071.17	-1297.21	-1340.79	-1419.22	-563.7556645
+2	0	0	0	0	0	0	0	0
-2.05	-1101.9	-1003.12	-1079.55	-1017.61	-1232.35	-1273.75	-1348.26	-535.5678822
+2.05	138.75	172.8223	172.8223	169.3359	182.6529	131.3518	138.265	98.69952619
-2.1	-1043.91	-950.328	-1022.73	-964.056	-1167.49	-1206.71	-1277.3	-507.3801
+2.1	404.6388	449.4841	472.0358	447.2938	518.5687	330.9471	350.6411	218.2334451
-2.15	-985.912	-897.532	-965.913	-910.498	-1102.63	-1139.67	-1206.34	-479.1923177
+2.15	726.0376	737.6737	781.7823	739.6015	875.0787	702.3718	741.9565	376.4268563
-2.2	-927.917	-844.736	-909.095	-856.939	-1037.77	-1072.63	-1135.38	-451.0045355
+2.2	1034.266	1017.549	1080.633	1021.323	1217.77	1065.581	1126.523	527.3801865
-2.25	-869.922	-791.94	-852.276	-803.38	-972.909	-1005.59	-1064.42	-422.8167532

+2.25	1321.941	1278.613	1361.113	1285.844	1538.386	1401.948	1482.465	667.5440086
-2.3	-811.927	-739.144	-795.458	-749.822	-908.049	-938.552	-993.457	-394.628971
+2.3	1582.139	1514.63	1616.384	1526.39	1829.184	1703.483	1801.784	793.593181
-2.35	-753.933	-686.348	-738.639	-696.263	-843.188	-871.513	-922.496	-366.4411887
+2.35	1808.398	1719.777	1840.057	1736.907	2082.929	1962.739	2076.433	902.4269473
-2.4	-695.938	-633.552	-681.821	-642.704	-778.327	-804.473	-851.535	-338.2534065
+2.4	1994.715	1893.065	2026.192	1911.81	2292.902	2172.813	2299.097	991.1700622
-2.45	-637.943	-580.756	-625.003	-589.145	-713.467	-737.434	-780.574	-310.0656242
+2.45	2135.549	2027.204	2169.292	2045.936	2452.891	2327.347	2463.034	1057.170966
-2.5	-579.948	-527.96	-568.184	-535.587	-648.606	-670.394	-709.612	-281.877842
+2.5	2225.817	2116.975	2264.312	2134.7	2557.198	2420.925	2562.438	1098.004068
-2.55	-521.953	-475.164	-511.366	-482.028	-583.746	-603.355	-638.651	-253.6900597
+2.55	2264.988	2158.969	2308.198	2175.72	2604.125	2459.82	2603.898	1115.002638
-2.6	-463.958	-422.368	-454.547	-428.469	-518.885	-536.315	-567.69	-225.5022775
+2.6	2268.387	2153.482	2304.291	2172.795	2604.734	2473.752	2618.212	1120.057719
-2.65	-405.964	-369.572	-397.729	-374.911	-454.024	-469.276	-496.729	-197.3144952
+2.65	2211.674	2092.635	2241.001	2114.367	2538.054	2419.08	2559.764	1096.253521
-2.7	-347.969	-316.776	-340.91	-321.352	-389.164	-402.237	-425.767	-169.126713
+2.7	2091.242	1981.237	2116.442	1996.966	2400.126	2290.803	2423.333	1041.780737
-2.75	-289.974	-263.98	-284.092	-267.793	-324.303	-335.197	-354.806	-140.9389307
+2.75	1917.16	1813.645	1938.53	1818.927	2188.127	2096.621	2218.373	955.0555085
-2.8	-231.979	-211.184	-227.274	-214.235	-259.442	-268.158	-283.845	-112.7511485
+2.8	1678.686	1583.253	1693.147	1589.21	1901.289	1827.279	1932.512	835.1073918
-2.85	-173.984	-158.388	-170.455	-160.676	-194.582	-201.118	-212.884	-84.5633662
+2.85	1369.275	1288.039	1378.084	1293.873	1549.322	1490.386	1575.898	680.4315879
-2.9	-115.99	-105.592	-113.637	-107.117	-129.721	-134.079	-141.922	-56.37558395
+2.9	987.3163	926.3936	991.5817	931.2388	1116.001	1080.15	1142.228	490.1117135
-2.95	-57.9948	-52.796	-56.8184	-53.5587	-64.8606	-67.0395	-70.9612	-28.1878017
+2.95	531.3628	497.1252	532.3276	500.0541	599.7454	583.5535	617.143	263.4567883
-3	-2.27E-13	-1.7E-13	-1.7E-13	-1.3E-13	-1.4E-13	-1.4E-13	-1.4E-13	-1.23854E-13
+3	3.83E-13	2.74E-13	2.88E-13	2.25E-13	2.57E-13	2.81E-13	2.97E-13	1.98961E-13

2-Span: Moment (Max and Min) Raw Data Results - 170' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.56E-13	-3E-13	-3.4E-13	-2.7E-13	-2.2E-13	-2E-13
End Shear	3.69E-13	4.39E-13	3.96E-13	2.09E-13	2.27E-13	2.48E-13
-0.05	-57.9949	-124.334	-137.406	-78.213	-94.1995	-101.573
+0.05	531.2674	1036.338	1118.16	674.7457	813.7687	865.6321
-0.1	-115.99	-248.668	-274.811	-156.426	-188.399	-203.145
+0.1	987.8864	1910.219	2067.435	1247.623	1504.776	1598.722
-0.15	-173.985	-373.002	-412.217	-234.639	-282.598	-304.718
+0.15	1369.691	2657.461	2868.191	1719.4	2079.978	2212.815
-0.2	-231.979	-497.336	-549.622	-312.852	-376.798	-406.291
+0.2	1679.002	3250.565	3560.811	2118.871	2556.314	2714.937
-0.25	-289.974	-621.67	-687.028	-391.065	-470.997	-507.863
+0.25	1917.391	3721.882	4093.643	2425.382	2918.104	3120.232
-0.3	-347.969	-746.004	-824.434	-469.278	-565.197	-609.436
+0.3	2091.558	4080.372	4497.171	2645.034	3171.91	3407.616
-0.35	-405.964	-870.338	-961.839	-547.491	-659.396	-711.009
+0.35	2211.915	4318.564	4754.03	2787.05	3336.871	3581.476
-0.4	-463.959	-994.672	-1099.24	-625.704	-753.596	-812.581
+0.4	2268.557	4453.973	4875.477	2843.479	3399.808	3663.423
-0.45	-521.954	-1119.01	-1236.65	-703.917	-847.795	-914.154
+0.45	2265.096	4456.273	4906.523	2820.214	3367.565	3640.274
-0.5	-579.949	-1243.34	-1374.06	-782.13	-941.995	-1015.73
+0.5	2225.67	4370.735	4797.698	2778.53	3319.659	3582.324
-0.55	-637.943	-1367.67	-1511.46	-860.343	-1036.19	-1117.3
+0.55	2135.35	4175.777	4566.623	2676.918	3200.644	3443.969
-0.6	-695.938	-1492.01	-1648.87	-938.556	-1130.39	-1218.87
+0.6	1994.474	3868.686	4257.92	2502.473	2993.913	3212.043
-0.65	-753.933	-1616.34	-1786.27	-1016.77	-1224.59	-1320.44
+0.65	1808.125	3471.047	3832.115	2261.505	2706.638	2906.127
-0.7	-811.928	-1740.68	-1923.68	-1094.98	-1318.79	-1422.02
+0.7	1581.845	2997.492	3302.047	1961.379	2348.007	2521.36
-0.75	-869.923	-1865.01	-2061.08	-1173.19	-1412.99	-1523.59
+0.75	1321.638	2440.256	2680.017	1610.102	1931.816	2067.988
-0.8	-927.918	-1989.34	-2198.49	-1251.41	-1507.19	-1625.16
+0.8	1033.966	1813.017	1984.453	1217.212	1460.173	1557.084
-0.85	-985.913	-2113.68	-2335.9	-1329.62	-1601.39	-1726.74
+0.85	725.7546	1130.481	1231.713	789.3114	943.9029	1000.557
-0.9	-1043.91	-2238.01	-2473.3	-1407.83	-1695.59	-1828.31
+0.9	404.3869	496.5633	547.5213	393.0195	449.6503	483.296
-0.95	-1101.9	-2362.35	-2610.71	-1486.05	-1789.79	-1929.88
+0.95	138.75	179.7251	166.7746	155.555	182.6229	182.698
-1	-1159.9	-2486.68	-2748.11	-1564.26	-1883.99	-2031.45
+1	0	0	0	0	0	0
(Span 2) -2	-1159.9	-2486.68	-2748.11	-1564.26	-1883.99	-2031.45
+2	0	0	0	0	0	0
-2.05	-1101.9	-2362.35	-2610.71	-1486.05	-1789.79	-1929.88
+2.05	138.75	179.7206	166.7739	155.5567	182.6183	182.6936
-2.1	-1043.91	-2238.01	-2473.3	-1407.83	-1695.59	-1828.31
+2.1	404.6388	496.5657	547.5216	393.0203	449.6559	483.3033
-2.15	-985.912	-2113.68	-2335.9	-1329.62	-1601.39	-1726.74
+2.15	726.0376	1130.486	1231.712	789.3106	943.9046	1000.561
-2.2	-927.917	-1989.34	-2198.49	-1251.41	-1507.19	-1625.16
+2.2	1034.266	1813.023	1985.862	1217.213	1460.174	1557.089
-2.25	-869.922	-1865.01	-2061.08	-1173.19	-1412.99	-1523.59

+2.25	1321.941	2440.261	2681.491	1610.102	1931.817	2067.992
-2.3	-811.927	-1740.68	-1923.68	-1094.98	-1318.79	-1422.02
+2.3	1582.139	2997.496	3302.046	1961.378	2348.008	2521.364
-2.35	-753.933	-1616.34	-1786.27	-1016.77	-1224.59	-1320.44
+2.35	1808.398	3471.049	3831.604	2261.502	2706.637	2906.129
-2.4	-695.938	-1492.01	-1648.87	-938.556	-1130.39	-1218.87
+2.4	1994.715	3869.69	4257.921	2502.469	2993.909	3212.043
-2.45	-637.943	-1367.67	-1511.46	-860.343	-1036.19	-1117.3
+2.45	2135.549	4175.784	4566.624	2676.913	3200.651	3443.966
-2.5	-579.948	-1243.34	-1374.06	-782.13	-941.995	-1015.73
+2.5	2225.817	4370.738	4799.284	2778.536	3319.662	3582.319
-2.55	-521.953	-1119.01	-1236.65	-703.917	-847.795	-914.154
+2.55	2264.988	4456.271	4906.521	2820.209	3367.562	3640.269
-2.6	-463.958	-994.672	-1099.24	-625.704	-753.596	-812.581
+2.6	2268.387	4453.967	4875.477	2843.486	3399.803	3663.427
-2.65	-405.964	-870.338	-961.839	-547.491	-659.396	-711.009
+2.65	2211.674	4318.553	4754.029	2787.054	3336.875	3581.476
-2.7	-347.969	-746.004	-824.434	-469.278	-565.197	-609.436
+2.7	2091.242	4080.368	4497.688	2645.035	3171.911	3407.612
-2.75	-289.974	-621.67	-687.028	-391.065	-470.997	-507.863
+2.75	1917.16	3721.886	4093.642	2425.38	2918.101	3120.237
-2.8	-231.979	-497.336	-549.623	-312.852	-376.798	-406.291
+2.8	1678.686	3251.228	3560.809	2118.865	2556.306	2714.931
-2.85	-173.984	-373.002	-412.217	-234.639	-282.598	-304.718
+2.85	1369.275	2657.466	2869.579	1719.397	2079.979	2212.818
-2.9	-115.99	-248.668	-274.811	-156.426	-188.399	-203.145
+2.9	987.3163	1910.218	2067.435	1247.616	1504.772	1598.719
-2.95	-57.9948	-124.334	-137.406	-78.213	-94.1995	-101.573
+2.95	531.3628	1036.332	1118.161	674.7495	813.7607	865.6247
-3	-2.27E-13	-3.1E-13	-2.8E-13	-2.3E-13	-2.3E-13	-2.4E-13
+3	3.83E-13	5.07E-13	4.41E-13	3.12E-13	3.26E-13	3.46E-13

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-28.48022597**	***-23.74685518***	***-35.34463174***	**-11.98741849**	**-12.90172322**	**-12.16182835**	**-14.72965549**	**-15.2705993**	**-16.1645**	**-6.406885674**
End Shear	**245.2618427**	***203.2670861***	***284.5735629***	**121.0090611**	**129.6495828**	**121.8293153**	**146.2637757**	**143.8523816**	**152.1528**	**64.24417783**
-0.05	**-28.77730796**	***-24.04393717***	***-35.61200553***	**-11.98741849**	**-12.90172322**	**-12.16182835**	**-14.72965549**	**-15.2705993**	**-16.1645**	**-6.406885674**
+0.05	**224.8345711**	***186.038942***	***258.4600188***	**113.0126771**	**121.0409021**	**113.7174754**	**136.4374716**	**133.5417014**	**141.2372**	**59.97087204**
-0.1	**-29.77248843**	***-26.74193139***	***-37.00862874***	**-11.98741849**	**-12.90172322**	**-12.16182835**	**-14.72965549**	**-15.2705993**	**-16.1645**	**-6.406885674**
+0.1	**204.3841627**	***168.771412***	***232.4639027***	**104.8214433**	**112.2246785**	**105.4080052**	**126.3764669**	**122.9923944**	**130.0695**	**55.56207178**
-0.15	**-35.40023946**	***-35.02488773***	***-46.20633251***	**-18.60377422**	**-19.37001176**	**-17.85375116**	**-20.23838397**	**-15.2705993**	**-16.1645**	**-9.027689148**
+0.15	**186.6720796**	***153.95749***	***210.0891957***	**97.54845356**	**104.3987001**	**98.03304541**	**117.4510519**	**113.6679866**	**120.1991**	**51.65042853**
-0.2	**-48.43018631**	***-44.87595434***	***-57.94893105***	**-26.74629623**	**-28.14411843**	**-26.12987093**	**-30.28077429**	**-21.18370817**	**-22.2986**	**-13.42557574**
+0.2	**167.6649841**	***138.1301138***	***186.1051582***	**89.50773811**	**95.74882963**	**89.88303114**	**107.5923046**	**103.407624**	**109.3384**	**47.32924591**
-0.25	**-60.76151064**	***-54.19492639***	***-69.05740261***	**-33.95776443**	**-35.91690457**	**-33.46270263**	**-39.18267167**	**-30.10324987**	**-31.7119**	**-17.32343253**
+0.25	**151.3876059**	***124.6356091***	***165.6054787***	**82.41391606**	**88.11960885**	**82.69592768**	**98.90262634**	**94.39994891**	**99.8042**	**43.52005356**
-0.3	**-75.05486514**	***-65.14196679***	***-81.93244671***	**-41.9096648**	**-44.4899824**	**-41.55189857**	**-49.0074638**	**-40.65563947**	**-42.8864**	**-21.62470616**
+0.3	**134.0348664**	***110.313282***	***143.8163482***	**74.62318008**	**79.74320262**	**74.80636338**	**89.36855137**	**84.5586227**	**89.38825**	**39.34026773**
-0.35	**-88.26237545**	***-75.38261423***	***-93.82855439***	**-48.90608074**	**-52.03498152**	**-48.67230668**	**-57.65990958**	**-49.9836153**	**-52.7648**	**-25.41205881**
+0.35	**119.2796581**	***98.1890706***	***125.3661803***	**67.79752298**	**72.4065831**	**67.89747599**	**81.02413635**	**75.98407679**	**80.31361**	**35.68164575**
-0.4	**-103.4447069**	***-87.28980295***	***-107.5024081***	**-56.5679049**	**-60.29992573**	**-56.47359468**	**-67.14469946**	**-60.24885561**	**-63.6363**	**-29.56293821**
+0.4	**103.6709751**	***85.42060154***	***105.9597368***	**60.35622479**	**64.4107508**	**60.36935636**	**71.93715365**	**66.69188995**	**70.48014**	**31.6970277**
-0.45	**-117.3632958**	***-98.32340733***	***-120.0371565***	**-63.26028006**	**-67.52130459**	**-63.29121445**	**-75.4381608**	**-69.26171342**	**-73.1819**	**-33.19167594**
+0.45	**90.51103643**	***74.70317977***	***89.72064516***	**53.88771294**	**57.46255707**	**53.82904016**	**64.0475224**	**58.66687671**	**61.9883**	**28.2370864**
-0.5	**-133.2420396**	***-111.0388635***	***-134.3360676***	**-70.53256273**	**-75.3709985**	**-70.70359482**	**-84.46052388**	**-79.10971016**	**-83.6127**	**-37.13839088**
+0.5	**76.72008457**	***63.52134918***	***72.98416962***	**46.89531179**	**49.9544085**	**46.7633553**	**55.5300432**	**50.05391196**	**52.87505**	**24.50141353**
-0.55	**-147.6922411**	***-122.722355***	***-151.2752949***	**-76.83191511**	**-82.17292994**	**-77.12806668**	**-92.28547365**	**-87.69103462**	**-92.7023**	**-40.56039369**
+0.55	**65.21412872**	***54.23284516***	***59.45489476***	**40.87293518**	**43.49047623**	**40.68198075**	**48.20473716**	**42.69482836**	**45.08923**	**21.28827078**
-0.6	**-164.0587701**	***-136.0781275***	***-174.7837764***	**-83.61520148**	**-89.50026852**	**-84.05055219**	**-100.7230016**	**-96.99169383**	**-102.555**	**-44.24916662**
+0.6	**53.29850201**	***44.65435405***	***48.0020902***	**34.42888985**	**36.5771205**	**34.17972341**	**40.3791767**	**34.89118951**	**36.83396**	**17.85531558**
-0.65	**-178.8467315**	***-148.2540502***	***-195.8722503***	**-89.43253054**	**-95.78690597**	**-89.99152123**	**-107.9699192**	**-105.0251001**	**-111.065**	**-47.41632034**
+0.65	**43.49088691**	***36.80253359***	***39.16923088***	**28.94164162**	**30.69328846**	**28.6476479**	**33.72771948**	**28.31443749**	**29.87743**	**14.9370884**
-0.7	**-195.4763818**	***-162.066142***	***-219.4220739***	**-95.62736807**	**-102.4847866**	**-96.32311872**	**-115.7001955**	**-113.6483259**	**-120.201**	**-50.79337966**
+0.7	**33.49214019**	***28.82802545***	***30.16412811***	**23.14540968**	**24.48183406**	**22.80980365**	**26.71648477**	**21.45022881**	**22.61788**	**11.86063146**
-0.75	**-210.3938904**	***-174.5626734***	***-240.404276***	**-100.873695**	**-108.1603067**	**-101.6902132**	**-122.2595392**	**-121.017407**	**-128.009**	**-53.65756971**
+0.75	**25.41285115**	***22.40628273***	***22.88767869***	**18.28228358**	**19.27394145**	**17.91738859**	**20.84840496**	**15.7721996**	**16.61387**	**9.285425279**
-0.8	**-227.0459061**	***-188.6310299***	***-263.6715265***	**-106.380614**	**-114.1216077**	**-107.3299366**	**-129.1601569**	**-128.8330983**	**-136.291**	**-56.66913334**
+0.8	**17.35645174**	***16.02034281***	***15.631841***	**13.23332195**	**13.87149574**	**12.84496228**	**14.77392622**	**10.23119334**	**10.76968**	**6.619239128**
-0.85	**-241.8703719**	***-201.2619895***	***-284.2511748***	**-110.9669404**	**-119.0901663**	**-112.0327998**	**-134.9224036**	**-135.4214472**	**-143.273**	**-59.18225059**
+0.85	**11.07372143**	***11.00770124***	***9.972236282***	**9.083301821**	**9.435371434**	**8.682560808**	**9.798743093**	**6.729403783**	**7.120594**	**4.435176594**
-0.9	**-258.2879732**	***-215.3704715***	***-307.9344493***	**-115.6864878**	**-124.2077848**	**-116.8796437**	**-140.8709317**	**-142.2995278**	**-150.564**	**-61.77454669**
+0.9	**5.411632691**	***6.178856852***	***4.873313716***	**4.881069943**	**4.949044589**	**4.509275205**	**4.837990054**	**3.672349914**	**3.872742**	**2.452541301**
-0.95	**-272.7824509**	***-227.9352986***	***-328.8372953***	**-119.5238294**	**-128.3735522**	**-120.8279156**	**-145.7265538**	**-147.9907501**	**-156.597**	**-63.8884719**
+0.95	**2.139359287**	***2.539970749***	***1.925423355***	**1.9910056**	**1.9910056**	**1.668881732**	**1.701280876**	**1.491397258**	**1.569892**	**1.183758816**
-1	**-288.6927556**	***-241.8517317***	***-351.6606214***	**-123.356547**	**-132.5403795**	**-124.7809035**	**-150.6005969**	**-153.8011109**	**-162.758**	**-66.00772438**
+1	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
(Span 2) -2	**0.00E+00**	***0.00E+00***	***0***	**0.00E+00**	**0.00E+00**	**0**	**0**	**0.00E+00**	**0.00E+00**	**0.00E+00**
+2	**2.88E+02**	***2.41E+02***	***350.4751843***	**1.23E+02**	**1.32E+02**	**124.5851272**	**150.3588239**	**1.54E+02**	**1.62E+02**	**6.59E+01**
-2.05	**-2.01E+00**	***-2.35E+00***	***-1.805519874***	**-1.84E+00**	**-1.84E+00**	**-1.470260309**	**-1.523987276**	**-1.40E+00**	**-1.47E+00**	**-1.11E+00**
+2.05	**2.74E+02**	***2.29E+02***	***3.30E+02***	**119.7374878**	**128.6056549**	**1.21E+02**	**1.46E+02**	**1.48E+02**	**156.9364**	**6.40E+01**
-2.1	**-5.68E+00**	***-6.41E+00***	***-5.120376594***	**-5.090619844**	**-5.172594135**	**-4.686745741**	**-5.034073635**	**-3.824858182**	**-4.03475**	**-2.526313895**
+2.1	**2.57E+02**	***2.15E+02***	***3.07E+02***	**115.4488904**	**123.9500084**	**1.17E+02**	**1.41E+02**	**1.42E+02**	**150.1936**	**6.16E+01**
-2.15	**-1.08E+01**	***-1.07E+01***	***-9.682535353***	**-8.85074783**	**-9.186930669**	**-8.449535871**	**-9.520527764**	**-6.560289336**	**-6.94091**	**-4.312930334**
+2.15	**242.7858738**	***202.0049338***	***285.4531753***	**111.2259048**	**119.3708364**	**112.2985426**	**135.2482655**	**135.796048**	**143.6703**	**59.32443346**
-2.2	**-17.75624493**	***-16.33608164***	***-15.99061452***	**-13.4888073**	**-14.14473864**	**-13.10142191**	**-15.08077237**	**-10.49952188**	**-11.0521**	**-6.753819942**
+2.2	**226.2186887**	***187.8884726***	***262.4531941***	**106.1002042**	**113.8179502**	**107.0426033**	**128.8083521**	**128.4328639**	**135.8669**	**56.5157774**
-2.25	**-24.96129558**	***-22.0497765***	***-22.48269235***	**-18.00652835**	**-18.97875274**	**-17.64014808**	**-20.51612364**	**-15.45282255**	**-16.2762**	**-9.139472908**

+2.25	211.3188843	175.3005297	241.6344278	101.1727307	108.4839065	101.9963042	122.6338353	121.4395614	128.4564	53.82110805
-2.3	-33.98681179	-29.22710595	-30.61516016	-23.44158654	-24.79912289	-23.10793966	-27.07432126	-21.79858493	-22.9863	-12.01752133
+2.3	194.6460719	161.3342714	218.184499	95.30939648	102.140902	95.99800101	115.3030643	113.2038294	119.7301	50.62007053
-2.35	-42.92887374	-36.3621772	-38.67240769	-28.62792837	-30.35699812	-28.33150353	-33.34780925	-27.9405521	-29.482	-14.77025439
+2.35	179.7649774	148.9756462	197.1129337	89.76642569	96.14782329	90.33265653	108.3862215	105.4880059	111.5555	47.59837522
-2.4	-53.88506778	-45.13778614	-48.54435136	-34.76052406	-36.93281862	-34.51419584	-40.78153042	-35.2907752	-37.2566	-18.03168998
+2.4	163.2355192	135.3676873	173.5441964	83.26491166	89.12180406	83.69295237	100.2869708	96.50976902	102.0441	44.05873485
-2.45	-64.54153187	-53.70803941	-58.69312805	-40.52647465	-43.11869581	-40.33224667	-47.78364059	-42.27327189	-44.6433	-21.10339276
+2.45	148.5887301	123.4173727	152.5096452	77.19542071	82.5655117	77.49893424	92.73734386	88.18785307	93.2286	40.75814536
-2.5	-77.39514527	-64.08929432	-73.81375923	-47.25715063	-50.34285859	-47.12885711	-55.97048099	-50.49786446	-53.3448	-24.69443008
+2.5	132.4355633	110.3597536	133.4433144	70.15518304	74.9635847	70.31886287	83.99207955	78.59723424	83.06984	36.93367606
-2.55	-89.72903578	-74.09415356	-88.79923749	-53.51374238	-57.06092661	-53.45102497	-63.59167411	-58.20447396	-61.499	-28.03698415
+2.55	118.2243102	98.98239675	120.6584914	63.64819743	67.93995216	63.68649735	75.91915293	69.78556883	73.73675	33.40228363
-2.6	-104.430702	-86.07239409	-106.9484252	-60.74303859	-64.82632136	-60.76056002	-72.40921823	-67.17333643	-70.9896	-31.903854
+2.6	102.6133852	86.65108635	106.6611424	56.16869962	59.86923158	56.06703325	66.65026774	59.71266569	63.06838	29.34675999
-2.65	-118.390677	-97.4969017	-124.3124457	-67.40124755	-71.98070857	-67.4964563	-80.53993198	-75.48770226	-79.7883	-35.46916083
+2.65	89.02837247	75.99694593	94.43763958	49.3131571	52.47403846	49.08670174	58.16359669	50.52771102	53.34097	25.63270349
-2.7	-134.8749856	-111.0473976	-144.9328042	-75.029708	-80.18022829	-75.21795207	-89.86579855	-85.07074412	-89.9303	-39.55808892
+2.7	74.26705089	64.55185358	81.15594864	41.49385388	44.04162968	41.12883253	48.49349987	40.102615	42.30073	21.39990283
-2.75	-150.3953327	-123.8622376	-164.4287337	-82.0005917	-87.67515004	-82.27724041	-98.39653433	-93.87640323	-99.2501	-43.29800773
+2.75	61.4776075	54.75683318	69.64868473	34.37877207	36.37074044	33.89090084	39.70261738	30.66070975	32.30219	17.5512875
-2.8	-168.580772	-138.9441913	-187.3396856	-89.92875646	-96.20168436	-90.30967941	-108.1082785	-103.9435284	-109.906	-47.55521496
+2.8	47.69570163	44.34181118	57.24862218	26.31912091	27.6837516	25.69561843	29.753724	20.68085372	21.76932	13.19498317
-2.85	-185.5814474	-153.1056784	-208.7995028	-97.12330159	-103.9412802	-97.60199868	-116.9295078	-113.1241125	-119.623	-51.42164373
+2.85	35.99581788	35.5274336	46.72096843	19.0335122	19.83302604	18.29047085	20.76818721	15.2705992	16.16447	9.259908677
-2.9	-205.3705248	-169.6622606	-233.8060444	-105.2517127	-112.6877206	-105.8443628	-126.9046833	-123.5452231	-130.655	-55.79335767
+2.9	29.70271149	26.27027951	36.44485755	11.98741874	12.90172276	12.16182785	14.72965564	15.2705992	16.16447	6.406912654
-2.95	-223.7570103	-185.1123168	-257.0487851	-112.5809053	-120.5761295	-113.2793786	-135.9069094	-132.9843672	-140.647	-59.73819544
+2.95	28.81226333	24.07887964	35.64345423	11.98741874	12.90172276	12.16182785	14.72965564	15.2705992	16.16447	6.406912654
-3	-245.0361653	-203.07059	-284.5735629	-120.8101037	-129.4353659	-121.6307021	-146.0231333	-143.6293699	-151.917	-64.17064019
+3	28.48023834	23.74685465	35.34463174	11.98741874	12.90172276	12.16182785	14.72965564	15.2705992	16.16447	6.406912654

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.183354769	-13.14277012	-14.08977837	-19.26416514	-7.360622933	-9.942541051	-11.38924788	-12.75632624	-14.20017603
End Shear	91.7296196	124.6964448	128.9618402	155.4786068	73.77279131	99.48966246	112.9969573	124.3258723	136.0497413
-0.05	-9.183354769	-13.14277012	-14.08977837	-19.34108816	-7.360622933	-9.942541051	-11.38924788	-12.75632624	-14.20017603
+0.05	85.58989455	115.8121336	119.3536873	140.240952	68.85497409	92.8540952	105.3894531	115.8139963	126.5789483
-0.1	-9.183354769	-13.14277012	-14.08977837	-19.59876883	-7.360622933	-9.942541051	-11.38924788	-12.75632624	-14.20017603
+0.1	79.30163448	106.719458	109.5305082	124.8904388	63.82034466	86.05749942	97.59723173	107.0986384	116.8854073
-0.15	-12.95637009	-13.14277012	-14.08977837	-19.98231165	-10.7551717	-14.41799433	-15.32279576	-15.28900435	-15.28515592
+0.15	73.722241	98.68013622	100.8677544	111.6902139	59.35212512	80.02582595	90.68558361	99.37499962	108.3024883
-0.2	-19.22814886	-19.0696852	-16.1950115	-20.58068226	-15.77058513	-21.19023657	-23.10613838	-23.58445329	-23.72539094
+0.2	67.55839254	89.83108948	91.35831821	97.57979335	54.41455131	73.36090154	83.05239159	90.8528262	98.84088319
-0.25	-24.7867244	-26.7275603	-23.33077933	-22.76201163	-20.21453585	-27.19114576	-30.00657264	-31.34131196	-32.3960518
+0.25	62.12454815	82.05987504	83.03107812	85.71266435	50.06055293	67.48400888	76.32547641	83.34961446	90.51855141
-0.3	-30.92051362	-35.80505346	-31.83588862	-30.06674066	-25.11707141	-33.81165755	-37.62357143	-39.91143388	-41.98431001
+0.3	56.16162864	73.56648951	73.95784859	73.41545381	45.28124288	61.03338696	68.94619432	75.12698322	81.40748569
-0.35	-36.32139712	-43.82683258	-40.59960072	-37.62893247	-29.43264442	-39.63984595	-44.33272786	-47.46723333	-50.44555814
+0.35	50.94178666	66.16362049	66.07567395	63.412362	41.09623041	55.38520592	62.48889936	67.93935795	73.45185607
-0.4	-42.24068949	-52.65183638	-50.3405919	-46.19027185	-34.16109984	-46.02600388	-51.68850681	-55.75946003	-59.74046643
+0.4	45.25630158	58.13793769	57.56111308	53.33111073	36.53638448	49.23151854	55.45839533	60.12262219	64.8099368
-0.45	-47.41542455	-60.39758786	-58.91318586	-53.88235994	-38.29353277	-51.6075364	-58.12149882	-63.019041	-67.88617976
+0.45	40.3189218	51.203658	50.23357233	45.18423892	32.57511528	43.88597586	49.35561126	53.34574767	57.32712706
-0.5	-53.04370761	-68.85806825	-68.30329625	-63.58536803	-42.78670115	-57.67670427	-65.12118116	-70.92701978	-76.76913816
+0.5	34.98738748	43.7577022	42.40013506	36.90205098	28.29594645	38.11185146	42.76876279	46.04126351	49.27295602
-0.55	-57.92383777	-76.22753808	-76.50716804	-73.64931778	-46.68123672	-62.93765062	-71.19311855	-77.79521835	-84.49319929
+0.55	30.40092183	37.39224985	35.73680361	30.55837462	24.61318384	33.14288651	37.10537516	39.77029962	42.36908564
-0.6	-63.18459827	-84.21146113	-85.42393405	-85.46276382	-50.87791059	-68.6072026	-77.74183138	-85.21259259	-92.84559958
+0.6	25.49983997	30.63806347	28.70693096	24.37651515	20.67588735	27.83095548	31.05705266	33.08442983	35.02126756
-0.65	-67.70166832	-91.10442133	-93.14950975	-96.74984624	-54.47978325	-73.47363576	-83.36782538	-91.5942423	-100.0418984
+0.65	21.33274686	24.94168132	22.81737091	19.22423503	17.32639809	23.31249718	25.9179527	27.41453283	28.80245011
-0.7	-72.51840445	-98.49975158	-101.4704876	-110.3983834	-58.31876501	-78.66094118	-89.37069438	-98.414661	-107.7451305
+0.7	16.9386309	18.99130706	16.7475833	14.03126018	13.7921827	18.54538402	20.50303987	21.45362706	22.27958829
-0.75	-76.60395733	-104.8159552	-108.6082019	-123.4394899	-61.57321039	-83.05892067	-94.46585689	-104.2146131	-114.3075355
+0.75	13.25936721	14.06422845	12.2428397	10.18684006	10.83072597	14.55136439	15.97311578	16.4799639	16.85195865
-0.8	-80.90015543	-111.5106527	-116.2109285	-138.4843342	-64.99329124	-87.68135446	-99.82800706	-110.3317047	-121.2430098
+0.8	9.448726189	9.255192242	7.870617881	6.503063731	7.760795197	10.41170941	11.28648226	11.35037764	11.3492155
-0.85	-84.48573553	-117.1498527	-122.6512016	-152.0804117	-67.84554977	-91.53695225	-104.3074496	-115.4547967	-127.0654127
+0.85	6.325747722	5.736079829	5.13513104	4.184506335	5.242132186	7.016053821	7.45062182	7.435732991	7.434742236
-0.9	-88.18488505	-123.0318988	-129.4132212	-166.9337936	-70.78552569	-95.51187361	-108.9340054	-120.7622154	-133.1145179
+0.9	3.293358473	3.28591544	2.612586636	2.100819861	2.69769125	3.619219273	3.865978296	3.865176475	3.86438941
-0.95	-91.20203613	-127.8938591	-135.0465106	-179.8691639	-73.18083604	-98.75115856	-112.7128399	-125.1132736	-138.090786
+0.95	1.380472231	1.395450499	1.108881407	0.869667501	1.138654364	1.397490028	1.336799761	1.397490028	1.396860337
-1	-94.2276266	-132.8512069	-140.845367	-193.8735766	-75.57950138	-101.9959504	-116.5089258	-129.5046708	-143.1349203
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.41E+01	1.33E+02	1.41E+02	1.93E+02	7.55E+01	1.02E+02	116.3205339	129.2861224	1.43E+02
-2.05	-1.29E+00	-1.29E+00	-1.03E+00	-8.03E-01	-1.07E+00	-1.25E+00	-1.249237193	-1.270575288	-1.27E+00
+2.05	9.14E+01	1.28E+02	1.35E+02	1.81E+02	7.33E+01	9.89E+01	112.9238079	125.3567328	1.38E+02
-2.1	-3.411321927	-3.403829632	-2.706371731	-2.179478093	-2.824393337	-3.75797075	-4.028193066	-4.027381133	-4.026589004
+2.1	8.80E+01	1.23E+02	1.29E+02	1.66E+02	7.06E+01	9.53E+01	108.700598	120.4939931	1.33E+02
-2.15	-6.151050088	-5.565292912	-4.935440528	-4.058007359	-5.101148344	-6.825997155	-7.236213753	-7.222751068	-7.221766024
+2.15	84.68843569	117.4703529	123.018405	152.8709861	68.00672849	91.75485219	104.5608227	115.7450003	127.395683
-2.2	-9.641285688	-9.488064213	-8.070048346	-6.671137058	-7.915999014	-10.62097024	-11.52315884	-11.60894125	-11.60777307
+2.2	80.68117614	111.1679455	115.8206967	137.6758587	64.81903163	87.44582001	99.55458427	110.0194124	120.8885362
-2.25	-13.05098328	-13.78692895	-11.98960081	-9.972544666	-10.66292242	-14.32506802	-15.7166869	-16.19882261	-16.54563136
+2.25	76.83703479	105.1776812	109.0179927	124.2002123	61.75882021	83.30976946	94.75664894	104.5459776	114.6828377

-2.3	-17.16294793	-19.29343106	-17.02409451	-14.2691619	-13.97266465	-18.7888074	-20.77934645	-21.75740114	-22.61157331
+2.3	72.27099086	98.11865271	101.0408091	109.625312	58.12162292	78.39455589	89.0622556	98.06390757	107.3486288
-2.35	-21.09470194	-24.61771422	-22.48364614	-18.93674691	-17.13499756	-23.05430683	-25.62449321	-27.09109293	-28.44808517
+2.35	67.96110696	91.50151487	93.59543378	97.40993584	54.68661301	73.75309367	83.69103699	91.96119473	100.4559852
-2.4	-25.7518771	-30.98403113	-29.06583802	-24.68989798	-20.87841753	-28.10417209	-31.36799177	-33.42781215	-35.39827909
+2.4	62.91276865	83.79785574	84.96126045	84.79533386	50.66112034	68.31430466	77.4033754	84.82897812	92.41331653
-2.45	-30.13723598	-37.02750307	-35.35599536	-30.22120652	-24.40139405	-32.85715029	-36.77986641	-39.41015171	-41.9729172
+2.45	58.20560484	76.65410985	76.98281044	74.23958331	46.90605622	63.24137141	71.54377178	78.19214507	84.93987583
-2.5	-35.26311848	-44.14160325	-42.80298866	-37.32294201	-28.5172907	-38.41051922	-43.10931932	-46.41865458	-49.68876167
+2.5	52.75149364	68.41787864	67.81404491	62.9919626	42.5534718	57.361671	64.75770767	70.51614867	76.30735109
-2.55	-40.03362079	-50.80400875	-49.81215295	-44.73356223	-32.3461671	-43.57703698	-49.00304351	-52.9544825	-56.89539529
+2.55	47.7155037	60.84771682	59.41211651	54.33490995	38.5331291	51.93116997	58.49460843	63.44035751	68.35917841
-2.6	-45.55169895	-58.55385345	-58.00149004	-53.84584664	-36.77333578	-49.55127866	-55.82358333	-60.5284104	-65.25828605
+2.6	41.93213196	52.19095071	49.83124813	45.73811515	33.91465724	45.69317364	51.30501819	55.32694013	59.2554032
-2.65	-50.63888793	-65.73498908	-65.62004575	-62.86620381	-40.85333687	-55.05738186	-62.11425853	-67.52256461	-72.99076698
+2.65	36.6357666	44.29466534	41.11534391	38.07773917	29.68380998	39.97905331	44.72330922	47.90734986	50.93864153
-2.7	-56.472655	-74.00854764	-74.42927021	-74.04515292	-45.53057385	-61.36988956	-69.3310124	-75.55556452	-81.88210147
+2.7	30.59966287	35.32939591	31.39316948	29.6813383	24.86065692	33.46538716	37.22506628	39.46286532	41.4822178
-2.75	-61.80805377	-81.60811815	-82.54770653	-85.04827854	-49.80692206	-67.14166609	-75.93375184	-82.91288436	-90.03436825
+2.75	25.11136169	27.2071756	23.7770207	23.14153197	20.47404044	27.54158313	30.40963944	31.79463924	32.90298862
-2.8	-67.88101833	-90.29335469	-91.85433025	-98.30541271	-54.67301984	-73.70978925	-83.45184319	-91.29859731	-99.33554163
+2.8	18.89901584	18.6386258	15.82475209	20.5447507	15.50740879	20.83487702	22.69761772	23.12544354	23.2125189
-2.85	-73.39619034	-98.21114629	-100.3630536	-110.9308667	-59.09098467	-79.67330748	-90.28175788	-98.92392346	-107.8014484
+2.85	13.28725283	13.14277035	14.08977815	20.00935175	11.01981378	14.77534024	15.73335865	15.69625003	15.69241224
-2.9	-79.63182353	-107.1960238	-110.0446791	-125.6837223	-64.08474127	-86.41439463	-98.00631261	-107.5559938	-117.3938571
+2.9	9.183354769	13.14277035	14.08977815	19.58069788	7.360622709	9.942541187	11.38924769	12.75632602	14.20017565
-2.95	-85.25831357	-115.3318257	-118.83409	-139.418735	-68.58952905	-92.49574478	-104.9785138	-115.3541644	-126.067284
+2.95	9.183354769	13.14277035	14.08977815	19.3501354	7.360622709	9.942541187	11.38924769	12.75632602	14.20017565
-3	-91.5801063	-124.5043109	-128.7682328	-155.3217787	-73.64973759	-99.32718789	-112.8146572	-124.1262078	-135.832325
+3	9.183354769	13.14277035	14.08977815	19.26416464	7.360622709	9.942541187	11.38924769	12.75632602	14.20017565

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.43328022	-28.12268763	-15.9874	-19.2473	-20.7648
End Shear	230.4920365	249.561126	149.4398	180.034	191.9205
-0.05	-25.43328022	-28.12268763	-15.9874	-19.2473	-20.7648
+0.05	213.2504748	230.7084753	138.5972	167.0116	177.853
-0.1	-25.43328022	-28.12268763	-15.9874	-19.2473	-20.7648
+0.1	195.6294182	211.2176126	127.5076	153.6902	163.4663
-0.15	-25.43328022	-28.12268763	-15.9874	-19.2473	-20.7648
+0.15	180.0918943	194.0510914	117.7127	141.9218	150.7663
-0.2	-27.66713196	-29.2692118	-20.8014	-25.1289	-24.9718
+0.2	163.0379675	175.2320323	106.9428	128.9793	136.8102
-0.25	-40.22044034	-41.56085936	-29.4236	-36.0369	-36.3263
+0.25	148.1061234	158.7760428	97.49524	117.6236	124.5754
-0.3	-56.30841226	-56.61857107	-40.5673	-49.4077	-50.4092
+0.3	131.8388927	140.8733976	87.18214	105.2247	111.2284
-0.35	-72.16697991	-73.85823938	-50.4248	-61.2331	-63.2506
+0.35	117.7091764	125.3467708	78.20474	94.4291	99.61824
-0.4	-89.66078405	-93.38787012	-61.2805	-74.2536	-77.4005
+0.4	102.4482254	108.6051529	68.48569	82.73853	87.05867
-0.45	-105.0587043	-110.5969114	-70.8188	-85.6919	-89.8407
+0.45	89.317095	94.22675946	60.10121	72.65031	76.23293
-0.5	-121.9278947	-129.4722712	-81.2493	-98.1976	-103.453
+0.5	75.28201284	78.89074132	51.11344	61.8327	64.63921
-0.55	-136.6687171	-145.9864966	-90.3458	-109.102	-115.332
+0.55	63.34592401	65.87946071	43.44465	52.59921	54.75746
-0.6	-152.6937081	-163.9629845	-100.214	-120.928	-128.228
+0.6	50.75627216	52.19367077	35.32539	42.81922	44.30798
-0.65	-166.5809666	-179.5635103	-108.746	-131.15	-139.387
+0.65	40.21169261	40.7683187	28.49509	34.58782	35.52983
-0.7	-181.5421783	-196.3965179	-117.914	-142.132	-151.389
+0.7	29.28704351	29.47900206	21.38155	26.01012	26.403
-0.75	-194.3794226	-210.8644986	-125.758	-151.525	-161.668
+0.75	20.96497117	21.50256198	15.5125	18.92812	19.02971
-0.8	-208.057289	-226.3094271	-134.09	-161.498	-172.597
+0.8	13.32413024	13.85803357	10.33487	12.17279	12.28076
-0.85	-219.6480456	-239.4260201	-141.124	-169.915	-181.836
+0.85	8.212111204	8.424968654	7.159852	7.866215	8.314827
-0.9	-231.8229913	-253.2382338	-148.481	-178.715	-191.513
+0.9	4.289181244	3.896326635	3.940462	4.327841	4.33994
-0.95	-241.9708017	-264.7845679	-154.582	-186.008	-199.553
+0.95	1.412551829	1.435986407	1.601987	1.708787	1.519595
-1	-252.4232585	-276.719482	-160.828	-193.469	-207.801
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.52E+02	2.76E+02	1.61E+02	1.93E+02	2.07E+02
-2.05	-1.30E+00	-1.32E+00	-1.48E+00	-1.58E+00	-1.36E+00
+2.05	2.43E+02	2.65E+02	1.55E+02	186.4188	2.00E+02
-2.1	-4.385712413	-4.139502406	-4.10111	-4.50358	-4.51576
+2.1	2.31E+02	2.53E+02	1.48E+02	178.2678	1.91E+02
-2.15	-7.966716257	-8.074231693	-6.9818	-7.67142	-8.09275
+2.15	220.3089909	240.1756876	141.5242	170.3942	182.3617
-2.2	-13.64914842	-14.24122258	-10.5302	-12.5087	-12.5251
+2.2	207.3550841	225.5165205	133.6628	160.9873	172.0361
-2.25	-20.50574991	-21.08140778	-15.1829	-18.5302	-18.6308
+2.25	195.116481	211.6968374	126.2081	152.0637	162.2572

-2.3	**-29.83913131**	**-29.74854075**	**-21.7421**	**-26.445**	**-26.8652**
+2.3	**180.7694505**	**195.5273362**	**117.441**	**141.5657**	**150.7696**
-2.35	**-39.61432047**	**-40.12158897**	**-28.1072**	**-34.1202**	**-35.0317**
+2.35	**167.3825987**	**180.4656747**	**109.2375**	**131.7394**	**140.0308**
-2.4	**-51.39899129**	**-52.89052415**	**-35.7407**	**-43.3197**	**-44.8422**
+2.4	**151.8620223**	**163.0303928**	**99.70222**	**120.3148**	**127.5596**
-2.45	**-62.66391265**	**-65.13621601**	**-43.0057**	**-52.0705**	**-54.1921**
+2.45	**137.5234345**	**146.9456168**	**90.87268**	**109.7331**	**116.0205**
-2.5	**-76.00377518**	**-79.67770703**	**-51.5764**	**-62.39**	**-65.2361**
+2.5	**121.0488271**	**128.4890976**	**80.70628**	**97.54663**	**102.744**
-2.55	**-88.56199128**	**-93.39990003**	**-59.6184**	**-72.0693**	**-75.6098**
+2.55	**105.9549159**	**111.6001247**	**71.37348**	**86.35701**	**90.56429**
-2.6	**-103.2374932**	**-109.4693094**	**-68.989**	**-83.344**	**-87.7088**
+2.6	**88.74590883**	**92.3670353**	**60.71326**	**73.57335**	**76.66096**
-2.65	**-116.8925227**	**-124.4491544**	**-77.6853**	**-93.8043**	**-98.9467**
+2.65	**73.09313111**	**74.89266315**	**50.99994**	**61.92301**	**64.00015**
-2.7	**-132.6840798**	**-141.8018885**	**-87.7185**	**-105.87**	**-111.922**
+2.7	**55.36935102**	**55.985602**	**39.9831**	**48.70681**	**49.64838**
-2.75	**-147.2394585**	**-157.8205388**	**-96.9464**	**-116.964**	**-123.865**
+2.75	**41.04550888**	**42.28067664**	**30.01211**	**36.74318**	**37.03254**
-2.8	**-163.9275027**	**-176.2119848**	**-107.505**	**-129.655**	**-137.539**
+2.8	**27.07440735**	**28.54333426**	**20.47762**	**24.48793**	**24.55888**
-2.85	**-179.186772**	**-193.0506405**	**-117.142**	**-141.236**	**-150.026**
+2.85	**25.43327988**	**28.12268754**	**15.98744**	**19.24733**	**20.76485**
-2.9	**-196.551728**	**-212.2361324**	**-128.089**	**-154.388**	**-164.22**
+2.9	**25.43327988**	**28.12268754**	**15.98744**	**19.24733**	**20.76485**
-2.95	**-212.3184261**	**-229.6758764**	**-138.011**	**-166.308**	**-177.092**
+2.95	**25.43327988**	**28.12268754**	**15.98744**	**19.24733**	**20.76485**
-3	**-230.140726**	**-249.4108664**	**-149.209**	**-179.757**	**-191.628**
+3	**25.43327988**	**28.12268754**	**15.98744**	**19.24733**	**20.76485**

2-Span: Moment (Max and Min) Raw Data Results – 180' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.93E-13	-4.67E-13	-9.22E-13	-3.98E-13	-4.33E-13	-2.95E-13	-3.48E-13	-4.41E-13	-4.68E-13	-2.98E-13
End Shear	9.73E-13	6.90E-13	9.11E-13	5.59E-13	5.88E-13	4.70E-13	4.96E-13	5.22E-13	5.53E-13	3.87E-13
-0.05	-256.3220337	-213.7216966	-318.1016857	-107.886766	-116.115509	-109.456455	-132.566899	-137.435394	-145.480208	-57.66197106
+0.05	2063.677402	1715.290317	2362.289804	1017.521261	1089.924023	1024.0577	1228.954409	1202.108615	1271.395392	539.7378483
-0.1	-512.6440674	-427.4433932	-636.2033713	-215.773533	-232.231018	-218.91291	-265.133799	-274.870787	-290.960416	-115.3239421
+0.1	3852.42892	3210.153755	4406.128522	1896.272758	2030.414761	1907.279938	2287.189553	2226.084369	2354.204866	1004.278651
-0.15	-768.9661012	-641.1650898	-954.305057	-323.660299	-348.346527	-328.369365	-397.700698	-412.306181	-436.440623	-172.9859132
+0.15	5366.017935	4485.534429	6142.716362	2636.864975	2822.258052	2650.43137	3175.941447	3073.292212	3249.898554	1394.56157
-0.2	-1025.288135	-854.8867864	-1272.406743	-431.547066	-464.462036	-437.825821	-530.267598	-549.741575	-581.920831	-230.6478843
+0.2	6609.880848	5543.482295	7504.97077	3241.71731	3468.113841	3256.053667	3898.405694	3769.524226	3986.919095	1711.984078
-0.25	-1281.610169	-1068.608483	-1590.508428	-539.433832	-580.577545	-547.282276	-662.834497	-687.176969	-727.401039	-288.3098553
+0.25	7587.928974	6386.8348	8506.594336	3714.097674	3971.555862	3727.549762	4486.212108	4325.310598	4576.704231	1958.434587
-0.3	-1537.932202	-1282.33018	-1908.610114	-647.320598	-696.693054	-656.738731	-795.401397	-824.612362	-872.881247	-345.9718264
+0.3	8316.427451	7019.216725	9319.620058	4058.122217	4337.071275	4092.133672	4920.745679	4727.055464	5000.83615	2136.870921
-0.35	-1794.254236	-1496.051876	-2226.7118	-755.207365	-812.808563	-766.195186	-927.968296	-962.047756	-1018.36145	-403.6337974
+0.35	8819.345275	7445.039103	9815.219384	4286.887176	4592.30314	4332.600762	5203.764683	4992.184546	5282.735589	2249.328788
-0.4	-2050.57627	-1709.773573	-2544.813485	-863.094131	-928.924072	-875.651641	-1060.5352	-1099.48315	-1163.84166	-461.2957685
+0.4	9074.305214	7669.501497	9981.321983	4411.408393	4722.081003	4452.616558	5341.159172	5106.583456	5404.944326	2299.030307
-0.45	-2306.898303	-1923.495269	-2862.915171	-970.980898	-1045.03958	-985.108096	-1193.10209	-1236.91854	-1309.32187	-518.9577396
+0.45	9090.181696	7698.589648	9837.434383	4422.842223	4730.523442	4459.108663	5340.995005	5080.468195	5378.136301	2286.69831
-0.5	-2563.220337	-2137.216966	-3181.016857	-1078.86766	-1161.15509	-1094.56455	-1325.66899	-1374.35394	-1454.80208	-576.6197106
+0.5	8923.789462	7552.755177	9620.424343	4336.839126	4640.488546	4374.853233	5244.283452	4999.117743	5291.457323	2254.206721
-0.55	-2819.542371	-2350.938663	-3499.118542	-1186.75443	-1277.2706	-1204.02101	-1458.23589	-1511.78933	-1600.28229	-634.2816817
+0.55	8540.783934	7225.950513	9372.842471	4153.163462	4445.867134	4192.956735	5030.096922	4804.35357	5084.619018	2169.676458
-0.6	-3075.864405	-2564.660359	-3817.220228	-1294.6412	-1393.38611	-1313.47746	-1590.80279	-1649.22472	-1745.76249	-691.9436528
+0.6	7942.709499	6723.758554	8792.652993	3878.937337	4153.151652	3918.499481	4702.387068	4485.457661	4746.360718	2033.911187
-0.65	-3332.186438	-2778.382056	-4135.321914	-1402.52796	-1509.50162	-1422.93392	-1723.36969	-1786.66012	-1891.2427	-749.6056238
+0.65	7142.115682	6055.0663	7899.020045	3524.490891	3772.656086	3560.886542	4272.807632	4053.585795	4288.638625	1851.880732
-0.7	-3588.508472	-2992.103753	-4453.423599	-1510.41473	-1625.61713	-1532.39037	-1855.93659	-1924.09551	-2036.72291	-807.2675949
+0.7	6152.689641	5229.551647	6713.161306	3104.974025	3315.608869	3130.672161	3754.058107	3521.770498	3725.26519	1629.014588
-0.75	-3844.830506	-3205.825449	-4771.525285	-1618.3015	-1741.73264	-1641.84683	-1988.50349	-2061.53091	-2182.20312	-864.9295659
+0.75	4989.248446	4257.676894	5296.567776	2622.696283	2794.150681	2639.269726	3159.879525	2904.151522	3071.22526	1371.200324
-0.8	-4101.15254	-3419.547146	-5089.62697	-1726.18826	-1857.84814	-1751.30328	-2121.07039	-2198.9663	-2327.68333	-922.591537
+0.8	3667.746891	3150.692645	3652.757533	2089.564951	2221.335802	2099.050196	2505.058901	2215.979693	2342.680066	1084.78385
-0.85	-4521.239688	-3797.033957	-5555.117257	-1834.07503	-1973.96365	-1860.75974	-2253.63729	-2336.40169	-2473.16353	-980.2535081
+0.85	2369.036292	2084.401039	2133.329114	1518.335572	1611.132505	1523.811936	1805.425063	1473.613853	1556.964077	776.5702547
-0.9	-5239.773761	-4472.967693	-6289.209769	-1941.9618	-2090.07916	-1970.21619	-2386.20419	-2473.83709	-2618.64374	-1037.915479
+0.9	1246.019937	1206.30818	1122.208196	930.5647998	978.7901143	927.0949033	1077.851305	695.22903	735.1842347	453.8218445
-0.95	-6208.546015	-5399.13961	-7297.479524	-2049.84856	-2206.19467	-2079.67265	-2518.77109	-2611.27248	-2764.12395	-1095.57745
+0.95	392.0989747	481.8189288	352.8890763	357.6971101	357.6971101	352.864407	381.4491053	271.8623696	286.1709154	202.1295636
-1	-7389.705773	-6537.696771	-9227.624241	-2157.73533	-2322.3102	-2189.12913	-2651.33807	-2748.7079	-2909.60422	-1153.244294
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-7389.705773	-6537.696771	-9227.624241	-2157.73533	-2322.3102	-2189.12913	-2651.33807	-2748.7079	-2909.60422	-1153.244294
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-6208.548111	-5399.139563	-7297.48845	-2049.84857	-2206.19461	-2079.67259	-2518.77117	-2611.27249	-2764.12401	-1095.58208
+2.05	392.098963	481.8235883	352.8890658	357.700891	357.700891	352.8761541	381.4646483	271.8650512	286.1737381	201.644771
-2.1	-5239.775742	-4472.967647	-6289.209617	-1941.9618	-2090.0791	-1970.21614	-2386.20427	-2473.8371	-2618.6438	-1037.919866
+2.1	1246.572089	1206.315826	1122.208434	930.5625132	978.8177479	927.1115693	1077.861602	695.232807	735.1885276	453.8161221
-2.15	-4521.241566	-3797.033924	-5555.117111	-1834.07503	-1973.9636	-1860.75969	-2253.63737	-2336.4017	-2473.16359	-980.2576526
+2.15	2369.658635	2084.409775	2133.329155	1518.336654	1611.129883	1523.830195	1805.437223	1473.611438	1556.961859	776.56431
-2.2	-4101.15434	-3419.547152	-5089.626856	-1726.18826	-1857.84809	-1751.30324	-2121.07047	-2198.96631	-2327.68338	-922.5954387
+2.2	3668.407058	3150.702515	3652.757601	2089.567024	2221.334489	2099.069115	2505.072041	2215.978246	2342.678881	1084.778417

-2.25	-3844.832195	-3205.82546	-4771.525171	-1618.30149	-1741.73259	-1641.84679	-1988.50357	-2061.53092	-2182.20317	-864.9332248
+2.25	4989.916848	4257.687317	5296.568298	2622.698535	2794.149449	2639.264291	3159.893131	2904.150181	3071.224196	1371.194966
-2.3	-3588.51005	-2992.103768	-4453.423485	-1510.41472	-1625.61708	-1532.39034	-1855.93667	-1924.09552	-2036.72296	-807.2710109
+2.3	6153.337613	5229.561944	6713.161597	3104.975996	3315.607306	3130.666552	3754.071192	3521.768131	3725.263051	1629.008895
-2.35	-3332.187905	-2778.382076	-4135.321799	-1402.52795	-1509.50158	-1422.93389	-1723.36977	-1786.66013	-1891.24275	-749.6087971
+2.35	7142.717682	6055.075734	7899.020457	3524.491647	3772.653301	3560.879882	4272.819438	4053.581983	4288.634955	1851.874784
-2.4	-3075.86576	-2564.660384	-3817.220114	-1294.64119	-1393.38607	-1313.47744	-1590.80286	-1649.22474	-1745.76254	-691.9465832
+2.4	7943.240452	6723.765975	8792.65305	3878.935377	4153.147271	3918.490977	4702.396785	4485.451547	4746.354617	2033.905142
-2.45	-2819.543615	-2350.938693	-3499.118428	-1186.75442	-1277.27057	-1204.02099	-1458.23596	-1511.78935	-1600.28233	-634.2843693
+2.45	8541.221841	7225.956105	9372.842353	4153.159463	4445.860537	4192.946194	5030.10411	4804.344333	5084.609633	2169.67049
-2.5	-2563.22147	-2137.217001	-3181.016742	-1078.86765	-1161.15506	-1094.56454	-1325.66906	-1374.35395	-1454.80212	-576.6221554
+2.5	8924.113697	7552.758135	9620.424597	4336.832223	4640.478746	4374.864991	5244.287248	4999.127612	5291.468028	2254.200376
-2.55	-2306.899325	-1923.495309	-2862.915057	-970.980879	-1045.03956	-985.108085	-1193.10216	-1236.91856	-1309.32191	-518.9599415
+2.55	9089.943696	7698.588985	9837.434833	4422.851242	4730.535552	4459.099184	5340.993772	5080.460572	5378.127978	2289.6536
-2.6	-2050.57718	-1709.773617	-2544.813371	-863.094111	-928.924055	-875.651635	-1060.53526	-1099.48317	-1163.8417	-461.2977276
+2.6	9073.929199	7669.498018	9981.322586	4411.413668	4722.089004	4452.603838	5341.154193	5106.594649	5404.955768	2299.027037
-2.65	-1794.255035	-1496.051925	-2226.711685	-755.207342	-812.80855	-766.195184	-927.968361	-962.047775	-1018.36149	-403.6355138
+2.65	8818.814513	7445.031257	9815.219228	4286.888663	4592.307129	4332.608848	5203.754676	4992.191009	5282.742022	2249.324649
-2.7	-1537.93289	-1282.330233	-1908.61	-647.320573	-696.693045	-656.738734	-795.40146	-824.612383	-872.881282	-345.9732999
+2.7	8315.728533	7019.204685	9319.620028	4058.119122	4337.070455	4092.137746	4920.730761	4727.057231	5000.83761	2136.865987
-2.75	-1281.610745	-1068.608542	-1590.508314	-539.433805	-580.577541	-547.282283	-662.834559	-687.17699	-727.401072	-288.311086
+2.75	7587.419411	6386.818953	8506.593696	3714.090776	3971.550849	3727.549272	4486.217015	4325.306673	4576.699664	1958.429395
-2.8	-1025.2886	-854.8868498	-1272.406628	-431.547036	-464.462036	-437.825832	-530.267659	-549.741597	-581.920862	-230.6488721
+2.8	6609.184177	5543.461896	7504.971273	3241.705364	3468.103362	3256.04865	3898.404914	3769.515155	3986.909078	1711.987772
-2.85	-768.9664547	-641.165158	-954.3049427	-323.660267	-348.346531	-328.369382	-397.700758	-412.306204	-436.440651	-172.9866582
+2.85	5365.124581	4485.509474	6142.716207	2636.848359	2822.242597	2650.421658	3175.935051	3073.287924	3249.894151	1394.564327
-2.9	-512.6443096	-427.4434661	-636.2032571	-215.773499	-232.231026	-218.912931	-265.133857	-274.870811	-290.960441	-115.3244443
+2.9	3851.064653	3210.123265	4406.128217	1896.25041	2030.393196	1907.264436	2287.176235	2226.073873	2354.193886	1004.280405
-2.95	-256.3221646	-213.7217743	-318.1015714	-107.88673	-116.115521	-109.45648	-132.566956	-137.435419	-145.480231	-57.66223045
+2.95	2063.888962	1715.255269	2362.29009	1017.493749	1089.896924	1024.03827	1228.936085	1202.092447	1271.37841	539.7388175
-3	-1.03E-12	-7.71E-13	-1.04E-12	-4.46E-13	-4.46E-13	-3.57E-13	-4.79E-13	-4.81E-13	-5.08E-13	-3.14E-13
+3	1.63E-12	1.24E-12	1.79E-12	9.45E-13	9.78E-13	8.49E-13	9.50E-13	9.70E-13	1.02E-12	4.70E-13

2-Span: Moment (Max and Min) Raw Data Results - 180' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.21E-13	-3.89E-13	-3.90E-13	-3.34E-13	-2.70E-13	-2.57E-13	-3.08E-13	-3.06E-13	-3.07E-13
End Shear	4.03E-13	4.64E-13	3.95E-13	3.94E-13	2.74E-13	3.75E-13	3.80E-13	3.77E-13	3.75E-13
-0.05	-82.6501924	-118.2849311	-126.8080053	-173.3774863	-66.24560639	-89.48286946	-102.503231	-114.806936	-127.801584
+0.05	770.5528918	1042.363221	1074.475702	1272.681178	619.6947668	836.1339821	949.0303161	1043.700712	1140.74719
-0.1	-165.3003848	-236.5698621	-253.6160106	-346.7549726	-132.4912128	-178.9657389	-205.006462	-229.613872	-255.603169
+0.1	1434.681038	1931.312734	1983.075617	2319.899326	1154.085723	1557.102684	1766.070121	1943.261691	2127.65443
-0.15	-247.9505788	-354.8547932	-380.4240159	-520.1324589	-198.7368192	-268.4486084	-307.509693	-344.420809	-383.404753
+0.15	1992.855321	2667.835756	2729.291482	3161.285035	1603.719423	2163.518012	2451.874809	2722.353968	2975.902134
-0.2	-330.6007696	-473.1397243	-507.2320213	-693.5099452	-264.9824256	-357.9314778	-410.012924	-459.227745	-511.206337
+0.2	2447.0474	3255.605351	3346.119094	3881.777818	1970.036645	2657.47497	3008.950065	3358.19024	3683.061461
-0.25	-413.250962	-591.4246553	-634.0400266	-866.8874315	-331.228032	-447.4143534	-512.516155	-574.034681	-639.007921
+0.25	2799.881575	3725.664496	3808.547757	4451.237095	2255.105157	3041.773225	3450.847556	3852.956731	4246.142737
-0.3	-495.9011575	-709.7095864	-760.8480319	-1040.264918	-397.4736384	-536.8972168	-615.019386	-688.841617	-766.809506
+0.3	3054.634356	4057.244854	4156.665739	4875.414044	2461.514394	3333.999735	3784.742591	4211.164714	4657.422454
-0.35	-578.5513504	-827.9945174	-887.6560372	-1213.642404	-463.7192448	-626.3800862	-717.522617	-803.648553	-894.61109
+0.35	3232.388808	4256.009443	4389.2726	5168.321886	2592.375466	3529.45096	4000.972763	4458.499717	4921.701265
-0.4	-661.2015392	-946.2794485	-1014.464043	-1387.01989	-529.9648512	-715.8629557	-820.025848	-918.45549	-1022.41267
+0.4	3319.684181	4350.325224	4529.650497	5308.124811	2651.321785	3626.266086	4105.378431	4583.452334	5057.928488
-0.45	-743.8517316	-1064.56438	-1141.272048	-1560.397377	-596.2104575	-805.3458251	-922.529079	-1033.26243	-1150.21426
+0.45	3320.944084	4323.436454	4535.536816	5269.298872	2642.508171	3630.278845	4103.457287	4588.619055	5072.990785
-0.5	-826.501924	-1182.849311	-1268.080053	-1733.774863	-662.4560639	-894.8287069	-1025.03231	-1148.06936	-1278.01584
+0.5	3260.03427	4256.426797	4445.284961	5099.6779	2599.848637	3562.349966	4029.906744	4501.833457	4971.177683
-0.55	-909.1521164	-1301.134242	-1394.888058	-1907.152349	-728.7016703	-984.311564	-1127.53554	-1262.8763	-1405.81743
+0.55	3125.677493	4092.739129	4243.798495	4956.056835	2500.106682	3414.795731	3866.126222	4312.738984	4753.650452
-0.6	-991.802315	-1419.419173	-1521.696064	-2080.529836	-794.9472767	-1073.794434	-1230.03877	-1377.68323	-1533.61901
+0.6	2920.532958	3824.266773	3932.628859	4631.901924	2342.319231	3191.122556	3614.094169	4025.724403	4440.537198
-0.65	-1074.452501	-1537.704104	-1648.504069	-2253.907322	-861.1928831	-1163.277303	-1332.542	-1492.49017	-1661.4206
+0.65	2651.896675	3467.53612	3541.229209	4120.476269	2132.191058	2899.243987	3282.813027	3650.974133	4030.133016
-0.7	-1157.102701	-1655.989035	-1775.312074	-2427.284808	-927.4384895	-1252.760172	-1435.04523	-1607.29711	-1789.22218
+0.7	2327.717279	3020.477702	3053.485008	3492.845419	1875.949896	2547.779794	2882.095956	3199.581314	3531.888648
-0.75	-1239.752886	-1774.273966	-1902.12008	-2600.662294	-993.6840959	-1342.243042	-1537.54846	-1722.10404	-1917.02376
+0.75	1956.59581	2494.917457	2482.525696	2713.018094	1580.34454	2146.052777	2422.563695	2683.93558	2958.992855
-0.8	-1322.403078	-1892.558897	-2028.928085	-2774.039781	-1059.929702	-1431.725911	-1640.0517	-1836.91098	-2044.82535
+0.8	1547.784945	1903.637335	1842.113651	1797.869681	1252.646066	1704.091008	1915.647032	2115.768579	2325.647821
-0.85	-1405.053271	-2010.843828	-2155.73609	-2989.820736	-1126.175309	-1521.208802	-1742.55493	-1951.71792	-2172.62693
+0.85	1111.190801	1260.374197	1147.861345	1004.675398	900.6470589	1233.007203	1373.584444	1510.067366	1647.065673
-0.9	-1487.703463	-2129.128759	-2282.544096	-3282.87813	-1192.420915	-1610.69165	-1845.05816	-2066.52485	-2300.42852
+0.9	657.4966801	611.2392572	542.8703573	465.3965672	532.6624921	744.4313938	809.4237264	881.6955272	939.4695418
-0.95	-1570.353656	-2247.41369	-2409.352101	-3640.729341	-1258.666521	-1700.17452	-1947.56139	-2181.33179	-2428.2301
+0.95	251.8293311	251.7039166	200.1982745	163.1743949	194.7098962	281.3546921	293.062965	307.0220244	306.9896055
-1	-1653.003868	-2365.698664	-2536.16008	-4193.494267	-1324.91205	-1789.657432	-2050.06468	-2296.1387	-2556.03168
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1653.003868	-2365.698664	-2536.16008	-4193.494267	-1324.91205	-1789.657432	-2050.06468	-2296.1387	-2556.03168
+2	0	0	0	0	0	0	0	0	0
-2.05	-1570.353675	-2247.413731	-2409.352076	-3640.729256	-1258.666446	-1700.174561	-1947.56142	-2181.33176	-2428.23003
+2.05	251.831994	251.7063869	200.2001424	163.1755858	194.7249979	281.3622098	293.0776574	307.0303826	306.9979622
-2.1	-1487.703482	-2129.128798	-2282.544073	-3282.878049	-1192.420841	-1610.69169	-1845.05819	-2066.52483	-2300.42845
+2.1	657.5158713	611.2533555	542.8827904	465.394418	532.6711333	744.4467346	809.4360142	881.7130186	939.473099
-2.15	-1405.053279	-2010.843865	-2155.73607	-2989.820662	-1126.175237	-1521.20882	-1742.55496	-1951.71789	-2172.62687
+2.15	1111.189098	1260.387587	1147.871463	1004.673305	900.6567735	1233.023886	1373.598104	1510.065331	1647.070642
-2.2	-1322.403096	-1892.558932	-2028.928066	-2774.03972	-1059.929633	-1431.725949	-1640.05173	-1836.91096	-2044.82529
+2.2	1547.784068	1903.651285	1842.124506	1797.876214	1252.656074	1704.087301	1915.661659	2115.767706	2325.654155
-2.25	-1239.752894	-1774.273999	-1902.120063	-2600.662238	-993.6840281	-1342.243078	-1537.5485	-1722.10402	-1917.02371

+2.25	1956.594941	2494.931334	2482.52251	2713.024953	1580.354677	2146.04923	2422.578721	2683.936408	2958.999432
-2.3	-1157.102702	-1655.989065	-1775.312059	-2427.284756	-927.4384237	-1252.760207	-1435.04527	-1607.29709	-1789.22213
+2.3	2327.716322	3020.49048	3053.481227	3492.850258	1875.959575	2547.776042	2882.110577	3199.580357	3531.894753
-2.35	-1074.452518	-1537.704132	-1648.504056	-2253.907275	-861.1928194	-1163.277337	-1332.54204	-1492.49016	-1661.42055
+2.35	2651.894563	3467.547009	3541.237387	4120.47854	2132.19987	2899.239359	3282.825923	3650.972008	4030.137691
-2.4	-991.8023247	-1419.419199	-1521.696053	-2080.529793	-794.947215	-1073.794466	-1230.03881	-1377.68322	-1533.61897
+2.4	2920.529706	3824.275619	3932.634627	4631.905284	2342.327017	3191.11644	3614.105435	4025.720481	4440.539511
-2.45	-909.1521318	-1301.134266	-1394.888049	-1907.152311	-728.7016106	-984.3115954	-1127.53558	-1262.87629	-1405.81739
+2.45	3125.672435	4092.748224	4243.790869	4956.05569	2500.113178	3414.787935	3866.135562	4312.732914	4753.649656
-2.5	-826.5019389	-1182.849333	-1268.080046	-1733.774829	-662.4560062	-894.8287248	-1025.03235	-1148.06935	-1278.01581
+2.5	3260.027022	4256.432439	4445.292787	5099.682631	2599.853432	3562.339959	4029.913368	4501.824512	4971.173734
-2.55	-743.8517459	-1064.5644	-1141.272042	-1560.397347	-596.2104018	-805.3458541	-922.529125	-1033.26242	-1150.21423
+2.55	3320.952988	4323.432662	4535.530795	5269.301788	2642.504827	3630.269478	4103.452325	4588.609297	5072.997079
-2.6	-661.201553	-946.2794667	-1014.464039	-1387.019866	-529.9647974	-715.8629834	-820.025895	-918.455485	-1022.41265
+2.6	3319.690406	4350.317894	4529.658953	5308.1234	2651.316528	3626.275192	4105.370398	4583.460048	5057.930859
-2.65	-578.5513601	-827.9945335	-887.6560356	-1213.642384	-463.7191931	-626.3801127	-717.522666	-803.64855	-894.611064
+2.65	3232.391941	4256.016263	4389.267202	5168.325824	2592.367615	3529.456748	4000.960927	4458.503252	4921.698581
-2.7	-495.9011672	-709.7096004	-760.8480323	-1040.264902	-397.4735887	-536.897242	-615.019437	-688.841616	-766.809484
+2.7	3054.634034	4057.253626	4156.669463	4875.417816	2461.503959	3334.002253	3784.748534	4211.163802	4657.415019
-2.75	-413.2509743	-591.4246673	-634.0400289	-866.8874202	-331.2279843	-447.4143714	-512.516208	-574.034682	-639.007903
+2.75	2799.878177	3725.669012	3808.542107	4451.241462	2255.092447	3041.771989	3450.849447	3852.951223	4246.130185
-2.8	-330.6007779	-473.1397341	-507.2320255	-693.5099384	-264.9823799	-357.9315007	-410.012979	-459.227748	-511.206322
+2.8	2447.040266	3255.604995	3346.124562	3881.781802	1970.021189	2657.470027	3008.947515	3358.179931	3683.064823
-2.85	-247.9505884	-354.854801	-380.4240221	-520.1324566	-198.7367755	-268.44863	-307.509749	-344.420813	-383.404741
+2.85	1992.844592	2667.830602	2729.291774	3161.28228	1603.700738	2163.509235	2451.867796	2722.338702	2975.900254
-2.9	-165.3003955	-236.5698679	-253.6160187	-346.7549748	-132.4911712	-178.9657593	-205.00652	-229.613879	-255.60316
+2.9	1434.666148	1931.302187	1983.070492	2319.901395	1154.063619	1557.089209	1766.057747	1943.262123	2127.656111
-2.95	-82.65020066	-118.2849347	-126.8080153	-173.377493	-66.24556678	-89.48288862	-102.503291	-114.806945	-127.801579
+2.95	770.5342921	1042.3478	1074.465034	1272.677271	619.6979461	836.117332	949.0133962	1043.696038	1140.743186
-3	-3.67E-13	-4.15E-13	-3.46E-13	-4.33E-13	-2.83E-13	-3.03E-13	-3.75E-13	-3.68E-13	-3.65E-13
+3	6.44E-13	8.43E-13	7.06E-13	8.27E-13	5.32E-13	7.08E-13	7.24E-13	7.56E-13	7.52E-13

2-Span: Moment (Max and Min) Raw Data Results - 180' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.87E-13	-5.76E-13	-4.05E-13	-5.31E-13	-3.94E-13
End Shear	5.66E-13	6.46E-13	4.87E-13	5.71E-13	5.53E-13
-0.05	-228.899522	-253.1041887	-143.886954	-173.225973	-186.883648
+0.05	1920.902046	2076.376278	1247.470711	1504.015014	1601.69558
-0.1	-457.7990439	-506.2083774	-287.773907	-346.451945	-373.767295
+0.1	3543.275876	3841.719003	2307.827643	2782.599912	2959.924614
-0.15	-686.6985659	-759.3125661	-431.660861	-519.677918	-560.650943
+0.15	4929.969449	5330.860688	3182.557804	3848.330464	4098.754689
-0.2	-915.5980879	-1012.416755	-575.547815	-692.903891	-747.53459
+0.2	6032.937631	6615.695592	3922.248129	4730.313469	5030.058301
-0.25	-1144.49761	-1265.520944	-719.434769	-866.129863	-934.418238
+0.25	6910.326468	7604.625247	4490.420663	5401.694248	5781.124197
-0.3	-1373.397132	-1518.625132	-863.321722	-1039.35584	-1121.30189
+0.3	7575.323946	8353.713335	4898.911142	5874.995779	6314.686679
-0.35	-1602.296654	-1771.729321	-1007.20868	-1212.58181	-1308.18553
+0.35	8018.591217	8830.64674	5163.025842	6182.49254	6640.163729
-0.4	-1831.196176	-2024.83351	-1151.09563	-1385.80778	-1495.06918
+0.4	8267.766094	9059.402816	5269.875941	6302.577023	6793.984118
-0.45	-2060.095698	-2277.937698	-1294.98258	-1559.03375	-1681.95283
+0.45	8272.735161	9114.221391	5230.249995	6247.423493	6754.777755
-0.5	-2288.99522	-2531.041887	-1438.86954	-1732.25973	-1868.83648
+0.5	8113.547772	8912.522168	5151.895138	6157.157742	6646.114176
-0.55	-2517.894742	-2784.146076	-1582.75649	-1905.4857	-2055.72012
+0.55	7752.163547	8485.435256	4960.920784	5933.095712	6387.108956
-0.6	-2746.794264	-3037.250265	-1726.64344	-2078.71167	-2242.60377
+0.6	7185.796236	7911.967399	4637.090922	5548.94784	5956.432991
-0.65	-2975.693786	-3290.354453	-1870.5304	-2251.93764	-2429.48742
+0.65	6450.719254	7124.874567	4192.035853	5018.160044	5390.18019
-0.7	-3204.593308	-3543.458642	-2014.41735	-2425.16362	-2616.37107
+0.7	5577.512784	6147.977767	3639.301951	4356.790956	4680.770825
-0.75	-3433.49283	-3796.562831	-2158.30431	-2598.38959	-2803.25471
+0.75	4552.356929	5003.864573	2993.603504	3589.761467	3846.845037
-0.8	-3662.392352	-4049.667019	-2302.19126	-2771.61556	-2990.13836
+0.8	3400.408579	3726.345707	2270.826771	2723.648466	2908.775432
-0.85	-3891.291874	-4302.771208	-2446.07821	-2944.84154	-3177.02201
+0.85	2148.693343	2345.560731	1488.0268	1777.255678	1888.451336
-0.9	-4120.191395	-4555.875397	-2589.96517	-3118.06751	-3363.90566
+0.9	941.5277937	1049.04133	727.7473723	847.0614305	897.0853795
-0.95	-4349.090917	-4808.979586	-2733.85212	-3291.29348	-3550.7893
+0.95	336.9512485	312.5800173	288.6519316	341.9754071	342.0989188
-1	-4577.990344	-5062.08382	-2877.73913	-3464.51929	-3737.67305
+1	0	0	0	0	0
(Span 2) -2	-4577.990344	-5062.08382	-2877.73913	-3464.51929	-3737.67305
+2	0	0	0	0	0
-2.05	-4349.090825	-4808.979632	-2733.85205	-3291.29332	-3550.7894
+2.05	336.9433923	312.5787111	288.6547117	341.967811	342.0913263
-2.1	-4120.191306	-4555.875444	-2589.96511	-3118.06735	-3363.90575
+2.1	941.5315335	1049.041623	727.7484238	847.070407	897.0975284
-2.15	-3891.291787	-4302.771256	-2446.07816	-2944.84139	-3177.02209
+2.15	2148.700618	2345.559251	1488.024925	1777.257676	1888.458513
-2.2	-3662.392268	-4049.667068	-2302.19121	-2771.61542	-2990.13844
+2.2	3400.416384	3728.958671	2270.82582	2723.650973	2908.783599
-2.25	-3433.49275	-3796.562881	-2158.30426	-2598.38946	-2803.25479

+2.25	**4552.364778**	**5006.565625**	**2993.602528**	**3589.763801**	**3846.853365**
-2.3	**-3204.593231**	**-3543.458693**	**-2014.41732**	**-2425.16349**	**-2616.37114**
+2.3	**5577.518686**	**6146.001381**	**3639.29977**	**4356.789969**	**4680.77703**
-2.35	**-2975.693712**	**-3290.354505**	**-1870.53037**	**-2251.93753**	**-2429.48748**
+2.35	**6450.722595**	**7124.093538**	**4192.031932**	**5018.156866**	**5390.184469**
-2.4	**-2746.794193**	**-3037.250317**	**-1726.64342**	**-2078.71156**	**-2242.60383**
+2.4	**7187.531232**	**7911.96863**	**4637.084679**	**5548.941496**	**5956.432281**
-2.45	**-2517.894674**	**-2784.146129**	**-1582.75647**	**-1905.4856**	**-2055.72018**
+2.45	**7752.175545**	**8485.435658**	**4960.91161**	**5933.106762**	**6387.104172**
-2.5	**-2288.995155**	**-2531.041941**	**-1438.86953**	**-1732.25963**	**-1868.83653**
+2.5	**8113.554147**	**8915.41374**	**5151.905143**	**6157.163961**	**6646.104684**
-2.55	**-2060.095636**	**-2277.937754**	**-1294.98258**	**-1559.03367**	**-1681.95287**
+2.55	**8272.732723**	**9114.219453**	**5230.242054**	**6247.419847**	**6754.768959**
-2.6	**-1831.196117**	**-2024.833566**	**-1151.09563**	**-1385.8077**	**-1495.06922**
+2.6	**8267.756215**	**9059.403294**	**5269.887154**	**6302.568799**	**6793.991093**
-2.65	**-1602.296599**	**-1771.729378**	**-1007.20868**	**-1212.58174**	**-1308.18557**
+2.65	**8018.573482**	**8830.645215**	**5163.032502**	**6182.499458**	**6640.164712**
-2.7	**-1373.39708**	**-1518.62519**	**-863.321736**	**-1039.35577**	**-1121.30192**
+2.7	**7575.317978**	**8354.532088**	**4898.913185**	**5874.997101**	**6314.681184**
-2.75	**-1144.497561**	**-1265.521002**	**-719.434788**	**-866.129806**	**-934.418265**
+2.75	**6910.332647**	**7604.624596**	**4490.416794**	**5401.688521**	**5781.110982**
-2.8	**-915.5980419**	**-1012.416814**	**-575.547841**	**-692.903841**	**-747.534612**
+2.8	**6034.031231**	**6615.692369**	**3922.238772**	**4730.30111**	**5030.048342**
-2.85	**-686.698523**	**-759.3126266**	**-431.660894**	**-519.677875**	**-560.65096**
+2.85	**4929.978068**	**5333.213366**	**3182.55306**	**3848.332391**	**4098.758394**
-2.9	**-457.7990041**	**-506.2084387**	**-287.773946**	**-346.45191**	**-373.767307**
+2.9	**3543.27485**	**3841.719547**	**2307.816845**	**2782.594186**	**2959.920023**
-2.95	**-228.8994852**	**-253.1042509**	**-143.886999**	**-173.225945**	**-186.883655**
+2.95	**1920.891167**	**2076.378081**	**1247.453818**	**1504.002026**	**1601.683197**
-3	**-6.15E-13**	**-6.17E-13**	**-5.13E-13**	**-6.16E-13**	**-5.63E-13**
+3	**1.21E-12**	**1.16E-12**	**8.66E-13**	**1.08E-12**	**1.00E-12**

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.83418	-4.76192	-6.815022099	-7.30608	-10.5463	-3.81676066	-5.15558	-5.90575	-6.614636372	-7.36333
End Shear	67.34931	47.56527	64.65981064	66.87158	84.54299	38.25397527	51.58914	58.59319	64.46765479	70.54692
-0.05	-6.83418	-4.76192	-6.815022099	-7.30608	-10.5994	-3.81676066	-5.15558	-5.90575	-6.614636372	-7.36333
+0.05	62.77601	44.38159	60.05296014	61.88939	76.20824	35.70390152	48.14835	54.64841	60.05392603	65.63596
-0.1	-6.83418	-4.76192	-6.815022099	-7.30608	-10.7771	-3.81676066	-5.15558	-5.90575	-6.614636372	-7.36333
+0.1	58.13344	41.12089	55.3380648	56.7957	67.82108	33.09325624	44.62406	50.60785	55.53468418	60.60949
-0.15	-8.61569	-6.71837	-6.815022099	-7.30608	-11.0416	-5.576962248	-7.47627	-7.94545	-7.927925513	-7.92593
+0.15	53.97733	38.22776	51.1693732	52.30374	60.62009	30.77631585	41.49641	47.0239	51.52968609	56.15893
-0.2	-13.2211	-9.97052	-9.888351156	-8.39772	-11.4542	-8.177643314	-10.9879	-11.9814	-12.22942872	-12.3025
+0.2	49.38955	35.03158	46.58080865	47.37273	52.93427	28.21599757	38.04039	43.0658	47.11061768	51.25273
-0.25	-17.3814	-12.8529	-13.85924828	-12.0979	-12.7027	-10.48199941	-14.0996	-15.5595	-16.25165256	-16.7986
+0.25	45.34854	32.21392	42.5511408	43.05475	46.47624	25.95828516	34.993	39.57764	43.21991935	46.93728
-0.3	-21.9761	-16.0335	-18.56627092	-16.5081	-16.6499	-13.02414903	-17.5326	-19.5092	-20.69558407	-21.7704
+0.3	40.91803	29.12192	38.14700001	38.34993	39.78772	23.4800326	31.64811	35.7512	38.95617486	42.21285
-0.35	-26.0252	-18.834	-22.725866	-21.0524	-20.7388	-15.26193644	-20.5548	-22.9882	-24.61355112	-26.1579
+0.35	37.04332	26.41524	34.30833316	34.26273	34.34656	21.30994577	28.71932	32.40285	35.22912002	38.08756
-0.4	-30.467	-21.9034	-27.30196338	-26.1035	-25.3928	-17.71381895	-23.8662	-26.8024	-28.91338347	-30.9777
+0.4	32.8273	23.4671	30.14671386	29.84761	28.86225	18.94549364	25.5284	28.75727	31.17584765	33.6064
-0.45	-34.3537	-24.5867	-31.31842772	-30.5487	-29.5973	-19.85664131	-26.7605	-30.1382	-32.67775007	-35.2015
+0.45	29.17012	20.90688	26.55102826	26.048	24.43185	16.89142612	22.75653	25.59275	27.66178256	29.72628
-0.5	-38.5855	-27.5052	-35.70550596	-35.4178	-34.8959	-22.18651862	-29.9075	-33.7678	-36.77833538	-39.8077
+0.5	25.22583	18.14228	22.69001929	21.98607	19.93294	14.67251566	19.76243	22.17722	23.87413198	25.54989
-0.55	-42.2588	-30.0357	-39.52685407	-39.6719	-40.3758	-24.20598222	-32.6355	-36.9163	-40.33975543	-43.8129
+0.55	21.83738	15.76402	19.38929212	18.53088	16.48314	12.76286432	17.18584	19.24054	20.62240063	21.96997
-0.6	-46.2233	-32.7636	-43.66681936	-44.2955	-46.8179	-26.38211594	-35.5754	-40.3121	-44.18594378	-48.1439
+0.6	18.22207	13.22263	15.88699169	14.88563	13.1225	10.72122756	14.4314	16.10425	17.15552493	18.15985
-0.65	-49.632	-35.1059	-47.24107925	-48.3015	-52.9743	-28.24982279	-38.0989	-43.2294	-47.4950699	-51.8755
+0.65	15.15357	11.06183	12.93320266	11.83167	10.33274	8.984391023	12.08841	13.43944	14.21546945	14.93516
-0.7	-53.2722	-37.6035	-51.07583696	-52.6163	-60.413	-30.24047965	-40.7887	-46.3421	-51.03171429	-55.8699
+0.7	11.92447	8.783319	9.847709134	8.684254	7.52997	7.151767021	9.616481	10.6316	11.12451494	11.55281
-0.75	-56.3651	-39.722	-54.35102678	-56.3174	-67.5173	-31.92803235	-43.0692	-48.9841	-54.03920826	-59.2728
+0.75	9.22713	6.875482	7.292833005	6.348374	5.456685	5.616139988	7.545431	8.282663	8.545482965	8.738376
-0.8	-59.6239	-41.9498	-57.82248001	-60.2598	-75.7204	-33.70147329	-45.4661	-51.7646	-57.21115097	-62.8691
+0.8	6.441468	4.899521	4.799166317	4.081212	3.476823	4.024265075	5.398864	5.852467	5.885598985	5.884996
-0.85	-62.3499	-43.809	-60.74661794	-63.5993	-83.1462	-35.18047694	-47.4654	-54.0873	-59.86766744	-65.8882
+0.85	4.189114	3.280139	2.974373777	2.662759	2.228468	2.718243291	3.638089	3.863428	3.855708059	3.855194
-0.9	-65.1701	-45.7272	-63.79668073	-67.1056	-91.2848	-36.70496536	-49.5265	-56.4864	-62.61976425	-69.0249
+0.9	2.094269	1.707731	1.703871112	1.354725	1.113157	1.39885468	1.876702	2.004656	2.00423981	2.003832
-0.95	-67.4781	-47.2917	-66.31779058	-70.0267	-98.3965	-37.94702413	-51.2062	-58.4459	-64.87595211	-71.6053
+0.95	0.859119	0.715827	0.723593725	0.574997	0.457148	0.590435242	0.724651	0.693181	0.724651298	0.724325
-1	-69.8025	-48.8606	-68.88836242	-73.0336	-106.124	-39.1908226	-52.8887	-60.4143	-67.1530572	-74.2209
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.70421	48.7828	68.75965974	72.88225	105.7229	39.12921411	52.80539	60.31658	67.03973161	74.09035
-2.05	-8.08E-01	-0.67084	-0.669466622	-0.53194	-4.22E-01	-0.555616105	-0.64803	-0.64778	-0.658841218	-0.6608
+2.05	67.62572	47.37897	66.45953664	70.1917	98.80895	38.01626473	51.29986	58.55525	65.00219487	71.74996
-2.1	-2.19728	-1.7689	-1.765014069	-1.40336	-1.15537	-1.464554492	-1.94865	-2.08877	-2.088349045	-2.08794
+2.1	65.04738	45.63048	63.64194531	66.9271	90.86088	36.6281458	49.42264	56.36536	62.4806809	68.86612
-2.15	-4.07432	-3.18955	-2.885814318	-2.55921	-2.16061	-2.64513785	-3.53954	-3.75225	-3.745268897	-3.74476
+2.15	62.52457	43.91415	60.9128094	63.78968	83.57869	35.26405418	47.57835	54.21873	60.01814897	66.05947
-2.2	-6.58243	-4.99937	-4.919919219	-4.18462	-3.56715	-4.104744109	-5.50737	-5.97519	-6.019673969	-6.01907
+2.2	59.47827	41.83623	57.64477339	60.0574	75.27955	33.61111311	45.34396	51.62281	57.04921564	62.68527
-2.25	-9.07355	-6.76743	-7.149042752	-6.21706	-5.3414	-5.52912752	-7.42809	-8.1497	-8.399700604	-8.57953
+2.25	56.56237	39.8429	54.53859539	56.52994	67.93245	32.02427804	43.19926	49.1349	54.21103326	59.46738

-2.3	-12.0863	-8.89964	-10.00437182	-8.82764	-7.65856	-7.245353718	-9.74271	-10.7749	-11.28203326	-11.725
+2.3	53.10534	37.47524	50.87822282	52.39347	59.99259	30.13825404	40.65053	46.18214	50.8498354	55.66431
-2.35	-14.9738	-10.9384	-12.76521349	-11.6586	-10.1773	-8.885142629	-11.9545	-13.2873	-14.04775366	-14.7514
+2.35	49.84755	35.2404	47.44698723	48.53276	53.33508	28.35707182	38.24376	43.39696	47.68534857	52.09022
-2.4	-18.4009	-13.3533	-16.06638897	-15.0717	-13.2925	-10.8262471	-14.5731	-16.2655	-17.33358162	-18.3553
+2.4	46.03703	32.62264	43.45234936	44.05562	46.45452	26.26970202	35.42354	40.13657	43.98702521	47.91979
-2.45	-21.6336	-15.6273	-19.20015715	-18.3334	-16.2995	-12.65304333	-17.0377	-19.0717	-20.43565035	-21.7645
+2.45	42.48857	30.1818	39.74804763	39.91849	40.69794	24.32255961	32.79304	37.09814	40.54557691	44.04453
-2.5	-25.4181	-18.2853	-22.88908647	-22.195	-20.1613	-14.787291	-19.9173	-22.3538	-24.06982348	-25.7655
+2.5	38.38179	27.35364	35.47725105	35.16414	34.57343	22.0655804	29.74419	33.57931	36.56528321	39.56824
-2.55	-28.9449	-20.7589	-26.34379505	-25.8295	-24.1867	-16.77270786	-22.5963	-25.4099	-27.45889681	-29.5024
+2.55	34.59387	24.74229	31.55183657	30.80742	29.8454	19.98088105	26.92827	30.33166	32.89621857	35.44681
-2.6	-33.0295	-23.6203	-30.36238188	-30.076	-29.142	-19.06836183	-25.6942	-28.9466	-31.38626415	-33.8389
+2.6	30.22621	21.74339	27.06297677	25.83938	25.14637	17.58602916	23.69363	26.60359	28.68910559	30.72616
-2.65	-36.7993	-26.2582	-34.0860716	-34.0265	-34.0491	-21.1839963	-28.5493	-32.2086	-35.01299694	-37.8485
+2.65	26.25169	18.99703	22.96845493	21.31986	20.98214	15.39217525	20.73065	23.19072	24.84176814	26.41361
-2.7	-41.1269	-29.2832	-38.37622382	-38.5944	-40.1299	-23.60932012	-31.8226	-35.9507	-39.17841043	-42.459
+2.7	21.72615	15.86708	18.31962453	16.27854	16.44095	12.89118845	17.35307	19.3026	20.46298435	21.51009
-2.75	-45.0886	-32.0498	-42.31688781	-42.8041	-46.1146	-25.82676798	-34.8155	-39.3745	-42.99345831	-46.6862
+2.75	17.61489	13.02119	14.1079469	12.32928	12.90712	10.61656232	14.28135	15.76855	16.48671985	17.06144
-2.8	-49.602	-35.1989	-46.8205106	-47.6299	-53.3292	-28.35002325	-38.2213	-43.2729	-47.34176682	-51.5092
+2.8	12.96512	9.799853	9.664830594	8.205731	11.42946	8.041176454	10.80367	11.76957	11.99141485	12.03657
-2.85	-53.7045	-38.0587	-50.92618423	-52.042	-60.2062	-30.64090468	-41.3136	-46.8145	-51.29578608	-55.8991
+2.85	8.826712	6.889942	6.815022219	7.306081	11.06022	5.714189151	7.661571	8.15834	8.139097761	8.137108
-2.9	-58.3466	-41.2921	-55.58518214	-57.0623	-68.2541	-33.23035586	-44.8091	-50.82	-55.77184016	-60.8731
+2.9	6.834181	4.761916	6.815022219	7.306081	10.7646	3.816760544	5.155583	5.905755	6.614636258	7.363327
-2.95	-62.5386	-44.2097	-59.80390236	-61.62	-75.7586	-35.56625826	-47.9625	-54.4353	-59.81548582	-65.3706
+2.95	6.834181	4.761916	6.815022219	7.306081	10.60559	3.816760544	5.155583	5.905755	6.614636258	7.363327
-3	-67.2524	-47.4877	-64.56018194	-66.7712	-84.4617	-38.19016728	-51.5049	-58.4987	-64.36412124	-70.4342
+3	6.834181	4.761916	6.815022219	7.306081	10.5463	3.816760544	5.155583	5.905755	6.614636258	7.363327

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.83418	-6.21593	-6.690030191	-6.30637	-7.63788	-7.918381801	-8.38189	-3.32221
End Shear	67.34931	62.74776	67.22819954	63.1731	75.84329	74.59288651	78.89696	33.31303
-0.05	-6.83418	-6.21593	-6.690030191	-6.30637	-7.63788	-7.918381801	-8.38189	-3.32221
+0.05	62.77601	58.60134	62.76427383	58.9668	70.74798	69.24640983	73.23681	31.09716
-0.1	-6.83418	-6.21593	-6.690030191	-6.30637	-7.63788	-7.918381801	-8.38189	-3.32221
+0.1	58.13344	54.35387	58.19272932	54.65803	65.53097	63.77619621	67.44596	28.81103
-0.15	-8.61569	-9.64676	-10.0440818	-9.25784	-10.4944	-7.918381801	-8.38189	-4.6812
+0.15	53.97733	50.58255	54.1346643	50.83383	60.9028	58.941139	62.32774	26.7827
-0.2	-13.2211	-13.869	-14.5937871	-13.5493	-15.7017	-10.98455181	-11.5627	-6.96167
+0.2	49.38955	46.41314	49.64938015	46.60774	55.79067	53.62075397	56.69607	24.542
-0.25	-17.3814	-17.6084	-18.62426993	-17.3517	-20.3177	-15.60967066	-16.4438	-8.98285
+0.25	45.34854	42.73472	45.69334138	42.88096	51.28474	48.94993462	51.75224	22.56679
-0.3	-21.9761	-21.7317	-23.0697342	-21.5462	-25.4122	-21.08148274	-22.2382	-11.2132
+0.3	40.91803	38.69493	41.34985876	38.78992	46.34097	43.84683573	46.35118	20.39941
-0.35	-26.0252	-25.3596	-26.98210087	-25.2384	-29.8988	-25.9183901	-27.3605	-13.1771
+0.35	37.04332	35.15557	37.54554477	35.2074	42.01407	39.40061021	41.64564	18.50228
-0.4	-30.467	-29.3326	-31.26778622	-29.2837	-34.8171	-31.24130444	-32.9978	-15.3295
+0.4	32.8273	31.29698	33.3994041	31.30379	37.30213	34.5822608	36.54661	16.4361
-0.45	-34.3537	-32.8028	-35.01234358	-32.8189	-39.1175	-35.91481121	-37.9476	-17.2111
+0.45	29.17012	27.94281	29.79650354	27.91239	33.21106	30.4209887	32.14327	14.64199
-0.5	-38.5855	-36.5738	-39.08270599	-36.6625	-43.796	-41.02136902	-43.3563	-19.2577
+0.5	25.22583	24.31699	25.90324527	24.24856	28.79442	25.95484156	27.41771	12.70491
-0.55	-42.2588	-39.8402	-42.60976403	-39.9938	-47.8535	-45.47110947	-48.0697	-21.0321
+0.55	21.83738	21.19416	22.55145254	21.09514	24.99597	22.13887911	23.38047	11.03877
-0.6	-46.2233	-43.3576	-46.4092655	-43.5834	-52.2287	-50.29385213	-53.1784	-22.9449
+0.6	18.22207	17.85268	18.9666168	17.72348	20.93813	18.09239798	19.0998	9.258655
-0.65	-49.632	-46.3741	-49.66912417	-46.664	-55.9865	-54.45947633	-57.5914	-24.5872
+0.65	15.15357	15.00733	15.91562793	14.85489	17.48909	14.68210396	15.49257	7.745444
-0.7	-53.2722	-49.5864	-53.14222792	-49.9472	-59.9949	-58.93094422	-62.3288	-26.3383
+0.7	11.92447	12.00177	12.69475451	11.82774	13.85351	11.12275282	11.72823	6.150185
-0.75	-56.3651	-52.3068	-56.08519922	-52.7302	-63.3962	-62.75209072	-66.3775	-27.8235
+0.75	9.22713	9.480054	9.994265726	9.290842	10.81068	8.178480479	8.614921	4.814843
-0.8	-59.6239	-55.1624	-59.1763587	-55.6546	-66.9744	-66.80482152	-70.6721	-29.3851
+0.8	6.441468	6.861977	7.192893825	6.660598	7.660838	5.305259704	5.584484	3.432325
-0.85	-62.3499	-57.5405	-61.75274372	-58.0932	-69.9624	-70.22112894	-74.2926	-30.6882
+0.85	4.189114	4.710035	4.892596025	4.502235	5.081018	3.489449719	3.692297	2.299806
-0.9	-65.1701	-59.9878	-64.40642198	-60.6065	-73.0469	-73.78767321	-78.0729	-32.0324
+0.9	2.094269	2.531019	2.566266316	2.338229	2.50868	1.904251965	2.008163	1.271735
-0.95	-67.4781	-61.9776	-66.56652956	-62.6538	-75.5647	-76.73878666	-81.2014	-33.1286
+0.95	0.859119	1.032412	1.032411512	0.865378	0.882178	0.773345739	0.814048	0.613824
-1	-69.8025	-63.965	-68.72718667	-64.7036	-78.0921	-79.75167791	-84.396	-34.2275
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.70421	63.86673	68.62023477	64.60209	77.96672	79.60071457	84.23594	34.17307
-2.05	-8.08E-01	-0.95551	-0.955507294	-0.76239	-0.79024	-0.724310551	-0.76243	-0.57502
+2.05	67.62572	62.0884	66.68688353	62.76796	75.70524	76.90480995	81.37743	33.18977
-2.1	-2.19728	-2.63968	-2.682185188	-2.43025	-2.61036	-1.983333255	-2.09217	-1.30999
+2.1	65.04738	59.8646	64.27275521	60.47987	72.89133	73.60664572	77.88103	31.96473
-2.15	-4.07432	-4.58945	-4.763770116	-4.3814	-4.93675	-3.401757498	-3.59912	-2.23642
+2.15	62.52457	57.67483	61.89828177	58.23103	70.13133	70.41537359	74.4985	30.76196
-2.2	-6.58243	-6.99446	-7.334580574	-6.79358	-7.81995	-5.444398177	-5.73095	-3.50211
+2.2	59.47827	55.01696	59.01890081	55.50563	66.79199	66.59728488	70.45213	29.30556
-2.25	-9.07355	-9.33706	-9.841199242	-9.14708	-10.6384	-8.012871428	-8.43982	-4.73916
+2.25	56.56237	52.46188	56.25299794	52.88893	63.59027	62.97099375	66.60947	27.90827

-2.3	-12.0863	-12.1553	-12.85928073	-11.9823	-14.0391	-11.30338861	-11.9193	-6.23154
+2.3	53.10534	49.42152	52.96391081	49.77858	59.78899	58.70045601	62.08458	26.24842
-2.35	-14.9738	-14.8447	-15.7412487	-14.691	-17.2921	-14.48823028	-15.2875	-7.65893
+2.35	49.84755	46.54728	49.85627342	46.84089	56.20234	54.69951046	57.84571	24.68155
-2.4	-18.4009	-18.0246	-19.1510597	-17.8969	-21.1468	-18.29959824	-19.319	-9.35011
+2.4	46.03703	43.176	46.2130174	43.39795	52.00258	50.04395593	52.9137	22.84612
-2.45	-21.6336	-21.0145	-22.35867037	-20.9138	-24.7776	-21.92028617	-23.1492	-10.9429
+2.45	42.48857	40.02874	42.81333248	40.18612	48.08781	45.72872858	48.34254	21.13464
-2.5	-25.4181	-24.5046	-26.10467129	-24.4381	-29.0228	-26.18504768	-27.6613	-12.805
+2.5	38.38179	36.37811	38.87144656	36.46298	43.55306	40.75563093	43.07485	19.1515
-2.55	-28.9449	-27.7489	-29.58824299	-27.7164	-32.9747	-30.18121543	-31.8896	-14.5382
+2.55	34.59387	33.00399	35.22942814	33.02385	39.36694	36.18645	38.23528	17.32034
-2.6	-33.0295	-31.4976	-33.61489311	-31.5066	-37.5469	-34.83190896	-36.8108	-16.5434
+2.6	30.22621	29.12559	31.04445506	29.07287	34.56068	30.96326974	32.70333	15.2174
-2.65	-36.7993	-34.9501	-37.32471277	-34.9995	-41.763	-39.14322129	-41.3732	-18.3921
+2.65	26.25169	25.57073	27.20976845	25.45331	30.16002	26.20052425	27.65931	13.29152
-2.7	-41.1269	-38.9057	-41.57647306	-39.0033	-46.5988	-44.11239	-46.6322	-20.5124
+2.7	21.72615	21.51613	22.8372464	21.32685	25.14571	20.79471869	21.93453	11.09666
-2.75	-45.0886	-42.5204	-45.46287272	-42.6639	-51.0223	-48.67845643	-51.4649	-22.4517
+2.75	17.61489	17.82669	18.85960095	17.57371	20.5873	15.89873464	16.7499	9.101005
-2.8	-49.602	-46.6315	-49.88420242	-46.829	-56.0582	-53.89864061	-56.9902	-24.6592
+2.8	12.96512	13.64746	14.35506953	13.32415	15.42843	10.72380281	11.28821	6.842097
-2.85	-53.7045	-50.3621	-53.89747482	-50.6103	-60.6324	-58.6591198	-62.0292	-26.6641
+2.85	8.826712	9.869594	10.28417217	9.484299	10.76909	7.918381747	8.381886	4.801612
-2.9	-58.3466	-54.577	-58.43283411	-54.8843	-65.8049	-64.06285874	-67.7494	-28.931
+2.9	6.834181	6.215929	6.690029951	6.306367	7.637882	7.918381747	8.381886	3.322226
-2.95	-62.5386	-58.3774	-62.52327172	-58.7396	-70.4729	-68.95741103	-72.9309	-30.9765
+2.95	6.834181	6.215929	6.690029951	6.306367	7.637882	7.918381747	8.381886	3.322226
-3	-67.2524	-62.6446	-67.11711997	-63.0701	-75.7185	-74.4772465	-78.7745	-33.2749
+3	6.834181	6.215929	6.690029951	6.306367	7.637882	7.918381747	8.381886	3.322226

2-Span: Shear (Max and Min) Raw Data Results - 180' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.83418	-14.7098	-16.2653	-9.24664	-11.1321	-12.0097
End Shear	67.34931	133.3094	144.3384	86.43133	104.1261	111.0009
-0.05	-6.83418	-14.7098	-16.2653	-9.24664	-11.1321	-12.0097
+0.05	62.77601	123.3375	133.4346	80.16031	96.59436	102.8647
-0.1	-6.83418	-14.7098	-16.2653	-9.24664	-11.1321	-12.0097
+0.1	58.13344	113.146	122.1617	73.74645	88.88964	94.54384
-0.15	-8.61569	-14.7098	-16.2653	-9.24664	-11.1321	-12.0097
+0.15	53.97733	104.1596	112.2331	68.0814	82.08316	87.19856
-0.2	-13.2211	-16.0018	-16.9284	-12.0309	-14.5338	-14.4429
+0.2	49.38955	94.29611	101.3488	61.85239	74.59762	79.1268
-0.25	-17.3814	-23.2623	-24.0375	-17.0177	-20.8427	-21.01
+0.25	45.34854	85.65999	91.83114	56.38823	68.02984	72.05053
-0.3	-21.9761	-32.567	-32.7464	-23.4629	-28.5759	-29.1551
+0.3	40.91803	76.25153	81.47681	50.42345	60.85872	64.33103
-0.35	-26.0252	-41.7391	-42.7173	-29.1641	-35.4153	-36.5822
+0.35	37.04332	68.07934	72.49669	45.2312	54.61487	57.6161
-0.4	-30.467	-51.857	-54.0126	-35.4427	-42.946	-44.766
+0.4	32.8273	59.25288	62.81385	39.61	47.8534	50.35204
-0.45	-34.3537	-60.7627	-63.9658	-40.9594	-49.5616	-51.9611
+0.45	29.17012	51.65824	54.49784	34.76068	42.01869	44.09076
-0.5	-38.5855	-70.5193	-74.8827	-46.9921	-56.7944	-59.8339
+0.5	25.22583	43.54078	45.62796	29.56243	35.76212	37.38531
-0.55	-42.2588	-79.0449	-84.4341	-52.2532	-63.101	-66.7046
+0.55	21.83738	36.63732	38.10264	25.12704	30.42175	31.67002
-0.6	-46.2233	-88.3133	-94.8311	-57.9605	-69.9409	-74.1633
+0.6	18.22207	29.35585	30.1872	20.43111	24.76531	25.62636
-0.65	-49.632	-96.3453	-103.854	-62.8951	-75.8531	-80.6172
+0.65	15.15357	23.2572	23.57913	16.48068	20.00452	20.54935
-0.7	-53.2722	-104.998	-113.59	-68.1978	-82.2047	-87.5587
+0.7	11.92447	16.93872	17.04974	12.36642	15.04345	15.27068
-0.75	-56.3651	-112.423	-121.957	-72.7347	-87.6375	-93.5036
+0.75	9.22713	12.12549	12.43642	8.971947	10.94744	11.0062
-0.8	-59.6239	-120.334	-130.89	-77.5533	-93.4056	-99.8245
+0.8	6.441468	7.706264	8.015057	5.97737	7.040364	7.102813
-0.85	-62.3499	-127.038	-138.477	-81.6217	-98.2737	-105.168
+0.85	4.189114	4.749631	4.872741	4.141037	4.549575	4.809038
-0.9	-65.1701	-134.079	-146.465	-85.8769	-103.363	-110.765
+0.9	2.094269	2.480729	2.253515	2.279041	2.503089	2.510087
-0.95	-67.4781	-139.948	-153.143	-89.4057	-107.581	-115.415
+0.95	0.859119	0.816976	0.83053	0.92654	0.988309	0.878886
-1	-69.8025	-145.994	-160.046	-93.0181	-111.897	-120.186
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.70421	145.6893	159.698	92.83678	111.6802	119.9458
-2.05	-8.08E-01	-0.75014	-0.76094	-0.85733	-0.91448	-0.78931
+2.05	67.62572	140.28	153.5215	89.60444	107.8188	115.6774
-2.1	-2.19728	-2.53656	-2.39416	-2.37196	-2.60473	-2.61178
+2.1	65.04738	133.7206	146.0581	85.66069	103.1046	110.4806
-2.15	-4.07432	-4.6077	-4.66989	-4.03806	-4.43691	-4.6806
+2.15	62.52457	127.4199	138.9102	81.85323	98.55072	105.4723
-2.2	-6.58243	-7.89424	-8.23668	-6.09034	-7.23467	-7.24411
+2.2	59.47827	119.9278	130.4318	77.3064	93.11008	99.50035
-2.25	-9.07355	-11.8599	-12.1928	-8.78129	-10.7173	-10.7755
+2.25	56.56237	112.8493	122.4389	72.99483	87.94895	93.84455

-2.3	-12.0863	-17.258	-17.2056	-12.575	-15.295	-15.538
+2.3	53.10534	104.5514	113.0869	67.92426	81.87718	87.20048
-2.35	-14.9738	-22.9117	-23.2051	-16.2563	-19.7341	-20.2613
+2.35	49.84755	96.80891	104.3758	63.17961	76.19397	80.9895
-2.4	-18.4009	-29.7276	-30.5902	-20.6713	-25.0547	-25.9353
+2.4	46.03703	87.83229	94.29173	57.66467	69.58632	73.77652
-2.45	-21.6336	-36.2429	-37.6728	-24.8731	-30.116	-31.3431
+2.45	42.48857	79.53929	84.98879	52.55794	63.46624	67.10267
-2.5	-25.4181	-43.9582	-46.0831	-29.8302	-36.0844	-37.7305
+2.5	38.38179	70.01089	74.31411	46.67801	56.41795	59.42397
-2.55	-28.9449	-51.2215	-54.0196	-34.4814	-41.6826	-43.7304
+2.55	34.59387	61.28104	64.54605	41.28021	49.94622	52.37958
-2.6	-33.0295	-59.7094	-63.3137	-39.9011	-48.2036	-50.728
+2.6	30.22621	51.32788	53.42223	35.11467	42.55254	44.33832
-2.65	-36.7993	-67.607	-71.9775	-44.9308	-54.2535	-57.2277
+2.65	26.25169	42.2748	43.31559	29.49678	35.81435	37.01571
-2.7	-41.1269	-76.7404	-82.0138	-50.7337	-61.2317	-64.7324
+2.7	21.72615	32.02392	32.38034	23.12498	28.17051	28.71508
-2.75	-45.0886	-85.1587	-91.2785	-56.0708	-67.6482	-71.6396
+2.75	17.61489	23.73945	24.45383	17.35808	21.25111	21.41847
-2.8	-49.602	-94.8106	-101.916	-62.1776	-74.9884	-79.5481
+2.8	12.96512	15.659	16.50858	11.84362	14.16306	14.2041
-2.85	-53.7045	-103.636	-111.655	-67.7511	-81.6863	-86.7704
+2.85	8.826712	14.70982	16.26529	9.246639	11.13206	12.00975
-2.9	-58.3466	-113.679	-122.751	-74.0824	-89.2933	-94.9796
+2.9	6.834181	14.70982	16.26529	9.246639	11.13206	12.00975
-2.95	-62.5386	-122.798	-132.837	-79.8213	-96.1872	-102.425
+2.95	6.834181	14.70982	16.26529	9.246639	11.13206	12.00975
-3	-67.2524	-133.106	-144.252	-86.2979	-103.966	-110.831
+3	6.834181	14.70982	16.26529	9.246639	11.13206	12.00975

2-Span: Moment (Max and Min) Raw Data Results - 180' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.41E-13	-1.7E-13	-2.01597E-13	-2E-13	-1.77E-13	-1.40261E-13	-1.3E-13	-1.6E-13	-1.58586E-13	-1.6E-13
End Shear	3.69E-13	2.09E-13	2.40662E-13	2.05E-13	2.09E-13	1.42146E-13	1.95E-13	1.97E-13	1.95633E-13	1.94E-13
-0.05	-61.5076	-42.8572	-61.33519889	-65.7547	-94.9167	-34.35084594	-46.4002	-53.1518	-59.53172735	-66.2699
+0.05	564.9841	399.5607	540.5046519	557.1562	693.105	321.3351137	433.567	492.108	541.1981913	591.5205
-0.1	-123.015	-85.7145	-122.6703978	-131.509	-189.833	-68.70169188	-92.8005	-106.304	-119.0634547	-132.54
+0.1	1050.825	743.9362	1001.458509	1028.3	1265.279	598.4369835	807.4165	915.774	1007.654494	1103.269
-0.15	-184.523	-128.572	-184.0055967	-197.264	-284.75	-103.0525378	-139.201	-159.455	-178.595182	-198.81
+0.15	1457.421	1033.371	1383.37348	1415.241	1726.702	831.5890191	1121.866	1271.39	1411.64323	1543.118
-0.2	-246.03	-171.429	-245.3407956	-263.019	-379.667	-137.4033838	-185.601	-212.607	-238.1269094	-265.08
+0.2	1787.108	1268.886	1688.154188	1735.089	2121.418	1021.538318	1378.001	1560.254	1741.348323	1909.806
-0.25	-307.538	-214.286	-306.6759945	-328.774	-474.584	-171.7542297	-232.001	-265.759	-297.6586367	-331.35
+0.25	2041.566	1451.844	1931.897587	1974.876	2433.798	1169.357095	1577.274	1789.395	1997.903412	2201.785
-0.3	-369.045	-257.143	-368.0111933	-394.528	-569.5	-206.1050756	-278.401	-318.911	-357.1903641	-397.62
+0.3	2227.784	1583.943	2103.834511	2155.388	2666.824	1276.38807	1728.805	1962.532	2183.647765	2415.049
-0.35	-430.553	-300.001	-429.3463922	-460.283	-664.417	-240.4559216	-324.802	-372.063	-416.7220914	-463.89
+0.35	2356.059	1676.116	2206.901449	2276.003	2827.762	1344.244473	1830.153	2074.655	2311.900294	2552.088
-0.4	-492.061	-342.858	-490.6815911	-526.038	-759.334	-274.8067675	-371.202	-425.214	-476.2538188	-530.16
+0.4	2416.778	1721.381	2255.807739	2348.795	2905.29	1374.810363	1880.356	2128.794	2376.69294	2622.727
-0.45	-553.568	-385.715	-552.01679	-591.793	-854.25	-309.1576135	-417.602	-478.366	-535.7855461	-596.429
+0.45	2413.753	1722.035	2241.864897	2351.847	2886.172	1370.240171	1882.437	2127.797	2379.372079	2630.537
-0.5	-615.076	-428.572	-613.3519889	-657.547	-949.167	-343.5084594	-464.002	-531.518	-595.3172735	-662.699
+0.5	2371.395	1690.451	2207.117862	2305.048	2795.213	1348.119594	1847.213	2089.659	2334.370473	2577.743
-0.55	-676.583	-471.43	-674.6871878	-723.302	-1044.08	-377.8593053	-510.403	-584.67	-654.8490008	-728.969
+0.55	2274.947	1620.782	2122.239631	2200.57	2713.717	1296.399627	1770.7	2004.732	2236.317855	2464.947
-0.6	-738.091	-514.287	-736.0223867	-789.057	-1139	-412.2101513	-556.803	-637.822	-714.3807282	-795.239
+0.6	2125.073	1514.407	1983.026587	2039.216	2534.587	1214.580882	1654.717	1874.044	2087.489968	2302.586
-0.65	-799.599	-557.144	-797.3575856	-854.812	-1233.92	-446.5609972	-603.203	-690.973	-773.9124555	-861.509
+0.65	1927.165	1375.108	1798.048286	1836.261	2254.331	1105.621498	1503.367	1702.262	1893.167816	2089.776
-0.7	-861.106	-600.001	-858.6927845	-920.566	-1328.83	-480.9118432	-649.603	-744.125	-833.4441829	-927.779
+0.7	1687.104	1207.009	1566.231632	1583.347	1909.798	972.7507886	1321.12	1494.475	1659.103611	1831.417
-0.75	-922.614	-642.859	-920.0279834	-986.321	-1423.75	-515.2626891	-696.004	-797.277	-892.9759102	-994.049
+0.75	1411.255	1014.569	1293.708819	1287.283	1482.326	819.4682602	1112.809	1256.191	1391.721846	1534.349
-0.8	-984.121	-685.716	-981.3631823	-1052.08	-1518.67	-549.613535	-742.404	-850.429	-952.5076376	-1060.32
+0.8	1106.474	802.5849	987.1077702	955.2054	980.6657	649.5442394	883.6355	993.3353	1097.105823	1205.936
-0.85	-1045.63	-728.573	-1042.698381	-1117.83	-1642.83	-583.964381	-788.804	-903.58	-1012.039365	-1126.59
+0.85	780.1008	576.1943	653.5515671	595.2094	545.4796	467.0194757	639.3607	712.2554	783.0268947	854.0657
-0.9	-1107.14	-771.43	-1104.03358	-1183.59	-1820.28	-618.3152269	-835.204	-956.732	-1071.571092	-1192.86
+0.9	439.9654	340.9368	316.950613	281.4988	251.1619	276.2055961	386.0158	419.7167	457.1923916	487.1504
-0.95	-1168.64	-814.288	-1165.368779	-1249.34	-2042.42	-652.6660728	-881.605	-1009.88	-1131.10282	-1259.13
+0.95	146.9093	130.583	130.5179759	103.8104	86.83487	100.9644264	145.893	151.9642	159.2025016	159.1857
-1	-1230.15	-857.145	-1226.704	-1315.09	-2375.04	-687.0168784	-928.005	-1063.04	-1190.634532	-1325.4
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1230.15	-857.145	-1226.704	-1315.09	-2375.04	-687.0168784	-928.005	-1063.04	-1190.634532	-1325.4
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-1168.64	-814.288	-1165.3688	-1249.34	-2042.42	-652.6660335	-881.605	-1009.88	-1131.102806	-1259.13
+2.05	146.9093	130.5844	130.5192569	103.8113	86.83548	100.9722572	145.8969	151.9718	159.2068357	159.19
-2.1	-1107.14	-771.43	-1104.0336	-1183.59	-1820.28	-618.3151886	-835.204	-956.732	-1071.571079	-1192.86
+2.1	440.2026	340.9468	316.9579235	281.5052	251.1608	276.2100769	386.0237	419.7231	457.2014615	487.1522
-2.15	-1045.63	-728.573	-1042.6984	-1117.83	-1642.83	-583.9643437	-788.804	-903.58	-1012.039353	-1126.59
+2.15	780.3682	576.1935	653.5585101	595.2147	545.4785	467.0245131	639.3694	712.2624	783.0258395	854.0683
-2.2	-984.122	-685.716	-981.3632003	-1052.08	-1518.67	-549.6134988	-742.404	-850.429	-952.5076267	-1060.32
+2.2	1106.757	802.5844	987.1150039	955.211	980.6691	649.5494289	883.6336	993.3428	1097.10537	1205.939
-2.25	-922.614	-642.859	-920.0280003	-986.321	-1423.75	-515.2626539	-696.004	-797.277	-892.9759004	-994.049

+2.25	1411.542	1014.568	1293.716015	1287.282	1482.33	819.4735168	1112.807	1256.198	1391.722275	1534.353
-2.3	-861.107	-600.001	-858.6928004	-920.566	-1328.83	-480.911809	-649.603	-744.125	-833.4441741	-927.779
+2.3	1687.382	1207.009	1566.238257	1583.345	1909.8	972.7558078	1321.118	1494.483	1659.103115	1831.421
-2.35	-799.599	-557.144	-797.3576004	-854.812	-1233.92	-446.5609641	-603.203	-690.973	-773.9124478	-861.509
+2.35	1927.424	1375.107	1798.053932	1836.265	2254.332	1105.626067	1503.365	1702.269	1893.166714	2089.778
-2.4	-738.092	-514.287	-736.0224004	-789.057	-1139	-412.2101193	-556.803	-637.822	-714.3807215	-795.239
+2.4	2125.301	1514.405	1983.031174	2039.219	2534.589	1214.584919	1654.714	1874.05	2087.487934	2302.587
-2.45	-676.584	-471.43	-674.6872005	-723.302	-1044.08	-377.8592744	-510.403	-584.67	-654.8489951	-728.969
+2.45	2275.135	1620.779	2122.244347	2200.566	2713.716	1296.402996	1770.696	2004.737	2236.314708	2464.947
-2.5	-615.076	-428.572	-613.3520005	-657.547	-949.167	-343.5084295	-464.002	-531.518	-595.3172688	-662.699
+2.5	2371.534	1690.447	2207.120788	2305.052	2795.216	1348.12208	1847.208	2089.662	2334.365835	2577.741
-2.55	-553.569	-385.715	-552.0168005	-591.793	-854.25	-309.1575846	-417.602	-478.366	-535.7855425	-596.429
+2.55	2413.651	1722.039	2241.862931	2351.844	2886.174	1370.238438	1882.432	2127.795	2379.367019	2630.54
-2.6	-492.061	-342.858	-490.6816006	-526.038	-759.334	-274.8067397	-371.202	-425.214	-476.2538162	-530.16
+2.6	2416.616	1721.385	2255.803938	2348.799	2905.289	1374.807637	1880.36	2128.789	2376.696939	2622.728
-2.65	-430.553	-300.001	-429.3464006	-460.283	-664.417	-240.4558948	-324.802	-372.063	-416.7220899	-463.89
+2.65	2355.831	1676.117	2206.904985	2276.001	2827.764	1344.240402	1830.156	2074.649	2311.902127	2552.086
-2.7	-369.046	-257.143	-368.0112006	-394.528	-569.5	-206.1050499	-278.401	-318.911	-357.1903635	-397.62
+2.7	2227.483	1583.943	2103.839059	2155.39	2666.825	1276.38266	1728.806	1962.535	2183.647292	2415.045
-2.75	-307.538	-214.286	-306.6760007	-328.774	-474.584	-171.754205	-232.001	-265.759	-297.6586372	-331.35
+2.75	2041.347	1451.842	1931.899928	1974.873	2433.8	1169.350504	1577.274	1789.396	1997.900556	2201.779
-2.8	-246.031	-171.429	-245.3408007	-263.019	-379.667	-137.4033601	-185.601	-212.607	-238.1269109	-265.08
+2.8	1786.809	1268.883	1688.154003	1735.092	2121.42	1021.530303	1377.998	1560.253	1741.342977	1909.808
-2.85	-184.523	-128.572	-184.0056007	-197.264	-284.75	-103.0525152	-139.201	-159.455	-178.5951846	-198.81
+2.85	1457.037	1033.365	1383.370807	1415.241	1726.701	831.5793301	1121.861	1271.386	1411.635313	1543.117
-2.9	-123.015	-85.7145	-122.6704008	-131.509	-189.833	-68.70167029	-92.8005	-106.304	-119.0634583	-132.54
+2.9	1050.239	743.9285	1001.453039	1028.297	1265.28	598.4255219	807.4095	915.7676	1007.654718	1103.27
-2.95	-61.5076	-42.8572	-61.33520079	-65.7547	-94.9167	-34.3508254	-46.4003	-53.1518	-59.53173195	-66.2699
+2.95	565.075	399.5511	540.4966552	557.1507	693.1029	321.3367623	433.5584	492.0992	541.1957675	591.5184
-3	-3.41E-13	-1.9E-13	-2.152E-13	-1.8E-13	-2.35E-13	-1.46731E-13	-1.6E-13	-1.9E-13	-1.91064E-13	-1.9E-13
+3	5.69E-13	3.34E-13	4.37217E-13	3.66E-13	4.42E-13	2.75711E-13	3.67E-13	3.75E-13	3.92166E-13	3.9E-13

2-Span: Moment (Max and Min) Raw Data Results - 180' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.41E-13	-2.1E-13	-2.2E-13	-1.5E-13	-1.8E-13	-2.3E-13	-2.4E-13	-1.5E-13
End Shear	3.69E-13	2.9E-13	3.05E-13	2.44E-13	2.57E-13	2.71E-13	2.87E-13	2E-13
-0.05	-61.5076	-55.9434	-60.2103	-56.7573	-68.7409	-71.2654	-75.437	-29.8999
+0.05	564.9841	527.6232	565.1667	531.0125	637.2592	623.3387	659.2665	279.8744
-0.1	-123.015	-111.887	-120.421	-113.515	-137.482	-142.531	-150.874	-59.7998
+0.1	1050.825	983.289	1052.847	988.9966	1185.994	1154.309	1220.744	520.7564
-0.15	-184.523	-167.83	-180.631	-170.272	-206.223	-213.796	-226.311	-89.6997
+0.15	1457.421	1367.314	1463.447	1374.349	1646.845	1593.618	1685.195	723.1328
-0.2	-246.03	-223.773	-240.841	-227.029	-274.964	-285.062	-301.748	-119.6
+0.2	1787.108	1680.953	1798.348	1688.387	2021.47	1954.641	2067.368	887.7283
-0.25	-307.538	-279.717	-301.051	-283.787	-343.705	-356.327	-377.185	-149.5
+0.25	2041.566	1925.9	2059.402	1932.875	2326.27	2242.837	2373.194	1015.522
-0.3	-369.045	-335.66	-361.262	-340.544	-412.446	-427.593	-452.622	-179.399
+0.3	2227.784	2104.289	2248.935	2121.926	2551.592	2451.157	2593.122	1108.048
-0.35	-430.553	-391.604	-421.472	-397.301	-481.187	-498.858	-528.059	-209.299
+0.35	2356.059	2222.913	2381.282	2246.617	2698.348	2588.636	2739.298	1166.362
-0.4	-492.061	-447.547	-481.682	-454.058	-549.928	-570.123	-603.496	-239.199
+0.4	2416.778	2287.482	2448.577	2308.85	2769.593	2647.956	2802.668	1192.134
-0.45	-553.568	-503.49	-541.892	-510.816	-618.668	-641.389	-678.933	-269.099
+0.45	2413.753	2293.411	2452.955	2312.216	2769.507	2634.414	2788.767	1185.739
-0.5	-615.076	-559.434	-602.103	-567.573	-687.409	-712.654	-754.37	-298.999
+0.5	2371.395	2248.815	2406.268	2268.526	2719.359	2592.231	2743.82	1168.891
-0.55	-676.583	-615.377	-662.313	-624.33	-756.15	-783.92	-829.807	-328.899
+0.55	2274.947	2153.572	2305.35	2174.206	2608.295	2491.239	2636.567	1125.059
-0.6	-738.091	-671.32	-722.523	-681.088	-824.891	-855.185	-905.244	-358.799
+0.6	2125.073	2011.375	2153.566	2031.89	2438.365	2325.879	2461.167	1054.66
-0.65	-799.599	-727.264	-782.734	-737.845	-893.632	-926.451	-980.681	-388.699
+0.65	1927.165	1827.581	1956.264	1846.454	2215.612	2101.937	2223.821	960.27
-0.7	-861.106	-783.207	-842.944	-794.602	-962.373	-997.716	-1056.12	-418.599
+0.7	1687.104	1610.046	1719.268	1623.372	1946.621	1826.171	1931.691	844.7055
-0.75	-922.614	-839.15	-903.154	-851.36	-1031.11	-1068.98	-1131.55	-448.499
+0.75	1411.255	1359.967	1448.873	1368.561	1638.517	1505.912	1592.546	711.0191
-0.8	-984.121	-895.094	-963.364	-908.117	-1099.86	-1140.25	-1206.99	-478.399
+0.8	1106.474	1083.518	1151.846	1088.437	1298.968	1149.069	1214.768	562.5013
-0.85	-1045.63	-951.037	-1023.57	-964.874	-1168.6	-1211.51	-1282.43	-508.298
+0.85	780.1008	787.3143	835.433	790.154	936.181	764.1244	807.3446	402.681
-0.9	-1107.14	-1006.98	-1083.78	-1021.63	-1237.34	-1282.78	-1357.87	-538.198
+0.9	439.9654	482.533	507.5396	480.7337	558.9066	360.5025	381.2208	235.3237
-0.95	-1168.64	-1062.92	-1144	-1078.39	-1306.08	-1354.04	-1433.3	-568.098
+0.95	146.9093	185.4794	185.4794	182.9735	197.7958	140.9709	148.3904	104.8118
-1	-1230.15	-1118.87	-1204.21	-1135.15	-1374.82	-1425.31	-1508.74	-598.001
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1230.15	-1118.87	-1204.21	-1135.15	-1374.82	-1425.31	-1508.74	-598.001
+2	0	0	0	0	0	0	0	0
-2.05	-1168.64	-1062.92	-1144	-1078.39	-1306.08	-1354.04	-1433.3	-568.101
+2.05	146.9093	185.4814	185.4814	182.9796	197.8038	140.9723	148.3919	104.5604
-2.1	-1107.14	-1006.98	-1083.78	-1021.63	-1237.34	-1282.78	-1357.87	-538.201
+2.1	440.2026	482.5318	507.5539	480.7423	558.9119	360.5044	381.223	235.3208
-2.15	-1045.63	-951.037	-1023.57	-964.874	-1168.6	-1211.51	-1282.43	-508.301
+2.15	780.3682	787.3148	835.4316	790.1634	936.1873	764.1231	807.3435	402.6779
-2.2	-984.122	-895.094	-963.364	-908.117	-1099.86	-1140.25	-1206.99	-478.401
+2.2	1106.757	1083.519	1151.846	1088.447	1298.974	1149.068	1214.767	562.4985
-2.25	-922.614	-839.15	-903.154	-851.359	-1031.11	-1068.98	-1131.55	-448.501

+2.25	1411.542	1359.968	1448.872	1368.558	1638.524	1505.911	1592.546	711.0163
-2.3	-861.107	-783.207	-842.944	-794.602	-962.373	-997.716	-1056.12	-418.6
+2.3	1687.382	1610.047	1719.267	1623.369	1946.628	1826.17	1931.689	844.7026
-2.35	-799.599	-727.264	-782.734	-737.845	-893.632	-926.451	-980.681	-388.7
+2.35	1927.424	1827.582	1956.263	1846.451	2215.618	2101.935	2223.819	960.2669
-2.4	-738.092	-671.32	-722.523	-681.088	-824.891	-855.185	-905.244	-358.8
+2.4	2125.301	2011.374	2153.564	2031.885	2438.37	2325.876	2461.164	1054.657
-2.45	-676.584	-615.377	-662.313	-624.33	-756.15	-783.92	-829.807	-328.9
+2.45	2275.135	2153.57	2305.346	2174.201	2608.299	2491.234	2636.562	1125.056
-2.5	-615.076	-559.434	-602.103	-567.573	-687.409	-712.654	-754.37	-299
+2.5	2371.534	2248.811	2406.263	2268.533	2719.361	2592.236	2743.826	1168.888
-2.55	-553.569	-503.49	-541.892	-510.816	-618.668	-641.389	-678.933	-269.1
+2.55	2413.651	2293.415	2452.961	2312.211	2769.507	2634.41	2788.762	1187.272
-2.6	-492.061	-447.547	-481.682	-454.058	-549.928	-570.123	-603.496	-239.2
+2.6	2416.616	2287.484	2448.581	2308.843	2769.59	2647.962	2802.673	1192.132
-2.65	-430.553	-391.603	-421.472	-397.301	-481.187	-498.858	-528.059	-209.3
+2.65	2355.831	2222.913	2381.284	2246.621	2698.343	2588.639	2739.301	1166.36
-2.7	-369.046	-335.66	-361.262	-340.544	-412.446	-427.593	-452.622	-179.4
+2.7	2227.483	2104.288	2248.935	2121.928	2551.585	2451.157	2593.123	1108.046
-2.75	-307.538	-279.717	-301.051	-283.787	-343.705	-356.327	-377.185	-149.5
+2.75	2041.347	1925.896	2059.399	1932.875	2326.273	2242.835	2373.191	1015.52
-2.8	-246.031	-223.773	-240.841	-227.029	-274.964	-285.062	-301.748	-119.6
+2.8	1786.809	1680.947	1798.342	1688.384	2021.47	1954.636	2067.363	887.7302
-2.85	-184.523	-167.83	-180.631	-170.272	-206.223	-213.796	-226.311	-89.7001
+2.85	1457.037	1367.305	1463.439	1374.344	1646.842	1593.616	1685.193	723.1342
-2.9	-123.015	-111.887	-120.421	-113.515	-137.482	-142.531	-150.874	-59.8001
+2.9	1050.239	983.2774	1052.835	988.9886	1185.987	1154.303	1220.738	520.7573
-2.95	-61.5076	-55.9433	-60.2103	-56.7573	-68.741	-71.2654	-75.437	-29.9
+2.95	565.075	527.6089	565.1527	531.0025	637.2497	623.3303	659.2577	279.8749
-3	-3.41E-13	-2.3E-13	-2.3E-13	-1.9E-13	-2.5E-13	-2.5E-13	-2.6E-13	-1.6E-13
+3	5.69E-13	4.9E-13	5.07E-13	4.4E-13	4.92E-13	5.03E-13	5.31E-13	2.44E-13

2-Span: Moment (Max and Min) Raw Data Results - 180' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.41E-13	-3.4E-13	-3.3E-13	-2.3E-13	-3.1E-13	-2.3E-13
End Shear	3.69E-13	3.27E-13	3.73E-13	2.82E-13	3.31E-13	3.2E-13
-0.05	-61.5076	-132.388	-146.388	-83.2198	-100.189	-108.088
+0.05	564.9841	1110.99	1200.912	721.4984	869.8757	926.3711
-0.1	-123.015	-264.777	-292.775	-166.44	-200.377	-216.175
+0.1	1050.825	2049.321	2221.931	1334.776	1609.37	1711.929
-0.15	-184.523	-397.165	-439.163	-249.659	-300.566	-324.263
+0.15	1457.421	2851.341	3083.205	1840.693	2225.755	2370.593
-0.2	-246.03	-529.554	-585.55	-332.879	-400.754	-432.351
+0.2	1787.108	3489.264	3826.313	2268.507	2735.867	2909.23
-0.25	-307.538	-661.942	-731.938	-416.099	-500.943	-540.439
+0.25	2041.566	3996.719	4398.279	2597.12	3124.172	3343.623
-0.3	-369.045	-794.33	-878.326	-499.319	-601.131	-648.526
+0.3	2227.784	4381.333	4831.529	2833.378	3397.915	3652.219
-0.35	-430.553	-926.719	-1024.71	-582.538	-701.32	-756.614
+0.35	2356.059	4637.705	5107.372	2986.134	3575.762	3840.465
-0.4	-492.061	-1059.11	-1171.1	-665.758	-801.508	-864.702
+0.4	2416.778	4781.82	5239.678	3047.933	3645.215	3929.43
-0.45	-553.568	-1191.5	-1317.49	-748.978	-901.697	-972.789
+0.45	2413.753	4784.694	5271.383	3025.014	3613.316	3906.754
-0.5	-615.076	-1323.88	-1463.88	-832.198	-1001.89	-1080.88
+0.5	2371.395	4692.625	5154.727	2979.696	3561.109	3843.906
-0.55	-676.583	-1456.27	-1610.26	-915.417	-1102.07	-1188.96
+0.55	2274.947	4483.611	4907.713	2869.243	3431.519	3694.106
-0.6	-738.091	-1588.66	-1756.65	-998.637	-1202.26	-1297.05
+0.6	2125.073	4156.042	4576.037	2681.95	3209.339	3445.016
-0.65	-799.599	-1721.05	-1903.04	-1081.86	-1302.45	-1405.14
+0.65	1927.165	3730.896	4120.807	2424.544	2902.348	3117.513
-0.7	-861.106	-1853.44	-2049.43	-1165.08	-1402.64	-1513.23
+0.7	1687.104	3225.86	3555.8	2104.859	2519.833	2707.213
-0.75	-922.614	-1985.83	-2195.81	-1248.3	-1502.83	-1621.32
+0.75	1411.255	2632.942	2894.08	1731.407	2076.207	2224.896
-0.8	-984.121	-2118.21	-2342.2	-1331.52	-1603.02	-1729.4
+0.8	1106.474	1966.691	2155.203	1313.376	1575.274	1682.346
-0.85	-1045.63	-2250.6	-2488.59	-1414.74	-1703.21	-1837.49
+0.85	780.1008	1242.738	1356.6	860.6286	1027.91	1092.222
-0.9	-1107.14	-2382.99	-2634.98	-1497.96	-1803.39	-1945.58
+0.9	439.9654	544.5505	606.733	420.9065	489.9141	518.8464
-0.95	-1168.64	-2515.38	-2781.36	-1581.18	-1903.58	-2053.67
+0.95	146.9093	194.8822	180.7866	166.9473	197.788	197.8594
-1	-1230.15	-2647.77	-2927.75	-1664.4	-2003.77	-2161.75
+1	0	0	0	0	0	0
(Span 2) -2	-1230.15	-2647.77	-2927.75	-1664.4	-2003.77	-2161.75
+2	0	0	0	0	0	0
-2.05	-1168.64	-2515.38	-2781.36	-1581.18	-1903.58	-2053.67
+2.05	146.9093	194.8776	180.7858	166.9489	197.7836	197.855
-2.1	-1107.14	-2382.99	-2634.98	-1497.96	-1803.39	-1945.58
+2.1	440.2026	544.5527	606.7332	420.9071	489.9193	518.8534
-2.15	-1045.63	-2250.6	-2488.59	-1414.74	-1703.2	-1837.49
+2.15	780.3682	1242.742	1356.599	860.6275	1027.911	1092.226
-2.2	-984.122	-2118.21	-2342.2	-1331.52	-1603.02	-1729.4
+2.2	1106.757	1966.695	2156.714	1313.375	1575.275	1682.35
-2.25	-922.614	-1985.83	-2195.81	-1248.3	-1502.83	-1621.32

+2.25	**1411.542**	**2632.947**	**2895.642**	**1731.407**	**2076.208**	**2224.901**
-2.3	**-861.107**	**-1853.44**	**-2049.43**	**-1165.08**	**-1402.64**	**-1513.23**
+2.3	**1687.382**	**3225.864**	**3554.657**	**2104.858**	**2519.832**	**2707.216**
-2.35	**-799.599**	**-1721.05**	**-1903.04**	**-1081.86**	**-1302.45**	**-1405.14**
+2.35	**1927.424**	**3730.898**	**4120.355**	**2424.541**	**2902.346**	**3117.516**
-2.4	**-738.092**	**-1588.66**	**-1756.65**	**-998.637**	**-1202.26**	**-1297.05**
+2.4	**2125.301**	**4157.045**	**4576.037**	**2681.946**	**3209.336**	**3445.016**
-2.45	**-676.584**	**-1456.27**	**-1610.26**	**-915.417**	**-1102.07**	**-1188.96**
+2.45	**2275.135**	**4483.618**	**4907.713**	**2869.237**	**3431.525**	**3694.103**
-2.5	**-615.076**	**-1323.88**	**-1463.88**	**-832.198**	**-1001.89**	**-1080.88**
+2.5	**2371.534**	**4692.628**	**5156.399**	**2979.702**	**3561.113**	**3843.901**
-2.55	**-553.569**	**-1191.5**	**-1317.49**	**-748.978**	**-901.697**	**-972.789**
+2.55	**2413.651**	**4784.692**	**5271.382**	**3025.01**	**3613.314**	**3906.749**
-2.6	**-492.061**	**-1059.11**	**-1171.1**	**-665.758**	**-801.508**	**-864.702**
+2.6	**2416.616**	**4781.814**	**5239.678**	**3047.939**	**3645.21**	**3929.434**
-2.65	**-430.553**	**-926.719**	**-1024.71**	**-582.538**	**-701.32**	**-756.614**
+2.65	**2355.831**	**4637.694**	**5107.371**	**2986.138**	**3575.766**	**3840.465**
-2.7	**-369.046**	**-794.33**	**-878.326**	**-499.319**	**-601.131**	**-648.526**
+2.7	**2227.483**	**4381.329**	**4832.002**	**2833.38**	**3397.916**	**3652.216**
-2.75	**-307.538**	**-661.942**	**-731.938**	**-416.099**	**-500.943**	**-540.439**
+2.75	**2041.347**	**3996.722**	**4398.279**	**2597.118**	**3124.169**	**3343.615**
-2.8	**-246.031**	**-529.554**	**-585.55**	**-332.879**	**-400.754**	**-432.351**
+2.8	**1786.809**	**3489.897**	**3826.311**	**2268.501**	**2735.86**	**2909.224**
-2.85	**-184.523**	**-397.165**	**-439.163**	**-249.659**	**-300.566**	**-324.263**
+2.85	**1457.037**	**2851.346**	**3084.565**	**1840.69**	**2225.756**	**2370.595**
-2.9	**-123.015**	**-264.777**	**-292.775**	**-166.44**	**-200.377**	**-216.175**
+2.9	**1050.239**	**2049.32**	**2221.931**	**1334.77**	**1609.366**	**1711.926**
-2.95	**-61.5076**	**-132.388**	**-146.388**	**-83.2198**	**-100.189**	**-108.088**
+2.95	**565.075**	**1110.984**	**1200.913**	**721.4886**	**869.8681**	**926.3639**
-3	**-3.41E-13**	**-3.6E-13**	**-3.6E-13**	**-3E-13**	**-3.6E-13**	**-3.3E-13**
+3	**5.69E-13**	**6.98E-13**	**6.71E-13**	**5.01E-13**	**6.23E-13**	**5.8E-13**

2-Span: Shear (Max and Min) Raw Data Results - 190' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-29.20386391	-24.45078474	-36.47345138	-11.99502463	-12.91069075	-12.17054167	-14.74149268	-15.32190732	-16.2192	-6.41679681
End Shear	250.7266739	208.250467	293.6369718	121.2368119	129.9298405	122.1150834	146.6838838	144.8955266	153.2656	64.419326
-0.05	-29.51845872	-24.76537955	-36.7565867	-11.99502463	-12.91069075	-12.17054167	-14.74149268	-15.32190732	-16.2192	-6.41679681
+0.05	229.7622663	190.4883947	266.8858535	113.2475168	121.3285609	114.0097659	136.864962	134.5805278	142.3452	60.14771398
-0.1	-30.56613178	-27.60039861	-38.06650679	-11.99502463	-12.91069075	-12.17054167	-14.74149268	-15.32190732	-16.2192	-6.41679681
+0.1	208.8221789	172.7326477	239.7422141	105.0756546	112.5328278	105.7194027	126.8263015	124.043058	131.1899	55.74853477
-0.15	-36.70106793	-35.99214869	-47.36688419	-18.85760152	-19.67847979	-18.16615463	-20.69112666	-15.32190732	-16.2192	-9.217704587
+0.15	190.5990804	157.4232558	216.7498892	97.77661913	104.6783973	98.31738613	117.8672132	114.671233	121.2691	51.82200339
-0.2	-49.98333107	-45.94421022	-59.36459568	-26.97695955	-28.4274669	-26.41846509	-30.70432438	-21.98850099	-23.1458	-13.60311373
+0.2	171.1724553	141.1763356	192.2633535	89.75362278	96.04700004	90.18443711	108.0278341	104.4154211	110.413	47.50919173
-0.25	-62.49765067	-55.43943086	-70.6372974	-34.20935056	-36.22256098	-33.77217667	-39.63108539	-31.19508517	-32.8766	-17.51216138
+0.25	154.4505739	127.2552178	171.2048447	82.63318455	88.38852166	82.96939483	99.30300926	95.35544816	100.8232	43.68450903
-0.3	-76.94571194	-66.55493293	-83.65100493	-42.13675096	-44.76884364	-41.83584459	-49.42410192	-41.71203008	-44.0135	-21.79988744
+0.3	136.7417305	112.5802203	148.9436791	74.8582031	80.0282365	75.09453108	89.78493759	85.51096822	90.40358	39.51165705
-0.35	-90.39847645	-77.0371514	-95.76740074	-49.15177357	-52.33346547	-48.97448115	-58.09779497	-51.05999711	-53.9131	-25.59690246
+0.35	121.6069214	100.0965567	129.9729657	68.00558354	72.66179552	68.15706274	81.40419483	76.87954104	81.26844	35.83705962
-0.4	-105.7979027	-89.17824543	-109.6361224	-56.78808384	-60.57028486	-56.74883561	-67.54860416	-61.28333362	-64.7401	-29.73335438
+0.4	105.7028193	87.03967768	110.1220984	60.57775009	64.67938088	60.64094985	72.32944851	67.57607066	71.42266	31.85776718
-0.45	-120.0209377	-100.5157825	-122.44448	-63.4965026	-67.80833506	-63.58179016	-75.8594024	-70.30870508	-74.299	-33.37009995
+0.45	92.22573122	76.0274389	93.39876603	54.08217613	57.70106736	54.07165755	64.40260893	59.48991058	62.86574	28.38148364
-0.5	-136.1764336	-113.5276998	-136.9920271	-70.74257901	-75.62892159	-70.96616454	-84.84598471	-80.10875604	-84.6789	-37.30167852
+0.5	78.19642289	64.61798556	76.12791433	47.10063327	50.20329215	47.01495846	55.89320412	50.85711872	53.73108	24.64934527
-0.55	-150.9863763	-125.5736739	-158.0889577	-77.05517927	-82.44432277	-77.4028369	-92.68406982	-88.69480794	-93.7734	-40.7299249
+0.55	66.43250381	55.09594863	62.06961382	41.0513399	43.70920554	40.90444954	48.53009397	43.4329285	45.87596	21.41962275
-0.6	-167.6857427	-139.2847739	-181.8345409	-83.81187958	-89.7419077	-84.29656744	-101.0844089	-97.94189569	-103.569	-44.40303317
+0.6	54.33114764	45.34632853	48.93025108	34.61522035	36.80282822	34.40783628	40.7080575	35.60050619	37.58973	17.98823193
-0.65	-182.8840178	-151.8771003	-203.2708456	-89.63942606	-96.03856008	-90.24635203	-108.3399554	-105.9719311	-112.076	-47.57453565
+0.65	44.32064672	37.31806141	39.91503856	29.10142859	30.88905252	28.84670274	34.01848536	28.9549942	30.55997	15.05330268
-0.7	-199.8981674	-166.0988361	-227.0799421	-95.80761761	-102.7063854	-96.54876202	-116.0320187	-114.5363888	-121.149	-50.93557918
+0.7	34.1835138	29.22379347	30.78567049	23.30988004	24.68084734	23.01084598	27.00584217	22.0525947	23.25945	11.97625646
-0.75	-215.2710076	-179.060221	-248.4274426	-101.0608884	-108.3882041	-101.9210654	-122.5952164	-121.8936983	-128.944	-53.8021052
+0.75	25.95146147	22.67765464	23.37192893	18.42081278	19.44346896	18.08970047	21.09964201	16.30246603	17.17864	9.384355032
-0.8	-232.3539721	-193.5871555	-271.9718136	-106.5414254	-114.3194971	-107.5314962	-129.4569933	-129.6458332	-137.159	-56.79748875
+0.8	17.79792383	16.21736833	16.02887761	13.37298367	14.04021122	13.01526806	15.01841359	10.61606544	11.17481	6.715252117
-0.85	-247.6723686	-206.725103	-293.7854781	-111.1311939	-119.2903918	-112.2357129	-135.2180179	-136.2137199	-144.119	-59.31080195
+0.85	11.35415553	11.12651699	10.22567024	9.197861549	9.575313831	8.824696486	10.00538627	6.80476721	7.202601	4.51461611
-0.9	-264.5612682	-221.334903	-317.8699787	-115.8249287	-124.3783782	-117.0534904	-141.1274792	-143.0238683	-151.337	-61.88692858
+0.9	5.617245916	6.261923774	5.058343091	4.992881684	5.083758794	4.612356106	4.977594319	3.746781604	3.953506	2.457096922
-0.95	-279.5810452	-234.4417125	-339.1478614	-119.6619766	-128.5422677	-120.9990188	-145.9765102	-148.6856027	-157.339	-63.99879319
+0.95	2.14667534	2.584313541	1.932007803	2.021438486	2.021438486	1.725345569	1.771531659	1.536836598	1.617723	1.18414373
-1	-295.9961113	-248.8951473	-362.2509857	-123.4697772	-132.68019	-124.9234694	-150.8116274	-154.4240993	-163.423	-66.10206686
+1	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	2.95E+02	2.48E+02	361.1108622	1.23E+02	1.32E+02	124.7389091	150.5838964	1.54E+02	1.63E+02	6.60E+01
-2.05	-2.02E+00	-2.40E+00	-1.817687515	-1.88E+00	-1.88E+00	-1.551879088	-1.603195989	-1.43E+00	-1.50E+00	-1.11E+00
+2.05	2.80E+02	2.35E+02	3.40E+02	119.8637006	128.761317	1.21E+02	1.46E+02	1.49E+02	157.6577	6.41E+01
-2.1	-5.88E+00	-6.49E+00	-5.295011171	-5.192128711	-5.296435549	-4.811717869	-5.215230156	-3.891737758	-4.1075	-2.526931554
+2.1	2.64E+02	2.21E+02	3.17E+02	115.6005105	124.1349849	1.17E+02	1.41E+02	1.43E+02	150.9893	6.18E+01
-2.15	-1.10E+01	-1.09E+01	-9.925629622	-8.976842592	-9.339085242	-8.603050104	-9.740517193	-6.64408679	-7.03186	-4.398236865
+2.15	248.5658026	207.4554954	294.9992488	111.3759279	119.555559	112.4867268	135.5256533	136.5662522	144.4928	59.4450737
-2.2	-18.1814117	-16.52049383	-16.37365304	-13.61566789	-14.29986761	-13.25904851	-15.31031436	-10.87270651	-11.445	-6.843277594
+2.2	231.5466721	192.8582538	270.8003563	106.2763677	114.0325394	107.2600118	129.1247487	129.2688824	136.7594	56.6526129
-2.25	-25.51636384	-22.33470387	-22.9824042	-18.15893521	-19.16303783	-17.82626056	-20.78369059	-15.9967687	-16.8554	-9.245580705

+2.25	216.1714159	179.7835536	249.609746	101.3436721	108.694147	102.2104052	122.9488847	122.2916657	129.3661	53.95665883
-2.3	-34.65895387	-29.6082795	-31.21986938	-23.59104536	-24.98214621	-23.29401441	-27.34591081	-22.38554329	-23.6116	-12.12535738
+2.3	199.0902324	165.3824693	225.8910395	95.50689324	102.3812187	96.24138528	115.6566927	114.1171266	120.7049	50.77174297
-2.35	-43.77829926	-36.8930999	-39.43633658	-28.80365181	-30.56975986	-28.54649744	-33.6575465	-28.59799349	-30.1824	-14.89480784
+2.35	183.7756507	152.582475	204.4622048	89.95530229	96.37994066	90.56898432	108.7335544	106.408859	112.5384	47.74669365
-2.4	-54.89604387	-45.81343498	-49.45318714	-34.92988808	-37.14040785	-34.72533527	-41.09016303	-35.98163724	-37.9929	-18.15572676
+2.4	166.8870464	138.5914217	180.6447847	83.48044978	89.38387495	83.95831819	100.6720863	97.48685216	103.0867	44.22291327
-2.45	-65.78253323	-54.58810083	-61.32750532	-40.72261353	-43.35638211	-40.57251397	-48.13027084	-43.03111442	-45.4508	-21.24409274
+2.45	151.8547134	126.251046	159.2731435	77.39922035	82.81583391	77.75373687	93.11150973	89.16418728	94.27061	40.91701522
-2.5	-78.84779889	-65.1681567	-76.95805555	-47.44384645	-50.57181456	-47.36175989	-56.31125222	-51.27993402	-54.1785	-24.83255767
+2.5	135.3964562	112.8669966	136.1323806	70.38540692	75.24336751	70.60209174	84.40278524	79.62441366	84.16584	37.1079692
-2.55	-91.46897603	-75.43670536	-92.50212571	-53.72745631	-57.32005037	-53.71299339	-63.96996421	-59.04973364	-62.4	-28.19158438
+2.55	120.852732	101.1559172	123.0479658	63.8637444	68.20463104	63.95595131	76.31461438	70.8040878	74.82366	33.56943526
-2.6	-106.4373113	-87.67248368	-111.0832552	-60.94454873	-65.07350396	-61.0120136	-72.77732959	-68.03410045	-71.9074	-32.05400379
+2.6	105.0456347	88.55900845	108.8277197	56.41013013	60.16255168	56.36397421	67.08063024	60.77616641	64.20301	29.52872034
-2.65	-120.7455233	-99.42374139	-128.9493706	-67.62981416	-72.25790914	-67.776718	-80.94484747	-76.4074797	-80.7688	-35.6354806
+2.65	91.13732013	77.63171091	96.35617058	49.5372606	52.74920933	49.36685578	58.57466035	51.574917	54.45839	25.80581517
-2.7	-137.5554572	-113.2944214	-150.0275461	-75.24362182	-80.44261337	-75.48482054	-90.25654696	-85.99768794	-90.9187	-39.7182539
+2.7	76.18986717	65.98512386	82.90657671	41.74298456	44.34428231	41.43523583	48.93746438	41.18855078	43.45919	21.58702477
-2.75	-153.4878764	-126.5020187	-170.0629636	-82.24132051	-87.96710219	-82.57239755	-98.82305415	-94.85800179	-100.297	-43.47391956
+2.75	63.1859898	55.98088738	71.20600485	34.60813317	36.65242261	34.17773962	40.12351383	31.72302376	33.43563	17.72795679
-2.8	-172.0611519	-141.9698064	-193.460884	-90.15270425	-96.47629171	-90.58888917	-108.5170347	-104.9243469	-110.952	-47.72345249
+2.8	49.28131683	45.43090763	58.69511004	26.57236129	27.99144208	26.00717097	30.20515941	21.51218915	22.64441	13.38468754
-2.85	-189.5396449	-156.5921637	-215.4991613	-97.37360894	-104.2447732	-97.90876233	-117.3727417	-114.1548575	-120.722	-51.60509596
+2.85	37.29438522	36.47380947	47.9098567	19.26473167	20.1171304	18.57987497	21.19301929	15.32190682	16.21925	9.437720688
-2.9	-209.7811065	-173.602435	-241.0736989	-105.4834292	-112.9716825	-106.1329987	-127.3270104	-124.5677254	-131.745	-55.96779209
+2.9	30.49633343	27.14989637	37.63667568	11.99502442	12.91069093	12.17054175	14.7414923	15.32190682	16.21925	6.416796971
-2.95	-228.7124347	-189.5827689	-265.5034253	-112.8383138	-120.888067	-113.5945419	-136.3620671	-134.0516932	-141.785	-59.92715151
+2.95	29.55340387	24.80032669	36.7880391	11.99502442	12.91069093	12.17054175	14.7414923	15.32190682	16.21925	6.416796971
-3	-250.5099334	-208.0640061	-293.6369718	-121.047429	-129.7259282	-121.9258547	-146.4546022	-144.6813773	-153.039	-64.34941532
+3	29.20386195	24.45078478	36.47345138	11.99502442	12.91069093	12.17054175	14.7414923	15.32190682	16.21925	6.416796971

2-Span: Shear (Max and Min) Raw Data Results - 190' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-9.19303604	-13.18762883	-14.16631676	-20.05424996	-7.366965833	-9.950514908	-11.40100913	-12.77058477	-14.21858186
End Shear	91.97548829	125.5523332	130.2668851	161.2682962	73.94929628	99.73331393	113.3409639	124.833703	136.7507375
-0.05	-9.19303604	-13.18762883	-14.16631676	-20.13570755	-7.366965833	-9.950514908	-11.40100913	-12.77058477	-14.21858186
+0.05	85.84017974	116.664749	120.6454941	145.702704	69.03558482	93.10295503	105.7384215	116.3259803	127.2826857
-0.1	-9.19303604	-13.18762883	-14.16631676	-20.40698005	-7.366965833	-9.950514908	-11.40100913	-12.77058477	-14.21858186
+0.1	79.56582226	107.5828916	110.823958	130.0416465	64.01240104	86.32182241	97.96307853	107.6280758	117.6066107
-0.15	-13.22315291	-13.18762883	-14.16631676	-20.81312368	-10.94806637	-14.6836304	-15.69275663	-15.65142255	-15.64795269
+0.15	73.96536711	99.50337284	102.107656	116.4754781	59.52766168	80.2678422	91.02490913	99.87315351	108.9867814
-0.2	-19.47700621	-19.71257895	-16.75659832	-21.44304293	-15.94912938	-21.43640814	-23.45362839	-24.09660052	-24.43290781
+0.2	67.81367512	90.65915959	92.59067972	102.0347656	54.60027576	73.61664299	83.40615805	91.36486826	99.53775245
-0.25	-25.05143238	-27.62497808	-24.2440323	-23.74072249	-20.40579529	-27.45439246	-30.37342398	-31.87452141	-33.12664682
+0.25	62.35794256	82.84377884	84.20341344	89.64651118	50.22920357	67.71666795	76.65148468	83.82831449	91.17546814
-0.3	-31.16578796	-36.67227741	-33.10952803	-31.37323595	-25.29291344	-34.05396575	-37.96581764	-40.41578645	-42.68169002
+0.3	56.40517859	74.3488819	75.11306636	76.84458683	45.45861871	61.2777691	69.28389875	75.61567392	82.07171641
-0.35	-36.58034667	-44.71163456	-41.9610205	-39.05024717	-29.61957704	-39.8970057	-44.69142462	-47.9887142	-51.16089603
+0.35	51.16280116	66.89813287	67.1646877	66.13386293	41.25612735	55.60592592	62.79782473	68.39289992	74.07337541
-0.4	-42.47894633	-53.50117249	-51.6620621	-47.64758977	-34.33174311	-46.26100774	-52.02077333	-56.24921187	-60.41845996
+0.4	45.48523337	58.86422765	58.62301859	55.6087701	36.70335536	49.46169028	55.77597672	60.58190742	65.43311863
-0.45	-47.66500152	-61.25829609	-60.24546997	-55.54413472	-38.4734904	-51.85497034	-58.46708531	-63.52173876	-68.57672165
+0.45	40.52485068	51.87862803	51.22338155	46.90787436	32.72434467	44.09210793	49.64362762	53.76832794	57.90512243
-0.5	-53.27157676	-69.67839733	-69.58761903	-66.44294731	-42.94969612	-57.9010377	-65.43880861	-71.39544695	-77.41857752
+0.5	35.19874229	44.4173823	43.35245709	38.43397245	28.45039358	38.32489647	43.06208637	46.46500824	49.84657382
-0.55	-58.16048939	-77.05276761	-77.79309264	-76.60173017	-46.85162743	-63.17179518	-71.52070519	-78.27215603	-85.14950857
+0.55	30.58899341	37.99743386	36.6114171	31.49742382	24.74977672	33.33170823	37.36857017	40.15603589	42.89532115
-0.6	-63.39877403	-84.9917569	-86.65427644	-89.33409519	-51.03086073	-68.81756678	-78.04024334	-85.6530542	-93.45742751
+0.6	25.69060894	31.22053452	29.53330685	25.15198247	20.8156569	28.02388857	31.32190586	33.46639217	35.53670947
-0.65	-67.92190812	-91.88287701	-94.37196103	-101.1601923	-54.63806441	-73.69098722	-83.67260933	-92.03853637	-100.6546239
+0.65	21.50012791	25.46674374	23.56071789	19.90040077	17.44833849	23.48121534	26.15233751	27.75744602	29.26860617
-0.7	-72.71563453	-99.2290884	-102.630128	-115.9295691	-58.45931867	-78.85409118	-89.64538662	-98.82062126	-108.3103916
+0.7	17.1057399	19.4858451	17.39746159	14.60168916	13.91505759	18.71515461	20.73512206	21.78749916	22.72815462
-0.75	-76.80435422	-105.5364511	-109.750169	-129.5016816	-61.71688407	-83.25605295	-94.74311128	-104.6194549	-114.8674577
+0.75	13.40316707	14.49871557	12.67973718	10.57169087	10.93595178	14.69713378	16.17461289	16.77397717	17.24959346
-0.8	-81.07726594	-112.1781961	-117.2832638	-144.9868156	-65.1191528	-87.85413194	-100.0745584	-110.6967085	-121.7528577
+0.8	9.589026356	9.564424665	8.138286072	6.73936509	7.864513355	10.55519652	11.48141725	11.6297427	11.64552392
-0.85	-84.66292938	-117.8013046	-123.6958073	-158.6552328	-67.97217509	-91.71050334	-104.5525282	-115.8134956	-127.5633763
+0.85	6.443001582	5.8756282	5.257296722	4.295657694	5.32852364	7.135943963	7.615075774	7.596898978	7.596005263
-0.9	-88.33875203	-123.6269201	-130.3817637	-173.4886038	-70.89444207	-95.66118765	-109.1480734	-121.0798935	-133.5601808
+0.9	3.323647152	3.271104368	2.637359394	2.127131356	2.779941205	3.700494624	3.948239158	3.947514192	3.946803258
-0.95	-91.35272156	-128.4652499	-135.976955	-186.4713112	-73.28801798	-98.89783998	-112.9211755	-125.4192111	-138.5177648
+0.95	1.423596007	1.417477423	1.126504187	0.884603046	1.138597079	1.436522775	1.378845006	1.436529896	1.435963799
-1	-94.35520153	-133.3630709	-141.6937109	-200.4315925	-75.66927893	-102.1187603	-116.6862479	-129.7687552	-143.5077524
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.42E+01	1.33E+02	1.41E+02	2.00E+02	7.56E+01	1.02E+02	116.5088389	129.5632527	1.43E+02
-2.05	-1.32E+00	-1.32E+00	-1.05E+00	-8.22E-01	-1.07E+00	-1.30E+00	-1.27543442	-1.316164129	-1.32E+00
+2.05	9.15E+01	1.29E+02	1.36E+02	1.87E+02	7.34E+01	9.91E+01	113.1200632	125.6484292	1.39E+02
-2.1	-3.435553472	-3.42879398	-2.726343954	-2.202184708	-2.900545028	-3.863043237	-4.102413063	-4.101683709	-4.100968472
+2.1	8.82E+01	1.23E+02	1.30E+02	1.73E+02	7.08E+01	9.55E+01	108.9279058	120.8271722	1.33E+02
-2.15	-6.27672087	-5.712799893	-5.113353896	-4.174498902	-5.194406087	-6.955132725	-7.410872416	-7.394076422	-7.393187551
+2.15	84.8543462	118.1030048	124.040934	159.4056117	68.12441759	91.9163068	104.7917007	116.0871687	127.8745641
-2.2	-9.772151797	-9.786983513	-8.328916273	-6.900847247	-8.012057898	-10.75414489	-11.70662275	-11.87616877	-11.91349349
+2.2	80.87042995	111.8553489	116.916134	144.2189553	64.95450856	87.63160724	99.81635812	110.4020609	121.418665
-2.25	-13.2050473	-14.23343863	-12.43718936	-10.36541782	-10.77648374	-14.48207065	-15.93071295	-16.50621878	-16.95742067
+2.25	77.02464189	105.877524	110.13609	130.2818746	61.89233208	83.493157	95.01785119	104.9323172	115.2215357

-2.3	-17.3188674	-19.77447207	-17.6936451	-14.85432867	-14.08648608	-18.94638644	-20.9977563	-22.0765796	-23.04448956
+2.3	72.48177822	98.86955787	102.2251877	115.1942006	58.27293128	78.60225707	89.35390434	98.48936201	107.9361554
-2.35	-21.27399188	-25.1575311	-23.24084078	-19.62330824	-17.26657276	-23.23601481	-25.87346419	-27.44976842	-28.93114883
+2.35	68.1672487	92.25774726	94.79257595	101.88923	54.83367742	73.95527394	83.97820258	92.3852508	101.045712
-2.4	-25.92992131	-31.550409	-29.87681459	-25.45379966	-21.00791209	-28.28326609	-31.61724487	-33.79283814	-35.89547217
+2.4	63.14170086	84.60116615	86.21760331	88.69832641	50.82578605	68.5405305	77.72019511	85.29049595	93.04905126
-2.45	-30.33864118	-37.64987424	-36.24738417	-31.14573954	-24.54875745	-33.06048963	-37.05944444	-39.8137507	-42.5184914
+2.45	58.42707381	77.45582956	78.24227881	77.22513727	47.06435472	63.45915279	71.8524137	78.64745264	85.57167686
-2.5	-35.46042422	-44.78290843	-43.73717677	-38.84198755	-28.66042651	-38.60830574	-43.38537446	-46.82349473	-50.24185896
+2.5	52.99510746	69.2623293	69.12534904	65.87727125	42.72900362	57.60293006	65.09495398	71.00689123	76.98200516
-2.55	-40.25407867	-51.49827653	-50.82126656	-46.44310349	-32.5071155	-43.79896362	-49.30896154	-53.39672058	-57.49479768
+2.55	47.94903866	61.68399693	60.71716613	56.04265699	38.70028722	52.16130276	58.82018188	63.92032709	69.02409735
-2.6	-45.76546974	-59.25983371	-59.04285635	-56.10847826	-36.92811143	-49.76500762	-56.1225039	-60.96713776	-65.85901406
+2.6	42.18690097	53.06520233	51.18028443	47.21613147	34.09847184	45.94594851	51.65782181	55.8399731	59.95958293
-2.65	-50.87543283	-66.4905686	-66.73061071	-65.55961228	-41.02573744	-55.29498567	-62.44236233	-67.99725875	-73.63549081
+2.65	36.87801139	45.15440578	42.44909659	39.47830224	29.85739173	40.21818322	45.06121763	48.40530209	51.62754348
-2.7	-56.70013265	-74.76894912	-75.56188398	-77.45776686	-45.69504502	-61.59687352	-69.64890166	-76.02233137	-82.52228073
+2.7	30.86200098	36.22201389	32.61438099	30.94852497	25.05012031	33.72607929	37.5885045	39.99117075	42.20646439
-2.75	-62.0577874	-82.41459891	-83.74345133	-88.97644491	-49.9887013	-67.39204604	-76.27994201	-83.41393742	-90.71589748
+2.75	25.35891056	28.0792059	24.66663266	24.10251371	20.65158358	27.78630367	30.75515846	32.30380517	33.60666116
-2.8	-68.11954701	-91.09810427	-93.06237229	-102.740859	-54.84531507	-73.94739205	-83.78492942	-91.78765201	-100.0070952
+2.8	19.16527477	19.30426879	16.40589377	21.40710828	15.69986551	21.0998359	23.06670942	23.66188549	23.9472129
-2.85	-73.65621884	-99.05813701	-101.627898	-115.7378669	-59.28009243	-79.93365088	-90.6419944	-99.44533053	-108.5114528
+2.85	13.53665992	13.18762868	14.16631629	20.84016617	11.19878087	15.02215917	16.0817372	16.03726605	16.03379585
-2.9	-79.87879374	-108.0351467	-111.3124384	-130.8110021	-64.26300334	-86.66011002	-98.35088177	-108.0616981	-118.0887779
+2.9	9.19303574	13.18762868	14.16631629	20.38890711	7.366965971	9.950514564	11.40100948	12.77058515	14.21858216
-2.95	-85.52586281	-116.2090291	-120.1520674	-144.906342	-68.78399415	-92.76330653	-105.3488799	-115.8900089	-126.7975064
+2.95	9.19303574	13.18762868	14.16631629	20.1447557	7.366965971	9.950514564	11.40100948	12.77058515	14.21858216
-3	-91.83296878	-125.3678426	-130.0801067	-161.1103452	-73.83219267	-99.5785135	-113.1670498	-124.64299	-136.5427662
+3	9.19303574	13.18762868	14.16631629	20.05424931	7.366965971	9.950514564	11.40100948	12.77058515	14.21858216

2-Span: Shear (Max and Min) Raw Data Results - 190' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.55394197	-28.26906863	-16.0536	-19.3203	-20.8528
End Shear	232.8752065	252.5320336	150.6561	181.4578	193.6219
-0.05	-25.55394197	-28.26906863	-16.0536	-19.3203	-20.8528
+0.05	215.6112823	233.6407086	139.8058	168.4273	179.5418
-0.1	-25.55394197	-28.26906863	-16.0536	-19.3203	-20.8528
+0.1	197.9940831	214.1461193	128.7254	155.1181	165.1644
-0.15	-25.55394197	-28.26906863	-16.0536	-19.3203	-20.8528
+0.15	182.3612554	196.8659599	118.8773	143.287	152.3928
-0.2	-28.80514084	-30.49662705	-21.3024	-26.2522	-25.7612
+0.2	165.2944705	178.0222072	108.108	130.3468	138.4341
-0.25	-42.05737353	-42.82096037	-30.6992	-37.5284	-37.8026
+0.25	150.2554858	161.4375005	98.60145	118.9217	126.1194
-0.3	-58.7495942	-59.22550337	-41.8062	-50.8546	-52.1439
+0.3	133.9579839	143.4883611	88.27998	106.5147	112.7573
-0.35	-74.64196867	-76.94786592	-51.6851	-62.7053	-65.0127
+0.35	119.7098316	127.8185093	79.23809	95.64325	101.0595
-0.4	-92.06212189	-96.39388133	-62.4964	-75.6724	-79.1038
+0.4	104.4004531	111.0077552	69.50128	83.93343	88.4718
-0.45	-107.4776601	-113.6204525	-72.0476	-87.1261	-91.5596
+0.45	91.14010768	96.47217511	61.04715	73.76343	77.55098
-0.5	-124.2585765	-132.393697	-82.4265	-99.5699	-105.103
+0.5	77.03774166	81.04360694	52.03178	62.91501	65.91547
-0.55	-139.0002855	-148.9050666	-91.527	-110.479	-116.985
+0.55	64.9621897	67.86165817	44.28849	53.59414	55.93166
-0.6	-154.9230892	-166.7617605	-101.337	-122.235	-129.803
+0.6	52.28568463	54.05906809	36.13135	43.77127	45.42618
-0.65	-168.7940224	-182.3385459	-109.863	-132.452	-140.953
+0.65	41.59189843	42.45018422	29.22201	35.44725	36.53943
-0.7	-183.6398347	-199.0349148	-118.967	-143.356	-152.867
+0.7	30.5601188	30.56776448	22.05987	26.81405	27.3418
-0.75	-196.4430013	-213.457685	-126.797	-152.733	-163.123
+0.75	21.8419939	22.15751634	16.10759	19.6346	19.73602
-0.8	-209.9929734	-228.7499352	-135.057	-162.622	-173.956
+0.8	13.82394729	14.46253623	10.42712	12.69257	12.48486
-0.85	-221.5313907	-241.799326	-142.067	-171.01	-183.159
+0.85	8.426381538	8.642459035	7.234466	7.945804	8.448287
-0.9	-233.5666601	-255.443667	-149.348	-179.719	-192.732
+0.9	4.37260358	3.976700844	4.014805	4.409371	4.434112
-0.95	-243.643356	-266.9002538	-155.415	-186.972	-200.722
+0.95	1.480754583	1.470695233	1.626984	1.73545	1.58313
-1	-253.9450756	-278.6529423	-161.58	-194.337	-208.859
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.53E+02	2.78E+02	1.61E+02	1.94E+02	2.08E+02
-2.05	-1.33E+00	-1.36E+00	-1.51E+00	-1.61E+00	-1.44E+00
+2.05	2.44E+02	2.68E+02	1.56E+02	187.3573	2.01E+02
-2.1	-4.463509521	-4.207771486	-4.16746	-4.57634	-4.6241
+2.1	2.33E+02	2.55E+02	1.49E+02	179.2993	1.92E+02
-2.15	-8.185199114	-8.373588939	-7.06533	-7.7608	-8.23708
+2.15	222.1525163	242.5033175	142.4436	171.4605	183.6537
-2.2	-14.18061354	-14.82921726	-10.6246	-13.0143	-12.7868
+2.2	209.3324707	228.0045141	134.6554	162.1406	173.4283
-2.25	-21.40162253	-21.75504165	-15.7916	-19.2533	-19.3538
+2.25	197.1370414	214.2410374	127.2204	153.24	163.6785

-2.3	**-31.09017735**	**-31.0888991**	**-22.405**	**-27.2301**	**-27.7845**
+2.3	**182.911724**	**198.2162292**	**118.521**	**142.8224**	**152.2828**
-2.35	**-41.01926419**	**-41.82898162**	**-28.8512**	**-35.0004**	**-36.0628**
+2.35	**169.5500482**	**183.189006**	**110.3274**	**133.0077**	**141.5598**
-2.4	**-52.90083546**	**-54.72722651**	**-36.528**	**-44.249**	**-45.9367**
+2.4	**154.1383294**	**165.8820275**	**100.8537**	**121.6565**	**129.1717**
-2.45	**-64.31015167**	**-67.15003062**	**-43.8697**	**-53.0899**	**-55.392**
+2.45	**139.8073777**	**149.8105098**	**92.02471**	**111.0754**	**117.6356**
-2.5	**-77.72700655**	**-81.79611771**	**-52.473**	**-63.4461**	**-66.4847**
+2.5	**123.4281209**	**131.4650931**	**81.91336**	**98.95473**	**104.433**
-2.55	**-90.41959371**	**-95.6822788**	**-60.5872**	**-73.21**	**-76.957**
+2.55	**108.3248742**	**114.5686775**	**72.5721**	**87.75496**	**92.24374**
-2.6	**-105.1528788**	**-111.8324364**	**-69.9804**	**-84.5097**	**-89.0909**
+2.6	**91.19694271**	**95.42854593**	**61.95988**	**75.02897**	**78.40436**
-2.65	**-118.9317559**	**-126.9626038**	**-78.7438**	**-95.0489**	**-100.42**
+2.65	**75.51837749**	**77.92663736**	**52.22942**	**63.35827**	**65.722**
-2.7	**-134.7626044**	**-144.3729945**	**-88.79**	**-107.128**	**-113.417**
+2.7	**57.86063371**	**58.23568532**	**41.25319**	**50.19113**	**51.42367**
-2.75	**-149.4307927**	**-160.5277168**	**-98.0797**	**-118.295**	**-125.444**
+2.75	**42.83874726**	**43.50251682**	**31.25663**	**38.19722**	**38.5465**
-2.8	**-166.14034**	**-178.954611**	**-108.642**	**-130.989**	**-139.126**
+2.8	**28.1301381**	**29.80915747**	**20.79648**	**25.64506**	**25.19951**
-2.85	**-181.5008655**	**-195.9144869**	**-118.335**	**-142.635**	**-151.689**
+2.85	**25.55394199**	**28.2691954**	**16.05356**	**19.32028**	**20.85283**
-2.9	**-198.8702442**	**-215.1141609**	**-129.277**	**-155.781**	**-165.88**
+2.9	**25.55394199**	**28.2691954**	**16.05356**	**19.32028**	**20.85283**
-2.95	**-214.7261877**	**-232.659789**	**-139.25**	**-167.759**	**-178.82**
+2.95	**25.55394199**	**28.2691954**	**16.05356**	**19.32028**	**20.85283**
-3	**-232.5364839**	**-252.3883477**	**-150.434**	**-181.191**	**-193.34**
+3	**25.55394199**	**28.2691954**	**16.05356**	**19.32028**	**20.85283**

2-Span: Moment (Max and Min) Raw Data Results – 190' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.02E-12	*-5.86E-13*	*-1.21E-12*	-4.36E-13	-4.84E-13	-4.01E-13	-4.89E-13	-5.17E-13	-5.44E-13	-3.15E-13
End Shear	8.37E-13	*5.05E-13*	*1.07E-12*	3.73E-13	3.94E-13	2.96E-13	3.78E-13	4.23E-13	4.45E-13	3.28E-13
-0.05	-277.4367072	*-232.282455*	*-346.4977881*	-113.952734	-122.651562	-115.620146	-140.04418	-145.55812	-154.082838	-60.95956969
+0.05	2227.632878	*1855.321105*	*2575.817821*	1076.30653	1153.225307	1083.738711	1301.280136	1278.838231	1352.635247	571.4032828
-0.1	-554.8734143	*-464.56491*	*-692.9955762*	-227.905468	-245.303124	-231.240292	-280.088361	-291.116239	-308.165676	-121.9191394
+0.1	4159.521037	*3472.584393*	*4807.845149*	2005.975431	2148.546468	2018.654126	2422.165078	2369.150242	2505.679167	1063.386222
-0.15	-832.3101215	*-696.847365*	*-1039.493364*	-341.858202	-367.954686	-346.860438	-420.132541	-436.674359	-462.248515	-182.8787091
+0.15	5795.596167	*4852.818105*	*6701.915071*	2789.73791	2986.875599	2805.63048	3364.02599	3272.483947	3460.795063	1476.927097
-0.2	-1109.746829	*-929.12982*	*-1385.991152*	-455.810936	-490.606249	-462.480583	-560.176722	-582.232478	-616.331353	-243.8382788
+0.2	7141.268658	*5998.183499*	*8193.075041*	3430.133552	3671.002011	3447.330929	4130.205633	4015.24299	4247.097056	1813.487853
-0.25	-1387.183536	*-1161.412275*	*-1732.488941*	-569.76367	-613.257811	-578.100729	-700.220902	-727.790598	-770.414191	-304.7978485
+0.25	8200.772514	*6911.672206*	*9295.423265*	3930.596152	4204.678048	3947.327049	4752.655879	4607.444093	4875.440503	2075.068791
-0.3	-1664.620243	*-1393.69473*	*-2078.986729*	-683.716404	-735.909373	-693.720875	-840.265083	-873.348717	-924.497029	-365.7574182
+0.3	8990.971549	*7597.106211*	*10193.74842*	4295.454575	4592.619978	4333.149294	5212.86706	5036.460989	5328.446485	2264.6985
-0.35	-1942.05695	*-1625.977185*	*-2425.484517*	-797.669138	-858.560935	-809.341021	-980.309263	-1018.90684	-1078.57987	-426.7169879
+0.35	9535.648569	*8059.138375*	*10738.42094*	4538.156226	4862.872838	4587.686193	5512.926895	5319.391465	5629.195148	2384.574343
-0.4	-2219.493657	*-1858.25964*	*-2771.982305*	-911.621872	-981.212497	-924.961167	-1120.35344	-1164.46496	-1232.66271	-487.6765576
+0.4	9813.065415	*8303.252231*	*10927.5777*	4669.864745	5000.384072	4715.020984	5659.137848	5442.882056	5760.957952	2438.083875
-0.45	-2496.930364	*-2090.542095*	*-3118.480093*	-1025.57461	-1103.86406	-1040.58131	-1260.39762	-1310.02308	-1386.74554	-548.6361272
+0.45	9832.568237	*8335.761595*	*10781.57268*	4682.159142	5009.745571	4722.37458	5660.000331	5417.479941	5734.978225	2426.15244
-0.5	-2774.367072	*-2322.82455*	*-3464.977881*	-1139.52734	-1226.51562	-1156.20146	-1400.4418	-1455.5812	-1540.82838	-609.5956969
+0.5	9651.588418	*8177.484576*	*10564.61963*	4591.123181	4914.288179	4632.99416	5557.08104	5329.741724	5641.529463	2390.96381
-0.55	-3051.803779	*-2555.107005*	*-3811.475669*	-1253.48007	-1349.16718	-1271.8216	-1540.48599	-1601.13932	-1694.91122	-670.5552666
+0.55	9236.215964	*7822.796222*	*10270.15006*	4396.903909	4708.30177	4440.368839	5329.879317	5120.720514	5419.596664	2300.663409
-0.6	-3329.240486	*-2787.38946*	*-4157.973457*	-1367.43281	-1471.81875	-1387.44175	-1680.53017	-1746.69743	-1848.99406	-731.5148363
+0.6	8588.733999	*7277.734005*	*9621.128912*	4107.147211	4398.849749	4150.125549	4983.013082	4781.013772	5059.304069	2156.429705
-0.65	-3606.677193	*-3019.671915*	*-4504.471245*	-1481.38554	-1594.47031	-1503.0619	-1820.57435	-1892.25555	-2003.0769	-792.474406
+0.65	7722.415475	*6551.687416*	*8638.02432*	3732.475877	3996.827936	3772.210411	4528.800455	4322.471217	4573.343178	1963.524865
-0.7	-3884.1139	*-3251.95437*	*-4850.969034*	-1595.33828	-1717.12187	-1618.68204	-1960.61853	-2037.81367	-2157.15973	-853.4339757
+0.7	6651.730844	*5654.877738*	*7343.465633*	3289.080221	3514.096761	3317.772989	3980.663765	3758.892243	3976.338443	1727.694518
-0.75	-4161.550607	*-3484.236825*	*-5197.466822*	-1709.29101	-1839.77343	-1734.30219	-2100.66271	-2183.37179	-2311.24257	-914.3935454
+0.75	5392.346825	*4598.356142*	*5784.44649*	2779.694121	2963.479195	2798.870229	3353.124041	3105.245884	3284.152741	1455.168752
-0.8	-4438.987315	*-3716.51928*	*-5543.96461*	-1823.24374	-1962.42499	-1849.92233	-2240.70689	-2328.92991	-2465.32541	-975.3531151
+0.8	3961.124891	*3394.005247*	*3994.715127*	2216.906308	2358.763136	2228.591691	2661.805346	2377.672951	2513.889644	1152.65979
-0.85	-4899.233282	*-4131.610995*	*-6054.990729*	-1937.19648	-2085.07656	-1965.54248	-2380.75107	-2474.48803	-2619.40825	-1036.312685
+0.85	2558.934156	*2237.346527*	*2304.221282*	1614.19882	1714.698432	1621.422519	1923.431671	1593.482769	1683.890011	827.3651588
-0.9	-5691.779445	*-4879.002906*	*-6865.087018*	-2051.14921	-2207.72812	-2081.16263	-2520.79525	-2620.04615	-2773.49109	-1097.272254
+0.9	1354.519429	*1291.413814*	*1219.842516*	994.386166	1047.398783	991.7122886	1155.82853	771.8633628	814.3579636	486.9645076
-0.95	-6763.084774	*-5905.153982*	*-7926.06655*	-2165.10195	-2330.37968	-2196.78277	-2660.83943	-2765.60427	-2927.57393	-1158.231824
+0.95	416.821041	*517.0403844*	*375.1389359*	382.1293808	382.1293808	379.2030374	410.6991888	290.4302375	305.7160395	213.4347725
-1	-8070.995936	*-7167.910918*	*-9987.723177*	-2279.05468	-2453.03129	-2312.4029	-2800.88353	-2911.16231	-3081.65674	-1219.191373
+1	0	*0*	*0*	0	0	0	0	0	0	0
(Span 2) -2	-8070.995936	*-7167.910918*	*-9987.723177*	-2279.05468	-2453.03129	-2312.4029	-2800.88353	-2911.16231	-3081.65674	-1219.191373
+2	0	*0*	*0*	0	0	0	0	0	0	0
-2.05	-6763.084405	*-5905.153985*	*-7926.066629*	-2165.10195	-2330.37972	-2196.78275	-2660.83935	-2765.6042	-2927.5739	-1158.231802
+2.05	416.8210337	*517.0443856*	*375.1389293*	382.1326079	382.1326079	379.2143057	410.7141803	290.4325613	305.7184855	212.9484487
-2.1	-5691.779092	*-4879.002906*	*-6865.087094*	-2051.14922	-2207.72816	-2081.1626	-2520.79518	-2620.04608	-2773.49107	-1097.272231
+2.1	1355.041604	*1291.420702*	*1219.843265*	994.3839557	1047.42503	991.7285398	1155.838571	771.880873	814.3766837	486.9591665
-2.15	-4899.232943	*-4131.61099*	*-6054.990801*	-1937.19649	-2085.07659	-1965.54246	-2380.751	-2474.48797	-2619.40823	-1036.31266
+2.15	2559.522891	*2237.354963*	*2304.221062*	1614.199833	1714.695785	1621.439861	1923.443135	1593.480291	1683.887713	827.3595924
-2.2	-4438.986978	*-3716.519258*	*-5543.964667*	-1823.24376	-1962.42503	-1849.92231	-2240.70682	-2328.92985	-2465.3254	-975.3530886
+2.2	3961.750657	*3394.014703*	*3994.715319*	2216.908333	2358.761716	2228.61019	2661.818169	2377.671416	2513.888354	1152.654741

-2.25	**-4161.550289**	***-3484.236803***	***-5197.466879***	**-1709.29102**	**-1839.77347**	**-1734.30216**	**-2100.66264**	**-2183.37174**	**-2311.24256**	**-914.3935174**
+2.25	**5392.980941**	***4598.366011***	***5784.446727***	**2779.696351**	**2963.478296**	**2798.865153**	**3353.137375**	**3105.244582**	**3284.151697**	**1455.163369**
-2.3	**-3884.113601**	***-3251.954347***	***-4850.969091***	**-1595.33829**	**-1717.1219**	**-1618.68202**	**-1960.61847**	**-2037.81362**	**-2157.15972**	**-853.4339461**
+2.3	**6652.347047**	***5654.887078***	***7343.466001***	**3289.08187**	**3514.095444**	**3317.767621**	**3980.676246**	**3758.889915**	**3976.336337**	**1727.689242**
-2.35	**-3606.676912**	***-3019.671892***	***-4504.471303***	**-1481.38556**	**-1594.47034**	**-1503.06187**	**-1820.57429**	**-1892.25551**	**-2003.07689**	**-792.4743749**
+2.35	**7722.986715**	***6551.695657***	***8638.024009***	**3732.476569**	**3996.82522**	**3772.203791**	**4528.811712**	**4322.467178**	**4573.339269**	**1963.519133**
-2.4	**-3329.240224**	***-2787.389436***	***-4157.973515***	**-1367.43283**	**-1471.81877**	**-1387.44172**	**-1680.53011**	**-1746.69739**	**-1848.99405**	**-731.5148037**
+2.4	**8589.238175**	***7277.74076***	***9621.128617***	**4107.145181**	**4398.845344**	**4150.117326**	**4983.022191**	**4781.007774**	**5059.298085**	**2156.424252**
-2.45	**-3051.803535**	***-2555.106981***	***-3811.475727***	**-1253.4801**	**-1349.16721**	**-1271.82158**	**-1540.48594**	**-1601.13928**	**-1694.91121**	**-670.5552325**
+2.45	**9236.631686**	***7822.80139***	***10270.15043***	**4396.899819**	**4708.295116**	**4440.35848**	**5329.886114**	**5120.711739**	**5419.587744**	**2300.65752**
-2.5	**-2774.366847**	***-2322.824526***	***-3464.977939***	**-1139.52737**	**-1226.51565**	**-1156.20143**	**-1400.44176**	**-1455.58116**	**-1540.82838**	**-609.5956613**
+2.5	**9651.896516**	***8177.487191***	***10564.61955***	**4591.116698**	**4914.278914**	**4633.0055**	**5557.084781**	**5329.751533**	**5641.540091**	**2390.95757**
-2.55	**-2496.930158**	***-2090.54207***	***-3118.480151***	**-1025.57463**	**-1103.86408**	**-1040.58128**	**-1260.39758**	**-1310.02305**	**-1386.74554**	**-548.63609**
+2.55	**9832.342656**	***8335.760805***	***10781.57227***	**4682.16803**	**5009.757464**	**4722.365568**	**5659.999255**	**5417.473078**	**5734.970717**	**2429.095216**
-2.6	**-2219.49347**	***-1858.259615***	***-2771.982363***	**-911.621901**	**-981.212519**	**-924.961138**	**-1120.35341**	**-1164.46493**	**-1232.66271**	**-487.6765188**
+2.6	**9812.707704**	***8303.248424***	***10927.57795***	**4669.870191**	**5000.392285**	**4715.008458**	**5659.132735**	**5442.870414**	**5760.968515**	**2438.080729**
-2.65	**-1942.056781**	***-1625.97716***	***-2425.484574***	**-797.669169**	**-858.560955**	**-809.340992**	**-980.30923**	**-1018.90682**	**-1078.57987**	**-426.7169476**
+2.65	**9535.143527**	***8059.131328***	***10738.42125***	**4538.157991**	**4862.877078**	**4587.694078**	**5512.91729**	**5319.397997**	**5629.201664**	**2384.570377**
-2.7	**-1664.620093**	***-1393.694704***	***-2078.986786***	**-683.716437**	**-735.909391**	**-693.720845**	**-840.265053**	**-873.348704**	**-924.497034**	**-365.7573764**
+2.7	**8990.30559**	***7597.09514***	***10193.74866***	**4295.451682**	**4592.619217**	**4333.153005**	**5212.852501**	**5036.462514**	**5328.447698**	**2264.693922**
-2.75	**-1387.183404**	***-1161.412249***	***-1732.488998***	**-569.763705**	**-613.257827**	**-578.100698**	**-700.220876**	**-727.790589**	**-770.414198**	**-304.7978051**
+2.75	**8200.287286**	***6911.65672***	***9295.42294***	**3930.588982**	**4204.672718**	**3947.326458**	**4752.660387**	**4607.440414**	**4875.436222**	**2075.063443**
-2.8	**-1109.746716**	***-929.1297934***	***-1385.99121***	**-455.810973**	**-490.606263**	**-462.480552**	**-560.176699**	**-582.232475**	**-616.331362**	**-243.8382339**
+2.8	**7140.605402**	***5998.16477***	***8193.074872***	**3430.122069**	**3670.992038**	**3447.326086**	**4130.204821**	**4015.234063**	**4247.087192**	**1813.49125**
-2.85	**-832.310027**	***-696.847338***	***-1039.493422***	**-341.858241**	**-367.9547**	**-346.860405**	**-420.132522**	**-436.67436**	**-462.248525**	**-182.8786627**
+2.85	**5794.745457**	***4852.794737***	***6701.91523***	**2789.721672**	**2986.860523**	**2805.620994**	**3364.019616**	**3272.479568**	**3460.79056**	**1476.929813**
-2.9	**-554.8733385**	***-464.5648826***	***-692.9956338***	**-227.905509**	**-245.303136**	**-231.240258**	**-280.088345**	**-291.116245**	**-308.165689**	**-121.9190915**
+2.9	**4158.123757**	***3472.555939***	***4807.84446***	**2005.953849**	**2148.525628**	**2018.639478**	**2422.152508**	**2369.140236**	**2505.668708**	**1063.388102**
-2.95	**-277.4366499**	***-232.2824273***	***-346.4978457***	**-113.952778**	**-122.651572**	**-115.620112**	**-140.044168**	**-145.55813**	**-154.082853**	**-60.95952023**
+2.95	**2227.834444**	***1855.289462***	***2575.817818***	**1076.280286**	**1153.199442**	**1083.719435**	**1301.261937**	**1278.822795**	**1352.619041**	**571.4041971**
-3	**-1.73E-12**	***-1.07E-12***	***-1.89E-12***	**-7.07E-13**	**-7.42E-13**	**-6.87E-13**	**-8.90E-13**	**-7.68E-13**	**-8.09E-13**	**-4.26E-13**
+3	**9.27E-13**	***5.71E-13***	***9.96E-13***	**3.31E-13**	**4.58E-13**	**2.88E-13**	**3.02E-13**	**3.80E-13**	**4.01E-13**	**3.10E-13**

2-Span: Moment (Max and Min) Raw Data Results - 190’ Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.27E-13	-4.44E-13	-4.59E-13	-4.17E-13	-3.91E-13	-3.29E-13	-4.19E-13	-4.67E-13	-4.69E-13
End Shear	2.36E-13	3.65E-13	3.23E-13	3.66E-13	2.53E-13	2.38E-13	4.21E-13	4.66E-13	4.61E-13
-0.05	-87.33384238	-125.2824739	-134.5800093	-190.5153747	-69.98617542	-94.52989163	-108.309587	-121.320555	-135.076528
+0.05	815.7675713	1108.45206	1146.508959	1396.065557	655.8380558	884.9638959	1005.086739	1106.497727	1210.752122
-0.1	-174.6676848	-250.5649478	-269.1600185	-381.0307493	-139.9723508	-189.0597833	-216.619173	-242.641111	-270.153055
+0.1	1519.047813	2054.537432	2117.297543	2549.359071	1221.597037	1648.224566	1870.670038	2060.493486	2258.342632
-0.15	-262.0015271	-375.8474217	-403.7400278	-571.546124	-209.9585262	-283.5896749	-324.92876	-363.961666	-405.229583
+0.15	2110.409941	2839.406701	2916.326082	3481.049113	1697.789482	2290.493208	2597.621264	2885.761837	3158.028933
-0.2	-349.3353695	-501.1298956	-538.320037	-762.0614986	-279.9447017	-378.1195665	-433.238347	-485.282221	-540.306111
+0.2	2591.917605	3466.867167	3576.293735	4279.277199	2085.969632	2813.964222	3188.56006	3559.566971	3907.599012
-0.25	-436.6692119	-626.4123696	-672.9000463	-952.5768733	-349.9308771	-472.6494581	-541.547934	-606.602777	-675.382638
+0.25	2966.322759	3968.50583	4072.667624	4910.023369	2388.307135	3221.575239	3657.297893	4084.317801	4504.16413
-0.3	-524.0030543	-751.6948435	-807.4800555	-1143.092248	-419.9170525	-567.1793498	-649.85752	-727.923332	-810.459166
+0.3	3237.065539	4323.201389	4447.031821	5379.882208	2607.522439	3531.178041	4011.047139	4464.752989	4940.233905
-0.35	-611.3368967	-876.9773174	-942.0600648	-1333.607623	-489.9032279	-661.7092414	-758.167107	-849.243887	-945.535693
+0.35	3425.552447	4537.695722	4696.2073	5705.177422	2746.886475	3738.135272	4240.500519	4726.992069	5220.963128
-0.4	-698.6707391	-1002.259791	-1076.640074	-1524.122997	-559.8894033	-756.239133	-866.476694	-970.564443	-1080.61222
+0.4	3518.343678	4639.818776	4845.65296	5855.57995	2810.221114	3840.905692	4351.715713	4859.581072	5365.82598
-0.45	-786.0045814	-1127.542265	-1211.220083	-1714.638372	-629.8755787	-850.7690247	-974.786281	-1091.885	-1215.68875
+0.45	3520.228809	4613.513461	4852.138056	5815.976778	2801.898511	3845.644184	4350.564352	4865.648475	5381.844796
-0.5	-873.3384238	-1252.824739	-1345.800093	-1905.153747	-699.8617542	-945.2989163	-1083.09587	-1213.20555	-1350.76528
+0.5	3455.456891	4541.024316	4755.67254	5650.220881	2756.133163	3773.513138	4272.216032	4773.460927	5274.004248
-0.55	-960.6722662	-1378.107213	-1480.380102	-2095.669121	-769.8479296	-1039.828808	-1191.40545	-1334.52611	-1485.8418
+0.55	3312.947788	4365.047336	4540.63432	5477.105109	2649.857332	3617.178974	4098.323196	4573.031836	5043.825426
-0.6	-1048.006109	-1503.389687	-1614.960111	-2286.184496	-839.834105	-1134.3587	-1299.71504	-1455.84666	-1620.91833
+0.6	3095.811091	4078.023438	4208.896998	5111.260233	2482.462431	3380.580836	3831.416372	4269.344677	4711.899456
-0.65	-1135.339951	-1628.672161	-1749.54012	-2476.699871	-909.8202804	-1228.888591	-1408.02463	-1577.16722	-1755.99486
+0.65	2811.757567	3698.160132	3792.021495	4545.720988	2259.98573	3072.081347	3481.013814	3873.161672	4277.538688
-0.7	-1222.673793	-1753.954635	-1884.12013	-2667.215245	-979.8064558	-1323.418483	-1516.33421	-1698.48777	-1891.07139
+0.7	2469.188082	3223.567751	3273.93878	3849.049333	1989.016535	2700.787528	3057.488268	3396.203068	3750.724112
-0.75	-1310.007636	-1879.237109	-2018.700139	-2857.73062	-1049.792631	-1417.948374	-1624.6438	-1819.80833	-2026.14791
+0.75	2077.19036	2666.7864	2668.594186	2993.436027	1676.693774	2276.548739	2572.06471	2851.144769	3145.400528
-0.8	-1397.341478	-2004.519583	-2153.280148	-3048.245995	-1119.778807	-1512.478266	-1732.95339	-1941.12889	-2161.22444
+0.8	1645.541504	2041.3644	1990.704638	1986.652626	1330.707043	1809.958322	2036.822566	2251.620301	2476.581333
-0.85	-1484.675321	-2129.802056	-2287.860157	-3286.095912	-1189.764982	-1607.008158	-1841.26297	-2062.44944	-2296.30097
+0.85	1184.705978	1361.857067	1256.584565	1102.540785	959.2964947	1312.760704	1464.694872	1612.219415	1760.345615
-0.9	-1572.009163	-2255.08453	-2422.440167	-3609.987847	-1259.751157	-1701.538049	-1949.57256	-2183.77	-2431.3775
+0.9	705.9977369	670.5166332	585.2037246	503.681509	571.2526836	797.176708	869.4668679	949.0603786	1013.839272
-0.95	-1659.343005	-2380.367004	-2557.020176	-4006.058497	-1329.737333	-1796.067941	-2057.88215	-2305.09055	-2566.45403
+0.95	269.029053	268.911019	213.8868322	174.9224056	205.5167728	301.8500834	317.3140485	334.9919555	334.9611441
-1	-1746.676757	-2505.649466	-2691.600224	-4463.393044	-1399.723519	-1890.597804	-2166.19174	-2426.41115	-2701.53063
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1746.676757	-2505.649466	-2691.600224	-4463.393044	-1399.723519	-1890.597804	-2166.19174	-2426.41115	-2701.53063
+2	0	0	0	0	0	0	0	0	0
-2.05	-1659.342917	-2380.366993	-2557.020129	-4006.058382	-1329.737342	-1796.06785	-2057.88215	-2305.09059	-2566.4541
+2.05	269.0312646	268.9131864	213.8884648	174.9234146	205.5311767	301.8572413	317.3276747	334.9997464	334.9689357
-2.1	-1572.009078	-2255.084521	-2422.440124	-3609.987737	-1259.751165	-1701.537962	-1949.57256	-2183.77003	-2431.37757
+2.1	706.0155679	670.5299496	585.2160366	503.6842335	571.2612679	797.1917181	869.4784376	949.0765215	1013.842433
-2.15	-1484.675238	-2129.802048	-2287.860119	-3286.095807	-1189.764988	-1607.008074	-1841.26297	-2062.44947	-2296.30104
+2.15	1184.704238	1361.869256	1256.593779	1102.538507	959.30556	1312.776498	1464.707561	1612.217424	1760.350282
-2.2	-1397.341399	-2004.519576	-2153.280115	-3048.245892	-1119.778812	-1512.478185	-1732.95338	-1941.12892	-2161.22451
+2.2	1645.540592	2041.377417	1990.7146	1986.658117	1330.71667	1809.95473	2036.836588	2251.619401	2476.587191
-2.25	-1310.007559	-1879.237103	-2018.70011	-2857.730524	-1049.792635	-1417.948297	-1624.64379	-1819.80836	-2026.14798

+2.25	2077.189659	2666.799345	2668.590922	2993.443101	1676.703555	2276.545403	2572.078608	2851.144196	3145.406997
-2.3	-1222.67372	-1753.954631	-1884.120105	-2667.215155	-979.8064582	-1323.418409	-1516.3342	-1698.4878	-1891.07145
+2.3	2469.187133	3223.579817	3273.947914	3849.05365	1989.026158	2700.783989	3057.501563	3396.202182	3750.729747
-2.35	-1135.33988	-1628.672158	-1749.540101	-2476.699787	-909.8202815	-1228.88852	-1408.02461	-1577.16724	-1755.99492
+2.35	2811.755629	3698.170433	3792.029579	4545.727548	2259.994588	3072.076756	3481.026188	3873.159466	4277.543018
-2.4	-1048.006041	-1503.389686	-1614.960096	-2286.184418	-839.8341048	-1134.358632	-1299.71502	-1455.84668	-1620.91839
+2.4	3095.808002	4078.032173	4208.902502	5111.263413	2482.470038	3380.574912	3831.427355	4269.340953	4711.90165
-2.45	-960.6722011	-1378.107213	-1480.380091	-2095.66905	-769.8479281	-1039.828743	-1191.40543	-1334.52612	-1485.84186
+2.45	3312.94328	4365.055853	4540.627264	5477.104252	2649.863614	3617.171292	4098.332275	4573.025914	5043.824583
-2.5	-873.3383616	-1252.824741	-1345.800086	-1905.153682	-699.8617514	-945.2988551	-1083.09584	-1213.20556	-1350.76533
+2.5	3455.450475	4541.030009	4755.680197	5650.225428	2756.138007	3773.503417	4272.222762	4773.452586	5274.000654
-2.55	-786.0045221	-1127.542268	-1211.220082	-1714.638313	-629.8755746	-850.7689668	-974.786245	-1091.885	-1215.6888
+2.55	3520.236907	4613.510186	4852.13213	5815.980123	2801.895222	3845.635282	4350.560028	4865.63957	5381.851038
-2.6	-698.6706825	-1002.259796	-1076.640077	-1524.122945	-559.8893979	-756.2390784	-866.476655	-970.564445	-1080.61226
+2.6	3518.349422	4639.811545	4845.661383	5855.578918	2810.215956	3840.914144	4351.708169	4859.588333	5365.828181
-2.65	-611.336843	-876.9773232	-942.0600722	-1333.607576	-489.9032212	-661.7091901	-758.167065	-849.243886	-945.535734
+2.65	3425.555512	4537.702557	4696.201912	5705.181739	2746.878813	3738.140932	4240.489467	4726.995742	5220.960755
-2.7	-524.0030035	-751.6948507	-807.4800675	-1143.092208	-419.9170445	-567.1793017	-649.857475	-727.923327	-810.459204
+2.7	3237.065361	4323.209914	4447.035362	5379.886547	2607.512315	3531.180287	4011.052841	4464.752052	4940.227048
-2.75	-436.669164	-626.4123782	-672.9000628	-952.5768396	-349.9308677	-472.6494133	-541.547885	-606.602768	-675.382673
+2.75	2966.319246	3968.510006	4072.662011	4910.02746	2388.294547	3221.573987	3657.299637	4084.31239	4504.151925
-2.8	-349.3353244	-501.1299057	-538.3200581	-762.0614712	-279.944691	-378.119525	-433.238295	-485.282209	-540.306143
+2.8	2591.91099	3466.866897	3576.299266	4279.281165	2085.954434	2813.959472	3188.557603	3559.557531	3907.602319
-2.85	-262.0014849	-375.8474332	-403.7400533	-571.5461028	-209.9585143	-283.5896366	-324.928705	-363.96165	-405.229612
+2.85	2110.399834	2839.401519	2916.326437	3481.050256	1697.771356	2290.484626	2597.614501	2885.747561	3158.026874
-2.9	-174.6676454	-250.5649606	-269.1600486	-381.0307344	-139.9723376	-189.0597483	-216.619114	-242.641091	-270.153082
+2.9	1519.033949	2054.527396	2117.29287	2549.361301	1221.575389	1648.211816	1870.658769	2060.494064	2258.344422
-2.95	-87.33380584	-125.2824881	-134.5800439	-190.515366	-69.98616084	-94.52985991	-108.309524	-121.320532	-135.076551
+2.95	815.751049	1108.437364	1146.498436	1396.061847	655.8411653	884.9473622	1005.071094	1106.493654	1210.748371
-3	-5.47E-13	-6.57E-13	-6.62E-13	-8.47E-13	-5.79E-13	-5.65E-13	-6.10E-13	-6.37E-13	-6.46E-13
+3	3.28E-13	3.25E-13	3.28E-13	3.88E-13	2.77E-13	2.31E-13	2.15E-13	2.92E-13	3.05E-13

2-Span: Moment (Max and Min) Raw Data Results - 190' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.92E-13	-7.19E-13	-5.13E-13	-5.59E-13	-6.65E-13
End Shear	5.41E-13	6.48E-13	4.97E-13	5.85E-13	5.67E-13
-0.05	-242.7624487	-268.556152	-152.508814	-183.54267	-198.101926
+0.05	2050.0625	2219.586732	1328.353134	1601.061115	1706.764006
-0.1	-485.5248974	-537.112304	-305.017628	-367.08534	-396.203853
+0.1	3783.998616	4109.081123	2458.600718	2963.542242	3155.791016
-0.15	-728.2873461	-805.6684559	-457.526441	-550.62801	-594.305779
+0.15	5265.478254	5703.015534	3392.428731	4100.513267	4371.729869
-0.2	-971.0497948	-1074.224608	-610.035255	-734.17068	-792.407706
+0.2	6446.064677	7075.121788	4181.129391	5040.956645	5366.251258
-0.25	-1213.812244	-1342.78076	-762.544069	-917.71335	-990.509632
+0.25	7385.870779	8131.866991	4787.58566	5758.26661	6167.663871
-0.3	-1456.574692	-1611.336912	-915.052883	-1101.25602	-1188.61156
+0.3	8096.143702	8932.304939	5224.794203	6266.044429	6737.964107
-0.35	-1699.337141	-1879.893064	-1067.5617	-1284.79869	-1386.71349
+0.35	8570.736848	9442.206024	5507.546572	6595.904282	7088.31263
-0.4	-1942.09959	-2148.449216	-1220.07051	-1468.34136	-1584.81541
+0.4	8835.062542	9689.572786	5623.757578	6727.333731	7254.360293
-0.45	-2184.862038	-2417.005368	-1372.57932	-1651.88403	-1782.91734
+0.45	8840.087577	9745.645819	5584.803238	6672.875223	7216.060431
-0.5	-2427.624487	-2685.56152	-1525.08814	-1835.4267	-1981.01926
+0.5	8670.63525	9533.555878	5500.028232	6574.994508	7098.797252
-0.55	-2670.386936	-2954.117672	-1677.59695	-2018.96937	-2179.12119
+0.55	8285.067181	9075.994318	5293.848157	6332.73955	6820.103216
-0.6	-2913.149384	-3222.673824	-1830.10577	-2202.51204	-2377.22312
+0.6	7683.420531	8462.98603	4947.891707	5921.990662	6360.717024
-0.65	-3155.911833	-3491.229976	-1982.61458	-2386.05471	-2575.32504
+0.65	6901.088922	7625.22224	4474.511467	5357.225083	5756.508705
-0.7	-3398.674282	-3759.786128	-2135.12339	-2569.59738	-2773.42697
+0.7	5973.648616	6588.131512	3888.062885	4655.411466	5003.102328
-0.75	-3641.436731	-4028.34228	-2287.63221	-2753.14005	-2971.5289
+0.75	4887.013055	5375.640276	3204.135309	3840.545162	4119.297305
-0.8	-3884.199179	-4296.898432	-2440.14102	-2936.68272	-3169.63082
+0.8	3667.837871	4023.483428	2439.553576	2923.965462	3126.68603
-0.85	-4126.961628	-4565.454584	-2592.64983	-3120.22539	-3367.73275
+0.85	2344.758097	2563.653042	1612.375194	1923.997554	2048.461926
-0.9	-4369.724077	-4834.010736	-2745.15865	-3303.76806	-3565.83468
+0.9	1028.59044	1152.087666	776.0451813	917.1999521	958.6451218
-0.95	-4612.486525	-5102.566888	-2897.66746	-3487.31073	-3763.9366
+0.95	363.1839787	336.832484	308.3647063	368.2209372	368.3386314
-1	-4855.248922	-5371.14708	-3050.1764	-3670.8534	-3962.03854
+1	0	0	0	0	0
(Span 2) -2	-4855.248922	-5371.14708	-3050.1764	-3670.8534	-3962.03854
+2	0	0	0	0	0
-2.05	-4612.486473	-5102.589723	-2897.66759	-3487.31073	-3763.93662
+2.05	363.1766596	336.8312859	308.3671718	368.2133551	368.3312395
-2.1	-4369.724024	-4834.032367	-2745.15877	-3303.76806	-3565.83469
+2.1	1028.603598	1152.088092	776.0460785	917.2081499	958.6565771
-2.15	-4126.961575	-4565.475011	-2592.64996	-3120.22539	-3367.73276
+2.15	2344.764104	2561.883987	1612.3734	1923.999224	2048.468592
-2.2	-3884.199126	-4296.917654	-2440.14114	-2936.68271	-3169.63084
+2.2	3667.845066	4026.258473	2439.552339	2923.9678	3126.693348
-2.25	-3641.436678	-4028.360298	-2287.63232	-2753.14004	-2971.52891

+2.25	**4887.019652**	**5378.479936**	**3204.134245**	**3840.547134**	**4119.3048**
-2.3	**-3398.674229**	**-3759.802942**	**-2135.12351**	**-2569.59737**	**-2773.42699**
+2.3	**5973.654128**	**6586.268792**	**3888.060799**	**4655.410286**	**5003.108196**
-2.35	**-3155.91178**	**-3491.245586**	**-1982.61469**	**-2386.0547**	**-2575.32506**
+2.35	**6901.09132**	**7624.53456**	**4474.507277**	**5357.221693**	**5756.512008**
-2.4	**-2913.149331**	**-3222.688229**	**-1830.10588**	**-2202.51202**	**-2377.22313**
+2.4	**7685.155266**	**8462.986811**	**4947.885295**	**5921.984741**	**6360.716298**
-2.45	**-2670.386882**	**-2954.130873**	**-1677.59706**	**-2018.96935**	**-2179.12121**
+2.45	**8285.078172**	**9075.994571**	**5293.839494**	**6332.75004**	**6820.099006**
-2.5	**-2427.624433**	**-2685.573517**	**-1525.08825**	**-1835.42668**	**-1981.01928**
+2.5	**8670.641156**	**9533.555035**	**5500.038274**	**6575.000969**	**7098.788188**
-2.55	**-2184.861984**	**-2417.016161**	**-1372.57943**	**-1651.88401**	**-1782.91735**
+2.55	**8841.130199**	**9745.644367**	**5584.795413**	**6672.872301**	**7216.052691**
-2.6	**-1942.099535**	**-2148.458804**	**-1220.07061**	**-1468.34133**	**-1584.81543**
+2.6	**8835.053807**	**9689.572708**	**5623.768591**	**6727.325492**	**7254.367132**
-2.65	**-1699.337086**	**-1879.901448**	**-1067.5618**	**-1284.79866**	**-1386.7135**
+2.65	**8570.720297**	**9442.204521**	**5507.553708**	**6595.911227**	**7088.314028**
-2.7	**-1456.574637**	**-1611.344092**	**-915.052983**	**-1101.25599**	**-1188.61158**
+2.7	**8096.138027**	**8933.057811**	**5224.796211**	**6266.045455**	**6737.958894**
-2.75	**-1213.812188**	**-1342.786735**	**-762.544168**	**-917.713316**	**-990.509649**
+2.75	**7385.877144**	**8131.865759**	**4787.582145**	**5758.261442**	**6167.651256**
-2.8	**-971.0497396**	**-1074.229379**	**-610.035352**	**-734.170644**	**-792.407723**
+2.8	**6447.111798**	**7075.119763**	**4181.120672**	**5040.945181**	**5366.241894**
-2.85	**-728.2872906**	**-805.6720229**	**-457.526536**	**-550.627971**	**-594.305796**
+2.85	**5265.487274**	**5705.326633**	**3392.424188**	**4100.5148**	**4371.733048**
-2.9	**-485.5248417**	**-537.1146666**	**-305.01772**	**-367.085299**	**-396.20387**
+2.9	**3783.997725**	**4109.081409**	**2458.590005**	**2963.536474**	**3155.786462**
-2.95	**-242.7623928**	**-268.5573103**	**-152.508905**	**-183.542626**	**-198.101944**
+2.95	**2050.052351**	**2219.58807**	**1328.336403**	**1601.048194**	**1706.752112**
-3	**-1.17E-12**	**-1.22E-12**	**-8.65E-13**	**-9.74E-13**	**-9.89E-13**
+3	**4.54E-13**	**4.40E-13**	**4.00E-13**	**3.90E-13**	**3.57E-13**

2-Span: Shear (Max and Min) Raw Data Results - 190’ Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.84374	-4.76694	-6.838283035	-7.34577	-10.9871	-3.820049693	-5.15972	-5.91185	-6.622029957	-7.37287
End Shear	67.59258	47.69276	65.10362107	67.54829	87.76221	38.34549975	51.71549	58.77157	64.73098418	70.91042
-0.05	-6.84374	-4.76694	-6.838283035	-7.34577	-11.0432	-3.820049693	-5.15972	-5.91185	-6.622029957	-7.37287
+0.05	63.02158	44.51137	60.49507338	62.55924	79.23337	35.797555	48.27739	54.82936	60.31940904	66.00087
-0.1	-6.84374	-4.76694	-6.838283035	-7.34577	-11.2303	-3.820049693	-5.15972	-5.91185	-6.622029957	-7.37287
+0.1	58.38667	41.25788	55.78578773	57.4664	70.6627	33.19284472	44.76112	50.79755	55.80921742	60.98346
-0.15	-8.80566	-6.8567	-6.838283035	-7.34577	-11.5104	-5.676985414	-7.61402	-8.13729	-8.115853022	-8.11405
+0.15	54.2141	38.35383	51.59625245	52.94667	63.25101	30.86733818	41.6219	47.19985	51.78799767	56.51376
-0.2	-13.4671	-10.0996	-10.22171582	-8.68893	-11.9449	-8.270225241	-11.1156	-12.1616	-12.49499638	-12.6694
+0.2	49.63433	35.16395	47.01019424	48.01176	55.37451	28.3123027	38.17301	43.24924	47.37613081	51.61408
-0.25	-17.6391	-12.9901	-14.32459325	-12.5714	-13.2605	-10.58117464	-14.2361	-15.7498	-16.52814177	-17.1774
+0.25	45.57592	32.33495	42.9576245	43.66265	48.62835	26.04573688	35.11365	39.74669	43.46814337	47.27792
-0.3	-22.2187	-16.1606	-19.01595925	-17.1685	-17.3862	-13.11532976	-17.6583	-19.6867	-20.9571099	-22.1321
+0.3	41.15151	29.24821	38.55269997	38.94896	41.66171	23.57200866	31.77483	35.92632	39.20957942	42.55728
-0.35	-26.2775	-18.9683	-23.18466921	-21.7584	-21.5445	-15.35886805	-20.6881	-23.1742	-24.88395862	-26.5289
+0.35	37.25859	26.52984	34.68920553	34.82742	35.83867	21.39285836	28.83377	32.56304	35.46429863	38.40984
-0.4	-30.7029	-22.0269	-27.74237619	-26.7887	-26.2284	-17.80230392	-23.9881	-26.9747	-29.16733828	-31.3293
+0.4	33.0466	23.58581	30.52332261	30.39825	30.11071	19.03207434	25.64775	28.92195	31.41400437	33.92954
-0.45	-34.5972	-24.7161	-31.76473741	-31.2395	-30.5517	-19.94995613	-26.8888	-30.3174	-32.93841782	-35.5596
+0.45	29.37052	21.01366	26.90102568	26.56126	25.38093	16.96880719	22.86342	25.74209	27.88090637	30.02599
-0.5	-38.8114	-27.6233	-36.13087754	-36.0838	-36.4843	-22.27103766	-30.0239	-33.9325	-37.02123254	-40.1445
+0.5	25.42799	18.25188	23.03208831	22.47988	20.77187	14.75260232	19.8729	22.32932	24.0938596	25.84733
-0.55	-42.49	-30.1584	-39.95476672	-40.3387	-42.0289	-24.29433623	-32.757	-37.0862	-40.58706561	-44.1532
+0.55	22.0201	15.86155	19.70310286	18.9844	17.00522	12.83369288	17.28375	19.37701	20.82241944	22.24284
-0.6	-46.4361	-32.8747	-44.07143215	-44.9335	-48.9641	-26.46142636	-35.6845	-40.4668	-44.41433974	-48.4612
+0.6	18.40407	13.32155	16.1890249	15.31413	13.55159	10.79370334	14.53144	16.24159	17.35358681	18.42712
-0.65	-49.8477	-35.2201	-47.64473788	-48.9354	-55.4179	-28.33189754	-38.2116	-43.3874	-47.72545313	-52.1932
+0.65	15.31572	11.14863	13.20546733	12.21712	10.7034	9.047621723	12.1759	13.56097	14.39328287	15.17688
-0.7	-53.4686	-37.7058	-51.45402562	-53.2176	-63.4568	-30.31336203	-40.8888	-46.4845	-51.24221999	-56.163
+0.7	12.08324	8.869971	10.10414576	9.02124	7.840018	7.215482285	9.704514	10.75194	11.29764022	11.78541
-0.75	-56.5621	-39.826	-54.7246311	-56.9096	-70.8566	-32.00253257	-43.1714	-49.1279	-54.24913399	-59.5631
+0.75	9.365763	6.950048	7.518130965	6.574922	5.665813	5.670703542	7.621018	8.387147	8.69793994	8.944565
-0.8	-59.8009	-42.0416	-58.16862643	-60.8158	-79.3091	-33.76673725	-45.5557	-51.8924	-57.40041926	-63.1334
+0.8	6.573898	4.972272	4.959514994	4.220008	3.605258	4.078046853	5.473268	5.953548	6.030460304	6.038643
-0.85	-62.5249	-43.9009	-61.08442033	-64.1409	-86.7945	-35.24613694	-47.5554	-54.2144	-60.05366638	-66.1464
+0.85	4.278633	3.340939	3.046734872	2.726107	2.289297	2.763040518	3.700256	3.948704	3.939278703	3.938815
-0.9	-65.3247	-45.807	-64.10522172	-67.6079	-94.9457	-36.76144261	-49.6039	-56.5974	-62.78449236	-69.256
+0.9	2.169409	1.723436	1.696191013	1.36757	1.128162	1.441504384	1.918846	2.047311	2.046935023	2.046566
-0.95	-67.6278	-47.3698	-66.61407825	-70.5092	-102.106	-38.00260201	-51.2823	-58.5539	-65.03459224	-71.8267
+0.95	0.859106	0.738188	0.735015516	0.584135	0.465218	0.590405538	0.744891	0.714983	0.744894942	0.744601
-1	-69.9317	-48.9267	-69.15378319	-73.4735	-109.834	-39.23737564	-52.9524	-60.5062	-67.2899949	-74.4142
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.83951	48.85345	69.0330842	73.33189	109.4539	39.17929854	52.87386	60.41423	67.18343413	74.29163
-2.05	-8.11E-01	-0.68488	-0.683641215	-0.54327	-4.32E-01	-0.557411092	-0.67365	-0.66136	-0.682480751	-0.68426
+2.05	67.76727	47.45215	66.74722246	70.66383	102.4978	38.06793095	51.37061	58.65702	65.15345047	71.96274
-2.1	-2.26745	-1.78146	-1.777959025	-1.41371	-1.1685	-1.504042016	-2.00313	-2.12726	-2.126877734	-2.12651
+2.1	65.20938	45.71572	63.95971791	67.44027	94.54252	36.68892562	49.50588	56.48323	62.6534468	69.10653
-2.15	-4.15913	-3.25472	-2.962302252	-2.65147	-2.22421	-2.693495508	-3.6065	-3.84282	-3.834107556	-3.83365
+2.15	62.69003	44.00018	61.24086326	64.3199	87.20617	35.32508042	47.66207	54.33845	60.1955762	66.30779
-2.2	-6.70785	-5.06723	-5.074920152	-4.31886	-3.69217	-4.154554264	-5.57643	-6.07033	-6.158241517	-6.1776
+2.2	59.66387	41.93437	58.00121801	60.62543	78.88932	33.68136301	45.44029	51.75855	57.24763333	62.96016
-2.25	-9.21925	-6.84732	-7.380574868	-6.44915	-5.55468	-5.588013349	-7.5095	-8.26068	-8.559097113	-8.79306
+2.25	56.74876	39.94018	54.90149026	57.10972	71.2818	32.09350899	43.29435	49.27034	54.41136489	59.74671

-2.3	-12.2368	-8.98049	-10.25380973	-9.17482	-7.97625	-7.304374426	-9.82442	-10.8881	-11.44753933	-11.9494
+2.3	53.3114	37.58454	51.26759547	53.00762	63.05593	30.21671313	40.75824	46.33337	51.07044958	55.96897
-2.35	-15.1444	-11.0314	-13.04512891	-12.0513	-10.5534	-8.953369334	-12.0488	-13.4164	-14.23374043	-15.0019
+2.35	50.05187	35.34729	47.83912225	49.15353	55.81439	28.43333027	38.3486	43.54587	47.90523765	52.39601
-2.4	-18.5736	-13.4456	-16.36007726	-15.4923	-13.7156	-10.89339491	-14.6659	-16.3947	-17.52286136	-18.6132
+2.4	46.26034	32.74135	43.86889611	44.70708	48.61713	26.3550874	35.54085	40.30085	44.22633962	48.24944
-2.45	-21.8261	-15.7317	-19.52288009	-18.7956	-16.8141	-12.7294568	-17.1431	-19.2167	-20.64493166	-22.0474
+2.45	42.70773	30.29664	40.16376954	40.57157	42.36817	24.40464336	32.90596	37.25819	40.78167106	44.37214
-2.5	-25.6101	-18.3876	-23.2216274	-22.6794	-20.9935	-14.86151232	-20.0199	-22.497	-24.27974837	-26.0523
+2.5	38.6191	27.47996	35.91513057	35.8441	36.17629	22.15660027	29.86929	33.75419	36.81975174	39.91807
-2.55	-29.1562	-20.8733	-26.70379908	-26.3527	-25.1285	-16.85616567	-22.7114	-25.5686	-27.68821394	-29.8132
+2.55	34.82476	24.86339	31.98547935	31.48414	30.82357	20.06755884	27.0476	30.50048	33.1451009	35.7916
-2.6	-33.238	-23.7311	-30.72845928	-30.6159	-30.3826	-19.14861884	-25.805	-29.1016	-31.61376083	-34.1504
+2.6	30.49606	21.8755	27.51630922	26.53891	25.99272	17.68134397	23.82471	26.78653	28.95513254	31.09131
-2.65	-37.0265	-26.3808	-34.47786809	-34.6023	-35.5267	-21.2733925	-28.6725	-32.3787	-35.25914376	-38.1828
+2.65	26.49227	19.12264	23.41426279	22.01146	21.77701	15.48218394	20.85465	23.36594	25.09997516	26.77083
-2.7	-41.3491	-29.4012	-38.77052067	-39.1817	-41.9953	-23.69460463	-31.9403	-36.1156	-39.42044665	-42.7909
+2.7	21.98249	16.00311	18.78248063	16.91179	17.15679	12.98943236	17.48824	19.49106	20.73693065	21.88564
-2.75	-45.3287	-32.1793	-42.73507851	-43.4241	-48.2637	-25.92102738	-34.9453	-39.554	-43.25327323	-47.0396
+2.75	17.8606	13.14955	14.56012751	12.79058	13.45578	10.70862514	14.40825	15.94771	16.7507416	17.42632
-2.8	-49.8352	-35.3226	-47.23780361	-48.2564	-55.7593	-28.43936483	-38.3445	-43.4456	-47.59536013	-51.8575
+2.8	13.2251	9.937918	10.0099916	8.507075	11.92007	8.140972523	10.94106	11.96096	12.26958024	12.41753
-2.85	-53.9546	-38.1935	-51.36538087	-52.6979	-62.8483	-30.73896419	-41.4486	-47.0013	-51.56615532	-56.2673
+2.85	9.015707	7.019269	6.838282958	7.345769	11.52908	5.806990338	7.789556	8.338987	8.31592743	8.314128
-2.9	-58.5881	-41.4202	-56.02029902	-57.7197	-71.0834	-33.32279147	-44.9365	-50.9986	-56.03406695	-61.2335
+2.9	6.843738	4.766936	6.838282958	7.345769	11.21786	3.820049765	5.159717	5.911854	6.622030152	7.372871
-2.95	-62.7961	-44.3484	-60.25876539	-62.3034	-78.7972	-35.66709575	-48.1013	-54.6274	-60.09334143	-65.7493
+2.95	6.843738	4.766936	6.838282958	7.345769	11.04948	3.820049765	5.159717	5.911854	6.622030152	7.372871
-3	-67.4995	-47.6189	-65.00795573	-67.4514	-87.6803	-38.28477712	-51.6352	-58.6814	-64.63209229	-70.8026
+3	6.843738	4.766936	6.838282958	7.345769	10.98707	3.820049765	5.159717	5.911854	6.622030152	7.372871

2-Span: Shear (Max and Min) Raw Data Results - 190' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.84374	-6.21987	-6.694680194	-6.31088	-7.64402	-7.944986944	-8.41029	-3.32735
End Shear	67.59258	62.86586	67.37352371	63.32128	76.06113	75.13379651	79.47398	33.40385
-0.05	-6.84374	-6.21987	-6.694680194	-6.31088	-7.64402	-7.944986944	-8.41029	-3.32735
+0.05	63.02158	58.72311	62.91343579	59.11836	70.96965	69.78508051	73.81138	31.18886
-0.1	-6.84374	-6.21987	-6.694680194	-6.31088	-7.64402	-7.944986944	-8.41029	-3.32735
+0.1	58.38667	54.48569	58.35251638	54.8195	65.76422	64.32100492	68.02693	28.90772
-0.15	-8.80566	-9.77838	-10.20403411	-9.41984	-10.7291	-7.944986944	-8.41029	-4.77973
+0.15	54.2141	50.70087	54.27969786	50.98127	61.1186	59.46136013	62.88259	26.87166
-0.2	-13.4671	-13.9886	-14.74071397	-13.699	-15.9214	-11.40186725	-12.002	-7.05373
+0.2	49.63433	46.54064	49.80399276	46.76403	56.01651	54.14333475	57.25328	24.63531
-0.25	-17.6391	-17.7388	-18.78276431	-17.5121	-20.5502	-16.17582845	-17.0477	-9.08072
+0.25	45.57592	42.84842	45.83278282	43.02276	51.49236	49.44539703	52.28062	22.65207
-0.3	-22.2187	-21.8495	-23.21433427	-21.6935	-25.6283	-21.62926113	-22.8227	-11.3041
+0.3	41.15151	38.8168	41.49765958	38.93935	46.55688	44.34066281	46.87767	20.48828
-0.35	-26.2775	-25.487	-27.13687605	-25.3951	-30.1259	-26.47653467	-27.956	-13.273
+0.35	37.25859	35.26346	37.67788204	35.34201	42.21115	39.8649422	42.14075	18.58287
-0.4	-30.7029	-29.4468	-31.40797763	-29.4264	-35.0265	-31.77772031	-33.5702	-15.4179
+0.4	33.0466	31.41185	33.53869893	31.44462	37.50555	35.04074185	37.03534	16.51945
-0.45	-34.5972	-32.9253	-35.1611797	-32.9696	-39.336	-36.45771588	-38.5268	-17.3037
+0.45	29.37052	28.04365	29.92018012	28.03819	33.39518	30.84776281	32.59826	14.71687
-0.5	-38.8114	-36.6827	-39.21644884	-36.7986	-43.9958	-41.539412	-43.9092	-19.3423
+0.5	25.42799	24.42346	26.03230083	24.37903	28.98273	26.37133457	27.86159	12.78162
-0.55	-42.49	-39.956	-42.75049145	-40.1363	-48.0602	-45.99160381	-48.6251	-21.12
+0.55	22.0201	21.28667	22.66487194	21.2105	25.16468	22.52161187	23.78841	11.10688
-0.6	-46.4361	-43.4596	-46.53456453	-43.711	-52.4161	-50.78656764	-53.7043	-23.0246
+0.6	18.40407	17.9493	19.08365477	17.84176	21.10866	18.46020544	19.49169	9.327577
-0.65	-49.8477	-46.4814	-49.79961632	-46.7961	-56.1784	-54.9504439	-58.1154	-24.6692
+0.65	15.31572	15.09019	16.01713898	14.9581	17.63987	15.01425678	15.8465	7.805705
-0.7	-53.4686	-49.6799	-53.25713526	-50.0642	-60.167	-59.39143833	-62.8204	-26.412
+0.7	12.08324	12.08705	12.7979504	11.93199	14.00355	11.43510225	12.0609	6.210141
-0.75	-56.5621	-52.4039	-56.20337262	-52.8499	-63.5702	-63.20648086	-66.8625	-27.8984
+0.75	9.365763	9.551886	10.08217213	9.380192	10.94096	8.453443626	8.907773	4.866142
-0.8	-59.8009	-55.2457	-59.2789718	-55.7591	-67.1283	-67.2262552	-71.122	-29.4516
+0.8	6.573898	6.934397	7.280379165	6.748907	7.787614	5.504830405	5.794558	3.482112
-0.85	-62.5249	-57.6257	-61.85656822	-58.1985	-70.1156	-70.63195222	-74.7312	-30.7549
+0.85	4.278633	4.769438	4.965161437	4.575938	5.18817	3.528528499	3.73482	2.340999
-0.9	-65.3247	-60.0596	-64.49488109	-60.6967	-73.1799	-74.16327109	-78.474	-32.0907
+0.9	2.169409	2.588998	2.636120712	2.391681	2.58107	1.942847604	2.050042	1.274097
-0.95	-67.6278	-62.0492	-66.65401489	-62.7426	-75.6943	-77.09909396	-81.5862	-33.1858
+0.95	0.859106	1.048192	1.048192111	0.894657	0.918606	0.796907751	0.83885	0.614023
-1	-69.9317	-64.0237	-68.7996837	-64.7775	-78.2015	-80.07472091	-84.7411	-34.2764
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.83951	63.93101	68.6988309	64.68183	78.08343	79.93320059	84.59106	34.22513
-2.05	-8.11E-01	-0.9752	-0.975200069	-0.80471	-0.83132	-0.739461327	-0.77838	-0.57722
+2.05	67.76727	62.15385	66.7676002	62.85023	75.82681	77.25498855	81.75145	33.24351
-2.1	-2.26745	-2.69231	-2.746401633	-2.49506	-2.70429	-2.018012838	-2.1299	-1.31031
+2.1	65.20938	59.94323	64.36867252	60.5771	73.03315	73.99309544	78.29366	32.02681
-2.15	-4.15913	-4.65483	-4.842668002	-4.46101	-5.05083	-3.44520964	-3.64629	-2.28065
+2.15	62.69003	57.75262	61.99406741	58.32861	70.27516	70.81475352	74.92496	30.82451
-2.2	-6.70785	-7.06024	-7.415020796	-6.87532	-7.93898	-5.637908484	-5.93464	-3.5485
+2.2	59.66387	55.10831	59.13017338	55.61836	66.95605	67.03079204	70.91489	29.37652
-2.25	-9.21925	-9.41609	-9.936758017	-9.24359	-10.7771	-8.294928026	-8.74016	-4.79418
+2.25	56.74876	52.55052	56.36201557	52.99995	63.75363	63.41284195	67.08118	27.97856

-2.3	-12.2368	-12.2328	-12.95418522	-12.0788	-14.1799	-11.60774866	-12.2435	-6.28746
+2.3	53.3114	49.52393	53.08852408	49.90479	59.97236	59.17403505	62.59002	26.32706
-2.35	-15.1444	-14.9358	-15.85157369	-14.8024	-17.4527	-14.82913844	-15.6507	-7.72352
+2.35	50.05187	46.64522	49.97663503	46.96343	56.38245	55.17700752	58.3554	24.75846
-2.4	-18.5736	-18.1125	-19.25870254	-18.0064	-21.3068	-18.65783626	-19.7008	-9.41443
+2.4	46.26034	43.28776	46.34891104	43.53556	52.20227	50.5506104	53.45436	22.93125
-2.45	-21.8261	-21.1162	-22.48191969	-21.0384	-24.9574	-22.31325612	-23.568	-11.0159
+2.45	42.70773	40.13442	42.94313399	40.31825	48.28183	46.2349947	48.88287	21.21702
-2.5	-25.6101	-24.6014	-26.2233936	-24.5589	-29.1995	-26.59058025	-28.0936	-12.8766
+2.5	38.6191	36.49749	39.0165245	36.60985	43.76603	41.2882622	43.64316	19.24188
-2.55	-29.1562	-27.8597	-29.72260844	-27.8522	-33.1708	-30.61951446	-32.3567	-14.6184
+2.55	34.82476	33.11576	35.36667412	33.16357	39.57201	36.71459051	38.79889	17.40702
-2.6	-33.238	-31.602	-33.74306661	-31.637	-37.7378	-35.27824758	-37.2867	-16.6212
+2.6	30.49606	29.25078	31.19655259	29.22685	34.78384	31.51473498	33.29168	15.31176
-2.65	-37.0265	-35.0686	-37.46845172	-35.1448	-41.973	-39.62016059	-41.8817	-18.4783
+2.65	26.49227	25.68694	27.35245493	25.59858	30.37317	26.74354006	28.23873	13.38129
-2.7	-41.3491	-39.0167	-41.71252962	-39.1417	-46.8014	-44.59304534	-47.1448	-20.5954
+2.7	21.98249	21.64531	22.9941832	21.48573	25.37592	21.35781736	22.53523	11.19369
-2.75	-45.3287	-42.6452	-45.61426092	-42.8169	-51.2435	-49.18745232	-52.0076	-22.5429
+2.75	17.8606	17.94562	19.00566378	17.72245	20.80556	16.44958453	17.33763	9.192614
-2.8	-49.8352	-46.7476	-50.02659669	-46.9738	-56.2702	-54.40723201	-57.5326	-24.7464
+2.8	13.2251	13.77877	14.51461866	13.4857	15.66251	11.15488159	11.74198	6.940465
-2.85	-53.9546	-50.4919	-54.05484737	-50.7694	-60.8622	-59.19359994	-62.5991	-26.7592
+2.85	9.015707	9.98949	10.431491	9.634366	10.98938	7.944986682	8.410291	4.893814
-2.9	-58.5881	-54.6971	-58.58007906	-55.034	-66.0239	-64.59306479	-68.3149	-29.0214
+2.9	6.843738	6.219873	6.694680287	6.310885	7.64402	7.944986682	8.410291	3.327351
-2.95	-62.7961	-58.5109	-62.68502306	-58.9031	-70.7089	-69.51085984	-73.5211	-31.0745
+2.95	6.843738	6.219873	6.694680287	6.310885	7.64402	7.944986682	8.410291	3.327351
-3	-67.4995	-62.7677	-67.26778749	-63.2232	-75.9422	-75.02275205	-79.3564	-33.3676
+3	6.843738	6.219873	6.694680287	6.310885	7.64402	7.944986682	8.410291	3.327351

2-Span: Shear (Max and Min) Raw Data Results - 190’ Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.84374	-14.7796	-16.35	-9.28488	-11.1743	-12.0606
End Shear	67.59258	134.6878	146.0567	87.13483	104.9496	111.9849
-0.05	-6.84374	-14.7796	-16.35	-9.28488	-11.1743	-12.0606
+0.05	63.02158	124.7029	135.1305	80.85937	97.41314	103.8414
-0.1	-6.84374	-14.7796	-16.35	-9.28488	-11.1743	-12.0606
+0.1	58.38667	114.5136	123.8555	74.45078	89.7155	95.52595
-0.15	-8.80566	-14.7796	-16.35	-9.28488	-11.1743	-12.0606
+0.15	54.2141	105.4721	113.8612	68.75496	82.87279	88.13925
-0.2	-13.4671	-16.66	-17.6383	-12.3207	-15.1835	-14.8995
+0.2	49.63433	95.6012	102.9625	62.5263	75.38856	80.06599
-0.25	-17.6391	-24.3247	-24.7663	-17.7555	-21.7053	-21.8639
+0.25	45.57592	86.90311	93.37045	57.02802	68.78065	72.94354
-0.3	-22.2187	-33.9789	-34.2542	-24.1794	-29.4127	-30.1584
+0.3	41.15151	77.47715	82.98922	51.0584	61.60477	65.21532
-0.35	-26.2775	-43.1706	-44.5043	-29.8931	-36.2668	-37.6013
+0.35	37.25859	69.23646	73.92626	45.82886	55.31709	58.44969
-0.4	-30.7029	-53.2459	-55.7512	-36.146	-43.7666	-45.7512
+0.4	33.0466	60.38199	64.20344	40.19739	48.54449	51.16934
-0.45	-34.5972	-62.1617	-65.7145	-41.6701	-50.391	-52.9552
+0.45	29.37052	52.71261	55.79652	35.30778	42.66248	44.85308
-0.5	-38.8114	-71.8673	-76.5724	-47.6729	-57.5881	-60.7882
+0.5	25.42799	44.55624	46.87311	30.09357	36.38809	38.12347
-0.55	-42.49	-80.3935	-86.1221	-52.9364	-63.8975	-67.6608
+0.55	22.0201	37.57212	39.24908	25.61509	30.99719	32.34914
-0.6	-46.4361	-89.6027	-96.4498	-58.61	-70.6971	-75.074
+0.6	18.40407	30.24042	31.26609	20.89725	25.31594	26.27309
-0.65	-49.8477	-97.6252	-105.459	-63.5415	-76.6059	-81.5226
+0.65	15.31572	24.05546	24.55187	16.90111	20.50159	21.13327
-0.7	-53.4686	-106.212	-115.116	-68.8068	-82.9129	-88.4133
+0.7	12.08324	17.67503	17.67945	12.75875	15.50841	15.81365
-0.75	-56.5621	-113.617	-123.457	-73.3352	-88.3358	-94.3453
+0.75	9.365763	12.63273	12.81522	9.31613	11.35604	11.4147
-0.8	-59.8009	-121.453	-132.302	-78.113	-94.0554	-100.611
+0.8	6.573898	7.995343	8.364683	6.030725	7.340988	7.220855
-0.85	-62.5249	-128.127	-139.849	-82.1672	-98.9069	-105.933
+0.85	4.278633	4.873558	4.99853	4.184191	4.595607	4.886227
-0.9	-65.3247	-135.088	-147.741	-86.3784	-103.944	-111.47
+0.9	2.169409	2.528978	2.3	2.322039	2.550244	2.564553
-0.95	-67.6278	-140.916	-154.367	-89.8871	-108.139	-116.092
+0.95	0.859106	0.856423	0.850605	0.940997	1.00373	0.915633
-1	-69.9317	-146.874	-161.164	-93.4527	-112.399	-120.798
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.83951	146.5892	160.839	93.28283	112.1958	120.5732
-2.05	-8.11E-01	-0.7717	-0.78451	-0.87531	-0.93366	-0.83047
+2.05	67.76727	141.2265	154.7211	90.07361	108.3617	116.3376
-2.1	-2.26745	-2.58156	-2.43364	-2.41033	-2.64681	-2.67444
+2.1	65.20938	134.7512	147.359	86.17527	103.7012	111.2032
-2.15	-4.15913	-4.73407	-4.84302	-4.08637	-4.48861	-4.76407
+2.15	62.69003	128.4861	140.2564	82.38496	99.16745	106.2196
-2.2	-6.70785	-8.20163	-8.57676	-6.14495	-7.52706	-7.39547
+2.2	59.66387	121.0714	131.8707	77.88051	93.77712	100.3055
-2.25	-9.21925	-12.378	-12.5824	-9.13336	-11.1355	-11.1936
+2.25	56.74876	114.018	123.9104	73.58031	88.62927	94.66654

-2.3	-12.2368	-17.9816	-17.9809	-12.9583	-15.7491	-16.0697
+2.3	53.3114	105.7905	114.6421	68.54887	82.60406	88.07566
-2.35	-15.1444	-23.7243	-24.1926	-16.6866	-20.2431	-20.8576
+2.35	50.05187	98.06249	105.9508	63.80997	76.92752	81.87379
-2.4	-18.5736	-30.5962	-31.6525	-21.1266	-25.5922	-26.5683
+2.4	46.26034	89.14883	95.94102	58.33064	70.36233	74.70893
-2.45	-21.8261	-37.195	-38.8375	-25.3729	-30.7056	-32.037
+2.45	42.70773	80.86025	86.64575	53.22424	64.24255	68.03679
-2.5	-25.6101	-44.9549	-47.3083	-30.3488	-36.6952	-38.4527
+2.5	38.6191	71.387	76.03533	47.37615	57.23235	60.4008
-2.55	-29.1562	-52.2959	-55.3397	-35.0417	-42.3424	-44.5096
+2.55	34.82476	62.65175	66.26297	41.97345	50.75475	53.35092
-2.6	-33.238	-60.8172	-64.6804	-40.4745	-48.8778	-51.5274
+2.6	30.49606	52.74548	55.19291	35.83568	43.39443	45.34665
-2.65	-37.0265	-68.7864	-73.4312	-45.543	-54.9733	-58.08
+2.65	26.49227	43.67749	45.07035	30.20788	36.64446	38.01157
-2.7	-41.3491	-77.9425	-83.5009	-51.3534	-61.9594	-65.5971
+2.7	21.98249	33.4648	33.68172	23.85956	29.02899	29.74186
-2.75	-45.3287	-86.4261	-92.8443	-56.7262	-68.4179	-72.5527
+2.75	17.8606	24.7766	25.16051	18.07787	22.09209	22.2941
-2.8	-49.8352	-96.0904	-103.502	-62.8353	-75.7599	-80.4663
+2.8	13.2251	16.2696	17.24069	12.02804	14.83231	14.57461
-2.85	-53.9546	-104.974	-113.311	-68.4412	-82.4959	-87.7325
+2.85	9.015707	14.77961	16.35003	9.284881	11.17425	12.06063
-2.9	-58.5881	-115.02	-124.415	-74.7698	-90.0987	-95.9397
+2.9	6.843738	14.77961	16.35003	9.284881	11.17425	12.06063
-2.95	-62.7961	-124.191	-134.563	-80.5376	-97.0267	-103.424
+2.95	6.843738	14.77961	16.35003	9.284881	11.17425	12.06063
-3	-67.4995	-134.492	-145.974	-87.0065	-104.795	-111.822
+3	6.843738	14.77961	16.35003	9.284881	11.17425	12.06063

2-Span: Moment (Max and Min) Raw Data Results - 190' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	-3.63E-13	-1.7E-13	-2.30023E-13	-2.4E-13	-2.24E-13	-2.02956E-13	-1.7E-13	-2.2E-13	-2.4205E-13	-2.4E-13
End Shear	3.05E-13	1.23E-13	1.89161E-13	1.67E-13	1.96E-13	1.31343E-13	1.23E-13	2.18E-13	2.41679E-13	2.39E-13
-0.05	-65.0155	-45.2859	-64.96368883	-69.7848	-104.377	-36.29047209	-49.0173	-56.1626	-62.90928459	-70.0423
+0.05	598.705	423.0063	574.7742079	594.5081	760.8714	340.0767725	458.8872	521.1754	573.7608128	627.8206
-0.1	-130.031	-90.5718	-129.9273777	-139.57	-208.754	-72.58094417	-98.0346	-112.325	-125.8185692	-140.085
+0.1	1113.773	787.6836	1065.355163	1097.899	1391.378	633.4441468	854.6666	970.013	1068.443602	1171.036
-0.15	-195.047	-135.858	-194.8910665	-209.354	-313.131	-108.8714163	-147.052	-168.488	-188.7278538	-210.127
+0.15	1545.175	1094.327	1472.339487	1512.225	1902.496	880.3678934	1187.707	1346.965	1496.376374	1637.557
-0.2	-260.062	-181.144	-259.8547553	-279.139	-417.509	-145.1618883	-196.069	-224.65	-251.6371384	-280.169
+0.2	1895.236	1344.007	1797.701409	1854.443	2339.93	1081.653944	1459.147	1653.389	1845.769754	2026.237
-0.25	-325.078	-226.429	-324.8184442	-348.924	-521.886	-181.4523604	-245.087	-280.813	-314.546423	-350.211
+0.25	2165.774	1538.15	2057.819979	2111.832	2686.04	1238.427345	1670.508	1896.447	2117.872855	2335.579
-0.3	-390.093	-271.715	-389.782133	-418.709	-626.263	-217.7428325	-294.104	-336.976	-377.4557075	-420.254
+0.3	2364.034	1678.541	2241.743007	2305.954	2944.246	1352.09875	1831.049	2079.879	2315.142851	2561.698
-0.35	-455.109	-317.001	-454.7458218	-488.494	-730.64	-254.0333046	-343.121	-393.138	-440.3649921	-490.296
+0.35	2500.236	1776.278	2352.96641	2435.161	3123.011	1424.36426	1938.364	2198.859	2451.123707	2707.266
-0.4	-520.124	-362.287	-519.7095106	-558.278	-835.017	-290.3237767	-392.139	-449.301	-503.2742767	-560.338
+0.4	2565.04	1824.394	2405.921066	2512.654	3206.609	1457.205659	1991.654	2256.529	2519.876107	2782.383
-0.45	-585.14	-407.573	-584.6731995	-628.063	-939.394	-326.6142488	-441.156	-505.463	-566.1835613	-630.38
+0.45	2562.46	1825.371	2392.280768	2516.017	3187.203	1452.890076	1994.112	2255.932	2523.022284	2790.69
-0.5	-650.155	-452.859	-649.6368883	-697.848	-1043.77	-362.9047209	-490.173	-561.626	-629.0928459	-700.423
+0.5	2517.173	1791.785	2354.692412	2465.996	3097.904	1429.159017	1956.709	2215.305	2475.219563	2734.77
-0.55	-715.171	-498.145	-714.6005771	-767.633	-1148.15	-399.1951929	-539.19	-617.789	-692.0021305	-770.465
+0.55	2414.608	1717.888	2263.441709	2354.49	3000.31	1374.050989	1875.644	2125.135	2371.289518	2615.414
-0.6	-780.186	-543.431	-779.564266	-837.418	-1252.53	-435.485665	-588.208	-673.951	-754.9114151	-840.507
+0.6	2255.747	1605.295	2114.608991	2182.472	2798.3	1287.250418	1752.959	1986.734	2213.81627	2443.298
-0.65	-845.202	-588.717	-844.5279548	-907.203	-1356.9	-471.7761371	-637.225	-730.114	-817.8206997	-910.55
+0.65	2046.292	1458.002	1917.635537	1966.306	2488.262	1171.887856	1592.99	1805.037	2008.380436	2218.065
-0.7	-910.217	-634.002	-909.4916436	-976.987	-1461.28	-508.0666092	-686.242	-786.276	-880.7299843	-980.592
+0.7	1792.462	1280.367	1671.541483	1697.661	2105.749	1031.380106	1400.46	1585.423	1761.059408	1944.892
-0.75	-975.233	-679.288	-974.4553325	-1046.77	-1565.66	-544.3570813	-735.26	-842.439	-943.6392689	-1050.63
+0.75	1500.985	1077.102	1382.829349	1383.767	1636.34	869.4289726	1180.476	1333.713	1478.426118	1631.009
-0.8	-1040.25	-724.574	-1039.419021	-1116.56	-1670.03	-580.6475534	-784.277	-898.602	-1006.548553	-1120.68
+0.8	1179.108	853.2753	1058.524449	1032.255	1084.065	690.0218007	938.5317	1056.169	1167.550065	1284.201
-0.85	-1105.26	-769.86	-1104.38271	-1186.34	-1807.06	-616.9380255	-833.294	-954.764	-1069.457838	-1190.72
+0.85	834.5897	614.3147	706.1742633	651.5865	599.0211	497.4314206	680.7159	759.4995	835.9965856	912.8056
-0.9	-1170.28	-815.146	-1169.346399	-1256.13	-2003.42	-653.2284975	-882.312	-1010.93	-1132.367123	-1260.76
+0.9	475.702	366.0865	347.6881686	303.4502	272.1361	296.2160661	413.3662	450.8514	492.1236083	525.7139
-0.95	-1235.29	-860.432	-1234.310088	-1325.91	-2249.56	-689.5189696	-931.329	-1067.09	-1195.276407	-1330.8
+0.95	155.0687	139.5017	139.4405077	110.9084	93.18058	106.5681995	156.5207	164.5393	173.705966	173.69
-1	-1300.31	-905.718	-1299.27377	-1395.7	-2537.95	-725.809447	-980.346	-1123.25	-1258.185715	-1400.85
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1300.31	-905.718	-1299.27377	-1395.7	-2537.95	-725.809447	-980.346	-1123.25	-1258.185715	-1400.85
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-1235.29	-860.432	-1234.310082	-1325.91	-2249.56	-689.5189743	-931.329	-1067.09	-1195.276429	-1330.8
+2.05	155.0687	139.5029	139.4416315	110.9092	93.1811	106.5756685	156.5244	164.5464	173.7100059	173.694
-2.1	-1170.28	-815.146	-1169.346394	-1256.13	-2003.42	-653.2285015	-882.312	-1010.93	-1132.367142	-1260.76
+2.1	475.9263	366.0957	347.6950737	303.4566	272.1375	296.2205175	413.374	450.8574	492.131979	525.7155
-2.15	-1105.26	-769.86	-1104.382706	-1186.34	-1807.06	-616.9380287	-833.294	-954.764	-1069.457856	-1190.72
+2.15	834.8426	614.3138	706.1805839	651.5913	599.0199	497.4361214	680.7241	759.5061	835.9955533	912.808
-2.2	-1040.25	-724.574	-1039.419018	-1116.56	-1670.03	-580.647556	-784.277	-898.602	-1006.548569	-1120.68
+2.2	1179.377	853.2749	1058.531199	1032.261	1084.068	690.0267928	938.5298	1056.177	1167.549599	1284.204
-2.25	-975.233	-679.288	-974.4553296	-1046.77	-1565.66	-544.3570832	-735.26	-842.439	-943.6392829	-1050.63

+2.25	1501.258	1077.101	1382.836062	1383.765	1636.344	869.4340445	1180.475	1333.72	1478.425821	1631.012
-2.3	-910.217	-634.002	-909.4916415	-976.987	-1461.28	-508.0666104	-686.242	-786.276	-880.7299964	-980.592
+2.3	1792.726	1280.367	1671.54774	1697.665	2105.751	1031.385096	1400.458	1585.43	1761.058949	1944.895
-2.35	-845.202	-588.717	-844.5279534	-907.203	-1356.9	-471.7761377	-637.225	-730.114	-817.82071	-910.55
+2.35	2046.538	1458.001	1917.640878	1966.31	2488.266	1171.892449	1592.988	1805.043	2008.379293	2218.067
-2.4	-780.186	-543.431	-779.5642653	-837.418	-1252.53	-435.4856649	-588.208	-673.951	-754.9114236	-840.507
+2.4	2255.964	1605.293	2114.61352	2182.475	2798.302	1287.254363	1752.956	1986.74	2213.814339	2443.299
-2.45	-715.171	-498.145	-714.6005772	-767.633	-1148.15	-399.1951922	-539.19	-617.789	-692.0021371	-770.465
+2.45	2414.787	1717.886	2263.446125	2354.487	3000.31	1374.054246	1875.64	2125.14	2371.286447	2615.413
-2.5	-650.155	-452.859	-649.6368891	-697.848	-1043.77	-362.9047194	-490.173	-561.626	-629.0928507	-700.423
+2.5	2517.305	1791.781	2354.695364	2466	3097.906	1429.161528	1956.704	2215.309	2475.215238	2734.768
-2.55	-585.14	-407.573	-584.673201	-628.063	-939.394	-326.6142466	-441.156	-505.463	-566.1835642	-630.381
+2.55	2562.363	1825.376	2392.27907	2516.014	3187.205	1452.88837	1994.107	2255.929	2523.017667	2790.693
-2.6	-520.124	-362.287	-519.7095129	-558.278	-835.017	-290.3237739	-392.138	-449.301	-503.2742778	-560.338
+2.6	2564.886	1824.397	2405.917316	2512.658	3206.608	1457.202985	1991.659	2256.525	2519.879872	2782.384
-2.65	-455.109	-317.001	-454.7458248	-488.494	-730.64	-254.0333011	-343.121	-393.138	-440.3649914	-490.296
+2.65	2500.019	1776.28	2352.969954	2435.158	3123.013	1424.360287	1938.367	2198.854	2451.125612	2707.265
-2.7	-390.093	-271.715	-389.7821367	-418.709	-626.263	-217.7428283	-294.104	-336.976	-377.4557049	-420.254
+2.7	2363.748	1678.541	2241.747428	2305.956	2944.248	1352.0935	1831.05	2079.882	2315.142366	2561.694
-2.75	-325.078	-226.429	-324.8184486	-348.924	-521.886	-181.4523556	-245.087	-280.813	-314.5464185	-350.211
+2.75	2165.565	1538.148	2057.822145	2111.829	2686.042	1238.420818	1670.508	1896.448	2117.870049	2335.573
-2.8	-260.062	-181.144	-259.8547605	-279.139	-417.508	-145.1618828	-196.069	-224.65	-251.637132	-280.169
+2.8	1894.951	1344.004	1797.701269	1854.446	2339.932	1081.646064	1459.144	1653.387	1845.764859	2026.239
-2.85	-195.047	-135.858	-194.8910724	-209.354	-313.131	-108.8714101	-147.052	-168.488	-188.7278456	-210.127
+2.85	1544.81	1094.322	1472.3368	1512.225	1902.496	880.3584943	1187.703	1346.961	1496.368971	1637.556
-2.9	-130.031	-90.5718	-129.9273843	-139.57	-208.754	-72.58093729	-98.0346	-112.325	-125.8185592	-140.085
+2.9	1113.173	787.6764	1065.349959	1097.896	1391.379	633.4329217	854.66	970.0071	1068.443902	1171.037
-2.95	-65.0155	-45.2859	-64.96369621	-69.7848	-104.377	-36.29046453	-49.0173	-56.1626	-62.90927273	-70.0423
+2.95	598.7916	422.9977	574.7665873	594.5027	760.8694	340.0783849	458.8786	521.1673	573.7587005	627.8187
-3	-6.01E-13	-2.8E-13	-3.40707E-13	-3.4E-13	-4.54E-13	-3.00429E-13	-2.9E-13	-3.2E-13	-3.30171E-13	-3.4E-13
+3	3.16E-13	1.7E-13	1.68479E-13	1.7E-13	2.10E-13	1.43854E-13	1.2E-13	1.11E-13	1.51539E-13	1.58E-13

2-Span: Moment (Max and Min) Raw Data Results - 190' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-3.63E-13	-2.3E-13	-2.5E-13	-2.1E-13	-2.5E-13	-2.7E-13	-2.8E-13	-1.6E-13
End Shear	3.05E-13	1.93E-13	2.04E-13	1.53E-13	1.96E-13	2.19E-13	2.31E-13	1.7E-13
-0.05	-65.0155	-59.0888	-63.5995	-59.9534	-72.6182	-75.4774	-79.8978	-31.6098
+0.05	598.705	558.1055	597.9908	561.9594	674.7628	663.1259	701.3924	296.2942
-0.1	-130.031	-118.178	-127.199	-119.907	-145.236	-150.955	-159.796	-63.2197
+0.1	1113.773	1040.174	1114.102	1046.748	1255.984	1228.494	1299.289	551.4059
-0.15	-195.047	-177.266	-190.798	-179.86	-217.855	-226.432	-239.693	-94.8295
+0.15	1545.175	1446.584	1548.808	1454.825	1744.374	1696.906	1794.553	765.8424
-0.2	-260.062	-236.355	-254.398	-239.814	-290.473	-301.91	-319.591	-126.439
+0.2	1895.236	1778.654	1903.553	1787.571	2141.667	2082.055	2202.28	940.3619
-0.25	-325.078	-295.444	-317.997	-299.767	-363.091	-377.387	-399.489	-158.049
+0.25	2165.774	2038.162	2180.284	2046.838	2464.431	2389.134	2528.1	1076.001
-0.3	-390.093	-354.533	-381.597	-359.72	-435.709	-452.864	-479.387	-189.659
+0.3	2364.034	2227.355	2381.447	2246.901	2703.068	2611.595	2763.001	1174.332
-0.35	-455.109	-413.622	-445.196	-419.674	-508.327	-528.342	-559.284	-221.269
+0.35	2500.236	2353.205	2521.583	2378.888	2858.661	2758.305	2918.95	1236.492
-0.4	-520.124	-472.71	-508.796	-479.627	-580.946	-603.819	-639.182	-252.879
+0.4	2565.04	2421.501	2592.888	2444.916	2934.476	2822.34	2987.274	1264.238
-0.45	-585.14	-531.799	-572.395	-539.581	-653.564	-679.296	-719.08	-284.489
+0.45	2562.46	2427.876	2597.742	2448.729	2934.924	2809.168	2973.803	1258.052
-0.5	-650.155	-590.888	-635.995	-599.534	-726.182	-754.774	-798.978	-316.098
+0.5	2517.173	2380.671	2548.244	2402.382	2881.556	2763.672	2925.346	1239.805
-0.55	-715.171	-649.977	-699.594	-659.487	-798.8	-830.251	-878.875	-347.708
+0.55	2414.608	2279.961	2441.432	2302.499	2763.743	2655.287	2810.265	1192.981
-0.6	-780.186	-709.065	-763.194	-719.441	-871.418	-905.729	-958.773	-379.318
+0.6	2255.747	2129.711	2280.97	2151.997	2583.88	2479.136	2623.44	1118.19
-0.65	-845.202	-768.154	-826.793	-779.394	-944.036	-981.206	-1038.67	-410.928
+0.65	2046.292	1935.43	2072.506	1956.033	2348.354	2241.364	2371.451	1018.162
-0.7	-910.217	-827.243	-890.392	-839.348	-1016.65	-1056.68	-1118.57	-442.538
+0.7	1792.462	1705.512	1822.192	1720.39	2064.124	1949.127	2061.881	895.8748
-0.75	-975.233	-886.332	-953.992	-899.301	-1089.27	-1132.16	-1198.47	-474.148
+0.75	1500.985	1441.376	1536.676	1451.32	1738.721	1610.187	1702.957	754.5599
-0.8	-1040.25	-945.421	-1017.59	-959.255	-1161.89	-1207.64	-1278.36	-505.757
+0.8	1179.108	1149.55	1223.108	1155.609	1380.246	1232.913	1303.547	597.6976
-0.85	-1105.26	-1004.51	-1081.19	-1019.21	-1234.51	-1283.12	-1358.26	-537.367
+0.85	834.5897	837.023	889.1358	840.7687	997.3719	826.2809	873.1605	429.02
-0.9	-1170.28	-1063.6	-1144.79	-1079.16	-1307.13	-1358.59	-1438.16	-568.977
+0.9	475.702	515.6267	543.1158	514.2402	599.3407	400.2403	422.2753	252.5095
-0.95	-1235.29	-1122.69	-1208.39	-1139.11	-1379.75	-1434.07	-1518.06	-600.587
+0.95	155.0687	198.1485	198.1485	196.6311	212.963	150.599	158.5253	110.674
-1	-1300.31	-1181.78	-1271.99	-1199.07	-1452.36	-1509.55	-1597.96	-632.197
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1300.31	-1181.78	-1271.99	-1199.07	-1452.36	-1509.55	-1597.96	-632.197
+2	0	0	0	0	0	0	0	0
-2.05	-1235.29	-1122.69	-1208.39	-1139.11	-1379.75	-1434.07	-1518.06	-600.587
+2.05	155.0687	198.1502	198.1502	196.6369	212.9708	150.6002	158.5266	110.4218
-2.1	-1170.28	-1063.6	-1144.79	-1079.16	-1307.13	-1358.59	-1438.16	-568.977
+2.1	475.9263	515.6256	543.1294	514.2487	599.3459	400.2494	422.285	252.5067
-2.15	-1105.26	-1004.51	-1081.19	-1019.21	-1234.51	-1283.12	-1358.26	-537.367
+2.15	834.8426	837.0235	889.1344	840.7777	997.3778	826.2796	873.1593	429.0172
-2.2	-1040.25	-945.421	-1017.59	-959.255	-1161.89	-1207.64	-1278.36	-505.757
+2.2	1179.377	1149.551	1223.107	1155.618	1380.253	1232.912	1303.546	597.695
-2.25	-975.233	-886.332	-953.992	-899.301	-1089.27	-1132.16	-1198.47	-474.148

+2.25	1501.258	1441.377	1536.675	1451.317	1738.728	1610.186	1702.957	754.5571
-2.3	-910.217	-827.243	-890.392	-839.348	-1016.65	-1056.68	-1118.57	-442.538
+2.3	1792.726	1705.513	1822.191	1720.388	2064.131	1949.126	2061.88	895.872
-2.35	-845.202	-768.154	-826.793	-779.394	-944.036	-981.206	-1038.67	-410.928
+2.35	2046.538	1935.43	2072.505	1956.03	2348.36	2241.362	2371.449	1018.159
-2.4	-780.186	-709.066	-763.194	-719.441	-871.418	-905.728	-958.773	-379.318
+2.4	2255.964	2129.71	2280.967	2151.992	2583.885	2479.133	2623.437	1118.187
-2.45	-715.171	-649.977	-699.594	-659.487	-798.8	-830.251	-878.875	-347.708
+2.45	2414.787	2279.958	2441.429	2302.493	2763.747	2655.282	2810.261	1192.978
-2.5	-650.155	-590.888	-635.995	-599.534	-726.182	-754.774	-798.978	-316.098
+2.5	2517.305	2380.667	2548.239	2402.388	2881.558	2763.677	2925.351	1239.802
-2.55	-585.14	-531.799	-572.395	-539.581	-653.564	-679.296	-719.08	-284.489
+2.55	2562.363	2427.881	2597.748	2448.725	2934.923	2809.164	2973.799	1259.578
-2.6	-520.124	-472.71	-508.796	-479.627	-580.946	-603.819	-639.182	-252.879
+2.6	2564.886	2421.504	2592.892	2444.91	2934.474	2822.334	2987.279	1264.237
-2.65	-455.109	-413.622	-445.196	-419.674	-508.327	-528.342	-559.284	-221.269
+2.65	2500.019	2353.206	2521.585	2378.892	2858.656	2758.309	2918.953	1236.49
-2.7	-390.093	-354.533	-381.597	-359.72	-435.709	-452.864	-479.387	-189.659
+2.7	2363.748	2227.354	2381.446	2246.903	2703.061	2611.596	2763.001	1174.329
-2.75	-325.078	-295.444	-317.997	-299.767	-363.091	-377.387	-399.489	-158.049
+2.75	2165.565	2038.159	2180.281	2046.838	2464.434	2389.132	2528.098	1075.999
-2.8	-260.062	-236.355	-254.398	-239.814	-290.473	-301.91	-319.591	-126.439
+2.8	1894.951	1778.648	1903.548	1787.569	2141.667	2082.05	2202.275	940.3636
-2.85	-195.047	-177.266	-190.798	-179.86	-217.855	-226.432	-239.693	-94.8295
+2.85	1544.81	1446.576	1548.8	1454.82	1744.371	1696.904	1794.55	765.8438
-2.9	-130.031	-118.178	-127.199	-119.907	-145.236	-150.955	-159.796	-63.2196
+2.9	1113.173	1040.163	1114.092	1046.741	1255.977	1228.489	1299.284	551.4068
-2.95	-65.0155	-59.0888	-63.5995	-59.9534	-72.6182	-75.4774	-79.8978	-31.6098
+2.95	598.7916	558.0919	597.9774	561.9494	674.7534	663.1179	701.384	296.2946
-3	-6.01E-13	-3.7E-13	-3.8E-13	-3.6E-13	-4.6E-13	-4E-13	-4.2E-13	-2.2E-13
+3	3.16E-13	1.72E-13	2.37E-13	1.49E-13	1.57E-13	1.97E-13	2.08E-13	1.61E-13

2-Span: Moment (Max and Min) Raw Data Results - 190' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-3.63E-13	-4E-13	-4.2E-13	-3E-13	-3.2E-13	-3.8E-13
End Shear	3.05E-13	3.13E-13	3.75E-13	2.87E-13	3.39E-13	3.28E-13
-0.05	-65.0155	-140.406	-155.325	-88.2064	-106.155	-114.576
+0.05	598.705	1185.693	1283.74	768.2783	926.0041	987.1394
-0.1	-130.031	-280.813	-310.649	-176.413	-212.311	-229.152
+0.1	1113.773	2188.547	2376.565	1421.978	1714.021	1825.212
-0.15	-195.047	-421.219	-465.974	-264.619	-318.466	-343.728
+0.15	1545.175	3045.389	3298.447	1962.076	2371.61	2528.473
-0.2	-260.062	-561.625	-621.298	-352.825	-424.622	-458.304
+0.2	1895.236	3728.204	4092.031	2418.236	2915.533	3103.673
-0.25	-325.078	-702.031	-776.623	-441.032	-530.777	-572.88
+0.25	2165.774	4271.759	4703.22	2768.991	3330.403	3567.186
-0.3	-390.093	-842.438	-931.947	-529.238	-636.932	-687.456
+0.3	2364.034	4682.559	5166.168	3021.859	3624.086	3897.03
-0.35	-455.109	-982.844	-1087.27	-617.445	-743.088	-802.032
+0.35	2500.236	4957.048	5461.079	3185.394	3814.867	4099.66
-0.4	-520.124	-1123.25	-1242.6	-705.651	-849.243	-916.608
+0.4	2565.04	5109.926	5604.149	3252.607	3890.881	4195.697
-0.45	-585.14	-1263.66	-1397.92	-793.857	-955.399	-1031.18
+0.45	2562.46	5112.833	5636.579	3230.077	3859.384	4173.546
-0.5	-650.155	-1404.06	-1553.25	-882.064	-1061.55	-1145.76
+0.5	2517.173	5014.827	5513.913	3181.046	3802.773	4105.724
-0.55	-715.171	-1544.47	-1708.57	-970.27	-1167.71	-1260.34
+0.55	2414.608	4791.826	5249.274	3061.798	3662.66	3944.536
-0.6	-780.186	-1684.88	-1863.89	-1058.48	-1273.86	-1374.91
+0.6	2255.747	4443.852	4894.729	2861.707	3425.096	3678.842
-0.65	-845.202	-1825.28	-2019.22	-1146.68	-1380.02	-1489.49
+0.65	2046.292	3991.376	4410.192	2587.919	3098.453	3329.386
-0.7	-910.217	-1965.69	-2174.54	-1234.89	-1486.18	-1604.06
+0.7	1792.462	3454.973	3810.371	2248.735	2692.546	2893.639
-0.75	-975.233	-2106.09	-2329.87	-1323.1	-1592.33	-1718.64
+0.75	1500.985	2826.497	3109.104	1853.173	2221.252	2382.474
-0.8	-1040.25	-2246.5	-2485.19	-1411.3	-1698.49	-1833.22
+0.8	1179.108	2121.364	2327.058	1410.962	1691.131	1808.378
-0.85	-1105.26	-2386.91	-2640.52	-1499.51	-1804.64	-1947.79
+0.85	834.5897	1356.135	1482.737	932.5478	1112.781	1184.767
-0.9	-1170.28	-2527.31	-2795.84	-1587.71	-1910.8	-2062.37
+0.9	475.702	594.9048	666.3318	448.8405	530.48	554.4506
-0.95	-1235.29	-2667.72	-2951.17	-1675.92	-2016.95	-2176.94
+0.95	155.0687	210.0544	194.8135	178.3486	212.9676	213.0356
-1	-1300.31	-2808.13	-3106.5	-1764.13	-2123.11	-2291.52
+1	0	0	0	0	0	0
(Span 2) -2	-1300.31	-2808.13	-3106.5	-1764.13	-2123.11	-2291.52
+2	0	0	0	0	0	0
-2.05	-1235.29	-2667.72	-2951.18	-1675.92	-2016.95	-2176.94
+2.05	155.0687	210.0501	194.8128	178.35	212.9632	213.0314
-2.1	-1170.28	-2527.31	-2795.85	-1587.71	-1910.8	-2062.37
+2.1	475.9263	594.9124	666.332	448.841	530.4848	554.4572
-2.15	-1105.26	-2386.91	-2640.53	-1499.51	-1804.64	-1947.79
+2.15	834.8426	1356.139	1481.714	932.5468	1112.782	1184.771
-2.2	-1040.25	-2246.5	-2485.2	-1411.3	-1698.49	-1833.22
+2.2	1179.377	2121.368	2328.663	1410.961	1691.132	1808.383
-2.25	-975.233	-2106.09	-2329.88	-1323.1	-1592.33	-1718.64

+2.25	1501.258	2826.501	3110.746	1853.172	2221.253	2382.478
-2.3	-910.217	-1965.69	-2174.55	-1234.89	-1486.18	-1604.06
+2.3	1792.726	3454.976	3809.294	2248.734	2692.545	2893.643
-2.35	-845.202	-1825.28	-2019.23	-1146.68	-1380.02	-1489.49
+2.35	2046.538	3991.377	4409.794	2587.916	3098.451	3329.388
-2.4	-780.186	-1684.88	-1863.9	-1058.48	-1273.86	-1374.91
+2.4	2255.964	4444.856	4894.729	2861.703	3425.092	3678.841
-2.45	-715.171	-1544.47	-1708.58	-970.27	-1167.71	-1260.34
+2.45	2414.787	4791.832	5249.274	3061.793	3662.666	3944.534
-2.5	-650.155	-1404.06	-1553.25	-882.064	-1061.55	-1145.76
+2.5	2517.305	5014.83	5513.913	3181.052	3802.777	4105.719
-2.55	-585.14	-1263.66	-1397.93	-793.857	-955.398	-1031.18
+2.55	2562.363	5113.436	5636.579	3230.073	3859.382	4173.541
-2.6	-520.124	-1123.25	-1242.6	-705.651	-849.243	-916.608
+2.6	2564.886	5109.921	5604.148	3252.613	3890.877	4195.701
-2.65	-455.109	-982.844	-1087.28	-617.445	-743.088	-802.032
+2.65	2500.019	4957.039	5461.078	3185.398	3814.871	4099.661
-2.7	-390.093	-842.438	-931.951	-529.238	-636.932	-687.456
+2.7	2363.748	4682.555	5166.604	3021.86	3624.086	3897.027
-2.75	-325.078	-702.031	-776.626	-441.032	-530.777	-572.88
+2.75	2165.565	4271.762	4703.219	2768.989	3330.4	3567.178
-2.8	-260.062	-561.625	-621.301	-352.826	-424.622	-458.304
+2.8	1894.951	3728.81	4092.03	2418.231	2915.526	3103.668
-2.85	-195.047	-421.219	-465.976	-264.619	-318.466	-343.728
+2.85	1544.81	3045.395	3299.784	1962.073	2371.611	2528.475
-2.9	-130.031	-280.813	-310.65	-176.413	-212.311	-229.152
+2.9	1113.173	2188.547	2376.565	1421.972	1714.018	1825.209
-2.95	-65.0155	-140.406	-155.325	-88.2064	-106.155	-114.576
+2.95	598.7916	1185.687	1283.741	768.2686	925.9966	987.1325
-3	-6.01E-13	-6.7E-13	-7.1E-13	-5E-13	-5.6E-13	-5.7E-13
+3	3.16E-13	2.63E-13	2.55E-13	2.32E-13	2.26E-13	2.06E-13

2-Span: Shear (Max and Min) Raw Data Results - 200' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-29.92414739	*-25.15423033*	*-37.53215153*	-12.00149699	-12.91838488	-12.17801784	-14.751568	-15.36572582	-16.266	-6.425216691
End Shear	256.135494	*213.2255361*	*302.2953659*	121.4419013	130.1822165	122.3724294	147.0622199	145.8361473	154.269	64.57711402
-0.05	-30.25625345	*-25.48633639*	*-37.83104698*	-12.00149699	-12.91838488	-12.17801784	-14.751568	-15.36572582	-16.266	-6.425216691
+0.05	234.6337596	*194.9287399*	*274.9281239*	113.4591361	121.5877674	114.2731603	137.2501772	135.5179937	143.3452	60.3071176
-0.1	-31.35641312	*-28.44995634*	*-39.08701465*	-12.00149699	-12.91838488	-12.17801784	-14.751568	-15.36572582	-16.266	-6.425216691
+0.1	213.2023622	*176.6828791*	*247.2226108*	105.3047862	112.8105692	106.0000896	127.2317652	124.9917624	132.2016	55.91667905
-0.15	-38.06711974	*-36.9483139*	*-48.6444787*	-19.08594437	-19.9559882	-18.44721442	-21.09846582	-15.36572582	-16.266	-9.388674467
+0.15	194.4721968	*160.8803031*	*223.1164152*	97.98234351	104.9305732	98.57376584	118.2424355	115.5776143	122.2358	51.97679358
-0.2	-51.47874491	*-47.00341477*	*-60.72564679*	-27.18437999	-28.68227599	-26.67800822	-31.08525837	-22.71256785	-23.908	-13.76277425
+0.2	174.6243749	*144.2119932*	*198.125727*	89.97537243	96.31589749	90.45626406	108.4206201	105.3265024	111.3844	47.67159281
-0.25	-64.1731368	*-56.67282559*	*-72.15998517*	-34.43553564	-36.49736487	-34.05042847	-40.03427071	-32.17707406	-33.9241	-17.68181878
+0.25	157.4621192	*129.8665112*	*176.531501*	82.83098914	88.63110205	83.2160998	99.66420237	96.21977516	101.745	43.83300166
-0.3	-78.77921309	*-67.95889768*	*-85.31540118*	-42.34083942	-45.01947155	-42.09105227	-49.798583	-42.66156707	-45.0267	-21.95729285
+0.3	139.3959804	*114.8370866*	*153.8178898*	75.07025125	80.28540708	75.35454824	90.1606588	86.37308352	91.32275	39.66647385
-0.35	-92.47474801	*-78.68077592*	*-97.64990228*	-49.37253661	-52.60166449	-49.24600616	-58.49126406	-52.02697686	-54.9447	-25.76293008
+0.35	123.8858529	*101.9961677*	*134.3518*	68.19336939	72.89213445	68.39136787	81.74724349	77.69074687	82.13346	35.97751846
-0.4	-108.0949315	*-91.05789048*	*-111.7168472*	-56.98585676	-60.81313396	-56.99608551	-67.91143021	-62.21210001	-65.7312	-29.88634269
+0.4	107.6856131	*88.6492366*	*114.0793817*	60.77771552	64.92187536	60.88614019	72.68363701	68.37777915	72.2773	32.00310189
-0.45	-122.6204241	*-102.6976257*	*-124.7970725*	-63.70865352	-68.06610908	-63.84275336	-76.23769539	-71.24816206	-75.3013	-33.53022689
+0.45	93.89581017	*77.34432308*	*96.89900867*	54.25778217	57.91645291	54.29076127	64.72330594	60.23682724	63.66208	28.51213334
-0.5	-139.0566306	*-116.0081254*	*-142.8995294*	-70.9311319	-75.86047895	-71.2019054	-85.19203901	-81.0046162	-85.6349	-37.44814141
+0.5	79.62797799	*65.70576593*	*79.23397009*	47.2860771	50.42809935	47.24224341	56.22131559	51.58689106	54.50889	24.78325928
-0.55	-154.2248381	*-128.4150479*	*-164.4551843*	-77.25558804	-82.68791624	-77.64946678	-93.04180339	-89.59433195	-94.7333	-40.88192852
+0.55	67.61063628	*55.9522425*	*64.56497219*	41.21253049	43.90684536	41.10548739	48.82415528	44.10431378	46.59162	21.53862552
-0.6	-171.2612512	*-142.483543*	*-188.4432092*	-83.98836443	-89.95872157	-84.517304	-101.4086432	-98.79281063	-104.477	-44.54090939
+0.6	55.32397081	*46.03020277*	*50.0768451*	34.78362464	37.00685154	34.61405668	41.00545163	36.24670166	38.2783	18.108731
-0.65	-186.8689018	*-155.490945*	*-210.2240121*	-89.82503718	-96.26429768	-90.47493776	-108.6718199	-106.8192007	-112.98	-47.71624788
+0.65	45.11520527	*37.82742743*	*40.62922147*	29.24590242	31.06608333	29.02674475	34.28154841	29.53948532	31.18284	15.15877321
-0.7	-204.2719974	*-170.1243277*	*-234.300508*	-95.96925831	-102.9050809	-96.75109276	-116.329498	-115.3304116	-121.997	-51.06285859
+0.7	34.84075493	*29.61233311*	*31.37652539*	23.4586579	24.86091621	23.19278412	27.26780683	22.60349221	23.84627	12.08129659
-0.75	-220.0997669	*-183.5494692*	*-256.0127082*	-101.2287108	-108.5924796	-102.1279794	-122.8960032	-122.6764929	-129.78	-53.9314055
+0.75	26.46062202	*22.94361165*	*23.82969058*	18.54621298	19.59696783	18.2457341	21.32724299	16.78863244	17.69651	9.474367539
-0.8	-237.6182725	*-198.5368808*	*-280.5427495*	-106.6855185	-114.4967783	-107.7120651	-129.7228382	-130.3711166	-137.933	-56.91221054
+0.8	18.21169461	*16.40814756*	*16.40098699*	13.49948421	14.19308589	13.16963027	15.24014458	10.96884083	11.54615	6.802743302
-0.85	-253.4308191	*-212.1809837*	*-302.9108484*	-111.2783038	-119.4696719	-112.4173844	-135.4825868	-136.9198968	-144.873	-59.42561621
+0.85	11.66421409	*11.24076264*	*10.50456925*	9.301743622	9.70226332	8.953656812	10.19299851	6.873057707	7.276917	4.587191648
-0.9	-270.795727	*-227.2938577*	*-327.2867403*	-115.9488342	-124.531017	-117.2090211	-141.3569066	-143.6686427	-152.026	-61.98717574
+0.9	5.80706712	*6.339882522*	*5.229149589*	5.094387192	5.206127646	4.735780533	5.154204949	3.814296488	4.026774	2.461198984
-0.95	-286.3416434	*-240.942089*	*-348.9433681*	-119.7855119	-128.6930851	-121.1519528	-146.1998133	-149.3031346	-157.998	-64.09709449
+0.95	2.153995688	*2.625056754*	*1.938596117*	2.048918582	2.048918582	1.776442294	1.835119741	1.557682639	1.639666	1.184487181
-1	-303.2662471	*-255.9341214*	*-372.3419543*	-123.5709227	-132.8050316	-125.0507605	-150.9999451	-154.9767088	-164.014	-66.18598031
+1	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	*0.00E+00*	*0*	0.00E+00	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00
+2	3.03E+02	*2.55E+02*	*371.2420597*	1.23E+02	1.33E+02	124.8762138	150.7847351	1.55E+02	1.64E+02	6.61E+01
-2.05	-2.03E+00	*-2.45E+00*	*-1.829300064*	-1.91E+00	-1.91E+00	-1.634724248	-1.678594416	-1.45E+00	-1.53E+00	-1.12E+00
+2.05	2.87E+02	*2.42E+02*	*3.50E+02*	119.9765767	128.9004833	1.21E+02	1.46E+02	1.50E+02	158.2987	6.42E+01
-2.1	-6.06E+00	*-6.55E+00*	*-5.456357736*	-5.284293557	-5.408934561	-4.925945434	-5.381094157	-3.952411215	-4.17352	-2.527491165
+2.1	2.70E+02	*2.27E+02*	*3.26E+02*	115.7362205	124.3004993	1.17E+02	1.41E+02	1.43E+02	151.6976	6.19E+01
-2.15	-1.13E+01	*-1.10E+01*	*-10.21589346*	-9.091157811	-9.477091562	-8.742334589	-9.940264539	-6.720009941	-7.11428	-4.476149281
+2.15	254.304456	*212.9000892*	*304.0805996*	111.5102856	119.7209534	112.6552121	135.7739197	137.2527979	145.2259	59.55279965
-2.2	-18.58038371	*-16.69990475*	*-16.73301469*	-13.73058484	-14.4404374	-13.40190538	-15.51845959	-11.21470232	-11.8049	-6.924816665
+2.2	236.8287116	*197.8202438*	*279.3587369*	106.4342321	114.2247944	107.4547863	129.4081125	130.0149131	137.5557	56.77493028
-2.25	-26.04052694	*-22.61288656*	*-23.45421542*	-18.29687478	-19.32988142	-17.99478832	-21.02609836	-16.49555383	-17.3866	-9.342100654

+2.25	220.97809	184.2597547	257.1522032	101.4969203	108.8825945	102.4023036	123.2311924	123.0528358	130.1787	54.07790696
-2.3	-35.29879822	-29.98367351	-31.79544404	-23.72624169	-25.14773861	-23.46238617	-27.59174945	-22.92227578	-24.1834	-12.22333538
+2.3	203.4840244	169.4218806	233.1552173	95.6840226	102.5967178	96.45962558	115.9737145	114.9337527	121.5764	50.90752037
-2.35	-44.59076161	-37.41633878	-40.16695725	-28.96253065	-30.76216446	-28.74094894	-33.93777909	-29.19796698	-30.8216	-15.00782572
+2.35	187.736605	156.1817367	211.3710961	90.12475795	96.58816686	90.78098474	109.045079	107.2328715	113.4179	47.87953016
-2.4	-55.86930792	-46.48261351	-50.7076068	-35.08297136	-37.32806186	-34.91620161	-41.36922309	-36.61096369	-38.6637	-18.26819232
+2.4	170.4845306	141.8055394	187.2982484	83.67389403	89.61905648	84.1964308	101.0175989	98.36184118	104.0205	44.37006167
-2.45	-66.98122111	-55.45969713	-63.84179385	-40.8998034	-43.57113216	-40.7896129	-48.4435459	-43.72048179	-46.1855	-21.3715333
+2.45	155.0678608	129.0765176	165.594205	77.58213112	83.04048984	77.98245673	93.44733834	90.03914226	95.20442	41.0594534
-2.5	-80.25803283	-66.23991565	-80.04305266	-47.61249113	-50.77864063	-47.57214124	-56.61911043	-51.99045203	-54.9359	-24.95759972
+2.5	138.3003695	115.363978	141.7701748	70.59214165	75.49458951	70.85640785	84.77152995	80.54549033	85.14862	37.26432397
-2.55	-93.1620227	-76.77007689	-96.02599219	-53.9204322	-57.55404166	-53.9495849	-64.31164487	-59.81686026	-63.2177	-28.33144939
+2.55	123.4259077	103.3207996	125.3845004	64.05731999	68.44232689	64.19794177	76.66975598	71.71799231	75.79893	33.71944125
-2.6	-108.3974138	-89.2649548	-115.0144988	-61.12647118	-65.29665825	-61.23900871	-73.10965709	-68.81450078	-72.7395	-32.189778
+2.6	107.3678994	90.45616974	110.9379813	56.62704005	60.42607431	56.63075551	67.46726434	61.73102096	65.22172	29.69209619
-2.65	-123.0494811	-101.3408135	-133.3565231	-67.83607135	-72.50805952	-68.02966101	-81.31031558	-77.24078455	-81.6572	-35.78578511
+2.65	93.18912072	79.25751489	98.22045841	49.73859814	52.99643424	49.61859321	58.94403209	52.51564988	55.46219	25.96128686
-2.7	-140.1860442	-115.5333375	-154.8713059	-75.43662534	-80.67934537	-75.7255993	-90.60910123	-86.83676944	-91.8135	-39.86294048
+2.7	78.05201714	67.40731952	84.59986047	41.96693036	44.61633995	41.71067346	49.33655904	42.16466276	44.50049	21.75516393
-2.75	-156.5262319	-129.1314845	-175.422065	-82.45844757	-88.23043001	-82.83864385	-99.20780264	-95.74594285	-101.243	-43.63275907
+2.75	64.83641353	57.19583398	72.70844961	34.8143137	36.90564831	34.43563842	40.50195755	32.67843671	34.45501	17.88677527
-2.8	-175.4887472	-144.9869123	-199.28897	-90.35468227	-96.72394786	-90.84071801	-108.8856912	-105.8110257	-111.897	-47.87529272
+2.8	50.80589817	46.50886501	60.0839607	26.80009174	28.26814839	26.28736346	30.61117349	22.26018711	23.43178	13.55530927
-2.85	-193.4410276	-160.0678916	-221.8836662	-97.59925961	-104.5183668	-98.18530763	-117.7723176	-115.0860981	-121.715	-51.77057713
+2.85	38.67113478	37.41115042	49.16536646	19.47274133	20.37272612	18.84027491	21.57528645	15.36572603	16.26603	9.597688929
-2.9	-214.1366591	-177.5337504	-248.5170825	-105.6922953	-113.2276309	-106.3931599	-127.7076629	-125.4909488	-132.73	-56.12507715
+2.9	31.28659472	28.01846804	38.75836834	12.00149725	12.91838464	12.17801756	14.75156823	15.36572603	16.26603	6.425216726
-2.95	-233.608965	-194.0420678	-273.5844034	-113.0702334	-121.1691133	-113.8784988	-136.7721587	-135.0149366	-142.813	-60.09747973
+2.95	30.29118819	25.52128663	37.86250248	12.00149725	12.91838464	12.17801756	14.75156823	15.36572603	16.26603	6.425216726
-3	-255.9270282	-213.0481577	-302.2953659	-121.2611912	-129.9876388	-122.1917268	-146.843261	-145.6302213	-154.051	-64.51049709
+3	29.92413157	25.15423	37.53215153	12.00149725	12.91838464	12.17801756	14.75156823	15.36572603	16.26603	6.425216726

2-Span: Shear (Max and Min) Raw Data Results - 200' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.201288999	-13.22596902	-14.2318064	-20.7615531	-7.372402132	-9.957305132	-11.41109307	-12.78281078	-14.23435834
End Shear	92.19694124	126.3241196	131.445187	166.7003968	74.10824737	99.95273996	113.6508096	125.2911491	137.3822735
-0.05	-9.201288999	-13.22596902	-14.2318064	-20.84754485	-7.372402132	-9.957305132	-11.41109307	-12.78281078	-14.23435834
+0.05	86.06576054	117.4342029	121.8129521	150.8344628	69.19832927	93.32721996	106.0529454	116.7874516	127.9170739
-0.1	-9.201288999	-13.22596902	-14.2318064	-21.13240763	-7.372402132	-9.957305132	-11.41109307	-12.78281078	-14.23435834
+0.1	79.80400407	108.3625654	111.9938372	134.8903828	64.18551483	86.56008853	98.29290885	108.1054286	118.2569898
-0.15	-13.46318592	-13.22596902	-14.2318064	-21.56115037	-11.1215971	-14.92261938	-16.02563984	-15.97750341	-15.97436021
+0.15	74.18464248	100.2471604	103.2299352	120.9893563	59.68593615	80.48607238	91.33093247	100.3224444	109.6040819
-0.2	-19.70081848	-20.29097989	-17.40004259	-22.22261535	-16.10968631	-21.65779992	-23.76616855	-24.55728923	-25.06937527
+0.2	68.04397665	91.40779585	93.70715415	106.2498841	54.76777303	73.84730414	83.72530101	91.82684746	100.1666517
-0.25	-25.28942226	-28.43211634	-25.06547934	-24.65059612	-20.57773987	-27.69107775	-30.70327114	-32.35398645	-33.78362896
+0.25	62.56857158	83.55292384	85.26641615	93.51831956	50.3813544	67.92657747	76.94567991	84.26035102	91.76851796
-0.3	-31.38622245	-37.45178694	-34.31610262	-32.62088104	-25.45093823	-34.27174461	-38.27342531	-40.86913764	-43.30854296
+0.3	56.6250372	75.05718274	76.16166257	80.15821242	45.61868578	61.49830307	69.58874311	76.05687905	82.67162828
-0.35	-36.81300599	-45.50651258	-43.18447879	-40.36814715	-29.78752273	-40.1280723	-45.01372438	-48.45730158	-51.80364166
+0.35	51.36239134	67.56357542	68.15421073	69.08030364	41.40046514	55.80517623	63.07679568	68.80251567	74.63493059
-0.4	-42.69293091	-54.26371925	-52.84873535	-49.00387232	-34.48500007	-46.4721006	-52.31921459	-56.68912254	-61.02739875
+0.4	45.69204027	59.52281104	59.58920749	57.78053149	36.85411606	49.66951911	56.06286504	60.99689301	65.99646383
-0.45	-47.88909416	-62.03060785	-61.44098512	-57.72300316	-38.63507894	-52.0771715	-58.77739191	-63.97311688	-69.19668325
+0.45	40.71095907	52.49122103	52.12514468	48.83555444	32.85913844	44.27829771	49.90391061	54.15030271	58.42786095
-0.5	-53.47609132	-70.41400114	-70.73918435	-69.0727154	-43.09599866	-58.10242959	-65.72390796	-71.81588581	-78.0013943
+0.5	35.3898363	45.01679033	44.22158495	39.87962229	28.58995085	38.51739216	43.32728183	46.84822857	50.36569739
-0.55	-58.3728264	-77.79229632	-78.94518933	-80.10344276	-47.0045278	-63.38193585	-71.81464248	-78.70006392	-85.73821103
+0.55	30.75912311	38.54796651	37.41103574	32.63841697	24.87325506	33.50238456	37.60663958	40.50506098	43.37183494
-0.6	-63.59085203	-85.69052051	-87.755632	-92.98549221	-51.16805158	-69.00628896	-78.30788736	-86.04808106	-94.00598506
+0.6	25.86326779	31.75121279	30.29063347	25.87587142	20.94205501	28.19835743	31.56160496	33.81224526	36.003852
-0.65	-68.11935105	-92.57948239	-95.46526845	-106.1815744	-54.77999509	-73.88592221	-83.94586141	-92.43679499	-101.2036805
+0.65	21.65172841	25.9459012	24.24372391	20.56710052	17.55868184	23.63387187	26.3645949	28.06813433	29.69139224
-0.7	-72.89236626	-99.88119416	-103.6662517	-121.1923756	-58.5852898	-79.02725146	-89.8915426	-99.18435057	-108.8166477
+0.7	17.25719905	19.93817034	18.02818689	15.15932094	14.02630957	18.86885446	20.94546152	22.09030367	23.13548895
-0.75	-76.98383328	-106.1800796	-110.7694144	-135.4382551	-61.84560058	-83.43270481	-94.99143701	-104.9819681	-115.3685712
+0.75	13.53363516	14.89712478	13.08081453	10.92952602	11.03129958	14.82919659	16.35740044	17.04089453	17.61108532
-0.8	-81.2357851	-112.773912	-118.2392257	-150.9298131	-65.23184052	-88.00887533	-100.2952483	-111.0233359	-122.2088425
+0.8	9.716465068	9.847795561	8.411970726	6.97844166	7.958587883	10.68532358	11.65847417	11.88374846	11.98512389
-0.85	-84.8214121	-118.3819699	-124.625793	-164.6677597	-68.08548001	-91.86584141	-104.7717446	-116.1342093	-128.0083234
+0.85	6.549681549	6.003438964	5.368625706	4.398566754	5.406986185	7.244796131	7.764681838	7.743485224	7.742673818
-0.9	-88.47624994	-124.1565809	-131.2427145	-179.4882595	-70.99182437	-95.79472429	-109.3393798	-121.3636894	-133.9580169
+0.9	3.385922765	3.300868775	2.659701748	2.155634234	2.854769089	3.80418908	4.022731177	4.022075879	4.021433956
-0.95	-91.48723414	-128.9730649	-136.8025706	-192.5188709	-73.383753	-99.02889569	-113.1071596	-125.6921757	-138.8984182
+0.95	1.442897369	1.43734408	1.142398741	0.898268835	1.138553669	1.471835609	1.41687695	1.471839	1.471327047
-1	-94.46892199	-133.8171095	-142.444913	-206.4456583	-75.74936782	-102.2283618	-116.8443324	-130.0040573	-143.8396497
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00
+2	9.43E+01	1.34E+02	1.42E+02	2.06E+02	7.56E+01	1.02E+02	116.6767094	129.8101532	1.44E+02
-2.05	-1.35E+00	-1.34E+00	-1.07E+00	-8.38E-01	-1.08E+00	-1.36E+00	-1.306409615	-1.36100337	-1.36E+00
+2.05	9.16E+01	1.29E+02	1.37E+02	1.93E+02	7.35E+01	9.92E+01	113.2952594	125.9087017	1.39E+02
-2.1	-3.528446433	-3.451302667	-2.744341266	-2.227452895	-2.96982323	-3.959270591	-4.169625992	-4.168966927	-4.168321312
+2.1	8.83E+01	1.24E+02	1.31E+02	1.79E+02	7.09E+01	9.56E+01	109.1310402	121.1247734	1.34E+02
-2.15	-6.391053857	-5.847870079	-5.231177127	-4.282283928	-5.279098743	-7.072377062	-7.569765611	-7.549912649	-7.549099504
+2.15	85.0027254	118.66694	124.951299	165.3820317	68.22972475	92.06081679	104.998216	116.393122	128.3025025
-2.2	-9.891044508	-10.06086352	-8.623750328	-7.155791063	-8.099185472	-10.87491056	-11.87326258	-12.11911048	-12.2414412
+2.2	81.03981026	112.4687673	117.8926927	150.1984269	65.07581408	87.7980102	100.0506868	110.7444595	121.8927586
-2.25	-13.34483577	-14.64291972	-12.84815697	-10.73067026	-10.879386	-14.62430673	-16.12487505	-16.78532667	-17.3318448
+2.25	77.19264126	106.5026821	111.1340438	136.1818412	62.01195303	83.65748974	95.25180806	105.27823	115.7036978

-2.3	**-17.46021231**	**-20.21440497**	**-18.31284879**	**-15.40334775**	**-14.18954181**	**-19.08903322**	**-21.19571647**	**-22.36604431**	**-23.43754462**
+2.3	**72.67064447**	**99.54098841**	**103.2834144**	**120.4368134**	**58.40856152**	**78.7884656**	**89.61524914**	**98.87053857**	**108.4623223**
-2.35	**-21.43637335**	**-25.65020254**	**-23.93668268**	**-20.29952848**	**-17.38562553**	**-23.4004171**	**-26.09893786**	**-27.77479055**	**-29.36933357**
+2.35	**68.35203889**	**92.93445207**	**95.86323094**	**106.8901188**	**54.96554574**	**74.13661071**	**84.23563124**	**92.76538605**	**101.5741578**
-2.4	**-26.09109519**	**-32.06639057**	**-30.61988923**	**-26.16699348**	**-21.12503334**	**-28.44521342**	**-31.84281799**	**-34.12334286**	**-36.34603996**
+2.4	**63.34700451**	**85.32054543**	**87.34228415**	**92.32404372**	**50.97352173**	**68.74349508**	**78.00437145**	**85.70437535**	**93.61902998**
-2.45	**-30.52082692**	**-38.21604956**	**-37.06240888**	**-32.27211307**	**-24.68195639**	**-33.24426872**	**-37.31232454**	**-40.17896788**	**-43.01255289**
+2.45	**58.62578345**	**78.17430413**	**79.37068412**	**80.7135562**	**47.20639871**	**63.65461735**	**72.12933942**	**79.05596767**	**86.1384201**
-2.5	**-35.63882864**	**-45.36558932**	**-44.58962394**	**-40.27535206**	**-28.78976131**	**-38.78700657**	**-43.63497078**	**-47.18963797**	**-50.74236215**
+2.5	**53.21374207**	**70.01955658**	**70.30112889**	**68.53200963**	**42.88655639**	**57.81953986**	**65.39766319**	**71.44734839**	**77.58744933**
-2.55	**-40.45334535**	**-52.12840694**	**-51.74071217**	**-48.3815527**	**-32.65248593**	**-43.99942903**	**-49.58544708**	**-53.79647878**	**-58.03694491**
+2.55	**48.15869385**	**62.43438353**	**61.88825419**	**58.26294595**	**38.85036499**	**52.36796394**	**59.11253352**	**64.35128591**	**69.62104902**
-2.6	**-45.95859397**	**-59.89994571**	**-59.99022775**	**-58.28773212**	**-37.06786293**	**-49.95797914**	**-56.39252407**	**-61.36355412**	**-66.40201966**
+2.6	**42.41570725**	**53.85014728**	**52.39179944**	**48.59100407**	**34.2635617**	**46.17303564**	**51.9747186**	**56.30076775**	**60.59206684**
-2.65	**-51.08907415**	**-67.17515134**	**-67.7397677**	**-68.5179866**	**-41.18134736**	**-55.50945846**	**-62.73864824**	**-68.42600825**	**-74.21801758**
+2.65	**37.09563377**	**45.92673658**	**43.64771133**	**40.77752285**	**30.01334323**	**40.43304885**	**45.36480664**	**48.85273416**	**52.24652853**
-2.7	**-56.90552409**	**-75.45731637**	**-76.58987706**	**-80.77730963**	**-45.84347521**	**-61.80169115**	**-69.93587143**	**-76.44377813**	**-83.10045093**
+2.7	**31.09776692**	**37.02436486**	**33.84606513**	**32.21496874**	**25.22040226**	**33.96041839**	**37.91519723**	**40.4660051**	**42.85744398**
-2.75	**-62.28314932**	**-83.14416472**	**-84.82775121**	**-92.86537403**	**-50.15268002**	**-67.61792252**	**-76.59232917**	**-83.86616214**	**-91.33121002**
+2.75	**25.58145548**	**28.86348976**	**25.46681689**	**24.99641154**	**20.81119719**	**28.00633078**	**31.06582514**	**32.76162498**	**34.23942722**
-2.8	**-68.33477166**	**-91.82565229**	**-94.15671928**	**-106.9367639**	**-55.00069935**	**-74.16171004**	**-84.08542218**	**-92.22894048**	**-100.6131205**
+2.8	**19.40473803**	**19.90318003**	**16.9947022**	**22.18667895**	**15.87293881**	**21.33812598**	**23.39869876**	**24.1444428**	**24.60812173**
-2.85	**-73.89075353**	**-99.82339382**	**-102.772813**	**-120.2728285**	**-59.4505827**	**-80.16836445**	**-90.96689173**	**-99.91562985**	**-109.1519544**
+2.85	**13.76100956**	**13.2259686**	**14.23180662**	**21.58819579**	**11.35978828**	**15.24424418**	**16.3951619**	**16.34404257**	**16.3409032**
-2.9	**-80.10148407**	**-108.7928277**	**-112.4589859**	**-135.6367667**	**-64.4236857**	**-86.88159544**	**-98.66151087**	**-108.5176582**	**-118.7154595**
+2.9	**9.201289082**	**13.2259686**	**14.23180662**	**21.11433388**	**7.372402033**	**9.95730521**	**11.41109303**	**12.78281074**	**14.2343582**
-2.95	**-85.76701933**	**-117.0007189**	**-121.3431825**	**-150.0627033**	**-68.95919287**	**-93.00438518**	**-105.6826745**	**-116.3730374**	**-127.455769**
+2.95	**9.201289082**	**13.2259686**	**14.23180662**	**20.85659468**	**7.372402033**	**9.95730521**	**11.41109303**	**12.78281074**	**14.2343582**
-3	**-92.06079497**	**-126.14672**	**-131.2648256**	**-166.542119**	**-73.99653136**	**-99.80491248**	**-113.484543**	**-125.1086304**	**-137.1829877**
+3	**9.201289082**	**13.2259686**	**14.23180662**	**20.76155323**	**7.372402033**	**9.95730521**	**11.41109303**	**12.78281074**	**14.2343582**

2-Span: Shear (Max and Min) Raw Data Results - 200' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.65707591	-28.39448591	-16.1101	-19.3827	-20.9281
End Shear	235.0263003	255.2147483	151.7534	182.742	195.1569
-0.05	-25.65707591	-28.39448591	-16.1101	-19.3827	-20.9281
+0.05	217.7440978	236.2905549	140.8971	169.7053	181.0667
-0.1	-25.65707591	-28.39448591	-16.1101	-19.3827	-20.9281
+0.1	200.1320346	216.7948095	129.8256	156.4079	166.6987
-0.15	-25.65707591	-28.39448591	-16.1101	-19.3827	-20.9281
+0.15	184.4144173	199.4137814	119.9301	144.521	153.8634
-0.2	-29.94644792	-31.60088375	-22.1739	-27.263	-26.9988
+0.2	167.3377658	180.5500804	109.1621	131.5837	139.9035
-0.25	-43.70972339	-43.9540894	-31.8467	-38.87	-39.2865
+0.25	152.2033122	163.8508505	99.60287	120.0967	127.5175
-0.3	-60.94469625	-61.97048473	-42.9199	-52.1553	-53.7034
+0.3	135.880305	145.8622392	89.27468	107.6831	114.143
-0.35	-76.86597392	-79.72445319	-52.8173	-64.0281	-66.5959
+0.35	121.5264305	130.0647046	80.17514	96.7439	102.3669
-0.4	-94.21840832	-99.09324477	-63.5881	-76.9463	-80.6331
+0.4	106.1753095	113.1942427	70.42319	85.0177	89.75502
-0.45	-109.6482382	-116.3335093	-73.1501	-88.4129	-93.1019
+0.45	92.79947345	98.51829242	61.90671	74.77448	78.74916
-0.5	-126.3483721	-135.0130294	-83.482	-100.8	-106.582
+0.5	78.63843889	83.00900592	52.86739	63.89934	67.07729
-0.55	-141.0892862	-151.5197267	-92.5853	-111.713	-118.467
+0.55	66.4381138	69.67454905	45.05734	54.50014	57.00209
-0.6	-156.9188874	-169.2669251	-102.342	-123.406	-131.213
+0.6	53.68542097	55.76948724	36.86704	44.63973	46.44752
-0.65	-170.7734551	-184.8201396	-110.863	-133.616	-142.353
+0.65	42.85801189	43.9964234	29.88685	36.23265	37.46343
-0.7	-185.5143021	-201.3919815	-119.908	-144.451	-154.187
+0.7	31.73190688	31.93863151	22.68193	27.5506	28.20347
-0.75	-198.2850852	-215.771812	-127.724	-153.811	-164.422
+0.75	22.64740932	22.82673146	16.655	20.28372	20.47088
-0.8	-211.7189118	-230.9252409	-135.921	-163.624	-175.168
+0.8	14.37103762	15.01551107	10.76055	13.17014	13.0271
-0.85	-223.2084481	-243.9118011	-142.907	-171.985	-184.338
+0.85	8.7457243	8.961646638	7.302021	8.017756	8.569255
-0.9	-235.1170681	-257.4037495	-150.12	-180.613	-193.817
+0.9	4.448011028	4.073922761	4.08218	4.416852	4.550295
-0.95	-245.1278959	-268.7771555	-156.154	-187.828	-201.761
+0.95	1.54251669	1.509511176	1.602733	1.706982	1.640605
-1	-255.2930556	-280.3646058	-162.246	-195.107	-209.797
+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(Span 2) -2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
+2	2.55E+02	2.80E+02	1.62E+02	1.95E+02	2.09E+02
-2.05	-1.40E+00	-1.39E+00	-1.54E+00	-1.64E+00	-1.50E+00
+2.05	2.46E+02	2.69E+02	1.56E+02	188.1911	2.02E+02
-2.1	-4.533893972	-4.35109856	-4.2276	-4.6421	-4.73151
+2.1	2.35E+02	2.57E+02	1.50E+02	180.2172	1.93E+02
-2.15	-8.478386848	-8.676890826	-7.14094	-7.84161	-8.36791
+2.15	223.7941166	244.5751625	143.2626	172.4107	184.8046
-2.2	-14.71313324	-15.36698317	-11.016	-13.4787	-13.3607
+2.2	211.0955798	230.2220969	135.5408	163.1696	174.6699
-2.25	-22.22454079	-22.3869202	-16.3516	-19.9178	-20.082
+2.25	198.9407257	216.5114119	128.1242	154.2906	164.9474

-2.3	**-32.24140164**	**-32.48921872**	**-23.0127**	**-27.9493**	**-28.6282**
+2.3	**184.8260865**	**200.6184157**	**119.4862**	**143.9459**	**153.6352**
-2.35	**-42.3083607**	**-43.39911516**	**-29.5317**	**-35.8048**	**-37.0067**
+2.35	**171.4886725**	**185.6243583**	**111.3024**	**134.1424**	**142.9275**
-2.4	**-54.27507443**	**-56.41097019**	**-37.2464**	**-45.0966**	**-46.9362**
+2.4	**156.1761564**	**168.4344717**	**101.8846**	**122.8579**	**130.6151**
-2.45	**-65.81365128**	**-68.99219936**	**-44.657**	**-54.0182**	**-56.4859**
+2.45	**141.8537219**	**152.3770367**	**93.05691**	**112.2781**	**119.0827**
-2.5	**-79.29784902**	**-83.72975612**	**-53.2889**	**-64.4065**	**-67.6213**
+2.5	**125.5615171**	**134.1333093**	**82.9956**	**100.2173**	**105.9474**
-2.55	**-92.11063471**	**-97.76243099**	**-61.4676**	**-74.2463**	**-78.1819**
+2.55	**110.4514641**	**117.2322933**	**73.64748**	**89.00929**	**93.7506**
-2.6	**-106.8940145**	**-113.9827407**	**-70.8803**	**-85.5674**	**-90.3459**
+2.6	**93.39789743**	**98.17776706**	**63.07915**	**76.33597**	**79.96967**
-2.65	**-120.7835975**	**-129.2469528**	**-79.7037**	**-96.1771**	**-101.757**
+2.65	**77.69761914**	**80.65317161**	**53.33392**	**64.6477**	**67.26899**
-2.7	**-136.6479642**	**-146.7068682**	**-89.7609**	**-108.268**	**-114.772**
+2.7	**60.10087254**	**61.03089494**	**42.39493**	**51.52548**	**53.01976**
-2.75	**-151.416811**	**-162.982729**	**-99.1057**	**-119.499**	**-126.874**
+2.75	**44.45174741**	**45.04649977**	**32.37606**	**39.50513**	**39.97555**
-2.8	**-168.1439303**	**-181.4392541**	**-109.671**	**-132.195**	**-140.563**
+2.8	**29.30534075**	**30.94800388**	**21.69332**	**26.68632**	**26.35736**
-2.85	**-183.594691**	**-198.5069144**	**-119.414**	**-143.901**	**-153.194**
+2.85	**25.65707662**	**28.39446006**	**16.11013**	**19.38269**	**20.92811**
-2.9	**-200.9663325**	**-217.7170077**	**-130.35**	**-157.038**	**-167.38**
+2.9	**25.65707662**	**28.39446006**	**16.11013**	**19.38269**	**20.92811**
-2.95	**-216.9015111**	**-235.3564621**	**-140.368**	**-169.07**	**-180.38**
+2.95	**25.65707662**	**28.39446006**	**16.11013**	**19.38269**	**20.92811**
-3	**-234.6994432**	**-255.0770754**	**-151.54**	**-182.486**	**-194.885**
+3	**25.65707662**	**28.39446006**	**16.11013**	**19.38269**	**20.92811**

2-Span: Moment (Max and Min) Raw Data Results – 200' Max Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-8.25E-13	-5.03E-13	-1.06E-12	-3.75E-13	-4.00E-13	-3.24E-13	-4.08E-13	-4.90E-13	-5.19E-13	-2.32E-13
End Shear	8.61E-13	5.31E-13	1.18E-12	4.04E-13	4.33E-13	3.83E-13	4.71E-13	3.38E-13	3.56E-13	2.83E-13
-0.05	-299.2414739	-251.5423033	-375.3215153	-120.01497	-129.183849	-121.780178	-147.51568	-153.657258	-162.660296	-64.25216691
+0.05	2396.216535	1999.971146	2794.172283	1135.089797	1216.525078	1143.418718	1373.606236	1355.584793	1433.893458	603.071176
-0.1	-598.4829478	-503.0846066	-750.6430306	-240.02994	-258.367698	-243.560357	-295.03136	-307.314516	-325.320591	-128.5043338
+0.1	4475.311776	3743.695831	5218.280912	2115.679669	2266.680936	2130.03192	2557.147568	2512.267289	2657.208552	1122.50003
-0.15	-897.7244217	-754.6269099	-1125.964546	-360.04491	-387.551546	-365.340535	-442.54704	-460.971775	-487.980887	-192.7565007
+0.15	6237.378783	5232.284585	7273.574672	2942.617477	3151.501906	2960.839145	3552.126041	3471.770262	3671.793224	1559.303807
-0.2	-1196.965896	-1006.169213	-1501.286061	-480.05988	-516.735395	-487.120714	-590.06272	-614.629033	-650.641183	-257.0086676
+0.2	7687.818028	6468.009551	8896.969736	3618.561964	3873.905596	3638.624722	4362.031189	4261.054802	4507.372941	1915.008798
-0.25	-1496.207369	-1257.711516	-1876.607576	-600.074849	-645.919244	-608.900892	-737.5784	-768.286291	-813.301478	-321.2608345
+0.25	8831.178073	7454.016137	10102.96072	4147.112863	4437.823097	4167.128476	5019.123538	4889.711667	5174.317977	2191.724722
-0.3	-1795.448843	-1509.25382	-2251.929092	-720.089819	-775.103093	-730.681071	-885.09408	-921.943549	-975.961774	-385.5130014
+0.3	9684.884473	8194.324565	11087.54552	4532.811796	4848.199683	4574.186442	5505.016685	5346.002534	5656.200286	2392.55599
-0.35	-2094.690317	-1760.796123	-2627.250607	-840.104789	-904.286942	-852.461249	-1032.60976	-1075.60081	-1138.62207	-449.7651684
+0.35	10272.59635	8693.828285	11683.02596	4789.447865	5133.469722	4842.799789	5822.126268	5646.775875	5975.842009	2519.85876
-0.4	-2393.931791	-2012.338426	-3002.572122	-960.119759	-1033.47079	-974.241428	-1180.12544	-1229.25807	-1301.28237	-514.0173353
+0.4	10573.18717	8958.295542	11896.53032	4928.348392	5278.720063	4977.456054	5977.162834	5779.399331	6117.213127	2577.186008
-0.45	-2693.173265	-2263.88073	-3377.893638	-1080.13473	-1162.65464	-1096.02161	-1327.64112	-1382.91532	-1463.94266	-578.2695022
+0.45	10596.47448	8994.367571	11749.26004	4941.508869	5289.007355	4985.677877	5979.061721	5754.756928	6092.100258	2565.664393
-0.5	-2992.414739	-2515.423033	-3753.215153	-1200.1497	-1291.83849	-1217.80178	-1475.1568	-1536.57258	-1626.60296	-642.5216691
+0.5	10400.49475	8823.22971	11528.89175	4845.440117	5188.127552	4891.173918	5869.935329	5660.58215	5991.830969	2527.771618
-0.55	-3291.656213	-2766.965336	-4128.536668	-1320.16467	-1421.02234	-1339.58196	-1622.67248	-1690.22984	-1789.26325	-706.773836
+0.55	9951.795251	8439.678679	11187.12674	4640.681997	4970.782294	4687.826475	5629.728024	5437.3546	5754.857253	2431.711118
-0.6	-3590.897687	-3018.50764	-4503.858183	-1440.17964	-1550.20619	-1461.36214	-1770.18816	-1843.8871	-1951.92355	-771.0260029
+0.6	9253.388011	7850.206871	10468.42488	4335.399711	4644.600257	4381.803817	5263.714947	5076.892715	5372.589257	2279.02105
-0.65	-3890.139161	-3270.049943	-4879.179699	-1560.19461	-1679.39003	-1583.14232	-1917.70384	-1997.54436	-2114.58384	-835.2781698
+0.65	8319.267953	7064.705642	9394.556764	3940.531901	4221.058348	3983.592854	4784.880125	4591.738641	4858.452176	2075.254199
-0.7	-4189.380635	-3521.592246	-5254.501214	-1680.20958	-1808.57388	-1704.9225	-2065.21952	-2151.20161	-2277.24414	-899.5303367
+0.7	7164.690248	6093.941439	7989.566588	3473.266564	3712.649777	3504.939407	4207.367296	3996.460345	4227.884204	1826.473665
-0.75	-4488.622108	-3773.134549	-5629.822729	-1800.22455	-1937.75773	-1826.70268	-2212.7352	-2304.85887	-2439.90443	-963.7825036
+0.75	5806.168844	4949.553729	6286.735468	2936.782482	3132.880561	2958.544004	3546.478275	3306.856427	3497.626594	1539.250192
-0.8	-4787.863582	-4024.676853	-6005.144245	-1920.23952	-2066.94158	-1948.48286	-2360.25088	-2458.51613	-2602.56473	-1028.034671
+0.8	4261.474662	3644.055846	4348.762277	2344.347823	2496.270226	2358.212012	2818.673873	2539.956357	2685.723843	1220.664461
-0.85	-5289.98751	-4479.101609	-6563.059964	-2040.25449	-2196.12543	-2070.26303	-2507.76656	-2612.17339	-2765.22503	-1092.286837
+0.85	2752.521619	2393.718798	2478.435642	1710.1727	1818.352266	1719.119788	2041.573204	1714.02114	1811.524456	878.3050699
-0.9	-6160.095356	-5301.510285	-7452.161204	-2160.26946	-2325.30928	-2192.04321	-2655.28224	-2765.83065	-2927.88532	-1156.539004
+0.9	1464.701753	1377.905288	1318.992929	1058.283215	1116.101458	1056.425338	1233.955384	849.3477866	896.4048765	520.26951
-0.95	-7339.01952	-6432.735278	-8619.197124	-2280.28443	-2454.49313	-2313.82339	-2802.79792	-2919.48791	-3090.54562	-1220.791171
+0.95	441.8473515	552.5841858	397.6626152	406.5771112	407.8975071	405.5635183	439.9751221	309.0099399	325.2736209	224.7401123
-1	-8780.090497	-7826.106945	-10772.71011	-2400.29945	-2583.67695	-2435.60356	-2950.31364	-3073.14519	-3253.20586	-1285.043388
+1	0	0	0	0	0	0	0	0	0	0
(Span 2) -2	-8780.090497	-7826.106945	-10772.71011	-2400.29945	-2583.67695	-2435.60356	-2950.31364	-3073.14519	-3253.20586	-1285.043388
+2	0	0	0	0	0	0	0	0	0	0
-2.05	-7339.016565	-6432.735192	-8619.197076	-2280.28447	-2454.49311	-2313.82333	-2802.79796	-2919.48793	-3090.54546	-1220.791221
+2.05	441.8473551	552.5881047	397.6626184	406.5803607	407.9192202	405.5740577	439.9891211	309.0122205	325.2760216	224.2526733
-2.1	-6160.092561	-5301.510204	-7452.161157	-2160.2695	-2325.30926	-2192.04315	-2655.28227	-2765.83067	-2927.88517	-1156.539053
+2.1	1465.196447	1377.911918	1318.993429	1058.281156	1116.126218	1056.439983	1233.964356	849.3641682	896.4223963	520.2645186
-2.15	-5289.984864	-4479.101522	-6563.059909	-2040.25453	-2196.12541	-2070.26298	-2507.76659	-2612.17341	-2765.22488	-1092.286886
+2.15	2753.08055	2393.72683	2478.435959	1710.173803	1818.349445	1719.136015	2041.584084	1714.018405	1811.521875	878.2997565
-2.2	-4787.861099	-4024.676773	-6005.144194	-1920.23956	-2066.94157	-1948.4828	-2360.25091	-2458.51615	-2602.56459	-1028.034719
+2.2	4262.06912	3644.064876	4348.761697	2344.349542	2496.268686	2358.229112	2818.685655	2539.954544	2685.722237	1220.659719

-2.25	**-4488.619783**	***-3773.134473***	***-5629.822679***	**-1800.22458**	**-1937.75772**	**-1826.70263**	**-2212.73523**	**-2304.85889**	**-2439.9043**	**-963.7825516**
+2.25	**5806.771699**	***4949.562649***	***6286.735204***	**2936.784166**	**3132.879527**	**2958.539041**	**3546.490485**	**3306.854872**	**3497.625275**	**1539.245188**
-2.3	**-4189.378468**	***-3521.592173***	***-5254.501163***	**-1680.20961**	**-1808.57388**	**-1704.92245**	**-2065.21954**	**-2151.20163**	**-2277.24401**	**-899.5303844**
+2.3	**7165.276453**	***6093.950471***	***7989.56717***	**3473.268117**	**3712.648634**	**3504.934284**	**4207.37924**	**3996.458353**	**4227.882429**	**1826.469208**
-2.35	**-3890.137152**	***-3270.049873***	***-4879.179648***	**-1560.19464**	**-1679.39003**	**-1583.14228**	**-1917.70386**	**-1997.54437**	**-2114.58372**	**-835.2782171**
+2.35	**8319.811732**	***7064.71349***	***9394.556544***	**3940.532489**	**4221.056078**	**3983.586946**	**4784.891016**	**4591.735118**	**4858.448778**	**2075.249088**
-2.4	**-3590.895836**	***-3018.507573***	***-4503.858133***	**-1440.17967**	**-1550.20618**	**-1461.3621**	**-1770.18818**	**-1843.88711**	**-1951.92343**	**-771.0260498**
+2.4	**9253.867594**	***7850.21351***	***10468.42478***	**4335.397396**	**4644.595715**	**4381.796038**	**5263.723864**	**5076.886386**	**5372.582913**	**2279.015693**
-2.45	**-3291.65452**	***-2766.965273***	***-4128.536617***	**-1320.16469**	**-1421.02234**	**-1339.58192**	**-1622.6725**	**-1690.22985**	**-1789.26314**	**-706.7738826**
+2.45	**9952.190909**	***8439.683566***	***11187.12673***	**4640.678339**	**4970.776299**	**4687.816967**	**5629.734588**	**5437.346203**	**5754.848715**	**2431.706097**
-2.5	**-2992.413205**	***-2515.422973***	***-3753.215102***	**-1200.14972**	**-1291.83849**	**-1217.80175**	**-1475.15682**	**-1536.57259**	**-1626.60285**	**-642.5217153**
+2.5	**10400.78767**	***8823.23238***	***11528.89151***	**4845.433911**	**5188.118698**	**4891.184631**	**5869.938786**	**5660.590942**	**5991.840502**	**2527.765767**
-2.55	**-2693.171889**	***-2263.880673***	***-3377.893587***	**-1080.13475**	**-1162.65464**	**-1096.02157**	**-1327.64113**	**-1382.91533**	**-1463.94256**	**-578.269548**
+2.55	**10596.26075**	***8994.366966***	***11749.26041***	**4941.516941**	**5289.018138**	**4985.669296**	**5979.060689**	**5754.750405**	**6092.093123**	**2568.596247**
-2.6	**-2393.930573**	***-2012.338373***	***-3002.572072***	**-960.119777**	**-1033.4708**	**-974.241398**	**-1180.12545**	**-1229.25807**	**-1301.28227**	**-514.0173808**
+2.6	**10572.84687**	***8958.291908***	***11896.53021***	**4928.353496**	**5278.727688**	**4977.444221**	**5977.157896**	**5779.388777**	**6117.21731**	**2577.183015**
-2.65	**-2094.689258**	***-1760.796073***	***-2627.250556***	**-840.104804**	**-904.28695**	**-852.461223**	**-1032.60977**	**-1075.60081**	**-1138.62198**	**-449.7652135**
+2.65	**10272.11494**	***8693.821305***	***11683.02605***	**4789.449156**	**5133.473332**	**4842.807111**	**5822.117132**	**5646.781744**	**5975.847857**	**2519.855325**
-2.7	**-1795.447942**	***-1509.253773***	***-2251.929041***	**-720.089832**	**-775.103104**	**-730.681047**	**-885.094086**	**-921.943546**	**-975.961686**	**-385.5130462**
+2.7	**9684.24915**	***8194.314294***	***11087.54538***	**4532.809454**	**4848.199303**	**4574.190179**	**5505.003255**	**5346.003822**	**5656.201293**	**2392.55203**
-2.75	**-1496.206626**	***-1257.711473***	***-1876.607526***	**-600.074859**	**-645.919257**	**-608.900872**	**-737.578404**	**-768.286286**	**-813.301396**	**-321.260879**
+2.75	**8830.7163**	***7454.002418***	***10102.96065***	**4147.10635**	**4437.818318**	**4167.128093**	**5019.128115**	**4889.708553**	**5174.314303**	**2191.71953**
-2.8	**-1196.965311**	***-1006.169173***	***-1501.28601***	**-480.059887**	**-516.735411**	**-487.120696**	**-590.062722**	**-614.629025**	**-650.641106**	**-257.0087117**
+2.8	**7687.185506**	***6467.991171***	***8896.969991***	**3618.551187**	**3873.896264**	**3638.619932**	**4362.030029**	**4261.046355**	**4507.363624**	**1915.011843**
-2.85	**-897.7239949**	***-754.6268726***	***-1125.964495***	**-360.044914**	**-387.551565**	**-365.34052**	**-442.547039**	**-460.971765**	**-487.980815**	**-192.7565445**
+2.85	**6236.56579**	***5232.262644***	***7273.573623***	**2942.602253**	**3151.487696**	**2960.830243**	**3552.119953**	**3471.766445**	**3671.789301**	**1559.306407**
-2.9	**-598.4826792**	***-503.0845726***	***-750.6429799***	**-240.029942**	**-258.367718**	**-243.560345**	**-295.031357**	**-307.314505**	**-325.320525**	**-128.5043772**
+2.9	**4473.883328**	***3743.668701***	***5218.280078***	**2115.659913**	**2266.661869**	**2130.018513**	**2557.136148**	**2512.257737**	**2657.198562**	**1122.501392**
-2.95	**-299.2413635**	***-251.5422726***	***-375.3214646***	**-120.014969**	**-129.183872**	**-121.780169**	**-147.515675**	**-153.657244**	**-162.660235**	**-64.25220993**
+2.95	**2396.409212**	***1999.940657***	***2794.171787***	**1135.06597**	**1216.501616**	**1143.40108**	**1373.589695**	**1355.569892**	**1433.877811**	**603.0721101**
-3	**-1.24E-12**	***-6.08E-13***	***-1.12E-12***	**-5.10E-13**	**-5.10E-13**	**-3.47E-13**	**-3.90E-13**	**-4.03E-13**	**-4.25E-13**	**-3.07E-13**
+3	**1.56E-12**	***1.14E-12***	***2.00E-12***	**8.43E-13**	**9.11E-13**	**6.26E-13**	**7.83E-13**	**9.04E-13**	**9.52E-13**	**4.71E-13**

2-Span: Moment (Max and Min) Raw Data Results - 200' Max Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.89E-13	-4.17E-13	-3.17E-13	-3.91E-13	-2.47E-13	-2.58E-13	-2.80E-13	-3.21E-13	-3.21E-13
End Shear	3.20E-13	2.85E-13	3.79E-13	5.36E-13	3.26E-13	3.16E-13	3.37E-13	3.31E-13	3.24E-13
-0.05	-92.01288999	-132.2596902	-142.318064	-207.615531	-73.72402132	-99.57305132	-114.110931	-127.828108	-142.343583
+0.05	860.9814822	1174.554279	1218.582712	1521.664872	691.9832927	933.7930319	1061.143255	1169.299163	1280.764537
-0.1	-184.02578	-264.5193804	-284.6361279	-415.231062	-147.4480426	-199.1461026	-228.221861	-255.656216	-284.687167
+0.1	1603.418505	2177.803983	2251.62297	2783.063525	1289.109294	1739.349722	1975.276367	2177.734236	2389.045358
-0.15	-276.03867	-396.7790705	-426.9541919	-622.846593	-221.172064	-298.719154	-342.332792	-383.484323	-427.03075
+0.15	2227.974368	3011.055537	3103.504667	3808.313214	1791.864514	2417.476928	2743.382083	3049.182577	3340.180079
-0.2	-368.05156	-529.0387607	-569.2722559	-830.462124	-294.8960853	-398.2922053	-456.443723	-511.312431	-569.374333
+0.2	2736.804523	3678.250335	3806.687524	4683.642111	2201.91177	2970.46817	3368.193963	3760.966338	4132.163202
-0.25	-460.0644499	-661.2984509	-711.5903199	-1038.077655	-368.6201066	-497.8652566	-570.554653	-639.140539	-711.717917
+0.25	3132.788483	4211.477368	4337.083275	5376.465941	2521.523289	3401.398743	3863.771688	4315.712347	4762.219576
-0.3	-552.0773399	-793.5581411	-853.9083838	-1245.693186	-442.3441279	-597.4383079	-684.665584	-766.968647	-854.0615
+0.3	3419.53026	4589.332397	4737.61997	5892.587949	2753.550387	3728.37569	4237.38309	4718.387053	5223.092895
-0.35	-644.0902299	-925.8178313	-996.2264478	-1453.308717	-516.0681492	-697.0113592	-798.776515	-894.796755	-996.405083
+0.35	3618.746186	4819.545232	5003.998509	6250.398847	2901.423443	3946.844942	4480.065116	4995.526645	5520.286827
-0.4	-736.1031199	-1058.077521	-1138.544512	-1660.924248	-589.7921706	-796.5844106	-912.887446	-1022.62486	-1138.74867
+0.4	3717.040236	4929.510582	5161.908619	6412.252706	2969.153099	4055.576212	4598.099274	5135.762171	5673.782936
-0.45	-828.1160099	-1190.337212	-1280.862576	-1868.539779	-663.5161919	-896.1574619	-1026.99838	-1150.45297	-1281.09225
+0.45	3719.558414	4903.834708	5169.045746	6372.176967	2961.328442	4061.043637	4597.728016	5142.738129	5690.771497
-0.5	-920.1288999	-1322.596902	-1423.18064	-2076.15531	-737.2402132	-995.7305132	-1141.10931	-1278.28108	-1423.43583
+0.5	3650.921871	4825.819819	5066.343286	6207.678046	2912.457005	3984.71196	4514.578827	5045.147979	5576.904503
-0.55	-1012.14179	-1454.856592	-1565.498704	-2283.770841	-810.9642345	-1095.303565	-1255.22024	-1406.10919	-1565.77942
+0.55	3500.268284	4637.598777	4837.814728	6005.300285	2799.654447	3819.603748	4330.583576	4833.395327	5334.087615
-0.6	-1104.15468	-1587.116282	-1707.816768	-2491.386372	-884.6882558	-1194.876616	-1369.33117	-1533.93729	-1708.123
+0.6	3271.147045	4332.119098	4485.637149	5597.743089	2622.659855	3570.086927	4048.812655	4513.04734	4983.381766
-0.65	-1196.16757	-1719.375972	-1850.134832	-2699.001903	-958.4122772	-1294.449667	-1483.4421	-1661.7654	-1850.46658
+0.65	2971.685123	3929.190005	4043.378828	4978.48873	2387.843485	3244.972833	3679.29989	4095.44383	4525.083449
-0.7	-1288.18046	-1851.635663	-1992.452896	-2906.617434	-1032.136298	-1394.022718	-1597.55303	-1789.59351	-1992.81017
+0.7	2610.734643	3427.13566	3495.094817	4212.105711	2102.155171	2853.856203	3232.97723	3592.932651	3969.719119
-0.75	-1380.19335	-1983.895353	-2134.77096	-3114.232965	-1105.86032	-1493.59577	-1711.66396	-1917.42162	-2135.15375
+0.75	2197.870942	2839.211422	2855.440929	3280.804178	1773.124465	2407.112972	2721.67507	3018.867215	3331.989914
-0.8	-1472.20624	-2116.155043	-2277.089024	-3321.848496	-1179.584341	-1593.168821	-1825.77489	-2045.24972	-2277.49733
+0.8	1743.394151	2179.730828	2140.182592	2182.542062	1408.85926	1915.901438	2158.121306	2387.608306	2627.719931
-0.85	-1564.21913	-2248.414733	-2419.407088	-3581.996093	-1253.308362	-1692.741872	-1939.88582	-2173.07783	-2419.84092
+0.85	1258.328099	1464.068993	1366.318491	1202.048691	1018.047511	1392.595834	1555.942356	1714.523911	1873.855509
-0.9	-1656.23202	-2380.674423	-2561.725152	-3937.425243	-1327.032384	-1792.314924	-2053.99675	-2300.90594	-2562.1845
+0.9	754.6142589	730.321153	627.7923	542.4108975	609.9568287	850.0124969	929.6628301	1016.590847	1088.465763
-0.95	-1748.24491	-2512.934113	-2704.043215	-4372.815765	-1400.756405	-1891.887975	-2168.10768	-2428.73405	-2704.52808
+0.95	286.2397364	286.1283769	227.583418	186.7553965	216.3251971	322.3614481	341.5989153	363.0171998	364.7898682
-1	-1840.257829	-2645.193736	-2846.361325	-4876.083593	-1474.48045	-1991.461027	-2282.21862	-2556.56216	-2846.87165
+1	0	0	0	0	0	0	0	0	0
(Span 2) -2	-1840.257829	-2645.193736	-2846.361325	-4876.083593	-1474.48045	-1991.461027	-2282.21862	-2556.56216	-2846.87165
+2	0	0	0	0	0	0	0	0	0
-2.05	-1748.244938	-2512.93405	-2704.043259	-4372.815781	-1400.75641	-1891.887975	-2168.10769	-2428.73405	-2704.52807
+2.05	286.2419073	286.130432	227.5849601	186.7564128	216.3385563	322.3681579	341.6118047	363.02477	364.7939016
-2.1	-1656.232048	-2380.674364	-2561.725193	-3937.425258	-1327.03239	-1792.314923	-2053.99676	-2300.90594	-2562.18449
+2.1	754.631529	730.3332343	627.7999034	542.4179706	609.9644276	850.0260013	929.6734157	1016.606447	1088.468569
-2.15	-1564.219157	-2248.414678	-2419.407127	-3581.996104	-1253.308369	-1692.741871	-1939.88583	-2173.07784	-2419.84091
+2.15	1258.326415	1464.079953	1366.32688	1202.046439	1018.056073	1392.610614	1555.954456	1714.521846	1873.859972
-2.2	-1472.206266	-2116.154992	-2277.08906	-3321.848507	-1179.584349	-1593.168818	-1825.7749	-2045.24973	-2277.49732
+2.2	1743.392985	2179.742824	2140.191396	2182.546901	1408.868008	1915.897958	2158.134117	2387.607476	2627.725564
-2.25	-1380.193375	-1983.895306	-2134.770994	-3114.232975	-1105.860329	-1493.595766	-1711.66397	-1917.42162	-2135.15374

+2.25	2197.870115	2839.223235	2855.43783	3280.810157	1773.133152	2407.109708	2721.688161	3018.866465	3331.995825
-2.3	-1288.180484	-1851.63562	-1992.452928	-2906.617442	-1032.136308	-1394.022714	-1597.55304	-1789.59351	-1992.81016
+2.3	2610.733659	3427.146929	3495.103202	4212.109619	2102.163811	2853.852781	3232.990302	3592.931565	3969.72463
-2.35	-1196.167593	-1719.375934	-1850.134862	-2699.00191	-958.4122879	-1294.449662	-1483.44211	-1661.76541	-1850.46658
+2.35	2971.68358	3929.199835	4043.386066	4978.494787	2387.851709	3244.968784	3679.311451	4095.441812	4525.087539
-2.4	-1104.154703	-1587.116248	-1707.816796	-2491.386378	-884.6882675	-1194.87661	-1369.33118	-1533.9373	-1708.123
+2.4	3271.143976	4332.126717	4485.642318	5597.746251	2622.666843	3570.081315	4048.822955	4513.043518	4983.383803
-2.45	-1012.141812	-1454.856562	-1565.498729	-2283.770846	-810.9642472	-1095.303558	-1255.22025	-1406.10919	-1565.77941
+2.45	3500.263702	4637.606578	4837.807955	6005.29929	2799.660191	3819.596688	4330.592203	4833.389613	5334.086813
-2.5	-920.1289209	-1322.596876	-1423.180663	-2076.155313	-737.2402269	-995.7305059	-1141.10932	-1278.28108	-1423.43583
+2.5	3650.915608	4825.824915	5066.350161	6207.682601	2912.46121	3984.702879	4514.58487	5045.139723	5576.900792
-2.55	-828.1160301	-1190.33719	-1280.862597	-1868.539781	-663.5162066	-896.1574538	-1026.99839	-1150.45298	-1281.09225
+2.55	3719.566266	4903.83159	5169.040471	6372.180699	2961.325599	4061.035163	4597.723623	5142.729152	5690.777236
-2.6	-736.1031393	-1058.077504	-1138.544531	-1660.924249	-589.7921862	-796.5844017	-912.88746	-1022.62487	-1138.74867
+2.6	3717.04561	4929.504128	5161.91668	6412.25199	2969.148155	4055.584406	4598.092081	5135.769085	5673.784986
-2.65	-644.0902485	-925.817818	-996.2264643	-1453.308716	-516.0681659	-697.0113496	-798.776529	-894.796762	-996.405086
+2.65	3618.748807	4819.551419	5004.002422	6250.40348	2901.416358	3946.850179	4480.05463	4995.530033	5520.284624
-2.7	-552.0773577	-793.558132	-853.9083981	-1245.693184	-442.3441456	-597.4382975	-684.665599	-766.968655	-854.061504
+2.7	3419.530303	4589.340067	4737.623487	5892.592636	2753.541091	3728.377975	4237.388722	4718.386187	5223.086333
-2.75	-460.0644669	-661.298446	-711.5903319	-1038.077652	-368.6201252	-497.8652454	-570.554669	-639.140547	-711.717922
+2.75	3132.785339	4211.481416	4337.078029	5376.470414	2521.511857	3401.397766	3863.773392	4315.707202	4762.208372
-2.8	-368.051576	-529.03876	-569.2722656	-830.4621196	-294.8961049	-398.2921933	-456.443738	-511.31244	-569.37434
+2.8	2736.798052	3678.249966	3806.692472	4683.646655	2201.898237	2970.463525	3368.191444	3760.956907	4132.166031
-2.85	-276.0386852	-396.779074	-426.9541994	-622.8465873	-221.1720846	-298.7191412	-342.332808	-383.484333	-427.030758
+2.85	2227.96456	3011.050917	3103.505062	3808.314335	1791.848099	2417.468916	2743.375537	3049.168422	3340.178132
-2.9	-184.0257944	-264.5193881	-284.6361331	-415.2310551	-147.4480642	-199.1460891	-228.221878	-255.656225	-284.687176
+2.9	1603.405187	2177.794471	2251.618534	2783.065713	1289.08931	1739.337999	1975.26573	2177.734851	2389.046903
-2.95	-92.01290358	-132.2597021	-142.3180669	-207.6155228	-73.7240439	-99.573037	-114.110947	-127.828118	-142.343594
+2.95	860.9648177	1174.540104	1218.573482	1521.661178	691.9861222	933.7778707	1061.128051	1169.294958	1280.761089
-3	-3.61E-13	-3.55E-13	-3.22E-13	-4.37E-13	-2.97E-13	-2.74E-13	-2.73E-13	-2.43E-13	-3.39E-13
+3	5.67E-13	7.84E-13	8.20E-13	1.04E-12	5.47E-13	5.21E-13	6.67E-13	7.12E-13	7.62E-13

2-Span: Moment (Max and Min) Raw Data Results - 200' Max Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.10E-13	-5.44E-13	-4.72E-13	-4.42E-13	-5.47E-13
End Shear	7.24E-13	5.88E-13	3.86E-13	4.62E-13	4.82E-13
-0.05	-256.5707591	-283.9448591	-161.101271	-193.826915	-209.281119
+0.05	2179.293902	2362.905549	1409.260297	1698.137357	1811.873721
-0.1	-513.1415181	-567.8897183	-322.202542	-387.653829	-418.562238
+0.1	4024.898489	4376.638784	2609.444332	3144.566363	3351.765625
-0.15	-769.7122772	-851.8345774	-483.303812	-581.480744	-627.843357
+0.15	5601.226189	6075.496764	3602.428108	4352.807609	4644.853073
-0.2	-1026.283036	-1135.779437	-644.405083	-775.307659	-837.124476
+0.2	6859.536117	7534.858316	4440.144565	5351.762573	5702.660574
-0.25	-1282.853795	-1419.724296	-805.506354	-969.134573	-1046.40559
+0.25	7861.708491	8659.54508	5084.941675	6115.071574	6554.425186
-0.3	-1539.424554	-1703.669155	-966.607625	-1162.96149	-1255.68671
+0.3	8617.34713	9511.303128	5550.874198	6657.331801	7161.541433
-0.35	-1795.995314	-1987.614014	-1127.7089	-1356.7884	-1464.96783
+0.35	9123.178452	10054.29151	5852.323131	7009.625602	7536.762112
-0.4	-2052.566073	-2271.558873	-1288.81017	-1550.61532	-1674.24895
+0.4	9402.739466	10320.13886	5977.982479	7152.465965	7715.114428
-0.45	-2309.136832	-2555.503732	-1449.91144	-1744.44223	-1883.53007
+0.45	9408.99957	10377.56476	5939.737859	7098.787242	7677.796478
-0.5	-2565.707591	-2839.448591	-1611.01271	-1938.26915	-2092.81119
+0.5	9228.185701	10152.28463	5848.436874	6993.152508	7551.833702
-0.55	-2822.27835	-3123.39345	-1772.11398	-2132.09606	-2302.09231
+0.55	8818.534176	9667.258977	5627.120662	6732.783159	7253.535188
-0.6	-3078.849109	-3407.33831	-1933.21525	-2325.92298	-2511.37343
+0.6	8181.717425	9014.864665	5259.112023	6295.526855	6765.531007
-0.65	-3335.419868	-3691.283169	-2094.31652	-2519.74989	-2720.65455
+0.65	7352.399025	8126.604694	4757.487218	5696.879362	6123.562504
-0.7	-3591.990627	-3975.228028	-2255.41779	-2713.57681	-2929.93567
+0.7	6370.894361	7029.503413	4137.412627	4954.725048	5326.290047
-0.75	-3848.561386	-4259.172887	-2416.51906	-2907.40372	-3139.21678
+0.75	5222.959422	5751.813655	3415.351405	4092.305924	4392.747304
-0.8	-4105.132145	-4543.117746	-2577.62033	-3101.23063	-3348.4979
+0.8	3936.754698	4325.189645	2609.065734	3125.409557	3345.744264
-0.85	-4361.702904	-4827.062605	-2738.7216	-3295.05755	-3557.77902
+0.85	2542.517557	2783.602671	1737.618364	2072.026986	2209.782032
-0.9	-4618.273663	-5111.007464	-2899.82287	-3488.88446	-3767.06014
+0.9	1133.030004	1255.705132	831.0929242	998.4099686	1036.089281
-0.95	-4874.844422	-5394.952323	-3060.92414	-3682.71138	-3976.34126
+0.95	389.4392741	361.1067129	329.4578135	394.4873381	394.5903652
-1	-5131.415452	-5678.892068	-3222.02538	-3876.53831	-4185.62238
+1	0	0	0	0	0
(Span 2) -2	-5131.415452	-5678.892068	-3222.02538	-3876.53831	-4185.62238
+2	0	0	0	0	0
-2.05	-4874.844685	-5394.947468	-3060.92411	-3682.7114	-3976.34117
+2.05	389.4323534	361.1057454	329.4555453	394.4804241	394.592852
-2.1	-4618.273919	-5111.002867	-2899.82284	-3488.88448	-3767.06006
+2.1	1133.018073	1255.705305	831.0964453	998.412062	1036.098238
-2.15	-4361.703153	-4827.058267	-2738.72157	-3295.05757	-3557.77894
+2.15	2542.522576	2782.002105	1737.616123	2072.02807	2209.787593
-2.2	-4105.132387	-4543.113666	-2577.6203	-3101.23066	-3348.49783
+2.2	3936.761132	4325.188236	2609.064413	3125.411398	3345.751424
-2.25	-3848.561621	-4259.169065	-2416.51903	-2907.40375	-3139.21671

+2.25	**5222.965653**	**5751.812203**	**3415.349762**	**4092.3068**	**4392.753804**
-2.3	**-3591.990855**	**-3975.224465**	**-2255.41776**	**-2713.57683**	**-2929.9356**
+2.3	**6370.898927**	**7027.746474**	**4137.410546**	**4954.724121**	**5326.295695**
-2.35	**-3335.420089**	**-3691.279864**	**-2094.31649**	**-2519.74992**	**-2720.65448**
+2.35	**7352.400776**	**8126.004334**	**4757.483937**	**5696.876203**	**6123.566064**
-2.4	**-3078.849322**	**-3407.335264**	**-1933.21523**	**-2325.92301**	**-2511.37337**
+2.4	**8183.453243**	**9014.86541**	**5259.105844**	**6295.520725**	**6765.530087**
-2.45	**-2822.278556**	**-3123.390663**	**-1772.11396**	**-2132.09609**	**-2302.09226**
+2.45	**8818.544446**	**9667.259131**	**5627.111688**	**6732.792796**	**7253.530725**
-2.5	**-2565.70779**	**-2839.446062**	**-1611.01269**	**-1938.26918**	**-2092.81114**
+2.5	**9228.191097**	**10152.2837**	**5848.446358**	**6993.158401**	**7551.825085**
-2.55	**-2309.137024**	**-2555.501462**	**-1449.91142**	**-1744.44227**	**-1883.53003**
+2.55	**9410.00047**	**10377.56312**	**5939.730939**	**7098.784287**	**7677.788904**
-2.6	**-2052.566258**	**-2271.556861**	**-1288.81015**	**-1550.61536**	**-1674.24891**
+2.6	**9402.731069**	**10320.13899**	**5977.971695**	**7152.45861**	**7715.121053**
-2.65	**-1795.995492**	**-1987.612261**	**-1127.70888**	**-1356.78844**	**-1464.9678**
+2.65	**9123.162363**	**10054.29054**	**5852.329334**	**7009.632113**	**7536.763205**
-2.7	**-1539.424725**	**-1703.66766**	**-966.607611**	**-1162.96153**	**-1255.68668**
+2.7	**8617.342031**	**9511.997278**	**5550.876175**	**6657.33269**	**7161.536457**
-2.75	**-1282.853959**	**-1419.723059**	**-805.506341**	**-969.134619**	**-1046.40557**
+2.75	**7861.714624**	**8659.544066**	**5084.938585**	**6115.066987**	**6554.41395**
-2.8	**-1026.283193**	**-1135.778459**	**-644.405072**	**-775.307706**	**-837.124456**
+2.8	**6860.542114**	**7534.855995**	**4440.135785**	**5351.751159**	**5702.65158**
-2.85	**-769.712427**	**-851.8338582**	**-483.303803**	**-581.480793**	**-627.843341**
+2.85	**5601.234991**	**6077.772079**	**3602.423783**	**4352.809301**	**4644.856674**
-2.9	**-513.1416608**	**-567.8892576**	**-322.202534**	**-387.653881**	**-418.562227**
+2.9	**4024.897573**	**4376.639185**	**2609.434077**	**3144.561155**	**3351.761596**
-2.95	**-256.5708947**	**-283.944657**	**-161.101265**	**-193.826968**	**-209.281113**
+2.95	**2179.284308**	**2362.906961**	**1409.245028**	**1698.125756**	**1811.861896**
-3	**-5.63E-13**	**-6.08E-13**	**-4.72E-13**	**-4.16E-13**	**-4.91E-13**
+3	**1.34E-12**	**1.35E-12**	**7.67E-13**	**8.79E-13**	**9.12E-13**

2-Span: Shear (Max and Min) Raw Data Results - 200' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)			Force Y (kips)						
-0	-6.85192	-4.77122	-6.858163867	-7.37973	-11.3849	-3.822868619	-5.16324	-5.91708	-6.628369603	-7.38105
End Shear	67.81173	47.80759	65.50382142	68.15929	90.79601	38.42792189	51.82927	58.93223	64.96818724	71.23789
-0.05	-6.85192	-4.77122	-6.858163867	-7.37973	-11.4442	-3.822868619	-5.16324	-5.91708	-6.628369603	-7.38105
+0.05	63.24295	44.62834	60.89406427	63.16461	82.08739	35.88194414	48.39368	54.99245	60.55869931	66.32983
-0.1	-6.85192	-4.77122	-6.858163867	-7.37973	-11.6407	-3.822868619	-5.16324	-5.91708	-6.628369603	-7.38105
+0.1	58.615	41.38139	56.19007801	58.07303	73.34748	33.28261075	44.88467	50.96858	56.05674285	61.32071
-0.15	-9.02372	-6.98117	-6.858163867	-7.37973	-11.9363	-5.766967644	-7.73794	-8.3099	-8.284938245	-8.28331
+0.15	54.42767	38.46754	51.98193433	53.52862	65.74121	30.94940946	41.73506	47.35853	52.02097196	56.83385
-0.2	-13.6884	-10.2156	-10.52163852	-9.02258	-12.3925	-8.353480066	-11.2304	-12.3237	-12.73388086	-12.9994
+0.2	49.85519	35.28337	47.39839038	48.59069	57.69037	28.39915636	38.29261	43.41473	47.61568445	51.94019
-0.25	-17.8707	-13.1135	-14.74312489	-12.9974	-13.7827	-10.67033439	-14.3589	-15.9208	-16.77676248	-17.5181
+0.25	45.78116	32.44416	43.32534293	44.21385	50.7483	26.12463283	35.22249	39.89924	43.69217061	47.58544
-0.3	-22.4367	-16.2749	-19.42016434	-17.7942	-18.0919	-13.19727158	-17.7712	-19.8462	-21.1921896	-22.4571
+0.3	41.36235	29.36222	38.91998068	39.4927	43.47581	23.65500948	31.88919	36.08439	39.43836093	42.86836
-0.35	-26.5041	-19.0889	-23.59684344	-22.3928	-22.2965	-15.44595423	-20.8079	-23.3413	-25.12693886	-26.8621
+0.35	37.45307	26.63334	35.0342626	35.34053	37.44743	21.46770295	28.93709	32.7077	35.67669985	38.70103
-0.4	-30.9147	-22.1379	-28.13778545	-27.4041	-27.0117	-17.88177343	-24.0975	-27.1295	-29.39544855	-31.645
+0.4	33.24479	23.69305	30.86482294	30.89925	31.30426	19.11024945	25.75552	29.07071	31.62919005	34.22166
-0.45	-34.8158	-24.8323	-32.16521019	-31.8595	-31.7741	-20.03374589	-27.004	-30.4783	-33.1724744	-35.8811
+0.45	29.55174	21.11017	27.21867826	27.02885	26.43581	17.03870285	22.95997	25.87706	28.0789747	30.29705
-0.5	-39.0141	-27.7294	-36.51231586	-36.6809	-37.9547	-22.34690104	-30.1283	-34.0803	-37.23924595	-40.4467
+0.5	25.61088	18.35097	23.34290398	22.93056	21.56606	14.82496803	19.97272	22.46683	24.2925738	26.11651
-0.55	-42.6975	-30.2685	-40.33824025	-40.9361	-43.9668	-24.37362085	-32.8659	-37.2386	-40.808952	-44.4585
+0.55	22.18551	15.94977	19.98857481	19.39903	17.63201	12.89772106	17.37225	19.50046	21.00340212	22.48993
-0.6	-46.6268	-32.9743	-44.43376744	-45.5046	-50.9962	-26.53256499	-35.7824	-40.6056	-44.61917607	-48.7456
+0.6	18.56895	13.41108	16.4642016	15.70684	13.95394	10.85924553	14.62191	16.36588	17.53292469	18.66936
-0.65	-50.0411	-35.3225	-48.00595405	-49.5023	-58.1783	-28.40549395	-38.3126	-43.5291	-47.93196525	-52.4779
+0.65	15.46273	11.22724	13.45392855	12.57129	11.06915	9.104838912	12.25505	13.67104	14.55438648	15.39611
-0.7	-53.6446	-37.7974	-51.79216705	-53.7549	-66.3614	-30.37868281	-40.9786	-46.6122	-51.43082736	-56.4255
+0.7	12.22735	8.948509	10.33869346	9.348295	8.14343	7.273170633	9.784213	10.86101	11.45465578	11.99662
-0.75	-56.7384	-39.919	-55.05837676	-57.4381	-74.1307	-32.06927694	-43.263	-49.2566	-54.43711075	-59.823
+0.75	9.49174	7.0177	7.724721173	6.782896	5.860932	5.720144973	7.689498	8.481929	8.836346658	9.132012
-0.8	-59.9593	-42.1238	-58.47752759	-61.3115	-82.6077	-33.82517009	-45.6359	-52.0069	-57.56978784	-63.3699
+0.8	6.694424	5.038354	5.106453493	4.361924	3.735132	4.126828044	5.540743	6.045359	6.162171877	6.214739
-0.85	-62.6812	-43.9831	-61.38551721	-64.6232	-90.1513	-35.30488982	-47.6359	-54.3281	-60.21996854	-66.3771
+0.85	4.38088	3.396257	3.113009574	2.783835	2.345853	2.803726308	3.7567	4.02628	4.015289201	4.014868
-0.9	-65.4627	-45.8783	-64.37987082	-68.0543	-98.3188	-36.811939	-49.6732	-56.6966	-62.93165124	-69.4623
+0.9	2.237764	1.755729	1.71162498	1.379156	1.144303	1.480305465	1.972616	2.085938	2.085598071	2.085265
-0.95	-67.7614	-47.4396	-66.87739947	-70.9373	-105.527	-38.05224423	-51.3502	-58.6503	-65.17613467	-72.0241
+0.95	0.859096	0.748197	0.745317127	0.592377	0.47263	0.590383028	0.763202	0.734704	0.763204044	0.762939
-1	-70.0467	-48.9857	-69.38921935	-73.8631	-113.263	-39.27890476	-53.0093	-60.5882	-67.41200794	-74.5863
+1	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0.00E+00	0	0	0	0	0
+2	69.95997	48.91642	69.27562222	73.73005	112.9006	39.22398316	52.93497	60.50128	67.31146135	74.47078
-2.05	-8.13E-01	-0.69756	-0.696428966	-0.55349	-4.41E-01	-0.559028601	-0.70573	-0.67742	-0.705731589	-0.70547
+2.05	67.89347	47.51747	67.00290184	71.0828	105.9013	38.11407985	51.43384	58.74787	65.28841155	72.15246
-2.1	-2.33128	-1.82963	-1.789630628	-1.42304	-1.18296	-1.539965377	-2.05303	-2.16211	-2.16176662	-2.16143
+2.1	65.35398	45.79188	64.24258657	67.89645	97.9341	36.74327436	49.58034	56.58856	62.80776425	69.32113
-2.15	-4.26634	-3.314	-3.032341239	-2.71256	-2.2833	-2.737411845	-3.66729	-3.92521	-3.914914519	-3.91449
+2.15	62.83786	44.07712	61.53328495	64.79196	90.54419	35.37968615	47.73701	54.44554	60.35422455	66.52969
-2.2	-6.82202	-5.12888	-5.216937269	-4.47174	-3.83027	-4.199733198	-5.63905	-6.15673	-6.284215958	-6.34765
+2.2	59.82985	42.0222	58.31929858	61.13181	82.20681	33.7442645	45.52658	51.88006	57.42517995	63.20599
-2.25	-9.35168	-6.9198	-7.592906259	-6.66225	-5.75365	-5.641372049	-7.58325	-8.36136	-8.703825079	-8.98722
+2.25	56.91557	40.0273	55.22565835	57.62719	74.53692	32.15553696	43.37956	49.39166	54.59073373	59.99673

-2.3	-12.3734	-9.05378	-10.48193154	-9.4959	-8.2752	-7.357812708	-9.89838	-10.9908	-11.5976377	-12.1533
+2.3	53.49592	37.68247	51.61575754	53.55635	65.95007	30.28704253	40.85479	46.46889	51.268104	56.24181
-2.35	-15.2991	-11.1156	-13.30059763	-12.4121	-10.924	-9.015102687	-12.134	-13.5333	-14.40227667	-15.2291
+2.35	50.23493	35.44311	48.19001922	49.7087	58.56416	28.50170897	38.44263	43.67935	48.10235212	52.67003
-2.4	-18.7301	-13.5292	-16.62763317	-15.8776	-14.1124	-10.9541267	-14.7499	-16.5117	-17.69424053	-18.8468
+2.4	46.46053	32.84781	44.24192141	45.29027	50.63595	26.43169392	35.6461	40.44821	44.4409517	48.545
-2.45	-22.0003	-15.8262	-19.81646334	-19.2183	-17.4333	-12.79852548	-17.2384	-19.3478	-20.83431054	-22.3036
+2.45	42.9043	30.39968	40.53632571	41.15669	44.29914	24.47829853	33.00732	37.40178	40.99350151	44.66602
-2.5	-25.7838	-18.4801	-23.52376942	-23.1214	-21.7813	-14.92857729	-20.1125	-22.6264	-24.46960745	-26.3118
+2.5	38.83202	27.59333	36.30778148	36.45379	37.65958	22.23829732	29.98161	33.91116	37.04814539	40.23202
-2.55	-29.3473	-20.9766	-27.03054547	-26.8295	-26.189	-16.93154573	-22.8154	-25.7119	-27.89550364	-30.0943
+2.55	35.03201	24.9721	32.37458311	32.09139	32.06751	20.14537982	27.15476	30.65208	33.36856931	36.10114
-2.6	-33.4264	-23.8313	-31.06038149	-31.1072	-31.5801	-19.22108526	-25.9051	-29.2417	-31.81931767	-34.432
+2.6	30.71874	21.99414	27.92333279	27.16712	26.78557	17.76694929	23.94246	26.95085	29.19407195	31.41927
-2.65	-37.2317	-26.4916	-34.83285006	-35.1256	-37.1416	-21.35408212	-28.7837	-32.5324	-35.48146655	-38.4848
+2.65	26.70839	19.23549	23.81474544	22.63298	22.51933	15.56305068	20.96606	23.52336	25.33198556	27.0918
-2.7	-41.5497	-29.5077	-39.12746506	-39.7147	-43.8125	-23.77157128	-32.0465	-36.2644	-39.6389827	-43.0907
+2.7	22.21285	16.12537	19.19852987	17.55046	17.87224	13.07772998	17.60976	19.66046	20.98315017	22.2232
-2.75	-45.5455	-32.2962	-43.11338591	-43.9864	-50.3926	-26.00605653	-35.0624	-39.716	-43.4877688	-47.3587
+2.75	18.08147	13.26495	14.96680827	13.20551	13.96965	10.79139082	14.52234	16.1088	16.98813844	17.75443
-2.8	-50.0456	-35.4342	-47.61506471	-48.8238	-58.0652	-28.51993744	-38.4556	-43.6015	-47.82418485	-52.1717
+2.8	13.45893	10.06209	10.32054966	8.812394	12.36774	8.230717558	11.06462	12.13311	12.51980441	12.76024
-2.85	-54.1804	-38.3151	-51.76219539	-53.2916	-65.3495	-30.82736982	-41.5703	-47.1698	-51.81002326	-56.5994
+2.85	9.238359	7.135603	6.85816365	7.379729	11.955	5.890478755	7.904716	8.50151	8.475002629	8.473375
-2.9	-58.8058	-41.5356	-56.41318524	-58.3142	-73.7562	-33.40611133	-45.0514	-51.1597	-56.27049947	-61.5584
+2.9	6.851913	4.771215	6.85816365	7.379729	11.6282	3.822868568	5.163238	5.917082	6.628369581	7.381052
-2.95	-63.0282	-44.4734	-60.66928643	-62.921	-81.6639	-35.75794289	-48.2263	-54.8005	-60.34380989	-66.0906
+2.95	6.851913	4.771215	6.85816365	7.379729	11.45045	3.822868568	5.163238	5.917082	6.628369581	7.381052
-3	-67.7222	-47.737	-65.41183301	-68.0658	-90.7139	-38.36999293	-51.7526	-58.846	-64.87354441	-71.1346
+3	6.851913	4.771215	6.85816365	7.379729	11.3849	3.822868568	5.163238	5.917082	6.628369581	7.381052

2-Span: Shear (Max and Min) Raw Data Results - 200' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.85192	-6.22323	-6.698669889	-6.31476	-7.64924	-7.967708487	-8.43455	-3.33172
End Shear	67.81173	62.97221	67.50439018	63.45472	76.25731	75.62154382	79.99429	33.48567
-0.05	-6.85192	-6.22323	-6.698669889	-6.31476	-7.64924	-7.967708487	-8.43455	-3.33172
+0.05	63.24295	58.83284	63.0478441	59.25494	71.16939	70.27119198	74.3299	31.27152
-0.1	-6.85192	-6.22323	-6.698669889	-6.31476	-7.64924	-7.967708487	-8.43455	-3.33172
+0.1	58.615	54.6045	58.49653573	54.96505	65.97447	64.81294394	68.55153	28.99491
-0.15	-9.02372	-9.89678	-10.34793269	-9.56558	-10.9404	-7.967708487	-8.43455	-4.86838
+0.15	54.42767	50.80754	54.41046054	51.11422	61.31316	59.931353	63.38387	26.95193
-0.2	-13.6884	-14.0961	-14.8728421	-13.8336	-16.1189	-11.77732323	-12.3972	-7.13652
+0.2	49.85519	46.65562	49.94342623	46.90499	56.22018	54.6157648	57.75704	24.71952
-0.25	-17.8707	-17.8561	-18.9252605	-17.6564	-20.7593	-16.68502674	-17.5909	-9.16869
+0.25	45.78116	42.95099	45.9585699	43.15069	51.67965	49.89358318	52.7586	22.72906
-0.3	-22.4367	-21.9553	-23.3442943	-21.8258	-25.8224	-22.12163188	-23.348	-11.3857
+0.3	41.36235	38.92676	41.63101223	39.07418	46.7517	44.78770211	47.35429	20.56856
-0.35	-26.5041	-25.6015	-27.27594736	-25.5359	-30.3299	-26.97795015	-28.4909	-13.3591
+0.35	37.45307	35.36083	37.79732147	35.4635	42.38903	40.28558303	42.5893	18.6557
-0.4	-30.9147	-29.5493	-31.53390405	-29.5546	-35.2146	-32.25932072	-34.0841	-15.4972
+0.4	33.24479	31.51554	33.66444146	31.57176	37.68921	35.45645795	37.47851	16.59482
-0.45	-34.8158	-33.0353	-35.29484526	-33.1049	-39.5321	-36.94485977	-39.0466	-17.3867
+0.45	29.55174	28.13471	30.03186565	28.15181	33.56148	31.23506727	33.01119	14.78462
-0.5	-39.0141	-36.7805	-39.33652007	-36.9209	-44.1753	-42.00394928	-44.4049	-19.4183
+0.5	25.61088	24.51961	26.14887185	24.49689	29.15287	26.74974906	28.26492	12.85105
-0.55	-42.6975	-40.0599	-42.87680386	-40.2642	-48.2457	-46.45804094	-49.1228	-21.1988
+0.55	22.18551	21.37025	22.76735565	21.31475	25.31717	22.86975047	24.15951	11.16859
-0.6	-46.6268	-43.5511	-46.6469907	-43.8254	-52.5842	-51.22779914	-54.1753	-23.0961
+0.6	18.56895	18.03662	19.18944855	17.94869	21.26287	18.79528217	19.84874	9.39006
-0.65	-50.0411	-46.5777	-49.91666978	-46.9147	-56.3504	-55.38978518	-58.5842	-24.7427
+0.65	15.46273	15.1651	16.10893613	15.05146	17.77628	15.31733747	16.16948	7.860396
-0.7	-53.6446	-49.7637	-53.36016642	-50.1691	-60.3212	-59.80316912	-63.2599	-26.478
+0.7	12.22735	12.1642	12.8913229	12.02633	14.13939	11.7207634	12.36519	6.264608
-0.75	-56.7384	-52.4909	-56.30929715	-52.9572	-63.7262	-63.61238935	-67.2958	-27.9655
+0.75	9.49174	9.616911	10.16176709	9.461101	11.05898	8.70553925	9.176306	4.912817
-0.8	-59.9593	-55.3205	-59.37089879	-55.8528	-67.2662	-67.60234204	-71.5236	-29.5111
+0.8	6.694424	6.999992	7.359650447	6.82895	7.90259	5.687757754	5.987113	3.527479
-0.85	-62.6812	-57.702	-61.94953169	-58.2927	-70.2528	-70.99813159	-75.1221	-30.8144
+0.85	4.38088	4.823305	5.030989536	4.642809	5.285454	3.563939698	3.773356	2.378632
-0.9	-65.4627	-60.1238	-64.57403008	-60.7773	-73.2989	-74.49761092	-78.8311	-32.1427
+0.9	2.237764	2.641632	2.699573578	2.455681	2.67265	1.977856618	2.088034	1.276225
-0.95	-67.7614	-62.1133	-66.73221938	-62.8219	-75.8101	-77.41930752	-81.9281	-33.2368
+0.95	0.859096	1.062442	1.062441577	0.921152	0.951579	0.80771721	0.850229	0.614201
-1	-70.0467	-64.0762	-68.86441877	-64.8435	-78.2992	-80.36126977	-85.0472	-34.3199
+1	0.00E+00	0	0	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0	0	0
+2	69.95997	63.98843	68.76901099	64.75303	78.18757	80.2281243	84.90606	34.27144
-2.05	-8.13E-01	-0.99298	-0.992984321	-0.84767	-0.87041	-0.753134295	-0.79277	-0.57921
+2.05	67.89347	62.21238	66.8397632	62.92378	75.93544	77.56620794	82.08386	33.29138
-2.1	-2.33128	-2.74011	-2.804736615	-2.55429	-2.7903	-2.049474314	-2.16413	-1.3106
+2.1	65.35398	60.0136	64.45449796	60.6641	73.15999	74.33709357	78.66095	32.08219
-2.15	-4.26634	-4.71411	-4.914229485	-4.53323	-5.1544	-3.484578658	-3.68902	-2.32105
+2.15	62.83786	57.82229	62.07983067	58.41598	70.4039	71.17075336	75.30509	30.88037
-2.2	-6.82202	-7.11983	-7.48791154	-6.94939	-8.04691	-5.815246213	-6.12131	-3.59078
+2.2	59.82985	55.19016	59.22986488	55.71936	67.10299	67.4176371	71.32783	29.43994
-2.25	-9.35168	-9.48762	-10.02327271	-9.33098	-10.9028	-8.553566934	-9.01559	-4.84423
+2.25	56.91557	52.62998	56.45973269	53.09946	63.90002	63.80753734	67.50255	28.04143

-2.3	-12.3734	-12.303	-13.04005113	-12.1661	-14.3074	-11.8860647	-12.54	-6.33826
+2.3	53.49592	49.61578	53.2002685	50.01795	60.13675	59.59748649	63.04196	26.39747
-2.35	-15.2991	-15.0182	-15.95134273	-14.9033	-17.598	-15.14024733	-15.9821	-7.78212
+2.35	50.23493	46.73309	50.08460817	47.07337	56.54399	55.60428908	58.81148	24.82734
-2.4	-18.7301	-18.1918	-19.35600822	-18.1054	-21.4515	-18.98416577	-20.0486	-9.47275
+2.4	46.46053	43.38807	46.47086154	43.65903	52.38144	51.00432522	53.93853	23.00755
-2.45	-22.0003	-21.2081	-22.59327569	-21.151	-25.1198	-22.6707191	-23.9489	-11.0819
+2.45	42.9043	40.22926	43.05962657	40.43685	48.45597	46.68869186	49.36708	21.29088
-2.5	-25.7838	-24.6889	-26.33064072	-24.6679	-29.3591	-26.95901065	-28.4863	-12.9415
+2.5	38.83202	36.60469	39.14679259	36.74172	43.95724	41.7658752	44.15277	19.32296
-2.55	-29.3473	-27.9598	-29.84394175	-27.9749	-33.348	-31.01729856	-32.7807	-14.6909
+2.55	35.03201	33.21614	35.48992839	33.28905	39.75616	37.18848447	39.3046	17.4848
-2.6	-33.4264	-31.6964	-33.85878053	-31.7547	-37.9101	-35.68291459	-37.7182	-16.6916
+2.6	30.71874	29.36326	31.33319902	29.36518	34.98432	32.00986309	33.81992	15.39647
-2.65	-37.2317	-35.1756	-37.59816413	-35.2759	-42.1625	-40.05226059	-42.3424	-18.5563
+2.65	26.70839	25.79134	27.48065037	25.72911	30.5647	27.23134554	28.75924	13.46191
-2.7	-41.5497	-39.1167	-41.83528409	-39.2666	-46.9842	-45.02814075	-47.6088	-20.6704
+2.7	22.21285	21.76144	23.13525535	21.62856	25.58287	21.86396825	23.07518	11.28087
-2.75	-45.5455	-42.7578	-45.75080633	-42.955	-51.443	-49.64788325	-52.4985	-22.6252
+2.75	18.08147	18.05253	19.13697086	17.85618	21.00179	16.94500219	17.86622	9.274968
-2.8	-50.0456	-46.8523	-50.15501574	-47.1043	-56.4613	-54.86700842	-58.023	-24.8251
+2.8	13.45893	13.89686	14.65810132	13.63099	15.87305	11.54274675	12.15026	7.028939
-2.85	-54.1804	-50.6089	-54.196716	-50.9128	-61.0694	-59.67648332	-63.1141	-26.845
+2.85	9.238359	10.09735	10.56402702	9.769393	11.1876	7.967708598	8.43455	4.976764
-2.9	-58.8058	-54.8054	-58.71279798	-55.1689	-66.2212	-65.07179094	-68.8256	-29.103
+2.9	6.851913	6.223229	6.698669765	6.314762	7.649245	7.967708598	8.43455	3.331717
-2.95	-63.0282	-58.6312	-62.8307562	-59.0503	-70.9215	-70.01033789	-74.0537	-31.1628
+2.95	6.851913	6.223229	6.698669765	6.314762	7.649245	7.967708598	8.43455	3.331717
-3	-67.7222	-62.8785	-67.40349433	-63.361	-76.1438	-75.51476346	-79.8812	-33.4511
+3	6.851913	6.223229	6.698669765	6.314762	7.649245	7.967708598	8.43455	3.331717

2-Span: Shear (Max and Min) Raw Data Results - 200’ Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.85192	-14.8393	-16.4225	-9.3176	-11.2103	-12.1042
End Shear	67.81173	135.9319	147.6083	87.76944	105.6923	112.8727
-0.05	-6.85192	-14.8393	-16.4225	-9.3176	-11.2103	-12.1042
+0.05	63.24295	125.9364	136.6631	81.49049	98.15227	104.7234
-0.1	-6.85192	-14.8393	-16.4225	-9.3176	-11.2103	-12.1042
+0.1	58.615	115.7502	125.3874	75.08708	90.46149	96.41338
-0.15	-9.02372	-14.8393	-16.4225	-9.3176	-11.2103	-12.1042
+0.15	54.42767	106.6596	115.3347	69.36385	83.58649	88.9898
-0.2	-13.6884	-17.3201	-18.277	-12.8247	-15.7681	-15.6153
+0.2	49.85519	96.78298	104.4246	63.13595	76.10395	80.91583
-0.25	-17.8707	-25.2803	-25.4217	-18.4191	-22.4812	-22.7221
+0.25	45.78116	88.02968	94.76625	57.60721	69.46019	73.75218
-0.3	-22.4367	-35.2485	-35.8418	-24.8235	-30.165	-31.0604
+0.3	41.36235	78.58896	84.3622	51.63371	62.28056	66.01677
-0.35	-26.5041	-44.4569	-46.1102	-30.5479	-37.0318	-38.517
+0.35	37.45307	70.28712	75.22539	46.37081	55.95367	59.20582
-0.4	-30.9147	-54.493	-57.3125	-36.7774	-44.5033	-46.6357
+0.4	33.24479	61.40851	65.46804	40.73059	49.1716	51.91152
-0.45	-34.8158	-63.4171	-67.2837	-42.3078	-51.1353	-53.8472
+0.45	29.55174	53.67234	56.97993	35.80492	43.24724	45.54607
-0.5	-39.0141	-73.076	-78.0874	-48.2834	-58.2998	-61.6438
+0.5	25.61088	45.48204	48.00984	30.57686	36.9574	38.79543
-0.55	-42.6975	-81.6017	-87.6343	-53.5485	-64.6113	-68.5175
+0.55	22.18551	38.42575	40.2976	26.05977	31.52119	32.96824
-0.6	-46.6268	-90.757	-97.8987	-59.1914	-71.3742	-75.8894
+0.6	18.56895	31.04998	32.25534	21.32275	25.81824	26.86381
-0.65	-50.0411	-98.7701	-106.894	-64.1197	-77.2794	-82.3325
+0.65	15.46273	24.78775	25.44617	17.28563	20.95584	21.66769
-0.7	-53.6446	-107.296	-116.479	-69.3511	-83.546	-89.1772
+0.7	12.22735	18.35275	18.47231	13.11853	15.93442	16.31201
-0.75	-56.7384	-114.682	-124.796	-73.8714	-88.9594	-95.0968
+0.75	9.49174	13.09856	13.20227	9.632734	11.73148	11.83972
-0.8	-59.9593	-122.452	-133.56	-78.6122	-94.6351	-101.312
+0.8	6.694424	8.311763	8.684506	6.223569	7.617203	7.534474
-0.85	-62.6812	-129.097	-141.071	-82.6531	-99.471	-106.615
+0.85	4.38088	5.058256	5.183139	4.223263	4.637222	4.956192
-0.9	-65.4627	-135.984	-148.874	-86.8245	-104.461	-112.098
+0.9	2.237764	2.572592	2.356231	2.361006	2.55457	2.63175
-0.95	-67.7614	-141.774	-155.452	-90.3146	-108.634	-116.692
+0.95	0.859096	0.892144	0.873054	0.926971	0.987266	0.948875
-1	-70.0467	-147.654	-162.154	-93.8378	-112.844	-121.34
+1	0.00E+00	0	0	0	0	0
(Span 2) -2	0.00E+00	0	0	0	0	0
+2	69.95997	147.3862	161.8491	93.67815	112.653	121.1291
-2.05	-8.13E-01	-0.81138	-0.80582	-0.89154	-0.95097	-0.86772
+2.05	67.89347	142.0667	155.7853	90.49027	108.8439	116.9238
-2.1	-2.33128	-2.62226	-2.51654	-2.44511	-2.68484	-2.73656
+2.1	65.35398	135.6675	148.5151	86.63302	104.2321	111.8459
-2.15	-4.26634	-4.90364	-5.01844	-4.1301	-4.53534	-4.83974
+2.15	62.83786	129.4356	141.4547	82.85864	99.71701	106.8852
-2.2	-6.82202	-8.50962	-8.88779	-6.37133	-7.79565	-7.72743
+2.2	59.82985	122.0911	133.1533	78.39259	94.37223	101.0237
-2.25	-9.35168	-12.854	-12.9479	-9.45727	-11.5198	-11.6148
+2.25	56.91557	115.0611	125.2235	74.10309	89.23688	95.40045

-2.3	**-12.3734**	**-18.6474**	**-18.7908**	**-13.3098**	**-16.165**	**-16.5577**
+2.3	**53.49592**	**106.8977**	**116.0315**	**69.10713**	**83.25386**	**88.85784**
-2.35	**-15.2991**	**-24.4698**	**-25.1007**	**-17.0802**	**-20.7084**	**-21.4035**
+2.35	**50.23493**	**99.18373**	**107.3594**	**64.37386**	**77.58383**	**82.66485**
-2.4	**-18.7301**	**-31.391**	**-32.6264**	**-21.5422**	**-26.0825**	**-27.1464**
+2.4	**46.46053**	**90.32745**	**97.41728**	**58.92688**	**71.05721**	**75.54374**
-2.45	**-22.0003**	**-38.0646**	**-39.9029**	**-25.8282**	**-31.2425**	**-32.6697**
+2.45	**42.9043**	**82.0438**	**88.13015**	**53.82123**	**64.93819**	**68.87373**
-2.5	**-25.7838**	**-45.8634**	**-48.4267**	**-30.8206**	**-37.2507**	**-39.1101**
+2.5	**38.83202**	**72.62089**	**77.57855**	**48.00208**	**57.9626**	**61.27667**
-2.55	**-29.3473**	**-53.2739**	**-56.5428**	**-35.551**	**-42.9417**	**-45.218**
+2.55	**35.03201**	**63.8817**	**67.80352**	**42.59542**	**51.48021**	**54.22244**
-2.6	**-33.4264**	**-61.8242**	**-65.9241**	**-40.995**	**-49.4895**	**-52.2533**
+2.6	**30.71874**	**54.01845**	**56.78298**	**36.48302**	**44.15036**	**46.25198**
-2.65	**-37.2317**	**-69.8575**	**-74.7524**	**-46.0982**	**-55.6259**	**-58.8531**
+2.65	**26.70839**	**44.93789**	**46.64729**	**30.84669**	**37.39022**	**38.9063**
-2.7	**-41.5497**	**-79.0329**	**-84.8507**	**-51.9149**	**-62.6186**	**-66.3808**
+2.7	**22.21285**	**34.76048**	**35.29838**	**24.51991**	**29.80074**	**30.66499**
-2.75	**-45.5455**	**-87.5748**	**-94.2642**	**-57.3197**	**-69.1146**	**-73.3797**
+2.75	**18.08147**	**25.70951**	**26.0535**	**18.72531**	**22.84854**	**23.12062**
-2.8	**-50.0456**	**-97.2492**	**-104.939**	**-63.4302**	**-76.4575**	**-81.2972**
+2.8	**13.45893**	**16.9493**	**17.89937**	**12.54674**	**15.43454**	**15.24428**
-2.85	**-54.1804**	**-106.185**	**-114.81**	**-69.0651**	**-83.2276**	**-88.6024**
+2.85	**9.238359**	**14.83926**	**16.42248**	**9.317598**	**11.21035**	**12.10417**
-2.9	**-58.8058**	**-116.233**	**-125.921**	**-75.3907**	**-90.8261**	**-96.8072**
+2.9	**6.851913**	**14.83926**	**16.42248**	**9.317598**	**11.21035**	**12.10417**
-2.95	**-63.0282**	**-125.449**	**-136.123**	**-81.1844**	**-97.7846**	**-104.326**
+2.95	**6.851913**	**14.83926**	**16.42248**	**9.317598**	**11.21035**	**12.10417**
-3	**-67.7222**	**-135.743**	**-147.529**	**-87.6459**	**-105.544**	**-112.716**
+3	**6.851913**	**14.83926**	**16.42248**	**9.317598**	**11.21035**	**12.10417**

2-Span: Moment (Max and Min) Raw Data Results - 200' Max Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**-2.98E-13**	**-1.5E-13**	**-2.16337E-13**	**-1.6E-13**	**-2.08E-13**	**-1.2824E-13**	**-1.3E-13**	**-1.4E-13**	**-1.66235E-13**	**-1.7E-13**
End Shear	**3.06E-13**	**1.66E-13**	**1.47528E-13**	**1.97E-13**	**2.85E-13**	**1.69245E-13**	**1.64E-13**	**1.75E-13**	**1.71825E-13**	**1.68E-13**
-0.05	**-68.5192**	**-47.7122**	**-68.58163867**	**-73.7973**	**-113.849**	**-38.22868619**	**-51.6324**	**-59.1708**	**-66.28369603**	**-73.8105**
+0.05	**632.4295**	**446.4514**	**609.0507019**	**631.8811**	**829.991**	**358.8194414**	**484.2069**	**550.2428**	**606.3257261**	**664.1247**
-0.1	**-137.038**	**-95.4243**	**-137.1632773**	**-147.595**	**-227.698**	**-76.45737238**	**-103.265**	**-118.342**	**-132.5673921**	**-147.621**
+0.1	**1176.73**	**831.433**	**1129.27352**	**1167.551**	**1520.062**	**668.4517986**	**901.9184**	**1024.255**	**1129.237353**	**1238.81**
-0.15	**-205.558**	**-143.136**	**-205.744916**	**-221.392**	**-341.547**	**-114.6860586**	**-154.897**	**-177.512**	**-198.8510881**	**-221.432**
+0.15	**1632.94**	**1155.289**	**1561.345884**	**1609.284**	**2082.718**	**929.1493463**	**1253.553**	**1422.547**	**1581.116192**	**1732.009**
-0.2	**-274.077**	**-190.849**	**-274.3265547**	**-295.189**	**-455.396**	**-152.9147448**	**-206.53**	**-236.683**	**-265.1347841**	**-295.242**
+0.2	**2003.381**	**1419.136**	**1907.311556**	**1973.911**	**2562.672**	**1141.774317**	**1540.3**	**1746.536**	**1950.202923**	**2142.683**
-0.25	**-342.596**	**-238.561**	**-342.9081934**	**-368.986**	**-569.245**	**-191.143431**	**-258.162**	**-295.854**	**-331.4184802**	**-369.053**
+0.25	**2290.008**	**1624.469**	**2183.809887**	**2248.941**	**2943.028**	**1307.504947**	**1763.754**	**2003.511**	**2237.859656**	**2469.39**
-0.3	**-411.115**	**-286.273**	**-411.489832**	**-442.784**	**-683.094**	**-229.3721172**	**-309.794**	**-355.025**	**-397.7021762**	**-442.863**
+0.3	**2500.306**	**1773.155**	**2379.741974**	**2456.635**	**3226.795**	**1427.819749**	**1933.303**	**2197.243**	**2446.661682**	**2708.371**
-0.35	**-479.634**	**-333.985**	**-480.0714707**	**-516.581**	**-796.943**	**-267.6008033**	**-361.427**	**-414.196**	**-463.9858722**	**-516.674**
+0.35	**2644.442**	**1876.456**	**2499.116014**	**2594.762**	**3423.51**	**1504.497507**	**2046.588**	**2323.083**	**2590.369015**	**2862.477**
-0.4	**-548.154**	**-381.697**	**-548.6531094**	**-590.378**	**-910.792**	**-305.8294895**	**-413.059**	**-473.367**	**-530.2695683**	**-590.484**
+0.4	**2713.337**	**1927.426**	**2556.137196**	**2676.644**	**3513.65**	**1539.617889**	**2102.969**	**2384.288**	**2663.086425**	**2942.07**
-0.45	**-616.673**	**-429.409**	**-617.2347481**	**-664.176**	**-1024.64**	**-344.0581757**	**-464.691**	**-532.537**	**-596.5532643**	**-664.295**
+0.45	**2711.21**	**1928.731**	**2542.823287**	**2680.345**	**3494.121**	**1535.560509**	**2105.804**	**2384.095**	**2666.703722**	**2950.88**
-0.5	**-685.192**	**-477.122**	**-685.8163867**	**-737.973**	**-1138.49**	**-382.2868619**	**-516.324**	**-591.708**	**-662.8369603**	**-738.105**
+0.5	**2662.997**	**1893.141**	**2502.369623**	**2627.09**	**3405.11**	**1510.218826**	**2066.223**	**2340.979**	**2616.099548**	**2891.835**
-0.55	**-753.711**	**-524.834**	**-754.3980254**	**-811.77**	**-1252.34**	**-420.5155481**	**-567.956**	**-650.879**	**-729.1206564**	**-811.916**
+0.55	**2554.324**	**1815.021**	**2404.769913**	**2508.589**	**3291.496**	**1451.726444**	**1980.609**	**2245.571**	**2506.29781**	**2765.926**
-0.6	**-822.23**	**-572.546**	**-822.9796641**	**-885.567**	**-1366.19**	**-458.7442343**	**-619.589**	**-710.05**	**-795.4043524**	**-885.726**
+0.6	**2386.485**	**1696.213**	**2246.367175**	**2325.972**	**3066.526**	**1359.948071**	**1851.225**	**2099.462**	**2340.185294**	**2584.071**
-0.65	**-890.75**	**-620.258**	**-891.5613028**	**-959.365**	**-1480.04**	**-496.9729205**	**-671.221**	**-769.221**	**-861.6880484**	**-959.537**
+0.65	**2165.494**	**1540.931**	**2037.433241**	**2096.644**	**2726.821**	**1238.186925**	**1682.641**	**1907.856**	**2123.642121**	**2346.426**
-0.7	**-959.269**	**-667.97**	**-960.1429414**	**-1033.16**	**-1593.89**	**-535.2016067**	**-722.853**	**-828.392**	**-927.9717444**	**-1033.35**
+0.7	**1897.905**	**1353.764**	**1777.099124**	**1812.339**	**2305.862**	**1090.046757**	**1479.832**	**1676.421**	**1863.071118**	**2058.449**
-0.75	**-1027.79**	**-715.682**	**-1028.72458**	**-1106.96**	**-1707.73**	**-573.4302929**	**-774.486**	**-887.562**	**-994.2554405**	**-1107.16**
+0.75	**1590.812**	**1139.679**	**1472.238228**	**1480.654**	**1794.423**	**919.4319238**	**1248.179**	**1411.291**	**1565.396534**	**1727.762**
-0.8	**-1096.31**	**-763.394**	**-1097.306219**	**-1180.76**	**-1821.58**	**-611.6589791**	**-826.118**	**-946.733**	**-1060.539137**	**-1180.97**
+0.8	**1251.851**	**904.0156**	**1130.272662**	**1109.765**	**1191.447**	**730.5466734**	**993.4672**	**1119.067**	**1238.064976**	**1362.572**
-0.85	**-1164.83**	**-811.107**	**-1165.887857**	**-1254.55**	**-1971.66**	**-649.8876653**	**-877.751**	**-1005.9**	**-1126.822833**	**-1254.78**
+0.85	**889.1992**	**652.4906**	**759.175003**	**708.4877**	**653.5654**	**527.8960388**	**722.1135**	**806.8148**	**889.0453259**	**971.6648**
-0.9	**-1233.35**	**-858.819**	**-1234.469496**	**-1328.35**	**-2187.45**	**-688.1163515**	**-929.383**	**-1065.07**	**-1193.106529**	**-1328.59**
+0.9	**511.5737**	**391.296**	**378.6990682**	**325.534**	**293.4013**	**316.2856254**	**440.7635**	**482.0652**	**527.1407038**	**564.4106**
-0.95	**-1301.86**	**-906.531**	**-1303.051135**	**-1402.15**	**-2458.39**	**-726.3450376**	**-981.015**	**-1124.25**	**-1259.390225**	**-1402.4**
+0.95	**163.2283**	**148.4261**	**148.3683572**	**118.0106**	**99.58382**	**112.1727753**	**167.1566**	**177.1319**	**188.2381124**	**189.1573**
-1	**-1370.38**	**-954.243**	**-1371.632738**	**-1475.95**	**-2776.13**	**-764.5737361**	**-1032.65**	**-1183.42**	**-1325.673922**	**-1476.21**
+1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(Span 2) -2	**-1370.38**	**-954.243**	**-1371.632738**	**-1475.95**	**-2776.13**	**-764.5737361**	**-1032.65**	**-1183.42**	**-1325.673922**	**-1476.21**
+2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
-2.05	**-1301.86**	**-906.531**	**-1303.051102**	**-1402.15**	**-2458.39**	**-726.3450401**	**-981.015**	**-1124.25**	**-1259.390226**	**-1402.4**
+2.05	**163.2283**	**148.4272**	**148.3694229**	**118.0114**	**99.58435**	**112.1797025**	**167.1601**	**177.1386**	**188.2420379**	**189.1594**
-2.1	**-1233.34**	**-858.819**	**-1234.469465**	**-1328.35**	**-2187.45**	**-688.1163544**	**-929.383**	**-1065.07**	**-1193.10653**	**-1328.59**
+2.1	**511.7863**	**391.3049**	**378.7053328**	**325.5379**	**293.405**	**316.2895658**	**440.7705**	**482.0707**	**527.148793**	**564.412**
-2.15	**-1164.83**	**-811.107**	**-1165.887829**	**-1254.55**	**-1971.66**	**-649.8876688**	**-877.751**	**-1005.9**	**-1126.822834**	**-1254.78**
+2.15	**889.4393**	**652.4897**	**759.1806862**	**708.492**	**653.5643**	**527.9004784**	**722.1211**	**806.8211**	**889.044255**	**971.6671**
-2.2	**-1096.31**	**-763.394**	**-1097.306192**	**-1180.76**	**-1821.58**	**-611.6589831**	**-826.118**	**-946.733**	**-1060.539138**	**-1180.97**
+2.2	**1252.107**	**904.015**	**1130.278882**	**1109.77**	**1191.45**	**730.55121**	**993.4654**	**1119.074**	**1238.064545**	**1362.575**
-2.25	**-1027.79**	**-715.682**	**-1028.724556**	**-1106.96**	**-1707.73**	**-573.4302974**	**-774.486**	**-887.562**	**-994.2554425**	**-1107.16**

+2.25	1591.071	1139.679	1472.244353	1480.652	1794.426	919.4364284	1248.177	1411.298	1565.396145	1727.766
-2.3	-959.268	-667.97	-960.1429193	-1033.16	-1593.89	-535.2016117	-722.853	-828.392	-927.9717467	-1033.35
+2.3	1898.156	1353.764	1777.104967	1812.343	2305.864	1090.051237	1479.83	1676.427	1863.070555	2058.452
-2.35	-890.749	-620.258	-891.5612828	-959.365	-1480.04	-496.972926	-671.221	-769.221	-861.6880509	-959.537
+2.35	2165.728	1540.93	2037.438338	2096.648	2726.824	1238.19119	1682.639	1907.862	2123.641074	2346.429
-2.4	-822.23	-572.546	-822.9796463	-885.567	-1366.19	-458.7442404	-619.589	-710.05	-795.4043551	-885.726
+2.4	2386.691	1696.212	2246.371127	2325.975	3066.528	1359.951695	1851.222	2099.467	2340.183312	2584.072
-2.45	-753.71	-524.834	-754.3980098	-811.77	-1252.34	-420.5155547	-567.956	-650.879	-729.1206593	-811.916
+2.45	2554.494	1815.019	2404.773958	2508.586	3291.496	1451.729422	1980.605	2245.575	2506.294848	2765.925
-2.5	-685.191	-477.122	-685.8163733	-737.973	-1138.49	-382.286869	-516.324	-591.708	-662.8369635	-738.105
+2.5	2663.123	1893.137	2502.372266	2627.094	3405.113	1510.221006	2066.219	2340.983	2616.095267	2891.833
-2.55	-616.672	-429.409	-617.2347368	-664.176	-1024.64	-344.0581833	-464.691	-532.537	-596.5532677	-664.295
+2.55	2711.119	1928.735	2542.82167	2680.342	3494.123	1535.559035	2105.8	2384.093	2666.699067	2950.883
-2.6	-548.153	-381.697	-548.6531003	-590.378	-910.792	-305.8294977	-413.059	-473.367	-530.2695719	-590.484
+2.6	2713.191	1927.428	2556.133849	2676.649	3513.65	1539.615325	2102.974	2384.284	2663.09001	2942.072
-2.65	-479.634	-333.985	-480.0714638	-516.581	-796.943	-267.600812	-361.427	-414.196	-463.9858761	-516.674
+2.65	2644.235	1876.458	2499.119221	2594.764	3423.512	1504.493833	2046.591	2323.077	2590.370772	2862.476
-2.7	-411.115	-286.273	-411.4898273	-442.784	-683.094	-229.3721263	-309.794	-355.025	-397.7021803	-442.863
+2.7	2500.033	1773.155	2379.745951	2456.636	3226.798	1427.814929	1933.305	2197.246	2446.661232	2708.367
-2.75	-342.596	-238.561	-342.9081908	-368.986	-569.245	-191.1434406	-258.162	-295.854	-331.4184845	-369.053
+2.75	2289.81	1624.467	2183.811987	2248.939	2943.03	1307.499019	1763.753	2003.512	2237.856988	2469.385
-2.8	-274.077	-190.849	-274.3265543	-295.189	-455.396	-152.9147549	-206.53	-236.683	-265.1347887	-295.242
+2.8	2003.11	1419.133	1907.311364	1973.914	2562.674	1141.767299	1540.297	1746.534	1950.198033	2142.684
-2.85	-205.557	-143.136	-205.7449178	-221.392	-341.547	-114.6860693	-154.897	-177.512	-198.8510929	-221.432
+2.85	1632.591	1155.284	1561.343488	1609.284	2082.718	929.1408345	1253.549	1422.544	1581.108852	1732.008
-2.9	-137.038	-95.4243	-137.1632813	-147.595	-227.698	-76.45738358	-103.265	-118.342	-132.567397	-147.621
+2.9	1176.116	831.4261	1129.268587	1167.549	1520.063	668.4414365	901.9124	1024.25	1129.237672	1238.811
-2.95	-68.5191	-47.7122	-68.58164484	-73.7973	-113.849	-38.2286979	-51.6324	-59.1708	-66.28370124	-73.8105
+2.95	632.5123	446.4427	609.0433517	631.8763	829.9891	358.8209086	484.1991	550.2349	606.3235456	664.1229
-3	-4.37E-13	-1.9E-13	-1.83991E-13	-1.7E-13	-2.37E-13	-1.54111E-13	-1.4E-13	-1.4E-13	-1.26135E-13	-1.8E-13
+3	5.12E-13	2.94E-13	4.06652E-13	4.25E-13	5.58E-13	2.83538E-13	2.7E-13	3.46E-13	3.69357E-13	3.95E-13

2-Span: Moment (Max and Min) Raw Data Results - 200' Max Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	-2.98E-13	-1.9E-13	-2.1E-13	-1.7E-13	-2.1E-13	-2.5E-13	-2.7E-13	-1.20189E-13
End Shear	3.06E-13	2.09E-13	2.24E-13	1.99E-13	2.44E-13	1.75E-13	1.84E-13	1.46847E-13
-0.05	-68.5192	-62.2323	-66.9867	-63.1476	-76.4924	-79.6771	-84.3455	-33.31717237
+0.05	632.4295	588.5869	630.8141	592.9057	712.2667	702.9219	743.5278	312.7151548
-0.1	-137.038	-124.465	-133.973	-126.295	-152.985	-159.354	-168.691	-66.63434473
+0.1	1176.73	1097.06	1175.36	1104.502	1325.977	1302.705	1377.863	582.0586101
-0.15	-205.558	-186.697	-200.96	-189.443	-229.477	-239.031	-253.036	-99.9515171
+0.15	1632.94	1525.858	1634.173	1535.307	1841.911	1800.244	1903.963	808.5578468
-0.2	-274.077	-248.929	-267.947	-252.59	-305.97	-318.708	-337.382	-133.2686895
+0.2	2003.381	1876.361	2008.766	1886.764	2261.878	2209.518	2337.243	993.0043026
-0.25	-342.596	-311.161	-334.933	-315.738	-382.462	-398.385	-421.727	-166.5858618
+0.25	2290.008	2150.434	2301.179	2160.813	2602.605	2535.5	2683.079	1136.491948
-0.3	-411.115	-373.394	-401.92	-378.886	-458.955	-478.063	-506.073	-199.9030342
+0.3	2500.306	2350.434	2513.974	2371.888	2854.559	2772.104	2932.953	1240.630536
-0.35	-479.634	-435.626	-468.907	-442.033	-535.447	-557.74	-590.418	-233.2202066
+0.35	2644.442	2483.509	2661.898	2511.174	3018.992	2928.066	3098.7	1306.641825
-0.4	-548.154	-497.858	-535.894	-505.181	-611.94	-637.417	-674.764	-266.5373789
+0.4	2713.337	2555.535	2737.215	2580.999	3099.384	2996.837	3172.006	1336.368166
-0.45	-616.673	-560.091	-602.88	-568.329	-688.432	-717.094	-759.109	-299.8545513
+0.45	2711.21	2562.359	2742.55	2585.262	3100.369	2984.059	3158.984	1330.393774
-0.5	-685.192	-622.323	-669.867	-631.476	-764.924	-796.771	-843.455	-333.1717237
+0.5	2662.997	2512.543	2690.24	2536.258	3043.783	2935.225	3106.99	1310.744941
-0.55	-753.711	-684.555	-736.854	-694.624	-841.417	-876.448	-927.8	-366.488896
+0.55	2554.324	2406.369	2577.538	2430.815	2919.226	2819.473	2984.111	1260.933947
-0.6	-822.23	-746.787	-803.84	-757.771	-917.909	-956.125	-1012.15	-399.8060684
+0.6	2386.485	2248.068	2408.4	2272.131	2729.435	2632.56	2785.89	1181.758387
-0.65	-890.75	-809.02	-870.827	-820.919	-994.402	-1035.8	-1096.49	-433.1232408
+0.65	2165.494	2043.314	2188.778	2065.643	2481.141	2380.99	2519.291	1076.097588
-0.7	-959.269	-871.252	-937.814	-884.067	-1070.89	-1115.48	-1180.84	-466.4404131
+0.7	1897.905	1801.02	1925.149	1817.443	2181.679	2072.315	2192.317	947.0954963
-0.75	-1027.79	-933.484	-1004.8	-947.214	-1147.39	-1195.16	-1265.18	-499.7575855
+0.75	1590.812	1522.833	1624.517	1534.117	1838.983	1714.73	1813.651	798.1592906
-0.8	-1096.31	-995.717	-1071.79	-1010.36	-1223.88	-1274.83	-1349.53	-533.0747579
+0.8	1251.851	1215.633	1294.41	1222.822	1461.589	1317.063	1392.649	632.9605707
-0.85	-1164.83	-1057.95	-1138.77	-1073.51	-1300.37	-1354.51	-1433.87	-566.3919302
+0.85	889.1992	886.7891	942.8842	891.4285	1058.633	888.7846	939.3438	455.4343116
-0.9	-1233.35	-1120.18	-1205.76	-1136.66	-1376.86	-1434.19	-1518.22	-599.7091026
+0.9	511.5737	548.7598	578.7407	547.7964	639.8524	440.4189	464.8197	269.7793674
-0.95	-1301.86	-1182.41	-1272.75	-1199.8	-1453.36	-1513.86	-1602.56	-633.026275
+0.95	163.2283	210.8256	211.5102	210.3	228.1437	160.2333	168.6666	116.5362263
-1	-1370.38	-1244.65	-1339.73	-1262.95	-1529.85	-1593.54	-1686.91	-666.3434731
+1	0	0	0	0	0	0	0	0
(Span 2) -2	-1370.38	-1244.65	-1339.73	-1262.95	-1529.85	-1593.54	-1686.91	-666.3434731
+2	0	0	0	0	0	0	0	0
-2.05	-1301.86	-1182.41	-1272.75	-1199.8	-1453.36	-1513.86	-1602.56	-633.0263006
+2.05	163.2283	210.8273	211.5215	210.3054	228.151	160.2345	168.6679	116.2834707
-2.1	-1233.34	-1120.18	-1205.76	-1136.66	-1376.86	-1434.19	-1518.22	-599.709128
+2.1	511.7863	548.7587	578.7535	547.804	639.8571	440.4274	464.8288	269.7767792
-2.15	-1164.83	-1057.95	-1138.77	-1073.51	-1300.37	-1354.51	-1433.87	-566.3919555
+2.15	889.4393	886.7896	942.8828	891.4369	1058.638	888.7832	939.3424	455.4315564
-2.2	-1096.31	-995.717	-1071.79	-1010.36	-1223.88	-1274.83	-1349.53	-533.0747829
+2.2	1252.107	1215.634	1294.409	1222.831	1461.595	1317.062	1392.648	632.9581118
-2.25	-1027.79	-933.484	-1004.8	-947.214	-1147.39	-1195.16	-1265.18	-499.7576104

+2.25	1591.071	1522.833	1624.516	1534.114	1838.989	1714.729	1813.651	798.156696
-2.3	-959.268	-871.252	-937.814	-884.067	-1070.89	-1115.48	-1180.84	-466.4404378
+2.3	1898.156	1801.021	1925.148	1817.441	2181.685	2072.314	2192.317	947.0931854
-2.35	-890.749	-809.02	-870.827	-820.919	-994.402	-1035.8	-1096.49	-433.1232653
+2.35	2165.728	2043.315	2188.777	2065.64	2481.146	2380.988	2519.289	1076.094938
-2.4	-822.23	-746.787	-803.84	-757.771	-917.909	-956.125	-1012.15	-399.8060927
+2.4	2386.691	2248.067	2408.398	2272.127	2729.439	2632.557	2785.887	1181.75561
-2.45	-753.71	-684.555	-736.854	-694.624	-841.417	-876.448	-927.8	-366.4889202
+2.45	2554.494	2406.367	2577.535	2430.81	2919.23	2819.469	2984.106	1260.931344
-2.5	-685.191	-622.323	-669.867	-631.476	-764.924	-796.771	-843.455	-333.1717476
+2.5	2663.123	2512.54	2690.235	2536.264	3043.785	2935.23	3106.995	1310.741907
-2.55	-616.672	-560.091	-602.88	-568.329	-688.432	-717.094	-759.109	-299.8545751
+2.55	2711.119	2562.363	2742.555	2585.258	3100.369	2984.055	3158.98	1331.914051
-2.6	-548.153	-497.858	-535.894	-505.181	-611.94	-637.417	-674.764	-266.5374025
+2.6	2713.191	2555.537	2737.219	2580.993	3099.382	2996.831	3172.008	1336.366614
-2.65	-479.634	-435.626	-468.907	-442.033	-535.447	-557.74	-590.418	-233.22023
+2.65	2644.235	2483.51	2661.9	2511.178	3018.987	2928.069	3098.703	1306.640044
-2.7	-411.115	-373.394	-401.92	-378.886	-458.955	-478.063	-506.073	-199.9030574
+2.7	2500.033	2350.433	2513.974	2371.89	2854.552	2772.105	2932.954	1240.628483
-2.75	-342.596	-311.161	-334.934	-315.738	-382.462	-398.385	-421.727	-166.5858849
+2.75	2289.81	2150.431	2301.176	2160.813	2602.607	2535.498	2683.077	1136.489256
-2.8	-274.077	-248.929	-267.947	-252.59	-305.97	-318.708	-337.382	-133.2687123
+2.8	2003.11	1876.355	2008.761	1886.762	2261.877	2209.513	2337.238	993.0058817
-2.85	-205.557	-186.697	-200.96	-189.443	-229.477	-239.031	-253.036	-99.95153977
+2.85	1632.591	1525.85	1634.165	1535.302	1841.908	1800.242	1903.961	808.5591946
-2.9	-137.038	-124.465	-133.973	-126.295	-152.985	-159.354	-168.691	-66.63436722
+2.9	1176.116	1097.049	1175.35	1104.495	1325.972	1302.7	1377.858	582.0593167
-2.95	-68.5191	-62.2323	-66.9867	-63.1476	-76.4924	-79.6771	-84.3455	-33.31719467
+2.95	632.5123	588.5745	630.802	592.8966	712.2581	702.9141	743.5197	312.7156392
-3	-4.37E-13	-2.6E-13	-2.6E-13	-1.8E-13	-2E-13	-2.1E-13	-2.2E-13	-1.5926E-13
+3	5.12E-13	4.37E-13	4.73E-13	3.25E-13	4.06E-13	4.69E-13	4.93E-13	2.44426E-13

2-Span: Moment (Max and Min) Raw Data Results - 200' Max Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	-2.98E-13	-3E-13	-3.1E-13	-2.7E-13	-2.6E-13	-3.2E-13
End Shear	3.06E-13	4.19E-13	3.4E-13	2.23E-13	2.67E-13	2.79E-13
-0.05	-68.5192	-148.393	-164.225	-93.176	-112.103	-121.042
+0.05	632.4295	1260.436	1366.631	815.0725	982.15	1047.932
-0.1	-137.038	-296.785	-328.45	-186.352	-224.207	-242.083
+0.1	1176.73	2327.877	2531.312	1509.222	1818.72	1938.557
-0.15	-205.558	-445.178	-492.675	-279.528	-336.31	-363.125
+0.15	1632.94	3239.576	3513.879	2083.533	2517.529	2686.439
-0.2	-274.077	-593.57	-656.9	-372.704	-448.414	-484.167
+0.2	2003.381	3967.343	4357.928	2568.042	3095.294	3298.242
-0.25	-342.596	-741.963	-821.125	-465.88	-560.517	-605.209
+0.25	2290.008	4546.968	5008.412	2940.973	3536.768	3790.876
-0.3	-411.115	-890.355	-985.349	-559.056	-672.621	-726.25
+0.3	2500.306	4984.006	5501.043	3210.454	3850.394	4142.014
-0.35	-479.634	-1038.75	-1149.57	-652.232	-784.724	-847.292
+0.35	2644.442	5276.564	5815.091	3384.802	4054.15	4359.03
-0.4	-548.154	-1187.14	-1313.8	-745.408	-896.828	-968.334
+0.4	2713.337	5438.253	5968.848	3457.48	4136.765	4462.183
-0.45	-616.673	-1335.53	-1478.02	-838.584	-1008.93	-1089.38
+0.45	2711.21	5441.874	6002.062	3435.36	4105.718	4440.599
-0.5	-685.192	-1483.93	-1642.25	-931.76	-1121.03	-1210.42
+0.5	2662.997	5337.297	5871.767	3382.555	4044.623	4367.747
-0.55	-753.711	-1632.32	-1806.47	-1024.94	-1233.14	-1331.46
+0.55	2554.324	5100.367	5591.243	3254.552	3894.033	4195.22
-0.6	-822.23	-1780.71	-1970.7	-1118.11	-1345.24	-1452.5
+0.6	2386.485	4732.052	5213.918	3041.707	3641.138	3912.973
-0.65	-890.75	-1929.1	-2134.92	-1211.29	-1457.35	-1573.54
+0.65	2165.494	4252.4	4700.176	2751.583	3294.898	3541.679
-0.7	-959.269	-2077.5	-2299.15	-1304.46	-1569.45	-1694.58
+0.7	1897.905	3684.728	4065.647	2392.951	2865.659	3080.561
-0.75	-1027.79	-2225.89	-2463.37	-1397.64	-1681.55	-1815.63
+0.75	1590.812	3020.798	3326.671	1975.333	2366.863	2540.629
-0.8	-1096.31	-2374.28	-2627.6	-1490.82	-1793.66	-1936.67
+0.8	1251.851	2276.897	2501.556	1509.003	1807.64	1935.075
-0.85	-1164.83	-2522.67	-2791.82	-1583.99	-1905.76	-2057.71
+0.85	889.1992	1470.513	1609.949	1004.985	1198.396	1278.069
-0.9	-1233.35	-2671.07	-2956.05	-1677.17	-2017.86	-2178.75
+0.9	511.5737	655.3094	726.2609	480.6784	577.4494	599.2419
-0.95	-1301.86	-2819.46	-3120.27	-1770.34	-2129.97	-2299.79
+0.95	163.2283	225.2396	208.8529	190.5482	228.1592	228.2188
-1	-1370.38	-2967.85	-3284.5	-1863.52	-2242.07	-2420.83
+1	0	0	0	0	0	0
(Span 2) -2	-1370.38	-2967.85	-3284.5	-1863.52	-2242.07	-2420.83
+2	0	0	0	0	0	0
-2.05	-1301.86	-2819.46	-3120.27	-1770.34	-2129.97	-2299.79
+2.05	163.2283	225.2356	208.8524	190.5469	228.1552	228.2203
-2.1	-1233.34	-2671.07	-2956.05	-1677.17	-2017.86	-2178.75
+2.1	511.7863	655.3025	726.261	480.6804	577.4506	599.2471
-2.15	-1164.83	-2522.67	-2791.82	-1583.99	-1905.76	-2057.71
+2.15	889.4393	1470.516	1609.024	1004.983	1198.397	1278.073
-2.2	-1096.31	-2374.28	-2627.6	-1490.82	-1793.66	-1936.67
+2.2	1252.107	2276.901	2501.555	1509.002	1807.641	1935.079
-2.25	-1027.79	-2225.89	-2463.37	-1397.64	-1681.55	-1815.63

+2.25	1591.071	3020.801	3326.67	1975.332	2366.863	2540.633
-2.3	-959.268	-2077.5	-2299.15	-1304.46	-1569.45	-1694.58
+2.3	1898.156	3684.73	4064.631	2392.95	2865.659	3080.564
-2.35	-890.749	-1929.1	-2134.92	-1211.29	-1457.35	-1573.54
+2.35	2165.728	4252.401	4699.829	2751.581	3294.897	3541.681
-2.4	-822.23	-1780.71	-1970.7	-1118.11	-1345.24	-1452.5
+2.4	2386.691	4733.056	5213.919	3041.704	3641.134	3912.973
-2.45	-753.71	-1632.32	-1806.47	-1024.94	-1233.14	-1331.46
+2.45	2554.494	5100.373	5591.243	3254.547	3894.039	4195.217
-2.5	-685.191	-1483.93	-1642.25	-931.76	-1121.03	-1210.42
+2.5	2663.123	5337.3	5871.766	3382.56	4044.626	4367.742
-2.55	-616.672	-1335.53	-1478.02	-838.584	-1008.93	-1089.38
+2.55	2711.119	5442.453	6002.061	3435.356	4105.717	4440.595
-2.6	-548.153	-1187.14	-1313.8	-745.408	-896.828	-968.334
+2.6	2713.191	5438.248	5968.848	3457.474	4136.76	4462.187
-2.65	-479.634	-1038.75	-1149.57	-652.232	-784.724	-847.292
+2.65	2644.235	5276.554	5815.09	3384.806	4054.154	4359.03
-2.7	-411.115	-890.356	-985.349	-559.056	-672.621	-726.25
+2.7	2500.033	4984.003	5501.444	3210.455	3850.395	4142.011
-2.75	-342.596	-741.963	-821.124	-465.88	-560.517	-605.209
+2.75	2289.81	4546.972	5008.412	2940.971	3536.765	3790.87
-2.8	-274.077	-593.57	-656.899	-372.704	-448.414	-484.167
+2.8	2003.11	3967.925	4357.927	2568.037	3095.287	3298.237
-2.85	-205.557	-445.178	-492.674	-279.528	-336.31	-363.125
+2.85	1632.591	3239.581	3515.195	2083.53	2517.53	2686.441
-2.9	-137.038	-296.785	-328.45	-186.352	-224.207	-242.083
+2.9	1176.116	2327.876	2531.312	1509.216	1818.717	1938.555
-2.95	-68.5191	-148.393	-164.225	-93.176	-112.104	-121.042
+2.95	632.5123	1260.43	1366.632	815.0636	982.1433	1047.925
-3	-4.37E-13	-3.3E-13	-3.5E-13	-2.7E-13	-2.4E-13	-2.8E-13
+3	5.12E-13	7.75E-13	7.8E-13	4.44E-13	5.09E-13	5.27E-13

3-Span: Shear (Max and Min) Raw Data Results - 10’ Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-7.585786004	-10.959090	-7.586494	-8.380134881	-8.380134881	-7.305395477	-7.669016693	-6.36889747	-6.7041026	-4.515073706
End Shear	74.62911812	96.334880	72.010916	75.26745371	75.26745371	63.99822433	65.62005062	57.32651095	60.34369574	44.3555
-0.05	-7.585786004	-10.959090	-7.586494	-8.380134881	-8.380134881	-7.305395477	-7.669016693	-6.36889747	-6.7041026	-4.515073706
+0.05	70.98931846	88.759626	68.101513	69.3119191	69.3119191	58.04778321	59.44329738	53.12996087	55.9262746	42.05893104
-0.1	-14.23906188	-11.042594	-13.486065	-10.37210014	-11.17695084	-8.744314928	-10.42929649	-7.819395841	-8.329388826	-4.515073706
+0.1	63.17947383	75.197683	60.180377	58.90075642	58.90075642	47.86010923	48.44452454	45.19434207	47.57299165	37.15173927
-0.15	-14.23906188	-11.042594	-13.486065	-10.37210014	-11.17695084	-8.744314928	-10.42929649	-7.819395841	-8.329388826	-4.515073706
+0.15	63.17947383	75.197683	60.180377	58.90075642	58.90075642	47.86010923	48.44452454	45.19434207	47.57299165	37.15173927
-0.2	-21.72095887	-13.121262	-20.497056	-13.85671468	-15.68659392	-11.19617532	-14.89820845	-9.921589324	-10.65153799	-9.236851371
+0.2	54.86015117	61.717828	51.917323	48.46381499	48.46381499	38.82858325	39.05854964	37.22682415	39.18613069	32.11545934
-0.25	-21.72095887	-13.121262	-20.497056	-13.85671468	-15.68659392	-11.19617532	-14.89820845	-9.921589324	-10.65153799	-9.236851371
+0.25	54.86015117	61.717828	51.917323	48.46381499	48.46381499	38.82858325	39.05854964	37.22682415	39.18613069	32.11545934
-0.3	-29.229461	-19.985001	-28.349829	-17.67884659	-19.74296754	-13.64550498	-18.97938073	-13.18438392	-13.98049402	-14.27329722
+0.3	46.26835873	48.682546	42.733733	38.29853808	38.29853808	30.68899235	30.90808258	29.50427042	31.05712676	27.03575154
-0.35	-29.229461	-19.985001	-28.349829	-17.67884659	-19.74296754	-13.64550498	-18.97938073	-13.18438392	-13.98049402	-14.27329722
+0.35	46.26835873	48.682546	42.733733	38.29853808	38.29853808	30.68899235	30.90808258	29.50427042	31.05712676	27.03575154
-0.4	-36.66231273	-27.457094	-35.430461	-24.06673692	-25.03646713	-18.42840931	-22.75392595	-17.404246	-18.42259598	-19.40194752
+0.4	37.64111361	36.450766	34.448301	28.70238853	28.70238853	23.00374113	23.20519235	21.96371661	23.11970169	21.93430336
-0.45	-36.66231273	-27.457094	-35.430461	-24.06673692	-25.03646713	-18.42840931	-22.75392595	-17.404246	-18.42259598	-19.40194752
+0.45	37.64111361	36.450766	34.448301	28.70238853	28.70238853	23.00374113	23.20519235	21.96371661	23.11970169	21.93430336
-0.5	-43.91727882	-39.732193	-42.457889	-32.55730515	-33.46926826	-24.87248468	-27.90958911	-24.74696541	-26.14492047	-24.48295088
+0.5	29.21543292	25.187562	27.057925	19.972827	19.972827	16.03045661	16.04326462	15.27631106	16.08032743	16.9537125
-0.55	-43.91727882	-39.732193	-42.457889	-32.55730515	-33.46926826	-24.87248468	-27.90958911	-24.74696541	-26.14492047	-24.48295088
+0.55	29.21543292	25.187562	27.057925	19.972827	19.972827	16.03045661	16.04326462	15.27631106	16.08032743	16.9537125
-0.6	-50.89207446	-53.025866	-49.336965	-42.66491477	-43.4651124	-33.19161887	-36.02219903	-32.51079457	-34.30529563	-29.37645126
+0.6	21.22832488	16.837688	19.019881	13.56441255	13.56441255	10.9134964	10.94298065	10.35173958	10.89656798	12.23654351
-0.65	-50.89207446	-53.025866	-49.336965	-42.66491477	-43.4651124	-33.19161887	-36.02219903	-32.51079457	-34.30529563	-29.37645126
+0.65	21.22832488	16.837688	19.019881	13.56441255	13.56441255	10.9134964	10.94298065	10.35173958	10.89656798	12.23654351
-0.7	-57.48446157	-66.337772	-55.969454	-52.61819312	-53.27307083	-41.78666958	-43.88655847	-40.16065524	-42.34225421	-33.94259015
+0.7	13.91680549	10.930464	12.282926	8.88463949	8.88463949	7.177607171	7.215075875	6.815251159	7.173948588	7.925393688
-0.75	-57.48446157	-66.337772	-55.969454	-52.61819312	-53.27307083	-41.78666958	-43.88655847	-40.16065524	-42.34225421	-33.94259015
+0.75	13.91680549	10.930464	12.282926	8.88463949	8.88463949	7.177607171	7.215075875	6.815251159	7.173948588	7.925393688
-0.8	-64.04065832	-79.301143	-62.253822	-62.1696676	-62.66233193	-50.44876701	-52.59390317	-47.49830977	-50.048898	-38.04151611
+0.8	7.51789075	5.827542	6.462817	4.765897496	4.773732766	3.805577469	3.805577469	3.595710058	3.784957956	4.162856805
-0.85	-64.04065832	-79.301143	-62.253822	-62.1696676	-62.66233193	-50.44876701	-52.59390317	-47.49830977	-50.048898	-38.04151611
+0.85	7.51789075	5.827542	6.462817	4.765897496	4.773732766	3.805577469	3.805577469	3.595710058	3.784957956	4.162856805
-0.9	-69.89439182	-91.545647	-68.085355	-71.10367111	-71.40208644	-59.38798381	-61.32644679	-54.325566	-57.2183766	-41.53337228
+0.9	2.268593328	1.457946	1.771011	1.298482322	1.298482322	1.069304757	1.082112773	1.023359006	1.077220006	1.091504723
-0.95	-69.89439182	-91.545647	-68.085355	-71.10367111	-71.40208644	-59.38798381	-61.32644679	-54.325566	-57.2183766	-41.53337228
+0.95	2.268593328	1.457946	1.771011	1.298482322	1.298482322	1.069304757	1.082112773	1.023359006	1.077220006	1.091504723
-1	-74.48	-102.697398	-73.223422	-79.4231681	-79.4231681	-68.93032713	-71.51318919	-60.58694918	-63.77573597	-44.27830108
+1	1.87E-01	0.228356	0.181749	1.77E-01	1.77E-01	1.42E-01	1.42E-01	1.35E-01	1.42E-01	1.11E-01
(Span 2) -2	-4.06E+00	-4.889102	-3.891293	-3.79E+00	-3.79E+00	-3.03E+00	-3.03E+00	-2.88E+00	-3.04E+00	-2.38E+00
+2	7.29E+01	103.882200	72.019026	79.70835407	79.70835407	70.96506798	75.69340598	60.68911245	63.88327627	43.25100584
-2.05	-5.04E+00	-4.901042	-4.196294	-3.79E+00	-3.79E+00	-3.46E+00	-3.78E+00	-2.88E+00	-3.04E+00	-2.38E+00
+2.05	7.10E+01	99.204438	69.811050	76.94945258	76.94945258	66.98269381	71.26561442	58.48158396	61.55956207	42.10321185
-2.1	-6.827936587	-4.927227	-6.367929	-3.91597749	-4.358090797	-4.080160478	-4.777029872	-2.883865901	-3.035648317	-2.384632986
+2.1	68.82209223	94.272456	67.369172	72.58208025	72.58208025	62.87927218	66.81695083	55.26612867	58.17487228	40.80713314
-2.15	-8.907833566	-4.969768	-8.621035	-5.144291825	-5.659779939	-4.667675688	-5.807176805	-3.335013542	-3.564906173	-3.278368604
+2.15	66.3914838	89.126661	64.770812	68.73904565	68.74543998	58.68945372	62.34513509	52.32441954	55.07833636	39.33439135
-2.2	-13.94117759	-8.256422	-13.371774	-8.229692528	-8.691667759	-6.783448902	-7.998693039	-5.658673809	-6.006235435	-6.280222189
+2.2	60.86649473	78.354439	58.943208	60.78563176	60.86167325	50.18936001	53.43855899	46.43360419	48.87747809	36.02093217

-2.25	-16.80579059	-10.514822	-15.869017	-9.920906982	-10.44919755	-8.202639835	-9.181934657	-6.946298281	-7.357218851	-7.971686621
+2.25	57.82316666	72.807882	55.810253	56.70109458	56.82764684	45.94841624	49.0570711	43.208881	45.48303263	34.20290826
-2.3	-19.84911865	-12.938615	-18.446972	-11.94940741	-12.34178402	-9.678815319	-11.027764	-8.355500607	-8.833276858	-9.770093448
+2.3	54.62666313	67.207317	52.629119	52.57552851	52.75909403	42.06575638	44.75893777	39.93478791	42.03661885	32.29603403
-2.35	-24.89805524	-18.977421	-23.842329	-17.45079659	-17.95099649	-13.55823146	-14.76319438	-12.23935356	-12.93482968	-13.62745923
+2.35	47.87987413	55.619217	45.832069	44.29386056	44.59909304	34.69894398	36.55371924	33.39611645	35.18617499	28.2759711
-2.4	-27.81382312	-23.157817	-26.657967	-20.90632525	-21.42425276	-16.13437303	-16.91038447	-14.81656512	-15.65033666	-15.65629406
+2.4	44.42875869	49.328396	42.500866	40.18403719	40.54798987	31.6049292	33.30176934	29.73257724	31.29744973	26.19292527
-2.45	-30.79228366	-27.651664	-29.550781	-24.52883779	-25.0443259	-18.88801738	-20.35559444	-17.53750521	-18.5148974	-17.73180751
+2.45	40.95198904	43.809389	39.303946	36.12574164	36.54304998	27.99749929	30.05772958	26.51488808	27.9104085	24.08128016
-2.5	-37.24	-37.427756	-35.930232	-32.18226118	-32.64423642	-24.85359689	-26.86633261	-23.393938	-24.6251979	-21.9626244
+2.5	34.15879386	32.359493	32.853391	28.25629838	28.75235754	21.77220579	23.64853379	20.36358198	21.4882191	19.83247446
-2.55	-40.8194533	-42.633575	-39.327121	-36.16688839	-36.58372361	-28.02843652	-30.08902762	-26.5360155	-27.9326479	-24.08779488
+2.55	31.86331831	27.593300	29.528822	24.49142959	25.0069504	18.86117028	20.51095767	17.51891705	18.49533317	17.72542154
-2.6	-44.37337588	-48.631692	-42.524420	-40.2259434	-40.58933862	-31.30658851	-33.3332774	-29.75420739	-31.32021831	-26.19938846
+2.6	28.85965132	23.103126	26.636445	20.87064964	21.38840058	16.109256	17.25145623	14.79890292	15.63173274	15.65004878
-2.65	-47.87623701	-54.923035	-45.790205	-44.33628008	-44.64090198	-35.07424362	-36.58531107	-33.41738659	-35.20852259	-28.28234807
+2.65	25.91524522	19.873730	23.821255	17.41709726	17.91688011	13.53502826	14.74500249	12.22275784	12.91733183	13.62140271
-2.7	-54.62666313	-67.276702	-52.586893	-52.61824762	-52.80119002	-41.8047422	-44.79968892	-39.95694401	-42.05994106	-32.30207167
+2.7	20.09245991	12.907333	18.879641	11.9263289	12.31771377	9.664467268	11.00911634	8.344350578	8.821471768	9.764551548
-2.75	-57.82316777	-72.876744	-55.897258	-56.74359983	-56.86956955	-45.99916229	-49.09888412	-43.23085855	-45.50616689	-34.2087219
+2.75	16.86011926	10.485379	15.849386	9.903405523	10.42979688	8.188851375	9.170389253	6.937463251	7.347951345	7.96647509
-2.8	-60.86649251	-78.422251	-58.965294	-60.82767757	-60.90320831	-50.23070529	-53.48117039	-46.45524623	-48.90025919	-36.02646559
+2.8	14.11278816	8.229073	13.352645	8.213192081	8.675524853	6.77027377	7.987758909	5.650362239	5.997511021	6.275372004
-2.85	-66.39148435	-89.190801	-64.790121	-68.7794589	-68.78557967	-58.73051576	-62.38855151	-52.34489024	-55.09988447	-39.33929988
+2.85	9.162870983	4.969160	8.602957	5.130021611	5.645542425	4.661987961	5.797155912	3.327916001	3.557437326	3.274405781
-2.9	-68.82209112	-94.333970	-67.386812	-72.62161801	-72.62161801	-62.9196856	-66.86037402	-55.28576042	-58.19553729	-40.81148034
+2.9	7.061651108	4.926619	6.350393	3.907585572	4.347195849	4.074204212	4.767299303	2.883671707	3.035443902	2.384678027
-2.95	-70.9973998	-99.262811	-69.826839	-76.29308707	-76.29308707	-67.02211518	-71.30879782	-58.08118807	-61.13809271	-42.1071687
+2.95	5.242979673	4.900434	4.179319	3.791859766	3.791859766	3.458088277	3.766495654	2.883671707	3.035443902	2.384678027
-3	-74.48	-108.315597	-73.980130	-82.94078188	-82.94078188	-74.82815227	-80.03371816	-63.13724959	-66.46026273	-44.22245238
+3	4.056407356	4.888493	3.891473	3.791859766	3.791859766	3.034561575	3.036772364	2.883671707	3.035443902	2.384678027
(Span 3) -4	-0.187096468	-0.228328	-0.181757	-0.177125458	-0.177125458	-0.141750524	-0.141853795	-0.134702152	-0.141791739	-0.11139315
+4	72.36052369	97.213388	70.775411	75.360732	75.41546774	64.20186533	66.44106217	57.51610369	60.54326704	43.00344518
-3.05	-0.187096468	-0.228328	-0.181757	-0.177125458	-0.177125458	-0.141750524	-0.141853795	-0.134702152	-0.141791739	-0.11139315
+3.05	72.36052369	97.213388	70.775411	75.360732	75.41546774	64.20186533	66.44106217	57.51610369	60.54326704	43.00344518
-3.1	-4.585608459	-3.463670	-3.975547	-2.882838771	-2.882838771	-2.32023849	-2.320774464	-2.239667421	-2.357544654	-2.536378855
+3.1	67.14453043	85.460736	65.212431	66.67122123	67.08249514	54.4779718	56.1494024	50.9649263	53.68934986	39.86647366
-3.15	-4.585608459	-3.463670	-3.975547	-2.882838771	-2.882838771	-2.32023849	-2.320774464	-2.239667421	-2.357544654	-2.536378855
+3.15	67.14453043	85.460736	65.212431	66.67122123	67.08249514	54.4779718	56.1494024	50.9649263	53.68934986	39.86647366
-3.2	-10.43934057	-8.299745	-9.268294	-6.727544296	-6.72766279	-5.3946227	-5.3946227	-5.111223177	-5.380234923	-5.972242443
+3.2	60.93389482	72.805175	59.139074	57.41014295	57.98582282	46.15688097	48.94565104	43.85605917	46.223708	36.0527208
-3.25	-10.43934057	-8.299745	-9.268294	-6.727544296	-6.72766279	-5.3946227	-5.3946227	-5.111223177	-5.380234923	-5.972242443
+3.25	60.93389482	72.805175	59.139074	57.41014295	57.98582282	46.15688097	48.94565104	43.85605917	46.223708	36.0527208
-3.3	-17.32418366	-13.830437	-15.574929	-11.18494771	-11.18494771	-9.014233574	-9.04865608	-8.575922164	-9.027286488	-10.02779162
+3.3	54.59637681	59.618774	52.666019	47.6248269	48.35626215	37.32453494	39.95774559	36.33656449	38.3250303	31.70202531
-3.35	-17.32418366	-13.830437	-15.574929	-11.18494771	-11.18494771	-9.014233574	-9.04865608	-8.575922164	-9.027286488	-10.02779162
+3.35	54.59637681	59.618774	52.666019	47.6248269	48.35626215	37.32453494	39.95774559	36.33656449	38.3250303	31.70202531
-3.4	-25.00312507	-20.081263	-22.698852	-16.10081839	-16.1008183852834	-12.93261495	-12.9548887600438	-12.28165151	-12.928054219337	-14.56043455
+3.4	47.81980944	46.270129	45.896377	37.56274688	38.42462582	28.9597118	31.94668469	28.60463531	30.20016811	26.95427584
-3.45	-25.00312507	-20.081263	-22.698852	-16.10081839	-16.10081839	-12.93261495	-12.95488876	-12.28165151	-12.92805422	-14.56043455
+3.45	47.81980944	46.270129	45.896377	37.56274688	38.42462582	28.9597118	31.94668469	28.60463531	30.20016811	26.95427584
-3.5	-33.42624415	-30.625294	-31.038401	-24.25454022	-24.25454022	-19.43987304	-19.44040902	-18.54424575	-19.52025869	-19.42757376
+3.5	40.70709166	33.124202	38.930738	27.47137546	28.42172555	20.91364965	24.53431313	20.85855412	22.05606672	21.94931156
-3.55	-33.42624415	-30.625294	-31.038401	-24.25454022	-24.25454022	-19.43987304	-19.44040902	-18.54424575	-19.52025869	-19.42757376

+3.55	40.70709166	33.124202	38.930738	27.47137546	28.4217255464422	20.9136496467357	24.53431313	20.85855412	22.05606672	21.94931156
-3.6	-41.79523662	-42.519727	-38.596103	-33.45942739	-33.45942739	-26.81138774	-27.0225178	-25.59536168	-26.94248598	-24.48664081
+3.6	33.35852846	23.833218	31.863752	21.30479238	22.28688075	16.37793685	20.88155941	15.29343218	16.20159668	16.8269681
-3.65	-41.79523662	-42.519727	-38.596103	-33.45942739	-33.45942739	-26.81138774	-27.0225178	-25.59536168	-26.94248598	-24.48664081
+3.65	33.35852846	23.833218	31.863752	21.30479238	22.28688075	16.37793685	20.88155941	15.29343218	16.20159668	16.8269681
-3.7	-50.43438143	-55.203009	-46.960187	-43.38060449	-43.38060449	-34.7560946	-34.98146316	-33.3878366	-35.14509116	-29.59504186
+3.7	25.87833316	16.467269	24.790940	15.38818137	17.74740536	12.27953867	16.96231021	11.0305303	11.70999634	11.72713793
-3.75	-50.43438143	-55.203009	-46.960187	-43.38060449	-43.38060449	-34.7560946	-34.98146316	-33.3878366	-35.14509116	-29.59504186
+3.75	25.87833316	16.467269	24.790940	15.38818137	17.74740536	12.27953867	16.96231021	11.0305303	11.70999634	11.72713793
-3.8	-58.89933883	-68.508360	-56.108587	-53.72065699	-53.72065699	-43.03477873	-43.26763066	-41.22695667	-43.39679649	-34.61349161
+3.8	18.36810358	11.130522	16.991252	12.16457079	13.46797037	10.00686162	12.69547676	8.918385486	9.539645916	6.78965812
-3.85	-58.89933883	-68.508360	-56.108587	-53.72065699	-53.72065699	-43.03477873	-43.26763066	-41.22695667	-43.39679649	-34.61349161
+3.85	18.36810358	11.130522	16.991252	12.16457079	13.46797037	10.00686162	12.69547676	8.918385486	9.539645916	6.78965812
-3.9	-66.99463107	-82.075026	-64.226275	-64.18204634	-64.18204634	-52.9638762	-53.93435857	-49.20715982	-51.79701034	-39.52323183
+3.9	10.93007964	10.988298	10.087081	8.393847494	8.711202501	7.34474945	7.999962142	6.584209573	6.977208037	4.514986331
-3.95	-66.99463107	-82.075026	-64.226275	-64.18204634	-64.18204634	-52.9638762	-53.93435857	-49.20715982	-51.79701034	-39.52323183
+3.95	10.93007964	10.988298	10.087081	8.393847494	8.711202501	7.34474945	7.999962142	6.584209573	6.977208037	4.514986331
-5	-74.46250524	-95.538787	-71.891866	-74.46735794	-74.46735794	-63.26955599	-65.14022085	-57.0404542	-60.04258337	-44.21979935
+5	7.585786004	10.960931	7.587186	8.37964212	8.37964212	7.305609665	7.66869522	6.368652891	6.703845148	4.514986331

HDR

3-Span: Shear (Max and Min) Raw Data Results - 10' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-5.898528337	-5.894624211	-4.689721082	-3.738752912	-4.318485413	-6.021081722	-6.019931129	-6.021561775	-6.022988252
End Shear	52.98828741	53.08558699	42.14977408	33.03510427	42.427	53.34430359	53.34430359	52.87079636	53.09409945
-0.05	-5.898528337	-5.894624211	-4.689721082	-3.738752912	-4.318485413	-6.021081722	-6.019931129	-6.021561775	-6.022988252
+0.05	48.89961958	47.83300211	38.17214535	30.44131268	39.93357179	48.63568621	48.82444665	48.77278308	48.99395741
-0.1	-6.679348408	-6.340565163	-5.449248545	-4.525708774	-7.206289624	-7.437274804	-6.019931129	-6.021561775	-6.022988252
+0.1	41.56564334	40.44449558	32.30755383	25.65733536	35.50231544	40.4927886	40.69131723	40.61635902	40.82820281
-0.15	-6.679348408	-6.340565163	-5.449248545	-4.525708774	-7.206289624	-7.437274804	-6.019931129	-6.021561775	-6.022988252
+0.15	41.56564334	40.44449558	32.30755383	25.65733536	35.50231544	40.4927886	40.69131723	40.61635902	40.82820281
-0.2	-8.853762923	-8.186025265	-8.118883667	-6.600728435	-11.367449	-9.644188284	-7.947736047	-7.727430722	-8.233540915
+0.2	34.21066335	33.07264053	26.44832835	21.00610757	30.7977931	33.00429577	33.20055498	33.10345429	33.28528426
-0.25	-8.853762923	-8.186025265	-8.118883667	-6.600728435	-11.367449	-9.644188284	-7.947736047	-7.727430722	-8.233540915
+0.25	34.21066335	33.07264053	26.44832835	21.00610757	30.7977931	33.00429577	33.20055498	33.10345429	33.28528426
-0.3	-12.22801505	-10.88647068	-10.96639841	-8.841397819	-15.71701037	-11.886281	-11.8495894	-11.9143773	-12.31120111
+0.3	27.0445858	25.92617671	20.79472715	16.52830173	25.95077819	26.0856435	26.28188393	26.17632545	26.34120569
-0.35	-12.22801505	-10.88647068	-10.96639841	-8.841397819	-15.71701037	-11.886281	-11.8495894	-11.9143773	-12.31120111
+0.35	27.0445858	25.92617671	20.79472715	16.52830173	25.95077819	26.0856435	26.28188393	26.17632545	26.34120569
-0.4	-16.25730315	-14.89491259	-13.97638887	-11.23687936	-20.05469067	-15.88950375	-16.0304095	-16.97963823	-16.46851627
+0.4	20.30116984	19.21780511	15.48355931	12.33482186	21.09207508	19.55317996	19.73534477	19.63422968	19.54787471
-0.45	-16.25730315	-14.89491259	-13.97638887	-11.23687936	-20.05469067	-15.88950375	-16.0304095	-16.97963823	-16.46851627
+0.45	20.30116984	19.21780511	15.48355931	12.33482186	21.09207508	19.55317996	19.73534477	19.63422968	19.54787471
-0.5	-21.84916676	-21.96333235	-17.80631222	-13.85073324	-24.30962499	-21.31829819	-21.38568385	-21.4845591	-22.13179212
+0.5	14.17341556	13.16932202	12.00487447	8.984820008	16.35248887	13.62876992	13.76667779	13.67445194	13.5956465
-0.55	-21.84916676	-21.96333235	-17.80631222	-13.85073324	-24.30962499	-21.31829819	-21.38568385	-21.4845591	-22.13179212
+0.55	14.17341556	13.16932202	12.00487447	8.984820008	16.35248887	13.62876992	13.76667779	13.67445194	13.5956465
-0.6	-29.21673126	-29.35284283	-23.37399623	-18.4618457	-28.41097379	-28.21287604	-28.62896248	-28.73299596	-29.39294876
+0.6	9.651223573	8.995761702	8.731623303	6.43834644	11.8627927	9.283105894	9.227177154	9.282581548	9.243104017
-0.65	-29.21673126	-29.35284283	-23.37399623	-18.4618457	-28.41097379	-28.21287604	-28.62896248	-28.73299596	-29.39294876
+0.65	9.651223573	8.995761702	8.731623303	6.43834644	11.8627927	9.283105894	9.227177154	9.282581548	9.243104017
-0.7	-36.52123468	-36.67536315	-29.20392588	-23.05996369	-32.28787559	-35.31205994	-36.55090462	-36.38444021	-37.08257241
+0.7	6.227626547	5.753371196	5.726218557	4.133034414	7.75379125	6.109396554	6.057651532	6.079556347	6.051656582
-0.75	-36.52123468	-36.67536315	-29.20392588	-23.05996369	-32.28787559	-35.31205994	-36.55090462	-36.38444021	-37.08257241
+0.75	6.227626547	5.753371196	5.726218557	4.133034414	7.75379125	6.109396554	6.057651532	6.079556347	6.051656582
-0.8	-43.5527717	-43.7188056	-34.81078517	-27.51447247	-36.16430825	-42.38651362	-44.40908063	-45.16896372	-44.29157515
+0.8	3.34309981	2.939506878	3.106643217	2.157755197	4.156286012	3.234740849	3.273954686	3.232461154	3.232294807
-0.85	-43.5527717	-43.7188056	-34.81078517	-27.51447247	-36.16430825	-42.38651362	-44.40908063	-45.16896372	-44.29157515
+0.85	3.34309981	2.939506878	3.106643217	2.157755197	4.156286012	3.234740849	3.273954686	3.232461154	3.232294807
-0.9	-50.10143369	-50.27183056	-40.02567561	-31.69383733	-39.51757673	-49.79270811	-51.20184006	-51.81618194	-52.11144223
+0.9	0.988615246	0.8998743	0.959831743	0.725427829	1.229043529	0.911790847	0.980291423	0.947156948	0.932373348
-0.95	-50.10143369	-50.27183056	-40.02567561	-31.69383733	-39.51757673	-49.79270811	-51.20184006	-51.81618194	-52.11144223
+0.95	0.988615246	0.8998743	0.959831743	0.725427829	1.229043529	0.911790847	0.980291423	0.947156948	0.932373348
-1	-55.95731085	-56.12264766	-44.67968425	-35.46559753	-42.42070868	-57.09928182	-57.14835629	-59.58589007	-59.36774959
+1	1.25E-01	1.24E-01	9.90E-02	7.83E-02	1.06E-01	1.20E-01	1.21E-01	1.21E-01	1.20E-01
(Span 2) -2	-2.67E+00	-2.66E+00	-2.12E+00	-1.68E+00	-2.28E+00	-2.58E+00	-2.58E+00	-2.58E+00	-2.58E+00
+2	5.61E+01	55.8616522	44.51634704	35.48204309	41.22444084	58.12826998	58.4301878	59.96033464	60.48463044
-2.05	-3.17E+00	-2.66E+00	-2.42E+00	-1.85E+00	-2.45E+00	-3.01E+00	-2.58E+00	-2.58E+00	-2.58E+00
+2.05	53.71470634	53.40475209	42.56542571	33.88604883	40.11401206	55.07012632	55.16783906	56.99511587	57.12635085
-2.1	-3.738128142	-2.664186096	-3.099507662	-2.296450069	-3.618046659	-3.62493202	-2.788444323	-2.732962713	-2.72185659
+2.1	51.12811615	50.79389059	40.49100887	32.19874565	38.85065898	51.89535926	53.27656327	54.07855123	54.45749726
-2.15	-4.350145469	-2.725326952	-3.850618977	-2.858731901	-4.976914577	-4.223912086	-3.365241048	-3.227098953	-3.215454351
+2.15	48.40822315	48.05187552	38.31356741	30.43448797	37.44846247	48.63091918	48.7295741	50.68186474	50.82066517
-2.2	-6.232842454	-4.700407054	-5.596290666	-4.179374746	-7.892092749	-5.951470955	-5.200130644	-5.255015243	-5.303027882
+2.2	42.65896647	42.26557722	33.70893762	26.73199731	34.3606559	41.94092419	42.1600082	43.90219436	44.04512763
-2.25	-7.388623964	-5.981945561	-6.598940303	-4.944672806	-9.430260925	-7.150510751	-6.551740464	-6.609183477	-6.659451336

+2.25	39.69724871	39.26690909	31.32259602	24.82212718	32.63033678	38.5692938	39.50498299	40.38125009	40.52503502
-2.3	-8.600367664	-7.345740578	-7.71332813	-5.872293062	-11.01760695	-8.392891977	-7.939520802	-7.999323825	-8.051644771
+2.3	36.6478369	36.22828639	28.90379677	22.89204118	31.11768846	35.75589292	36.13942322	36.83856961	36.96954214
-2.35	-11.8610695	-10.86070441	-10.10421554	-7.660676515	-14.32612833	-11.65465327	-10.87715624	-11.15469789	-11.22311429
+2.35	30.8653354	30.12244364	24.0414098	19.02729267	26.99695608	29.49410238	30.17768657	30.30791522	30.42186103
-2.4	-14.0723105	-13.23392843	-11.36747829	-8.65527594	-16.04048717	-13.82313912	-13.19631959	-13.11650475	-13.19762847
+2.4	27.53580349	27.10080572	21.6342827	17.12059871	25.05699295	26.86418982	27.22873208	27.35686553	27.46899363
-2.45	-16.45577667	-15.7722642	-12.67172969	-9.99366297	-17.79034865	-16.14168668	-16.00797569	-16.00797569	-16.00797569
+2.45	24.56347839	24.13044798	19.26739747	15.24962492	23.19947762	23.82457572	24.28931173	24.414633	24.5242849
-2.5	-21.68814827	-21.25311367	-16.9718602	-13.43312284	-21.38294212	-21.17016229	-21.40246314	-21.52253684	-21.62757642
+2.5	18.9733318	18.43474171	14.72727412	11.67012121	19.55350913	18.5716626	18.50756321	18.62513369	18.72801328
-2.55	-24.59117083	-24.15001864	-19.28068382	-15.25470421	-23.21883668	-23.85069907	-24.31560707	-24.43916483	-24.54728911
+2.55	16.4329603	15.75501013	12.66426013	9.9891641	17.77189236	16.11908123	15.69942815	15.81214515	15.91078307
-2.6	-27.56416614	-27.12086493	-21.64786696	-17.12582639	-25.07657825	-26.6225157	-27.25522686	-27.38161594	-27.49219223
+2.6	14.05114136	13.21775084	11.36025382	8.652508676	16.02240579	13.8019968	13.24337237	13.24337237	13.24337237
-2.65	-30.58450821	-30.14280065	-24.05523124	-19.03257268	-27.01773512	-29.81310708	-30.20425613	-30.33272472	-30.44511486
+2.65	11.84168173	10.84578565	10.09723346	7.65798443	14.30845648	11.63511968	10.85785472	11.13980927	11.20915279
-2.7	-37.0178646	-36.24879845	-28.91769547	-22.8973614	-30.8366102	-35.3416218	-36.16943666	-36.86631882	-36.99556332
+2.7	8.58880917	7.336492455	7.706906663	5.79267913	11.00086607	8.380817438	7.926984298	7.987612645	8.040667808
-2.75	-39.72628136	-39.28725521	-31.33640888	-24.8274357	-32.9385545	-38.97000532	-39.53532858	-40.41132876	-40.55322778
+2.75	7.377608824	5.973241567	6.593193746	5.024418712	9.414042502	7.138862057	6.539516388	6.597779312	6.648757411
-2.8	-42.68732873	-42.28561324	-33.72253078	-26.73719738	-34.37870898	-41.97370631	-42.18712386	-43.93171053	-44.07279313
+2.8	6.222387872	4.692318184	5.591049128	4.177353718	7.876430635	5.940283187	5.188289385	5.243953288	5.292664264
-2.85	-48.43503897	-48.07083767	-38.32624086	-30.43940695	-37.46424783	-48.66304013	-48.75938893	-50.70979427	-50.84685558
+2.85	4.344283883	2.719727453	3.846319567	2.857082766	4.96247821	4.218102556	3.306027386	3.222911625	3.211529562
-2.9	-51.15383358	-50.81207605	-40.50333942	-32.20348737	-38.86507248	-51.92675524	-52.0231594	-53.93248226	-54.06625638
+2.9	3.732731804	2.664681568	3.095642794	2.294971378	3.605757527	3.619019975	2.834681303	2.729057529	2.718194564
-2.95	-53.73910726	-53.42200142	-42.57710921	-33.89052433	-40.12691736	-55.10053021	-56.43810456	-57.26777729	-57.54901985
+2.95	3.168841953	2.664681568	2.42070984	1.848539436	2.438407149	3.008766695	2.580442219	2.581256509	2.578915423
-3	-58.33944885	-58.15671943	-46.33575473	-36.97628845	-42.17727103	-61.07045914	-61.72731487	-62.7247963	-63.61475866
+3	2.670705418	2.664681568	2.120367372	1.675613925	2.279543795	2.579377339	2.580442219	2.581256509	2.578915423
(Span 3) -4	-0.124754065	-1.24E-01	-9.90E-02	-7.83E-02	-0.106482116	-0.120487945	-0.120537688	-0.120575725	-0.120466368
+4	53.10055892	53.27807499	42.41968065	33.63373566	41.2123405	53.49273225	54.47454504	56.04748824	55.81558944
-3.05	-0.124754065	-1.24E-01	-9.90E-02	-7.83E-02	-0.106482116	-0.120487945	-0.120537688	-0.120575725	-0.120466368
+3.05	53.10055892	53.27807499	42.41968065	33.63373566	41.2123405	53.49273225	54.47454504	56.04748824	55.81558944
-3.1	-2.093944954	-2.012935784	-1.9763479	-1.314003727	-2.604984029	-1.97232331	-2.069078991	-2.030787657	-2.021603489
+3.1	46.86889383	47.04745852	37.46257671	29.64097782	37.90146998	45.88393005	48.09221504	48.42015305	48.1612617
-3.15	-2.093944954	-2.012935784	-1.9763479	-1.314003727	-2.604984029	-1.97232331	-2.069078991	-2.030787657	-2.021603489
+3.15	46.86889383	47.04745852	37.46257671	29.64097782	37.90146998	45.88393005	48.09221504	48.42015305	48.1612617
-3.2	-4.740851805	-4.295584515	-4.362465642	-3.099685576	-5.901143379	-4.585429295	-4.623126994	-4.577652363	-4.587540848
+3.2	40.05041657	40.22119472	32.0295741	25.3071478	34.24668441	38.86975036	40.862799	41.65940895	40.739598
-3.25	-4.740851805	-4.295584515	-4.362465642	-3.099685576	-5.901143379	-4.585429295	-4.623126994	-4.577652363	-4.587540848
+3.25	40.05041657	40.22119472	32.0295741	25.3071478	34.24668441	38.86975036	40.862799	41.65940895	40.739598
-3.3	-7.845181809	-7.338426752	-7.197616938	-5.25423342	-9.773631911	-7.669843602	-7.614628424	-7.651290066	-7.616561604
+3.3	32.85503463	33.01204316	26.28954105	20.76424353	30.3614315	31.7258547	33.36355317	32.5000307	33.22207806
-3.35	-7.845181809	-7.338426752	-7.197616938	-5.25423342	-9.773631911	-7.669843602	-7.614628424	-7.651290066	-7.616561604
+3.35	32.85503463	33.01204316	26.28954105	20.76424353	30.3614315	31.7258547	33.36355317	32.5000307	33.22207806
-3.4	-11.43270839	-10.756495253 7017	-10.35017789	-7.689510077	-14.09150208	-10.9977343133975	-10.93937844	-11.01413853	-10.9687315287282
+3.4	25.49265673	25.62846249	20.53775001	16.14334069	26.36227951	24.63154276	24.97555334	25.08039509	25.74556413
-3.45	-11.43270839	-10.75649525	-10.35017789	-7.689510077	-14.09150208	-10.99773431	-10.93937844	-11.01413853	-10.96873153
+3.45	25.49265673	25.62846249	20.53775001	16.14334069	26.36227951	24.63154276	24.97555334	25.08039509	25.74556413
-3.5	-17.17870788	-16.11787215	-13.72069093	-10.38357883	-18.72397433	-16.52401268	-16.69203457	-16.59307132	-16.50848443
+3.5	18.35854939	18.28542455	15.52752061	12.48457855	22.17448096	17.98318524	18.66051425	18.47730759	18.97935578
-3.55	-17.17870788	-16.11787215	-13.72069093	-10.38357883	-18.72397433	-16.52401268	-16.69203457	-16.59307132	-16.50848443
+3.55	18.35854939	18.285424548 0087	15.5275206101 792	12.48457855258 63	22.174480959 7882	17.98318523512	18.6605142455918	18.477307589728 4	18.97935578

-3.6	**-23.630872**	**-22.52625173**	**-18.10314719**	**-14.3960261**	**-23.54024605**	**-22.78967958**	**-22.97820931**	**-22.87241391**	**-22.78196828**
+3.6	**14.53410334**	**12.92440321**	**12.44346637**	**10.01720619**	**17.86889757**	**14.17491357**	**13.97452504**	**14.93515039**	**14.40671269**
-3.65	**-23.630872**	**-22.52625173**	**-18.10314719**	**-14.3960261**	**-23.54024605**	**-22.78967958**	**-22.97820931**	**-22.87241391**	**-22.78196828**
+3.65	**14.53410334**	**12.92440321**	**12.44346637**	**10.01720619**	**17.86889757**	**14.17491357**	**13.97452504**	**14.93515039**	**14.40671269**
-3.7	**-30.62473253**	**-29.48205522**	**-23.59815582**	**-18.73887582**	**-28.40951519**	**-29.54268041**	**-29.7384428**	**-29.63096104**	**-29.80556608**
+3.7	**10.51670259**	**8.983560812**	**9.513248187**	**7.697897796**	**13.51639051**	**10.66887862**	**9.647336161**	**9.713818403**	**10.12101148**
-3.75	**-30.62473253**	**-29.48205522**	**-23.59815582**	**-18.73887582**	**-28.40951519**	**-29.54268041**	**-29.7384428**	**-29.63096104**	**-29.80556608**
+3.75	**10.51670259**	**8.983560812**	**9.513248187**	**7.697897796**	**13.51639051**	**10.66887862**	**9.647336161**	**9.713818403**	**10.12101148**
-3.8	**-37.91262209**	**-36.76767553**	**-29.38347306**	**-23.32716506**	**-33.2010061**	**-36.57956192**	**-36.76699581**	**-36.67995783**	**-36.86406251**
+3.8	**7.714866431**	**7.299012572**	**6.75326352**	**5.538953374**	**9.187799135**	**8.555788794**	**6.790700102**	**6.621939169**	**7.139766052**
-3.85	**-37.91262209**	**-36.76767553**	**-29.38347306**	**-23.32716506**	**-33.2010061**	**-36.57956192**	**-36.76699581**	**-36.67995783**	**-36.86406251**
+3.85	**7.714866431**	**7.299012572**	**6.75326352**	**5.538953374**	**9.187799135**	**8.555788794**	**6.790700102**	**6.621939169**	**7.139766052**
-3.9	**-45.28342729**	**-44.17526371**	**-35.26654402**	**-28.00612918**	**-37.78391354**	**-44.58616167**	**-44.76923306**	**-44.71167558**	**-44.92687803**
+3.9	**5.898207759**	**5.894397654**	**4.689567274**	**3.745780188**	**5.47893136**	**6.235811626**	**6.019579321**	**6.02123312**	**6.022680345**
-3.95	**-45.28342729**	**-44.17526371**	**-35.26654402**	**-28.00612918**	**-37.78391354**	**-44.58616167**	**-44.76923306**	**-44.71167558**	**-44.92687803**
+3.95	**5.898207759**	**5.894397654**	**4.689567274**	**3.745780188**	**5.47893136**	**6.235811626**	**6.019579321**	**6.02123312**	**6.022680345**
-5	**-52.52728412**	**-51.48916687**	**-41.07001667**	**-32.73009332**	**-42.02743599**	**-52.76816569**	**-52.95689073**	**-52.9052483**	**-53.12638386**
+5	**5.898207759**	**5.894397654**	**4.689567274**	**3.738694112**	**4.318200922**	**6.020702551**	**6.019579321**	**6.02123312**	**6.022680345**

3-Span: Shear (Max and Min) Raw Data Results - 10' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**-6.706933424**	**-6.245350134**	**-6.760762776**	**-7.211480294**	**-6.874738949**
End Shear	57.51458652	54.11881379	60.76617552	64.628118	58.86121544
-0.05	**-6.706933424**	**-6.245350134**	**-6.760762776**	**-7.211480294**	**-6.874738949**
+0.05	**50.74927153**	**50.03218259**	**56.37613828**	**60.21680328**	**53.60299086**
-0.1	**-7.961892428**	**-8.615988741**	**-7.243382736**	**-7.947882609**	**-8.272282366**
+0.1	**42.50628256**	**41.82646569**	**47.93137651**	**51.20255484**	**43.69221886**
-0.15	**-7.961892428**	**-8.615988741**	**-7.243382736**	**-7.947882609**	**-8.272282366**
+0.15	**42.50628256**	**41.82646569**	**47.93137651**	**51.20255484**	**43.69221886**
-0.2	**-12.20076373**	**-13.5923771**	**-10.0275997**	**-11.16591209**	**-10.37933777**
+0.2	**34.81785888**	**33.77913583**	**39.46585092**	**42.15670034**	**35.17694564**
-0.25	**-12.20076373**	**-13.5923771**	**-10.0275997**	**-11.16591209**	**-10.37933777**
+0.25	**34.81785888**	**33.77913583**	**39.46585092**	**42.15670034**	**35.17694564**
-0.3	**-16.13211364**	**-18.19666978**	**-13.777194**	**-14.90766674**	**-12.95920202**
+0.3	**27.14945984**	**26.15076496**	**31.21615667**	**33.33674522**	**27.70309793**
-0.35	**-16.13211364**	**-18.19666978**	**-13.777194**	**-14.90766674**	**-12.95920202**
+0.35	**27.14945984**	**26.15076496**	**31.21615667**	**33.33674522**	**27.70309793**
-0.4	**-20.05106353**	**-22.46062484**	**-18.40776407**	**-19.86710677**	**-17.80851688**
+0.4	**20.28523035**	**19.65873386**	**23.41996433**	**25.0011509**	**20.75821778**
-0.45	**-20.05106353**	**-22.46062484**	**-18.40776407**	**-19.86710677**	**-17.80851688**
+0.45	**20.28523035**	**19.65873386**	**23.41996433**	**25.0011509**	**20.75821778**
-0.5	**-24.39946083**	**-26.38305604**	**-26.37230728**	**-28.36287283**	**-23.67070599**
+0.5	**14.06060093**	**15.23583559**	**16.23223367**	**17.31438258**	**14.44848914**
-0.55	**-24.39946083**	**-26.38305604**	**-26.37230728**	**-28.36287283**	**-23.67070599**
+0.55	**14.06060093**	**15.23583559**	**16.23223367**	**17.31438258**	**14.44848914**
-0.6	**-30.26651082**	**-31.74909847**	**-34.72047168**	**-37.25195292**	**-31.08049497**
+0.6	**9.873188194**	**11.2239211**	**10.95354345**	**11.74357237**	**9.78145412**
-0.65	**-30.26651082**	**-31.74909847**	**-34.72047168**	**-37.25195292**	**-31.08049497**
+0.65	**9.873188194**	**11.2239211**	**10.95354345**	**11.74357237**	**9.78145412**
-0.7	**-38.42379984**	**-39.14567963**	**-42.91869849**	**-45.96924778**	**-39.48254271**
+0.7	**6.468910155**	**7.342472181**	**7.163291634**	**7.680355851**	**6.370162891**
-0.75	**-38.42379984**	**-39.14567963**	**-42.91869849**	**-45.96924778**	**-39.48254271**
+0.75	**6.468910155**	**7.342472181**	**7.163291634**	**7.680355851**	**6.370162891**
-0.8	**-46.61964531**	**-46.51611499**	**-50.75437862**	**-54.2920044**	**-47.51105585**
+0.8	**3.42093594**	**3.941359905**	**3.844209667**	**4.120345928**	**3.405406941**
-0.85	**-46.61964531**	**-46.51611499**	**-50.75437862**	**-54.2920044**	**-47.51105585**
+0.85	**3.42093594**	**3.941359905**	**3.844209667**	**4.120345928**	**3.405406941**
-0.9	**-54.15950736**	**-53.56468696**	**-58.03654332**	**-61.99748828**	**-54.75641647**
+0.9	**1.03133395**	**1.193966801**	**1.046782568**	**1.116568073**	**0.973777862**
-0.95	**-54.15950736**	**-53.56468696**	**-58.03654332**	**-61.99748828**	**-54.75641647**
+0.95	**1.03133395**	**1.193966801**	**1.046782568**	**1.116568073**	**0.973777862**
-1	**-62.89590986**	**-60.01613298**	**-64.6935924**	**-69.00649856**	**-64.50172046**
+1	**1.25E-01**	**1.16E-01**	**1.43E-01**	**1.53E-01**	**1.27E-01**
(Span 2) -2	**-2.69E+00**	**-2.48E+00**	**-3.06E+00**	**-3.27E+00**	**-2.72E+00**
+2	**66.26575578**	**62.4338874**	**64.36165953**	**68.67618439**	**67.8230458**
-2.05	**-3.39E+00**	**-3.07E+00**	**-3.06E+00**	**-3.27E+00**	**-2.95E+00**
+2.05	**62.26993953**	**58.7111533**	**61.56742866**	**65.71100794**	**63.81853628**
-2.1	**-3.863181566**	**-3.932057464**	**-3.062852358**	**-3.267042515**	**-3.427089444**
+2.1	**58.18609732**	**54.91888007**	**58.59342334**	**62.60200207**	**59.71351196**
-2.15	**-4.656217485**	**-5.048337762**	**-3.458614062**	**-3.805831104**	**-3.862204661**
+2.15	**54.04917094**	**51.06778973**	**55.46580887**	**59.35581907**	**56.0777287**
-2.2	**-6.930618425**	**-7.312587887**	**-6.068289262**	**-6.596310125**	**-5.517302711**
+2.2	**45.75581119**	**44.77923369**	**48.85440289**	**52.11136308**	**47.63654148**
-2.25	**-8.138895313**	**-8.60250843**	**-7.49254163**	**-8.11202407**	**-6.781850345**

+2.25	41.66925726	41.66257823	45.42292157	48.45111634	43.40551454
-2.3	-9.528281583	-10.25943872	-8.986142825	-9.698066043	-8.10493971
+2.3	37.66937542	38.49478351	41.94244952	44.73861283	39.43215077
-2.35	-12.83769693	-14.18419644	-12.77941288	-13.71800342	-11.46928855
+2.35	30.89411643	32.23195762	34.93920602	37.29697256	31.1518996
-2.4	-14.14307262	-16.0571116	-15.61070798	-16.75631536	-14.00410626
+2.4	27.81799597	29.14683717	31.48714355	33.69918723	28.33545377
-2.45	-16.49811099	-17.88563648	-18.58580325	-19.94149957	-16.66113205
+2.45	24.79275336	26.1114269	28.14490642	30.14124482	25.16851768
-2.5	-21.85853212	-23.19815281	-24.88434466	-26.66676922	-22.27023085
+2.5	19.00243351	20.43601419	21.66370475	23.23052037	19.40532428
-2.55	-24.81014717	-26.11418955	-28.16623995	-30.16396894	-25.18653016
+2.55	16.48398627	17.88393524	18.56631534	19.92064981	16.64459449
-2.6	-27.83580014	-29.14963141	-31.50885071	-33.72228779	-28.15349959
+2.6	14.12999458	16.05538877	15.59209954	16.73636282	13.98830951
-2.65	-30.91219526	-32.23481838	-34.96163051	-37.32026696	-31.44587359
+2.65	12.82858986	14.18241153	12.76185257	13.69912352	11.45431385
-2.7	-37.69270622	-38.4976925	-41.96505832	-44.76272888	-39.45597863
+2.7	9.518610561	10.25754354	8.976346634	9.687670521	8.096709382
-2.75	-41.69320893	-41.6654663	-45.44536069	-48.47505141	-43.42996973
+2.75	8.131796892	8.601307468	7.4831907	8.102081388	6.773969241
-2.8	-45.7801754	-44.78213819	-48.87651288	-52.13494707	-47.50410854
+2.8	6.923916751	7.31145479	6.059420652	6.586855183	5.509803479
-2.85	-54.07374592	-51.0714317	-55.4867097	-59.37742268	-56.06484511
+2.85	4.65160255	4.980250734	3.450858219	3.797495546	3.859587915
-2.9	-58.21046766	-54.92250243	-58.61346763	-62.62281893	-59.73907892
+2.9	3.85897938	3.98591873	3.062654202	3.266831148	3.424237056
-2.95	-62.29389722	-58.7146709	-61.58644684	-65.73093609	-63.84366928
+2.95	3.123491007	3.066985575	3.062654202	3.266831148	2.947790647
-3	-70.16111643	-65.99967625	-66.96642436	-71.43085265	-71.7157632
+3	2.685098538	2.483121729	3.062654202	3.266831148	2.722623499
(Span 3) -4	-0.125426397	-0.115991651	-0.143062788	-0.152600307	-0.127179264
+4	58.11835921	56.86125756	61.46040846	65.55776902	59.72417997
-3.05	-0.125426397	-0.115991651	-0.143062788	-0.152600307	-0.127179264
+3.05	58.11835921	56.86125756	61.46040846	65.55776902	59.72417997
-3.1	-2.160240176	-2.483245432	-2.33516212	-2.490839595	-2.122974568
+3.1	50.65382362	50.1044534	54.44607926	58.2106195	51.18415711
-3.15	-2.160240176	-2.483245432	-2.33516212	-2.490839595	-2.122974568
+3.15	50.65382362	50.1044534	54.44607926	58.2106195	51.18415711
-3.2	-4.843613796	-5.575114968	-5.447552074	-5.840137487	-4.836907897
+3.2	42.60013724	42.83828364	46.86961137	50.1667415	43.56732466
-3.25	-4.843613796	-5.575114968	-5.447552074	-5.840137487	-4.836907897
+3.25	42.60013724	42.83828364	46.86961137	50.1667415	43.56732466
-3.3	-8.118883414	-9.233210444	-9.019029856	-9.670190442	-8.027571734
+3.3	33.76650683	35.44010744	38.82501837	41.61771	34.79136749
-3.35	-8.118883414	-9.233210444	-9.019029856	-9.670190442	-8.027571734
+3.35	33.76650683	35.44010744	38.82501837	41.61771	34.79136749
-3.4	-11.70486467	-13.30523248	-13.00084249	-13.93648191	-11.60334395
+3.4	26.73939424	28.21877872	30.5248479	32.78621268	27.3592042
-3.45	-11.70486467	-13.30523248	-13.00084249	-13.93648191	-11.60334395
+3.45	26.73939424	28.21877872	30.5248479	32.78621268	27.3592042
-3.5	-17.09735447	-17.41987285	-19.70024022	-21.01358956	-17.5285941
+3.5	22.46407411	24.46186437	22.18177149	23.89506894	20.06449618
-3.55	-17.09735447	-17.41987285	-19.70024022	-21.01358956	-17.5285941
+3.55	22.46407411	24.46186437	22.18177149	23.89506894	20.06449618
-3.6	-23.67079937	-22.59999942	-27.27089745	-29.11837255	-24.18702531
+3.6	17.97724821	20.3705392	16.09443589	17.3921386	15.41219504

-3.65	***-23.67079937***	***-22.59999942***	***-27.27089745***	***-29.11837255***	***-24.18702531***
+3.65	***17.97724821***	***20.3705392***	***16.09443589***	***17.3921386***	***15.41219504***
-3.7	***-30.77508855***	***-29.89892099***	***-35.32587679***	***-37.73082717***	***-31.36412806***
+3.7	***14.1927871***	***15.9371333***	***11.40708368***	***12.53608244***	***11.25733476***
-3.75	***-30.77508855***	***-29.89892099***	***-35.32587679***	***-37.73082717***	***-31.36412806***
+3.75	***14.1927871***	***15.9371333***	***11.40708368***	***12.53608244***	***11.25733476***
-3.8	***-38.58279199***	***-37.77062418***	***-43.71238389***	***-46.6954594***	***-38.95289429***
+3.8	***10.10845104***	***11.14958722***	***8.702980187***	***9.626112291***	***9.381090271***
-3.85	***-38.58279199***	***-37.77062418***	***-43.71238389***	***-46.6954594***	***-38.95289429***
+3.85	***10.10845104***	***11.14958722***	***8.702980187***	***9.626112291***	***9.381090271***
-3.9	***-45.88716754***	***-45.92944433***	***-52.19937547***	***-55.75971537***	***-48.62239354***
+3.9	***6.706654243***	***6.776778846***	***6.760512915***	***7.211213776***	***7.008132694***
-3.95	***-45.88716754***	***-45.92944433***	***-52.19937547***	***-55.75971537***	***-48.62239354***
+3.95	***6.706654243***	***6.776778846***	***6.760512915***	***7.211213776***	***7.008132694***
-5	***-55.76434065***	***-54.12260143***	***-60.53952357***	***-64.65654382***	***-58.72066367***
+5	***6.706654243***	***6.245435967***	***6.760512915***	***7.211213776***	***6.874556026***

3-Span: Moment (Max and Min) Raw Data Results - 10' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.89E-32	-4.24E-32	-4.80E-32	-3.68E-32	-3.85E-32	-2.71E-32	-3.41E-32	-2.71E-32	-2.87E-32	-2.14E-32
End Shear	1.62E-17	1.23E-17	1.37E-17	1.05E-17	1.05E-17	8.24E-18	8.24E-18	7.95E-18	8.36E-18	8.97E-18
-0.05	-3.792893002	-5.479545223	-3.793246914	-4.190067441	-4.190067441	-3.652697738	-3.834508347	-3.184448735	-3.3520513	-2.257536853
+0.05	35.49465923	44.37981277	34.05075674	34.65595955	34.65595955	29.02389161	29.72164869	26.56498044	27.9631373	21.02946552
-0.1	-7.585786004	-10.95909045	-7.586493828	-8.380134881	-8.380134881	-7.305395477	-7.669016693	-6.36889747	-6.7041026	-4.515073706
+0.1	67.16289835	80.6717642	64.42469539	64.12815163	64.12815163	52.91464102	53.88145852	49.18042012	51.76886329	39.78742987
-0.15	-11.37867901	-16.43863567	-11.37974074	-12.57020232	-12.57020232	-10.95809322	-11.50352504	-9.553346204	-10.0561539	-6.772610559
+0.15	94.76921074	111.6605266	90.9138357	88.16890074	88.16890074	71.79016384	72.66678681	67.6284812	71.18787494	56.13445706
-0.2	-15.17157201	-21.91818089	-15.17298766	-16.76026976	-16.76026976	-14.61079095	-15.33803339	-12.73779494	-13.4082052	-9.030147412
+0.2	118.1373729	136.7417595	113.362746	107.0920935	107.0920935	85.98855674	85.98855674	82.15958485	86.48377352	69.96605064
-0.25	-18.96446501	-27.39772612	-18.96623457	-20.9503372	-20.9503372	-18.26348869	-19.17254173	-15.92224367	-16.7602565	-11.28768426
+0.25	137.1503779	155.3053191	131.6684852	121.1996635	121.1996635	97.07145814	97.07145814	92.74710057	97.62852691	81.21266076
-0.3	-22.75735801	-32.87727134	-22.75948148	-25.14040464	-25.14040464	-21.91618643	-23.00705008	-19.10669241	-20.1123078	-13.54522112
+0.3	151.7505075	167.5219401	145.6451159	130.3691499	130.3691499	104.3514227	104.3514227	99.58438925	104.8256729	89.83972308
-0.35	-26.55025101	-38.35681656	-26.5527284	-29.33047208	-29.33047208	-25.56888417	-26.84155843	-22.29114114	-23.4643591	-15.80275797
+0.35	161.9392556	173.6512663	155.2956717	134.7213134	134.7213134	107.8213569	107.8213569	103.2649465	108.6999437	95.84759914
-0.4	-30.34314402	-43.83636179	-30.34597531	-33.52053952	-33.52053952	-29.22158191	-30.67606677	-25.47558988	-26.8164104	-18.06029482
+0.4	167.7774323	174.0419048	160.8112345	134.5494985	134.5494985	107.6719424	108.2002048	102.5824066	107.9814807	99.27167422
-0.45	-34.13603702	-49.31590701	-34.13922223	-37.71060696	-37.71060696	-32.87427965	-34.51057512	-28.66003861	-30.1684617	-20.31783168
+0.45	169.3850113	169.1313421	162.302584	130.2213572	130.2213572	110.5240832	114.8373831	99.19475645	104.4155331	100.1822258
-0.5	-37.92893002	-54.79545223	-37.93246914	-41.90067441	-41.90067441	-36.52697738	-38.34508347	-31.84448735	-33.520513	-22.57536853
+0.5	166.941329	169.9361655	159.9211615	131.2433791	131.2433791	112.7965957	116.1099586	100.3875392	105.6710938	98.68455946
-0.55	-41.72182302	-60.27499746	-41.72571605	-46.09074185	-46.09074185	-40.17967512	-42.17959181	-35.02893608	-36.8725643	-24.83290538
+0.55	160.684881	172.617407	154.4457659	134.363432	134.363432	111.2685342	112.8618778	102.8097111	108.2207486	94.91890232
-0.6	-45.51471602	-65.75454268	-45.51896297	-50.28080929	-50.28080929	-43.83237286	-46.01410016	-38.21338482	-40.2246156	-27.09044224
+0.6	150.9134769	168.7378932	144.4263134	131.9930647	131.9930647	105.8181466	105.8181466	101.1952075	106.5212711	89.06047961
-0.65	-49.30760903	-71.2340879	-49.31220988	-54.47087673	-54.47087673	-47.4850706	-49.84860851	-41.39783355	-43.5766669	-29.34797909
+0.65	137.9841117	159.4697748	131.8874378	124.7096549	124.7096549	100.0528745	100.0528745	95.73674424	100.7755202	81.31941979
-0.7	-53.10050203	-76.71363313	-53.1054568	-58.66094417	-58.66094417	-51.13776834	-53.68311685	-44.58228229	-46.9287182	-31.60551594
+0.7	122.3131114	144.240972	116.6240506	112.706232	112.706232	90.49987335	90.49987335	86.64658221	91.20692864	71.9408819
-0.75	-56.89339503	-82.19317835	-56.89870371	-62.85101161	-62.85101161	-54.79046608	-57.5176252	-47.76673102	-50.2807695	-33.86305279
+0.75	104.3760412	123.3801642	99.05355177	96.36562783	96.36562783	77.4636016	77.4636016	74.71602598	78.6484484	61.20498117
-0.8	-60.68628803	-87.67272357	-60.69195062	-67.04107905	-67.04107905	-58.44316382	-61.35213355	-50.95117976	-53.6328208	-36.12058965
+0.8	84.70768729	97.41381329	79.64534517	76.24899984	76.24899984	61.30811198	62.12041189	58.79678412	61.8913517	49.42675743
-0.85	-64.47918103	-93.1522688	-64.48519754	-71.23114649	-71.23114649	-62.09586155	-65.18664189	-54.13562849	-56.9848721	-38.3781265
+0.85	63.90207138	66.95721806	58.92086055	52.65903714	52.65903714	44.09935914	45.16202223	40.96037526	43.11618449	36.95622336
-0.9	-68.27207404	-98.63181402	-68.27844445	-75.42121393	-75.42121393	-65.74855929	-69.02115024	-57.32007723	-60.3369234	-40.63566335
+0.9	42.61251899	32.71474152	37.45360591	27.01546816	27.13998481	23.47512566	24.53140139	20.80923313	21.90445593	24.17838415
-0.95	-72.06496704	-105.5285254	-73.34714091	-79.61128137	-79.61128137	-69.40125703	-72.85565859	-60.50452596	-63.6889747	-42.89320021
+0.95	21.55163662	16.11322003	17.60024524	13.51059493	13.68471765	10.77643542	11.28866503	9.735825378	10.24823724	11.51319557
-1	-77.33399198	-113.5980857	-80.84635135	-87.08132057	-88.81137125	-80.87486318	-87.88468109	-65.4931199	-69.09120256	-45.15073683
+1	2.63615443	2.289893485	1.823187371	1.771437254	1.771437254	1.417642966	1.417642966	1.522267332	1.602386665	1.113910413
(Span 2) -2	-77.33399198	-113.5980857	-80.84635135	-87.08132057	-88.81137125	-80.87486318	-87.88468109	-65.4931199	-69.09120256	-45.15073683
+2	2.63615443	2.289893485	1.823187371	1.771437254	1.771437254	1.417642966	1.417642966	1.522267332	1.602386665	1.113910413
-2.05	-60.56511712	-63.49019221	-61.80063309	-54.26757105	-57.69010173	-45.64775695	-54.12305395	-39.59427833	-42.03069363	-28.48125747
+2.05	18.28117081	14.10104822	16.30090083	11.72164294	11.72164294	9.401995624	9.733924654	8.973960111	9.446273801	10.4494222
-2.1	-48.21911743	-56.36633271	-47.89867101	-46.28485942	-47.65317859	-34.08686531	-41.24120469	-34.57403102	-36.53384459	-27.63008579
+2.1	43.80815778	35.13464467	39.6366914	28.32482388	28.41626156	22.65323839	22.65323839	21.54506791	22.68893678	25.79833343
-2.15	-48.21396081	-52.20311651	-41.60489412	-40.12879597	-40.12879597	-32.11440029	-32.13779684	-31.4941016	-33.1516859	-26.77891412
+2.15	73.66348006	68.24832483	68.88739284	53.76795208	53.76795208	44.09775142	44.64749331	41.00692681	43.16518611	43.05464751
-2.2	-48.2088042	-49.23375115	-39.26277648	-37.66408712	-37.66408712	-30.14193526	-30.16389481	-30.0491689	-31.6307041	-25.96376273
+2.2	94.57746738	104.8676117	90.86825336	81.0141722	81.0141722	68.53303855	70.35452805	61.99849179	65.26157031	55.88233117

-2.25	-48.20364759	*-46.26438579*	*-36.92065884*	-35.19937828	-35.19937828	-28.16947024	-28.18999277	-28.62910355	-30.13589847	-25.15058663
+2.25	114.6266259	*133.487126*	*110.8963746*	102.8753381	102.8753381	86.87426843	89.5733807	78.19774482	82.3134156	68.02411773
-2.3	-48.19849097	*-43.29502043*	*-34.5785412*	-32.73466943	-32.73466943	-26.19700522	-26.21609073	-27.30237577	-28.73934292	-24.33741053
+2.3	137.6656918	*161.9061939*	*134.1475794*	124.4965258	124.4965258	103.2325514	104.8300739	94.64352064	99.62475856	81.20738645
-2.35	-48.19333436	*-40.32565507*	*-32.23642356*	-30.26996058	-30.26996058	-24.22454019	-24.2421887	-26.06430686	-27.43611248	-23.52423443
+2.35	153.9786514	*182.7157257*	*150.5437907*	139.801425	139.801425	116.3150332	118.5766121	106.3129723	111.9083919	90.86482419
-2.4	-48.18817775	*-37.35628971*	*-29.89430592*	-27.80525173	-27.80525173	-22.25207517	-24.18729341	-24.82623795	-26.13288205	-22.71105833
+2.4	159.3618063	*191.3870658*	*156.0072462*	146.1151052	146.1151052	125.7782524	130.5054755	111.1132988	116.9613671	94.70990256
-2.45	-48.18302113	*-34.38692435*	*-27.55218828*	-25.34054288	-25.34054288	-20.27961015	-24.18802098	-23.73578098	-24.98503261	-21.89788223
+2.45	169.4382061	*193.8269233*	*165.8525977*	148.1244609	148.1244609	132.6688068	140.4044745	112.5849409	118.5104641	100.4051642
-2.5	-48.17786417	*-31.42122982*	*-25.21007064*	-22.87819289	-22.87819289	-19.35234945	-24.18874856	-22.76775945	-23.96606258	-21.13291959
+2.5	176.9656821	*194.3937065*	*172.8785979*	148.1230673	148.1230673	136.9913623	145.3542137	112.6388757	118.5672375	104.2934676
-2.55	-48.18869306	*-34.39099069*	*-27.55098527*	-25.3431559	-25.3431559	-20.28158019	-24.18947613	-23.7446458	-24.994364	-21.89896914
+2.55	169.4382302	*193.7583967*	*165.870139*	148.1444821	148.1444821	132.7584576	140.3554388	112.5948764	118.5209225	100.389522
-2.6	-48.19952195	*-37.36075156*	*-29.89298614*	-27.80811892	-27.80811892	-22.25423684	-24.1902037	-24.81541856	-26.12149322	-22.71194827
+2.6	159.1571379	*191.2889381*	*156.0151916*	146.1296456	146.1296456	125.7880755	130.4953284	111.0972081	116.9444296	94.7118912
-2.65	-48.21035084	*-40.33051243*	*-32.23498701*	-30.27308193	-30.27308193	-24.22689349	-24.22689349	-26.0510004	-27.42210568	-23.5249274
+2.65	153.8445623	*182.7526859*	*150.6276885*	139.7195647	139.7195647	116.3676008	118.6103767	106.2723184	111.8655983	90.88468791
-2.7	-48.22117973	*-43.3002733*	*-34.57698789*	-32.73804495	-32.73804495	-26.19955014	-26.19955014	-27.297865	-28.73459474	-24.33790653
+2.7	137.6657184	*162.1165278*	*133.9841957*	124.4459604	124.4459604	103.2114129	104.8162208	94.61840157	99.59831744	81.17964011
-2.75	-48.23200862	*-46.27003417*	*-36.91898876*	-35.20300796	-35.20300796	-28.17220679	-28.17220679	-28.62844422	-30.13520444	-25.15088566
+2.75	114.6266195	*133.4977121*	*111.4846149*	102.8821405	102.8821405	86.8822935	89.59545331	78.20111939	82.31696778	68.0152217
-2.8	-48.2428375	*-49.23979504*	*-39.26098963*	-37.66797098	-37.66797098	-30.14486345	-30.14486345	-30.0527868	-31.63451242	-25.96386479
+2.8	94.57746627	*104.9709402*	*90.91018621*	80.89922228	80.89922228	68.45216527	70.41306403	62.03144948	65.29626261	55.8928381
-2.85	-48.25366639	*-52.20955591*	*-41.6029905*	-40.13293399	-40.13293399	-32.1175201	-32.1175201	-31.49830179	-33.15610714	-26.77894253
+2.85	73.66348836	*68.4105616*	*68.98221087*	53.66867357	53.66867357	44.02209234	44.57148764	41.05868025	43.21966342	43.02067479
-2.9	-48.26449528	*-56.37316668*	*-47.89873878*	-46.29745743	-47.65234501	-34.09017675	-41.18393392	-34.5713349	-36.53120027	-27.62986302
+2.9	43.80813581	*35.06321132*	*39.60203172*	28.41555899	28.50796393	22.66905076	22.66905076	21.52212726	22.66478047	25.78566409
-2.95	-60.58053612	*-63.50535872*	*-61.81101886*	-54.27178367	-57.69998457	-45.65428817	-54.13205855	-39.59459147	-42.03141326	-28.48078351
+2.95	18.28116913	*14.121098*	*16.33881686*	11.83379252	11.83379252	9.428012578	9.764777971	8.993682315	9.467034016	10.45893437
-3	-77.3261193	*-113.6164886*	*-80.84435261*	-87.08580529	-88.81889024	-80.87964494	-87.87044861	-65.4914649	-69.0890204	-45.14986307
+3	2.640498181	*2.289609254*	*1.823271287*	1.771254599	1.771254599	1.417505254	1.418537956	1.520218802	1.600230318	1.113931453
(Span 3) -4	-7.73E+01	*-113.6164886*	*-80.84435261*	-8.71E+01	-8.88E+01	-8.09E+01	-8.79E+01	-6.55E+01	-6.91E+01	-4.51E+01
+4	2.64E+00	*2.289609254*	*1.823271287*	1.77E+00	1.77E+00	1.42E+00	1.42E+00	1.52E+00	1.60E+00	1.11E+00
-3.05	-72.06496704	*-105.546006*	*-73.35371968*	-79.60659799	-79.60659799	-69.4032903	-72.8526031	-60.50220082	-63.68652718	-42.8923699
+3.05	20.27704533	*15.97127112*	*17.49587898*	13.41804064	13.59172327	10.88301191	11.32549742	9.788263236	10.30343499	11.48801495
-3.1	-68.27207404	*-98.64837417*	*-68.28467678*	-75.41677693	-75.41677693	-65.75048546	-69.01825549	-57.31787438	-60.33460461	-40.63487674
+3.1	41.27047502	*32.60008221*	*37.36513554*	27.04707024	27.17109952	23.40980194	24.46782579	20.77264387	21.86594092	24.15616785
-3.15	*-64.47918103*	*-93.1679088*	*-64.49108362*	*-71.22695587*	*-71.22695587*	*-62.09768063*	*-65.18390788*	*-54.13354793*	*-56.98268204*	*-38.37738357*
+3.15	*62.63456732*	*66.8358929*	*58.8400057*	52.71738846	52.71738846	44.01860455	45.25093207	40.92166839	43.07544041	36.93592583
-3.2	-60.68628803	*-87.68744343*	*-60.69749047*	-67.03713481	-67.03713481	-58.4448758	-61.34956027	-50.94922149	-53.63075946	-36.11989041
+3.2	83.5147312	*97.27750247*	*79.5683068*	76.28564207	76.28564207	61.41642305	61.41642305	58.93827524	62.04028972	49.40742014
-3.25	-56.89339503	*-82.20697806*	*-56.90389732*	-62.84731375	-62.84731375	-54.79207097	-57.51521266	-47.76489504	-50.27883689	-33.86239724
+3.25	103.2576547	*123.2214423*	*98.97686364*	96.49798528	96.49798528	77.56397142	78.31655607	74.28287154	78.19249636	61.18574164
-3.3	-53.10050203	*-76.72651269*	*-53.11030416*	-58.65749269	-58.65749269	-51.13926613	-53.68086505	-44.5805686	-46.92691431	-31.60490408
+3.3	121.2693034	*144.0532987*	*116.5445583*	112.824228	112.824228	90.58883637	90.58883637	87.14886983	91.73565245	71.92095828
-3.35	-49.30760903	*-71.24604732*	*-49.31671101*	-54.46767163	-54.46767163	-47.4864613	-49.84651744	-41.39624215	-43.57499174	-29.34741091
+3.35	137.014835	*159.2475156*	*131.8022616*	124.8085081	124.8085081	100.1274333	100.1274333	95.7862963	100.8276803	81.29801418
-3.4	-45.51471602	*-65.76558195*	*-45.52311786*	-50.27785057	-50.27785057	-43.83365647	-46.01216983	-38.21191571	-40.22306916	-27.08991774
+3.4	150.0187504	*168.8566564*	*144.3329551*	132.0693763	132.0693763	105.8756806	105.8756806	101.2335654	106.5616478	89.03702225
-3.45	-41.72182302	*-60.28511658*	*-41.72952471*	-46.08802951	-46.08802951	-40.18085164	-42.17782222	-35.02758926	-36.87114659	-24.83242458
+3.45	159.8647225	*172.6967356*	*153.7715917*	134.4144027	134.4144027	111.3475993	112.9583584	102.8355001	108.2478948	94.89286218
-3.5	-37.92893002	*-54.80465121*	*-37.93593155*	-41.89820845	-41.89820845	-36.5280468	-38.34347461	-31.84326282	-33.51922402	-22.57493141
+3.5	167.1312162	*169.9725532*	*160.4429856*	131.266772	131.266772	112.8572356	116.1890283	100.3995874	105.6837762	98.65545885
-3.55	-34.13603702	*-49.32418584*	*-34.1423384*	-37.70838739	-37.70838739	-32.87524197	-34.509127	-28.65893637	-30.16730144	-20.31743825
+3.55	168.7139852	*169.0896318*	*162.1729131*	130.1945683	130.1945683	110.4311371	114.895373	99.18175319	104.4018455	100.1496808
-3.6	-30.34314402	*-43.84372047*	*-30.34874525*	-33.51856633	-33.51856633	-29.22243714	-30.67477939	-25.47460993	-26.81537887	-18.05994508

+3.6	167.1809753	173.9737676	160.6665683	134.5057109	134.5057109	107.6389394	107.7082146	102.5609526	107.9588975	99.23538566
-3.65	-26.55025101	-38.3632551	-26.55515209	-29.32874527	-29.32874527	-25.56963231	-26.84043178	-22.29028348	-23.46345629	-15.80245192
+3.65	161.4173532	173.5516785	155.1351063	134.6572922	134.6572922	107.7731115	108.5450601	102.7763667	108.1856491	95.80723484
-3.7	-22.75735801	-32.88278973	-22.76155894	-25.13892421	-25.13892421	-21.91682747	-23.00608417	-19.10595703	-20.11153372	-13.54495875
+3.7	151.3031454	167.3868175	145.4680428	130.2823235	130.2823235	104.2859477	104.2859477	100.1635191	105.4352832	89.79521634
-3.75	-18.96446501	-27.40232436	-18.96796579	-20.94910315	-20.94910315	-18.26402264	-19.17173656	-15.92163059	-16.75961115	-11.28746559
+3.75	136.7347758	155.1314824	131.6104129	121.0879341	121.0879341	97.17149027	97.17149027	92.81314144	97.69804362	81.16397307
-3.8	-15.17157201	-21.92185899	-15.17437264	-16.75928209	-16.75928209	-14.61121781	-15.33738895	-12.73730414	-13.40768857	-9.02997242
+3.8	117.7986854	136.5270303	113.4239156	107.1995329	107.1995329	86.06956045	86.06956045	82.2130978	86.54010294	69.9131954
-3.85	-11.37867901	-16.44139362	-11.38077948	-12.56946102	-12.56946102	-10.95841298	-11.50304134	-9.552977698	-10.055766	-6.772479254
+3.85	94.51589544	111.4034859	90.95864873	88.24988102	88.24988102	71.86229736	72.74365257	67.83170314	71.40179278	56.07752862
-3.9	-7.585786004	-10.96092825	-7.587186331	-8.379639965	-8.379639965	-7.305608144	-7.668693731	-6.368651253	-6.703843424	-4.514986089
+3.9	66.9946159	82.32764488	64.45363141	64.18203497	64.18203497	52.96386611	53.93434796	49.20715033	51.79700034	39.72660456
-3.95	-3.792893002	-5.480462877	-3.793593178	-4.189818905	-4.189818905	-3.652803312	-3.834346121	-3.184324807	-3.35192085	-2.257492923
+3.95	35.41090317	44.42132773	34.08835401	34.68264131	34.68264131	29.04886282	29.74870581	26.57823788	27.97709251	20.96486501
-5	-1.85E-14	-1.32E-14	-1.70E-14	-1.10E-14	-1.11E-14	-9.00E-15	-9.28E-15	-8.37E-15	-8.82E-15	-9.85E-15
+5	1.73E-14	1.33E-14	1.61E-14	1.10E-14	1.11E-14	8.89E-15	9.10E-15	8.33E-15	8.78E-15	9.85E-15

3-Span: Moment (Max and Min) Raw Data Results - 10’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.36E-32	-2.22E-32	-1.87E-32	-1.51E-32	-2.65E-32	-2.33E-32	-2.47E-32	-2.47E-32	-2.47E-32
End Shear	7.33E-18	6.30E-18	6.60E-18	5.05E-18	9.03E-18	7.01E-18	6.97E-18	7.09E-18	6.97E-18
-0.05	-2.949264169	-2.947312106	-2.344860541	-1.869376456	-2.159242707	-3.010540861	-3.009965564	-3.010780887	-3.011494126
+0.05	24.44980979	23.91650106	19.08607268	15.22065634	19.96678589	24.3178431	24.41222333	24.38639154	24.4969787
-0.1	-5.898528337	-5.894624211	-4.689721082	-3.738752912	-4.318485413	-6.021081722	-6.019931129	-6.021561775	-6.022988252
+0.1	45.24837798	44.92464983	35.74107654	28.31177415	37.77738284	44.5467077	44.73279232	44.67750162	44.89483964
-0.15	-8.847792506	-8.841936317	-7.034581623	-5.608129368	-6.47772812	-9.031622583	-9.029896693	-9.032342662	-9.034482378
+0.15	62.34846502	62.26072979	49.51103113	39.10909615	53.30063142	60.73918291	61.03697585	60.92453853	61.24230422
-0.2	-11.79705667	-11.78924842	-9.379442164	-7.477505824	-8.636970827	-12.04216344	-12.03986226	-12.04312355	-12.0459765
+0.2	75.75532076	75.87753427	60.32758561	47.61319277	66.43746551	73.09027323	73.47027888	73.30024163	73.67219267
-0.25	-14.74632084	-14.73656053	-11.72430271	-9.34688228	-10.79621353	-15.05270431	-15.04982782	-15.05390444	-15.05747063
+0.25	85.52665839	85.83183045	68.23215818	53.85614836	77.12165725	82.51073941	83.00138744	82.7368325	82.50944769
-0.3	-17.69558501	-17.68387263	-14.06916325	-11.21625874	-12.95545624	-18.06324517	-18.05979339	-18.06468532	-18.06896476
+0.3	91.84445962	92.22442439	73.30840731	57.90234059	85.31969715	88.69870933	89.1226683	88.80411943	88.53105882
-0.35	-20.64484918	-20.63118474	-16.41402379	-13.08563519	-15.11469895	-21.07378603	-21.06975895	-21.07546621	-21.08045888
+0.35	94.894808	95.21192876	75.68219227	59.84779407	91.03073945	91.64815337	91.98659375	91.61713908	91.30110855
-0.4	-23.59411335	-23.57849685	-18.75888433	-14.95501165	-17.27394165	-24.08432689	-24.07972452	-24.0862471	-24.09195301
+0.4	94.76007833	95.00601126	75.52163453	59.82070816	94.28669128	91.52115108	91.79693901	92.19301933	91.448539
-0.45	-26.54337752	-26.52580895	-21.10374487	-16.8243881	-19.43318436	-27.09486775	-27.08969008	-27.09702799	-27.10344713
+0.45	91.70004547	91.87200939	73.18588846	57.98103094	95.15209523	92.18323704	92.25453975	92.89987044	93.12191436
-0.5	-29.49264169	-29.47312106	-23.44860541	-18.69376456	-21.59242707	-30.10540861	-30.09965564	-30.10780887	-30.11494126
+0.5	92.47674851	92.33967607	73.23833422	58.23856486	93.72424538	93.72342048	93.91634722	93.85459559	94.07256704
-0.55	-32.44190585	-32.42043316	-25.79346595	-20.56314102	-23.75166977	-33.11594947	-33.10962121	-33.11858976	-33.12643539
+0.55	94.68580224	94.50286239	74.95064683	59.58096288	90.13310423	93.54258075	93.90831029	93.74165227	94.02542355
-0.6	-35.39117002	-35.36774527	-28.13832649	-22.43251747	-25.91091248	-36.12649033	-36.11958677	-36.12937065	-36.13792951
+0.6	93.18063146	93.16732208	73.90718411	58.61270035	84.54135684	89.94542465	90.37051957	90.21702347	90.3588254
-0.65	-38.34043419	-38.31505737	-30.48318703	-24.30189393	-28.07015519	-39.13703119	-39.12955234	-39.14015154	-39.14942364
+0.65	88.12387765	88.24492561	70.00588777	55.42676143	77.1443348	85.04494332	85.61689885	85.41211173	85.56852499
-0.7	-41.28969836	-41.26236948	-32.82804758	-26.17127038	-30.22939789	-42.14757206	-42.1395179	-42.15093242	-42.16091776
+0.7	79.73071155	79.93301753	63.41488229	50.15144865	68.26773438	76.92489235	77.61985156	77.36931908	77.53559057
-0.75	-44.23896253	-44.20968159	-35.17290812	-28.04064684	-32.3886406	-45.15811292	-45.14948347	-45.16171331	-45.17241189
+0.75	68.26876083	68.4935122	54.34448454	42.94662676	58.15343438	65.84406136	66.63470913	66.3455861	66.51708906
-0.8	-47.1882267	-47.15699369	-37.51776866	-29.9100233	-34.54788331	-48.16865378	-48.15944903	-48.1724942	-48.18390602
+0.8	54.06938733	54.24562455	43.04727067	34.00441743	47.06343177	52.11189519	52.96813761	53.24804062	52.7909491
-0.85	-50.13749087	-50.1043058	-39.8626292	-31.77939975	-36.70712601	-51.17919464	-51.1694146	-51.18327509	-51.19540014
+0.85	37.67411242	37.56219235	29.99260321	23.54857306	35.3284311	36.95211615	37.02800979	37.99915848	37.95123158
-0.9	-53.08675503	-53.0516179	-42.20748974	-33.64877621	-38.86636872	-54.1897355	-54.17938016	-54.19405597	-54.20689427
+0.9	19.30674231	18.86992594	17.73510251	13.2998194	23.31578802	19.26727759	19.3351551	20.2534654	20.12112448
-0.95	-56.0360192	-55.99893001	-44.55235028	-35.8850975	-41.02561143	-57.20027636	-58.12744056	-61.97763358	-62.02134622
+0.95	9.391844838	8.444295745	9.118401563	6.363174869	11.67591353	9.149202414	9.411888998	9.594647561	9.466816825
-1	-58.98528185	-58.9462406	-46.89720962	-38.4251026	-43.18485388	-64.48447132	-71.64632191	-75.23478525	-75.30660415
+1	1.247659543	1.333457477	0.9903098	0.784231045	1.064752516	1.204996521	1.205485543	1.205097928	1.204758789
(Span 2) -2	-58.98528185	-58.9462406	-46.89720962	-38.4251026	-43.18485388	-64.48447132	-71.64632191	-75.23478525	-75.30660415
+2	1.247659543	1.333457477	0.9903098	0.784231045	1.064752516	1.204996521	1.205485543	1.205097928	1.204758789
-2.05	-32.30326847	-32.28534888	-25.68571613	-21.37195224	-32.5653257	-35.48004049	-43.65224098	-44.67893726	-44.93965572
+2.05	8.297305686	7.608820051	7.509085193	5.353514665	10.32849277	7.991696281	7.957160838	8.032606149	7.9562855
-2.1	-30.07706687	-30.38701629	-24.6812183	-19.81674886	-26.95229341	-28.97383552	-33.39907959	-33.36270037	-33.34314739
+2.1	19.94906447	19.48912391	18.09187241	13.55257312	24.89581853	19.25525263	19.28341231	19.28341231	19.28341231
-2.15	-28.67061679	-29.01004207	-24.09438909	-19.0411927	-24.12413934	-27.29724025	-29.15361068	-29.08569058	-29.05993317
+2.15	37.86548187	36.79854827	30.39266468	23.40262654	41.93421484	37.12575648	36.92659618	37.198398	37.43618009
-2.2	-27.28803946	-27.63306786	-23.50755988	-18.60026205	-22.64243587	-25.62064498	-28.28509794	-28.1830993	-28.15843319
+2.2	57.05497226	56.29252685	44.96195159	35.79662098	53.70887233	57.15351997	57.21392284	57.24260772	57.50733201

-2.25	**-25.90546212**	**-26.25609365**	**-22.92073066**	**-18.21319178**	**-21.16073241**	**-23.94404971**	**-27.41658519**	**-27.28050803**	**-27.25693321**
+2.25	**72.41176011**	**72.36691556**	**57.57843277**	**45.612397**	**65.07890506**	**72.52719627**	**72.55982684**	**72.81495418**	**72.86171257**
-2.3	**-24.53630385**	**-24.87911944**	**-22.3871454**	**-17.82612152**	**-19.67902894**	**-22.26745443**	**-26.54807245**	**-26.37791676**	**-26.35543323**
+2.3	**87.55063621**	**87.15785098**	**69.41928922**	**55.24212145**	**78.42027801**	**86.70927906**	**86.64520151**	**86.74712383**	**86.83629008**
-2.35	**-23.44551427**	**-23.59545967**	**-21.90832918**	**-17.43905126**	**-18.19732547**	**-20.59085916**	**-25.6795597**	**-25.47532549**	**-25.45393325**
+2.35	**99.02531256**	**97.65105693**	**77.82569511**	**62.12932931**	**87.19875736**	**97.47847385**	**97.49594172**	**98.6201264**	**98.87671832**
-2.4	**-22.40833946**	**-22.38992624**	**-21.50333556**	**-17.10863433**	**-16.71562201**	**-18.91426389**	**-24.81104696**	**-24.57273422**	**-24.55243327**
+2.4	**103.3755211**	**102.287969**	**81.48340141**	**65.09331333**	**90.54890762**	**104.3856263**	**104.3270038**	**104.4240087**	**104.5088847**
-2.45	**-21.37116465**	**-21.18439281**	**-21.13282809**	**-16.80468293**	**-15.23391854**	**-17.86124185**	**-23.94253421**	**-23.67014295**	**-23.65093329**
+2.45	**104.382991**	**104.0865495**	**82.83142674**	**66.07988868**	**96.09813911**	**108.5023106**	**108.5389462**	**108.8318839**	**108.8850186**
-2.5	**-20.33435971**	**-20.13493648**	**-20.76232061**	**-16.5752949**	**-13.75221507**	**-17.53768683**	**-23.07583958**	**-22.76755168**	**-22.75100952**
+2.5	**104.2133476**	**103.9787471**	**82.91157086**	**66.31546749**	**99.80635998**	**111.0068045**	**110.6950072**	**111.2715237**	**111.5234517**
-2.55	**-21.37510096**	**-21.18420245**	**-21.13074611**	**-16.80388658**	**-15.23293555**	**-17.86398508**	**-23.94445889**	**-23.65856173**	**-23.65260439**
+2.55	**104.3979904**	**104.0957672**	**82.83766826**	**66.08228837**	**96.04711757**	**108.489487**	**108.5270544**	**108.8207811**	**108.8746138**
-2.6	**-22.41584221**	**-22.38826232**	**-21.50249185**	**-17.10831168**	**-16.71454355**	**-18.91610132**	**-24.8130782**	**-24.56049504**	**-24.55419927**
+2.6	**102.7423428**	**102.2589582**	**81.46374345**	**65.08578691**	**90.55540439**	**104.406954**	**104.3467921**	**104.4424862**	**104.5262037**
-2.65	**-23.45658346**	**-23.59232218**	**-21.90872351**	**-17.43920314**	**-18.19615156**	**-20.59285947**	**-25.68169751**	**-25.46242834**	**-25.45579414**
+2.65	**99.02531256**	**97.61339971**	**77.80016174**	**62.11951016**	**87.06780022**	**97.53651547**	**97.42492791**	**98.58062185**	**98.85065688**
-2.7	**-24.53604854**	**-24.8790355**	**-22.38877716**	**-17.82674959**	**-19.67775956**	**-22.26961762**	**-26.55031682**	**-26.36436165**	**-26.35738902**
+2.7	**87.98393724**	**87.13459379**	**69.40350103**	**55.23609626**	**77.94534372**	**86.68657583**	**86.62413756**	**86.72745664**	**86.81785746**
-2.75	**-25.90848382**	**-26.25489365**	**-22.91694393**	**-18.21429605**	**-21.15936757**	**-23.94637578**	**-27.41893614**	**-27.26629496**	**-27.25898389**
+2.75	**72.41618738**	**72.37004306**	**57.58055395**	**45.61320693**	**65.29623506**	**72.53834084**	**72.57016238**	**72.82460654**	**72.87075904**
-2.8	**-27.29433818**	**-27.6307518**	**-23.50500143**	**-18.6018425**	**-22.64097558**	**-25.62313393**	**-28.28755545**	**-28.16822827**	**-28.16057877**
+2.8	**56.98015845**	**56.3230914**	**44.98297308**	**35.80471598**	**53.57568114**	**57.12123582**	**57.25654019**	**57.18161686**	**57.4501911**
-2.85	**-28.68019254**	**-29.00660994**	**-24.09305893**	**-19.04068528**	**-24.12258358**	**-27.29989208**	**-29.15617476**	**-29.07016158**	**-29.06217364**
+2.85	**37.80090759**	**36.75287713**	**30.36168065**	**23.39078395**	**41.82369937**	**37.06167155**	**36.86713803**	**37.14285644**	**37.38412275**
-2.9	**-30.07607125**	**-30.38246809**	**-24.68111643**	**-19.81670984**	**-26.95162435**	**-28.97665023**	**-33.40102253**	**-33.35090941**	**-33.34484568**
+2.9	**19.91920103**	**19.46801746**	**18.07550511**	**13.5462765**	**24.94469631**	**19.26869314**	**19.1673831**	**19.27066452**	**19.28340264**
-2.95	**-32.32412272**	**-32.28423614**	**-25.6849578**	**-21.37165506**	**-32.56658838**	**-35.47692308**	**-43.65854989**	**-44.68805193**	**-44.93450239**
+2.95	**8.319755558**	**7.624686442**	**7.466036775**	**5.358220784**	**10.35947275**	**8.013810692**	**7.928920747**	**8.030218467**	**7.948167264**
-3	**-58.98207607**	**-58.94397502**	**-46.89567154**	**-38.4245146**	**-43.18200894**	**-64.48218763**	**-71.65101054**	**-75.23278208**	**-75.30472571**
+3	**1.247540664**	**1.331937873**	**0.990466599**	**0.784291395**	**1.064821119**	**1.204879466**	**1.205376892**	**1.205757263**	**1.204663696**
(Span 3) -4	**-5.90E+01**	**-5.89E+01**	**-4.69E+01**	**-3.84E+01**	**-4.32E+01**	**-6.45E+01**	**-7.17E+01**	**-7.52E+01**	**-7.53E+01**
+4	**1.25E+00**	**1.33E+00**	**9.90E-01**	**7.84E-01**	**1.06E+00**	**1.20E+00**	**1.21E+00**	**1.21E+00**	**1.20E+00**
-3.05	**-56.0329722**	**-55.9967762**	**-44.5508879**	**-35.88453804**	**-41.02290848**	**-57.19667285**	**-58.12968277**	**-61.98216098**	**-62.01145748**
+3.05	**9.477535339**	**8.402656655**	**9.125684014**	**6.350725429**	**11.69220881**	**9.091093949**	**9.460474397**	**9.67204739**	**9.479911572**
-3.1	**-53.08386832**	**-53.04957737**	**-42.20610426**	**-33.6482461**	**-38.86380802**	**-54.18632158**	**-54.17621251**	**-54.19109669**	**-54.20412171**
+3.1	**19.40234432**	**18.83647247**	**17.7871306**	**13.28879266**	**23.4448556**	**19.21447481**	**19.28615413**	**20.33394283**	**20.07822946**
-3.15	***-50.13476444***	***-50.10237854***	***-39.86132063***	***-31.77889904***	***-36.70470756***	***-51.1759703***	***-51.16642285***	***-51.18048013***	***-51.19278153***
+3.15	**37.76969562**	**37.5267888**	**29.96758853**	**23.53927587**	**35.46877166**	**36.8895955**	**37.06715091**	**38.0740122**	**37.90045616**
-3.2	**-47.18566056**	**-47.15517972**	**-37.51653699**	**-29.90955198**	**-34.5456071**	**-48.16561903**	**-48.15663319**	**-48.16986357**	**-48.18144136**
+3.2	**54.1611563**	**54.20577532**	**43.01996323**	**33.9939041**	**47.20915079**	**52.20395959**	**53.05361624**	**52.82039528**	**52.74533549**
-3.25	**-44.23655668**	**-44.20798089**	**-35.17175335**	**-28.04020493**	**-32.38650664**	**-45.15526775**	**-45.14684353**	**-45.15924701**	**-45.17010119**
+3.25	**68.35540481**	**68.44702674**	**54.31266612**	**42.93445866**	**58.3015204**	**65.92937571**	**66.71376921**	**66.97296506**	**66.55579619**
-3.3	**-41.2874528**	***-41.26078206***	**-32.82696971**	***-26.17085787***	**-30.22740618**	**-42.14491648**	**-42.13705387**	**-42.14863045**	**-42.15876102**
+3.3	**79.8075086**	**79.87790375**	**63.37722539**	**50.13698685**	**68.41543278**	**77.00051091**	**77.68975537**	**77.43460415**	**77.59702308**
-3.35	**-38.33834892**	**-38.31358323**	**-30.48218608**	**-24.30151082**	**-28.06830572**	**-39.1345652**	**-39.12726421**	**-39.13801389**	**-39.14742085**
+3.35	**88.18821448**	**88.17959584**	**69.96137018**	**55.40971875**	**77.25294237**	**85.10831832**	**85.67523586**	**85.46664992**	**85.61998775**
-3.4	**-35.38924504**	**-35.36638441**	**-28.13740244**	**-22.43216376**	**-25.90920525**	**-36.12421392**	**-36.11747455**	**-36.12739733**	**-36.13608067**
+3.4	**93.23029709**	**93.09047305**	**73.85475015**	**58.59254006**	**84.54901197**	**89.99432848**	**90.41532789**	**90.25886678**	**90.39855173**
-3.45	**-32.44014116**	**-32.41918558**	**-25.7926188**	**-20.5628167**	**-23.75010479**	**-33.11386265**	**-33.10768489**	**-33.11678077**	**-33.1247405**
+3.45	**94.71897574**	**94.413236**	**74.88969619**	**59.55761425**	**90.07125716**	**93.598466**	**93.95946767**	**93.78944869**	**94.07082267**
-3.5	**-29.49103728**	**-29.47198675**	**-23.44783517**	**-18.69346965**	**-21.59100433**	**-30.10351137**	**-30.09789523**	**-30.10616421**	**-30.11340033**
+3.5	**92.49196127**	**92.35078168**	**73.24562124**	**58.24136021**	**93.62949664**	**93.76298501**	**93.95222699**	**93.88886488**	**94.10469481**
-3.55	**-26.5419334**	**-26.52478793**	**-21.10305153**	**-16.82412259**	**-19.43190387**	**-27.0931601**	**-27.08810557**	**-27.09554765**	**-27.10206016**
+3.55	**91.68261114**	***91.859922658 0194***	***73.17715897***	**57.97783505**	**95.04605507**	***92.12449542***	**92.20002674**	**92.98159368**	**93.07420503**

-3.6	**-23.59282952**	**-23.5775891**	**-18.75826789**	**-14.95477554**	**-17.27280341**	**-24.08280882**	**-24.07831591**	**-24.08493109**	**-24.09071998**
+3.6	**94.73158029**	**94.98609852**	**75.50799038**	**59.8154591**	**94.16835862**	**91.49309848**	**91.91285257**	**91.74416416**	**91.51328422**
-3.65	**-20.64372564**	**-20.63039027**	**-16.41348425**	**-13.08542848**	**-15.11370295**	**-21.07245755**	**-21.06852625**	**-21.07431453**	**-21.07937981**
+3.65	**94.85317322**	**95.18269148**	**75.66222756**	**59.84015865**	**90.91751062**	**91.60714482**	**92.09177287**	**92.45178422**	**91.39316578**
-3.7	**-17.69462176**	**-17.68319144**	**-14.06870062**	**-11.21608142**	**-12.95460249**	**-18.06210627**	**-18.05873659**	**-18.06369797**	**-18.06803964**
+3.7	**91.87420509**	**92.18462731**	***73.28129322***	**57.89192663**	**85.22854563**	**88.64305555**	**89.21533611**	**88.89065369**	**88.61216728**
-3.75	**-14.74551788**	**-14.73599262**	**-11.72391698**	**-9.346734367**	**-10.79550203**	**-15.051755**	**-15.04894693**	**-15.05308141**	**-15.05669947**
+3.75	**85.61297614**	**85.78060049**	**68.19733814**	**53.84281733**	**77.05790967**	**82.59576673**	**83.08007545**	**82.81037996**	**83.28225564**
-3.8	**-11.796414**	**-11.78879379**	**-9.379133342**	**-7.477387311**	**-8.636401567**	**-12.04140372**	**-12.03915727**	**-12.04246485**	**-12.04535929**
+3.8	**75.82524691**	**75.81422317**	**60.28452621**	**47.59664006**	**66.40201605**	**73.15912638**	**73.53399452**	**73.35991844**	**73.72812826**
-3.85	**-8.847310121**	**-8.841594964**	**-7.034349705**	**-5.608040254**	**-6.477301106**	**-9.031052445**	**-9.029367606**	**-9.031848294**	**-9.034019122**
+3.85	**62.401169**	**62.18484146**	**49.45957215**	**39.08938162**	**53.29005357**	**60.79740987**	**61.09082605**	**60.97502654**	**61.28960372**
-3.9	**-5.898206242**	**-5.894396137**	**-4.689566068**	**-3.738693198**	**-4.318200645**	**-6.020701169**	**-6.019577946**	**-6.021231734**	**-6.02267895**
+3.9	**45.28341909**	**44.83609456**	**35.68100601**	**28.2886624**	**37.7839077**	**44.58615334**	**44.76922451**	**44.71166709**	**44.92686929**
-3.95	**-2.949102362**	**-2.94719731**	**-2.34478243**	**-1.869346142**	**-2.159100184**	**-3.010349894**	**-3.009788286**	**-3.010615175**	**-3.011338777**
+3.95	**24.46717024**	**23.9288066**	**19.09439427**	**15.19443509**	**19.97812937**	**24.33771685**	**24.43067084**	**24.40361707**	**24.51312494**
-5	**-7.80E-15**	**-7.55E-15**	**-7.12E-15**	**-5.32E-15**	**-1.00E-14**	**-7.71E-15**	**-7.31E-15**	**-7.32E-15**	**-7.32E-15**
+5	**7.73E-15**	**7.54E-15**	**7.04E-15**	**5.39E-15**	**9.84E-15**	**7.60E-15**	**7.48E-15**	**7.46E-15**	**7.49E-15**

3-Span: Moment (Max and Min) Raw Data Results - 10' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.76E-32	-3.15E-32	-2.89E-32	-3.13E-32	-2.61E-32
End Shear	7.42E-18	8.53E-18	8.26E-18	8.81E-18	7.48E-18
-0.05	-3.353466712	-3.122675067	-3.380381388	-3.60574015	-3.43736947
+0.05	25.37463577	25.0160913	28.18806914	30.10840164	26.80149543
-0.1	-6.706933424	-6.245350134	-6.760762776	-7.21148029	-6.87473895
+0.1	47.08431787	45.97977746	52.17199376	55.73047914	48.59233084
-0.15	-10.06040014	-9.368025201	-10.14114416	-10.8172204	-10.3121084
+0.15	63.75942384	63.42223911	71.89706477	76.80383226	65.5383283
-0.2	-13.41386685	-12.49070027	-13.52152555	-14.4229606	-13.7494779
+0.2	77.49046676	76.81695949	87.37029825	93.33270521	77.85973451
-0.25	-16.76733356	-15.61337533	-16.90190694	-18.0287007	-17.1868474
+0.25	86.23857569	86.34120919	98.66462731	105.3917509	87.94236411
-0.3	-20.12080027	-18.7360504	-20.28228833	-21.6344409	-20.6242168
+0.3	92.71786328	92.18530105	105.898494	113.1078695	94.35938207
-0.35	-23.47426698	-21.85872547	-23.66266971	-25.240181	-24.0615863
+0.35	95.74955149	94.56776606	109.2565483	116.6786083	97.27510651
-0.4	-26.82773369	-24.98140054	-27.0430511	-28.8459212	-27.4989558
+0.4	95.54996814	93.79686765	108.9848667	116.3679404	97.12486384
-0.45	-30.18120041	-28.1040756	-30.42343249	-32.4516613	-30.9363253
+0.45	99.53429764	92.53264418	105.3898395	112.505179	103.3524949
-0.5	-33.53466712	-31.22675067	-33.80381388	-36.0574015	-34.3736947
+0.5	101.3849819	93.89892636	106.1851914	113.6659665	104.9546931
-0.55	-36.88813383	-34.34942574	-37.18419527	-39.6631416	-37.8110642
+0.55	99.17839716	91.36298496	108.8229924	116.4945013	102.1565916
-0.6	-40.24160054	-37.4721008	-40.56457665	-43.2688818	-41.2484337
+0.6	94.24978408	88.91548632	107.1866637	114.7456025	95.56737067
-0.65	-43.59506725	-40.59477587	-43.94495804	-46.8746219	-44.6858032
+0.65	89.35829658	87.22077824	101.4791363	108.6330646	90.4311587
-0.7	-46.94853397	-43.71745094	-47.32533943	-50.4803621	-48.1231726
+0.7	81.11182897	81.91908698	91.92292346	98.39989552	81.86947018
-0.75	-50.30200068	-46.840126	-50.70572082	-54.0861022	-51.5605421
+0.75	69.69268019	72.46423218	78.82296381	84.37416387	70.14924937
-0.8	-53.65546739	-49.96280107	-54.0861022	-57.6918424	-54.9979116
+0.8	55.38203841	59.71192771	62.54672124	66.95133454	55.92972974
-0.85	-57.0089341	-53.08547614	-57.46648359	-61.2975825	-58.4352811
+0.85	39.78656232	43.86201975	43.52202067	46.59226145	41.58520713
-0.9	-60.36240081	-56.2081512	-60.84686498	-64.9033226	-61.8726505
+0.9	22.54667465	24.7411723	22.18144384	23.76392865	23.00823094
-0.95	-63.71586753	-63.60412611	-65.41893847	-70.0289252	-65.31002
+0.95	10.99378088	12.09821295	10.50539115	11.20575056	10.60856854
-1	-79.06102537	-74.35740366	-71.98712732	-78.5741493	-78.7145869
+1	1.554033595	1.406590588	1.627363691	1.659422533	1.451238281
(Span 2) -2	-79.06102537	-74.35740366	-71.98712732	-78.5741493	-78.7145869
+2	1.554033595	1.406590588	1.627363691	1.659422533	1.451238281
-2.05	-49.05787686	-49.57160634	-43.85501595	-47.7763663	-46.0083414
+2.05	8.487686445	9.385765966	9.421819312	10.03831848	8.485971287
-2.1	-31.74652164	-34.82692604	-37.46245328	-40.3969441	-33.6697186
+2.1	20.35387938	22.89009035	22.78308133	24.30195342	20.30999724
-2.15	-30.63918258	-29.51658959	-32.41170122	-35.5043276	-29.7479619
+2.15	38.70931154	40.60508747	43.6012283	46.03622046	40.57497055
-2.2	-30.08049788	-29.33989544	-30.42097599	-33.7893494	-28.387998
+2.2	61.50712672	60.45490411	65.14830733	69.53639439	63.61608089

-2.25	**-29.52181319**	**-29.20969109**	**-28.43025075**	**-32.0743712**	**-27.028034**
+2.25	**78.73319252**	**76.60905176**	**83.00831185**	**88.54219931**	**80.25045186**
-2.3	**-28.96312849**	**-29.08625055**	**-26.43952552**	**-30.359393**	**-25.7624138**
+2.3	**92.09215955**	**92.11589397**	**100.369195**	**107.0604747**	**93.96360902**
-2.35	**-28.4044438**	**-28.96281001**	**-24.44880029**	**-28.8211966**	**-24.5864083**
+2.35	**103.6252108**	**102.2648532**	**112.6896998**	**120.2576851**	**106.074935**
-2.4	**-27.90273872**	**-28.83936947**	**-22.45807506**	**-27.3054552**	**-23.4213468**
+2.4	**114.4686312**	**106.4270169**	**117.829666**	**125.7275824**	**116.9722185**
-2.45	**-27.44742086**	**-28.7311827**	**-20.46734983**	**-25.7897138**	**-22.4019886**
+2.45	**123.2219688**	**114.1681025**	**119.4868258**	**127.4526141**	**125.7377875**
-2.5	**-26.99333723**	**-28.66067431**	**-18.47781988**	**-24.4878865**	**-21.4860616**
+2.5	**127.6240779**	**117.9107186**	**119.5124389**	**129.2130376**	**130.0940908**
-2.55	**-27.44797454**	**-28.73120901**	**-20.46867391**	**-25.7933822**	**-22.4028872**
+2.55	**123.1936608**	**114.1641634**	**119.4969825**	**127.463448**	**125.7098902**
-2.6	**-27.90261185**	**-28.83929771**	**-22.45952794**	**-27.3078314**	**-23.4294806**
+2.6	**114.4615993**	**106.4262059**	**117.7976889**	**125.6934936**	**116.9664452**
-2.65	**-28.40711923**	**-28.96263963**	**-24.45038197**	**-28.8222806**	**-24.5978941**
+2.65	**103.6176648**	**102.2578322**	**112.648192**	**120.2134101**	**106.0922778**
-2.7	**-28.96559842**	**-29.08598155**	**-26.44123601**	**-30.3657218**	**-25.7663076**
+2.7	**92.08454279**	**92.11164263**	**100.3435785**	**107.0331504**	**93.95573964**
-2.75	**-29.52407761**	**-29.20932348**	**-28.43209004**	**-32.0799846**	**-27.0192147**
+2.75	**78.74515475**	**76.60870549**	**83.01176151**	**88.54587894**	**80.26301059**
-2.8	**-30.0825568**	**-29.34036771**	**-30.42294407**	**-33.7942473**	**-28.368528**
+2.8	**61.53883977**	**60.44535326**	**65.18195694**	**69.57230865**	**63.61890238**
-2.85	**-30.64103598**	**-29.51700238**	**-32.4137981**	**-35.50851**	**-29.7316528**
+2.85	**38.6682959**	**40.59667348**	**43.6541**	**45.98252772**	**40.59728513**
-2.9	**-31.74526838**	**-34.82683307**	**-37.4585769**	**-40.3931104**	**-33.6666813**
+2.9	**20.38768193**	**22.88662379**	**22.75981599**	**24.27713705**	**20.31127371**
-2.95	**-49.05778058**	**-49.57123549**	**-43.8517929**	**-47.7718384**	**-46.0041734**
+2.95	**8.486894234**	**9.38834415**	**9.439327172**	**9.973004759**	**8.467466609**
-3	**-79.06195566**	**-74.35719168**	**-71.98432247**	**-78.5656409**	**-78.7064986**
+3	**1.551684188**	**1.406054931**	**1.625273363**	**1.657693922**	**1.452166163**
(Span 3) -4	**-7.91E+01**	**-7.44E+01**	**-7.20E+01**	**-7.86E+01**	**-7.87E+01**
+4	**1.55E+00**	**1.41E+00**	**1.63E+00**	**1.66E+00**	**1.45E+00**
-3.05	**-63.7132141**	**-63.60334133**	**-65.41904514**	**-70.0282928**	**-65.3082809**
+3.05	**10.9577913**	**12.09166603**	**10.51694863**	**11.21807854**	**10.67072922**
-3.1	**-60.35988698**	**-56.20892247**	**-60.84461449**	**-64.9009221**	**-61.8710029**
+3.1	**22.50841014**	**24.73418227**	**22.19078728**	**23.72458778**	**23.06837727**
-3.15	***-57.00655986***	***-53.0862045***	***-57.46435804***	***-61.2953152***	***-58.4337249***
+3.15	**39.73682572**	**43.85602569**	**43.54004765**	**46.6119791**	**41.63623867**
-3.2	**-53.65323274**	**-49.9634865**	**-54.08410158**	**-57.6897084**	**-54.9964469**
+3.2	**55.34666586**	**59.70493628**	**62.61951736**	**67.02947406**	**55.7540184**
-3.25	**-50.29990561**	**-46.84076852**	**-50.70384512**	**-54.0841015**	**-51.5591689**
+3.25	**69.65134638**	**72.4562667**	**78.89051055**	**84.44670598**	**70.51240896**
-3.3	**-46.94657849**	**-43.71805054**	**-47.32358866**	**-50.4784946**	**-48.1218909**
+3.3	**81.08487665**	**81.92277486**	**91.98279446**	**98.46422425**	**81.9141929**
-3.35	**-43.59325137**	**-40.59533255**	**-43.94333221**	**-46.8728877**	**-44.6846129**
+3.35	**89.39751501**	**87.22718765**	**101.5292292**	**108.6869145**	**90.47390959**
-3.4	**-40.23992425**	**-37.47261457**	**-40.56307575**	**-43.2672808**	**-41.2473348**
+3.4	**94.27940093**	**88.91995135**	**107.2254078**	**114.7872678**	**95.60050464**
-3.45	**-36.88659713**	**-34.34989659**	**-37.18281929**	**-39.6616739**	**-37.8100568**
+3.45	**99.12975542**	**91.37059861**	**108.8489994**	**116.5224842**	**102.2115703**
-3.5	**-33.53327001**	**-31.2271786**	**-33.80256283**	**-36.056067**	**-34.3727788**
+3.5	**101.3723613**	**93.90513881**	**106.1972951**	**113.6790226**	**104.9998132**
-3.55	**-30.17994289**	**-28.10446062**	**-30.42230638**	**-32.4504601**	**-30.9355008**
+3.55	**99.56348215**	**92.53731192**	**105.4360458**	**112.5547246**	**103.3857178**
-3.6	**-26.82661576**	**-24.98174264**	**-27.04204992**	**-28.8448532**	**-27.4982228**

+3.6	95.52931376	93.79184947	109.0836083	116.47351	97.03702134
-3.65	-23.47328864	-21.85902465	-23.66179346	-25.2392464	-24.0609448
+3.65	95.72125573	94.56164559	109.3463124	116.7745863	97.45512472
-3.7	-20.11996152	-18.73630667	-20.28153701	-21.6336395	-20.6236668
+3.7	92.68078798	92.17774328	105.9776399	113.1924917	94.3221817
-3.75	-16.7666344	-15.61358869	-16.90128055	-18.0280326	-17.1863888
+3.75	86.19179891	86.33207693	98.73183426	105.4635989	87.94685044
-3.8	-13.41330728	-12.4908707	-13.52102409	-14.4224257	-13.7491107
+3.8	77.44181074	76.80626291	87.42477154	93.39092279	77.90579215
-3.85	-10.05998016	-9.368152719	-10.14076763	-10.8168188	-10.3118327
+3.85	63.79248054	63.40962072	71.9381467	76.84771901	65.58204201
-3.9	-6.706653036	-6.245434736	-6.760511176	-7.21121192	-6.87455472
+3.9	47.11296098	45.96523839	52.1993655	55.75970479	48.62238389
-3.95	-3.353325915	-3.122716752	-3.380254718	-3.60560503	-3.4372767
+3.95	25.38927961	25.01798008	28.2016395	30.12288235	26.81687096
-5	-9.97E-15	-1.10E-14	-9.01E-15	-9.66E-15	-8.06E-15
+5	8.26E-15	9.14E-15	8.81E-15	9.43E-15	7.85E-15

3-Span: Shear (Max and Min) Raw Data Results - 10' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-3.259199142	-3.058609457	-3.05658502	-2.431797294	-1.976217744	-2.239297596	-3.12215801	-3.121561384	-3.122406935	-3.123146618
End Shear	32.06406794	27.47642593	27.52687943	21.8562479	17.37340918	22	27.66103375	27.66103375	27.41550239	27.53129347
-0.05	-3.259199142	-3.058609457	-3.05658502	-2.431797294	-1.976217744	-2.239297596	-3.12215801	-3.121561384	-3.122406935	-3.123146618
+0.05	30.50024424	25.35629742	24.80321603	19.79369736	16.00361836	20.70706341	25.21943801	25.31731742	25.29052791	25.40521515
-0.1	-6.117749463	-3.463494119	-3.287822226	-2.825640936	-2.38798387	-3.736733017	-3.856507547	-3.121561384	-3.122406935	-3.123146618
+0.1	27.1447793	21.55335408	20.97199667	16.75268542	13.47702141	18.40928983	20.99703843	21.09998301	21.06111435	21.17096335
-0.15	-6.117749463	-3.463494119	-3.287822226	-2.825640936	-2.38798387	-3.736733017	-3.856507547	-3.121561384	-3.122406935	-3.123146618
+0.15	27.1447793	21.55335408	20.97199667	16.75268542	13.47702141	18.40928983	20.99703843	21.09998301	21.06111435	21.17096335
-0.2	-9.332313158	-4.591010071	-4.244762906	-4.209947455	-3.472957892	-5.894451126	-5.000875439	-4.121200958	-4.006964336	-4.269401564
+0.2	23.57041941	17.7395195	17.14941173	13.71445598	11.02455833	15.96981753	17.1139724	17.2157402	17.16538983	17.25967553
-0.25	-9.332313158	-4.591010071	-4.244762906	-4.209947455	-3.472957892	-5.894451126	-5.000875439	-4.121200958	-4.006964336	-4.269401564
+0.25	23.57041941	17.7395195	17.14941173	13.71445598	11.02455833	15.96981753	17.1139724	17.2157402	17.16538983	17.25967553
-0.3	-12.55830763	-6.34068709	-5.645045727	-5.686491266	-4.649425746	-8.14986278	-6.16348509	-6.144459115	-6.178054085	-6.383822198
+0.3	19.87899408	14.02363796	13.44370065	10.78285048	8.667619279	13.45645745	13.5263902	13.62814827	13.57341221	13.65890883
-0.35	-12.55830763	-6.34068709	-5.645045727	-5.686491266	-4.649425746	-8.14986278	-6.16348509	-6.144459115	-6.178054085	-6.383822198
+0.35	19.87899408	14.02363796	13.44370065	10.78285048	8.667619279	13.45645745	13.5263902	13.62814827	13.57341221	13.65890883
-0.4	-15.75179924	-8.430024968	-7.723574066	-7.247284868	-5.9119098	-10.39911365	-8.239307106	-8.312372053	-8.804582953	-8.539546937
+0.4	16.17233668	10.5269224	9.965156917	8.028809598	6.463854218	10.9370366	10.13906142	10.23352075	10.18108877	10.13631046
-0.45	-15.75179924	-8.430024968	-7.723574066	-7.247284868	-5.9119098	-10.39911365	-8.239307106	-8.312372053	-8.804582953	-8.539546937
+0.45	16.17233668	10.5269224	9.965156917	8.028809598	6.463854218	10.9370366	10.13906142	10.23352075	10.18108877	10.13631046
-0.5	-18.9716866	-11.3296172	-11.38881636	-9.233244602	-7.293352556	-12.6054576	-11.05434182	-11.08928382	-11.14055437	-11.4761691
+0.5	12.55228052	7.349450638	6.82879026	6.224980278	4.703188738	8.479382355	7.067031329	7.138541763	7.090719179	7.049855589
-0.55	-18.9716866	-11.3296172	-11.38881636	-9.233244602	-7.293352556	-12.6054576	-11.05434182	-11.08928382	-11.14055437	-11.4761691
+0.55	12.55228052	7.349450638	6.82879026	6.224980278	4.703188738	8.479382355	7.067031329	7.138541763	7.090719179	7.049855589
-0.6	-21.86555294	-15.14997732	-15.2205563	-12.1202988	-9.715999852	-14.73216168	-14.62944052	-14.84519704	-14.89914232	-15.24135274
+0.6	9.120655157	5.004523502	4.664641795	4.527676071	3.364733609	6.151305524	4.813640598	4.784639437	4.813368705	4.792898116
-0.65	-21.86555294	-15.14997732	-15.2205563	-12.1202988	-9.715999852	-14.73216168	-14.62944052	-14.84519704	-14.89914232	-15.24135274
+0.65	9.120655157	5.004523502	4.664641795	4.527676071	3.364733609	6.151305524	4.813640598	4.784639437	4.813368705	4.792898116
-0.7	-24.69794267	-18.93763789	-19.01755932	-15.14333725	-12.13712797	-16.74248151	-18.31063518	-18.95302288	-18.8667048	-19.22871268
+0.7	5.979293443	3.229259293	2.983340003	2.969260335	2.156548775	4.020633264	3.167952582	3.141120836	3.152479309	3.138012228
-0.75	-24.69794267	-18.93763789	-19.01755932	-15.14333725	-12.13712797	-16.74248151	-18.31063518	-18.95302288	-18.8667048	-19.22871268
+0.75	5.979293443	3.229259293	2.983340003	2.969260335	2.156548775	4.020633264	3.167952582	3.141120836	3.152479309	3.138012228
-0.8	-27.51478338	-22.58375509	-22.66984994	-18.0507053	-14.48851861	-18.75255808	-21.97900628	-23.02778358	-23.42181163	-22.96685255
+0.8	3.230028249	1.733523365	1.524245205	1.610911702	1.124227734	2.155191087	1.677335156	1.69766901	1.676153049	1.676066791
-0.85	-27.51478338	-22.58375509	-22.66984994	-18.0507053	-14.48851861	-18.75255808	-21.97900628	-23.02778358	-23.42181163	-22.96685255
+0.85	3.230028249	1.733523365	1.524245205	1.610911702	1.124227734	2.155191087	1.677335156	1.69766901	1.676153049	1.676066791
-0.9	-30.02981389	-25.97948338	-26.06784058	-20.75482272	-16.70131858	-20.49135428	-25.81939751	-26.55008559	-26.86864503	-27.02174863
+0.9	0.974691011	0.512634299	0.466618771	0.497708967	0.377529517	0.637305434	0.47279795	0.508318083	0.491136608	0.483470753
-0.95	-30.02981389	-25.97948338	-26.06784058	-20.75482272	-16.70131858	-20.49135428	-25.81939751	-26.55008559	-26.86864503	-27.02174863
+0.95	0.974691011	0.512634299	0.466618771	0.497708967	0.377529517	0.637305434	0.47279795	0.508318083	0.491136608	0.483470753
-1	-32	-29.01597659	-29.10170996	-23.16810177	-18.70603651	-21.99673771	-29.60813161	-29.63357858	-30.8975318	-30.78441773
+1	8.04E-02	0.064695853	0.064531778	0.051351299	4.12E-02	0.055211437	0.062483615	0.062508972	0.062488873	0.062471287
(Span 2) -2	-1.748349223	-1.384993473	-1.381480993	-1.099316412	-0.882990922	-1.181953296	-1.337634393	-1.338177245	-1.337746963	-1.337370493
+2	31.31767082	29.06901713	28.96637397	23.08340526	18.72311712	21.37642771	30.14170079	30.29825657	31.09169543	31.36356258
-2.05	-2.391343521	-1.645777764	-1.381480993	-1.257019285	-0.973809811	-1.270712474	-1.563341354	-1.338177245	-1.337746963	-1.337370493
+2.05	30.50371552	27.85310155	27.69237858	22.07177895	17.87125092	20.8006285	28.55593794	28.60660568	29.55411764	29.62216793
-2.1	-3.20318995	-1.938360458	-1.381480993	-1.607211647	-1.20667412	-1.876093679	-1.879663998	-1.445913572	-1.417144264	-1.41138532
+2.1	29.56910515	26.51185696	26.3385484	20.99611557	16.97266872	20.14553227	26.90970146	27.62590784	28.04176885	28.23826666
-2.15	-4.135867214	-2.255714529	-1.413184834	-1.996691199	-1.500123319	-2.580717955	-2.190257758	-1.745004432	-1.673372545	-1.66733438
+2.15	28.52480507	25.10148984	24.91671015	19.86703003	16.03490739	19.41844048	25.21696613	25.26812243	26.28045877	26.35243203
-2.2	-6.303037062	-3.231963938	-2.437338374	-2.901887823	-2.191201888	-4.092347809	-3.086062201	-2.696463907	-2.724923642	-2.749820006
+2.2	26.15101814	22.12028336	21.9162962	17.47935578	14.07167768	17.81729629	21.74795136	21.86155468	22.76494393	22.83906022
-2.25	-7.457152031	-3.831280251	-3.101864434	-3.421799483	-2.592572962	-4.889946033	-3.707809568	-3.397324586	-3.427110955	-3.453176736

+2.25	24.84346581	20.58452098	20.36137365	16.24194764	13.0610611	16.92006055	19.99963381	20.48482395	20.9392015	21.01375941
-2.3	-8.639953144	-4.459615071	-3.809043598	-3.99965161	-3.079128062	-5.71304483	-4.352031101	-4.116941043	-4.147951167	-4.175081551
+2.3	23.47010231	19.00328592	18.78573316	14.98770898	12.04097567	16.13569534	18.54077932	18.73965425	19.10218803	19.17010222
-2.35	-11.08841624	-6.150411979	-5.63168494	-5.239416925	-4.0208075	-7.428637972	-6.043377375	-5.640215837	-5.78413165	-5.819608136
+2.35	20.57137449	16.00484076	15.61962335	12.46637791	10.00166887	13.99894015	15.29380471	15.6482689	15.71579737	15.77488257
-2.4	-12.35247622	-7.297023854	-6.862291123	-5.894466315	-4.545407514	-8.317597702	-7.16781909	-6.842789522	-6.801402516	-6.843468225
+2.4	19.08861813	14.27835286	14.05279011	11.2181917	8.99702679	12.99299609	13.93009584	14.11912475	14.18556678	14.24370943
-2.45	-13.64204359	-8.532940972	-8.178513976	-6.57076987	-5.249441303	-9.224966893	-8.370073465	-8.300739273	-8.300739273	-8.300739273
+2.45	17.61178682	12.73709017	12.51254756	9.990872425	8.012073891	12.02980431	12.35394126	12.59492441	12.65990822	12.71676687
-2.5	-16.2944823	-11.24612304	-11.02054118	-8.800549753	-7.05655058	-11.08786213	-10.97752776	-11.09798452	-11.16024726	-11.21471424
+2.5	15.00512061	9.838388281	9.559109001	7.636647197	6.129961712	10.13923211	9.630107646	9.596869696	9.657834426	9.711181376
-2.55	-17.65576029	-12.75144974	-12.52269569	-9.9977619	-8.014707698	-12.03984272	-12.3674872	-12.60855954	-12.6726289	-12.72869542
+2.55	13.68993268	8.521109825	8.169567086	6.56689662	5.247108469	9.215396611	8.358351687	8.140745736	8.199193753	8.250341236
-2.6	-19.06482315	-14.29305996	-14.06319157	-11.22523565	-8.999737539	-13.0031518	-13.80477869	-14.13286329	-14.1984008	-14.25573877
+2.6	12.39942055	7.286046854	6.853902431	5.890720157	4.543972584	8.308221823	7.156856	6.867188159	6.867188159	6.867188159
-2.65	-20.56981182	-15.85922127	-15.63017923	-12.47354485	-10.00440676	-14.00971487	-15.45922068	-15.66204622	-15.72866203	-15.78694056
+2.65	11.13436959	6.140358689	5.623949002	5.235796452	4.019411552	7.419474453	6.033248471	5.630207272	5.776411339	5.812368573
-2.7	-23.47010231	-19.19515924	-18.79636943	-14.99491598	-12.04373441	-15.98994566	-18.32596412	-18.75521735	-19.11657704	-19.18359519
+2.7	8.681951523	4.453621556	3.804248097	3.996321837	3.037845235	5.704364049	4.345769997	4.110440393	4.141878478	4.169389581
-2.75	-24.87233154	-20.5995755	-20.37192389	-16.24911013	-13.06381377	-17.07988307	-20.20741785	-20.50055929	-20.95479842	-21.02837842
+2.75	7.419902092	3.825568486	3.097351085	3.418819677	2.633924222	4.881536169	3.70176928	3.390985941	3.421197465	3.447631533
-2.8	-26.15101719	-22.13499027	-21.92668563	-17.48640434	-14.07437411	-17.8266575	-21.76495012	-21.87561517	-22.78024917	-22.85340582
+2.8	6.266742905	3.226542842	2.43314399	2.899169887	2.190153908	4.084226411	3.080260922	2.690323767	2.719187601	2.744446079
-2.85	-28.52480531	-25.11539485	-24.92654274	-19.87360169	-16.03745806	-19.42662579	-25.23362206	-25.28358254	-26.29494129	-26.36601274
+2.85	4.11042954	2.252675075	1.410281283	1.994461792	1.49926818	2.573232154	2.187245297	1.714299915	1.671201257	1.665299228
-2.9	-29.56910467	-26.52519242	-26.34797825	-21.00250942	-16.97512748	-20.15300621	-26.92598146	-26.97597065	-27.96602658	-28.03539351
+2.9	3.186429318	1.935562252	1.381737914	1.605207568	1.205907363	1.8697213	1.87659838	1.46988919	1.415119279	1.409486422
-2.95	-30.50371635	-27.86575435	-27.70132301	-22.07783729	-17.87357163	-20.80732038	-28.57170351	-29.26528626	-29.69550287	-29.84133775
+2.95	2.381856024	1.643164093	1.381737914	1.25522937	0.973255377	1.264406092	1.560159033	1.338056634	1.338478874	1.337264933
-3	-32	-30.251205	-30.15645291	-24.02683678	-19.52275173	-21.87050611	-31.66733687	-32.00794134	-32.52517309	-32.98665214
+3	1.745186421	1.384861508	1.381737914	1.09949047	0.883057915	1.18202945	1.337504454	1.338056634	1.338478874	1.337264933
(Span 3) -4	-8.04E-02	-0.064689689	-0.06454378	-0.051359429	-4.12E-02	-0.055214994	-0.062477545	-0.062503338	-0.062523062	-0.062466356
+4	31.08937645	27.53464295	27.62669173	21.99620464	17.73133499	21.37015323	27.73799961	28.24710658	29.06273697	28.94248869
-3.05	-8.04E-02	-0.064689689	-0.06454378	-0.051359429	-4.12E-02	-0.055214994	-0.062477545	-0.062503338	-0.062523062	-0.062466356
+3.05	31.08937645	27.53464295	27.62669173	21.99620464	17.73133499	21.37015323	27.73799961	28.24710658	29.06273697	28.94248869
-3.1	-1.970186234	-1.08578945	-1.043783139	-1.024810941	-0.684255958	-1.350782489	-1.02272404	-1.07289551	-1.053040009	-1.048277671
+3.1	28.88739786	24.30328951	24.39588204	19.42575925	15.61354908	19.65334196	23.79254864	24.93762771	25.10767594	24.97343101
-3.15	-1.970186234	-1.08578945	-1.043783139	-1.024810941	-0.684255958	-1.350782489	-1.02272404	-1.07289551	-1.053040009	-1.048277671
+3.15	28.88739786	24.30328951	24.39588204	19.42575925	15.61354908	19.65334196	23.79254864	24.93762771	25.10767594	24.97343101
-3.2	-4.561372361	-2.458310503	-2.227422616	-2.262103003	-1.616131897	-3.059965454	-2.377718068	-2.397265748	-2.373685436	-2.378812988
+3.2	26.17997629	20.76765184	20.85620675	16.60854244	13.32260321	17.75819777	20.15543187	21.18890277	21.60197508	21.12501841
-3.25	-4.561372361	-2.458310503	-2.227422616	-2.262103003	-1.616131897	-3.059965454	-2.377718068	-2.397265748	-2.373685436	-2.378812988
+3.25	26.17997629	20.76765184	20.85620675	16.60854244	13.32260321	17.75819777	20.15543187	21.18890277	21.60197508	21.12501841
-3.3	-7.499153771	-4.068022716	-3.805251103	-3.732235902	-2.743704079	-5.067996843	-3.977103242	-3.948472089	-3.967482534	-3.949474516
+3.3	23.45708993	17.03657487	17.11798971	13.63211877	10.92766975	15.74354758	16.45105248	17.30026091	16.85249194	17.22690073
-3.35	-7.499153771	-4.068022716	-3.805251103	-3.732235902	-2.743704079	-5.067996843	-3.977103242	-3.948472089	-3.967482534	-3.949474516
+3.35	23.45708993	17.03657487	17.11798971	13.63211877	10.92766975	15.74354758	16.45105248	17.30026091	16.85249194	17.22690073
-3.4	-10.77421952	-5.928290581	-5.577648563	-5.366957681	-4.021838615	-7.306975411	-5.702740116	-5.672480395	-5.711246323	-5.687701078
+3.4	20.54556797	13.21890419	13.2893246	10.64959814	8.497284973	13.6698364	12.77238411	12.95076658	13.00513098	13.35004622
-3.45	-10.77421952	-5.928290581	-5.577648563	-5.366957681	-4.021838615	-7.306975411	-5.702740116	-5.672480395	-5.711246323	-5.687701078
+3.45	20.54556797	13.21890419	13.2893246	10.64959814	8.497284973	13.6698364	12.77238411	12.95076658	13.00513098	13.35004622
-3.5	-14.3614368	-8.90780808	-8.357724736	-7.114695842	-5.439571137	-9.709087024	-8.568323921	-8.655449606	-8.604133428	-8.560271937
+3.5	17.48962048	9.519600407	9.481682421	8.051605191	6.571210967	11.49830488	9.324959935	9.676180578	9.581181016	9.841511943
-3.55	-14.3614368	-8.90780808	-8.357724736	-7.114695842	-5.439571137	-9.709087024	-8.568323921	-8.655449606	-8.604133428	-8.560271937
+3.55	17.48962048	9.519600407	9.481682421	8.051605191	6.571210967	11.49830488	9.324959935	9.676180578	9.581181016	9.841511943
-3.6	-17.95713711	-12.25349858	-11.6807113	-9.387164734	-7.546589906	-12.2065056	-11.81730857	-11.91506835	-11.86020944	-11.81330997
+3.6	14.33234305	7.536480862	6.701790619	6.452406723	5.268574753	9.265697468	7.350227416	7.246318405	7.744438887	7.470424004

-3.65	**-17.95713711**	**-12.25349858**	**-11.6807113**	**-9.387164734**	**-7.546589906**	**-12.2065056**	**-11.81730857**	**-11.91506835**	**-11.86020944**	**-11.81330997**
+3.65	**14.33234305**	**7.536480862**	**6.701790619**	**6.452406723**	**5.268574753**	**9.265697468**	**7.350227416**	**7.246318405**	**7.744438887**	**7.470424004**
-3.7	**-21.74929233**	**-15.8800791**	**-15.2875578**	**-12.236534**	**-9.83068688**	**-14.73140534**	**-15.31899425**	**-15.42050443**	**-15.36477108**	**-15.45531039**
+3.7	**11.11851049**	**5.453307022**	**4.658315173**	**4.932978059**	**4.048467366**	**7.008758368**	**5.532216032**	**5.002507732**	**5.036981282**	**5.248126255**
-3.75	**-21.74929233**	**-15.8800791**	**-15.2875578**	**-12.236534**	**-9.83068688**	**-14.73140534**	**-15.31899425**	**-15.42050443**	**-15.36477108**	**-15.45531039**
+3.75	**11.11851049**	**5.453307022**	**4.658315173**	**4.932978059**	**4.048467366**	**7.008758368**	**5.532216032**	**5.002507732**	**5.036981282**	**5.248126255**
-3.8	**-25.30583838**	**-19.65912476**	**-19.06542677**	**-15.23643923**	**-12.24774248**	**-17.21597412**	**-18.96788277**	**-19.06507431**	**-19.01994184**	**-19.11540706**
+3.8	**7.891773827**	**4.000449277**	**3.784813364**	**3.501821893**	**2.917203716**	**4.764220449**	**4.436499245**	**3.521234173**	**3.433725263**	**3.702238036**
-3.85	**-25.30583838**	**-19.65912476**	**-19.06542677**	**-15.23643923**	**-12.24774248**	**-17.21597412**	**-18.96788277**	**-19.06507431**	**-19.01994184**	**-19.11540706**
+3.85	**7.891773827**	**4.000449277**	**3.784813364**	**3.501821893**	**2.917203716**	**4.764220449**	**4.436499245**	**3.521234173**	**3.433725263**	**3.702238036**
-3.9	**-28.78394461**	**-23.48116531**	**-22.90654069**	**-18.28703346**	**-14.71728437**	**-19.59238452**	**-23.11960678**	**-23.2145362**	**-23.18469047**	**-23.29628106**
+3.9	**4.696059995**	**3.058443225**	**3.056467542**	**2.431717539**	**1.981074203**	**2.841032595**	**3.233503566**	**3.121378958**	**3.122236515**	**3.122986956**
-3.95	**-28.78394461**	**-23.48116531**	**-22.90654069**	**-18.28703346**	**-14.71728437**	**-19.59238452**	**-23.11960678**	**-23.2145362**	**-23.18469047**	**-23.29628106**
+3.95	**4.696059995**	**3.058443225**	**3.056467542**	**2.431717539**	**1.981074203**	**2.841032595**	**3.233503566**	**3.121378958**	**3.122236515**	**3.122986956**
-5	**-31.91493278**	**-27.23737834**	**-26.69907538**	**-21.29635295**	**-17.21524949**	**-21.79281099**	**-27.36228452**	**-27.46014557**	**-27.43336702**	**-27.54803415**
+5	**3.259199142**	**3.058443225**	**3.056467542**	**2.431717539**	**1.976187254**	**2.239150076**	**3.121961395**	**3.121378958**	**3.122236515**	**3.122986956**

3-Span: Shear (Max and Min) Raw Data Results - 10' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-3.259199142	-4.345416065	-4.345416065	-3.788123141	-3.976674459	-3.302513596	-3.476330101	-2.341236041
End Shear	32.06406794	39.02901411	39.02901411	33.18549356	34.02647167	29.72595849	31.29048262	23
-0.05	-3.259199142	-4.345416065	-4.345416065	-3.788123141	-3.976674459	-3.302513596	-3.476330101	-2.341236041
+0.05	30.50024424	35.94084475	35.94084475	30.09996537	30.82359211	27.54988897	28.99988312	21.80914236
-0.1	-6.117749463	-5.378325194	-5.795670644	-4.534257157	-5.407983658	-4.05465172	-4.319102321	-2.341236041
+0.1	27.1447793	30.54226415	30.54226415	24.81727209	25.12031348	23.43497126	24.6683908	19.26457831
-0.15	-6.117749463	-5.378325194	-5.795670644	-4.534257157	-5.407983658	-4.05465172	-4.319102321	-2.341236041
+0.15	27.1447793	30.54226415	30.54226415	24.81727209	25.12031348	23.43497126	24.6683908	19.26457831
-0.2	-9.332313158	-7.185229289	-8.1340907	-5.805639263	-7.725283098	-5.144718343	-5.523224264	-4.789655883
+0.2	23.57041941	25.1303163	25.1303163	20.13408517	20.25333142	19.30351265	20.319487	16.65307718
-0.25	-9.332313158	-7.185229289	-8.1340907	-5.805639263	-7.725283098	-5.144718343	-5.523224264	-4.789655883
+0.25	23.57041941	25.1303163	25.1303163	20.13408517	20.25333142	19.30351265	20.319487	16.65307718
-0.3	-12.55830763	-9.167148868	-10.23747344	-7.075709091	-9.841524881	-6.836600426	-7.249413545	-7.401243051
+0.3	19.87899408	19.85923675	19.85923675	15.91340023	16.02700678	15.29907722	16.10429181	14.01905706
-0.35	-12.55830763	-9.167148868	-10.23747344	-7.075709091	-9.841524881	-6.836600426	-7.249413545	-7.401243051
+0.35	19.87899408	19.85923675	19.85923675	15.91340023	16.02700678	15.29907722	16.10429181	14.01905706
-0.4	-15.75179924	-12.47951098	-12.98235267	-9.555825412	-11.79876896	-9.024758102	-9.552810985	-10.0606417
+0.4	16.17233668	14.88327121	14.88327121	11.92830756	12.03276762	11.38901561	11.98843749	11.37376373
-0.45	-15.75179924	-12.47951098	-12.98235267	-9.555825412	-11.79876896	-9.024758102	-9.552810985	-10.0606417
+0.45	16.17233668	14.88327121	14.88327121	11.92830756	12.03276762	11.38901561	11.98843749	11.37376373
-0.5	-18.9716866	-16.8821909	-17.35507817	-12.89732159	-14.47217481	-12.83223511	-13.55712754	-12.69533362
+0.5	12.55228052	10.35666425	10.35666425	8.312396477	8.319037916	7.92134356	8.338256379	8.791139484
-0.55	-18.9716866	-16.8821909	-17.35507817	-12.89732159	-14.47217481	-12.83223511	-13.55712754	-12.69533362
+0.55	12.55228052	10.35666425	10.35666425	8.312396477	8.319037916	7.92134356	8.338256379	8.791139484
-0.6	-21.86555294	-22.12336778	-22.53830044	-17.21110649	-18.67886909	-16.85807341	-17.7885899	-15.23279817
+0.6	9.120655157	7.033659604	7.033659604	5.659059577	5.674348277	5.367767477	5.650281555	6.345109416
-0.65	-21.86555294	-22.12336778	-22.53830044	-17.21110649	-18.67886909	-16.85807341	-17.7885899	-15.23279817
+0.65	9.120655157	7.033659604	7.033659604	5.659059577	5.674348277	5.367767477	5.650281555	6.345109416
-0.7	-24.69794267	-27.28451808	-27.62409688	-21.66796452	-22.75683613	-20.82481475	-21.95605611	-17.60051343
+0.7	5.979293443	4.607020737	4.607020737	3.721860084	3.74128902	3.533964822	3.71996297	4.109615602
-0.75	-24.69794267	-27.28451808	-27.62409688	-21.66796452	-22.75683613	-20.82481475	-21.95605611	-17.60051343
+0.75	5.979293443	4.607020737	4.607020737	3.721860084	3.74128902	3.533964822	3.71996297	4.109615602
-0.8	-27.51478338	-32.23731791	-32.49278296	-26.15958881	-27.27192283	-24.62966543	-25.95224164	-19.72596117
+0.8	3.230028249	2.471297639	2.475360521	1.973335478	1.973335478	1.864511308	1.962643482	2.158598291
-0.85	-27.51478338	-32.23731791	-32.49278296	-26.15958881	-27.27192283	-24.62966543	-25.95224164	-19.72596117
+0.85	3.230028249	2.471297639	2.475360521	1.973335478	1.973335478	1.864511308	1.962643482	2.158598291
-0.9	-30.02981389	-36.86993576	-37.02467536	-30.79490994	-31.80007612	-28.16985533	-29.66988675	-21.53662032
+0.9	0.974691011	0.673312068	0.673312068	0.554474854	0.561116294	0.530650249	0.55857921	0.565986375
-0.95	-30.02981389	-36.86993576	-37.02467536	-30.79490994	-31.80007612	-28.16985533	-29.66988675	-21.53662032
+0.95	0.974691011	0.673312068	0.673312068	0.554474854	0.561116294	0.530650249	0.55857921	0.565986375
-1	-32	-41.18390879	-41.18390879	-35.74297492	-37.08228633	-31.41661871	-33.07012495	-22.95996945
+1	8.04E-02	0.091855703	0.091855703	0.073510135	0.073510135	0.069852851	0.073529317	0.057760459
(Span 2) -2	-1.748349223	-1.966425093	-1.966425093	-1.573687522	-1.573687522	-1.49539326	-1.574098168	-1.23652216
+2	31.31767082	41.33178847	41.33178847	36.79806481	39.24988643	31.46959422	33.12588865	22.42727811
-2.05	-2.391343521	-1.966425093	-1.966425093	-1.796458879	-1.958020245	-1.49539326	-1.574098168	-1.23652216
+2.05	30.50371552	39.90119398	39.90119398	34.73305357	36.95390947	30.32490742	31.92095518	21.83210363
-2.1	-3.20318995	-2.030582053	-2.259834481	-2.115717126	-2.477070196	-1.49539326	-1.574098168	-1.23652216
+2.1	29.56910515	37.63654667	37.63654667	32.60527466	34.64710958	28.65757255	30.16586585	21.16003792
-2.15	-4.135867214	-2.667509373	-2.934809406	-2.420365926	-3.011240241	-1.72933033	-1.848538332	-1.699957793
+2.15	28.52480507	35.64378826	35.64710395	30.43269573	32.32830443	27.1321854	28.56019515	20.39636575
-2.2	-6.303037062	-4.267406029	-4.506957614	-3.517474152	-4.14762408	-2.934235836	-3.11445965	-3.256532118
+2.2	26.15101814	31.51964312	31.5590735	26.02507649	27.70990873	24.07757541	25.34481623	18.67821217
-2.25	-7.457152031	-5.144364523	-5.418303111	-4.253378188	-4.761179496	-3.601917698	-3.814995515	-4.133620234

+2.25	24.84346581	29.40165651	29.46727863	23.82598716	25.43794198	22.4054348	23.58466821	17.73549819
-2.3	-8.639953144	-6.196218519	-6.399680591	-5.018830863	-5.718311643	-4.332642264	-4.580387274	-5.066162016
+2.3	23.47010231	27.26239487	27.35758052	21.81268156	23.20919771	20.70769402	21.79757265	16.74671197
-2.35	-11.08841624	-9.048896339	-9.308268858	-7.030454479	-7.655273208	-6.346566535	-6.70719714	-7.066351687
+2.35	20.57137449	22.96803762	23.12631218	17.99271142	18.95448236	17.3171462	18.24535908	14.66215769
-2.4	-12.35247622	-10.8407183	-11.10928326	-8.366281062	-8.768672268	-7.682947947	-8.115289947	-8.11837908
+2.4	19.08861813	20.83693917	21.02566236	16.38834804	17.26822367	15.41746292	16.22890834	13.58201984
-2.45	-13.64204359	-12.71912771	-12.98642774	-9.794149534	-10.5551436	-9.09385803	-9.600672753	-9.194611103
+2.45	17.61178682	18.73255984	18.94894995	14.51775955	15.58606667	13.74896971	14.47259969	12.48705219
-2.5	-16.2944823	-16.68771646	-16.92726804	-12.88752755	-13.93120695	-12.13063936	-12.76909406	-11.38844926
+2.5	15.00512061	14.65195664	14.90918203	11.28971003	12.26265688	10.55928544	11.14245222	10.28388616
-2.55	-17.65576029	-18.75389598	-18.97004076	-14.53380167	-15.60229589	-13.75992507	-14.48413165	-12.49043032
+2.55	13.68993268	12.69973015	12.96704714	9.780228304	10.6357053	9.084219368	9.590527959	9.191299734
-2.6	-19.06482315	-20.85866912	-21.04710325	-16.23364714	-17.28456178	-15.42867897	-16.2407147	-13.58537125
+2.6	12.39942055	10.82221915	11.09069255	8.353256936	8.945530841	7.673789434	8.105643109	8.11514067
-2.65	-20.56981182	-22.99003375	-23.14799169	-18.18731844	-18.97086392	-17.32817557	-18.25694716	-14.66546439
+2.65	11.13436959	9.031421967	9.290578226	7.018422743	7.645840025	6.337961028	6.698123844	7.063211152
-2.7	-23.47010231	-27.28454634	-27.37940888	-21.67733586	-23.23032871	-20.71918279	-21.80966609	-16.74984271
+2.7	8.681951523	6.184251438	6.387199256	5.011390857	5.708642125	4.326860554	4.57426589	5.063288332
-2.75	-24.87233154	-29.42369709	-29.48901714	-23.8523009	-25.45962361	-22.41683098	-23.59666419	-17.73851278
+2.75	7.419902092	5.135289356	5.408243132	4.246228351	4.755192768	3.597336402	3.810189963	4.130917858
-2.8	-26.15101719	-31.54144546	-31.580611	-26.04651557	-27.73200435	-24.08879763	-25.35662908	-18.68108146
+2.8	6.266742905	4.258849926	4.498586908	3.510642349	4.141954322	2.929925973	3.109935712	3.254017114
-2.85	-28.52480531	-35.66474405	-35.6679179	-30.45398795	-32.35081748	-27.14280023	-28.57136866	-20.39891101
+2.85	4.11042954	2.660109728	2.927426718	2.417416625	3.00604403	1.725649988	1.844665453	1.69790292
-2.9	-29.56910467	-37.65704849	-37.65704849	-32.62623054	-34.66962614	-28.66775236	-30.17658143	-21.16229211
+2.9	3.186429318	2.026230528	2.25418504	2.112628577	2.472024528	1.495292563	1.573992171	1.236545516
-2.95	-30.50371635	-39.5608437	-39.5608437	-34.75349504	-36.9763017	-30.11728705	-31.70240742	-21.83415541
+2.95	2.381856024	1.966222332	1.966222332	1.793149223	1.953070082	1.495292563	1.573992171	1.236545516
-3	-32	-43.00792423	-43.00792423	-38.80121974	-41.50050203	-32.73904568	-34.46215335	-22.93100979
+3	1.745186421	1.966222332	1.966222332	1.573534651	1.574681029	1.495292563	1.573992171	1.236545516
(Span 3) -4	-8.04E-02	-0.091846232	-0.091846232	-0.073502994	-0.073556544	-0.069848148	-0.073524366	-0.05776155
+4	31.08937645	39.07738242	39.10576497	33.2910891	34.45219713	29.82426948	31.39396787	22.29890857
-3.05	-8.04E-02	-0.091846232	-0.091846232	-0.073502994	-0.073556544	-0.069848148	-0.073524366	-0.05776155
+3.05	31.08937645	39.07738242	39.10576497	33.2910891	34.45219713	29.82426948	31.39396787	22.29890857
-3.1	-1.970186234	-1.494860654	-1.494860654	-1.203131185	-1.203409108	-1.161352046	-1.222475838	-1.315208117
+3.1	28.88739786	34.57154329	34.78480432	28.24888349	29.1155833	26.42723687	27.83995326	20.6722705
-3.15	-1.970186234	-1.494860654	-1.494860654	-1.203131185	-1.203409108	-1.161352046	-1.222475838	-1.315208117
+3.15	28.88739786	34.57154329	34.78480432	28.24888349	29.1155833	26.42723687	27.83995326	20.6722705
-3.2	-4.561372361	-3.488485505	-3.488546949	-2.797315375	-2.797315375	-2.650362031	-2.78985477	-3.096833001
+3.2	26.17997629	29.76932484	30.06783657	23.93408399	25.38016647	22.74102109	23.96873632	18.69469577
-3.25	-4.561372361	-3.488485505	-3.488546949	-2.797315375	-2.797315375	-2.650362031	-2.78985477	-3.096833001
+3.25	26.17997629	29.76932484	30.06783657	23.93408399	25.38016647	22.74102109	23.96873632	18.69469577
-3.3	-7.499153771	-5.799817324	-5.799817324	-4.674220158	-4.692069526	-4.446939157	-4.680988586	-5.19978824
+3.3	23.45708993	24.69526933	25.0745461	19.35417938	20.71959844	18.84187943	19.87297397	16.43869604
-3.35	-7.499153771	-5.799817324	-5.799817324	-4.674220158	-4.692069526	-4.446939157	-4.680988586	-5.19978824
+3.35	23.45708993	24.69526933	25.0745461	19.35417938	20.71959844	18.84187943	19.87297397	16.43869604
-3.4	-10.77421952	-8.348881714	-8.348881714	-6.706048715	-6.717598527	-6.368499615	-6.703683806	-7.550134587
+3.4	20.54556797	19.47770126	19.924618	15.01670303	16.56556116	14.83258248	15.65992642	13.97680884
-3.45	-10.77421952	-8.348881714	-8.348881714	-6.706048715	-6.717598527	-6.368499615	-6.703683806	-7.550134587
+3.45	20.54556797	19.47770126	19.924618	15.01670303	16.56556116	14.83258248	15.65992642	13.97680884
-3.5	-14.3614368	-12.57689407	-12.57689407	-10.08030752	-10.08058544	-9.615890979	-10.1219905	-10.07392987
+3.5	17.48962048	14.2449445	14.73773687	10.84451628	12.72196688	10.81594717	11.43690263	11.38154605
-3.55	-14.3614368	-12.57689407	-12.57689407	-10.08030752	-10.08058544	-9.615890979	-10.1219905	-10.07392987
+3.55	17.48962048	14.2449445	14.73773687	10.84451628	12.72196688	10.81594717	11.43690263	11.38154605
-3.6	-17.95713711	-17.34997531	-17.34997531	-13.90271597	-14.01219486	-13.27216058	-13.97069535	-12.69724699
+3.6	14.33234305	11.04733855	11.55658841	8.492578089	10.82787628	7.930221507	8.40113906	8.725417735

-3.65	**-17.95713711**	**-17.34997531**	**-17.34997531**	**-13.90271597**	**-14.01219486**	**-13.27216058**	**-13.97069535**	**-12.69724699**
+3.65	**14.33234305**	**11.04733855**	**11.55658841**	**8.492578089**	**10.82787628**	**7.930221507**	**8.40113906**	**8.725417735**
-3.7	**-21.74929233**	**-22.4944799**	**-22.4944799**	**-18.02234617**	**-18.13920828**	**-17.31285279**	**-18.22405556**	**-15.34614564**
+3.7	**11.11851049**	**7.979352536**	**9.202699175**	**6.367404028**	**8.795597724**	**5.719746073**	**6.072074843**	**6.080963406**
-3.75	**-21.74929233**	**-22.4944799**	**-22.4944799**	**-18.02234617**	**-18.13920828**	**-17.31285279**	**-18.22405556**	**-15.34614564**
+3.75	**11.11851049**	**7.979352536**	**9.202699175**	**6.367404028**	**8.795597724**	**5.719746073**	**6.072074843**	**6.080963406**
-3.8	**-25.30583838**	**-27.85618718**	**-27.85618718**	**-22.3151562**	**-22.43589871**	**-21.37773226**	**-22.50287606**	**-17.94840115**
+3.8	**7.891773827**	**6.307788848**	**6.983650699**	**5.188935244**	**6.583083622**	**4.624519308**	**4.946666277**	**3.520693866**
-3.85	**-25.30583838**	**-27.85618718**	**-27.85618718**	**-22.3151562**	**-22.43589871**	**-21.37773226**	**-22.50287606**	**-17.94840115**
+3.85	**7.891773827**	**6.307788848**	**6.983650699**	**5.188935244**	**6.583083622**	**4.624519308**	**4.946666277**	**3.520693866**
-3.9	**-28.78394461**	**-33.28081221**	**-33.28081221**	**-27.4637678**	**-27.96699952**	**-25.51576864**	**-26.85870383**	**-20.49428666**
+3.9	**4.696059995**	**4.352526572**	**4.517087115**	**3.80852966**	**4.148282158**	**3.414161044**	**3.617945573**	**2.341190734**
-3.95	**-28.78394461**	**-33.28081221**	**-33.28081221**	**-27.4637678**	**-27.96699952**	**-25.51576864**	**-26.85870383**	**-20.49428666**
+3.95	**4.696059995**	**4.352526572**	**4.517087115**	**3.80852966**	**4.148282158**	**3.414161044**	**3.617945573**	**2.341190734**
-5	**-31.91493278**	**-38.61413427**	**-38.61413427**	**-32.80765154**	**-33.77766183**	**-29.57762727**	**-31.1343445**	**-22.92963409**
+5	**3.259199142**	**4.34516055**	**4.34516055**	**3.788234205**	**3.976507763**	**3.302386772**	**3.476196603**	**2.341190734**

HDR

3-Span: Shear (Max and Min) Raw Data Results - 10' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-3.259199142	-3.879082373	-3.612116908	-3.910215602	-4.170896642	-3.976135887
End Shear	32.06406794	33.26465386	31.30064418	35.14527213	37.37889994	34.04350228
-0.05	-3.259199142	-3.879082373	-3.612116908	-3.910215602	-4.170896642	-3.976135887
+0.05	30.50024424	29.3518054	28.93706338	32.60621069	34.82753226	31.00230819
-0.1	-6.117749463	-4.604911757	-4.983220787	-4.189348025	-4.596808912	-4.784431675
+0.1	27.1447793	24.58431611	24.19113111	27.72202227	29.61397041	25.27022491
-0.15	-6.117749463	-4.604911757	-4.983220787	-4.189348025	-4.596808912	-4.784431675
+0.15	27.1447793	24.58431611	24.19113111	27.72202227	29.61397041	25.27022491
-0.2	-9.332313158	-7.056543511	-7.861409543	-5.799652806	-6.458017405	-6.0030872
+0.2	23.57041941	20.1375702	19.53680499	22.82582471	24.3821286	20.34525485
-0.25	-9.332313158	-7.056543511	-7.861409543	-5.799652806	-6.458017405	-6.0030872
+0.25	23.57041941	20.1375702	19.53680499	22.82582471	24.3821286	20.34525485
-0.3	-12.55830763	-9.330314425	-10.52438969	-7.968301911	-8.622132298	-7.495200705
+0.3	19.87899408	15.70240592	15.12479176	18.0544573	19.28093998	16.02261303
-0.35	-12.55830763	-9.330314425	-10.52438969	-7.968301911	-8.622132298	-7.495200705
+0.35	19.87899408	15.70240592	15.12479176	18.0544573	19.28093998	16.02261303
-0.4	-15.75179924	-11.59691355	-12.99052912	-10.64648009	-11.49051867	-10.29989409
+0.4	16.17233668	11.73234838	11.37000223	13.54538133	14.45989063	12.00590964
-0.45	-15.75179924	-11.59691355	-12.99052912	-10.64648009	-11.49051867	-10.29989409
+0.45	16.17233668	11.73234838	11.37000223	13.54538133	14.45989063	12.00590964
-0.5	-18.9716866	-14.11189175	-15.25914172	-15.25292498	-16.40420638	-13.69040254
+0.5	12.55228052	8.13221569	8.811934983	9.388220744	10.01410213	8.356558208
-0.55	-18.9716866	-14.11189175	-15.25914172	-15.25292498	-16.40420638	-13.69040254
+0.55	12.55228052	8.13221569	8.811934983	9.388220744	10.01410213	8.356558208
-0.6	-21.86555294	-17.50521158	-18.36269431	-20.08124446	-21.54537474	-17.97599478
+0.6	9.120655157	5.710345977	6.491568015	6.335189966	6.792118203	5.657289832
-0.65	-21.86555294	-17.50521158	-18.36269431	-20.08124446	-21.54537474	-17.97599478
+0.65	9.120655157	5.710345977	6.491568015	6.335189966	6.792118203	5.657289832
-0.7	-24.69794267	-22.22313467	-22.64064756	-24.8228447	-26.58718784	-22.83547872
+0.7	5.979293443	3.741417094	4.246658289	4.143025815	4.442079729	3.684304737
-0.75	-24.69794267	-22.22313467	-22.64064756	-24.8228447	-26.58718784	-22.83547872
+0.75	5.979293443	3.741417094	4.246658289	4.143025815	4.442079729	3.684304737
-0.8	-27.51478338	-26.96335761	-26.90347889	-29.35475918	-31.40081226	-27.47892183
+0.8	3.230028249	1.978563297	2.279560384	2.223371699	2.383080352	1.969581805
-0.85	-27.51478338	-26.96335761	-26.90347889	-29.35475918	-31.40081226	-27.47892183
+0.85	3.230028249	1.978563297	2.279560384	2.223371699	2.383080352	1.969581805
-0.9	-30.02981389	-31.32418008	-30.9801544	-33.56653749	-35.85742526	-31.6694138
+0.9	0.974691011	0.596491585	0.690553384	0.605426587	0.645788359	0.563202928
-0.95	-30.02981389	-31.32418008	-30.9801544	-33.56653749	-35.85742526	-31.6694138
+0.95	0.974691011	0.596491585	0.690553384	0.605426587	0.645788359	0.563202928
-1	-32	-36.37704446	-34.71147078	-37.41676831	-39.91121953	-37.30579552
+1	8.04E-02	0.07254586	0.067084208	0.082748435	0.088264997	0.073536172
(Span 2) -2	-1.748349223	-1.55304455	-1.436122788	-1.771458854	-1.889556111	-1.574244914
+2	31.31767082	38.32605886	36.10982499	37.22478862	39.72017605	39.22674714
-2.05	-2.391343521	-1.957819044	-1.774249275	-1.771458854	-1.889556111	-1.706749828
+2.05	30.50371552	36.01500262	33.95671099	35.60869211	38.00520991	36.91066297
-2.1	-3.20318995	-2.234344457	-2.274180141	-1.771458854	-1.889556111	-1.982122292
+2.1	29.56910515	33.65303489	31.76337772	33.88861963	36.2070573	34.53644416
-2.15	-4.135867214	-2.693011848	-2.91980206	-2.000355154	-2.201174727	-2.233779445
+2.15	28.52480507	31.26036492	29.53602645	32.07970438	34.32956568	32.43361984
-2.2	-6.303037062	-4.008454844	-4.22937414	-3.509710389	-3.815101287	-3.191036848
+2.2	26.15101814	26.46374273	25.89892059	28.25587212	30.13959692	27.55149883
-2.25	-7.457152031	-4.707284739	-4.975424193	-4.333453806	-4.691743245	-3.922411998

+2.25	**24.84346581**	**24.10020663**	**24.09634368**	**26.2712097**	**28.02262368**	**25.10440401**
-2.3	**-8.639953144**	**-5.510862685**	**-5.933741307**	**-5.197306434**	**-5.609060753**	**-4.687645871**
+2.3	**23.47010231**	**21.78679897**	**22.26418942**	**24.25821256**	**25.87542674**	**22.80633358**
-2.35	**-11.08841624**	**-7.424925927**	**-8.203699503**	**-7.391216242**	**-7.934067914**	**-6.63348094**
+2.35	**20.57137449**	**17.86819921**	**18.64196508**	**20.20775362**	**21.5714127**	**18.017293**
-2.4	**-12.35247622**	**-8.17991476**	**-9.286935571**	**-9.028749552**	**-9.691333349**	**-8.099540923**
+2.4	**19.08861813**	**16.08906649**	**16.85762705**	**18.21118771**	**19.4905652**	**16.38834804**
-2.45	**-13.64204359**	**-9.541995945**	**-10.34449767**	**-10.74945243**	**-11.53354515**	**-9.636282274**
+2.45	**17.61178682**	**14.33935995**	**15.10203985**	**16.27814136**	**17.43276161**	**14.55669039**
-2.5	**-16.2944823**	**-12.64229735**	**-13.41709243**	**-14.39233352**	**-15.42323263**	**-12.88041113**
+2.5	**15.00512061**	**10.99041846**	**11.81955708**	**12.52961524**	**13.43581282**	**11.22343799**
-2.55	**-17.65576029**	**-14.34941999**	**-15.10363768**	**-16.29048002**	**-17.44590454**	**-14.56710825**
+2.55	**13.68993268**	**9.533826648**	**10.34351373**	**10.73818123**	**11.5214863**	**9.626717461**
-2.6	**-19.06482315**	**-16.09936387**	**-16.85924315**	**-18.22374246**	**-19.50392585**	**-16.28311139**
+2.6	**12.39942055**	**8.172350825**	**9.285939136**	**9.017987011**	**9.679793418**	**8.090404576**
-2.65	**-20.56981182**	**-17.87865544**	**-18.64361965**	**-20.22072325**	**-21.58488546**	**-18.18731844**
+2.65	**11.13436959**	**7.419658679**	**8.202667169**	**7.381059903**	**7.923148361**	**6.624820039**
-2.7	**-23.47010231**	**-21.80029278**	**-22.26587189**	**-24.27128879**	**-25.88937471**	**-22.82011488**
+2.7	**8.681951523**	**5.505269266**	**5.932645195**	**5.191640621**	**5.603048306**	**4.682885704**
-2.75	**-24.87233154**	**-24.11405953**	**-24.09801405**	**-26.28418779**	**-28.03646698**	**-25.11854814**
+2.75	**7.419902092**	**4.703179232**	**4.974729594**	**4.328045518**	**4.685992705**	**3.917853812**
-2.8	**-26.15101719**	**-26.47783424**	**-25.90060045**	**-28.26865985**	**-30.15323717**	**-27.47490372**
+2.8	**6.266742905**	**4.004578803**	**4.228718791**	**3.504581059**	**3.809632842**	**3.186699525**
-2.85	**-28.52480531**	**-31.27457832**	**-29.53813285**	**-32.09179277**	**-34.34206054**	**-32.42616837**
+2.85	**4.11042954**	**2.690342712**	**2.880422634**	**1.995869415**	**2.196353699**	**2.232266001**
-2.9	**-29.56910467**	**-33.66712994**	**-31.76547277**	**-33.90021262**	**-36.21909712**	**-34.5512313**
+2.9	**3.186429318**	**2.231914043**	**2.305331828**	**1.771344246**	**1.889433863**	**1.98047256**
-2.95	**-30.50371635**	**-36.02885901**	**-33.95874546**	**-35.61969164**	**-38.01673574**	**-36.92519912**
+2.95	**2.381856024**	**1.806530368**	**1.773849378**	**1.771344246**	**1.889433863**	**1.704910727**
-3	**-32**	**-40.57901471**	**-38.17216672**	**-38.73130385**	**-41.31339078**	**-41.47817421**
+3	**1.745186421**	**1.552977755**	**1.43616063**	**1.771344246**	**1.889433863**	**1.574681029**
(Span 3) -4	**-8.04E-02**	**-0.07254274**	**-0.067085975**	**-0.082743081**	**-0.088259287**	**-0.073556544**
+4	**31.08937645**	**33.61385727**	**32.88678864**	**35.54679494**	**37.91658127**	**34.54261421**
-3.05	**-8.04E-02**	**-0.07254274**	**-0.067085975**	**-0.082743081**	**-0.088259287**	**-0.073556544**
+3.05	**31.08937645**	**33.61385727**	**32.88678864**	**35.54679494**	**37.91658127**	**34.54261421**
-3.1	**-1.970186234**	**-1.249415949**	**-1.436232176**	**-1.350585379**	**-1.440624404**	**-1.227862677**
+3.1	**28.88739786**	**29.29660129**	**28.97886258**	**31.48992438**	**33.66721775**	**29.60332973**
-3.15	**-1.970186234**	**-1.249415949**	**-1.436232176**	**-1.350585379**	**-1.440624404**	**-1.227862677**
+3.15	**28.88739786**	**29.29660129**	**28.97886258**	**31.48992438**	**33.66721775**	**29.60332973**
-3.2	**-4.561372361**	**-2.801396065**	**-3.224473666**	**-3.150695242**	**-3.377754475**	**-2.797517581**
+3.2	**26.17997629**	**24.63859875**	**24.77633524**	**27.10793023**	**29.01488808**	**25.19798997**
-3.25	**-4.561372361**	**-2.801396065**	**-3.224473666**	**-3.150695242**	**-3.377754475**	**-2.797517581**
+3.25	**26.17997629**	**24.63859875**	**24.77633524**	**27.10793023**	**29.01488808**	**25.19798997**
-3.3	**-7.499153771**	**-4.695710477**	**-5.340202686**	**-5.216327274**	**-5.59293837**	**-4.642898631**
+3.3	**23.45708993**	**19.52950077**	**20.49745948**	**22.45518702**	**24.07039329**	**20.1222484**
-3.35	**-7.499153771**	**-4.695710477**	**-5.340202686**	**-5.216327274**	**-5.59293837**	**-4.642898631**
+3.35	**23.45708993**	**19.52950077**	**20.49745948**	**22.45518702**	**24.07039329**	**20.1222484**
-3.4	**-10.77421952**	**-6.769730867**	**-7.695333996**	**-7.519284264**	**-8.060429095**	**-6.711014431**
+3.4	**20.54556797**	**15.46523669**	**16.32086681**	**17.65462573**	**18.96252902**	**15.82371556**
-3.45	**-10.77421952**	**-6.769730867**	**-7.695333996**	**-7.519284264**	**-8.060429095**	**-6.711014431**
+3.45	**20.54556797**	**15.46523669**	**16.32086681**	**17.65462573**	**18.96252902**	**15.82371556**
-3.5	**-14.3614368**	**-9.888579799**	**-10.07511443**	**-11.39400822**	**-12.15360877**	**-10.13799543**
+3.5	**17.48962048**	**12.99252406**	**14.14798402**	**12.82924898**	**13.82016711**	**11.60468258**
-3.55	**-14.3614368**	**-9.888579799**	**-10.07511443**	**-11.39400822**	**-12.15360877**	**-10.13799543**
+3.55	**17.48962048**	**12.99252406**	**14.14798402**	**12.82924898**	**13.82016711**	**11.60468258**
-3.6	**-17.95713711**	**-13.69045655**	**-13.07113905**	**-15.77264167**	**-16.841164**	**-13.98902562**
+3.6	**14.33234305**	**10.39748306**	**11.78168838**	**9.308522782**	**10.0590738**	**8.913935823**

-3.65	**-17.95713711**	**-13.69045655**	**-13.07113905**	**-15.77264167**	**-16.841164**	**-13.98902562**
+3.65	**14.33234305**	**10.39748306**	**11.78168838**	**9.308522782**	**10.0590738**	**8.913935823**
-3.7	**-21.74929233**	**-17.79935717**	**-17.29260901**	**-20.43139201**	**-21.82234076**	**-18.14003937**
+3.7	**11.11851049**	**8.208668071**	**9.217543838**	**6.597503572**	**7.250481458**	**6.510893442**
-3.75	**-21.74929233**	**-17.79935717**	**-17.29260901**	**-20.43139201**	**-21.82234076**	**-18.14003937**
+3.75	**11.11851049**	**8.208668071**	**9.217543838**	**6.597503572**	**7.250481458**	**6.510893442**
-3.8	**-25.30583838**	**-22.3150908**	**-21.84535812**	**-25.28188773**	**-27.00720613**	**-22.52914649**
+3.8	**7.891773827**	**5.846414715**	**6.448575604**	**5.033533943**	**5.567444934**	**5.425731794**
-3.85	**-25.30583838**	**-22.3150908**	**-21.84535812**	**-25.28188773**	**-27.00720613**	**-22.52914649**
+3.85	**7.891773827**	**5.846414715**	**6.448575604**	**5.033533943**	**5.567444934**	**5.425731794**
-3.9	**-28.78394461**	**-26.53971517**	**-26.56416676**	**-30.19050056**	**-32.24969079**	**-28.1216851**
+3.9	**4.696059995**	**3.878920904**	**3.919478801**	**3.91007109**	**4.170742496**	**4.053286694**
-3.95	**-28.78394461**	**-26.53971517**	**-26.56416676**	**-30.19050056**	**-32.24969079**	**-28.1216851**
+3.95	**4.696059995**	**3.878920904**	**3.919478801**	**3.91007109**	**4.170742496**	**4.053286694**
-5	**-31.91493278**	**-32.25236591**	**-31.30283484**	**-35.01418367**	**-37.39534055**	**-33.96221149**
+5	**3.259199142**	**3.878920904**	**3.612166551**	**3.91007109**	**4.170742496**	**3.97603009**

3-Span: Moment (Max and Min) Raw Data Results - 10' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-1.629600	-1.529305	-1.528293	-1.215899	-0.988109	-1.119649	-1.561079	-1.560781	-1.561203	-1.561573
+0.05	15.250122	12.678149	12.401608	9.896849	8.001809	10.353532	12.609719	12.658659	12.645264	12.702608
-0.1	-3.259199	-3.058609	-3.056585	-2.431797	-1.976218	-2.239298	-3.122158	-3.121561	-3.122407	-3.123147
+0.1	28.856240	23.462991	23.295126	18.533096	14.886966	19.588998	23.099148	23.195640	23.166970	23.279668
-0.15	-4.888799	-4.587914	-4.584878	-3.647696	-2.964327	-3.358946	-4.683237	-4.682342	-4.683610	-4.684720
+0.15	40.717169	32.330031	32.284537	25.673337	20.570298	27.638388	31.495558	31.649975	31.591672	31.756445
-0.2	-6.518398	-6.117219	-6.113170	-4.863595	-3.952435	-4.478595	-6.244316	-6.243123	-6.244814	-6.246293
+0.2	50.757196	39.281992	39.345364	31.282129	25.052099	34.450332	37.900064	38.097111	38.008940	38.201811
-0.25	-8.147998	-7.646524	-7.641463	-6.079493	-4.940544	-5.598244	-7.805395	-7.803903	-7.806017	-7.807867
+0.25	58.926049	44.348799	44.507042	35.380948	28.349008	39.990489	42.784931	43.039351	42.902169	42.784261
-0.3	-9.777597	-9.175828	-9.169755	-7.295392	-5.928653	-6.717893	-9.366474	-9.364684	-9.367221	-9.369440
+0.3	65.198929	47.624817	47.821843	38.013175	30.494406	44.241482	45.993627	46.213466	46.048286	45.906694
-0.35	-11.407197	-10.705133	-10.698048	-8.511291	-6.916762	-7.837542	-10.927553	-10.925465	-10.928424	-10.931013
+0.35	69.576479	49.206538	49.370977	39.244072	31.538085	47.202872	47.523025	47.698519	47.506943	47.343069
-0.4	-13.036797	-12.234438	-12.226340	-9.727189	-7.904871	-8.957190	-12.488632	-12.486246	-12.489628	-12.492586
+0.4	72.086431	49.136675	49.264201	39.160816	31.546523	48.891206	47.457169	47.600176	47.805558	47.419517
-0.45	-14.666396	-13.763743	-13.754633	-10.943088	-8.892980	-10.076839	-14.049711	-14.047026	-14.050831	-14.054160
+0.45	72.783600	47.549933	47.639103	37.949644	30.602657	49.339951	47.800486	47.837459	48.172087	48.287225
-0.5	-16.295996	-15.293047	-15.282925	-12.158986	-9.881089	-11.196488	-15.610790	-15.607807	-15.612035	-15.615733
+0.5	71.739931	47.952683	47.881605	37.976839	30.733869	48.599557	48.599129	48.699169	48.667148	48.780175
-0.55	-17.925595	-16.822352	-16.811218	-13.374885	-10.869198	-12.316137	-17.171869	-17.168588	-17.173238	-17.177306
+0.55	69.057831	49.098160	49.003299	38.864738	31.415218	46.737415	48.505357	48.695001	48.608583	48.755729
-0.6	-19.555195	-18.351657	-18.339510	-14.590784	-11.857306	-13.435786	-18.732948	-18.729368	-18.734442	-18.738880
+0.6	64.867629	48.317673	48.310771	38.323663	30.885995	43.837883	46.640096	46.860523	46.780930	46.854460
-0.65	-21.184794	-19.880961	-19.867803	-15.806682	-12.845415	-14.555434	-20.294027	-20.290149	-20.295645	-20.300453
+0.65	59.324024	45.695555	45.758323	36.300694	29.194418	40.002248	44.099011	44.395592	44.289402	44.370508
-0.7	-22.814394	-21.410266	-21.396095	-17.022581	-13.833524	-15.675083	-21.855106	-21.850930	-21.856849	-21.862026
+0.7	52.601055	41.343382	41.448285	32.883009	26.407016	35.399396	39.888459	40.248821	40.118911	40.205129
-0.75	-24.443994	-22.939571	-22.924388	-18.238480	-14.821633	-16.794732	-23.416185	-23.411710	-23.418052	-23.423600
+0.75	44.902865	35.399928	35.516470	28.179665	22.606685	30.154749	34.142630	34.552610	34.402689	34.491620
-0.8	-26.073593	-24.468876	-24.452680	-19.454378	-15.809742	-17.914381	-24.977264	-24.972491	-24.979255	-24.985173
+0.8	36.459037	28.037017	28.128403	22.321634	17.893046	24.404165	27.021984	27.465978	27.611118	27.374099
-0.85	-27.703193	-25.998180	-25.980973	-20.670277	-16.797851	-19.034030	-26.538343	-26.533272	-26.540459	-26.546746
+0.85	27.524608	19.535448	19.477414	15.552296	12.382125	18.319124	19.161066	19.200420	19.703997	19.679145
-0.9	-29.332792	-27.527485	-27.509265	-21.886176	-17.785960	-20.153678	-28.099422	-28.094052	-28.101662	-28.108320
+0.9	18.380092	10.011274	9.784768	9.196320	6.966182	12.090116	9.990810	10.026007	10.502186	10.433562
-0.95	-30.962392	-29.056790	-29.037558	-23.102074	-19.027134	-21.273327	-29.660501	-30.141271	-32.137741	-32.160408
+0.95	9.331472	4.870026	4.378686	4.728235	3.318077	6.054402	4.744207	4.880419	4.975187	4.908902
-1	-33.231945	-30.586094	-30.565849	-24.317972	-20.477746	-22.392976	-33.437631	-37.151321	-39.012074	-39.049315
+1	1.159391	0.646959	0.691448	0.513513	0.413551	0.552114	0.624836	0.625090	0.624889	0.624713
(Span 2) -2	-33.231945	-30.586094	-30.565849	-24.317972	-20.477746	-22.392976	-33.437631	-37.151321	-39.012074	-39.049315
+2	1.159391	0.646959	0.691448	0.513513	0.413551	0.552114	0.624836	0.625090	0.624889	0.624713
-2.05	-26.026229	-16.750463	-16.741171	-13.319013	-11.440980	-16.886350	-18.397739	-22.635334	-23.167714	-23.302907
+2.05	7.854424	4.302466	3.945460	3.893744	2.786709	5.355713	4.143996	4.126088	4.165209	4.125634
-2.1	-20.760882	-15.596094	-15.756814	-12.798143	-10.499558	-13.975781	-15.024027	-17.318683	-17.299819	-17.289680
+2.1	18.821980	10.344342	10.105846	9.381318	7.081266	12.909421	9.984575	9.999177	9.999177	9.999177
-2.15	-20.760394	-14.866796	-15.042801	-12.493850	-10.044506	-12.509276	-14.154649	-15.117247	-15.082028	-15.068672
+2.15	31.649186	19.634681	19.081435	15.759743	12.294171	21.744472	19.251105	19.147833	19.288773	19.412072
-2.2	-20.759907	-14.149878	-14.328788	-12.189557	-9.815867	-11.740957	-13.285271	-14.666890	-14.614000	-14.601210
+2.2	40.634787	29.585155	29.189799	23.314468	18.856770	27.850076	29.636256	29.667577	29.682452	29.819721

-2.25	-20.759420	-13.432959	-13.614775	-11.885264	-9.615157	-10.972638	-12.415893	-14.216534	-14.145973	-14.133748
+2.25	49.248819	37.548229	37.524976	29.856589	24.061376	33.745867	37.608087	37.625007	37.757301	37.781547
-2.3	-20.758933	-12.722999	-12.900762	-11.608579	-9.414446	-10.204319	-11.546515	-13.766177	-13.677945	-13.666286
+2.3	59.147451	45.398308	45.194634	35.996520	29.149658	40.663872	44.962032	44.928806	44.981656	45.027892
-2.35	-20.758445	-12.157384	-12.235136	-11.360295	-9.213736	-9.436000	-10.677137	-13.315820	-13.209917	-13.198825
+2.35	66.156241	51.348360	50.635757	40.355559	32.794751	45.215845	50.546266	50.555324	51.138256	51.271308
-2.4	-20.757958	-11.619569	-11.610021	-11.150291	-9.042402	-8.667681	-9.807759	-12.865464	-12.741890	-12.731363
+2.4	68.501771	53.604107	53.040171	42.252217	34.383173	46.953024	54.127885	54.097487	54.147788	54.191799
-2.45	-20.757471	-11.081755	-10.984907	-10.958169	-8.884792	-7.899361	-9.261728	-12.415107	-12.273862	-12.263901
+2.45	72.798370	54.126519	53.972802	42.951219	34.926385	49.830510	56.262541	56.281538	56.433437	56.460990
-2.5	-20.756984	-10.544133	-10.440724	-10.766046	-8.765845	-7.131042	-9.093952	-11.965693	-11.805834	-11.797257
+2.5	76.032516	54.038552	53.916903	42.992777	35.060327	51.753363	57.561216	57.399537	57.698483	57.829117
-2.55	-20.756496	-11.083796	-10.984808	-10.957089	-8.884379	-7.898852	-9.263150	-12.416105	-12.267857	-12.264768
+2.55	72.798380	54.134296	53.977582	42.954456	34.927629	49.804054	56.255892	56.275372	56.427680	56.455594
-2.6	-20.756009	-11.623460	-11.609159	-11.149853	-9.042235	-8.667121	-9.808712	-12.866517	-12.735543	-12.732279
+2.6	68.520445	53.275781	53.025127	42.242024	34.379270	46.956393	54.138944	54.107748	54.157369	54.200780
-2.65	-20.755522	-12.163123	-12.233509	-11.360500	-9.213814	-9.435391	-10.678174	-13.316929	-13.203230	-13.199790
+2.65	66.098630	51.348360	50.616230	40.342319	32.789659	45.147939	50.576363	50.518500	51.117771	51.257795
-2.7	-20.755035	-12.722867	-12.900718	-11.609426	-9.414772	-10.203661	-11.547637	-13.767341	-13.670916	-13.667301
+2.7	59.147462	45.622991	45.182574	35.988333	29.146533	40.417601	44.950260	44.917883	44.971458	45.018334
-2.75	-20.754547	-13.434526	-13.614153	-11.883300	-9.615729	-10.971930	-12.417099	-14.217753	-14.138603	-14.134811
+2.75	49.329145	37.550525	37.526597	29.857689	24.061796	33.858561	37.613866	37.630367	37.762306	37.786238
-2.8	-20.754060	-14.153144	-14.327587	-12.188230	-9.816687	-11.740200	-13.286562	-14.668165	-14.606289	-14.602322
+2.8	40.634787	29.546362	29.205648	23.325368	18.860968	27.781012	29.619516	29.689676	29.650825	29.790091
-2.85	-20.753573	-14.871762	-15.041021	-12.493160	-10.044243	-12.508470	-14.156024	-15.118576	-15.073975	-15.069833
+2.85	31.649189	19.601197	19.057753	15.743677	12.288030	21.687166	19.217875	19.117002	19.259972	19.385078
-2.9	-20.753085	-15.595578	-15.754456	-12.798090	-10.499537	-13.975434	-15.025486	-17.319690	-17.293705	-17.290560
+2.9	18.821970	10.328857	10.094901	9.372831	7.078001	12.934766	9.991544	9.939011	9.992567	9.999172
-2.95	-26.028157	-16.761277	-16.740594	-13.318620	-11.440826	-16.887005	-18.396123	-22.638605	-23.172441	-23.300235
+2.95	7.854423	4.314107	3.953688	3.871422	2.789150	5.371777	4.155463	4.111445	4.163971	4.121425
-3	-33.232970	-30.584431	-30.564675	-24.317175	-20.477441	-22.391501	-33.436447	-37.153752	-39.011036	-39.048341
+3	1.134478	0.646897	0.690660	0.513594	0.413583	0.552150	0.624775	0.625033	0.625231	0.624664
(Span 3) -4	-33.232970	-30.584431	-30.564675	-24.317175	-20.477441	-22.391501	-33.436447	-37.153752	-39.011036	-39.048341
+4	1.134478	0.646897	0.690660	0.513594	0.413583	0.552150	0.624775	0.625033	0.625231	0.624664
-3.05	-30.962392	-29.055210	-29.036441	-23.101316	-19.026844	-21.271926	-29.658633	-30.142433	-32.140089	-32.155280
+3.05	9.319048	4.914460	4.357094	4.732011	3.311622	6.062851	4.714075	4.905613	5.015321	4.915692
-3.1	-29.332792	-27.525988	-27.508207	-21.885457	-17.785685	-20.152351	-28.097652	-28.092410	-28.100128	-28.106882
+3.1	18.404557	10.060847	9.767422	9.223298	6.960464	12.157042	9.963430	10.000598	10.543916	10.411319
-3.15	-27.703193	-25.996767	-25.979973	-20.669598	-16.797591	-19.032776	-26.536671	-26.531720	-26.539010	-26.545388
+3.15	27.578526	19.585012	19.459056	15.539325	12.377304	18.391896	19.128647	19.220716	19.742812	19.652816
-3.2	-26.073593	-24.467545	-24.451740	-19.453740	-15.809498	-17.913200	-24.975690	-24.971031	-24.977891	-24.983895
+3.2	36.490982	28.084603	28.107739	22.307474	17.887595	24.479726	27.069722	27.510301	27.389368	27.350446
-3.25	-24.443994	-22.938323	-22.923506	-18.237881	-14.821404	-16.793625	-23.414710	-23.410341	-23.416773	-23.422401
+3.25	44.863943	35.444856	35.492365	28.163166	22.600375	30.231538	34.186868	34.593606	34.728009	34.511691
-3.3	-22.814394	-21.409102	-21.395272	-17.022022	-13.833310	-15.674050	-21.853729	-21.849652	-21.855655	-21.860908
+3.3	52.494084	41.383204	41.419706	32.863482	26.399517	35.475983	39.927670	40.285069	40.152763	40.236984
-3.35	-21.184794	-19.879880	-19.867038	-15.806163	-12.845217	-14.554475	-20.292748	-20.288963	-20.294537	-20.299414
+3.35	59.154945	45.728916	45.724447	36.277610	29.185581	40.058565	44.131874	44.425842	44.317682	44.397194
-3.4	-19.555195	-18.350659	-18.338804	-14.590305	-11.857123	-13.434900	-18.731768	-18.728273	-18.733418	-18.737921
+3.4	64.645317	48.343426	48.270922	38.296474	30.875542	43.841852	46.665454	46.883758	46.802627	46.875059
-3.45	-17.925595	-16.821437	-16.810571	-13.374446	-10.869029	-12.315325	-17.170787	-17.167584	-17.172300	-17.176428
+3.45	68.788682	49.115362	48.956824	38.833133	31.403110	46.705345	48.534335	48.721528	48.633367	48.779270
-3.5	-16.295996	-15.292215	-15.282337	-12.158587	-9.880936	-11.195750	-15.609806	-15.606894	-15.611182	-15.614934
+3.5	71.807182	47.960571	47.887364	37.980618	30.735319	48.550426	48.619645	48.717774	48.684918	48.796834
-3.55	-14.666396	-13.762994	-13.754103	-10.942728	-8.892842	-10.076175	-14.048826	-14.046205	-14.050064	-14.053441
+3.55	72.487212	47.540892	47.632835	37.945117	30.601000	49.284965	47.770026	47.809192	48.214464	48.262486
-3.6	-13.036797	-12.233772	-12.225869	-9.726870	-7.904749	-8.956600	-12.487845	-12.485515	-12.488945	-12.491947

+3.6	71.828561	49.121898	49.253875	39.153741	31.543801	48.829846	47.442623	47.660281	47.572810	47.453090
-3.65	-11.407197	-10.704551	-10.697636	-8.511011	-6.916655	-7.837025	-10.926864	-10.924826	-10.927827	-10.930454
+3.65	69.352246	49.184949	49.355816	39.233719	31.534126	47.144159	47.501760	47.753058	47.939738	47.390804
-3.7	-9.777597	-9.175329	-9.169402	-7.295152	-5.928561	-6.717450	-9.365883	-9.364136	-9.366709	-9.368960
+3.7	65.247877	47.640241	47.801207	37.999115	30.489006	44.194216	45.964768	46.261517	46.093157	45.948752
-3.75	-8.147998	-7.646107	-7.641168	-6.079293	-4.940468	-5.597875	-7.804903	-7.803447	-7.805591	-7.807467
+3.75	58.628132	44.393558	44.480477	35.362892	28.342095	39.957433	42.829021	43.080153	42.940306	43.184991
-3.8	-6.518398	-6.116886	-6.112934	-4.863434	-3.952374	-4.478300	-6.243922	-6.242757	-6.244472	-6.245973
+3.8	50.499996	39.318251	39.312535	31.259801	25.043516	34.431950	37.935767	38.130150	38.039885	38.230816
-3.85	-4.888799	-4.587664	-4.584701	-3.647576	-2.964280	-3.358725	-4.682941	-4.682068	-4.683354	-4.684480
+3.85	40.512312	32.357360	32.245186	25.646654	20.560075	27.632903	31.525751	31.677898	31.617851	31.780972
-3.9	-3.259199	-3.058442	-3.056467	-2.431717	-1.976187	-2.239150	-3.121961	-3.121378	-3.122236	-3.122986
+3.9	28.713426	23.481161	23.249206	18.501948	14.874982	19.592381	23.119602	23.214532	23.184686	23.296277
-3.95	-1.629600	-1.529221	-1.528233	-1.215858	-0.988093	-1.119575	-1.560980	-1.560689	-1.561118	-1.561493
+3.95	15.214137	12.687151	12.407989	9.901164	7.988212	10.359414	12.620024	12.668224	12.654196	12.710980
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 10’ Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-1.629600	-2.172708	-2.172708	-1.894062	-1.988337	-1.651257	-1.738165	-1.170618
+0.05	15.250122	17.970422	17.970422	15.049983	15.411796	13.774944	14.499942	10.904571
-0.1	-3.259199	-4.345416	-4.345416	-3.788123	-3.976674	-3.302514	-3.476330	-2.341236
+0.1	28.856240	33.252866	33.252866	27.438238	27.939569	25.501903	26.844109	20.631283
-0.15	-4.888799	-6.518124	-6.518124	-5.682185	-5.965012	-4.953770	-5.214495	-3.511854
+0.15	40.717169	45.718901	45.718901	37.225908	37.680470	35.067919	36.913599	29.107834
-0.2	-6.518398	-8.690832	-8.690832	-7.576246	-7.953349	-6.605027	-6.952660	-4.682472
+0.2	50.757196	55.531290	55.531290	44.588310	44.588310	42.602844	44.845099	36.280037
-0.25	-8.147998	-10.863540	-10.863540	-9.470308	-9.941686	-8.256284	-8.690825	-5.853090
+0.25	58.926049	62.846598	62.846598	50.335213	50.335213	48.092870	50.624074	42.111828
-0.3	-9.777597	-13.036248	-13.036248	-11.364369	-11.930023	-9.907541	-10.428990	-7.023708
+0.3	65.198929	67.601322	67.601322	54.110149	54.110149	51.638263	54.356066	46.585285
-0.35	-11.407197	-15.208956	-15.208956	-13.258431	-13.918361	-11.558798	-12.167155	-8.194326
+0.35	69.576479	69.858083	69.858083	55.909441	55.909441	53.546770	56.365021	49.700596
-0.4	-13.036797	-17.381664	-17.381664	-15.152493	-15.906698	-13.210054	-13.905320	-9.364944
+0.4	72.086431	69.768991	69.768991	55.831964	56.105888	53.192848	55.992471	51.476108
-0.45	-14.666396	-19.554372	-19.554372	-17.046554	-17.895035	-14.861311	-15.643485	-10.535562
+0.45	72.783600	67.524686	67.524686	57.310907	59.547515	51.436223	54.143393	51.948263
-0.5	-16.295996	-21.727080	-21.727080	-18.940616	-19.883372	-16.512568	-17.381651	-11.706180
+0.5	71.739931	68.054643	68.054643	58.489290	60.207394	52.054726	54.794448	51.171667
-0.55	-17.925595	-23.899788	-23.899788	-20.834677	-21.871710	-18.163825	-19.119816	-12.876798
+0.55	69.057831	69.672508	69.672508	57.696932	58.523141	53.310714	56.116541	49.219032
-0.6	-19.555195	-26.072496	-26.072496	-22.728739	-23.860047	-19.815082	-20.857981	-14.047416
+0.6	64.867629	68.443383	68.443383	54.870701	54.870701	52.473533	55.235297	46.181218
-0.65	-21.184794	-28.245204	-28.245204	-24.622800	-25.848384	-21.466338	-22.596146	-15.218034
+0.65	59.324024	64.666661	64.666661	51.881190	51.881190	49.643113	52.255909	42.167187
-0.7	-22.814394	-30.417912	-30.417912	-26.516862	-27.836721	-23.117595	-24.334311	-16.388652
+0.7	52.601055	58.442433	58.442433	46.927598	46.927598	44.929521	47.294233	37.304061
-0.75	-24.443994	-32.590620	-32.590620	-28.410924	-29.825058	-24.768852	-26.072476	-17.559270
+0.75	44.902865	49.969213	49.969213	40.167800	40.167800	38.743078	40.782187	31.737092
-0.8	-26.073593	-34.763329	-34.763329	-30.304985	-31.813396	-26.420109	-27.810641	-18.729888
+0.8	36.459037	39.537983	39.537983	31.790569	32.211777	30.488351	32.093001	25.629638
-0.85	-27.703193	-36.936037	-36.936037	-32.199047	-33.801733	-28.071366	-29.548806	-19.900506
+0.85	27.524608	27.305697	27.305697	22.867181	23.418212	21.239500	22.357368	19.163196
-0.9	-29.332792	-39.108745	-39.108745	-34.093108	-35.790070	-29.722622	-31.286971	-21.071124
+0.9	18.380092	14.008539	14.073106	12.172738	12.720457	10.790372	11.358287	12.537404
-0.95	-30.962392	-41.281453	-41.281453	-35.987170	-37.778407	-31.373879	-33.025136	-22.241742
+0.95	9.331472	7.005753	7.096042	5.587988	5.853599	5.048393	5.314098	5.970026
-1	-33.231945	-45.154950	-46.052046	-41.936667	-45.571522	-33.960653	-35.826395	-23.412360
+1	1.159391	0.918557	0.918557	0.735101	0.735101	0.789353	0.830898	0.577605
(Span 2) -2	-33.231945	-45.154950	-46.052046	-41.936667	-45.571522	-33.960653	-35.826395	-23.412360
+2	1.159391	0.918557	0.918557	0.735101	0.735101	0.789353	0.830898	0.577605
-2.05	-26.026229	-28.139783	-29.914494	-23.670084	-28.064845	-20.531127	-21.794500	-14.768606
+2.05	7.854424	6.078114	6.078114	4.875289	5.047407	4.653337	4.898249	5.418420
-2.1	-20.760882	-24.000446	-24.709971	-17.675326	-21.385120	-17.927939	-18.944177	-14.327242
+2.1	18.821980	14.687490	14.734904	11.746559	11.746559	11.171930	11.765070	13.377409
-2.15	-20.760394	-20.808295	-20.808295	-16.652528	-16.664660	-16.330880	-17.190400	-13.885877
+2.15	31.649186	27.880711	27.880711	22.866348	23.151410	21.263638	22.382777	22.325459
-2.2	-20.759907	-19.530250	-19.530250	-15.629730	-15.641117	-15.581628	-16.401713	-13.463190
+2.2	40.634787	42.008904	42.008904	35.536966	36.481477	32.148557	33.840586	28.977097

-2.25	**-20.759420**	**-18.252205**	**-18.252205**	**-14.606933**	**-14.617575**	**-14.845270**	**-15.626600**	**-13.041528**
+2.25	**49.248819**	**53.344744**	**53.344744**	**45.047585**	**46.447177**	**40.548481**	**42.682611**	**35.273071**
-2.3	**-20.758933**	**-16.974161**	**-16.974161**	**-13.584135**	**-13.594032**	**-14.157312**	**-14.902433**	**-12.619865**
+2.3	**59.147451**	**64.556145**	**64.556145**	**53.529972**	**54.358348**	**49.076236**	**51.659196**	**42.109093**
-2.35	**-20.758445**	**-15.696116**	**-15.696116**	**-12.561338**	**-12.570489**	**-13.515326**	**-14.226659**	**-12.198203**
+2.35	**66.156241**	**72.492313**	**72.492313**	**60.313733**	**61.486447**	**55.127287**	**58.028723**	**47.116839**
-2.4	**-20.757958**	**-14.418072**	**-14.418072**	**-11.538540**	**-12.542024**	**-12.873341**	**-13.550885**	**-11.776540**
+2.4	**68.501771**	**75.766194**	**75.766194**	**65.220769**	**67.672012**	**57.616437**	**60.648881**	**49.110657**
-2.45	**-20.757471**	**-13.140027**	**-13.140027**	**-10.515743**	**-12.542401**	**-12.307898**	**-12.955682**	**-11.354878**
+2.45	**72.798370**	**76.808121**	**76.808121**	**68.793781**	**72.805017**	**58.379539**	**61.452146**	**52.063865**
-2.5	**-20.756984**	**-11.863206**	**-11.863206**	**-10.034923**	**-12.542779**	**-11.805942**	**-12.427308**	**-10.958216**
+2.5	**76.032516**	**76.807398**	**76.807398**	**71.035189**	**75.371643**	**58.407506**	**61.481585**	**54.080097**
-2.55	**-20.756496**	**-13.141382**	**-13.141382**	**-10.516764**	**-12.543156**	**-12.312495**	**-12.960521**	**-11.355442**
+2.55	**72.798380**	**76.818503**	**76.818503**	**68.840268**	**72.779590**	**58.384691**	**61.457569**	**52.055754**
-2.6	**-20.756009**	**-14.419559**	**-14.419559**	**-11.539661**	**-12.543533**	**-12.867731**	**-13.544980**	**-11.777002**
+2.6	**68.520445**	**75.773734**	**75.773734**	**65.225862**	**67.666751**	**57.608093**	**60.640098**	**49.111688**
-2.65	**-20.755522**	**-15.697735**	**-15.697735**	**-12.562558**	**-12.562558**	**-13.508426**	**-14.219396**	**-12.198562**
+2.65	**66.098630**	**72.449865**	**72.449865**	**60.340991**	**61.503955**	**55.106206**	**58.006533**	**47.127139**
-2.7	**-20.755035**	**-16.975911**	**-16.975911**	**-13.585455**	**-13.585455**	**-14.154973**	**-14.899971**	**-12.620123**
+2.7	**59.147462**	**64.529925**	**64.529925**	**53.519011**	**54.351165**	**49.063211**	**51.645485**	**42.094706**
-2.75	**-20.754547**	**-18.254088**	**-18.254088**	**-14.608352**	**-14.608352**	**-14.844928**	**-15.626240**	**-13.041683**
+2.75	**49.329145**	**53.348271**	**53.348271**	**45.051747**	**46.458622**	**40.550230**	**42.684453**	**35.268458**
-2.8	**-20.754060**	**-19.532264**	**-19.532264**	**-15.631249**	**-15.631249**	**-15.583504**	**-16.403688**	**-13.463243**
+2.8	**40.634787**	**41.949299**	**41.949299**	**35.495030**	**36.511830**	**32.165647**	**33.858575**	**28.982545**
-2.85	**-20.753573**	**-20.810440**	**-20.810440**	**-16.654146**	**-16.654146**	**-16.333058**	**-17.192692**	**-13.885892**
+2.85	**31.649189**	**27.829232**	**27.829232**	**22.827116**	**23.111998**	**21.290475**	**22.411026**	**22.307843**
-2.9	**-20.753085**	**-24.006978**	**-24.709539**	**-17.677043**	**-21.355423**	**-17.926541**	**-18.942805**	**-14.327126**
+2.9	**18.821970**	**14.734539**	**14.782455**	**11.754758**	**11.754758**	**11.160035**	**11.752544**	**13.370840**
-2.95	**-26.028157**	**-28.141967**	**-29.919619**	**-23.673471**	**-28.069514**	**-20.531289**	**-21.794873**	**-14.768361**
+2.95	**7.854423**	**6.136268**	**6.136268**	**4.888780**	**5.063406**	**4.663564**	**4.909014**	**5.423352**
-3	**-33.232970**	**-45.157275**	**-46.055945**	**-41.939147**	**-45.564142**	**-33.959795**	**-35.825263**	**-23.411907**
+3	**1.134478**	**0.918462**	**0.918462**	**0.735030**	**0.735565**	**0.788291**	**0.829780**	**0.577615**
(Span 3) -4	**-33.232970**	**-45.157275**	**-46.055945**	**-41.939147**	**-45.564142**	**-33.959795**	**-35.825263**	**-23.411907**
+4	**1.134478**	**0.918462**	**0.918462**	**0.735030**	**0.735565**	**0.788291**	**0.829780**	**0.577615**
-3.05	**-30.962392**	**-41.279024**	**-41.279024**	**-35.988224**	**-37.776823**	**-31.372673**	**-33.023867**	**-22.241312**
+3.05	**9.319048**	**6.957760**	**7.047821**	**5.643252**	**5.872698**	**5.075584**	**5.342720**	**5.956969**
-3.1	**-29.332792**	**-39.106444**	**-39.106444**	**-34.094107**	**-35.788569**	**-29.721480**	**-31.285769**	**-21.070716**
+3.1	**18.404557**	**14.024926**	**14.089240**	**12.138865**	**12.687491**	**10.771399**	**11.338315**	**12.525884**
-3.15	**-27.703193**	**-36.933864**	**-36.933864**	**-32.199990**	**-33.800315**	**-28.070287**	**-29.547670**	**-19.900121**
+3.15	**27.578526**	**27.335955**	**27.335955**	**22.825307**	**23.464315**	**21.219429**	**22.336241**	**19.152671**
-3.2	**-26.073593**	**-34.761283**	**-34.761283**	**-30.305873**	**-31.812061**	**-26.419093**	**-27.809572**	**-18.729526**
+3.2	**36.490982**	**39.556983**	**39.556983**	**31.846732**	**31.846732**	**30.561719**	**32.170231**	**25.619611**
-3.25	**-24.443994**	**-32.588703**	**-32.588703**	**-28.411756**	**-29.823807**	**-24.767900**	**-26.071474**	**-17.558930**
+3.25	**44.863943**	**50.037846**	**50.037846**	**40.219845**	**40.610089**	**38.518471**	**40.545759**	**31.727115**
-3.3	**-22.814394**	**-30.416123**	**-30.416123**	**-26.517639**	**-27.835554**	**-23.116707**	**-24.333375**	**-16.388335**
+3.3	**52.494084**	**58.503618**	**58.503618**	**46.973729**	**46.973729**	**45.189977**	**47.568396**	**37.293730**
-3.35	**-21.184794**	**-28.243542**	**-28.243542**	**-24.623522**	**-25.847300**	**-21.465513**	**-22.595277**	**-15.217740**
+3.35	**59.154945**	**64.717920**	**64.717920**	**51.919851**	**51.919851**	**49.668808**	**52.282956**	**42.156087**
-3.4	**-19.555195**	**-26.070962**	**-26.070962**	**-22.729404**	**-23.859046**	**-19.814320**	**-20.857179**	**-14.047144**
+3.4	**64.645317**	**68.482954**	**68.482954**	**54.900534**	**54.900534**	**52.493423**	**55.256234**	**46.169055**
-3.45	**-17.925595**	**-23.898382**	**-23.898382**	**-20.835287**	**-21.870792**	**-18.163126**	**-19.119080**	**-12.876549**
+3.45	**68.788682**	**69.698938**	**69.698938**	**57.737931**	**58.573170**	**53.324086**	**56.130617**	**49.205529**
-3.5	**-16.295996**	**-21.725802**	**-21.725802**	**-18.941170**	**-19.882538**	**-16.511933**	**-17.380982**	**-11.705954**
+3.5	**71.807182**	**68.066773**	**68.066773**	**58.520734**	**60.248394**	**52.060974**	**54.801025**	**51.156577**
-3.55	**-14.666396**	**-19.553221**	**-19.553221**	**-17.047053**	**-17.894284**	**-14.860740**	**-15.642884**	**-10.535358**
+3.55	**72.487212**	**67.510795**	**67.510795**	**57.262710**	**59.577585**	**51.429481**	**54.136295**	**51.931387**
-3.6	**-13.036797**	**-17.380641**	**-17.380641**	**-15.152936**	**-15.906030**	**-13.209546**	**-13.904786**	**-9.364763**

+3.6	**71.828561**	**69.746285**	**69.746285**	**55.814851**	**55.850772**	**53.181723**	**55.980761**	**51.457291**
-3.65	**-11.407197**	**-15.208061**	**-15.208061**	**-13.258819**	**-13.917776**	**-11.558353**	**-12.166687**	**-8.194167**
+3.65	**69.352246**	**69.824886**	**69.824886**	**55.884424**	**56.284708**	**53.293423**	**56.098340**	**49.679665**
-3.7	**-9.777597**	**-13.035481**	**-13.035481**	**-11.364702**	**-11.929523**	**-9.907159**	**-10.428589**	**-7.023572**
+3.7	**65.247877**	**67.556299**	**67.556299**	**54.076198**	**54.076198**	**51.938563**	**54.672172**	**46.562207**
-3.75	**-8.147998**	**-10.862900**	**-10.862900**	**-9.470585**	**-9.941269**	**-8.255966**	**-8.690491**	**-5.852977**
+3.75	**58.628132**	**62.788662**	**62.788662**	**50.387083**	**50.387083**	**48.127115**	**50.660121**	**42.086582**
-3.8	**-6.518398**	**-8.690320**	**-8.690320**	**-7.576468**	**-7.953015**	**-6.604773**	**-6.952392**	**-4.682381**
+3.8	**50.499996**	**55.587002**	**55.587002**	**44.630314**	**44.630314**	**42.630593**	**44.874308**	**36.252629**
-3.85	**-4.888799**	**-6.517740**	**-6.517740**	**-5.682351**	**-5.964761**	**-4.953579**	**-5.214294**	**-3.511786**
+3.85	**40.512312**	**45.760892**	**45.760892**	**37.263312**	**37.720328**	**35.173297**	**37.024523**	**29.078314**
-3.9	**-3.259199**	**-4.345159**	**-4.345159**	**-3.788233**	**-3.976507**	**-3.302386**	**-3.476196**	**-2.341191**
+3.9	**28.713426**	**33.280806**	**33.280806**	**27.463763**	**27.966994**	**25.515764**	**26.858699**	**20.599743**
-3.95	**-1.629600**	**-2.172579**	**-2.172579**	**-1.894116**	**-1.988253**	**-1.651193**	**-1.738097**	**-1.170595**
+3.95	**15.214137**	**17.984258**	**17.984258**	**15.062931**	**15.425826**	**13.781819**	**14.507178**	**10.871073**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 10' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-1.629600	-1.939541	-1.806058	-1.955108	-2.085448	-1.988068
+0.05	15.250122	14.675903	14.468532	16.303105	17.413766	15.501154
-0.1	-3.259199	-3.879082	-3.612117	-3.910216	-4.170897	-3.976136
+0.1	28.856240	27.232110	26.593278	30.174664	32.232781	28.104298
-0.15	-4.888799	-5.818624	-5.418175	-5.865323	-6.256345	-5.964204
+0.15	40.717169	36.876474	36.681457	41.583033	44.420956	37.905337
-0.2	-6.518398	-7.758165	-7.224234	-7.820431	-8.341793	-7.952272
+0.2	50.757196	44.818084	44.428548	50.532272	53.980743	45.031657
-0.25	-8.147998	-9.697706	-9.030292	-9.775539	-10.427242	-9.940340
+0.25	58.926049	49.877719	49.937079	57.064562	60.955321	50.863137
-0.3	-9.777597	-11.637247	-10.836351	-11.730647	-12.512690	-11.928408
+0.3	65.198929	53.625138	53.317120	61.248406	65.418085	54.574541
-0.35	-11.407197	-13.576788	-12.642409	-13.685755	-14.598138	-13.916476
+0.35	69.576479	55.378572	54.695064	63.190601	67.483290	56.260906
-0.4	-13.036797	-15.516329	-14.448468	-15.640862	-16.683587	-15.904544
+0.4	72.086431	55.263139	54.249200	63.033468	67.303609	56.174010
-0.45	-14.666396	-17.455871	-16.254526	-17.595970	-18.769035	-17.892611
+0.45	72.783600	57.567552	53.518013	60.954216	65.069508	59.775879
-0.5	-16.295996	-19.395412	-18.060585	-19.551078	-20.854483	-19.880679
+0.5	71.739931	58.637931	54.308228	61.414223	65.740871	60.702541
-0.55	-17.925595	-21.334953	-19.866643	-21.506186	-22.939932	-21.868747
+0.55	69.057831	57.361710	52.841518	62.939845	67.376808	59.084206
-0.6	-19.555195	-23.274494	-21.672701	-23.461294	-25.025380	-23.856815
+0.6	64.867629	54.511153	51.425961	61.993443	66.365299	55.273205
-0.65	-21.184794	-25.214035	-23.478760	-25.416401	-27.110828	-25.844883
+0.65	59.324024	51.682069	50.445794	58.692387	62.829997	52.302579
-0.7	-22.814394	-27.153577	-25.284818	-27.371509	-29.196276	-27.832951
+0.7	52.601055	46.912567	47.379460	53.165369	56.911449	47.350764
-0.75	-24.443994	-29.093118	-27.090877	-29.326617	-31.281725	-29.821019
+0.75	44.902865	40.308086	41.911065	45.588759	48.799401	40.572151
-0.8	-26.073593	-31.032659	-28.896935	-31.281725	-33.367173	-31.809087
+0.8	36.459037	32.031254	34.535528	36.175085	38.722576	32.348022
-0.85	-27.703193	-32.972200	-30.702994	-33.236833	-35.452621	-33.797155
+0.85	27.524608	23.011314	25.368432	25.171788	26.947520	24.051595
-0.9	-29.332792	-34.911741	-32.509052	-35.191940	-37.538070	-35.785223
+0.9	18.380092	13.040298	14.309527	12.829059	13.744320	13.307248
-0.95	-30.962392	-36.851283	-36.786655	-37.836286	-40.502559	-37.773291
+0.95	9.331472	6.358462	6.997231	6.075993	6.481059	6.135667
-1	-33.231945	-45.726446	-43.006017	-41.635123	-45.444852	-45.526077
+1	1.159391	0.898805	0.813528	0.941217	0.959759	0.839351
(Span 2) -2	-33.231945	-45.726446	-43.006017	-41.635123	-45.444852	-45.526077
+2	1.159391	0.898805	0.813528	0.941217	0.959759	0.839351
-2.05	-26.026229	-28.373555	-28.670680	-25.364382	-27.632369	-26.609798
+2.05	7.854424	4.909015	5.428436	5.449288	5.805852	4.908023
-2.1	-20.760882	-18.361204	-20.142814	-21.667122	-23.364340	-19.473521
+2.1	18.821980	11.772053	13.238919	13.177028	14.055496	11.746673
-2.15	-20.760394	-17.720753	-17.071480	-18.745923	-20.534602	-17.205299
+2.15	31.649186	22.388266	23.484724	25.217599	26.625923	23.467305
-2.2	-20.759907	-17.397627	-16.969286	-17.594549	-19.542712	-16.418738
+2.2	40.634787	35.573815	34.965242	37.679761	40.217695	36.793569

-2.25	**-20.759420**	**-17.074502**	**-16.893980**	**-16.443176**	**-18.550822**	**-15.632177**
+2.25	**49.248819**	**45.536838**	**44.308301**	**48.009434**	**51.210063**	**46.414374**
-2.3	**-20.758933**	**-16.751376**	**-16.822586**	**-15.291802**	**-17.558932**	**-14.900182**
+2.3	**59.147451**	**53.263250**	**53.276977**	**58.050431**	**61.920460**	**54.345639**
-2.35	**-20.758445**	**-16.428250**	**-16.751191**	**-14.140428**	**-16.669287**	**-14.220016**
+2.35	**66.156241**	**59.933610**	**59.146821**	**65.176229**	**69.553317**	**61.350454**
-2.4	**-20.757958**	**-16.138079**	**-16.679797**	**-12.989054**	**-15.792629**	**-13.546181**
+2.4	**68.501771**	**66.205108**	**61.554087**	**68.149026**	**72.716936**	**67.653105**
-2.45	**-20.757471**	**-15.874737**	**-16.617225**	**-11.837681**	**-14.915971**	**-12.956616**
+2.45	**72.798370**	**71.267767**	**66.031291**	**69.107476**	**73.714641**	**72.722838**
-2.5	**-20.756984**	**-15.612109**	**-16.576446**	**-10.686998**	**-14.163034**	**-12.426872**
+2.5	**76.032516**	**73.813810**	**68.195904**	**69.122290**	**74.732815**	**75.242389**
-2.55	**-20.756496**	**-15.875058**	**-16.617241**	**-11.838446**	**-14.918093**	**-12.957135**
+2.55	**72.798380**	**71.251394**	**66.029013**	**69.113350**	**73.720907**	**72.706703**
-2.6	**-20.756009**	**-16.138006**	**-16.679756**	**-12.989895**	**-15.794003**	**-13.550885**
+2.6	**68.520445**	**66.201041**	**61.553618**	**68.130531**	**72.697220**	**67.649766**
-2.65	**-20.755522**	**-16.429797**	**-16.751093**	**-14.141343**	**-16.669914**	**-14.226659**
+2.65	**66.098630**	**59.929245**	**59.142760**	**65.152222**	**69.527710**	**61.360485**
-2.7	**-20.755035**	**-16.752804**	**-16.822430**	**-15.292791**	**-17.562592**	**-14.902434**
+2.7	**59.147462**	**53.258845**	**53.274519**	**58.035615**	**61.904656**	**54.341087**
-2.75	**-20.754547**	**-17.075811**	**-16.893767**	**-16.444239**	**-18.554069**	**-15.627076**
+2.75	**49.329145**	**45.543756**	**44.308100**	**48.011429**	**51.212191**	**46.421637**
-2.8	**-20.754060**	**-17.398818**	**-16.969559**	**-17.595688**	**-19.545545**	**-16.407477**
+2.8	**40.634787**	**35.592157**	**34.959718**	**37.699223**	**40.238467**	**36.795201**
-2.85	**-20.753573**	**-17.721825**	**-17.071719**	**-18.747136**	**-20.537021**	**-17.195866**
+2.85	**31.649189**	**22.364544**	**23.479857**	**25.248178**	**26.594869**	**23.480211**
-2.9	**-20.753085**	**-18.360479**	**-20.142761**	**-21.664880**	**-23.362123**	**-19.471765**
+2.9	**18.821970**	**11.791603**	**13.236914**	**13.163572**	**14.041143**	**11.747411**
-2.95	**-26.028157**	**-28.373499**	**-28.670466**	**-25.362518**	**-27.629750**	**-26.607388**
+2.95	**7.854423**	**4.908557**	**5.429927**	**5.459414**	**5.768077**	**4.897320**
-3	**-33.232970**	**-45.726984**	**-43.005895**	**-41.633501**	**-45.439931**	**-45.521399**
+3	**1.134478**	**0.897446**	**0.813219**	**0.940008**	**0.958759**	**0.839888**
(Span 3) -4	**-33.232970**	**-45.726984**	**-43.005895**	**-41.633501**	**-45.439931**	**-45.521399**
+4	**1.134478**	**0.897446**	**0.813219**	**0.940008**	**0.958759**	**0.839888**
-3.05	**-30.962392**	**-36.849748**	**-36.786201**	**-37.836348**	**-40.502194**	**-37.772285**
+3.05	**9.319048**	**6.337647**	**6.993445**	**6.082677**	**6.488189**	**6.171619**
-3.1	**-29.332792**	**-34.910287**	**-32.509498**	**-35.190639**	**-37.536681**	**-35.784270**
+3.1	**18.404557**	**13.018167**	**14.305484**	**12.834463**	**13.721566**	**13.342034**
-3.15	**-27.703193**	**-32.970827**	**-30.703415**	**-33.235603**	**-35.451310**	**-33.796255**
+3.15	**27.578526**	**22.982548**	**25.364966**	**25.182214**	**26.958924**	**24.081110**
-3.2	**-26.073593**	**-31.031367**	**-28.897332**	**-31.280568**	**-33.365939**	**-31.808240**
+3.2	**36.490982**	**32.010796**	**34.531484**	**36.217188**	**38.767770**	**32.246396**
-3.25	**-24.443994**	**-29.091906**	**-27.091248**	**-29.325532**	**-31.280568**	**-29.820225**
+3.25	**44.863943**	**40.284180**	**41.906458**	**45.627826**	**48.841357**	**40.782191**
-3.3	**-22.814394**	**-27.152446**	**-25.285165**	**-27.370497**	**-29.195196**	**-27.832210**
+3.3	**52.494084**	**46.896979**	**47.381593**	**53.199997**	**56.948655**	**47.376630**
-3.35	**-21.184794**	**-25.212985**	**-23.479082**	**-25.415461**	**-27.109825**	**-25.844195**
+3.35	**59.154945**	**51.704751**	**50.449501**	**58.721359**	**62.861142**	**52.327305**
-3.4	**-19.555195**	**-23.273525**	**-21.672999**	**-23.460426**	**-25.024454**	**-23.856180**
+3.4	**64.645317**	**54.528283**	**51.428543**	**62.015852**	**66.389397**	**55.292368**
-3.45	**-17.925595**	**-21.334064**	**-19.866915**	**-21.505390**	**-22.939083**	**-21.868165**
+3.45	**68.788682**	**57.333577**	**52.845922**	**62.954887**	**67.392993**	**59.116004**
-3.5	**-16.295996**	**-19.394604**	**-18.060832**	**-19.550354**	**-20.853711**	**-19.880150**
+3.5	**71.807182**	**58.630631**	**54.311821**	**61.421223**	**65.748423**	**60.728637**
-3.55	**-14.666396**	**-17.455143**	**-16.254749**	**-17.595319**	**-18.768340**	**-17.892135**
+3.55	**72.487212**	**57.584432**	**53.520713**	**60.980940**	**65.098163**	**59.795094**
-3.6	**-13.036797**	**-15.515683**	**-14.448665**	**-15.640283**	**-16.682969**	**-15.904120**

+3.6	**71.828561**	**55.251194**	**54.246298**	**63.090577**	**67.364667**	**56.123205**
-3.65	**-11.407197**	**-13.576222**	**-12.642582**	**-13.685248**	**-14.597598**	**-13.916105**
+3.65	**69.352246**	**55.362207**	**54.691524**	**63.242517**	**67.538801**	**56.365023**
-3.7	**-9.777597**	**-11.636762**	**-10.836499**	**-11.730212**	**-12.512226**	**-11.928090**
+3.7	**65.247877**	**53.603695**	**53.312749**	**61.294182**	**65.467028**	**54.553026**
-3.75	**-8.147998**	**-9.697302**	**-9.030416**	**-9.775177**	**-10.426855**	**-9.940074**
+3.75	**58.628132**	**49.850664**	**49.931797**	**57.103432**	**60.996876**	**50.865732**
-3.8	**-6.518398**	**-7.757841**	**-7.224332**	**-7.820141**	**-8.341484**	**-7.952059**
+3.8	**50.499996**	**44.789943**	**44.422361**	**50.563778**	**54.014415**	**45.058295**
-3.85	**-4.888799**	**-5.818381**	**-5.418249**	**-5.865106**	**-6.256113**	**-5.964044**
+3.85	**40.512312**	**36.895593**	**36.674159**	**41.606794**	**44.446338**	**37.930620**
-3.9	**-3.259199**	**-3.878920**	**-3.612166**	**-3.910070**	**-4.170741**	**-3.976029**
+3.9	**28.713426**	**27.248676**	**26.584869**	**30.190495**	**32.249685**	**28.121680**
-3.95	**-1.629600**	**-1.939460**	**-1.806083**	**-1.955035**	**-2.085370**	**-1.988014**
+3.95	**15.214137**	**14.684372**	**14.469624**	**16.310954**	**17.422141**	**15.510047**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-8.131926979**	***-13.336704***	***-8.595423***	**-9.874814133**	**-9.874814133**	**-9.752133964**	**-10.63446126**	**-7.505166999**	**-7.900175788**	**-4.84134649**
End Shear	**76.96868266**	***106.866393***	***76.884062***	**81.88918305**	**81.88918305**	**76.20194701**	**80.78363296**	**62.42331702**	**65.71972188**	**44.3555**
-0.05	**-10.18809751**	***-13.356911***	***-8.613609***	**-9.874814133**	**-9.874814133**	**-9.752133964**	**-10.63446126**	**-7.960948818**	**-8.379946124**	**-5.633333562**
+0.05	**69.05765767**	***96.345111***	***68.075029***	**74.63823954**	**74.63823954**	**67.66839069**	**71.78061992**	**56.80308561**	**59.80287167**	**40.92578315**
-0.1	**-15.67790987**	***-13.459318***	***-9.348560***	**-9.874814133**	**-9.874814133**	**-9.752133964**	**-10.63446126**	**-10.14226391**	**-10.67606728**	**-6.732382696**
+0.1	**63.47257751**	***86.582271***	***62.336984***	**66.83071507**	**66.83071507**	**60.07456451**	**63.4146995**	**51.25671345**	**53.96342915**	**37.39948677**
-0.15	**-18.47956457**	***-13.542081***	***-12.879060***	**-9.874814133**	**-9.874814133**	**-9.752133964**	**-10.63446126**	**-11.21082631**	**-11.8008698**	**-9.020809803**
+0.15	**60.63544855**	***81.726583***	***59.369600***	**63.13426286**	**63.13426286**	**56.31563744**	**59.28581367**	**48.47703876**	**51.03677691**	**35.60987222**
-0.2	**-24.16348497**	***-14.779617***	***-19.843096***	**-12.47942029**	**-13.20471005**	**-11.12890316**	**-14.40723591**	**-13.3096851**	**-14.01019484**	**-12.30597064**
+0.2	**54.90491739**	***72.117701***	***53.443088***	**55.89997526**	**55.89997526**	**48.91877187**	**51.18617822**	**42.93771269**	**45.20441315**	**31.99716817**
-0.25	**-27.0325914**	***-17.149696***	***-23.273374***	**-14.56084341**	**-15.36572419**	**-12.49806108**	**-16.36614701**	**-14.34235204**	**-15.09721267**	**-13.94102366**
+0.25	**52.02466899**	***67.384756***	***50.495820***	**52.31568619**	**52.31568619**	**45.29882157**	**47.23540831**	**40.19121456**	**42.31257325**	**30.18185707**
-0.3	**-32.79220999**	***-23.894898***	***-29.936294***	**-18.62963907**	**-19.55760099**	**-15.66771669**	**-20.03390116**	**-17.26154662**	**-18.17004908**	**-17.18363936**
+0.3	**46.26708885**	***58.112127***	***44.662534***	**45.25441251**	**45.25441251**	**38.26083669**	**39.58197008**	**34.65685769**	**36.48533703**	**26.74288541**
-0.35	**-35.66956834**	***-28.447631***	***-33.165254***	**-21.70539631**	**-21.97866141**	**-18.70767266**	**-21.74522881**	**-19.59932625**	**-20.63086973**	**-18.78620865**
+0.35	**43.40291535**	***53.592401***	***41.788114***	**41.79407241**	**41.79407241**	**34.86079426**	**35.89928501**	**31.96833153**	**33.6508753**	**25.46906512**
-0.4	**-41.38649199**	***-37.676258***	***-39.408685***	**-29.71559803**	**-30.24274979**	**-24.74790662**	**-26.30494911**	**-24.31740584**	**-25.59726931**	**-20.76651243**
+0.4	**37.9670209**	***44.835654***	***35.978553***	**35.055591**	**35.055591**	**28.34361428**	**28.8719589**	**26.88101759**	**28.29580799**	**22.10997844**
-0.45	**-44.21290347**	***-42.331840***	***-42.419209***	**-33.66683834**	**-34.29974214**	**-27.73760586**	**-29.34903537**	**-26.79525713**	**-28.20553383**	**-22.32970131**
+0.45	**35.28160141**	***40.618298***	***33.266930***	**31.79410062**	**31.79410062**	**25.41617947**	**25.5661225**	**24.43940445**	**25.72568889**	**20.45792196**
-0.5	**-49.76872675**	***-51.674355***	***-48.207705***	**-41.42854573**	**-42.23342651**	**-33.62973441**	**-35.30314879**	**-32.06947564**	**-33.75734278**	**-25.38938083**
+0.5	**29.98538717**	***32.554395***	***27.995329***	**25.52819149**	**25.52819149**	**20.40298309**	**20.54392835**	**19.72944075**	**20.76783237**	**17.25142722**
-0.55	**-52.48498815**	***-56.340680***	***-50.981467***	**-45.22578659**	**-46.09803421**	**-36.52156073**	**-38.20440201**	**-34.57692099**	**-36.39675893**	**-27.9824475**
+0.55	**27.38946008**	***28.727216***	***25.446837***	**22.54042297**	**22.54042297**	**18.01269963**	**18.14854241**	**17.48084733**	**18.40089193**	**15.681061**
-0.6	**-57.62759042**	***-65.611558***	***-56.277186***	**-52.6200625**	**-53.59265699**	**-42.17031335**	**-45.74853936**	**-39.76450534**	**-41.96013282**	**-30.82837603**
+0.6	**22.33915643**	***21.530442***	***20.552814***	**16.89686461**	**16.89686461**	**13.49807264**	**13.49807264**	**13.35358535**	**14.05640563**	**12.64958741**
-0.65	**-60.02470028**	***-70.195198***	***-58.794664***	**-56.20386847**	**-57.2105849**	**-45.86619255**	**-50.17681155**	**-42.47278827**	**-44.81445998**	**-32.19898157**
+0.65	**19.89964443**	***17.647576***	***18.218519***	**14.25771279**	**14.25771279**	**11.38705742**	**11.47568192**	**11.40674848**	**12.00710366**	**11.19625522**
-0.7	**-64.46037979**	***-79.206234***	***-63.742285***	**-63.11177767**	**-64.15749036**	**-53.31218151**	**-58.81616185**	**-47.70377736**	**-50.32469447**	**-34.50024373**
+0.7	**15.23462116**	***11.868540***	***13.803040***	**9.428918242**	**9.428918242**	**7.509751109**	**7.509751109**	**7.865643344**	**8.279624572**	**8.433858457**
-0.75	**-66.49488886**	***-83.612418***	***-66.374745***	**-66.42266338**	**-67.47439253**	**-56.96414961**	**-63.01181863**	**-50.21581868**	**-52.96949669**	**-35.7594349**
+0.75	**13.03345601**	***10.052742***	***11.341372***	**7.98407336**	**7.98407336**	**6.375841696**	**6.375841696**	**6.756708109**	**7.112324325**	**7.13257318**
-0.8	**-70.18709353**	***-92.172736***	***-70.488468***	**-72.72526315**	**-73.76491744**	**-64.08105959**	**-71.11652172**	**-55.0063239**	**-58.01069893**	**-38.18178363**
+0.8	**8.931404071**	***6.699840***	***7.524687***	**5.264554932**	**5.264554932**	**4.260683861**	**4.260683861**	**4.756779096**	**5.00713589**	**4.709262652**
-0.85	**-71.84072891**	***-96.305364***	***-72.392483***	**-75.70376161**	**-76.72646672**	**-67.52800946**	**-75.01016711**	**-57.27412537**	**-60.39599636**	**-39.37734837**
+0.85	**7.043672375**	***5.171215***	***5.782304***	**4.050499231**	**4.050499231**	**3.286102381**	**3.286102381**	**3.821700163**	**4.022842276**	**3.595025803**
-0.9	**-74.75291145**	***-104.221427***	***-75.881921***	**-81.28210815**	**-82.25194698**	**-74.15392766**	**-82.44147312**	**-61.5281888**	**-64.86824728**	**-41.56857519**
+0.9	**3.627688913**	***2.222838***	***2.750892***	**1.851174896**	**1.851174896**	**1.508059653**	**1.508059653**	**2.101948324**	**2.212577184**	**1.623078342**
-0.95	**-76.36918705**	***-107.983059***	***-77.504081***	**-83.86875108**	**-84.80381483**	**-77.31489752**	**-85.96371734**	**-63.50378692**	**-66.94409667**	**-42.55645568**
+0.95	**2.113157688**	***1.286630***	***1.279579***	**0.964620878**	**0.964620878**	**0.898380969**	**0.964877799**	**1.325530728**	**1.395295503**	**0.77607603**
-1	**-79.24878093**	***-115.058652***	***-81.229173***	**-88.60392724**	**-89.45561253**	**-83.28788557**	**-92.58287069**	**-67.12544531**	**-70.74747155**	**-44.29730635**
+1	**8.29E-01**	***1.276197***	***0.846849***	**9.65E-01**	**9.65E-01**	**8.98E-01**	**9.65E-01**	**7.33E-01**	**7.72E-01**	**4.93E-01**
(Span 2) -2	**-4.94E+00**	***-7.614982***	***-5.053093***	**-5.76E+00**	**-5.76E+00**	**-5.36E+00**	**-5.76E+00**	**-4.37E+00**	**-4.60E+00**	**-2.94E+00**
+2	**8.89E+01**	***115.616712***	***90.346527***	**91.27980166**	**92.82302658**	**85.69350881**	**92.99595881**	**68.3626429**	**72.11975917**	**43.58469767**
-2.05	**-5.57E+00**	***-7.623223***	***-5.060510***	**-5.76E+00**	**-5.76E+00**	**-5.36E+00**	**-5.76E+00**	**-4.79E+00**	**-5.05E+00**	**-2.94E+00**
+2.05	**8.57E+01**	***112.548317***	***87.024469***	**88.49208519**	**89.79794462**	**82.81648357**	**90.28452771**	**66.34376869**	**69.96974826**	**42.84564487**
-2.1	**-8.034394159**	***-7.668237***	***-5.101022***	**-5.755828495**	**-5.755828495**	**-5.360579443**	**-5.757361532**	**-6.120483653**	**-6.442614372**	**-3.443209778**
+2.1	**79.32940162**	***106.023045***	***80.307243***	**82.66961166**	**83.53486453**	**76.62415459**	**84.53556743**	**62.10451551**	**65.46126353**	**41.15746104**
-2.15	**-10.96918689**	***-7.757127***	***-7.160826***	**-5.755828495**	**-5.755828495**	**-5.360579443**	**-5.757361532**	**-7.446379459**	**-7.838294167**	**-5.323279126**
+2.15	**72.86895007**	***99.055990***	***73.571019***	**76.38070417**	**76.9315101**	**70.45069886**	**78.40255075**	**57.65198109**	**60.7337556**	**39.21656538**
-2.2	**-14.31857222**	***-8.394352***	***-10.184175***	**-6.538010675**	**-6.538010675**	**-6.187672586**	**-6.838765319**	**-8.790738499**	**-9.253408946**	**-7.449600557**
+2.2	**66.44468787**	***91.737844***	***66.909274***	**71.27382115**	**71.87871419**	**64.22407089**	**71.94636761**	**53.23271729**	**56.09876118**	**37.05580131**

-2.25	-18.02698788	-12.019291	-13.579158	-9.128051167	-9.128051167	-8.418982431	-9.264796502	-10.79513595	-11.363301	-9.695013798
+2.25	62.15386448	84.158465	62.197120	65.83555847	66.47097719	58.1706618	65.22791153	50.01054403	52.70948725	34.70803092
-2.3	-22.03887025	-17.304797	-17.414807	-13.31831149	-13.31831149	-11.19513889	-11.65228866	-13.49166475	-14.20175237	-12.04107366
+2.3	58.54113652	76.406875	57.935702	60.11856623	60.75507084	52.04251556	58.30807574	44.65961111	47.07673057	32.20612055
-2.35	-26.29865892	-23.202820	-22.874539	-18.75859651	-18.75859651	-15.52199332	-15.89373477	-16.48515607	-17.35279586	-14.46930508
+2.35	54.58868083	68.571271	53.657716	54.17550417	54.77777646	45.91567105	51.24775879	40.12883537	42.30319505	29.58291256
-2.4	-30.75078462	-29.631849	-28.456159	-23.84502207	-23.84502207	-20.00841006	-20.6595028	-19.76678018	-20.80713703	-16.96126341
+2.4	50.30543787	60.738997	49.142909	48.05902991	48.58587365	39.86606635	44.10784945	35.53715016	37.41436124	26.8740615
-2.45	-35.33968815	-36.509548	-33.849126	-29.23277797	-29.23277797	-24.60971396	-25.45552803	-23.32776316	-24.55554017	-19.49848021
+2.45	45.32489649	52.120771	44.401226	41.8217741	42.2261143	33.97107776	36.94924311	31.38407428	33.07769234	24.31012032
-2.5	-40.00980469	-43.752742	-39.041116	-35.54073466	-35.77045469	-29.2837733	-30.24909543	-27.26210271	-28.69695022	-22.06248536
+2.5	40.46037424	43.721088	39.441803	35.51640083	35.74528429	29.26652192	30.23147685	27.25116368	28.68543545	22.0594739
-2.55	-44.70557222	-51.428261	-44.415182	-41.84599261	-42.25094753	-33.99100115	-36.97548469	-31.39702923	-33.09137542	-24.31314187
+2.55	35.80970374	36.479089	33.833411	29.21177719	29.21177719	24.59269767	25.43787565	23.40765391	24.63963569	19.49548655
-2.6	-49.34250999	-60.238051	-49.155968	-48.08292639	-48.61018596	-39.88806599	-44.13420122	-35.54875167	-37.42791681	-26.877072
+2.6	31.23377862	29.602983	28.439609	23.82512068	23.82512068	19.99176958	20.64192151	19.75756161	20.79743328	16.95832398
-2.65	-53.69509184	-68.604108	-53.669820	-54.19888459	-54.80139693	-45.93810032	-51.273967	-40.14145694	-42.31649898	-29.58606906
+2.65	27.2293684	23.175945	23.233319	18.74006783	18.74006783	15.50590235	15.87636411	16.47672635	17.34392248	14.46644129
-2.7	-57.71878219	-76.439315	-57.946844	-60.14121406	-60.7778057	-52.06511461	-58.3339404	-44.67188706	-47.08965917	-32.20916195
+2.7	22.52489231	17.280316	17.402943	13.84976986	13.84976986	11.1822172	11.64354668	13.48405146	14.19373838	12.03830009
-2.75	-62.17286064	-84.190105	-62.208838	-65.85724164	-66.49261741	-58.19312231	-65.25317686	-49.05374441	-51.70259191	-34.71092003
+2.75	18.50129288	11.997597	13.568538	9.113101569	9.113101569	8.410733082	9.255911057	10.78835848	11.35616682	9.69235432
-2.8	-65.50196945	-91.768289	-66.927568	-71.29436	-71.89910315	-64.24613318	-71.97083355	-53.24394004	-56.11056331	-37.05849205
+2.8	14.77116505	8.381712	10.174563	6.529297113	6.529297113	6.179593448	6.82974537	8.7870239	9.249498843	7.447073879
-2.85	-71.70070416	-99.084844	-73.589613	-76.39989403	-76.9504661	-70.18999173	-78.42596545	-57.66451309	-60.74704737	-39.21902064
+2.85	11.38918983	7.757084	7.152339	5.755798763	5.755798763	5.360494763	5.757095563	7.442735366	7.83445828	5.32091419
-2.9	-78.33437405	-106.049920	-80.325848	-82.69279278	-83.55959622	-76.36232986	-84.55772806	-62.11658521	-65.47408522	-41.15964913
+2.9	8.410049114	7.668194	5.100911	5.755798763	5.755798763	5.360494763	5.757095563	6.116850968	6.438790493	3.44164043
-2.95	-84.90443384	-112.572800	-87.042812	-88.51419305	-89.82179519	-82.556033	-90.30518051	-66.3551884	-69.98190023	-42.84752324
+2.95	5.888423779	7.623180	5.060399	5.755798763	5.755798763	5.360494763	5.757095563	4.791295121	5.043468549	2.944295361
-3	-91.30143317	-118.561967	-93.646219	-93.99062441	-95.78332576	-88.51941801	-96.32978751	-70.31384721	-74.19977382	-44.24978216
+3	4.945882563	7.614939	5.052982	5.755798763	5.755798763	5.360494763	5.757095563	4.374606611	4.604849064	2.944295361
(Span 3) -4	-0.828881763	-1.276190	-0.846831	-0.964615894	-0.964615894	-0.898366777	-0.964833225	-0.733141525	-0.771727921	-0.493435236
+4	77.3136694	111.571130	78.993964	86.29319792	87.18900502	80.34030947	89.32223815	65.36122742	68.89509274	43.46520078
-3.05	-1.700515097	-1.286623	-1.287540	-0.964615894	-0.964615894	-0.898366777	-0.964833225	-1.34786959	-1.418810094	-0.777906221
+3.05	76.22059117	107.953542	77.455084	83.84926268	84.78460897	77.29178674	85.93815485	63.49309051	66.93285857	42.55414795
-3.1	-4.763423027	-3.533214	-4.271164	-2.919502159	-2.919502159	-2.365036799	-2.365036799	-2.939965052	-3.094700054	-2.553217405
+3.1	73.62406	100.293003	74.182607	78.53663786	79.536079	70.86403325	78.76020587	59.43803871	62.67127044	40.5049285
-3.15	-6.485487311	-5.183963	-5.792505	-4.059289812	-4.059289812	-3.252491414	-3.252491414	-3.82657482	-4.027973495	-3.597504813
+3.15	72.12467195	96.271953	72.383149	75.68115864	76.70401315	67.50276925	74.98178273	57.26178482	60.38301757	39.37455062
-3.2	-10.27851094	-8.342802	-9.390912	-6.559241035	-6.559241035	-5.299299789	-5.299299789	-5.741874638	-6.044078567	-5.892534865
+3.2	68.73377335	87.902614	68.470904	69.60494995	70.65450742	60.53041637	67.08455559	52.63851353	55.51938894	36.97072313
-3.25	-12.33649551	-10.067875	-11.353483	-7.994506452	-7.994506452	-6.383823376	-6.383823376	-6.762320413	-7.118232013	-7.135514561
+3.25	66.84632446	83.575930	66.363204	66.39743921	67.44914416	56.93734797	62.98113837	50.2021243	52.95507973	35.75650763
-3.3	-16.74308516	-14.320298	-15.979902	-11.81516344	-11.81516344	-9.396392469	-9.396392469	-9.64474417	-10.15236228	-9.79291725
+3.3	62.69760783	74.692226	61.429319	59.67658988	60.70732647	49.58234849	54.5033634	45.10652665	47.58926153	33.5282277
-3.35	-19.08391978	-17.451741	-18.232123	-14.2770198	-14.2770198	-11.40183917	-11.40183917	-11.41698872	-12.01788287	-11.19958184
+3.35	60.44040144	70.156515	58.781013	56.17649329	57.18297191	45.83843733	50.1443585	42.45798093	44.79885539	32.19576798
-3.4	-24.03951615	-25.080272	-22.978541	-19.68184141	-19.6818414116869	-15.72513875	-15.7251387533511	-15.39188386	-16.2019830127371	-14.14934393
+3.4	55.57041993	60.950210	53.657041	48.92994066	49.85750006	39.34933837	41.2247911	37.16443854	39.12046162	29.41866086
-3.45	-26.61708535	-28.759424	-25.461597	-22.56263389	-22.56263389	-18.02969632	-18.16552574	-17.64278792	-18.5713557	-15.68468434
+3.45	52.96169793	56.300622	50.965804	45.19669679	46.06845259	36.50038474	38.18318897	34.7638963	36.59357506	27.97900293
-3.5	-31.93944134	-36.555843	-30.619272	-28.63934031	-28.63934031	-22.89124476	-23.0368903	-22.06605572	-23.22742707	-18.85679156
+3.5	47.53015746	46.960801	45.335973	37.54337301	38.26797904	30.67824619	32.32791325	29.66279105	31.22399057	25.0099154
-3.55	-34.67127957	-40.653838	-33.282498	-31.81860747	-31.81860747	-25.43492296	-25.58487088	-24.45254068	-25.7395165	-20.4858014

+3.55	***44.75481565***	***42.291282***	***42.401656***	***33.6365099***	***34.2686278282716***	***27.715666893762***	**29.32673245**	***27.27561991***	***28.71117885***	***23.48547958***
-3.6	***-40.55725396***	***-49.200922***	***-38.787789***	***-38.41741627***	**-38.41741627**	***-31.57576055***	**-32.35140162**	***-29.3870009***	***-30.93368515***	***-23.81023596***
+3.6	***39.20901385***	***33.004370***	***36.304619***	***25.69535721***	**26.10181554**	***21.71389948***	**23.78679003**	***21.93899944***	***23.09368362***	***20.36925458***
-3.65	***-43.70677789***	***-53.630450***	***-41.624996***	***-41.82029211***	**-41.82029211**	***-34.88525095***	**-35.92561311**	***-31.98257219***	***-33.66586547***	***-25.49790651***
+3.65	***36.26809408***	***28.407394***	***33.145903***	***21.67431337***	**21.94645893**	***18.6853174***	**21.7328349**	***19.5864557***	***20.61732179***	***18.78245958***
-3.7	***-49.14319755***	***-62.752134***	***-47.583512***	***-48.79142859***	**-48.79142859**	***-41.76887584***	**-43.39188862**	***-37.29855898***	***-39.26164103***	***-28.90465488***
+3.7	***30.54114229***	***19.527040***	***26.617898***	***16.59601311***	**17.46776891**	***13.77219736***	***18.22768738***	***15.35983248***	***16.16824471***	***15.56393474***
-3.75	***-52.02466677***	***-67.424432***	***-50.512349***	***-52.34305186***	**-52.34305186**	***-45.32507568***	***-47.26393966***	***-40.2061659***	***-42.3283159***	***-30.61596613***
+3.75	***27.6763542***	***17.293812***	***23.252348***	***14.5448868***	**15.34918221**	***12.48819117***	***16.35193268***	***14.67604031***	***15.44846348***	***13.93719957***
-3.8	***-57.7773714***	***-76.941982***	***-56.419460***	***-59.53674644***	**-59.53674644**	***-52.62115747***	***-55.23591179***	***-45.71702088***	***-48.13077042***	***-34.03502761***
+3.8	***21.97647732***	***13.646210***	***16.329983***	***10.35352881***	**10.98564674**	***9.751685345***	***12.34783733***	***12.26046061***	***12.90574801***	***10.66122716***
-3.85	***-60.8426701***	***-81.767077***	***-59.385988***	***-63.16217427***	**-63.16217427**	***-56.34307423***	***-59.31587357***	***-48.49228459***	***-51.05282915***	***-35.73498468***
+3.85	***18.76035879***	***13.542115***	***12.857090***	***9.874837991***	**9.874837991**	***9.751685345***	***10.63446951***	***11.20498512***	***11.79472118***	***9.016959268***
-3.9	***-66.45964204***	***-91.499079***	***-65.315250***	***-70.49119634***	**-70.49119634**	***-63.88971429***	***-67.61365312***	***-54.04952024***	***-56.90384513***	***-39.09632991***
+3.9	***12.91189453***	***13.397715***	***8.649197***	***9.874837991***	**9.874837991**	***9.751685345***	***10.63446951***	***9.053362349***	***9.529855104***	***6.510972103***
-3.95	***-69.22080683***	***-96.385533***	***-68.265952***	***-74.48177868***	**-74.48177868**	***-67.69641482***	***-71.8115077***	***-56.81829221***	***-59.81888157***	***-40.82542343***
+3.95	***9.528007064***	***13.356945***	***8.612505***	***9.874837991***	**9.874837991**	***9.751685345***	***10.63446951***	***7.954859244***	***8.373536047***	***5.631237068***
-5	***-77.28070165***	***-106.147911***	***-76.642622***	***-81.84790029***	**-81.84790029**	***-75.4112659***	***-80.25521152***	***-62.3032858***	***-65.59335809***	***-44.25160948***
+5	***8.131926979***	***13.336738***	***8.594318***	***9.874837991***	**9.874837991**	***9.751685345***	***10.63446951***	***7.504907392***	***7.899902517***	***4.841312328***

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-6.951822263	-6.951637669	-5.529654082	-4.514754257	-4.631428886	-7.744894962	-8.169714296	-8.533809171	-8.535027916
End Shear	57.64998487	57.81668522	46.16025373	36.70058314	43.78425369	61.79355909	63.91631034	63.20167621	63.57675225
-0.05	-6.951822263	-7.2458241	-5.529654082	-4.519986445	-4.631428886	-7.744894962	-8.169714296	-8.533809171	-8.632665423
+0.05	52.10213597	52.61109911	41.47739383	33.14752116	38.92149592	55.12626686	56.49392687	56.43732434	56.80564638
-0.1	-7.787755344	-8.899207182	-7.88158446	-6.46995529	-4.73410595	-7.744894962	-9.06851959	-10.04738066	-10.41107614
+0.1	46.99052937	47.47414687	37.21709731	29.88248002	36.1567004	49.16887623	49.83580301	49.77808791	50.13602221
-0.15	-9.36105445	-9.701610821	-9.308043167	-7.55829907	-6.855038793	-7.744894962	-10.24552612	-11.10316969	-11.38996534
+0.15	44.43154067	44.89972479	35.18844662	28.2490027	34.22420629	46.2109981	46.56676067	46.50875206	46.86015658
-0.2	-12.29616054	-11.44875101	-12.02038739	-9.645898442	-10.98148024	-10.19719255	-12.38889636	-12.99706474	-13.1461094
+0.2	39.33652539	39.76951589	31.13400173	24.99925283	30.95822624	40.37189007	40.48093968	40.61644246	40.73847837
-0.25	-13.66109067	-12.45690613	-13.30735662	-10.64603712	-12.98377726	-11.49367125	-13.36087524	-13.84279276	-13.93282557
+0.25	36.81222759	37.22589641	29.11879992	23.39059339	29.33010264	37.50465081	37.61090384	38.00433928	37.86260328
-0.3	-16.19348162	-15.12207237	-15.74558092	-12.56112122	-16.85849451	-13.87113806	-15.11943858	-15.35085334	-15.34719885
+0.3	31.83938845	32.08950584	25.13893599	20.22462582	26.0774667	31.90976328	32.00975748	32.13515842	32.24809409
-0.35	-17.47329351	-17.34052778	-16.89792143	-13.47686023	-18.72771376	-16.21582549	-16.51614137	-16.45270419	-16.48917666
+0.35	29.40257577	29.50096804	23.1848519	18.6748784	24.4602759	29.19610872	29.29265751	29.4141175	29.52351017
-0.4	-22.74922336	-22.01529179	-19.57727055	-15.22666857	-22.32184109	-21.38605519	-21.34922193	-21.29144882	-21.3293282
+0.4	24.65749381	24.60134717	19.37487936	15.60689921	21.26244223	23.97138253	24.06043089	24.17319205	24.27474265
-0.45	-25.35198696	-24.63586505	-21.60345495	-16.75593811	-24.04354088	-23.93953662	-23.75096745	-23.69681133	-23.73528253
+0.45	22.36095822	21.96233796	17.5295853	14.09615067	19.68912237	21.60375255	21.58419874	21.68080632	21.76781392
-0.5	-30.46624626	-29.35975021	-25.56971592	-19.90526632	-27.32818356	-28.96179249	-28.67185635	-28.63100092	-28.67471528
+0.5	17.94921675	17.43394214	13.9848752	11.20484343	16.6119713	17.34253563	17.32250447	17.41183663	17.49228996
-0.55	-32.96938822	-31.8126425	-27.50409681	-21.45180904	-28.88791379	-31.42196591	-31.2558413	-32.09907947	-31.26309852
+0.55	15.84574817	15.39487983	12.29603976	9.867492218	15.11546077	15.31079468	15.29068849	15.37607665	15.24983717
-0.6	-37.84684108	-36.58224783	-31.26105765	-24.47736759	-31.83418959	-36.21897235	-36.26215958	-37.15847967	-37.21183473
+0.6	11.87293797	11.60429708	9.111904738	7.351179776	12.2248697	11.47336174	11.45348313	11.53040608	11.374639
-0.65	-40.21280632	-38.8731405	-33.0779243	-25.95183205	-33.21752095	-38.54722159	-38.67773046	-40.14722865	-40.20063555
+0.65	10.01532903	9.824132631	8.070433348	6.179986305	10.83810756	9.678998803	9.659432865	9.731843896	9.583393408
-0.7	-44.77834839	-43.35585645	-36.57413126	-28.81265545	-35.79654492	-43.9612176	-43.98555911	-45.95386229	-46.00697595
+0.7	6.605383768	6.768930765	6.109628764	4.594246674	8.199953361	6.383288443	6.37144906	6.411664405	6.399589606
-0.75	-46.96957764	-45.53931502	-38.24776921	-30.19438458	-36.98902823	-46.77920662	-46.80429265	-48.76216595	-48.81493656
+0.75	5.607583708	5.800611747	5.183579877	3.875778116	6.955878765	5.419465442	5.407774751	5.397306638	5.434038939
-0.8	-51.14808948	-49.76956235	-41.43182035	-32.84881243	-39.17191426	-52.25226563	-52.27852061	-54.56741015	-55.69929559
+0.8	3.746386262	3.977587495	3.455115332	2.696106787	4.636036035	3.621581282	3.611449745	3.600402682	3.573957965
-0.85	-53.12702575	-51.80802145	-42.93651844	-34.11683983	-40.15910423	-54.89334164	-55.3807244	-57.37081054	-57.77166902
+0.85	2.888854379	3.269659115	2.658661163	2.079663616	3.567589255	2.793187024	2.833350911	2.812398451	2.795439928
-0.9	-56.84339404	-55.8017131	-45.75697565	-36.52252126	-41.91696958	-59.94960906	-61.5677543	-62.65141063	-64.1768432
+0.9	1.312097464	1.761406536	1.216237428	0.945002452	1.658865618	1.281850705	1.414332039	1.392077736	1.377008612
-0.95	-58.57248597	-57.67185768	-47.06701008	-37.65542848	-42.6844314	-62.3508016	-64.54559682	-65.58586135	-67.2203074
+0.95	0.679110363	1.135465399	0.57623572	0.437259895	0.772053945	0.724923598	0.724948534	0.757310473	0.748517967
-1	-61.75159316	-61.12590483	-49.47244757	-39.76932438	-44.47395155	-66.86432553	-70.22824982	-71.51233968	-73.06633952
+1	6.79E-01	6.79E-01	5.40E-01	4.34E-01	4.72E-01	7.25E-01	7.25E-01	7.28E-01	7.28E-01
(Span 2) -2	-4.05E+00	-4.05E+00	-3.22E+00	-2.59E+00	-2.82E+00	-4.33E+00	-4.33E+00	-4.34E+00	-4.34E+00
+2	6.10E+01	60.62874554	48.19600233	39.23401816	49.15389588	68.59694126	72.33815327	73.87175436	74.73581187
-2.05	-4.05E+00	-4.17E+00	-3.22E+00	-2.59E+00	-2.82E+00	-4.33E+00	-4.33E+00	-4.34E+00	-4.34E+00
+2.05	59.42679222	59.14246446	47.03401447	38.20970073	47.53470567	66.32896228	69.76508343	71.45455834	72.35580583
-2.1	-4.052206275	-5.232444767	-3.222751609	-2.604453896	-2.81601894	-4.325570894	-4.32571969	-4.344541303	-4.344208757
+2.1	56.44096915	55.92773615	44.64769269	36.02147284	44.19973706	61.48512834	64.49010551	65.9186929	67.29516089
-2.15	-4.236940344	-6.319073203	-3.98898626	-3.318536503	-3.571555099	-4.325570894	-5.003608118	-5.65722106	-5.842860199
+2.15	53.20794675	52.43164222	42.42480019	33.71588835	40.78284003	56.70705301	59.31017855	60.07130457	61.87671568
-2.2	-6.146380495	-7.608851961	-5.589108718	-4.57114286	-5.760995358	-5.406017563	-6.64830869	-7.126120116	-7.200738229
+2.2	49.75984137	48.70399213	39.74129033	31.42734609	36.80845948	51.99048956	53.99049363	53.97393737	55.93605672
-2.25	-8.073157732	-9.390209685	-7.774046127	-6.315966887	-7.895885529	-7.346443232	-8.120098044	-8.408244575	-8.400284613

+2.25	**46.12879206**	**44.79459014**	**36.9292432**	**29.05914396**	**34.87171609**	**47.29121683**	**48.60153869**	**49.19362232**	**50.59058568**
-2.3	**-10.53083804**	**-11.94591488**	**-9.95890699**	**-8.012118097**	**-10.19461293**	**-9.515868058**	**-10.925338**	**-10.90892792**	**-10.55723197**
+2.3	**42.34691635**	**40.75326155**	**34.00939852**	**26.62811536**	**32.74718065**	**42.50924167**	**43.21373836**	**44.37698833**	**45.18730116**
-2.35	**-14.36326153**	**-14.78320723**	**-12.0081306**	**-9.623564344**	**-13.44992057**	**-13.27733615**	**-14.20562339**	**-14.18994661**	**-14.02988318**
+2.35	**38.44634499**	**36.64479054**	**31.00247951**	**24.1508847**	**30.44462313**	**37.70370606**	**37.89754228**	**39.48898568**	**39.77377628**
-2.4	**-18.30174552**	**-17.88775332**	**-15.00675892**	**-11.64138031**	**-16.61522957**	**-17.15364442**	**-17.65576704**	**-17.64397131**	**-17.690526**
+2.4	**34.45919891**	**32.79919663**	**27.67070406**	**21.64385085**	**27.97379096**	**33.0932647**	**32.98547695**	**34.55410811**	**34.6211622**
-2.45	**-22.31418225**	**-21.24527213**	**-18.13404153**	**-14.10790155**	**-19.66104727**	**-21.10856503**	**-21.24202174**	**-21.45323581**	**-21.5088816**
+2.45	**30.41760522**	**28.72836433**	**24.41781521**	**19.12321269**	**25.34445113**	**29.10466812**	**28.88203975**	**30.04913274**	**30.11316753**
-2.5	**-26.36841388**	**-24.91887355**	**-21.28049165**	**-16.60809846**	**-22.57760042**	**-25.10840478**	**-24.93059503**	**-25.67654302**	**-25.73629254**
+2.5	**26.35368175**	**24.90861409**	**21.27292859**	**16.60493861**	**22.56636302**	**25.09365849**	**24.91769985**	**25.66247554**	**25.72291447**
-2.55	**-30.43233215**	**-28.7389749**	**-24.4253573**	**-19.12635967**	**-25.35512873**	**-29.11941357**	**-28.89802065**	**-30.06370184**	**-30.12700564**
+2.55	**22.29956981**	**21.23582133**	**18.12651268**	**14.10478048**	**19.64929554**	**21.09395807**	**21.22944309**	**21.4398357**	**21.4961232**
-2.6	**-34.47380953**	**-32.81060204**	**-27.54887471**	**-21.64696312**	**-27.98387102**	**-33.1078981**	**-33.00190418**	**-34.56901658**	**-34.63533092**
+2.6	**18.28738715**	**17.87899502**	**14.99929111**	**11.63828741**	**16.6029967**	**17.13928833**	**17.64364528**	**17.63246971**	**17.67960147**
-2.65	**-38.46072121**	**-36.65580441**	**-30.88079412**	**-24.15393724**	**-30.45406694**	**-37.72134842**	**-37.91577366**	**-39.505245**	**-39.79065083**
+2.65	**14.34925893**	**14.77517375**	**12.00335178**	**9.621577306**	**13.43723273**	**13.26337089**	**14.19405614**	**14.17898817**	**14.22280521**
-2.7	**-42.36094085**	**-40.76452941**	**-34.0165687**	**-26.63109233**	**-32.75595481**	**-42.52692519**	**-43.23235682**	**-44.39296946**	**-45.20425028**
+2.7	**10.51731222**	**11.93864874**	**9.953805692**	**8.009994744**	**10.18547622**	**9.504884619**	**10.91445367**	**10.89864214**	**10.54745054**
-2.75	**-46.14234356**	**-44.80558697**	**-36.93619433**	**-29.06202328**	**-34.87977427**	**-47.30870112**	**-48.62029528**	**-49.21138274**	**-50.60745749**
+2.75	**8.066155412**	**9.383746486**	**7.768611477**	**6.31370098**	**7.887366052**	**7.339288164**	**8.115144219**	**8.404191206**	**8.469021967**
-2.8	**-49.77280403**	**-48.71457385**	**-39.74796843**	**-31.43014041**	**-36.81575775**	**-52.00757314**	**-54.00915129**	**-53.92725106**	**-55.95268114**
+2.8	**6.139442022**	**7.605271192**	**5.585200918**	**4.569523117**	**5.753212519**	**5.398938613**	**6.642778963**	**7.121483183**	**7.19666403**
-2.85	**-53.22019656**	**-52.44164992**	**-42.43116081**	**-33.71854004**	**-40.46736826**	**-56.56444026**	**-59.32845884**	**-59.87524809**	**-61.69030375**
+2.85	**4.230084416**	**6.315620352**	**3.985433212**	**3.316939109**	**3.813935127**	**4.325678827**	**4.997411493**	**5.651883485**	**5.838187363**
-2.9	**-56.45239501**	**-55.9370606**	**-44.65367534**	**-36.02416343**	**-44.21303022**	**-61.26084471**	**-64.50779125**	**-65.72142854**	**-67.31183034**
+2.9	**4.052186536**	**5.229574056**	**3.222741171**	**2.604531404**	**2.815933462**	**4.325678827**	**4.32582162**	**4.344424905**	**4.344097998**
-2.95	**-59.43727375**	**-59.15096407**	**-47.03957652**	**-38.21216549**	**-47.54762065**	**-66.10627392**	**-69.55528196**	**-71.25610994**	**-72.37132712**
+2.95	**4.052186536**	**4.163811909**	**3.222741171**	**2.592875964**	**2.815933462**	**4.325678827**	**4.32582162**	**4.344424905**	**4.344097998**
-3	**-62.84530274**	**-62.03354922**	**-49.31541613**	**-40.20866542**	**-50.74385072**	**-70.82752837**	**-74.61695318**	**-76.20336106**	**-77.02117566**
+3	**4.052186536**	**4.051487985**	**3.222741171**	**2.59074229**	**2.815933462**	**4.325678827**	**4.32582162**	**4.344424905**	**4.344097998**
(Span 3) -4	**-0.679107055**	**-6.79E-01**	**-5.40E-01**	**-4.34E-01**	**-0.471923032**	**-0.724941686**	**-0.724965617**	**-0.728083333**	**-0.728028546**
+4	**60.19835579**	**59.43882709**	**48.30054854**	**38.73604077**	**43.37030542**	**64.64121557**	**67.4152728**	**68.58732093**	**70.15350742**
-3.05	**-0.679107055**	**-1.16E+00**	**-5.79E-01**	**-4.59E-01**	**-0.778182339**	**-0.724941686**	**-0.724965617**	**-0.761134851**	**-0.750943057**
+3.05	**58.56021796**	**57.66161267**	**47.06075973**	**37.6528224**	**42.67868884**	**62.33325716**	**64.5250347**	**65.56543326**	**67.20153758**
-3.1	**-2.064955351**	**-2.52729636**	**-1.914725769**	**-1.477357863**	**-2.601540479**	**-2.010281279**	**-2.104696401**	**-2.082670733**	**-2.066379224**
+3.1	**55.01332042**	**53.83285012**	**44.37228598**	**35.33931091**	**41.06774622**	**57.44266764**	**58.48837828**	**60.04931613**	**61.00546429**
-3.15	**-2.868444379**	**-3.134777133**	**-2.662263979**	**-2.051194596**	**-3.575444778**	**-2.764617702**	**-2.838446717**	**-2.817241334**	**-2.800039828**
+3.15	***53.11290483***	***51.89753735***	***42.92931478***	***34.11383282***	***40.15162258***	***54.8740112***	***55.35861379***	***57.35264718***	***57.75093672***
-3.2	***-4.660188857***	***-4.873923085***	***-4.301807464***	***-3.352823566***	***-5.775550296***	***-4.504404821***	***-4.49257276***	***-4.481987244***	***-4.450506956***
+3.2	***49.07900645***	***47.66685319***	***39.86018626***	***31.5373385***	***38.10610009***	***49.52493577***	***49.55178569***	***51.64089697***	***52.81299983***
-3.25	***-5.614506695***	***-5.805818627***	***-5.187849743***	***-3.87755552***	***-6.965192879***	***-5.42624987***	***-5.414180002***	***-5.403378781***	***-5.439808095***
+3.25	***46.95387089***	***45.52732689***	***38.23975749***	***30.19106337***	***36.9799112***	***46.7585326***	***46.78475818***	***48.74385933***	***48.79752762***
-3.3	***-8.263493606***	***-8.138606391***	***-7.07754972***	***-5.347607781***	***-9.505395136***	***-7.986933598***	***-7.967163038***	***-8.034311139***	***-7.893218421***
+3.3	***42.50809017***	***41.11999917***	***34.84140385***	***27.39416849***	***34.52869932***	***41.07693422***	***41.10162133***	***43.06145063***	***43.11571421***
-3.35	***-10.02814337***	***-9.833653923***	***-8.075239901***	***-6.182861869***	***-10.84862734***	***-9.69156329***	***-9.671288725***	***-9.743082995***	***-9.594087905***
+3.35	***40.19579207***	***38.86055819***	***33.06920515***	***25.94821326***	***33.20688656***	***38.53022257***	***38.66111479***	***40.12769365***	***40.18204709***
-3.4	***-13.83250205***	***- 13.473815453 6427***	***-10.67757353***	***-8.584809104***	***-13.6630515***	***-13.3663679403484***	***-13.34553713***	***-13.42610996***	***-13.2629666165683***
+3.4	***35.41322641***	**34.2514224**	***29.39305132***	***22.97280678***	***30.3788719***	**33.82475068**	***33.7696283***	***34.09892033***	**34.15313065**
-3.45	***-15.86047879***	***-16.29003512***	***-12.30396752***	***-9.870787555***	***-15.12692426***	**-15.32524187**	***-15.30433234***	***-15.38899633***	**-15.21962309**
+3.45	***32.95132253***	**31.98560916**	***27.49480831***	***21.44794268***	***28.87587756***	**31.40395798**	***31.23802172***	***31.20246445***	**31.24701484**
-3.5	***-20.13870248***	**-19.5845003**	***-15.73964871***	***-12.59333012***	***-18.14969388***	**-19.45755805**	***-19.43685484***	***-19.52916203***	**-19.61229834**
+3.5	***27.90712248***	**27.08035504**	***23.59229247***	***18.33522003***	***25.69994193***	**26.44768435**	***26.12059391***	***26.07133677***	**26.11109791**
-3.55	***-22.37721544***	**-21.78946268**	***-17.53832839***	***-14.04635898***	***-19.70126954***	***-21.61968452***	***-21.5992523***	***-21.69506891***	**-21.78137712**
+3.55	***25.3331728***	***24.631485557 2837***	***21.5937193593 129***	***16.75187372025 41***	***24.030209678 6893***	***23.9208066096622***	***23.7343257044258***	***23.681014442854 7***	**23.7202602**

-3.6	***-27.02371644***	**-26.93654918**	***-21.27088293***	**-17.10235137**	**-22.86650406**	***-26.56667565***	**-26.6585223**	***-26.77482693***	**-26.87957864**
+3.6	***20.10243852***	**19.75325548**	***18.00119717***	**14.36305567**	**20.53525358**	***18.79098969***	**18.91939367**	***18.85935437***	**18.89734712**
-3.65	***-29.4199736***	**-29.33527221**	***-23.19416513***	**-18.67870674**	**-24.47284313**	***-29.21567608***	**-29.31113157**	***-29.43162088***	**-29.54015527**
+3.65	***17.4540001***	**17.32854882**	***16.89243379***	**13.47457621**	**18.71322544**	***16.19665416***	**16.49932446**	***16.43675388***	**16.4739992**
-3.7	***-34.32916825***	**-34.53316935**	***-27.12823735***	**-21.80170973**	**-27.71466646**	***-34.70205577***	**-34.80416179**	***-34.93221646***	**-35.0475533**
+3.7	***14.95041281***	***13.45261259***	***14.54298675***	**11.61518775**	**14.92810482**	***12.70885301***	***14.26395772***	***14.62112426***	**14.66050476**
-3.75	***-36.83039592***	***-37.23974327***	***-29.12845077***	**-23.39454078**	**-29.34283096**	***-37.52548674***	***-37.63057555***	***-37.76197465***	**-37.88033829**
+3.75	***13.65134594***	***12.90417014***	***13.3012244***	**10.64349713**	**12.96822204**	***11.48430434***	***13.35428167***	***13.83739027***	**13.92805212**
-3.8	***-41.89670411***	***-42.34354034***	***-33.16873264***	**-26.62400552**	**-32.59535416**	***-43.29775745***	***-43.40816972***	***-43.54538522***	**-43.66897537**
+3.8	***10.85260124***	***10.48555876***	***10.68088396***	**8.614057683**	**8.921835463**	***8.815892811***	***11.3438711***	***12.07884709***	**12.29454053**
-3.85	***-44.45007119***	***-44.91384469***	***-35.1982069***	**-28.25302603**	**-34.21240504**	***-46.2326246***	***-46.58915952***	***-46.52998576***	**-46.88036777**
+3.85	***9.349804223***	***9.697232459***	***9.301245479***	**7.555465031**	**6.83854075**	***7.744707176***	***10.23752353***	***11.09640435***	**11.38401866**
-3.9	***-49.56790429***	***-50.06077151***	***-39.249324***	**-31.52059732**	**-37.75716579**	***-52.16486504***	***-53.17067361***	***-53.11223629***	**-53.47471591**
+3.9	***6.951838102***	***8.076566332***	***6.400290399***	**5.348278322**	**4.631320798**	***7.744707176***	***8.16967273***	***9.008977616***	**9.463718317**
-3.95	***-52.12063836***	***-52.62518333***	***-41.35778337***	**-33.15148139**	**-39.32594734**	***-55.14822073***	***-56.51719308***	***-56.45938021***	**-56.82660143**
+3.95	***6.951838102***	***7.241170308***	***5.529662461***	**4.519989906**	**4.631320798**	***7.744707176***	***8.16967273***	***8.53352223***	**8.627224617**
-5	***-57.18439499***	***-57.70550811***	***-45.53785508***	**-36.43653637**	**-43.73212963**	***-61.11549509***	***-63.28006334***	***-63.22401667***	**-63.59796526**
+5	***6.951838102***	***6.951649697***	***5.529662461***	***4.514757722***	**4.631320798**	***7.744707176***	***8.16967273***	***8.53352223***	***8.534755037***

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.433253212	-8.754749014	-8.01137486	-9.534235647	-9.534326925
End Shear	71.96251037	67.12901026	66.2055437	72.5820386	72.7974321
-0.05	-10.02383042	-9.710929396	-8.01137486	-9.534235647	-9.534326925
+0.05	63.79937093	59.81465564	60.3629905	64.93283371	65.25689523
-0.1	-11.96565806	-12.21276523	-8.01137486	-11.09713399	-10.43314511
+0.1	56.05519685	52.81232332	54.6043386	57.79615415	57.81885212
-0.15	-13.49234129	-13.45675092	-8.63076235	-12.18646789	-11.26416487
+0.15	52.35953139	49.34833915	51.7056253	54.70856386	53.81513128
-0.2	-16.66524959	-16.92660988	-10.7625875	-14.37404742	-12.92765189
+0.2	44.48130167	42.54224756	45.7012889	48.53736599	46.58789242
-0.25	-18.12580803	-18.26372832	-11.866635	-15.47745836	-13.76649022
+0.25	40.75490496	39.21905631	42.6922718	45.4690705	43.04726191
-0.3	-20.81107891	-21.5730701	-15.048548	-18.6670976	-16.28500849
+0.3	33.86550796	33.12404305	37.1041162	39.4861475	36.24068753
-0.35	-22.04216085	-23.11514988	-18.3722135	-21.35674998	-18.45988022
+0.35	30.60157152	30.35932892	34.3843173	36.57079592	32.98036881
-0.4	-26.91035367	-27.09770079	-23.8302517	-26.85110321	-22.91384036
+0.4	25.67548275	25.01748632	29.045512	30.8558735	26.71830148
-0.45	-29.52593593	-29.86086011	-26.7754378	-29.61629397	-25.17406717
+0.45	23.31669822	23.5253289	26.4420339	28.07251023	23.76077152
-0.5	-34.62169152	-35.51123583	-32.915821	-35.26354107	-30.04019067
+0.5	18.76823702	17.69373704	21.405696	22.69444356	19.2259663
-0.55	-36.96906794	-38.61028428	-35.985752	-38.56000887	-32.80803178
+0.55	16.5923634	15.47983525	18.9883652	20.11953209	17.04861652
-0.6	-43.36742771	-44.54457825	-41.9770021	-44.98537682	-39.94968641
+0.6	12.47190729	12.24511315	14.3942303	15.3637738	12.91070577
-0.65	-46.82625133	-47.37874934	-44.8868598	-48.10232648	-43.65807568
+0.65	10.54112898	10.90183665	12.2988026	13.18793811	11.03909622
-0.7	-53.6183091	-52.77838981	-50.5063851	-54.11487911	-51.27118555
+0.7	7.47194268	8.329565833	8.27927536	8.955143345	7.586867014
-0.75	-56.94177353	-55.39805794	-53.2045887	-56.99852872	-54.99231197
+0.75	6.410587043	7.110050861	7.15783382	7.725798472	6.561771441
-0.8	-63.41903742	-60.36772362	-58.3492272	-62.49070169	-62.22378815
+0.8	4.454700221	4.880850763	5.03546662	5.401920412	4.619221063
-0.85	-66.56306763	-62.89350968	-60.7841994	-65.08727322	-65.71814344
+0.85	3.604483843	3.920124553	4.04330394	4.31726803	3.71044414
-0.9	-72.63739253	-68.36483653	-65.3507959	-71.30118016	-72.42416447
+0.9	2.037045556	2.154604735	2.24525259	2.464151394	2.158766699
-0.95	-75.55789312	-70.98533574	-67.4709575	-74.62130396	-75.61983635
+0.95	1.212739522	1.251862858	1.39545664	1.613249776	1.47552932
-1	-81.22039745	-75.97750717	-71.3563528	-80.62417795	-81.65657415
+1	8.50E-01	7.91E-01	7.78E-01	8.66E-01	8.66E-01
(Span 2) -2	-5.07E+00	-4.72E+00	-4.64E+00	-5.17E+00	-5.17E+00
+2	80.98338793	75.77795564	73.2639582	81.56173735	82.29153476
-2.05	-5.14E+00	-4.72E+00	-4.64E+00	-5.46E+00	-5.61E+00
+2.05	78.49743646	73.45920715	71.1105052	78.97043721	79.4297701
-2.1	-6.579987899	-6.299674104	-4.91059107	-6.767887355	-6.536103848
+2.1	73.3166986	68.70342866	66.5764661	73.53145248	73.95783147
-2.15	-7.929512773	-8.05729638	-5.89641047	-8.149289932	-7.489054794
+2.15	67.90337421	63.75876515	61.7977903	67.81412616	68.30730883
-2.2	-9.226069483	-9.760742045	-7.05257074	-9.483164113	-8.503352231
+2.2	62.3124402	58.65502454	56.8442915	61.89461824	62.41842758
-2.25	-10.50802246	-11.44040262	-8.99788641	-11.54465005	-10.18226526

+2.25	56.59891836	53.48293927	52.0425844	55.84909217	56.35675458
-2.3	-12.9310397	-13.19784224	-12.0785737	-14.69624521	-12.72695486
+2.3	50.99263429	48.39653027	47.3260737	50.62278232	50.18792501
-2.35	-16.5178865	-16.72234522	-15.5474764	-18.19449156	-15.55254646
+2.35	45.44798914	43.35637667	42.4450024	45.39648569	43.97750881
-2.4	-20.43031237	-20.87398736	-19.3688529	-22.01869493	-18.65030058
+2.4	39.99180127	38.33019021	37.4510553	40.14786852	38.55958484
-2.45	-24.50340069	-25.02824184	-23.6555713	-26.15039276	-22.49751579
+2.45	34.65782385	33.34713149	33.011707	35.33993735	32.62991626
-2.5	-29.49227825	-29.18613874	-28.2028186	-30.66724178	-27.39343104
+2.5	29.47980692	29.18450774	28.190627	30.6550649	27.38067293
-2.55	-34.67072537	-33.34876352	-33.0252643	-35.35251957	-32.64351415
+2.55	24.49148076	25.02659468	23.6438225	26.13917134	22.48618204
-2.6	-40.00507801	-38.33222086	-37.4637261	-40.16074835	-38.57526129
+2.6	20.42084554	20.87234074	19.3584344	22.00828302	18.64223246
-2.65	-45.46155804	-43.35832847	-42.4581902	-45.41062155	-43.99331739
+2.65	16.50842661	16.72069588	15.5379762	18.1849377	15.5451576
-2.7	-51.00638111	-48.39854772	-47.3388897	-50.63649257	-50.20374447
+2.7	12.92388799	13.19679072	12.0700845	14.68760259	12.72028177
-2.75	-56.61309302	-53.48493868	-52.0549011	-55.86527941	-56.37239165
+2.75	10.5049856	11.43974229	9.03231906	11.5808249	10.18778617
-2.8	-62.32641267	-58.65706046	-56.857693	-61.91062386	-62.43369033
+2.8	9.223069706	9.760083368	7.04934317	9.479535434	8.553676785
-2.85	-67.91695533	-63.76076808	-61.8108515	-67.82970022	-68.32205264
+2.85	7.926454649	8.056620421	5.8937642	8.145950344	7.530917408
-2.9	-73.32980558	-68.70534711	-66.5889989	-73.54643525	-73.97190921
+2.9	6.576782326	6.298970007	4.95076699	6.912191124	6.533734194
-2.95	-78.5098809	-73.4610672	-71.1223195	-78.98457805	-79.44463091
+2.95	5.135694544	4.717519647	4.64463845	5.460561572	5.603792537
-3	-83.40226023	-78.44990109	-75.3409978	-84.06804943	-85.09655666
+3	5.071546429	4.717519647	4.64463845	5.166403465	5.165643134
(Span 3) -4	-0.849941847	-0.790610405	-0.77839624	-0.865838979	-0.865711555
+4	78.39780869	73.52212334	69.4642083	77.61284921	78.68443046
-3.05	-1.215914749	-1.252316943	-1.39950163	-1.61731401	-1.478770025
+3.05	75.54359656	70.98328472	67.4598219	74.5015884	75.60366288
-3.1	-2.801000797	-3.010617535	-3.13598254	-3.352695664	-2.891313192
+3.1	69.62241774	65.66416708	63.1076451	67.96768216	69.10371401
-3.15	-3.501270845	-3.920835633	-4.04832037	-4.259304855	-3.714840428
+3.15	*66.54765066*	*62.89126016*	*60.7713492*	*65.0735726*	*65.70041149*
-3.2	*-5.394764042*	*-5.94378897*	*-6.0806553*	*-6.545808149*	*-5.575966133*
+3.2	*60.19429178*	*57.93618738*	*55.8069633*	*59.77770881*	*58.62731134*
-3.25	*-6.415576228*	*-7.110970442*	*-7.1636093*	*-7.732114533*	*-6.566829323*
+3.25	*56.925472*	*55.39599811*	*53.1903372*	*56.98330023*	*54.97338715*
-3.3	*-8.752534683*	*-9.596075362*	*-10.182932*	*-10.98630635*	*-9.265508073*
+3.3	*50.22808577*	*50.12138639*	*47.7168269*	*51.13135744*	*47.47096528*
-3.35	*-10.55018446*	*-10.90287401*	*-12.243935*	*-13.13084859*	*-11.04820493*
+3.35	*46.80928745*	*47.37651942*	*44.8714474*	*48.08581997*	*43.63833326*
-3.4	*-14.50123112*	*-13.36074158*	*-16.660651*	*-17.71245805*	*-14.95143331*
+3.4	*39.85602191*	*41.61924635*	*38.9920087*	*41.78539839*	*36.33374645*
-3.45	*-16.60271233*	*-15.48153123*	*-19.000837*	*-20.13242797*	*-17.05935386*
+3.45	*36.95764896*	*38.6078692*	*35.9694545*	*38.54251168*	*32.65024049*
-3.5	*-21.02301661*	*-19.99526834*	*-23.906086*	*-25.36347209*	*-21.47723874*
+3.5	*32.21249971*	*32.57544438*	*29.7872903*	*32.37462525*	*27.96109061*
-3.55	*-23.32803537*	*-22.46267311*	*-26.455623*	*-28.08702687*	*-23.77246694*
+3.55	*29.68248943*	*29.85868535*	*26.9666824*	*29.60155391*	*25.33776514*
-3.6	*-27.49067897*	*-27.6551613*	*-31.709665*	*-33.70646386*	*-29.81853203*
+3.6	*24.46369278*	*24.58043224*	*21.0765508*	*24.08228386*	*20.66943766*

-3.65	***-30.61734212***	***-30.36147144***	***-34.599086***	***-36.58614046***	***-32.99657283***
+3.65	***22.03635942***	***23.11395554***	***18.3578553***	***21.3422181***	***18.44859897***
-3.7	***-37.24884374***	***-35.96431165***	***-39.861743***	***-42.44493495***	***-39.5904423***
+3.7	***19.50016824***	***19.95166019***	***12.9917016***	***16.58476879***	***14.60996252***
-3.75	***-40.69951925***	***-39.22166109***	***-42.707468***	***-45.48529983***	***-43.0649981***
+3.75	***18.11891382***	***18.26251606***	***12.2633971***	***15.47156939***	***13.76220707***
-3.8	***-48.11567854***	***-45.92450322***	***-48.613468***	***-51.63618114***	***-50.19880892***
+3.8	***15.11411234***	***15.11817738***	***9.67872885***	***13.27209316***	***12.09037375***
-3.85	***-51.95015495***	***-49.35107545***	***-51.721072***	***-54.72501041***	***-53.83365617***
+3.85	***13.48421427***	***13.45539753***	***8.62523847***	***12.18066943***	***11.25993862***
-3.9	***-59.80097629***	***-56.30702278***	***-57.507979***	***-61.24111011***	***-61.52860853***
+3.9	***11.0039856***	***10.97636477***	***8.0113371***	***10.0015183***	***9.594082687***
-3.95	***-63.64889642***	***-59.81742507***	***-60.378268***	***-64.95258953***	***-65.10038205***
+3.95	***10.01902405***	***9.709903687***	***8.0113371***	***9.534241015***	***9.534332061***
-5	***-71.49361964***	***-66.85571859***	***-66.441417***	***-72.48063166***	***-72.77807689***
+5	***9.433258162***	***8.754749747***	***8.0113371***	***9.534241015***	***9.534332061***

3-Span: Moment (Max and Min) Raw Data Results - 15’ Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.31E-14	*-3.23E-14*	*-3.02E-14*	-2.74E-14	-2.74E-14	-2.37E-14	-2.50E-14	-2.40E-14	-2.53E-14	-1.91E-14
End Shear	1.65E-14	*1.35E-14*	*1.47E-14*	1.27E-14	1.27E-14	1.01E-14	1.06E-14	1.01E-14	1.06E-14	9.46E-15
-0.05	-6.098945235	*-10.00252775*	*-6.446566989*	-7.4061106	-7.4061106	-7.31410047	-7.97584594	-5.62887525	-5.92513184	-3.631009867
+0.05	51.79324325	*72.00610893*	*51.34332615*	55.29941157	55.29941157	51.18438121	53.51113751	42.60231421	44.85215376	30.79841824
-0.1	-12.19789047	*-20.0050555*	*-12.89313398*	-14.8122212	-14.8122212	-14.6282009	-15.9516919	-11.2577505	-11.8502637	-7.262019734
+0.1	99.42326204	*136.6400526*	*98.35664482*	105.1609166	105.1609166	96.51215622	100.7301929	81.05140029	85.33167835	59.07141679
-0.15	-18.2968357	*-30.00758325*	*-19.33970097*	-22.2183318	-22.2183318	-21.9423014	-23.9275378	-16.8866257	-17.7753955	-10.8930296
+0.15	136.4297592	*186.9488362*	*135.5561646*	142.8980037	142.8980037	128.0452713	134.2296543	109.0733372	114.832748	81.16327511
-0.2	-24.39578094	*-40.010111*	*-25.78626796*	-29.6244424	-29.6244424	-29.2564019	-31.9033838	-22.515501	-23.7005274	-14.52403947
+0.2	173.3321142	*233.5115707*	*171.609975*	178.664678	178.664678	157.7821578	165.5699901	137.105512	144.3443506	102.9850483
-0.25	-30.49472617	*-50.01263875*	*-32.23283494*	-37.030553	-37.030553	-36.5705024	-39.8792297	-28.1443762	-29.6256592	-18.15504934
+0.25	195.0925087	*261.1540708*	*194.2775209*	199.0611567	199.0611567	175.5624938	182.8211869	151.9561279	159.979397	116.0971169
-0.3	-36.59367141	*-60.0151665*	*-38.67940193*	-44.4366636	-44.4366636	-43.8846028	-47.8550757	-33.7732515	-35.550791	-21.7860592
+0.3	221.1444123	*289.171141*	*219.2656864*	220.2903119	220.2903119	189.4824822	195.9542671	168.6102949	177.5080635	131.3940081
-0.35	-42.69261664	*-70.01769425*	*-45.12596892*	-51.8427742	-51.8427742	-51.1987033	-55.8309216	-39.4021267	-41.4759229	-25.41706907
+0.35	227.8653056	*298.7881888*	*227.5704175*	226.8055132	226.8055132	201.4765371	212.0004494	173.7388912	182.906323	135.646832
-0.4	-48.79156188	*-80.020222*	*-51.57253591*	-59.2488848	-59.2488848	-58.5128038	-63.8067675	-45.031002	-47.4010547	-29.04807894
+0.4	244.0046472	*305.9297224*	*241.7699409*	231.7448249	231.7448249	214.3927977	227.5965881	178.0382797	187.4261092	144.5814804
-0.45	-54.89050711	*-90.02274975*	*-58.0191029*	-66.6549954	-66.6549954	-65.8269043	-71.7826135	-50.6598772	-53.3261866	-32.6790888
+0.45	239.9159465	*299.8658411*	*236.6408071*	226.3040938	226.3040938	214.279483	230.2176152	174.1420211	183.3221547	140.5503553
-0.5	-60.98945235	*-100.0252775*	*-64.46566989*	-74.061106	-74.061106	-73.1410047	-79.7584594	-56.2887525	-59.2513184	-36.31009867
+0.5	244.6392426	*302.9718961*	*241.0320231*	229.378565	229.378565	216.1299886	230.6473733	175.6670054	184.9637936	143.4608011
-0.55	-67.08839758	*-110.0278053*	*-70.91223688*	-81.4672166	-81.4672166	-80.4551052	-87.7343054	-61.9176277	-65.1764503	-39.94110854
+0.55	230.5327988	*296.0964687*	*226.144151*	224.1114503	224.1114503	205.2178863	217.9019126	171.7132435	180.793944	133.4733157
-0.6	-73.18734281	*-120.030333*	*-77.35880387*	-88.8733272	-88.8733272	-87.7692057	-95.7101513	-67.546503	-71.1015821	-43.57211841
+0.6	223.5442966	*284.5156979*	*219.0674327*	216.5204081	216.5204081	193.1644	203.1079917	166.9470141	175.7736069	129.5754338
-0.65	-79.28628805	*-130.0328608*	*-83.80537085*	-96.2794378	-96.2794378	-95.0833061	-103.685997	-73.1753782	-77.0267139	-47.20312827
+0.65	200.6646102	*259.0899531*	*195.2574783*	196.2485048	196.2485048	171.5856559	178.472503	151.9441248	159.9694488	114.6278896
-0.7	-85.38523328	*-140.0353885*	*-90.25193784*	-103.685548	-103.685548	-102.397407	-111.661843	-78.8042535	-82.9518458	-50.83413814
+0.7	184.0346325	*231.8496923*	*178.8008785*	176.5104531	176.5104531	155.4417926	162.8473328	138.3930714	145.6998837	105.0989514
-0.75	-91.48417852	*-150.0379163*	*-96.69850483*	-111.091659	-111.091659	-109.711507	-119.637689	-84.4331287	-88.8769776	-54.46514801
+0.75	154.1063338	*189.7132386*	*147.4724063*	143.6625852	143.6625852	129.2975225	135.4548721	113.1645167	119.131131	86.15047895
-0.8	-97.58312375	*-160.040444*	*-103.1450718*	-118.49777	-118.49777	-117.025608	-127.613535	-90.062004	-94.8021095	-58.09615788
+0.8	131.1623101	*149.3491942*	*123.951013*	114.082773	114.082773	101.30165	105.952161	92.18520319	97.04224774	72.83516753
-0.85	-103.682069	*-170.0429718*	*-109.5916388*	-125.90388	-125.90388	-124.339708	-135.589381	-95.6908792	-100.727241	-61.72716774
+0.85	96.60759147	*95.07569526*	*86.98987205*	72.43089212	72.43089212	62.27211011	64.24614368	60.54952015	63.736337	51.08103837
-0.9	-121.9474072	*-180.9444948*	*-127.5312319*	-136.312425	-137.477426	-133.727992	-148.672542	-103.163973	-108.701505	-65.35817761
+0.9	71.1932388	*49.13355849*	*60.65292373*	39.74654266	39.74654266	31.87798488	31.87798488	39.6276403	41.71330558	36.21786037
-0.95	-161.1565235	*-195.2821555*	*-167.9428027*	-158.365812	-164.249049	-151.592378	-175.263044	-117.573555	-124.382978	-70.63687736
+0.95	34.45157244	*19.76273657*	*24.30575811*	14.74016115	14.74016115	12.8019288	13.74950864	20.94258033	22.0448214	13.91414729
-1	-203.1575376	*-211.4127949*	*-212.2380889*	-180.621158	-191.461895	-169.914448	-202.534218	-132.112092	-140.209703	-77.35109086
+1	12.42962171	*19.14295434*	*12.70273855*	14.46931266	14.46931266	13.47571457	14.47316683	10.99716313	11.57596119	7.401376031
(Span 2) -2	-203.1575376	*-211.4127949*	*-212.2380889*	-180.621158	-191.461895	-169.914448	-202.534218	-132.112092	-140.209703	-77.35109086
+2	12.42962171	*19.14295434*	*12.70273855*	14.46931266	14.46931266	13.47571457	14.47316683	10.99716313	11.57596119	7.401376031
-2.05	-154.6781327	*-133.6423062*	*-159.5326459*	-121.027194	-130.737512	-110.277432	-135.164651	-87.3685978	-92.982002	-57.66170534
+2.05	40.93873353	*27.94868679*	*32.6826989*	22.31985312	22.31985312	17.88860449	17.88860449	23.41067913	24.64282014	20.72453313
-2.1	-110.6147461	*-119.1031132*	*-111.5284966*	-97.497165	-101.3691	-88.6451789	-102.247982	-72.2796246	-76.4807498	-49.85392523
+2.1	72.52192558	*57.1878022*	*65.72119964*	45.65652728	45.65652728	36.62199977	36.73329799	36.98913245	38.9359289	41.45957535
-2.15	-76.38511372	*-107.8679417*	*-72.14487031*	-80.9331265	-80.9331265	-75.3747028	-80.9513636	-62.3573901	-65.6431122	-42.66501873
+2.15	106.5057696	*107.3160281*	*101.3486095*	84.55441899	84.55441899	67.53708995	67.53708995	64.21615617	67.59595386	62.60236536
-2.2	-71.53344318	*-100.5774174*	*-68.24070325*	-75.3212227	-75.3212227	-70.1482204	-75.3381954	-60.1357223	-63.308544	-38.52947665
+2.2	141.845701	*166.0619806*	*140.0990353*	128.3945633	128.5693653	109.3550303	112.4156438	97.12369977	102.2354734	82.89268765

-2.25	**-71.51756485**	***-93.80504089***	***-64.8028692***	**-69.709319**	**-69.709319**	**-64.921738**	**-69.7250272**	**-57.9289066**	**-60.9910551**	**-35.65878867**
+2.25	**171.5563001**	***217.2415768***	***172.2297093***	**165.2122316**	**165.2122316**	**145.481636**	**151.208996**	**125.654505**	**132.2678999**	**101.3147211**
-2.3	**-71.50168652**	***-87.03266441***	***-61.40784207***	**-64.0974152**	**-64.0974152**	**-59.6952557**	**-64.1118591**	**-55.722091**	**-58.6735662**	**-32.78810069**
+2.3	**197.8682767**	***258.8520035***	***198.9583735***	**195.527991**	**195.527991**	**175.3823628**	**184.5003435**	**148.5956728**	**156.4164977**	**117.1822474**
-2.35	**-71.48580819**	***-80.26028793***	***-58.05906712***	**-58.4855114**	**-58.4855114**	**-54.4687733**	**-58.4986909**	**-53.5152753**	**-56.3560773**	**-29.91741271**
+2.35	**219.0793945**	***291.6868154***	***221.5919279***	**219.0989846**	**219.0989846**	**202.3488043**	**215.3110254**	**166.5235493**	**175.2879467**	**129.9371814**
-2.4	**-71.46992986**	***-73.48791145***	***-54.71029218***	**-52.8736076**	**-52.8736076**	**-49.2422909**	**-52.8855227**	**-51.5606967**	**-54.2744175**	**-27.04672474**
+2.4	**234.2920238**	***314.2987179***	***237.3145286***	**235.4151655**	**235.4151655**	**221.4051439**	**237.7678468**	**178.9277288**	**188.3449777**	**139.1494717**
-2.45	**-71.45405153**	***-66.71553497***	***-51.36151724***	**-47.2617038**	**-47.2617038**	**-44.0158085**	**-47.2723545**	**-50.9870498**	**-53.6705788**	**-24.17603676**
+2.45	**243.0050776**	***325.5240766***	***246.7615887***	**243.4117624**	**243.4117624**	**232.7366981**	**251.101433**	**185.0044411**	**194.7415169**	**144.5173186**
-2.5	**-71.4381732**	***-59.94347096***	***-48.0138792***	**-41.6500152**	**-41.6500152**	**-38.789935**	**-41.6611081**	**-50.6567008**	**-53.3228429**	**-21.30534878**
+2.5	**244.9341171**	***325.2609875***	***249.1703768***	**242.8758859**	**242.8758859**	**236.5983687**	**254.8718182**	**184.6000453**	**194.3158371**	**145.8670138**
-2.55	**-71.44106974**	***-66.71588951***	***-51.36348513***	**-47.2619479**	**-47.2619479**	**-44.0165**	**-47.2745356**	**-50.9840934**	**-53.6674667**	**-24.17554102**
+2.55	**243.0050998**	***325.4838917***	***246.8585362***	**243.3840324**	**243.3840324**	**232.735313**	**251.0832016**	**184.9893807**	**194.7256639**	**144.5131558**
-2.6	**-71.44396587**	***-73.48830806***	***-54.71309106***	**-52.8738807**	**-52.8738807**	**-49.2430649**	**-52.8879631**	**-51.5486239**	**-54.2617093**	**-27.04616984**
+2.6	**234.2920416**	***314.3413823***	***237.4053462***	**235.4445789**	**235.4445789**	**221.4653151**	**237.7322736**	**178.9437303**	**188.3618214**	**139.1412299**
-2.65	**-71.44686201**	***-80.26072661***	***-58.062697***	**-58.4858135**	**-58.4858135**	**-54.4696299**	**-58.5013906**	**-53.5119879**	**-56.3526998**	**-29.91679866**
+2.65	**219.0794012**	***291.7010588***	***221.1658768***	**219.1088069**	**219.1088069**	**202.4000552**	**215.2599925**	**166.5288894**	**175.2935677**	**129.9251103**
-2.7	**-71.45607811**	***-87.03314515***	***-61.41230293***	**-64.0977463**	**-64.0977463**	**-59.6961948**	**-64.1148181**	**-55.7196004**	**-58.6710087**	**-32.78742748**
+2.7	**197.868313**	***258.9679849***	***198.8943727***	**195.5195815**	**195.5195815**	**175.4267409**	**184.4366245**	**148.5911025**	**156.4116868**	**117.1666962**
-2.75	**-71.47816819**	***-93.8055637***	***-64.80310523***	**-69.7096791**	**-69.7096791**	**-64.9227598**	**-69.7282456**	**-57.9272129**	**-60.9893176**	**-35.65805631**
+2.75	**171.9746919**	***217.3953469***	***172.3219359***	**165.1877374**	**165.1877374**	**145.4743753**	**151.2066559**	**125.5210969**	**132.1274704**	**101.2960939**
-2.8	**-71.50025828**	***-100.5779822***	***-68.2415069***	**-75.3216119**	**-75.3216119**	**-70.1493247**	**-75.3416731**	**-60.1348253**	**-63.3076265**	**-38.52868513**
+2.8	**141.5340535**	***166.2083051***	***140.183027***	**128.3602527**	**128.5361835**	**109.3338928**	**112.397804**	**97.10322208**	**102.213918**	**82.87160927**
-2.85	**-76.79909434**	***-107.8685477***	***-72.14624073***	**-80.9335446**	**-80.9335446**	**-75.3758897**	**-80.9551006**	**-62.354252**	**-65.6398178**	**-42.66478796**
+2.85	**106.5057911**	***107.2477418***	***101.4291578***	**84.50730007**	**84.50730007**	**67.50107011**	**67.50107011**	**64.27016442**	**67.65280465**	**62.57949407**
-2.9	**-110.6712807**	***-119.1037602***	***-111.5309433***	**-97.4979879**	**-101.366937**	**-88.6431712**	**-102.253165**	**-72.2810937**	**-76.4820715**	**-49.85380619**
+2.9	**70.80560244**	***57.0650803***	***65.80714874***	**45.73058973**	**45.73058973**	**36.55602402**	**36.66649771**	**37.02971507**	**38.97864744**	**41.480339**
-2.95	**-154.7987154**	***-133.6429946***	***-159.5385727***	**-121.035287**	**-130.744828**	**-110.279315**	**-135.171027**	**-87.3667811**	**-92.9799683**	**-57.66169285**
+2.95	**40.39637259**	***27.82545154***	***32.58473122***	**22.31822535**	**22.31822535**	**17.82610641**	**17.82610641**	**23.45512928**	**24.68960977**	**20.74703709**
-3	**-203.2013683**	***-211.4133141***	***-212.2468556***	**-180.619326**	**-191.459334**	**-169.919163**	**-202.540741**	**-132.111347**	**-140.208864**	**-77.35336864**
+3	**12.43322645**	***19.14284587***	***12.70245953***	**14.46923791**	**14.46923791**	**13.4755017**	**14.47249822**	**10.99712248**	**11.5759184**	**7.401528551**
(Span 3) -4	**-2.03E+02**	***-211.4133141***	***-212.2468556***	**-1.81E+02**	**-1.91E+02**	**-1.70E+02**	**-2.03E+02**	**-1.32E+02**	**-1.40E+02**	**-7.74E+01**
+4	**1.24E+01**	***19.14284587***	***12.70245953***	**1.45E+01**	**1.45E+01**	**1.35E+01**	**1.45E+01**	**1.10E+01**	**1.16E+01**	**7.40E+00**
-3.05	**-161.1629042**	***-195.2826502***	***-167.9426097***	**-158.369604**	**-164.253992**	**-151.591283**	**-175.264075**	**-117.530197**	**-124.337517**	**-70.63648062**
+3.05	**33.4941798**	***19.66483749***	***24.22811952***	**14.75549721**	**14.75549721**	**12.80172662**	**13.7488733**	**20.95336196**	**22.05617049**	**13.91678415**
-3.1	**-122.0706059**	***-180.9449637***	***-127.5334322***	**-136.310837**	**-137.478**	**-133.731406**	**-148.680928**	**-103.147854**	**-108.686167**	**-65.35771578**
+3.1	**71.29900733**	***49.03873721***	***60.57759192***	**39.68119411**	**39.68119411**	**31.92799075**	**31.92799075**	**39.68952258**	**41.77844482**	**36.19937725**
-3.15	***-103.6820673***	***-170.0434132***	***-109.5775576***	***-125.904184***	***-125.904184***	***-124.333988***	***-135.589482***	***-95.6875691***	***-100.723757***	***-61.72673154***
+3.15	***96.21941108***	***95.08584847***	***86.92310071***	**72.43789974**	**72.43789974**	**62.27595027**	**64.24933379**	**60.52269747**	**63.7081026**	**51.06478844**
-3.2	**-97.58312209**	***-160.0408595***	***-103.1318188***	**-118.498056**	**-118.498056**	**-117.020224**	**-127.61363**	**-90.0588886**	**-94.7988301**	**-58.09574729**
+3.2	**131.7179975**	***149.2294993***	***123.8826254***	**114.1750945**	**114.1750945**	**101.2314112**	**106.0127561**	**92.13913293**	**96.99378607**	**72.81849701**
-3.25	**-91.48417685**	***-150.0383058***	***-96.68608005***	**-111.091927**	**-111.091927**	**-109.70646**	**-119.637778**	**-84.430208**	**-88.8739032**	**-54.46476305**
+3.25	**153.5729549**	***189.7126763***	***147.4067158***	**143.6621972**	**143.6621972**	**129.284189**	**135.4359517**	**113.1627938**	**119.1293537**	**86.13458913**
-3.3	**-85.38523162**	***-140.035752***	***-90.24034128***	**-103.685799**	**-103.685799**	**-102.392696**	**-111.661926**	**-78.8015275**	**-82.9489763**	**-50.8337788**
+3.3	**184.7463695**	***231.7074704***	***178.9388892***	**176.5904692**	**176.5904692**	**155.4838778**	**162.8811993**	**138.3375312**	**145.6414613**	**105.0818876**
-3.35	**-79.28628638**	***-130.0331983***	***-83.79460252***	**-96.2796702**	**-96.2796702**	**-95.0789317**	**-103.686074**	**-73.172847**	**-77.0240494**	**-47.20279455**
+3.35	**200.1479141**	***259.0603857***	***195.2875172***	**196.2281249**	**196.2281249**	**171.543978**	**178.4873183**	**151.9305272**	**159.9551758**	**114.6103679**
-3.4	**-73.18734115**	***-120.0306446***	***-77.34886376***	**-88.8735417**	**-88.8735417**	**-87.7651677**	**-95.7102218**	**-67.5441664**	**-71.0991225**	**-43.57181031**
+3.4	**224.4910299**	***284.5968744***	***219.1973118***	**216.5763699**	**216.5763699**	**193.2495716**	**203.0771084**	**166.8759541**	**175.6988463**	**129.5560897**
-3.45	**-67.08839592**	***-110.0280909***	***-70.90312499***	**-81.4674132**	**-81.4674132**	**-80.4514037**	**-87.7343697**	**-61.9154859**	**-65.1741956**	**-39.94082606**
+3.45	**229.9184087**	***296.0234072***	***226.1616919***	**224.061079**	**224.061079**	**205.2231497**	**217.9259615**	**171.6864733**	**180.7658011**	**133.4524733**
-3.5	**-60.98945068**	***-100.0255372***	***-64.45738623***	**-74.0612847**	**-74.0612847**	**-73.1376397**	**-79.7585175**	**-56.2868053**	**-59.2492688**	**-36.30984182**
+3.5	**245.7310582**	***303.005252***	***241.1470484***	**229.4015622**	**229.4015622**	**216.1895103**	**230.5878132**	**175.6800689**	**184.9775772**	**143.437624**
-3.55	**-54.89050545**	***-90.02298352***	***-58.01164746***	**-66.6551562**	**-66.6551562**	**-65.8238757**	**-71.7826654**	**-50.6581248**	**-53.3243419**	**-32.67885757**
+3.55	**240.0470683**	***299.8506948***	***236.6404255***	**226.2936576**	**226.2936576**	**214.2914496**	**230.2092197**	**174.1349112**	**183.314697**	**140.582894**
-3.6	**-48.79156021**	***-80.02042981***	***-51.5659087***	**-59.2490277**	**-59.2490277**	**-58.5101117**	**-63.8068133**	**-45.0294442**	**-47.399415**	**-29.04787333**

+3.6	**245.1276091**	***305.891***	***241.8669813***	**231.7181365**	**231.7181365**	**214.3183941**	**227.6382267**	**178.0222271**	**187.4092365**	**144.5533573**
-3.65	**-42.69261498**	***-70.01787611***	***-45.12016994***	**-51.8428992**	**-51.8428992**	**-51.1963477**	**-55.8309611**	**-39.4007637**	**-41.4744881**	**-25.41688908**
+3.65	**229.4605771**	***298.727166***	***227.5498679***	**226.7634397**	**226.7634397**	**201.4532333**	**212.0207503**	**173.714133**	**182.8802846**	**135.6418273**
-3.7	**-36.59366974**	***-60.0153224***	***-38.67443117***	**-44.4367707**	**-44.4367707**	**-43.8825837**	**-47.855109**	**-33.7720831**	**-35.5495612**	**-21.78590483**
+3.7	**221.5630812**	***289.0827494***	***219.3398734***	**220.2293713**	**220.2293713**	**189.45975**	**195.9417952**	**168.5774946**	**177.4735566**	**131.3600243**
-3.75	**-30.49472451**	***-50.01276869***	***-32.22869241***	**-37.0306423**	**-37.0306423**	**-36.5688197**	**-39.8792569**	**-28.1434026**	**-29.6246343**	**-18.15492059**
+3.75	**195.7454158**	***261.170757***	***194.2326992***	**199.0726577**	**199.0726577**	**175.592256**	**182.7914087**	**151.9626579**	**159.9862869**	**116.0861956**
-3.8	**-24.39577927**	***-40.01021499***	***-25.78295364***	**-29.6245138**	**-29.6245138**	**-29.2550557**	**-31.9034047**	**-22.5147221**	**-23.6997074**	**-14.52393634**
+3.8	**173.8019953**	***233.3660235***	***171.6593928***	**178.5643066**	**178.5643066**	**157.8634901**	**165.5193392**	**137.1510771**	**144.3923265**	**102.9450539**
-3.85	**-18.29683404**	***-30.00766128***	***-19.33721488***	**-22.2183853**	**-22.2183853**	**-21.9412916**	**-23.9275526**	**-16.8860415**	**-17.7747805**	**-10.8929521**
+3.85	**136.8959889**	***186.9066006***	***135.4859305***	**142.8688758**	**142.8688758**	**128.0371946**	**134.2276636**	**109.1076261**	**114.8688506**	**81.14620744**
-3.9	**-12.1978888**	***-20.00510758***	***-12.89147612***	**-14.8122568**	**-14.8122568**	**-14.6275276**	**-15.9517005**	**-11.257361**	**-11.8498537**	**-7.26196785**
+3.9	**99.6894373**	***136.4337238***	***98.38079983***	**105.202815**	**105.202815**	**96.41331366**	**100.776231**	**81.074265**	**85.35575153**	**59.02508241**
-3.95	**-6.09894357**	***-10.00255387***	***-6.445737353***	**-7.40612828**	**-7.40612828**	**-7.31376362**	**-7.97584832**	**-5.62868043**	**-5.92492677**	**-3.630983604**
+3.95	**51.91560798**	***71.90278598***	***51.30656947***	**55.32033405**	**55.32033405**	**51.13507151**	**53.53433111**	**42.61373605**	**44.86417896**	**30.77524373**
-5	**-3.39E-14**	***-3.23E-14***	***-3.03E-14***	**-2.98E-14**	**-2.98E-14**	**-2.37E-14**	**-2.57E-14**	**-2.41E-14**	**-2.54E-14**	**-1.91E-14**
+5	**4.13E-15**	***5.20E-15***	***4.04E-15***	**4.01E-15**	**4.01E-15**	**3.87E-15**	**4.16E-15**	**3.05E-15**	**3.21E-15**	**2.46E-15**

3-Span: Moment (Max and Min) Raw Data Results - 15' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.06E-14	-2.22E-14	-1.67E-14	-1.37E-14	-1.71E-14	-2.02E-14	-2.00E-14	-2.07E-14	-2.15E-14
End Shear	8.84E-15	9.09E-15	7.40E-15	5.65E-15	8.18E-15	8.56E-15	8.87E-15	8.83E-15	9.48E-15
-0.05	-5.213866697	-5.213728252	-4.147240561	-3.386065693	-3.473571664	-5.808671221	-6.12728572	-6.40035688	-6.40127094
+0.05	39.01419859	39.45832433	31.49560809	24.92921673	29.35731993	41.66509294	42.43499687	42.52915789	42.28976144
-0.1	-10.42773339	-10.4274565	-8.294481122	-6.772131385	-6.947143329	-11.61734244	-12.2545714	-12.8007138	-12.8025419
+0.1	74.19887658	75.06996632	59.92053253	47.46874016	56.19756604	78.73306995	79.72625492	79.9193079	80.18096436
-0.15	-15.64160009	-15.64118476	-12.44172168	-10.15819708	-10.42071499	-17.42601366	-18.3818572	-19.2010706	-19.2038128
+0.15	100.6155257	101.0243808	81.16723994	64.3191883	77.44606689	104.8445949	105.6741284	105.6877611	105.7958824
-0.2	-20.85546679	-20.85491301	-16.58896224	-13.54426277	-13.89428666	-23.23468488	-24.5091429	-25.6014275	-25.6050837
+0.2	125.8368266	126.9884348	101.873773	80.70707777	97.97790053	129.8290386	130.1638328	130.4192469	130.2605608
-0.25	-26.06933349	-26.06864126	-20.73620281	-16.93032846	-17.36785832	-29.04335611	-30.6364286	-32.0017844	-32.0063547
+0.25	140.1826286	140.7429906	113.0828319	90.39919414	110.8568322	144.6941222	144.7944341	144.7449641	144.7004025
-0.3	-31.28320018	-31.28236951	-24.88344337	-20.31639416	-20.84142999	-34.85202733	-36.7637143	-38.4021413	-38.4076256
+0.3	155.1263434	156.1713112	125.6767921	99.82496995	125.0086553	157.0155938	156.8838181	162.2738146	162.1444954
-0.35	-36.49706688	-36.49609776	-29.03068393	-23.70245985	-24.31500165	-40.66069855	-42.8910001	-44.8024981	-44.8088966
+0.35	159.7017458	160.8652128	129.4955177	103.3036661	129.6277975	164.6369294	164.6401566	170.9569446	170.9301747
-0.4	-41.71093358	-41.70982602	-33.17792449	-27.08852554	-27.78857332	-46.46936977	-49.0182858	-51.202855	-51.2101675
+0.4	163.1699869	164.7371233	132.2628886	105.7672064	137.5503049	174.1613705	174.2145169	177.9127781	177.7283512
-0.45	-46.92480027	-46.92355427	-37.32516505	-30.47459123	-31.26214498	-52.27804099	-55.1455715	-57.6032119	-57.6114384
+0.45	159.3269772	161.0609868	129.2449417	103.7888233	134.4733454	172.5313053	172.5708711	174.7058654	174.6033074
-0.5	-52.13866697	-52.13728252	-41.47240561	-33.86065693	-34.73571664	-58.08671221	-61.2728572	-64.0035688	-64.0127094
+0.5	161.569658	162.6903807	131.6691634	105.8660139	136.4563044	174.905892	174.8431188	174.7441789	174.6550558
-0.55	-57.35253367	-57.35101077	-45.61964617	-37.24672262	-38.20928831	-63.89538343	-67.4001429	-70.4039257	-70.4139803
+0.55	157.809142	159.0330654	129.4410994	103.5126906	127.6996806	166.7148037	166.6756715	169.6296148	169.5656622
-0.6	-62.56640036	-62.56473902	-49.76688673	-40.63278831	-41.68285997	-69.70405465	-73.5274287	-76.8042825	-76.8152512
+0.6	152.635562	154.5224574	125.3089566	100.1635972	123.1729967	158.6822089	159.0754195	164.5059886	164.4040186
-0.65	-67.78026706	-67.77846727	-53.9141273	-44.01885401	-45.15643164	-75.51272588	-79.6547144	-83.2046394	-83.2165222
+0.65	138.1754558	140.4516041	113.8101211	90.96210172	109.5597257	141.7883043	141.8193421	148.1386906	148.1179027
-0.7	-72.99413376	-72.99219553	-58.06136786	-47.4049197	-48.6300033	-81.3213971	-85.7820001	-89.6049963	-89.6177931
+0.7	124.5468024	127.8075498	103.063244	81.9943405	99.73951011	128.10594	128.1928573	131.6260645	131.4646835
-0.75	-78.20800046	-78.20592378	-62.20860842	-50.79098539	-52.10357497	-87.13006832	-91.9092858	-96.0053532	-96.0190641
+0.75	101.138813	104.3000516	84.0445765	67.31701163	82.35510665	105.9006168	105.9103781	105.8640141	105.8222553
-0.8	-83.42186715	-83.41965203	-66.35584898	-54.17705108	-55.57714663	-92.93873954	-98.0365715	-102.40571	-102.420335
+0.8	80.63047117	84.79074868	67.58178382	54.19533668	68.78804695	83.28020777	83.3565475	84.4035051	84.66396525
-0.85	-88.63573385	-88.63338028	-70.50308954	-57.56311678	-59.0507183	-98.74741076	-104.163857	-108.806067	-108.821606
+0.85	51.01501975	55.25284183	43.32049335	34.66870638	49.0782629	51.68976002	52.4598001	52.46040672	52.46270161
-0.9	-97.57545937	-93.84710853	-77.5328509	-63.34833424	-68.01907485	-106.5671123	-110.291143	-115.206424	-115.484944
+0.9	28.07493376	35.0562491	25.80353807	20.56071504	34.62752145	27.09628715	28.34910563	28.05503293	27.8380914
-0.95	-112.1909446	-99.06083679	-90.64884754	-74.61157613	-87.09317121	-122.4677562	-119.168687	-124.482924	-127.811572
+0.95	10.39513596	17.86271352	10.18473346	8.511119401	13.03208758	10.33016126	11.95810851	11.85527999	13.3740624
-1	-127.4690586	-106.2444039	-104.8512528	-87.09318574	-107.1660977	-138.7285616	-133.420714	-144.529692	-147.352305
+1	10.18665509	10.18488703	8.101527074	6.512553119	7.079060346	10.87385398	10.87422804	10.9215425	10.92070653
(Span 2) -2	-127.4690586	-106.2444039	-104.8512528	-87.09318574	-107.1660977	-138.7285616	-133.420714	-144.529692	-147.352305
+2	10.18665509	10.18488703	8.101527074	6.512553119	7.079060346	10.87385398	10.87422804	10.9215425	10.92070653
-2.05	-90.49043749	-70.70080551	-77.06028127	-63.60335385	-80.3047471	-92.34520247	-86.6552695	-90.4855894	-90.58255
+2.05	16.25177019	20.40473469	14.77325982	11.48843556	19.67746493	15.20531381	17.1120449	17.23681482	17.05858049
-2.1	-74.43088515	-62.36781019	-62.02352702	-50.32464867	-58.55530951	-73.26128925	-72.2369753	-73.8906399	-73.8900974
+2.1	32.57223938	33.39547536	29.65497073	23.01114397	40.1106193	31.1537419	31.63142279	31.81031781	31.82745697
-2.15	-59.12150973	-57.65106579	-48.87096696	-39.29066204	-39.59524936	-60.8240038	-60.8260117	-63.1141136	-63.1080692
+2.15	59.40321554	58.91865362	46.71563628	37.01757556	60.67025089	57.40652646	57.52901003	57.52901003	57.52901003
-2.2	-53.02750451	-55.31793208	-44.91402118	-36.17337298	-36.84971424	-56.60646694	-56.6083356	-56.851777	-56.8474991
+2.2	89.92513773	89.54942377	71.11503887	56.91641998	81.55004074	90.96237695	92.34285131	92.41908369	92.48774954

-2.25	**-49.07662264**	**-53.00169733**	**-43.72528302**	**-35.29060905**	**-34.10417911**	**-52.38893008**	**-52.3906595**	**-52.6159627**	**-52.6120035**
+2.25	**116.249302**	**116.0125591**	**92.20872451**	**74.16215907**	**98.53665566**	**119.9366066**	**122.3847771**	**127.9203549**	**128.0228141**
-2.3	**-45.12574077**	**-50.68546258**	**-42.63077436**	**-34.4820202**	**-31.35864398**	**-48.17139323**	**-48.1729834**	**-48.3801484**	**-48.376508**
+2.3	**137.6317376**	**137.5530983**	**109.3926571**	**88.17111989**	**112.4185389**	**143.3699799**	**145.779542**	**155.9676384**	**156.0216297**
-2.35	**-41.17485889**	**-48.36922783**	**-41.64714642**	**-33.72796164**	**-28.61310886**	**-43.95385637**	**-43.9553073**	**-44.1443342**	**-44.1410124**
+2.35	**154.2252032**	**154.1445602**	**122.5897791**	**99.05201905**	**124.4912149**	**163.782895**	**165.6622381**	**175.9336692**	**175.9693755**
-2.4	**-37.22397702**	**-46.05299308**	**-40.75964163**	**-33.07451665**	**-25.86757373**	**-39.73631952**	**-39.7376313**	**-39.9085199**	**-39.9055169**
+2.4	**165.6685485**	**165.4176598**	**131.5037964**	**106.5868583**	**133.2019716**	**178.4612462**	**182.6503179**	**189.3145574**	**189.3479742**
-2.45	**-33.27309515**	**-44.41079516**	**-40.00308814**	**-32.5053674**	**-23.12203861**	**-35.51878266**	**-35.5199552**	**-35.6727056**	**-35.6700213**
+2.45	**171.3017608**	**171.0650469**	**136.0004921**	**110.358786**	**138.2674716**	**187.121048**	**192.3493462**	**198.6720297**	**198.7076733**
-2.5	**-29.3223561**	**-43.60163226**	**-39.43670728**	**-32.0637387**	**-20.37712432**	**-31.3012458**	**-31.3022791**	**-31.4377352**	**-31.4353288**
+2.5	**170.9491782**	**170.8096308**	**135.8276829**	**110.281503**	**139.5249694**	**189.2308793**	**194.5058966**	**201.5401826**	**201.6320976**
-2.55	**-33.27325722**	**-44.41020762**	**-40.00297177**	**-32.5053201**	**-23.12274279**	**-35.51789385**	**-35.5191156**	**-35.673663**	**-35.6709324**
+2.55	**171.2833697**	**171.0511011**	**135.9907714**	**110.3547473**	**138.2542655**	**187.1308291**	**192.3265987**	**198.6800717**	**198.7153132**
-2.6	**-37.22415833**	**-46.04996204**	**-40.75836693**	**-33.07477222**	**-25.86836126**	**-39.73532547**	**-39.7366923**	**-39.9095907**	**-39.9065359**
+2.6	**165.6880763**	**165.4324808**	**131.5141047**	**106.5911603**	**133.1759159**	**178.4571512**	**182.6143312**	**189.3219124**	**189.3549691**
-2.65	**-41.17505945**	**-48.36679613**	**-41.64667133**	**-33.72776585**	**-28.61397972**	**-43.9527571**	**-43.954269**	**-44.1455185**	**-44.1421395**
+2.65	**154.2317207**	**154.1495019**	**122.5932208**	**99.05345413**	**124.4530167**	**163.8343487**	**165.6142399**	**175.9343414**	**175.9700187**
-2.7	**-45.12596057**	**-50.68363023**	**-42.62921509**	**-34.48228514**	**-31.35959819**	**-48.17018872**	**-48.1718457**	**-48.3814463**	**-48.377743**
+2.7	**137.6261551**	**137.548864**	**109.3897061**	**88.16989627**	**112.3692481**	**143.4196102**	**145.7589847**	**155.9551123**	**156.0097054**
-2.75	**-49.07686169**	**-53.00046432**	**-43.72493849**	**-35.29046655**	**-34.10521666**	**-52.38762034**	**-52.3894224**	**-52.6173741**	**-52.6133465**
+2.75	**116.2330332**	**116.0002337**	**92.20013517**	**74.15859022**	**98.48616678**	**119.9272366**	**122.3794466**	**127.8959704**	**127.9996259**
-2.8	**-53.02776281**	**-55.31729841**	**-44.91270122**	**-36.17392737**	**-36.85083512**	**-56.60505196**	**-56.6069991**	**-56.8533018**	**-56.8489501**
+2.8	**89.90015**	**89.53045431**	**71.10182646**	**56.91095678**	**81.48659959**	**90.94226666**	**92.3251838**	**92.40234483**	**92.47183179**
-2.85	**-59.12572258**	**-57.64804487**	**-48.87083729**	**-39.29060701**	**-39.59645359**	**-60.82248358**	**-60.8245758**	**-63.1162695**	**-63.1101209**
+2.85	**59.37198189**	**58.89495689**	**46.69913201**	**37.01070404**	**60.59782795**	**57.37590959**	**57.26866019**	**57.3919442**	**57.50297022**
-2.9	**-74.43445345**	**-62.36787703**	**-62.02381146**	**-50.32476255**	**-58.55791619**	**-73.2598411**	**-72.2370333**	**-73.8908295**	**-73.8902777**
+2.9	**32.5149663**	**33.35298216**	**29.68414087**	**23.02336886**	**40.17677086**	**31.097477**	**31.57924558**	**31.76086141**	**31.8683195**
-2.95	**-90.4930963**	**-70.69916489**	**-77.05792278**	**-63.60377056**	**-80.30873741**	**-92.34471073**	**-86.6589302**	**-90.4908586**	**-90.5429899**
+2.95	**16.19130804**	**20.36151323**	**14.97352516**	**11.93420068**	**19.60156143**	**15.15219045**	**17.05877337**	**17.18635599**	**17.1031827**
-3	**-127.4725656**	**-106.2437223**	**-104.8520991**	**-87.09225386**	**-107.1663594**	**-138.7294708**	**-133.421378**	**-144.535457**	**-147.355575**
+3	**10.18660546**	**10.18484934**	**8.101500832**	**6.512747972**	**7.078845466**	**10.87412532**	**10.87448428**	**10.9212499**	**10.9204281**
(Span 3) -4	**-1.27E+02**	**-1.06E+02**	**-1.05E+02**	**-8.71E+01**	**-1.07E+02**	**-1.39E+02**	**-1.33E+02**	**-1.45E+02**	**-1.47E+02**
+4	**1.02E+01**	**1.02E+01**	**8.10E+00**	**6.51E+00**	**7.08E+00**	**1.09E+01**	**1.09E+01**	**1.09E+01**	**1.09E+01**
-3.05	**-112.1935468**	**-99.06100769**	**-90.64746058**	**-74.61100364**	**-87.09349257**	**-122.472852**	**-119.1733**	**-124.486168**	**-127.81293**
+3.05	**10.40531189**	**17.87155939**	**10.19200738**	**8.501786845**	**12.9909627**	**10.33041905**	**11.91289981**	**11.86132169**	**13.37691223**
-3.1	**-97.57762045**	**-93.84727041**	**-77.53256979**	**-63.34822212**	**-68.02019473**	**-106.5688848**	**-110.290581**	**-115.202547**	**-115.484573**
+3.1	**28.03155026**	**35.02438241**	**25.84879357**	**20.55024832**	**35.12078982**	**27.13879214**	**28.41339624**	**28.11605008**	**27.89611504**
-3.15	***-88.63593557***	***-88.63353314***	***-70.50319589***	***-57.5631609***	***-59.04933945***	***-98.74501977***	***-104.163326***	***-108.802405***	***-108.818123***
+3.15	**51.01967066**	**55.23687331**	**43.32487745**	**34.67053133**	**49.10280014**	**51.69344735**	**52.45989847**	**52.46050071**	**52.46279387**
-3.2	**-83.422057**	**-83.41979587**	**-66.35594904**	**-54.17709261**	**-55.57584885**	**-92.93648939**	**-98.0360719**	**-102.402263**	**-102.417057**
+3.2	**80.69176071**	**84.7482949**	**67.55463413**	**54.18402849**	**68.88124714**	**83.22248209**	**83.30203057**	**84.44690455**	**84.61488193**
-3.25	**-78.20817842**	**-78.20605859**	**-62.2087022**	**-50.79102432**	**-52.10235825**	**-87.12795901**	**-91.9088174**	**-96.0021217**	**-96.0159906**
+3.25	**101.1385552**	**104.2987241**	**84.04606428**	**67.3176275**	**82.38256053**	**105.8929149**	**105.9031024**	**105.857118**	**106.0775438**
-3.3	**-72.99429985**	***-72.99232132***	**-58.06145535**	***-47.40495603***	**-48.62886766**	**-81.31942862**	**-85.7815628**	**-89.60198**	**-89.6149243**
+3.3	**124.5998998**	**127.7564782**	**103.0302226**	**82.00662821**	**99.68558964**	**128.0309385**	**128.1219726**	**131.6825947**	**131.5184111**
-3.35	**-67.78042127**	**-67.77858405**	**-53.91420851**	**-44.01888774**	**-45.15537706**	**-75.51089824**	**-79.6543083**	**-83.2018383**	**-83.2138581**
+3.35	**138.1619291**	**140.4394219**	**113.8040609**	**90.95958521**	**109.5834528**	**141.7601439**	**141.792755**	**148.1353392**	**148.1147188**
-3.4	**-62.56654269**	**-62.56484677**	**-49.76696166**	**-40.63281945**	**-41.68188646**	**-69.70236786**	**-73.5270537**	**-76.8016967**	**-76.8127918**
+3.4	**152.6726948**	**154.4571445**	**125.2658733**	**100.1721417**	**123.1117353**	**158.7428013**	**159.0419673**	**164.5436447**	**164.4397847**
-3.45	**-57.35266412**	**-57.3511095**	**-45.61971482**	**-37.24675115**	**-38.20839586**	**-63.89383748**	**-67.3997992**	**-70.401555**	**-70.4117255**
+3.45	**157.832517**	**159.0082445**	**129.4238566**	**103.5186699**	**127.7141445**	**166.7070772**	**166.6683753**	**169.6536649**	**169.5885189**
-3.5	**-52.13878554**	**-52.13737223**	**-41.47246797**	**-33.86068286**	**-34.73490526**	**-58.0853071**	**-61.2725446**	**-64.0014133**	**-64.0106592**
+3.5	**161.5849256**	**162.7024608**	**131.6132164**	**105.8694556**	**136.3829536**	**174.8270618**	**174.8798616**	**175.6147576**	**174.6881602**
-3.55	**-46.92490697**	**-46.92363496**	**-37.32522112**	**-30.47461457**	**-31.26141466**	**-52.27677671**	**-55.1452901**	**-57.6012717**	**-57.609593**
+3.55	**159.3200476**	***161.05464262 6548***	***129.2421356***	**103.7876624**	**134.4742549**	***172.4971683***	**172.5386082**	**174.6892412**	**174.5874841**

-3.6	**-41.71102839**	**-41.70989768**	**-33.17797428**	**-27.08854628**	**-27.78792406**	**-46.46824633**	**-49.0180355**	**-51.20113**	**-51.2085267**
+3.6	**163.1522737**	**164.7225079**	**132.254201**	**105.7636013**	**137.461243**	**174.1131651**	**174.1690056**	**177.883082**	**177.7001445**
-3.65	**-36.49714981**	**-36.49616041**	**-29.03072743**	**-23.70247799**	**-24.31443346**	**-40.65971595**	**-42.890781**	**-44.8009883**	**-44.8074604**
+3.65	**159.6738272**	**160.842577**	**129.481158**	**103.3109029**	**129.6119622**	**164.63384**	**164.6372384**	**170.9668371**	**170.9395707**
-3.7	**-31.28327124**	**-31.28242314**	**-24.88348059**	**-20.3164097**	**-20.84094286**	**-34.85118557**	**-36.7635264**	**-38.4008466**	**-38.4063941**
+3.7	**155.0858845**	**156.1409151**	***125.6556446***	**99.84256524**	**124.9014078**	**156.9896098**	**156.8592856**	**162.3224509**	**162.1907189**
-3.75	**-26.06939266**	**-26.06868586**	**-20.73623374**	**-16.9303414**	**-17.36745227**	**-29.04265519**	**-30.6362719**	**-32.000705**	**-32.0053278**
+3.75	**140.1902634**	**140.749029**	**113.0548574**	**90.40091609**	**110.8223347**	**144.7135819**	**144.812806**	**145.1802525**	**144.7169557**
-3.8	**-20.85551408**	**-20.85494859**	**-16.5889869**	**-13.54427311**	**-13.89396167**	**-23.2341248**	**-24.5090173**	**-25.6005633**	**-25.6042616**
+3.8	**125.7702499**	**127.0306344**	**101.8385411**	**80.71913217**	**97.85137828**	**129.8932853**	**130.2245233**	**130.3701813**	**130.2192747**
-3.85	**-15.64163551**	**-15.64121132**	**-12.44174005**	**-10.15820482**	**-10.42047107**	**-17.42559442**	**-18.3817628**	**-19.2004216**	**-19.2031953**
+3.85	**100.5961946**	**101.0561373**	**81.1568676**	**64.3148574**	**77.39204336**	**104.8337734**	**105.668812**	**105.6827212**	**105.7910867**
-3.9	**-10.42775693**	**-10.42747404**	**-8.294493204**	**-6.772136529**	**-6.94698047**	**-11.61706404**	**-12.2545082**	**-12.8002799**	**-12.802129**
+3.9	**74.22667601**	**75.09114303**	**59.87039554**	**47.47470489**	**56.05152358**	**78.64625301**	**79.75599704**	**79.84521378**	**80.21205708**
-3.95	**-5.213878356**	**-5.213736771**	**-4.147246359**	**-3.386068237**	**-3.473489871**	**-5.808533657**	**-6.12725369**	**-6.40013827**	**-6.40106273**
+3.95	**39.02807648**	**39.46890315**	**31.47048967**	**24.93219681**	**29.28417064**	**41.6217412**	**42.39610203**	**42.49228784**	**42.61997213**
-5	**-2.08E-14**	**-2.22E-14**	**-1.68E-14**	**-1.38E-14**	**-1.69E-14**	**-2.01E-14**	**-2.05E-14**	**-2.11E-14**	**-2.22E-14**
+5	**2.83E-15**	**2.83E-15**	**2.25E-15**	**1.78E-15**	**2.36E-15**	**3.11E-15**	**3.10E-15**	**3.23E-15**	**3.25E-15**

3-Span: Moment (Max and Min) Raw Data Results - 15' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.13E-14	-1.96E-14	-2.59E-14	-2.68E-14	-2.30E-14
End Shear	9.17E-15	8.21E-15	1.07E-14	1.14E-14	9.45E-15
-0.05	-7.074939909	-6.56606176	-6.00853114	-7.15067674	-7.15074519
+0.05	48.18682779	44.86099173	45.2722429	48.69962529	48.94267142
-0.1	-14.14987982	-13.13212352	-12.0170623	-14.3013535	-14.3014904
+0.1	90.65910763	84.45636048	86.23891246	91.83215166	92.23347731
-0.15	-21.22481973	-19.69818528	-18.0255934	-21.4520302	-21.4522356
+0.15	119.5884142	111.5120074	116.337657	123.0942687	121.7886882
-0.2	-28.29975964	-26.26424704	-24.0341246	-28.6027069	-28.6029808
+0.2	148.1730766	137.7654879	146.4120122	154.8592994	151.2938748
-0.25	-35.37469954	-32.8303088	-30.0426557	-35.7533837	-35.753726
+0.25	163.0935312	152.1187268	162.3226824	172.6840475	166.9821928
-0.3	-42.44963945	-39.39637056	-36.0511869	-42.9040604	-42.9044712
+0.3	174.3614499	166.6617579	180.3967857	190.931672	179.0218996
-0.35	-49.52457936	-45.96243232	-42.059718	-50.0547371	-50.0552164
+0.35	188.6861832	176.861881	186.220168	197.8064989	193.3178757
-0.4	-56.59951927	-52.52849408	-48.0682492	-57.2054139	-57.2059616
+0.4	203.0926474	190.1293731	191.3587311	207.0135545	208.5931194
-0.45	-63.67445918	-59.09455584	-54.0767803	-64.3560906	-64.3567067
+0.45	206.4890625	192.6379221	187.4948727	209.2882451	210.9995792
-0.5	-70.74939909	-65.6606176	-60.0853114	-71.5067674	-71.5074519
+0.5	207.1791758	192.7305678	188.4866142	211.1825597	212.934385
-0.55	-77.824339	-72.22667936	-66.0938426	-78.6574441	-78.6581971
+0.55	196.1513574	182.6778623	184.9459515	199.4926665	201.4246683
-0.6	-84.89927891	-78.79274112	-72.1023737	-85.8081208	-85.8089423
+0.6	183.3013394	170.208804	180.1794645	191.1477849	189.4668717
-0.65	-91.97421881	-85.35880288	-78.1109049	-92.9587976	-92.9596875
+0.65	163.3709245	153.4629791	165.0735609	174.4175652	167.5717184
-0.7	-99.04915872	-91.92486464	-84.119436	-100.109474	-100.110433
+0.7	150.6624969	140.013737	150.8572823	159.429852	153.2116787
-0.75	-106.1240986	-98.49092641	-90.1279672	-107.260151	-107.261178
+0.75	126.7005628	117.9160846	124.5351143	131.1980566	129.4310134
-0.8	-113.1990385	-105.0569882	-96.1364983	-114.410828	-114.411923
+0.8	101.5870853	94.52448777	102.3352874	107.4471196	104.3152779
-0.85	-120.2739784	-111.6230499	-102.145029	-121.561504	-121.562668
+0.85	63.62053634	60.62995671	68.429875	71.30563894	66.92878372
-0.9	-129.9783184	-122.5512728	-108.153561	-128.712181	-131.00236
+0.9	36.29509212	39.15194747	41.89033605	44.81705494	39.22525475
-0.95	-145.9239041	-148.6173251	-123.328573	-135.862858	-146.476464
+0.95	20.38990907	21.02709147	22.26922677	24.74015984	22.55623345
-1	-165.1850085	-186.3537586	-138.88585	-150.735838	-162.301974
+1	12.74865359	11.85908408	11.67598496	12.98706997	12.98518086
(Span 2) -2	-165.1850085	-186.3537586	-138.88585	-150.735838	-162.301974
+2	12.74865359	11.85908408	11.67598496	12.98706997	12.98518086
-2.05	-119.5255885	-137.8356983	-90.5977642	-98.8477502	-102.873683
+2.05	23.54613019	22.78788913	23.08480272	26.88056906	23.53172199
-2.1	-94.60224285	-94.99238295	-74.4409632	-80.129164	-84.4380779
+2.1	35.42771766	39.92419076	38.4342677	41.99044508	35.28648413
-2.15	-75.91502677	-71.35437311	-67.1470466	-73.7625102	-74.3323408
+2.15	60.17704836	60.75968334	68.09818901	72.53468976	60.61230521
-2.2	-70.71570802	-65.81433112	-67.0733327	-71.7347466	-73.4597424
+2.2	99.72727015	97.13274763	103.0162832	109.8840354	100.7044516

-2.25	**-68.83951774**	**-64.21483715**	**-66.9996188**	**-69.9191711**	**-72.8510449**
+2.25	**133.884961**	**126.364078**	**133.2261176**	**142.2079619**	**135.5571024**
-2.3	**-67.0930637**	**-62.81073911**	**-66.9259049**	**-68.6618087**	**-72.2655734**
+2.3	**162.3348022**	**150.6758953**	**157.7430552**	**168.2592589**	**165.0740419**
-2.35	**-65.43964316**	**-61.48640897**	**-66.8560883**	**-67.8052821**	**-71.8176135**
+2.35	**189.8742116**	**176.0298164**	**176.7748339**	**192.3272099**	**192.7751325**
-2.4	**-63.79788011**	**-60.42033997**	**-66.7968459**	**-66.9487555**	**-71.6049002**
+2.4	**209.9623026**	**194.5690652**	**189.8950536**	**212.6231993**	**213.0077668**
-2.45	**-62.31473009**	**-59.57121387**	**-66.7376036**	**-66.0922289**	**-71.4128462**
+2.45	**221.9046749**	**205.9319899**	**196.350924**	**224.8533339**	**225.0515615**
-2.5	**-60.92658309**	**-58.959813**	**-66.6783633**	**-65.2829136**	**-71.2399988**
+2.5	**225.3042551**	**209.3583542**	**195.949101**	**228.5057665**	**228.5057639**
-2.55	**-62.31316008**	**-59.57102119**	**-66.7383173**	**-66.0933949**	**-71.414818**
+2.55	**221.8925559**	**205.9303533**	**196.3354252**	**224.8414845**	**225.0402228**
-2.6	**-63.79743997**	**-60.42027065**	**-66.7982696**	**-66.9506157**	**-71.6022077**
+2.6	**209.9398268**	**194.565888**	**189.9115206**	**212.6000834**	**212.9856495**
-2.65	**-65.43844137**	**-61.48652457**	**-66.858222**	**-67.8078366**	**-71.8169354**
+2.65	**189.8424798**	**176.0327716**	**176.780329**	**192.348461**	**192.7433372**
-2.7	**-67.09050524**	**-62.81058375**	**-66.9236132**	**-68.6650574**	**-72.2669077**
+2.7	**162.2953644**	**150.6782335**	**157.7383522**	**168.2542424**	**165.090246**
-2.75	**-68.83937026**	**-64.21499612**	**-66.9980685**	**-69.914174**	**-72.8482721**
+2.75	**133.8827631**	**126.3732226**	**133.2152843**	**142.1967888**	**135.5556545**
-2.8	**-70.71463501**	**-65.8142512**	**-67.0725237**	**-71.7328463**	**-73.4591041**
+2.8	**99.71409049**	**97.14090359**	**102.9952103**	**109.8615576**	**100.6933628**
-2.85	**-75.91324425**	**-71.35392127**	**-67.1469789**	**-73.7594922**	**-74.3337112**
+2.85	**60.15360534**	**60.75463301**	**68.15376977**	**72.50659108**	**60.58990281**
-2.9	**-94.5988925**	**-94.99185749**	**-74.4406501**	**-80.1280586**	**-84.4370106**
+2.9	**35.38906602**	**39.9303919**	**38.38785637**	**41.94054689**	**35.32247095**
-2.95	**-119.5251317**	**-137.8352861**	**-90.6004772**	**-98.8502275**	**-102.870004**
+2.95	**23.50630456**	**22.79455442**	**23.13304402**	**26.93066762**	**23.57193074**
-3	**-165.1861836**	**-186.3536518**	**-138.881226**	**-150.730959**	**-162.300044**
+3	**12.74912776**	**11.85915607**	**11.67594312**	**12.98758451**	**12.98567315**
(Span 3) -4	**-1.65E+02**	**-1.86E+02**	**-1.39E+02**	**-1.51E+02**	**-1.62E+02**
+4	**1.27E+01**	**1.19E+01**	**1.17E+01**	**1.30E+01**	**1.30E+01**
-3.05	**-145.9255292**	**-148.6177991**	**-123.326471**	**-135.862932**	**-146.476824**
+3.05	**20.36525588**	**21.02827825**	**22.21378506**	**24.70148774**	**22.56218618**
-3.1	**-129.9795968**	**-122.5514461**	**-108.153052**	**-128.712251**	**-130.998507**
+3.1	**36.26447242**	**39.14606765**	**42.33575801**	**45.26138477**	**39.19071679**
-3.15	***-120.2740405***	***-111.6230569***	***-102.14455***	***-121.56157***	***-121.56273***
+3.15	**63.58741687**	**60.63180271**	**68.43443674**	**71.30530168**	**66.92643184**
-3.2	**-113.1990969**	**-105.0569946**	**-96.1360467**	**-114.410889**	**-114.411981**
+3.2	**101.5449679**	**94.06838622**	**102.3391661**	**107.5021975**	**104.2690089**
-3.25	**-106.1241532**	**-98.49093231**	**-90.1275439**	**-107.260208**	**-107.261232**
+3.25	**126.6906641**	**117.9147302**	**124.5334935**	**131.1965744**	**129.4180344**
-3.3	**-99.04920961**	**-91.92487**	**-84.1190411**	**-100.109528**	**-100.110483**
+3.3	**150.6014379**	**140.0046963**	**150.799617**	**159.4758016**	**153.145019**
-3.35	**-91.97426599**	**-85.35880769**	**-78.1105383**	**-92.958847**	**-92.9597343**
+3.35	**163.3395441**	**153.4617191**	**164.9700813**	**174.4550561**	**167.5585966**
-3.4	**-84.89932237**	**-78.79274538**	**-72.1020354**	**-85.8081662**	**-85.8089852**
+3.4	**183.2845094**	**170.2063716**	**180.1053787**	**191.1777079**	**189.4445753**
-3.45	**-77.82437875**	**-72.22668307**	**-66.0935326**	**-78.6574854**	**-78.6582362**
+3.45	**196.1669524**	**182.6802955**	**184.9172753**	**199.4648851**	**201.398339**
-3.5	**-70.74943513**	**-65.66062076**	**-60.0850298**	**-71.5068047**	**-71.5074871**
+3.5	**207.144489**	**192.7254344**	**188.3962844**	**211.1428646**	**212.8964911**
-3.55	**-63.6744915**	**-59.09455845**	**-54.0765269**	**-64.3561239**	**-64.3567381**
+3.55	**206.4847001**	**192.6373598**	**187.4872285**	**209.2816166**	**210.9932519**
-3.6	**-56.59954788**	**-52.52849614**	**-48.0680241**	**-57.2054432**	**-57.205989**

+3.6	**203.1173884**	**190.1332016**	**191.2396434**	**207.0392786**	**208.4054903**
-3.65	**-49.52460426**	**-45.96243383**	**-42.0595213**	**-50.0547624**	**-50.05524**
+3.65	**188.6978527**	**176.8637695**	**186.1941304**	**197.8331224**	**193.3501856**
-3.7	**-42.44966064**	**-39.39637152**	**-36.0510185**	**-42.9040816**	**-42.9044909**
+3.7	**174.3530019**	**166.6564513**	**180.3624164**	**191.00222**	**179.0141303**
-3.75	**-35.37471702**	**-32.83030921**	**-30.0425156**	**-35.7534009**	**-35.7537419**
+3.75	**163.0749339**	**152.1222929**	**162.2775155**	**172.6904035**	**166.9632448**
-3.8	**-28.2997734**	**-26.2642469**	**-24.0340128**	**-28.6027201**	**-28.6029929**
+3.8	**148.1421663**	**137.773525**	**146.3553732**	**154.9085571**	**151.2618818**
-3.85	**-21.22482978**	**-19.69818459**	**-18.02551**	**-21.4520393**	**-21.4522438**
+3.85	**119.5867771**	**111.5118716**	**116.3723971**	**123.1312602**	**121.786935**
-3.9	**-14.14988615**	**-13.13212228**	**-12.0170072**	**-14.3013586**	**-14.3014948**
+3.9	**90.60222182**	**84.46052354**	**86.2619522**	**91.86164421**	**92.29289125**
-3.95	**-7.074942532**	**-6.566059965**	**-6.00850433**	**-7.15067782**	**-7.15074571**
+3.95	**48.158411**	**44.86308407**	**45.28371938**	**48.71447165**	**48.91303829**
-5	**-2.15E-14**	**-1.99E-14**	**-2.52E-14**	**-2.69E-14**	**-2.38E-14**
+5	**3.79E-15**	**3.47E-15**	**3.44E-15**	**3.75E-15**	**3.77E-15**

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-3.493846178	-3.604782091	-3.604686372	-2.86733424	-2.403922046	-2.401570592	-4.016020203	-4.236305054	-4.425101981	-4.425733946
End Shear	33.25117731	29.89369192	29.98013234	23.93583289	19.38662835	22.70378724	32.04229146	33.14301807	32.77245331	32.96694439
-0.05	-4.37727068	-3.604782091	-3.757233135	-2.86733424	-2.407530452	-2.401570592	-4.016020203	-4.236305054	-4.425101981	-4.476362677
+0.05	29.73020805	27.01692298	27.28083957	21.50759338	17.49550294	20.18226389	28.58504893	29.29423224	29.26488169	29.45587056
-0.1	-6.735944092	-4.038244928	-4.614574634	-4.086898865	-3.423200237	-2.454812523	-4.016020203	-4.702369505	-5.209945898	-5.39853572
+0.1	27.33060326	24.36636213	24.61713605	19.29846892	15.75736926	18.74861312	25.49591715	25.84174385	25.81181639	25.99741883
-0.15	-7.939662543	-4.854059865	-5.030651191	-4.826571515	-3.991214521	-3.554596211	-4.016020203	-5.312691791	-5.757412338	-5.906126697
+0.15	26.11164345	23.03942996	23.28220109	18.24653701	14.8892046	17.74654202	23.96214576	24.14662208	24.11654242	24.29875892
-0.2	-10.38173361	-6.376023098	-5.936609288	-6.233024316	-5.083889938	-5.694311765	-5.287629013	-6.424110117	-6.739468363	-6.816753644
+0.2	23.64954628	20.39747233	20.62199424	16.14415439	13.16463903	16.05300816	20.93434798	20.99089431	21.06115762	21.12443784
-0.25	-11.6144324	-7.083790857	-6.45937575	-6.90036641	-5.609020754	-6.732578304	-5.959902128	-6.928117834	-7.178010245	-7.224695655
+0.25	22.41206039	19.0885287	19.30303159	15.09919622	12.31219757	15.20876466	19.44757626	19.50267246	19.70668358	19.63318812
-0.3	-14.08902685	-8.396931096	-7.841364985	-8.164677686	-6.617985423	-8.741765366	-7.192708352	-7.839999266	-7.959996546	-7.958101556
+0.3	19.93834175	16.50992401	16.63961931	13.03548664	10.63682121	13.52215022	16.54641601	16.59826678	16.66329189	16.7218533
-0.35	-15.32527104	-9.060561843	-8.991717803	-8.762209712	-7.102229403	-9.711026061	-8.408517238	-8.56424235	-8.531347777	-8.55026013
+0.35	18.70776238	15.24634471	15.29736481	12.02222033	9.817805441	12.68357578	15.13928375	15.18934794	15.25232953	15.30905376
-0.4	-17.7815218	-11.7963305	-11.41575929	-10.15155331	-8.031224871	-11.57471667	-11.08947638	-11.07037694	-11.04041941	-11.06006129
+0.4	16.39658883	12.78584071	12.75672656	10.04660584	8.198972273	11.02537839	12.43006613	12.47624106	12.53471198	12.5873698
-0.45	-18.99587689	-13.14596161	-12.77462538	-11.20220635	-8.83644937	-12.46748296	-12.41355282	-12.3157726	-12.2876906	-12.30763937
+0.45	15.19835237	11.59500037	11.38830073	9.089751257	7.403020683	10.20955269	11.20236067	11.19222128	11.24231595	11.28743268
-0.5	-21.3829116	-15.79789798	-15.22413804	-13.25886229	-10.49675046	-14.1706941	-15.01778195	-14.86743912	-14.84625404	-14.86892159
+0.5	12.88308793	9.307345997	9.040156669	7.25168535	5.881400364	8.613933781	8.992758945	8.982372034	9.028694129	9.070412219
-0.55	-22.5499412	-17.09587152	-16.49605522	-14.26191175	-11.3136786	-14.97947306	-16.29347467	-16.2073328	-16.6445836	-16.21109594
+0.55	11.76775943	8.216618187	7.982825944	6.375960468	5.178108668	7.837936618	7.939224622	7.928798801	7.973075783	7.907615852
-0.6	-24.75943735	-19.62501482	-18.96927551	-16.21003767	-12.91515316	-16.50722821	-18.78090347	-18.80329768	-19.26807346	-19.29574007
+0.6	9.597918981	6.156566227	6.017265794	4.724866341	3.856289999	6.339056105	5.94937088	5.939063067	5.978950521	5.898179413
-0.65	-25.78934491	-20.85185705	-20.15718978	-17.15215157	-13.69729871	-17.2245377	-19.98818853	-20.05586231	-20.81785256	-20.84554604
+0.65	8.549793525	5.193325915	5.094183371	4.184824137	3.241750079	5.619967621	5.018926006	5.008780329	5.04632818	4.969351002
-0.7	-27.69511484	-23.21926284	-22.48164711	-18.96506677	-15.21833718	-18.56185892	-22.7955497	-22.80817169	-23.82881114	-23.85635258
+0.7	6.545487073	3.425140663	3.50994595	3.168072991	2.40745382	4.25198515	3.309975858	3.303836692	3.324689865	3.318428627
-0.75	-28.56923259	-24.35549787	-23.61385274	-19.83291118	-15.9547754	-19.1802065	-24.25678331	-24.26979137	-25.28502253	-25.31238608
+0.75	5.599766276	2.907743691	3.007836011	2.68788171	2.03004828	3.606885541	2.810197273	2.804135209	2.798707098	2.817754182
-0.8	-30.15557187	-26.52221388	-25.80739557	-21.48396181	-17.37328956	-20.31211525	-27.09477087	-27.10838507	-28.29526064	-28.88218594
+0.8	3.837337947	1.942642604	2.062529165	1.791607639	1.410813321	2.403959572	1.877926514	1.87267293	1.866944611	1.853232027
-0.85	-30.86604894	-27.54836699	-26.86441351	-22.26420453	-18.05287613	-20.82401049	-28.46426842	-28.71699476	-29.7489295	-29.95678975
+0.85	3.026282438	1.497979974	1.695441594	1.378616107	1.088418778	1.849929611	1.448372841	1.469199331	1.458334691	1.449541057
-0.9	-32.11725519	-29.47544415	-28.93529329	-23.726718	-19.34630139	-21.73552999	-31.08613381	-31.92520316	-32.48711985	-33.27811418
+0.9	1.558620371	0.680372032	0.913355736	0.630664987	0.496418791	0.860184401	0.664687946	0.733384516	0.72184482	0.714030911
-0.95	-32.81168079	-30.37204354	-29.9050338	-24.40602026	-19.95759842	-22.13348789	-32.33124273	-33.46932684	-34.00874325	-34.85626518
+0.95	0.907908781	0.352144342	0.588781643	0.298799958	0.232164989	0.400339095	0.375900232	0.375913163	0.392694049	0.388134802
-1	-34.22104271	-32.02053055	-31.69608754	-25.65333035	-21.10289499	-23.0614216	-34.67167515	-36.41599679	-37.08184583	-37.88765337
+1	3.56E-01	0.352144342	0.35208322	0.280063169	2.30E-01	0.244717323	0.375900232	0.375913163	0.377548789	0.37751989
(Span 2) -2	-2.124360308	-2.101221818	-2.10085713	-1.671118283	-1.372995041	-1.460212051	-2.242971685	-2.243048841	-2.252808558	-2.25263612
+2	38.31271104	31.65496168	31.4382917	24.99144534	20.84538466	25.48814928	35.57010177	37.51006133	38.30529134	38.75333776
-2.05	-2.560360911	-2.101221818	-2.160646635	-1.671118283	-1.374466543	-1.460212051	-2.242971685	-2.243048841	-2.252808558	-2.25263612
+2.05	36.9776783	30.81503356	30.66759889	24.3889108	20.28979052	24.64853807	34.39406911	36.17582755	37.05188403	37.51921484
-2.1	-3.656792815	-2.101221818	-2.713219998	-1.671118283	-1.382504778	-1.460212051	-2.242971685	-2.243048841	-2.252808558	-2.25263612
+2.1	34.11792232	29.26677166	29.00064099	23.15151293	19.10748219	22.91923104	31.88235849	33.44055251	34.18132896	34.89507954
-2.15	-4.951059508	-2.197013401	-3.276677834	-2.068439855	-1.75672201	-1.851986051	-2.242971685	-2.594559563	-2.933482531	-3.029743427
+2.15	31.30781958	27.59032759	27.1877844	21.99885932	17.86626406	21.14744103	29.40474618	30.75456497	31.14923753	32.0854113
-2.2	-6.419285222	-3.187130151	-3.945476775	-2.898163712	-2.412405789	-2.987293419	-2.803224041	-3.447398854	-3.695162103	-3.73385441
+2.2	28.54766396	25.80235487	25.25485721	20.60735822	16.63610464	19.08657479	26.95903011	27.99610767	27.98752262	29.00495552
-2.25	-8.037599209	-4.186236833	-4.869177954	-4.031136182	-3.325785296	-4.094314508	-3.80940795	-4.210577155	-4.359992001	-4.355864461

+2.25	26.72920981	23.91951883	23.2276848	19.1492057	15.36710087	18.08230028	24.52227992	25.20173124	25.50874893	26.23312713
-2.3	-9.782127466	-5.460636786	-6.194407509	-5.16406896	-4.216592022	-5.286291382	-4.934336561	-5.665199898	-5.656690649	-5.474323032
+2.3	25.15193835	21.95847361	21.13210347	17.63515609	14.06818511	16.98064851	22.04264541	22.40795352	23.01114251	23.43132028
-2.35	-11.62899939	-7.447892937	-7.665650624	-6.226668708	-5.066308534	-6.974291195	-6.884799663	-7.366151613	-7.358022616	-7.275023688
+2.35	23.45378339	19.93588021	19.00170627	16.07595515	12.74814434	15.78668558	19.55079391	19.65130531	20.47652874	20.62420341
-2.4	-13.55434054	-9.490145461	-9.275474885	-7.781570607	-6.129705147	-8.615623318	-8.894811728	-9.15518125	-9.149064719	-9.173205082
+2.4	21.61350714	17.86839456	17.00762076	14.34830389	11.41561157	14.50546589	17.16010615	17.10421413	17.91760856	17.95237864
-2.45	-15.53427884	-11.57074527	-11.01647505	-9.403184614	-7.428827001	-10.19499469	-10.94558726	-11.0147896	-11.12431206	-11.1531665
+2.45	19.54094741	15.77267577	14.89674064	12.66155832	10.07907908	13.142054	15.09186835	14.97642715	15.58160889	15.61481334
-2.5	-17.54494177	-13.67301731	-12.92137597	-11.0347377	-8.748521111	-11.70733753	-13.01965506	-12.927454	-13.31425617	-13.34523855
+2.5	17.53418613	13.66537814	12.91605605	11.03081597	8.746882607	11.70151051	13.01200855	12.92076736	13.30696165	13.33830152
-2.55	-19.56245703	-15.78031224	-14.90224262	-12.66546917	-10.08071091	-13.14759073	-15.09951443	-14.98471385	-15.58916352	-15.62198893
+2.55	15.53427796	11.56316817	11.01157445	9.399280624	7.427208607	10.18890098	10.938013	11.00826709	11.1173636	11.14655079
-2.6	-21.54111093	-17.87597072	-17.01353489	-14.28513078	-11.4172254	-14.51069278	-17.16769412	-17.11273227	-17.92533916	-17.95972565
+2.6	13.5647155	9.482700104	9.27093338	7.777698266	6.128101364	8.609280115	8.887367555	9.148895658	9.143100703	9.167540298
-2.65	-23.38659911	-19.94333482	-19.00741738	-16.01285668	-12.7497272	-15.79158254	-19.55994214	-19.66075896	-20.48495981	-20.6329535
+2.65	11.69897676	7.440632059	7.66148496	6.22419071	5.065278179	6.967712072	6.877558149	7.36015356	7.352340251	7.375061035
-2.7	-25.09011173	-21.96574584	-21.13794629	-17.6388741	-14.06972878	-16.98519824	-22.05181498	-22.41760789	-23.01942933	-23.44010904
+2.7	9.810602952	5.453623139	6.19063974	5.161423745	4.215490983	5.281553652	4.928641233	5.659555959	5.651357088	5.469250994
-2.75	-26.71229243	-23.92654579	-23.23338707	-19.15281013	-15.36859391	-18.08647875	-24.53134619	-25.21145724	-25.51795838	-26.2418758
+2.75	8.099620104	4.182605866	4.865826542	4.028318111	3.324610337	4.089896838	3.805697778	4.20800841	4.357890177	4.391507372
-2.8	-28.1426292	-25.8090765	-25.26034423	-20.61082107	-16.6375536	-19.09035922	-26.96788859	-28.00578236	-27.96331401	-29.01357591
+2.8	6.459796966	3.18353229	3.943620011	2.89613737	2.41156589	2.983257723	2.799553339	3.444531482	3.692757679	3.731741784
-2.85	-31.04309478	-27.59667957	-27.19297377	-22.00215754	-17.86763907	-20.98385702	-29.33079609	-30.76404399	-31.04757484	-31.98874968
+2.85	4.994368095	2.193458344	3.274887401	2.066597465	1.7558937	1.977669239	2.243027652	2.59134638	2.930714796	3.027320385
-2.9	-34.15748155	-29.2726964	-29.00547607	-23.15461516	-19.10887737	-22.92612404	-31.76605896	-33.44972323	-34.07903995	-34.90372328
+2.9	3.70024693	2.101211582	2.711731426	1.671112871	1.382544968	1.460167727	2.243027652	2.243101696	2.252748201	2.252578687
-2.95	-37.07254909	-30.82046863	-30.67200626	-24.39179493	-20.29106859	-24.65523498	-34.2785968	-36.06703758	-36.94898104	-37.52726322
+2.95	2.529935029	2.101211582	2.159093549	1.671112871	1.374506733	1.460167727	2.243027652	2.243101696	2.252748201	2.252578687
-3	-39.74580747	-32.58766022	-32.1667354	-25.57190362	-21.37558806	-26.31260084	-36.72674533	-38.69170504	-39.51431737	-39.9383851
+3	2.124976397	2.101211582	2.100849357	1.671112871	1.373035234	1.460167727	2.243027652	2.243101696	2.252748201	2.252578687
(Span 3) -4	-3.56E-01	-0.352142626	-0.352081917	-0.280062262	-2.30E-01	-0.244709895	-0.375909612	-0.375922021	-0.377538674	-0.377510265
+4	33.21747343	31.21511838	30.82127409	25.04565649	20.54228643	22.48913944	33.51890877	34.95736209	35.56511327	36.37724004
-3.05	-9.40E-01	-0.352142626	-0.598982458	-0.300254603	-2.44E-01	-0.403516899	-0.375909612	-0.375922021	-0.394677133	-0.389392303
+3.05	32.74783724	30.36568211	29.89972137	24.40277922	19.95624707	22.13051016	32.32214527	33.45866461	33.99815051	34.84653232
-3.1	-2.318302631	-1.070757247	-1.310498501	-0.992857542	-0.773986579	-1.348996878	-1.042406678	-1.091364481	-1.079943341	-1.071495579
+3.1	31.63224919	28.52648194	27.91436356	23.00870416	18.70947159	21.29517564	29.78619012	30.32843053	31.13783569	31.63363458
-3.15	-3.054058713	-1.487396619	-1.625500199	-1.380484304	-1.073656518	-1.854002996	-1.43355857	-1.471841699	-1.460845908	-1.451926278
+3.15	30.9880438	27.54104477	26.91083088	22.26046916	18.05131688	20.82013097	28.45424486	28.70552958	29.73951111	29.94603926
-3.2	-4.71783671	-2.416483721	-2.527312982	-2.23064945	-1.754759651	-2.994840703	-2.335703822	-2.329568452	-2.324079463	-2.307755746
+3.2	29.53115933	25.44931628	24.71706154	20.66901025	16.67184273	19.7594504	25.68054746	25.69447015	26.77775316	27.38553271
-3.25	-5.617623673	-2.911333521	-3.010535975	-2.690095796	-2.030969931	-3.61171526	-2.813715255	-2.807456574	-2.801855733	-2.820745707
+3.25	28.72022533	24.34735333	23.60763645	19.8287568	15.95305323	19.17547897	24.24606306	24.25966201	25.27552986	25.30335889
-3.3	-7.539101492	-4.284933164	-4.220174431	-3.669976521	-2.803718255	-4.928905956	-4.141526367	-4.131274586	-4.166093409	-4.092931512
+3.3	26.93774772	22.04204831	21.32227076	18.06658224	14.46360444	17.90443314	21.29993996	21.31274116	22.32898659	22.3571243
-3.35	-8.555231187	-5.199970634	-5.09912052	-4.187316516	-3.243241166	-5.625422528	-5.025441167	-5.01492804	-5.052156077	-4.974896502
+3.35	25.96794906	20.84303452	20.15066538	17.14763036	13.69542223	17.21902336	19.9793739	20.04724645	20.80772292	20.83590723
-3.4	-10.67736986	-7.172674125	-6.986681594	-5.53672467	-4.504048728	-7.08480762	-6.930966005	-6.920164442	-6.961944497	-6.877348518
+3.4	23.87558321	18.36309381	17.7606546	15.24140592	12.11824497	15.75259108	17.53940922	17.51082619	17.68157652	17.70968662
-3.45	-11.77360317	-8.224256568	-8.446997731	-6.380071308	-5.179817423	-7.843880871	-7.946716033	-7.935873653	-7.979775124	-7.891948713
+3.45	22.75475743	17.08650378	16.58574496	14.25709531	11.31167374	14.97323182	16.28413688	16.19809267	16.17965489	16.20275594
-3.5	-14.02045147	-10.44267694	-10.15530221	-8.161601613	-6.612109143	-9.411300949	-10.08947786	-10.07874246	-10.12660722	-10.16971654
+3.5	20.42112028	14.47089576	14.04218565	12.23349363	9.668536258	13.32638939	13.71412204	13.54451331	13.51897162	13.53958927
-3.55	-15.16467985	-11.60343035	-11.29865838	-9.094284879	-7.377201811	-10.21585146	-11.21062199	-11.20002712	-11.24971164	-11.29446571
+3.55	19.22870705	13.13620576	12.77235445	11.19715808	8.834341832	12.46057022	12.40384061	12.30714322	12.27949932	12.29984973
-3.6	-17.47876396	-14.01281641	-13.96761689	-11.02975521	-8.987931747	-11.85714496	-13.77582352	-13.82344947	-13.88375781	-13.93807552
+3.6	16.84597802	10.42387271	10.24280813	9.334299802	7.572108089	10.64830365	9.74383702	9.810419327	9.779286686	9.798987356

-3.65	-18.7784223	-15.25536614	-15.21144527	-12.02704959	-9.819790577	-12.69009237	-15.14943017	-15.19892744	-15.26140569	-15.31768487
+3.65	15.58242495	9.050557479	8.985506257	8.759364162	7.101045054	9.703513319	8.398576178	8.555522147	8.523076942	8.542390042
-3.7	-21.11415577	-17.80096876	-17.90675103	-14.06701444	-11.47097012	-14.37110006	-17.994325	-18.04727083	-18.113672	-18.1734785
+3.7	13.12186565	7.752353028	6.975687107	7.541087245	6.119042609	7.740785491	6.59001971	7.396400167	7.58160449	7.602024767
-3.75	-22.35216618	-19.09794966	-19.3102117	-15.10420056	-12.31424444	-15.21536477	-19.45838047	-19.51287298	-19.58100837	-19.64238439
+3.75	11.89102221	7.078737849	6.691299008	6.89718662	5.60770367	6.724512335	5.955045027	6.924698817	7.175208853	7.22222044
-3.8	-24.82379007	-21.72502158	-21.95672302	-17.19923912	-14.02638235	-16.90192074	-22.45152059	-22.50877351	-22.57992493	-22.64401108
+3.8	9.442095518	5.62748314	5.437157769	5.538441254	4.543277318	4.626308252	4.57137299	5.882225098	6.263337875	6.37518306
-3.85	-26.140782	-23.04903873	-23.28952279	-18.25159808	-14.89129084	-17.74042263	-23.97335992	-24.15823672	-24.1275529	-24.30923919
+3.85	8.107170195	4.848226198	5.028380845	4.823046658	3.989744965	3.546041353	4.015922829	5.308542145	5.75390425	5.903043124
-3.9	-28.55408895	-25.70282825	-25.9583985	-20.35225512	-16.6288759	-19.5785148	-27.04945037	-27.57100006	-27.5406981	-27.72865746
+3.9	5.428354825	3.604790304	4.18800432	3.318792014	2.838837416	2.401514544	4.015922829	4.2362835	4.671494745	4.907294953
-3.95	-29.7404111	-27.02651717	-27.28814277	-21.44557084	-17.49755647	-20.39198721	-28.59643284	-29.30629665	-29.27631849	-29.46673654
+3.95	4.266288987	3.604790304	3.754819968	2.867338585	2.407532246	2.401514544	4.015922829	4.2362835	4.424953192	4.473541414
-5	-33.20330898	-29.652266	-29.92248281	-23.61309571	-19.24971014	-22.67675895	-31.6906897	-32.81309999	-32.78403768	-32.97794413
+5	3.493846178	3.604790304	3.604692609	2.867338585	2.403923843	2.401514544	4.015922829	4.2362835	4.424953192	4.425592449

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-3.493846178	-5.120463642	-5.120463642	-5.056849346	-5.514369333	-3.891712211	-4.09653917	-2.510420788
End Shear	33.25117731	42.46263057	42.46263057	39.51358414	41.88936114	32.36884471	34.07815498	23
-0.05	-4.37727068	-5.120463642	-5.120463642	-5.056849346	-5.514369333	-4.128052278	-4.345318187	-2.921095962
+0.05	29.73020805	38.70274282	38.70274282	35.08861327	37.22095925	29.45454271	31.01004494	21.22156243
-0.1	-6.735944092	-5.120463642	-5.120463642	-5.056849346	-5.514369333	-5.259146442	-5.535943624	-3.490994398
+0.1	27.33060326	34.65424686	34.65424686	31.15092793	32.88291392	26.57853951	27.98207371	19.39304473
-0.15	-7.939662543	-5.120463642	-5.120463642	-5.056849346	-5.514369333	-5.813236356	-6.119196165	-4.677630181
+0.15	26.11164345	32.73749695	32.73749695	29.20178244	30.74193087	25.13717333	26.46449412	18.46506208
-0.2	-10.38173361	-6.471050191	-6.847140289	-5.770756109	-7.47069531	-6.901573814	-7.264814542	-6.381110005
+0.2	23.64954628	28.98624592	28.98624592	25.36622861	26.54196434	22.2648238	23.44019349	16.59173874
-0.25	-11.6144324	-7.550346595	-7.967707642	-6.480716143	-8.486464616	-7.437050576	-7.82847429	-7.228946674
+0.25	22.41206039	27.12765683	27.12765683	23.48914782	24.4933411	20.84066091	21.94066542	15.65043146
-0.3	-14.08902685	-9.660170634	-10.1413539	-8.124302149	-10.3883335	-8.950763093	-9.421855887	-8.910365238
+0.3	19.93834175	23.46612004	23.46612004	19.83968716	20.52474466	17.97088809	18.91902361	13.86719493
-0.35	-15.32527104	-11.25506679	-11.39676505	-9.700633997	-11.27572145	-10.16299002	-10.69788423	-9.741357868
+0.35	18.70776238	21.67180317	21.67180317	18.0766369	18.61513353	16.57678586	17.44924827	13.20667105
-0.4	-17.7815218	-15.40865856	-15.68200663	-12.83272317	-13.64010843	-12.60949227	-13.27314976	-10.76822008
+0.4	16.39658883	18.17764636	18.17764636	14.69723323	14.97119985	13.93882167	14.67244386	11.46485789
-0.45	-18.99587689	-17.45752571	-17.78571021	-14.382995	-15.21858199	-13.89435164	-14.6256333	-11.57879248
+0.45	15.19835237	16.48644056	16.48644056	13.17924785	13.25699896	12.67275315	13.33974016	10.60820428
-0.5	-21.3829116	-21.4822638	-21.89962484	-17.43828593	-18.30601441	-16.6292329	-17.50445568	-13.16535174
+0.5	12.88308793	13.2373303	13.2373303	10.57971641	10.65280184	10.2304593	10.76890452	8.945515802
-0.55	-22.5499412	-23.45127643	-23.90356972	-18.93780696	-19.81042365	-17.9294379	-18.87309252	-14.50995463
+0.55	11.76775943	11.68805961	11.68805961	9.340264261	9.410703868	9.064478781	9.541556612	8.131221673
-0.6	-24.75943735	-27.28548742	-27.78981436	-21.86689829	-23.72234346	-20.61939608	-21.75791175	-15.98567593
+0.6	9.597918981	8.761661714	8.761661714	6.999259858	6.999259858	6.924337747	7.288776576	6.559288261
-0.65	-25.78934491	-29.14382601	-29.66584646	-23.78335108	-26.01856964	-22.02374295	-23.23798806	-16.69638661
+0.65	8.549793525	7.393161936	7.393161936	5.904618831	5.950573981	5.914829391	6.226136201	5.805680696
-0.7	-27.69511484	-32.72583753	-33.268079	-27.64437724	-30.49839868	-24.73620812	-26.09525251	-17.88967785
+0.7	6.545487073	4.889249802	4.889249802	3.894089245	3.894089245	4.078632794	4.293297678	4.373273766
-0.75	-28.56923259	-34.44265666	-34.98801791	-29.53806047	-32.67400499	-26.03879631	-27.46668224	-18.54261597
+0.75	5.599766276	4.140043225	4.140043225	3.306114439	3.306114439	3.503608042	3.688008465	3.69850826
-0.8	-30.15557187	-37.7107924	-38.24989237	-33.22844677	-36.87659928	-28.52285398	-30.08073577	-19.79869517
+0.8	3.837337947	2.729870331	2.729870331	2.209325311	2.209325311	2.466569404	2.596388846	2.441930336
-0.85	-30.86604894	-39.25525621	-39.78556739	-35.0158203	-38.8956013	-29.69879459	-31.31760247	-20.41864058
+0.85	3.026282438	2.100336651	2.100336651	1.703968048	1.703968048	1.981695703	2.085995476	1.864156496
-0.9	-32.11725519	-42.14783933	-42.65073735	-38.45160885	-42.7490138	-31.90468696	-33.63663328	-21.55487435
+0.9	1.558620371	0.959904017	0.959904017	0.781985819	0.781985819	1.089939499	1.147304736	0.841627349
-0.95	-32.81168079	-43.48911127	-43.97397709	-40.09069096	-44.5754303	-32.92910911	-34.7130395	-22.06712766
+0.95	0.907908781	0.500192314	0.500192314	0.465844422	0.500325538	0.687337686	0.723513354	0.402424698
-1	-34.22104271	-45.94447873	-46.38610968	-43.18791059	-48.00771101	-34.80707561	-36.68523285	-22.96982439
+1	3.56E-01	0.500192314	0.500192314	0.465844422	0.500325538	0.380162943	0.400171519	0.255859512
(Span 2) -2	-2.124360308	-2.984614205	-2.984614205	-2.779662662	-2.985409143	-2.268406939	-2.387796778	-1.526696754
+2	38.31271104	47.33202056	48.1322409	44.43531699	48.22191279	35.44860923	37.39681575	22.60030992
-2.05	-2.560360911	-2.984614205	-2.984614205	-2.779662662	-2.985409143	-2.486367091	-2.617228517	-1.526696754
+2.05	36.9776783	45.88648441	46.56362179	42.94347087	46.81593348	34.40174679	36.28195399	22.21708316
-2.1	-3.656792815	-2.984614205	-2.984614205	-2.779662662	-2.985409143	-3.173701661	-3.34073859	-1.78543416
+2.1	34.11792232	42.86731224	43.31597849	39.7325147	43.8348807	32.2035341	33.94413458	21.34169616
-2.15	-4.951059508	-2.984614205	-2.984614205	-2.779662662	-2.985409143	-3.861228654	-4.064451214	-2.76032104
+2.15	31.30781958	39.60627647	39.89189012	36.53134501	40.65468019	29.89472704	31.49274338	20.33526854
-2.2	-6.419285222	-3.390205172	-3.390205172	-3.208541657	-3.546157801	-4.55832953	-4.79824161	-3.862898915
+2.2	28.54766396	36.95816497	37.27182483	33.30260352	37.30690569	27.60317204	29.08932392	19.21483086
-2.25	-8.037599209	-4.733238873	-4.733238873	-4.365559985	-4.804146488	-5.597685222	-5.892300233	-5.027230385

+2.25	**26.72920981**	**34.13822062**	**34.4677092**	**30.16368255**	**33.82313276**	**25.93235366**	**27.33185753**	**17.99742334**
-2.3	**-9.782127466**	**-6.906046922**	**-6.906046922**	**-5.805101837**	**-6.042151237**	**-6.995937127**	**-7.364144344**	**-6.243750925**
+2.3	**25.15193835**	**31.17374448**	**31.50379613**	**26.98600755**	**30.23493686**	**23.15769308**	**24.4110607**	**16.70008844**
-2.35	**-11.62899939**	**-9.727039933**	**-9.727039933**	**-8.048739084**	**-8.241501048**	**-8.548175301**	**-8.998079264**	**-7.502880519**
+2.35	**23.45378339**	**28.09204261**	**28.40434351**	**23.80900755**	**26.57389618**	**20.80831494**	**21.93580246**	**15.33985613**
-2.4	**-13.55434054**	**-12.36454346**	**-12.36454346**	**-10.37511541**	**-10.71273155**	**-10.2498212**	**-10.78928547**	**-8.795054919**
+2.4	**21.61350714**	**24.92041997**	**25.19360832**	**20.67205929**	**22.87158385**	**18.42735295**	**19.40075771**	**13.93521468**
-2.45	**-15.53427884**	**-15.15829814**	**-15.15829814**	**-12.76106506**	**-13.19965156**	**-12.09632521**	**-12.7329739**	**-10.11069754**
+2.45	**19.54094741**	**21.68616754**	**21.89583318**	**17.61528533**	**19.15957641**	**16.27382643**	**17.15203129**	**12.60571445**
-2.5	**-17.54494177**	**-18.42921165**	**-18.54833015**	**-15.18474114**	**-15.68529708**	**-14.13642868**	**-14.88045124**	**-11.44023094**
+2.5	**17.53418613**	**18.41659364**	**18.53527834**	**15.17579566**	**15.67616119**	**14.13075638**	**14.8744804**	**11.43866938**
-2.55	**-19.56245703**	**-21.69872575**	**-21.90871015**	**-17.62561636**	**-19.17318366**	**-16.28054406**	**-17.15912648**	**-12.60728124**
+2.55	**15.53427796**	**15.14740845**	**15.14740845**	**12.75224147**	**13.19049813**	**12.13775157**	**12.7765806**	**10.10914522**
-2.6	**-21.54111093**	**-24.93281119**	**-25.20621517**	**-20.68346694**	**-22.88524823**	**-18.43336877**	**-19.40778678**	**-13.93677573**
+2.6	**13.5647155**	**12.35422384**	**12.35422384**	**10.36648669**	**10.70361499**	**10.24504102**	**10.78425371**	**8.793530712**
-2.65	**-23.38659911**	**-28.10416624**	**-28.41659162**	**-23.82063797**	**-26.58748613**	**-20.8148597**	**-21.94270105**	**-15.3414929**
+2.65	**11.69897676**	**9.717432111**	**9.717432111**	**8.040395305**	**8.232493703**	**8.543804177**	**8.993478081**	**7.501395538**
-2.7	**-25.09011173**	**-31.18548823**	**-31.51558501**	**-26.99772601**	**-30.24834867**	**-23.16405863**	**-24.41776467**	**-16.70166552**
+2.7	**9.810602952**	**7.181628135**	**7.181628135**	**5.798401451**	**6.037618192**	**6.99198935**	**7.35998879**	**6.242312726**
-2.75	**-26.71229243**	**-34.14946417**	**-34.47893047**	**-30.17532917**	**-33.83623379**	**-25.43621696**	**-26.80974431**	**-17.99892146**
+2.75	**8.099620104**	**4.725486943**	**4.725486943**	**4.361282386**	**4.799539049**	**5.594170846**	**5.888600891**	**5.025851346**
-2.8	**-28.1426292**	**-36.96881514**	**-37.28239728**	**-33.31404365**	**-37.3195922**	**-27.60899146**	**-29.09544377**	**-19.21622611**
+2.8	**6.459796966**	**3.385686862**	**3.385686862**	**3.20435232**	**3.541480617**	**4.556403371**	**4.796214074**	**3.861588737**
-2.85	**-31.04309478**	**-39.61622713**	**-39.90171952**	**-36.39615853**	**-40.6668216**	**-29.90122535**	**-31.49963566**	**-20.33654168**
+2.85	**4.994368095**	**2.984598788**	**2.984598788**	**2.779618752**	**2.985271228**	**3.859339054**	**4.062462162**	**2.759094732**
-2.9	**-34.15748155**	**-42.87933253**	**-43.32880281**	**-39.59674869**	**-43.84637182**	**-32.20979269**	**-33.95078311**	**-21.34283076**
+2.9	**3.70024693**	**2.984598788**	**2.984598788**	**2.779618752**	**2.985271228**	**3.171817977**	**3.338755765**	**1.784620394**
-2.95	**-37.07254909**	**-45.89794817**	**-46.57598921**	**-42.80841742**	**-46.82664273**	**-34.40766834**	**-36.28825524**	**-22.21805716**
+2.95	**2.529935029**	**2.984598788**	**2.984598788**	**2.779618752**	**2.985271228**	**2.484467265**	**2.6152287**	**1.526728214**
-3	**-39.74580747**	**-48.73768442**	**-49.6672677**	**-45.90065751**	**-49.95062873**	**-36.46038227**	**-38.47538181**	**-22.94518131**
+3	**2.124976397**	**2.984598788**	**2.984598788**	**2.779618752**	**2.985271228**	**2.268398554**	**2.387787951**	**1.526728214**
(Span 3) -4	**-3.56E-01**	**-0.50018973**	**-0.50018973**	**-0.465837064**	**-0.500302424**	**-0.380161537**	**-0.400170039**	**-0.255864784**
+4	**33.21747343**	**44.74627842**	**45.21078819**	**41.65948119**	**46.31695004**	**33.89226208**	**35.72470456**	**22.53834627**
-3.05	**-9.40E-01**	**-0.50018973**	**-0.50018973**	**-0.465837064**	**-0.500302424**	**-0.698921229**	**-0.735706557**	**-0.403373721**
+3.05	**32.74783724**	**43.4790058**	**43.96401813**	**40.07870715**	**44.56217519**	**32.92356262**	**34.70721212**	**22.06593101**
-3.1	**-2.318302631**	**-1.513872004**	**-1.513872004**	**-1.226360798**	**-1.226360798**	**-1.524482785**	**-1.604718721**	**-1.323939541**
+3.1	**31.63224919**	**40.72420941**	**41.24245735**	**36.74567449**	**40.84013786**	**30.82086529**	**32.49741791**	**21.00333342**
-3.15	**-3.054058713**	**-2.104894898**	**-2.104894898**	**-1.686539494**	**-1.686539494**	**-1.984223397**	**-2.088656207**	**-1.865441956**
+3.15	**30.9880438**	**39.24353572**	**39.77392437**	**35.0027323**	**38.88088293**	**29.69239555**	**31.31087247**	**20.41718985**
-3.2	**-4.71783671**	**-3.401213915**	**-3.401213915**	**-2.747886849**	**-2.747886849**	**-2.977378604**	**-3.134082741**	**-3.055501615**
+3.2	**29.53115933**	**36.0927923**	**36.63702744**	**31.38730432**	**34.78587275**	**27.29505498**	**28.78889756**	**19.17071461**
-3.25	**-5.617623673**	**-4.145453177**	**-4.145453177**	**-3.310253242**	**-3.310253242**	**-3.506518233**	**-3.691071824**	**-3.700033477**
+3.25	**28.72022533**	**34.42957698**	**34.97492567**	**29.5241628**	**32.65809612**	**26.03169525**	**27.4592065**	**18.54109807**
-3.3	**-7.539101492**	**-6.126607955**	**-6.126607955**	**-4.872383961**	**-4.872383961**	**-5.001163687**	**-5.264382828**	**-5.077997019**
+3.3	**26.93774772**	**30.94456307**	**31.47903887**	**25.71031812**	**28.26204999**	**23.38943565**	**24.67682734**	**17.38565087**
-3.35	**-8.555231187**	**-7.403173347**	**-7.403173347**	**-5.912283726**	**-5.912283726**	**-5.920139344**	**-6.231725625**	**-5.807405674**
+3.35	**25.96794906**	**29.12963095**	**29.65152808**	**23.76895895**	**26.00174151**	**22.01606478**	**23.22989649**	**16.69472024**
-3.4	**-10.67736986**	**-10.20577724**	**-10.20577724**	**-8.154077653**	**-8.154077653**	**-7.98127242**	**-8.40133939**	**-7.336968593**
+3.4	**23.87558321**	**25.37202005**	**25.85299459**	**20.40411635**	**21.37660933**	**19.27116336**	**20.28543511**	**15.25468543**
-3.45	**-11.77360317**	**-11.69957682**	**-11.69957682**	**-9.349077686**	**-9.419510365**	**-9.148451086**	**-9.629948512**	**-8.133100514**
+3.45	**22.75475743**	**23.43619227**	**23.88823054**	**18.92682641**	**19.79942389**	**18.02639165**	**18.97514911**	**14.50816849**
-3.5	**-14.02045147**	**-14.85057833**	**-14.85057833**	**-11.86997395**	**-11.94549665**	**-11.4420823**	**-12.04429716**	**-9.77795777**
+3.5	**20.42112028**	**19.46765518**	**19.84339074**	**15.90782794**	**16.76324255**	**15.38127614**	**16.19081699**	**12.9685846**
-3.55	**-15.16467985**	**-16.49914829**	**-16.49914829**	**-13.18896705**	**-13.26672071**	**-12.67956478**	**-13.34691029**	**-10.62266083**
+3.55	**19.22870705**	**17.44179928**	**17.76957627**	**14.37161882**	**15.20701709**	**14.14343786**	**14.88782932**	**12.17810712**
-3.6	**-17.47876396**	**-19.92087958**	**-19.92087958**	**-16.373223**	**-16.77542215**	**-15.23826855**	**-16.04028268**	**-12.34650555**
+3.6	**16.84597802**	**13.32401204**	**13.53477601**	**11.25947601**	**12.33434795**	**11.37619883**	**11.97494613**	**10.5622269**

-3.65	**-18.7784223**	**-21.68539907**	**-21.68539907**	**-18.08931861**	**-18.62878564**	**-16.58417018**	**-17.45702124**	**-13.2216264**
+3.65	**15.58242495**	**11.23894912**	**11.38006685**	**9.689041949**	**11.26929474**	**10.15631615**	**10.69085911**	**9.739413837**
-3.7	**-21.11415577**	**-25.30019631**	**-25.30019631**	**-21.6587378**	**-22.50033115**	**-19.34070987**	**-20.35864196**	**-14.98815394**
+3.7	**13.12186565**	**8.605658858**	**9.057697129**	**7.141403869**	**9.451743519**	**7.964652569**	**8.383844809**	**8.070487291**
-3.75	**-22.35216618**	**-27.14184696**	**-27.14184696**	**-23.50276157**	**-24.50813568**	**-20.84841374**	**-21.94882857**	**-15.87553338**
+3.75	**11.89102221**	**7.542072494**	**7.959130004**	**6.475598223**	**8.479093947**	**7.610080533**	**8.010611087**	**7.226963738**
-3.8	**-24.82379007**	**-30.87204897**	**-30.87204897**	**-27.28605521**	**-28.64190396**	**-23.70599994**	**-24.95762013**	**-17.64844574**
+3.8	**9.442095518**	**5.368695263**	**5.696472253**	**5.05661672**	**6.402819461**	**6.357511334**	**6.692117194**	**5.528248464**
-3.85	**-26.140782**	**-32.75197007**	**-32.75197007**	**-29.21600945**	**-30.75751806**	**-25.14507887**	**-26.47281781**	**-18.52993761**
+3.85	**8.107170195**	**5.120476013**	**5.120476013**	**5.05661672**	**5.514373614**	**5.810207476**	**6.116007869**	**4.675633533**
-3.9	**-28.55408895**	**-36.55234449**	**-36.55234449**	**-33.12922701**	**-35.06022977**	**-28.02671519**	**-29.50679032**	**-20.27292191**
+3.9	**5.428354825**	**5.120476013**	**5.120476013**	**5.05661672**	**5.514373614**	**4.694509904**	**4.941589372**	**3.376184653**
-3.95	**-29.7404111**	**-38.62161197**	**-38.62161197**	**-35.10314484**	**-37.23697573**	**-29.4624279**	**-31.01834668**	**-21.16952213**
+3.95	**4.266288987**	**5.120476013**	**5.120476013**	**5.05661672**	**5.514373614**	**4.124894604**	**4.34199432**	**2.92000885**
-5	**-33.20330898**	**-42.4412239**	**-42.4412239**	**-39.10358615**	**-41.61535469**	**-32.30660399**	**-34.01263059**	**-22.94612885**
+5	**3.493846178**	**5.120476013**	**5.120476013**	**5.05661672**	**5.514373614**	**3.891577595**	**4.096397468**	**2.510403074**

3-Span: Shear (Max and Min) Raw Data Results - 15' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-3.493846178	-5.455901221	-5.063475427	-4.633530861	-5.514306331	-5.514359124
End Shear	33.25117731	41.62088512	38.8253385	38.29123409	41.97920104	42.10377797
-0.05	-4.37727068	-5.797472772	-5.616500518	-4.633530861	-5.514306331	-5.514359124
+0.05	29.73020805	36.89957833	34.59494253	34.91208243	37.55513807	37.7425652
-0.1	-6.735944092	-6.920565679	-7.063484806	-4.633530861	-6.418238283	-6.034207698
+0.1	27.33060326	32.42058812	30.54501059	31.58145668	33.42750385	33.44063165
-0.15	-7.939662543	-7.80355193	-7.782967567	-4.991765386	-7.048275242	-6.514843764
+0.15	26.11164345	30.28312978	28.54154954	29.90493079	31.64173734	31.12500363
-0.2	-10.38173361	-9.638663732	-9.789826421	-6.224746945	-8.313503425	-7.47695309
+0.2	23.64954628	25.72660594	24.60511716	26.43220873	28.0725078	26.94499273
-0.25	-11.6144324	-10.48340546	-10.56317427	-6.86329379	-8.951682106	-7.962111177
+0.25	22.41206039	23.5713736	22.68308635	24.69188655	26.29790081	24.8972018
-0.3	-14.08902685	-12.03648288	-12.47719497	-8.703613638	-10.79647056	-9.418744066
+0.3	19.93834175	19.58675995	19.15791964	21.45987058	22.83756362	20.96049019
-0.35	-15.32527104	-12.74850252	-13.36908611	-10.62591872	-12.35208212	-10.67662245
+0.35	18.70776238	17.6990003	17.55889469	19.88682318	21.15141465	19.07482291
-0.4	-17.7815218	-15.56411433	-15.67247009	-13.78267886	-15.5298457	-13.25265492
+0.4	16.39658883	14.84990327	14.46933853	16.79902372	17.84608068	15.45303729
-0.45	-18.99587689	-17.07688602	-17.27059579	-15.48608319	-17.12914631	-14.55990004
+0.45	15.19835237	13.48565542	13.60632094	15.29325271	16.23626965	13.74249365
-0.5	-21.3829116	-20.02411308	-20.53859794	-19.03749044	-20.39533897	-17.37431502
+0.5	12.88308793	10.85496646	10.23350899	12.38039096	13.12576262	11.11970289
-0.55	-22.5499412	-21.38176283	-22.33099149	-20.81304335	-22.30191375	-18.97514851
+0.55	11.76775943	9.59650862	8.953056825	10.98228179	11.63651365	9.860391276
-0.6	-24.75943735	-25.08237577	-25.76320315	-24.27819668	-26.01814738	-23.10566016
+0.6	9.597918981	7.213364539	7.082193841	8.325176584	8.885930482	7.467151977
-0.65	-25.78934491	-27.08285213	-27.40239985	-25.96116817	-27.82089444	-25.25047755
+0.65	8.549793525	6.096662221	6.305284355	7.113246177	7.62749457	6.384671033
-0.7	-27.69511484	-31.01116779	-30.5253845	-29.21132744	-31.29836848	-29.65366428
+0.7	6.545487073	4.321540012	4.817562657	4.788476205	5.179377296	4.388008684
-0.75	-28.56923259	-32.93335658	-32.04051934	-30.77188473	-32.96618202	-31.80584845
+0.75	5.599766276	3.707684814	4.112233002	4.139869182	4.468362332	3.795125183
-0.8	-30.15557187	-36.67960522	-34.91481991	-33.74738414	-36.14268461	-35.98831009
+0.8	3.837337947	2.57646051	2.822932772	2.912357792	3.124303303	2.671614264
-0.85	-30.86604894	-38.49801483	-36.37565626	-35.15569659	-37.64446109	-38.00933687
+0.85	3.026282438	2.084721714	2.267278516	2.338521652	2.49697399	2.146005865
-0.9	-32.11725519	-42.01121604	-39.5401021	-37.79687442	-41.23839223	-41.88789154
+0.9	1.558620371	1.178164	1.246156585	1.298584496	1.425188776	1.248563736
-0.95	-32.81168079	-43.70034304	-41.0557176	-39.02311018	-43.15864891	-43.73616909
+0.95	0.907908781	0.701410944	0.724038669	0.807088863	0.933053659	0.853400417
-1	-34.22104271	-46.97536001	-43.9430348	-41.27030237	-46.63052513	-47.22763109
+1	3.56E-01	0.491561733	0.457261773	0.450201865	0.500754584	0.500681744
(Span 2) -2	-2.124360308	-2.933116141	-2.728450556	-2.686324519	-2.987969221	-2.987534587
+2	38.31271104	46.83828105	43.82762038	42.37360221	47.17278042	47.59487262
-2.05	-2.560360911	-2.972324931	-2.728450556	-2.686324519	-3.159971397	-3.242438021
+2.05	36.9776783	45.40048378	42.48652813	41.12811176	45.67405275	45.93971666
-2.1	-3.656792815	-3.805661017	-3.643536208	-2.840133646	-3.914336238	-3.780279843
+2.1	34.11792232	42.40410561	39.73593329	38.50576409	42.5283126	42.77491699
-2.15	-4.951059508	-4.586184368	-4.660090446	-3.410301024	-4.713296664	-4.331437128
+2.15	31.30781958	39.2732066	36.8760932	35.74192613	39.22158829	39.50682986
-2.2	-6.419285222	-5.336072575	-5.64531061	-4.078988284	-5.48476814	-4.918075321
+2.2	28.54766396	36.03958369	33.92424786	32.87697601	35.79792842	36.1008835
-2.25	-8.037599209	-6.077514437	-6.616774216	-5.204098558	-6.677067698	-5.889106573

+2.25	**26.72920981**	**32.73505978**	**30.93287407**	**30.09981747**	**32.30138356**	**32.59499976**
-2.3	**-9.782127466**	**-7.478912494**	**-7.633222808**	**-6.985872558**	**-8.499852635**	**-7.360876148**
+2.3	**25.15193835**	**29.49255887**	**27.99105279**	**27.37193388**	**29.27864796**	**29.02713997**
-2.35	**-11.62899939**	**-9.553433488**	**-9.671686071**	**-8.992178365**	**-10.52312988**	**-8.995110734**
+2.35	**23.45378339**	**26.285708**	**25.0759842**	**24.5488736**	**26.25592001**	**25.43522777**
-2.4	**-13.55434054**	**-11.81625932**	**-12.07286718**	**-11.20234405**	**-12.73493056**	**-10.78675568**
+2.4	**21.61350714**	**23.13001809**	**22.16899376**	**21.66052938**	**23.22028254**	**22.3016685**
-2.45	**-15.53427884**	**-14.17200734**	**-14.47555919**	**-13.68164912**	**-15.1245765**	**-13.0118657**
+2.45	**19.54094741**	**20.0450109**	**19.28694707**	**19.09294795**	**20.4395242**	**18.87213202**
-2.5	**-17.54494177**	**-17.05741946**	**-16.88035786**	**-16.31163595**	**-17.73698195**	**-15.8435113**
+2.5	**17.53418613**	**17.05020643**	**16.87941454**	**16.30458471**	**17.72993921**	**15.83613241**
-2.55	**-19.56245703**	**-20.05247274**	**-19.28789099**	**-19.10078906**	**-20.44680137**	**-18.87999662**
+2.55	**15.53427796**	**14.16511322**	**14.47460653**	**13.67485398**	**15.11808637**	**13.0053106**
-2.6	**-21.54111093**	**-23.13769694**	**-22.17016823**	**-21.66785777**	**-23.22773184**	**-22.31073527**
+2.6	**13.5647155**	**11.810784**	**12.07191483**	**11.19631836**	**12.72890863**	**10.78208934**
-2.65	**-23.38659911**	**-26.29355584**	**-25.07711305**	**-24.55650098**	**-26.26409575**	**-25.44437096**
+2.65	**11.69897676**	**9.547962179**	**9.670732143**	**8.986683767**	**10.51760422**	**8.990837244**
-2.7	**-25.09011173**	**-29.5005096**	**-27.99221962**	**-27.3793463**	**-29.28657754**	**-29.03628946**
+2.7	**9.810602952**	**7.474776167**	**7.632614642**	**6.980962674**	**8.494854014**	**7.357016642**
-2.75	**-26.71229243**	**-32.74325796**	**-30.93403047**	**-30.10694106**	**-32.31074575**	**-32.60404376**
+2.75	**8.099620104**	**6.075758008**	**6.616392303**	**5.224013336**	**6.697990112**	**5.892299693**
-2.8	**-28.1426292**	**-36.04766493**	**-33.92542537**	**-32.88472699**	**-35.80718557**	**-36.10971101**
+2.8	**6.459796966**	**5.334337597**	**5.644929652**	**4.077121556**	**5.482669424**	**4.947181484**
-2.85	**-31.04309478**	**-39.2810615**	**-36.87725164**	**-35.74948033**	**-39.23059585**	**-39.51535722**
+2.85	**4.994368095**	**4.584415644**	**4.659699492**	**3.408770503**	**4.71136515**	**4.355649166**
-2.9	**-34.15748155**	**-42.41168628**	**-39.73704286**	**-38.51301266**	**-42.53697817**	**-42.78305912**
+2.9	**3.70024693**	**3.803807013**	**3.64312898**	**2.863370148**	**3.997797064**	**3.778909308**
-2.95	**-37.07254909**	**-45.40768126**	**-42.48760393**	**-41.13494478**	**-45.68223138**	**-45.94831169**
+2.95	**2.529935029**	**2.970326515**	**2.728467118**	**2.686314895**	**3.158219533**	**3.241059882**
-3	**-39.74580747**	**-48.2372818**	**-45.3729908**	**-43.57489752**	**-48.62235363**	**-49.21721033**
+3	**2.124976397**	**2.933225234**	**2.728467118**	**2.686314895**	**2.988087603**	**2.987647851**
(Span 3) -4	**-3.56E-01**	**-0.491580015**	**-0.457264549**	**-0.450200252**	**-0.500774424**	**-0.500700726**
+4	**33.21747343**	**45.34286217**	**42.52291691**	**40.17594462**	**44.88886594**	**45.50863532**
-3.05	**-9.40E-01**	**-0.703247397**	**-0.724301297**	**-0.809428359**	**-0.935404286**	**-0.85527474**
+3.05	**32.74783724**	**43.69207436**	**41.05453136**	**39.01666971**	**43.08940914**	**43.72681485**
-3.1	**-2.318302631**	**-1.620012028**	**-1.741247852**	**-1.813755082**	**-1.939095236**	**-1.672245918**
+3.1	**31.63224919**	**40.26744809**	**37.97811861**	**36.49950556**	**39.31040033**	**39.96744593**
-3.15	**-3.054058713**	**-2.025026515**	**-2.267689782**	**-2.341423004**	**-2.463449887**	**-2.148548541**
+3.15	**30.9880438**	**38.48909812**	**36.37435521**	**35.14826441**	**37.63653708**	**37.99908126**
-3.2	**-4.71783671**	**-3.120164281**	**-3.437703279**	**-3.516862506**	**-3.785892509**	**-3.224965953**
+3.2	**29.53115933**	**34.81451231**	**33.50849473**	**32.2770175**	**34.57357363**	**33.9082194**
-3.25	**-5.617623673**	**-3.710570404**	**-4.112764859**	**-4.14320957**	**-4.472015346**	**-3.798050505**
+3.25	**28.72022533**	**32.92392828**	**32.039328**	**30.76364208**	**32.95737434**	**31.79490292**
-3.3	**-7.539101492**	**-5.062194727**	**-5.550072505**	**-5.889492162**	**-6.354139009**	**-5.358882633**
+3.3	**26.93774772**	**29.05036771**	**28.9886561**	**27.59793344**	**29.57279204**	**27.45573469**
-3.35	**-8.555231187**	**-6.101899627**	**-6.30588433**	**-7.081512309**	**-7.594475758**	**-6.389939229**
+3.35	**25.96794906**	**27.07304075**	**27.40111013**	**25.95225416**	**27.81134758**	**25.23905915**
-3.4	**-10.67736986**	**-8.387062532**	**-7.72743874**	**-9.636004334**	**-10.24433664**	**-8.647445523**
+3.4	**23.87558321**	**23.05148751**	**24.07128187**	**22.55176903**	**24.16737906**	**21.01431258**
-3.45	**-11.77360317**	**-9.602494117**	**-8.954037725**	**-10.98949506**	**-11.64397222**	**-9.866601421**
+3.45	**22.75475743**	**21.37515845**	**22.32959468**	**20.80361743**	**22.29179392**	**18.88388692**
-3.5	**-14.02045147**	**-12.15906108**	**-11.56464334**	**-13.82653929**	**-14.66944597**	**-12.42176908**
+3.5	**20.42112028**	**18.63071123**	**18.84062717**	**17.2280453**	**18.72447961**	**16.171828**
-3.55	**-15.16467985**	**-13.49221248**	**-12.99171377**	**-15.30111192**	**-16.24466563**	**-13.74925792**
+3.55	**19.22870705**	**17.16743171**	**17.26933797**	**15.59669313**	**17.12062112**	**14.65457787**
-3.6	**-17.47876396**	**-15.89975649**	**-15.99488797**	**-18.33988714**	**-19.49477378**	**-17.24611453**
+3.6	**16.84597802**	**14.14904152**	**14.21656**	**12.19002362**	**13.92844642**	**11.95456198**

-3.65	**-18.7784223**	**-17.70812153**	**-17.56013386**	**-20.01103868**	**-21.16028945**	**-19.08419481**
+3.65	**15.58242495**	**12.74514715**	**13.36839534**	**10.61761438**	**12.34367733**	**10.67009772**
-3.7	**-21.11415577**	**-21.54357649**	**-20.80064294**	**-23.05479634**	**-24.54883456**	**-22.8978845**
+3.7	**13.12186565**	**11.27829279**	**11.53942174**	**7.513997465**	**9.592116131**	**8.449949405**
-3.75	**-22.35216618**	**-23.53934023**	**-22.68459288**	**-24.70067559**	**-26.30728735**	**-24.90745986**
+3.75	**11.89102221**	**10.47941805**	**10.56247314**	**7.092768727**	**8.948276106**	**7.959633934**
-3.8	**-24.82379007**	**-27.82861685**	**-26.56130897**	**-28.11652308**	**-29.86476642**	**-29.03343489**
+3.8	**9.442095518**	**8.74153403**	**8.743885122**	**5.59787672**	**7.676167244**	**6.992697369**
-3.85	**-26.140782**	**-30.04635914**	**-28.54313213**	**-29.91386487**	**-31.65124952**	**-31.13571785**
+3.85	**8.107170195**	**7.798851513**	**7.782184804**	**4.988570541**	**7.044921593**	**6.512399434**
-3.9	**-28.55408895**	**-34.58703082**	**-32.56623642**	**-33.26083247**	**-35.41995958**	**-35.58623975**
+3.9	**5.428354825**	**6.364364141**	**6.348389107**	**4.633509024**	**5.784568132**	**5.548920004**
-3.95	**-29.7404111**	**-36.81254853**	**-34.59654428**	**-34.92091836**	**-37.56656422**	**-37.65204283**
+3.95	**4.266288987**	**5.794692916**	**5.61590728**	**4.633509024**	**5.514309436**	**5.514362094**
-5	**-33.20330898**	**-41.34969326**	**-38.66727507**	**-38.42765597**	**-41.92055041**	**-42.09258351**
+5	**3.493846178**	**5.455904084**	**5.063475851**	**4.633509024**	**5.514309436**	**5.514362094**

3-Span: Moment (Max and Min) Raw Data Results - 15' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-2.620385	-2.703587	-2.703515	-2.150501	-1.802942	-1.801178	-3.012015	-3.177229	-3.318826	-3.319300
+0.05	22.297656	20.230334	20.460630	16.331661	13.168921	15.222878	21.604922	22.004147	22.052973	21.928837
-0.1	-5.240769	-5.407173	-5.407030	-4.301001	-3.605883	-3.602356	-6.024030	-6.354458	-6.637653	-6.638601
+0.1	42.806601	38.474917	38.926609	31.071057	25.073884	29.140558	40.826067	41.341071	41.441176	41.576855
-0.15	-7.861154	-8.110760	-8.110544	-6.451502	-5.408825	-5.403534	-9.036045	-9.531686	-9.956479	-9.957901
+0.15	58.751198	52.172946	52.384952	42.088276	33.997831	40.158707	54.365878	54.796022	54.803091	54.859156
-0.2	-10.481539	-10.814346	-10.814059	-8.602003	-7.211766	-7.204712	-12.048061	-12.708915	-13.275306	-13.277202
+0.2	74.651050	65.251142	65.848294	52.825394	42.657113	50.805238	67.321254	67.494858	67.627299	67.545015
-0.25	-13.101923	-13.517933	-13.517574	-10.752503	-9.014708	-9.005890	-15.060076	-15.886144	-16.594132	-16.596502
+0.25	84.045226	72.689981	72.980550	58.637714	47.813368	57.483449	75.029361	75.081376	75.055724	75.032617
-0.3	-15.722308	-16.221519	-16.221089	-12.903004	-10.817649	-10.807068	-18.072091	-19.063373	-19.912959	-19.915803
+0.3	95.283231	80.438861	80.980716	65.168158	52.806704	64.821704	81.418509	81.350178	84.145094	84.078038
-0.35	-18.342692	-18.925106	-18.924603	-15.053505	-12.620591	-12.608246	-21.084106	-22.240602	-23.231785	-23.235103
+0.35	98.537994	82.811380	83.414681	67.148311	54.685239	67.216903	85.370459	85.372132	88.647625	88.633744
-0.4	-20.963077	-21.628693	-21.628118	-17.204005	-14.423532	-14.409424	-24.096121	-25.417830	-26.550612	-26.554404
+0.4	105.650608	84.609794	85.422413	68.583297	56.012566	71.325022	90.309241	90.336799	92.254487	92.158855
-0.45	-23.583462	-24.332279	-24.331633	-19.354506	-16.226474	-16.210601	-27.108136	-28.595059	-29.869438	-29.873704
+0.45	103.136013	82.617048	83.516197	67.018378	55.005573	69.729502	89.463990	89.484507	90.591582	90.538402
-0.5	-26.203846	-27.035866	-27.035148	-21.505007	-18.029415	-18.011779	-30.120152	-31.772288	-33.188265	-33.193005
+0.5	105.616249	83.779963	84.361100	68.275428	56.076736	70.757741	90.695303	90.662753	90.611449	90.565235
-0.55	-28.824231	-29.739452	-29.738663	-23.655507	-19.832357	-19.812957	-33.132167	-34.949517	-36.507091	-36.512305
+0.55	99.047389	81.829993	82.464644	67.120093	54.819496	66.217102	86.447915	86.427623	87.959354	87.926192
-0.6	-31.444616	-32.443039	-32.442177	-25.806008	-21.635298	-21.614135	-36.144182	-38.126745	-39.825918	-39.831606
+0.6	96.483692	79.147297	80.125723	64.977421	53.021099	63.869845	82.282711	82.486606	85.302561	85.249686
-0.65	-34.065000	-35.146625	-35.145692	-27.956509	-23.438240	-23.415313	-39.156197	-41.303974	-43.144744	-43.150906
+0.65	86.214655	71.649186	72.829455	59.014841	48.156995	56.810851	73.522585	73.538679	76.815499	76.804720
-0.7	-36.685385	-37.850212	-37.849207	-30.107010	-25.241181	-25.216491	-42.168212	-44.481203	-46.463571	-46.470206
+0.7	79.440813	64.582215	66.273036	53.442180	43.389280	51.718699	66.427763	66.472832	68.253080	68.169398
-0.75	-39.305770	-40.553799	-40.552722	-32.257510	-27.044123	-27.017669	-45.180227	-47.658432	-49.782397	-49.789507
+0.75	66.211099	52.444290	54.083511	43.580283	35.629924	42.704230	54.913465	54.918526	54.894485	54.872831
-0.8	-41.926154	-43.257385	-43.256236	-34.408011	-28.847065	-28.818847	-48.192242	-50.835661	-53.101224	-53.108807
+0.8	56.734337	41.809941	43.967202	35.043704	28.652420	35.669197	43.183929	43.223514	43.766401	43.901460
-0.85	-44.546539	-45.960972	-45.959751	-36.558512	-30.650006	-30.620025	-51.204258	-54.012889	-56.420050	-56.428108
+0.85	41.507021	26.453212	28.650683	22.463310	18.322691	25.448931	26.803090	27.202385	27.202700	27.203890
-0.9	-52.430916	-50.596557	-48.663266	-40.203708	-33.736830	-35.270456	-55.259068	-57.190118	-59.738877	-59.883300
+0.9	30.881453	14.557912	18.177988	13.380108	10.817750	17.955676	14.050447	14.700081	14.547593	14.435101
-0.95	-69.240182	-58.175237	-51.366781	-47.004847	-39.816462	-45.161095	-63.504152	-61.793460	-64.549092	-66.275121
+0.95	14.801965	5.390270	9.262491	5.281169	4.501396	6.757629	5.356578	6.200730	6.147410	6.934956
-1	-87.285730	-66.097516	-55.091731	-54.369330	-46.607306	-55.569664	-71.935993	-69.183673	-74.944098	-76.407729
+1	5.340332	5.282165	5.281248	4.200947	3.451509	3.670760	5.638503	5.638697	5.663232	5.662798
(Span 2) -2	-87.285730	-66.097516	-55.091731	-54.369330	-46.607306	-55.569664	-71.935993	-69.183673	-74.944098	-76.407729
+2	5.340332	5.282165	5.281248	4.200947	3.451509	3.670760	5.638503	5.638697	5.663232	5.662798
-2.05	-66.485649	-46.922705	-36.661035	-39.958663	-33.974480	-41.641041	-47.884471	-44.934026	-46.920192	-46.970469
+2.05	17.589144	8.427156	10.580625	7.660493	6.027087	10.203508	7.884529	8.873241	8.937939	8.845517
-2.1	-47.559752	-38.595222	-32.340062	-32.161539	-26.744845	-30.363137	-37.988742	-37.457597	-38.315084	-38.314803
+2.1	31.158722	16.889935	17.316814	15.377221	12.058635	20.798869	16.154390	16.402086	16.494850	16.503737
-2.15	-33.016635	-30.656733	-29.894252	-25.341440	-20.825572	-20.531630	-31.539540	-31.540582	-32.727049	-32.723915
+2.15	45.810592	30.802808	30.551545	24.223820	19.477335	31.459814	29.767450	29.830962	29.830962	29.830962
-2.2	-30.734025	-27.496761	-28.684435	-23.289614	-19.186183	-19.107967	-29.352589	-29.353557	-29.479791	-29.477573
+2.2	61.875319	46.629576	46.434754	36.875830	30.079108	42.286772	47.167424	47.883252	47.922781	47.958387

-2.25	**-30.727203**	**-25.448080**	**-27.483379**	**-22.673209**	**-18.728436**	**-17.684303**	**-27.165637**	**-27.166533**	**-27.283362**	**-27.281309**
+2.25	**74.609084**	**60.279648**	**60.156888**	**47.813702**	**39.280960**	**51.094973**	**62.191655**	**63.461124**	**66.331530**	**66.384659**
-2.3	**-30.720381**	**-23.399399**	**-26.282324**	**-22.105665**	**-18.309153**	**-16.260640**	**-24.978685**	**-24.979509**	**-25.086932**	**-25.085044**
+2.3	**85.013223**	**71.367248**	**71.326470**	**56.724219**	**46.757277**	**58.293253**	**74.342743**	**75.592192**	**80.875104**	**80.903101**
-2.35	**-30.713559**	**-21.350718**	**-25.081269**	**-21.595617**	**-17.918145**	**-14.836976**	**-22.791733**	**-22.792485**	**-22.890503**	**-22.888780**
+2.35	**94.126485**	**79.971586**	**79.929769**	**63.567425**	**52.564434**	**64.553391**	**84.927610**	**85.902120**	**91.228244**	**91.246759**
-2.4	**-30.706737**	**-19.302036**	**-23.880214**	**-21.135412**	**-17.579309**	**-13.413313**	**-20.604781**	**-20.605461**	**-20.694073**	**-20.692516**
+2.4	**100.662524**	**85.905392**	**85.775297**	**68.189679**	**56.589389**	**69.070247**	**92.538888**	**94.711080**	**98.166740**	**98.184068**
-2.45	**-30.699915**	**-17.253355**	**-23.028673**	**-20.743110**	**-17.284184**	**-11.989649**	**-18.417829**	**-18.418437**	**-18.497644**	**-18.496252**
+2.45	**104.406048**	**88.826425**	**88.703680**	**70.521386**	**58.615990**	**71.696900**	**97.029322**	**99.740392**	**103.018942**	**103.037425**
-2.5	**-30.693093**	**-15.204748**	**-22.609091**	**-20.449420**	**-17.055182**	**-10.566308**	**-16.230877**	**-16.231413**	**-16.301652**	**-16.300404**
+2.5	**105.234852**	**88.643598**	**88.571237**	**70.431778**	**58.599488**	**72.348960**	**98.123349**	**100.858645**	**104.506187**	**104.553849**
-2.55	**-30.700001**	**-17.253439**	**-23.028368**	**-20.743050**	**-17.284159**	**-11.990014**	**-18.417368**	**-18.418001**	**-18.498140**	**-18.496724**
+2.55	**104.406058**	**88.816889**	**88.696449**	**70.516345**	**58.613896**	**71.690052**	**97.034394**	**99.728597**	**103.023112**	**103.041386**
-2.6	**-30.706909**	**-19.302130**	**-23.878642**	**-21.134751**	**-17.579441**	**-13.413721**	**-20.604265**	**-20.604974**	**-20.694628**	**-20.693044**
+2.6	**100.662531**	**85.915518**	**85.782982**	**68.195024**	**56.591620**	**69.056736**	**92.536765**	**94.692420**	**98.170553**	**98.187695**
-2.65	**-30.713817**	**-21.350822**	**-25.080008**	**-21.595370**	**-17.918043**	**-14.837428**	**-22.791163**	**-22.791947**	**-22.891117**	**-22.889365**
+2.65	**94.126488**	**79.974965**	**79.932332**	**63.569210**	**52.565178**	**64.533584**	**84.954290**	**85.877231**	**91.228593**	**91.247093**
-2.7	**-30.720725**	**-23.399513**	**-26.281374**	**-22.104856**	**-18.309290**	**-16.261135**	**-24.978060**	**-24.978919**	**-25.087605**	**-25.085685**
+2.7	**85.013239**	**71.364353**	**71.324275**	**56.722689**	**46.756643**	**58.267694**	**74.368478**	**75.581532**	**80.868609**	**80.896917**
-2.75	**-30.727633**	**-25.448204**	**-27.482740**	**-22.673030**	**-18.728363**	**-17.684841**	**-27.164957**	**-27.165892**	**-27.284093**	**-27.282005**
+2.75	**74.483994**	**60.271212**	**60.150497**	**47.809248**	**39.279109**	**51.068793**	**62.186796**	**63.458360**	**66.318885**	**66.372635**
-2.8	**-30.734541**	**-27.496895**	**-28.684106**	**-23.288930**	**-19.186470**	**-19.108548**	**-29.351855**	**-29.352864**	**-29.480582**	**-29.478325**
+2.8	**61.713827**	**46.616619**	**46.424918**	**36.868979**	**30.076275**	**42.253876**	**47.156996**	**47.874091**	**47.914102**	**47.950133**
-2.85	**-32.996389**	**-30.658918**	**-29.892686**	**-25.341373**	**-20.825544**	**-20.532255**	**-31.538752**	**-31.539837**	**-32.728167**	**-32.724978**
+2.85	**45.759738**	**30.786612**	**30.539257**	**24.215262**	**19.473772**	**31.422260**	**29.751574**	**29.695961**	**29.759888**	**29.817459**
-2.9	**-47.562234**	**-38.597072**	**-32.340097**	**-32.161686**	**-26.744904**	**-30.364489**	**-37.987991**	**-37.457627**	**-38.315183**	**-38.314896**
+2.9	**31.511887**	**16.860237**	**17.294779**	**15.392347**	**12.064974**	**20.833171**	**16.125215**	**16.375030**	**16.469205**	**16.524926**
-2.95	**-66.508578**	**-46.924084**	**-36.660184**	**-39.957440**	**-33.974696**	**-41.643110**	**-47.884216**	**-44.935924**	**-46.922924**	**-46.949956**
+2.95	**18.073758**	**8.395804**	**10.558213**	**7.764338**	**6.258233**	**10.164149**	**7.856982**	**8.845618**	**8.911774**	**8.868645**
-3	**-87.304562**	**-66.099334**	**-55.091378**	**-54.369769**	**-46.606823**	**-55.569800**	**-71.936464**	**-69.184018**	**-74.947087**	**-76.409424**
+3	**5.341880**	**5.282139**	**5.281229**	**4.200934**	**3.451610**	**3.670648**	**5.638644**	**5.638830**	**5.663080**	**5.662654**
(Span 3) -4	**-87.304562**	**-66.099334**	**-55.091378**	**-54.369769**	**-46.606823**	**-55.569800**	**-71.936464**	**-69.184018**	**-74.947087**	**-76.409424**
+4	**5.341880**	**5.282139**	**5.281229**	**4.200934**	**3.451610**	**3.670648**	**5.638644**	**5.638830**	**5.663080**	**5.662654**
-3.05	**-69.242923**	**-58.176586**	**-51.366869**	**-47.004128**	**-39.816166**	**-45.161261**	**-63.506794**	**-61.795852**	**-64.550774**	**-66.275826**
+3.05	**14.867604**	**5.395547**	**9.267078**	**5.284940**	**4.496557**	**6.736304**	**5.356712**	**6.177288**	**6.150543**	**6.936434**
-3.1	**-52.447092**	**-50.597677**	**-48.663350**	**-40.203562**	**-33.736772**	**-35.271037**	**-55.259987**	**-57.189827**	**-59.736866**	**-59.883107**
+3.1	**31.297081**	**14.535416**	**18.161464**	**13.403575**	**10.812323**	**18.211454**	**14.072487**	**14.733418**	**14.579233**	**14.465188**
-3.15	**-44.546538**	**-45.961076**	**-45.959831**	**-36.558567**	**-30.650029**	**-30.619310**	**-51.203018**	**-54.012614**	**-56.418151**	**-56.426302**
+3.15	**41.584015**	**26.455624**	**28.642403**	**22.465583**	**18.323637**	**25.461654**	**26.805003**	**27.202436**	**27.202749**	**27.203938**
-3.2	**-41.926153**	**-43.257484**	**-43.256311**	**-34.408063**	**-28.847086**	**-28.818174**	**-48.191076**	**-50.835402**	**-53.099437**	**-53.107108**
+3.2	**56.614039**	**41.841722**	**43.945188**	**35.029626**	**28.646556**	**35.717525**	**43.153996**	**43.195245**	**43.788906**	**43.876008**
-3.25	**-39.305769**	**-40.553891**	**-40.552792**	**-32.257559**	**-27.044143**	**-27.017038**	**-45.179134**	**-47.658189**	**-49.780722**	**-49.787913**
+3.25	**66.254074**	**52.444156**	**54.082823**	**43.581055**	**35.630243**	**42.718465**	**54.909471**	**54.914754**	**54.890909**	**55.005208**
-3.3	**-36.685384**	**-37.850298**	**-37.849272**	**-30.107055**	**-25.241200**	**-25.215902**	**-42.167191**	**-44.480976**	**-46.462007**	**-46.468719**
+3.3	**79.375454**	**64.609748**	**66.246553**	**53.425057**	**43.395652**	**51.690739**	**66.388871**	**66.436076**	**68.282393**	**68.197257**
-3.35	**-34.065000**	**-35.146705**	**-35.145753**	**-27.956551**	**-23.438257**	**-23.414766**	**-39.155249**	**-41.303764**	**-43.143292**	**-43.149525**
+3.35	**86.226808**	**71.642172**	**72.823138**	**59.011699**	**48.155691**	**56.823154**	**73.507982**	**73.524892**	**76.813762**	**76.803069**
-3.4	**-31.444615**	**-32.443113**	**-32.442233**	**-25.806047**	**-21.635315**	**-21.613631**	**-36.143307**	**-38.126551**	**-39.824577**	**-39.830330**
+3.4	**96.451570**	**79.166552**	**80.091856**	**64.955081**	**53.025529**	**63.838079**	**82.314131**	**82.469260**	**85.322087**	**85.268232**
-3.45	**-28.824230**	**-29.739520**	**-29.738714**	**-23.655543**	**-19.832372**	**-19.812495**	**-33.131365**	**-34.949338**	**-36.505862**	**-36.511136**
+3.45	**99.054073**	**81.842114**	**82.451773**	**67.111152**	**54.822596**	**66.224602**	**86.443908**	**86.423840**	**87.971825**	**87.938045**
-3.5	**-26.203846**	**-27.035927**	**-27.035194**	**-21.505039**	**-18.029429**	**-18.011359**	**-30.119423**	**-31.772126**	**-33.187147**	**-33.191942**
+3.5	**105.577254**	**83.787879**	**84.367364**	**68.246418**	**56.078521**	**70.719706**	**90.654427**	**90.681805**	**91.062877**	**90.582401**
-3.55	**-23.583461**	**-24.332334**	**-24.331675**	**-19.354535**	**-16.226486**	**-16.210223**	**-27.107481**	**-28.594913**	**-29.868432**	**-29.872747**
+3.55	**103.135153**	**82.613455**	**83.512908**	**67.016923**	**55.004972**	**69.729974**	**89.446289**	**89.467777**	**90.582961**	**90.530197**
-3.6	**-20.963076**	**-21.628742**	**-21.628155**	**-17.204031**	**-14.423543**	**-14.409087**	**-24.095539**	**-25.417701**	**-26.549717**	**-26.553553**

+3.6	**105.317985**	**84.600609**	**85.414834**	**68.578792**	**56.010697**	**71.278840**	**90.284244**	**90.313200**	**92.239088**	**92.144228**
-3.65	**-18.342692**	**-18.925149**	**-18.924636**	**-15.053527**	**-12.620600**	**-12.607951**	**-21.083597**	**-22.240488**	**-23.231002**	**-23.234359**
+3.65	**98.586714**	**82.796903**	**83.402944**	**67.140865**	**54.688992**	**67.208692**	**85.368857**	**85.370619**	**88.652755**	**88.638616**
-3.7	**-15.722307**	**-16.221556**	**-16.221116**	**-12.903023**	**-10.817657**	**-10.806815**	**-18.071654**	**-19.063275**	**-19.912288**	**-19.915164**
+3.7	**95.193590**	**80.417882**	**80.964955**	**65.157192**	**52.815828**	**64.766092**	**81.405035**	**81.337457**	**84.170314**	**84.102006**
-3.75	**-13.101922**	**-13.517964**	**-13.517597**	**-10.752519**	**-9.014714**	**-9.005679**	**-15.059712**	**-15.886063**	**-16.593573**	**-16.595970**
+3.75	**84.101145**	**72.693940**	**72.983681**	**58.623208**	**47.814261**	**57.465561**	**75.039451**	**75.090903**	**75.281438**	**75.041201**
-3.8	**-10.481538**	**-10.814371**	**-10.814078**	**-8.602016**	**-7.211772**	**-7.204543**	**-12.047770**	**-12.708850**	**-13.274858**	**-13.276776**
+3.8	**74.673253**	**65.216619**	**65.870176**	**52.807125**	**42.663363**	**50.739631**	**67.354568**	**67.526328**	**67.601857**	**67.523606**
-3.85	**-7.861153**	**-8.110778**	**-8.110558**	**-6.451512**	**-5.408829**	**-5.403407**	**-9.035828**	**-9.531637**	**-9.956143**	**-9.957581**
+3.85	**58.816751**	**52.162922**	**52.401419**	**42.082897**	**33.995586**	**40.130694**	**54.360266**	**54.793265**	**54.800478**	**54.856669**
-3.9	**-5.240769**	**-5.407185**	**-5.407039**	**-4.301008**	**-3.605886**	**-3.602271**	**-6.023886**	**-6.354425**	**-6.637428**	**-6.638387**
+3.9	**42.831122**	**38.489332**	**38.937590**	**31.045059**	**25.076977**	**29.064829**	**40.781049**	**41.356493**	**41.402755**	**41.592977**
-3.95	**-2.620384**	**-2.703593**	**-2.703519**	**-2.150504**	**-1.802943**	**-1.801136**	**-3.011944**	**-3.177212**	**-3.318713**	**-3.319192**
+3.95	**22.305310**	**20.237530**	**20.466115**	**16.318636**	**13.170466**	**15.184947**	**21.582443**	**21.983978**	**22.033854**	**22.100063**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 15' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**							
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-2.620385**	**-3.840348**	**-3.840348**	**-3.792637**	**-4.135777**	**-2.918784**	**-3.072404**	**-1.882816**
+0.05	**22.297656**	**28.674831**	**28.674831**	**26.541033**	**27.747543**	**22.090907**	**23.257534**	**15.970142**
-0.1	**-5.240769**	**-7.680695**	**-7.680695**	**-7.585274**	**-8.271554**	**-5.837568**	**-6.144809**	**-3.765631**
+0.1	**42.806601**	**54.529902**	**54.529902**	**50.045194**	**52.232405**	**42.028209**	**44.247694**	**30.630758**
-0.15	**-7.861154**	**-11.521043**	**-11.521043**	**-11.377911**	**-12.407331**	**-8.756352**	**-9.217213**	**-5.648447**
+0.15	**58.751198**	**74.098006**	**74.098006**	**66.396304**	**69.603139**	**56.558640**	**59.545112**	**42.086220**
-0.2	**-10.481539**	**-15.361391**	**-15.361391**	**-15.170548**	**-16.543108**	**-11.675137**	**-12.289618**	**-7.531262**
+0.2	**74.651050**	**92.644375**	**92.644375**	**81.816001**	**85.854286**	**71.094380**	**74.847991**	**53.401632**
-0.25	**-13.101923**	**-19.201739**	**-19.201739**	**-18.963185**	**-20.678885**	**-14.593921**	**-15.362022**	**-9.414078**
+0.25	**84.045226**	**103.220719**	**103.220719**	**91.035776**	**94.799682**	**78.794985**	**82.955352**	**60.200735**
-0.3	**-15.722308**	**-23.042086**	**-23.042086**	**-22.755822**	**-24.814662**	**-17.512705**	**-18.434426**	**-11.296894**
+0.3	**95.283231**	**114.228837**	**114.228837**	**98.253815**	**101.609680**	**87.430798**	**92.044627**	**68.132750**
-0.35	**-18.342692**	**-26.882434**	**-26.882434**	**-26.548459**	**-28.950439**	**-20.431489**	**-21.506831**	**-13.179709**
+0.35	**98.537994**	**117.607214**	**117.607214**	**104.473185**	**109.930230**	**90.090169**	**94.843828**	**70.337999**
-0.4	**-20.963077**	**-30.722782**	**-30.722782**	**-30.341096**	**-33.086216**	**-23.350273**	**-24.579235**	**-15.062525**
+0.4	**105.650608**	**120.168434**	**120.168434**	**111.170753**	**118.017417**	**92.319564**	**97.187508**	**74.970952**
-0.45	**-23.583462**	**-34.563130**	**-34.563130**	**-34.133733**	**-37.221993**	**-26.269057**	**-27.651639**	**-16.945340**
+0.45	**103.136013**	**117.347210**	**117.347210**	**111.111995**	**119.376518**	**90.299207**	**95.059453**	**72.880661**
-0.5	**-26.203846**	**-38.403477**	**-38.403477**	**-37.926370**	**-41.357770**	**-29.187842**	**-30.724044**	**-18.828156**
+0.5	**105.616249**	**118.941439**	**118.941439**	**112.071552**	**119.599364**	**91.089969**	**95.910704**	**74.389837**
-0.55	**-28.824231**	**-42.243825**	**-42.243825**	**-41.719007**	**-45.493547**	**-32.106626**	**-33.796448**	**-20.710972**
+0.55	**99.047389**	**116.210241**	**116.210241**	**106.413216**	**112.990362**	**89.039794**	**93.748480**	**69.210949**
-0.6	**-31.444616**	**-46.084173**	**-46.084173**	**-45.511644**	**-49.629324**	**-35.025410**	**-36.868853**	**-22.593787**
+0.6	**96.483692**	**112.274000**	**112.274000**	**100.163028**	**105.319156**	**86.568325**	**91.145246**	**67.189750**
-0.65	**-34.065000**	**-49.924521**	**-49.924521**	**-49.304281**	**-53.765101**	**-37.944194**	**-39.941257**	**-24.476603**
+0.65	**86.214655**	**101.762253**	**101.762253**	**88.973635**	**92.544725**	**78.788761**	**82.950194**	**59.438885**
-0.7	**-36.685385**	**-53.764868**	**-53.764868**	**-53.096918**	**-57.900878**	**-40.862978**	**-43.013661**	**-26.359418**
+0.7	**79.440813**	**91.527329**	**91.527329**	**80.602433**	**84.442485**	**71.762028**	**75.550886**	**54.497771**
-0.75	**-39.305770**	**-57.605216**	**-57.605216**	**-56.889555**	**-62.036655**	**-43.781762**	**-46.086066**	**-28.242234**
+0.75	**66.211099**	**74.494470**	**74.494470**	**67.045643**	**70.238461**	**58.680071**	**61.773986**	**44.672273**
-0.8	**-41.926154**	**-61.445564**	**-61.445564**	**-60.682192**	**-66.172432**	**-46.700547**	**-49.158470**	**-30.125049**
+0.8	**56.734337**	**59.156221**	**59.156221**	**52.528727**	**54.940192**	**47.801505**	**50.320066**	**37.767782**
-0.85	**-44.546539**	**-65.285911**	**-65.285911**	**-64.474829**	**-70.308209**	**-49.619331**	**-52.230874**	**-32.007865**
+0.85	**41.507021**	**37.558150**	**37.558150**	**32.290438**	**33.314049**	**31.397210**	**33.049695**	**26.487445**
-0.9	**-52.430916**	**-70.683134**	**-71.287232**	**-69.343008**	**-77.092321**	**-53.494412**	**-56.365831**	**-33.890681**
+0.9	**30.881453**	**20.610082**	**20.610082**	**16.529938**	**16.529938**	**20.548426**	**21.629923**	**18.780327**
-0.95	**-69.240182**	**-82.118648**	**-85.169328**	**-78.606367**	**-90.880500**	**-60.966324**	**-64.497266**	**-36.627886**
+0.95	**14.801965**	**7.643330**	**7.643330**	**6.638283**	**7.129639**	**10.859518**	**11.431072**	**7.215010**
-1	**-87.285730**	**-93.658884**	**-99.280215**	**-88.107051**	**-105.021633**	**-68.505103**	**-72.704020**	**-40.109459**
+1	**5.340332**	**7.502884**	**7.502884**	**6.987666**	**7.504883**	**5.702444**	**6.002573**	**3.837893**
(Span 2) -2	**-87.285730**	**-93.658884**	**-99.280215**	**-88.107051**	**-105.021633**	**-68.505103**	**-72.704020**	**-40.109459**
+2	**5.340332**	**7.502884**	**7.502884**	**6.987666**	**7.504883**	**5.702444**	**6.002573**	**3.837893**
-2.05	**-66.485649**	**-62.757166**	**-67.792332**	**-57.183008**	**-70.087970**	**-45.303914**	**-48.214676**	**-29.899769**
+2.05	**17.589144**	**11.573686**	**11.573686**	**9.275916**	**9.275916**	**12.139320**	**12.778232**	**10.746452**
-2.1	**-47.559752**	**-50.555958**	**-52.563703**	**-45.965869**	**-53.019436**	**-37.479712**	**-39.658154**	**-25.851141**
+2.1	**31.158722**	**23.674632**	**23.674632**	**18.989888**	**19.047601**	**19.180261**	**20.189748**	**21.498354**
-2.15	**-33.016635**	**-41.966879**	**-41.966879**	**-39.084627**	**-41.976336**	**-32.334659**	**-34.038430**	**-22.123422**
+2.15	**45.810592**	**43.844656**	**43.844656**	**35.020529**	**35.020529**	**33.298499**	**35.051052**	**32.461688**
-2.2	**-30.734025**	**-39.056895**	**-39.056895**	**-36.374499**	**-39.065696**	**-31.182641**	**-32.827868**	**-19.978987**
+2.2	**61.875319**	**66.577425**	**66.668066**	**56.704708**	**58.291752**	**50.362302**	**53.012950**	**42.982986**

-2.25	-30.727203	-36.146912	-36.146912	-33.664370	-36.155057	-30.038323	-31.626163	-18.490427
+2.25	74.609084	85.668774	85.668774	75.437716	78.407569	65.156601	68.585896	52.535505
-2.3	-30.720381	-33.236928	-33.236928	-30.954242	-33.244417	-28.894006	-30.424457	-17.001867
+2.3	85.013223	101.388639	101.388639	90.942371	95.670388	77.052462	81.107855	60.763416
-2.35	-30.713559	-30.326944	-30.326944	-28.244114	-30.333778	-27.749689	-29.222752	-15.513307
+2.35	94.126485	113.611089	113.611089	104.925488	111.646889	86.348742	90.893413	67.377330
-2.4	-30.706737	-27.416960	-27.416960	-25.533985	-27.423139	-26.736166	-28.143333	-14.024747
+2.4	100.662524	122.071644	122.071644	114.806919	123.291598	92.780777	97.663976	72.154250
-2.45	-30.699915	-24.506976	-24.506976	-22.823857	-24.512499	-26.438709	-27.830220	-12.536187
+2.45	104.406048	126.218181	126.218181	120.682758	130.205565	95.931782	100.980823	74.937681
-2.5	-30.693093	-21.597104	-21.597104	-20.114045	-21.602856	-26.267410	-27.649906	-11.047627
+2.5	105.234852	125.940309	125.940309	122.685180	132.160652	95.722087	100.760092	75.637549
-2.55	-30.700001	-24.507103	-24.507103	-22.824216	-24.513630	-26.437176	-27.828606	-12.535930
+2.55	104.406058	126.203802	126.203802	120.682039	130.196112	95.923972	100.972603	74.935523
-2.6	-30.706909	-27.417102	-27.417102	-25.534387	-27.424404	-26.729906	-28.136743	-14.024459
+2.6	100.662531	122.086896	122.086896	114.838120	123.273152	92.789075	97.672710	72.149977
-2.65	-30.713817	-30.327101	-30.327101	-28.244558	-30.335178	-27.747984	-29.221001	-15.512989
+2.65	94.126488	113.616182	113.616182	104.952064	111.620426	86.351511	90.896328	67.371071
-2.7	-30.720725	-33.237099	-33.237099	-30.954729	-33.245952	-28.892715	-30.423131	-17.001518
+2.7	85.013239	101.384279	101.384279	90.965383	95.637347	77.050092	81.105360	60.755352
-2.75	-30.727633	-36.147098	-36.147098	-33.664900	-36.156726	-30.037445	-31.625262	-18.490047
+2.75	74.483994	85.656073	85.656073	75.433951	78.406355	65.087424	68.513078	52.525846
-2.8	-30.734541	-39.057097	-39.057097	-36.375071	-39.067500	-31.182175	-32.827393	-19.978577
+2.8	61.713827	66.559633	66.650860	56.693748	58.282501	50.351684	53.001772	42.972056
-2.85	-32.996389	-41.967096	-41.967096	-39.085242	-41.978274	-32.333032	-34.036722	-22.123302
+2.85	45.759738	43.820223	43.820223	35.001851	35.001851	33.326505	35.080531	32.449828
-2.9	-47.562234	-50.556385	-52.562581	-45.964828	-53.022124	-37.480474	-39.658839	-25.851079
+2.9	31.511887	23.713036	23.713036	18.955677	19.012962	19.201304	20.211899	21.509121
-2.95	-66.508578	-62.761362	-67.796126	-57.183985	-70.091277	-45.302972	-48.213621	-29.899763
+2.95	18.073758	11.572842	11.572842	9.243509	9.243509	12.162369	12.802494	10.758121
-3	-87.304562	-93.657934	-99.278887	-88.109496	-105.025015	-68.504717	-72.703585	-40.110640
+3	5.341880	7.502846	7.502846	6.987556	7.504536	5.702423	6.002550	3.837972
(Span 3) -4	-87.304562	-93.657934	-99.278887	-88.109496	-105.025015	-68.504717	-72.703585	-40.110640
+4	5.341880	7.502846	7.502846	6.987556	7.504536	5.702423	6.002550	3.837972
-3.05	-69.242923	-82.120614	-85.171891	-78.605799	-90.881034	-60.943841	-64.473693	-36.627680
+3.05	14.867604	7.651282	7.651282	6.638178	7.129309	10.865109	11.436956	7.216378
-3.1	-52.447092	-70.682311	-71.287529	-69.344779	-77.096670	-53.486053	-56.357878	-33.890441
+3.1	31.297081	20.576196	20.576196	16.555868	16.555868	20.580515	21.663700	18.770743
-3.15	-44.546538	-65.286069	-65.286069	-64.471863	-70.308262	-49.617614	-52.229068	-32.007639
+3.15	41.584015	37.561784	37.561784	32.292429	33.315703	31.383302	33.035054	26.479019
-3.2	-41.926153	-61.445712	-61.445712	-60.679400	-66.172481	-46.698931	-49.156770	-30.124837
+3.2	56.614039	59.204094	59.204094	52.492306	54.971613	47.777616	50.294937	37.759138
-3.25	-39.305769	-57.605355	-57.605355	-56.886938	-62.036701	-43.780248	-46.084471	-28.242034
+3.25	66.254074	74.494269	74.494269	67.038729	70.228650	58.679178	61.773064	44.664034
-3.3	-36.685384	-53.764998	-53.764998	-53.094475	-57.900921	-40.861565	-43.012173	-26.359232
+3.3	79.375454	91.568820	91.568820	80.624256	84.460046	71.733229	75.520592	54.488923
-3.35	-34.065000	-49.924641	-49.924641	-49.302013	-53.765141	-37.942881	-39.939875	-24.476430
+3.35	86.226808	101.751685	101.751685	88.952024	92.552408	78.781710	82.942793	59.429799
-3.4	-31.444615	-46.084284	-46.084284	-45.509550	-49.629361	-35.024198	-36.867577	-22.593627
+3.4	96.451570	112.303018	112.303018	100.207193	105.303141	86.531477	91.106480	67.179720
-3.45	-28.824230	-42.243927	-42.243927	-41.717088	-45.493580	-32.105515	-33.795279	-20.710825
+3.45	99.054073	116.184122	116.184122	106.415945	113.002832	89.025913	93.733887	69.200142
-3.5	-26.203846	-38.403570	-38.403570	-37.924625	-41.357800	-29.186832	-30.722981	-18.828023
+3.5	105.577254	118.953364	118.953364	112.102417	119.568480	91.096743	95.917852	74.377819
-3.55	-23.583461	-34.563213	-34.563213	-34.132163	-37.222020	-26.268149	-27.650683	-16.945220
+3.55	103.135153	117.341798	117.341798	111.118200	119.372165	90.295520	95.055586	72.897534
-3.6	-20.963076	-30.722856	-30.722856	-30.339700	-33.086240	-23.349466	-24.578385	-15.062418

+3.6	**105.317985**	**120.154595**	**120.154595**	**111.132172**	**118.039008**	**92.311240**	**97.178759**	**74.956369**
-3.65	**-18.342692**	**-26.882499**	**-26.882499**	**-26.547238**	**-28.950459**	**-20.430782**	**-21.506087**	**-13.179616**
+3.65	**98.586714**	**117.585398**	**117.585398**	**104.461101**	**109.940757**	**90.077331**	**94.830326**	**70.335404**
-3.7	**-15.722307**	**-23.042142**	**-23.042142**	**-22.754775**	**-24.814679**	**-17.512099**	**-18.433789**	**-11.296813**
+3.7	**95.193590**	**114.197237**	**114.197237**	**98.242027**	**101.603212**	**87.413790**	**92.026734**	**68.115128**
-3.75	**-13.101922**	**-19.201785**	**-19.201785**	**-18.962313**	**-20.678899**	**-14.593416**	**-15.361490**	**-9.414011**
+3.75	**84.101145**	**103.226683**	**103.226683**	**91.051209**	**94.784241**	**78.798371**	**82.958925**	**60.195072**
-3.8	**-10.481538**	**-15.361428**	**-15.361428**	**-15.169850**	**-16.543119**	**-11.674733**	**-12.289192**	**-7.531209**
+3.8	**74.673253**	**92.592329**	**92.592329**	**81.858175**	**85.828021**	**71.118007**	**74.872868**	**53.380894**
-3.85	**-7.861153**	**-11.521071**	**-11.521071**	**-11.377387**	**-12.407339**	**-8.756050**	**-9.216894**	**-5.648407**
+3.85	**58.816751**	**74.082902**	**74.082902**	**66.392115**	**69.602107**	**56.576420**	**59.563832**	**42.077370**
-3.9	**-5.240769**	**-7.680714**	**-7.680714**	**-7.584925**	**-8.271558**	**-5.837366**	**-6.144596**	**-3.765604**
+3.9	**42.831122**	**54.551628**	**54.551628**	**49.993940**	**52.256277**	**42.040065**	**44.260177**	**30.606732**
-3.95	**-2.620384**	**-3.840357**	**-3.840357**	**-3.792462**	**-4.135778**	**-2.918683**	**-3.072298**	**-1.882802**
+3.95	**22.305310**	**28.685680**	**28.685680**	**26.515464**	**27.759570**	**22.096830**	**23.263769**	**15.958125**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 15' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-2.620385	-4.091926	-3.797607	-3.475148	-4.135730	-4.135769
+0.05	22.297656	27.869767	25.946207	26.184062	28.166354	28.306924
-0.1	-5.240769	-8.183852	-7.595213	-6.950296	-8.271459	-8.271539
+0.1	42.806601	52.434417	48.846941	49.877914	53.112870	53.344984
-0.15	-7.861154	-12.275778	-11.392820	-10.425444	-12.407189	-12.407308
+0.15	58.751198	69.166231	64.495088	67.286094	71.193909	70.438802
-0.2	-10.481539	-16.367704	-15.190426	-13.900593	-16.542919	-16.543077
+0.2	74.651050	85.698714	79.679287	84.680169	89.565818	87.503687
-0.25	-13.101923	-20.459630	-18.988033	-17.375741	-20.678649	-20.678847
+0.25	84.045226	94.328242	87.980756	93.882407	99.875100	96.577324
-0.3	-15.722308	-24.551555	-22.785639	-20.850889	-24.814378	-24.814616
+0.3	95.283231	100.845257	96.391994	104.335908	110.428960	103.540717
-0.35	-18.342692	-28.643481	-26.583246	-24.326037	-28.950108	-28.950385
+0.35	98.537994	109.130239	102.291429	107.703972	114.405147	111.809066
-0.4	-20.963077	-32.735407	-30.380853	-27.801185	-33.085838	-33.086155
+0.4	105.650608	117.462491	109.964935	110.675958	119.730222	120.643794
-0.45	-23.583462	-36.827333	-34.178459	-31.276333	-37.221568	-37.221924
+0.45	103.136013	119.426872	111.415802	108.441222	121.045833	122.035616
-0.5	-26.203846	-40.919259	-37.976066	-34.751481	-41.357297	-41.357693
+0.5	105.616249	119.826013	111.469386	109.014814	122.141446	123.154647
-0.55	-28.824231	-45.011185	-41.773672	-38.226630	-45.493027	-45.493463
+0.55	99.047389	113.447864	105.655212	106.967005	115.380374	116.497784
-0.6	-31.444616	-49.103111	-45.571279	-41.701778	-49.628757	-49.629232
+0.6	96.483692	106.015812	98.443496	104.210217	110.553953	109.581765
-0.65	-34.065000	-53.195037	-49.368885	-45.176926	-53.764487	-53.765001
+0.65	86.214655	94.488678	88.758230	95.473430	100.877713	96.918287
-0.7	-36.685385	-57.286963	-53.166492	-48.652074	-57.900216	-57.900771
+0.7	79.440813	87.138518	80.979605	87.251175	92.209284	88.612885
-0.75	-39.305770	-61.378889	-56.964099	-52.127222	-62.035946	-62.036540
+0.75	66.211099	73.279678	68.199008	72.027249	75.880889	74.858886
-0.8	-41.926154	-65.470815	-60.761705	-55.602370	-66.171676	-66.172309
+0.8	56.734337	58.754821	54.670033	59.187558	62.144083	60.332723
-0.85	-44.546539	-69.562741	-64.559312	-59.077518	-70.307406	-70.308079
+0.85	41.507021	36.796146	35.066487	39.577718	41.240971	38.709534
-0.9	-52.430916	-75.175430	-70.879857	-62.552667	-74.443135	-75.767704
+0.9	30.881453	20.991956	22.644273	24.228072	25.920795	22.686671
-0.95	-69.240182	-84.397862	-85.955654	-71.329423	-78.578865	-84.717446
+0.95	14.801965	11.792891	12.161418	12.879830	14.308941	13.045826
-1	-87.285730	-95.537888	-107.781237	-80.327270	-87.180936	-93.870430
+1	5.340332	7.373426	6.858927	6.753028	7.511319	7.510226
(Span 2) -2	-87.285730	-95.537888	-107.781237	-80.327270	-87.180936	-93.870430
+2	5.340332	7.373426	6.858927	6.753028	7.511319	7.510226
-2.05	-66.485649	-69.129895	-79.719895	-52.398938	-57.170474	-59.498949
+2.05	17.589144	13.618352	13.179809	13.351534	15.546888	13.610019
-2.1	-47.559752	-54.715005	-54.940649	-43.054345	-46.344224	-48.836367
+2.1	31.158722	20.490294	23.090914	22.229189	24.285972	20.408609
-2.15	-33.016635	-43.906898	-41.269157	-38.835770	-42.661949	-42.991522
+2.15	45.810592	34.804539	35.141517	39.385881	41.951816	35.056278
-2.2	-30.734025	-40.899773	-38.064969	-38.793136	-41.489154	-42.486838
+2.2	61.875319	57.679161	56.178570	59.581425	63.553520	58.244333

-2.25	**-30.727203**	**-39.814643**	**-37.139871**	**-38.750502**	**-40.439081**	**-42.134786**
+2.25	**74.609084**	**77.434911**	**73.085065**	**77.053856**	**82.248677**	**78.402026**
-2.3	**-30.720381**	**-38.804548**	**-36.327784**	**-38.707869**	**-39.711862**	**-41.796167**
+2.3	**85.013223**	**93.889417**	**87.146267**	**91.233693**	**97.315939**	**95.473708**
-2.35	**-30.713559**	**-37.848261**	**-35.561833**	**-38.667489**	**-39.216473**	**-41.537081**
+2.35	**94.126485**	**109.817358**	**101.810189**	**102.241084**	**111.236096**	**111.495160**
-2.4	**-30.706737**	**-36.898716**	**-34.945252**	**-38.633225**	**-38.721085**	**-41.414054**
+2.4	**100.662524**	**121.435687**	**112.532716**	**109.829412**	**122.974667**	**123.197089**
-2.45	**-30.699915**	**-36.040908**	**-34.454143**	**-38.598961**	**-38.225696**	**-41.302976**
+2.45	**104.406048**	**128.342785**	**119.104679**	**113.563287**	**130.048198**	**130.162846**
-2.5	**-30.693093**	**-35.238047**	**-34.100528**	**-38.564698**	**-37.757613**	**-41.203007**
+2.5	**105.234852**	**130.308997**	**121.086382**	**113.330885**	**132.160652**	**132.160650**
-2.55	**-30.700001**	**-36.040000**	**-34.454032**	**-38.599374**	**-38.226371**	**-41.304117**
+2.55	**104.406058**	**128.335776**	**119.103732**	**113.554323**	**130.041344**	**130.156288**
-2.6	**-30.706909**	**-36.898462**	**-34.945211**	**-38.634048**	**-38.722161**	**-41.412497**
+2.6	**100.662531**	**121.422688**	**112.530878**	**109.838936**	**122.961297**	**123.184297**
-2.65	**-30.713817**	**-37.847566**	**-35.561900**	**-38.668723**	**-39.217951**	**-41.536689**
+2.65	**94.126488**	**109.799005**	**101.811898**	**102.244262**	**111.248387**	**111.476771**
-2.7	**-30.720725**	**-38.803068**	**-36.327694**	**-38.706543**	**-39.713741**	**-41.796939**
+2.7	**85.013239**	**93.866608**	**87.147619**	**91.230973**	**97.313038**	**95.483080**
-2.75	**-30.727633**	**-39.814558**	**-37.139963**	**-38.749606**	**-40.436191**	**-42.133182**
+2.75	**74.483994**	**77.433640**	**73.090354**	**77.047591**	**82.242214**	**78.401188**
-2.8	**-30.734541**	**-40.899153**	**-38.064923**	**-38.792668**	**-41.488055**	**-42.486469**
+2.8	**61.713827**	**57.671539**	**56.183287**	**59.569237**	**63.540519**	**58.237920**
-2.85	**-32.996389**	**-43.905867**	**-41.268896**	**-38.835731**	**-42.660204**	**-42.992314**
+2.85	**45.759738**	**34.790981**	**35.138596**	**39.418028**	**41.935565**	**35.043321**
-2.9	**-47.562234**	**-54.713067**	**-54.940346**	**-43.054164**	**-46.343585**	**-48.835749**
+2.9	**31.511887**	**20.467939**	**23.094501**	**22.202346**	**24.257112**	**20.429422**
-2.95	**-66.508578**	**-69.129631**	**-79.719657**	**-52.400507**	**-57.171907**	**-59.496821**
+2.95	**18.073758**	**13.595318**	**13.183664**	**13.379436**	**15.575863**	**13.633274**
-3	**-87.304562**	**-95.538568**	**-107.781175**	**-80.324595**	**-87.178114**	**-93.869314**
+3	**5.341880**	**7.373700**	**6.858968**	**6.753004**	**7.511616**	**7.510511**
(Span 3) -4	**-87.304562**	**-95.538568**	**-107.781175**	**-80.324595**	**-87.178114**	**-93.869314**
+4	**5.341880**	**7.373700**	**6.858968**	**6.753004**	**7.511616**	**7.510511**
-3.05	**-69.242923**	**-84.398802**	**-85.955928**	**-71.328208**	**-78.578908**	**-84.717654**
+3.05	**14.867604**	**11.778633**	**12.162104**	**12.847765**	**14.286575**	**13.049269**
-3.1	**-52.447092**	**-75.176169**	**-70.879957**	**-62.552373**	**-74.443176**	**-75.765476**
+3.1	**31.297081**	**20.974247**	**22.640872**	**24.485690**	**26.177782**	**22.666696**
-3.15	**-44.546538**	**-69.562776**	**-64.559316**	**-59.077241**	**-70.307444**	**-70.308115**
+3.15	**41.584015**	**36.776991**	**35.067555**	**39.580357**	**41.240776**	**38.708173**
-3.2	**-41.926153**	**-65.470848**	**-60.761709**	**-55.602109**	**-66.171712**	**-66.172343**
+3.2	**56.614039**	**58.730461**	**54.406238**	**59.189801**	**62.175938**	**60.305962**
-3.25	**-39.305769**	**-61.378920**	**-56.964102**	**-52.126977**	**-62.035979**	**-62.036572**
+3.25	**66.254074**	**73.273953**	**68.198225**	**72.026312**	**75.880031**	**74.851379**
-3.3	**-36.685384**	**-57.286992**	**-53.166495**	**-48.651846**	**-57.900247**	**-57.900800**
+3.3	**79.375454**	**87.103203**	**80.974376**	**87.217824**	**92.235860**	**88.574331**
-3.35	**-34.065000**	**-53.195064**	**-49.368888**	**-45.176714**	**-53.764515**	**-53.765028**
+3.35	**86.226808**	**94.470529**	**88.757501**	**95.413581**	**100.899396**	**96.910698**
-3.4	**-31.444615**	**-49.103136**	**-45.571281**	**-41.701582**	**-49.628783**	**-49.629257**
+3.4	**96.451570**	**106.006078**	**98.442089**	**104.167368**	**110.571260**	**109.568869**
-3.45	**-28.824230**	**-45.011208**	**-41.773674**	**-38.226450**	**-45.493051**	**-45.493485**
+3.45	**99.054073**	**113.456884**	**105.656620**	**106.950419**	**115.364306**	**116.482556**
-3.5	**-26.203846**	**-40.919280**	**-37.976068**	**-34.751319**	**-41.357319**	**-41.357714**
+3.5	**105.577254**	**119.805951**	**111.466417**	**108.962570**	**122.118487**	**123.132731**
-3.55	**-23.583461**	**-36.827352**	**-34.178461**	**-31.276187**	**-37.221587**	**-37.221942**
+3.55	**103.135153**	**119.424349**	**111.415477**	**108.436801**	**121.041999**	**122.031956**
-3.6	**-20.963076**	**-32.735424**	**-30.380854**	**-27.801055**	**-33.085855**	**-33.086171**

+3.6	**105.317985**	**117.476801**	**109.967150**	**110.607081**	**119.745100**	**120.535275**
-3.65	**-18.342692**	**-28.643496**	**-26.583247**	**-24.325923**	**-28.950123**	**-28.950399**
+3.65	**98.586714**	**109.136988**	**102.292521**	**107.688913**	**114.420545**	**111.827753**
-3.7	**-15.722307**	**-24.551568**	**-22.785640**	**-20.850791**	**-24.814391**	**-24.814627**
+3.7	**95.193590**	**100.840371**	**96.388925**	**104.316030**	**110.469763**	**103.536223**
-3.75	**-13.101922**	**-20.459640**	**-18.988033**	**-17.375660**	**-20.678659**	**-20.678856**
+3.75	**84.101145**	**94.317486**	**87.982818**	**93.856284**	**99.878776**	**96.566365**
-3.8	**-10.481538**	**-16.367712**	**-15.190426**	**-13.900528**	**-16.542927**	**-16.543084**
+3.8	**74.673253**	**85.680836**	**79.683936**	**84.647411**	**89.594307**	**87.485183**
-3.85	**-7.861153**	**-12.275784**	**-11.392819**	**-10.425396**	**-12.407195**	**-12.407313**
+3.85	**58.816751**	**69.165285**	**64.495010**	**67.306187**	**71.215304**	**70.437788**
-3.9	**-5.240769**	**-8.183855**	**-7.595212**	**-6.950264**	**-8.271462**	**-8.271541**
+3.9	**42.831122**	**52.401516**	**48.849348**	**49.891239**	**53.129927**	**53.379347**
-3.95	**-2.620384**	**-4.091927**	**-3.797606**	**-3.475133**	**-4.135730**	**-4.135770**
+3.95	**22.305310**	**27.853332**	**25.947417**	**26.190699**	**28.174940**	**28.289785**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.77185393	-14.566471	-11.472281	-11.22412945	-11.56153111	-11.0098845	-12.46504695	-8.383414292	-8.856167401	-4.966568067
End Shear	90.60324965	113.459428	91.689541	90.38653612	92.10183961	84.06977471	91.20962328	67.59677266	71.33266565	44.3555
-0.05	-10.77185393	-14.582397	-11.486615	-11.22412945	-11.56153111	-11.0098845	-12.46504695	-9.015611837	-9.523842711	-4.966568067
+0.05	83.05047696	105.019204	83.754814	83.40772819	84.70672272	77.25823957	83.23608761	62.64918089	66.08228424	41.65867971
-0.1	-16.74641839	-14.726890	-11.616658	-11.22412945	-11.56153111	-11.0098845	-12.46504695	-12.07725162	-12.73393488	-6.510721163
+0.1	72.01335138	93.404930	73.343649	73.40046134	74.14998345	67.7222623	72.32453571	55.29868698	58.28712259	37.55349558
-0.15	-18.91678746	-14.807590	-13.165373	-11.22412945	-11.56153111	-11.0098845	-12.46504695	-13.04644835	-13.75023343	-7.986526925
+0.15	68.43067847	89.569119	68.204466	70.11384625	70.69598611	64.78287169	69.08034169	52.87868904	55.72215865	36.17472162
-0.2	-25.46162487	-16.051591	-19.249712	-11.22412945	-11.56153111	-11.0098845	-12.46504695	-16.85733072	-17.78102673	-12.32926604
+0.2	58.03660418	78.219483	57.858398	60.45567901	60.58717182	55.45203948	59.11900207	45.74855743	48.16941149	32.1381452
-0.25	-27.646666	-19.346740	-21.298990	-13.81707188	-13.81707188	-11.05797382	-12.46504695	-18.17763953	-19.16808239	-13.74586069
+0.25	54.70530334	74.500887	53.758176	57.31810902	57.31810902	52.51473912	55.98595082	43.43863368	45.72487756	30.84195518
-0.3	-34.17924636	-29.949513	-27.486679	-22.1651146	-22.1651146	-17.73788348	-17.73788348	-24.44080788	-25.74820463	-17.8911257
+0.3	46.32225226	63.588933	46.778854	48.84941497	48.84941497	44.1658207	46.81769449	37.36100029	39.3337148	27.29868598
-0.35	-36.34144258	-33.522186	-30.219342	-24.95256101	-24.95256101	-19.96832458	-19.97412844	-26.47060959	-27.88092946	-19.23528097
+0.35	44.17163388	60.044678	44.494615	46.19943606	46.19943606	41.457949	43.85050527	35.37146741	37.24115616	26.02220346
-0.4	-42.74920162	-44.304011	-38.676092	-33.28747201	-33.28747201	-27.27285703	-27.94113809	-32.47307415	-34.18218332	-22.18460677
+0.4	37.81266334	49.740087	37.788930	38.44217489	38.44217489	33.60473288	35.2657268	29.53125858	31.09759247	22.24969907
-0.45	-44.8510315	-47.906861	-41.375069	-36.04669993	-36.04669993	-29.70212963	-30.51699086	-34.4327895	-36.24504158	-23.46001948
+0.45	35.73178943	46.426163	35.610794	35.93057904	35.93057904	31.08786569	32.52165813	27.63524971	29.10281124	21.01581198
-0.5	-51.02141385	-58.689725	-49.109162	-44.48785725	-44.69699845	-38.40154746	-39.69233338	-40.10164787	-42.21226092	-27.14574865
+0.5	29.63833665	36.895219	29.281124	28.65998498	28.65998498	23.88496711	24.69212908	22.13275083	23.31287637	17.40442264
-0.55	-53.02535819	-62.262853	-51.565439	-47.49818019	-47.81524505	-41.33031415	-42.95612481	-41.9194277	-44.12571336	-28.32473478
+0.55	27.66472641	33.866489	27.247346	26.48448766	26.48448766	21.61063806	22.22844067	20.36837966	21.45609314	16.23534729
-0.6	-58.84580847	-72.865334	-58.564989	-56.21552927	-56.80783234	-49.99279866	-53.92141992	-47.14996978	-49.63154714	-31.70132427
+0.6	21.94934454	25.272082	21.406932	19.69357301	19.69357301	15.74279991	15.82213516	15.31798914	16.14050916	12.85171815
-0.65	-60.7143503	-76.347703	-60.774058	-59.00912477	-59.67776199	-52.82829245	-57.46422683	-48.81748486	-51.38682617	-32.7706491
+0.65	20.12051717	22.582285	19.554754	17.60178587	17.60178587	14.0694025	14.14623069	13.63879363	14.37291718	11.76967097
-0.7	-66.07231201	-86.585020	-67.091675	-67.02131062	-67.87593347	-61.13366415	-67.70782562	-53.58475004	-56.40500004	-35.79838739
+0.7	14.89576605	14.537837	14.313795	11.73369099	11.73369099	9.375265567	9.375265567	8.893120956	9.376742785	8.680452225
-0.75	-67.85975429	-89.914458	-69.260471	-69.561534	-70.46457914	-63.82435023	-70.9852326	-55.0936694	-57.99333621	-36.74479952
+0.75	13.24924074	12.263168	12.679440	9.923338467	9.923338467	7.92719034	7.92719034	7.520978276	7.931979357	7.707647468
-0.8	-74.27206158	-99.598426	-76.332080	-76.75858825	-77.76939853	-71.61799981	-80.36883438	-60.17027807	-63.3837794	-39.38396176
+0.8	8.694418356	7.192610	9.245436	5.541236004	5.541236004	4.462472151	4.462472151	4.521782277	4.776080884	4.979488667
-0.85	-76.2612563	-102.711652	-79.953070	-79.00877761	-80.04377536	-74.11234539	-83.3383012	-62.00945151	-65.34882618	-40.19423038
+0.85	7.429582043	6.021395	6.767104	4.624950825	4.624950825	3.728036089	3.728036089	3.793560142	4.006091589	4.138148425
-0.9	-86.66000458	-111.650704	-90.816770	-87.14720251	-88.75678585	-81.72958969	-91.73427099	-67.28226265	-70.9872883	-42.4050963
+0.9	3.925459266	2.683218	3.164355	2.115712977	2.115712977	1.687716991	1.687716991	2.041775482	2.159854195	1.835040491
-0.95	-90.07744122	-114.483303	-94.334091	-89.89211237	-91.78237797	-84.00104448	-94.35325586	-68.95477836	-72.77740805	-43.06598283
+0.95	2.863469582	2.021564	2.104773	1.469726298	1.469726298	1.470923169	1.61101464	1.509206412	1.598435486	1.147536217
-1	-99.89932885	-122.482486	-104.515454	-97.67359755	-100.4070306	-92.29512492	-101.7645652	-73.70215291	-77.8635287	-44.80883156
+1	1.20E+00	1.997861	1.279126	1.47E+00	1.47E+00	1.47E+00	1.61E+00	1.12E+00	1.18E+00	7.13E-01
(Span 2) -2	-5.52E+00	-9.216446	-5.900806	-6.78E+00	-6.78E+00	-6.79E+00	-7.43E+00	-5.15E+00	-5.43E+00	-3.29E+00
+2	1.06E+02	123.076326	109.649214	100.4700906	104.1546542	96.37740582	108.3897943	74.42940716	78.73215649	46.65680679
-2.05	-6.18E+00	-9.235941	-5.918352	-6.78E+00	-6.78E+00	-6.79E+00	-7.43E+00	-5.15E+00	-5.43E+00	-3.29E+00
+2.05	1.01E+02	118.331936	104.003872	96.15208058	99.40063633	91.82313208	102.6878971	71.34193661	75.43627692	44.69821133
-2.1	-9.720545512	-9.321452	-6.140572	-6.780076799	-6.780076799	-6.785598157	-7.431862033	-6.878076337	-7.258342294	-3.287856816
+2.1	92.70148051	110.675764	94.609117	89.23716303	91.85139176	84.6295241	93.80863524	66.62947503	70.40903471	41.61085674
-2.15	-12.17092425	-9.421341	-8.294343	-6.780076799	-6.780076799	-6.785598157	-7.431862033	-8.385782527	-8.837778129	-4.253339172
+2.15	87.05002434	105.266944	88.610368	84.38895241	86.59754771	79.6468134	87.73756728	63.39317541	66.95974202	39.53005788
-2.2	-16.44409045	-10.960235	-12.058863	-7.939042865	-7.939042865	-6.785598157	-7.431862033	-10.60136255	-11.159329	-6.596683516
+2.2	78.37746584	96.789921	79.504537	76.85111098	78.4842008	71.4181671	78.11155475	58.35193298	61.59269035	37.53286892

-2.25	-19.36731476	-14.888968	-14.778316	-11.03768683	-11.03768683	-8.844603228	-8.844603228	-12.9586387	-13.66289099	-8.66394092
+2.25	72.5233348	90.949830	73.417624	71.26138039	72.53694721	65.78689487	72.71743929	55.02369296	58.05173676	35.95707616
-2.3	-23.94916305	-21.446509	-19.824833	-16.16554619	-16.16554619	-13.08785889	-13.08785889	-17.48630764	-18.41727825	-11.94603693
+2.3	63.73258967	81.997753	64.356932	62.5807357	63.349355	57.84969139	64.26880553	50.1245751	52.84336966	33.4194736
-2.35	-28.80650295	-28.705135	-24.507762	-22.05115778	-22.05115778	-17.96937273	-18.19325214	-22.15872072	-23.32496918	-15.22727352
+2.35	55.04931553	72.923377	55.491523	55.49341251	55.75988884	50.81001572	55.46669762	45.19693045	47.61176827	30.69659252
-2.4	-32.16067834	-33.879561	-27.764255	-26.49337004	-26.49337004	-21.85934136	-22.38802798	-25.26219163	-26.59178067	-17.40127546
+2.4	51.04434818	66.865170	50.709205	50.54990125	50.6421334	46.12100708	49.90017759	41.91248041	44.12898718	28.79142235
-2.45	-37.31023498	-42.061827	-32.813707	-32.75368875	-32.75368875	-28.07289047	-29.67510817	-29.86715312	-31.43910855	-20.62252613
+2.45	45.87919671	57.238420	43.984691	43.62605439	43.62605439	39.17009727	42.22393016	37.36133393	39.32771993	25.81829387
-2.5	-42.53496628	-50.648589	-39.298505	-39.23863898	-39.23863898	-34.64903717	-37.24241881	-34.39747425	-36.20786764	-23.77265613
+2.5	40.66954586	47.729911	36.987489	37.04464768	37.04464768	32.41002906	34.77914304	32.889628	34.62066105	22.73015485
-2.55	-46.02278871	-56.847172	-43.920357	-43.63960369	-43.63960369	-39.18362443	-42.23878342	-37.3682172	-39.33496548	-25.82022307
+2.55	37.20832454	42.043718	32.861343	32.74069186	32.74069186	28.06029123	29.88770513	29.86004953	31.43163108	20.62051429
-2.6	-51.88762613	-66.884145	-50.501133	-50.5653227	-50.65816347	-46.1348147	-49.915409	-41.92011469	-44.13707642	-28.79326014
+2.6	32.08918608	33.862278	27.811018	26.48098156	26.48098156	21.84757216	22.40390578	25.25497596	26.58418522	17.39923024
-2.65	-55.81407553	-72.942264	-54.896046	-55.50847759	-55.77545918	-50.82389797	-55.48440427	-45.2045759	-47.6198778	-30.69837498
+2.65	28.75692882	28.688554	24.195902	22.33290445	22.33290445	17.95826852	18.18131664	22.17685759	23.34406062	15.22521336
-2.7	-61.7652116	-82.016272	-63.618400	-62.65770055	-63.30831706	-57.86353034	-64.28592073	-50.13222179	-52.85149221	-33.42114811
+2.7	23.93464242	21.431208	19.525477	16.15458394	16.15458394	13.30573891	13.30573891	17.47927994	18.40989811	11.9439736
-2.75	-67.5660087	-88.004969	-69.640381	-68.09198459	-69.19873319	-62.93050983	-69.96237096	-53.40347674	-56.32849983	-35.13501904
+2.75	20.86888959	16.975918	16.569699	12.67628307	12.67628307	10.15665003	10.15665003	14.46162267	15.24104103	9.754381744
-2.8	-76.35065158	-96.807197	-79.222394	-76.71965897	-78.35388044	-71.20678447	-78.12730867	-58.56382333	-61.8180927	-37.53433379
+2.8	16.5487975	10.947703	12.408015	7.93005382	7.93005382	6.78561027	7.431810464	10.61013324	11.1685613	6.595139423
-2.85	-85.10373658	-105.283124	-89.171525	-84.4041692	-86.61397063	-79.54841303	-87.64233031	-63.40087256	-66.96794074	-39.75490688
+2.85	12.62882771	9.421217	8.613775	6.779987719	6.779987719	6.78561027	7.431810464	8.382317683	8.834148364	4.251965974
-2.9	-90.84838906	-110.691058	-95.158124	-89.25191455	-91.8674012	-84.64415365	-93.82650606	-66.63691955	-70.4169715	-41.87795364
+2.9	10.16587709	9.321328	6.310577	6.779987719	6.779987719	6.78561027	7.431810464	6.874451246	7.254544794	3.287863605
-2.95	-99.21949262	-118.345667	-103.926907	-96.16587221	-99.41574417	-91.83703703	-102.7051574	-71.34941946	-75.44425887	-44.95227836
+2.95	6.731196965	9.235817	5.918491	6.779987719	6.779987719	6.78561027	7.431810464	5.154639854	5.425936689	3.287863605
-3	-107.1638041	-125.338229	-112.325919	-102.5403339	-106.4471341	-98.58102322	-111.1748233	-75.9018229	-80.30544141	-47.83404508
+3	5.521137931	9.216322	5.900945	6.779987719	6.779987719	6.78561027	7.431810464	5.154639854	5.425936689	3.287863605
(Span 3) -4	-1.196824435	-1.997834	-1.279156	-1.469706988	-1.469706988	-1.470925794	-1.611003461	-1.117378159	-1.176187536	-0.71271458
+4	97.66344229	119.888485	100.559316	95.14336893	97.59413208	89.58550923	99.29161791	72.15850133	76.20887212	44.54150909
-3.05	-1.574646647	-2.005553	-1.286103	-1.469706988	-1.469706988	-1.470925794	-1.611003461	-1.117378159	-1.176187536	-0.71271458
+3.05	94.41831573	117.220043	97.148460	92.54776199	94.71736932	86.81911055	96.86324364	70.57547605	74.51289113	43.98070026
-3.1	-4.741393508	-3.674354	-4.341253	-2.91558337	-2.91558337	-2.327329253	-2.327329253	-2.603631715	-2.620942896	-2.564450953
+3.1	84.23324935	108.724491	86.558693	84.31563207	85.64350419	79.41609268	89.00729797	65.5584004	69.14306104	42.05763028
-3.15	-5.907211632	-4.719622	-5.544979	-3.752754319	-3.752754319	-3.02174139	-3.02174139	-3.065343142	-3.226676991	-3.331655613
+3.15	80.70227517	105.742886	82.923719	81.43607393	82.48493907	76.53522397	86.20723596	63.80023519	67.26297248	41.33915263
-3.2	-10.11285272	-8.428226	-9.592911	-6.50083452	-6.50083452	-5.231356419	-5.231356419	-5.250832746	-5.543412215	-5.854087257
+3.2	71.38710931	96.405677	73.621568	74.41787744	75.39857846	69.05442054	77.30003984	58.28782367	61.36841774	39.17574965
-3.25	-11.65415646	-10.109526	-11.105086	-8.200943537	-8.200943537	-6.549219152	-6.549219152	-6.213262638	-6.554962144	-6.763870929
+3.25	69.85126322	93.175893	71.282448	72.01764381	72.96246196	66.4551975	74.17083137	56.70789771	59.69252391	38.3213859
-3.3	-16.59138394	-16.932305	-16.005946	-13.63044452	-13.63044452	-10.89217722	-10.89217722	-10.32812957	-10.8876018	-9.680714939
+3.3	64.80650705	83.190282	65.477780	64.39803338	65.19723367	58.38559987	64.34000377	52.02806082	54.76637981	35.55612062
-3.35	-18.33375046	-19.695053	-17.753677	-15.58791937	-15.58791937	-12.51600502	-12.51600502	-11.81043835	-12.44816182	-10.71086221
+3.35	63.02698925	79.776174	63.415620	61.72614862	62.46338687	55.61588071	60.9241884	50.43862963	53.09329434	34.56973745
-3.4	-23.81577429	-28.070060	-23.307946	-21.86150252	-21.8615025231391	-17.47677323	-17.5585011522659	-16.96625607	-17.8754367624564	-13.95547203
+3.4	57.44785199	69.332062	56.852568	53.3465694	53.85443642	47.11209379	50.2973538	45.43605666	47.82742806	31.42827544
-3.45	-25.72163997	-30.936464	-25.255515	-24.07647666	-24.07647666	-19.41767788	-19.85739631	-18.65071336	-19.64834575	-15.08377344
+3.45	55.51565664	65.796358	54.540508	50.4396863	50.85583464	44.22341265	46.63747227	43.69217913	45.9917675	30.32310309
-3.5	-31.92793896	-40.020682	-31.354523	-31.05112096	-31.05112096	-26.23866043	-27.24630862	-23.94200216	-25.21676661	-18.58950347
+3.5	48.69455607	55.080180	46.380549	41.5019491	41.50208402	35.44003546	36.39533713	38.23883673	40.25140709	26.84516035
-3.55	-33.95053411	-43.199209	-33.465199	-33.47592758	-33.47592758	-28.64106804	-29.95443688	-25.77711786	-27.14774573	-19.79372744

+3.55	46.44360888	51.484477	43.499967	38.77457499	38.7745749935441	32.4839254004612	33.10758358	36.34889684	38.26199668	25.63445736
-3.6	-40.15037126	-53.138632	-39.997221	-41.00850397	-41.00850397	-36.1894355	-38.08755318	-31.46317171	-33.1300044	-23.49392447
+3.6	40.1426132	40.679360	35.354317	30.4996604	30.4996604	24.80087127	25.30874973	30.46977597	32.07344839	21.85975623
-3.65	-42.25256036	-56.574960	-42.233258	-43.59549662	-43.59549662	-38.80853755	-40.95066011	-33.41083162	-35.17883252	-24.75186425
+3.65	38.00913286	37.084131	32.519072	27.7203438	27.7203438	22.31715622	22.65236285	28.46202066	29.97346062	20.55675562
-3.7	-48.63190381	-67.205002	-49.083527	-51.54299045	-51.54299045	-46.92968907	-49.84956918	-39.3772821	-41.4542385	-28.57988096
+3.7	31.5416804	26.369819	25.005078	19.36099744	19.36099744	15.49457666	15.49457666	22.37231488	23.57494794	16.52501657
-3.75	-51.53124432	-70.843702	-51.406157	-54.24440411	-54.24440411	-49.71395165	-52.9070796	-41.39932682	-43.58064698	-29.86932811
+3.75	29.37121446	22.834376	22.939967	16.5773361	16.5773361	13.26719113	13.26745888	20.28440675	21.38138752	15.14294518
-3.8	-61.52631104	-81.996379	-61.420781	-63.65709754	-63.93079243	-58.34988106	-62.30331581	-48.11176638	-50.67191165	-33.75851685
+3.8	22.84830755	15.018204	16.790112	11.2240741	11.56143501	11.0097146	12.46480599	15.71693253	16.58515171	10.89388748
-3.85	-64.9942515	-85.780898	-64.940779	-66.87802546	-67.30209103	-61.48022264	-65.49797085	-50.48954816	-53.19063669	-35.05723657
+3.85	20.67788524	14.904723	14.760950	11.2240741	11.56143501	11.0097146	12.46480599	14.07977131	14.86817606	9.446007917
-3.9	-75.7419749	-97.284848	-76.022081	-76.73457808	-77.66064776	-70.69223371	-75.60579835	-57.74699002	-60.88282302	-38.94094751
+3.9	14.21057671	14.662569	11.559194	11.2240741	11.56143501	11.0097146	12.46480599	11.07836964	11.68658452	4.96655102
-3.95	-79.42377984	-101.157496	-79.860827	-80.07177092	-81.18114556	-73.96943788	-79.40662744	-60.19817231	-63.48229591	-40.22673357
+3.95	12.07717678	14.614435	11.515873	11.2240741	11.56143501	11.0097146	12.46480599	10.05803535	10.61678605	4.96655102
-5	-90.70202645	-112.837949	-91.689541	-90.18410982	-91.88713685	-83.96554856	-91.0873976	-67.60831712	-71.34491854	-44.27157541
+5	10.77368199	14.566532	11.472760	11.2240741	11.56143501	11.0097146	12.46480599	8.383455414	8.856230791	4.96655102

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-7.346363365	-7.345987671	-5.843273772	-4.893372201	-5.774675567	-8.669096187	-9.369354054	-10.27043513	-10.45928233
End Shear	60.82403251	60.00940046	48.10621416	38.92398235	50.1597695	67.63989801	71.16533264	71.13247133	71.1058175
-0.05	-7.346363365	-7.822839209	-5.843273772	-4.953052202	-5.774675567	-8.669096187	-9.369354054	-10.27043513	-10.45928233
+0.05	56.04924792	55.86623096	44.90517145	36.33804385	46.05495483	62.16422122	65.44269393	65.73470987	65.70700272
-0.1	-7.346363365	-10.42053527	-7.203585634	-6.174882318	-5.774675567	-8.669096187	-9.369354054	-10.27043513	-10.45928233
+0.1	50.11362737	49.97288778	40.18856415	32.44258089	40.24881026	54.57244525	57.0858277	57.22979162	57.55864891
-0.15	-7.346363365	-11.23234001	-7.681496645	-6.573744968	-6.075870999	-8.669096187	-9.369354054	-10.27043513	-10.45928233
+0.15	47.95535936	48.00998636	38.61401721	31.14569101	38.35618535	52.27208544	54.45031605	54.41817724	54.7722015
-0.2	-9.363905679	-14.53358966	-9.994376309	-8.330111745	-9.780787386	-8.669096187	-9.795795122	-11.27129393	-12.73144403
+0.2	42.01292507	42.15538204	33.90890063	27.28086869	32.83995359	44.91468907	46.68664938	46.65367771	46.99490728
-0.25	-10.57957237	-15.74965614	-10.79347202	-8.962197771	-11.01779315	-9.534878598	-10.90477027	-12.34513213	-13.75608146
+0.25	40.08300766	40.22473675	32.35277796	26.00615303	31.06303239	42.64657784	44.15633105	44.12317853	44.45936167
-0.3	-15.88971741	-21.54153103	-15.6687044	-12.94100255	-14.71655562	-15.07720096	-16.47165358	-16.42164372	-16.49186463
+0.3	34.37866016	34.60402298	27.69105762	22.24336228	26.19636285	36.0714617	36.77985163	36.74652635	37.06523936
-0.35	-18.17186116	-23.42767719	-17.32898766	-14.23768629	-16.06064742	-16.97307589	-18.51628475	-18.46040777	-18.48263138
+0.35	32.51267843	32.76000791	26.07094572	21.01446176	24.96483147	33.93400823	34.40247363	34.3692089	34.68132831
-0.4	-24.85746895	-28.94774839	-22.54876666	-18.03712595	-20.86103998	-23.33229171	-24.53730762	-25.02338501	-24.49059259
+0.4	27.05053377	27.34755455	21.45854376	17.42427024	21.36959328	27.71947702	27.7815772	27.94946998	28.01775479
-0.45	-27.02766918	-30.74046592	-24.10068385	-19.27372696	-22.38390354	-25.43015396	-26.50176472	-26.74249647	-26.7707529
+0.45	25.28208567	25.59060034	19.95400822	16.26454844	20.19337732	25.72226212	25.78256848	25.94653488	26.01298188
-0.5	-33.34338372	-36.02118968	-28.91882901	-22.89515582	-26.71390663	-31.80230449	-32.24681508	-33.8059077	-33.83492417
+0.5	20.16294152	20.49216045	15.86355844	12.91658029	16.74967424	19.98857243	20.04317293	20.19422944	20.25476829
-0.55	-35.37893647	-37.73949844	-30.42134153	-24.07308092	-28.07610049	-34.0739901	-34.10746399	-36.11186038	-36.14105949
+0.55	18.5256297	18.85750784	14.5988663	11.87062518	15.63445953	18.17167785	18.22426816	18.37065938	18.42909608
-0.6	-41.25665708	-42.7015944	-34.70785252	-27.58279857	-31.9124813	-40.78026529	-40.79438816	-42.85643386	-43.57222132
+0.6	13.85028523	14.17885676	11.573958	9.049205768	12.40521923	13.38137993	13.3687796	13.4189021	13.3383647
-0.65	-43.13485688	-44.28895584	-36.09156664	-28.72950763	-33.10626579	-42.97108495	-43.36277138	-45.17323389	-45.50626314
+0.65	12.37770362	12.62340281	9.956377475	8.016332096	11.37197832	11.95899212	11.94642471	11.9946245	11.83677482
-0.7	-48.50646192	-48.84083692	-40.04386409	-32.04136111	-36.42580697	-49.37464423	-51.09357389	-52.02590087	-53.68353229
+0.7	8.246958828	8.227878147	6.811282405	5.645687212	8.420132408	7.968975732	7.956767282	7.998920005	7.857099614
-0.75	-50.20459648	-50.29126097	-41.29372849	-33.10130152	-37.4434402	-51.44451504	-53.61047317	-54.20370439	-56.30763586
+0.75	7.00661991	6.649817224	5.833950443	4.870265588	7.489844105	6.738111789	6.726114016	6.766165403	6.630208748
-0.8	-55.00197185	-54.81229494	-44.92570466	-36.2056694	-40.28476305	-57.42510727	-60.93929858	-60.8543058	-63.8457863
+0.8	3.925140147	4.178159878	3.845382554	3.039111382	4.878321445	3.793101328	3.786252178	3.779992357	3.734592482
-0.85	-56.49735074	-56.24010076	-46.12838477	-37.40148088	-42.13629899	-59.33394848	-63.2983289	-63.36974315	-66.36761042
+0.85	3.278871909	3.48231148	3.274973411	2.592527002	4.071963155	3.168830676	3.162112945	3.155975475	3.112380175
-0.9	-60.65238111	-59.88394829	-49.22473009	-39.98970402	-47.50672165	-65.14430658	-70.08191405	-70.67782958	-73.68945425
+0.9	1.483830987	1.710305305	1.813198385	1.449643723	1.863695085	1.434559443	1.429489602	1.446994493	1.409326088
-0.95	-61.92229236	-60.98754258	-50.18180079	-40.85380257	-49.22751865	-66.99395976	-72.23531968	-72.98007868	-75.96872034
+0.95	1.034758422	1.21769176	1.440866257	1.144905933	1.202243	1.163773335	1.24437754	1.317406283	1.317790549
-1	-65.36686198	-64.03397431	-52.75555418	-43.23610853	-54.14850016	-73.75555995	-78.33039776	-79.44886389	-82.29841013
+1	1.03E+00	1.04E+00	8.23E-01	6.76E-01	6.82E-01	1.16E+00	1.24E+00	1.32E+00	1.32E+00
(Span 2) -2	-4.77E+00	-4.77E+00	-3.80E+00	-3.12E+00	-3.14E+00	-5.37E+00	-5.74E+00	-6.08E+00	-6.08E+00
+2	6.89E+01	62.73449182	54.81753522	45.33771923	56.77523623	77.4812547	82.05347439	82.75645506	83.8589741
-2.05	-4.77E+00	-4.77E+00	-4.21E+00	-3.49E+00	-3.14E+00	-5.37E+00	-5.74E+00	-6.08E+00	-6.08E+00
+2.05	65.6807381	60.59167011	51.97146338	42.92196993	54.10625708	73.79975817	77.87420046	78.42739195	79.5056746
-2.1	-4.773502103	-5.782476648	-5.060020236	-4.262019107	-3.144524817	-5.368667836	-5.740507826	-6.077400759	-6.079173435
+2.1	60.5940774	57.24570268	47.57958681	39.21627969	49.88899427	67.99631347	71.10372691	71.61285788	72.70210133
-2.15	-4.773502103	-7.120437763	-5.614611485	-4.764168319	-3.929382734	-5.368667836	-5.740507826	-6.077400759	-6.079173435
+2.15	56.99276249	54.88048924	45.37865762	36.78592363	46.96796387	63.98446958	66.30739898	66.90267308	68.57468549
-2.2	-5.60380319	-9.066798078	-7.265462313	-5.746630687	-6.143703837	-5.409333957	-5.740507826	-6.077400759	-6.080116013
+2.2	52.47460427	51.10142604	42.36684278	34.11985806	42.47869376	57.34644172	59.85574282	60.40030256	62.48465339
-2.25	-7.78729691	-11.45506097	-8.737982504	-6.898082257	-7.887369223	-7.517912744	-7.805983736	-7.772620079	-7.74201264

+2.25	49.66063216	48.56029227	40.11475102	32.23676213	39.31593824	52.80973474	55.68989753	55.89590715	58.23514029
-2.3	-11.71029374	-15.54839308	-11.15638375	-8.805548964	-10.61226424	-11.12468006	-11.38553781	-11.29258198	-10.95513715
+2.3	45.18459356	44.71970968	36.42445196	29.27178709	34.14524677	46.5364496	49.35832664	49.30632654	51.64085051
-2.35	-15.80171596	-19.6875667	-13.81043764	-11.09048195	-13.36123369	-15.27058744	-15.69299519	-16.07058274	-15.68455053
+2.35	40.44269408	40.74595138	32.69946797	26.15996024	30.13427249	41.05163442	43.01238965	43.31248314	45.37668436
-2.4	-18.61826376	-22.54874867	-15.70185893	-12.62981646	-15.25930041	-18.23679386	-18.79024051	-19.56894508	-19.52230973
+2.4	37.15608207	38.03400999	30.10129992	24.01561179	27.90835364	37.38594701	38.82100673	39.65527928	41.18681551
-2.45	-23.30786188	-26.83682317	-19.59456682	-15.49641943	-18.17342847	-23.17527102	-23.62629452	-24.95305575	-24.99319868
+2.45	32.07166501	33.88881403	26.22212411	20.84552011	24.32631374	31.93315319	32.66359782	34.12459094	34.93961424
-2.5	-28.6088846	-31.09020536	-23.61070972	-18.72436614	-21.7909444	-28.37355718	-28.69745817	-30.44482849	-30.84435324
+2.5	26.84210394	29.6710698	22.27812834	17.65127873	20.46606004	26.60658039	26.74678939	28.59626476	28.80741081
-2.55	-32.08177097	-33.89532808	-26.22753024	-20.84790207	-24.33410054	-31.94378932	-32.67499089	-34.13457521	-34.95030004
+2.55	23.29742863	26.83017842	19.58891323	15.49392087	18.16734446	23.16528342	23.61674214	24.94326857	24.98381423
-2.6	-37.16586965	-38.04038486	-30.10680505	-24.01806445	-27.91554707	-37.39675719	-38.83275462	-39.66522501	-41.19765161
+2.6	18.60994617	22.54207152	15.69786854	12.62789075	15.25337061	18.22740774	18.78147429	19.55942839	19.59767775
-2.65	-40.45222286	-40.75223392	-32.7048076	-26.16232765	-30.14106021	-41.06247346	-43.02430138	-43.32234223	-45.38754811
+2.65	15.79373448	19.8453368	13.80663641	11.08879095	13.3554483	15.26279711	15.68432014	16.06130704	15.844618
-2.7	-45.19365676	-44.72579535	-36.42948176	-29.27401403	-34.1545934	-46.54721072	-49.37030552	-49.31778524	-51.65163695
+2.7	11.80148527	15.54200709	11.15290952	8.804015499	10.60677472	11.30987807	11.37867194	11.31805558	10.94882109
-2.75	-48.20965612	-47.30225463	-38.78484175	-31.26836686	-37.28266221	-50.57427154	-53.59878942	-53.54754962	-56.07236622
+2.75	9.028155704	12.80741899	9.513580368	7.508862382	8.857944429	8.633152525	8.986319542	8.899232489	8.867897184
-2.8	-52.48269397	-51.10751179	-42.3712895	-34.12181391	-42.48809424	-57.16604918	-59.86743029	-60.23526482	-62.49555899
+2.8	5.597771849	9.130897403	7.262571665	5.745350417	6.138899949	5.403443217	5.740500468	6.077330659	6.079106219
-2.85	-56.80573139	-54.88618034	-45.38268396	-36.78771479	-46.97718278	-63.9001514	-66.13561497	-66.82640898	-68.584968
+2.85	4.773442292	7.184472732	5.613466628	4.763590139	3.925105187	5.368744073	5.740500468	6.077330659	6.079106219
-2.9	-60.6042669	-57.25108532	-47.58575188	-39.21900498	-49.89800616	-68.00809744	-70.93199622	-71.62551957	-72.71265762
+2.9	4.773442292	5.779302303	5.05886094	4.261422869	3.144546038	5.368744073	5.740500468	6.077330659	6.079106219
-2.95	-65.69049079	-60.59693417	-51.97746336	-42.92462702	-54.1148183	-73.81098495	-77.88629475	-78.43945953	-79.51738102
+2.95	4.773442292	4.774824286	4.20671633	3.493840508	3.144546038	5.368744073	5.740500468	6.077330659	6.079106219
-3	-70.49087707	-63.7335993	-56.21237191	-46.52422017	-58.06645367	-79.26476596	-84.09639545	-84.85631988	-85.95905248
+3	4.773442292	4.774824286	3.797842314	3.116757932	3.144546038	5.368744073	5.740500468	6.077330659	6.079106219
(Span 3) -4	-1.034745457	-1.04E+00	-8.23E-01	-6.76E-01	-0.681647439	-1.163789861	-1.244375945	-1.317391088	-1.317775978
+4	64.27437884	63.0585525	51.94460304	42.47628003	52.54065133	71.54510087	76.35114693	77.3566406	80.2641571
-3.05	-1.034745457	-1.04E+00	-1.11E+00	-8.84E-01	-0.681647439	-1.163789861	-1.244375945	-1.317391088	-1.317775978
+3.05	63.12535211	62.04262897	51.08616349	41.68180266	50.89927977	69.2898492	74.31809865	75.19912268	78.15322806
-3.1	-2.046613018	-2.231268887	-2.270162107	-1.783019569	-2.567692088	-1.978229865	-1.972870011	-1.991392669	-1.951538623
+3.1	59.31599528	58.73196727	48.21528103	39.09007455	45.73858339	63.38302299	67.85991392	68.29384834	71.3158441
-3.15	-2.635833488	-2.774438866	-2.744994545	-2.151149102	-3.30444502	-2.568480182	-2.568480182	-2.568480182	-2.568480182
+3.15	57.9301813	57.54318865	47.1629243	38.15953651	43.94744685	61.18532328	65.59743066	65.85658536	68.87424944
-3.2	-4.60168308	-4.853548577	-4.439047233	-3.505262082	-5.722851494	-4.446652956	-4.439520597	-4.433006707	-4.38575358
+3.2	53.44452404	53.49536558	43.73285308	35.17966043	39.33682883	55.46049971	58.52254204	58.43606956	61.37792448
-3.25	-5.760098692	-5.74604445	-5.128087453	-4.066598267	-6.594000842	-5.566836279	-5.554814622	-5.481537706	-5.462366871
+3.25	51.84462859	51.98792906	42.5041374	34.13637249	38.40988766	53.46591422	56.0783794	56.31426491	58.86420612
-3.3	-9.581710177	-9.556942164	-7.829710291	-6.453394272	-9.384088749	-9.258350639	-9.245645017	-9.289553284	-9.141843036
+3.3	46.75078307	47.35230855	38.7544928	30.95674816	35.35662816	47.25817823	48.53012293	49.78155503	50.99315873
-3.35	-10.95962363	-10.92987779	-8.87887331	-7.288260879	-10.44368999	-10.63860427	-10.57648963	-10.62238533	-10.4693383
+3.35	44.95951096	45.83459549	37.43678593	29.8526022	34.24967699	45.1226644	45.95203613	47.49652076	48.26641635
-3.4	-15.37608568	-15.7057301786651	-12.73321501	-9.96501796	-13.46749414	-14.8552572416729	-14.84228254	-14.89391105	-14.8152245321899
+3.4	39.32560954	41.07279447	33.28561345	26.41265596	30.6680038	38.55226451	38.56652741	40.62699666	41.35326617
-3.45	-16.93548112	-17.2662001	-13.3935566	-10.90139716	-14.54446776	-16.41629655	-16.46638754	-16.60750025	-16.66341208
+3.45	37.36566569	39.41836772	31.83774662	25.23389822	29.38879314	36.31590433	36.32966856	38.37796911	38.40782687
-3.5	-21.84599451	-22.16847282	-17.1841906	-14.01178485	-17.88916238	-21.86538411	-21.92144972	-22.07654684	-22.13869497
+3.5	31.25979111	34.2637146	27.44169792	21.69991045	25.30192635	29.52774011	30.34721941	31.46169245	31.49098547
-3.55	-23.55327431	-23.86883131	-18.52402826	-15.12829521	-19.03759058	-23.77772271	-23.83567155	-23.99507874	-24.05920113
+3.55	29.15388042	32.5007633910355	25.8340739052564	20.4927588933956	23.8581794603488	27.4876062398813	28.4315589031176	29.10642926063	29.13549135

-3.6	-28.8570384	-29.13787192	-22.87491348	-18.60615847	-22.56516575	-29.76759252	-29.8308959	-30.00200475	-30.07162749
+3.6	22.64416239	27.12261427	20.96499489	16.7827211	19.28934225	21.19501323	22.53927179	23.03564856	22.49725704
-3.65	-30.67860261	-30.94287777	-24.44681399	-19.80340668	-23.76409126	-31.84015086	-32.08373869	-32.07976874	-32.45267158
+3.65	20.41499044	25.28236804	19.36237616	15.516217	17.68880985	19.04500428	20.5316696	20.47107963	20.49400769
-3.7	-36.27482219	-36.47293872	-29.22035559	-23.48873039	-27.43028268	-38.25055861	-39.21367037	-39.17975225	-39.50414428
+3.7	13.63685234	19.62396729	13.97540972	11.62591802	13.47931987	13.17039017	14.39894629	14.35603673	15.63005076
-3.75	-38.17707052	-38.34730885	-30.8121938	-24.74351452	-29.33159146	-40.44325464	-41.67370165	-41.63981964	-41.97004618
+3.75	11.76591698	17.69310801	12.26297007	10.50706331	12.24595457	11.27711246	12.3230374	13.3597913	14.71837668
-3.8	-43.96494484	-44.10817894	-35.47886558	-28.56621958	-34.66062325	-47.18910497	-49.26224783	-49.22886192	-49.57422391
+3.8	8.11889564	13.49391047	9.175739183	7.686710265	8.53625763	8.668901829	9.369297476	10.27035266	11.64192375
-3.85	-45.9142795	-46.06045056	-37.04786463	-29.85499459	-36.5003385	-49.65852837	-51.85129268	-52.38631854	-52.16778545
+3.85	7.346392406	12.01469585	8.340457526	7.034213993	7.3008546	8.668901829	9.369297476	10.27035266	10.49723336
-3.9	-52.08816151	-51.94712525	-41.76968575	-33.74412744	-42.17630838	-56.89458163	-59.75518841	-59.90345933	-60.23180458
+3.9	7.346392406	9.578178246	6.715499906	5.771158682	5.77464279	8.668901829	9.369297476	10.27035266	10.45917234
-3.95	-54.10015893	-53.91226913	-43.34248357	-35.04310684	-44.11262835	-59.52345986	-62.42547228	-62.75401021	-63.03378924
+3.95	7.346392406	8.712386913	6.220709852	5.364014968	5.77464279	8.668901829	9.369297476	10.27035266	10.45917234
-5	-60.77208793	-59.78698239	-48.03196366	-38.92678531	-50.02110051	-67.55607993	-71.03482591	-71.14709363	-71.11981802
+5	7.346392406	7.346010824	5.843290189	4.893379477	5.77464279	8.668901829	9.369297476	10.27035266	10.45917234

HDR

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.53743106	-9.925779151	-9.018141835	-10.59944829	-10.83885673
End Shear	79.37822759	74.01426882	72.30772667	79.66983291	79.80528019
-0.05	-10.63644839	-10.46592562	-9.710489156	-11.40220131	-11.36116937
+0.05	73.30763016	68.27731149	67.05405847	73.45159472	73.94936017
-0.1	-13.01670222	-13.26951004	-12.96209203	-14.69587513	-14.21735763
+0.1	64.50712142	60.06453202	59.23456498	64.68348245	64.93027654
-0.15	-14.2792358	-14.13708492	-13.98944925	-15.94921444	-15.34665593
+0.15	61.59659286	57.35368258	56.65614211	61.81430988	62.03044295
-0.2	-18.1188806	-18.00906758	-17.29191398	-19.84835971	-18.4538427
+0.2	53.03572624	49.5431335	49.04648999	53.31364021	53.44636939
-0.25	-19.28768474	-19.39670046	-18.52701464	-21.86747803	-20.00910516
+0.25	50.28744979	46.97090985	46.56164968	50.52687939	50.63459386
-0.3	-24.96463519	-24.30198433	-24.66944762	-28.78674377	-25.72930153
+0.3	42.20395625	39.39845904	39.82129146	42.35381127	42.39462717
-0.35	-26.83452595	-26.11921638	-26.67947366	-31.02189965	-27.56384009
+0.35	39.57543648	36.93439258	37.68999936	39.88752175	39.72421024
-0.4	-33.17680191	-31.53224011	-32.58942155	-37.51223163	-33.42559742
+0.4	31.57574603	29.79459856	31.43727347	33.19539871	32.06636032
-0.45	-34.75617656	-34.05976923	-34.51751535	-39.60365196	-35.20422697
+0.45	28.98015559	27.58317507	29.40847657	31.02846725	29.66115093
-0.5	-43.48339999	-42.31141326	-40.16844365	-45.66060115	-43.05609808
+0.5	21.67705938	21.31220042	23.52380033	24.75507559	22.38782737
-0.55	-46.30157784	-44.97665079	-42.00577449	-47.60681839	-45.61753948
+0.55	19.41781793	19.96412589	21.63789705	22.74833776	20.2002103
-0.6	-54.79156589	-52.82057108	-47.37114049	-53.22592664	-53.12398629
+0.6	14.37290095	15.01143933	15.95379763	17.01738414	14.66518297
-0.65	-57.56669156	-55.36512223	-49.10887469	-55.60528747	-55.56440536
+0.65	12.88483866	13.44721795	14.32064158	15.24469609	13.2575006
-0.7	-65.75950953	-62.64197015	-54.81767151	-62.96413686	-62.69002813
+0.7	9.273374447	8.834138591	9.778428396	10.36519147	9.262427202
-0.75	-68.3743181	-64.94815549	-56.19082106	-65.33306622	-65.11638774
+0.75	7.900197302	8.193748945	8.369103542	8.852797926	8.015323572
-0.8	-75.71405038	-71.50641981	-62.28591899	-72.26209814	-72.23331424
+0.8	5.376370093	5.744292609	5.150996607	5.328745475	5.094776221
-0.85	-77.94160115	-73.57190117	-64.34768496	-74.5792044	-74.60599293
+0.85	4.717122514	4.971968133	4.505388387	4.63355516	4.523488182
-0.9	-84.28355327	-79.98804236	-70.39335982	-81.22742916	-81.20250702
+0.9	2.858577384	2.962227612	2.689909119	2.689498829	2.902645982
-0.95	-86.32654399	-82.34579961	-72.31490774	-83.33844179	-83.19972571
+0.95	2.284520204	2.385458424	2.136429528	2.104568688	2.39358165
-1	-91.98236862	-90.44918593	-77.7701865	-89.1056175	-89.89774544
+1	1.43E+00	1.33E+00	1.20E+00	1.44E+00	1.44E+00
(Span 2) -2	-6.60E+00	-6.12E+00	-5.52E+00	-6.66E+00	-6.66E+00
+2	89.39590828	93.28300484	79.36066145	88.18979093	92.60297692
-2.05	-7.06E+00	-6.94E+00	-6.40E+00	-6.68E+00	-7.43E+00
+2.05	86.0643355	88.43307688	76.11849309	84.47379486	88.1840748
-2.1	-8.772516366	-8.389320837	-7.994148657	-9.038441494	-8.595302196
+2.1	80.7801411	81.222603	70.88218917	78.78824127	81.44630651
-2.15	-9.778325651	-9.342708478	-9.07745312	-10.62468623	-9.965831301
+2.15	77.00003605	76.17807568	67.18351486	74.86465111	76.85934459
-2.2	-11.09110256	-10.77652854	-12.1861124	-12.84685368	-12.62846462
+2.2	70.98076203	68.30793877	61.39385972	68.73835885	69.81967931
-2.25	-12.47590317	-12.15704022	-14.78353612	-16.04400803	-14.68905545

+2.25	**66.7566615**	**63.17367433**	**57.55489111**	**64.68227451**	**65.18365153**
-2.3	**-16.57078142**	**-15.26464332**	**-18.80418872**	**-20.99987087**	**-18.62493993**
+2.3	**60.14042698**	**56.98065606**	**51.88895417**	**58.66186021**	**58.40173704**
-2.35	**-21.23338431**	**-19.75541888**	**-22.95285201**	**-25.915048**	**-23.5328106**
+2.35	**53.54273008**	**50.46636194**	**46.21466385**	**52.57592843**	**52.16181849**
-2.4	**-24.85377152**	**-23.1499986**	**-25.78125215**	**-29.16810289**	**-27.14363423**
+2.4	**49.05594326**	**46.18252549**	**42.59528392**	**48.50149198**	**48.10821081**
-2.45	**-30.6158397**	**-28.49546933**	**-30.10508698**	**-34.01043953**	**-32.69366141**
+2.45	**42.179027**	**39.55806313**	**37.47890588**	**42.39295464**	**42.23542914**
-2.5	**-37.51638307**	**-35.01253825**	**-34.51112371**	**-38.8060605**	**-38.38387929**
+2.5	**35.14643266**	**32.69860085**	**33.0277242**	**37.20562018**	**36.46468178**
-2.55	**-42.18875396**	**-39.55959967**	**-37.48565942**	**-42.4021346**	**-42.24390278**
+2.55	**30.60628988**	**28.49417353**	**30.09851356**	**34.00315516**	**32.68550817**
-2.6	**-49.06544706**	**-46.18400711**	**-42.60311715**	**-48.51072117**	**-48.11681964**
+2.6	**24.84608274**	**23.14881567**	**25.77483073**	**29.16076176**	**27.13569391**
-2.65	**-53.55210344**	**-50.46780834**	**-46.41489524**	**-52.58513448**	**-52.33946346**
+2.65	**21.22592699**	**19.78173506**	**22.94652537**	**25.90764706**	**23.52503605**
-2.7	**-60.14991716**	**-56.9821103**	**-51.89751707**	**-58.6710187**	**-58.41081283**
+2.7	**16.56507809**	**15.26374326**	**18.79806112**	**20.99242328**	**18.61886653**
-2.75	**-64.59597962**	**-61.15252061**	**-55.67970527**	**-62.6942174**	**-62.9219084**
+2.75	**13.8062668**	**13.13093352**	**16.10248392**	**17.69286051**	**15.74923566**
-2.8	**-70.98952052**	**-68.30979043**	**-61.40280164**	**-68.74783092**	**-69.83004802**
+2.8	**11.08934982**	**10.77620275**	**12.18062479**	**12.84358672**	**12.62401854**
-2.85	**-77.00823879**	**-76.17985284**	**-67.19210326**	**-74.87372224**	**-76.86954038**
+2.85	**9.776455024**	**9.342383613**	**9.074996123**	**10.62115394**	**9.962910008**
-2.9	**-80.78792165**	**-81.22431995**	**-70.89044117**	**-78.79701075**	**-81.45626929**
+2.9	**8.843031962**	**8.388997842**	**7.985453622**	**9.034694865**	**8.53340191**
-2.95	**-86.07145276**	**-88.4346899**	**-76.12615022**	**-84.4825411**	**-88.19404118**
+2.95	**7.057851953**	**6.936504437**	**6.39286128**	**6.680068321**	**7.43315246**
-3	**-91.7184503**	**-96.05336225**	**-80.90352767**	**-89.96104245**	**-94.7376017**
+3	**6.602100225**	**6.124648764**	**5.521805278**	**6.664286628**	**6.664432621**
(Span 3) -4	**-1.431146058**	**-1.327648272**	**-1.196969156**	**-1.444626291**	**-1.444657937**
+4	**90.16965586**	**87.60678674**	**75.99721654**	**87.309529**	**87.52843712**
-3.05	**-1.75825285**	**-1.834891088**	**-1.616321981**	**-1.530986408**	**-1.719677083**
+3.05	**88.28352774**	**84.67889753**	**74.17787067**	**85.46451522**	**85.14516026**
-3.1	**-3.459025475**	**-3.563407679**	**-3.275706364**	**-3.315036118**	**-3.429776663**
+3.1	**82.2002808**	**77.65950549**	**68.41459344**	**79.20967399**	**79.1276748**
-3.15	**-4.07920666**	**-4.225283645**	**-3.881566051**	**-3.963744329**	**-3.968377039**
+3.15	***80.09779816***	***75.63958686***	***66.39849994***	***76.99303168***	***76.99400921***
-3.2	***-6.055452631***	***-6.540472777***	***-5.816842145***	***-6.047897687***	***-5.680704263***
+3.2	***73.41509851***	***69.37903743***	***60.23625839***	***70.04252301***	***70.03812547***
-3.25	***-6.747030912***	***-7.357584206***	***-7.022440532***	***-7.408392876***	***-6.819849143***
+3.25	***71.064898***	***67.19284756***	***58.16912828***	***67.64751261***	***67.66568057***
-3.3	***-10.61466794***	***-10.10782532***	***-11.24853737***	***-11.94362894***	***-10.55920045***
+3.3	***63.22046353***	***60.27431402***	***53.16392503***	***60.54135086***	***60.33781434***
-3.35	***-11.44574277***	***-11.93047199***	***-12.76373292***	***-13.57132111***	***-11.89193403***
+3.35	***60.48919671***	***57.84861446***	***50.8956315***	***58.08779713***	***57.9622149***
-3.4	***-15.90787995***	***-16.62009573***	***-17.70500285***	***-18.88533637***	***-16.1128781***
+3.4	***52.11970669***	***50.21496923***	***45.59964341***	***51.38118051***	***50.64133854***
-3.45	***-17.47435602***	***-18.26797431***	***-19.53949497***	***-20.79675269***	***-18.11136626***
+3.45	***49.26901504***	***47.5929848***	***43.81088525***	***49.50794092***	***48.13880986***
-3.5	***-23.89412676***	***-23.30933469***	***-25.45793134***	***-26.81501446***	***-24.64033026***
+3.5	***40.60769498***	***39.8217688***	***38.29908292***	***43.66884291***	***40.45484813***
-3.55	***-26.53021261***	***-25.41602375***	***-27.42050485***	***-28.97586549***	***-27.09130043***
+3.55	***37.69844248***	***36.83439701***	***36.41517663***	***41.64968924***	***37.83719265***
-3.6	***-34.08692171***	***-32.11958754***	***-33.50479102***	***-35.40590114***	***-34.52928113***
+3.6	***30.57358298***	***29.74634613***	***30.6311124***	***35.37498251***	***31.70058374***

-3.65	***-36.77890756***	***-34.50801307***	***-35.58999093***	***-37.63761412***	***-37.10874966***
+3.65	***28.66547069***	***27.92319259***	***28.66084707***	***33.21133799***	***29.35501997***
-3.7	***-44.87917497***	***-41.89668806***	***-41.98162805***	***-45.05578449***	***-45.11724682***
+3.7	***23.05422512***	***22.14148302***	***22.63109179***	***26.50551194***	***23.85059744***
-3.75	***-47.57503473***	***-44.42206991***	***-44.14910098***	***-47.78142587***	***-47.86516777***
+3.75	***21.11821853***	***20.72997387***	***20.5833427***	***24.1988924***	***21.94381816***
-3.8	***-55.84276378***	***-52.13518497***	***-51.57055473***	***-56.13877044***	***-56.29758193***
+3.8	***16.8902359***	***16.56586706***	***16.34596944***	***18.59058807***	***17.45861448***
-3.85	***-58.71546791***	***-54.73990276***	***-54.1081735***	***-58.97355131***	***-59.16015341***
+3.85	***15.61058021***	***15.06800352***	***14.98584454***	***17.2910486***	***16.42329376***
-3.9	***-67.4437817***	***-62.796672***	***-61.84075013***	***-67.57791233***	***-67.85655246***
+3.9	***12.1345805***	***12.36971851***	***11.90234856***	***13.62568012***	***13.10599993***
-3.95	***-70.37844681***	***-65.53540018***	***-64.44825978***	***-70.51473205***	***-70.78049883***
+3.95	***11.39541964***	***11.4361161***	***10.81870239***	***12.52803527***	***12.23931784***
-5	***-79.21014771***	***-73.76864002***	***-72.31963113***	***-79.38183046***	***-80.4348816***
+5	***10.53735888***	***9.925768823***	***9.018178005***	***10.59933148***	***10.83881685***

3-Span: Moment (Max and Min) Raw Data Results - 20' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.62E-14	-3.97E-14	-6.47E-14	-3.62E-14	-3.62E-14	-2.91E-14	-2.91E-14	-3.32E-14	-3.50E-14	-3.75E-14
End Shear	3.31E-14	2.36E-14	3.15E-14	1.65E-14	1.65E-14	1.70E-14	1.89E-14	1.56E-14	1.64E-14	1.94E-14
-0.05	-10.77185393	-14.56647136	-11.47228114	-11.2241295	-11.5615311	-11.0098845	-12.4650469	-8.38341429	-8.8561674	-4.966568067
+0.05	83.05047696	104.4440592	83.99248057	83.40772819	84.70672272	77.25823957	83.23608761	62.64918089	66.08228424	41.74312778
-0.1	-21.54370787	-29.13294272	-22.94456227	-22.4482589	-23.1230622	-22.019769	-24.9300939	-16.7668286	-17.7123348	-9.933136134
+0.1	151.2945751	195.231736	155.4985265	153.4284435	153.533193	141.3495484	149.7665088	114.2520869	120.4489538	78.36285272
-0.15	-32.3155618	-43.69941407	-34.41684341	-33.6723884	-34.6845933	-33.0296535	-37.3951408	-25.1502429	-26.5685022	-14.8997042
+0.15	202.6428445	271.8306204	208.8099546	207.89926	209.5262815	192.1563727	206.0265788	157.393992	165.8720615	109.7912824
-0.2	-43.08741574	-58.26588543	-45.88912454	-44.8965178	-46.2461244	-44.039538	-49.8601878	-33.5336572	-35.4246696	-19.86627227
+0.2	243.1610427	333.9783063	250.869577	252.1834359	253.424604	233.738061	249.6008724	191.5522182	201.7610074	136.0048894
-0.25	-53.85926967	-72.83235679	-57.36140568	-56.1206473	-57.8076555	-55.0494225	-62.3252347	-41.9170715	-44.280837	-24.83284033
+0.25	271.2944718	381.8981556	280.4954972	285.5220727	285.5220727	264.4569698	280.8835933	217.2037513	228.6355277	157.0245936
-0.3	-64.63112361	-87.39882815	-68.83368682	-67.3447767	-69.3691866	-66.059307	-74.7902817	-50.3004858	-53.1370044	-29.7994084
+0.3	290.9067086	415.9283254	305.3562599	310.2576314	310.2576314	284.363946	300.3834582	236.2076471	248.6664882	172.9157822
-0.35	-75.40297754	-101.9652995	-80.30596795	-78.5689062	-80.9307177	-77.0691915	-87.2553286	-58.6839	-61.9931718	-34.76597647
+0.35	309.2014372	436.5216391	325.0894109	324.7816589	324.7816589	307.050166	328.4638216	247.6002718	260.6880931	183.7881818
-0.4	-86.17483148	-116.5317709	-91.77824909	-89.7930356	-92.4922488	-88.079076	-99.7203756	-67.0673143	-70.8493392	-39.73254453
+0.4	319.3159547	444.2458001	336.1864341	329.5662676	329.5662676	320.5451614	345.2532816	251.6337718	264.9647088	189.7960506
-0.45	-96.94668541	-131.0982422	-103.2505302	-101.017165	-104.05378	-99.0889605	-112.185423	-75.4507286	-79.7055066	-44.6991126
+0.45	321.5861049	439.7832087	338.929642	325.1789001	325.1789001	323.549119	350.72057	248.7628496	261.9687484	191.1380358
-0.5	-107.7185393	-145.6647136	-114.7228114	-112.241295	-115.615311	-110.098845	-124.650469	-83.8341429	-88.561674	-49.66568067
+0.5	316.4228099	439.0397503	333.6824337	325.1381594	325.1381594	318.9944714	345.3002979	248.2584527	261.3694531	188.0572009
-0.55	-118.4903933	-160.2311849	-126.1950925	-123.465424	-127.176842	-121.108729	-137.115516	-92.2175572	-97.4178414	-54.63224873
+0.55	304.3119905	428.1329688	320.8892194	317.5363691	317.5363691	305.6710962	329.3986256	243.4956356	256.3995537	180.8410901
-0.6	-129.2622472	-174.7976563	-137.6673736	-134.689553	-138.738373	-132.118614	-149.580563	-100.600972	-106.274009	-59.5988168
+0.6	285.814672	405.0730288	301.0755217	300.7561468	300.7561468	283.6685107	303.8678847	231.6904827	244.0153	169.8216592
-0.65	-140.0341011	-189.3641277	-149.1396548	-145.913683	-150.299904	-143.128498	-162.04561	-108.984386	-115.130176	-64.56538487
+0.65	261.5667232	370.6782673	274.8477333	275.4730056	275.4730056	253.9049539	269.6747605	213.3283593	224.7261388	155.3751882
-0.7	-150.8059551	-203.930599	-160.6119359	-157.137812	-161.861435	-154.138383	-174.510657	-117.3678	-123.986344	-69.53195294
+0.7	232.2793419	325.9514732	242.8935596	242.4580329	242.4580329	223.8153925	237.5230121	188.9710426	199.1221522	137.9226043
-0.75	-161.577809	-218.4970704	-172.084217	-168.361942	-173.422967	-165.148267	-186.975704	-125.751214	-132.842511	-74.498521
+0.75	207.024694	271.9223071	215.5992141	204.4173264	204.4173264	185.7050607	196.9776759	159.256588	167.8739162	117.9291162
-0.8	-172.349663	-233.0635417	-183.5564982	-179.586071	-184.984498	-176.158152	-199.440751	-134.134629	-141.698678	-79.46508907
+0.8	171.5644616	209.467008	192.6442187	158.3996076	159.1545816	140.2626561	147.7524317	124.8991813	131.7323467	95.90440707
-0.85	-183.1215169	-247.6300131	-195.0287793	-190.810201	-196.546029	-187.168036	-211.905798	-142.518043	-150.554846	-84.43165714
+0.85	127.2952453	140.136975	125.6393107	106.5176323	106.9434209	88.3346434	90.94458286	86.64874454	91.4861741	72.40253654
-0.9	-199.4528297	-265.5645503	-214.4650433	-202.03433	-208.10756	-198.177921	-224.370845	-161.528719	-170.373072	-97.81613743
+0.9	90.76192137	68.72959948	79.82791445	52.98776928	52.98776928	42.62347446	42.62347446	48.489519	51.25040802	48.02211693
-0.95	-228.5510965	-288.1628321	-248.2651915	-213.25846	-219.669091	-217.408471	-246.847187	-190.932156	-201.079365	-114.9022468
+0.95	54.40592206	38.68792399	40.41433372	27.92479967	27.92479967	27.94754021	30.60927816	30.06788788	31.84051627	23.4061022
-1	-286.325311	-313.7623953	-316.8032728	-245.786262	-259.13584	-246.678377	-289.785828	-228.084074	-240.088499	-132.7244414
+1	23.93607777	39.95722479	25.5825154	29.39452596	29.39452596	29.41846236	32.22029199	22.3477864	23.52398568	14.25426312
(Span 2) -2	-286.325311	-313.7623953	-316.8032728	-245.786262	-259.13584	-246.678377	-289.785828	-228.084074	-240.088499	-132.7244414
+2	23.93607777	39.95722479	25.5825154	29.39452596	29.39452596	29.41846236	32.22029199	22.3477864	23.52398568	14.25426312
-2.05	-218.5946585	-210.103181	-226.9325145	-163.890139	-173.95543	-161.597317	-190.328651	-181.883963	-191.456803	-99.14626851
+2.05	55.09741583	34.21691539	41.66800445	25.32969151	25.32969151	20.59718475	22.55887135	31.6061271	33.34923693	23.58665806
-2.1	-159.9108533	-185.3585441	-145.2067663	-129.257571	-129.257571	-130.014095	-142.744155	-140.922924	-148.33992	-79.70301141
+2.1	100.3764488	76.49597268	88.88420542	58.80436636	58.80436636	47.1251402	47.1251402	52.18460939	54.96286004	53.2509094
-2.15	-113.8206231	-165.6716963	-109.1709329	-120.443587	-120.443587	-120.543467	-132.022936	-105.055648	-110.584893	-61.19381872
+2.15	142.4827958	156.4212763	136.2498968	121.4381019	121.4381019	97.46782953	97.51162511	94.65074247	99.63236049	82.73412388
-2.2	-90.90318304	-152.638038	-99.58379667	-111.629603	-111.629603	-111.722173	-122.361583	-85.8689049	-90.4467982	-54.13327276
+2.2	187.7356503	237.7750568	188.0332851	182.3814576	183.1858082	160.2032197	167.3769199	137.7004239	145.0312063	107.13611

-2.25	-83.72570373	-142.0029279	-95.73160576	-102.815619	-102.815619	-102.90088	-112.700229	-80.6714472	-85.0637184	-49.85905007
+2.25	249.3200681	313.7242912	254.5960582	241.36258	243.5635202	215.0688111	236.4438082	181.0454417	190.8021234	135.5100825
-2.3	-76.54822442	-131.3678178	-92.26233931	-94.0016351	-94.0016351	-94.0795867	-103.038876	-75.4773361	-79.6888356	-45.58482739
+2.3	283.9206494	369.4894633	292.6886361	281.5721747	284.4454582	259.2887255	289.3582425	212.4452517	223.9228887	153.9887757
-2.35	-69.37074511	-120.7327077	-89.29757708	-85.187651	-85.187651	-85.2582933	-93.377522	-70.3470778	-74.3846126	-41.3106047
+2.35	314.81021	419.1391407	326.3386015	315.3794844	317.577323	296.5290412	331.1590344	237.8037577	250.5430448	171.9282416
-2.4	-62.19326579	-110.0975976	-86.93861649	-76.373667	-76.373667	-76.437	-83.7161684	-65.224656	-69.0840091	-37.03638201
+2.4	325.858532	448.0622625	341.1747965	332.7968213	339.9724722	324.7885588	358.5606844	252.0514218	265.4517905	184.9624874
-2.45	-55.01578648	-99.46248751	-85.41334541	-67.559683	-67.559683	-67.6157066	-74.0548148	-60.1022343	-63.7834056	-32.76215933
+2.45	325.8994975	467.2537192	342.2130079	348.4379125	353.9159984	338.5626849	369.524466	262.1000164	276.4575293	190.6962588
-2.5	-59.79600934	-88.82845413	-84.87791505	-58.7464724	-58.7464724	-58.7944133	-64.3939144	-54.9802653	-58.4831947	-28.48793664
+2.5	332.7382148	469.9340882	348.0284183	355.1997474	359.3234693	346.1211031	377.0372682	268.2342883	282.7711269	196.8048469
-2.55	-65.17915199	-99.46372567	-85.4133549	-67.5605723	-67.5605723	-67.6155913	-74.0553351	-60.1031865	-63.7843366	-32.76208935
+2.55	324.2640893	467.2266094	341.771616	348.4046506	353.8892982	338.5789363	369.4820036	262.1098556	276.4683876	190.6991867
-2.6	-70.56229463	-110.0989972	-86.9386135	-76.3746721	-76.3746721	-76.4368689	-83.7167557	-65.2261077	-69.0854785	-37.03630321
+2.6	326.6636395	448.0613852	340.9236806	332.6981986	339.8799057	324.736818	358.5278955	252.0567388	265.4577204	184.9476748
-2.65	-75.94543728	-120.7342687	-89.29757308	-85.1887719	-85.1887719	-85.2581465	-93.3781764	-70.3490289	-74.3866204	-41.31051707
+2.65	313.5934258	419.2471575	325.7851703	315.3543148	317.5558612	296.4490629	331.0962967	237.853282	250.595459	171.9372683
-2.7	-81.32857992	-131.3695403	-92.2623433	-94.0028718	-94.0028718	-94.0794241	-103.039597	-75.4773045	-79.6887589	-45.58473093
+2.7	284.6743773	369.508176	292.5723977	281.5399596	284.4161989	259.2763002	289.3600418	212.456869	223.9353431	153.9805379
-2.75	-86.71172257	-142.0048118	-95.73161225	-102.816972	-102.816972	-102.900702	-112.701018	-80.6717655	-85.0640264	-49.85894479
+2.75	249.7549407	313.854967	254.3392707	241.3197205	243.5225087	215.0479592	236.4720267	181.101929	190.8617226	135.5261688
-2.8	-92.09486522	-152.6400833	-99.58380416	-111.631071	-111.631071	-111.721979	-122.362438	-85.8695697	-90.4474872	-54.13315865
+2.8	187.5668201	237.8224856	187.9368788	182.4173623	183.2223438	160.1776322	167.3565856	137.7209562	145.0528699	107.1357407
-2.85	-113.8827963	-165.6739005	-109.1924981	-120.445171	-120.445171	-120.543257	-132.023859	-105.058195	-110.587574	-61.19398547
+2.85	140.9228656	156.4727576	136.2260423	121.5272243	121.5272243	97.50152694	97.54869223	94.63764887	99.61857776	82.71786382
-2.9	-160.013841	-185.3609104	-145.2735508	-129.259271	-129.259271	-130.01252	-142.741398	-140.923873	-148.340919	-79.70273407
+2.9	99.412078	76.54152554	87.32299918	58.83702309	58.83702309	47.15031768	47.15031768	52.19470312	54.95214868	53.47859005
-2.95	-220.3556139	-210.1057083	-226.9336198	-163.895688	-173.955974	-161.600283	-190.333447	-181.887002	-191.460002	-99.1647424
+2.95	55.32978946	34.19140865	41.80969469	25.82409017	25.82409017	20.59722689	22.55872121	31.59075489	33.33311275	23.58147446
-3	-293.7038818	-313.7636015	-316.886064	-245.790964	-259.136106	-246.677237	-289.79227	-228.085756	-240.090269	-132.7243419
+3	23.93649037	39.9566864	25.58311573	29.39413976	29.39413976	29.41851487	32.22006842	22.34756319	23.52375072	14.25429256
(Span 3) -4	-2.94E+02	-313.7636015	-316.886064	-2.46E+02	-2.59E+02	-2.47E+02	-2.90E+02	-2.28E+02	-2.40E+02	-1.33E+02
+4	2.39E+01	39.9566864	25.58311573	2.94E+01	2.94E+01	2.94E+01	3.22E+01	2.23E+01	2.35E+01	1.43E+01
-3.05	-235.6012885	-288.1639825	-248.279161	-213.257396	-219.667257	-217.410802	-246.849631	-190.933872	-201.081423	-114.9022806
+3.05	55.90718807	38.6874126	40.84492635	27.92443278	27.92443278	27.94758907	30.60906496	30.0305957	31.80133336	23.38920776
-3.1	-193.9262767	-265.5656406	-214.5067326	-202.033322	-208.105822	-198.174861	-224.366512	-161.529387	-170.374097	-97.81569816
+3.1	93.20116725	68.81518908	79.80974915	53.04921649	53.04921649	42.37479872	42.4587694	48.45400118	51.21308339	48.00653867
-3.15	-183.1525947	-247.6310429	-195.0369237	-190.809248	-196.544387	-187.165147	-211.901706	-142.518734	-150.555915	-84.43136791
+3.15	129.5648823	140.2269715	123.7303232	106.4410043	106.866397	88.27252362	91.94277766	86.60519039	91.44032903	72.38790047
-3.2	-172.3789128	-233.0645113	-183.5641635	-179.585174	-184.982952	-176.155432	-199.4369	-134.135279	-141.699684	-79.46481689
+3.2	172.0870873	209.4815983	175.7223366	158.3160175	159.2012527	140.1968371	147.791404	124.9364468	131.7715668	95.89024093
-3.25	-161.6052308	-218.4979796	-172.0914034	-168.3611	-173.421517	-165.145717	-186.972094	-125.751823	-132.843453	-74.49826587
+3.25	207.7627106	271.819029	215.5991883	202.6398923	202.6398923	185.7420712	197.0099691	159.2921889	167.9113682	117.9149242
-3.3	-150.8315488	-203.9314479	-160.6186432	-157.137026	-161.860082	-154.136003	-174.507288	-117.368368	-123.987223	-69.53171485
+3.3	236.0914116	325.9621125	242.8935974	242.5155249	242.5155249	223.8448495	237.5461213	189.0036233	199.1564095	137.908122
-3.35	-140.0578668	-189.3649163	-149.145883	-145.912952	-150.298647	-143.126288	-162.042482	-108.984912	-115.130992	-64.56516383
+3.35	265.1830097	370.7483836	274.847735	275.5232736	275.5232736	253.872496	269.6592408	213.3564869	224.7556941	155.3600319
-3.4	-129.2841848	-174.7983846	-137.6731229	-134.688878	-138.737212	-132.116574	-149.577676	-100.601457	-106.274761	-59.59861281
+3.4	289.2430846	405.130288	301.0754978	300.7972183	300.7972183	283.6282952	303.8445621	231.7130506	244.0389897	169.8053722
-3.45	-118.5105028	-160.2318529	-126.2003627	-123.464803	-127.175777	-121.106859	-137.11287	-92.2180017	-97.4185303	-54.63206179
+3.45	307.5682634	428.1748847	320.8892194	317.5664543	317.5664543	305.7316613	329.3651794	243.5116808	256.4163654	180.8235556
-3.5	-107.7368208	-145.6653213	-114.7276025	-112.240729	-115.614342	-110.097144	-124.648064	-83.8345462	-88.5622995	-49.66551077
+3.5	319.2793896	439.0640871	333.6824322	325.1555998	325.1555998	319.0440656	345.2546249	248.267024	261.3783881	188.0381542
-3.55	-96.96313884	-131.0987896	-103.2548424	-101.016655	-104.052907	-99.0874297	-112.183258	-75.4510908	-79.7060687	-44.69895975
+3.55	323.972362	439.771885	338.929635	325.1707732	325.1707732	323.5054205	350.660823	248.7954399	262.0075726	191.1170671
-3.6	-86.18945686	-116.5322579	-91.78208221	-89.7925811	-92.4914715	-88.0777151	-99.7184525	-67.0676354	-70.849838	-39.73240873

+3.6	**321.2030215**	***444.2181744***	***336.1864718***	**329.5464652**	**329.5464652**	**320.4878407**	**345.2898608**	**251.7054144**	**265.0400781**	**189.7731821**
-3.65	**-75.41577487**	***-101.9657263***	***-80.30932204***	**-78.568507**	**-80.9300365**	**-77.0680005**	**-87.2536465**	**-58.68418**	**-61.9936072**	**-34.76585771**
+3.65	**310.5795438**	***436.4755565***	***325.0894024***	**324.7486029**	**324.7486029**	**306.9778633**	**328.4838529**	**247.664551**	**260.7557058**	**183.7631907**
-3.7	**-64.64209288**	***-87.39919461***	***-68.83656188***	**-67.3444329**	**-69.3686015**	**-66.0582859**	**-74.7888405**	**-50.3007246**	**-53.1373764**	**-29.79930669**
+3.7	**291.7914104**	***415.8621536***	***305.35623***	**310.2101509**	**310.2101509**	**284.349625**	**300.378685**	**236.2636852**	**248.7254232**	**172.8883449**
-3.75	**-53.8684109**	***-72.83266294***	***-57.36380171***	**-56.1203588**	**-57.8071665**	**-55.0485713**	**-62.3240345**	**-41.9172692**	**-44.2811456**	**-24.83275567**
+3.75	**273.9508853**	***381.810534***	***281.0824744***	**285.4591641**	**285.4591641**	**264.4279755**	**280.8629728**	**217.1700718**	**228.6008403**	**156.9948647**
-3.8	**-43.09472891**	***-58.26613128***	***-45.89104155***	**-44.8962847**	**-46.2457315**	**-44.0388567**	**-49.8592285**	**-33.5338138**	**-35.4249148**	**-19.86620465**
+3.8	**246.1052899**	***333.8681655***	***251.1131462***	**252.1154914**	**253.3603504**	**233.6933981**	**249.5632287**	**191.5116738**	**201.718624**	**135.9727937**
-3.85	**-32.32104692**	***-43.69959962***	***-34.41828139***	**-33.6722106**	**-34.6842965**	**-33.0291421**	**-37.3944225**	**-25.1503583**	**-26.568684**	**-14.89965363**
+3.85	**205.5677724**	***271.6970734***	***208.7173228***	**207.9591942**	**209.5891494**	**192.2082359**	**205.970788**	**157.3429374**	**165.8185669**	**109.7565048**
-3.9	**-21.54736494**	***-29.13306795***	***-22.94552122***	**-22.4481365**	**-23.1228615**	**-22.0194275**	**-24.9296165**	**-16.7669029**	**-17.7124532**	**-9.933102607**
+3.9	**151.483892**	***195.0744123***	***153.383237***	**153.4691189**	**155.3212549**	**141.3844445**	**149.6919442**	**114.2747628**	**120.4729954**	**78.32580721**
-3.95	**-10.77368295**	***-14.56653629***	***-11.47276106***	**-11.2240624**	**-11.5614265**	**-11.0097129**	**-12.4648106**	**-8.38344752**	**-8.85622242**	**-4.966551587**
+3.95	**83.14739207**	***104.4679093***	***83.99244761***	**83.42830446**	**84.72846745**	**77.27778761**	**83.25884542**	**62.66066286**	**66.09446411**	**41.70374439**
-5	**-4.72E-14**	***-3.67E-14***	***-3.28E-14***	**-2.96E-14**	**-2.96E-14**	**-2.37E-14**	**-2.37E-14**	**-2.68E-14**	**-2.82E-14**	**-1.98E-14**
+5	**4.01E-14**	***2.69E-14***	***3.15E-14***	**2.14E-14**	**2.14E-14**	**1.76E-14**	**1.80E-14**	**1.63E-14**	**1.71E-14**	**1.94E-14**

3-Span: Moment (Max and Min) Raw Data Results - 20' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.57E-14	-3.05E-14	-2.70E-14	-2.01E-14	-3.18E-14	-2.48E-14	-2.49E-14	-2.75E-14	-2.81E-14
End Shear	1.10E-14	1.44E-14	1.31E-14	1.02E-14	1.78E-14	1.32E-14	1.31E-14	1.63E-14	1.63E-14
-0.05	-7.346363365	-7.345987671	-5.843273772	-4.893372201	-5.774675567	-8.669096187	-9.36935405	-10.2704351	-10.4592823
+0.05	55.55911393	55.86623096	44.90517145	36.40642012	46.05495483	62.16422122	65.60383754	65.73470987	65.70700272
-0.1	-14.69272673	-14.69197534	-11.68654754	-9.786744403	-11.54935113	-17.33819237	-18.7387081	-20.5408703	-20.9185647
+0.1	103.3604784	103.8759329	83.52629513	67.86779317	84.32880819	113.7618613	120.4648311	120.593279	119.3601743
-0.15	-22.03909009	-22.03796301	-17.52982132	-14.6801166	-17.3240267	-26.00728856	-28.1080622	-30.8113054	-31.377847
+0.15	143.663331	144.0299591	115.8420516	94.33727545	115.0685561	155.0989864	163.3509482	163.2545317	163.7567101
-0.2	-29.38545346	-29.38395068	-23.37309509	-19.57348881	-23.09870227	-34.67638475	-37.4774162	-41.0817405	-41.8371293
+0.2	176.1809897	176.3965309	141.8894479	115.8156103	136.7874105	188.8573717	197.3687504	199.1085613	198.1262103
-0.25	-36.73181682	-36.72993835	-29.21636886	-24.46686101	-28.87337784	-43.34548094	-46.8467703	-51.3521756	-52.2964116
+0.25	201.0445861	201.1992643	161.7638898	132.3508685	153.1372719	214.3795002	222.1182702	232.7751003	232.6893008
-0.3	-44.07818019	-44.07592602	-35.05964263	-29.36023321	-34.6480534	-52.01457712	-56.2161243	-61.6226108	-62.755694
+0.3	218.452444	218.7856829	175.6189658	144.0386169	164.6913116	231.3586738	237.4003412	256.1979125	256.8753716
-0.35	-51.42454355	-51.42191369	-40.9029164	-34.25360541	-40.42272897	-60.68367331	-65.5854784	-71.8930459	-73.2149763
+0.35	228.6700864	229.3200554	183.5838142	151.0217295	175.0422204	247.8428667	253.5597494	269.9065618	270.3886875
-0.4	-58.77090692	-58.76790137	-46.74619018	-39.14697761	-46.19740454	-69.3527695	-74.9548324	-82.163481	-83.6742586
+0.4	232.030254	233.0366213	186.7742308	153.4909051	180.7552773	256.6186064	266.2053312	273.621803	274.2674669
-0.45	-66.11727028	-66.11388904	-52.58946395	-44.04034981	-51.97208011	-78.02186568	-84.3241865	-92.4339162	-94.1335409
+0.45	228.9328434	230.3605605	184.8019492	152.471389	182.0175326	257.355308	269.4461418	277.9471392	277.7576865
-0.5	-73.46363365	-73.45987671	-58.43273772	-48.93372201	-57.74675567	-86.69096187	-93.6935405	-102.704351	-104.592823
+0.5	228.9666944	229.9370742	184.7301831	153.6747469	179.058023	254.7585956	263.8544692	277.4954176	277.4352465
-0.55	-80.80999701	-80.80586438	-64.27601149	-53.82709422	-63.52143124	-95.36005806	-103.062895	-112.974786	-115.052106
+0.55	223.6632075	225.4973027	180.4570061	150.3009649	172.1477362	245.4626992	253.1597946	267.3384647	267.2509266
-0.6	-88.15636038	-88.15185205	-70.11928526	-58.72046642	-69.29610681	-104.0291542	-112.432249	-123.245222	-125.511388
+0.6	211.8903379	214.5349803	172.0677713	142.588036	161.5996556	229.0619078	234.9719376	248.3607521	249.4072136
-0.65	-95.50272374	-95.49783972	-75.96255904	-63.61383862	-75.07078238	-112.6982504	-121.801603	-133.515657	-135.97067
+0.65	194.1231226	197.500646	158.7696891	130.8212486	147.7685667	206.1923181	210.6503179	228.951695	229.704693
-0.7	-102.8490871	-102.8438274	-81.80583281	-68.50721082	-80.84545794	-121.3673466	-131.170957	-143.786092	-146.429953
+0.7	170.9039419	174.9154908	140.9688369	115.3334057	132.316268	181.6334948	188.1028149	200.783972	201.256234
-0.75	-110.1954505	-110.1898151	-87.64910658	-73.40058302	-86.62013351	-130.0364428	-140.540311	-154.056527	-156.889235
+0.75	142.8423025	147.3712344	119.1377164	96.50487961	116.4170844	151.0778799	157.3702996	164.1245251	164.2865588
-0.8	-117.5418138	-117.5358027	-93.49238035	-78.29395522	-92.39480908	-138.705539	-149.909665	-164.326962	-167.348517
+0.8	110.6148401	115.5299881	95.36603269	76.69509313	96.08303574	114.9650146	119.4058262	119.7965769	120.260834
-0.85	-124.8881772	-124.8817904	-99.33565412	-83.18732742	-98.16948465	-147.3746352	-159.279019	-174.597397	-177.8078
+0.85	75.51789876	80.08683985	69.10173391	54.9252541	70.0046742	73.95068205	74.94047822	74.89837604	76.54870953
-0.9	-138.7493259	-143.1874557	-114.4622441	-95.93069437	-103.9441602	-156.0437314	-168.648373	-185.786679	-194.840282
+0.9	37.23053337	44.08329886	41.61382024	33.42843621	46.14010656	36.22995329	36.06103193	36.06103193	36.06103193
-0.95	-165.4331638	-169.1552156	-139.9101872	-117.6218389	-115.6446557	-175.4822344	-193.712056	-210.684774	-219.482398
+0.95	19.66041002	26.72157605	27.37645888	21.82525085	22.84261699	22.11169336	23.64317326	25.03071939	25.03802043
-1	-192.7314592	-199.0950426	-166.2294926	-140.7329561	-146.7798413	-201.948372	-219.296736	-235.832228	-244.498085
+1	20.69516844	20.7011074	16.46496515	13.51254044	13.63285762	23.27546574	24.88755024	26.34812547	26.35581075
(Span 2) -2	-192.7314592	-199.0950426	-166.2294926	-140.7329561	-146.7798413	-201.948372	-219.296736	-235.832228	-244.498085
+2	20.69516844	20.7011074	16.46496515	13.51254044	13.63285762	23.27546574	24.88755024	26.34812547	26.35581075
-2.05	-136.3717718	-156.8311095	-122.4090531	-103.0640767	-105.0586151	-134.4821397	-143.353493	-152.166867	-157.620018
+2.05	18.21896196	27.75417225	24.18133708	18.98638227	22.2260537	17.59181796	17.53956128	18.44750449	18.45288528
-2.1	-106.3103289	-124.3196615	-91.79986706	-76.45999583	-69.62303648	-105.5037129	-116.211677	-127.570875	-131.682246
+2.1	41.4929414	47.31761876	40.36332009	31.33487667	51.71644243	40.05636917	40.10606938	40.06281723	39.99049888
-2.15	-84.79816412	-95.46929787	-67.81297204	-56.54864346	-55.86151937	-95.37344846	-101.977538	-107.961185	-108.708453
+2.15	85.70455395	87.16563274	68.63933896	54.41326576	79.6605328	82.81918798	82.81793831	82.83040225	82.67710377
-2.2	-78.59268914	-79.50429694	-63.78964897	-52.65763419	-51.77360952	-88.39408116	-94.5148872	-100.060656	-100.089888
+2.2	127.4534626	126.097963	100.6428646	81.15650536	106.1450977	132.029351	134.1149173	140.085397	140.1161706

-2.25	-72.38721416	-74.63353569	-60.7467258	-50.71449417	-47.68569967	-81.41471387	-87.0522366	-92.1601258	-92.1870504
+2.25	165.8294245	164.6103863	130.7620684	106.5988979	140.9977437	175.8838033	181.1992532	196.1462072	196.2915151
-2.3	-66.18173918	-69.76288303	-57.73826302	-48.88219899	-43.59778982	-74.43534657	-79.589586	-84.2595959	-84.2842123
+2.3	192.056535	191.9398435	152.6404368	124.9718627	159.7343659	207.1598494	215.9103922	235.620629	235.7604974
-2.35	-59.9762642	-64.94917234	-54.84395167	-47.23190194	-39.50987997	-67.45597928	-72.1269354	-76.3590661	-76.3813742
+2.35	217.2956038	216.9210069	172.4256617	141.6928944	177.0797676	237.7290426	248.2417969	270.1475704	274.6731214
-2.4	-53.77078922	-60.14568382	-52.85814274	-45.80615934	-35.42197012	-60.47661198	-64.6642848	-68.4585362	-68.4785361
+2.4	231.4076821	231.4016529	184.0674826	151.3644791	184.9295966	257.7036181	273.993421	290.9101813	299.9965322
-2.45	-47.56531424	-55.3421953	-51.37973163	-44.66219906	-31.33406027	-53.49724469	-57.2016342	-60.5580064	-60.575698
+2.45	240.7296392	240.5421407	191.2777042	157.6661495	184.9314151	269.5441196	286.3329809	306.3732359	313.5081823
-2.5	-41.36035889	-50.53917987	-50.33201933	-43.82897548	-27.24615042	-46.51787739	-49.7390515	-52.6580844	-52.6734439
+2.5	241.7975282	241.6833461	192.2099757	158.562717	188.6922374	274.1074304	293.1550217	312.3528447	315.8234257
-2.55	-47.56591162	-55.343123	-51.37928091	-44.66233694	-31.33384727	-53.49648431	-57.2017117	-60.5587054	-60.5763694
+2.55	240.7165994	240.5317551	191.2703283	157.6629085	184.8821078	269.5674194	286.3284565	306.3930346	313.4884591
-2.6	-53.77146436	-60.14706614	-52.84788531	-45.80617776	-35.42172953	-60.4757525	-64.6643719	-68.4593264	-68.4792948
+2.6	231.4072635	231.4013158	184.0672417	151.3643708	184.900187	257.7572113	273.9467422	290.9558545	299.9838735
-2.65	-59.97701709	-64.95100927	-54.84222697	-47.23188315	-39.50961179	-67.45502068	-72.127032	-76.3599473	-76.3822203
+2.65	217.2712366	216.9016271	172.4118735	141.6867856	177.0198945	237.7588427	248.2423935	270.1239793	274.6385359
-2.7	-66.18256982	-69.76288158	-57.73816697	-48.8822396	-43.59749405	-74.43428887	-79.5896922	-84.2605683	-84.2851458
+2.7	192.0655474	191.9470305	152.6455335	124.9741175	159.7199862	207.1480535	215.8763357	235.592153	235.7630749
-2.75	-72.38812256	-74.63384801	-60.74519019	-50.71470268	-47.68537632	-81.41355706	-87.0523524	-92.1611893	-92.1880712
+2.75	165.8007837	164.584541	130.7437146	106.5907547	140.9271562	175.8628813	181.1803141	196.1100594	196.2568029
-2.8	-78.59367529	-79.50491973	-63.78831238	-52.65815659	-51.77325858	-88.39282524	-94.5150125	-100.06181	-100.090997
+2.8	127.4217425	126.7337002	100.625178	81.16262493	106.1470656	132.0046066	134.0932023	140.0481595	140.1261682
-2.85	-84.79922802	-95.47143417	-67.81277286	-56.54868227	-55.86114084	-95.37209343	-101.977673	-107.962431	-108.709313
+2.85	85.68971297	87.15367457	68.63126328	54.40960821	79.71134193	82.84564046	82.80866418	82.84605706	82.71572994
-2.9	-106.3115855	-124.3226064	-91.79984537	-76.45998506	-69.62623565	-105.5072058	-116.212753	-127.570998	-131.681719
+2.9	41.51486749	47.29461701	40.37789874	31.34131005	51.7455399	40.07777003	40.06578055	40.08238375	40.00931467
-2.95	-136.3729633	-156.8317348	-122.4088524	-103.0639919	-105.0583329	-134.4839363	-143.354187	-152.167553	-157.621436
+2.95	18.20668451	27.74068984	24.17457917	18.98341115	22.71641142	17.57983441	17.600845	18.44729221	18.45268279
-3	-192.7335182	-199.0964337	-166.2283158	-140.7324354	-146.7830438	-201.9471334	-219.295633	-235.832749	-244.499442
+3	20.69490914	20.70090064	16.46526691	13.51247551	13.63294962	23.27579626	24.88751834	26.34782156	26.35551934
(Span 3) -4	-1.93E+02	-1.99E+02	-1.66E+02	-1.41E+02	-1.47E+02	-2.02E+02	-2.19E+02	-2.36E+02	-2.44E+02
+4	2.07E+01	2.07E+01	1.65E+01	1.35E+01	1.36E+01	2.33E+01	2.49E+01	2.63E+01	2.64E+01
-3.05	-165.4340748	-169.1549972	-139.9091211	-117.6213642	-115.6478009	-175.4844494	-193.714252	-210.688256	-219.48654
+3.05	19.66016369	26.68757372	27.26332629	21.80269737	22.916089	22.1120064	23.6431424	25.03043048	25.03774336
-3.1	-138.7495159	-143.1866187	-114.4615986	-95.93041196	-103.9435659	-156.0402319	-168.647349	-185.787523	-194.841841
+3.1	37.27176414	44.05106092	41.59371881	33.41959621	46.21847849	36.01857891	36.03036422	36.18402719	36.01795689
-3.15	*-124.8886732*	*-124.8821858*	*-99.33593449*	*-83.18745254*	*-98.16892314*	*-147.3713301*	*-159.278052*	*-174.596*	*-177.805927*
+3.15	75.56124557	80.04649404	69.06960513	54.93474415	69.9583699	73.89898341	74.89087612	74.93459885	76.50315505
-3.2	-117.5422808	-117.536175	-93.4926443	-78.29407306	-92.39428035	-138.7024283	-149.908754	-164.325648	-167.346755
+3.2	110.6583179	115.5645121	95.73543812	77.36465481	96.03112934	114.9110321	119.3514971	119.7628974	120.2918376
-3.25	-110.1958884	-110.1901642	-87.64935412	-73.40069359	-86.61963756	-130.0335264	-140.539457	-154.055295	-156.887582
+3.25	142.8841563	147.4042266	119.1071726	96.51640035	116.3579205	151.0196724	157.3981073	164.0856908	164.3296741
-3.3	-102.849496	*-102.8441533*	-81.80606393	*-68.50731411*	-80.84499477	-121.3646246	-131.170159	-143.784942	-146.42841
+3.3	170.9425441	174.9456953	140.9357379	115.3440405	131.0062257	181.6626672	188.1227241	200.737668	201.2930337
-3.35	-95.50310356	-95.49814252	-75.96277374	-63.61393463	-75.07035198	-112.6957228	-121.800862	-133.51459	-135.969238
+3.35	194.1568955	197.5267347	158.7332226	130.8305685	147.7211803	206.2469027	210.6606067	228.9813064	229.7330864
-3.4	-88.15671115	-88.1521317	-70.11948355	-58.72055515	-69.29570919	-104.026821	-112.431565	-123.244237	-125.510065
+3.4	211.9179136	214.5559276	172.0271142	142.5956747	161.5490624	229.1105236	234.9555745	248.39293	248.7594167
-3.45	-80.81031875	-80.80612088	-64.27619336	-53.82717568	-63.5210664	-95.35791913	-103.062267	-112.973885	-115.050893
+3.45	223.6833679	225.5122153	180.4142602	150.3066188	172.0930663	245.5037652	253.1348758	267.37476	267.2857287
-3.5	-73.46392634	-73.46011005	-58.43290317	-48.9337962	-57.74642361	-86.6890173	-93.6929696	-102.703532	-104.591721
+3.5	228.9783958	229.94507	184.7099572	153.6781121	178.9985874	254.7906831	263.8995445	277.5212582	277.460061
-3.55	-66.11753393	-66.11409923	-52.58961298	-44.04041672	-51.97178082	-78.02011547	-84.3236721	-92.4331792	-94.1325482
+3.55	228.9273897	*230.38785736 2439*	*184.7981598*	152.4722798	181.9524816	*257.3285958*	269.4813365	277.9169017	277.7286716

-3.6	**-58.77114153**	**-58.7680884**	**-46.7463228**	**-39.14703724**	**-46.19713803**	**-69.35121364**	**-74.9543746**	**-82.1628265**	**-83.6733758**
+3.6	**232.0169384**	**233.1030131**	**186.7657943**	**153.5124958**	**180.684041**	**256.5816006**	**266.2292678**	**273.601664**	**273.8338662**
-3.65	**-51.42474912**	**-51.42207758**	**-40.90303261**	**-34.25365777**	**-40.42249524**	**-60.68231181**	**-65.5850771**	**-71.8924739**	**-73.2142035**
+3.65	**228.6478699**	**229.3796298**	**183.5718268**	**151.0410501**	**174.9642377**	**247.7944559**	**253.5712223**	**269.8841814**	**270.3672241**
-3.7	**-44.07835671**	**-44.07606676**	**-35.05974242**	**-29.36027829**	**-34.64785245**	**-52.01340998**	**-56.2157796**	**-61.6221212**	**-62.7550311**
+3.7	**218.4206267**	**218.8376254**	***175.6291506***	**144.0553677**	**164.606169**	**231.3402991**	**237.3918612**	**256.249716**	**256.8416878**
-3.75	**-36.73196431**	**-36.73005593**	**-29.21645223**	**-24.46689881**	**-28.87320966**	**-43.34450816**	**-46.8464822**	**-51.3517686**	**-52.2958588**
+3.75	**201.0024435**	**201.1675771**	**161.7960062**	**132.3650965**	**153.1913679**	**214.3494294**	**222.0978258**	**232.8132492**	**232.7259333**
-3.8	**-29.3855719**	**-29.38404511**	**-23.37316204**	**-19.57351934**	**-23.09856686**	**-34.67560633**	**-37.4771847**	**-41.0814159**	**-41.8366864**
+3.8	**176.1280287**	**176.4327421**	**141.9154854**	**115.8270904**	**136.8324109**	**188.8148792**	**197.3353038**	**198.1809755**	**198.1291897**
-3.85	**-22.0391795**	**-22.03803428**	**-17.52987185**	**-14.68013986**	**-17.32392407**	**-26.0067045**	**-28.1078872**	**-30.8110632**	**-31.3775141**
+3.85	**143.5991039**	**144.0572833**	**115.8616262**	**94.34587987**	**115.1033514**	**155.1396113**	**163.3953473**	**163.2970323**	**163.713143**
-3.9	**-14.69278709**	**-14.69202346**	**-11.68658166**	**-9.78676038**	**-11.54928128**	**-17.33780267**	**-18.7385897**	**-20.5407106**	**-20.9183418**
+3.9	**103.2932612**	**103.8942329**	**83.5393559**	**67.87350896**	**84.35258591**	**113.7891438**	**120.4029225**	**120.5340173**	**119.3877396**
-3.95	**-7.346394682**	**-7.346012636**	**-5.843291475**	**-4.893380903**	**-5.774638494**	**-8.668900839**	**-9.36929227**	**-10.2703579**	**-10.4591694**
+3.95	**55.57056733**	**55.87534709**	**44.9116714**	**36.40925886**	**46.0670867**	**62.179916**	**65.52684096**	**65.68320891**	**65.72093113**
-5	**-2.09E-14**	**-2.27E-14**	**-1.73E-14**	**-1.39E-14**	**-1.77E-14**	**-2.02E-14**	**-2.02E-14**	**-1.94E-14**	**-1.86E-14**
+5	**1.51E-14**	**1.51E-14**	**1.25E-14**	**1.06E-14**	**1.79E-14**	**1.50E-14**	**1.56E-14**	**1.63E-14**	**1.60E-14**

3-Span: Moment (Max and Min) Raw Data Results - 20' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.10E-14	-3.44E-14	-3.58E-14	-3.52E-14	-3.24E-14
End Shear	2.05E-14	2.21E-14	1.66E-14	2.12E-14	2.18E-14
-0.05	-10.53743106	-9.925779151	-9.01814183	-10.5994483	-10.8388567
+0.05	73.30763016	68.27731149	67.05405847	73.45159472	73.94936017
-0.1	-21.07486213	-19.8515583	-18.0362837	-21.1988966	-21.6777135
+0.1	134.8628412	125.5895836	122.3599689	135.1297139	135.6876019
-0.15	-31.61229319	-29.77733745	-27.0544255	-31.7983449	-32.5165702
+0.15	184.7897786	172.0610478	168.9191751	185.4429296	186.0913288
-0.2	-42.14972426	-39.7031166	-36.0725673	-42.3977931	-43.3554269
+0.2	223.3228316	208.5336014	205.6134332	224.5041936	225.1406323
-0.25	-52.68715532	-49.62889575	-45.0907092	-52.9972414	-54.1942837
+0.25	251.437249	234.8545492	232.5758205	252.634397	253.1729693
-0.3	-63.22458639	-59.5546749	-54.108851	-63.5966897	-65.0331404
+0.3	269.2075281	252.2329096	251.8314076	270.6446898	270.7537447
-0.35	-73.76201745	-69.48045405	-63.1269928	-74.196138	-75.8719971
+0.35	293.4736351	274.9059401	263.8299955	295.6652618	296.8328472
-0.4	-84.29944852	-79.40623321	-72.1451347	-84.7955863	-86.7108539
+0.4	309.2617107	290.4757649	267.9637357	311.8176895	312.7506293
-0.45	-94.83687958	-89.33201236	-81.1632765	-95.3950346	-97.5497106
+0.45	315.784401	296.125031	264.6762892	317.395427	318.0303277
-0.5	-105.3743106	-99.25779151	-90.1814183	-105.994483	-108.388567
+0.5	312.6817373	292.8810692	265.0289458	312.9338702	313.2225564
-0.55	-115.9117417	-109.1835707	-99.1995602	-116.593931	-119.227424
+0.55	300.0028666	281.077916	259.7248144	299.0754884	298.9846634
-0.6	-126.4491728	-119.1093498	-108.217702	-127.193379	-130.066281
+0.6	278.4595129	260.9343296	246.9051836	276.5703123	276.0906005
-0.65	-136.9866038	-129.035129	-117.235844	-137.792828	-140.905138
+0.65	248.8793705	234.0959267	227.0944884	246.2752389	247.3125488
-0.7	-147.5240349	-138.9609081	-126.253986	-148.392276	-151.743994
+0.7	220.8787489	208.2487549	200.898158	217.2860411	217.4928082
-0.75	-158.061466	-148.8866873	-135.272128	-158.991724	-162.582851
+0.75	186.8917562	176.4559492	169.0022433	181.9097181	181.5798672
-0.8	-168.598897	-158.8124664	-144.290269	-169.591173	-173.421708
+0.8	144.5640113	138.2098798	132.0472427	139.2145282	137.7127852
-0.85	-179.1363281	-168.7382456	-153.308411	-180.190621	-184.260564
+0.85	94.84042217	96.60743951	93.78569643	95.82368476	90.3870164
-0.9	-209.5450446	-197.8941619	-163.276539	-200.085434	-200.584048
+0.9	62.04484413	64.62010952	60.40077117	59.61982146	61.63282109
-0.95	-254.9849316	-252.404243	-176.011192	-230.088995	-223.492338
+0.95	43.02205564	43.25479738	41.72176665	41.05735838	45.47805135
-1	-303.1464754	-313.2975242	-198.296315	-267.042636	-256.74758
+1	28.6229373	26.55298598	23.93995047	28.89267854	28.89330652
(Span 2) -2	-303.1464754	-313.2975242	-198.296315	-267.042636	-256.74758
+2	28.6229373	26.55298598	23.93995047	28.89267854	28.89330652
-2.05	-233.4781674	-233.1015371	-160.731324	-208.069388	-205.548467
+2.05	38.44941914	39.17391688	37.45672761	39.98527389	38.40391207
-2.1	-174.387465	-167.7499791	-130.21641	-167.497897	-163.902955
+2.1	53.74263873	58.72568788	57.07629236	61.67995442	53.31921331
-2.15	-125.7239032	-116.7141091	-105.657519	-132.001523	-130.126728
+2.15	88.03431486	89.5069472	100.4248826	107.6094169	90.20549323
-2.2	-111.7441016	-104.6271266	-91.2154353	-110.967925	-110.790099
+2.2	145.9323707	138.1016316	146.5467496	156.4931167	148.6422347

-2.25	**-107.7374392**	**-102.3599412**	**-85.7649329**	**-104.173811**	**-103.724796**
+2.25	**198.887969**	**187.6375926**	**192.8274507**	**206.3480433**	**206.4624155**
-2.3	**-103.7625078**	**-100.0935058**	**-80.3144304**	**-97.3992081**	**-96.7841894**
+2.3	**243.8653338**	**226.2074276**	**226.9382**	**246.7540981**	**252.8906685**
-2.35	**-99.79311902**	**-97.85538663**	**-74.8639279**	**-90.6708031**	**-90.1962229**
+2.35	**281.1718851**	**261.0829789**	**254.2197617**	**284.5038151**	**290.5766626**
-2.4	**-95.82373025**	**-95.61726748**	**-69.4134255**	**-83.9436126**	**-84.1036575**
+2.4	**310.0313895**	**287.4433625**	**270.1917185**	**313.2214902**	**317.1732427**
-2.45	**-91.85434148**	**-93.37914833**	**-63.962923**	**-77.2164222**	**-78.2460811**
+2.45	**325.2231965**	**301.8629255**	**281.8594314**	**328.6648518**	**329.9570629**
-2.5	**-87.88495271**	**-92.2972003**	**-58.5132484**	**-70.4902148**	**-72.685527**
+2.5	**333.8100409**	**309.2877383**	**288.5003546**	**337.1665401**	**337.7926466**
-2.55	**-91.85365886**	**-93.37907174**	**-63.9637648**	**-77.2179133**	**-78.2450545**
+2.55	**325.2242748**	**301.8631055**	**281.8380751**	**328.6659972**	**329.9643348**
-2.6	**-95.82326975**	**-95.61713298**	**-69.4142811**	**-83.9456119**	**-84.1031737**
+2.6	**309.9981236**	**287.4468103**	**270.068241**	**313.2459919**	**317.2025209**
-2.65	**-99.79288063**	**-97.85519422**	**-74.8647975**	**-90.6733104**	**-90.1980091**
+2.65	**281.1765955**	**261.0836796**	**254.2710841**	**284.5088874**	**290.5865104**
-2.7	**-103.7624915**	**-100.0932555**	**-80.3153138**	**-97.401009**	**-96.7863438**
+2.7	**243.8380617**	**226.2095211**	**226.9502882**	**246.7688229**	**252.9087336**
-2.75	**-107.7369313**	**-102.3601092**	**-85.7658302**	**-104.173938**	**-103.72561**
+2.75	**198.9060913**	**187.6337243**	**192.8860175**	**206.4108651**	**206.4786346**
-2.8	**-111.7439415**	**-104.6272449**	**-91.2163466**	**-110.968349**	**-110.790786**
+2.8	**145.9176809**	**138.1045451**	**146.5191629**	**156.5470257**	**148.6696736**
-2.85	**-125.7218544**	**-116.7140641**	**-105.657607**	**-132.001975**	**-130.127919**
+2.85	**88.02334389**	**89.50417609**	**100.4119302**	**107.5952419**	**90.19406513**
-2.9	**-174.385752**	**-167.7497204**	**-130.216654**	**-167.499783**	**-163.904215**
+2.9	**53.73106374**	**58.72885893**	**56.95581558**	**61.64987261**	**53.31146555**
-2.95	**-233.4797182**	**-233.1017093**	**-160.73265**	**-208.069451**	**-205.548305**
+2.95	**38.48093539**	**39.17231307**	**37.44513459**	**39.96896758**	**38.39559144**
-3	**-303.1464236**	**-313.2969327**	**-198.297734**	**-267.044706**	**-256.747759**
+3	**28.62292089**	**26.55296503**	**23.93938171**	**28.89252505**	**28.89315798**
(Span 3) -4	**-3.03E+02**	**-3.13E+02**	**-1.98E+02**	**-2.67E+02**	**-2.57E+02**
+4	**2.86E+01**	**2.66E+01**	**2.39E+01**	**2.89E+01**	**2.89E+01**
-3.05	**-254.9845475**	**-252.4039646**	**-176.011361**	**-230.090962**	**-223.494341**
+3.05	**42.99573934**	**43.24880752**	**41.68254458**	**41.02198138**	**45.48156797**
-3.1	**-209.5446449**	**-197.8943051**	**-163.276808**	**-200.08543**	**-200.584172**
+3.1	**62.01958318**	**64.61558255**	**60.36288361**	**59.67067054**	**61.73599733**
-3.15	***-179.1350954***	***-168.7380719***	***-153.309019***	***-180.188629***	***-184.259883***
+3.15	**94.79993811**	**96.61317169**	**93.73523364**	**95.85967532**	**90.34241027**
-3.2	**-168.5977366**	**-158.812303**	**-144.290841**	**-169.589297**	**-173.421066**
+3.2	**144.5194127**	**138.2154938**	**132.0022528**	**139.2469949**	**137.73381**
-3.25	**-158.0603777**	**-148.8865342**	**-135.272663**	**-158.989966**	**-162.58225**
+3.25	**186.9125056**	**176.4485328**	**168.9973851**	**181.9311096**	**181.601658**
-3.3	**-147.5230188**	**-138.9607654**	**-126.254485**	**-148.390634**	**-151.743433**
+3.3	**220.8924582**	**208.2402188**	**200.932527**	**217.3007799**	**217.5082875**
-3.35	**-136.9856599**	**-129.0349966**	**-117.236307**	**-137.791303**	**-140.904616**
+3.35	**248.8697044**	**234.093843**	**227.1244052**	**246.3389736**	**247.3349068**
-3.4	**-126.4483011**	**-119.1092277**	**-108.218129**	**-127.191971**	**-130.065799**
+3.4	**278.4442158**	**260.932168**	**246.9293778**	**276.6290324**	**276.1440365**
-3.45	**-115.9109422**	**-109.1834589**	**-99.1999508**	**-116.59264**	**-119.226982**
+3.45	**299.9793983**	**281.0746757**	**259.7422499**	**299.1275584**	**299.035795**
-3.5	**-105.3735833**	**-99.2576901**	**-90.1817728**	**-105.993308**	**-108.388165**
+3.5	**312.650076**	**292.8765361**	**265.0386639**	**312.9777461**	**313.2658871**
-3.55	**-94.83622443**	**-89.33192128**	**-81.1635948**	**-95.3939768**	**-97.5493484**
+3.55	**315.7434005**	**296.1298351**	**264.7576999**	**317.4298813**	**318.0645032**
-3.6	**-84.29886555**	**-79.40615246**	**-72.1454168**	**-84.7946453**	**-86.7105316**

+3.6	**309.2133123**	**290.4790439**	**268.0383727**	**311.8416712**	**312.774733**
-3.65	**-73.76150668**	**-69.48038363**	**-63.1272388**	**-74.1953138**	**-75.8717147**
+3.65	**293.48674**	**274.9075317**	**263.89689**	**295.6778007**	**296.8458324**
-3.7	**-63.2241478**	**-59.55461481**	**-54.1090608**	**-63.5959824**	**-65.0328979**
+3.7	**269.275047**	**252.2323469**	**251.8897606**	**270.6408244**	**270.7505663**
-3.75	**-52.68678893**	**-49.62884599**	**-45.0908828**	**-52.9966509**	**-54.194081**
+3.75	**251.4948247**	**234.8633292**	**232.5444615**	**252.6967704**	**253.2337218**
-3.8	**-42.14943005**	**-39.70307717**	**-36.0727048**	**-42.3973194**	**-43.3552642**
+3.8	**223.3710714**	**208.5407606**	**205.5717711**	**224.5551238**	**225.1903716**
-3.85	**-31.61207118**	**-29.77730834**	**-27.0545268**	**-31.7979879**	**-32.5164473**
+3.85	**184.8264825**	**172.0664401**	**168.8665958**	**185.4816949**	**186.1291541**
-3.9	**-21.0747123**	**-19.85153952**	**-18.0363488**	**-21.1986564**	**-21.6776305**
+3.9	**134.8875342**	**125.593319**	**122.3834099**	**135.1558043**	**135.7130844**
-3.95	**-10.53735342**	**-9.925770697**	**-9.01817078**	**-10.599325**	**-10.8388136**
+3.95	**73.32005114**	**68.27917394**	**67.06589013**	**73.46493273**	**73.96336046**
-5	**-2.46E-14**	**-2.49E-14**	**-2.62E-14**	**-3.07E-14**	**-2.68E-14**
+5	**2.16E-14**	**2.19E-14**	**1.73E-14**	**1.84E-14**	**1.58E-14**

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-4.629707761	-3.809366536	-3.809171724	-3.02995788	-2.624755324	-2.994387123	-4.495253403	-4.858363523	-5.325608052	-5.423532448
End Shear	39.12841368	31.53955536	31.11713791	24.94488678	20.65244792	26.00973269	35.07383874	36.90190959	36.88486976	36.87104874
-0.05	-4.629707761	-3.809366536	-4.056437236	-3.02995788	-2.656407298	-2.994387123	-4.495253403	-4.858363523	-5.325608052	-5.423532448
+0.05	35.68226722	29.06364943	28.96874823	23.28502538	19.26262284	23.88123144	32.23449376	33.93450554	34.08592682	34.07155962
-0.1	-7.348297581	-3.809366536	-5.403440638	-3.735330897	-3.296374371	-2.994387123	-4.495253403	-4.858363523	-5.325608052	-5.423532448
+0.1	30.94021542	25.98580626	25.91282747	20.83928657	17.17464432	20.87052645	28.29787153	29.60115515	29.67580587	29.84633078
-0.15	-8.280786976	-3.809366536	-5.824392021	-3.983145784	-3.50677529	-3.150568317	-4.495253403	-4.858363523	-5.325608052	-5.423532448
+0.15	29.40093597	24.86666288	24.89498904	20.02282458	16.48092155	19.88912904	27.10504819	28.23454294	28.21787775	28.40145268
-0.2	-11.0927472	-4.855538335	-7.536214498	-5.18246114	-4.432602693	-5.071707226	-4.495253403	-5.079489304	-5.844591096	-6.601734003
+0.2	24.93516828	21.78528653	21.85915584	17.58304414	14.41751426	17.02875478	23.28996063	24.20878889	24.19169184	24.36863224
-0.25	-12.03154038	-5.485907373	-8.166790843	-5.596822413	-4.766846975	-5.713141379	-4.944194243	-5.654534753	-6.401416713	-7.133047168
+0.25	23.50388973	20.78455155	20.85804343	16.77613583	13.7381979	16.1073541	22.11385939	22.89672339	22.87953255	23.05385619
-0.3	-14.83823441	-8.239417894	-11.17009647	-8.124814314	-6.853815138	-7.63108925	-7.818097462	-8.54117375	-8.515241754	-8.551653942
+0.3	19.97255937	17.82663218	17.94349131	14.35885798	11.73642065	13.58380236	18.70441364	19.07174054	19.05446012	19.21972484
-0.35	-15.76721238	-9.42279552	-12.1481344	-8.985733813	-7.535574954	-8.328051552	-8.801180137	-9.601392142	-9.57241782	-9.583941603
+0.35	19.05861306	16.85905026	16.98729993	13.51876884	11.08375773	12.94520688	17.59606338	17.83898036	17.82173134	17.98357704
-0.4	-18.52027749	-12.88953537	-15.01049955	-11.69238614	-9.538148268	-10.81723618	-12.09867343	-12.72351964	-12.9755691	-12.69929613
+0.4	16.35015708	14.0267222	14.18073868	11.12706443	9.180092418	11.08094025	14.37359451	14.4057958	14.49285454	14.52826279
-0.45	-19.42331932	-14.01486605	-15.94009122	-12.49711374	-10.19158778	-11.60689839	-13.18649415	-13.74216475	-13.86699324	-13.88164527
+0.45	15.46193763	13.10971515	13.26969165	10.346906	8.566136125	10.47102791	13.33796325	13.36923437	13.45425713	13.48871241
-0.5	-22.0743966	-17.28980229	-18.6783457	-14.99550376	-12.11020844	-13.85216833	-16.49069457	-16.72119009	-17.52963843	-17.54468456
+0.5	12.85570408	10.4552458	10.62595823	8.225853483	6.796425437	8.685337951	10.36482884	10.39314127	10.47146976	10.50286144
-0.55	-22.93538235	-18.34531318	-19.56935361	-15.77461319	-12.73594545	-14.55851724	-17.66864926	-17.68600674	-18.72536188	-18.74050272
+0.55	12.00991569	9.606237851	9.778329189	7.5700629	6.244184635	8.107057054	9.422700468	9.449970527	9.525879895	9.556181529
-0.6	-25.43611287	-21.39313305	-22.14238756	-17.99733084	-14.60458225	-16.54782541	-21.14610593	-21.15342917	-22.22267765	-22.59384045
+0.6	9.55443575	7.181895375	7.352272108	6.001533832	4.755451941	6.432574139	6.938750286	6.932216544	6.958206949	6.916445266
-0.65	-26.23892353	-22.36705049	-22.96549434	-18.71483881	-15.21669405	-17.1668477	-22.28212857	-22.48523276	-23.42402587	-23.5967141
+0.65	8.768728893	6.418306259	6.545710556	5.162757311	4.212555843	5.896799753	6.201188551	6.194671873	6.219665282	6.137814271
-0.7	-28.5409479	-25.15243034	-25.3258164	-20.76425413	-16.99011337	-18.88815503	-25.60261563	-26.4939455	-26.97739221	-27.83693663
+0.7	6.524073475	4.276359258	4.266465204	3.531906873	2.964949309	4.366156291	4.132214536	4.125883994	4.147741771	4.074202548
-0.75	-29.26946209	-26.03297717	-26.07791598	-21.41235597	-17.55958216	-19.41583624	-26.67592172	-27.79905272	-28.10666549	-29.19763332
+0.75	5.81670096	3.633196738	3.448181086	3.025123383	2.557901617	3.883766713	3.493965148	3.487743851	3.508512006	3.438013351
-0.8	-31.91066018	-28.52059728	-28.42224264	-23.29567263	-19.23208491	-20.88916933	-29.7770844	-31.59932516	-31.5552532	-33.10644869
+0.8	3.831228743	2.035333237	2.166533512	1.993975916	1.596713882	2.529593697	1.966866128	1.963314586	1.960068632	1.936527084
-0.85	-33.36269395	-29.29600764	-29.16261382	-23.91930763	-19.8740961	-21.84926056	-30.76689058	-32.82257138	-32.85960236	-34.41410963
+0.85	3.218311002	1.700218776	1.805709868	1.698197258	1.362268838	2.111466505	1.643158245	1.639674848	1.636492339	1.613886531
-0.9	-37.89997725	-31.45054763	-31.05208623	-25.52487949	-21.28477085	-24.6340273	-33.77978044	-36.34011618	-36.64912086	-38.21076186
+0.9	1.686556076	0.769422342	0.88685782	0.940211763	0.763788056	0.966396207	0.743873188	0.741244284	0.750321231	0.730788742
-0.95	-39.35464088	-32.10904452	-31.6243415	-26.02115675	-21.75655283	-25.52632546	-34.73889539	-37.45673823	-37.84292387	-39.39264731
+0.95	1.230276942	0.536561277	0.631419113	0.747143509	0.60467228	0.623408348	0.603460376	0.645256697	0.683124855	0.683324111
-1	-43.52020505	-33.89518381	-33.20403127	-27.35574497	-23.06525424	-28.07804001	-38.24504016	-40.61726614	-41.19723303	-42.67483025
+1	5.14E-01	0.536561277	0.536715255	0.426885278	3.60E-01	0.353457526	0.603460376	0.645256697	0.683124855	0.683324111
(Span 2) -2	-2.372091414	-2.475240914	-2.475951246	-1.969288416	-1.662042996	-1.63055474	-2.783856798	-2.976669861	-3.151361555	-3.152280754
+2	45.57905071	35.73712605	32.53020058	28.42495993	24.18790317	29.44010175	40.17695344	42.54782182	42.91234382	43.48404153
-2.05	-2.894139121	-2.475240914	-2.475951246	-2.181966654	-1.858759151	-1.63055474	-2.783856798	-2.976669861	-3.151361555	-3.152280754
+2.05	43.34445286	34.05794042	31.41906669	26.94916431	22.88648575	28.05613538	38.2679586	40.38071064	40.66756129	41.22669152
-2.1	-4.422895193	-2.475240914	-2.998432278	-2.623811375	-2.260548901	-1.63055474	-2.783856798	-2.976669861	-3.151361555	-3.152280754
+2.1	39.82877788	31.42031496	29.68405636	24.67181064	20.89429824	25.86932552	35.2586536	36.86996469	37.13396831	37.69878213
-2.15	-5.444480658	-2.475240914	-3.692215589	-2.911387858	-2.525358014	-2.037533178	-2.783856798	-2.976669861	-3.151361555	-3.152280754
+2.15	37.40065493	29.55289733	28.45760396	23.53054583	19.58886869	24.35466107	33.1783612	34.38288773	34.6915598	35.55856131
-2.2	-7.144206762	-2.90578335	-4.701476836	-3.767416289	-3.044651919	-3.185742202	-2.804943717	-2.976669861	-3.151361555	-3.152769517
+2.2	33.67452883	27.21006184	26.49801714	21.96880621	18.14182713	22.02680517	29.73629335	31.03746063	31.3198354	32.40064993
-2.25	-8.374974966	-4.038007213	-5.939881241	-4.530973557	-3.650614486	-4.089898482	-3.898321361	-4.047697037	-4.030396722	-4.014525611

+2.25	31.15932752	25.75091115	25.18034341	20.80101168	17.12463828	20.38679712	27.38383964	28.87731269	28.98413645	30.19711708
-2.3	-10.34365058	-6.072229059	-8.062428352	-5.785005833	-4.656801083	-5.502859339	-5.768566273	-5.903830859	-5.855629754	-5.68065188
+2.3	27.38242306	23.42991629	23.18885646	18.88745241	15.52984393	17.70559853	24.13090464	25.59415434	25.56719033	26.77772907
-2.35	-12.43066573	-8.193785823	-10.20874602	-7.161232896	-5.863486653	-6.928303703	-7.918375647	-8.137410003	-8.333203392	-8.133031128
+2.35	23.98700046	20.97106253	21.12831287	16.95590768	13.86366985	15.62575706	21.28682106	22.30354661	22.45915641	23.52952262
-2.4	-13.87181258	-9.654272109	-11.69237681	-8.142006186	-6.679027534	-7.912522898	-9.456465573	-9.743448538	-10.14723624	-10.12305405
+2.4	22.30776474	19.26683021	19.72206896	15.60865954	12.7194581	14.47153416	19.38602386	20.13015646	20.56275825	21.35691756
-2.45	-16.084337	-12.08600564	-13.9159052	-10.16052207	-8.19574179	-9.423608228	-12.01725228	-12.25112498	-12.93910072	-12.95991635
+2.45	19.80716905	16.63036817	17.57262848	13.59716054	11.03148236	12.61411135	16.55854456	16.93730766	17.69488771	18.11750803
-2.5	-18.32913566	-14.8347859	-16.12144431	-12.24304367	-9.905028628	-11.29942671	-14.71275975	-14.88071463	-15.78679206	-15.99396071
+2.5	17.56908466	13.91864347	15.38556899	11.55204995	9.336186317	10.61242418	13.79651563	13.86921928	14.82824203	14.93772922
-2.55	-19.82766032	-16.63560849	-17.57600626	-13.59996383	-11.03271749	-12.6181491	-16.5640598	-16.9432154	-17.70006492	-18.12304902
+2.55	16.08136868	12.08059561	13.91245964	10.15759047	8.194446197	9.420453442	12.01207333	12.24617171	12.9340257	12.95505016
-2.6	-22.29328727	-19.27190545	-19.72537457	-15.61151416	-12.72072989	-14.47526423	-19.39162934	-20.13624818	-20.56791548	-21.36253648
+2.6	13.87991075	9.649959124	11.68891445	8.13993702	6.678028981	7.909448073	9.451598515	9.738902922	10.14230147	10.16213521
-2.65	-23.98026875	-20.97600356	-21.13157061	-16.95867649	-13.86489744	-15.62927675	-21.29244151	-22.3097233	-22.46426872	-23.53515588
+2.65	12.44609182	8.189647122	10.29055577	7.159261814	5.862609807	6.92530376	7.914336072	8.132911664	8.32839359	8.216032151
-2.7	-26.94324728	-23.4346159	-23.19201211	-18.89006055	-15.53099868	-17.71044511	-24.13648469	-25.60036584	-25.57313209	-26.78332224
+2.7	10.36970058	6.119515307	8.059116979	5.783204314	4.656005925	5.500012816	5.86459843	5.900270644	5.868838777	5.677376766
-2.75	-29.45691281	-24.99852534	-24.52800344	-20.11140355	-16.60286165	-19.33246679	-26.22466764	-27.79299425	-27.76642448	-29.07563714
+2.75	9.048744381	4.681439307	6.641129889	4.933150308	3.972511903	4.59317834	4.476615258	4.659745679	4.614587757	4.598339219
-2.8	-33.64564065	-27.21425666	-26.50117282	-21.971112	-18.1428413	-22.03167967	-29.64275301	-31.04352102	-31.2342571	-32.40630489
+2.8	7.185851512	2.902655872	4.734714754	3.765917379	3.04398805	3.183251205	2.801889146	2.976666045	3.151325206	3.1522459
-2.85	-37.58452813	-29.45591464	-28.46055501	-23.53263363	-19.58979746	-24.35944142	-33.13463905	-34.29381123	-34.65201399	-35.56389318
+2.85	5.425919534	2.4752099	3.725420136	2.910794207	2.525058206	2.035315109	2.78389633	2.976666045	3.151325206	3.1522459
-2.9	-40.00867377	-31.4255986	-29.68684746	-24.67500746	-20.8957114	-25.87399853	-35.26476403	-36.78091585	-37.14053387	-37.70425596
+2.9	4.367723777	2.4752099	2.99678626	2.623210236	2.26023973	1.630565744	2.78389633	2.976666045	3.151325206	3.1522459
-2.95	-43.51594835	-34.06299756	-31.4217963	-26.95227553	-22.88786354	-28.0605747	-38.27378011	-40.38698198	-40.67381879	-41.23276174
+2.95	2.892028771	2.4752099	2.475926516	2.181341109	1.858430549	1.630565744	2.78389633	2.976666045	3.151325206	3.1522459
-3	-46.81743178	-36.55217893	-33.0482755	-29.14823537	-24.8279607	-30.10964671	-41.1017713	-43.60715346	-44.00120294	-44.5730114
+3	2.372132301	2.4752099	2.475926516	1.969324508	1.662035231	1.630565744	2.78389633	2.976666045	3.151325206	3.1522459
(Span 3) -4	-5.14E-01	-0.536554554	-0.536709895	-0.426893102	-3.60E-01	-0.353459911	-0.603468945	-0.64525587	-0.683116976	-0.683316556
+4	41.96066264	33.32869009	32.69823827	26.93523622	22.64644247	27.24430974	37.09883374	39.59094993	40.11233633	41.61999331
-3.05	-8.01E-01	-0.536554554	-0.536709895	-0.573592215	-4.68E-01	-0.353459911	-0.603468945	-0.64525587	-0.683116976	-0.683316556
+3.05	40.56640848	32.73287638	32.17144359	26.49010292	22.21000597	26.39319667	35.92940068	38.5367377	38.99358189	40.52539697
-3.1	-2.168590605	-1.061246055	-1.15699709	-1.177164691	-0.938165906	-1.33144521	-1.025786811	-1.023007524	-1.032612221	-1.011946395
+3.1	36.19044011	30.75758116	30.45474061	25.00144207	20.79497689	23.71718091	32.86648846	35.18792529	35.41293665	36.97995546
-3.15	-2.670934964	-1.366779097	-1.438651214	-1.423383222	-1.130998838	-1.713479398	-1.331853867	-1.331853867	-1.331853867	-1.331853867
+3.15	34.67337279	30.03898434	29.83831405	24.45575541	20.28958967	22.78840905	31.72689825	34.01474237	34.14912386	35.71389652
-3.2	-4.344942093	-2.386146269	-2.51674803	-2.301813447	-1.84179957	-2.967514386	-2.305757301	-2.302058904	-2.298681207	-2.274178678
+3.2	30.88195657	27.71300184	27.73936509	22.67713409	18.67861748	20.39762968	28.75836127	30.34614573	30.30130649	31.82676924
-3.25	-5.007156372	-2.986828463	-2.979540809	-2.659106794	-2.136755986	-3.419238186	-2.886614612	-2.880380929	-2.842384084	-2.832443283
+3.25	30.01128388	26.88339569	26.95770239	22.03999865	18.11670373	19.91697571	27.72409345	29.0787552	29.20107073	30.52331145
-3.3	-7.128414154	-4.968478184	-4.955635034	-4.060000151	-3.389303093	-4.866004018	-4.800804065	-4.79421572	-4.816983813	-4.740390477
+3.3	27.84382687	24.24204463	24.55395829	20.09566648	16.40841581	18.33374548	24.50514816	25.16469947	25.81361423	26.44187645
-3.35	-7.87701416	-5.682978291	-5.66755395	-4.604030755	-3.761688043	-5.415447235	-5.516517639	-5.484308856	-5.508107509	-5.428746849
+3.35	27.07926499	23.31320247	23.76696681	19.41238575	15.8171701	17.75974954	23.39780368	23.82786421	24.62873775	25.02795766
-3.4	-10.23234127	-7.973080465	-8.144013575	-6.602652324	-5.238269729	-6.983403754	-7.703011274	-7.696283399	-7.723054733	-7.682252804
+3.4	24.68221353	20.39181205	21.29779335	17.25984623	13.98094175	15.90251688	19.99080348	19.99819933	21.06663037	21.4432285
-3.45	-11.05118796	-8.781685829	-8.953176093	-6.945064352	-5.73238721	-7.541855201	-8.512469046	-8.538443111	-8.611615372	-8.640607767
+3.45	23.85205441	19.37550723	20.43991067	16.50907266	13.35346891	15.2391979	18.83116636	18.83830364	19.90042474	19.91590711
-3.5	-13.71769665	-11.32797226	-11.49518943	-8.910651075	-7.374871533	-9.27620554	-11.33802651	-11.36709864	-11.44752234	-11.47974849
+3.5	20.92139895	16.20938092	17.76702857	14.22955557	11.47615781	13.12000329	15.31124714	15.73617807	16.31407439	16.32926392
-3.55	-14.58669564	-12.21326125	-12.37688945	-9.605407448	-7.965042394	-9.871708885	-12.32964621	-12.35969487	-12.44235351	-12.47560339
+3.55	19.95428953	15.11738679	16.85287186	13.39594187	10.83661028	12.37136607	14.25336077	14.74283583	15.09278157	15.10785136
-3.6	-17.25042804	-14.963463	-15.10908578	-11.86150556	-9.806243044	-11.70088968	-15.43561966	-15.46844485	-15.55717125	-15.59327326
+3.6	17.24709482	11.74185242	14.06409866	10.87114073	8.876176991	10.00225162	10.99041391	11.68746269	11.94485277	11.66567645

-3.65	-18.15362422	-15.90801276	-16.0450494	-12.67659527	-10.44106479	-12.32257779	-16.51031935	-16.63662883	-16.63457026	-16.82793444
+3.65	16.3304545	10.58594267	13.10986157	10.04012246	8.208638194	9.172315191	9.875553165	10.64644522	10.61502703	10.62691609
-3.7	-20.89448069	-18.80986372	-18.91259462	-15.15185667	-12.39834296	-14.22363634	-19.83435759	-20.33376737	-20.31617955	-20.48438905
+3.7	13.55174238	7.071222371	10.17576733	7.246777143	6.163234124	6.989535843	6.829344135	7.466396831	7.444146607	8.104770942
-3.75	-22.14016942	-19.79625124	-19.88452624	-15.97728483	-13.0658712	-15.20953667	-20.9713532	-21.60938639	-21.59181729	-21.76305221
+3.75	12.61921137	6.101071806	9.174543952	6.358812587	5.575129057	6.349989407	5.847608226	6.389959761	6.927555768	7.632033537
-3.8	-26.43450528	-22.79748242	-22.8717547	-18.39713019	-15.1030733	-17.97284068	-24.46933107	-25.54433385	-25.527022	-25.70610521
+3.8	9.816673493	4.209953664	6.997101617	4.757966908	4.09321884	4.4263716	4.495152621	4.858334185	5.325565288	6.036776642
-3.85	-27.92449044	-23.80828597	-23.88408118	-19.21071539	-15.79113575	-18.92680244	-25.74982026	-26.88685128	-27.16428237	-27.05096472
+3.85	8.884161218	3.809381595	6.230073039	4.32484186	3.749846861	3.785768525	4.495152621	4.858334185	5.325565288	5.44321149
-3.9	-32.54220189	-27.0096767	-26.93654408	-21.65915776	-17.87150478	-21.87000694	-29.50198685	-30.98531937	-31.06220344	-31.23246283
+3.9	6.10551094	3.809381595	4.966646744	3.482240034	3.084175878	2.994370127	4.495152621	4.858334185	5.325565288	5.423475418
-3.95	-34.12407297	-28.05297326	-27.95554531	-22.47471277	-18.56775392	-22.87406189	-30.86515938	-32.36996229	-32.5403216	-32.68539758
+3.95	5.188905167	3.809381595	4.517701277	3.225672726	2.8709238	2.994370127	4.495152621	4.858334185	5.325565288	5.423475418
-5	-38.96972135	-31.51262014	-31.00180575	-24.9063851	-20.65390136	-25.93782759	-35.0303759	-36.83423693	-36.89245197	-36.87830854
+5	4.62985805	3.809381595	3.80918373	3.029966393	2.624759097	2.994370127	4.495152621	4.858334185	5.325565288	5.423475418

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-4.629707761	-5.820134537	-5.995090021	-5.709040444	-6.463597069	-4.347116563	-4.592256884	-2.5753529
End Shear	39.12841368	46.86882868	47.75827825	43.59334961	47.29563043	35.05147662	36.98867807	23
-0.05	-4.629707761	-5.820134537	-5.995090021	-5.709040444	-6.463597069	-4.674934839	-4.938471719	-2.5753529
+0.05	35.68226722	43.25005351	43.92363117	40.06131168	43.16105139	32.48596365	34.26615724	21.60159695
-0.1	-7.348297581	-5.820134537	-5.995090021	-5.709040444	-6.463597069	-6.262510562	-6.603025605	-3.376054531
+0.1	30.94021542	38.06090813	38.44956363	35.11654773	37.50300011	28.67445527	30.22407186	19.47290411
-0.15	-8.280786976	-5.820134537	-5.995090021	-5.709040444	-6.463597069	-6.765075629	-7.13001474	-4.141315491
+0.15	29.40093597	36.35667423	36.65853571	33.59236282	35.82076313	27.41959504	28.8940413	18.7579578
-0.2	-11.0927472	-5.820134537	-5.995090021	-5.709040444	-6.463597069	-8.741161898	-9.220133126	-6.393189548
+0.2	24.93516828	31.34855017	31.41673416	28.75397432	30.65543276	23.72235283	24.97765698	16.66484065
-0.25	-12.03154038	-7.164673002	-7.164673002	-5.733976574	-6.463597069	-9.425791822	-9.939373807	-7.127747312
+0.25	23.50388973	29.72160177	29.72160177	27.23087328	29.03082749	22.52457022	23.71007392	15.99271723
-0.3	-14.83823441	-11.49344807	-11.49344807	-9.19776172	-9.19776172	-12.67348088	-13.35141541	-9.277223592
+0.3	19.97255937	25.33026444	25.33026444	22.90164413	24.27674073	19.37308804	20.39601494	14.15539848
-0.35	-15.76721238	-12.93884418	-12.93884418	-10.35432957	-10.35733909	-13.72600964	-14.4573137	-9.974218807
+0.35	19.05861306	23.95615041	23.95615041	21.4975105	22.73814118	18.34144019	19.31094434	13.49349415
-0.4	-18.52027749	-17.26080996	-17.26080996	-14.1420052	-14.48853414	-16.83851395	-17.72475153	-11.50355549
+0.4	16.35015708	19.93371786	19.93371786	17.42532169	18.2866097	15.3130716	16.12527481	11.53730831
-0.45	-19.42331932	-18.69157373	-18.69157373	-15.40167468	-15.82421097	-17.85470029	-18.79442135	-12.1649051
+0.45	15.46193763	18.63136066	18.63136066	16.12023111	16.86370658	14.32991948	15.09090549	10.89749131
-0.5	-22.0743966	-23.06863223	-23.17707983	-19.912651	-20.5819722	-20.7942172	-21.88864968	-14.07609471
+0.5	12.85570408	14.86128337	14.86128337	12.38525647	12.8038004	11.47666623	12.08860584	9.024849697
-0.55	-22.93538235	-24.62959823	-24.79400832	-21.43132702	-22.27437118	-21.73680461	-22.88084696	-14.68744349
+0.55	12.00991569	13.73320594	13.73320594	11.20593106	11.52628503	10.56177322	11.12579369	8.418640025
-0.6	-25.43611287	-29.14987258	-29.45700407	-25.92315202	-27.96029034	-24.449038	-25.73582947	-16.43833252
+0.6	9.55443575	10.21186052	10.21186052	8.163235631	8.204373947	7.942955219	8.369462878	6.664100672
-0.65	-26.23892353	-30.59845723	-30.94517085	-27.39346251	-29.79736937	-25.31370747	-26.64600787	-16.99281778
+0.65	8.768728893	9.127189978	9.127189978	7.295515943	7.335354259	7.072229001	7.452899758	6.103018394
-0.7	-28.5409479	-34.75307784	-35.19623203	-31.70011105	-35.10906177	-27.7857143	-29.24812032	-18.56281431
+0.7	6.524073475	6.084361416	6.084361416	4.861428865	4.861428865	4.611418696	4.862194859	4.501141936
-0.75	-29.26946209	-36.07027949	-36.53854246	-33.09533328	-36.80852092	-28.56814591	-30.07173254	-19.0535647
+0.75	5.81670096	5.145625339	5.145625339	4.110547233	4.110547233	3.899910955	4.113030519	3.996705973
-0.8	-31.91066018	-39.80222362	-40.32636688	-37.13663459	-41.67427243	-31.20055902	-32.86688069	-20.42206988
+0.8	3.831228743	2.873339903	2.873339903	2.313960151	2.313960151	2.344714689	2.47657811	2.582052718
-0.85	-33.36269395	-40.96903169	-41.50571707	-38.43004687	-43.21405299	-32.15423983	-33.88583157	-20.84222473
+0.85	3.218311002	2.398211473	2.398211473	1.933127347	1.933127347	1.967104041	2.077309613	2.145786064
-0.9	-37.89997725	-45.18911201	-46.02374169	-42.37987539	-47.56768006	-34.88839131	-36.80958688	-21.98864211
+0.9	1.686556076	1.097076991	1.097076991	0.875144927	0.875144927	1.058737611	1.119965878	0.951537719
-0.95	-39.35464088	-46.61245132	-47.59262534	-43.55771039	-48.92572251	-35.7556538	-37.7378315	-22.3313367
+0.95	1.230276942	0.762108529	0.762108529	0.762729152	0.835371864	0.782580458	0.828849098	0.595040818
-1	-43.52020505	-50.64744493	-52.0648331	-47.85850398	-52.76876597	-38.2173466	-40.37517693	-23.23506952
+1	5.14E-01	0.762108529	0.762108529	0.762729152	0.835371864	0.579408514	0.609903699	0.369568633
(Span 2) -2	-2.372091414	-3.51572559	-3.51572559	-3.518588622	-3.853700821	-2.672901913	-2.813580961	-1.704877789
+2	45.57905071	52.09753209	54.00811728	49.97532062	56.20419719	38.59445536	40.8255932	24.19331438
-2.05	-2.894139121	-3.51572559	-3.51572559	-3.518588622	-3.853700821	-2.672901913	-2.813580961	-1.704877789
+2.05	43.34445286	49.85848098	51.54297969	47.61375788	53.2475484	36.99348541	39.11655531	23.17770876
-2.1	-4.422895193	-3.51572559	-3.51572559	-3.518588622	-3.853700821	-3.566542047	-3.76372429	-1.704877789
+2.1	39.82877788	46.27283538	47.62841159	43.88360078	48.64331617	34.54989631	36.50974058	21.57679893
-2.15	-5.444480658	-3.51572559	-3.51572559	-3.518588622	-3.853700821	-4.348344582	-4.582721353	-2.205516812
+2.15	37.40065493	43.75885528	44.90409526	41.29987732	45.49523841	32.87175287	34.7211522	20.49782623
-2.2	-7.144206762	-4.116693215	-4.116693215	-3.518588622	-3.853700821	-5.497206404	-5.786533057	-3.420629254
+2.2	33.67452883	39.85020014	40.69701882	37.03301379	40.50378779	30.2576785	31.93813344	19.46220841
-2.25	-8.374974966	-5.723457002	-5.723457002	-4.586260424	-4.586260424	-6.719543011	-7.084724394	-4.492580202

+2.25	31.15932752	36.95171397	37.61314348	34.11298671	37.70673544	28.53186049	30.10201543	18.64510042
-2.3	-10.34365058	-8.382445522	-8.382445522	-6.786548556	-6.786548556	-9.067310161	-9.550053541	-6.194470794
+2.3	27.38242306	32.45047223	32.84903033	29.99724729	33.32580012	25.99148307	27.40128061	17.32925777
-2.35	-12.43066573	-11.43435716	-11.43435716	-9.317797629	-9.433887552	-11.4901326	-12.09487642	-7.89591575
+2.35	23.98700046	28.7754278	28.91360583	26.34690989	28.76157512	23.43631343	24.68849794	15.91734121
-2.4	-13.87181258	-13.73781179	-13.73781179	-11.33489311	-11.60903707	-13.09939934	-13.78884141	-9.023217765
+2.4	22.30776474	26.21203072	26.25985657	23.91548202	25.8751245	21.73320218	22.88254456	14.9294386
-2.45	-16.084337	-16.98402321	-16.98402321	-14.55685272	-15.38766304	-15.48724559	-16.30236378	-10.69355775
+2.45	19.80716905	22.62175494	22.62175494	20.31117307	21.89470063	19.37326105	20.39290637	13.38775933
-2.5	-18.32913566	-20.34671453	-20.34671453	-17.96683286	-19.31159907	-17.836388	-18.77514526	-12.32701899
+2.5	17.56908466	19.20904728	19.20904728	16.80582269	18.03429766	17.05451283	17.95211877	11.78644275
-2.55	-19.82766032	-22.62878076	-22.62878076	-20.31818742	-21.9024026	-19.37683028	-20.39666346	-13.38875969
+2.55	16.08136868	16.97728383	16.97728383	14.55031954	15.49790258	15.48356211	16.29848643	10.69251454
-2.6	-22.29328727	-26.22002733	-26.26816877	-23.9226418	-25.88302256	-21.73716084	-22.88673914	-14.93039157
+2.6	13.87991075	13.7313879	13.7313879	11.32879033	11.6172703	13.09565774	13.78490289	9.022157242
-2.65	-23.98026875	-28.78323961	-28.92167964	-26.35410836	-28.77075669	-23.44027788	-24.69270303	-15.91826548
+2.65	12.44609182	11.58045343	11.58045343	9.312039679	9.427698542	11.49953725	12.10477605	7.894847479
-2.7	-26.94324728	-32.49038141	-32.82775062	-30.0044233	-33.334675	-25.99544817	-27.40549246	-17.33012606
+2.7	10.36970058	8.376761182	8.376761182	6.899527564	6.899527564	9.06366603	9.546226657	6.193400883
-2.75	-29.45691281	-35.30826269	-35.88215358	-32.63184331	-36.27812858	-27.69171726	-29.20845208	-18.21883279
+2.75	9.048744381	6.573130969	6.573130969	5.266606186	5.266606186	7.498896899	7.903054721	5.058014905
-2.8	-33.64564065	-39.78203732	-40.6294428	-36.92340393	-40.51195679	-30.36755164	-32.05501307	-19.462968
+2.8	7.185851512	4.112032056	4.112032056	3.518594903	3.853674081	5.501754336	5.791320354	3.419828583
-2.85	-37.58452813	-43.76674576	-44.91261116	-41.24885301	-45.44585445	-32.87574413	-34.72540354	-20.61441892
+2.85	5.425919534	3.515679398	3.515679398	3.518594903	3.853674081	4.34654793	4.580839183	2.204804757
-2.9	-40.00867377	-46.2804846	-47.63671309	-43.89118675	-48.65258287	-34.55375657	-36.51385611	-21.71529875
+2.9	4.367723777	3.515679398	3.515679398	3.518594903	3.853674081	3.5646623	3.761755143	1.704881309
-2.95	-43.51594835	-49.86563247	-51.55081367	-47.62096813	-53.25649854	-36.99736555	-39.12069425	-23.30945209
+2.95	2.892028771	3.515679398	3.515679398	3.518594903	3.853674081	2.672875216	2.813552859	1.704881309
-3	-46.81743178	-53.17103133	-55.19685462	-51.11797937	-57.64833979	-39.35795846	-41.64140078	-24.80375685
+3	2.372132301	3.515679398	3.515679398	3.518594903	3.853674081	2.672875216	2.813552859	1.704881309
(Span 3) -4	-5.14E-01	-0.762098516	-0.762098516	-0.762730513	-0.835366068	-0.579402727	-0.609897608	-0.369569396
+4	41.96066264	49.33542594	50.60623909	46.45346603	51.48644952	37.41690502	39.51717507	23.09645273
-3.05	-8.01E-01	-0.762098516	-0.762098516	-0.762730513	-0.835366068	-0.579402727	-0.609897608	-0.369569396
+3.05	40.56640848	47.98950583	49.11452908	45.01898395	50.22724586	36.59604669	38.63774495	22.80565219
-3.1	-2.168590605	-1.511839964	-1.511839964	-1.206808013	-1.206808013	-1.350081262	-1.359057763	-1.32976456
+3.1	36.19044011	43.72083592	44.40938771	41.18023992	46.15364168	33.99450371	35.85328548	21.80846787
-3.15	-2.670934964	-1.945944682	-1.945944682	-1.566886902	-1.566886902	-1.589496055	-1.673153742	-1.727589117
+3.15	34.67337279	42.22767639	42.77155254	39.68640081	44.7017039	33.08282872	34.87838864	21.4359101
-3.2	-4.344942093	-3.370927934	-3.370927934	-2.712655649	-2.712655649	-2.722754859	-2.874468351	-3.03556508
+3.2	30.88195657	38.58847676	39.09700724	35.80732203	40.08298669	30.2244354	31.82183964	20.31410404
-3.25	-5.007156372	-4.252498593	-4.252498593	-3.396017191	-3.396017191	-3.221811065	-3.398995148	-3.507322235
+3.25	30.01128388	37.34386508	37.83378894	34.45952683	38.46037406	29.40518419	30.95282547	19.87108421
-3.3	-7.128414154	-7.067899674	-7.067899674	-5.648004782	-5.648004782	-5.355524797	-5.645632251	-5.019815887
+3.3	27.84382687	33.39280963	33.80722513	30.27513605	33.36271909	26.97851222	28.39843392	18.43718985
-3.35	-7.87701416	-8.082924228	-8.082924228	-6.490020752	-6.490020752	-6.124157816	-6.454841492	-5.553986109
+3.35	27.07926499	32.00733659	32.38962243	28.83893218	31.59148997	26.15433219	27.53087599	17.92571296
-3.4	-10.23234127	-11.33601375	-11.33601375	-9.062366205	-9.104745218	-8.797643799	-9.269088288	-7.236438696
+3.4	24.68221353	27.66220866	27.92555687	24.42939787	26.08107535	23.56030939	24.80032568	16.2967464
-3.45	-11.05118796	-12.4845614	-12.4845614	-10.06879849	-10.29680908	-9.67109845	-10.18840848	-7.821505545
+3.45	23.85205441	26.15488012	26.37066873	22.93150773	24.1832887	22.65604311	23.84846643	15.72367285
-3.5	-13.71769665	-16.10117758	-16.10117758	-13.60573525	-14.12823885	-12.4148313	-13.07584475	-9.639358815
+3.5	20.92139895	21.52032621	21.52039617	18.37699531	18.87235527	19.82827935	20.871873	13.92022834
-3.55	-14.58669564	-17.35853128	-17.35853128	-14.85147423	-15.53250551	-13.36640802	-14.07713027	-10.26379437
+3.55	19.95428953	20.10607985	20.10607985	16.84414073	17.16753103	18.84827423	19.84028866	13.29243317
-3.6	-17.25042804	-21.2644563	-21.2644563	-18.7655875	-19.74983312	-16.31484144	-17.17915706	-12.18248611
+3.6	17.24709482	15.81522447	15.81522447	12.86018733	13.12354147	15.79972827	16.63129291	11.33510824

-3.65	**-18.15362422**	**-22.60590958**	**-22.60590958**	**-20.12369072**	**-21.23446207**	**-17.32477657**	**-18.24155174**	**-12.83477534**
+3.65	**16.3304545**	**14.37404397**	**14.37404397**	**11.57228738**	**11.74610467**	**14.7586314**	**15.54237004**	**10.65945326**
-3.7	**-20.89448069**	**-26.72698493**	**-26.72698493**	**-24.33481414**	**-25.84888212**	**-20.41860622**	**-21.49558647**	**-14.81974641**
+3.7	**13.55174238**	**10.03940754**	**10.03940754**	**8.034522512**	**8.034522512**	**11.60088923**	**12.22449984**	**8.568844476**
-3.75	**-22.14016942**	**-28.12776983**	**-28.12776983**	**-25.77855932**	**-27.43431662**	**-21.46711269**	**-22.59820948**	**-15.4883734**
+3.75	**12.61921137**	**8.595974123**	**8.595974123**	**6.87953909**	**6.879677928**	**10.5182301**	**11.08705601**	**7.852188321**
-3.8	**-26.43450528**	**-33.00860645**	**-33.15052758**	**-30.2566145**	**-32.30661956**	**-24.94776582**	**-26.27529772**	**-17.50506448**
+3.8	**9.816673493**	**5.820105835**	**5.995040191**	**5.708952346**	**6.463472123**	**8.149822414**	**8.600026816**	**5.648891615**
-3.85	**-27.92449044**	**-34.67877908**	**-34.89867308**	**-31.8798147**	**-33.96316871**	**-26.18073537**	**-27.58135167**	**-18.17849965**
+3.85	**8.884161218**	**5.820105835**	**5.995040191**	**5.708952346**	**6.463472123**	**7.300892564**	**7.70971017**	**4.898111442**
-3.9	**-32.54220189**	**-39.78977344**	**-40.26997551**	**-36.65658994**	**-39.20445857**	**-29.94399275**	**-31.57004046**	**-20.19235027**
+3.9	**6.10551094**	**5.820105835**	**5.995040191**	**5.708952346**	**6.463472123**	**5.744552574**	**6.059934934**	**2.57534406**
-3.95	**-34.12407297**	**-41.52023382**	**-42.09548642**	**-38.35594393**	**-41.17533183**	**-31.21502324**	**-32.91796521**	**-20.85907885**
+3.95	**5.188905167**	**5.820105835**	**5.995040191**	**5.708952346**	**6.463472123**	**5.215470752**	**5.505204069**	**2.57534406**
-5	**-38.96972135**	**-46.76386301**	**-47.64694677**	**-43.53930441**	**-47.2322518**	**-35.05746286**	**-36.99503165**	**-22.95648193**
+5	**4.62985805**	**5.820105835**	**5.995040191**	**5.708952346**	**6.463472123**	**4.347137887**	**4.592289754**	**2.57534406**

3-Span: Shear (Max and Min) Raw Data Results - 20' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	-4.629707761	-6.094523461	-5.740762956	-5.21581367	-6.130392299	-6.268858723
End Shear	39.12841368	45.90990607	42.8075586	41.82054753	46.07856154	46.15690005
-0.05	-4.629707761	-6.151792013	-6.053166931	-5.616245897	-6.594679765	-6.570948162
+0.05	35.68226722	42.39886071	39.48948033	38.7819887	42.48212534	42.77001745
-0.1	-7.348297581	-7.528457038	-7.674673243	-7.496872196	-8.499638595	-8.222878908
+0.1	30.94021542	37.30891927	34.73946328	34.25943608	37.41092102	37.55365908
-0.15	-8.280786976	-8.258667322	-8.176451658	-8.091063766	-9.224531198	-8.876030033
+0.15	29.40093597	35.62555978	33.17159201	32.76815622	35.75148056	35.87648522
-0.2	-11.0927472	-10.47939885	-10.41588639	-10.00110699	-11.47967594	-10.67313054
+0.2	24.93516828	30.67421992	28.65421255	28.36696934	30.83495674	30.91172319
-0.25	-12.03154038	-11.15539892	-11.21845024	-10.71545092	-12.64747139	-11.57264613
+0.25	23.50388973	29.08470202	27.16651813	26.92981474	29.22318068	29.28547939
-0.3	-14.83823441	-14.43877107	-14.05551436	-14.26804373	-16.64936019	-14.88103038
+0.3	19.97255937	24.40945995	22.78684733	23.0314005	24.49613144	24.5197381
-0.35	-15.76721238	-15.52025792	-15.10654504	-15.43058048	-17.94210506	-15.94207061
+0.35	19.05861306	22.8892056	21.36170768	21.79872722	23.06970604	22.97525173
-0.4	-18.52027749	-19.18843372	-18.23727016	-18.84871114	-21.69591187	-19.33232933
+0.4	16.35015708	18.26243264	17.23227216	18.1823444	19.19918954	18.54618873
-0.45	-19.42331932	-20.10189506	-19.69911465	-19.96386081	-22.90552456	-20.36103353
+0.45	15.46193763	16.76122359	15.95325337	17.00895117	17.94590356	17.15509018
-0.5	-22.0743966	-25.14945055	-24.47160975	-23.23218256	-26.4086762	-24.90231237
+0.5	12.85570408	12.53733914	12.32631603	13.60543686	14.3175683	12.94842531
-0.55	-22.93538235	-26.77939725	-26.01310051	-24.29483776	-27.53430792	-26.38377066
+0.55	12.00991569	11.23066393	11.54663152	12.51468887	13.15693335	11.68317542
-0.6	-25.43611287	-31.68974314	-30.54978084	-27.39799912	-30.78422593	-30.72526679
+0.6	9.55443575	8.312840342	8.682151147	9.227181971	9.842327435	8.481887202
-0.65	-26.23892353	-33.2947898	-32.02147034	-28.40305072	-32.16037447	-32.13672953
+0.65	8.768728893	7.452191243	7.777453988	8.282615139	8.817059622	7.667727357
-0.7	-28.5409479	-38.03326173	-36.2301736	-31.70484182	-36.41650484	-36.25796884
+0.7	6.524073475	5.3634323	5.109391898	5.655539847	5.99490542	5.357100753
-0.75	-29.26946209	-39.54558594	-37.56399971	-32.49902895	-37.78662014	-37.66130002
+0.75	5.81670096	4.569229209	4.739010379	4.840430042	5.120183879	4.635814674
-0.8	-31.91066018	-43.79065956	-41.35709648	-36.02424464	-41.7941574	-41.77750968
+0.8	3.831228743	3.109525791	3.322320769	2.979176753	3.081981188	2.946660625
-0.85	-33.36269395	-45.07900587	-42.55170686	-37.21670617	-43.13429983	-43.14979348
+0.85	3.218311002	2.728237429	2.875632234	2.605776974	2.679904662	2.616245334
-0.9	-37.89997725	-48.74699438	-46.26260403	-40.71333708	-46.97942693	-46.96501274
+0.9	1.686556076	1.653312541	1.71326062	1.555760046	1.555522747	1.678800453
-0.95	-39.35464088	-49.92859687	-47.62625772	-41.82470083	-48.20037119	-48.12014211
+0.95	1.230276942	1.321295665	1.379675202	1.235644608	1.217217286	1.384373424
-1	-43.52020505	-53.1997505	-52.31300517	-44.97986495	-51.53592684	-51.99406908
+1	5.14E-01	0.827730989	0.767871209	0.692306301	0.835531501	0.835549661
(Span 2) -2	-2.372091414	-3.818452292	-3.542309773	-3.193716869	-3.854437265	-3.854521043
+2	45.57905071	51.70382202	53.95199817	45.89974636	51.00624114	53.5586911
-2.05	-2.894139121	-4.083326392	-4.012054586	-3.698747487	-3.864705199	-4.300077072
+2.05	43.34445286	49.77694361	51.14695019	44.02457669	48.85702421	51.00293511
-2.1	-4.422895193	-5.073751513	-4.852123099	-4.62356776	-5.227554363	-4.971256331
+2.1	39.82877788	46.72072938	46.97663563	40.99606082	45.56867627	47.10601881
-2.15	-5.444480658	-5.655480423	-5.403532954	-5.250117478	-6.144989143	-5.763927878
+2.15	37.40065493	44.5344338	44.05903741	38.85686227	43.29939336	44.45306223
-2.2	-7.144206762	-6.414749888	-6.232810028	-7.048069634	-7.430221907	-7.303912447
+2.2	33.67452883	41.05307231	39.5071942	35.50830522	39.75613583	40.38153806
-2.25	-8.374974966	-7.215675636	-7.031255188	-8.550338995	-9.279356869	-8.495694306

+2.25	**31.15932752**	**38.60998352**	**36.53769481**	**33.28796478**	**37.41022239**	**37.70020331**
-2.3	**-10.34365058**	**-9.584026268**	**-8.828596482**	**-10.87575982**	**-12.1456743**	**-10.77208787**
+2.3	**27.38242306**	**34.78335858**	**32.95584503**	**30.0109625**	**33.92820139**	**33.77775422**
-2.35	**-12.43066573**	**-12.28073124**	**-11.42592185**	**-13.27521805**	**-14.98846038**	**-13.61064812**
+2.35	**23.98700046**	**30.96745522**	**29.18817926**	**26.72912889**	**30.40828712**	**30.16877877**
-2.4	**-13.87181258**	**-14.37465097**	**-13.38924152**	**-14.91107701**	**-16.86992648**	**-15.69903657**
+2.4	**22.30776474**	**28.37243682**	**26.71054106**	**24.63579174**	**28.05175939**	**27.82429775**
-2.45	**-16.084337**	**-17.70725258**	**-16.48089609**	**-17.41184903**	**-19.67058388**	**-18.90900024**
+2.45	**19.80716905**	**24.39504164**	**22.87915739**	**21.67663729**	**24.51877076**	**24.42766289**
-2.5	**-18.32913566**	**-21.69831294**	**-20.25016671**	**-19.96016409**	**-22.44422238**	**-22.20004586**
+2.5	**17.56908466**	**20.32760709**	**18.91185706**	**19.1022118**	**21.51857732**	**21.09004152**
-2.55	**-19.82766032**	**-24.40066741**	**-22.88004608**	**-21.68054333**	**-24.52408016**	**-24.43256378**
+2.55	**16.08136868**	**17.70172925**	**16.48014664**	**17.40804717**	**19.66637083**	**18.90428465**
-2.6	**-22.29328727**	**-28.37793352**	**-26.71139798**	**-24.64032224**	**-28.05709727**	**-27.82927683**
+2.6	**13.87991075**	**14.37020402**	**13.38855735**	**14.90736306**	**16.8656806**	**15.69444414**
-2.65	**-23.98026875**	**-30.97287649**	**-29.18901581**	**-26.84493652**	**-30.41361161**	**-30.27152311**
+2.65	**12.44609182**	**12.27641816**	**11.44114231**	**13.27155892**	**14.98417991**	**13.60615156**
-2.7	**-26.94324728**	**-34.7888474**	**-32.95668612**	**-30.01591502**	**-33.93349838**	**-33.78300337**
+2.7	**10.36970058**	**9.580727642**	**8.828075918**	**10.8722158**	**12.14136685**	**10.76857521**
-2.75	**-29.45691281**	**-37.3603121**	**-35.36872216**	**-32.20341542**	**-36.26039179**	**-36.3920812**
+2.75	**9.048744381**	**7.985116717**	**7.59452488**	**9.313177511**	**10.23300203**	**9.108869671**
-2.8	**-33.64564065**	**-41.05813795**	**-39.50826514**	**-35.51347694**	**-39.76161418**	**-40.387535**
+2.8	**7.185851512**	**6.413736161**	**6.232621601**	**7.044895774**	**7.428332401**	**7.301340974**
-2.85	**-37.58452813**	**-44.53917802**	**-44.06006526**	**-38.86182953**	**-43.30463981**	**-44.45895916**
+2.85	**5.425919534**	**5.65439851**	**5.403345062**	**5.248696427**	**6.142946178**	**5.762238293**
-2.9	**-40.00867377**	**-46.72522941**	**-46.97762866**	**-41.00083353**	**-45.57374826**	**-47.11178096**
+2.9	**4.367723777**	**5.114535548**	**4.851936288**	**4.618538821**	**5.225387429**	**4.935455125**
-2.95	**-43.51594835**	**-49.78106001**	**-51.14788311**	**-44.02900533**	**-48.86208277**	**-51.00869935**
+2.95	**2.892028771**	**4.082042772**	**4.01185913**	**3.697432782**	**3.863544431**	**4.299104951**
-3	**-46.81743178**	**-53.04710833**	**-55.55428701**	**-46.79209235**	**-52.03067811**	**-54.7932919**
+3	**2.372132301**	**3.818450101**	**3.542306977**	**3.193640994**	**3.854416789**	**3.854501226**
(Span 3) -4	**-5.14E-01**	**-0.827730514**	**-0.767870603**	**-0.692289853**	**-0.835527062**	**-0.835545366**
+4	**41.96066264**	**52.15133364**	**50.66904959**	**43.95443409**	**50.49712493**	**50.6237346**
-3.05	**-8.01E-01**	**-1.016918942**	**-1.061244123**	**-0.934830527**	**-0.885475077**	**-0.994607914**
+3.05	**40.56640848**	**51.06045561**	**48.97564924**	**42.90218084**	**49.43002615**	**49.24532114**
-3.1	**-2.168590605**	**-2.000593103**	**-2.060964534**	**-1.894567012**	**-1.917314122**	**-1.983676497**
+3.1	**36.19044011**	**47.54209416**	**44.91585049**	**39.56887996**	**45.81241989**	**45.7649941**
-3.15	**-2.670934964**	**-2.359286675**	**-2.443773074**	**-2.244977473**	**-2.292506841**	**-2.295186257**
+3.15	**34.67337279**	**46.32608338**	**43.74759217**	**38.40283397**	**44.53038269**	**44.53094807**
-3.2	**-4.344942093**	**-3.502286079**	**-3.782806696**	**-3.364281171**	**-3.497916534**	**-3.285543241**
+3.2	**30.88195657**	**42.46101707**	**40.12668446**	**34.83878449**	**40.51042395**	**40.50788055**
-3.25	**-5.007156372**	**-3.902273518**	**-4.255398615**	**-4.061561904**	**-4.284784775**	**-3.944389325**
+3.25	**30.01128388**	**41.10173395**	**38.86226001**	**33.64322052**	**39.12522418**	**39.13573197**
-3.3	**-7.128414154**	**-6.139194877**	**-5.846052817**	**-6.505805306**	**-6.90782472**	**-6.107114198**
+3.3	**27.84382687**	**36.56475623**	**34.86079469**	**30.74836613**	**35.01524052**	**34.89752131**
-3.35	**-7.87701416**	**-6.619862793**	**-6.900215147**	**-7.382147435**	**-7.849231411**	**-6.877925987**
+3.35	**27.07926499**	**34.98507618**	**33.45784526**	**29.43645546**	**33.5961811**	**33.52354824**
-3.4	**-10.23234127**	**-9.20062461**	**-9.612548139**	**-10.24002478**	**-10.9226931**	**-9.319189184**
+3.4	**24.68221353**	**30.14442261**	**29.04278151**	**26.37342013**	**29.71728196**	**29.2893803**
-3.45	**-11.05118796**	**-10.1066258**	**-10.56563002**	**-11.30103816**	**-12.02819704**	**-10.47505278**
+3.45	**23.85205441**	**28.49567093**	**27.526307**	**25.33885786**	**28.63385825**	**27.84199529**
-3.5	**-13.71769665**	**-13.81962219**	**-13.48139658**	**-14.72407828**	**-15.50897308**	**-14.25120316**
+3.5	**20.92139895**	**23.48623192**	**23.03167657**	**22.15100227**	**25.25670498**	**23.39783004**
-3.55	**-14.58669564**	**-15.34425252**	**-14.69984023**	**-15.85916995**	**-16.75874233**	**-15.66876832**
+3.55	**19.95428953**	**21.80361046**	**21.30387334**	**21.06140927**	**24.08888909**	**21.88385925**
-3.6	**-17.25042804**	**-19.7148188**	**-18.57697371**	**-19.37813246**	**-20.47767562**	**-19.97066578**
+3.6	**17.24709482**	**17.6828126**	**17.20436445**	**17.71608583**	**20.45979324**	**18.3346349**

-3.65	**-18.15362422**	**-21.27177997**	**-19.95836499**	**-20.58414744**	**-21.76842922**	**-21.46255041**
+3.65	**16.3304545**	**16.5792196**	**16.14990896**	**16.57654544**	**19.20840832**	**16.97803353**
-3.7	**-20.89448069**	**-25.95672352**	**-24.23174555**	**-24.28087221**	**-26.05886899**	**-26.0944169**
+3.7	**13.55174238**	**13.33384911**	**12.80594738**	**13.08912191**	**15.32996642**	**13.79444617**
-3.75	**-22.14016942**	**-27.51592524**	**-25.69234813**	**-25.53447136**	**-27.63529547**	**-27.68372919**
+3.75	**12.61921137**	**12.21412292**	**11.98957425**	**11.90476732**	**13.99588918**	**12.69162415**
-3.8	**-26.43450528**	**-32.29772341**	**-30.15337477**	**-29.82681014**	**-32.46892449**	**-32.56077613**
+3.8	**9.816673493**	**9.76878884**	**9.581183954**	**9.454001989**	**10.75221982**	**10.09752139**
-3.85	**-27.92449044**	**-33.95920643**	**-31.65986279**	**-31.29449017**	**-34.10847386**	**-34.21639873**
+3.85	**8.884161218**	**9.028675654**	**8.714866121**	**8.667347912**	**10.00060648**	**9.498723979**
-3.9	**-32.54220189**	**-39.00739254**	**-36.31964835**	**-35.76677278**	**-39.08496954**	**-39.24612635**
+3.9	**6.10551094**	**7.01826518**	**7.154261719**	**6.88394943**	**7.880670976**	**7.580104067**
-3.95	**-34.12407297**	**-40.70471186**	**-37.90364383**	**-37.27487553**	**-40.78353502**	**-40.93724629**
+3.95	**5.188905167**	**6.590757457**	**6.614295025**	**6.257202076**	**7.245827226**	**7.078842015**
-5	**-38.96972135**	**-45.81269388**	**-42.66549451**	**-41.82743269**	**-45.91198986**	**-46.52104199**
+5	**4.62985805**	**6.09448171**	**5.740756983**	**5.215834589**	**6.13032474**	**6.268835657**

3-Span: Moment (Max and Min) Raw Data Results - 20’ Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-4.629708	-3.809367	-3.809172	-3.029958	-2.624755	-2.994387	-4.495253	-4.858364	-5.325608	-5.423532
+0.05	35.687171	28.809496	28.968748	23.285025	19.309779	23.881231	32.234494	34.018065	34.085927	34.071560
-0.1	-9.259416	-7.618733	-7.618343	-6.059916	-5.249511	-5.988774	-8.990507	-9.716727	-10.651216	-10.847065
+0.1	65.057732	53.596307	53.863590	43.311535	36.005740	43.727668	58.989817	62.465559	62.532164	61.892753
-0.15	-13.889123	-11.428100	-11.427515	-9.089874	-7.874266	-8.983161	-13.485760	-14.575091	-15.976824	-16.270597
+0.15	87.641430	74.494857	74.684967	60.068474	50.063594	59.667387	80.424675	84.703629	84.653633	84.914032
-0.2	-18.518831	-15.237466	-15.236687	-12.119832	-10.499021	-11.977548	-17.981014	-19.433454	-21.302432	-21.694130
+0.2	104.863791	91.356489	91.468256	73.575031	61.483725	70.929432	97.929672	102.343143	103.245300	102.735914
-0.25	-23.148539	-19.046833	-19.045859	-15.149789	-13.123777	-14.971936	-22.476267	-24.291818	-26.628040	-27.117662
+0.25	116.655228	104.249202	104.329409	83.880679	70.291061	79.407452	111.163858	115.176702	120.702671	120.658180
-0.3	-27.778247	-22.856199	-22.855030	-18.179747	-15.748532	-17.966323	-26.971520	-29.150181	-31.953648	-32.541195
+0.3	125.341987	113.275833	113.448630	91.065059	76.535156	85.398658	119.968200	123.101033	132.848282	133.199570
-0.35	-32.407954	-26.665566	-26.664202	-21.209705	-18.373287	-20.960710	-31.466774	-34.008545	-37.279256	-37.964727
+0.35	133.410291	118.574066	118.911099	95.195133	80.290095	90.765994	128.515876	131.480295	139.956734	140.206735
-0.4	-37.037662	-30.474932	-30.473374	-24.239663	-20.998043	-23.955097	-35.962027	-38.866908	-42.604864	-43.388260
+0.4	137.970946	120.316440	120.838279	96.849484	81.654764	93.728430	133.066428	138.037506	141.883227	142.218028
-0.45	-41.667370	-34.284299	-34.282546	-27.269621	-23.622798	-26.949484	-40.457281	-43.725272	-47.930472	-48.811792
+0.45	139.157439	118.710315	119.450641	95.826782	81.160791	94.382957	133.448436	139.717989	144.126077	144.027838
-0.5	-46.297078	-38.093665	-38.091717	-30.299579	-26.247553	-29.943871	-44.952534	-48.583635	-53.256081	-54.235324
+0.5	137.136708	118.727869	119.231047	95.789569	81.769837	92.848340	132.101942	136.818496	143.891842	143.860641
-0.55	-50.926785	-41.903032	-41.900889	-33.329537	-28.872309	-32.938258	-49.447787	-53.441999	-58.581689	-59.658857
+0.55	132.109073	115.977810	116.928858	93.573765	79.955840	89.265095	127.281669	131.272904	138.625079	138.579687
-0.6	-55.556493	-45.712398	-45.710061	-36.359495	-31.497064	-35.932645	-53.943041	-58.300362	-63.907297	-65.082389
+0.6	124.286511	109.873133	111.244480	89.223630	75.842208	83.795518	118.777240	121.841814	128.784419	129.327049
-0.65	-60.186201	-49.521765	-49.519232	-39.389452	-34.121819	-38.927033	-58.438294	-63.158726	-69.232905	-70.505922
+0.65	113.993476	100.660162	102.411535	82.328073	69.576872	76.623576	106.918495	109.230136	118.720091	119.110549
-0.7	-64.815909	-53.331132	-53.328404	-42.419410	-36.746575	-41.921420	-62.933548	-68.017089	-74.558513	-75.929454
+0.7	101.535555	88.620141	90.700280	73.097660	61.332405	68.610976	94.183819	97.538405	104.114064	104.358949
-0.75	-69.445616	-57.140498	-57.137576	-45.449368	-39.371330	-44.915807	-67.428801	-72.875453	-79.884121	-81.352987
+0.75	88.947237	74.069122	76.417544	61.777400	51.306044	60.366650	78.339580	81.602437	85.104758	85.188778
-0.8	-74.075324	-60.949865	-60.946748	-48.479326	-41.996085	-47.910194	-71.924054	-77.733816	-85.209729	-86.776519
+0.8	73.711906	57.357967	59.906657	49.450885	40.721238	49.822679	59.613697	61.916425	62.119044	62.359779
-0.85	-78.705032	-64.759231	-64.755919	-51.509284	-44.620841	-50.904581	-76.419308	-82.592180	-90.535337	-92.200052
+0.85	55.696590	39.158879	41.528048	35.831856	29.070447	36.300064	38.346218	38.859465	38.837633	39.693394
-0.9	-85.694019	-71.946760	-74.248097	-59.352991	-51.465344	-53.898968	-80.914561	-87.450543	-96.337402	-101.032036
+0.9	40.073910	19.305436	22.858853	21.578336	17.660834	23.925386	18.786598	18.699005	18.699005	18.699005
-0.95	-101.186888	-85.783336	-87.713360	-72.548710	-63.156245	-59.966116	-90.994158	-100.447009	-109.248003	-113.809903
+0.95	24.052441	10.194664	13.856145	14.195727	11.538455	11.844759	11.465747	12.259877	12.979372	12.983158
-1	-126.136675	-99.938532	-103.238290	-86.196263	-75.716433	-76.110885	-104.717849	-113.713631	-122.287907	-126.781480
+1	10.284029	10.731226	10.734305	8.537706	7.205666	7.069151	12.069207	12.905134	13.662497	13.666482
(Span 2) -2	-126.136675	-99.938532	-103.238290	-86.196263	-75.716433	-76.110885	-104.717849	-113.713631	-122.287907	-126.781480
+2	10.284029	10.731226	10.734305	8.537706	7.205666	7.069151	12.069207	12.905134	13.662497	13.666482
-2.05	-94.639090	-70.713908	-81.322847	-63.473712	-55.370134	-54.476855	-69.734063	-74.334194	-78.904261	-81.731925
+2.05	23.781952	9.447219	14.391585	12.538935	10.025720	11.525047	9.122021	9.094924	9.565727	9.568517
-2.1	-68.728957	-55.125916	-64.464434	-47.601694	-40.949760	-36.102171	-54.707655	-60.260138	-66.150311	-68.282212
+2.1	43.213097	21.515655	24.535970	20.929904	16.517072	26.816926	20.770738	20.796510	20.774082	20.736582
-2.15	-48.919035	-43.971047	-49.504432	-35.163584	-30.223916	-28.966305	-49.454731	-52.879200	-55.981947	-56.369434
+2.15	61.269489	44.441044	45.198669	35.592087	28.712016	41.306991	42.944873	42.944225	42.950688	42.871197
-2.2	-39.565825	-40.753274	-41.225977	-33.077339	-28.100008	-26.846570	-45.835666	-49.009534	-51.885225	-51.900383
+2.2	80.700823	66.089428	65.386551	52.187122	43.017745	55.040237	68.462199	69.543644	72.639563	72.655520

-2.25	-37.252872	-37.535501	-38.700304	-31.499469	-27.092417	-24.726834	-42.216600	-45.139869	-47.788502	-47.802463
+2.25	108.028983	85.988812	85.356695	67.805065	56.673330	73.112649	91.202387	93.958648	101.709208	101.784555
-2.3	-34.940299	-34.317728	-36.174687	-29.939467	-26.142302	-22.607099	-38.597535	-41.270203	-43.691779	-43.704544
+2.3	122.524945	99.588558	99.528050	79.149825	66.576308	82.828294	107.420197	111.957683	122.178185	122.250712
-2.35	-32.627726	-31.099956	-33.678596	-28.438658	-25.286561	-20.487363	-34.978470	-37.400537	-39.595056	-39.606624
+2.35	135.761431	112.675968	112.481725	89.409210	75.540816	91.822540	123.271477	128.722736	140.081706	142.428375
-2.4	-30.315154	-27.882183	-31.187806	-27.408941	-24.547260	-18.367628	-31.359405	-33.530871	-35.498334	-35.508704
+2.4	140.815837	119.993613	119.990486	95.445933	80.765559	95.892972	133.629048	142.075925	150.847903	155.559519
-2.45	-28.002581	-24.664410	-28.697016	-26.642329	-23.954073	-16.247892	-27.740339	-29.661205	-31.401611	-31.410785
+2.45	140.138277	124.827399	124.730174	99.184705	84.158514	95.893915	139.768794	148.474452	158.866080	162.565819
-2.5	-25.691089	-21.446906	-26.206471	-26.099051	-23.522015	-14.128157	-24.121274	-25.791575	-27.305203	-27.313168
+2.5	142.977280	125.381140	125.321932	99.668123	84.666839	97.844043	142.135043	152.011938	161.966733	163.766360
-2.55	-28.003932	-24.664720	-28.697497	-26.642095	-23.954145	-16.247782	-27.739945	-29.661245	-31.401973	-31.411133
+2.55	140.014057	124.820637	124.724789	99.180881	84.156833	95.868347	139.780876	148.472106	158.876347	162.555592
-2.6	-30.316775	-27.882533	-31.188523	-27.403622	-24.547269	-18.367503	-31.358959	-33.530916	-35.498743	-35.509098
+2.6	140.745185	119.993396	119.990312	95.445808	80.765503	95.877722	133.656838	142.051720	150.871586	155.552955
-2.65	-32.629619	-31.100346	-33.679548	-28.437764	-25.286551	-20.487224	-34.977973	-37.400587	-39.595513	-39.607063
+2.65	135.605697	112.663332	112.471676	89.402060	75.537648	91.791493	123.286929	128.723046	140.069473	142.410441
-2.7	-34.942462	-34.318159	-36.174686	-29.939418	-26.142323	-22.606945	-38.596987	-41.270258	-43.692283	-43.705028
+2.7	122.492246	99.593232	99.531776	79.152467	66.577477	82.820838	107.414080	111.940024	122.163419	122.252048
-2.75	-37.255305	-37.535972	-38.700466	-31.498673	-27.092525	-24.726666	-42.216001	-45.139929	-47.789053	-47.802993
+2.75	107.945070	85.973961	85.343293	67.795548	56.669107	73.076047	91.191538	93.948828	101.690464	101.766556
-2.8	-39.568148	-40.753785	-41.226300	-33.076646	-28.100279	-26.846388	-45.835014	-49.009599	-51.885823	-51.900958
+2.8	80.687505	66.072980	65.716204	52.177951	43.020919	55.041258	68.449368	69.532384	72.620254	72.660704
-2.85	-48.929236	-43.971599	-49.505540	-35.163481	-30.223936	-28.966109	-49.454028	-52.879270	-55.982593	-56.369880
+2.85	61.246255	44.433349	45.192468	35.587899	28.710119	41.333338	42.958590	42.939416	42.958806	42.891226
-2.9	-68.749234	-55.126568	-64.465961	-47.601683	-40.949755	-36.103830	-54.709466	-60.260696	-66.150375	-68.281939
+2.9	43.142069	21.527025	24.524043	20.937464	16.520408	26.832014	20.781836	20.775619	20.784228	20.746339
-2.95	-94.674807	-70.714526	-81.323171	-63.473608	-55.370090	-54.476709	-69.734994	-74.334554	-78.904616	-81.732661
+2.95	23.772197	9.440853	14.384594	12.535431	10.024179	11.779316	9.115807	9.126702	9.565617	9.568412
-3	-126.188564	-99.939600	-103.239012	-86.195652	-75.716163	-76.112545	-104.717207	-113.713058	-122.288177	-126.782184
+3	10.284206	10.731091	10.734198	8.537862	7.205632	7.069199	12.069378	12.905117	13.662339	13.666331
(Span 3) -4	-126.188564	-99.939600	-103.239012	-86.195652	-75.716163	-76.112545	-104.717207	-113.713058	-122.288177	-126.782184
+4	10.284206	10.731091	10.734198	8.537862	7.205632	7.069199	12.069378	12.905117	13.662339	13.666331
-3.05	-101.225043	-85.783809	-87.713247	-72.548157	-63.155999	-59.967747	-90.995307	-100.448147	-109.249809	-113.812051
+3.05	24.020274	10.194537	13.838514	14.137063	11.526760	11.882857	11.465909	12.259861	12.979222	12.983014
-3.1	-85.708668	-71.946858	-74.247663	-59.352657	-51.465197	-53.898660	-80.912747	-87.450013	-96.337839	-101.032845
+3.1	40.043466	19.326816	22.842137	21.567912	17.656250	23.966025	18.676992	18.683103	18.762783	18.676669
-3.15	-78.707587	-64.759488	-64.756124	-51.509429	-44.620905	-50.904290	-76.417594	-82.591678	-90.534613	-92.199081
+3.15	55.666974	39.181356	41.507127	35.815196	29.075368	36.276054	38.319411	38.833744	38.856416	39.669772
-3.2	-74.077729	-60.950107	-60.946941	-48.479463	-41.996146	-47.909920	-71.922441	-77.733344	-85.209047	-86.775605
+3.2	74.368440	57.380512	59.924559	49.642436	41.068431	49.795763	59.585705	61.888254	62.101580	62.375856
-3.25	-69.447871	-57.140725	-57.137757	-45.449497	-39.371387	-44.915550	-67.427289	-72.875010	-79.883482	-81.352130
+3.25	89.712021	74.090825	76.434652	61.761562	51.312018	60.335971	78.309397	81.616856	85.084621	85.211135
-3.3	-64.818013	-53.331344	-53.328573	-42.419530	-36.746628	-41.921180	-62.932136	-68.016676	-74.557917	-75.928654
+3.3	101.435623	88.640158	90.715943	73.080497	61.337920	67.931670	94.198946	97.548729	104.090053	104.378031
-3.35	-60.188155	-49.521962	-49.519389	-39.389564	-34.121869	-38.926809	-58.436984	-63.158342	-69.232351	-70.505179
+3.35	113.934698	100.677675	102.425063	82.309164	69.581705	76.599005	106.946799	109.235471	118.735445	119.125272
-3.4	-55.558297	-45.712580	-45.710206	-36.359597	-31.497110	-35.932439	-53.941831	-58.300008	-63.906786	-65.081703
+3.4	124.272002	109.887433	111.255342	89.202548	75.846169	83.769283	118.802449	121.833329	128.801104	128.991142
-3.45	-50.928439	-41.903199	-41.901022	-33.329631	-28.872351	-32.938069	-49.446678	-53.441673	-58.581221	-59.658228
+3.45	132.145333	115.988264	116.936591	93.551600	79.958772	89.236747	127.302964	131.259982	138.643899	138.597733
-3.5	-46.298581	-38.093817	-38.091838	-30.299665	-26.247592	-29.943699	-44.951526	-48.583339	-53.255656	-54.234753
+3.5	137.176967	118.733936	119.235193	95.779081	81.771582	92.817520	132.118581	136.841869	143.905241	143.873508
-3.55	-41.668723	-34.284436	-34.282655	-27.269698	-23.622833	-26.949329	-40.456373	-43.725005	-47.930090	-48.811277
+3.55	139.193281	118.707488	119.464795	95.824817	81.161253	94.349226	133.434584	139.736239	144.110398	144.012793
-3.6	-37.038865	-30.475054	-30.473471	-24.239732	-20.998074	-23.954959	-35.961220	-38.866671	-42.604525	-43.387802

+3.6	138.003446	120.309535	120.872706	96.845110	81.665960	93.691491	133.047239	138.049918	141.872784	141.993190
-3.65	-32.409007	-26.665672	-26.664287	-21.209765	-18.373314	-20.960589	-31.466068	-34.008337	-37.278960	-37.964326
+3.65	133.439117	118.562546	118.941991	95.188917	80.300114	90.725558	128.490773	131.486244	139.945129	140.195605
-3.7	-27.779149	-22.856291	-22.855103	-18.179799	-15.748555	-17.966219	-26.970915	-29.150002	-31.953394	-32.540851
+3.7	125.366879	113.259335	113.475564	91.070340	76.543841	85.354508	119.958672	123.096635	132.875144	133.182104
-3.75	-23.149291	-19.046909	-19.045920	-15.149833	-13.123796	-14.971848	-22.475763	-24.291668	-26.627829	-27.117376
+3.75	117.701777	104.227349	104.312978	83.897333	70.298439	79.435503	111.148265	115.166101	120.722452	120.677176
-3.8	-18.519433	-15.237528	-15.236736	-12.119866	-10.499037	-11.977478	-17.980610	-19.433334	-21.302264	-21.693900
+3.8	105.738041	91.329027	91.487032	73.588533	61.489678	70.952767	97.907638	102.325799	102.764312	102.737459
-3.85	-13.889575	-11.428146	-11.427552	-9.089900	-7.874278	-8.983108	-13.485457	-14.575000	-15.976699	-16.270425
+3.85	88.321277	74.461552	74.699136	60.078624	50.068056	59.685430	80.445741	84.726651	84.675671	84.891440
-3.9	-9.259717	-7.618764	-7.618368	-6.059933	-5.249519	-5.988738	-8.990305	-9.716666	-10.651133	-10.846949
+3.9	65.084379	53.561453	53.873079	43.318307	36.008704	43.739998	59.003964	62.433457	62.501435	61.907047
-3.95	-4.629859	-3.809383	-3.809185	-3.029967	-2.624760	-2.994368	-4.495152	-4.858331	-5.325568	-5.423474
+3.95	35.723906	28.815435	28.973475	23.288396	19.311251	23.887522	32.242632	33.978139	34.059222	34.078782
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 20' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-4.629708	-5.820135	-5.995090	-5.709040	-6.463597	-4.347117	-4.592257	-2.575353
+0.05	35.687171	43.250054	43.923631	40.061312	43.161051	32.485964	34.266157	21.645386
-0.1	-9.259416	-11.640269	-11.990180	-11.418081	-12.927194	-8.694233	-9.184514	-5.150706
+0.1	65.057732	79.558436	79.612752	73.295073	77.659585	59.244017	62.457326	40.634095
-0.15	-13.889123	-17.460404	-17.985270	-17.127121	-19.390791	-13.041350	-13.776771	-7.726059
+0.15	87.641430	107.803609	108.647281	99.640328	106.832553	81.614722	86.010921	56.930922
-0.2	-18.518831	-23.280538	-23.980360	-22.836162	-25.854388	-17.388466	-18.369028	-10.301412
+0.2	104.863791	130.766625	131.410217	121.202002	129.427468	99.327051	104.620693	70.523666
-0.25	-23.148539	-29.100673	-29.975450	-28.545202	-32.317985	-21.735583	-22.961284	-12.876764
+0.25	116.655228	148.053966	148.053966	137.130915	145.648739	112.628339	118.556146	81.423175
-0.3	-27.778247	-34.920807	-35.970540	-34.254243	-38.781582	-26.082699	-27.553541	-15.452117
+0.3	125.341987	160.880286	160.880286	147.453433	155.760155	122.482576	128.942955	89.663356
-0.35	-32.407954	-40.740942	-41.965630	-39.963283	-45.245179	-30.429816	-32.145798	-18.027470
+0.35	133.410291	168.411542	168.411542	159.217094	170.320882	128.390081	135.176610	95.301105
-0.4	-37.037662	-46.561076	-47.960720	-45.672324	-51.708777	-34.776933	-36.738055	-20.602823
+0.4	137.970946	170.892542	170.892542	166.214758	179.026851	130.481603	137.394197	98.416412
-0.45	-41.667370	-52.381211	-53.955810	-51.381364	-58.172374	-39.124049	-41.330312	-23.178176
+0.45	139.157439	168.617527	168.617527	167.772424	181.861846	128.992922	135.840678	99.112282
-0.5	-46.297078	-58.201345	-59.950900	-57.090404	-64.635971	-43.471166	-45.922569	-25.753529
+0.5	137.136708	168.596401	168.596401	165.410667	179.051230	128.731373	135.529921	97.514753
-0.55	-50.926785	-64.021480	-65.945990	-62.799445	-71.099568	-47.818282	-50.514826	-28.328882
+0.55	132.109073	164.654586	164.654586	158.501994	170.805613	126.261673	132.952841	93.772927
-0.6	-55.556493	-69.841614	-71.941080	-68.508485	-77.563165	-52.165399	-55.107083	-30.904235
+0.6	124.286511	155.953408	155.953408	147.092824	157.566961	120.140255	126.531138	88.058937
-0.65	-60.186201	-75.661749	-77.936170	-74.217526	-84.026762	-56.512515	-59.699339	-33.479588
+0.65	113.993476	142.843145	142.843145	131.659297	139.836536	110.618802	116.528980	80.567896
-0.7	-64.815909	-81.481884	-83.931260	-79.926566	-90.490359	-60.859632	-64.291596	-36.054941
+0.7	101.535555	125.723636	125.723636	116.056724	123.164642	97.988614	103.252348	71.518073
-0.75	-69.445616	-87.302018	-89.926350	-85.635607	-96.953956	-65.206748	-68.883853	-38.630293
+0.75	88.947237	105.998095	105.998095	96.295079	102.140356	82.580549	87.048958	61.150695
-0.8	-74.075324	-93.122153	-95.921440	-91.344647	-103.417553	-69.553865	-73.476110	-41.205646
+0.8	73.711906	82.136172	82.527654	72.731478	76.615210	64.764937	68.308191	49.730053
-0.85	-78.705032	-98.942287	-101.916530	-97.053688	-109.881150	-73.900982	-78.068367	-43.780999
+0.85	55.696590	55.233411	55.454198	45.804845	47.158197	44.930643	47.439032	37.543446
-0.9	-85.694019	-104.762422	-107.911620	-102.762728	-116.344747	-83.758734	-88.344865	-50.721357
+0.9	40.073910	27.476157	27.476157	22.101879	22.101879	25.143645	26.575270	24.901279
-0.95	-101.186888	-110.582556	-113.906710	-112.734494	-127.999578	-99.005525	-104.267236	-59.581150
+0.95	24.052441	14.480062	14.480062	14.491854	15.872065	15.591334	16.510509	12.136947
-1	-126.136675	-127.449449	-134.371709	-127.912044	-150.264883	-118.270197	-124.494944	-68.822630
+1	10.284029	15.242171	15.242171	15.254583	16.707437	11.588170	12.198074	7.391373
(Span 2) -2	-126.136675	-127.449449	-134.371709	-127.912044	-150.264883	-118.270197	-124.494944	-68.822630
+2	10.284029	15.242171	15.242171	15.254583	16.707437	11.588170	12.198074	7.391373
-2.05	-94.639090	-84.983220	-90.202453	-83.794305	-98.692585	-94.313696	-99.277575	-51.411080
+2.05	23.781952	13.134401	13.134401	10.680417	11.697626	16.388969	17.292837	12.230572
-2.1	-68.728957	-67.024927	-67.024927	-67.417213	-74.018229	-73.073852	-76.919844	-41.329018
+2.1	43.213097	30.492282	30.492282	24.436163	24.436163	27.059689	28.500316	27.612605
-2.15	-48.919035	-62.454544	-62.454544	-62.506335	-68.458873	-54.475317	-57.342439	-31.731303
+2.15	61.269489	62.970237	62.970237	50.540746	50.563456	49.079981	51.663137	42.900764
-2.2	-39.565825	-57.884160	-57.884160	-57.932161	-63.449097	-44.526266	-46.900077	-28.070144
+2.2	80.700823	94.571666	94.988752	83.071413	86.791247	71.402864	75.204152	55.554115

-2.25	-37.252872	-53.313777	-53.313777	-53.357988	-58.439320	-41.831189	-44.108747	-25.853798
+2.25	108.028983	125.155603	126.296873	111.521292	122.605034	93.878891	98.938099	70.267090
-2.3	-34.940299	-48.743394	-48.743394	-48.783815	-53.429544	-39.137846	-41.321667	-23.637453
+2.3	122.524945	146.005795	147.495700	134.450986	150.043164	110.160877	116.112465	79.848989
-2.35	-32.627726	-44.173011	-44.173011	-44.209641	-48.419768	-36.477614	-38.571228	-21.421107
+2.35	135.761431	163.536160	164.675822	153.761494	171.718452	123.310219	129.916020	89.151279
-2.4	-30.315154	-39.602627	-39.602627	-39.635468	-43.409991	-33.821445	-35.822665	-19.204761
+2.4	140.815837	172.567706	176.288552	168.415120	185.927241	130.698171	137.646767	95.910027
-2.45	-28.002581	-35.032244	-35.032244	-35.061295	-38.400215	-31.165276	-33.074102	-16.988416
+2.45	140.138277	180.678202	183.518796	175.557524	191.612375	135.908746	143.353658	98.883204
-2.5	-25.691089	-30.462262	-30.462262	-30.487121	-33.390674	-28.509342	-30.325743	-14.772070
+2.5	142.977280	184.184468	186.322774	179.476849	195.508047	139.089597	146.627496	102.050737
-2.55	-28.003932	-35.032705	-35.032705	-35.061235	-38.400485	-31.165770	-33.074585	-16.988379
+2.55	140.014057	180.660954	183.504951	175.565951	191.590357	135.913848	143.359288	98.884722
-2.6	-30.316775	-39.603149	-39.603149	-39.635400	-43.410296	-33.822197	-35.823427	-19.204720
+2.6	140.745185	172.516567	176.240553	168.388290	185.910239	130.700928	137.649842	95.902346
-2.65	-32.629619	-44.173592	-44.173592	-44.209565	-48.420107	-36.478625	-38.572269	-21.421061
+2.65	135.605697	163.523109	164.664693	153.720022	171.685920	123.335899	129.943199	89.155960
-2.7	-34.942462	-48.744035	-48.744035	-48.783730	-53.429918	-39.137830	-41.321628	-23.637403
+2.7	122.492246	145.989090	147.480528	134.444542	150.044097	110.166901	116.118923	79.844718
-2.75	-37.255305	-53.314478	-53.314478	-53.357896	-58.439729	-41.831354	-44.108907	-25.853744
+2.75	107.945070	125.133379	126.275607	111.510479	122.619666	93.908182	98.969003	70.275431
-2.8	-39.568148	-57.884922	-57.884922	-57.932061	-63.449540	-44.526611	-46.900434	-28.070085
+2.8	80.687505	94.590284	95.007697	83.058145	86.780703	71.413511	75.215385	55.553923
-2.85	-48.929236	-62.455365	-62.455365	-62.506226	-68.459351	-54.476637	-57.343829	-31.731390
+2.85	61.246255	63.016450	63.016450	50.558220	50.582677	49.073191	51.655991	42.892333
-2.9	-68.749234	-67.025808	-67.025808	-67.416396	-74.016800	-73.074344	-76.920362	-41.328874
+2.9	43.142069	30.509216	30.509216	24.449218	24.449218	27.064923	28.494762	27.730666
-2.95	-94.674807	-84.986097	-90.202735	-83.795843	-98.695072	-94.315272	-99.279234	-51.420660
+2.95	23.772197	13.390765	13.390765	10.680439	11.697548	16.380998	17.284476	12.227884
-3	-126.188564	-127.451887	-134.371846	-127.911453	-150.268224	-118.271069	-124.495862	-68.822578
+3	10.284206	15.241970	15.241970	15.254610	16.707321	11.588055	12.197952	7.391388
(Span 3) -4	-126.188564	-127.451887	-134.371846	-127.911453	-150.268224	-118.271069	-124.495862	-68.822578
+4	10.284206	15.241970	15.241970	15.254610	16.707321	11.588055	12.197952	7.391388
-3.05	-101.225043	-110.582005	-113.905759	-112.735702	-128.000846	-99.006415	-104.268303	-59.581167
+3.05	24.020274	14.479872	14.479872	14.491879	15.871955	15.571997	16.490191	12.128187
-3.1	-85.708668	-104.761899	-107.910719	-102.761141	-116.342501	-83.759081	-88.345397	-50.721129
+3.1	40.043466	27.508020	27.508020	21.972932	22.016474	25.125227	26.555916	24.893201
-3.15	-78.707587	-98.941793	-101.915679	-97.052189	-109.879028	-73.901340	-78.068921	-43.780849
+3.15	55.666974	55.193676	55.414258	45.772633	47.675799	44.908058	47.415260	37.535857
-3.2	-74.077729	-93.121687	-95.920639	-91.343237	-103.415556	-69.554202	-73.476632	-41.205505
+3.2	74.368440	82.092827	82.551855	72.697349	76.635418	64.784261	68.328528	49.722707
-3.25	-69.447871	-87.301581	-89.925598	-85.634284	-96.952084	-65.207064	-68.884342	-38.630161
+3.25	89.712021	105.076428	105.076428	96.314271	102.157101	82.599009	87.068379	61.143336
-3.3	-64.818013	-81.481476	-83.930558	-79.925332	-90.488612	-60.859926	-64.292052	-36.054817
+3.3	101.435623	125.753448	125.753448	116.071999	123.176625	98.005509	103.270111	71.510564
-3.35	-60.188155	-75.661370	-77.935518	-74.216380	-84.025140	-56.512788	-59.699762	-33.479473
+3.35	113.934698	142.869211	142.869211	131.642466	139.828489	110.633387	116.544306	80.560037
-3.4	-55.558297	-69.841264	-71.940478	-68.507427	-77.561668	-52.165651	-55.107473	-30.904129
+3.4	124.272002	155.974705	155.974705	147.071971	157.554868	120.151958	126.543422	88.050491
-3.45	-50.928439	-64.021158	-65.945438	-62.798475	-71.098196	-47.818513	-50.515183	-28.328785
+3.45	132.145333	164.670186	164.670186	158.533400	170.788270	126.269993	132.961558	93.763835
-3.5	-46.298581	-58.201052	-59.950397	-57.089523	-64.634724	-43.471375	-45.922893	-25.753441
+3.5	137.176967	168.605445	168.605445	165.436383	179.027547	128.735817	135.534554	97.504876
-3.55	-41.668723	-52.380946	-53.955357	-51.380570	-58.171251	-39.124237	-41.330603	-23.178097
+3.55	139.193281	168.613313	168.613313	167.749764	181.830865	129.009821	135.860810	99.101409
-3.6	-37.038865	-46.560841	-47.960317	-45.671618	-51.707779	-34.777099	-36.738314	-20.602753

+3.6	**138.003446**	**170.882274**	**170.882274**	**166.185035**	**179.045818**	**130.518753**	**137.433279**	**98.404554**
-3.65	**-32.409007**	**-40.740735**	**-41.965277**	**-39.962666**	**-45.244307**	**-30.429961**	**-32.146024**	**-18.027409**
+3.65	**133.439117**	**168.394401**	**168.394401**	**159.179602**	**170.331269**	**128.423412**	**135.211670**	**95.288147**
-3.7	**-27.779149**	**-34.920629**	**-35.970237**	**-34.253713**	**-38.780835**	**-26.082823**	**-27.553734**	**-15.452065**
+3.7	**125.366879**	**160.855665**	**160.855665**	**147.446007**	**155.757680**	**122.511633**	**128.973515**	**89.649129**
-3.75	**-23.149291**	**-29.100523**	**-29.975197**	**-28.544761**	**-32.317363**	**-21.735685**	**-22.961444**	**-12.876721**
+3.75	**117.701777**	**148.021345**	**148.021345**	**137.115880**	**145.638047**	**112.610875**	**118.538159**	**81.407760**
-3.8	**-18.519433**	**-23.280417**	**-23.980156**	**-22.835809**	**-25.853891**	**-17.388547**	**-18.369155**	**-10.301377**
+3.8	**105.738041**	**130.731393**	**131.376899**	**121.178843**	**129.407949**	**99.306027**	**104.598716**	**70.507023**
-3.85	**-13.889575**	**-17.460311**	**-17.985116**	**-17.126856**	**-19.390419**	**-13.041410**	**-13.776865**	**-7.726032**
+3.85	**88.321277**	**107.834687**	**108.679880**	**99.667221**	**106.803624**	**81.588249**	**85.983182**	**56.912888**
-3.9	**-9.259717**	**-11.640206**	**-11.990076**	**-11.417904**	**-12.926947**	**-8.694272**	**-9.184575**	**-5.150688**
+3.9	**65.084379**	**79.579528**	**80.539930**	**73.313168**	**77.620920**	**59.255775**	**62.469793**	**40.614886**
-3.95	**-4.629859**	**-5.820100**	**-5.995036**	**-5.708951**	**-6.463474**	**-4.347134**	**-4.592285**	**-2.575344**
+3.95	**35.723906**	**43.260723**	**43.934907**	**40.071448**	**43.172852**	**32.491917**	**34.272473**	**21.624965**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 20' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-4.629708	-6.094523	-5.740763	-5.215814	-6.130392	-6.268859
+0.05	35.687171	42.398861	39.489480	38.781989	42.482125	42.770017
-0.1	-9.259416	-12.189047	-11.481526	-10.431627	-12.260785	-12.537717
+0.1	65.057732	78.000487	72.637122	70.769213	78.154837	78.477503
-0.15	-13.889123	-18.283570	-17.222289	-15.647441	-18.391177	-18.806576
+0.15	87.641430	106.876679	99.514776	97.697614	107.254442	107.629456
-0.2	-18.518831	-24.378094	-22.963052	-20.863255	-24.521569	-25.075435
+0.2	104.863791	129.163003	120.609370	118.920436	129.846266	130.214362
-0.25	-23.148539	-30.472617	-28.703815	-26.079068	-30.651961	-31.344294
+0.25	116.655228	145.423510	135.832591	134.514645	146.115903	146.427397
-0.3	-27.778247	-36.567141	-34.444578	-31.294882	-36.782354	-37.613152
+0.3	125.341987	155.701289	145.883696	145.651479	156.532498	156.595572
-0.35	-32.407954	-42.661664	-40.185341	-36.510696	-42.912746	-43.882011
+0.35	133.410291	169.736053	158.997074	152.591091	171.003622	171.678917
-0.4	-37.037662	-48.756188	-45.926104	-41.726509	-49.043138	-50.150870
+0.4	137.970946	178.867386	168.002178	154.981918	180.345685	180.885269
-0.45	-41.667370	-54.850711	-51.666867	-46.942323	-55.173531	-56.419729
+0.45	139.157439	182.639908	171.269538	153.080561	183.571676	183.938882
-0.5	-46.297078	-60.945235	-57.407630	-52.158137	-61.303923	-62.688587
+0.5	137.136708	180.845424	169.393331	153.284526	180.991249	181.158217
-0.55	-50.926785	-67.039758	-63.148393	-57.373950	-67.434315	-68.957446
+0.55	132.109073	173.512358	162.566753	150.216781	172.975991	172.923461
-0.6	-55.556493	-73.134282	-68.889155	-62.589764	-73.564708	-75.226305
+0.6	124.286511	161.052350	150.916327	142.802304	159.959695	159.682244
-0.65	-60.186201	-79.228805	-74.629918	-67.805578	-79.695100	-81.495163
+0.65	113.993476	143.944112	135.393827	131.344412	142.437964	143.037911
-0.7	-64.815909	-85.323328	-80.370681	-73.021391	-85.825492	-87.764022
+0.7	101.535555	127.749421	120.444624	116.193267	125.671510	125.791098
-0.75	-69.445616	-91.417852	-86.111444	-78.237205	-91.955884	-94.032881
+0.75	88.947237	108.092398	102.056651	97.745658	105.210942	105.020166
-0.8	-74.075324	-97.512375	-91.852207	-83.453019	-98.086277	-100.301740
+0.8	73.711906	83.611343	79.936310	76.372032	80.517367	79.648806
-0.85	-78.705032	-103.606899	-97.592970	-88.668832	-104.216669	-106.570598
+0.85	55.696590	54.852760	55.874748	54.242739	55.421449	52.277048
-0.9	-85.694019	-121.194358	-114.455848	-94.434088	-115.723212	-116.011595
+0.9	40.073910	35.884814	37.374268	34.933934	34.482256	35.646513
-0.95	-101.186888	-147.475380	-145.982789	-101.799417	-133.076342	-129.261040
+0.95	24.052441	24.882623	25.017234	24.130576	23.746303	26.303095
-1	-126.136675	-175.330524	-181.201576	-114.688441	-154.449182	-148.494841
+1	10.284029	16.554620	15.357424	13.846125	16.710630	16.710993
(Span 2) -2	-126.136675	-175.330524	-181.201576	-114.688441	-154.449182	-148.494841
+2	10.284029	16.554620	15.357424	13.846125	16.710630	16.710993
-2.05	-94.639090	-135.036534	-134.818703	-92.962015	-120.340884	-118.882861
+2.05	23.781952	22.237952	22.656979	21.663810	23.126243	22.211632
-2.1	-68.728957	-100.860304	-97.021388	-75.313135	-96.875591	-94.796388
+2.1	43.213097	31.083076	33.965117	33.011158	35.673774	30.838180
-2.15	-48.919035	-72.714808	-67.503823	-61.109033	-76.345589	-75.261266
+2.15	61.269489	50.916319	51.768043	58.082639	62.237951	52.172061
-2.2	-39.565825	-64.629324	-60.513087	-52.756180	-64.180408	-64.077559
+2.2	80.700823	84.402759	79.873703	84.758097	90.510767	85.970061

-2.25	-37.252872	-62.311995	-59.201817	-49.603778	-60.250903	-59.991206
+2.25	108.028983	115.030636	108.523767	111.525420	119.345311	119.411461
-2.3	-34.940299	-60.013018	-57.890981	-46.451377	-56.332683	-55.976975
+2.3	122.524945	141.044149	130.831364	131.254020	142.714921	146.264123
-2.35	-32.627726	-57.717246	-56.596522	-43.298975	-52.441182	-52.166699
+2.35	135.761431	162.621102	151.002301	147.032829	164.548187	168.060534
-2.4	-30.315154	-55.421475	-55.302063	-40.146573	-48.550383	-48.642948
+2.4	140.815837	179.312545	166.248330	156.270514	181.157600	183.443171
-2.45	-28.002581	-53.125704	-54.007605	-36.994172	-44.659585	-45.255108
+2.45	140.138277	188.099015	174.588158	163.018757	190.089561	190.836936
-2.5	-25.691089	-50.829932	-53.381839	-33.842249	-40.769355	-42.039056
+2.5	142.977280	193.065379	178.882440	166.859661	195.006674	195.368795
-2.55	-28.003932	-53.125309	-54.007560	-36.994659	-44.660447	-45.254514
+2.55	140.014057	188.099638	174.588262	163.006405	190.090224	190.841142
-2.6	-30.316775	-55.421209	-55.301986	-40.147068	-48.551540	-48.642668
+2.6	140.745185	179.293305	166.250324	156.199098	181.171771	183.460105
-2.65	-32.629619	-57.717109	-56.596411	-43.299478	-52.442632	-52.167732
+2.65	135.605697	162.623826	151.002707	147.062512	164.551121	168.066229
-2.7	-34.942462	-60.013008	-57.890836	-46.451888	-56.333724	-55.978221
+2.7	122.492246	141.028376	130.832574	131.261011	142.723437	146.274571
-2.75	-37.255305	-62.311701	-59.201914	-49.604297	-60.250976	-59.991677
+2.75	107.945070	115.041117	108.521529	111.559293	119.381646	119.420841
-2.8	-39.568148	-64.629232	-60.513155	-52.756707	-64.180653	-64.077956
+2.8	80.687505	84.394263	79.875388	84.742142	90.541947	85.985930
-2.85	-48.929236	-72.713623	-67.503796	-61.109085	-76.345850	-75.261954
+2.85	61.246255	50.909973	51.766441	58.075148	62.229752	52.165451
-2.9	-68.749234	-100.859313	-97.021238	-75.313276	-96.876682	-94.797117
+2.9	43.142069	31.076382	33.966951	32.941478	35.656375	30.833699
-2.95	-94.674807	-135.037431	-134.818802	-92.962782	-120.340920	-118.882768
+2.95	23.772197	22.256180	22.656052	21.657105	23.116812	22.206820
-3	-126.188564	-175.330494	-181.201234	-114.689262	-154.450380	-148.494944
+3	10.284206	16.554610	15.357412	13.845796	16.710541	16.710907
(Span 3) -4	-126.188564	-175.330494	-181.201234	-114.689262	-154.450380	-148.494944
+4	10.284206	16.554610	15.357412	13.845796	16.710541	16.710907
-3.05	-101.225043	-147.475158	-145.982628	-101.799515	-133.077479	-129.262198
+3.05	24.020274	24.867403	25.013770	24.107892	23.725842	26.305129
-3.1	-85.708668	-121.194127	-114.455931	-94.434244	-115.723210	-116.011667
+3.1	40.043466	35.870204	37.371650	34.912021	34.511666	35.706187
-3.15	-78.707587	-103.606186	-97.592870	-88.669184	-104.215517	-106.570204
+3.15	55.666974	54.829345	55.878063	54.213553	55.442264	52.251249
-3.2	-74.077729	-97.511704	-91.852113	-83.453349	-98.085192	-100.301369
+3.2	74.368440	83.585548	79.939557	76.346011	80.536145	79.660966
-3.25	-69.447871	-91.417222	-86.111356	-78.237515	-91.954867	-94.032533
+3.25	89.712021	108.104399	102.052361	97.742849	105.223314	105.032769
-3.3	-64.818013	-85.322741	-80.370599	-73.021680	-85.824543	-87.763697
+3.3	101.435623	127.757350	120.439687	116.213145	125.680035	125.800051
-3.35	-60.188155	-79.228259	-74.629842	-67.805845	-79.694218	-81.494862
+3.35	113.934698	143.938522	135.392622	131.361715	142.474826	143.050843
-3.4	-55.558297	-73.133777	-68.889085	-62.590011	-73.563893	-75.226026
+3.4	124.272002	161.043502	150.915077	142.816297	159.993657	159.713150
-3.45	-50.928439	-67.039296	-63.148328	-57.374176	-67.433568	-68.957190
+3.45	132.145333	173.498784	162.564879	150.226865	173.006107	172.953034
-3.5	-46.298581	-60.944814	-57.407571	-52.158342	-61.303244	-62.688355
+3.5	137.176967	180.827112	169.390709	153.290147	181.016626	181.183278
-3.55	-41.668723	-54.850332	-51.666814	-46.942507	-55.172919	-56.419519
+3.55	139.193281	182.616195	171.272316	153.127646	183.591603	183.958648
-3.6	-37.038865	-48.755851	-45.926057	-41.726673	-49.042594	-50.150683

+3.6	**138.003446**	**178.839394**	**168.004074**	**155.025085**	**180.359555**	**180.899209**
-3.65	**-32.409007**	**-42.661369**	**-40.185300**	**-36.510838**	**-42.912269**	**-43.881848**
+3.65	**133.439117**	**169.743632**	**158.997994**	**152.629780**	**171.010874**	**171.686427**
-3.7	**-27.779149**	**-36.566887**	**-34.444543**	**-31.295003**	**-36.781945**	**-37.613012**
+3.7	**125.366879**	**155.740340**	**145.883370**	**145.685229**	**156.530263**	**156.593734**
-3.75	**-23.149291**	**-30.472405**	**-28.703786**	**-26.079169**	**-30.651620**	**-31.344176**
+3.75	**117.701777**	**145.456810**	**135.837669**	**134.496508**	**146.151978**	**146.462534**
-3.8	**-18.519433**	**-24.377924**	**-22.963029**	**-20.863334**	**-24.521295**	**-25.075341**
+3.8	**105.738041**	**129.190903**	**120.613511**	**118.896340**	**129.875722**	**130.243130**
-3.85	**-13.889575**	**-18.283442**	**-17.222272**	**-15.647500**	**-18.390970**	**-18.806505**
+3.85	**88.321277**	**106.897908**	**99.517895**	**97.667204**	**107.276862**	**107.651333**
-3.9	**-9.259717**	**-12.188960**	**-11.481515**	**-10.431665**	**-12.260646**	**-12.537669**
+3.9	**65.084379**	**78.014768**	**72.639282**	**70.782770**	**78.169927**	**78.492241**
-3.95	**-4.629859**	**-6.094479**	**-5.740758**	**-5.215830**	**-6.130321**	**-6.268834**
+3.95	**35.723906**	**42.406045**	**39.490558**	**38.788832**	**42.489840**	**42.778115**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 25' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-12.87671439**	***-15.423682***	***-13.851406***	**-12.22767735**	**-12.81696302**	**-12.1045861**	**-14.0953542**	**-9.022890349**	**-9.556607291**	**-5.107588122**
End Shear	**100.6355642**	***118.524204***	***104.445629***	**96.47799916**	**99.53010193**	**91.35939115**	**101.6905861**	**71.59211277**	**75.67879709**	**46.87895234**
-0.05	**-12.87671439**	***-15.462998***	***-13.886790***	**-12.22767735**	**-12.81696302**	**-12.1045861**	**-14.0953542**	**-9.022890349**	**-9.556607291**	**-5.107588122**
+0.05	**90.92095751**	***108.140762***	***94.104028***	**87.73092601**	**90.20268867**	**82.68576285**	**91.39320189**	**65.41653748**	**69.11902499**	**42.05017849**
-0.1	**-15.6929304**	***-15.620939***	***-14.028937***	**-12.22767735**	**-12.81696302**	**-12.1045861**	**-14.0953542**	**-11.37612564**	**-12.0695197**	**-5.2104352**
+0.1	**81.39174738**	***98.426345***	***83.985421***	**79.34822659**	**81.29006937**	**74.34556109**	**81.54810789**	**59.29447995**	**62.6189588**	**37.69890392**
-0.15	**-19.63478765**	***-15.792548***	***-16.077614***	**-12.22767735**	**-12.81696302**	**-12.1045861**	**-14.0953542**	**-13.6880744**	**-14.49714945**	**-7.310607419**
+0.15	**75.1704967**	***92.035524***	***77.395872***	**73.83364798**	**75.44178456**	**68.881922**	**75.13098027**	**55.260225**	**58.3372456**	**35.46861835**
-0.2	**-25.33964442**	***-19.554773***	***-21.338294***	**-13.53263507**	**-13.53263507**	**-12.1045861**	**-14.0953542**	**-16.90778662**	**-17.87642698**	**-10.55134388**
+0.2	**66.07881326**	***82.610941***	***67.891459***	**65.70852337**	**66.84822363**	**60.86769872**	**65.76892408**	**49.30556822**	**52.01988552**	**32.32239922**
-0.25	**-29.00212075**	***-25.323039***	***-23.978365***	**-18.062821**	**-18.062821**	**-14.45353856**	**-14.45353856**	**-20.25899006**	**-21.42268884**	**-13.38654276**
+0.25	**60.20280576**	***76.454932***	***61.795269***	**60.41056343**	**61.26100053**	**55.66700308**	**59.72912377**	**45.4154937**	**47.89463584**	**30.49638969**
-0.3	**-34.29363247**	***-34.065175***	***-29.240806***	**-24.85051227**	**-24.85051227**	**-19.88449882**	**-19.88449882**	**-26.35073267**	**-27.82626342**	**-17.04402189**
+0.3	**51.70931747**	***67.444123***	***53.002588***	**52.677741**	**53.13158933**	**48.29167449**	**51.49933408**	**39.72597069**	**41.86395318**	**27.39417921**
-0.35	**-37.75600063**	***-39.933056***	***-32.745597***	**-29.354458**	**-29.354458**	**-24.06631475**	**-24.31408815**	**-30.22668185**	**-31.89971732**	**-18.52489118**
+0.35	**46.28566881**	***61.604537***	***47.400005***	**47.68623818**	**47.90217694**	**43.58513997**	**46.6633918**	**36.04523171**	**37.96448104**	**25.35287985**
-0.4	**-42.87235945**	***-48.759822***	***-37.981056***	**-36.0509678**	**-36.0509678**	**-31.32110386**	**-32.38180408**	**-35.76330976**	**-37.71729659**	**-21.96827044**
+0.4	**37.93455083**	***53.128414***	***39.483614***	**40.54672605**	**40.54672605**	**37.14016629**	**39.582895**	**30.9048966**	**32.53147011**	**22.34404373**
-0.45	**-46.21915227**	***-54.640448***	***-41.447050***	**-40.4595834**	**-40.4595834**	**-36.12074726**	**-37.72671137**	**-39.26981346**	**-41.40105319**	**-24.17400293**
+0.45	**34.56974414**	***47.684832***	***36.004665***	**36.49637033**	**36.49637033**	**32.99692786**	**35.03915698**	**27.82109066**	**29.28535859**	**20.38105221**
-0.5	**-51.12150158**	***-63.420003***	***-48.495135***	**-46.96127391**	**-46.96127391**	**-43.2350233**	**-45.66053315**	**-44.25321861**	**-46.63553476**	**-27.34054454**
+0.5	**29.73547637**	***39.861222***	***30.985463***	**30.62785012**	**30.62785012**	**27.04203932**	**28.52163561**	**23.35261268**	**24.58169756**	**17.51376744**
-0.55	**-54.29852759**	***-69.224463***	***-53.000886***	**-51.20546185**	**-51.20546185**	**-47.90366226**	**-50.87469991**	**-47.39155301**	**-49.93154143**	**-29.35262594**
+0.55	**26.61083266**	***34.891187***	***27.761114***	**26.8696356**	**26.8696356**	**23.26285335**	**24.39469963**	**20.49074968**	**21.56921019**	**15.66120553**
-0.6	**-59.650869**	***-77.821903***	***-59.411972***	**-57.7210223**	**-57.85475363**	**-54.76544399**	**-58.55020332**	**-51.85505881**	**-54.58581164**	**-32.21504994**
+0.6	**22.09284222**	***27.834886***	***23.104690***	**21.49115447**	**21.49115447**	**17.91003704**	**18.56458321**	**16.39469821**	**17.25757707**	**12.98365383**
-0.65	**-63.48123698**	***-83.459241***	***-65.386474***	**-62.66394638**	**-63.07880993**	**-59.22842811**	**-63.98283732**	**-54.92491168**	**-57.85520036**	**-34.01528887**
+0.65	**19.20614566**	***23.413901***	***20.135200***	**18.09418448**	**18.09418448**	**14.56955243**	**14.93739069**	**13.75845973**	**14.48266495**	**11.27364277**
-0.7	**-69.91460572**	***-91.736620***	***-75.322207***	**-70.50245828**	**-71.59644933**	**-65.72573261**	**-72.29569878**	**-60.19155614**	**-63.47056492**	**-36.54631113**
+0.7	**15.08572267**	***17.070535***	***15.908026***	**13.30938062**	**13.30938062**	**10.63945403**	**10.63945403**	**10.21772514**	**10.76141385**	**8.83400071**
-0.75	**-76.0906597**	***-97.113850***	***-81.827379***	**-75.57512901**	**-77.12399288**	**-70.35065998**	**-77.57832279**	**-63.51413076**	**-67.01593382**	**-38.11652102**
+0.75	**12.4911689**	***13.012192***	***13.305314***	**10.34273766**	**10.34273766**	**8.266307945**	**8.266307945**	**8.015916677**	**8.446949819**	**7.298654318**
-0.8	**-85.10241069**	***-104.930154***	***-90.471074***	**-82.9186766**	**-85.15026398**	**-77.99680281**	**-85.77880844**	**-68.20660264**	**-72.02732359**	**-40.288855**
+0.8	**8.849607366**	***7.868661***	***9.736221***	**6.255255021**	**6.255255021**	**4.996717645**	**4.996717645**	**4.973424925**	**5.248242673**	**5.145107007**
-0.85	**-90.91702929**	***-109.952252***	***-96.631210***	**-87.61646802**	**-90.30187142**	**-82.91483435**	**-91.92027724**	**-71.13562489**	**-75.15834028**	**-41.61084234**
+0.85	**6.601390898**	***5.681587***	***7.540014***	**4.252185514**	**4.252185514**	**3.398162971**	**3.398162971**	**3.380712013**	**3.573946028**	**3.816547944**
-0.9	**-99.30628688**	***-117.163417***	***-105.584276***	**-94.33033983**	**-97.69170064**	**-89.98626653**	**-100.8059941**	**-75.22160944**	**-79.53064527**	**-43.40627726**
+0.9	**3.519981221**	***3.012233***	***4.539458***	**2.269241649**	**2.269241649**	**1.857832278**	**2.108635528**	**1.922085827**	**2.040716191**	**1.988022416**
-0.95	**-104.6523573**	***-121.733320***	***-111.338453***	**-98.56342633**	**-102.3706365**	**-94.47552307**	**-106.4863436**	**-77.73553298**	**-82.22389969**	**-45.65607042**
+0.95	**1.846410285**	***2.496204***	***2.745774***	**1.901165818**	**1.960696667**	**1.857832278**	**2.108635528**	**1.419596596**	**1.50322844**	**0.899217989**
-1	**-112.2584555**	***-128.192229***	***-119.607896***	**-104.5128773**	**-108.9789139**	**-100.8353737**	**-114.5974504**	**-81.18271109**	**-85.9220053**	**-48.84406891**
+1	**1.85E+00**	***2.477513***	***1.965105***	**1.90E+00**	**1.96E+00**	**1.86E+00**	**2.11E+00**	**1.42E+00**	**1.50E+00**	**8.42E-01**
(Span 2) -2	**-7.66E+00**	***-10.281599***	***-8.155123***	**-7.89E+00**	**-8.14E+00**	**-7.71E+00**	**-8.75E+00**	**-5.89E+00**	**-6.22E+00**	**-3.50E+00**
+2	**1.17E+02**	***129.014283***	***122.673152***	**106.2003489**	**111.2757053**	**103.3630885**	**118.7508361**	**79.06399016**	**83.75786635**	**51.08333402**
-2.05	**-7.66E+00**	***-10.313663***	***-8.183981***	**-7.89E+00**	**-8.14E+00**	**-7.71E+00**	**-8.75E+00**	**-5.89E+00**	**-6.22E+00**	**-3.50E+00**
+2.05	**1.10E+02**	***123.097295***	***114.881433***	**101.0613677**	**105.6002528**	**97.91944166**	**111.8827117**	**76.04332454**	**80.52169001**	**48.4949891**
-2.1	**-7.662544405**	***-10.400363***	***-8.262011***	**-7.889777452**	**-8.136828647**	**-7.709945039**	**-8.750770541**	**-6.665607784**	**-7.080028382**	**-3.495667379**
+2.1	**103.6914851**	***116.767408***	***107.348038***	**95.5408423**	**99.54575052**	**92.13759994**	**104.6718363**	**72.83805181**	**77.09146885**	**45.51327362**
-2.15	**-9.187532978**	***-10.549405***	***-9.680431***	**-7.889777452**	**-8.136828647**	**-7.709945039**	**-8.750770541**	**-7.313082389**	**-7.800460297**	**-4.462809747**
+2.15	**96.9663736**	***110.089576***	***100.124298***	**89.70054404**	**93.17872181**	**86.08031507**	**97.19427394**	**69.37278821**	**73.38835338**	**42.63522402**
-2.2	**-15.12662713**	***-13.683352***	***-12.885772***	**-9.75328282**	**-9.75328282**	**-7.812222679**	**-8.750770541**	**-9.026595017**	**-9.580978426**	**-6.99795219**
+2.2	**86.73531094**	***100.755240***	***89.537946***	**81.52283655**	**84.31819263**	**77.68394903**	**86.94083406**	**64.3790488**	**68.05990741**	**38.66803428**

-2.25	-19.92680479	-18.812075	-16.284579	-13.7453611	-13.7453611	-11.00730654	-11.00730654	-12.89707277	-13.65202359	-9.070823355
+2.25	79.13062021	93.513397	81.488647	75.17666247	77.48067736	70.8480568	78.75692191	60.37696382	63.7954891	35.96380376
-2.3	-24.49228608	-24.423397	-20.161708	-18.06915548	-18.06915548	-15.16159403	-15.4589733	-16.8194749	-17.77554516	-11.26616446
+2.3	71.41982856	86.134031	73.416819	68.22700131	70.0627937	63.7559555	70.36999644	56.1747311	59.32284206	33.96413662
-2.35	-28.67205293	-30.464136	-24.202248	-22.67713622	-22.67713622	-19.75132089	-20.43528834	-21.04612437	-22.21751827	-13.56188239
+2.35	63.66977821	78.678451	65.385811	61.11882949	62.44433517	57.09781634	62.28715736	51.79030417	54.66136657	31.63758654
-2.4	-34.10335372	-39.092949	-29.802420	-29.82747156	-29.82747156	-26.34275117	-27.62101804	-27.35515415	-28.84692285	-16.74079637
+2.4	53.39083848	68.723503	54.849393	52.4757027	53.27368633	48.5251467	52.49783192	45.69202342	48.18586869	28.32376966
-2.45	-38.38108586	-45.924139	-34.130003	-34.93340689	-34.93340689	-31.57361827	-33.75045969	-31.8666086	-33.58591701	-19.42191102
+2.45	46.53651774	60.991281	47.323719	46.10491988	46.55299498	42.54233648	46.2476212	40.95228773	43.15923041	25.69711368
-2.5	-43.11189638	-53.001411	-40.293208	-40.15891543	-40.15891543	-36.99368015	-40.11290295	-36.1858324	-38.12199456	-22.26815072
+2.5	42.38967368	52.989281	40.431718	40.14998038	40.14998038	36.98461139	40.10290822	36.18011914	38.11599488	22.96436084
-2.55	-47.93793321	-60.671069	-47.178155	-46.1156216	-46.56425339	-42.55159477	-46.25785528	-40.95878821	-43.16611954	-25.69855008
+2.55	38.25108865	45.912245	34.525411	34.92464442	34.92464442	31.56482151	33.93106375	31.8606198	33.57962673	20.13902248
-2.6	-55.02620961	-71.219395	-56.876376	-54.63609617	-55.56042923	-50.6590905	-54.71635682	-47.24789719	-49.83710745	-29.17476513
+2.6	32.8094893	36.868858	28.775540	28.15187957	28.15187957	24.64174226	25.76286019	25.8028271	27.2160176	16.00496396
-2.65	-62.34762553	-78.690598	-64.643103	-61.12988542	-62.45610229	-57.10853783	-62.29982054	-51.79634863	-54.66778856	-31.63887373
+2.65	28.83342185	30.453218	24.590471	22.66911699	22.66911699	19.74349694	20.42678619	21.03955384	22.21061229	13.56064155
-2.7	-69.78885814	-86.145940	-72.673824	-67.99341965	-69.82999296	-63.6277083	-70.19279105	-56.18055719	-59.32903873	-33.96535513
+2.7	24.84540467	24.413091	20.542006	18.061585	18.061585	15.15431908	15.45110967	16.81419369	17.76999408	11.26497418
-2.75	-77.2762296	-93.524955	-80.751843	-75.18759533	-77.4924203	-70.66867244	-78.57973649	-60.38252383	-63.80140932	-35.96493251
+2.75	20.76284108	18.802493	16.654067	13.73831195	13.73831195	11.00182835	11.00182835	12.89182156	13.64650134	9.069694096
-2.8	-87.20383433	-103.138828	-91.486443	-83.61284555	-86.57714791	-79.82089774	-89.53892318	-65.67067348	-69.43727462	-39.92236172
+2.8	15.17701789	12.081643	11.831877	8.498302073	8.498302073	7.709991743	8.75083082	8.178359464	8.677448501	6.336996
-2.85	-94.51237387	-110.099882	-99.427011	-89.7107595	-93.18981914	-86.09057912	-97.20686571	-69.37766725	-73.39356303	-42.88160638
+2.85	10.88434587	10.549474	9.540619	7.8898706	8.136924245	7.709991743	8.75083082	7.312271204	7.799552134	4.461865192
-2.9	-101.8965408	-116.776988	-107.200723	-95.55057795	-99.55638572	-92.14747306	-104.6840668	-72.84258318	-77.09631387	-45.75085229
+2.9	7.661209251	10.400431	11.710263	7.8898706	8.136924245	7.709991743	8.75083082	6.664623852	7.07894421	3.49568237
-2.95	-109.3230173	-123.106039	-114.741652	-101.0705223	-105.6103165	-97.92882235	-111.8944564	-76.04750426	-80.5261658	-48.49643404
+2.95	7.661209251	10.313731	8.184301	7.8898706	8.136924245	7.709991743	8.75083082	5.89127141	6.222892936	3.49568237
-3	-118.8051614	-130.890976	-125.103690	-107.8260947	-113.0809175	-105.1001897	-120.9617868	-80.08781152	-84.85446697	-51.90665627
+3	7.661209251	10.281667	8.155443	7.8898706	8.136924245	7.709991743	8.75083082	5.89127141	6.222892936	3.49568237
(Span 3) -4	-1.846088593	-2.477529	-1.965182	-1.901188264	-1.960719703	-1.857843531	-2.108650053	-1.419594361	-1.4995038	-0.842339531
+4	111.2654982	126.085620	117.061354	102.5754418	106.822263	98.75728402	111.9379562	80.07282579	84.73060314	47.80589254
-3.05	-1.846088593	-2.496221	-2.745773	-1.901188264	-1.960719703	-1.857843531	-2.108650053	-1.419594361	-1.50388425	-0.90003681
+3.05	106.1273332	121.723533	110.650473	98.55282405	102.3589019	94.46458556	106.4724743	77.73061236	82.21862563	45.65428147
-3.1	-4.506885395	-3.810995	-5.499230	-2.907675002	-2.907675002	-2.322591734	-2.322591734	-2.392188506	-2.534938319	-2.570981165
+3.1	97.98072029	114.794477	101.559840	92.127791	95.2635043	87.66065682	97.87592537	73.89576862	78.11125552	43.11447975
-3.15	-6.601390343	-5.520401	-7.540014	-4.255684202	-4.255684202	-3.400888152	-3.400888152	-3.382763811	-3.576102382	-3.80712322
+3.15	92.27914033	109.940895	95.510445	87.6046311	90.28887797	82.9027875	91.90520859	71.12985467	75.15216996	41.92336317
-3.2	-10.02864706	-9.522201	-10.890240	-7.574271014	-7.574271014	-6.051623805	-6.051623805	-5.95536228	-6.28067019	-5.831757294
+3.2	83.35942365	102.348347	86.164686	80.49615703	82.49913718	75.46953713	82.63375893	66.67562383	70.39169945	39.94051558
-3.25	-12.78370619	-13.021973	-13.305315	-10.34993175	-10.34993175	-8.271902895	-8.271902895	-8.020157731	-8.451408324	-7.287631882
+3.25	77.19045829	97.101149	80.965071	75.56231887	77.11002276	70.33774328	77.56543728	63.50755595	67.00891613	38.49207952
-3.3	-16.65369738	-19.078096	-17.285166	-14.86895493	-14.86895493	-11.88689534	-11.88689534	-11.37199075	-11.97461286	-9.617765239
+3.3	67.64168205	88.990445	69.994414	67.90513581	68.77103485	63.57751693	69.56174421	58.4662531	61.63045558	36.34274892
-3.35	-19.37270374	-23.425257	-20.135200	-18.1025379	-18.1025379	-14.57750352	-14.94597156	-13.7633599	-14.48781458	-11.26125177
+3.35	62.43530008	83.445474	63.567489	62.65036768	63.06408305	59.21744663	63.96866163	54.91757764	57.84738453	34.66661561
-3.4	-23.6370775	-30.144021	-24.631125	-23.25659069	-23.256590685393	-19.65885493	-20.4670797145351	-17.73780855	-18.6713774192056	-13.8487179
+3.4	57.97381968	74.958775	57.448099	55.6700547	55.6700547	52.48768998	56.00069742	50.37703939	53.06675818	31.98283569
-3.45	-26.61083266	-34.903888	-27.761114	-26.87897987	-26.87897987	-23.27194591	-24.40459439	-20.49637883	-21.57513561	-15.64769693
+3.45	54.88485045	69.209828	53.135577	51.19472251	51.19472251	47.89213775	50.8618241	47.3853514	49.92502852	30.0848436
-3.5	-31.32523213	-42.434837	-32.481264	-32.56442172	-32.56442172	-29.00005316	-30.6627522	-24.82565893	-26.13227256	-18.44431235
+3.5	50.10084349	60.486392	46.319922	44.799692	44.799692	40.86520758	43.01618339	42.6222463	44.92249127	27.08192219
-3.55	-34.56655908	-47.698593	-35.808127	-36.50648815	-36.50648815	-33.0069802	-35.05012281	-27.82719895	-29.29178837	-20.36666094

+3.55	***46.82363249***	***54.625240***	***41.550678***	***40.44839286***	***40.4483928616352***	***36.1088673369452***	**37.7134772**	***39.2628817***	***41.39377148***	***24.9802627***
-3.6	***-41.04809611***	***-55.928236***	***-42.024466***	***-42.61967719***	**-42.61967719**	***-39.26982644***	**-41.92093789**	***-32.48142783***	***-34.19097666***	***-23.32424547***
+3.6	***41.79742696***	***45.801100***	***35.587189***	***33.81718906***	**33.81718906**	***28.89674256***	**29.68429583**	***33.94730706***	***35.8092911***	***21.68547678***
-3.65	***-46.25971138***	***-61.619165***	***-47.400005***	***-47.69868672***	**-47.91518929**	***-43.59597176***	**-46.67524953**	***-36.05252182***	***-37.97220191***	***-25.33784802***
+3.65	***38.38553077***	***39.917466***	***32.080226***	***29.34298905***	**29.34298905**	***24.05430468***	**24.30074636**	***30.21900203***	***31.89164677***	***19.39833625***
-3.7	***-54.46743535***	***-70.430803***	***-55.883760***	***-55.23740022***	**-55.81893522**	***-50.56148524***	**-54.03425987**	***-41.60890183***	***-43.85939887***	***-28.40822122***
+3.7	***33.19746846***	***31.125775***	***26.804699***	***22.57925933***	**22.57925933**	***18.06748879***	***18.06748879***	***24.34906846***	***25.72232833***	***15.83897288***
-3.75	***-60.17446262***	***-76.470135***	***-61.795269***	***-60.42384476***	**-61.2749816**	***-55.67965465***	***-59.74376167***	***-45.42324544***	***-47.90285409***	***-30.48095507***
+3.75	***29.70444285***	***25.307350***	***23.287158***	***18.05128725***	**18.05128725**	***14.44455999***	***14.44455999***	***20.25056104***	***21.413827***	***13.38453874***
-3.8	***-69.04497394***	***-85.744177***	***-71.003454***	***-68.40861807***	**-69.70076949**	***-63.52560506***	***-68.86677345***	***-51.28377676***	***-54.11823642***	***-33.61593779***
+3.8	***24.36280381***	***16.678030***	***18.718457***	***12.22779934***	**12.81709823**	***12.10451121***	***14.09547678***	***15.86262975***	***16.77967595***	***9.410525074***
-3.85	***-75.14030106***	***-92.051113***	***-77.395875***	***-73.8475661***	**-75.45652215**	***-68.89530883***	***-75.14665399***	***-55.26831004***	***-58.34582465***	***-35.73643558***
+3.85	***20.66079046***	***15.792594***	***15.105559***	***12.22779934***	**12.81709823**	***12.10451121***	***14.09547678***	***13.6835238***	***14.49237192***	***7.308921179***
-3.9	***-84.51292702***	***-101.664742***	***-87.329465***	***-82.14366356***	**-84.25925227**	***-77.12184556***	***-84.81889582***	***-61.33525288***	***-64.78541387***	***-39.69313249***
+3.9	***14.89343098***	***15.555096***	***13.969086***	***12.22779934***	**12.81709823**	***12.10451121***	***14.09547678***	***10.16389332***	***10.79628204***	***5.107592851***
-3.95	***-90.889438***	***-108.156442***	***-94.104025***	***-87.74525255***	**-90.21793714**	***-82.69960977***	***-91.40958112***	***-65.42481699***	***-69.12781718***	***-42.3915614***
+3.95	***12.87499754***	***15.463044***	***13.886240***	***12.22779934***	**12.81709823**	***12.10451121***	***14.09547678***	***9.022894819***	***9.556627129***	***5.107592851***
-5	***-100.6035097***	***-117.983957***	***-104.445629***	***-96.21794268***	**-99.25251448**	***-91.16990533***	***-101.4651995***	***-71.60043574***	***-75.68763928***	***-46.51055092***
+5	***12.87499754***	***15.423728***	***13.850856***	***12.22779934***	**12.81709823**	***12.10451121***	***14.09547678***	***9.022894819***	***9.556627129***	***5.107592851***

3-Span: Shear (Max and Min) Raw Data Results - 25’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.269768033	-7.529852813	-6.6564901	-5.643960635	-6.7707532	-9.638424376	-10.3513358	-11.32962645	-11.91239239
End Shear	66.26126471	61.47447034	53.05487207	43.19242873	54.82954879	73.67449299	77.53006672	77.33658475	77.3184879
-0.05	-8.269768033	-7.859305525	-6.898917789	-6.263772713	-6.7707532	-9.638424376	-10.3513358	-11.32962645	-11.91239239
+0.05	59.9641402	56.42131603	47.65283515	38.51804653	49.58689035	66.64836408	69.85249838	69.79910521	69.78018444
-0.1	-8.269768033	-9.690556595	-8.675254058	-7.57459947	-6.7707532	-9.638424376	-10.3513358	-11.32962645	-11.91239239
+0.1	53.91830215	51.63433699	42.57580116	34.31722139	44.60479505	59.90054406	62.45663976	62.43756386	62.4198344
-0.15	-8.269768033	-11.74231279	-9.868441662	-8.403298132	-6.967912629	-9.638424376	-10.3513358	-11.32962645	-11.91239239
+0.15	49.97260295	48.4540886	39.33603387	31.66940837	41.34335326	55.48488918	58.1049151	58.11004817	58.06709077
-0.2	-9.530147883	-14.62278406	-12.5807417	-10.60868137	-9.971614692	-9.638424376	-10.3513358	-11.32962645	-11.91239239
+0.2	44.20901636	43.71989309	35.02572925	28.52604986	36.56322467	49.01560188	51.29231964	51.58554413	51.64145712
-0.25	-12.72003734	-17.97074662	-14.92795748	-12.35423737	-11.96774607	-12.28550777	-12.28897655	-12.23563064	-12.18604295
+0.25	40.78024768	40.59923472	32.6092442	26.47640732	33.46405718	44.8229645	46.96541531	47.08804876	47.37073813
-0.3	-17.49951165	-23.47193309	-18.38723712	-15.09096603	-14.94027132	-16.901824	-16.9061509	-16.85374949	-16.84655174
+0.3	35.94952825	35.99100658	29.02151449	23.44995816	28.96878687	38.96294458	40.84096342	40.81991276	41.26938683
-0.35	-20.67089437	-26.99008839	-20.72437467	-16.96443833	-16.90041736	-20.29531482	-20.33146991	-20.59475219	-20.61267333
+0.35	32.94059108	32.97874645	26.66430901	21.51044011	26.08715578	35.28164025	36.87927224	36.85811117	37.15285193
-0.4	-25.38611128	-32.04131005	-24.65338618	-20.16471283	-19.79617223	-25.93348313	-25.9405137	-26.78259051	-26.8010653
+0.4	28.53652854	28.56970028	23.19748115	18.71155054	21.85096205	30.20641181	31.14633979	31.1252014	31.40534203
-0.45	-28.7653308	-35.25689586	-27.44277766	-22.39204124	-21.68993802	-29.6587585	-29.66642826	-30.81780341	-30.8365854
+0.45	25.68473712	25.71462621	20.94221624	16.89220963	19.57101425	26.93742891	27.48026305	27.45925998	27.72867374
-0.5	-34.09660846	-39.85037306	-31.3968477	-25.58423012	-25.2606662	-35.17318841	-35.49958868	-36.71762533	-37.00041203
+0.5	21.55289341	21.5779582	17.6602833	14.24798793	16.83522	22.22892768	22.26897343	22.43500697	22.4784117
-0.55	-37.51234696	-42.75821678	-33.88121287	-27.61399755	-27.64904953	-38.78693845	-39.83542816	-40.53835329	-41.54266489
+0.55	18.90692253	18.92887016	15.54960226	12.5503617	15.15867075	19.23346338	19.27134413	19.43013384	19.47131002
-0.6	-42.41560063	-46.88615998	-37.38305733	-30.51244548	-31.00646174	-44.09053382	-46.22930254	-46.16279295	-48.17668228
+0.6	15.12031036	15.13778189	12.32017129	10.15058596	12.51056648	14.97879054	15.0132728	15.16033961	15.19799773
-0.65	-45.53012996	-49.4810607	-39.61010117	-32.34799643	-33.66389644	-47.53469644	-50.40249133	-50.33792159	-52.46671777
+0.65	12.72882361	12.74463	10.20078391	8.642096137	10.87713935	12.31490486	12.34705141	12.48571721	12.448848
-0.7	-49.95776616	-53.13570536	-42.92148505	-34.95732936	-38.51018748	-52.54035968	-56.50051976	-56.43912993	-58.78987903
+0.7	9.360453018	9.461055366	7.443547068	6.512316053	8.545520805	9.043535922	9.076528056	9.076528056	9.076528056
-0.75	-52.73934565	-55.41247791	-44.98497308	-36.60150568	-41.66134731	-56.19912553	-60.44190431	-60.38279852	-63.06807649
+0.75	7.272127861	7.4194188	5.844210587	5.188609536	7.077216952	7.026361753	7.018022849	7.045558912	6.915904423
-0.8	-56.64376741	-58.58604234	-47.57162662	-38.92555352	-46.24644236	-62.44505754	-66.14033868	-66.08491673	-69.15870684
+0.8	4.39499942	4.598604569	3.662534394	3.360030166	5.016079211	4.247209998	4.239289402	4.159196435	4.147343464
-0.85	-59.06067401	-60.5562709	-49.15538037	-40.38060394	-49.19584244	-66.46617398	-69.78074724	-69.72792512	-72.99040045
+0.85	3.008348138	3.121813763	2.732010507	2.558918403	3.743291243	2.888438525	2.90245294	2.898283732	2.851994238
-0.9	-63.88204965	-63.31970363	-51.32284939	-42.43488291	-53.4368457	-72.25371125	-75.40133732	-75.73721097	-78.77702854
+0.9	1.593599183	1.769278961	1.727202944	1.667569546	1.998228716	1.540197258	1.598071453	1.755712954	1.796201935
-0.95	-67.26819983	-64.97924518	-53.82195342	-44.99140417	-56.12922496	-75.93189358	-79.75352737	-80.30833395	-82.37837626
+0.95	1.24865072	1.296629034	1.156906391	1.128833966	0.983668082	1.457709307	1.598071453	1.755712954	1.796201935
-1	-72.08172112	-67.52863901	-58.23193721	-48.6952068	-59.94323816	-81.14905058	-85.97551677	-86.7981704	-88.36048399
+1	1.25E+00	1.25E+00	9.93E-01	8.32E-01	9.84E-01	1.46E+00	1.60E+00	1.76E+00	1.80E+00
(Span 2) -2	-5.18E+00	-5.18E+00	-4.12E+00	-3.45E+00	-4.08E+00	-6.05E+00	-6.63E+00	-7.29E+00	-7.45E+00
+2	7.49E+01	68.74107451	61.09995419	51.07461061	61.55837599	83.46019482	90.01205647	90.78954508	91.59219043
-2.05	-5.18E+00	-5.43E+00	-4.12E+00	-3.46E+00	-4.08E+00	-6.05E+00	-6.63E+00	-7.29E+00	-7.45E+00
+2.05	70.84656335	64.14222662	57.46853955	47.93270876	58.32075277	79.02153716	84.8339743	85.06127522	86.08141597
-2.1	-5.181860941	-6.13375429	-5.165822719	-4.354147018	-4.082190962	-6.049447423	-6.631945514	-7.286152819	-7.454180927
+2.1	66.59711273	60.44014133	53.68251633	44.68576884	54.8815381	74.31520947	79.40693816	79.33378785	80.18914737
-2.15	-5.181860941	-6.708637233	-6.440771483	-5.211590438	-4.151321638	-6.049447423	-6.631945514	-7.286152819	-7.454180927
+2.15	62.16597278	58.00146143	49.78388456	41.37401064	51.27875714	69.39255409	73.7899579	73.63050391	74.26063119
-2.2	-6.877461854	-8.310725834	-9.008574729	-7.181939562	-6.552906026	-6.640389277	-6.650541037	-7.286152819	-7.454180927
+2.2	56.05735755	54.38102482	44.4831339	37.12557704	46.28629272	62.58126088	65.64079731	65.99752312	66.21659852
-2.25	-9.68952725	-11.78001776	-11.41802601	-9.157366493	-8.518794019	-9.356210557	-9.367853734	-9.344134816	-9.322088477

+2.25	50.89048947	51.40506906	40.72627583	33.95160944	42.4496641	57.03056703	59.34409059	59.9004482	60.87372599
-2.3	-12.735067	-15.32071439	-13.84722442	-10.9909455	-10.8552926	-12.6940584	-12.7092001	-12.68031521	-12.65345639
+2.3	46.09285712	48.2194529	37.92888831	30.95595523	38.35863738	51.27323889	53.48750639	53.65645257	55.70574903
-2.35	-16.3719247	-19.12769467	-16.39368095	-13.02878997	-13.04659503	-16.34404392	-16.36097747	-16.64685934	-16.30248848
+2.35	42.05525545	44.83651772	35.15068322	28.55590518	34.06189686	45.94142774	48.20274539	48.16731862	50.41302535
-2.4	-20.9755276	-24.76847608	-19.81765043	-15.80409628	-16.07923811	-21.56046502	-21.81706319	-22.15568281	-22.22014502
+2.4	36.38824843	40.19985693	31.17715486	25.18932313	28.98214959	39.04010554	41.32009533	41.28378488	43.23028518
-2.45	-24.57012054	-28.84434845	-22.39451378	-17.92045305	-18.40980497	-25.68334927	-26.43190463	-26.39578685	-27.00959623
+2.45	31.97303553	36.56411607	27.9930275	22.53871957	25.27969561	34.29026525	36.22704882	36.19049892	37.80008714
-2.5	-28.24915227	-32.78012387	-24.96816612	-20.05893095	-21.71747251	-29.94234198	-31.25375149	-31.21707422	-32.38477296
+2.5	28.24310795	32.77490128	24.96503754	20.05747991	21.71147794	29.93522537	31.24597097	31.20956937	32.37680332
-2.55	-31.97914523	-36.56912831	-27.9970346	-22.54057822	-25.28594701	-34.29751097	-36.23504967	-36.19822921	-37.80810709
+2.55	24.56419288	28.83892017	22.39137453	17.91899166	18.40577995	25.67642567	26.42440512	26.38857668	27.00261482
-2.6	-37.83989559	-41.38126273	-32.20328553	-26.05059312	-30.2460714	-40.75623887	-43.04260921	-43.00617528	-45.04305822
+2.6	19.79618423	23.37422451	18.95653926	15.10332169	15.3075878	20.21675426	20.32604609	20.69673951	20.71853285
-2.65	-42.06205675	-45.0386748	-35.15419141	-28.55752679	-34.06851226	-45.95007007	-48.21096013	-48.17524232	-50.42092961
+2.65	16.36649131	19.12186304	16.39056872	13.02733638	13.04277594	16.33783438	16.35499856	16.79081114	16.2969325
-2.7	-46.09933177	-48.22389596	-37.93218713	-30.95748052	-38.14778131	-51.20998218	-53.49669246	-53.51547878	-55.71352155
+2.7	12.76840052	15.31593502	13.84414389	10.98950681	10.85163163	12.68825733	12.70362316	12.67493551	12.64827392
-2.75	-50.73242339	-51.40925481	-40.72960399	-33.95371836	-42.45630874	-56.8776546	-59.31308321	-59.75950776	-60.88126433
+2.75	9.684758683	11.77530012	11.32700081	8.996331149	8.515320965	9.351554094	9.363377485	9.339817216	9.317915105
-2.8	-57.60827164	-55.32807155	-45.81949993	-38.19000846	-47.55692146	-64.31347247	-67.58510979	-67.92936308	-68.26356436
+2.8	5.993570648	7.426549168	8.267547318	6.71846171	5.924267859	6.049470715	6.631967899	7.286182217	7.454233065
-2.85	-62.1733782	-58.00492975	-49.78867633	-41.37613461	-51.28509771	-69.40088703	-73.79902431	-73.63918674	-74.26940823
+2.85	5.181894872	6.707920561	6.439484189	5.210986133	4.148425544	6.049470715	6.631967899	7.286182217	7.454233065
-2.9	-66.60426887	-60.44328515	-54.19351223	-44.80798898	-54.88763686	-74.32323762	-79.41576172	-79.34283552	-80.19817694
+2.9	5.181894872	6.132873869	5.185611918	4.35350627	4.082239034	6.049470715	6.631967899	7.286182217	7.454233065
-2.95	-70.8533943	-64.14842984	-57.47306989	-47.93481736	-58.32654721	-79.02917713	-84.84246503	-85.06988002	-86.08992722
+2.95	5.181894872	5.429837313	4.122758681	3.462247047	4.082239034	6.049470715	6.631967899	7.286182217	7.454233065
-3	-76.15395701	-70.26884035	-62.27304045	-52.09469565	-62.59150432	-84.87837362	-91.68046932	-92.79894532	-93.58563442
+3	5.181894872	5.18215048	4.122758681	3.453944705	4.082239034	6.049470715	6.631967899	7.286182217	7.454233065
(Span 3) -4	-1.248658896	-1.25E+00	-9.93E-01	-8.32E-01	-0.983679666	-1.457714919	-1.598076847	-1.755720038	-1.796214498
+4	70.50666906	66.84600334	56.78582716	47.52240267	58.69679758	79.44343606	83.93480998	84.67594779	86.28787543
-3.05	-1.248658896	-1.30E+00	-1.16E+00	-1.13E+00	-0.983679666	-1.457714919	-1.598076847	-1.755720038	-1.796214498
+3.05	67.26001769	65.09996263	53.8164	45.03442705	56.12238979	75.9229289	79.74328463	80.29801151	82.37064418
-3.1	-2.042885652	-2.205141086	-2.027731003	-1.954538236	-2.560109362	-1.974202974	-1.970451169	-1.982846709	-1.939820266
+3.1	62.13132458	62.43116204	50.62528525	41.75930908	52.04179927	70.34954105	73.27317518	73.49673315	76.87857619
-3.15	-2.99174283	-3.123716573	-2.733373171	-2.559581688	-3.746411821	-2.890754929	-2.90579057	-2.90579057	-2.90579057
+3.15	59.05491142	60.55232792	49.15254533	40.37928152	49.18831498	66.45632144	69.77217888	69.7196736	72.98208948
-3.2	-5.323232737	-5.508950727	-4.367532338	-3.949061641	-5.68691125	-5.143880234	-5.135627537	-5.052210973	-5.039879829
+3.2	55.37254635	57.55631967	46.7345401	38.16830715	44.73058215	60.37985655	64.26216539	64.2058158	67.16436995
-3.25	-7.277001846	-7.423351042	-5.846997412	-5.189974608	-7.08086059	-7.03111746	-7.022601763	-6.975013234	-6.920162933
+3.25	52.73266242	55.40800434	44.98162247	36.59993234	41.65328973	56.18858077	60.43259329	60.37382428	63.05877164
-3.3	-10.45812068	-10.53143296	-8.318188584	-7.205137537	-9.310038988	-10.10386104	-10.13783661	-10.13783661	-10.13783661
+3.3	48.50809095	51.94445126	41.94129977	34.1049819	36.90126826	50.88650045	54.4815889	54.41945025	56.63105596
-3.35	-12.73448762	-12.74917451	-10.13188701	-8.643661005	-10.88123851	-12.32125818	-12.35315886	-12.49161806	-12.3193701
+3.35	45.52262675	49.47594239	39.70477476	32.34619999	33.65543261	47.52622569	50.39260764	50.32838371	52.45731679
-3.4	-16.3629761	- 16.380841679 2393	-13.31594156	-10.93113739	-13.35349301	-16.3705575322771	-16.40591621	-16.55677708	-16.5953986513023
+3.4	40.80344535	45.53598025	36.2413322	29.56375763	29.9118787	42.33108165	44.10436084	44.25224005	45.98097708
-3.45	-18.91323403	-18.93408946	-15.55335541	-12.55211773	-15.07153226	-19.24068055	-19.27828202	-19.43682038	-19.47777315
+3.45	37.50408074	42.75245969	33.87678071	27.61194812	27.64300519	38.77802096	39.82513232	40.52967467	41.53269027
-3.5	-22.91608409	-22.94157851	-18.74360096	-15.11892427	-17.74126881	-23.77856214	-23.95994565	-23.98857921	-24.1965375
+3.5	32.33788617	38.34387063	30.10454318	24.53770737	24.01553851	33.33729216	33.34591335	34.7636281	34.78295781
-3.55	-25.69159718	-25.72028982	-20.94625515	-16.89406667	-19.57577427	-26.94536852	-27.48877525	-27.46747057	-27.73658953
+3.55	28.75637726	35.250527497 8658	27.4378009964 135	22.38973610483 3	21.685081648 1291	29.6495408269615	29.6575737825724	30.808609180307 4	30.82770586

-3.6	-29.99580296	-30.02937915	-24.34695075	-19.63785157	-23.20627833	-31.88470796	-33.03651314	-33.01501563	-33.29992264
+3.6	23.81354216	30.38108672	23.2069268	19.01857777	18.8326805	24.05032155	24.05738206	24.72763642	24.74625572
-3.65	-32.9478853	-32.98475949	-26.66856795	-21.51236895	-26.09439223	-35.2901624	-36.8885446	-36.8670628	-37.16148269
+3.65	20.66314494	26.98310506	20.72010978	16.96245386	16.89538872	20.28597188	20.3231887	20.58514271	20.60341653
-3.7	-37.48041224	-37.52224672	-30.21569819	-24.45348563	-30.45289193	-40.74517487	-42.869205	-42.8479192	-43.30289556
+3.7	15.90056289	21.66059462	17.23808627	14.17948458	13.94802606	15.35736547	15.36170778	15.30922252	15.26044239
-3.75	-40.62215044	-40.60549434	-32.61362449	-26.47847931	-33.47188258	-44.83315495	-46.97527059	-46.95421035	-47.26887684
+3.75	12.7122157	17.96316016	14.9237073	12.35225501	11.96260745	12.27787599	12.28163272	12.22856595	12.17920865
-3.8	-46.11703053	-45.29818339	-36.24323053	-29.56043386	-38.14831699	-51.16004749	-53.42850429	-53.72110602	-53.77710718
+3.8	8.26975557	13.68457073	11.39033842	9.684147776	8.965876425	9.638360861	10.35131045	11.32951592	11.91232632
-3.85	-49.98212718	-48.46049914	-39.34177262	-31.67158277	-41.35165365	-55.495701	-58.03766722	-58.09520426	-58.07665576
+3.85	8.26975557	11.73826322	10.09714317	8.402439795	6.962744258	9.638360861	10.35131045	11.32951592	11.91232632
-3.9	-55.92778997	-53.23518889	-44.25673971	-35.70357229	-46.26312281	-62.14580499	-64.90924843	-64.87760904	-64.85783419
+3.9	8.26975557	8.619720585	8.057352012	7.14627092	6.770838162	9.638360861	10.35131045	11.32951592	11.91232632
-3.95	-59.97410562	-56.42777317	-47.65907072	-38.52093505	-49.59551481	-66.65957198	-69.86433578	-69.81047905	-69.79115005
+3.95	8.26975557	7.85822666	6.897014981	6.262772326	6.770838162	9.638360861	10.35131045	11.32951592	11.91232632
-5	-66.13969994	-61.2112652	-52.87566621	-42.85868366	-54.65909373	-73.52093744	-77.43925489	-77.34818729	-77.32969302
+5	8.26975557	7.529871587	6.65644563	5.643970509	6.770838162	9.638360861	10.35131045	11.32951592	11.91232632

3-Span: Shear (Max and Min) Raw Data Results - 25' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	**-11.72306667**	**-12.3239459**	**-9.642787354**	**-11.10397786**	**-11.8048481**
End Shear	**85.12735216**	**83.5359345**	**76.33259037**	**84.16678478**	**87.36217331**
-0.05	**-12.41919576**	**-13.00644484**	**-10.63048524**	**-11.26999086**	**-12.95531665**
+0.05	**76.31210062**	**74.3923527**	**69.80706392**	**76.54640037**	**79.22566451**
-0.1	**-14.54543384**	**-15.26487487**	**-13.76010314**	**-14.09428573**	**-15.55852274**
+0.1	**68.78317794**	**66.07956793**	**63.33024188**	**69.34592446**	**71.2079485**
-0.15	**-16.51144103**	**-16.62486995**	**-15.7071867**	**-16.56636133**	**-17.13934216**
+0.15	**64.03835152**	**60.67861758**	**59.05765008**	**64.59239659**	**65.95200155**
-0.2	**-20.04304276**	**-19.8600875**	**-19.49556145**	**-20.18342903**	**-20.81924986**
+0.2	**57.02919601**	**53.3049954**	**52.74405618**	**57.56213119**	**58.2367254**
-0.25	**-23.22715136**	**-22.83425709**	**-23.4439459**	**-24.08453546**	**-24.21665206**
+0.25	**52.57579017**	**49.09413437**	**48.61447725**	**52.95937725**	**53.22595396**
-0.3	**-28.68899668**	**-27.61350364**	**-29.13745326**	**-30.96807004**	**-29.06192402**
+0.3	**46.02030699**	**43.05166524**	**42.56668208**	**46.21121625**	**46.29721384**
-0.35	**-32.2111381**	**-31.12559015**	**-32.78056436**	**-35.33919759**	**-32.61823673**
+0.35	**41.75181528**	**39.10721777**	**38.64849371**	**41.83383054**	**41.91721099**
-0.4	**-38.93554484**	**-37.78288742**	**-38.01665837**	**-41.56988168**	**-40.13357728**
+0.4	**35.53396433**	**33.34780002**	**32.96907309**	**35.4796723**	**35.58621225**
-0.45	**-44.04666455**	**-42.10123855**	**-41.35515782**	**-45.50681455**	**-44.94579427**
+0.45	**31.5307162**	**29.63130771**	**29.51706474**	**31.48486905**	**31.56644536**
-0.5	**-51.69141598**	**-49.43815843**	**-46.13483181**	**-51.08776557**	**-51.86603189**
+0.5	**25.77096055**	**24.2727141**	**24.77335864**	**26.42491588**	**25.78829994**
-0.55	**-56.53549618**	**-54.06568889**	**-49.1693858**	**-55.30485043**	**-56.28020916**
+0.55	**22.11328171**	**20.86270548**	**21.75209138**	**23.18435414**	**22.12195764**
-0.6	**-63.58545745**	**-60.62994205**	**-54.02942566**	**-61.84963884**	**-62.60150181**
+0.6	**16.93208074**	**16.18580268**	**17.49781903**	**18.5464909**	**16.93204181**
-0.65	**-68.04419716**	**-64.81847283**	**-57.66597037**	**-66.00641882**	**-66.62388735**
+0.65	**13.56031179**	**13.29620556**	**14.80312416**	**15.61715977**	**13.6965776**
-0.7	**-73.81866459**	**-70.67629189**	**-62.87996701**	**-71.92683512**	**-72.46078678**
+0.7	**9.829436121**	**10.01631702**	**10.99682278**	**11.40961428**	**9.78582695**
-0.75	**-77.75877177**	**-74.30405347**	**-66.19026676**	**-75.6609456**	**-76.38919411**
+0.75	**7.805230076**	**8.080660103**	**8.630164547**	**8.81985514**	**7.686268583**
-0.8	**-83.26379572**	**-79.61283045**	**-70.89834584**	**-80.93772775**	**-82.78209239**
+0.8	**5.655150239**	**5.473290049**	**5.107437627**	**5.306891198**	**4.784386667**
-0.85	**-86.78070705**	**-84.95111568**	**-73.860338**	**-84.23633083**	**-86.82502043**
+0.85	**4.598483592**	**4.362026213**	**3.661964958**	**3.676752163**	**3.430834183**
-0.9	**-91.78783652**	**-92.51459979**	**-78.02940814**	**-88.91296189**	**-92.55074353**
+0.9	**3.103358046**	**3.143380487**	**2.124243262**	**2.295440811**	**2.51753452**
-0.95	**-94.8613942**	**-97.93550688**	**-80.62102899**	**-91.82921051**	**-96.1362188**
+0.95	**2.176286401**	**2.375191674**	**1.7049866**	**1.94091618**	**2.104202495**
-1	**-100.8809946**	**-106.279996**	**-84.21799448**	**-95.82258691**	**-101.1568252**
+1	**1.80E+00**	**1.68E+00**	**1.53E+00**	**1.81E+00**	**1.84E+00**
(Span 2) -2	**-7.46E+00**	**-6.99E+00**	**-6.35E+00**	**-7.50E+00**	**-7.62E+00**
+2	**103.9565957**	**110.9295031**	**83.02444767**	**93.04227552**	**99.96121953**
-2.05	**-7.46E+00**	**-7.64E+00**	**-6.40E+00**	**-7.97E+00**	**-7.62E+00**
+2.05	**97.23078234**	**103.4529881**	**79.47432215**	**89.33941377**	**95.33439944**
-2.1	**-9.221778771**	**-9.306078169**	**-6.769493669**	**-8.799321799**	**-7.867235712**
+2.1	**90.36541264**	**95.81340173**	**75.73288403**	**85.54267348**	**90.48053605**
-2.15	**-10.85163533**	**-10.87032638**	**-8.788441555**	**-9.447928626**	**-10.20126708**
+2.15	**84.17926801**	**88.66179943**	**71.9475559**	**81.43212276**	**85.58123397**
-2.2	**-12.77867688**	**-13.52584002**	**-11.99943096**	**-11.81830144**	**-12.91480866**
+2.2	**76.63773299**	**78.77528779**	**66.59738194**	**75.49932867**	**78.59207906**
-2.25	**-16.05402392**	**-16.76714912**	**-15.9066277**	**-15.15959579**	**-16.53524013**

+2.25	71.48361442	71.15323411	62.53686563	70.73774837	73.29609516
-2.3	-19.88484296	-20.32184193	-20.3331418	-20.01109871	-20.4016391
+2.3	66.3197577	63.40180438	58.33182113	65.73194856	67.83584334
-2.35	-24.20102421	-23.87144201	-24.65734626	-24.95537495	-24.45645575
+2.35	60.84338346	56.92556239	54.00075263	60.5789576	62.23315324
-2.4	-30.51548341	-29.02590374	-30.25756068	-32.06992887	-32.19958199
+2.4	53.05640354	49.47877029	48.06193559	53.5749216	54.57906284
-2.45	-36.01778313	-34.02201986	-34.32899962	-37.31817901	-37.85751714
+2.45	47.05627867	44.26517315	43.50876274	48.12361545	48.98936613
-2.5	-41.59755001	-39.19982926	-38.8973427	-42.78850748	-43.37963364
+2.5	41.59075528	39.1988074	38.89124135	42.78139101	43.37268034
-2.55	-47.06291845	-44.26617896	-43.51479556	-48.13089974	-48.89159051
+2.55	36.01087449	34.02101847	34.32370983	37.31088798	37.85037056
-2.6	-55.06237793	-51.40057398	-49.56806533	-55.36223889	-56.51719752
+2.6	28.70939728	27.66622753	28.87014519	30.32250512	30.27728867
-2.65	-60.85029542	-56.92664594	-54.00652971	-60.58572209	-62.2403787
+2.65	24.19565239	23.87072882	24.65171989	24.94812332	24.44894532
-2.7	-66.32630124	-63.40333215	-58.33744924	-65.73870423	-67.84289197
+2.7	19.87965819	20.32113083	20.32737946	20.00495665	20.39680056
-2.75	-71.48976059	-71.1547814	-62.54231829	-70.74419783	-73.30296489
+2.75	16.04980942	16.76643822	15.90073515	15.31615835	16.53017626
-2.8	-78.28363961	-81.28119183	-67.92075249	-77.03464319	-80.32369244
+2.8	12.31924088	12.60801272	11.22491188	11.10255922	12.27356646
-2.85	-84.18707373	-88.66326248	-71.75955037	-81.43775301	-85.36642756
+2.85	10.84973643	10.87003091	8.785075784	9.447156557	10.19843144
-2.9	-90.37287797	-95.81479467	-75.73800474	-85.54790446	-90.48693391
+2.9	9.219663926	9.305753895	6.769053023	8.798321099	7.864039659
-2.95	-97.23915129	-103.4544893	-79.47909001	-89.34422221	-95.34041107
+2.95	7.458884256	7.635114956	6.39797492	7.966778203	7.621354265
-3	-106.1625233	-113.3723693	-84.22592479	-94.86464104	-101.506363
+3	7.458884256	6.985016605	6.353148853	7.501809823	7.621354265
(Span 3) -4	-1.79733534	-1.683149409	-1.53089098	-1.807678931	-1.83648493
+4	98.59817843	103.5590165	83.05367712	94.53779823	99.52534769
-3.05	-2.177937848	-2.375410735	-1.705703309	-1.9416049	-2.104980142
+3.05	94.92018688	97.93379305	80.61607413	91.82367208	96.12954455
-3.1	-3.590444918	-3.541885769	-2.609173258	-2.482948046	-2.728110353
+3.1	90.2933306	90.05239786	76.67142668	87.37402039	90.68079477
-3.15	-4.600391716	-4.362275326	-3.664078383	-3.642948854	-3.432535469
+3.15	86.9023951	84.94954297	73.85464483	84.23001387	86.81746053
-3.2	-6.200975317	-6.268116825	-6.152605169	-6.438961773	-5.720835739
+3.2	81.47594468	77.71355846	69.35777665	79.21555817	80.68638276
-3.25	-7.8088954	-8.081224421	-8.634608273	-8.824648463	-7.69009025
+3.25	77.75172497	74.30297727	66.18387921	75.65376593	76.38079957
-3.3	-10.8864767	-11.02022864	-12.237456	-12.75270228	-10.88612259
+3.3	71.75946012	68.77851171	61.16788281	69.98798591	70.55113721
-3.35	-13.44766882	-13.29702864	-14.80825043	-15.62271032	-13.70247471
+3.35	68.03616468	64.8172599	57.65893452	65.9984016	66.61619582
-3.4	-18.62258242	-17.68576385	-18.89426655	-20.06707575	-18.62509346
+3.4	61.26484392	58.47242964	52.15690427	59.70055919	60.52650697
-3.45	-22.11987204	-20.86370954	-21.75778424	-23.19055385	-22.12872374
+3.45	56.52670755	54.06431903	49.41122657	55.29601861	56.27192868
-3.5	-27.66309454	-26.02904976	-26.33694828	-28.09274483	-27.68595374
+3.5	49.18490994	47.03854691	44.56578846	49.26339943	49.59037045
-3.55	-31.53799478	-29.6324066	-29.52337164	-31.49159641	-31.57392902
+3.55	44.03699812	42.09995839	41.34870751	45.49922068	44.93675301
-3.6	-37.58738339	-35.24568155	-34.84134214	-37.57570835	-37.65600915
+3.6	36.55895298	35.5677449	36.29493971	39.52829014	37.65854658

-3.65	***-41.75962462***	***-39.10839763***	***-38.65604864***	***-41.84229599***	***-41.92539643***
+3.65	***32.2047831***	***31.12425477***	***32.77351214***	***35.33074686***	***32.60843631***
-3.7	***-48.19473834***	***-45.05182499***	***-44.56909067***	***-48.44659159***	***-48.5335546***
+3.7	***26.85634314***	***26.02318716***	***27.26272947***	***28.70821242***	***27.47358062***
-3.75	***-52.58397685***	***-49.09534876***	***-48.62248639***	***-52.96832894***	***-53.23532624***
+3.75	***23.2213727***	***22.83336418***	***23.43629208***	***24.0752248***	***24.21028736***
-3.8	***-59.35498984***	***-55.4350817***	***-54.84227828***	***-59.89940142***	***-60.79340655***
+3.8	***18.43026497***	***18.45391583***	***17.54462205***	***19.01125962***	***19.06228896***
-3.85	***-64.04706971***	***-60.68023933***	***-59.06598239***	***-64.60168919***	***-65.9618917***
+3.85	***16.50774254***	***16.62446633***	***15.70345316***	***16.56136331***	***17.13643307***
-3.9	***-71.18052187***	***-68.82588719***	***-65.48995019***	***-71.74764014***	***-73.87455813***
+3.9	***13.86151619***	***14.54186841***	***12.74127842***	***13.17902348***	***14.71939796***
-3.95	***-76.32238692***	***-74.39404709***	***-69.8155816***	***-76.55588257***	***-79.23590214***
+3.95	***12.22875654***	***13.00595299***	***10.62619873***	***11.26875948***	***12.95181161***
-5	***-84.80987379***	***-83.53784175***	***-76.34115508***	***-83.8048157***	***-87.37256059***
+5	***11.7230459***	***12.32393169***	***9.64277174***	***11.10394054***	***11.8049354***

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.94E-14	-3.03E-14	-3.33E-14	-2.56E-14	-2.60E-14	-2.88E-14	-3.34E-14	-2.39E-14	-2.52E-14	-1.97E-14
End Shear	4.47E-14	4.94E-14	3.34E-14	3.92E-14	4.00E-14	3.15E-14	3.15E-14	3.19E-14	3.35E-14	1.97E-14
-0.05	-16.09589299	-19.27960307	-17.3142572	-15.2845967	-16.0212038	-15.1307326	-17.6191927	-11.2786129	-11.9457591	-6.384485153
+0.05	112.6503656	135.9062692	118.341805	108.7863147	111.8195642	102.4829002	113.4288253	81.19798285	85.80196186	52.98670883
-0.1	-32.19178597	-38.55920615	-34.62851439	-30.5691934	-32.0424075	-30.2614653	-35.2383855	-22.5572259	-23.8915182	-12.76897031
+0.1	209.3878622	256.1393171	220.5480918	203.5847821	208.7633433	191.0432579	210.1610149	152.0466335	160.5924763	99.22743291
-0.15	-48.28767896	-57.83880922	-51.94277159	-45.8537901	-48.0636113	-45.3921979	-52.8575782	-33.8358388	-35.8372773	-19.15345546
+0.15	282.1536597	352.8049341	296.0455985	277.1251095	283.3094534	259.0716904	283.831447	207.7103314	219.2908	134.8351629
-0.2	-64.38357195	-77.1184123	-69.25702879	-61.1383868	-64.0848151	-60.5229305	-70.476771	-45.1144517	-47.7830365	-25.53794061
+0.2	343.5986542	438.653304	363.685962	340.4623005	347.1136525	316.5303106	343.786095	255.9126975	270.0784205	169.1124324
-0.25	-80.47946493	-96.39801537	-86.57128599	-76.4229834	-80.1060189	-75.6536631	-88.0959637	-56.3930647	-59.7287956	-31.92242576
+0.25	377.8157368	496.7462407	400.0812527	381.2935952	387.4360489	353.9573795	385.9924504	286.7767913	302.5083374	191.9961538
-0.3	-96.57535792	-115.6776184	-103.8855432	-91.7075801	-96.1272226	-90.7843958	-105.715156	-67.6716776	-71.6745547	-38.30691092
+0.3	407.7206904	548.2068712	436.2237178	413.5070337	418.111036	383.1483877	432.6679008	312.2474533	329.1611515	214.576526
-0.35	-112.6712509	-134.9572215	-121.1998004	-106.992177	-112.148426	-105.915128	-123.334349	-78.9502906	-83.6203138	-44.69139607
+0.35	409.9895958	573.5943132	442.2606029	426.6298389	429.8447076	410.5353502	458.0806626	322.8173466	340.1360311	223.7339328
-0.4	-128.7671439	-154.2368246	-138.5140576	-122.276774	-128.16963	-121.045861	-140.953542	-90.2289035	-95.5660729	-51.07588122
+0.4	410.140765	588.8755893	445.5530814	437.8752629	447.4460291	426.8113074	471.473759	328.1401431	346.4113386	235.1744998
-0.45	-144.8630369	-173.5164277	-155.8283148	-137.56137	-144.190834	-136.176594	-158.572735	-101.507516	-107.511832	-57.46036637
+0.45	388.9096216	584.465533	435.057285	439.7991916	446.3696726	426.5184526	465.7215029	331.143359	349.2149163	231.6074096
-0.5	-160.9589299	-192.7960307	-173.142572	-152.845967	-160.212038	-151.307326	-176.191927	-112.786129	-119.457591	-63.84485153
+0.5	391.60429	581.4021717	439.0912231	432.7010511	436.489707	422.6407687	460.6876526	326.800436	344.3915232	232.8065366
-0.55	-177.0548229	-212.0756338	-190.4568292	-168.130564	-176.233241	-166.438059	-193.81112	-124.064742	-131.40335	-70.22933668
+0.55	368.6159419	562.0089388	418.2890171	409.8480251	418.0553275	402.3517777	436.7978655	309.8745214	326.1837067	219.1216416
-0.6	-193.1507158	-231.3552369	-207.7710864	-183.41516	-192.254445	-181.568792	-211.430313	-135.343355	-143.349109	-76.61382183
+0.6	372.7577261	532.300153	422.260753	387.7096914	394.7347762	376.090981	416.8518649	294.6593654	310.1677531	210.1758199
-0.65	-209.2466088	-250.63484	-225.0853436	-198.699757	-208.275649	-196.699524	-229.049506	-146.621968	-155.294868	-82.99830698
+0.65	355.381552	483.4000974	399.2285883	359.8144848	363.5535763	337.9664368	379.2670624	272.2071253	286.9139318	188.2029844
-0.7	-225.3425018	-269.914443	-242.3996008	-213.984354	-224.296853	-211.830257	-246.668698	-157.900581	-167.240628	-89.38279214
+0.7	330.3515096	427.2717391	371.9632339	323.0610012	327.5757648	294.1345712	332.1464433	244.2377922	257.5528414	170.7884582
-0.75	-241.4383948	-289.1940461	-259.713858	-229.26895	-240.318057	-226.960989	-264.287891	-169.179194	-179.186387	-95.76727729
+0.75	277.5125901	353.6378932	313.5426762	269.4888593	273.8190958	244.2700826	266.625279	202.4513846	213.5809533	142.2532199
-0.8	-257.5342878	-308.4736492	-277.0281152	-244.553547	-256.33926	-242.091722	-281.907084	-180.457807	-191.132146	-102.1517624
+0.8	222.7485448	276.3727495	256.6123863	209.4874857	212.2156473	187.3294123	199.3214004	159.0438383	167.6972569	118.9537749
-0.85	-273.6301808	-327.8675095	-294.4452039	-259.838144	-272.360464	-257.222455	-299.526277	-192.491667	-203.872902	-108.5362476
+0.85	145.1500294	183.9344002	173.5730844	135.5618468	135.5618468	115.8649023	119.0383927	104.6655743	110.2614905	85.94356363
-0.9	-289.8431653	-353.9177042	-317.9504927	-275.12274	-288.381668	-272.353187	-317.145469	-240.932079	-254.851979	-121.2350617
+0.9	101.4048458	101.0648066	126.2955483	73.202793	73.202793	58.5136997	58.56816653	58.55676605	61.80952811	59.78372478
-0.95	-323.9028105	-385.9821719	-362.9668569	-290.407337	-304.402872	-287.48392	-334.764662	-297.665543	-314.461856	-147.1830018
+0.95	44.11223665	59.92628055	69.41217772	45.15268817	46.56654585	44.1235166	50.08009379	35.12904999	37.52012798	24.66495709
-1	-372.023156	-422.6177049	-413.6623232	-305.691943	-320.424091	-306.396052	-353.731972	-358.693118	-378.542781	-173.8397868
+1	46.16025852	61.93781684	49.12762307	47.52914416	49.01741551	46.44580671	52.71588791	35.48991469	37.48756665	21.05839808
(Span 2) -2	-372.023156	-422.6177049	-413.6623232	-305.691943	-320.424091	-306.396052	-353.731972	-358.693118	-378.542781	-173.8397868
+2	46.16025852	61.93781684	49.12762307	47.52914416	49.01741551	46.44580671	52.71588791	35.48991469	37.48756665	21.05839808
-2.05	-287.1927792	-291.7422752	-284.6523436	-196.070051	-202.209543	-201.116407	-229.289409	-276.601935	-291.702862	-127.0894127
+2.05	53.69515418	48.75761344	67.29525621	34.7082558	35.79506896	33.91714602	38.49588578	36.00391608	38.61923743	31.0220476
-2.1	-213.6296782	-255.0362289	-208.309542	-183.249012	-188.987041	-179.071167	-203.245548	-205.35846	-216.674754	-97.01358975
+2.1	113.7477891	109.9796713	114.2593241	82.79720218	82.79720218	66.30265318	66.30265318	67.43570964	71.20277607	65.88818074
-2.15	-165.4886836	-226.0033554	-184.43308	-170.427972	-175.764539	-166.54243	-189.025448	-143.347801	-151.576283	-75.50973012
+2.15	177.180481	212.8398995	174.4791338	161.4581924	161.4581924	139.5046062	145.0108066	126.0233313	132.7398284	103.1294128
-2.2	-153.0392186	-206.0505887	-165.9433141	-157.606932	-162.542037	-154.013694	-174.805348	-117.683205	-124.307625	-69.82924627
+2.2	249.9092384	318.5993528	253.0265025	243.8439126	245.5648559	217.7597401	239.4106343	183.2640402	193.0881354	138.1685857

-2.25	-140.5897536	-191.61539	-163.0424385	-144.785892	-149.319535	-141.484957	-160.585248	-108.109889	-114.195424	-64.14876242
+2.25	324.9111038	411.0340482	335.562387	316.6843033	321.7679668	289.9539891	327.087936	237.3592957	250.3823833	169.2653477
-2.3	-128.1402885	-177.1801913	-160.1415628	-131.964853	-136.097033	-128.956221	-146.365148	-98.5365733	-104.083223	-58.46827857
+2.3	382.7202428	488.0726247	399.6432155	375.1775379	382.2872034	355.478991	401.5593235	281.2355496	296.7790655	193.1474818
-2.35	-115.6908235	-162.7449926	-157.2406872	-119.143813	-122.874531	-116.427484	-132.145047	-88.9632573	-93.9710221	-52.78779472
+2.35	425.3583552	548.2729552	448.1733215	418.4307751	426.6660435	407.23069	459.7442141	314.1323311	331.4863838	213.9570696
-2.4	-103.2413585	-148.3097939	-154.7431581	-106.322773	-109.652029	-103.898747	-117.924947	-79.3899412	-83.8588211	-47.10731087
+2.4	453.5776146	595.2989387	479.7132318	451.4840998	466.196085	443.8967423	499.4090732	336.4280348	355.1285007	231.248381
-2.45	-90.79189344	-133.8745952	-153.5324935	-93.5017334	-96.4295274	-91.3700109	-103.704847	-69.8166252	-73.7466201	-41.42682702
+2.45	457.7730722	617.6179359	485.5141683	470.8436896	483.7257024	460.3018642	515.5713209	351.5017426	371.3436705	237.8906651
-2.5	-78.35608806	-119.4393965	-153.0640385	-80.6806937	-83.2070255	-78.8412743	-89.4847472	-60.2433964	-63.634419	-35.74634317
+2.5	448.3079876	620.7343887	479.1220636	477.0082739	488.1566795	461.364248	513.1131772	357.1118153	377.0655004	239.9702887
-2.55	-90.80772271	-133.8737925	-153.5324917	-93.5006278	-96.4283966	-91.3694609	-103.704136	-69.8167275	-73.7465629	-41.42665632
+2.55	455.0657215	617.5979214	485.8886823	470.8349797	483.7234392	460.2499353	515.5392276	351.5106527	371.3535706	238.6834566
-2.6	-103.2593574	-148.3088804	-154.7431458	-106.321516	-109.650743	-103.898122	-117.924138	-79.3900586	-83.8587565	-47.10711581
+2.6	453.7567197	595.4318572	479.3134365	451.3785603	466.0965427	443.836655	499.3670829	336.4212177	355.1352045	231.3416475
-2.65	-115.710992	-162.7439684	-157.2406838	-119.142405	-122.87309	-116.426782	-132.14414	-88.9633897	-93.9709501	-52.7875753
+2.65	426.767908	548.2752423	448.5344885	418.4166588	426.6770471	407.1868955	459.7165709	314.1388742	331.4935942	213.9456295
-2.7	-128.1626267	-177.1790564	-160.1415594	-131.963293	-136.095436	-128.955443	-146.364142	-98.5367208	-104.083144	-58.46803479
+2.7	382.3055086	488.1084213	399.542206	375.1553531	382.2682295	355.4963904	401.5902518	281.2557598	296.8005953	193.7541621
-2.75	-140.6142613	-191.6141444	-163.0424351	-144.784181	-149.317783	-141.484104	-160.584144	-108.110052	-114.195337	-64.14849428
+2.75	324.0994843	411.105215	334.9907141	316.7431125	321.8289545	289.9662302	327.0925093	237.3939511	250.4190447	169.2712842
-2.8	-153.065896	-206.0492323	-165.9433108	-157.60507	-162.540129	-154.012764	-174.804146	-117.683383	-124.307531	-69.82895377
+2.8	250.1012024	318.708184	253.8611399	243.9275321	245.6497018	217.8344755	239.4344344	183.3139237	193.1407466	138.66472
-2.85	-165.5175307	-226.0018852	-179.6771269	-170.425958	-175.762476	-166.541425	-189.024148	-143.349735	-151.57801	-75.50941326
+2.85	177.6639799	212.8288579	174.479164	161.4578365	161.4578365	139.5369071	145.0306058	126.0175041	132.7337028	103.1174785
-2.9	-210.79515	-255.0346426	-208.3139157	-183.246846	-188.984822	-179.070086	-203.24415	-205.358566	-216.674541	-97.01937223
+2.9	117.349814	110.0134398	114.2593381	82.82204381	82.82204381	66.32195895	66.32195895	67.4135772	71.1794876	65.88581254
-2.95	-291.913723	-291.7405763	-284.6472967	-196.067735	-202.207169	-201.119666	-229.28971	-276.60274	-291.70397	-127.089511
+2.95	59.04012566	48.6733536	67.29525488	34.70866382	35.7954916	33.9173549	38.49615356	35.98417725	38.59742486	31.11338902
-3	-387.632512	-422.6188507	-413.6770016	-305.694993	-320.427471	-306.397401	-353.737125	-358.692873	-378.542895	-173.8394122
+3	46.15221573	61.93822731	49.12955029	47.5297053	49.0179914	46.44608805	52.71625104	35.48985883	37.48759418	21.05848839
(Span 3) -4	-3.88E+02	-422.6188507	-413.6770016	-3.06E+02	-3.20E+02	-3.06E+02	-3.54E+02	-3.59E+02	-3.79E+02	-1.74E+02
+4	4.62E+01	61.93822731	49.12955029	4.75E+01	4.90E+01	4.64E+01	5.27E+01	3.55E+01	3.75E+01	2.11E+01
-3.05	-315.1375204	-385.983263	-362.9955178	-290.410244	-304.406098	-287.482143	-334.767576	-297.665612	-314.462287	-147.1827397
+3.05	50.40733222	59.92667026	69.41218166	45.15321997	46.56709178	44.12378364	50.08043847	35.12561253	37.51666375	25.01158585
-3.1	-289.6874477	-353.9187381	-317.9467483	-275.125495	-288.384726	-272.351504	-317.14823	-240.933167	-254.853465	-121.234959
+3.1	108.9203871	100.9675086	126.2955865	73.24811563	73.24811563	58.54889495	58.54889495	58.58165461	61.83558559	59.77024284
-3.15	-273.5937008	-327.8684852	-294.4335195	-259.840746	-272.363353	-257.220865	-299.528884	-192.49259	-203.874195	-108.5363479
+3.15	152.0930033	183.9202468	173.5731241	135.5514619	135.5514619	115.8499943	119.0205592	104.6906214	110.2877003	85.93119147
-3.2	-257.4999538	-308.4745677	-277.0171183	-244.555996	-256.34198	-242.090226	-281.909538	-180.457903	-191.132549	-102.1518569
+3.2	222.9192066	276.4393589	256.6124014	209.5326619	212.2595147	187.3555717	199.3416887	159.0715252	167.7262918	118.9414616
-3.25	-241.4062069	-289.1949073	-259.7035486	-229.271247	-240.320607	-226.959587	-264.290192	-169.179284	-179.186765	-95.76736581
+3.25	277.8157294	353.6218514	313.5426606	269.468988	273.7965375	244.2431928	266.6098953	202.4751703	213.6057658	142.2412875
-3.3	-225.31246	-269.9152469	-242.3899789	-213.986498	-224.299234	-211.828948	-246.670846	-157.900666	-167.240981	-89.38287475
+3.3	330.9377569	427.3317321	371.9633234	323.0925953	327.6031899	295.4938821	332.1212366	244.258426	257.5742131	170.7760233
-3.35	-209.218713	-250.6355866	-225.0764091	-198.701749	-208.277862	-196.698309	-229.0515	-146.622047	-155.295197	-82.99838368
+3.35	354.4294431	483.3713642	399.1750903	359.7762147	363.5683517	337.9496592	379.2776211	272.2216391	286.9287337	188.1901482
-3.4	-193.1249661	-231.3559262	-207.7628394	-183.417	-192.256489	-181.56767	-211.432154	-135.343429	-143.349414	-76.61389262
+3.4	374.1828423	532.343339	422.2607744	387.0475755	394.7216257	376.0564759	416.8039644	294.3018564	309.8164038	210.1619451
-3.45	-177.0312192	-212.0762659	-190.4492697	-168.13225	-176.235116	-166.437031	-193.812808	-124.06481	-131.40363	-70.22940155
+3.45	368.615888	561.9585748	418.2889658	409.8331514	418.0319084	402.3559997	437.6424284	309.88805	326.1979474	219.1660756
-3.5	-160.9374723	-192.7966055	-173.1357	-152.847501	-160.213743	-151.306392	-176.193462	-112.786191	-119.457846	-63.84491049
+3.5	390.5892343	581.4204119	438.9311121	432.7366402	436.5326936	422.6825405	460.6495318	326.8190622	344.4117472	232.7903008
-3.55	-144.8437253	-173.5169451	-155.8221302	-137.562752	-144.19237	-136.175752	-158.574116	-101.507573	-107.512062	-57.46041943
+3.55	388.8896008	584.4584612	435.0308851	439.8230123	446.3417364	426.5292729	465.7187679	331.1549316	349.2277062	231.6073433
-3.6	-128.7499784	-154.2372848	-138.5085605	-122.278003	-128.170998	-121.045113	-140.954771	-90.2289544	-95.5662779	-51.07592836

+3.6	**410.4810451**	***588.8540926***	***445.5531453***	**437.8874382**	**447.4654628**	**426.8443667**	**471.4343547**	**328.1447123**	**346.4167531**	**235.1551949**
-3.65	**-112.6562315**	***-134.9576244***	***-121.1949908***	**-106.993254**	**-112.149625**	**-105.914474**	**-123.335425**	**-78.9503359**	**-83.620494**	**-44.6914373**
+3.65	**411.1884181**	***573.5583205***	***442.2605611***	**426.6196693**	**429.8490653**	**410.5549295**	**458.0733554**	**322.8091439**	**340.12785**	**223.7304615**
-3.7	**-96.56248454**	***-115.6779641***	***-103.881421***	**-91.7085045**	**-96.1282521**	**-90.7838355**	**-105.716079**	**-67.6717174**	**-71.6747101**	**-38.30694623**
+3.7	**408.5057462**	***548.1540328***	***436.2236778***	**413.4833399**	**418.0924048**	**383.154456**	**432.6915438**	**312.2312831**	**329.1445518**	**214.5534901**
-3.75	**-80.46873761**	***-96.3983037***	***-86.56785132***	**-76.4237553**	**-80.1068793**	**-75.6531964**	**-88.0967326**	**-56.3930989**	**-59.7289262**	**-31.92245517**
+3.75	**377.7471097**	***496.7588506***	***400.0465816***	**381.3165008**	**387.4033053**	**353.9433388**	**385.9981949**	**286.7888525**	**302.5087941**	**191.9888793**
-3.8	**-64.37499068**	***-77.11864334***	***-69.25428159***	**-61.1390062**	**-64.0855065**	**-60.5225574**	**-70.4773866**	**-45.1144803**	**-47.7831422**	**-25.5379641**
+3.8	**345.2248469**	***438.5647809***	***363.6859387***	**340.4091574**	**347.0644902**	**316.501388**	**343.7683217**	**255.8791535**	**270.0434433**	**169.0853592**
-3.85	**-48.28124375**	***-57.83898298***	***-51.94071187***	**-45.854257**	**-48.0641337**	**-45.3919184**	**-52.8580407**	**-33.8358618**	**-35.8373583**	**-19.15347304**
+3.85	**281.776059**	***352.7804011***	***295.5643143***	**277.1165008**	**283.3039976**	**259.0747202**	**283.8432678**	**207.7039406**	**219.2843356**	**134.8237035**
-3.9	**-32.18749682**	***-38.55932262***	***-34.62714214***	**-30.5695078**	**-32.0427609**	**-30.2612794**	**-35.2386947**	**-22.5572433**	**-23.8915744**	**-12.76898198**
+3.9	**211.2822481**	***256.0122442***	***220.5480228***	**203.6202359**	**208.8010073**	**191.0774896**	**210.1066455**	**152.0671635**	**160.6142715**	**99.23279781**
-3.95	**-16.0937499**	***-19.27966226***	***-17.31357241***	**-15.2847586**	**-16.0213881**	**-15.1306404**	**-17.6193487**	**-11.2786248**	**-11.9457905**	**-6.384490912**
+3.95	**113.6118269**	***135.842702***	***118.3418144***	**108.8041676**	**111.838565**	**102.5001919**	**113.4018365**	**81.17149011**	**85.77417262**	**52.98944476**
-5	**-7.93E-14**	***-8.55E-14***	***-8.09E-14***	**-6.54E-14**	**-6.73E-14**	**-6.18E-14**	**-6.62E-14**	**-4.95E-14**	**-5.22E-14**	**-3.89E-14**
+5	**6.62E-14**	***2.78E-14***	***4.00E-14***	**2.44E-14**	**2.54E-14**	**1.97E-14**	**2.61E-14**	**2.31E-14**	**2.43E-14**	**2.60E-14**

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.06E-14	-2.12E-14	-1.79E-14	-1.34E-14	-1.88E-14	-2.41E-14	-2.10E-14	-2.23E-14	-2.30E-14
End Shear	2.77E-14	2.86E-14	2.38E-14	1.80E-14	1.88E-14	2.68E-14	2.68E-14	2.64E-14	2.61E-14
-0.05	-10.33721004	-9.412316017	-8.320612625	-7.054950794	-8.4634415	-12.04803047	-12.9391697	-14.1620331	-14.8904905
+0.05	74.32047212	70.55415299	59.56604393	48.3523332	61.98361293	82.6027715	86.53796308	86.47472489	86.45094339
-0.1	-20.67442008	-18.82463203	-16.64122525	-14.10990159	-16.926883	-24.09606094	-25.8783395	-28.3240661	-29.780981
+0.1	138.5448029	133.0718795	110.6265419	89.89181783	115.6365268	153.9400268	160.7164985	160.644777	160.5960628
-0.15	-31.01163012	-28.23694805	-24.96183788	-21.16485238	-25.3903245	-36.14409141	-38.8175092	-42.4860992	-44.6714715
+0.15	187.3325561	182.3566921	147.6376615	121.3240767	154.5992479	208.3967666	217.9077231	217.9126806	217.9098449
-0.2	-41.34884017	-37.64926407	-33.2824505	-28.21980318	-33.853766	-48.19212188	-51.756679	-56.6481323	-59.5619619
+0.2	228.9657148	226.8202549	181.194047	150.2857087	188.7286575	254.7271543	267.5146656	279.5703892	279.5284584
-0.25	-51.68605021	-47.06158008	-41.60306313	-35.27475397	-42.3172075	-60.24015235	-64.6958487	-70.8101653	-74.4524524
+0.25	255.8366505	256.0079682	205.0149199	170.5188501	209.3229384	284.3863678	300.575187	323.581417	323.6309458
-0.3	-62.02326025	-56.4738961	-49.92367575	-42.32970477	-50.780649	-72.28818282	-77.6350185	-84.9721984	-89.3429429
+0.3	282.0120448	282.1189434	226.5851459	188.3040822	226.4683539	306.7253175	324.5014727	358.0687551	358.6480491
-0.35	-72.36047029	-65.88621212	-58.24428838	-49.38465556	-59.2440905	-84.33621329	-90.5741882	-99.1342314	-104.233433
+0.35	294.075667	294.1547377	237.1349944	197.5271122	229.858517	325.2068275	347.17642	375.1411223	380.6053733
-0.4	-82.69768033	-75.29852813	-66.564901	-56.43960635	-67.707532	-96.38424376	-103.513358	-113.296265	-119.123924
+0.4	301.225953	301.2789803	243.4275803	203.640649	231.298365	339.2173173	363.1675751	386.4453842	398.1176158
-0.45	-93.03489037	-84.71084415	-74.88551363	-63.49455715	-76.1709735	-108.4322742	-116.452528	-127.458298	-134.014414
+0.45	297.9436899	297.9624938	241.6385974	203.2527348	221.5329771	337.8701155	363.8103298	388.9010553	397.033882
-0.5	-103.3721004	-94.12316017	-83.20612625	-70.54950794	-84.634415	-120.4803047	-129.391697	-141.620331	-148.904905
+0.5	296.6751489	296.9155719	240.5790972	201.8153623	221.8262925	335.4197889	359.4733918	386.905459	390.7909388
-0.55	-113.7093105	-103.5354762	-91.52673888	-77.60445874	-93.0978565	-132.5283352	-142.330867	-155.782364	-163.795395
+0.55	286.64772	287.0416619	233.9085112	197.1568805	209.6460829	320.175628	342.6372007	368.4390153	378.9100985
-0.6	-124.0465205	-112.9477922	-99.8473515	-84.65940953	-101.561298	-144.5763656	-155.270037	-169.944397	-178.685886
+0.6	272.0432907	272.5930831	223.3030078	188.7874328	209.6905401	300.7297447	319.9396142	346.3507655	357.1032785
-0.65	-134.3837305	-122.3601082	-108.1679641	-91.71436032	-110.0247395	-156.6243961	-168.209207	-184.10643	-193.576376
+0.65	246.4732733	246.5891519	203.4696296	173.0026764	197.9649135	269.2234009	285.0472785	314.7463703	318.242803
-0.7	-144.7209406	-131.7724242	-116.4885768	-98.76931112	-118.488181	-168.6724266	-181.148376	-198.268463	-208.466867
+0.7	218.7528458	219.4891977	182.5434412	155.7405405	183.1169613	237.0445845	252.1394176	275.3052271	275.7925774
-0.75	-155.0581506	-141.1847402	-124.8091894	-105.8242619	-126.9516225	-180.7204571	-194.087546	-212.430496	-223.357357
+0.75	180.8903805	180.6406236	151.9693165	130.946764	154.0123507	197.8451017	207.5132269	221.9117954	221.9199077
-0.8	-165.3953607	-150.5970563	-133.129802	-112.8792127	-135.415064	-192.7684875	-207.026716	-226.592529	-238.247848
+0.8	143.7196257	143.4486719	122.6015607	106.9615141	123.9773767	153.1648116	157.3657507	164.2841129	164.4349329
-0.85	-175.7325707	-160.0093723	-141.4504146	-119.963748	-143.8785055	-204.816518	-219.965886	-240.754562	-253.138338
+0.85	95.45751016	96.89756502	84.39775112	75.89915069	82.59119785	96.42239825	96.66722889	96.59719035	96.532085
-0.9	-186.0697807	-199.5340444	-153.9924995	-131.8856286	-152.341947	-216.8645485	-232.905055	-254.916595	-268.028829
+0.9	51.47838644	54.13272769	49.03923151	47.99354151	56.20773122	49.73664474	49.68533721	49.85957435	49.71085791
-0.95	-201.0526081	-248.6181235	-198.7457387	-169.5822951	-160.8053885	-228.9125789	-249.801549	-280.661622	-303.772131
+0.95	29.65545459	32.19359809	30.30203886	28.68822481	24.21486375	34.62059605	37.95419702	41.69818266	42.65979596
-1	-239.0029256	-304.1066814	-246.3703189	-210.5978934	-171.8467848	-249.1742136	-286.023939	-316.88394	-340.315316
+1	31.21626783	31.21835085	24.83632845	20.80699807	24.59170101	36.44273266	39.95178543	43.8928229	44.90504764
(Span 2) -2	-239.0029256	-304.1066814	-246.3703189	-210.5978934	-171.8467848	-249.1742136	-286.023939	-316.88394	-340.315316
+2	31.21626783	31.21835085	24.83632845	20.80699807	24.59170101	36.44273266	39.95178543	43.8928229	44.90504764
-2.05	-165.4681323	-238.0399516	-182.2873726	-155.0697907	-116.464051	-164.7091024	-188.612885	-206.647586	-217.93057
+2.05	24.38569727	32.88995377	33.58664779	27.2140098	30.33880968	26.6123806	29.17487397	32.05282457	32.79200363
-2.1	-122.4412285	-177.1799724	-125.8522667	-106.9946387	-94.81350545	-140.5041427	-154.033141	-169.22783	-181.394815
+2.1	58.36462505	62.21486402	55.63453347	44.42911617	62.73840493	56.3572552	56.4259168	56.36801769	56.31420527
-2.15	-111.9333707	-121.8676744	-100.9095082	-84.50436826	-88.17986702	-130.6737528	-143.256194	-157.387784	-161.017825
+2.15	113.8425076	116.4716473	94.67264119	75.57869322	98.94766325	115.2566815	115.1641973	119.4283862	119.2883892
-2.2	-103.5127916	-103.5178973	-83.22258942	-70.39273759	-81.54622859	-120.8433629	-132.479246	-145.547738	-148.904697
+2.2	169.5928075	167.8715432	134.3990346	108.6471834	141.4337446	178.3425924	183.4736858	199.071648	198.9130339

-2.25	**-95.0922124**	**-95.0969028**	**-79.48364755**	**-69.55420409**	**-74.91259016**	**-111.012973**	**-121.702298**	**-133.707692**	**-136.791568**
+2.25	**219.0565417**	**211.7997325**	**174.1769378**	**142.8740142**	**180.8523195**	**235.4092195**	**245.5943816**	**268.6213605**	**268.597015**
-2.3	**-86.67163323**	**-86.67590827**	**-75.74470567**	**-68.7156706**	**-68.27895173**	**-101.1825831**	**-110.92535**	**-121.867646**	**-124.678439**
+2.3	**257.7893678**	**248.6521927**	**204.6436801**	**169.2972944**	**211.3984693**	**283.0282508**	**301.3448833**	**323.7503264**	**331.2839094**
-2.35	**-78.25105406**	**-78.25491374**	**-72.0057638**	**-67.8771371**	**-61.6453133**	**-91.35219319**	**-100.148402**	**-110.0276**	**-112.56531**
+2.35	**285.4498497**	**277.9644584**	**225.6258229**	**187.7986024**	**236.5466128**	**324.132688**	**344.0600153**	**364.9474784**	**382.1737504**
-2.4	**-69.8304749**	**-69.83391921**	**-68.26682193**	**-67.03860361**	**-55.01167487**	**-81.52180328**	**-89.3714545**	**-98.1875536**	**-100.452182**
+2.4	**305.9800276**	**300.912728**	**243.0477059**	**203.1721459**	**252.5698584**	**353.0130243**	**373.1342918**	**399.1747382**	**419.6321773**
-2.45	**-61.40989573**	**-61.41292468**	**-64.52788006**	**-66.20007011**	**-48.37803644**	**-71.69141337**	**-78.5945066**	**-86.3475075**	**-88.3390529**
+2.45	**316.5954722**	**311.2418894**	**249.6454306**	**208.8289936**	**254.1860711**	**365.3347421**	**384.4095446**	**418.6413555**	**437.4793219**
-2.5	**-52.98931656**	**-52.99250819**	**-60.78927181**	**-65.36164108**	**-41.74439801**	**-61.86102346**	**-67.8175588**	**-74.5074614**	**-76.2259242**
+2.5	**317.7473359**	**312.3621552**	**248.4443985**	**208.4055435**	**246.9667815**	**366.4464664**	**389.1851432**	**423.7790993**	**439.4819456**
-2.55	**-61.40949649**	**-61.41359409**	**-64.52829245**	**-66.20021963**	**-48.37746244**	**-71.69114001**	**-78.5942406**	**-86.3471587**	**-88.3384364**
+2.55	**316.5901531**	**311.2336739**	**249.644266**	**208.8284546**	**254.1491078**	**365.2850721**	**384.3701514**	**418.6695913**	**437.4634934**
-2.6	**-69.83002052**	**-69.83468**	**-68.26731309**	**-67.03879818**	**-55.01102275**	**-81.52149207**	**-89.3711521**	**-98.1871571**	**-100.45148**
+2.6	**305.9092447**	**300.9004068**	**243.0553673**	**203.1756966**	**252.527847**	**352.9568151**	**373.0880779**	**399.2148266**	**419.6089216**
-2.65	**-78.25054455**	**-78.2557659**	**-72.00633374**	**-67.87737673**	**-61.64458307**	**-91.35184414**	**-100.148064**	**-110.027155**	**-112.564524**
+2.65	**285.4404292**	**277.9654104**	**225.6214497**	**187.8016564**	**236.5265509**	**324.0906484**	**344.0266328**	**364.9480197**	**382.1618561**
-2.7	**-86.67106858**	**-86.67685181**	**-75.74535438**	**-68.71595528**	**-68.27814338**	**-101.1821962**	**-110.924975**	**-121.867154**	**-124.677568**
+2.7	**257.7741834**	**248.6344173**	**204.63557**	**169.3042722**	**211.3480551**	**283.0386179**	**301.3249961**	**323.7323841**	**331.2550409**
-2.75	**-95.09159261**	**-95.09793771**	**-79.48437503**	**-69.55453383**	**-74.91170369**	**-111.0125483**	**-121.701886**	**-133.707152**	**-136.790612**
+2.75	**219.0361333**	**211.779662**	**174.1653734**	**142.8850225**	**180.8767945**	**235.3969721**	**245.6051057**	**268.5971628**	**268.6133016**
-2.8	**-103.5121166**	**-103.5190236**	**-83.22339567**	**-70.39311238**	**-81.54526401**	**-120.8429003**	**-132.478798**	**-145.54715**	**-148.903656**
+2.8	**169.648024**	**167.8505213**	**134.3843388**	**108.6623398**	**141.4815582**	**178.4031923**	**183.4597201**	**199.1135762**	**198.953494**
-2.85	**-111.9326407**	**-121.8697742**	**-100.9098318**	**-84.50451576**	**-88.17882432**	**-130.6732524**	**-143.255709**	**-157.387149**	**-161.0167**
+2.85	**113.8962413**	**116.4663917**	**94.6692891**	**75.57712971**	**98.99049247**	**115.2922824**	**115.1984197**	**119.4664774**	**119.3251465**
-2.9	**-122.4434722**	**-177.1814168**	**-125.8524895**	**-106.9947362**	**-94.81238464**	**-140.5036044**	**-154.032621**	**-169.227147**	**-181.394089**
+2.9	**58.38143012**	**62.19483501**	**55.62180626**	**44.43376967**	**62.7311334**	**56.3736651**	**56.44169195**	**56.38323455**	**56.32891461**
-2.95	**-165.466785**	**-238.0403506**	**-182.2891502**	**-155.0694113**	**-116.4644658**	**-164.7098349**	**-188.613747**	**-206.648027**	**-217.933084**
+2.95	**24.34370445**	**32.87233169**	**33.59653514**	**27.21861107**	**30.2836921**	**26.61248574**	**29.17497173**	**32.05295353**	**32.79223443**
-3	**-239.0055132**	**-304.1087632**	**-246.3713784**	**-210.5983876**	**-171.847273**	**-249.1767842**	**-286.025945**	**-316.886594**	**-340.318874**
+3	**31.21647223**	**31.21801212**	**24.83608507**	**20.80705455**	**24.5919906**	**36.44287297**	**39.95192028**	**43.893**	**44.90536172**
(Span 3) -4	**-2.39E+02**	**-3.04E+02**	**-2.46E+02**	**-2.11E+02**	**-1.72E+02**	**-2.49E+02**	**-2.86E+02**	**-3.17E+02**	**-3.40E+02**
+4	**3.12E+01**	**3.12E+01**	**2.48E+01**	**2.08E+01**	**2.46E+01**	**3.64E+01**	**4.00E+01**	**4.39E+01**	**4.49E+01**
-3.05	**-201.0545265**	**-248.6178857**	**-198.7465314**	**-169.5826648**	**-160.8074119**	**-228.9110715**	**-249.801661**	**-280.662069**	**-303.773876**
+3.05	**29.65564861**	**32.19031525**	**30.3021662**	**28.68124219**	**24.22308284**	**34.62072932**	**37.95432422**	**41.69834995**	**42.66009359**
-3.1	**-186.0695127**	**-199.5356881**	**-153.9935156**	**-131.8861034**	**-152.3438642**	**-216.8631205**	**-232.904485**	**-254.914114**	**-268.027343**
+3.1	**51.50911844**	**54.15587261**	**49.0114881**	**48.00246753**	**56.27260386**	**49.76656071**	**49.71411811**	**49.88738253**	**49.66852708**
-3.15	***-175.7323182***	***-160.0097713***	***-141.4494722***	***-119.9639599***	***-143.8803165***	***-204.8151694***	***-219.965347***	***-240.752219***	***-253.136935***
+3.15	**95.45086202**	**96.92086609**	**84.39444379**	**75.90805042**	**82.60546961**	**96.41162795**	**97.15802578**	**97.15802578**	**97.15802578**
-3.2	**-165.3951237**	**-150.5974318**	**-133.1289152**	**-112.8794123**	**-135.4167688**	**-192.7672183**	**-207.026209**	**-226.590324**	**-238.246527**
+3.2	**143.7488013**	**143.4760005**	**122.5743637**	**106.9689075**	**123.93466**	**153.1890796**	**157.3893123**	**164.2519462**	**164.4725397**
-3.25	**-155.0579293**	**-141.1850923**	**-124.8083581**	**-105.8244492**	**-126.9532211**	**-180.7192672**	**-194.087071**	**-212.428429**	**-223.356119**
+3.25	**180.5790186**	**180.6340306**	**151.9648549**	**130.9550133**	**154.0182336**	**197.8242451**	**207.495406**	**221.9121212**	**221.9202264**
-3.3	**-144.7207348**	***-131.7727528***	**-116.4878011**	***-98.76948604***	**-118.4896734**	**-168.6713162**	**-181.147933**	**-198.266534**	**-208.465711**
+3.3	**218.7827055**	**219.5137815**	**182.5612897**	**155.7488713**	**183.0633194**	**238.4515872**	**252.1536028**	**275.264394**	**275.8227789**
-3.35	**-134.3835404**	**-122.3604133**	**-108.1672441**	**-91.7145229**	**-110.0261257**	**-156.6233651**	**-168.208795**	**-184.104639**	**-193.575303**
+3.35	**246.4589936**	**246.610092**	**203.4845352**	**173.0095432**	**197.9578326**	**269.2290403**	**285.0406886**	**314.7347534**	**318.2443846**
-3.4	**-124.0463459**	**-112.9480739**	**-99.84668702**	**-84.65955976**	**-101.562578**	**-144.575414**	**-155.269657**	**-169.942744**	**-178.684896**
+3.4	**272.0648479**	**272.610804**	**223.3153195**	**188.7928642**	**209.6213374**	**300.769874**	**319.926276**	**346.3673117**	**357.1321712**
-3.45	**-113.7091514**	**-103.5357344**	**-91.52612998**	**-77.60459663**	**-93.0990303**	**-132.5274629**	**-142.330519**	**-155.780849**	**-163.794488**
+3.45	**286.6629054**	**287.0541937**	**233.9169265**	**197.1603683**	**209.9794077**	**320.1700008**	**342.6177322**	**368.4353284**	**378.8946142**
-3.5	**-103.371957**	**-94.12339489**	**-83.20557294**	**-70.54963349**	**-84.63548259**	**-120.4795119**	**-129.391381**	**-141.618955**	**-148.90408**
+3.5	**296.6842173**	**296.9230398**	**240.5836067**	**201.8168712**	**221.7763701**	**335.4465652**	**359.4447706**	**386.9293846**	**390.7999949**
-3.55	**-93.03476251**	**-84.7110554**	**-74.88501591**	**-63.49467036**	**-76.17193489**	**-108.4315608**	**-116.452243**	**-127.45706**	**-134.013672**
+3.55	**297.9401757**	***297.95960498 3045***	***241.6601112***	**203.2625036**	**221.532715**	***337.848755***	**363.8034614**	**388.9142643**	**397.022199**

-3.6	**-82.69756805**	**-75.29871592**	**-66.56445887**	**-56.43970722**	**-67.70838719**	**-96.3836097**	**-103.513105**	**-113.295165**	**-119.123264**
+3.6	**301.2152417**	**301.2701548**	**243.4695171**	**203.6597106**	**231.2605581**	**339.1867491**	**363.1893561**	**386.4112687**	**398.0943854**
-3.65	**-72.36037358**	**-65.88637644**	**-58.24390183**	**-49.38474409**	**-59.24483949**	**-84.33565862**	**-90.5739666**	**-99.1332699**	**-104.232856**
+3.65	**294.0577517**	**294.1399924**	**237.1479956**	**197.53274**	**229.8685514**	**325.2069343**	**347.187268**	**375.1258976**	**380.6057591**
-3.7	**-62.02317912**	**-56.47403695**	**-49.9233448**	**-42.32978095**	**-50.78129179**	**-72.28770755**	**-77.6348286**	**-84.971375**	**-89.3424482**
+3.7	**281.9856973**	**282.0972645**	***226.6177479***	**188.3194961**	**226.4174487**	**306.6752002**	**324.4968932**	**358.041657**	**359.6677911**
-3.75	**-51.68598466**	**-47.06169747**	**-41.60278776**	**-35.27481781**	**-42.31774408**	**-60.23975647**	**-64.6956905**	**-70.8094801**	**-74.4520403**
+3.75	**255.8429497**	**256.0131792**	**205.0179256**	**170.5204279**	**209.3182032**	**284.3709055**	**300.5602612**	**323.5790782**	**323.6286863**
-3.8	**-41.3487902**	**-37.64935799**	**-33.28223072**	**-28.21985468**	**-33.85419638**	**-48.19180539**	**-51.7565525**	**-56.6475852**	**-59.5616324**
+3.8	**228.929999**	**226.783882**	**181.2161438**	**150.2961284**	**188.76926**	**254.6997359**	**267.4879415**	**279.5922513**	**279.5494998**
-3.85	**-31.01159573**	**-28.2370185**	**-24.96167368**	**-21.16489154**	**-25.39064868**	**-36.14385432**	**-38.8174144**	**-42.4856903**	**-44.6712245**
+3.85	**187.3272432**	**182.3465926**	**147.6348464**	**121.322768**	**154.5762458**	**208.3972112**	**217.9076162**	**217.9078008**	**217.9097429**
-3.9	**-20.67440127**	**-18.82467902**	**-16.64111665**	**-14.10992841**	**-16.92710098**	**-24.09590324**	**-25.8782763**	**-28.3237954**	**-29.7808166**
+3.9	**138.5692996**	**133.0879649**	**110.641829**	**89.89888289**	**115.6577696**	**153.9677116**	**160.7455663**	**160.6726485**	**160.6230256**
-3.95	**-10.33720681**	**-9.412339535**	**-8.32055961**	**-7.054965272**	**-8.463553276**	**-12.04795217**	**-12.9391383**	**-14.1619005**	**-14.8904088**
+3.95	**74.33290034**	**70.53468894**	**59.57382078**	**48.3559309**	**61.99440487**	**82.61676393**	**86.5527403**	**86.48891147**	**86.46460832**
-5	**-4.52E-14**	**-4.52E-14**	**-3.86E-14**	**-3.11E-14**	**-4.20E-14**	**-4.99E-14**	**-5.15E-14**	**-5.47E-14**	**-5.66E-14**
+5	**1.99E-14**	**2.03E-14**	**2.25E-14**	**1.72E-14**	**2.24E-14**	**1.71E-14**	**1.57E-14**	**1.60E-14**	**1.62E-14**

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.62E-14	-2.61E-14	-2.51E-14	-2.67E-14	-2.85E-14
End Shear	3.42E-14	3.84E-14	3.35E-14	3.32E-14	3.03E-14
-0.05	-14.65383334	-15.40493238	-12.0534842	-13.8799723	-14.7560601
+0.05	95.39012578	93.96134369	86.75448858	95.69123141	98.59304087
-0.1	-29.30766669	-30.80986475	-24.1069684	-27.7599446	-29.5121202
+0.1	177.9483663	172.4153105	162.5342966	179.3455469	183.6334442
-0.15	-43.96150003	-46.21479713	-36.1604526	-41.639917	-44.2681804
+0.15	241.5491354	230.7488591	222.0871169	243.5529237	248.9287655
-0.2	-58.61533337	-61.6197295	-48.2139368	-55.5198893	-59.0242405
+0.2	297.7504563	279.7163949	273.8972802	300.2189021	304.1026515
-0.25	-73.26916671	-77.02466188	-60.267421	-69.3998616	-73.7803006
+0.25	334.8667765	312.6738935	307.1456166	337.8949404	340.3582413
-0.3	-87.92300006	-92.42959426	-72.3209052	-83.2798339	-88.5363607
+0.3	362.3544783	338.8620779	334.7001546	366.0758556	376.8275364
-0.35	-102.5768334	-107.8345266	-84.3743894	-97.1598062	-103.292421
+0.35	392.6563356	366.5869017	346.3513844	396.3307899	403.2606602
-0.4	-117.2306667	-123.239459	-96.4278735	-111.039779	-118.048481
+0.4	412.3898562	385.4211014	352.5862965	416.0241809	418.8229501
-0.45	-131.8845001	-138.6443914	-108.481358	-124.919751	-132.804541
+0.45	416.1671022	389.6765193	356.2223909	417.5589669	417.5608138
-0.5	-146.5383334	-154.0493238	-120.534842	-138.799723	-147.560601
+0.5	413.7909423	387.2998869	351.9968893	413.289061	413.4681561
-0.55	-161.1921668	-169.4542561	-132.588326	-152.679696	-162.316661
+0.55	394.0470084	370.5173898	334.0822703	392.1069913	392.1956447
-0.6	-175.8460001	-184.8591885	-144.64181	-166.559668	-177.072721
+0.6	369.1629701	347.6018168	317.6188775	364.5383655	368.8799576
-0.65	-190.4998335	-200.2641209	-156.695295	-180.43964	-191.828782
+0.65	330.2171064	312.1283071	292.6739127	323.932235	331.9766292
-0.7	-205.1536668	-215.6690533	-168.748779	-194.319612	-206.584842
+0.7	287.3121334	272.0219514	261.8600521	282.2576175	286.9710336
-0.75	-219.8075001	-231.0739856	-180.802263	-208.199585	-221.340902
+0.75	239.2623717	228.5891765	216.4731434	232.2343797	233.3633362
-0.8	-234.4613335	-246.478918	-192.855747	-222.079557	-236.096962
+0.8	185.4202432	178.619073	169.6497939	181.7261288	178.5924222
-0.85	-249.7454955	-262.510976	-206.018681	-236.838768	-251.755784
+0.85	119.2305916	118.2112325	114.3632662	116.6257584	112.0115449
-0.9	-310.6931532	-320.2552317	-248.407085	-292.339095	-306.632973
+0.9	85.37500727	79.68699614	64.94405279	63.08943283	63.40482704
-0.95	-392.6511403	-399.6046293	-297.552189	-356.610147	-372.284939
+0.95	58.34915257	57.98546891	42.56589769	47.99680161	52.5937998
-1	-480.3403384	-483.7554867	-352.437038	-426.834311	-445.800077
+1	44.93356752	42.07873828	38.27242624	45.19216978	45.91246247
(Span 2) -2	-480.3403384	-483.7554867	-352.437038	-426.834311	-445.800077
+2	44.93356752	42.07873828	38.27242624	45.19216978	45.91246247
-2.05	-359.6760731	-352.0430646	-276.947493	-337.619213	-349.468986
+2.05	53.35628294	56.26343325	40.42267266	47.10780121	46.20548505
-2.1	-249.2873534	-238.7725323	-214.229869	-256.090211	-263.736021
+2.1	73.65831282	77.69584159	77.0260971	77.84714353	75.0871646
-2.15	-178.5143923	-167.1317759	-160.462367	-182.457882	-191.213721
+2.15	132.8794221	126.8765928	136.5612426	143.7351471	135.1108092
-2.2	-150.0151487	-139.7623252	-126.909604	-149.855086	-152.243083
+2.2	204.3607504	191.4074714	195.1673203	208.7184587	210.1557283

-2.25	**-141.4097565**	**-134.3185621**	**-116.585737**	**-137.664645**	**-139.858383**
+2.25	**276.8253668**	**262.0007585**	**252.9371956**	**272.4944266**	**282.4933433**
-2.3	**-132.8691801**	**-128.9431875**	**-106.26187**	**-125.474204**	**-127.473682**
+2.3	**337.3654397**	**319.0377636**	**299.9810231**	**331.9252075**	**345.6603461**
-2.35	**-124.4134309**	**-123.6726918**	**-95.9380036**	**-113.283763**	**-115.403574**
+2.35	**383.8753377**	**368.8519422**	**335.4548914**	**380.3481491**	**395.9997535**
-2.4	**-116.0852144**	**-118.5058666**	**-85.6141367**	**-101.093322**	**-104.162662**
+2.4	**415.3835746**	**400.7650191**	**359.7113173**	**416.7708207**	**432.0405552**
-2.45	**-107.8583135**	**-113.4444003**	**-75.2902698**	**-88.9028807**	**-92.9849399**
+2.45	**432.6919704**	**418.221721**	**377.0816199**	**436.46062**	**449.23097**
-2.5	**-99.78038889**	**-108.4820931**	**-64.9666524**	**-76.7127733**	**-82.0549021**
+2.5	**438.8137153**	**419.2371973**	**382.7696166**	**442.430226**	**451.1734587**
-2.55	**-107.8586527**	**-113.4444281**	**-75.2905603**	**-88.9032676**	**-92.9865267**
+2.55	**432.7028819**	**418.2230228**	**377.0619889**	**436.897667**	**449.2485766**
-2.6	**-116.0852459**	**-118.5057468**	**-85.6144682**	**-101.093762**	**-104.163525**
+2.6	**415.4136122**	**400.7700836**	**359.7043405**	**416.7930092**	**432.0683578**
-2.65	**-124.4135887**	**-123.6726739**	**-95.938376**	**-113.284256**	**-115.403466**
+2.65	**383.8995741**	**368.8558163**	**335.4617527**	**380.3653636**	**396.0217906**
-2.7	**-132.8689262**	**-128.9433126**	**-106.262284**	**-125.474751**	**-127.474629**
+2.7	**337.3539967**	**319.0352518**	**300.0021264**	**331.907074**	**345.6774167**
-2.75	**-141.4103604**	**-134.3184881**	**-116.586192**	**-137.665245**	**-139.859421**
+2.75	**276.8291293**	**262.0014669**	**252.9732775**	**272.4908622**	**282.5104877**
-2.8	**-150.0155479**	**-139.7622463**	**-126.9101**	**-149.855739**	**-152.244214**
+2.8	**204.375378**	**191.4096061**	**195.2193942**	**208.7742885**	**210.1701492**
-2.85	**-178.5138113**	**-167.1317239**	**-160.46255**	**-182.459629**	**-191.216182**
+2.85	**132.8940935**	**126.8753569**	**136.5548286**	**143.7283517**	**135.0778862**
-2.9	**-249.2889053**	**-238.7729227**	**-214.22943**	**-256.091188**	**-263.737893**
+2.9	**73.66995361**	**77.69499224**	**77.00152936**	**77.85918459**	**75.06584497**
-2.95	**-359.6770994**	**-352.0426539**	**-276.949589**	**-337.619138**	**-349.47013**
+2.95	**53.36587182**	**56.25712774**	**40.38051909**	**47.08529902**	**46.21644983**
-3	**-480.3398898**	**-483.7550968**	**-352.437004**	**-426.833823**	**-445.801662**
+3	**44.93338233**	**42.07873546**	**38.27227432**	**45.19197202**	**45.91212297**
(Span 3) -4	**-4.80E+02**	**-4.84E+02**	**-3.52E+02**	**-4.27E+02**	**-4.46E+02**
+4	**4.49E+01**	**4.21E+01**	**3.83E+01**	**4.52E+01**	**4.59E+01**
-3.05	**-392.6506301**	**-399.6040996**	**-297.55408**	**-356.612403**	**-372.285396**
+3.05	**58.32760097**	**57.98607695**	**42.56633753**	**47.99304317**	**52.57984778**
-3.1	**-310.6934901**	**-320.2554935**	**-248.408769**	**-292.338285**	**-306.633458**
+3.1	**85.35351511**	**79.69241596**	**64.97103912**	**63.04169589**	**63.39014318**
-3.15	***-249.7470988***	***-262.5107434***	***-206.018504***	***-236.838511***	***-251.757321***
+3.15	**119.2480853**	**118.2093518**	**114.390432**	**116.6188512**	**112.0272674**
-3.2	**-234.4609178**	**-246.4786302**	**-192.855438**	**-222.078818**	**-236.09871**
+3.2	**185.4371194**	**178.6123606**	**169.6784467**	**181.7564313**	**178.6081107**
-3.25	**-219.8071104**	**-231.0737156**	**-180.801974**	**-208.198892**	**-221.342541**
+3.25	**239.274555**	**228.5863377**	**216.4978824**	**232.2602585**	**233.3728629**
-3.3	**-205.153303**	**-215.668801**	**-168.748509**	**-194.318967**	**-206.586372**
+3.3	**287.320385**	**272.0229111**	**261.8818493**	**282.2681522**	**286.9592042**
-3.35	**-190.4994957**	**-200.2638864**	**-156.695044**	**-180.439041**	**-191.830203**
+3.35	**330.2069227**	**312.1269756**	**292.6895296**	**323.9426409**	**331.9914897**
-3.4	**-175.8456883**	**-184.8589718**	**-144.64158**	**-166.559115**	**-177.074033**
+3.4	**369.1472706**	**347.5995515**	**317.6287752**	**364.5242983**	**368.9204328**
-3.45	**-161.1918809**	**-169.4540572**	**-132.588115**	**-152.679189**	**-162.317864**
+3.45	**394.0261539**	**370.5187903**	**334.0704533**	**392.1201012**	**392.3690737**
-3.5	**-146.5380735**	**-154.0491426**	**-120.53465**	**-138.799264**	**-147.561695**
+3.5	**413.7625398**	**387.2956408**	**352.0164978**	**413.3284048**	**413.5062746**
-3.55	**-131.8842662**	**-138.644228**	**-108.481186**	**-124.919338**	**-132.805526**
+3.55	**416.1624127**	**389.6757268**	**356.2345453**	**417.5570183**	**417.5589231**
-3.6	**-117.2304588**	**-123.2393133**	**-96.427721**	**-111.039412**	**-118.049356**

+3.6	**412.4110848**	**385.4240368**	**352.5910498**	**416.0467057**	**418.7877593**
-3.65	**-102.5766514**	**-107.8343987**	**-84.3742564**	**-97.1594868**	**-103.293187**
+3.65	**392.6680122**	**366.5883871**	**346.3430652**	**396.3432185**	**403.2479686**
-3.7	**-87.92284403**	**-92.42948413**	**-72.3207917**	**-83.2795611**	**-88.537018**
+3.7	**362.3565383**	**338.8615347**	**334.6834874**	**366.0781118**	**376.8367892**
-3.75	**-73.26903666**	**-77.02456952**	**-60.267327**	**-69.3996355**	**-73.7808488**
+3.75	**334.8561323**	**312.6769231**	**307.1204583**	**337.8840657**	**340.3526763**
-3.8	**-58.61522928**	**-61.61965491**	**-48.2138623**	**-55.5197098**	**-59.0246795**
+3.8	**297.7298194**	**279.7124513**	**273.862482**	**300.197266**	**304.0859973**
-3.85	**-43.96142191**	**-46.21474031**	**-36.1603977**	**-41.6397841**	**-44.2685103**
+3.85	**241.5501482**	**230.7489703**	**222.0804358**	**243.5540577**	**248.9333881**
-3.9	**-29.30761453**	**-30.8098257**	**-24.106933**	**-27.7598584**	**-29.512341**
+3.9	**177.9513124**	**172.4079704**	**162.4793162**	**179.3690824**	**183.5931897**
-3.95	**-14.65380716**	**-15.40491109**	**-12.0534683**	**-13.8799328**	**-14.7561718**
+3.95	**95.40295838**	**93.95769919**	**86.72702687**	**95.69482445**	**98.57305635**
-5	**-6.80E-14**	**-6.71E-14**	**-5.62E-14**	**-6.06E-14**	**-6.37E-14**
+5	**3.12E-14**	**3.78E-14**	**2.40E-14**	**2.56E-14**	**2.37E-14**

3-Span: Shear (Max and Min) Raw Data Results - 25' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-5.532834418	-4.288186691	-3.904512737	-3.451641224	-3.037989157	-3.510890951	-4.997886635	-5.367558101	-5.874838709	-6.177024831
End Shear	43.43322563	34.35896537	31.87683191	27.51095259	22.97892112	28.43118942	38.20300388	40.20226431	40.10193661	40.09255271
-0.05	-5.532834418	-4.288186691	-4.075346396	-3.577349126	-3.36112707	-3.510890951	-4.997886635	-5.367558101	-5.874838709	-6.177024831
+0.05	39.21547041	31.09366876	29.25658078	24.70979266	20.48238349	25.71267324	34.55969099	36.2211555	36.19346912	36.18365799
-0.1	-7.240445203	-4.288186691	-5.024919157	-4.498446491	-4.04783811	-3.510890951	-4.997886635	-5.367558101	-5.874838709	-6.177024831
+0.1	35.11777138	27.95867366	26.77435156	22.07715902	18.23665901	23.12926889	31.06069176	32.38612381	32.37623223	32.36703884
-0.15	-8.879996179	-4.288186691	-6.088832147	-5.117159275	-4.485153159	-3.613125553	-4.997886635	-5.367558101	-5.874838709	-6.177024831
+0.15	32.37926689	25.91267978	25.1252728	20.39721746	16.82164754	21.43808829	28.77100813	30.12959041	30.1322521	30.10997706
-0.2	-11.24731028	-4.941741189	-7.582465158	-6.523589165	-5.596489876	-5.170658383	-4.997886635	-5.367558101	-5.874838709	-6.177024831
+0.2	28.39046756	22.92404271	22.67041384	18.16216191	15.13308172	18.95941129	25.41643862	26.59700267	26.74905063	26.77804362
-0.25	-12.768347	-6.595819206	-9.318510044	-7.740709092	-6.56316843	-6.205727806	-6.370499234	-6.372297925	-6.344636062	-6.318922972
+0.25	25.86586713	21.1460968	21.05223475	16.90912326	14.03412468	17.35237603	23.24239798	24.35333955	24.41692961	24.56351472
-0.3	-15.02433418	-9.074156935	-12.17108275	-9.53447608	-8.006868677	-7.747094279	-8.764233342	-8.766477002	-8.739304895	-8.735572588
+0.3	22.21667775	18.64118655	18.66269462	15.04875006	12.41496373	15.0214088	20.20375659	21.1775802	21.16666464	21.3997339
-0.35	-16.5126515	-10.71863851	-13.99537899	-10.74637007	-8.997627826	-8.763503945	-10.52388635	-10.54263412	-10.67915592	-10.68844871
+0.35	19.88643128	17.08093911	17.10072411	13.8264501	11.37891948	13.52717437	18.29486142	19.12329387	19.11232106	19.26515527
-0.4	-18.71230387	-13.16365636	-16.61462798	-12.78371075	-10.69030228	-10.26506208	-13.44748931	-13.45113492	-13.88778352	-13.89736339
+0.4	16.41520928	14.79726655	14.81446735	12.02876907	9.886364965	11.33054812	15.66316402	16.15055214	16.13959108	16.28485456
-0.45	-20.15142112	-14.91590915	-18.28203052	-14.23011546	-11.87019662	-11.24705109	-15.37918512	-15.38316218	-15.98019363	-15.9899328
+0.45	14.85273647	13.31850512	13.33400374	10.85932914	8.91828455	10.14830918	13.96807307	14.24955305	14.23866216	14.37836336
-0.5	-22.25981031	-17.68037774	-20.66392173	-16.28044993	-13.56697642	-13.09860835	-18.23862505	-18.4078759	-19.03947385	-19.18610943
+0.5	12.77571487	11.17598829	11.18898532	9.157523102	7.5142292	8.729696654	11.52653756	11.54730279	11.63339744	11.65590443
-0.55	-23.62644464	-19.451567	-22.17174839	-17.568687	-14.64982348	-14.3370752	-20.11249077	-20.65617224	-21.02066543	-21.54143888
+0.55	11.43322563	9.803952568	9.815333242	8.063055359	6.614657972	7.860342622	9.973276317	9.992918914	10.07525737	10.09660878
-0.6	-25.62872997	-21.994089	-24.31224266	-19.38452545	-16.20213998	-16.07802009	-22.86260504	-23.9716373	-23.93714957	-24.98142716
+0.6	9.532437448	7.840451313	7.849510961	6.388473577	5.345209542	6.487200666	7.76706795	7.784948304	7.861207989	7.880735147
-0.65	-27.2744305	-23.60908995	-25.65779658	-20.53933169	-17.18933182	-17.45600023	-24.64853329	-26.13559312	-26.10211127	-27.2059724
+0.65	8.321073271	6.600375221	6.608571428	5.28949127	4.548766033	5.640207077	6.385742732	6.402411931	6.474315381	6.455197306
-0.7	-30.62428084	-25.90498634	-27.5528677	-22.25640915	-18.59900278	-19.96898495	-27.24415851	-29.2976509	-29.26581795	-30.48477005
+0.7	6.586331483	4.853748	4.905914112	3.859759952	3.426592023	4.431174905	4.68941453	4.706522197	4.706522197	4.706522197
-0.75	-33.3392729	-27.34734024	-28.73346016	-23.32640554	-19.49158055	-21.6029802	-29.14136662	-31.34140747	-31.31075889	-32.70317682
+0.75	5.490381811	3.770872627	3.847248535	3.030443654	2.730586528	3.669803968	3.643433629	3.639109592	3.65338808	3.586157336
-0.8	-37.27994886	-29.37193021	-30.37907303	-24.66768298	-20.75987553	-23.98052495	-32.38011799	-34.29626066	-34.26752228	-35.86139841
+0.8	3.93377836	2.278972995	2.384549945	1.899162248	1.771151552	2.601026295	2.202338604	2.198231476	2.156700251	2.150554039
-0.85	-39.80955882	-30.62518746	-31.40071086	-25.48891904	-21.55848257	-25.50990015	-34.46521855	-36.18394983	-36.15655956	-37.84827609
+0.85	2.967842177	1.559941995	1.618778202	1.416650509	1.350229325	1.94103772	1.497764338	1.50503134	1.502869449	1.4788666
-0.9	-43.44120829	-33.12525261	-32.83365498	-26.61283349	-22.69259552	-27.70902033	-37.46627495	-39.09843781	-39.27260097	-40.84886105
+0.9	1.643928245	0.826341293	0.917437885	0.895619883	0.882487035	1.03615697	0.79865038	0.828660334	0.910403399	0.931398463
-0.95	-45.74417258	-34.88109921	-33.69418988	-27.90871321	-24.06584191	-29.10512054	-39.37355125	-41.35521253	-41.64290067	-42.7162957
+0.95	0.850078955	0.647472502	0.672351068	0.599899607	0.601101932	0.510069008	0.755877266	0.828660334	0.910403399	0.931398463
-1	-49.00490915	-37.37709159	-35.01614675	-30.19545616	-26.06001121	-31.08283026	-42.07884396	-44.58154875	-45.00812569	-45.81824423
+1	7.93E-01	0.647472502	0.647515706	0.51514293	4.46E-01	0.510069008	0.755877266	0.828660334	0.910403399	0.931398463
(Span 2) -2	-3.292178047	-2.686990376	-2.687169671	-2.13782685	-1.852957965	-2.116770009	-3.136866696	-3.43891393	-3.778145097	-3.865274009
+2	50.42068731	38.82124857	35.64484029	31.68263116	27.3400595	31.92034015	43.27725943	46.67464686	47.07780403	47.49400593
-2.05	-3.292178047	-2.686990376	-2.816130241	-2.13782685	-1.858683719	-2.116770009	-3.136866696	-3.43891393	-3.778145097	-3.865274009
+2.05	47.45853495	36.73661568	33.26016418	29.79960568	25.63784945	30.24151038	40.975648	43.98961592	44.10748002	44.63646148
-2.1	-3.292178047	-2.686990376	-3.180582987	-2.678673953	-2.325013785	-2.116770009	-3.136866696	-3.43891393	-3.778145097	-3.865274009
+2.1	44.55058436	34.53311523	31.3404933	27.83640982	23.88359395	28.45814784	38.53523955	41.17549295	41.13756176	41.58109794
-2.15	-4.678861249	-2.686990376	-3.478681479	-3.339782983	-2.776234189	-2.152616872	-3.136866696	-3.43891393	-3.778145097	-3.865274009
+2.15	41.66117018	32.23540201	30.07594578	25.81482217	22.09848994	26.58997	35.98265704	38.2628768	38.18019389	38.50693865
-2.2	-7.129530924	-3.566223414	-4.309424856	-4.671285833	-3.811556641	-3.397928974	-3.44329234	-3.44855641	-3.778145097	-3.865274009
+2.2	37.26543972	29.06785458	28.19861282	23.06618299	19.80989083	24.00118886	32.45074456	34.03722961	34.2222054	34.33580426
-2.25	-8.922996816	-5.024385403	-6.108383592	-5.920677215	-4.850057557	-4.417316058	-4.851548124	-4.857585551	-4.845286396	-4.833854538

+2.25	33.99811824	26.38863856	26.65546749	21.11811036	18.10380034	22.01175219	29.5725004	30.77214965	31.06064205	31.5653233
-2.3	-10.67699955	-6.603612652	-7.944368364	-7.180308228	-5.8186364	-5.628878713	-6.582348144	-6.59019969	-6.575221786	-6.561294473
+2.3	30.68521098	23.9008852	25.00360534	19.66755941	16.49380349	19.89040051	26.58710858	27.73528981	27.82289478	28.88553229
-2.35	-12.39038027	-8.489460564	-9.918431251	-8.500742	-6.896946075	-6.765151687	-8.475003329	-8.483784015	-8.632024546	-8.453455266
+2.35	27.35543639	21.80723643	23.24942583	18.22695526	15.19646135	17.66237846	23.82236336	24.99494187	24.97657175	26.14105541
-2.4	-14.68721953	-10.87660234	-12.8433892	-10.27619934	-8.371031418	-8.337691528	-11.17991445	-11.31297028	-11.48855733	-11.52198341
+2.4	22.93913576	18.86867951	20.8451423	16.16653091	13.38649777	15.02833787	20.24376746	21.42602817	21.40719983	22.41653367
-2.45	-16.49026246	-12.74053437	-14.95688278	-11.6124002	-9.499437067	-9.54617836	-13.31778547	-13.70593966	-13.68721123	-14.00549454
+2.45	20.56622563	16.57922506	18.95987352	14.51544076	11.96861857	13.10847582	17.78079609	18.78509143	18.76613893	19.60077114
-2.5	-18.52283411	-14.64825111	-16.99773081	-12.94693602	-10.64345596	-11.26132876	-15.52623385	-16.20624915	-16.1872306	-16.79272645
+2.5	18.50130346	14.6451169	16.9950227	12.94531373	10.64270354	11.25822035	15.52254362	16.20221466	16.18333906	16.78859389
-2.55	-20.59631932	-16.58239317	-18.96247255	-14.51751859	-11.96958235	-13.1117174	-17.78455326	-18.78924017	-18.77014737	-19.60492978
+2.55	16.47715823	12.73746066	14.95406802	11.61077238	9.498679284	9.544091236	13.31419532	13.70205088	13.68347248	14.00187442
-2.6	-23.64176568	-19.62141332	-21.45774578	-16.69861837	-13.84849116	-15.68372901	-21.13364733	-22.3192166	-22.30032423	-23.35652488
+2.6	14.09645083	10.26506831	12.12041717	9.829680717	7.998233742	7.937561734	10.48314973	10.53982167	10.73204019	10.74334086
-2.65	-26.94504096	-21.81076316	-23.3542519	-18.22877439	-15.19730222	-17.6658088	-23.82684474	-24.99920152	-24.98068049	-26.14515406
+2.65	12.38815117	8.486643146	9.91540733	8.499128191	6.896192334	6.763171344	8.471783448	8.480683724	8.706668988	8.450574282
-2.7	-30.32735636	-23.90424256	-25.00590923	-19.66926997	-16.49459442	-19.78106368	-26.55430759	-27.74005313	-27.74979455	-28.88956264
+2.7	10.67471737	6.620897342	7.941890081	7.178710857	5.817890388	5.626980365	6.579340075	6.587307833	6.572432205	6.558607169
-2.75	-34.01554176	-26.30667534	-26.65763796	-21.11983614	-18.1048939	-22.01519769	-29.49320954	-30.75607115	-30.98755912	-31.56923222
+2.75	8.920662119	5.021912721	6.105937321	5.873477218	4.766554658	4.415515149	4.849133572	4.855264447	4.843047558	4.831690487
-2.8	-38.47883568	-29.87206204	-28.68969227	-23.75913919	-20.3826987	-24.6600578	-33.34896161	-35.04542898	-35.2239373	-35.39723327
+2.8	6.520738084	3.10789248	3.8509459	4.287035166	3.507877829	3.07195637	3.136878773	3.438925537	3.778160341	3.865301045
-2.85	-41.63657792	-32.239242	-30.07774423	-25.81730689	-22.0995913	-26.59325782	-35.98697798	-38.26757807	-38.18469626	-38.51148988
+2.85	4.676410684	2.687007971	3.478309858	3.339115473	2.775920836	2.151115138	3.136878773	3.438925537	3.778160341	3.865301045
-2.9	-44.68046899	-34.53682596	-31.34212349	-28.10138047	-23.9469697	-28.46131027	-38.53940245	-41.1800683	-41.14225332	-41.58578011
+2.9	3.291867721	2.687007971	3.180126455	2.688935399	2.324681533	2.116794936	3.136878773	3.438925537	3.778160341	3.865301045
-2.95	-47.58179082	-36.74015779	-33.26338078	-29.80195483	-25.63894284	-30.24451502	-40.97960961	-43.99401868	-44.11194194	-44.64087489
+2.95	3.291867721	2.687007971	2.81557548	2.137805901	1.858688581	2.116794936	3.136878773	3.438925537	3.778160341	3.865301045
-3	-51.17880574	-39.48869951	-36.43704452	-32.29092064	-27.8938241	-32.45605617	-44.01263864	-47.53978186	-48.11975386	-48.52768184
+3	3.291867721	2.687007971	2.687140513	2.137805901	1.852962828	2.116794936	3.136878773	3.438925537	3.778160341	3.865301045
(Span 3) -4	-7.93E-01	-0.647476741	-0.64750868	-0.515137882	-4.47E-01	-0.510075015	-0.755880176	-0.828663131	-0.910407072	-0.931404977
+4	47.80472531	36.56036767	34.6621744	29.44559355	25.427056	30.4365038	41.19441849	43.5233653	43.90767321	44.7435185
-3.05	-7.93E-01	-0.647476741	-0.672613311	-0.600419144	-6.01E-01	-0.510075015	-0.755880176	-0.828663131	-0.910407072	-0.931404977
+3.05	45.59713562	34.87685646	33.75678643	27.90583355	24.08815089	29.10157625	39.36890272	41.34990129	41.6375481	42.71228633
-3.1	-1.93636322	-1.059313276	-1.143448839	-1.051455018	-1.032792537	-1.327513281	-1.023698716	-1.021753264	-1.028180819	-1.005869985
+3.1	42.09697972	32.21743561	32.37291264	26.25112017	22.31897438	26.98563613	36.47889087	37.99490546	38.1108287	39.86444189
-3.15	-2.836257935	-1.551331517	-1.619764881	-1.417357102	-1.350573264	-1.942655857	-1.49896548	-1.506762028	-1.506762028	-1.506762028
+3.15	39.6473213	30.62219934	31.39866628	25.48744897	21.55779684	25.50599688	34.46010964	36.17950681	36.15228084	37.84396655
-3.2	-4.308763504	-2.760296986	-2.856598769	-2.264730276	-2.079927506	-2.948878014	-2.667295947	-2.663016612	-2.619761977	-2.613367814
+3.2	35.81500479	28.71275414	29.84512298	24.23362204	20.34574361	23.19449424	31.30923337	33.32235696	33.29313757	34.8272595
-3.25	-5.492462382	-3.773399972	-3.849287551	-3.031888728	-2.731294372	-3.671693332	-3.645899642	-3.641483932	-3.616807484	-3.588365534
+3.25	33.16453632	27.34387473	28.73114044	23.32466812	19.49076472	21.59880204	29.13589877	31.33657936	31.30610541	32.6983519
-3.3	-7.155186846	-5.422930091	-5.460945274	-4.313294573	-3.791319472	-4.827606424	-5.239233102	-5.256850719	-5.256850719	-5.256850719
+3.3	29.06194717	25.15327506	26.93515751	21.74814611	18.13768981	19.13469964	26.38657011	28.25075909	28.21853786	29.36533884
-3.35	-8.323395808	-6.60331222	-6.610927928	-5.253765628	-4.549577479	-5.642332649	-6.389037167	-6.405578875	-6.477375193	-6.388058126
+3.35	27.21341612	23.60519925	25.65514254	20.58842352	17.1884003	17.45161141	24.64414088	26.13046805	26.09716552	27.20109763
-3.4	-10.15556498	-8.484820381	-8.494084355	-6.904818023	-5.75780856	-6.924289869	-8.488751637	-8.507086447	-8.585313496	-8.605340239
+3.4	24.9081932	21.15812567	23.61212354	18.7924979	15.69325117	15.51043749	21.95026272	22.86977487	22.94645582	23.84287118
-3.45	-11.43322563	-9.807225319	-9.81803965	-8.06500151	-6.615568541	-7.815158029	-9.977018693	-9.996516476	-10.0787246	-10.09996015
+3.45	23.58103134	19.44728065	22.16876312	17.56638875	14.64876077	14.33394098	20.10786671	20.65083346	21.01616524	21.53626667
-3.5	-13.45874635	-11.88285408	-11.8960739	-9.719264175	-7.976279172	-9.199517145	-12.33008148	-12.42413568	-12.43898325	-12.54681747
+3.5	21.52560408	16.76841388	19.88274339	15.61034129	13.00993949	12.45296267	17.28664359	17.291114	18.02625258	18.03627576
-3.55	-14.85136802	-13.32206232	-13.33694054	-10.86142346	-8.919247496	-10.15077743	-13.97219006	-14.25396694	-14.24291966	-14.382468
+3.55	20.11756498	14.91126641	18.27872829	14.22753487	11.86900132	11.24453287	15.37440541	15.3785708	15.97542607	15.98532842
-3.6	-17.63613152	-15.55395538	-15.57136591	-12.62481242	-10.37986414	-12.03333074	-16.53342388	-17.13067832	-17.11953105	-17.26726608
+3.6	17.95807818	12.34821994	15.75373955	12.03366699	10.08435313	9.765455277	12.47099899	12.47466013	12.8222123	12.83186711

-3.65	**-19.87527879**	**-17.08472144**	**-17.1038421**	**-13.82865852**	**-11.37991966**	**-13.53092674**	**-18.29928048**	**-19.12810194**	**-19.11696282**	**-19.26963064**
+3.65	**16.49217219**	**10.71462014**	**13.99175787**	**10.74415856**	**8.9965988**	**8.760896408**	**10.51904168**	**10.53834001**	**10.67417304**	**10.68364871**
-3.7	**-23.40169081**	**-19.43500764**	**-19.4567004**	**-15.66797936**	**-12.95136066**	**-15.79097326**	**-21.12791022**	**-22.22929998**	**-22.21826248**	**-22.45418489**
+3.7	**14.26314434**	**8.245041685**	**11.23183542**	**8.938598017**	**7.525449211**	**7.232577684**	**7.963373332**	**7.965624981**	**7.938409397**	**7.913115058**
-3.75	**-25.85368963**	**-21.06411742**	**-21.0554806**	**-16.9113946**	**-14.03519909**	**-17.3564338**	**-23.24768211**	**-24.35844988**	**-24.34752935**	**-24.5106958**
+3.75	**12.76238146**	**6.591763389**	**9.314576176**	**7.738505211**	**6.5621405**	**6.203063238**	**6.366541866**	**6.368489873**	**6.340972749**	**6.315379128**
-3.8	**-29.66486528**	**-23.91342003**	**-23.4888169**	**-18.79348226**	**-15.68839915**	**-19.78134145**	**-26.52841457**	**-27.70469499**	**-27.85642002**	**-27.88545874**
+3.8	**10.46737006**	**4.288180228**	**7.095966156**	**5.906320155**	**5.159280522**	**4.649145152**	**4.9978537**	**5.367544955**	**5.874781393**	**6.176990571**
-3.85	**-32.28369541**	**-25.91761845**	**-25.12859691**	**-20.40019322**	**-16.82277506**	**-21.44239235**	**-28.77661447**	**-30.09471984**	**-30.12455497**	**-30.11493687**
+3.85	**8.876816524**	**4.288180228**	**6.086732289**	**5.235749632**	**4.484708079**	**3.610445558**	**4.9978537**	**5.367544955**	**5.874781393**	**6.176990571**
-3.9	**-36.31060237**	**-29.0006689**	**-27.60445367**	**-22.94878906**	**-18.97742691**	**-23.98917439**	**-32.22494425**	**-33.65789392**	**-33.6414877**	**-33.6312337**
+3.9	**6.39889623**	**4.288180228**	**4.46965029**	**4.17804097**	**3.822814229**	**3.510935007**	**4.9978537**	**5.367544955**	**5.874781393**	**6.176990571**
-3.95	**-39.17959469**	**-31.09883621**	**-29.25992905**	**-24.71302604**	**-20.48388129**	**-25.71714535**	**-34.56550271**	**-36.22729364**	**-36.19936689**	**-36.18934408**
+3.95	**5.532907897**	**4.288180228**	**4.074786964**	**3.576362448**	**3.360608331**	**3.510935007**	**4.9978537**	**5.367544955**	**5.874781393**	**6.176990571**
-5	**-43.41944017**	**-34.29592945**	**-31.74035012**	**-27.41802759**	**-22.80586171**	**-28.34280204**	**-38.12337954**	**-40.15517495**	**-40.10795296**	**-40.09836299**
+5	**5.532907897**	**4.288180228**	**3.904522472**	**3.451618164**	**3.037994277**	**3.510935007**	**4.9978537**	**5.367544955**	**5.874781393**	**6.176990571**

3-Span: Shear (Max and Min) Raw Data Results - 25' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-5.532834418	-6.340511979	-6.646078826	-6.276684523	-7.308972879	-4.678709022	-4.95546139	-2.648477118
End Shear	43.43322563	50.02748206	51.61011249	47.37329072	52.73040503	37.12321118	39.24231117	24.30850523
-0.05	-5.532834418	-6.340511979	-6.646078826	-6.276684523	-7.308972879	-4.678709022	-4.95546139	-2.648477118
+0.05	39.21547041	45.49179466	46.77349685	42.87568724	47.39082286	33.92094243	35.84082188	21.80460383
-0.1	-7.240445203	-6.340511979	-6.646078826	-6.276684523	-7.308972879	-5.898950292	-6.258501269	-2.701807208
+0.1	35.11777138	41.14504879	42.15196752	38.55097801	42.28577023	30.74642466	32.47029235	19.54830382
-0.15	-8.879996179	-6.340511979	-6.646078826	-6.276684523	-7.308972879	-7.09778294	-7.517318875	-3.790825729
+0.15	32.37926689	38.28553175	39.11941123	35.71787503	38.95824748	28.65451128	30.25006254	18.39181662
-0.2	-11.24731028	-7.017181785	-7.017181785	-6.276684523	-7.308972879	-8.767325185	-9.26960175	-5.471269839
+0.2	28.39046756	34.07234813	34.66332571	31.56219794	34.10366818	25.56679711	26.97427302	16.76038331
-0.25	-12.768347	-9.366254084	-9.366254084	-7.494704981	-7.494704981	-10.50505059	-11.10847231	-6.94142741
+0.25	25.86586713	31.32515604	31.76613976	28.86544106	30.97180387	23.54964672	24.83517544	15.81352849
-0.3	-15.02433418	-12.88592806	-12.88592806	-10.31086276	-10.31086276	-13.66384894	-14.42896729	-8.837968311
+0.3	22.21667775	27.3153959	27.55073338	25.04105496	26.70434746	20.59941441	21.70803898	14.20491533
-0.35	-16.5126515	-15.22139383	-15.22139383	-12.47929206	-12.60777192	-15.6736748	-16.5412068	-9.605854903
+0.35	19.88643128	24.72711339	24.83908579	22.60053926	24.19672896	18.6908124	19.68601558	13.1464246
-0.4	-18.71230387	-18.69378677	-18.69378677	-16.2411739	-16.79118698	-18.54462523	-19.55784112	-11.39137695
+0.4	16.41520928	21.02500703	21.02500703	19.25857728	20.52522427	16.02535473	16.86879446	11.58622957
-0.45	-20.15142112	-20.97982027	-20.97982027	-18.72997006	-19.56272303	-20.36287968	-21.46800788	-12.53513245
+0.45	14.85273647	18.92474479	18.92474479	17.11015186	18.1691247	14.42628502	15.18556318	10.56834442
-0.5	-22.25981031	-24.35119207	-24.35119207	-22.41899056	-23.67670892	-22.94696324	-24.18228404	-14.17710373
+0.5	12.77571487	15.88169568	15.88169568	14.02231751	14.789544	12.10921062	12.74653749	9.081549103
-0.55	-23.62644464	-26.55196363	-26.55196363	-24.83985598	-26.38045108	-24.57430802	-25.89138783	-15.22044384
+0.55	11.43322563	13.93291968	13.93291968	12.06266702	12.64957202	10.6252267	11.18444915	8.120925866
-0.6	-25.62872997	-29.93052751	-29.99987225	-28.39794866	-30.36048915	-26.88880415	-28.30480251	-16.70471866
+0.6	9.532437448	11.14397432	11.14397432	9.287029839	9.62643672	8.50126949	8.948704727	6.732514303
-0.65	-27.2744305	-32.49362011	-32.70874251	-30.71217428	-33.17751482	-28.48063867	-30.00010389	-17.63821046
+0.65	8.321073271	9.382517232	9.382517232	7.554862552	7.745600564	7.134280389	7.509808116	5.845809058
-0.7	-30.62428084	-36.55818423	-37.12545986	-34.08127177	-37.48804707	-31.2115925	-32.91188225	-18.95064098
+0.7	6.586331483	6.90141593	6.90141593	5.516958271	5.516958271	5.298275937	5.580199042	4.580762618
-0.75	-33.3392729	-39.18855536	-39.9916997	-36.47947108	-40.2272869	-32.93447278	-34.75028977	-19.76485404
+0.75	5.490381811	5.36309964	5.36309964	4.286392504	4.286392504	4.156555187	4.38006213	3.784627596
-0.8	-37.27994886	-42.99646181	-44.15362405	-40.44428458	-44.47954806	-35.36769647	-37.34888441	-20.89129116
+0.8	3.93377836	3.243585699	3.243585699	2.590986593	2.590986593	2.578908439	2.721411809	2.667932075
-0.85	-39.80955882	-45.43244388	-46.82492684	-42.99446946	-47.66413131	-36.886505	-38.97243468	-21.57679147
+0.85	2.967842177	2.204918597	2.204918597	1.762075691	1.762075691	1.753026711	1.853225837	1.979024083
-0.9	-43.44120829	-48.91383968	-50.65683206	-46.6612738	-52.27171072	-39.00524213	-41.23963976	-22.5077922
+0.9	1.643928245	1.176687399	1.176687399	0.96335612	1.093407067	0.996674009	1.058188328	1.030864618
-0.95	-45.74417258	-51.10885472	-53.08303681	-48.98912267	-55.21718619	-40.30880631	-42.63619377	-23.67439483
+0.95	0.850078955	0.985826195	1.016695187	0.96335612	1.093407067	0.736114387	0.779480654	0.466278449
-1	-49.00490915	-54.1938695	-56.50967795	-52.28694513	-59.42310109	-42.0962982	-44.55380104	-25.32749231
+1	7.93E-01	0.985826195	1.016695187	0.96335612	1.093407067	0.736114387	0.777548716	0.43678295
(Span 2) -2	-3.292178047	-4.09114724	-4.219252604	-3.99789735	-4.537604636	-3.054851274	-3.226802368	-1.812635405
+2	50.42068731	55.06888717	57.70065093	53.59766063	61.57678823	40.99766148	43.43161335	26.48863574
-2.05	-3.292178047	-4.09114724	-4.219252604	-3.99789735	-4.537604636	-3.054851274	-3.226802368	-1.812635405
+2.05	47.45853495	52.40413153	54.75771469	50.77492437	58.01540663	39.4313324	41.75353384	25.14648126
-2.1	-3.292178047	-4.09114724	-4.219252604	-3.99789735	-4.537604636	-3.456369087	-3.671261801	-1.812635405
+2.1	44.55058436	49.54153088	51.61822687	47.77682133	54.27629574	37.76927758	39.97483477	23.6003493
-2.15	-4.678861249	-4.09114724	-4.219252604	-3.99789735	-4.537604636	-3.792109095	-4.044832925	-2.314135207
+2.15	41.66117018	46.51311592	48.3166823	44.63589062	50.39889756	35.97240768	38.0546297	22.10797201
-2.2	-7.129530924	-5.057445071	-5.057445071	-4.050932164	-4.537604636	-4.680630032	-4.968098743	-3.628702198
+2.2	37.26543972	42.27266609	43.72216366	40.28205809	45.08210218	33.38296541	35.29162946	20.05083447
-2.25	-8.922996816	-7.127488256	-7.127488256	-5.707703675	-5.707703675	-6.687618754	-7.079089235	-4.703564094

+2.25	33.99811824	38.98193543	40.17665407	36.7373901	40.83843501	31.30773338	33.0803677	18.64858893
-2.3	-10.67699955	-9.369538751	-9.369538751	-7.861858454	-8.016060825	-8.721532228	-9.217290723	-5.841931273
+2.3	30.68521098	35.37827395	36.33020156	33.05986803	36.48949777	29.12871719	30.76113148	17.61168609
-2.35	-12.39038027	-11.75895059	-11.75895059	-10.24180497	-10.5964679	-10.91320942	-11.52062135	-7.032347622
+2.35	27.35543639	31.69241871	32.37974341	29.60737171	32.29824079	26.85522643	28.34398059	16.40528211
-2.4	-14.68721953	-15.4666692	-15.4666692	-13.65971022	-14.32253982	-14.18467936	-14.95821771	-8.680734443
+2.4	22.93913576	27.21063142	27.62441604	25.16211911	27.22210626	23.69303781	24.98619066	14.68694305
-2.45	-16.49026246	-18.11428929	-18.11428929	-16.37211215	-17.50088654	-16.52403868	-17.41556495	-10.07099353
+2.45	20.56622563	23.9071402	24.13948405	22.05980632	23.98113622	21.23530605	22.37968909	13.32492283
-2.5	-18.52283411	-20.82391259	-20.82391259	-19.18261869	-20.80005338	-18.76371916	-19.76769228	-11.54687619
+2.5	18.50130346	20.81927943	20.81927943	19.1779162	20.79487074	18.76075662	19.76458122	11.90788739
-2.55	-20.59631932	-23.91268945	-24.14532195	-22.06460709	-23.98644298	-21.2386768	-22.38326136	-13.32566766
+2.55	16.47715823	18.10974562	18.10974562	16.36755069	17.59453656	16.52093326	17.4123032	10.44284287
-2.6	-23.64176568	-28.33087693	-28.81017849	-26.26864947	-28.37249511	-24.49981705	-25.84242025	-15.1282163
+2.6	14.09645083	14.59781155	14.59781155	12.77767294	13.35901488	13.37973923	14.11253181	8.299177577
-2.65	-26.94504096	-31.69815163	-32.38584511	-29.6129312	-32.30480712	-26.85836071	-28.34731063	-16.40594956
+2.65	12.38815117	11.75479232	11.75479232	10.23774796	10.59205921	10.90980235	11.51704034	7.0317042
-2.7	-30.32735636	-35.25715305	-36.20948559	-32.99336702	-36.39761008	-29.13173824	-30.76434469	-17.61231793
+2.7	10.67471737	9.365613172	9.365613172	7.858086119	8.011983237	8.718793719	9.21441228	5.841314066
-2.75	-34.01554176	-38.98760453	-40.18274322	-36.64437254	-40.74655768	-31.31061645	-33.08343755	-18.64917424
+2.75	8.920662119	7.123833004	7.123833004	5.704863026	5.704863026	6.684895803	7.076225741	4.702978531
-2.8	-38.47883568	-43.3564146	-44.89351719	-41.39014661	-46.4293094	-34.05272153	-36.00584631	-20.70125057
+2.8	6.520738084	4.406690211	4.406690211	3.997921567	4.537635893	4.2407879	4.499584393	3.285971481
-2.85	-41.63657792	-46.51841302	-48.32243668	-44.64121292	-50.40542686	-35.97493765	-38.0573311	-22.23573056
+2.85	4.676410684	4.091195541	4.219302175	3.997921567	4.537635893	3.791688465	4.044362009	2.31364542
-2.9	-44.68046899	-49.54657918	-51.62374162	-47.78194092	-54.28263767	-37.77162726	-39.97734709	-23.7235428
+2.9	3.291867721	4.091195541	4.219302175	3.997921567	4.537635893	3.455858881	3.670699616	1.812643178
-2.95	-47.58179082	-52.40887855	-54.76293308	-50.77978862	-58.02149672	-39.43349975	-41.75585471	-25.14723051
+2.95	3.291867721	4.091195541	4.219302175	3.997921567	4.537635893	3.054846466	3.226804737	1.812643178
-3	-51.17880574	-55.9118977	-58.63672154	-54.49841313	-62.72324956	-41.52855148	-44.00024214	-26.91555938
+3	3.291867721	4.091195541	4.219302175	3.997921567	4.537635893	3.054846466	3.226804737	1.812643178
(Span 3) -4	-7.93E-01	-0.985837834	-1.016707131	-0.963361956	-1.093414598	-0.736113229	-0.777549287	-0.436784823
+4	47.80472531	53.18923611	55.39137308	51.20937725	58.04405301	41.52078081	43.93601407	24.78915869
-3.05	-7.93E-01	-0.985837834	-1.016707131	-0.963361956	-1.093414598	-0.736113229	-0.779820716	-0.466703039
+3.05	45.59713562	51.10335704	53.07695198	48.98345116	55.20999446	40.30625479	42.63345897	23.67346719
-3.1	-1.93636322	-1.507739176	-1.507739176	-1.204351431	-1.204351431	-1.240439983	-1.314461145	-1.333150721
+3.1	42.09697972	47.77173503	49.39772066	45.45535744	50.75235954	38.31774364	40.50363263	22.35648419
-3.15	-2.836257935	-2.206732798	-2.206732798	-1.7634888	-1.7634888	-1.754090646	-1.854343988	-1.974137008
+3.15	39.6473213	45.42630599	46.81818925	42.98822271	47.65631765	36.88351292	38.96923513	21.7388453
-3.2	-4.308763504	-3.927545249	-3.927545249	-3.137995232	-3.137995232	-3.08808	-3.256764423	-3.023986152
+3.2	35.81500479	41.74029403	42.77891479	39.13380199	42.84872125	34.5738262	36.5007516	20.71066403
-3.25	-5.492462382	-5.36683005	-5.36683005	-4.289293697	-4.289293697	-4.158754333	-4.382374034	-3.778912047
+3.25	33.16453632	39.18191282	39.98445567	36.47277329	40.22060528	32.9310635	34.74665083	19.95959529
-3.3	-7.155186846	-7.71011404	-7.71011404	-6.163803649	-6.163803649	-5.896806195	-6.209288496	-4.987174093
+3.3	29.06194717	35.21137455	35.66037586	32.9673409	36.07038849	30.31695779	31.95771614	18.84508629
-3.35	-8.323395808	-9.386848793	-9.386848793	-7.55898549	-7.750050069	-7.136821312	-7.512478394	-5.839383857
+3.35	27.21341612	32.48657904	32.70110607	30.70647997	33.17016419	28.47683569	29.99605109	17.97594795
-3.4	-10.15556498	-12.05941959	-12.05941959	-10.19385789	-10.61295292	-9.197722867	-9.681813544	-7.181082656
+3.4	24.9081932	28.86702344	28.86702344	27.21684728	29.03847416	26.12239533	27.51711599	16.58430681
-3.45	-11.43322563	-13.93776504	-13.93776504	-12.06738186	-12.65470282	-10.62814562	-11.1875217	-8.113921146
+3.45	23.58103134	26.54639487	26.54639487	24.83388009	26.37377449	24.57109225	25.88801064	15.60012631
-3.5	-13.45874635	-16.88588111	-16.88588111	-15.03762155	-15.89979373	-12.87304067	-13.55056913	-9.564071737
+3.5	21.52560408	23.23033031	23.23033031	21.19015171	22.30551382	22.10124257	23.29400636	14.04299828
-3.55	-14.85136802	-18.92999126	-18.92999126	-17.11536437	-18.1748109	-14.4294524	-15.18889726	-10.560882
+3.55	20.11756498	20.97401756	20.97401756	18.72380987	19.55586062	20.3592853	21.46423204	12.95320856
-3.6	-17.63613152	-22.09991039	-22.09991039	-20.36288641	-21.7375877	-16.84284565	-17.72931121	-12.09450115
+3.6	17.95807818	17.53548824	17.53548824	14.98405111	15.39242719	17.60295932	18.56846829	11.24473776

-3.65	**-19.87527879**	**-24.73356843**	**-24.84583318**	**-22.60615596**	**-24.20287764**	**-18.69459259**	**-19.69001914**	**-13.13863004**
+3.65	**16.49217219**	**15.21544675**	**15.21544675**	**12.47306439**	**12.6008537**	**15.66969252**	**16.53702192**	**10.05876912**
-3.7	**-23.40169081**	**-28.64267577**	**-28.94422361**	**-26.21803746**	**-28.01880211**	**-21.57578524**	**-22.74275285**	**-14.73073436**
+3.7	**14.26314434**	**11.70819774**	**11.70819774**	**9.368674508**	**9.368674508**	**12.62591053**	**13.33799758**	**8.213104941**
-3.75	**-25.85368963**	**-31.33204291**	**-31.77338947**	**-28.87200138**	**-30.97939418**	**-23.55366629**	**-24.83943691**	**-15.80552505**
+3.75	**12.76238146**	**9.360273399**	**9.360273399**	**7.490049254**	**7.490049254**	**10.50067982**	**11.10387711**	**6.940388249**
-3.8	**-29.66486528**	**-35.47244909**	**-36.14247834**	**-32.94042264**	**-35.71001994**	**-26.59257286**	**-28.06234712**	**-17.43113186**
+3.8	**10.46737006**	**6.340575237**	**6.646148942**	**6.276645688**	**7.309036442**	**8.225371923**	**8.700894969**	**4.87971225**
-3.85	**-32.28369541**	**-38.29274882**	**-39.12705323**	**-35.72481661**	**-38.9663749**	**-28.65870368**	**-30.2545111**	**-18.53068995**
+3.85	**8.876816524**	**6.340575237**	**6.646148942**	**6.276645688**	**7.309036442**	**7.095423283**	**7.514841545**	**3.78995135**
-3.9	**-36.31060237**	**-42.59458831**	**-43.69160086**	**-39.99058624**	**-43.98179716**	**-31.80464241**	**-33.59368103**	**-20.58238656**
+3.9	**6.39889623**	**6.340575237**	**6.646148942**	**6.276645688**	**7.309036442**	**5.270362104**	**5.59827951**	**2.64847957**
-3.95	**-39.17959469**	**-45.49922352**	**-46.78140376**	**-42.88286739**	**-47.39931611**	**-33.92523567**	**-35.84538096**	**-21.98162375**
+3.95	**5.532907897**	**6.340575237**	**6.646148942**	**6.276645688**	**7.309036442**	**4.67871134**	**4.955471677**	**2.64847957**
-5	**-43.41944017**	**-49.89263297**	**-51.46617292**	**-47.27503517**	**-52.61353359**	**-37.12752696**	**-39.24689618**	**-24.1174752**
+5	**5.532907897**	**6.340575237**	**6.646148942**	**6.276645688**	**7.309036442**	**4.67871134**	**4.955471677**	**2.64847957**

3-Span: Shear (Max and Min) Raw Data Results - 25' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-5.532834418	-6.780258342	-7.12778826	-5.577089274	-6.422196562	-6.827558181
End Shear	43.43322563	49.23502149	48.31459485	44.14840392	48.6794591	50.52757276
-0.05	-5.532834418	-7.182877824	-7.522524489	-6.148343112	-6.518213337	-7.492953527
+0.05	39.21547041	44.13655328	43.0262306	40.37424171	44.27206499	45.82166831
-0.1	-7.240445203	-8.412628014	-8.828730407	-7.958417084	-8.151697933	-8.998567231
+0.1	35.11777138	39.7820578	38.21837358	36.62824863	40.10753294	41.18446992
-0.15	-8.879996179	-9.549705628	-9.615309396	-9.084549857	-9.581469826	-9.912864178
+0.15	32.37926689	37.03779729	35.09463134	34.15711399	37.35823979	38.14459315
-0.2	-11.24731028	-11.59227458	-11.48645894	-11.27562837	-11.67346965	-12.04120871
+0.2	28.39046756	32.98391903	30.82995685	30.505527	33.29215222	33.6823166
-0.25	-12.768347	-13.43386429	-13.20662643	-13.55925153	-13.92974868	-14.00616082
+0.25	25.86586713	30.40820715	28.39452538	28.11710656	30.63006203	30.78424174
-0.3	-15.02433418	-16.59282631	-15.97079447	-16.85219969	-17.91097168	-16.80851592
+0.3	22.21667775	26.61671891	24.89974855	24.61924932	26.7271349	26.77687325
-0.35	-16.5126515	-18.62992371	-18.00207643	-18.95926221	-20.43909635	-18.86537694
+0.35	19.88643128	24.14795563	22.61840241	22.35309064	24.19539071	24.24361538
-0.4	-18.71230387	-22.51911211	-21.85245079	-21.98765666	-24.04273087	-23.21201693
+0.4	16.41520928	20.5517434	19.28733373	19.06828982	20.52034257	20.58196197
-0.45	-20.15142112	-25.4752253	-24.35005122	-23.91854125	-26.3197308	-25.99525406
+0.45	14.85273647	18.23638878	17.13782979	17.0717552	18.20987221	18.25705342
-0.5	-22.25981031	-29.89671254	-28.59349822	-26.68295651	-29.54757985	-29.99770497
+0.5	12.77571487	14.90512467	14.03858537	14.32814265	15.28335216	14.91515324
-0.55	-23.62644464	-32.69837836	-31.26991839	-28.43804847	-31.986611	-32.55072826
+0.55	11.43322563	12.78963662	12.06634209	12.58073533	13.40911171	12.7946545
-0.6	-25.62872997	-36.7758574	-35.06647892	-31.24894486	-35.77191373	-36.20676796
+0.6	9.532437448	9.792990594	9.361366503	10.12019608	10.72671538	9.792968078
-0.65	-27.2744305	-39.35465423	-37.48899528	-33.35220958	-38.17606641	-38.53319106
+0.65	8.321073271	7.842863963	7.690113109	8.56166811	9.032481073	7.921675884
-0.7	-30.62428084	-42.69442718	-40.87697622	-36.3678236	-41.60025166	-41.90907275
+0.7	6.586331483	5.685041134	5.793127251	6.36022139	6.598967198	5.659818941
-0.75	-33.3392729	-44.97326303	-42.97516106	-38.28239836	-43.7599454	-44.18114176
+0.75	5.490381811	4.514303109	4.673603299	4.991419634	5.101130792	4.445499469
-0.8	-37.27994886	-48.15719822	-46.04559309	-41.00540534	-46.81187261	-47.87859594
+0.8	3.93377836	3.270763585	3.165581289	2.95398359	3.069341352	2.76714093
-0.85	-39.80955882	-50.19127071	-49.13309178	-42.71852979	-48.71968238	-50.21690019
+0.85	2.967842177	2.659620354	2.522860736	2.117967009	2.12651947	1.984288134
-0.9	-43.44120829	-53.08723917	-53.50757651	-45.12979071	-51.42450081	-53.52848093
+0.9	1.643928245	1.794886088	1.818033827	1.22859645	1.327611805	1.456063921
-0.95	-45.74417258	-54.86488965	-56.64286112	-46.62870387	-53.1111686	-55.60220868
+0.95	0.850078955	1.258696588	1.373737232	0.986111394	1.122565749	1.217005492
-1	-49.00490915	-58.3464399	-61.46905495	-48.7090772	-55.42081372	-58.50597179
+1	7.93E-01	1.039527327	0.973481505	0.885423399	1.04551003	1.062173806
(Span 2) -2	-3.292178047	-4.314005205	-4.039917335	-3.674478931	-4.338833228	-4.407987635
+2	50.42068731	60.12527224	64.15818571	48.01876673	53.8127678	57.81447052
-2.05	-3.292178047	-4.314005205	-4.416109196	-3.700724376	-4.608468982	-4.407987635
+2.05	47.45853495	56.2352703	59.83400123	45.96548418	51.67114735	55.13846121
-2.1	-3.292178047	-5.333590961	-5.382347119	-3.91526528	-5.089254945	-4.550165247
+2.1	44.55058436	52.26455329	55.41550129	43.80155236	49.47523047	52.3311371
-2.15	-4.678861249	-6.27624947	-6.287059794	-5.082962148	-5.464389026	-5.900096634
+2.15	41.66117018	48.68667901	51.27923623	41.61223592	47.09781536	49.49753266
-2.2	-7.129530924	-7.39079056	-7.82292656	-6.940098879	-6.835339181	-7.469524965
+2.2	37.26543972	44.32488894	45.56118438	38.51786116	43.66647118	45.45522213
-2.25	-8.922996816	-9.285149752	-9.697599262	-9.199900347	-8.767840248	-9.563470288

+2.25	**33.99811824**	**41.34390654**	**41.15282482**	**36.1693844**	**40.91252075**	**42.39218922**
-2.3	**-10.67699955**	**-11.50077672**	**-11.75352338**	**-11.76005888**	**-11.57379914**	**-11.79967559**
+2.3	**30.68521098**	**38.3572919**	**36.66963816**	**33.73731702**	**38.01732132**	**39.23414883**
-2.35	**-12.39038027**	**-13.99712216**	**-13.80650203**	**-14.26104468**	**-14.43341524**	**-14.14485584**
+2.35	**27.35543639**	**35.18992681**	**32.92398056**	**31.23236127**	**35.03699109**	**35.99372657**
-2.4	**-14.68721953**	**-17.64920961**	**-16.7876829**	**-17.5000351**	**-18.54825267**	**-18.62324001**
+2.4	**22.93913576**	**30.68617903**	**28.61698687**	**27.7975336**	**30.9860738**	**31.56683796**
-2.45	**-16.49026246**	**-20.83156919**	**-19.67728158**	**-19.85482916**	**-21.58367785**	**-21.89561431**
+2.45	**20.56622563**	**27.21589281**	**25.6016039**	**25.16411957**	**27.83320731**	**28.33393067**
-2.5	**-18.52283411**	**-24.05873338**	**-22.67196603**	**-22.49701718**	**-24.74754626**	**-25.08943531**
+2.5	**18.50130346**	**24.05480352**	**22.67137502**	**22.49348835**	**24.74343031**	**25.08541373**
-2.55	**-20.59631932**	**-27.21973306**	**-25.60218563**	**-25.16760877**	**-27.83742033**	**-28.27738028**
+2.55	**16.47715823**	**20.82757345**	**19.67670241**	**19.85176971**	**21.57946095**	**21.89148095**
-2.6	**-23.64176568**	**-31.84637243**	**-29.72849854**	**-28.66863235**	**-32.01980271**	**-32.68779498**
+2.6	**14.09645083**	**16.60462538**	**16.00128833**	**16.69759698**	**17.53759695**	**17.51144515**
-2.65	**-26.94504096**	**-35.19392447**	**-32.92460725**	**-31.23570255**	**-35.04090346**	**-35.99790555**
+2.65	**12.38815117**	**13.99401526**	**13.80608954**	**14.25779057**	**14.42922112**	**14.14051204**
-2.7	**-30.32735636**	**-38.36107648**	**-36.67052177**	**-33.74057215**	**-38.02122859**	**-39.23822554**
+2.7	**10.67471737**	**11.49777802**	**11.75311211**	**11.75672612**	**11.57024676**	**11.79687713**
-2.75	**-34.01554176**	**-41.3474613**	**-41.15371972**	**-36.17253805**	**-40.91625091**	**-42.39616246**
+2.75	**8.920662119**	**9.282712218**	**9.697188098**	**9.196492277**	**8.858391181**	**9.560541502**
-2.8	**-38.47883568**	**-45.27683031**	**-47.01052159**	**-39.28325766**	**-44.5544495**	**-46.45673362**
+2.8	**6.520738084**	**7.125067021**	**7.292083703**	**6.492141054**	**6.42137607**	**7.098650356**
-2.85	**-41.63657792**	**-48.6911936**	**-51.28008241**	**-41.50349935**	**-47.10107172**	**-49.37329529**
+2.85	**4.676410684**	**6.275151205**	**6.286888902**	**5.081015491**	**5.463942485**	**5.898456585**
-2.9	**-44.68046899**	**-52.268871**	**-55.41630692**	**-43.80451402**	**-49.4782559**	**-52.33483743**
+2.9	**3.291867721**	**5.3323678**	**5.382159569**	**3.915010424**	**5.08867617**	**4.548316749**
-2.95	**-47.58179082**	**-56.24011064**	**-59.83486948**	**-45.96824177**	**-51.6739284**	**-55.14193816**
+2.95	**3.291867721**	**4.313987424**	**4.415913798**	**3.700390353**	**4.607737538**	**4.40795504**
-3	**-51.17880574**	**-61.40111239**	**-65.5710638**	**-48.71366385**	**-54.86676752**	**-58.70813361**
+3	**3.291867721**	**4.313987424**	**4.039917065**	**3.674464345**	**4.338814241**	**4.40795504**
(Span 3) -4	**-7.93E-01**	**-1.039523042**	**-0.97348144**	**-0.885419885**	**-1.045505455**	**-1.062165951**
+4	**47.80472531**	**57.0261298**	**59.89532475**	**48.03567213**	**54.67773177**	**57.56237576**
-3.05	**-7.93E-01**	**-1.259651734**	**-1.37386393**	**-0.986525916**	**-1.122964083**	**-1.217455259**
+3.05	**45.59713562**	**54.89889351**	**56.64186989**	**46.62583813**	**53.10796535**	**55.59834849**
-3.1	**-1.93636322**	**-2.076602035**	**-2.048516928**	**-1.509064927**	**-1.436060177**	**-1.577854455**
+3.1	**42.09697972**	**52.22286327**	**52.08351524**	**44.34437633**	**50.53442475**	**52.44696054**
-3.15	**-2.836257935**	**-2.660723954**	**-2.523004815**	**-2.119189348**	**-2.106968683**	**-1.985272105**
+3.15	**39.6473213**	**50.2616513**	**49.13218217**	**42.71523703**	**48.71602884**	**50.21252778**
-3.2	**-4.308763504**	**-3.586451889**	**-3.625284456**	**-3.558476095**	**-3.724095878**	**-3.308754042**
+3.2	**35.81500479**	**47.1231606**	**44.94711305**	**40.11438789**	**45.81582312**	**46.66650247**
-3.25	**-5.492462382**	**-4.516423019**	**-4.673929683**	**-4.993989747**	**-5.103903102**	**-4.447709803**
+3.25	**33.16453632**	**44.96918738**	**42.97453862**	**38.278704**	**43.7557929**	**44.17628662**
-3.3	**-7.155186846**	**-6.296400634**	**-6.373758614**	**-7.077765181**	**-7.375767656**	**-6.296195831**
+3.3	**29.06194717**	**41.50344715**	**39.779359**	**35.37760718**	**40.47888138**	**40.80459064**
-3.35	**-8.323395808**	**-7.777714757**	**-7.690589151**	**-8.564632985**	**-9.035691338**	**-7.925086587**
+3.35	**27.21341612**	**39.35000849**	**37.48829376**	**33.34814026**	**38.1714295**	**38.52874252**
-3.4	**-10.15556498**	**-10.77072436**	**-10.22889754**	**-10.92785804**	**-11.60617452**	**-10.77217667**
+3.4	**24.9081932**	**35.43368648**	**33.81864062**	**30.16593653**	**34.52895268**	**35.00665528**
-3.45	**-11.43322563**	**-12.79344826**	**-12.06692281**	**-12.5840279**	**-13.41269743**	**-12.79856781**
+3.45	**23.58103134**	**32.69329529**	**31.2691261**	**28.57792167**	**31.98150296**	**32.54593909**
-3.5	**-13.45874635**	**-15.99947631**	**-15.05439547**	**-15.23247442**	**-16.24797272**	**-16.01269736**
+3.5	**21.52560408**	**28.44702715**	**27.20563731**	**25.77547048**	**28.49242304**	**28.68153294**
-3.55	**-14.85136802**	**-18.24059848**	**-17.13846535**	**-17.07540291**	**-18.21376311**	**-18.26138174**
+3.55	**20.11756498**	**25.46963454**	**24.34931081**	**23.91481059**	**26.31533874**	**25.99002488**
-3.6	**-17.63613152**	**-21.73937732**	**-20.38500957**	**-20.15115219**	**-21.73262484**	**-21.77906834**
+3.6	**17.95807818**	**21.14456506**	**20.57128103**	**20.99186796**	**22.86193762**	**21.78053591**

-3.65	**-19.87527879**	**-24.15247231**	**-22.61908481**	**-22.35746017**	**-24.20028686**	**-24.24834959**
+3.65	**16.49217219**	**18.62624818**	**18.00130409**	**18.95518343**	**20.43420871**	**18.85970868**
-3.7	**-23.40169081**	**-27.87434259**	**-26.05657894**	**-25.77738038**	**-28.02000671**	**-28.07030341**
+3.7	**14.26314434**	**15.53287631**	**15.05100472**	**15.76791756**	**16.60394009**	**15.88986733**
-3.75	**-25.85368963**	**-30.41294208**	**-28.39522774**	**-28.1217388**	**-30.63523941**	**-30.78966237**
+3.75	**12.76238146**	**13.43052209**	**13.20610999**	**13.5548248**	**13.92436368**	**14.00247967**
-3.8	**-29.66486528**	**-34.32908609**	**-32.06193274**	**-31.71907362**	**-34.64395686**	**-35.16102172**
+3.8	**10.46737006**	**10.65949391**	**10.67317283**	**10.1472655**	**10.9955232**	**11.02503699**
-3.85	**-32.28369541**	**-37.04283962**	**-35.09556931**	**-34.16193314**	**-37.36361434**	**-38.1503133**
+3.85	**8.876816524**	**9.547566534**	**9.615075957**	**9.082390489**	**9.578579129**	**9.911181651**
-3.9	**-36.31060237**	**-41.16860721**	**-39.80675951**	**-37.87735696**	**-41.49661084**	**-42.72675427**
+3.9	**6.39889623**	**8.017071248**	**8.410565883**	**7.369160451**	**7.622338623**	**8.513243473**
-3.95	**-39.17959469**	**-44.14250255**	**-43.02721058**	**-40.37916808**	**-44.2775492**	**-45.82758944**
+3.95	**5.532907897**	**7.072733686**	**7.522240015**	**6.145863928**	**6.517501148**	**7.490926322**
-5	**-43.41944017**	**-49.05140184**	**-48.31569795**	**-44.15335748**	**-48.4701074**	**-50.53358044**
+5	**5.532907897**	**6.780246328**	**7.127780038**	**5.577080243**	**6.422174979**	**6.827608674**

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-6.916043	-5.360233	-4.880641	-4.314552	-3.797486	-4.388614	-6.247358	-6.709448	-7.343548	-7.721281
+0.05	48.589335	38.537968	36.584990	30.887241	25.744204	32.140842	42.832653	44.873198	44.840407	44.828075
-0.1	-13.832086	-10.720467	-9.761282	-8.629103	-7.594973	-8.777227	-12.494717	-13.418895	-14.687097	-15.442562
+0.1	90.336170	71.840707	69.002789	57.364035	47.881252	59.961901	79.823711	83.337567	83.300377	83.275117
-0.15	-20.748129	-16.080700	-14.641923	-12.943655	-11.392459	-13.165841	-18.742075	-20.128343	-22.030645	-23.163843
+0.15	121.226062	97.138997	94.558824	76.555697	64.696683	80.165542	108.061585	112.993375	112.995945	112.994475
-0.2	-27.664172	-21.440933	-19.522564	-17.258206	-15.189946	-17.554455	-24.989433	-26.837791	-29.374194	-30.885124
+0.2	147.625630	118.727361	117.614859	93.955949	80.156566	97.862928	132.085639	138.716446	144.967793	144.946050
-0.25	-34.580215	-26.801167	-24.403205	-21.572758	-18.987432	-21.943068	-31.236791	-33.547238	-36.717742	-38.606405
+0.25	162.326847	132.660954	132.749789	106.307970	91.009757	108.541840	147.465060	155.859573	167.789171	167.814854
-0.3	-41.496258	-32.161400	-29.283846	-25.887309	-22.784919	-26.331682	-37.484150	-40.256686	-44.061290	-46.327686
+0.3	175.175377	146.233884	146.289315	117.492946	100.519179	117.432385	159.048648	168.266255	185.672157	185.972543
-0.35	-48.412301	-37.521634	-34.164486	-30.201861	-26.582405	-30.720296	-43.731508	-46.966133	-51.404839	-54.048967
+0.35	176.386641	152.489327	152.530328	122.963440	105.508137	119.190312	168.632008	180.024071	194.524824	197.358244
-0.4	-55.328344	-42.881867	-39.045127	-34.516412	-30.379892	-35.108910	-49.978866	-53.675581	-58.748387	-61.770248
+0.4	176.215151	156.197020	156.224517	126.226383	108.810270	119.936928	175.896976	188.316088	200.386510	206.439002
-0.45	-62.244387	-48.242100	-43.925768	-38.830964	-34.177378	-39.497523	-56.226225	-60.385029	-66.091935	-69.491529
+0.45	167.093285	154.495043	154.504793	125.298728	108.660516	114.873206	175.198401	188.649380	201.659868	205.877045
-0.5	-69.160430	-53.602334	-48.806409	-43.145515	-37.974864	-43.886137	-62.473583	-67.094476	-73.435484	-77.212810
+0.5	168.251038	153.837256	153.961925	124.749337	107.892142	115.025301	173.927814	186.400514	200.625076	202.639844
-0.55	-76.076473	-58.962567	-53.687050	-47.460067	-41.772351	-48.274751	-68.720941	-73.803924	-80.779032	-84.934091
+0.55	158.374196	148.637656	148.841930	121.290387	105.372862	108.709403	166.023141	177.670314	191.049528	196.479180
-0.6	-82.992516	-64.322800	-58.567691	-51.774618	-45.569837	-52.663364	-74.968300	-80.513372	-88.122581	-92.655372
+0.6	160.153695	141.064709	141.349797	115.791033	100.854870	108.732455	155.939717	165.900759	179.595938	185.171521
-0.65	-89.908559	-69.683034	-63.448332	-56.089170	-49.367324	-57.051978	-81.215658	-87.222819	-95.466129	-100.376654
+0.65	152.688100	127.805690	127.865778	105.506679	92.411122	102.652276	139.602489	147.807767	163.207866	165.020899
-0.7	-96.824602	-75.043267	-68.328973	-60.403721	-53.164810	-61.440592	-87.463016	-93.932267	-102.809677	-108.097935
+0.7	141.934054	113.431603	113.813429	94.655660	83.126861	94.953052	122.916559	130.743800	142.756146	143.008855
-0.75	-103.740645	-80.403500	-73.209614	-64.718273	-56.962297	-65.829205	-93.710374	-100.641714	-110.153226	-115.819216
+0.75	119.291836	93.798486	93.668978	78.801823	69.856521	79.861214	102.590149	107.603436	115.069637	115.073844
-0.8	-110.656688	-85.763734	-78.090255	-69.032824	-60.759783	-70.217819	-99.957733	-107.351162	-117.496774	-123.540497
+0.8	95.702919	74.524048	74.383548	63.573534	56.930996	64.286947	79.421733	81.600078	85.187510	85.265716
-0.85	-117.572731	-91.123967	-82.970896	-73.347376	-64.577673	-74.606433	-106.205091	-114.060610	-124.840323	-131.261778
+0.85	65.368186	49.498320	50.245043	43.763418	40.260145	42.826652	49.998651	50.125605	50.089287	50.055528
-0.9	-124.529824	-96.484201	-103.465929	-79.850920	-71.198832	-78.995046	-112.452449	-120.770057	-132.183871	-138.983059
+0.9	46.821061	26.693485	28.069861	25.428691	25.446677	29.145829	25.790327	25.763722	25.854070	25.776955
-0.95	-139.163399	-104.253362	-128.917876	-103.057163	-91.451665	-83.383660	-118.699808	-129.531526	-145.533638	-157.517309
+0.95	21.707835	15.377472	16.693595	15.712750	15.278621	12.556320	17.952085	19.680683	21.622081	22.120713
-1	-166.528029	-123.932033	-157.690786	-127.752304	-113.628021	-89.109041	-129.206229	-148.314202	-164.316277	-176.466329
+1	19.832549	16.186812	16.187893	12.878573	11.162483	12.751725	18.896932	20.716508	22.760084	23.284961
(Span 2) -2	-166.528029	-123.932033	-157.690786	-127.752304	-113.628021	-89.109041	-129.206229	-148.314202	-164.316277	-176.466329
+2	19.832549	16.186812	16.187893	12.878573	11.162483	12.751725	18.896932	20.716508	22.760084	23.284961
-2.05	-125.406193	-85.801469	-123.432695	-94.522879	-83.554779	-60.391004	-85.407883	-97.802896	-107.154569	-113.005222
+2.05	25.639315	12.644904	17.054682	17.415944	14.448636	15.731817	13.799523	15.128273	16.620599	17.003891
-2.1	-91.785039	-63.490396	-91.874500	-65.259148	-57.639240	-49.164379	-72.856698	-79.871995	-87.751014	-94.060054
+2.1	50.425592	30.264260	32.260754	28.848604	23.501999	32.532230	29.223363	29.258966	29.228944	29.201040
-2.15	-71.107163	-58.041675	-63.192986	-52.325387	-45.330404	-45.724588	-67.759270	-74.283741	-81.611503	-83.493817
+2.15	76.354490	59.031635	60.394943	49.091336	39.990625	51.308096	59.764937	59.716981	61.928124	61.855530
-2.2	-65.757878	-53.675287	-53.677935	-43.154052	-37.768523	-42.284796	-62.661842	-68.695487	-75.471993	-77.212702
+2.2	108.053128	87.940268	87.047728	69.690969	57.746330	73.338732	92.477362	95.138027	103.226159	103.143912

-2.25	-60.408593	-49.308899	-49.311331	-41.215270	-37.333712	-38.845004	-57.564414	-63.107233	-69.332482	-70.931588
+2.25	140.024324	113.589080	109.826151	90.317313	76.213782	93.778750	122.068561	127.349952	139.290309	139.277685
-2.3	-55.059308	-44.942511	-44.944728	-39.276487	-36.898901	-35.405212	-52.466986	-57.518979	-63.192972	-64.650474
+2.3	164.509647	133.673512	128.935542	106.115468	90.504535	109.618081	146.760825	156.258690	167.876757	171.783204
-2.35	-49.710023	-40.576123	-40.578125	-37.337705	-36.464089	-31.965420	-47.369558	-51.930725	-57.053461	-58.369360
+2.35	183.677310	148.016515	144.135057	116.995501	100.557184	122.658342	168.075026	178.408097	189.239035	198.171507
-2.4	-44.360738	-36.209735	-36.211521	-35.398922	-36.029278	-28.525629	-42.272130	-46.342471	-50.913951	-52.088246
+2.4	195.679710	158.662187	156.034601	126.029404	108.857705	130.966999	183.050570	193.484206	206.987160	217.595114
-2.45	-39.011453	-31.843348	-31.844918	-33.460140	-35.594467	-25.085837	-37.174702	-40.754217	-44.774440	-45.807131
+2.45	196.680160	164.166695	161.390661	129.450573	111.986389	131.805067	189.439846	199.330850	217.081336	226.849532
-2.5	-33.665344	-27.476960	-27.478615	-31.521531	-35.159710	-21.646045	-32.077274	-35.165963	-38.634929	-39.526017
+2.5	192.613529	164.763980	161.971561	128.827793	111.831946	128.061593	190.016317	201.807178	219.745449	227.887968
-2.55	-39.015133	-31.843141	-31.845265	-33.460354	-35.594544	-25.085539	-37.174561	-40.754079	-44.774259	-45.806812
+2.55	196.862600	164.163937	161.386401	129.449969	111.986110	131.785900	189.414090	199.310423	217.095977	226.841324
-2.6	-44.364923	-36.209500	-36.211916	-35.399177	-36.029379	-28.525291	-42.271969	-46.342314	-50.913745	-52.087882
+2.6	195.569850	158.625483	156.028212	126.033377	108.859547	130.945215	183.021423	193.460243	207.007947	217.583055
-2.65	-49.714712	-40.575859	-40.578567	-37.338000	-36.464214	-31.965042	-47.369377	-51.930549	-57.053231	-58.368952
+2.65	183.629098	148.011630	144.135551	116.993233	100.558768	122.647939	168.053227	178.390787	189.239315	198.165339
-2.7	-55.064501	-44.942219	-44.945217	-39.276824	-36.899048	-35.404793	-52.466786	-57.518784	-63.192716	-64.650023
+2.7	164.432700	133.665638	128.926325	106.111263	90.508154	109.591939	146.766201	156.248378	167.867454	171.768235
-2.75	-60.414291	-49.308578	-49.311868	-41.215647	-37.333883	-38.844544	-57.564194	-63.107019	-69.332202	-70.931093
+2.75	140.100695	113.578498	109.815744	90.311316	76.219490	93.791441	122.062210	127.355512	139.277761	139.286130
-2.8	-65.764080	-53.674937	-53.678519	-43.154470	-37.768718	-42.284296	-62.661602	-68.695254	-75.471688	-77.212163
+2.8	108.194564	87.968900	87.036827	69.683349	57.754189	73.363525	92.508785	95.130786	103.247901	103.164892
-2.85	-71.113869	-58.041297	-63.194075	-52.325554	-45.330480	-45.724047	-67.759011	-74.283489	-81.611174	-83.493233
+2.85	76.332537	59.059498	60.392218	49.089598	39.989814	51.330305	59.783398	59.734726	61.947875	61.874590
-2.9	-91.793933	-63.491559	-91.875249	-65.259263	-57.639290	-49.163798	-72.856419	-79.871725	-87.750660	-94.059678
+2.9	50.418825	30.272974	32.250368	28.842005	23.504412	32.528459	29.231872	29.267146	29.236834	29.208667
-2.95	-125.419430	-85.800770	-123.432902	-94.523801	-83.554581	-60.391219	-85.408263	-97.803343	-107.154797	-113.006525
+2.95	25.366327	12.623129	17.045544	17.421071	14.451022	15.703237	13.799578	15.128323	16.620666	17.004011
-3	-166.544581	-123.933375	-157.691866	-127.752854	-113.628277	-89.109294	-129.207562	-148.315242	-164.317653	-176.468174
+3	19.830680	16.186918	16.187717	12.878447	11.162512	12.751875	18.897004	20.716578	22.760176	23.285124
(Span 3) -4	-166.544581	-123.933375	-157.691866	-127.752854	-113.628277	-89.109294	-129.207562	-148.315242	-164.317653	-176.468174
+4	19.830680	16.186918	16.187717	12.878447	11.162512	12.751875	18.897004	20.716578	22.760176	23.285124
-3.05	-139.199584	-104.254356	-128.917753	-103.057574	-91.451857	-83.384709	-118.699026	-129.531585	-145.533871	-157.518214
+3.05	21.657286	15.377573	16.691893	15.712816	15.275001	12.560582	17.952154	19.680749	21.622167	22.120868
-3.1	-124.533132	-96.484062	-103.466781	-79.851447	-71.199078	-78.996041	-112.451709	-120.769762	-132.182584	-138.982288
+3.1	46.797159	26.709421	28.081863	25.414305	25.451305	29.179468	25.805839	25.778646	25.868490	25.755005
-3.15	-117.574294	-91.123836	-82.971103	-73.346887	-64.577783	-74.607372	-106.204392	-114.060330	-124.839108	-131.261050
+3.15	65.346081	49.494873	50.257125	43.761703	40.264760	42.834052	49.993066	50.380102	50.380102	50.380102
-3.2	-110.658159	-85.763611	-78.090449	-69.032365	-60.759887	-70.218703	-99.957075	-107.350899	-117.495631	-123.539812
+3.2	95.776243	74.539176	74.397719	63.559432	56.934830	64.264796	79.434317	81.612296	85.170830	85.285216
-3.25	-103.742024	-80.403386	-73.209796	-64.717842	-56.962394	-65.830034	-93.709757	-100.641468	-110.152154	-115.818574
+3.25	119.362290	93.637033	93.665559	78.799510	69.860799	79.864264	102.579334	107.594196	115.069806	115.074009
-3.3	-96.825889	-75.043160	-68.329143	-60.403319	-53.164901	-61.441366	-87.462440	-93.932037	-102.808677	-108.097335
+3.3	142.185932	113.447086	113.826177	94.664916	83.131181	94.925237	123.646143	130.751155	142.734972	143.024516
-3.35	-89.909754	-69.682935	-63.448490	-56.088797	-49.367408	-57.052697	-81.215123	-87.222606	-95.465201	-100.376097
+3.35	152.466795	127.798286	127.876636	105.514408	92.414683	102.648604	139.605414	147.804350	163.201843	165.021719
-3.4	-82.993619	-64.322710	-58.567837	-51.774274	-45.569915	-52.664028	-74.967806	-80.513174	-88.121724	-92.654859
+3.4	161.441696	141.075887	141.358986	115.797417	100.857687	108.696571	155.960526	165.893843	179.604517	185.186503
-3.45	-76.077484	-58.962485	-53.687184	-47.459751	-41.772422	-48.275359	-68.720489	-73.803743	-80.778247	-84.933621
+3.45	158.374173	148.645530	148.848428	121.294751	105.374670	108.882244	166.020223	177.660219	191.047617	196.471151
-3.5	-69.161349	-53.602259	-48.806531	-43.145228	-37.974930	-43.886690	-62.473172	-67.094312	-73.434770	-77.212383
+3.5	167.814923	153.841959	153.965797	124.751676	107.892924	114.999414	173.941698	186.385673	200.637482	202.644540
-3.55	-62.245215	-48.242034	-43.925878	-38.830706	-34.177437	-39.498022	-56.225855	-60.384881	-66.091294	-69.491144
+3.55	167.089326	154.493220	154.503295	125.309884	108.665581	114.873070	175.187324	188.645819	201.666717	205.870987
-3.6	-55.329080	-42.881809	-39.045225	-34.516183	-30.379944	-35.109353	-49.978538	-53.675450	-58.747817	-61.769906

+3.6	176.361351	156.191466	156.219940	126.248129	108.820154	119.917323	175.881125	188.327382	200.368820	206.426956
-3.65	-48.412945	-37.521583	-34.164572	-30.201660	-26.582451	-30.720684	-43.731220	-46.966018	-51.404340	-54.048668
+3.65	176.665271	152.480037	152.522682	122.970182	105.511055	119.195515	168.632063	180.029696	194.516929	197.358444
-3.7	-41.496810	-32.161358	-29.283919	-25.887138	-22.784958	-26.332015	-37.483903	-40.256587	-44.060863	-46.327430
+3.7	175.512673	146.220222	146.278073	117.509851	100.527172	117.405988	159.022660	168.263880	185.658106	186.501318
-3.75	-34.580675	-26.801133	-24.403265	-21.572615	-18.987465	-21.943347	-31.236586	-33.547156	-36.717387	-38.606192
+3.75	162.310901	132.664221	132.752491	106.309528	91.010575	108.539385	147.457042	155.851834	167.787959	167.813682
-3.8	-27.664540	-21.440908	-19.522612	-17.258092	-15.189973	-17.554678	-24.989269	-26.837725	-29.373910	-30.884953
+3.8	148.756435	118.708841	117.595998	93.967407	80.161969	97.883982	132.071421	138.702588	144.979130	144.956961
-3.85	-20.748405	-16.080682	-14.641959	-12.943569	-11.392480	-13.166009	-18.741952	-20.128294	-22.030433	-23.163715
+3.85	121.063828	97.136242	94.553587	76.554237	64.696005	80.153615	108.061815	112.993319	112.993415	112.994422
-3.9	-13.832270	-10.720457	-9.761306	-8.629047	-7.594987	-8.777340	-12.494635	-13.418863	-14.686956	-15.442477
+3.9	91.093464	71.853409	69.011130	57.371962	47.884915	59.972917	79.838067	83.352640	83.314829	83.289098
-3.95	-6.916136	-5.360232	-4.880653	-4.314524	-3.797494	-4.388672	-6.247318	-6.709431	-7.343480	-7.721239
+3.95	49.037489	38.544413	36.574897	30.891273	25.746069	32.146438	42.839909	44.880861	44.847763	44.835161
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-6.916043	-7.925640	-8.307599	-7.845856	-9.136216	-5.848386	-6.194327	-3.310596
+0.05	48.589335	56.409808	57.982662	53.141250	58.817125	42.104217	44.491554	27.475607
-0.1	-13.832086	-15.851280	-16.615197	-15.691711	-18.272432	-11.696773	-12.388653	-6.621193
+0.1	90.336170	105.566389	108.251669	99.063136	108.976414	78.841915	83.273257	51.453167
-0.15	-20.748129	-23.776920	-24.922796	-23.537567	-27.408648	-17.545159	-18.582980	-9.931789
+0.15	121.226062	143.699823	146.906639	134.338445	147.177312	107.705642	113.710552	69.917118
-0.2	-27.664172	-31.702560	-33.230394	-31.383423	-36.544864	-23.393545	-24.777307	-13.242386
+0.2	147.625630	176.542546	179.991523	164.132907	178.266059	132.700388	140.045849	87.691176
-0.25	-34.580215	-39.628200	-41.537993	-39.229278	-45.681080	-29.241931	-30.971634	-16.552982
+0.25	162.326847	197.715113	200.900207	183.540254	200.151647	148.704585	156.861985	99.557249
-0.3	-41.496258	-47.553840	-49.845591	-47.075134	-54.817297	-35.090318	-37.165960	-19.863578
+0.3	175.175377	214.418996	216.806345	198.676893	224.354628	161.912084	170.682474	111.266023
-0.35	-48.412301	-55.479480	-58.153190	-54.920990	-63.953513	-40.938704	-43.360287	-23.174175
+0.35	176.386641	221.223665	222.890696	212.878066	237.532104	167.392972	176.373363	116.014484
-0.4	-55.328344	-63.405120	-66.460788	-62.766845	-73.089729	-46.787090	-49.554614	-26.484771
+0.4	176.215151	227.054842	232.017645	221.317764	244.476930	170.153043	179.627347	121.946850
-0.45	-62.244387	-71.330760	-74.768387	-70.612701	-82.225945	-52.635476	-55.748941	-29.795368
+0.45	167.093285	228.052472	231.459514	221.165908	241.494168	171.710324	181.081108	120.097179
-0.5	-69.160430	-79.256400	-83.075985	-78.458557	-91.362161	-58.483863	-61.943267	-33.105964
+0.5	168.251038	224.371818	226.336379	219.155182	238.883927	169.458354	178.579996	120.718972
-0.55	-76.076473	-87.182040	-91.383584	-86.304412	-100.498377	-64.332249	-68.137594	-36.416560
+0.55	158.374196	212.521662	216.777458	208.634575	226.496171	160.681629	169.138557	113.622837
-0.6	-82.992516	-95.107680	-99.691182	-94.150268	-109.634593	-70.180635	-74.331921	-39.727157
+0.6	160.153695	201.042101	204.684872	195.017361	216.153417	152.791997	160.833681	108.984091
-0.65	-89.908559	-103.033320	-107.998781	-101.996123	-118.770809	-76.029022	-80.526248	-43.037753
+0.65	152.688100	186.577384	188.516244	175.248347	196.664279	141.149663	148.775697	97.590347
-0.7	-96.824602	-110.958960	-116.306379	-109.841979	-127.907025	-81.877408	-86.720574	-46.348350
+0.7	141.934054	167.519316	169.860391	152.519871	172.230461	126.646509	133.550864	88.560258
-0.75	-103.740645	-118.884600	-124.613978	-117.687835	-137.043241	-87.725794	-92.914901	-49.658946
+0.75	119.291836	139.740140	141.985531	126.663253	138.255265	104.978680	110.749781	73.763661
-0.8	-110.656688	-126.810240	-132.921577	-125.533690	-146.179458	-93.574180	-99.109228	-52.969542
+0.8	95.702919	108.627164	110.041819	97.137367	103.355665	82.470230	86.957354	61.682020
-0.85	-117.572731	-134.735880	-141.229175	-133.379546	-155.315674	-99.814191	-105.715791	-56.280139
+0.85	65.368186	70.293931	70.293931	60.080323	61.725897	54.273049	57.174742	44.564980
-0.9	-124.529824	-142.661520	-149.536774	-141.225402	-164.451890	-124.932372	-132.150365	-62.864953
+0.9	46.821061	37.958410	37.958410	30.341561	30.369804	30.363892	32.050572	31.000117
-0.95	-139.163399	-150.587160	-157.844372	-149.071257	-173.588106	-154.350813	-163.060335	-76.319939
+0.95	21.707835	23.413372	24.146511	22.879708	25.968418	18.215738	19.455602	12.789711
-1	-166.528029	-158.512804	-166.151979	-158.877911	-183.423372	-185.995913	-196.288712	-90.142487
+1	19.832549	24.645654	25.417379	24.083903	27.335177	18.402860	19.438717	10.919574
(Span 2) -2	-166.528029	-158.512804	-166.151979	-158.877911	-183.423372	-185.995913	-196.288712	-90.142487
+2	19.832549	24.645654	25.417379	24.083903	27.335177	18.402860	19.438717	10.919574
-2.05	-125.406193	-101.669718	-104.853276	-104.286444	-118.895208	-143.428538	-151.258938	-65.900655
+2.05	25.639315	17.997540	18.561094	17.587320	19.961569	18.669389	20.025531	16.086102
-2.1	-91.785039	-95.021525	-97.996910	-92.855155	-105.390484	-106.486108	-112.354033	-50.305206
+2.1	50.425592	42.933473	42.933473	34.380427	34.380427	34.967959	36.921325	34.165507
-2.15	-71.107163	-88.373333	-91.140544	-86.358533	-98.016825	-74.331243	-78.598020	-39.154644
+2.15	76.354490	83.722164	83.722164	72.338401	75.193574	65.347851	68.830608	53.476491
-2.2	-65.757878	-81.725140	-84.284178	-79.861910	-90.643167	-61.023181	-64.458193	-36.209098
+2.2	108.053128	126.442267	127.334641	112.916640	124.143445	95.029318	100.123482	71.645624

-2.25	-60.408593	-75.076947	-77.427812	-73.365288	-83.269509	-56.059056	-59.214635	-33.263553
+2.25	140.024324	164.212758	166.848829	150.352081	169.607434	123.079749	129.832711	87.770468
-2.3	-55.059308	-68.428754	-70.571446	-66.868665	-75.895850	-51.094930	-53.971078	-30.318008
+2.3	164.509647	194.543706	198.230336	184.329267	208.223658	145.831242	153.891141	100.154256
-2.35	-49.710023	-61.780562	-63.715080	-60.372043	-68.522192	-46.130805	-48.727520	-27.372463
+2.35	183.677310	216.972142	221.242439	211.164475	238.394718	162.889464	171.888195	110.944812
-2.4	-44.360738	-55.132369	-56.858714	-53.875420	-61.148534	-41.166679	-43.483962	-24.426918
+2.4	195.679710	234.111537	241.740257	230.177206	258.962444	174.450627	184.147524	119.911009
-2.45	-39.011453	-48.484176	-50.002348	-47.378797	-53.774875	-36.202554	-38.240404	-21.481373
+2.45	196.680160	244.150215	250.830025	238.683881	267.343179	182.266913	192.555702	123.355284
-2.5	-33.665344	-41.835983	-43.145982	-40.882175	-46.401217	-31.238474	-32.996847	-18.535827
+2.5	192.613529	247.346785	253.127653	239.234767	266.068539	185.175948	195.522686	124.433647
-2.55	-39.015133	-48.483603	-50.001761	-47.378512	-53.774506	-36.202607	-38.240375	-21.481284
+2.55	196.862600	244.145699	250.828851	238.656954	267.326538	182.271534	192.560835	123.766376
-2.6	-44.364923	-55.131717	-56.858047	-53.875095	-61.148114	-41.166740	-43.483929	-24.426817
+2.6	195.569850	234.056811	241.688640	230.146049	258.940670	174.447092	184.151001	119.959371
-2.65	-49.714712	-61.779831	-63.714332	-60.371679	-68.521721	-46.130874	-48.727483	-27.372349
+2.65	183.629098	216.964822	221.248145	211.141766	238.380384	162.892857	171.891934	110.938880
-2.7	-55.064501	-68.427945	-70.570618	-66.868262	-75.895329	-51.095007	-53.971036	-30.317882
+2.7	164.432700	194.532203	198.220498	184.338289	208.239695	145.841721	153.902305	100.468842
-2.75	-60.414291	-75.076060	-77.426903	-73.364845	-83.268936	-56.059140	-59.214590	-33.263414
+2.75	140.100695	164.243253	166.880453	150.358429	169.609805	123.097719	129.851721	87.773546
-2.8	-65.764080	-81.724174	-84.283189	-79.861428	-90.642544	-61.023274	-64.458144	-36.208947
+2.8	108.194564	126.485627	127.378637	112.955393	124.155787	95.055185	100.150763	71.902888
-2.85	-71.113869	-88.372288	-91.139474	-86.358011	-98.016152	-74.332245	-78.598916	-39.154479
+2.85	76.332537	83.721979	83.721979	72.355150	75.203840	65.344830	68.827432	53.470303
-2.9	-91.793933	-95.020403	-97.995760	-92.854595	-105.389759	-106.486164	-112.353923	-50.308204
+2.9	50.418825	42.946354	42.946354	34.390438	34.390438	34.956483	36.909249	34.164279
-2.95	-125.419430	-101.668517	-104.852045	-104.288134	-118.895364	-143.428955	-151.259513	-65.900706
+2.95	25.366327	17.997752	18.561313	17.587428	19.961708	18.659153	20.014221	16.133466
-3	-166.544581	-158.514386	-166.153732	-158.878611	-183.426044	-185.995786	-196.288771	-90.142293
+3	19.830680	24.645945	25.417678	24.084049	27.335365	18.402831	19.438732	10.919621
(Span 3) -4	-166.544581	-158.514386	-166.153732	-158.878611	-183.426044	-185.995786	-196.288771	-90.142293
+4	19.830680	24.645945	25.417678	24.084049	27.335365	18.402831	19.438732	10.919621
-3.05	-139.199584	-150.588667	-157.846045	-149.070336	-173.589617	-154.350849	-163.060558	-76.319803
+3.05	21.657286	23.413648	24.146794	22.879846	25.968597	18.213955	19.453805	12.969451
-3.1	-124.533132	-142.662948	-149.538359	-141.224529	-164.453321	-124.932936	-132.151136	-62.864900
+3.1	46.797159	37.981911	37.981911	30.359811	30.359811	30.376798	32.064084	30.993126
-3.15	-117.574294	-134.737229	-141.230673	-133.378722	-155.317026	-99.814669	-105.716461	-56.280191
+3.15	65.346081	70.288546	70.288546	60.072592	61.716650	54.286037	57.188333	44.558564
-3.2	-110.658159	-126.811510	-132.922987	-125.532914	-146.180730	-93.574230	-99.109437	-52.969591
+3.2	95.776243	108.650590	110.064566	97.150932	103.366185	82.484587	86.972410	61.675635
-3.25	-103.742024	-118.885791	-124.615301	-117.687107	-137.044435	-87.725841	-92.915097	-49.658992
+3.25	119.362290	139.729836	141.973833	126.649309	138.247288	104.991014	110.762648	73.757473
-3.3	-96.825889	-110.960072	-116.307614	-109.841300	-127.908139	-81.877452	-86.720758	-46.348392
+3.3	142.185932	167.535699	169.874612	153.224725	172.217390	126.657208	133.561946	88.553810
-3.35	-89.909754	-103.034352	-107.999928	-101.995493	-118.771844	-76.029063	-80.526418	-43.037793
+3.35	152.466795	186.557539	188.523905	175.239647	196.669754	141.157189	148.783372	97.583691
-3.4	-82.993619	-95.108633	-99.692242	-94.149686	-109.635548	-70.180673	-74.332079	-39.727193
+3.4	161.441696	200.698769	204.678053	194.999469	216.128579	152.606615	160.651493	108.976897
-3.45	-76.077484	-87.182914	-91.384556	-86.303879	-100.499252	-64.332284	-68.137739	-36.416594
+3.45	158.374173	212.513949	216.765314	208.636764	226.934109	160.688644	169.145941	113.645878
-3.5	-69.161349	-79.257195	-83.076870	-78.458072	-91.362957	-58.483895	-61.943399	-33.105995
+3.5	167.814923	224.390272	226.358669	219.176842	238.864160	169.468013	178.590483	120.710553
-3.55	-62.245215	-71.331476	-74.769184	-70.612265	-82.226661	-52.635506	-55.749060	-29.795395
+3.55	167.089326	228.064824	231.445028	221.171518	241.492750	171.716324	181.087740	120.097145
-3.6	-55.329080	-63.405757	-66.461497	-62.766458	-73.090366	-46.787117	-49.554720	-26.484796

+3.6	**176.361351**	**227.061155**	**232.027722**	**221.334906**	**244.456497**	**170.155412**	**179.630155**	**121.936839**
-3.65	**-48.412945**	**-55.480038**	**-58.153811**	**-54.920650**	**-63.954070**	**-40.938727**	**-43.360381**	**-23.174196**
+3.65	**176.665271**	**221.218392**	**222.892956**	**212.888219**	**237.528315**	**167.388719**	**176.369121**	**116.012684**
-3.7	**-41.496810**	**-47.554319**	**-49.846125**	**-47.074843**	**-54.817775**	**-35.090338**	**-37.166041**	**-19.863597**
+3.7	**175.512673**	**214.406710**	**216.796684**	**198.680039**	**224.366888**	**161.903699**	**170.673867**	**111.254078**
-3.75	**-34.580675**	**-39.628600**	**-41.538439**	**-39.229036**	**-45.681479**	**-29.241949**	**-30.971701**	**-16.552997**
+3.75	**162.310901**	**197.726990**	**200.883228**	**183.532973**	**200.154625**	**148.710839**	**156.862221**	**99.553476**
-3.8	**-27.664540**	**-31.702881**	**-33.230753**	**-31.383229**	**-36.545184**	**-23.393560**	**-24.777362**	**-13.242398**
+3.8	**148.756435**	**176.514990**	**179.966031**	**164.117909**	**178.256843**	**132.682994**	**140.027712**	**87.677137**
-3.85	**-20.748405**	**-23.777162**	**-24.923066**	**-23.537422**	**-27.408888**	**-17.545171**	**-18.583022**	**-9.931798**
+3.85	**121.063828**	**143.695359**	**146.903810**	**134.340016**	**147.183442**	**107.702329**	**113.707200**	**69.911176**
-3.9	**-13.832270**	**-15.851443**	**-16.615380**	**-15.691615**	**-18.272593**	**-11.696782**	**-12.388683**	**-6.621199**
+3.9	**91.093464**	**105.584774**	**108.271199**	**99.080887**	**108.948222**	**78.852561**	**83.284559**	**51.455949**
-3.95	**-6.916136**	**-7.925724**	**-8.307694**	**-7.845808**	**-9.136297**	**-5.848392**	**-6.194343**	**-3.310599**
+3.95	**49.037489**	**56.419065**	**57.992515**	**53.150216**	**58.803130**	**42.090480**	**44.477144**	**27.477026**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 25' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-6.916043	-8.475323	-8.909735	-6.971362	-8.027746	-8.534448
+0.05	48.589335	55.170692	54.344328	50.176107	55.344842	57.023158
-0.1	-13.832086	-16.950646	-17.819471	-13.942723	-16.055491	-17.068895
+0.1	90.336170	102.919819	99.719671	94.004799	103.727905	106.207891
-0.15	-20.748129	-25.425969	-26.729206	-20.914085	-24.083237	-25.603343
+0.15	121.226062	139.704532	133.457987	128.448304	140.863461	143.972681
-0.2	-27.664172	-33.901292	-35.638941	-27.885446	-32.110983	-34.137791
+0.2	147.625630	172.209633	161.779291	158.413696	173.637306	175.883546
-0.25	-34.580215	-42.376615	-44.548677	-34.856808	-40.138729	-42.672239
+0.25	162.326847	193.676562	180.840887	177.643503	195.427959	196.852655
-0.3	-41.496258	-50.851938	-53.458412	-41.828170	-48.166474	-51.206686
+0.3	175.175377	209.574597	195.987321	193.580194	211.726926	217.945365
-0.35	-48.412301	-59.327260	-62.368147	-48.799531	-56.194220	-59.741134
+0.35	176.386641	227.100252	212.022500	200.318904	229.225442	233.233465
-0.4	-55.328344	-67.802583	-71.277883	-55.770893	-64.221966	-68.275582
+0.4	176.215151	238.513509	222.915617	203.924983	240.615489	242.234211
-0.45	-62.244387	-76.277906	-80.187618	-62.742254	-72.249711	-76.810030
+0.45	167.093285	240.698150	225.376819	206.027988	241.503162	241.504230
-0.5	-69.160430	-84.753229	-89.097353	-69.713616	-80.277457	-85.344477
+0.5	168.251038	239.323853	224.002248	203.584089	239.033581	239.137164
-0.55	-76.076473	-93.228552	-98.007089	-76.684978	-88.305203	-93.878925
+0.55	158.374196	227.904574	214.295772	193.222828	226.782528	226.833803
-0.6	-82.992516	-101.703875	-106.916824	-83.656339	-96.332948	-102.413373
+0.6	160.153695	213.512418	201.042115	183.700912	210.837690	213.348732
-0.65	-89.908559	-110.179198	-115.826559	-90.627701	-104.360694	-110.947820
+0.65	152.688100	190.987337	180.525337	169.273518	187.352363	192.004991
-0.7	-96.824602	-118.654521	-124.736295	-97.599062	-112.388440	-119.482268
+0.7	141.934054	166.172431	157.329064	151.451736	163.249056	165.975150
-0.75	-103.740645	-127.129844	-133.646030	-104.570424	-120.416186	-128.016716
+0.75	119.291836	138.381939	132.208893	125.201355	134.317166	134.970119
-0.8	-110.656688	-135.605167	-142.555765	-111.541785	-128.443931	-136.551164
+0.8	95.702919	107.241321	103.307735	98.120182	105.104759	103.292321
-0.85	-117.572731	-144.445052	-151.828211	-119.154818	-136.980201	-145.607741
+0.85	65.368186	68.959278	68.369712	66.144168	67.452723	64.784005
-0.9	-124.529824	-179.695288	-185.225698	-143.670957	-169.079870	-177.347006
+0.9	46.821061	49.378258	46.088488	37.561627	36.488972	36.671386
-0.95	-139.163399	-227.097247	-231.118930	-172.094962	-206.252254	-215.318068
+0.95	21.707835	33.747341	33.536998	24.618796	27.759862	30.418623
-1	-166.528029	-277.813961	-279.789177	-203.838657	-246.867733	-257.836944
+1	19.832549	25.988182	24.337038	22.135585	26.137750	26.554345
(Span 2) -2	-166.528029	-277.813961	-279.789177	-203.838657	-246.867733	-257.836944
+2	19.832549	25.988182	24.337038	22.135585	26.137750	26.554345
-2.05	-125.406193	-208.025491	-203.610795	-160.177845	-195.268487	-202.122027
+2.05	25.639315	30.859620	32.541026	23.379221	27.245692	26.723820
-2.1	-91.785039	-144.180077	-138.098631	-123.903915	-148.114639	-152.536738
+2.1	50.425592	42.601685	44.936866	44.549507	45.024375	43.428088
-2.15	-71.107163	-103.247190	-96.663838	-92.806459	-105.527982	-110.592088
+2.15	76.354490	76.853338	73.381488	78.982789	83.131953	78.143904
-2.2	-65.757878	-86.764111	-80.834196	-73.400581	-86.671536	-88.052680
+2.2	108.053128	118.195923	110.704148	112.878728	120.716286	121.547558

-2.25	**-60.408593**	**-81.787019**	**-77.685692**	**-67.429576**	**-79.620963**	**-80.889753**
+2.25	**140.024324**	**160.107210**	**151.533117**	**146.291033**	**157.602329**	**163.385392**
-2.3	**-55.059308**	**-76.847415**	**-74.576742**	**-61.458572**	**-72.570390**	**-73.726826**
+2.3	**164.509647**	**195.121712**	**184.521552**	**173.499724**	**191.975250**	**199.919228**
-2.35	**-49.710023**	**-71.956872**	**-71.528451**	**-55.487567**	**-65.519816**	**-66.745849**
+2.35	**183.677310**	**222.021595**	**213.332529**	**194.016710**	**219.981578**	**229.033981**
-2.4	**-44.360738**	**-67.140089**	**-68.540119**	**-49.516563**	**-58.469243**	**-60.244455**
+2.4	**195.679710**	**240.244982**	**231.790063**	**208.045875**	**241.047323**	**249.878864**
-2.45	**-39.011453**	**-62.381905**	**-65.612724**	**-43.545558**	**-51.418670**	**-53.779607**
+2.45	**196.680160**	**250.255622**	**241.886478**	**218.092319**	**252.435292**	**259.821267**
-2.5	**-33.665344**	**-57.709884**	**-62.742680**	**-37.574698**	**-44.368290**	**-47.458012**
+2.5	**192.613529**	**253.796249**	**242.473798**	**221.382080**	**255.887927**	**260.944742**
-2.55	**-39.015133**	**-62.382101**	**-65.612740**	**-43.545726**	**-51.418894**	**-53.780524**
+2.55	**196.862600**	**250.261933**	**241.887231**	**218.080965**	**252.688067**	**259.831450**
-2.6	**-44.364923**	**-67.140108**	**-68.540050**	**-49.516754**	**-58.469498**	**-60.244954**
+2.6	**195.569850**	**240.262355**	**231.792992**	**208.041840**	**241.060156**	**249.894944**
-2.65	**-49.714712**	**-71.956963**	**-71.528441**	**-55.487783**	**-65.520102**	**-66.745787**
+2.65	**183.629098**	**222.035613**	**213.334769**	**194.020678**	**219.991535**	**229.046727**
-2.7	**-55.064501**	**-76.847268**	**-74.576815**	**-61.458811**	**-72.570706**	**-73.727374**
+2.7	**164.432700**	**195.115094**	**184.520099**	**173.511930**	**191.964762**	**199.929102**
-2.75	**-60.414291**	**-81.787369**	**-77.685650**	**-67.429839**	**-79.621310**	**-80.890354**
+2.75	**140.100695**	**160.109387**	**151.533526**	**146.311901**	**157.600267**	**163.395308**
-2.8	**-65.764080**	**-86.764342**	**-80.834151**	**-73.400867**	**-86.671914**	**-88.053334**
+2.8	**108.194564**	**118.204383**	**110.705382**	**112.908846**	**120.748576**	**121.555899**
-2.85	**-71.113869**	**-103.246854**	**-96.663808**	**-92.806565**	**-105.528993**	**-110.593512**
+2.85	**76.332537**	**76.861824**	**73.380773**	**78.979080**	**83.128023**	**78.124862**
-2.9	**-91.793933**	**-144.180975**	**-138.098856**	**-123.903661**	**-148.115204**	**-152.537821**
+2.9	**50.418825**	**42.608417**	**44.936375**	**44.535297**	**45.031339**	**43.415758**
-2.95	**-125.419430**	**-208.026084**	**-203.610558**	**-160.179057**	**-195.268443**	**-202.122690**
+2.95	**25.366327**	**30.865166**	**32.537379**	**23.354840**	**27.232677**	**26.730162**
-3	**-166.544581**	**-277.813701**	**-279.788951**	**-203.838637**	**-246.867451**	**-257.837861**
+3	**19.830680**	**25.988075**	**24.337036**	**22.135497**	**26.137636**	**26.554149**
(Span 3) -4	**-166.544581**	**-277.813701**	**-279.788951**	**-203.838637**	**-246.867451**	**-257.837861**
+4	**19.830680**	**25.988075**	**24.337036**	**22.135497**	**26.137636**	**26.554149**
-3.05	**-139.199584**	**-227.096952**	**-231.118623**	**-172.096056**	**-206.253559**	**-215.318332**
+3.05	**21.657286**	**33.734876**	**33.537349**	**24.619050**	**27.757688**	**30.410554**
-3.1	**-124.533132**	**-179.695483**	**-185.225849**	**-143.671931**	**-169.079401**	**-177.347286**
+3.1	**46.797159**	**49.365827**	**46.091623**	**37.577235**	**36.461363**	**36.662894**
-3.15	**-117.574294**	**-144.445980**	**-151.828076**	**-119.154716**	**-136.980053**	**-145.608630**
+3.15	**65.346081**	**68.969396**	**68.368625**	**66.159880**	**67.448728**	**64.793099**
-3.2	**-110.658159**	**-135.604926**	**-142.555599**	**-111.541607**	**-128.443504**	**-136.552175**
+3.2	**95.776243**	**107.251081**	**103.303852**	**98.136753**	**105.122285**	**103.301394**
-3.25	**-103.742024**	**-127.129619**	**-133.645874**	**-104.570257**	**-120.415785**	**-128.017664**
+3.25	**119.362290**	**138.388985**	**132.207251**	**125.215664**	**134.332133**	**134.975629**
-3.3	**-96.825889**	**-118.654311**	**-124.736149**	**-97.598906**	**-112.388066**	**-119.483153**
+3.3	**142.185932**	**166.177204**	**157.329619**	**151.464343**	**163.255149**	**165.968308**
-3.35	**-89.909754**	**-110.179003**	**-115.826424**	**-90.627556**	**-104.360348**	**-110.948642**
+3.35	**152.466795**	**190.981447**	**180.524567**	**169.282550**	**187.358381**	**192.013586**
-3.4	**-82.993619**	**-101.703695**	**-106.916699**	**-83.656206**	**-96.332629**	**-102.414132**
+3.4	**161.441696**	**213.503338**	**201.040805**	**183.706637**	**210.829554**	**213.372142**
-3.45	**-76.077484**	**-93.228387**	**-98.006973**	**-76.684855**	**-88.304910**	**-93.879621**
+3.45	**158.374173**	**227.892512**	**214.296582**	**193.215994**	**226.790111**	**226.934109**
-3.5	**-69.161349**	**-84.753079**	**-89.097248**	**-69.713505**	**-80.277191**	**-85.345110**
+3.5	**167.814923**	**239.307426**	**223.999792**	**203.595430**	**239.056336**	**239.159210**
-3.55	**-62.245215**	**-76.277771**	**-80.187523**	**-62.742155**	**-72.249473**	**-76.810599**
+3.55	**167.089326**	**240.695438**	**225.376360**	**206.035018**	**241.502035**	**241.503137**
-3.6	**-55.329080**	**-67.802463**	**-71.277798**	**-55.770805**	**-64.221754**	**-68.276088**

+3.6	**176.361351**	**238.525786**	**222.917315**	**203.927733**	**240.628517**	**242.213857**
-3.65	**-48.412945**	**-59.327155**	**-62.368073**	**-48.799454**	**-56.194035**	**-59.741577**
+3.65	**176.665271**	**227.107005**	**212.023359**	**200.314092**	**229.232631**	**233.226124**
-3.7	**-41.496810**	**-50.851847**	**-53.458348**	**-41.828104**	**-48.166316**	**-51.207067**
+3.7	**175.512673**	**209.575788**	**195.987007**	**193.570554**	**211.728231**	**217.950717**
-3.75	**-34.580675**	**-42.376539**	**-44.548623**	**-34.856754**	**-40.138598**	**-42.672556**
+3.75	**162.310901**	**193.670406**	**180.842639**	**177.628952**	**195.421669**	**196.849437**
-3.8	**-27.664540**	**-33.901232**	**-35.638898**	**-27.885403**	**-32.110879**	**-34.138045**
+3.8	**148.756435**	**172.197698**	**161.777011**	**158.393570**	**173.624792**	**175.873914**
-3.85	**-20.748405**	**-25.425924**	**-26.729173**	**-20.914053**	**-24.083160**	**-25.603534**
+3.85	**121.063828**	**139.705118**	**133.458051**	**128.444439**	**140.864117**	**143.975355**
-3.9	**-13.832270**	**-16.950616**	**-17.819448**	**-13.942703**	**-16.055442**	**-17.069023**
+3.9	**91.093464**	**102.921522**	**99.715425**	**93.973000**	**103.741517**	**106.184609**
-3.95	**-6.916136**	**-8.475308**	**-8.909723**	**-6.971352**	**-8.027723**	**-8.534512**
+3.95	**49.037489**	**55.178114**	**54.342220**	**50.160224**	**55.346920**	**57.011600**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 30' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	**HL93 (Variable) + Lane Load**	***HL-93 Design Tandem (with Lane Load)***	***HL-93 Truck Train (with Lane Load)***	**SC SHV1A**	**SC SHV1B**	**SC SHV2A**	**SC SHV2B**	**SC SHV3A**	**SC SHV3B**	**SC School Bus**
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-14.13986612**	***-16.130445***	***-15.632422***	**-12.85529668**	**-13.59849752**	**-12.81269287**	**-15.13208922**	**-9.425655502**	**-9.995620233**	**-5.685454914**
End Shear	**107.8746071**	***122.805559***	***114.296225***	**100.8450669**	**104.876341**	**96.69892371**	**109.4453972**	**74.45547722**	**78.79595856**	**49.56855007**
-0.05	**-14.13986612**	***-16.163714***	***-15.662364***	**-12.85529668**	**-13.59849752**	**-12.81269287**	**-15.13208922**	**-9.425655502**	**-9.995620233**	**-5.685454914**
+0.05	**99.46950157**	***113.766099***	***104.625937***	**93.31643667**	**96.82213797**	**89.18771634**	**100.4654127**	**69.19096659**	**73.20115318**	**45.57036983**
-0.1	**-14.13986612**	***-16.363905***	***-17.533324***	**-12.85529668**	**-13.59849752**	**-12.81269287**	**-15.13208922**	**-9.955873037**	**-10.59460578**	**-5.685454914**
+0.1	**88.43497775**	***102.525209***	***92.816146***	**83.75128797**	**86.61126433**	**79.61012388**	**89.06201999**	**62.22641571**	**65.80204739**	**40.77339447**
-0.15	**-15.74391748**	***-16.530998***	***-19.704540***	**-12.85529668**	**-13.59849752**	**-12.81269287**	**-15.13208922**	**-10.79130196**	**-11.51435572**	**-7.050065299**
+0.15	**83.0125026**	***96.991313***	***87.057248***	**79.02455879**	**81.5750195**	**74.89204871**	**83.46513994**	**58.78037301**	**62.14204296**	**38.41957649**
-0.2	**-23.20633499**	***-22.299912***	***-24.432756***	**-15.24094217**	**-15.24094217**	**-12.81269287**	**-15.13208922**	**-14.37128405**	**-15.24118568**	**-10.57735163**
+0.2	**72.4036198**	***86.132705***	***75.872447***	**69.72185263**	**71.68298079**	**65.6369787**	**72.52905934**	**51.9890268**	**54.93120954**	**33.54108165**
-0.25	**-26.7771866**	***-27.203134***	***-26.957514***	**-19.05617934**	**-19.05617934**	**-15.24731338**	**-15.24731338**	**-17.70190867**	**-18.74916359**	**-12.33180066**
+0.25	**67.23582277**	***80.822228***	***70.463241***	**65.1614949**	**66.84400781**	**61.11585903**	**67.20910175**	**48.65505147**	**51.39243181**	**31.31215321**
-0.3	**-33.59502907**	***-37.101733***	***-32.052266***	**-26.65335681**	**-26.65335681**	**-22.35459878**	**-22.79555062**	**-24.86003721**	**-26.28343964**	**-15.80836346**
+0.3	**57.22007725**	***70.473956***	***60.052501***	**56.26180791**	**57.42219463**	**52.32609998**	**56.91341096**	**42.13880555**	**44.47827041**	**27.47264039**
-0.35	**-36.84079171**	***-42.081951***	***-34.620525***	**-30.42328254**	**-30.42328254**	**-26.44008822**	**-27.33928264**	**-28.63191206**	**-30.25237306**	**-17.5249018**
+0.35	**52.39072447**	***65.449969***	***55.067279***	**51.93809678**	**52.85617429**	**48.07332502**	**51.95690799**	**38.96786123**	**41.11493596**	**25.76719939**
-0.4	**-43.00287184**	***-52.065795***	***-39.793967***	**-37.87577066**	**-37.87577066**	**-34.54708563**	**-36.36531253**	**-35.77248011**	**-37.76378649**	**-21.19310929**
+0.4	**43.13561057**	***55.736273***	***45.573330***	**43.58200937**	**44.05598087**	**39.72201439**	**42.63775264**	**32.82861337**	**34.60584844**	**22.41896841**
-0.45	**-45.91794647**	***-57.053840***	***-42.397031***	**-41.5463145**	**-41.5463145**	**-38.5556142**	**-40.83318918**	**-39.14181151**	**-41.30704815**	**-23.16042166**
+0.45	**38.19178812**	***51.059947***	***41.057959***	**39.56525018**	**39.83862641**	**36.10995285**	**38.74925455**	**29.87163604**	**31.47214452**	**20.78175242**
-0.5	**-52.572637**	***-66.982694***	***-50.285946***	**-48.97897893**	**-48.97897893**	**-46.45028343**	**-49.64261242**	**-45.48023655**	**-47.97071116**	**-26.91752418**
+0.5	**29.90764658**	***42.101247***	***32.512917***	**31.98530971**	**31.98530971**	**29.31673002**	**31.28513456**	**24.36569003**	**25.64809477**	**17.59506881**
-0.55	**-55.9443574**	***-71.907496***	***-55.579719***	**-53.32938385**	**-53.6848221**	**-50.3234411**	**-53.96973386**	**-48.44998184**	**-51.09190829**	**-28.7042595**
+0.55	**27.21330848**	***37.831835***	***29.320293***	**28.81051426**	**28.81051426**	**26.07035577**	**27.72393355**	**21.94934685**	**23.10457563**	**16.05117668**
-0.6	**-62.56675036**	***-81.637307***	***-66.464011***	**-62.46155819**	**-63.5814912**	**-58.17452731**	**-62.7524269**	**-54.67368593**	**-57.66598777**	**-32.08650298**
+0.6	**22.19749333**	***29.744732***	***24.120929***	**22.73971793**	**22.73971793**	**19.91051712**	**20.97929564**	**17.32859286**	**18.24062407**	**13.07623283**
-0.65	**-67.96187599**	***-86.425879***	***-72.279470***	**-66.92025283**	**-68.42322366**	**-62.41132031**	**-67.95919826**	**-58.03099962**	**-61.24035325**	**-33.67896255**
+0.65	**19.79327685**	***25.939580***	***21.664913***	**19.85573177**	**19.85573177**	**17.01004507**	**17.81028771**	**15.13332664**	**15.92981751**	**11.65075648**
-0.7	**-78.50549523**	***-95.808767***	***-83.708883***	**-75.58377782**	**-77.8513981**	**-71.36577583**	**-79.00419852**	**-64.35861537**	**-67.98156828**	**-36.65892792**
+0.7	**15.21573581**	***18.836859***	***17.056510***	**14.42063443**	**14.42063443**	**11.60043576**	**11.87408089**	**10.93241151**	**11.50780159**	**8.937739973**
-0.75	**-83.6353789**	***-100.386223***	***-89.305607***	**-79.77300858**	**-82.4210411**	**-75.71233778**	**-84.38741012**	**-67.32552674**	**-71.14472197**	**-38.04339927**
+0.75	**13.05181602**	***15.201816***	***14.910450***	**11.88153846**	**11.88153846**	**9.499447759**	**9.499447759**	**9.002539102**	**9.47635695**	**7.655777337**
-0.8	**-93.56478825**	***-109.270499***	***-100.219536***	**-87.82732429**	**-91.22934911**	**-84.10443501**	**-94.82713976**	**-72.85703898**	**-77.04683837**	**-41.27060409**
+0.8	**8.997182034**	***9.213997***	***10.949950***	**7.190278936**	**7.190278936**	**5.746692194**	**5.746692194**	**5.437541819**	**5.723728231**	**5.254885894**
-0.85	**-98.34568593**	***-113.560036***	***-105.519130***	**-91.676793**	**-95.45119681**	**-88.13412385**	**-99.86445089**	**-75.41827131**	**-79.78212881**	**-43.34698825**
+0.85	**7.11587262**	***6.523506***	***9.141467***	**4.893797772**	**4.893797772**	**3.9938916**	**3.9938916**	**3.811584668**	**4.012194387**	**4.141532139**
-0.9	**-107.493369**	***-121.790191***	***-115.759073***	**-98.98131922**	**-103.4882441**	**-95.82109075**	**-109.5258537**	**-80.12317526**	**-84.81189551**	**-47.31246336**
+0.9	**3.668776712**	***3.272813***	***5.851546***	**2.369857505**	**2.330607888**	**2.196585041**	**2.555263355**	**1.800069798**	**1.894810314**	**2.090875861**
-0.95	**-112.2603992**	***-125.713100***	***-120.681429***	**-102.420743**	**-107.2866073**	**-99.46250385**	**-114.1307156**	**-82.26345638**	**-87.10267604**	**-49.19305308**
+0.95	**2.339776185**	***2.847302***	***4.357077***	**2.22534468**	**2.330607888**	**2.196585041**	**2.555263355**	**1.643937121**	**1.740561945**	**1.172113421**
-1	**-121.4411828**	***-133.129806***	***-130.085446***	**-108.834885**	**-114.4009841**	**-106.3015409**	**-122.8407011**	**-86.11121464**	**-91.22680718**	**-52.72868436**
+1	**2.34E+00**	***2.815993***	***2.508012***	**2.23E+00**	**2.33E+00**	**2.20E+00**	**2.56E+00**	**1.64E+00**	**1.74E+00**	**9.23E-01**
(Span 2) -2	**-9.19E+00**	***-11.064109***	***-9.854044***	**-8.74E+00**	**-9.16E+00**	**-8.63E+00**	**-1.00E+01**	**-6.46E+00**	**-6.84E+00**	**-3.63E+00**
+2	**1.24E+02**	***134.245047***	***134.478595***	**109.9487484**	**115.9410117**	**108.0087816**	**125.6783855**	**88.32374217**	**93.05409025**	**54.17917345**
-2.05	**-9.19E+00**	***-11.090843***	***-10.151417***	**-8.74E+00**	**-9.16E+00**	**-8.63E+00**	**-1.00E+01**	**-6.46E+00**	**-6.84E+00**	**-3.63E+00**
+2.05	**1.19E+02**	***129.153065***	***127.575041***	**105.7852302**	**111.3377943**	**103.5920837**	**120.0888279**	**83.17144593**	**87.62718823**	**51.97590666**
-2.1	**-9.193041272**	***-11.196837***	***-11.777309***	**-8.743436952**	**-9.157019083**	**-8.630439693**	**-10.03969612**	**-6.459071574**	**-6.838713011**	**-3.625877501**
+2.1	**111.0986956**	***121.916183***	***118.090733***	**99.78411993**	**104.7439707**	**97.29000363**	**112.1946775**	**77.70178031**	**82.31219604**	**48.8381858**
-2.15	**-9.193041272**	***-11.394718***	***-16.065082***	**-8.743436952**	**-9.157019083**	**-8.630439693**	**-10.03969612**	**-6.459071574**	**-6.838713011**	**-4.602020527**
+2.15	**103.0980242**	***114.250046***	***108.388496***	**93.34531994**	**97.71095685**	**90.59330982**	**103.8900688**	**73.72687171**	**78.06548792**	**45.51337389**
-2.2	**-11.36220678**	***-14.395841***	***-16.838161***	**-9.987764711**	**-9.987764711**	**-8.630439693**	**-10.03969612**	**-8.868302193**	**-9.39565177**	**-6.709867008**
+2.2	**94.6899108**	***106.242954***	***99.086571***	**86.55212009**	**90.32845082**	**83.58655122**	**95.27748585**	**69.32988331**	**73.37501662**	**42.0467787**

-2.25	-15.21563704	-20.247008	-20.037931	-14.49913443	-14.49913443	-12.1860031	-12.4339106	-12.52702704	-13.25881388	-8.997109857
+2.25	85.9650868	97.981744	89.457833	79.48776954	82.68610511	76.3543424	86.45949252	64.53616086	68.26813792	38.48371172
-2.3	-21.62018466	-26.691693	-23.474220	-19.40202492	-19.40202492	-17.10699427	-17.78243753	-16.40077738	-17.34368007	-11.43401449
+2.3	76.8846759	89.551694	79.894120	72.23556406	74.87362295	68.57247154	77.12985048	59.37103822	62.77219492	34.86947887
-2.35	-27.48679056	-33.659297	-27.140226	-24.63239621	-24.63239621	-22.43561993	-23.60105275	-20.69675357	-21.86884111	-13.99085975
+2.35	67.82230266	81.036632	70.345989	64.14527657	66.24721002	60.6237675	67.55516163	53.85985597	56.91453784	31.24938746
-2.4	-33.42720188	-41.077723	-32.654236	-30.37717943	-30.37717943	-28.10268681	-29.81287456	-25.80726818	-27.24774264	-16.63790892
+2.4	59.32400241	72.518822	61.419460	56.58167604	58.11755743	53.23294412	58.71008183	48.02795433	50.72251662	28.13799288
-2.45	-39.35858105	-48.873328	-39.274449	-36.93415796	-37.30576909	-34.03900351	-36.62302453	-31.03982934	-32.75193096	-19.34543247
+2.45	51.00189265	63.939210	52.773657	49.27993114	50.35227009	45.9656185	50.12948997	41.90065641	44.22346285	24.98267277
-2.5	-45.11736456	-56.971009	-53.812935	-43.90901596	-44.66276462	-40.6545266	-43.90721855	-37.13234576	-39.17024997	-22.08369985
+2.5	42.9552088	54.913910	44.611614	42.13391987	42.78686466	38.90642252	42.09809054	35.5033011	37.44472507	21.67288837
-2.55	-50.41474865	-63.668144	-52.902896	-49.28784498	-50.36066719	-45.97325906	-50.13847108	-41.90623566	-44.22937699	-24.37476324
+2.55	38.9490373	48.864940	38.905426	36.92669881	37.297923	34.03256804	36.77920581	31.03450893	32.74633489	19.36195288
-2.6	-58.71979329	-72.527407	-61.552457	-56.58970453	-58.12611359	-53.24075004	-58.71933596	-48.0332985	-50.72818727	-27.66997536
+2.6	33.91143022	41.069568	32.373587	30.65888834	30.58067689	28.09651493	29.80609854	25.80276751	27.2430068	16.65413462
-2.65	-67.20823542	-81.045120	-70.481173	-63.96393584	-66.04582025	-60.63165955	-67.51766145	-53.86492506	-56.91992218	-31.25063313
+2.65	28.58868565	33.651494	27.005068	24.62652758	24.62652758	22.42977504	23.59465862	20.69214967	21.86399351	14.00661085
-2.7	-75.78083636	-89.559985	-79.673175	-72.1387213	-74.77737961	-68.4170286	-76.97603329	-59.37582433	-62.77728412	-34.87073
+2.7	22.9858851	26.684313	23.382361	19.39649263	19.39649263	17.10154979	17.77650658	16.39727034	17.33998353	11.43316307
-2.75	-84.57051619	-97.989727	-89.241021	-79.49563664	-82.69459322	-76.36213685	-86.46895045	-64.54061831	-68.27288309	-38.48495471
+2.75	17.10815697	20.240160	19.986763	14.49400034	14.49400034	12.18102491	12.42851592	12.52369878	13.25530156	8.996296152
-2.8	-93.67305925	-106.250561	-98.864859	-86.55973431	-90.33670229	-83.59417619	-95.28681114	-69.33399257	-73.37939665	-42.04799657
+2.8	12.81879088	14.389616	16.823695	9.983089411	9.983089411	8.630417061	10.03969441	8.865187346	9.392359693	6.709115443
-2.85	-102.6660864	-114.257160	-108.670243	-93.35261344	-97.71889787	-90.60064432	-103.8991135	-73.73062658	-78.06949579	-45.51455017
+2.85	9.261217826	11.394717	13.711203	8.743424301	9.157017682	8.630417061	10.03969441	6.459080579	6.838733354	4.601342412
-2.9	-111.4380114	-121.922723	-118.363739	-99.79099094	-104.7514921	-97.29698685	-112.2033693	-77.70515133	-82.31580012	-48.8393073
+2.9	9.191388131	11.196836	11.654148	8.743424301	9.157017682	8.630417061	10.03969441	6.459080579	6.838733354	3.62588114
-2.95	-119.8771973	-129.158942	-127.835748	-105.7915817	-111.3447918	-103.5985965	-120.0970222	-83.17765018	-87.63372491	-51.97695578
+2.95	9.191388131	11.090843	10.068985	8.743424301	9.157017682	8.630417061	10.03969441	6.459080579	6.838733354	3.62588114
-3	-127.8719947	-135.875976	-136.975349	-111.2711267	-117.4091345	-109.4209042	-127.4775655	-90.0163716	-94.83645273	-54.88220326
+3	9.191388131	11.064109	9.854215	8.743424301	9.157017682	8.630417061	10.03969441	6.459080579	6.838733354	3.62588114
(Span 3) -4	-2.339355437	-2.815993	-2.508056	-2.22534146	-2.330607531	-2.196579281	-2.55526292	-1.643939413	-1.740567122	-0.922844769
+4	119.7384704	131.325978	127.675647	107.2849889	112.6776613	104.6425738	120.7195399	85.20060623	90.24999283	51.87309884
-3.05	-2.339355437	-2.831420	-3.649274	-2.22534146	-2.330607531	-2.196579281	-2.55526292	-1.643939413	-1.740567122	-0.922844769
+3.05	115.5927168	127.616079	122.991508	104.0765953	109.1190619	101.2217547	116.3629988	83.27626044	88.18742702	50.10470698
-3.1	-4.615411013	-3.943568	-6.637026	-2.901044863	-2.901044863	-2.318241334	-2.55526292	-2.203728058	-2.319713745	-2.576375818
+3.1	106.7575832	119.771719	113.193870	97.19905039	101.523765	93.94031219	107.1550073	78.99559518	83.60577106	46.34448618
-3.15	-6.273670516	-5.362502	-8.281475	-4.011837513	-4.011837513	-3.206799308	-3.206799308	-3.04855612	-3.209006443	-3.595218477
+3.15	102.0847694	115.655177	108.098300	93.545523	97.50389303	90.09555447	102.3227875	76.64268728	81.09039912	44.36118589
-3.2	-9.975219431	-10.640328	-11.893337	-8.317754493	-8.317754493	-6.648491725	-6.648491725	-6.293551366	-6.624790912	-5.819754917
+3.2	92.2701597	107.077613	96.922702	85.84799617	89.0617435	82.03767919	92.25004149	71.52017638	75.61978442	40.28973685
-3.25	-12.00312519	-13.625775	-13.855291	-10.66443072	-10.66443072	-8.525707946	-8.525707946	-8.076799757	-8.501894481	-7.019856078
+3.25	87.14495854	102.634112	91.495084	81.81958671	84.65625435	77.84039817	87.02870952	68.75394531	72.66821754	39.03288421
-3.3	-16.32979057	-20.554865	-18.108950	-15.74166965	-15.74166965	-12.9074565	-13.29663769	-11.93575437	-12.56395197	-9.581815707
+3.3	76.50026048	93.480765	80.374490	73.44265615	75.51864404	69.14888191	76.26428994	62.82009817	66.34190005	36.48033135
-3.35	-18.61914764	-24.107300	-20.399326	-18.4602422	-18.4602422	-15.61335165	-16.28611596	-14.00229504	-14.73925794	-10.93808895
+3.35	70.99735889	88.788011	74.698518	69.10972109	70.80330725	64.67047683	70.74038988	59.6558519	62.97082305	35.01617123
-3.4	-23.42640417	-31.716705	-25.278499	-24.22717244	-24.2271724443488	-21.41323427	-22.622940868628	-18.45985469	-19.4314259943258	-13.78726851
+3.4	59.67194007	79.212480	63.157090	60.19396654	61.12162963	56.30240162	60.65667314	52.9411699	55.82205023	31.88192738
-3.45	-25.93490107	-35.761332	-27.860766	-27.26353595	-27.26353595	-24.49419591	-25.99645443	-20.7709537	-21.86416179	-15.27460931
+3.45	56.39459291	74.346377	57.381325	55.62676517	56.17210839	52.23048424	56.10162811	49.88005928	52.59469378	30.21491264
-3.5	-32.34374077	-44.299101	-34.585384	-33.61201701	-33.61201701	-30.98577703	-33.11757394	-25.60272909	-26.95024114	-18.36082666
+3.5	51.12886668	64.498444	47.547468	47.19258756	47.19258756	44.48556911	47.44895514	43.94003553	46.35172309	26.68865962
-3.55	-36.5051875	-48.779466	-38.859133	-37.2421988	-37.42133106	-34.38341462	-36.85078062	-28.4288535	-29.94350578	-19.95413804

+3.55	48.41781806	59.532866	43.702153	43.3570788	43.3570788004518	40.5373496940043	43.0432673	40.77063375	43.01969835	24.8324949
-3.6	-45.31129354	-58.130906	-47.887392	-45.64113879	-46.22134776	-41.5350951	-44.62638659	-34.3416949	-36.20973163	-23.22720257
+3.6	42.78623182	49.558497	38.333088	36.01731579	36.01731579	32.52174251	34.10913896	34.03138346	35.93254089	20.94164923
-3.65	-49.93733508	-62.988775	-51.912731	-49.82038209	-50.62274959	-45.9541131	-49.50028948	-37.41214931	-39.46516009	-24.90138984
+3.65	39.80373357	44.565537	35.810343	32.29025522	32.29025522	28.46739864	29.59519172	30.46090868	32.17663908	18.91002921
-3.7	-59.58883711	-73.035367	-62.546115	-58.4662714	-59.75316566	-54.49871515	-59.45206828	-43.75284891	-46.19056644	-28.32883797
+3.7	33.49271973	34.606881	30.167164	24.75181337	24.75181337	20.29798956	20.50948581	22.91659639	24.23816369	14.94295536
-3.75	-64.59572332	-78.210467	-67.705657	-62.91726732	-64.46532656	-58.89476279	-64.60135708	-47.01177434	-49.64850203	-30.4897356
+3.75	30.16343169	29.656588	27.683278	20.95244592	20.95244592	16.76466523	16.8684052	19.38388193	20.51982035	13.20431193
-3.8	-74.92519953	-88.829887	-78.423139	-72.03632956	-74.14151906	-67.93535386	-75.23932914	-53.67848726	-56.72474313	-34.95819689
+3.8	23.15537075	19.851972	22.765943	13.32343153	13.59854287	12.81271486	15.13214221	13.2047747	14.01410538	9.696094477
-3.85	-80.22918164	-94.260160	-83.965119	-76.68878011	-79.08873349	-72.56403821	-80.70878934	-57.07493026	-60.33098007	-37.25729021
+3.85	19.47582402	16.631332	20.674427	12.85532678	13.59854287	12.81271486	15.13214221	11.18234026	11.94607396	7.932109026
-3.9	-91.06909593	-105.326263	-95.443739	-86.14047006	-89.15934506	-81.99844645	-91.90049202	-63.96570952	-67.64960177	-41.96392043
+3.9	14.32039886	16.297149	16.259408	12.85532678	13.59854287	12.81271486	15.13214221	9.510511317	10.10556751	5.685462849
-3.95	-96.58642152	-110.947651	-101.446358	-90.92408882	-94.26592013	-86.78833906	-97.6035442	-67.44874996	-71.34996969	-44.36294434
+3.95	14.32039886	16.197065	15.691576	12.85532678	13.59854287	12.81271486	15.13214221	9.425688031	9.995665143	5.685462849
-5	-108.4521394	-121.755306	-114.296225	-100.5678613	-104.5795944	-96.47376834	-109.175891	-74.46172148	-78.80259527	-49.2312344
+5	14.32039886	16.130479	15.631649	12.85532678	13.59854287	12.81271486	15.13214221	9.425688031	9.995665143	5.685462849

3-Span: Shear (Max and Min) Raw Data Results - 30’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-8.997336604	-7.821785475	-7.450540051	-6.377578703	-7.384495323	-10.28200468	-11.22219533	-12.35240336	-13.15660003
End Shear	70.52310839	64.8942627	57.4143444	47.8595045	58.19113689	78.15491314	83.41275775	83.06528757	83.05333602
-0.05	-8.997336604	-7.821785475	-7.68093817	-6.659295023	-7.384495323	-10.28200468	-11.22219533	-12.35240336	-13.15660003
+0.05	64.98883502	59.53172476	52.57385058	43.42096362	53.63475635	72.04877825	76.63874877	76.48394931	76.47136099
-0.1	-8.997336604	-9.148849162	-9.52180185	-8.08208052	-7.384495323	-10.28200468	-11.22219533	-12.35240336	-13.15660003
+0.1	57.93609196	53.00736335	46.55231938	38.28266421	47.88343338	64.26950547	67.97203162	67.86617481	67.85285371
-0.15	-8.997336604	-9.896895482	-10.4389813	-8.837648567	-7.384495323	-10.28200468	-11.22219533	-12.35240336	-13.15660003
+0.15	54.4709631	50.11798627	43.60788938	35.77580423	45.05157337	60.4402996	63.72466214	63.64136535	63.62773385
-0.2	-10.73198948	-12.9955855	-14.40257811	-12.05082996	-10.08709143	-10.36556912	-11.22219533	-12.35240336	-13.15660003
+0.2	47.69323237	44.8110829	37.8782309	30.90982538	39.49949362	52.93518031	55.43916532	55.39690381	55.38277718
-0.25	-13.41830823	-16.10348294	-16.63968574	-13.80245293	-11.76035485	-12.96021637	-12.96274992	-12.92378044	-13.15660003
+0.25	44.39265662	42.18816351	35.10361099	28.55979513	36.78888442	49.27225532	51.41595582	51.39204703	51.37774117
-0.3	-18.76748358	-22.54472803	-20.94108196	-17.21009322	-15.07630328	-18.71479027	-18.71878812	-18.67177754	-18.62766091
+0.3	37.99813499	37.02457248	29.76131559	24.59364773	31.52255199	42.15811611	43.91131468	44.16681143	44.1860518
-0.35	-21.42187818	-25.91272388	-23.0061304	-18.86656318	-16.71370482	-21.8895986	-21.8940229	-21.84762393	-21.80407935
+0.35	34.91620776	34.4923788	27.490576	22.85630013	28.97643679	38.71988172	40.38999626	40.50221435	40.74980098
-0.4	-26.66912684	-32.31806166	-26.96688371	-22.08557894	-19.93414196	-28.1831753	-28.18841561	-28.14345201	-28.34292535
+0.4	29.55873424	29.54842481	23.55484811	19.51700544	24.08234955	31.99900234	33.81640378	33.80189613	34.06446609
-0.45	-29.2535161	-35.3548397	-28.86334688	-23.64846212	-21.51189288	-31.29184833	-31.87613906	-31.82331991	-31.96116387
+0.45	27.15678214	27.14512337	21.64151215	17.90395944	21.74398687	29.18242749	30.65067954	30.63616172	30.89121214
-0.5	-34.32267716	-41.09526939	-32.90378567	-27.04779343	-25.87402104	-37.40772707	-39.21628239	-39.16539634	-39.95928337
+0.5	22.51117143	22.49710201	17.98565378	14.80819165	17.04496639	23.8323548	24.59146436	24.5770726	24.81565395
-0.55	-37.06350287	-43.79836929	-35.11619521	-28.8740931	-28.74272254	-40.40483465	-42.8267322	-42.77693029	-43.85048691
+0.55	20.27597407	20.26085979	16.28355597	13.37860038	15.42600799	21.27103117	21.709985	21.69575659	21.92538234
-0.6	-42.72367618	-48.86893757	-39.24049577	-32.33139369	-34.38601116	-46.47271349	-49.89831826	-49.85089391	-51.39307556
+0.6	16.001953	15.98509497	13.00951138	10.69879286	12.5848751	16.40103676	16.42746215	16.57646331	16.60487127
-0.65	-45.41407083	-51.23587535	-41.15649544	-33.96503081	-37.15098916	-49.93525448	-53.3474313	-53.30129569	-55.03484035
+0.65	13.97159115	13.95405927	11.44503183	9.422585797	11.22302985	14.10247125	14.12749592	14.27004153	14.29700105
-0.7	-50.59441918	-55.63165701	-44.84225016	-37.15795201	-42.54357154	-57.2580674	-60.04224393	-59.99888368	-62.0351911
+0.7	10.14531886	10.1268654	8.479774265	7.104460062	8.629992211	9.80343485	9.825555532	9.954308152	9.803100982
-0.75	-53.87326706	-57.65995326	-46.53793354	-38.65188195	-45.16157546	-60.81513337	-63.56619178	-63.56619178	-65.38415606
+0.75	8.357874846	8.339194116	7.086452748	6.028078333	7.404086862	8.074530595	8.068353494	8.089076568	7.964792283
-0.8	-60.2182914	-61.3759962	-49.61852874	-41.47757073	-50.21696181	-67.68810612	-71.2325422	-71.10973769	-72.21495798
+0.8	5.055522461	5.036880843	4.195460651	4.023773064	5.1067208	4.884688365	4.878779845	4.794391448	4.785912651
-0.85	-63.27244719	-63.06318774	-51.08114224	-43.70106314	-52.64473445	-70.99104802	-75.11535118	-74.95600903	-75.73771873
+0.85	3.549076985	3.530731061	3.09659499	3.101966046	4.040546675	3.39480786	3.423838838	3.344859993	3.336773711
-0.9	-69.11400217	-66.09454898	-56.38225216	-48.0304902	-57.27642457	-77.29736738	-82.57035317	-82.56715764	-83.56943919
+0.9	1.665464078	1.667433076	2.110026093	1.934238976	2.086427067	1.744147449	1.851620276	2.046330226	2.175108313
-0.95	-71.88937209	-67.43816368	-58.91648805	-50.11399783	-59.47072195	-80.28776474	-86.12762661	-86.32644212	-87.48130408
+0.95	1.478752911	1.382084088	1.648904595	1.493468782	1.228665145	1.744147449	1.851620276	2.046330226	2.175108313
-1	-77.11925725	-69.82504081	-63.72578821	-54.10650594	-63.59220481	-85.91059454	-92.86445569	-94.09602436	-94.92508843
+1	1.48E+00	1.38E+00	1.18E+00	9.99E-01	1.23E+00	1.74E+00	1.85E+00	2.05E+00	2.18E+00
(Span 2) -2	-5.81E+00	-5.43E+00	-4.63E+00	-3.93E+00	-4.83E+00	-6.85E+00	-7.28E+00	-8.04E+00	-8.55E+00
+2	7.90E+01	78.0048251	66.91466938	56.56047719	64.67927458	87.471759	95.60640839	98.76154979	100.0146414
-2.05	-5.81E+00	-5.43E+00	-4.76E+00	-4.33E+00	-4.83E+00	-6.85E+00	-7.28E+00	-8.04E+00	-8.55E+00
+2.05	75.67561068	73.32927271	63.22810669	53.52958616	62.03353641	83.85561062	91.33577544	93.6425309	94.1154074
-2.1	-5.810058678	-5.430244452	-5.363348002	-4.855362965	-4.827457186	-6.852800625	-7.275064103	-8.040084362	-8.546057138
+2.1	70.95928268	67.37290505	58.29273896	49.45495106	58.25845278	78.7040333	85.31428907	86.54867901	86.5219209
-2.15	-5.810058678	-5.486553145	-6.164480581	-5.973753274	-4.827457186	-6.852800625	-7.275064103	-8.040084362	-8.546057138
+2.15	65.97125736	61.42902612	53.8427382	45.80839358	54.24757224	73.23871668	78.99160108	79.22973306	79.20143723
-2.2	-7.039670277	-8.176066376	-8.279707298	-7.586645904	-6.300321921	-6.852800625	-7.275064103	-8.040084362	-8.546057138
+2.2	60.77561224	57.23328858	49.25800968	42.0732739	50.05211679	67.52883724	72.44721594	72.23714878	72.21279496
-2.25	-10.21698622	-11.55760237	-11.46054753	-9.515964786	-8.47231119	-10.19696276	-10.20721433	-10.18716713	-10.16835239

+2.25	55.43643339	53.89909032	44.59511245	38.28631611	45.72334279	61.64362403	65.42465826	65.59807781	65.57254719
-2.3	-13.6698889	-15.14128856	-14.75979529	-11.90901852	-10.78827058	-14.10190701	-14.1136451	-14.09232078	-14.07230155
+2.3	49.51852676	50.22301807	39.91060321	34.48383898	41.31247123	55.30481505	58.16740802	58.5673958	58.86613352
-2.35	-17.49208159	-19.08485446	-17.98361275	-14.4393451	-13.45334069	-18.31274561	-18.65359615	-18.62868135	-18.60529289
+2.35	43.90718382	46.21526388	36.38413433	30.70181259	36.40562411	48.87164032	51.443274	51.36852949	51.95825848
-2.4	-21.59002954	-23.69216293	-21.12921853	-17.00888377	-16.4641608	-22.77566176	-23.68749524	-23.66162917	-23.86962992
+2.4	38.53315259	41.88600323	32.66379047	27.08435045	31.90143863	42.88517637	44.82543179	44.78453305	45.69214683
-2.45	-25.61014726	-28.41065884	-24.1938321	-19.55281968	-20.32211929	-27.43684034	-29.0028735	-28.97645328	-29.5256217
+2.45	33.27998343	37.24542678	29.6035853	24.12058365	27.56481396	37.00888257	38.78342395	38.75711057	39.33662877
-2.5	-29.7211354	-33.57130008	-27.35167359	-22.27123132	-24.39900716	-32.72162111	-34.53563581	-34.50904403	-35.07789522
+2.5	28.68300191	32.30370944	26.54498974	21.59371844	23.35751343	31.31200269	33.12984492	33.10342535	33.66814629
-2.55	-33.28542768	-37.24971686	-29.60614964	-24.12182826	-27.56953494	-37.0150546	-38.78931211	-38.76280173	-39.34213328
+2.55	25.60586922	28.40593394	24.19135629	19.55161523	20.31774548	27.43179379	28.99728048	28.971037	29.52038252
-2.6	-38.5387508	-41.89001371	-32.66624251	-27.08598002	-31.90626786	-42.89149372	-44.83215417	-44.79101167	-45.69824713
+2.6	21.58587635	23.68809508	21.12668071	17.00765066	16.46006471	22.77080835	23.68217165	23.65647413	23.99062986
-2.65	-43.91288498	-46.21898269	-36.38708657	-30.70358694	-36.32104065	-48.87803778	-51.45016015	-51.37516136	-51.96425562
+2.65	17.63047833	19.08072036	17.98100969	14.43808482	13.45061129	18.30813445	18.64859818	18.62384162	18.6006114
-2.7	-49.38182716	-50.2264563	-39.9144236	-34.48563144	-41.31736736	-55.1723905	-58.17436457	-58.44377722	-58.8726089
+2.7	13.66613081	15.13804308	14.75712958	11.90772313	10.78565449	14.09759541	14.10946556	14.08827331	14.06838615
-2.75	-55.37089712	-53.90222163	-44.59893921	-38.28806849	-45.72817516	-61.6499614	-65.29725294	-65.60474067	-65.57900503
+2.75	10.21349232	11.55452504	11.45782229	9.514784415	8.46983998	10.19300202	10.20338894	10.18345573	10.16476212
-2.8	-60.78118842	-57.23612403	-49.26178855	-42.07500772	-50.05684586	-67.53504518	-72.45404985	-72.24372904	-72.21914786
+2.8	7.036499916	8.17318955	8.277522528	7.585781313	6.298022867	6.852788402	7.275106157	8.04011218	8.54603141
-2.85	-65.97665644	-61.43430468	-53.84643129	-45.81008949	-54.25212312	-73.24469704	-78.99826942	-79.23711753	-79.20859448
+2.85	5.810100558	5.485037698	6.163265385	5.973064028	4.827475807	6.852788402	7.275106157	8.04011218	8.54603141
-2.9	-70.96443886	-67.3781731	-58.29629958	-49.45656653	-58.26277788	-78.70973613	-85.32068651	-86.55590931	-86.52890141
+2.9	5.810100558	5.430244338	5.362859334	4.855109751	4.827475807	6.852788402	7.275106157	8.04011218	8.54603141
-2.95	-75.68045834	-73.26717359	-63.23217328	-53.53143826	-62.03758543	-83.86093805	-91.34183859	-93.64950087	-94.12311172
+2.95	5.810100558	5.430244338	4.761604318	4.329691136	4.827475807	6.852788402	7.275106157	8.04011218	8.54603141
-3	-80.06060864	-79.4232711	-68.1283732	-57.56135751	-65.52527894	-88.62911043	-96.9822036	-100.428722	-101.9530215
+3	5.810100558	5.430244338	4.629436124	3.926734085	4.827475807	6.852788402	7.275106157	8.04011218	8.54603141
(Span 3) -4	-1.47876357	-1.38E+00	-1.18E+00	-9.99E-01	-1.228669885	-1.744144339	-1.851630979	-2.046337306	-2.175101765
+4	75.8483554	69.23575915	62.55364468	53.14032827	62.59226576	84.54577193	91.22297245	92.08792843	93.02873942
-3.05	-1.47876357	-1.38E+00	-1.43E+00	-1.30E+00	-1.228669885	-1.744144339	-1.851630979	-2.046337306	-2.175101765
+3.05	73.23241388	68.06465445	60.14817379	51.13207717	60.53070641	81.73329679	87.85335164	88.14436263	89.36801405
-3.1	-2.039310331	-2.041348095	-2.3498439	-2.171934042	-2.553904114	-1.970505134	-1.967731877	-2.046337306	-2.175101765
+3.1	67.68275519	65.37707246	55.08076131	46.96581585	56.14293874	75.75364164	80.74016132	80.62686271	81.54508531
-3.15	-2.821228398	-2.823925669	-2.843446867	-2.670990861	-3.531429249	-2.725779411	-2.722927087	-2.732495605	-2.686993685
+3.15	64.76104282	63.8611574	52.42943274	44.80060062	53.82632815	72.59944281	77.01150516	76.83422338	77.61114482
-3.2	-5.849049722	-5.829816002	-4.813916524	-4.506307698	-5.663380393	-5.651217967	-5.645122784	-5.558023669	-5.549272811
+3.2	58.65387012	60.48643601	48.88453992	40.76106784	48.9716755	65.994796	69.247367	69.14314303	70.54129169
-3.25	-7.500953715	-7.481667144	-6.284558159	-5.508894615	-6.812512706	-7.246851754	-7.240613122	-7.228075037	-7.139393496
+3.25	55.48045562	58.62818107	47.34417943	39.37143357	46.44324388	62.55730484	65.22676759	65.15903754	67.10367004
-3.3	-11.07516337	-11.05627774	-9.201803775	-7.660960471	-9.263879601	-10.84378212	-10.86649924	-10.99867304	-10.8434314
+3.3	49.26218313	54.57123853	43.95225743	36.38336988	41.20818231	55.44449567	58.3890019	58.34514905	60.31531997
-3.35	-12.9889958	-12.97054699	-10.68499854	-8.804270348	-10.56082864	-12.99414387	-13.01831462	-13.1573801	-13.15196738
+3.35	46.71767413	52.37311566	42.09910512	34.7843922	38.51118382	51.78212953	55.0406933	54.99546056	56.81437361
-3.4	-17.04898834	-17.0318276123808	-13.81320857	-11.35465444	-13.28404341	-17.5904405416587	-17.61738137	-17.76935385	-17.7983166000364
+3.4	41.33715568	47.63892718	38.24306318	31.48947094	32.98225814	45.02676488	48.14372995	48.09590189	49.53170275
-3.45	-19.18667114	-19.17036024	-15.45076815	-12.69495074	-14.70502346	-20.02624389	-20.31459075	-20.30027023	-20.52506864
+3.45	38.50654543	45.10338923	36.18099996	29.76089196	30.1599412	41.87966809	44.60707128	44.55805905	45.75963844
-3.5	-23.65628278	-23.64202637	-18.85417981	-15.55732084	-18.12132257	-25.14797428	-26.07648058	-26.06184063	-26.30451361
+3.5	33.06385446	39.69688006	31.75531564	26.10783721	24.42362721	35.88653283	37.38748751	37.33632009	37.97814455
-3.55	-25.97973083	-25.96666214	-20.70299916	-17.1126691	-20.56242135	-27.82380432	-29.10701885	-29.09232747	-29.34323095
+3.55	30.52865812	36.8264392396048	29.7877604987223	24.4168270121968	22.384135810554	32.8279007953725	33.7165885006671	33.6644829136307	33.97835142

-3.6	-30.7827806	-30.77236604	-24.52894389	-20.33805727	-25.28487841	-33.42379813	-35.43732189	-35.42263958	-35.6885828
+3.6	25.36082235	30.75253065	25.9945538	21.29096248	19.13311364	26.61167345	26.61694365	26.571798	26.77206565
-3.65	-33.25393444	-33.24496949	-26.49729389	-22.06216443	-27.73267583	-37.00589335	-38.72503649	-38.71040738	-38.98317933
+3.65	22.73660713	27.54963751	24.01414167	19.68142873	17.52252322	23.46422333	23.46906863	23.42320794	23.38018176
-3.7	-39.57567508	-38.30840939	-31.07364911	-25.47374116	-32.82399295	-43.91561281	-45.64510424	-45.90035618	-45.91947281
+3.7	17.42881835	20.81332189	19.88374633	16.368379	14.2483186	17.11581856	17.11980109	17.07271929	17.02854497
-3.75	-42.77384135	-40.89078682	-33.74557144	-27.40973903	-35.45788229	-47.47364184	-49.41204476	-49.43128705	-49.41810172
+3.75	14.75368619	17.62921732	17.73299371	14.66453793	12.58998906	14.24996544	14.25284322	14.33814442	14.17806078
-3.8	-49.37377495	-46.13567086	-39.29369862	-32.10872973	-40.87811162	-54.79815045	-57.49046723	-57.43817985	-57.42388006
+3.8	9.382085234	11.68368022	13.25849196	11.16116831	9.244082945	10.28203007	11.22215237	12.35241063	13.15660954
-3.85	-52.76350121	-48.78968018	-42.15927394	-34.54233405	-43.65484245	-58.55165415	-61.63431126	-61.5614912	-61.5474341
+3.85	8.997345113	10.24625708	10.97750213	9.361207084	7.561803712	10.28203007	11.22215237	12.35241063	13.15660954
-3.9	-59.69247112	-54.62491998	-48.04697231	-39.55494183	-49.31750294	-66.20864769	-70.1274417	-70.00948602	-69.99607291
+3.9	8.997345113	8.749254901	9.080297632	7.736379965	7.384541947	10.28203007	11.22215237	12.35241063	13.15660954
-3.95	-63.21966718	-57.88796549	-51.05848537	-42.12469894	-52.1938458	-70.09918474	-74.46185063	-74.31940617	-74.30635655
+3.95	8.997345113	7.902940635	8.160166248	7.025242682	7.384541947	10.28203007	11.22215237	12.35241063	13.15660954
-5	-70.36948379	-64.54997244	-57.19027421	-47.36800811	-58.01243757	-77.97183069	-83.26905179	-83.07407399	-83.06185235
+5	8.997345113	7.821755644	7.450539783	6.377578574	7.384541947	10.28203007	11.22215237	12.35241063	13.15660954

3-Span: Shear (Max and Min) Raw Data Results - 30' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-13.6083908	-14.55887428	-10.0246148	-11.37854217	-12.41144864
End Shear	93.29111265	94.29489546	79.18258592	87.24691477	92.38721383
-0.05	-13.6083908	-14.55887428	-10.0246148	-11.37854217	-12.41144864
+0.05	84.35584075	85.44734592	73.63318387	80.72681839	85.42230168
-0.1	-15.01171388	-16.44713814	-11.36671939	-13.54436699	-13.82755991
+0.1	74.5568081	74.45672052	66.28516153	72.6125442	76.24887446
-0.15	-16.63936316	-18.1089397	-13.64700358	-14.50005121	-15.91172435
+0.15	69.77266741	69.11578566	62.64646191	68.5923498	71.72767366
-0.2	-21.10173275	-22.34078759	-18.0143958	-17.70008592	-19.6925681
+0.2	60.47205082	59.05330882	55.46936559	60.65825801	62.85407027
-0.25	-24.42045182	-25.01701218	-21.94621736	-21.00648032	-23.21910179
+0.25	56.30148426	54.56443876	51.94284954	56.75730768	58.51680327
-0.3	-30.65753808	-31.24542202	-29.44058139	-28.91745577	-29.96482632
+0.3	48.68204129	45.90309822	45.04360394	49.12001862	50.0791628
-0.35	-33.7040864	-34.95731399	-33.00370945	-33.20930549	-33.12980054
+0.35	44.96881577	41.76499546	41.68274676	45.39664003	45.9939059
-0.4	-43.45393699	-42.97923631	-39.76327563	-41.32400967	-42.74872343
+0.4	37.79858732	35.07705606	35.16828247	38.1728334	38.28361703
-0.45	-47.81048144	-46.96875276	-42.96027078	-45.28564409	-47.34113507
+0.45	34.32299539	31.94160286	32.02655429	34.68535119	34.79297737
-0.5	-56.07722138	-54.47988816	-48.99016976	-54.1757382	-56.0516498
+0.5	27.65544134	25.91077786	26.00379555	27.9916635	28.09240143
-0.55	-60.38954742	-58.00816454	-51.90355918	-58.39434486	-60.16987348
+0.55	24.47644546	23.02449644	23.2891077	24.84171488	24.89543429
-0.6	-68.81441221	-65.8749503	-58.78230715	-66.37432866	-67.93262979
+0.6	18.619071	17.59660096	18.38380373	19.60939065	18.84053122
-0.65	-72.73347029	-69.51804397	-62.04434018	-70.1339887	-71.57728646
+0.65	15.90027209	15.10529817	16.0534322	17.12366101	15.93154628
-0.7	-79.99918581	-76.24734742	-68.20512619	-77.18829763	-79.69701697
+0.7	10.82567386	10.44067459	11.66156671	12.43900449	10.67841506
-0.75	-83.35161628	-81.1644255	-71.10040764	-80.48120248	-83.65689295
+0.75	8.926309565	8.666045924	9.569360067	10.13390675	8.610536813
-0.8	-89.14686754	-90.67764112	-76.51208341	-86.59422682	-91.09463114
+0.8	5.507105143	5.667266932	5.782876201	6.103099528	5.340966476
-0.85	-91.98057838	-95.11368614	-79.02503021	-89.41260221	-94.56863051
+0.85	4.299480139	4.284040056	4.088364245	4.265232147	3.844615512
-0.9	-100.1448616	-105.7604563	-83.65647936	-94.56873704	-101.0170981
+0.9	3.112996048	3.132390026	2.059027203	2.037275004	2.148802679
-0.95	-104.4036615	-110.7845268	-85.77151432	-96.90477331	-103.9876973
+0.95	2.549478511	2.605876146	1.760501818	2.037275004	2.148802679
-1	-113.4427818	-121.2359855	-89.59158745	-101.0884428	-109.4118468
+1	2.13E+00	2.22E+00	1.76E+00	2.04E+00	2.15E+00
(Span 2) -2	-8.35E+00	-8.71E+00	-6.92E+00	-8.00E+00	-8.44E+00
+2	119.037152	128.7490712	86.63507584	104.6563783	106.3106388
-2.05	-8.58E+00	-8.71E+00	-6.92E+00	-8.00E+00	-8.44E+00
+2.05	112.9541721	121.2465665	84.26521671	98.05514511	102.9943972
-2.1	-10.0898781	-9.332775663	-6.917057446	-8.004506246	-8.442701619
+2.1	104.4290663	110.9390377	80.72920462	90.72446397	98.11375788
-2.15	-11.43201724	-11.34780969	-7.506991185	-8.349977455	-9.617001709
+2.15	95.49047022	100.9030002	76.78723225	86.32201427	92.73702762
-2.2	-12.63245016	-14.20743384	-9.612750811	-10.37372984	-10.62540544
+2.2	86.20395738	90.73546822	72.46545267	81.20891592	86.89523433
-2.25	-16.4614265	-17.87608723	-13.63605139	-12.87282907	-14.03518949

+2.25	76.76442758	80.31233598	67.78999866	75.86078032	80.61943077
-2.3	-21.21240243	-22.22412314	-18.62155652	-18.15133834	-18.85231417
+2.3	70.4115257	70.38929802	62.78703437	70.070549	73.94061883
-2.35	-27.39150323	-27.75194093	-23.84545532	-23.67377886	-24.97021834
+2.35	63.53250924	62.48734485	57.48269258	63.85775125	66.88985318
-2.4	-33.50241994	-33.14131833	-29.74796374	-30.28591629	-31.84767655
+2.4	57.15275928	55.0571159	51.90313345	57.24186312	59.498173
-2.45	-39.52561019	-38.39164215	-35.35919242	-37.21879694	-38.82448031
+2.45	50.76037266	48.33043726	46.07449449	50.24242781	51.79657814
-2.5	-45.74570513	-43.50230171	-41.56063306	-44.7593796	-46.29279422
+2.5	44.02387241	42.23708607	40.02293648	42.8789191	44.45506186
-2.55	-50.76576242	-48.33134736	-46.07969098	-50.24872887	-51.80324062
+2.55	39.52070291	38.39095145	35.35368243	37.21211375	38.81797151
-2.6	-57.15788225	-55.05803103	-51.90812828	-57.24782626	-59.50458954
+2.6	33.49741244	33.14060848	29.74292545	30.28005695	31.84188475
-2.65	-63.53814544	-62.48839278	-57.48746863	-63.8633705	-66.89599435
+2.65	27.38644747	27.75121341	23.84014895	23.66834354	24.96435843
-2.7	-70.4169954	-70.3906654	-62.79156213	-70.07582237	-73.94647533
+2.7	21.20730254	22.22338785	18.61720877	18.21900934	18.8482878
-2.75	-76.76942401	-80.31365958	-67.79424254	-75.86567488	-80.62494657
+2.75	16.45804208	17.87561016	13.63169882	12.86865881	14.03103573
-2.8	-86.21175723	-90.73686689	-72.46940131	-81.21341772	-86.90039903
+2.8	12.63151752	14.20693507	9.609623219	10.37209328	10.62464926
-2.85	-95.49801204	-100.9043565	-76.79087094	-86.0995257	-92.74182242
+2.85	11.43097992	11.34755987	7.50578459	8.34800194	9.615992342
-2.9	-104.4362776	-110.9404598	-80.73250189	-90.72831422	-98.11813779
+2.9	10.08871749	9.332484974	6.917048928	8.004469837	8.442691727
-2.95	-112.961014	-121.2479483	-84.26814794	-98.03737922	-102.9983354
+2.95	8.578148717	8.708304442	6.917048928	8.004469837	8.442691727
-3	-121.006577	-131.1998033	-87.37164844	-106.7259128	-107.3513957
+3	8.354941413	8.708304442	6.917048928	8.004469837	8.442691727
(Span 3) -4	-2.126466375	-2.216402928	-1.760499651	-2.037265737	-2.148800161
+4	110.851169	118.427675	88.6851372	100.1003392	108.1166002
-3.05	-2.277669996	-2.350141304	-1.760499651	-2.037265737	-2.148800161
+3.05	107.145871	113.2167205	86.77464325	98.00811077	105.4039668
-3.1	-3.403854488	-3.402394774	-2.462401436	-2.468817969	-2.197136786
+3.1	97.93324789	103.1696479	82.54453178	93.33568698	99.46269701
-3.15	-3.997593169	-3.953361816	-3.304292677	-3.423849224	-2.960339281
+3.15	93.37662166	97.83889508	80.22836089	90.75722686	96.23793688
-3.2	-6.289586177	-6.389222458	-6.692021295	-7.070766345	-6.127252819
+3.2	87.65859385	88.378435	75.20244562	85.1201333	89.28986494
-3.25	-8.08513331	-7.889239729	-8.586062814	-9.087022986	-7.762778682
+3.25	84.5569397	83.62191716	72.49616274	82.06323544	85.57047619
-3.3	-12.05083527	-11.56555179	-12.72811823	-13.57665945	-11.92045553
+3.3	78.2475396	74.61909216	66.70559699	75.47709491	77.65070359
-3.35	-14.58922948	-13.89875171	-14.92481002	-15.91979736	-14.56360898
+3.35	74.61476232	71.26544723	63.62477304	71.94955979	73.45421313
-3.4	-20.02546091	-18.87969568	-19.58464027	-20.89028295	-20.31483014
+3.4	66.77530534	63.97778548	57.10069565	64.42991821	66.04467398
-3.45	-22.93351665	-21.61721682	-22.03804234	-23.50724516	-23.34328906
+3.45	62.56289924	60.03279079	53.66092684	60.43954187	62.16304278
-3.5	-29.29026082	-27.38821883	-27.48018088	-29.63361393	-29.73597408
+3.5	54.05930837	52.65856551	47.52296211	52.00201473	53.92604255
-3.55	-32.62498991	-30.40445977	-30.49246246	-32.98144639	-33.08725841
+3.55	49.9258453	48.90337454	44.50783747	47.5597144	49.57050123
-3.6	-39.57484886	-36.72195464	-36.77473892	-39.95510512	-40.06720938
+3.6	41.21201034	40.9234196	38.11332235	39.34684824	40.38511848

-3.65	***-43.1451708***	***-40.06670043***	***-40.03282122***	***-43.56796596***	***-43.99468797***
+3.65	***36.62965953***	***36.7739457***	***34.73336211***	***35.2892774***	***35.55510776***
-3.7	***-50.57023095***	***-48.02741897***	***-46.7532772***	***-51.01331818***	***-52.16362285***
+3.7	***29.14227311***	***29.34981222***	***27.60660466***	***26.70492098***	***28.32516987***
-3.75	***-54.380872***	***-52.35912568***	***-50.20374642***	***-54.83288068***	***-56.3835643***
+3.75	***26.02390218***	***26.4737578***	***23.85923533***	***22.77219107***	***24.95235434***
-3.8	***-62.76864791***	***-61.33482668***	***-57.25545628***	***-62.63333531***	***-65.05644019***
+3.8	***19.5484005***	***21.11506055***	***16.85420992***	***16.75430848***	***18.79130621***
-3.85	***-67.42020408***	***-66.4896731***	***-60.8448187***	***-66.60127034***	***-69.49428578***
+3.85	***17.50397268***	***18.88893384***	***14.74107613***	***14.94265886***	***16.90121692***
-3.9	***-76.98656654***	***-77.16911474***	***-68.12085299***	***-74.64015178***	***-78.53501019***
+3.9	***14.2483143***	***15.56341655***	***10.34676747***	***13.02989813***	***12.88518917***
-3.95	***-81.884115***	***-82.66569763***	***-71.79561573***	***-78.69813478***	***-83.12272676***
+3.95	***13.60839555***	***14.55887651***	***10.0246307***	***11.93220281***	***12.41147081***
-5	***-92.85030596***	***-94.36431806***	***-79.1890417***	***-86.85875447***	***-92.39512841***
+5	***13.60839555***	***14.55887651***	***10.0246307***	***11.37853128***	***12.41147081***

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.19E-14	*-4.02E-14*	*-4.84E-14*	-3.33E-14	-3.73E-14	-3.15E-14	-3.94E-14	-2.43E-14	-2.56E-14	-2.70E-14
End Shear	4.92E-14	*3.54E-14*	*3.50E-14*	2.81E-14	2.81E-14	2.78E-14	2.63E-14	2.41E-14	2.54E-14	1.87E-14
-0.05	-21.20979918	*-24.19566811*	*-23.44863286*	-19.282945	-20.3977463	-19.2190393	-22.6981338	-14.1384833	-14.9934303	-8.528182372
+0.05	149.2042524	*170.7642832*	*157.649993*	139.974655	145.2332069	133.7815745	149.6199193	103.1305784	109.1048287	68.35555475
-0.1	-42.41959837	*-48.39133622*	*-46.89726572*	-38.56589	-40.7954926	-38.4380786	-45.3962677	-28.2769665	-29.9868607	-17.05636474
+0.1	271.460907	*319.4108509*	*290.5306046*	256.6054807	265.5804572	244.3233282	274.3632344	190.842507	201.851105	125.8868
-0.15	-63.62939755	*-72.58700433*	*-70.34589858*	-57.8488351	-61.1932388	-57.6571179	-68.0944015	-42.4154498	-44.980291	-25.58454711
+0.15	371.8044459	*444.9315217*	*399.2073767*	354.1724117	365.8216118	335.9804995	375.0491068	263.9093242	279.0232329	172.8880942
-0.2	-84.83919674	*-96.78267244*	*-93.79453145*	-77.1317801	-81.5909851	-76.8761572	-90.7925353	-56.553933	-59.9737214	-34.11272949
+0.2	448.9204642	*547.5838003*	*484.4099368*	431.2298885	444.0755873	407.086897	451.5244148	321.8421118	340.130225	209.739833
-0.25	-106.0489959	*-120.9783406*	*-117.2431643*	-96.4147251	-101.988731	-96.0951965	-113.490669	-70.6924163	-74.9671517	-42.64091186
+0.25	503.5156456	*627.7716323*	*547.0410398*	488.2490139	501.1255696	458.4179715	514.5053945	365.0980586	385.6652235	236.9084251
-0.3	-127.2587951	*-145.1740087*	*-140.6917972*	-115.69767	-122.386478	-115.314236	-136.188803	-84.8308995	-89.9605821	-51.16909423
+0.3	536.7677798	*686.0458276*	*588.1750007*	526.0584266	537.9250353	499.3227167	571.6551861	394.2490857	416.2434241	256.3721355
-0.35	-148.4685943	*-169.3696768*	*-164.14043*	-134.980615	-142.784224	-134.533275	-158.886937	-98.9693828	-104.954012	-59.6972766
+0.35	550.0430707	*723.1035624*	*609.057239*	545.6448106	560.9353926	534.5445098	606.3429619	409.9815726	432.6017903	272.1351866
-0.4	-169.6783935	*-193.5653449*	*-187.5890629*	-154.26356	-163.18197	-153.752314	-181.585071	-113.107866	-119.947443	-68.22545897
+0.4	544.8963455	*739.7888855*	*611.1055132*	562.5107678	580.6838764	551.0678238	620.1543489	418.733009	442.6782943	280.723252
-0.45	-190.8881927	*-217.761013*	*-211.0376958*	-173.546505	-183.579717	-172.971354	-204.283204	-127.246349	-134.940873	-76.75364134
+0.45	523.0705911	*737.0922686*	*595.4899413*	566.2125453	581.4630356	550.4310578	613.5885461	422.8710925	446.7258205	282.4617956
-0.5	-212.0979918	*-241.9566811*	*-234.4863286*	-192.82945	-203.977463	-192.190393	-226.981338	-141.384833	-149.934303	-85.28182372
+0.5	495.3949315	*730.3121988*	*576.7687368*	552.9831956	567.1377832	533.9191482	592.5731875	414.4890054	437.5182479	277.7329376
-0.55	-233.307791	*-266.1523492*	*-257.9349615*	-212.112395	-224.375209	-211.409432	-249.679472	-155.523316	-164.927734	-93.81000609
+0.55	509.949495	*707.2173144*	*588.2452607*	531.279126	549.1858464	519.3339871	582.7678464	394.9609585	417.6068951	266.9751526
-0.6	-254.5175902	*-290.3480173*	*-281.3835943*	-231.39534	-244.772955	-230.628472	-272.377606	-169.661799	-179.921164	-102.3381885
+0.6	503.0485483	*665.9780631*	*579.8775809*	498.2600638	513.7603966	487.9823237	553.0201838	374.826209	395.4465244	250.6834851
-0.65	-275.7273894	*-314.5436854*	*-304.8322272*	-250.678285	-265.170702	-249.847511	-295.07574	-183.800282	-194.914595	-110.8663708
+0.65	474.6223603	*607.8963298*	*549.7818075*	461.1777623	471.2448574	441.2548655	503.5875458	346.2067116	365.4705296	229.4092483
-0.7	-296.9371886	*-338.7393535*	*-328.2808601*	-269.96123	-285.568448	-269.06655	-317.773874	-197.938766	-209.908025	-119.3945532
+0.7	425.9630093	*534.4206799*	*499.2034683*	408.3642709	418.1187529	380.7030351	436.2091031	306.3933555	323.5333507	204.3006923
-0.75	-318.1469878	*-362.9350217*	*-351.7294929*	-289.244175	-305.966194	-288.28559	-340.472007	-212.077249	-224.901455	-127.9227356
+0.75	358.6251208	*447.1463712*	*429.5596144*	341.3022254	349.1080038	315.1951947	352.8310906	256.4852481	270.7974778	178.4803611
-0.8	-339.3567869	*-387.1306898*	*-375.1781258*	-308.52712	-326.36394	-307.504629	-363.170141	-226.215732	-239.894886	-136.4509179
+0.8	274.3519875	*347.8151321*	*342.4385872*	261.6323231	265.9184537	238.0470571	256.3104922	197.69601	208.5472316	145.3820815
-0.85	-360.5665861	*-412.2107902*	*-399.4227477*	-327.810065	-346.761687	-326.723668	-385.868275	-240.354215	-254.888316	-144.9791003
+0.85	181.4547518	*239.1996821*	*243.7881764*	174.1789323	174.1789323	151.2597132	157.7258922	133.4785052	140.5036897	107.4924542
-0.9	-381.7763853	*-446.847853*	*-432.2686356*	-347.09301	-367.159433	-345.942708	-408.566409	-299.992907	-318.049197	-153.5072827
+0.9	121.2202538	*134.1571624*	*182.8581177*	95.28975041	95.28975041	76.19264142	76.19264142	72.27463129	76.07855925	71.55358295
-0.95	-413.4517706	*-489.6657832*	*-477.34183*	-366.375955	-387.557179	-365.161747	-431.264543	-381.193953	-403.4578	-169.3868504
+0.95	66.68362127	*81.85656477*	*124.8142944*	63.42232339	66.4223248	62.60267368	72.8250056	46.85220795	49.60601542	35.12668754
-1	-462.9160962	*-538.952642*	*-544.7825412*	-385.658917	-407.954934	-384.380783	-453.962671	-466.310674	-493.016189	-204.1975445
+1	70.19328571	*84.47978722*	*75.24036173*	66.76033869	69.91823776	65.89755266	76.6579008	49.31811237	52.21685701	27.68531537
(Span 2) -2	-462.9160962	*-538.952642*	*-544.7825412*	-385.658917	-407.954934	-384.380783	-453.962671	-466.310674	-493.016189	-204.1975445
+2	70.19328571	*84.47978722*	*75.24036173*	66.76033869	69.91823776	65.89755266	76.6579008	49.31811237	52.21685701	27.68531537
-2.05	-360.5846273	*-378.6191544*	*-356.6747832*	-257.183632	-269.349285	-253.859574	-295.312786	-350.434585	-370.309753	-145.2270197
+2.05	68.50300324	*65.03026377*	*110.5971393*	49.71063664	52.06205055	49.06819526	57.08049337	38.25314375	40.54139686	39.97617759
-2.1	-271.2547015	*-328.189754*	*-292.5286717*	-240.133954	-251.4931	-237.03026	-275.735382	-251.944512	-266.618425	-105.2409677
+2.1	139.1518121	*148.9294522*	*160.7788148*	110.1773216	110.1773216	88.15130929	88.15130929	88.14205844	93.0202836	82.11883538
-2.15	-234.5138507	*-288.6532575*	*-257.1476164*	-223.084277	-233.636916	-220.200947	-256.157978	-168.521151	-178.667928	-92.51261888
+2.15	208.6960927	*272.7427713*	*220.4162589*	203.9829462	203.9829462	184.7003466	195.1981242	157.2301533	165.6368151	123.6522422
-2.2	-216.5906438	*-261.010969*	*-233.8326902*	-206.034599	-215.780731	-203.371634	-236.580574	-152.205132	-161.151467	-85.44215065
+2.2	308.2383414	*396.7379032*	*318.0315549*	303.7142335	307.6944251	280.3843098	314.2722036	228.6996023	241.1515662	162.8746291

-2.25	-198.667437	-242.8560154	-233.8305866	-188.984922	-197.924547	-186.542321	-217.00317	-139.609925	-147.815937	-78.37168243
+2.25	408.7171097	514.1998398	429.7861557	396.7533796	405.7257397	375.4999581	426.5670809	296.8031269	313.3633434	205.4678111
-2.3	-180.7442301	-224.7029144	-233.8301503	-171.935245	-180.068362	-169.713007	-197.425766	-127.014718	-134.480407	-71.3012142
+2.3	490.1394484	612.7825356	519.3449176	472.4026845	484.6059226	455.2605338	519.124222	352.4932219	372.3228517	240.7669431
-2.35	-162.8210233	-206.5498134	-233.8297141	-154.885567	-162.212178	-152.883694	-177.848362	-114.419511	-121.144877	-64.23074598
+2.35	548.4455416	690.2257954	585.4537682	528.7764667	545.2065479	517.3576286	592.4939322	394.4500833	416.6468993	266.5855212
-2.4	-144.8978164	-188.3967124	-233.8292778	-137.83589	-144.355993	-136.054381	-158.270958	-101.824303	-107.809347	-57.16027776
+2.4	590.2630105	744.8733684	632.3742577	570.3948633	592.1385547	563.074117	642.2504796	422.9522294	447.489525	282.64624
-2.45	-126.9746096	-170.2436114	-233.8288415	-120.786213	-126.499809	-119.225068	-138.693554	-89.2290964	-94.4738171	-50.08980953
+2.45	609.7317677	775.6710727	655.7308838	598.295584	620.7355912	588.6807444	667.3061373	444.0303228	469.7483631	286.5651566
-2.5	-109.0710191	-152.0905104	-233.8284052	-103.736682	-108.643634	-102.396021	-119.116174	-76.6338892	-81.1382871	-43.01934131
+2.5	604.91304	781.6856672	653.3231493	607.5449587	627.9103291	593.6806442	667.6457829	452.1105875	478.034525	291.5736126
-2.55	-126.9974496	-170.2436156	-233.8279689	-120.786384	-126.499822	-119.225379	-138.693581	-89.2289729	-94.4735371	-50.08975703
+2.55	594.0801074	775.7172106	654.1639413	598.2119864	620.6583246	588.6370532	667.280904	444.0332488	469.7519711	289.0391257
-2.6	-144.92388	-188.3967171	-233.8275327	-137.836086	-144.356009	-136.054736	-158.270988	-101.824162	-107.809027	-57.16021816
+2.6	582.9823145	744.9597014	630.9106337	570.3959961	592.1452417	563.0240773	642.2174596	422.9565562	447.4945503	282.6560062
-2.65	-162.8503105	-206.5498187	-233.8270964	-154.885788	-162.212196	-152.884094	-177.848396	-114.419352	-121.144518	-64.23067928
+2.65	548.1047276	690.2915726	585.870145	528.7664604	545.2160961	517.3787741	592.5080604	394.4863378	416.6853983	266.5912531
-2.7	-180.776741	-224.7029202	-233.8266601	-171.93549	-180.068383	-169.713451	-197.425803	-127.014542	-134.480008	-71.30114041
+2.7	489.3652457	612.8288185	519.796917	472.4471588	484.6536611	455.2769096	519.12401	352.5194659	372.3507567	240.7687504
-2.75	-198.7031715	-242.8560217	-233.8262238	-188.985192	-197.92457	-186.542808	-217.003211	-139.609731	-147.815499	-78.37160154
+2.75	409.1388072	514.2284452	429.9815482	396.7825998	405.7575305	375.5130267	426.5916302	296.8202119	313.381548	206.214921
-2.8	-216.629602	-261.0109757	-233.8274548	-206.034894	-215.780758	-203.372166	-236.580618	-152.204921	-161.150989	-85.44206267
+2.8	308.4577461	396.7511943	317.5747043	303.7297964	307.7118582	280.3963039	314.2943005	228.7085026	241.1610952	163.3672191
-2.85	-234.5560324	-288.6532579	-257.1432508	-223.084596	-233.636945	-220.201523	-256.158026	-168.522691	-178.669292	-92.51252379
+2.85	210.7451535	272.7435738	220.4162677	203.9835406	203.9835406	184.7288994	195.2152478	157.2302974	165.6369526	123.643512
-2.9	-263.0158952	-328.1897522	-292.52397	-240.134298	-251.493132	-237.030881	-275.735433	-251.944089	-266.617705	-105.2575274
+2.9	143.8901503	148.9213083	160.7788556	110.1712023	110.1712023	88.14656927	88.14656927	88.1375397	93.01548179	82.10800934
-2.95	-363.8949434	-378.6191545	-356.6747837	-257.184	-269.349319	-253.860238	-295.31284	-350.434907	-370.310324	-145.2271877
+2.95	75.28856653	65.03026152	110.5971432	49.7105613	52.06203601	49.06806515	57.08048749	38.22442472	40.51107034	39.96353512
-3	-481.2257211	-538.9536634	-544.6963668	-385.65982	-407.956294	-384.381443	-453.96426	-466.313442	-493.015725	-204.1976558
+3	70.18066365	84.47978522	75.24166752	66.7602421	69.91822708	65.89737984	76.65788777	49.31818113	52.21701234	27.68534316
(Span 3) -4	-4.81E+02	-538.9536634	-544.6963668	-3.86E+02	-4.08E+02	-3.84E+02	-4.54E+02	-4.66E+02	-4.93E+02	-2.04E+02
+4	7.02E+01	84.47978522	75.24166752	6.68E+01	6.99E+01	6.59E+01	7.67E+01	4.93E+01	5.22E+01	2.77E+01
-3.05	-408.1313611	-489.6667493	-477.3186932	-366.37683	-387.55848	-365.16237	-431.266047	-381.19639	-403.457156	-169.386828
+3.05	66.67163049	81.85656495	124.8142964	63.42222991	66.42231578	62.60251092	72.82499339	46.85227201	49.60616165	35.1141731
-3.1	-386.6507628	-446.8487675	-432.247769	-347.09384	-367.160666	-345.943298	-408.567834	-299.992509	-318.049043	-153.5075003
+3.1	124.6160386	134.0699107	182.8581616	95.32536166	95.32536166	76.22040715	76.22040715	72.25480346	76.05768786	71.54202023
-3.15	-365.1701645	-412.2116534	-399.4030402	-327.81085	-346.762851	-326.724226	-385.86962	-240.35505	-254.889467	-144.979306
+3.15	182.0663752	239.2508202	243.4842409	175.569663	175.569663	152.5451431	157.7438156	133.439514	140.4626463	107.4814755
-3.2	-343.6895663	-387.1315005	-375.1595763	-308.527859	-326.365037	-307.505153	-363.171407	-226.216518	-239.895969	-136.4511118
+3.2	274.9445498	347.867405	342.3471461	261.6673193	265.9520203	238.0657212	256.3234855	197.7181662	208.5704313	145.3705988
-3.25	-322.208968	-362.9357813	-351.7121027	-289.244869	-305.967223	-288.286081	-340.473194	-212.077986	-224.902471	-127.9229175
+3.25	359.2803006	447.1974414	428.9607974	341.3332897	349.1366501	315.2089559	352.8147603	256.5053856	270.8184683	178.4679677
-3.3	-300.7283697	-338.7400621	-328.2646291	-269.961879	-285.569408	-269.067009	-317.77498	-197.939454	-209.908974	-119.3947232
+3.3	426.6989308	534.4683227	498.2098676	408.389452	418.1404201	380.6933062	436.1870158	306.4103302	323.5509172	204.2870825
-3.35	-279.2477714	-314.544343	-304.8171555	-250.678889	-265.171594	-249.847936	-295.076767	-183.800922	-194.915476	-110.8665289
+3.35	475.4551012	607.9381984	548.5422046	461.195169	471.2575875	441.2395541	503.5574009	346.2192836	365.4833634	229.3978394
-3.4	-257.7671731	-290.3486238	-281.3696818	-231.395899	-244.77378	-230.628864	-272.378554	-169.66239	-179.921978	-102.3383347
+3.4	504.3369817	666.0124414	578.5720794	498.2681534	513.7499108	487.9596425	552.9799224	374.8334908	395.4536842	250.671399
-3.45	-236.2865748	-266.1529046	-257.9222082	-212.112909	-224.375966	-211.409792	-249.68034	-155.523858	-164.92848	-93.8101404
+3.45	511.7204244	707.2424755	587.0798419	531.2663803	549.1658868	519.3022914	582.7956811	394.9558943	417.6009473	266.9622386
-3.5	-214.8059765	-241.9571854	-234.4747346	-192.829918	-203.978151	-192.19072	-226.982127	-141.385326	-149.934983	-85.28194613
+3.5	501.0981391	730.3265213	576.7687471	553.0161969	567.1067945	533.8770407	592.5878171	414.5064763	437.5372718	277.7189422
-3.55	-193.3253782	-217.7614662	-211.027261	-173.546928	-183.580337	-172.971647	-204.283914	-127.246794	-134.941485	-76.75375185
+3.55	521.7485941	737.0860337	595.489954	566.2359544	581.4937058	550.3919189	613.570361	422.8827334	446.7386959	282.4465574
-3.6	-171.8447799	-193.565747	-187.5797874	-154.263938	-163.182523	-153.752575	-181.585701	-113.108262	-119.947987	-68.22555758

+3.6	543.7355303	*739.7713373*	*610.8045906*	562.5231482	580.7032005	551.0989527	620.1246564	418.7379553	442.6840962	280.7066634
-3.65	-150.3641816	*-169.3700279*	*-164.1323138*	-134.980948	-142.784708	-134.533503	-158.887487	-98.9697297	-104.95449	-59.69736331
+3.65	549.1711684	*723.0733628*	*609.0040808*	545.6386212	560.9420164	534.5642618	606.3000998	409.9756043	432.5959779	272.1171207
-3.7	-128.8835834	*-145.1743087*	*-140.6848402*	-115.697958	-122.386894	-115.31443	-136.189274	-84.8311977	-89.9609919	-51.16916903
+3.7	536.2995234	*686.0018508*	*587.6749443*	526.0407007	537.9123905	499.3299499	571.6786369	394.2361305	416.2302225	256.3524498
-3.75	-107.4029851	*-120.9785895*	*-117.2373666*	-96.4149675	-101.98908	-96.0953582	-113.491061	-70.6926656	-74.9674942	-42.64097476
+3.75	503.5529551	*627.71295*	*546.0922604*	488.2185399	501.0996294	458.4081109	514.513352	365.0774866	385.6439563	236.9197602
-3.8	-85.92238677	*-96.7828703*	*-93.78989303*	-77.1319774	-81.5912654	-76.8762859	-90.7928472	-56.5541336	-59.9739965	-34.11278049
+3.8	449.7161932	*547.509901*	*483.2023862*	431.1858285	444.0353687	407.0641611	451.5123439	321.8133797	340.1003097	209.7491874
-3.85	-64.44178848	*-72.58715112*	*-70.34241943*	-57.8489872	-61.1934511	-57.6572136	-68.0946339	-42.4156015	-44.9804988	-25.58458621
+3.85	373.1034516	*444.8415097*	*397.952244*	354.1138063	365.7660303	335.9437992	375.0207622	263.8718655	278.9840618	172.8952896
-3.9	-42.96119019	*-48.39143194*	*-46.89494583*	-38.565997	-40.7956368	-38.4381413	-45.3964206	-28.2770695	-29.9870011	-17.05639194
+3.9	273.2072365	*319.3043069*	*289.6611488*	256.6366972	265.5745231	244.272064	274.3177656	190.7962078	201.8025496	125.8917437
-3.95	-21.4805919	*-24.19571275*	*-23.44747222*	-19.2830069	-20.3978225	-19.2190691	-22.6982073	-14.1385374	-14.9935033	-8.528197665
+3.95	149.2554204	*170.6410718*	*157.6499553*	139.9903972	145.2500315	133.7969527	149.6383148	103.139899	109.1147325	68.35806962
-5	-8.47E-14	*-4.90E-14*	*-6.59E-14*	-3.80E-14	-3.80E-14	-3.38E-14	-4.14E-14	-3.71E-14	-3.90E-14	-3.80E-14
+5	1.22E-13	*1.03E-13*	*1.29E-13*	8.22E-14	8.52E-14	6.74E-14	7.24E-14	6.32E-14	6.68E-14	3.94E-14

HDR

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.67E-14	-2.18E-14	-2.65E-14	-2.02E-14	-2.73E-14	-2.77E-14	-2.71E-14	-2.62E-14	-2.57E-14
End Shear	2.17E-14	2.14E-14	1.96E-14	1.50E-14	1.59E-14	2.28E-14	2.73E-14	2.74E-14	2.75E-14
-0.05	-13.49600491	-11.73267821	-11.17581008	-9.566368054	-11.07674298	-15.42300702	-16.833293	-18.528605	-19.7349001
+0.05	97.48325253	89.29758715	78.86077586	65.33602414	80.45213452	108.0731674	114.9581232	114.725924	114.7070415
-0.1	-26.99200981	-23.46535642	-22.35162015	-19.13273611	-22.15348597	-30.84601404	-33.666586	-37.0572101	-39.4698001
+0.1	177.7430539	163.8575911	144.1263292	120.3890231	146.8622478	197.1525781	208.7454495	208.4013417	208.4209166
-0.15	-40.48801472	-35.19803464	-33.52743023	-28.69910416	-33.23022895	-46.26902107	-50.499879	-55.5858151	-59.2047002
+0.15	243.708492	225.9290457	196.2355022	164.6492686	201.1529754	271.0007911	285.5787583	292.1997111	292.1794668
-0.2	-53.98401962	-46.93071285	-44.7032403	-38.26547222	-44.30697194	-61.69202809	-67.333172	-74.1144202	-78.9396002
+0.2	295.1643883	277.4596647	235.7344971	198.4862287	243.5820516	328.2091984	344.222193	366.6550176	366.6110083
-0.25	-67.48002453	-58.66339106	-55.87905038	-47.83184027	-55.38371492	-77.11503511	-84.166465	-92.6430252	-98.6745003
+0.25	332.242539	317.3437602	263.2770824	222.370537	274.4416236	369.4150329	385.4066795	421.9590704	422.0080219
-0.3	-80.97602944	-70.39606927	-67.05486046	-57.39820832	-66.4604579	-92.53804213	-100.999758	-111.17163	-118.4094
+0.3	355.7039093	345.9040864	280.06503	236.866676	294.0275511	396.4813705	423.3447048	461.506871	471.3322795
-0.35	-94.47203434	-82.12874749	-78.23067053	-66.96457638	-77.53720089	-107.9610492	-117.833051	-129.700235	-138.1443
+0.35	366.4310936	363.5491743	291.1499223	248.86688	303.0106354	424.6087423	449.9971598	485.7891379	507.7505848
-0.4	-107.9680392	-93.8614257	-89.40648061	-76.53094443	-88.61394387	-123.3840562	-134.666344	-148.22884	-157.8792
+0.4	377.212358	370.7735234	298.191149	254.7597628	302.1592073	437.6376977	460.9821683	500.335178	525.4033458
-0.45	-121.4640442	-105.5941039	-100.5822907	-86.09731249	-99.69068686	-138.8070632	-151.499637	-166.757445	-177.6141
+0.45	376.358058	368.1573899	294.9433134	255.0565477	292.3387297	436.4991311	463.9011309	504.8637704	525.1480179
-0.5	-134.9600491	-117.3267821	-111.7581008	-95.66368054	-110.7674298	-154.2300702	-168.33293	-185.28605	-197.349001
+0.5	364.835841	365.0383439	290.4449487	254.0002861	278.5745609	422.6283547	456.0718831	497.6006809	516.9963595
-0.55	-148.456054	-129.0594603	-122.9339108	-105.2300486	-121.8441728	-169.6530772	-185.166223	-203.814655	-217.083901
+0.55	353.44933	353.7985568	281.5574976	246.729219	283.526431	411.4334551	436.9981762	476.1389584	500.5239904
-0.6	-161.9520589	-140.7921385	-134.1097209	-114.7964166	-132.9209158	-185.0760843	-201.999516	-222.34326	-236.818801
+0.6	332.9245551	333.394157	265.3704359	233.0113584	277.4998502	387.4779692	406.322577	444.6723777	467.4711122
-0.65	-175.4480638	-152.5248168	-145.285531	-124.3627847	-143.9976588	-200.4990913	-218.832809	-240.871866	-256.553701
+0.65	307.7157075	304.5820515	243.3599103	214.9260656	260.5650539	350.8655666	371.0227677	404.5899907	419.4172523
-0.7	-188.9440687	-164.257495	-156.4613411	-133.9291528	-155.0744018	-215.9220983	-235.666102	-259.400471	-276.288601
+0.7	277.0934864	268.2051653	218.1875036	194.6746517	233.4379409	305.9881831	322.900974	351.4982174	357.9730712
-0.75	-202.4400736	-175.9901732	-167.6371511	-143.4955208	-166.1511448	-231.3451053	-252.499395	-277.929076	-296.023501
+0.75	234.6934562	225.1921067	186.5088495	169.6405708	196.9552785	255.7648013	264.4693835	288.1998619	288.3498299
-0.8	-215.9360785	-187.7228514	-178.8129612	-153.0618889	-177.2278877	-246.7681124	-269.332688	-296.457681	-315.758401
+0.8	181.6541705	176.5574487	148.6263379	136.055121	152.0509742	194.1942323	200.7768116	214.220093	214.1988079
-0.85	-229.4320834	-199.4555296	-189.9887713	-164.6415254	-188.3046307	-262.1911194	-286.165981	-314.986286	-335.493301
+0.85	122.7640525	123.4013936	108.3478061	99.04662944	101.6345482	125.0518532	125.8839205	128.9075118	129.406155
-0.9	-242.9280883	-247.431976	-210.7771127	-186.2895579	-199.3813737	-277.6141264	-302.999274	-333.514891	-355.228201
+0.9	67.03842536	66.91036902	66.37034072	65.48840735	67.3079513	64.76374521	64.72187933	64.85900279	64.66880589
-0.95	-256.4240932	-320.1846793	-269.9806645	-232.7324046	-210.4581167	-293.0371334	-319.832567	-352.043496	-374.963101
+0.95	42.14445796	39.3893965	49.7661432	42.74729744	35.01695665	49.70820231	52.77117787	58.32041143	61.99058692
-1	-273.8690834	-396.9586954	-333.8339527	-288.3561224	-221.5348636	-308.4601386	-340.197791	-384.236559	-422.13504
+1	44.3625888	41.46252377	35.34783434	29.98261314	36.85995446	52.32442447	55.54860804	61.38990823	65.25325148
(Span 2) -2	-273.8690834	-396.9586954	-333.8339527	-288.3561224	-221.5348636	-308.4601386	-340.197791	-384.236559	-422.13504
+2	44.3625888	41.46252377	35.34783434	29.98261314	36.85995446	52.32442447	55.54860804	61.38990823	65.25325148
-2.05	-184.2800782	-302.6112733	-242.1569826	-208.7720556	-141.9978852	-201.5714803	-224.169321	-253.162543	-275.176639
+2.05	33.03297438	35.25853601	44.64267984	39.46526902	38.74059504	38.96146325	41.36223304	45.71174372	48.58844006
-2.1	-159.571624	-213.8543731	-172.3839927	-148.067376	-132.5843074	-188.208543	-199.807294	-220.817828	-234.712649
+2.1	77.57583655	81.49431199	71.57814265	60.26994029	78.88998694	74.92861289	74.93872141	74.91780321	74.89815587
-2.15	-148.2419279	-145.0006265	-127.6042834	-109.1282159	-123.1707295	-174.8456056	-185.620837	-205.13961	-218.047888
+2.15	143.6059173	145.5606837	120.1044096	97.12764041	118.4750994	150.4444795	150.4818368	158.7942286	158.6680522
-2.2	-136.9122318	-127.961097	-109.090437	-92.98353407	-113.7571517	-161.4826682	-171.43438	-189.461391	-201.383127
+2.2	209.5017722	205.2519002	166.2759397	136.3659937	171.8860992	225.2351988	236.4476737	255.8148629	255.8046503

-2.25	**-125.5825358**	**-117.3721206**	**-100.0630365**	**-90.67685846**	**-104.3435739**	**-148.1197308**	**-157.247923**	**-173.783172**	**-184.718366**
+2.25	**275.2644396**	**263.6238873**	**220.5434995**	**182.9564891**	**224.699897**	**299.3965685**	**320.9667756**	**347.6021451**	**355.6763715**
-2.3	**-114.2528397**	**-106.7831441**	**-91.03563609**	**-88.58994194**	**-94.92999606**	**-134.7567934**	**-143.061466**	**-158.104953**	**-168.053604**
+2.3	**327.3414348**	**309.32829**	**262.6203871**	**219.4141255**	**268.549649**	**363.7056509**	**390.3969621**	**421.0548459**	**439.6479532**
-2.35	**-102.9231436**	**-96.19416765**	**-82.00823565**	**-86.93650844**	**-85.51641824**	**-121.393856**	**-128.875009**	**-142.426735**	**-151.388843**
+2.35	**364.7932625**	**342.9379346**	**293.826332**	**246.9392575**	**300.5478361**	**413.5987889**	**443.3642217**	**474.6522407**	**503.0627887**
-2.4	**-91.5934475**	**-85.6051912**	**-73.16138156**	**-85.60697803**	**-76.10284041**	**-108.0309187**	**-114.688552**	**-126.748516**	**-134.724082**
+2.4	**392.9062631**	**368.541567**	**316.8756098**	**266.8788816**	**320.1240032**	**449.2597877**	**480.6142901**	**516.8709774**	**544.571546**
-2.45	**-80.26375141**	**-75.01621474**	**-66.98217538**	**-84.5868**	**-66.68926259**	**-94.66798127**	**-100.502095**	**-111.070297**	**-118.059321**
+2.45	**409.4275832**	**382.6541577**	**328.2727933**	**277.5357397**	**327.3591584**	**469.5629342**	**499.4200479**	**542.6038538**	**565.3173988**
-2.5	**-68.93405532**	**-64.42724303**	**-61.33916308**	**-83.86872177**	**-57.27568477**	**-81.30518772**	**-86.3156383**	**-95.3920785**	**-101.394863**
+2.5	**412.2111837**	**385.0028843**	**328.6784322**	**277.9546093**	**322.5978979**	**473.1933587**	**499.7645177**	**547.8841318**	**575.7245779**
-2.55	**-80.26316985**	**-75.01621972**	**-66.98213864**	**-84.58692964**	**-66.68900219**	**-94.66814894**	**-100.501517**	**-111.069901**	**-118.059674**
+2.55	**409.3725297**	**382.6474435**	**328.2797688**	**277.5391242**	**327.3300301**	**469.5211349**	**499.3879448**	**542.5605441**	**565.3043651**
-2.6	**-91.59278427**	**-85.6051964**	**-73.16160442**	**-85.60708367**	**-76.1025437**	**-108.0311102**	**-114.687892**	**-126.748066**	**-134.724486**
+2.6	**392.9020565**	**368.5316817**	**316.8752427**	**266.8787072**	**320.0908004**	**449.212866**	**480.5765479**	**516.8354951**	**544.558512**
-2.65	**-102.9223987**	**-96.19417308**	**-82.00792841**	**-86.93661695**	**-85.51608522**	**-121.3940714**	**-128.874267**	**-142.42623**	**-151.389297**
+2.65	**364.7871021**	**342.925276**	**293.8186919**	**246.9413606**	**300.5106073**	**413.6127654**	**443.3214225**	**474.644895**	**503.043938**
-2.7	**-114.2520131**	**-106.7831498**	**-91.03529477**	**-88.59006805**	**-94.92962673**	**-134.7570326**	**-143.060642**	**-158.104395**	**-168.054108**
+2.7	**327.3308428**	**309.3168346**	**262.6149598**	**219.4114876**	**268.5630046**	**363.7157167**	**390.412443**	**421.0419702**	**439.6591919**
-2.75	**-125.5816275**	**-117.3721264**	**-100.0626611**	**-90.67704866**	**-104.3431682**	**-148.1199938**	**-157.247017**	**-173.782559**	**-184.71892**
+2.75	**275.2838355**	**263.6095441**	**220.5353612**	**182.9626458**	**224.7007375**	**299.4039056**	**320.9787338**	**347.6147529**	**355.6773213**
-2.8	**-136.911242**	**-127.9611031**	**-109.0900275**	**-92.98387629**	**-113.7567098**	**-161.482955**	**-171.433392**	**-189.460724**	**-201.383731**
+2.8	**209.5111349**	**205.2353044**	**166.2656806**	**136.3688709**	**171.9294246**	**225.2511474**	**236.4578116**	**255.8176152**	**255.8073082**
-2.85	**-148.2408564**	**-145.000977**	**-127.604778**	**-109.1287638**	**-123.1702513**	**-174.8459162**	**-185.619767**	**-205.138888**	**-218.048543**
+2.85	**143.6063176**	**145.5608261**	**120.1037684**	**97.12757889**	**118.4484057**	**150.4302533**	**150.468047**	**158.8295263**	**158.7021301**
-2.9	**-159.5704708**	**-213.8560896**	**-172.3839279**	**-148.0673261**	**-132.5837928**	**-188.2088775**	**-199.806142**	**-220.817053**	**-234.713354**
+2.9	**77.57168822**	**81.49015517**	**71.57490208**	**60.26907675**	**78.85649853**	**74.92458388**	**74.93482463**	**74.91400712**	**74.89448979**
-2.95	**-184.2801437**	**-302.6123881**	**-242.1584923**	**-208.7716609**	**-141.9973343**	**-201.5718387**	**-224.170061**	**-253.163564**	**-275.176488**
+2.95	**33.03320947**	**35.23199453**	**44.62795494**	**39.47558701**	**38.70163823**	**38.96139258**	**41.36247477**	**45.71189027**	**48.58829192**
-3	**-273.8687503**	**-396.9584165**	**-333.8338536**	**-288.3558238**	**-221.5362623**	**-308.4609003**	**-340.197639**	**-384.236117**	**-422.135724**
+3	**44.36290858**	**41.46252291**	**35.34796777**	**29.98250035**	**36.86009664**	**52.32433114**	**55.54892915**	**61.39012064**	**65.25305502**
(Span 3) -4	**-2.74E+02**	**-3.97E+02**	**-3.34E+02**	**-2.88E+02**	**-2.22E+02**	**-3.08E+02**	**-3.40E+02**	**-3.84E+02**	**-4.22E+02**
+4	**4.44E+01**	**4.15E+01**	**3.53E+01**	**3.00E+01**	**3.69E+01**	**5.23E+01**	**5.55E+01**	**6.14E+01**	**6.53E+01**
-3.05	**-256.4243354**	**-320.184727**	**-269.9811309**	**-232.7326323**	**-210.4594494**	**-293.0378552**	**-319.831338**	**-352.043718**	**-374.963365**
+3.05	**42.14476322**	**39.38939683**	**49.74995005**	**42.75884723**	**35.01709182**	**49.70811463**	**52.77148268**	**58.32061468**	**61.99040238**
-3.1	**-242.9283177**	**-247.432929**	**-210.7768897**	**-186.2899307**	**-199.3826365**	**-277.6148101**	**-302.99811**	**-333.515102**	**-355.22845**
+3.1	**67.06255199**	**66.93076531**	**66.35439494**	**65.49472686**	**67.36336071**	**64.78734607**	**64.74471701**	**64.86541778**	**64.62956369**
-3.15	***-229.4323***	***-199.4547774***	***-189.9887721***	***-164.6416094***	***-188.3058236***	***-262.191765***	***-286.164881***	***-314.986486***	***-335.493536***
+3.15	**123.5535546**	**123.4234124**	**108.3625378**	**99.0530269**	**101.6005979**	**125.072505**	**125.90175**	**128.8771811**	**129.4365221**
-3.2	**-215.9362823**	**-187.7221439**	**-178.8129624**	**-153.0618906**	**-177.2290107**	**-246.7687199**	**-269.331653**	**-296.45787**	**-315.758622**
+3.2	**181.6781199**	**176.5799108**	**148.6411081**	**136.0601358**	**152.0124203**	**194.2123949**	**200.7914136**	**214.1871243**	**214.2271909**
-3.25	**-202.4402647**	**-175.9895105**	**-167.6371527**	**-143.4955227**	**-166.1521977**	**-231.3456748**	**-252.498424**	**-277.929254**	**-296.023708**
+3.25	**234.7133463**	**225.2140824**	**186.5197041**	**169.6452236**	**196.9134502**	**255.7788044**	**264.4783395**	**288.2244731**	**288.3736383**
-3.3	**-188.944247**	***-164.256877***	**-156.4613431**	***-133.9291548***	**-155.0753848**	**-215.9226297**	**-235.665195**	**-259.400638**	**-276.288793**
+3.3	**277.1079683**	**268.225578**	**218.1941559**	**194.6770155**	**233.3915534**	**305.9965211**	**322.8894555**	**351.4608651**	**357.9491986**
-3.35	**-175.4482293**	**-152.5242435**	**-145.2855334**	**-124.362787**	**-143.9985719**	**-200.4995845**	**-218.831967**	**-240.872022**	**-256.553879**
+3.35	**307.723514**	**304.6000732**	**243.3705485**	**214.9446509**	**260.5129663**	**350.8557951**	**371.0050888**	**404.6103323**	**419.388435**
-3.4	**-161.9522117**	**-140.7916101**	**-134.1097237**	**-114.7964191**	**-132.921759**	**-185.0765394**	**-201.998738**	**-222.343406**	**-236.818965**
+3.4	**332.9421073**	**333.4089367**	**265.3812293**	**233.0173432**	**277.4414268**	**387.462063**	**405.7977951**	**444.6860461**	**467.49685**
-3.45	**-148.456194**	**-129.0589766**	**-122.933914**	**-105.2300513**	**-121.8449461**	**-169.6534943**	**-185.16551**	**-203.81479**	**-217.08405**
+3.45	**353.4621223**	**353.8093711**	**281.5653965**	**246.7335855**	**283.5531326**	**411.4100779**	**436.9806085**	**476.1681316**	**500.5420135**
-3.5	**-134.9601763**	**-117.3263431**	**-111.7581044**	**-95.66368339**	**-110.7681331**	**-154.2304492**	**-168.332281**	**-185.286174**	**-197.349136**
+3.5	**364.8431175**	**365.0445054**	**290.4494592**	**254.1002575**	**278.5934304**	**422.5970803**	**456.0472953**	**497.6221911**	**517.0052979**
-3.55	**-121.4641587**	**-105.5937097**	**-100.5822947**	**-86.09731553**	**-99.69132021**	**-138.8074041**	**-151.499053**	**-166.757558**	**-177.614222**
+3.55	**376.3750643**	***368.154712276994***	***294.9562269***	**255.0575043**	**292.3146165**	***436.5291022***	**463.928972**	**504.8444972**	**525.1393477**

-3.6	**-107.968141**	**-93.86107622**	**-89.406485**	**-76.53094767**	**-88.61450729**	**-123.384359**	**-134.665824**	**-148.228942**	**-157.879307**
+3.6	**377.2224511**	**370.7659626**	**298.1999666**	**254.7573954**	**302.1304537**	**437.6595862**	**461.0016776**	**500.3064083**	**525.385097**
-3.65	**-94.47212333**	**-82.12844275**	**-78.23067532**	**-66.96457981**	**-77.53769437**	**-107.9613139**	**-117.832596**	**-129.700326**	**-138.144393**
+3.65	**366.4275979**	**363.5361555**	**291.1538596**	**248.8840064**	**302.9761435**	**424.6215046**	**450.0173689**	**485.7770622**	**507.7215918**
-3.7	**-80.97610566**	**-70.39580929**	**-67.05486565**	**-57.39821195**	**-66.46088145**	**-92.53826879**	**-100.999367**	**-111.17171**	**-118.409479**
+3.7	**355.6930054**	**345.885219**	***280.0601229***	**236.8648756**	**293.9863684**	**396.4840581**	**423.3546006**	**461.4846356**	**471.3541727**
-3.75	**-67.48008799**	**-58.66317582**	**-55.87905597**	**-47.83184409**	**-55.38406853**	**-77.11522368**	**-84.1661384**	**-92.6430943**	**-98.6745645**
+3.75	**332.223241**	**317.3184741**	**263.3104581**	**222.3661218**	**274.3930555**	**369.4037876**	**385.401239**	**421.9320562**	**423.5503609**
-3.8	**-53.98407032**	**-46.93054235**	**-44.7032463**	**-38.26547623**	**-44.30725561**	**-61.69217858**	**-67.3329099**	**-74.1144783**	**-78.9396502**
+3.8	**295.1359303**	**277.4278749**	**235.7622178**	**198.4788167**	**243.5255985**	**328.1875604**	**344.2059804**	**366.6804207**	**366.6355344**
-3.85	**-40.48805265**	**-35.19790889**	**-33.52743662**	**-28.69910837**	**-33.23044269**	**-46.26913347**	**-50.4996813**	**-55.5858624**	**-59.2047359**
+3.85	**243.6700411**	**225.8904497**	**196.2568968**	**164.6386725**	**201.1808286**	**270.967866**	**285.5507161**	**292.2120034**	**292.1913335**
-3.9	**-26.99203498**	**-23.46527542**	**-22.35162695**	**-19.13274051**	**-22.15362977**	**-30.84608836**	**-33.6664528**	**-37.0572464**	**-39.4698216**
+3.9	**177.7651652**	**163.8747169**	**144.1408811**	**120.3748679**	**146.8811087**	**197.1772315**	**208.7718914**	**208.4268017**	**208.3863663**
-3.95	**-13.49601731**	**-11.73264196**	**-11.17581727**	**-9.566372647**	**-11.07681685**	**-15.42304325**	**-16.8332242**	**-18.5286305**	**-19.7349073**
+3.95	**97.49447668**	**89.3064089**	**78.86824841**	**65.33972648**	**80.46169204**	**108.0856581**	**114.9716784**	**114.7389365**	**114.7196546**
-5	**-3.11E-14**	**-3.25E-14**	**-2.99E-14**	**-2.50E-14**	**-3.34E-14**	**-2.59E-14**	**-2.60E-14**	**-2.52E-14**	**-3.09E-14**
+5	**5.59E-14**	**5.66E-14**	**4.85E-14**	**4.18E-14**	**5.96E-14**	**5.46E-14**	**5.48E-14**	**5.37E-14**	**5.37E-14**

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.23E-14	-3.83E-14	-2.56E-14	-2.73E-14	-2.90E-14
End Shear	2.52E-14	2.80E-14	2.54E-14	2.71E-14	2.67E-14
-0.05	-20.41258619	-21.83831141	-15.0369222	-17.0678133	-18.617173
+0.05	126.5337611	129.3824591	109.7580738	121.0902276	127.2678137
-0.1	-40.82517239	-43.67662283	-30.0738444	-34.1356265	-37.2343459
+0.1	230.9356634	234.6312977	203.4216277	224.0908029	234.8427189
-0.15	-61.23775858	-65.51493424	-45.1107666	-51.2034398	-55.8515189
+0.15	313.9770034	315.9847482	281.4497123	309.4095032	322.677707
-0.2	-81.65034477	-87.35324565	-60.1476888	-68.271253	-74.4686918
+0.2	376.8935449	374.596494	343.4738493	377.0286723	390.8006716
-0.25	-102.062931	-109.1915571	-75.184611	-85.3390663	-93.0858648
+0.25	424.3496253	413.7382133	389.955538	427.4411524	439.9378795
-0.3	-122.4755172	-131.0298685	-90.2215332	-102.40688	-111.703038
+0.3	471.7860425	462.1647741	421.4765901	463.7605639	487.9767655
-0.35	-142.8881034	-152.8681799	-105.258455	-119.474693	-130.320211
+0.35	501.0778384	490.1495495	438.7390635	501.1431574	521.6809833
-0.4	-163.3006895	-174.7064913	-120.295378	-136.542506	-148.937384
+0.4	518.4897504	498.4575288	448.2824773	521.9657305	538.5295436
-0.45	-183.7132757	-196.5448027	-135.3323	-153.610319	-167.554557
+0.45	523.6361808	495.0932503	453.2931939	526.991575	538.3199308
-0.5	-204.1258619	-218.3831141	-150.369222	-170.678133	-186.17173
+0.5	513.8832679	481.6557092	444.9637242	517.3742449	524.2002032
-0.55	-224.5384481	-240.2214255	-165.406144	-187.745946	-204.788903
+0.55	490.4819717	469.7938458	424.2516659	493.8816507	508.112114
-0.6	-244.9510343	-262.059737	-180.443066	-204.813759	-223.406075
+0.6	454.3026302	447.3098647	401.878084	457.5935863	476.1943382
-0.65	-265.3636205	-283.8980484	-195.479989	-221.881572	-242.023248
+0.65	411.4344221	409.7340578	370.3497049	409.7902867	429.8729475
-0.7	-285.7762067	-305.7363598	-210.516911	-238.949386	-260.640421
+0.7	360.8042603	352.7999193	327.1851186	353.3611112	370.9354948
-0.75	-306.1887929	-327.5746712	-225.553833	-256.017199	-279.257594
+0.75	295.2475207	284.6349433	273.5555134	293.9069014	300.4627308
-0.8	-326.6013791	-349.4129826	-240.590755	-273.085012	-297.874767
+0.8	219.1706956	213.9156478	210.7523874	225.9771334	225.5367366
-0.85	-348.3630328	-372.4679969	-258.334581	-291.675404	-319.78021
+0.85	142.2036498	142.6832187	141.8105237	151.2645586	141.4986639
-0.9	-427.7281666	-449.0388393	-326.230871	-364.540837	-403.16382
+0.9	95.42429708	91.86072145	76.88722329	82.01303818	71.52019118
-0.95	-539.6167044	-555.6962052	-403.160167	-464.889959	-504.914493
+0.95	76.02253616	74.26747016	50.17430183	58.0623376	61.24087635
-1	-657.0817258	-667.9394685	-485.005303	-573.135098	-613.345744
+1	63.79414032	66.49206885	52.81505464	61.11824856	64.46408293
(Span 2) -2	-657.0817258	-667.9394685	-485.005303	-573.135098	-613.345744
+2	63.79414032	66.49206885	52.81505464	61.11824856	64.46408293
-2.05	-474.7491996	-470.6604265	-373.254934	-443.168899	-470.689391
+2.05	76.01873834	66.7759498	42.31907099	45.50946138	52.6836608
-2.1	-322.5196571	-325.6186922	-280.123069	-321.146218	-345.54969
+2.1	98.39678306	100.4896374	94.21160184	94.84660071	89.42920775
-2.15	-231.163349	-245.3146664	-195.337577	-216.631885	-236.344898
+2.15	178.9951893	171.2380797	167.9530478	177.6024262	178.3145911
-2.2	-196.8801895	-205.2070178	-162.996934	-188.621495	-198.947978
+2.2	266.0079892	250.0076646	244.0098853	265.7970051	273.467594

-2.25	-180.5880538	-188.2258241	-149.508689	-173.012779	-182.484729
+2.25	366.7116607	349.9299818	316.2574858	352.1446082	364.8778817
-2.3	-164.295918	-171.2446304	-136.020444	-157.404062	-166.02148
+2.3	445.2199517	439.2281285	375.5319612	421.3624094	441.5880158
-2.35	-148.0037823	-154.2634368	-122.532198	-141.795346	-149.558231
+2.35	501.5610561	502.8545486	420.5388439	475.6631738	503.1018101
-2.4	-131.7116465	-137.2822431	-109.043953	-126.18663	-133.094982
+2.4	537.5144238	555.0403933	451.1638832	518.8780681	547.1329897
-2.45	-115.4195108	-120.3010495	-95.5557074	-110.577914	-116.631733
+2.45	556.3412004	585.7437021	474.7382395	545.7747902	571.8418538
-2.5	-99.12759676	-103.3198558	-82.0675656	-94.9696232	-100.168599
+2.5	556.0357535	593.9401799	483.1942768	555.2490276	576.8022542
-2.55	-115.4197705	-120.3010054	-95.5558276	-110.57841	-116.631867
+2.55	556.3698942	585.7465171	474.7202805	545.7933787	571.8672007
-2.6	-131.7119442	-137.2821939	-109.04409	-126.187198	-133.095135
+2.6	537.5323946	555.0411974	451.1682805	518.886196	547.147496
-2.65	-148.0041179	-154.2633825	-122.532352	-141.795985	-149.558403
+2.65	501.5742277	502.8505752	420.5307593	475.6616121	503.1060976
-2.7	-164.2962916	-171.2445711	-136.020614	-157.404772	-166.021671
+2.7	445.2220536	439.2251282	375.5593441	421.3569663	441.5963573
-2.75	-180.5884653	-188.2257596	-149.508876	-173.013559	-182.484939
+2.75	366.7021114	349.9281613	316.2754278	352.1298193	364.8916756
-2.8	-196.880639	-205.2069482	-162.997138	-188.622346	-198.948208
+2.8	266.0217385	250.0098057	244.0194244	265.7738873	273.480548
-2.85	-231.1637712	-245.3146199	-195.338156	-216.631676	-236.344168
+2.85	179.0075609	171.2395938	167.9517477	177.575473	178.2873107
-2.9	-322.5193485	-325.6184325	-280.123084	-321.1482	-345.551165
+2.9	98.38934559	100.4954306	94.20732937	94.89770795	89.42354548
-2.95	-474.7491831	-470.6601251	-373.257189	-443.170049	-470.691181
+2.95	75.99343271	66.77900281	42.28987059	45.50924799	52.66566041
-3	-657.0810271	-667.9394631	-485.007715	-573.134478	-613.347302
+3	63.79399172	66.4920888	52.8149896	61.11797055	64.46400739
(Span 3) -4	-6.57E+02	-6.68E+02	-4.85E+02	-5.73E+02	-6.13E+02
+4	6.38E+01	6.65E+01	5.28E+01	6.11E+01	6.45E+01
-3.05	-539.6175272	-555.6960589	-403.160285	-464.892233	-504.9171
+3.05	75.99232057	74.27137268	50.17424013	58.06207195	61.24080715
-3.1	-427.7276859	-449.0386029	-326.23236	-364.541527	-403.16469
+3.1	95.39406069	91.86464077	76.84501419	81.96801514	71.53775934
-3.15	*-348.3630481*	*-372.4680768*	*-258.335048*	*-291.676432*	*-319.781618*
+3.15	142.1924025	142.6837225	141.8189026	151.2734961	141.511496
-3.2	-326.6014988	-349.41304	-240.591143	-273.084758	-297.875296
+3.2	219.1804304	213.9188377	210.7753128	226.0012776	225.5474216
-3.25	-306.1889054	-327.5747253	-225.554197	-256.016961	-279.25809
+3.25	295.2361743	284.6368161	273.5765481	293.9288493	300.454505
-3.3	-285.7763121	-305.7364105	-210.517251	-238.949164	-260.640884
+3.3	360.7977414	352.797482	327.2029602	353.3680222	370.9246182
-3.35	-265.3637188	-283.8980957	-195.480305	-221.881367	-242.023677
+3.35	411.4688781	409.7303734	370.3631932	409.7815434	429.8579055
-3.4	-244.9511255	-262.059781	-180.443359	-204.81357	-223.406471
+3.4	454.2899434	447.3048009	401.8862451	457.5809095	476.2306504
-3.45	-224.5385321	-240.2214662	-165.406413	-187.745773	-204.789265
+3.45	490.4645483	469.7894421	424.2751199	493.8637523	508.1420047
-3.5	-204.1259388	-218.3831514	-150.369467	-170.677976	-186.172059
+3.5	513.9166673	481.6577713	444.9818561	517.3501387	524.2224603
-3.55	-183.7133455	-196.5448367	-135.332521	-153.610179	-167.554852
+3.55	523.6627762	495.0983341	453.3051924	527.0196755	538.2983057
-3.6	-163.3007522	-174.7065219	-120.295575	-136.542382	-148.937646

+3.6	**518.5089437**	**498.4527512**	**448.2874072**	**521.9859088**	**538.4998812**
-3.65	**-142.8881588**	**-152.8682072**	**-105.258629**	**-119.474585**	**-130.32044**
+3.65	**501.0433662**	**490.1534429**	**438.7327406**	**501.1547616**	**521.7001184**
-3.7	**-122.4755655**	**-131.0298924**	**-90.2216825**	**-102.406788**	**-111.703234**
+3.7	**471.7422748**	**462.1670489**	**421.462954**	**463.7629315**	**487.986316**
-3.75	**-102.0629722**	**-109.1915776**	**-75.1847364**	**-85.3389914**	**-93.0860276**
+3.75	**424.3406257**	**413.7366164**	**389.9338906**	**427.4319465**	**439.9343976**
-3.8	**-81.65037887**	**-87.35326286**	**-60.1477904**	**-68.2711945**	**-74.4688214**
+3.8	**376.8825706**	**374.5941053**	**343.4437679**	**377.0100358**	**390.787327**
-3.85	**-61.23778555**	**-65.5149481**	**-45.1108443**	**-51.2033976**	**-55.8516152**
+3.85	**314.0122338**	**315.9805407**	**281.4106422**	**309.3809558**	**322.6537307**
-3.9	**-40.82519222**	**-43.67663333**	**-30.0738983**	**-34.1356007**	**-37.2344089**
+3.9	**230.9596486**	**234.6250003**	**203.3730821**	**224.0518626**	**234.8076029**
-3.95	**-20.4125989**	**-21.83831857**	**-15.0369522**	**-17.0678038**	**-18.6172027**
+3.95	**126.5476209**	**129.3741956**	**109.7677297**	**121.100888**	**127.2795804**
-5	**-4.58E-14**	**-4.55E-14**	**-4.00E-14**	**-4.51E-14**	**-4.31E-14**
+5	**6.65E-14**	**7.67E-14**	**7.18E-14**	**7.08E-14**	**7.93E-14**

3-Span: Shear (Max and Min) Raw Data Results - 30' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-6.152575861	-4.665458441	-4.055890835	-3.863386078	-3.442143551	-3.829139395	-5.331607302	-5.81913162	-6.405187119	-6.822193433
End Shear	46.84102118	36.56889209	33.65012326	29.77150345	25.51222655	30.17429966	40.52627075	43.25266153	43.07248513	43.0662878
-0.05	-6.152575861	-4.665458441	-4.055890835	-3.982856194	-3.589698131	-3.829139395	-5.331607302	-5.81913162	-6.405187119	-6.822193433
+0.05	42.9223655	33.69916257	30.86944504	27.2615248	23.13771361	27.81164446	37.36000946	39.74008233	39.65981297	39.65328545
-0.1	-6.152575861	-4.665458441	-4.744023418	-4.937413456	-4.336335972	-3.829139395	-5.331607302	-5.81913162	-6.405187119	-6.822193433
+0.1	38.10980302	30.04204924	27.48631752	24.13913372	20.3829333	24.82936654	33.32616306	35.24606254	35.1911718	35.1842643
-0.15	-7.773972703	-4.665458441	-5.131913654	-5.413005601	-4.73552996	-3.829139395	-5.331607302	-5.81913162	-6.405187119	-6.822193433
+0.15	35.77853165	28.24524921	25.98806652	22.61233569	19.04081122	23.3609403	31.34057537	33.04364125	33.00044872	32.99338027
-0.2	-10.94359812	-5.564941396	-6.738701322	-7.468280069	-6.422425173	-5.230537427	-5.374938617	-5.81913162	-6.405187119	-6.822193433
+0.2	31.21682071	24.73074015	23.23623692	19.64129162	16.43910895	20.4819775	27.4488879	28.74729858	28.7253844	28.71805921
-0.25	-12.45239889	-6.957899004	-8.350263387	-8.628304766	-7.344032565	-6.098187632	-6.720361094	-6.721674836	-6.701467689	-6.822193433
+0.25	28.99438985	23.01926711	21.87615427	18.20254653	15.18423036	19.07642438	25.54952311	26.66111269	26.64871508	26.64129695
-0.3	-15.3186932	-9.731648212	-11.69029195	-10.85874097	-9.143530906	-7.817631983	-9.704324744	-9.706397781	-9.682021022	-9.659144883
+0.3	24.58435113	19.70346642	19.19863753	15.43236484	13.0608935	16.34563235	21.86057356	22.76967315	22.90215786	22.91213471
-0.35	-16.67647892	-11.10805195	-13.43672486	-11.92954649	-10.02162658	-8.666686449	-11.35058263	-11.3528768	-11.32881718	-11.30623767
+0.35	22.50944123	18.10537089	17.88559958	14.2549007	12.12954268	15.02537557	20.07771932	20.94373672	21.00192603	21.13030904
-0.4	-19.195739	-13.82894832	-16.75813413	-13.98334649	-11.73481497	-10.33660459	-14.61403956	-14.61675686	-14.59344154	-14.69687599
+0.4	18.5330228	15.32731877	15.32197294	12.21407732	10.34275158	12.48760671	16.59268983	17.53508104	17.52755828	17.6637107
-0.45	-20.39002058	-15.16905164	-18.33281809	-14.96673419	-12.57003386	-11.15472796	-16.2260038	-16.52898059	-16.50159186	-16.57306916
+0.45	16.49891501	14.08181599	14.07577048	11.22194045	9.481507313	11.27507746	15.13218952	15.8935336	15.88600556	16.01825882
-0.5	-22.71877405	-17.79760288	-21.30944744	-17.06185412	-14.38778263	-13.41665597	-19.39731764	-20.3351218	-20.30873546	-20.72039584
+0.5	12.93248456	11.67289159	11.66559607	9.326239968	7.832054058	8.838458071	12.35797501	12.75160195	12.74413928	12.86785271
-0.55	-24.03624378	-19.21882441	-22.71110671	-18.20907192	-15.36498257	-14.90418592	-20.95143098	-22.20727623	-22.18145206	-22.73813166
+0.55	11.69207668	10.51385744	10.50602011	8.443638046	7.071327667	7.998967067	11.02983208	11.2574462	11.25006823	11.36913785
-0.6	-27.01165542	-22.15383779	-25.34038764	-20.34767735	-17.22324236	-17.83044395	-24.09785506	-25.87416036	-25.84956905	-26.64924841
+0.6	9.537054062	8.29761628	8.28887476	6.745922416	5.648017268	6.525732484	8.504556265	8.518258827	8.595521549	8.61025215
-0.65	-29.44257142	-23.54890891	-26.56773417	-21.34119546	-18.1055828	-19.26418935	-25.89331318	-27.66265558	-27.63873253	-28.53764083
+0.65	8.50409317	7.24479707	7.235706131	5.934680754	4.971869667	5.81956435	7.312663339	7.325639576	7.399554849	7.41353438
-0.7	-34.16467151	-26.23511495	-28.84711279	-23.25239832	-19.83642631	-22.06044674	-29.69046793	-31.13416849	-31.11168456	-32.16758678
+0.7	6.537373066	5.260730549	5.251161732	4.397082844	3.745779323	4.474976516	5.083450791	5.094921199	5.161684289	5.083277668
-0.75	-36.44873472	-27.93532127	-29.89886091	-24.13167412	-20.65093563	-23.41798053	-31.53494082	-32.96146838	-32.96146838	-33.90415144
+0.75	5.607654572	4.333873397	4.324186734	3.674593077	3.177861018	3.839298347	4.186948714	4.183745654	4.19449135	4.130045259
-0.8	-40.845049	-31.22545574	-31.82576936	-25.72907894	-22.20008317	-26.03938907	-35.09883646	-36.93676028	-36.87308151	-37.44617992
+0.8	3.865599155	2.621479108	2.611812727	2.175504616	2.123226315	2.648027379	2.532895185	2.529831395	2.486072827	2.481676252
-0.85	-42.95016297	-32.80915074	-32.70064181	-26.48749922	-23.39699492	-27.29828076	-36.81153644	-38.95014321	-38.86751829	-39.27286426
+0.85	3.066308578	1.840330301	1.830817247	1.605701317	1.6395576	2.095175875	1.76033594	1.775389597	1.734436087	1.730243044
-0.9	-46.95651124	-35.83821735	-34.27251697	-29.23632469	-25.73349969	-29.69998681	-40.08160093	-42.81584297	-42.81418597	-43.33390676
+0.9	1.642062522	0.863605952	0.864626952	1.094128127	1.026332461	1.081891142	0.904406248	0.960134963	1.061099417	1.127875713
-0.95	-48.85060714	-37.27735136	-34.96923188	-30.5504216	-26.86132069	-30.83781278	-41.63223476	-44.66042345	-44.76351678	-45.36235627
+0.95	1.005274408	0.766789168	0.716662737	0.855019235	0.795596126	0.637109228	0.904406248	0.960134963	1.061099417	1.127875713
-1	-52.66377449	-39.9892441	-36.20691772	-33.04422515	-29.02944765	-32.97495712	-44.54788413	-48.15372346	-48.79233827	-49.22223927
+1	1.01E+00	0.766789168	0.716662737	0.610972851	5.38E-01	0.637109228	0.904406248	0.960134963	1.061099417	1.127875713
(Span 2) -2	-3.949749204	-3.012734601	-2.815786597	-2.400528208	-2.113918853	-2.50321866	-3.553435637	-3.772395179	-4.169087043	-4.431453014
+2	54.42708185	40.96240689	40.44844444	34.69778034	30.3617557	33.53864381	45.35740679	49.57552937	51.21158921	51.86136447
-2.05	-3.949749204	-3.012734601	-2.815786597	-2.469330749	-2.324188079	-2.50321866	-3.553435637	-3.772395179	-4.169087043	-4.431453014
+2.05	51.8454681	39.2406589	38.02399415	32.78615851	28.71687277	32.16672876	43.48229744	47.36104508	48.55718481	48.80238911
-2.1	-3.949749204	-3.012734601	-2.815786597	-2.781098264	-2.601321079	-2.50321866	-3.553435637	-3.772395179	-4.169087043	-4.431453014
+2.1	48.23568563	36.79506491	34.93539282	30.22698416	26.50946892	30.20920549	40.81101027	44.23867724	44.87875499	44.86487991
-2.15	-3.9803126	-3.012734601	-2.844984779	-3.196515728	-3.190016194	-2.50321866	-3.553435637	-3.772395179	-4.169087043	-4.431453014
+2.15	44.47830167	34.20858562	31.85326737	27.9194909	24.52811074	28.12941262	37.97703743	40.96012501	41.08360543	41.06893297
-2.2	-5.510284906	-3.6503346	-4.239598847	-4.293340574	-4.039693346	-3.266954587	-3.553435637	-3.772395179	-4.169087043	-4.431453014
+2.2	40.68309809	31.51444762	29.67761918	25.54213621	22.50539364	25.9539107	35.01624954	37.56661443	37.45768669	37.44505831
-2.25	-7.352709324	-5.297892776	-5.993052824	-5.942726228	-5.058439238	-4.393212958	-5.287509855	-5.292825682	-5.282430451	-5.272674302

+2.25	36.93451635	28.74588197	27.9487116	23.12424809	20.46078632	23.70927809	31.96454448	33.92515336	34.01507794	34.00183935
-2.3	-9.877941616	-7.088353073	-7.851329303	-7.653510651	-6.322998	-5.59412527	-7.312370762	-7.318457402	-7.307399938	-7.297019214
+2.3	33.03315828	25.67722414	26.04252946	20.69515334	18.41348048	21.42207479	28.6776329	30.16199534	30.3694041	30.52431087
-2.35	-12.28505585	-9.070304168	-9.896216987	-9.325181618	-7.664379023	-6.976064657	-9.495849422	-9.672593283	-9.65967402	-9.647546225
+2.35	29.17344011	22.76753115	23.96435773	18.86654619	16.38242025	18.87768945	25.34178912	26.6752782	26.63652035	26.94231707
-2.4	-14.57184757	-11.19524477	-12.28528024	-10.95629688	-9.031959559	-8.537288462	-11.8100398	-12.28285986	-12.26944732	-12.37730356
+2.4	25.48829319	19.98089323	21.71947277	16.93740756	14.44255935	16.54209937	22.23758173	23.24367736	23.22246982	23.69310181
-2.45	-16.91023891	-13.27982746	-14.73199836	-12.54541462	-10.39228933	-10.53778547	-14.22703673	-15.03908401	-15.02538412	-15.31014866
+2.45	21.91273583	17.25692685	19.31315882	15.35057573	12.84768937	14.29339588	19.19050172	20.11066837	20.09702389	20.39752594
-2.5	-19.38447457	-15.4115299	-17.40798552	-14.18287456	-11.84920842	-12.65180563	-16.96739493	-17.90802998	-17.89424114	-18.18921194
+2.5	18.77134261	14.87321852	16.75069196	13.76457855	11.48548642	12.11175184	16.2364546	17.17907437	17.16537482	17.45820394
-2.55	-21.66047203	-17.2597499	-19.31538339	-15.35190544	-12.84833474	-14.29584389	-19.19370215	-20.1137216	-20.09997497	-20.40038023
+2.55	16.90803905	13.27760914	14.72954832	12.54413082	10.39166478	10.53551749	14.2244199	15.03618381	15.02257558	15.30743195
-2.6	-25.22869744	-19.98379611	-21.72155235	-16.93867903	-14.44340434	-16.54460351	-22.24085752	-23.24716317	-23.22582923	-23.69626504
+2.6	14.56989483	11.19309118	12.2831709	10.95498092	9.031320149	8.535164485	11.80752313	12.28009938	12.26677424	12.4400466
-2.65	-28.87571876	-22.77048742	-23.96628607	-18.86807704	-16.38334031	-18.83382974	-25.34510644	-26.67884892	-26.63995922	-26.94542682
+2.65	12.28300135	9.142068102	9.894073298	9.323831832	7.663725519	6.974649362	9.493458361	9.67000165	9.657164438	9.645118694
-2.7	-32.97824871	-25.60634024	-26.04431231	-20.69713435	-18.41440994	-21.42461362	-28.60896578	-30.16560258	-30.3053032	-30.5276686
+2.7	9.875783073	7.08640436	7.849646401	7.65212838	6.322326291	5.592768726	7.310135034	7.316290153	7.305301172	7.294988932
-2.75	-36.98543023	-28.71189895	-27.9503353	-23.12623241	-20.46169499	-23.71178385	-31.96783065	-33.8590889	-34.01853289	-34.00518799
+2.75	7.350443383	5.296081057	5.991457113	5.941313086	5.057827173	4.391931543	5.285456062	5.290842075	5.280505954	5.270812609
-2.8	-40.72942691	-31.51733908	-29.67908947	-25.5440957	-22.50629269	-25.9563629	-35.01946859	-37.57015808	-37.4610988	-37.44835253
+2.8	5.50753636	3.648690649	4.238107104	4.292207689	4.039245024	3.265762441	3.553429299	3.772416986	4.169101467	4.431439673
-2.85	-44.33795539	-34.21138524	-31.8560045	-27.9214059	-24.52899013	-28.13177243	-37.98013847	-40.96358279	-41.08743455	-41.07264427
+2.85	3.979040956	3.012756317	2.844198962	3.195885603	3.189658795	2.503228316	3.553429299	3.772416986	4.169101467	4.431439673
-2.9	-47.87884485	-36.79773858	-34.9381245	-30.22883048	-26.51030661	-30.21144821	-40.8139674	-44.24199456	-44.88250418	-44.86849956
+2.9	3.949259577	3.012756317	2.815786538	2.780844871	2.601189778	2.503228316	3.553429299	3.772416986	4.169101467	4.431439673
-2.95	-51.50470348	-39.24317259	-37.99179341	-32.78826719	-28.71783315	-32.16882833	-43.48505992	-47.36418906	-48.560799	-48.80638409
+2.95	3.949259577	3.012756317	2.815786538	2.469071464	2.324044118	2.503228316	3.553429299	3.772416986	4.169101467	4.431439673
-3	-54.93963254	-41.51444575	-41.1839622	-35.32713155	-30.90556194	-33.97732898	-45.95753717	-50.28893109	-52.07608089	-52.86648768
+3	3.949259577	3.012756317	2.815786538	2.40053727	2.113911193	2.503228316	3.553429299	3.772416986	4.169101467	4.431439673
(Span 3) -4	-1.01E+00	-0.766794695	-0.716662722	-0.610975157	-5.38E-01	-0.637111685	-0.904404635	-0.960140513	-1.061103088	-1.127872318
+4	51.44510007	39.33023355	35.90135294	32.43642452	28.50363604	32.456451	43.84017212	47.30255248	47.75106478	48.23891077
-3.05	-1.01E+00	-0.766794695	-0.716662722	-0.740517504	-6.93E-01	-0.637111685	-0.904404635	-0.960140513	-1.061103088	-1.127872318
+3.05	49.66389553	37.97376919	35.29409098	31.18909712	27.41334155	31.38745471	42.38179766	45.55527697	45.70617715	46.34068657
-3.1	-1.982990768	-1.057459337	-1.058515995	-1.218482707	-1.151081985	-1.324295626	-1.021781246	-1.020343208	-1.061103088	-1.127872318
+3.1	45.86791976	35.0960618	33.90047833	28.56145259	25.15810951	29.11223165	39.28112089	41.86681946	41.80806985	42.28420291
-3.15	-2.695454572	-1.462913351	-1.464311988	-1.474434466	-1.413710151	-1.831179284	-1.413419451	-1.411940413	-1.416902051	-1.393307589
+3.15	43.86026613	33.58104372	33.11441919	27.1866387	23.98958805	27.91098167	37.64554981	39.93337058	39.84144329	40.24430636
-3.2	-4.285808563	-3.032952928	-3.022979519	-2.496197316	-2.376761839	-2.936676377	-2.9303697	-2.927209118	-2.882044941	-2.877507291
+3.2	39.64346281	30.41424429	31.36449884	25.34847805	21.80706047	25.39366114	34.22079129	35.90737205	35.85332799	36.57832081
-3.25	-5.157089233	-3.889527464	-3.87952665	-3.258780482	-2.904296634	-3.532544831	-3.757766012	-3.754531046	-3.748029576	-3.702044851
+3.25	37.44144298	28.76870916	30.40092355	24.54974303	21.04451428	24.08257396	32.43832245	33.82253959	33.787419	34.79578431
-3.3	-7.016021729	-5.742890003	-5.733097089	-4.771482383	-4.039785832	-4.80367104	-5.622910095	-5.63468978	-5.70322688	-5.622728233
+3.3	32.86799591	25.5443003	28.2972458	22.79090352	19.41540428	21.36799705	28.75006257	30.27690013	30.25416077	31.27576872
-3.35	-7.999633789	-6.735284316	-6.725717908	-5.540574817	-4.644655911	-5.476188044	-6.737953783	-6.750487227	-6.822597924	-6.819791227
+3.35	30.50369877	24.2248764	27.15743617	21.82997414	18.54867075	19.96950159	26.85098757	28.54067581	28.51722093	29.46039596
-3.4	-10.06505013	-8.840543605	-8.831645119	-7.162669729	-5.995910435	-6.888277631	-9.121306996	-9.13527683	-9.214080294	-9.229098574
+3.4	25.9280474	21.43487461	24.70258086	19.83047092	16.76966582	17.10254506	23.34807616	24.96434013	24.93953948	25.68405639
-3.45	-11.14281464	-9.949012775	-9.940554962	-8.011806142	-6.707763786	-7.625109392	-10.38436292	-10.53388164	-10.52645591	-10.64302237
+3.45	24.51780976	19.96709641	23.38780878	18.76121336	15.84056751	15.63906726	21.71618776	23.1304492	23.10503451	23.72809875
-3.5	-13.89634405	-12.26667502	-12.25928253	-9.77660348	-8.230879058	-9.396589355	-13.04017334	-13.52163888	-13.51404752	-13.63988261
+3.5	21.96728966	17.14485583	20.58432982	16.46632909	13.88594109	12.66457206	18.60852104	19.38682267	19.36029043	19.69310062
-3.55	-15.68429108	-13.47147048	-13.46469387	-10.73528606	-9.059472016	-10.66239116	-14.42769216	-15.0930873	-15.08546926	-15.21557218
+3.55	20.8024997	15.83026089	19.09589797	15.44607752	12.98155066	11.60701883	17.02250495	17.48332305	17.45630434	17.619057
-3.6	-19.46779529	-15.96203298	-15.95663264	-12.71918273	-10.78160286	-13.11116329	-17.3315002	-18.37558822	-18.36797489	-18.50587648
+3.6	18.38291378	13.15054309	15.94634724	13.47915676	11.31106926	9.921241193	13.79915657	13.80188937	13.77847965	13.88232598

-3.65	**-21.45535342**	**-17.24341947**	**-17.2387708**	**-13.73984646**	**-11.70323482**	**-14.3804386**	**-19.1889517**	**-20.08039227**	**-20.07280652**	**-20.21424907**
+3.65	**17.1014967**	**11.7897885**	**14.28552632**	**12.45223835**	**10.4544586**	**9.0860893**	**12.16708495**	**12.16959742**	**12.14581693**	**12.12350623**
-3.7	**-25.60207824**	**-20.52148046**	**-19.8643554**	**-16.11285927**	**-13.53321208**	**-17.02047859**	**-22.7719019**	**-23.66870844**	**-23.80106621**	**-23.8109789**
+3.7	**14.38999774**	**9.037499794**	**10.79249256**	**10.31047256**	**8.698215233**	**7.38829069**	**8.875197595**	**8.877262687**	**8.852848995**	**8.829942947**
-3.75	**-27.75326458**	**-22.17985032**	**-21.20341552**	**-17.4983518**	**-14.57046804**	**-18.38624957**	**-24.61687417**	**-25.62200921**	**-25.63198706**	**-25.62514997**
+3.75	**12.95958397**	**7.650342853**	**9.141414217**	**9.195226193**	**7.79845334**	**6.528384265**	**7.389144642**	**7.390636877**	**7.434868768**	**7.35185936**
-3.8	**-32.22391551**	**-25.60216487**	**-23.92308575**	**-20.37526503**	**-17.07967307**	**-21.19684294**	**-28.4149082**	**-29.81097601**	**-29.78386303**	**-29.77644805**
+3.8	**9.948601824**	**4.86496512**	**6.058428942**	**6.875028238**	**5.955176999**	**4.793405727**	**5.331620468**	**5.819109343**	**6.405190891**	**6.822198359**
-3.85	**-34.64471603**	**-27.35986581**	**-25.2992897**	**-21.86117394**	**-18.38084235**	**-22.63668263**	**-30.36124146**	**-31.95971546**	**-31.92195551**	**-31.91466637**
+3.85	**8.367700976**	**4.665462853**	**5.313070824**	**5.692248965**	**5.011458777**	**3.921080483**	**5.331620468**	**5.819109343**	**6.405190891**	**6.822198359**
-3.9	**-39.3067977**	**-30.95279809**	**-28.32508166**	**-24.91416765**	**-21.06451002**	**-25.57298571**	**-34.33168145**	**-36.36372398**	**-36.30255952**	**-36.29560431**
+3.9	**6.152695536**	**4.665462853**	**4.53681872**	**4.708476864**	**4.154117938**	**3.829163571**	**5.331620468**	**5.819109343**	**6.405190891**	**6.822198359**
-3.95	**-41.67922098**	**-32.78178231**	**-30.01709385**	**-26.47575078**	**-22.44221561**	**-27.06447799**	**-36.34907168**	**-38.61127852**	**-38.53741569**	**-38.53064897**
+3.95	**6.152695536**	**4.665462853**	**4.097972847**	**4.23135403**	**3.780931963**	**3.829163571**	**5.331620468**	**5.819109343**	**6.405190891**	**6.822198359**
-5	**-46.59597825**	**-36.48923194**	**-33.47159577**	**-29.6553146**	**-25.25736713**	**-30.08163732**	**-40.43133559**	**-43.17814456**	**-43.07704122**	**-43.07070383**
+5	**6.152695536**	**4.665462853**	**4.055875366**	**3.863385939**	**3.442143484**	**3.829163571**	**5.331620468**	**5.819109343**	**6.405190891**	**6.822198359**

3-Span: Shear (Max and Min) Raw Data Results - 30' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.152575861	-6.665956278	-7.051333949	-6.643864595	-7.846559098	-4.887557947	-5.183106162	-2.948122849
End Shear	46.84102118	52.29197145	54.38233912	50.14203978	56.75156713	38.60797367	40.85867698	25.70316312
-0.05	-6.152575861	-6.665956278	-7.051333949	-6.643864595	-7.846559098	-4.887557947	-5.183106162	-2.948122849
+0.05	42.9223655	48.38809265	50.20593102	46.24719541	52.09510639	35.87812631	37.95755934	23.62995584
-0.1	-6.152575861	-6.665956278	-7.051333949	-6.643864595	-7.846559098	-5.162495741	-5.493702762	-2.948122849
+0.1	38.10980302	43.42820222	44.91120785	41.28085241	46.18201711	32.26674395	34.12084386	21.14254315
-0.15	-7.773972703	-6.665956278	-7.051333949	-6.643864595	-7.846559098	-5.595697155	-5.970627803	-3.655724811
+0.15	35.77853165	40.97721482	42.29972492	38.83435245	43.27982366	30.47984082	32.2229935	19.92199974
-0.2	-10.94359812	-7.903003458	-7.903003458	-6.643864595	-7.846559098	-7.452052918	-7.903129729	-5.484755838
+0.2	31.21682071	36.15341075	37.17032968	34.03524952	37.60905333	26.95827161	28.48390435	17.39231613
-0.25	-12.45239889	-9.881347854	-9.881347854	-7.90630717	-7.90630717	-9.179107428	-9.72214861	-6.39450384
+0.25	28.99438985	33.78869323	34.66113965	31.69087842	34.85045463	25.22947963	26.6489146	16.23653265
-0.3	-15.3186932	-13.82077097	-13.82077097	-11.59170276	-11.82035293	-12.8908671	-13.62895496	-8.197232804
+0.3	24.58435113	29.1738698	29.77557409	27.13305677	29.51175056	21.85056031	23.06366109	14.24560041
-0.35	-16.67647892	-15.77561968	-15.77561968	-13.71018316	-14.17644939	-14.8467265	-15.68699666	-9.087322686
+0.35	22.50944123	26.93186247	27.4079203	24.92783252	26.9416168	20.20630606	21.3196453	13.36126492
-0.4	-19.195739	-19.6400159	-19.6400159	-17.91396714	-18.85678638	-18.5493804	-19.58194788	-10.98942665
+0.4	18.5330228	22.59891593	22.84468803	20.59736292	22.10928319	17.02287445	17.94443787	11.62508085
-0.45	-20.39002058	-21.54333135	-21.54333135	-19.99254042	-21.17354896	-20.29650584	-21.41926272	-12.00955232
+0.45	16.49891501	20.51607476	20.65783065	18.72437275	20.09295024	15.48957015	16.31949418	10.77612259
-0.5	-22.71877405	-25.39744824	-25.39744824	-24.08622423	-25.74156724	-23.58321833	-24.87462336	-13.95775171
+0.5	12.93248456	16.58558969	16.58558969	15.20183045	16.22252246	12.63452944	13.29950468	9.123706926
-0.55	-24.03624378	-27.6532973	-27.83760544	-26.09460259	-27.98534294	-25.12314329	-26.49308182	-14.88424138
+0.55	11.69207668	14.93933848	14.93933848	13.51846294	14.37590539	11.38156435	11.98059405	8.323140617
-0.6	-27.01165542	-32.3886742	-32.96940171	-30.16568696	-32.53950059	-28.35036864	-29.90199003	-16.63806222
+0.6	9.537054062	11.79140157	11.79140157	10.32435422	10.8785562	8.985529096	9.45845168	6.780520007
-0.65	-29.44257142	-34.70067557	-35.48002264	-32.36262396	-35.23940797	-30.09126244	-31.75543337	-17.46381257
+0.65	8.50409317	10.29594595	10.29594595	8.820350052	9.235306047	7.847200745	8.260211311	6.041356746
-0.7	-34.16467151	-39.19304009	-40.36888675	-37.00584694	-40.96665726	-33.37236991	-35.25100767	-19.00903703
+0.7	6.537373066	7.477642949	7.477642949	6.015263554	6.157158875	5.668867779	5.967229241	4.63455534
-0.75	-36.44873472	-41.36531428	-42.73841903	-39.25970328	-43.75805555	-34.91082538	-36.89122218	-19.72693766
+0.75	5.607654572	6.161025906	6.161025906	4.925822017	4.925822017	4.668156133	4.913848561	3.969809353
-0.8	-40.845049	-45.54178081	-47.30585901	-43.61132228	-49.17144919	-37.77912314	-39.95169218	-21.4003651
+0.8	3.865599155	3.728430872	3.728430872	2.979876689	2.979876689	2.819570557	2.967969007	2.724856569
-0.85	-42.95016297	-47.53787555	-49.49504631	-45.70086795	-51.78348503	-39.10721872	-41.37004346	-22.47704861
+0.85	3.066308578	2.537618757	2.537618757	2.070983458	2.070983458	1.976450437	2.080474144	2.147540647
-0.9	-46.95651124	-51.32554795	-53.66255854	-49.68685027	-56.79328688	-41.54688891	-43.97816723	-24.53329705
+0.9	1.642062522	1.228860516	1.208508109	1.139012207	1.325000443	0.933404095	0.982530627	1.084198009
-0.95	-48.85060714	-53.10901893	-55.63215315	-51.57506033	-59.18108144	-42.65670541	-45.16602336	-25.50845376
+0.95	1.005274408	1.153925165	1.208508109	1.139012207	1.325000443	0.852443413	0.902547029	0.607785025
-1	-52.66377449	-56.4349935	-59.3212259	-55.12135904	-63.69753754	-44.65191322	-47.30454093	-27.34181196
+1	1.01E+00	1.153925165	1.208508109	1.139012207	1.325000443	0.852443413	0.902547029	0.478529346
(Span 2) -2	-3.949749204	-4.533801894	-4.74825983	-4.475208552	-5.205961172	-3.349272271	-3.546130677	-1.880154266
+2	54.42708185	57.01257369	60.11978828	56.00662774	65.16898395	45.79919221	48.25205613	28.09394527
-2.05	-3.949749204	-4.533801894	-4.74825983	-4.475208552	-5.205961172	-3.349272271	-3.546130677	-1.880154266
+2.05	51.8454681	54.85363244	57.73284642	53.71640326	62.27058747	43.12753224	45.43800271	26.95146832
-2.1	-3.949749204	-4.533801894	-4.74825983	-4.475208552	-5.205961172	-3.349272271	-3.546130677	-1.880154266
+2.1	48.23568563	51.7418304	54.31370011	50.44853701	58.17717267	40.29130429	42.68197876	25.32444169
-2.15	-3.9803126	-4.533801894	-4.74825983	-4.475208552	-5.205961172	-3.349272271	-3.546130677	-2.386321248
+2.15	44.47830167	48.40306971	50.66681714	46.97604865	53.87091976	38.23016423	40.4799004	23.60040129
-2.2	-5.510284906	-5.179032777	-5.179032777	-4.475208552	-5.205961172	-4.598549231	-4.871999881	-3.479319164
+2.2	40.68309809	44.88053933	46.83870926	43.34277999	49.40497063	35.95015987	38.04771409	21.80284091
-2.25	-7.352709324	-7.518348162	-7.518348162	-6.318902306	-6.447451698	-6.495736083	-6.875195168	-4.665340865

+2.25	36.93451635	41.21740707	42.87586472	39.5926069	44.83250844	33.46443394	35.39960484	19.95525627
-2.3	-9.877941616	-10.06068184	-10.06068184	-8.870621869	-9.220864679	-8.504421767	-8.993352382	-5.928967847
+2.3	33.03315828	37.45686495	38.82479801	35.5574133	39.99473709	30.78612301	32.54975106	18.0811402
-2.35	-12.28505585	-12.77282666	-12.77282666	-11.63371529	-12.23803617	-10.73204748	-11.33981909	-7.254788568
+2.35	29.17344011	33.26174569	34.35167748	31.4357104	35.02989973	27.92836711	29.51233489	16.20398624
-2.4	-14.57184757	-15.75171347	-15.75171347	-14.57230325	-15.45910011	-13.3820421	-14.12898244	-8.627383418
+2.4	25.48829319	29.33973349	30.13614593	27.60328967	30.44339219	24.90430611	26.3015383	14.59061077
-2.45	-16.91023891	-19.15175419	-19.34444858	-17.65050739	-18.99041977	-16.09532245	-16.98311172	-10.03133652
+2.45	21.91273583	25.55350332	26.10955151	23.83490718	25.99403161	21.72707099	22.93153375	12.95445827
-2.5	-19.38447457	-22.76848118	-23.1593283	-21.08090568	-22.76754916	-19.25452204	-20.31125225	-11.45123145
+2.5	18.77134261	21.84802689	22.1866034	20.17444777	21.82944804	18.40980094	19.4165025	11.2382102
-2.55	-21.66047203	-25.55760694	-26.11390573	-23.8388691	-25.99868866	-21.72996405	-22.93460046	-12.63923424
+2.55	16.90803905	19.14788634	19.34038009	17.64717036	19.07140566	16.09256361	16.98020995	10.03990297
-2.6	-25.22869744	-29.34389657	-30.14058262	-27.60733733	-30.4481908	-24.90707726	-26.30447875	-14.34792603
+2.6	14.56989483	15.89779017	15.85723458	14.56910289	15.45558649	13.37970833	14.12652673	8.635797053
-2.65	-28.87571876	-33.16771369	-34.24724928	-31.43980272	-35.01045447	-27.93099562	-29.51512688	-16.20463216
+2.65	12.28300135	12.76978355	12.76978355	11.63068449	12.23472057	10.72966019	11.33730542	7.262956107
-2.7	-32.97824871	-37.40664833	-38.7748922	-35.47681027	-39.91497707	-30.78860478	-32.55239	-18.08178896
+2.7	9.875783073	10.05781314	10.05781314	8.867798701	9.217789257	8.502603235	8.991435585	5.928526353
-2.75	-36.98543023	-41.22148646	-42.88026612	-39.59664861	-44.83741273	-33.4667453	-35.40206538	-19.95590081
+2.75	7.350443383	7.515685944	7.515685944	6.316320927	6.444654353	6.494010255	6.873373899	4.664918928
-2.8	-40.72942691	-44.88448759	-46.84298796	-43.34673383	-49.40980614	-35.95229068	-38.0499853	-21.80347243
+2.8	5.50753636	5.176608458	5.176608458	4.475196817	5.205960286	4.596934066	4.870292815	3.478929449
-2.85	-44.33795539	-48.40685167	-50.67093485	-46.97985186	-53.87560981	-38.23211127	-40.48197863	-23.60101124
+2.85	3.979040956	4.533795334	4.748259104	4.475196817	5.205960286	3.34927694	3.546141226	2.38596962
-2.9	-47.87884485	-51.74539328	-54.31760028	-50.45215808	-58.18167971	-40.29305228	-42.68384761	-25.32502323
+2.9	3.949259577	4.533795334	4.748259104	4.475196817	5.205960286	3.34927694	3.546141226	1.880156153
-2.95	-51.50470348	-54.85692593	-57.7364749	-53.71978038	-62.27483649	-43.13074938	-45.44139223	-26.95201233
+2.95	3.949259577	4.533795334	4.748259104	4.475196817	5.205960286	3.34927694	3.546141226	1.880156153
-3	-54.93963254	-57.69827675	-60.88106534	-56.73886656	-66.10192664	-46.67688442	-49.17627831	-28.45849275
+3	3.949259577	4.533795334	4.748259104	4.475196817	5.205960286	3.34927694	3.546141226	1.880156153
(Span 3) -4	-1.01E+00	-1.153923495	-1.208507924	-1.13900922	-1.325000218	-0.852444601	-0.902549713	-0.478529826
+4	51.44510007	55.63131394	58.42761799	54.26112201	62.59763541	44.17972841	46.79802584	26.89815859
-3.05	-1.01E+00	-1.153923495	-1.208507924	-1.13900922	-1.325000218	-0.852444601	-0.902549713	-0.478529826
+3.05	49.66389553	53.9676408	56.58234994	52.48729828	60.3386045	43.18188252	45.72850766	25.9811807
-3.1	-1.982990768	-1.504301199	-1.504301199	-1.202095584	-1.325000218	-1.14271613	-1.202859085	-1.335948052
+3.1	45.86791976	50.40137433	52.643902	48.71159564	55.56391358	40.9621961	43.35274621	24.03136437
-3.15	-2.695454572	-2.080289091	-2.080289091	-1.662846413	-1.662846413	-1.580791351	-1.663990896	-1.864256405
+3.15	43.86026613	48.50688255	50.55944673	46.71794372	53.05822529	39.7421246	42.04843097	23.00294835
-3.2	-4.285808563	-4.31306948	-4.31306948	-3.447493765	-3.447493765	-3.263443799	-3.435203999	-3.017762467
+3.2	39.64346281	44.51542451	46.18187374	42.53963142	47.83512652	37.08590945	39.21171088	20.89174843
-3.25	-5.157089233	-5.529909631	-5.529909631	-4.42090119	-4.42090119	-4.18812536	-4.408553011	-3.640060191
+3.25	37.44144298	42.42654224	43.89746142	40.36318287	45.12766892	35.65151429	37.6812121	20.24002292
-3.3	-7.016021729	-8.162649547	-8.162649547	-6.693003109	-6.894808238	-6.189138903	-6.514883055	-4.968532905
+3.3	32.86799591	38.08278774	39.15926577	35.85630382	39.5459113	32.5745907	34.40077783	18.91642798
-3.35	-7.999633789	-9.572331966	-9.572331966	-8.096111821	-8.444965497	-7.260718197	-7.64286126	-5.671811745
+3.35	30.50369877	35.83599746	36.71418577	33.53408184	36.68156074	30.93380964	32.65274724	18.15720572
-3.4	-10.06505013	-12.56270285	-12.56270285	-11.10356976	-11.73084826	-9.572131032	-10.0759274	-7.149218829
+3.4	25.9280474	31.21284238	31.69387069	29.19491917	31.45277321	27.45199373	28.94583885	16.53198205
-3.45	-11.14281464	-14.13717187	-14.13717187	-12.70116459	-13.4801423	-10.77052305	-11.33739268	-7.920461141
+3.45	24.51780976	28.84457618	29.12735721	27.0834764	29.09081053	25.86469239	27.27233279	15.66757202
-3.5	-13.89634405	-17.42909879	-17.42909879	-16.06729428	-17.1727114	-13.27598086	-13.97471669	-9.52078126
+3.5	21.96728966	24.47113693	24.47113693	23.06744574	24.60407319	22.784566	24.03511698	13.83907681
-3.55	-15.68429108	-19.31148499	-19.40437182	-17.82909755	-19.10851989	-14.74143298	-15.52683733	-10.34697332
+3.55	20.8024997	22.48228094	22.48228094	21.02014503	22.31955784	21.14111162	22.30733646	12.87658538
-3.6	-19.46779529	-23.66665221	-23.96751245	-21.53751366	-23.14046492	-17.8074643	-18.77611181	-12.04418075
+3.6	18.38291378	18.67633694	18.67633694	16.86375033	17.68687527	17.64655611	18.63237796	10.85903512

-3.65	-21.45535342	-25.83374752	-26.24980534	-23.8289412	-25.66776743	-19.39961074	-20.46417427	-12.91231
+3.65	17.1014967	16.74371544	16.74371544	14.76142009	15.34622335	15.79513025	16.68480118	9.805563502
-3.7	-25.60207824	-30.31696728	-30.9842705	-28.2596397	-30.82814015	-22.68750268	-23.95155118	-14.68957116
+3.7	14.38999774	12.83474896	12.83474896	10.5252733	10.63494209	11.88311972	12.56840223	7.748486057
-3.75	-27.75326458	-32.62497657	-33.42770369	-30.53915623	-33.49824064	-24.37737845	-25.74462122	-15.81007809
+3.75	12.95958397	10.86463361	10.86463361	8.693111344	8.746904433	10.05127401	10.64030093	6.846933852
-3.8	-32.22391551	-37.35355435	-38.44517452	-35.22704374	-39.01443046	-27.83432059	-29.41391917	-18.12714383
+3.8	9.948601824	6.908701857	7.051357464	6.643875996	7.846586575	6.847173815	7.266842303	5.027790758
-3.85	-34.64471603	-39.76602547	-41.01049183	-37.62719119	-41.8505519	-29.59550441	-31.28388907	-19.31931046
+3.85	8.367700976	6.665971884	7.051357464	6.643875996	7.846586575	5.798465264	6.194489997	4.113097758
-3.9	-39.3067977	-44.66708326	-46.23248383	-42.51928776	-47.65387193	-33.16863341	-35.07887051	-21.75987577
+3.9	6.152695536	6.665971884	7.051357464	6.643875996	7.846586575	4.931558889	5.240117971	2.948126963
-3.95	-41.67922098	-47.14757004	-48.88043564	-45.00302777	-50.61111962	-34.97472127	-36.99765086	-23.00386017
+3.95	6.152695536	6.665971884	7.051357464	6.643875996	7.846586575	4.887574815	5.183129449	2.948126963
-5	-46.59597825	-52.14822985	-54.22846479	-50.02528822	-56.611818	-38.61121155	-40.86211837	-25.52825222
+5	6.152695536	6.665971884	7.051357464	6.643875996	7.846586575	4.887574815	5.183129449	2.948126963

3-Span: Shear (Max and Min) Raw Data Results - 30' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.152575861	-7.870671368	-8.420401547	-5.797926432	-6.58099605	-7.178397129
End Shear	46.84102118	53.95668748	54.53724434	45.79675299	50.4609108	53.43390042
-0.05	-6.152575861	-7.870671368	-8.420401547	-5.797926432	-6.58099605	-7.178397129
+0.05	42.9223655	48.78880321	49.42009596	42.58715088	46.68988918	49.40561115
-0.1	-6.152575861	-8.682309935	-9.512514831	-6.574158123	-7.833641982	-7.997431991
+0.1	38.10980302	43.1213465	43.06345895	38.33728255	41.99684453	44.09998523
-0.15	-7.773972703	-9.623691822	-10.47364934	-7.893003805	-8.38638011	-9.202848093
+0.15	35.77853165	40.35434784	39.9744278	36.23277149	39.67168872	41.48506285
-0.2	-10.94359812	-12.20458806	-12.92121896	-10.41896807	-10.23718098	-11.38957091
+0.2	31.21682071	34.97515953	34.15460313	32.08176147	35.08285599	36.35284573
-0.25	-12.45239889	-14.12403229	-14.4690643	-12.69301177	-12.14949701	-13.42920867
+0.25	28.99438985	32.56303312	31.55837985	30.04213392	32.82666725	33.84430496
-0.3	-15.3186932	-17.73136963	-18.07138347	-17.0275196	-16.72495996	-17.33072662
+0.3	24.58435113	28.15618351	26.54892899	26.05182414	28.40949602	28.96423528
-0.35	-16.67647892	-19.49339872	-20.21822671	-19.08832241	-19.20723279	-19.16124959
+0.35	22.50944123	26.00856898	24.15557863	24.10800854	26.25600927	26.60144934
-0.4	-19.195739	-25.13241006	-24.8578579	-22.99784594	-23.90052613	-24.7245364
+0.4	18.5330228	21.86153113	20.28748182	20.34024434	22.07798346	22.14205728
-0.45	-20.39002058	-27.65210031	-27.16527054	-24.84688883	-26.19181266	-27.38064492
+0.45	16.49891501	19.8513565	18.47403288	18.52316616	20.06093186	20.12317951
-0.5	-22.71877405	-32.43332642	-31.5094784	-28.33439547	-31.3335675	-32.41853661
+0.5	12.93248456	15.99504994	14.98599067	15.03978922	16.18951041	16.2477741
-0.55	-24.03624378	-34.92744212	-33.55012409	-30.01940959	-33.77347881	-34.80038952
+0.55	11.69207668	14.15641727	13.31665497	13.46969792	14.36767778	14.39874742
-0.6	-27.01165542	-39.80012273	-38.10002909	-33.99786417	-38.38885406	-39.29012712
+0.6	9.537054062	10.76869346	10.17732849	10.63262217	11.34146365	10.89677919
-0.65	-29.44257142	-42.06678443	-40.20708153	-35.88452295	-40.56332487	-41.39808355
+0.65	8.50409317	9.19622446	8.73643619	9.284807519	9.903794687	9.214312483
-0.7	-34.16467151	-46.26904905	-44.09910204	-39.44773059	-44.64331846	-46.09428396
+0.7	6.537373066	6.261234161	6.038562515	6.744688672	7.194334583	6.176064231
-0.75	-36.44873472	-48.20799091	-46.94298757	-41.12227163	-46.54783255	-48.38455347
+0.75	5.607654572	5.162700731	5.01217231	5.534621207	5.861137509	4.980067561
-0.8	-40.845049	-51.55978458	-52.44513657	-44.25221713	-50.08341632	-52.68631066
+0.8	3.865599155	3.185138892	3.277771505	3.344636322	3.529843567	3.089049437
-0.85	-42.95016297	-53.19871508	-55.01080748	-45.70562765	-51.71347728	-54.69556421
+0.85	3.066308578	2.486686026	2.477755961	2.364583138	2.466878049	2.223606427
-0.9	-46.95651124	-57.9206834	-61.16856932	-48.38431426	-54.69562582	-58.42515797
+0.9	1.642062522	1.80046041	1.811677285	1.190877503	1.178296705	1.242800855
-0.95	-48.85060714	-60.38384124	-64.07433592	-49.60758492	-56.04671678	-60.14326045
+0.95	1.005274408	1.474539335	1.507157979	1.018219675	1.178296705	1.242800855
-1	-52.66377449	-65.61178819	-70.1191356	-51.81699679	-58.46642154	-63.28042038
+1	1.01E+00	1.229885095	1.281898359	1.018219675	1.178296705	1.242800855
(Span 2) -2	-3.949749204	-4.832250362	-5.036611815	-4.000611594	-4.629558269	-4.882996888
+2	54.42708185	68.84739847	74.46447148	50.10704213	60.53000482	61.4867778
-2.05	-3.949749204	-4.962097432	-5.036611815	-4.000611594	-4.629558269	-4.882996888
+2.05	51.8454681	65.32919149	70.12525537	48.73638908	56.71205616	59.56876645
-2.1	-3.949749204	-5.8356727	-5.397788122	-4.000611594	-4.629558269	-4.882996888
+2.1	48.23568563	60.3985346	64.16370026	46.6912693	52.47221745	56.74595597
-2.15	-3.9803126	-6.611924374	-6.563221335	-4.34181098	-4.829368106	-5.562175656
+2.15	44.47830167	55.22872771	58.35916725	44.41135469	49.92597702	53.63622187
-2.2	-5.510284906	-7.30621756	-8.217139295	-5.559717068	-5.999843746	-6.145405114
+2.2	40.68309809	49.85769658	52.47858196	41.91177135	46.96871944	50.25750974
-2.25	-7.352709324	-9.520778772	-10.33897469	-7.886669398	-7.445245271	-8.117518501

+2.25	36.93451635	44.39816517	46.4501654	39.2076337	43.87552361	46.62777951
-2.3	-9.877941616	-12.26859597	-12.85374386	-10.77013101	-10.49817139	-10.90359408
+2.3	33.03315828	40.72384367	40.71098787	36.31407424	40.52663332	42.76496173
-2.35	-12.28505585	-15.84239631	-16.05086231	-13.79147214	-13.69217979	-14.4420002
+2.35	29.17344011	36.7452338	36.14074312	33.24620739	36.9333437	38.68701746
-2.4	-14.57184757	-19.3767611	-19.16791112	-17.20530002	-17.5164351	-18.41970882
+2.4	25.48829319	33.0553842	31.84332904	30.01916336	33.1069191	34.41189878
-2.45	-16.91023891	-22.86038762	-22.20453566	-20.45066074	-21.52619834	-22.45487583
+2.45	21.91273583	29.35822595	27.95282664	26.64805928	29.0586627	29.95753507
-2.5	-19.38447457	-26.45789771	-25.16038271	-24.03738176	-25.88743759	-26.77431707
+2.5	18.77134261	25.46204304	24.42862121	23.14802573	24.79983753	25.71142964
-2.55	-21.66047203	-29.36134321	-27.95335301	-26.65106477	-29.06230704	-29.96138844
+2.55	16.90803905	22.8575494	22.20413618	20.44747394	21.522333	22.45111134
-2.6	-25.22869744	-33.05834717	-31.84385832	-30.02205221	-33.11036799	-34.41560991
+2.6	14.56989483	19.37386491	19.16750057	17.20238603	17.51304624	18.41635902
-2.65	-28.87571876	-36.7484936	-36.14134921	-33.24896971	-36.93659369	-38.69056932
+2.65	12.28300135	15.83947222	16.05044153	13.7884031	13.68903617	14.43861101
-2.7	-32.97824871	-40.72700717	-40.71177871	-36.31669296	-40.52968326	-42.76834895
+2.7	9.875783073	12.26564635	12.85331859	10.76761641	10.5373102	10.90126536
-2.75	-36.98543023	-44.40105495	-46.45093093	-39.21008822	-43.87835447	-46.63096968
+2.75	7.350443383	9.518821331	10.33869876	7.884152007	7.442833323	8.115116099
-2.8	-40.72942691	-49.86220777	-52.47939091	-41.91405512	-46.97132314	-50.26049683
+2.8	5.50753636	7.305678151	8.216850823	5.557908166	5.99889721	6.144967763
-2.85	-44.33795539	-55.23308967	-58.35995169	-44.41345919	-49.79729653	-53.63899504
+2.85	3.979040956	6.611324417	6.563076849	4.341113123	4.828225529	5.561591869
-2.9	-47.87884485	-60.40270535	-64.16452273	-46.69317634	-52.47444431	-56.74848918
+2.9	3.949259577	5.835001439	5.397619997	4.000606667	4.62953721	4.882991167
-2.95	-51.50470348	-65.33314861	-70.12605455	-48.7380844	-56.70178092	-59.57104419
+2.95	3.949259577	4.961335291	5.036613327	4.000606667	4.62953721	4.882991167
-3	-54.93963254	-69.98645285	-75.88189893	-50.53305289	-61.7269594	-62.08871934
+3	3.949259577	4.832239105	5.036613327	4.000606667	4.62953721	4.882991167
(Span 3) -4	-1.01E+00	-1.22988223	-1.281898744	-1.018218422	-1.178291346	-1.242799399
+4	51.44510007	64.1128797	68.49489591	51.29273407	57.894933	62.5312899
-3.05	-1.01E+00	-1.317333716	-1.359248875	-1.018218422	-1.178291346	-1.242799399
+3.05	49.66389553	61.9698502	65.48104137	50.18776359	56.68485296	60.96238681
-3.1	-1.982990768	-1.968683914	-1.967839661	-1.424176655	-1.427887779	-1.270755805
+3.1	45.86791976	56.64155459	59.67012601	47.74119825	53.98246789	57.52614055
-3.15	-2.695454572	-2.312083961	-2.286501918	-1.911100449	-1.98024825	-1.712168468
+3.15	43.86026613	54.00614324	56.58698385	46.40159681	52.49116649	55.66103926
-3.2	-4.285808563	-3.637701664	-3.6953282	-3.87045766	-4.089512056	-3.543813082
+3.2	39.64346281	50.69901322	51.11534702	43.49476323	49.23084633	51.64248984
-3.25	-5.157089233	-4.676190463	-4.562891688	-4.965912559	-5.255652392	-4.489750539
+3.25	37.44144298	48.90511261	48.36432456	41.92953311	47.46283137	49.49131069
-3.3	-7.016021729	-6.969829539	-6.689156614	-7.361549008	-7.852318942	-6.894421938
+3.3	32.86799591	45.25595119	43.15736967	38.58044939	43.65361187	44.91075974
-3.35	-7.999633789	-8.437958054	-8.038607122	-8.632047439	-9.207517268	-8.423139951
+3.35	30.50369877	43.15486542	41.21772541	36.79859632	41.61339491	42.48363975
-3.4	-10.06505013	-11.58210579	-10.9194307	-11.3271488	-12.08229205	-11.74946798
+3.4	25.9280474	38.62076653	37.00276777	33.02527221	37.26426733	38.19819201
-3.45	-11.14281464	-13.26403508	-12.50272806	-12.7461205	-13.59586186	-13.50103474
+3.45	24.51780976	36.18444143	34.72110514	31.03581656	34.95635736	35.95317685
-3.5	-13.89634405	-16.94057884	-15.84049672	-15.89368472	-17.13916364	-17.19836557
+3.5	21.96728966	31.26622809	30.45608184	27.48580804	30.07635323	31.18915127
-3.55	-15.68429108	-18.86928277	-17.58499697	-17.635895	-19.07544615	-19.13664454
+3.55	20.8024997	28.87556119	28.2841958	25.74195343	27.50706443	28.67004119
-3.6	-19.46779529	-22.88886574	-21.23884016	-21.26936895	-23.10879417	-23.1736318
+3.6	18.38291378	23.83574919	23.66883725	22.04356411	22.75699725	23.35750057

-3.65	-21.45535342	-24.95382927	-23.17333744	-23.15374275	-25.19836088	-25.44516366
+3.65	17.1014967	21.18545953	21.26891018	20.08869989	20.41022406	20.5639721
-3.7	-25.60207824	-29.24825388	-27.77757025	-27.04064615	-29.50452179	-30.16982235
+3.7	14.38999774	16.85498734	16.97502153	15.96680432	15.44529843	16.38240015
-3.75	-27.75326458	-31.45221053	-30.28289513	-29.03629058	-31.71363834	-32.61050567
+3.75	12.95958397	15.05141827	15.31160081	13.79944207	13.17072936	14.43166821
-3.8	-32.22391551	-36.30344009	-35.47416233	-33.11478096	-36.22517948	-37.62662822
+3.8	9.948601824	11.30618884	12.21229645	9.747952526	9.690172633	10.86830897
-3.85	-34.64471603	-38.99375597	-38.4555657	-35.19075691	-38.52011009	-40.19334053
+3.85	8.367700976	10.12375517	10.92477376	8.525781451	8.642370651	9.775139921
-3.9	-39.3067977	-44.52664346	-44.63222368	-39.39898958	-43.1695499	-45.42221526
+3.9	6.152695536	8.240783286	9.001397659	5.984249551	7.536089142	7.45239397
-3.95	-41.67922098	-47.35923366	-47.81127683	-41.52435843	-45.51656147	-48.07560831
+3.95	6.152695536	7.870674118	8.420402839	5.797935628	6.901216202	7.178409956
-5	-46.59597825	-53.70173855	-54.57739622	-45.80048682	-50.23641092	-53.43847797
+5	6.152695536	7.870674118	8.420402839	5.797935628	6.58098975	7.178409956

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-9.228864	-6.998188	-6.083836	-5.795079	-5.163215	-5.743709	-7.997411	-8.728697	-9.607781	-10.233290
+0.05	64.383548	50.548744	46.304168	40.892287	34.847659	41.717467	56.040014	59.610123	59.489719	59.479928
-0.1	-18.457728	-13.996375	-12.167673	-11.590158	-10.326431	-11.487418	-15.994822	-17.457395	-19.215561	-20.466580
+0.1	116.976369	92.166479	84.966342	74.734939	64.251528	76.153616	102.231049	108.242390	108.063957	108.074108
-0.15	-27.686591	-20.994563	-18.251509	-17.385237	-15.489646	-17.231127	-23.992233	-26.186092	-28.823342	-30.699870
+0.15	159.744123	126.372047	117.152733	101.755511	87.947292	104.305406	140.524133	148.083359	151.516573	151.506076
-0.2	-36.915455	-27.992751	-24.335345	-23.180316	-20.652861	-22.974836	-31.989644	-34.914790	-38.431123	-40.933161
+0.2	192.876676	153.053870	143.873303	122.237230	106.126536	126.306483	170.188851	178.492192	190.124458	190.101638
-0.25	-46.144319	-34.990938	-30.419181	-28.975396	-25.816077	-28.718545	-39.987055	-43.643487	-48.038903	-51.166451
+0.25	216.333253	172.280290	164.554711	136.519099	119.033300	142.308335	191.555630	199.847902	218.801696	218.827079
-0.3	-55.373183	-41.989126	-36.503018	-34.770475	-30.979292	-34.462255	-47.984466	-52.372185	-57.646684	-61.399741
+0.3	230.619884	184.445895	179.364318	145.224283	126.960291	152.464377	205.590547	219.520200	239.308722	244.403567
-0.35	-64.602047	-48.987314	-42.586854	-40.565554	-36.142507	-40.205964	-55.981877	-61.100882	-67.254465	-71.633031
+0.35	236.323553	190.008345	188.513961	150.972218	133.481390	157.122445	220.175651	233.340503	251.899994	263.287832
-0.4	-73.830910	-55.985501	-48.670690	-46.360633	-41.305723	-45.949673	-63.979288	-69.829579	-76.862245	-81.866321
+0.4	234.112286	195.598837	192.260059	154.623360	136.723959	156.680948	226.931656	239.036644	259.442664	272.441455
-0.45	-83.059774	-62.983689	-54.754526	-52.155712	-46.468938	-51.693382	-71.976699	-78.558277	-86.470026	-92.099611
+0.45	224.734948	195.155851	190.903495	152.939234	136.953086	151.588659	226.341266	240.550236	261.790910	272.309058
-0.5	-92.288638	-69.981877	-60.838363	-57.950791	-51.632153	-57.437091	-79.974110	-87.286974	-96.077807	-102.332901
+0.5	214.928159	189.181146	189.286152	150.606663	136.368954	144.451419	219.148745	236.490476	258.024724	268.082115
-0.55	-101.517502	-76.980064	-66.922199	-63.745870	-56.795369	-63.180800	-87.971520	-96.015672	-105.685587	-112.566192
+0.55	219.446775	183.276811	183.457898	145.998184	132.450556	147.019150	213.343767	226.600040	246.896012	259.540571
-0.6	-110.746366	-83.978252	-73.006035	-69.540949	-61.958584	-68.924509	-95.968931	-104.744369	-115.293368	-122.799482
+0.6	216.132566	172.633941	172.877447	137.604582	125.077598	143.894141	200.921944	210.693584	230.579402	242.401406
-0.65	-119.975229	-90.976440	-79.089871	-75.336029	-67.121799	-74.668218	-103.966342	-113.473067	-124.901149	-133.032772
+0.65	203.919381	159.562203	157.937284	126.191294	115.328308	135.112810	181.937032	192.389301	209.795173	217.483667
-0.7	-129.204093	-97.974627	-85.173708	-81.131108	-72.285015	-80.411927	-111.963753	-122.201764	-134.508930	-143.266062
+0.7	183.013108	143.683426	139.074496	113.138451	104.344148	121.046379	158.666416	167.436336	182.265086	185.622541
-0.75	-138.432957	-104.972815	-91.257544	-86.926187	-77.448230	-86.155636	-119.961164	-130.930461	-144.116710	-153.499352
+0.75	154.081685	121.697411	116.770602	96.711874	90.768340	102.128742	132.623698	137.137352	149.442500	149.520264
-0.8	-147.661821	-111.971003	-97.341380	-92.721266	-82.611445	-91.899345	-127.958575	-139.659159	-153.724491	-163.732642
+0.8	117.874109	94.194540	91.551698	77.068363	72.646672	78.844166	100.697035	104.110351	111.081199	111.070162
-0.85	-156.890684	-118.969190	-103.425216	-98.516345	-88.857803	-97.643055	-135.955986	-148.387856	-163.332272	-173.965933
+0.85	78.190869	63.657792	63.988278	56.182425	52.677559	52.701347	64.844103	65.275562	66.843408	67.101973
-0.9	-166.119548	-125.967378	-128.302814	-109.295884	-100.748446	-103.386764	-143.953397	-157.116554	-172.940052	-184.199223
+0.9	53.508820	34.761952	34.695550	34.415525	34.809330	34.901712	33.582445	33.560736	33.631840	33.533215
-0.95	-177.637710	-132.965566	-166.027835	-139.995159	-125.858607	-109.130473	-151.950808	-165.845251	-182.547833	-194.432513
+0.95	28.650321	21.853491	20.424888	25.805623	22.800998	18.157613	25.775578	27.363846	30.241333	32.144458
-1	-206.749694	-142.011451	-205.838058	-173.105498	-156.016016	-114.874184	-159.948218	-176.405388	-199.241151	-218.892943
+1	30.158232	23.003676	21.499883	18.329186	16.140786	19.113277	27.132188	28.804049	31.832983	33.836272
(Span 2) -2	-206.749694	-142.011451	-205.838058	-173.105498	-156.016016	-114.874184	-159.948218	-176.405388	-199.241151	-218.892943
+2	30.158232	23.003676	21.499883	18.329186	16.140786	19.113277	27.132188	28.804049	31.832983	33.836272
-2.05	-156.341011	-95.556172	-156.915361	-125.567531	-112.899186	-73.631260	-104.522417	-116.240250	-131.274329	-142.689468
+2.05	32.371076	17.128843	18.282881	23.148914	21.000460	20.088460	20.202988	21.447878	23.703264	25.194939
-2.1	-116.543373	-82.743907	-110.891560	-89.387603	-79.991447	-68.749965	-97.593229	-103.607620	-114.502374	-121.707363
+2.1	61.841958	40.225998	42.257875	37.115967	31.961871	40.907434	38.853312	38.858554	38.847707	38.837519
-2.15	-100.763459	-76.869032	-75.188295	-66.167635	-58.852585	-63.868670	-90.664042	-96.251406	-106.372626	-113.066056
+2.15	90.572131	74.465085	75.478706	62.278667	51.541447	61.433808	78.011138	78.030509	82.340798	82.275371
-2.2	-93.062403	-70.994157	-66.352656	-56.567507	-50.060519	-58.987374	-83.734855	-88.895193	-98.242878	-104.424748
+2.2	132.433229	108.634572	106.430853	86.220347	72.693909	89.129427	116.792947	122.607038	132.649657	132.644361

-2.25	-85.361347	-65.119282	-60.861872	-51.886459	-48.864339	-54.106079	-76.805668	-81.538980	-90.113131	-95.783441
+2.25	176.039978	142.734996	136.698930	114.360124	97.890519	116.515373	155.248415	166.433381	180.244825	184.431616
-2.3	-77.660291	-59.244407	-55.371088	-47.205412	-47.782194	-49.224784	-69.876481	-74.182767	-81.983383	-87.142133
+2.3	210.857130	169.738882	160.398387	136.178578	117.644371	139.253124	188.595100	202.435552	218.332821	227.974049
-2.35	-69.959235	-53.369533	-49.880305	-42.524364	-46.924826	-44.343489	-62.947294	-66.826554	-73.853635	-78.500826
+2.35	236.136806	189.159068	177.826256	152.360037	132.577811	155.845391	214.466574	229.901074	246.125092	260.857033
-2.4	-62.258178	-47.494658	-44.389521	-37.936936	-46.235414	-39.462194	-56.018107	-59.470341	-65.723887	-69.859519
+2.4	253.603871	203.736719	191.102705	164.311957	143.389307	165.996372	232.958148	249.216640	268.017100	282.380890
-2.45	-54.557122	-41.619783	-38.898737	-34.732785	-45.706414	-34.580898	-49.088920	-52.114128	-57.594139	-61.218211
+2.45	261.968536	212.303647	198.420616	170.221827	149.198767	169.748073	243.486095	258.968135	281.360567	293.138397
-2.5	-46.861877	-35.744908	-33.407956	-31.806670	-45.334063	-29.699603	-42.159807	-44.757915	-49.464391	-52.577061
+2.5	260.267566	213.747049	199.638519	170.432166	149.510873	167.279180	245.368607	259.146755	284.098590	298.534912
-2.55	-54.563888	-41.619481	-38.898740	-34.732766	-45.706481	-34.580763	-49.089006	-52.113828	-57.593934	-61.218395
+2.55	262.361253	212.275100	198.417134	170.225444	149.200522	169.732969	243.464421	258.951488	281.338109	293.131639
-2.6	-62.265899	-47.494314	-44.389524	-37.937052	-46.235469	-39.462040	-56.018206	-59.469998	-65.723654	-69.859728
+2.6	253.971004	203.734538	191.097579	164.311767	143.389216	165.979155	232.933817	249.197069	267.998701	282.374131
-2.65	-69.967910	-53.369146	-49.880308	-42.524205	-46.924882	-44.343316	-62.947405	-66.826169	-73.853373	-78.501061
+2.65	236.055060	189.155874	177.819692	152.356076	132.578901	155.826086	214.473822	229.878881	246.121283	260.847259
-2.7	-77.669921	-59.243979	-55.371091	-47.205235	-47.782259	-49.224593	-69.876605	-74.182340	-81.983093	-87.142395
+2.7	210.889287	169.733390	160.392447	136.175763	117.643003	139.260049	188.600320	202.443579	218.326145	227.979877
-2.75	-85.371932	-65.118811	-60.861875	-51.886265	-48.864437	-54.105869	-76.805804	-81.538510	-90.112813	-95.783728
+2.75	175.784665	142.745053	136.691493	114.355904	97.893712	116.515809	155.252220	166.439582	180.251363	184.432109
-2.8	-93.073943	-70.993644	-66.352659	-56.567295	-50.060697	-58.987145	-83.735004	-88.894681	-98.242532	-104.425062
+2.8	132.527496	108.639427	106.422248	86.215028	72.695401	89.151892	116.801217	122.612295	132.651084	132.645739
-2.85	-100.775954	-76.868476	-75.188477	-66.167891	-58.852869	-63.868422	-90.664203	-96.250851	-106.372252	-113.066395
+2.85	90.545716	74.465293	75.478779	62.278335	51.541415	61.419967	78.003761	78.023359	82.359101	82.293041
-2.9	-116.544180	-82.743309	-110.892450	-89.387570	-79.991421	-68.749698	-97.593403	-103.607022	-114.501972	-121.707728
+2.9	61.821762	40.223847	42.255720	37.114287	31.961424	40.890069	38.851223	38.856533	38.845739	38.835618
-2.95	-156.345840	-95.556206	-156.915939	-125.568313	-112.898981	-73.630974	-104.522602	-116.240633	-131.274858	-142.689390
+2.95	32.347397	17.128965	18.269118	23.141278	21.005810	20.068259	20.202952	21.448004	23.703340	25.194862
-3	-206.756486	-142.011278	-205.837914	-173.105447	-156.015861	-114.874909	-159.948613	-176.405309	-199.240922	-218.893297
+3	30.154494	23.003842	21.499882	18.329255	16.140727	19.113351	27.132140	28.804215	31.833093	33.836171
(Span 3) -4	-206.756486	-142.011278	-205.837914	-173.105447	-156.015861	-114.874909	-159.948613	-176.405309	-199.240922	-218.893297
+4	30.154494	23.003842	21.499882	18.329255	16.140727	19.113351	27.132140	28.804215	31.833093	33.836171
-3.05	-177.658113	-132.965691	-166.027859	-139.995401	-125.858725	-109.131164	-151.951182	-165.844614	-182.547948	-194.432650
+3.05	28.646769	21.853650	20.424888	25.797226	22.806987	18.157683	25.775533	27.364005	30.241439	32.144362
-3.1	-166.122777	-125.967497	-128.303308	-109.295769	-100.748639	-103.387418	-143.953752	-157.115950	-172.940162	-184.199352
+3.1	53.540726	34.774463	34.706127	34.407257	34.812606	34.930444	33.594683	33.572578	33.635166	33.512867
-3.15	-156.893733	-118.969303	-103.424826	-98.516345	-88.857847	-97.643673	-135.956321	-148.387286	-163.332375	-173.966055
+3.15	78.224007	64.067179	63.999695	56.190064	52.680876	52.683743	64.854812	65.284807	66.827680	67.117720
-3.2	-147.664690	-111.971108	-97.341013	-92.721266	-82.611446	-91.899928	-127.958890	-139.658622	-153.724589	-163.732757
+3.2	117.951236	94.206959	91.563345	77.076022	72.649272	78.824174	100.706453	104.117923	111.064104	111.084880
-3.25	-138.435647	-104.972914	-91.257200	-86.926188	-77.448231	-86.156182	-119.961460	-130.929958	-144.116803	-153.499459
+3.25	154.194508	121.707724	116.781998	96.717503	90.770753	102.107052	132.630959	137.141996	149.455262	149.532610
-3.3	-129.206604	-97.974720	-85.173387	-81.131109	-72.285016	-80.412437	-111.964029	-122.201294	-134.509016	-143.266162
+3.3	183.220949	143.690935	139.085081	113.141901	104.345373	121.022325	158.670740	167.430363	182.245717	185.610163
-3.35	-119.977560	-90.976525	-79.089574	-75.336030	-67.121800	-74.668692	-103.966598	-113.472630	-124.901230	-133.032864
+3.35	204.276014	159.566250	157.946629	126.196810	115.337945	135.085801	181.931965	192.380134	209.805721	217.468724
-3.4	-110.748517	-83.978331	-73.005761	-69.540951	-61.958585	-68.924946	-95.969167	-104.743966	-115.293444	-122.799567
+3.4	216.686136	172.643042	172.885111	137.610179	125.080701	143.863846	200.913696	210.421465	230.586490	242.414752
-3.45	-101.519474	-76.980137	-66.921948	-63.745872	-56.795370	-63.181201	-87.971737	-96.015302	-105.685657	-112.566269
+3.45	219.858399	183.283444	183.463506	146.002280	132.452820	147.032996	213.331645	226.590930	246.911139	259.549916
-3.5	-92.290430	-69.981943	-60.838135	-57.950793	-51.632155	-57.437456	-79.974306	-87.286638	-96.077871	-102.332972
+3.5	215.294582	189.184920	189.289347	150.609001	136.420792	144.461203	219.132528	236.477726	258.035878	268.086750
-3.55	-83.061387	-62.983748	-54.754322	-52.155714	-46.468940	-51.693710	-71.976875	-78.557974	-86.470085	-92.099674
+3.55	225.360045	195.164669	190.902106	152.945930	136.953582	151.576156	226.356807	240.564673	261.780916	272.304562
-3.6	-73.832344	-55.985554	-48.670509	-46.360635	-41.305724	-45.949965	-63.979445	-69.829310	-76.862298	-81.866377

+3.6	233.642024	195.604071	192.256138	154.627932	136.722732	156.666038	226.943006	239.046761	259.427746	272.431992
-3.65	-64.603300	-48.987360	-42.586696	-40.565556	-36.142509	-40.206220	-55.982014	-61.100646	-67.254512	-71.633079
+3.65	235.948945	190.006532	188.507211	150.974260	133.490271	157.104560	220.182268	233.350982	251.893732	263.272798
-3.7	-55.374257	-41.989165	-36.502883	-34.770477	-30.979294	-34.462474	-47.984583	-52.371982	-57.646726	-61.399782
+3.7	230.418700	184.440241	179.354534	145.221739	126.959357	152.443022	205.591941	219.525331	239.297192	244.414920
-3.75	-46.145214	-34.990971	-30.419070	-28.975398	-25.816079	-28.718729	-39.987153	-43.643318	-48.038939	-51.166484
+3.75	216.349283	172.270283	164.541599	136.536406	119.031011	142.283150	191.549799	199.845081	218.787688	219.626840
-3.8	-36.916170	-27.992777	-24.335257	-23.180320	-20.652863	-22.974983	-31.989722	-34.914654	-38.431153	-40.933187
+3.8	193.147697	153.039113	143.856819	122.251604	106.122693	126.277210	170.177630	178.483786	190.137631	190.114355
-3.85	-27.687127	-20.994583	-18.251444	-17.385241	-15.489648	-17.231238	-23.992291	-26.185990	-28.823367	-30.699889
+3.85	161.093856	126.352108	117.132720	101.766605	87.941798	104.319849	140.507060	148.068818	151.522947	151.512229
-3.9	-18.458084	-13.996388	-12.167631	-11.590162	-10.326433	-11.487493	-15.994860	-17.457326	-19.215580	-20.466591
+3.9	117.920365	92.177944	84.975223	74.742484	64.244188	76.163396	102.243833	108.256101	108.077159	108.056192
-3.95	-9.229041	-6.998194	-6.083817	-5.795083	-5.163218	-5.743747	-7.997430	-8.728662	-9.607794	-10.233294
+3.95	64.311037	50.554564	46.308742	40.896162	34.849579	41.722423	56.046491	59.617152	59.496467	59.486469
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-9.228864	-9.998934	-10.577001	-9.965797	-11.769839	-7.331337	-7.774659	-4.422184
+0.05	64.383548	72.582139	75.308897	69.370793	77.583572	53.477095	56.574969	35.444934
-0.1	-18.457728	-19.997869	-21.154002	-19.931594	-23.539677	-14.662674	-15.549318	-8.844369
+0.1	116.976369	133.059622	137.713486	126.690862	142.267687	98.959039	104.667412	65.277055
-0.15	-27.686591	-29.996803	-31.731003	-29.897391	-35.309516	-21.994011	-23.323978	-13.266553
+0.15	159.744123	183.651756	189.692306	174.218563	194.477110	136.846940	144.684072	89.648999
-0.2	-36.915455	-39.995738	-42.308004	-39.863188	-47.079355	-29.325348	-31.098637	-17.688737
+0.2	192.876676	223.608965	230.269944	211.089913	234.132442	166.887276	176.370353	108.758016
-0.25	-46.144319	-49.994672	-52.885005	-49.828984	-58.849193	-36.656685	-38.873296	-22.110921
+0.25	216.333253	253.175532	259.852512	237.707011	266.790456	189.317116	199.981967	122.845955
-0.3	-55.373183	-59.993606	-63.462006	-59.794781	-70.619032	-43.988022	-46.647955	-26.533106
+0.3	230.619884	272.781139	278.934423	258.917665	296.424779	204.433023	215.837918	132.938624
-0.35	-64.602047	-69.992541	-74.039006	-69.760578	-82.388871	-51.319358	-54.422615	-30.955290
+0.35	236.323553	282.937418	290.866162	277.181493	314.411699	212.590911	224.320348	141.112360
-0.4	-73.830910	-79.991475	-84.616007	-79.726375	-94.158709	-58.650695	-62.197274	-35.377474
+0.4	234.112286	291.683053	301.106495	285.749455	321.573424	217.128861	229.545395	145.565596
-0.45	-83.059774	-89.990410	-95.193008	-89.692172	-105.928548	-65.982032	-69.971933	-39.799658
+0.45	224.734948	293.602564	301.510519	285.419268	318.168808	219.274614	231.644190	146.467096
-0.5	-92.288638	-99.989344	-105.770009	-99.657969	-117.698386	-73.313369	-77.746592	-44.221843
+0.5	214.928159	286.742647	294.082335	276.857220	307.271552	214.928185	226.869716	144.015005
-0.55	-101.517502	-109.988279	-116.347010	-109.623766	-129.468225	-80.644706	-85.521252	-48.644027
+0.55	219.446775	275.488269	284.773579	269.294263	302.187112	204.802156	216.544929	138.436688
-0.6	-110.746366	-119.987213	-126.924011	-119.589563	-141.238064	-87.976043	-93.295911	-53.066211
+0.6	216.132566	258.366639	266.404147	253.037243	286.761827	194.361529	205.053941	129.988844
-0.65	-119.975229	-129.986147	-137.501012	-129.555360	-153.007902	-95.307380	-101.070570	-57.488396
+0.65	203.919381	239.138067	244.358236	228.807294	261.129140	179.521240	189.510256	118.957349
-0.7	-129.204093	-139.985082	-148.078013	-139.521156	-164.777741	-102.638717	-108.845229	-61.910580
+0.7	183.013108	211.752279	216.810346	197.408885	226.190875	158.876513	167.764247	105.937616
-0.75	-138.432957	-149.984016	-158.655014	-149.486953	-176.547580	-109.970054	-116.619889	-66.332764
+0.75	154.081685	176.978079	181.025670	163.440599	182.956231	132.997277	140.418708	92.548800
-0.8	-147.661821	-159.982951	-169.232015	-159.452750	-188.317418	-117.301391	-124.394548	-70.754948
+0.8	117.874109	135.666229	137.888750	123.436379	132.906659	102.512839	108.139607	75.386094
-0.85	-156.890684	-169.981885	-179.809016	-169.418547	-200.087257	-124.632728	-132.169207	-75.177133
+0.85	78.190869	90.318347	90.318347	78.433867	81.786825	69.213640	72.856463	55.738892
-0.9	-166.119548	-179.980819	-190.386017	-179.384344	-211.857096	-155.557639	-164.920507	-79.599317
+0.9	53.508820	49.411330	49.411330	39.508759	39.508759	37.477123	39.449603	37.103232
-0.95	-177.637710	-189.979754	-200.963018	-189.350141	-223.626934	-197.663445	-209.208089	-87.833472
+0.95	28.650321	32.886867	34.442481	32.461848	37.762513	24.294637	25.722590	18.214513
-1	-206.749694	-199.978697	-211.540023	-199.315936	-235.396770	-241.799675	-255.647492	-105.884130
+1	30.158232	34.617754	36.255244	34.170367	39.750013	25.573302	27.076410	14.355880
(Span 2) -2	-206.749694	-199.978697	-211.540023	-199.315936	-235.396770	-241.799675	-255.647492	-105.884130
+2	30.158232	34.617754	36.255244	34.170367	39.750013	25.573302	27.076410	14.355880
-2.05	-156.341011	-133.359415	-139.667765	-131.635765	-153.130820	-181.713552	-192.019576	-75.305688
+2.05	32.371076	25.776840	26.996137	25.443710	29.598389	19.835698	21.022244	20.729156
-2.1	-116.543373	-124.518514	-130.408660	-122.909132	-142.979197	-130.642734	-138.251711	-54.571412
+2.1	61.841958	57.131098	57.131098	45.709779	45.709779	45.704982	48.234526	42.581714
-2.15	-100.763459	-115.677613	-121.149554	-114.182498	-132.827575	-87.384574	-92.646061	-47.971283
+2.15	90.572131	105.772853	105.772853	95.774097	101.217591	81.529766	85.888937	64.118352
-2.2	-93.062403	-106.836712	-111.890449	-105.455864	-122.675952	-78.924103	-83.563115	-44.304978
+2.2	132.433229	157.487287	159.551167	145.389842	162.961993	118.589371	125.046184	84.456639

-2.25	-85.361347	-97.995811	-102.631344	-96.729230	-112.524330	-72.393013	-76.648140	-40.638674
+2.25	176.039978	205.731594	210.384101	194.710894	221.191123	153.903618	162.490715	106.542811
-2.3	-77.660291	-89.154910	-93.372239	-88.002596	-102.372707	-65.861923	-69.733164	-36.972369
+2.3	210.857130	244.958613	251.286452	236.069761	269.185492	182.781033	193.063444	124.846743
-2.35	-69.959235	-80.314010	-84.113133	-79.275963	-92.221085	-59.330833	-62.818189	-33.306065
+2.35	236.136806	274.190545	282.710162	268.269447	307.230455	204.537248	216.047135	138.234649
-2.4	-62.258178	-71.473109	-74.854028	-70.549329	-82.069462	-52.799743	-55.903213	-29.639760
+2.4	253.603871	295.771254	307.046178	291.975171	333.031102	219.316686	232.040200	146.562738
-2.45	-54.557122	-62.632208	-65.594923	-61.822695	-71.917840	-46.268653	-48.988238	-25.973456
+2.45	261.968536	310.238830	321.874820	305.253173	346.023405	230.246473	243.582247	148.594844
-2.5	-46.861877	-53.791383	-56.335823	-53.096200	-61.766229	-39.737562	-42.073263	-22.307151
+2.5	260.267566	315.034980	325.595193	307.845810	346.199524	234.436395	247.878934	151.191917
-2.55	-54.563888	-62.632297	-65.594930	-61.822856	-71.917854	-46.268588	-48.988093	-25.973429
+2.55	262.361253	310.195482	321.834755	305.230518	346.010321	230.247990	243.584118	149.877690
-2.6	-62.265899	-71.473210	-74.854036	-70.549513	-82.069478	-52.799669	-55.903048	-29.639729
+2.6	253.971004	295.771841	307.049646	291.949223	333.013980	219.318930	232.042805	146.567802
-2.65	-69.967910	-80.314124	-84.113143	-79.276170	-92.221102	-59.330750	-62.818002	-33.306030
+2.65	236.055060	274.185357	282.715113	268.280412	307.237781	204.556048	216.067098	138.237622
-2.7	-77.669921	-89.155038	-93.372250	-88.002827	-102.372727	-65.861831	-69.732957	-36.972331
+2.7	210.889287	244.981674	251.311206	236.078252	269.185382	182.794641	193.077914	124.847680
-2.75	-85.371932	-97.995951	-102.631356	-96.729483	-112.524351	-72.392912	-76.647912	-40.638632
+2.75	175.784665	205.746746	210.400586	194.717670	221.203853	153.912477	162.500155	106.930216
-2.8	-93.073943	-106.836865	-111.890463	-105.456140	-122.675975	-78.923993	-83.562867	-44.304933
+2.8	132.527496	157.495357	159.560206	145.396061	162.973451	118.593986	125.051125	84.712066
-2.85	-100.775954	-115.677779	-121.149570	-114.182797	-132.827599	-87.385372	-92.646768	-47.971233
+2.85	90.545716	105.773161	105.773161	95.788903	101.226470	81.529840	85.889008	64.113825
-2.9	-116.544180	-124.518692	-130.408676	-122.909453	-142.979224	-130.642514	-138.251338	-54.579999
+2.9	61.821762	57.127924	57.127924	45.707321	45.707321	45.702639	48.232036	42.576100
-2.95	-156.345840	-133.359606	-139.667783	-131.636110	-153.130848	-181.713719	-192.019872	-75.305775
+2.95	32.347397	25.776801	26.996130	25.443643	29.598386	19.820806	21.006518	20.722601
-3	-206.756486	-199.979165	-211.540728	-199.316278	-235.397594	-241.801110	-255.647252	-105.884188
+3	30.154494	34.617704	36.255238	34.170277	39.750007	25.573337	27.076491	14.355895
(Span 3) -4	-206.756486	-199.979165	-211.540728	-199.316278	-235.397594	-241.801110	-255.647252	-105.884188
+4	30.154494	34.617704	36.255238	34.170277	39.750007	25.573337	27.076491	14.355895
-3.05	-177.658113	-189.980207	-200.963692	-189.350464	-223.627714	-197.664708	-209.207755	-87.833460
+3.05	28.646769	32.886819	34.442476	32.461764	37.762506	24.294670	25.722666	18.208023
-3.1	-166.122777	-179.981250	-190.386656	-179.384650	-211.857834	-155.557433	-164.920427	-79.599430
+3.1	53.540726	49.429796	49.429796	39.523156	39.523156	37.466841	39.438780	37.097236
-3.15	-156.893733	-169.982292	-179.809620	-169.418836	-200.087955	-124.633161	-132.169804	-75.177239
+3.15	78.224007	91.039493	91.039493	79.100411	81.796119	69.193422	72.835181	55.733200
-3.2	-147.664690	-159.983334	-169.232583	-159.453022	-188.318075	-117.301798	-124.395110	-70.755049
+3.2	117.951236	135.684376	137.906155	123.446057	132.913397	102.524328	108.151637	75.380139
-3.25	-138.435647	-149.984376	-158.655547	-149.487208	-176.548195	-109.970436	-116.620416	-66.332858
+3.25	154.194508	176.994187	181.040524	163.447734	182.947763	133.007719	140.429592	92.542374
-3.3	-129.206604	-139.985418	-148.078511	-139.521394	-164.778315	-102.639074	-108.845721	-61.910668
+3.3	183.220949	211.765337	216.821582	197.403840	226.179422	158.885315	167.773356	105.930559
-3.35	-119.977560	-129.986460	-137.501475	-129.555580	-153.008435	-95.307712	-101.071027	-57.488478
+3.35	204.276014	239.147093	244.364837	228.799354	261.113508	179.527759	189.516911	118.951433
-3.4	-110.748517	-119.987503	-126.924439	-119.589766	-141.238555	-87.976349	-93.296333	-53.066287
+3.4	216.686136	258.370834	266.398709	253.025482	286.740950	194.365305	205.057653	129.982577
-3.45	-101.519474	-109.988545	-116.347402	-109.623952	-129.468675	-80.644987	-85.521639	-48.644097
+3.45	219.858399	275.481659	284.763229	269.277828	302.201546	204.799530	216.541845	138.429991
-3.5	-92.290430	-99.989587	-105.770366	-99.658138	-117.698796	-73.313625	-77.746945	-44.221906
+3.5	215.294582	286.759760	294.066266	276.835385	307.279138	214.937245	226.879581	144.007748
-3.55	-83.061387	-89.990629	-95.193330	-89.692324	-105.928916	-65.982263	-69.972250	-39.799716
+3.55	225.360045	293.614703	301.526423	285.398973	318.159378	219.280650	231.650866	146.459195
-3.6	-73.832344	-79.991671	-84.616294	-79.726510	-94.159036	-58.650901	-62.197556	-35.377525

+3.6	233.642024	291.689473	301.116516	285.765596	321.558028	217.131426	229.548404	145.556994
-3.65	-64.603300	-69.992713	-74.039258	-69.760696	-82.389156	-51.319538	-54.422862	-30.955335
+3.65	235.948945	282.934209	290.869596	277.191735	314.389474	212.587817	224.317334	141.102992
-3.7	-55.374257	-59.993756	-63.462221	-59.794882	-70.619276	-43.988176	-46.648168	-26.533144
+3.7	230.418700	272.771947	278.927866	258.921416	296.436939	204.426306	215.831072	132.928416
-3.75	-46.145214	-49.994798	-52.885185	-49.829068	-58.849396	-36.656814	-38.873474	-22.110954
+3.75	216.349283	253.159730	259.839061	237.701898	266.794582	189.306449	199.970939	122.851833
-3.8	-36.916170	-39.995840	-42.308149	-39.863254	-47.079516	-29.325452	-31.098780	-17.688764
+3.8	193.147697	223.586118	230.249089	211.078123	234.126183	166.872377	176.354840	108.762866
-3.85	-27.687127	-29.996882	-31.731113	-29.897440	-35.309636	-21.994089	-23.324085	-13.266573
+3.85	161.093856	183.621367	189.663485	174.199533	194.462412	136.827516	144.663760	89.652730
-3.9	-18.458084	-19.997924	-21.154077	-19.931626	-23.539757	-14.662727	-15.549391	-8.844383
+3.9	117.920365	133.075809	137.710409	126.664280	142.244110	98.935031	104.642235	65.279618
-3.95	-9.229041	-9.998966	-10.577040	-9.965812	-11.769877	-7.331365	-7.774697	-4.422192
+3.95	64.311037	72.590302	75.317621	69.378767	77.593111	53.481928	56.580105	35.446238
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 30' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-9.228864	-11.806007	-12.630602	-8.696890	-9.871494	-10.767596
+0.05	64.383548	73.183205	74.830803	63.480667	70.034834	73.607758
-0.1	-18.457728	-23.612014	-25.261205	-17.393779	-19.742988	-21.535191
+0.1	116.976369	133.566029	135.703469	117.652763	129.607173	135.825748
-0.15	-27.686591	-35.418021	-37.891807	-26.090669	-29.614482	-32.302787
+0.15	159.744123	181.594565	182.755783	162.781789	178.952865	186.626783
-0.2	-36.915455	-47.224028	-50.522409	-34.787559	-39.485976	-43.070383
+0.2	192.876676	217.983542	216.654999	198.654627	218.061696	226.026993
-0.25	-46.144319	-59.030035	-63.153012	-43.484448	-49.357470	-53.837978
+0.25	216.333253	245.430668	239.293356	225.538194	247.218712	254.446431
-0.3	-55.373183	-70.836042	-75.783614	-52.181338	-59.228964	-64.605574
+0.3	230.619884	272.866421	267.301778	243.768994	268.224733	282.230634
-0.35	-64.602047	-82.642049	-88.414216	-60.878228	-69.100459	-75.373170
+0.35	236.323553	289.807888	283.487305	253.753073	289.845667	301.724108
-0.4	-73.830910	-94.448056	-101.044819	-69.575117	-78.971953	-86.140766
+0.4	234.112286	299.878398	288.292382	259.272688	301.888797	311.468793
-0.45	-83.059774	-106.254063	-113.675421	-78.272007	-88.843447	-96.908361
+0.45	224.734948	302.854934	286.346588	262.170731	304.795590	311.347560
-0.5	-92.288638	-118.060071	-126.306023	-86.968896	-98.714941	-107.675957
+0.5	214.928159	297.214151	278.574731	257.353224	299.233224	303.181147
-0.55	-101.517502	-129.866078	-138.936626	-95.665786	-108.586435	-118.443553
+0.55	219.446775	283.679567	271.714197	245.374012	285.645836	293.876295
-0.6	-110.746366	-141.672085	-151.567228	-104.362676	-118.457929	-129.211148
+0.6	216.132566	262.754558	258.710159	232.433825	264.657945	275.416043
-0.65	-119.975229	-153.478092	-164.197830	-113.059565	-128.329423	-139.978744
+0.65	203.919381	237.960915	236.977477	214.198788	237.009998	248.625187
-0.7	-129.204093	-165.284099	-176.828432	-121.756455	-138.200917	-150.746340
+0.7	183.013108	208.677999	204.048536	189.233730	204.373112	214.537591
-0.75	-138.432957	-177.090106	-189.459035	-130.453345	-148.072411	-161.513935
+0.75	154.081685	170.762013	164.624027	158.216029	169.986640	173.778329
-0.8	-147.661821	-188.896113	-202.089637	-139.150234	-157.943905	-172.281531
+0.8	117.874109	126.761536	123.722179	121.892647	130.698169	130.443457
-0.85	-156.890684	-201.482379	-215.423943	-149.412713	-168.696012	-184.950960
+0.85	78.190869	82.246183	82.523550	82.018811	87.486731	81.838441
-0.9	-166.119548	-247.384712	-259.710144	-188.681823	-210.839119	-233.177455
+0.9	53.508820	55.190455	53.129394	44.469186	47.433799	41.365061
-0.95	-177.637710	-312.097573	-321.397458	-233.175343	-268.877941	-292.026890
+0.95	28.650321	43.969078	42.954002	29.019261	33.581456	35.419824
-1	-206.749694	-380.035700	-386.315482	-280.512032	-331.483573	-354.740164
+1	30.158232	36.896553	38.456951	30.546590	35.348900	37.284027
(Span 2) -2	-206.749694	-380.035700	-386.315482	-280.512032	-331.483573	-354.740164
+2	30.158232	36.896553	38.456951	30.546590	35.348900	37.284027
-2.05	-156.341011	-274.580220	-272.215400	-215.879083	-256.315153	-272.232152
+2.05	32.371076	43.966882	38.621139	24.476039	26.321262	30.470596
-2.1	-116.543373	-186.535371	-188.327757	-162.014499	-185.741017	-199.855228
+2.1	61.841958	56.909649	58.120091	54.489070	54.856334	51.723081
-2.15	-100.763459	-133.697715	-141.882398	-112.977199	-125.293167	-136.694562
+2.15	90.572131	103.525269	99.038797	97.138836	102.719738	103.131632
-2.2	-93.062403	-113.869398	-118.685378	-94.272374	-109.092825	-115.065343
+2.2	132.433229	153.850775	144.596683	141.127753	153.728748	158.165179

-2.25	-85.361347	-104.446532	-108.863982	-86.471191	-100.065228	-105.543510
+2.25	176.039978	212.094656	202.388653	182.913526	203.669525	211.034055
-2.3	-77.660291	-95.023666	-99.042586	-78.670008	-91.037630	-96.021677
+2.3	210.857130	257.501418	254.035933	217.196045	243.702955	255.400819
-2.35	-69.959235	-85.600799	-89.221190	-70.868825	-82.010032	-86.499844
+2.35	236.136806	290.087366	290.835482	243.226630	275.108834	290.978491
-2.4	-62.258178	-76.177933	-79.399794	-63.067642	-72.982435	-76.978012
+2.4	253.603871	310.881679	321.018157	260.939204	300.102989	316.444760
-2.45	-54.557122	-66.755067	-69.578398	-55.266459	-63.954837	-67.456179
+2.45	261.968536	321.770503	338.775999	274.573881	315.659219	330.735601
-2.5	-46.861877	-57.332329	-59.757002	-47.465336	-54.927486	-57.934412
+2.5	260.267566	321.593842	343.516588	279.464590	321.138825	333.604543
-2.55	-54.563888	-66.755217	-69.578372	-55.266528	-63.955125	-67.456256
+2.55	262.361253	321.787099	338.777627	274.563494	315.669970	330.750261
-2.6	-62.265899	-76.178105	-79.399765	-63.067721	-72.982763	-76.978100
+2.6	253.971004	310.892073	321.018622	260.941747	300.107690	316.453150
-2.65	-69.967910	-85.600994	-89.221158	-70.868914	-82.010402	-86.499944
+2.65	236.055060	290.094984	290.833184	243.221954	275.107931	290.980970
-2.7	-77.669921	-95.023882	-99.042551	-78.670106	-91.038040	-96.021788
+2.7	210.889287	257.502634	254.034198	217.211882	243.699807	255.405643
-2.75	-85.371932	-104.446770	-108.863944	-86.471299	-100.065679	-105.543632
+2.75	175.784665	212.089133	202.387601	182.923903	203.660971	211.042033
-2.8	-93.073943	-113.869658	-118.685337	-94.272491	-109.093318	-115.065476
+2.8	132.527496	153.858727	144.597921	141.133270	153.715377	158.172671
-2.85	-100.775954	-133.697959	-141.882371	-112.977534	-125.293046	-136.694140
+2.85	90.545716	103.532424	99.039673	97.138084	102.704149	103.115853
-2.9	-116.544180	-186.535193	-188.327607	-162.014508	-185.742163	-199.856082
+2.9	61.821762	56.905347	58.123442	54.486599	54.885892	51.719807
-2.95	-156.345840	-274.580210	-272.215226	-215.880387	-256.315818	-272.233187
+2.95	32.347397	43.952246	38.622905	24.459150	26.321138	30.460185
-3	-206.756486	-380.035296	-386.315479	-280.513427	-331.483214	-354.741066
+3	30.154494	36.896467	38.456963	30.546553	35.348739	37.283983
(Span 3) -4	-206.756486	-380.035296	-386.315479	-280.513427	-331.483214	-354.741066
+4	30.154494	36.896467	38.456963	30.546553	35.348739	37.283983
-3.05	-177.658113	-312.098049	-321.397374	-233.175411	-268.879256	-292.028398
+3.05	28.646769	43.951602	42.956260	29.019225	33.581302	35.419784
-3.1	-166.122777	-247.384434	-259.710007	-188.682684	-210.839518	-233.177958
+3.1	53.540726	55.172967	53.131660	44.444774	47.407759	41.375222
-3.15	-156.893733	-201.482388	-215.423989	-149.412983	-168.696606	-184.951774
+3.15	78.224007	82.239678	82.523842	82.023657	87.491901	81.845862
-3.2	-147.664690	-188.896182	-202.089670	-139.150459	-157.943758	-172.281837
+3.2	117.951236	126.767166	123.724024	121.905907	130.712133	130.449637
-3.25	-138.435647	-177.090171	-189.459066	-130.453555	-148.072273	-161.514222
+3.25	154.194508	170.755451	164.625111	158.228194	169.999334	173.773571
-3.3	-129.206604	-165.284160	-176.828462	-121.756652	-138.200789	-150.746607
+3.3	183.220949	208.674229	204.047127	189.244049	204.377109	214.531300
-3.35	-119.977560	-153.478149	-164.197858	-113.059748	-128.329304	-139.978992
+3.35	204.276014	237.980843	236.975346	214.206589	237.004941	248.616487
-3.4	-110.748517	-141.672137	-151.567253	-104.362845	-118.457819	-129.211377
+3.4	216.686136	262.747220	258.707230	232.438545	264.650613	275.437045
-3.45	-101.519474	-129.866126	-138.936649	-95.665941	-108.586335	-118.443762
+3.45	219.858399	283.669490	271.711650	245.387577	285.635484	293.893583
-3.5	-92.290430	-118.060115	-126.306045	-86.969038	-98.714850	-107.676147
+3.5	215.294582	297.233469	278.575923	257.363711	299.219282	303.194020
-3.55	-83.061387	-106.254104	-113.675441	-78.272135	-88.843366	-96.908532
+3.55	225.360045	302.870316	286.349528	262.177671	304.811842	311.335052
-3.6	-73.832344	-94.448093	-101.044836	-69.575231	-78.971881	-86.140917

+3.6	233.642024	299.889499	288.289619	259.275539	301.900468	311.451637
-3.65	-64.603300	-82.642081	-88.414232	-60.878328	-69.100396	-75.373303
+3.65	235.948945	289.787950	283.489556	253.749416	289.852378	301.735175
-3.7	-55.374257	-70.836070	-75.783628	-52.181424	-59.228912	-64.605688
+3.7	230.418700	272.841107	267.303094	243.761107	268.226103	282.236157
-3.75	-46.145214	-59.030059	-63.153023	-43.484521	-49.357427	-53.838073
+3.75	216.349283	245.425463	239.292433	225.525674	247.213387	254.444417
-3.8	-36.916170	-47.224048	-50.522419	-34.787617	-39.485942	-43.070458
+3.8	193.147697	217.977195	216.653618	198.637228	218.050917	226.019275
-3.85	-27.687127	-35.418037	-37.891815	-26.090714	-29.614458	-32.302843
+3.85	161.093856	181.614941	182.753349	162.759192	178.936354	186.612915
-3.9	-18.458084	-23.612026	-25.261211	-17.393810	-19.742973	-21.535228
+3.9	117.920365	133.579901	135.699827	117.624686	129.584652	135.805438
-3.95	-9.229041	-11.806014	-12.630606	-8.696907	-9.871489	-10.767613
+3.95	64.311037	73.191221	74.826024	63.486252	70.040999	73.614564
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-14.93429014	-16.765198	-17.153551	-13.26109208	-14.09912478	-13.2783937	-15.80166211	-10.28710323	-10.82852972	-6.145247542
End Shear	113.2786044	126.623871	123.387098	104.0951571	108.8616567	100.7099541	115.2951198	78.1634697	82.27733653	51.74532874
-0.05	-14.93429014	-16.822817	-19.357330	-13.26109208	-14.09912478	-13.2783937	-15.80166211	-10.28710323	-10.82852972	-6.145247542
+0.05	103.469702	115.552855	111.835560	95.41071128	99.55620242	92.00383935	104.8508898	70.48954363	74.63555268	47.10932206
-0.1	-14.93429014	-17.034443	-23.362527	-13.26109208	-14.09912478	-13.2783937	-15.80166211	-10.28710323	-10.82852972	-6.145247542
+0.1	93.79402484	105.582940	100.610268	87.08527353	90.65059696	83.6407415	94.85046941	64.43724566	68.20361739	42.84441012
-0.15	-14.93429014	-17.294339	-26.388879	-13.26109208	-14.09912478	-13.2783937	-15.80166211	-10.28710323	-10.82852972	-7.615157357
+0.15	86.65173299	98.731783	92.433118	80.91231593	84.0575468	77.45545004	87.47581848	59.94502458	63.43072776	39.69942126
-0.2	-19.58292058	-24.463960	-30.406462	-16.47332996	-16.47332996	-13.2783937	-15.80166211	-13.82648231	-14.64723143	-10.65140035
+0.2	77.31735412	89.141992	82.013464	72.80681759	75.41429789	69.35517731	77.84776196	54.04001345	57.15830529	35.59414941
-0.25	-24.72712885	-30.874260	-33.414742	-21.40432867	-21.40432867	-17.55868823	-17.74439892	-17.71666171	-18.75029473	-12.9123906
+0.25	70.48263979	82.122006	74.740851	66.84215471	69.06468923	63.41101526	70.80573043	49.6896609	52.53845817	32.59243981
-0.3	-31.25831477	-39.500421	-37.430915	-27.93472092	-27.93472092	-24.63218892	-25.61022568	-23.52951251	-24.87702957	-15.89465279
+0.3	61.6271615	73.018594	65.395505	59.07216638	60.80825779	55.69095569	61.6923271	44.01566203	46.51461816	28.70961669
-0.35	-35.90956815	-46.008999	-40.454566	-32.78343962	-32.78343962	-29.90035851	-31.47363364	-27.98457348	-29.57049616	-18.09970147
+0.35	55.20324797	66.401369	58.671326	53.40248106	54.79544128	50.07597059	55.08963909	39.86996482	42.11460802	25.89830448
-0.4	-42.17179538	-54.708689	-44.512280	-39.15967372	-39.15967372	-36.85015738	-39.21561486	-34.12679373	-36.03874248	-20.98676965
+0.4	46.96432254	57.884641	50.116210	46.08357882	47.05029389	42.85350041	46.63316336	34.51070789	36.4284246	22.4811682
-0.45	-47.2250058	-61.228620	-51.032318	-44.2966128	-44.4423399	-41.98953432	-44.94612141	-38.93725932	-41.10273826	-23.10496374
+0.45	41.05442501	51.744033	44.028356	40.7955556	41.46762209	37.51249884	40.4333243	30.63247073	32.31506495	20.38176439
-0.5	-53.71213096	-69.884111	-60.000250	-52.41031086	-53.21621497	-48.71958943	-52.45754522	-44.95361152	-47.43413598	-26.29082907
+0.5	33.56967316	43.910643	36.379024	33.95176794	34.26668253	31.0231261	33.35712037	25.67168813	27.05561508	17.65983841
-0.55	-59.34579061	-76.325742	-66.876462	-58.38239361	-59.68428512	-54.3955921	-59.20419912	-49.65298487	-52.4008741	-28.68763454
+0.55	28.27701281	38.317766	31.012925	28.83452477	28.89140124	26.79347522	28.7056394	22.12369825	23.29570089	15.68371185
-0.6	-68.75108143	-84.815659	-75.983063	-66.16396793	-68.12598684	-62.39568607	-69.0213924	-56.14868039	-59.30798779	-31.70820655
+0.6	22.28024289	31.260703	24.878674	23.65892678	23.65892678	21.43167581	22.81771338	18.01706305	18.96532953	13.14676287
-0.65	-75.64815991	-91.086580	-82.751529	-71.84362431	-74.29826058	-68.25168951	-76.22983117	-60.74039079	-64.19326764	-33.83834329
+0.65	19.20916886	26.283939	21.683367	19.93221568	19.93221568	17.63578162	18.65636529	15.1813537	15.98037231	11.32482754
-0.7	-84.59902618	-99.285889	-91.671398	-79.17751682	-82.28334276	-75.83684949	-85.59786235	-66.48314658	-70.30688993	-37.53988401
+0.7	15.31290439	20.092537	17.696830	15.24404417	15.24404417	12.90034343	13.47530432	11.5542475	12.16236579	9.014074971
-0.75	-91.1036692	-105.290955	-98.266930	-84.47806359	-88.06646874	-81.33762686	-92.4160654	-70.50140285	-74.58748954	-40.40947068
+0.75	12.55198804	15.556119	14.920041	11.9543781	11.9543781	9.610236238	9.684601657	9.0544899	9.531042	7.377242578
-0.8	-99.82117188	-113.070967	-107.593299	-91.24868954	-95.47045471	-88.39047281	-101.1926565	-75.46793	-79.88216796	-44.09355128
+0.8	9.104000659	10.269671	11.512681	7.893393064	7.893393064	6.310476414	6.310476414	5.96916867	6.283335443	5.333901314
-0.85	-106.3710098	-118.712290	-114.525583	-96.08344683	-100.7710855	-93.4480013	-107.5139298	-78.89529741	-83.53903205	-46.73887543
+0.85	6.70533948	6.742709	9.185550	4.961950033	4.961950033	3.979853223	3.979853223	3.853023811	4.055814538	3.913084638
-0.9	-115.2775241	-125.940661	-123.775373	-102.1752317	-107.4695106	-99.85114671	-115.5567933	-83.06231187	-87.98931938	-50.09252974
+0.9	3.775090083	3.492959	6.397238	2.45180085	2.589881958	2.437488411	2.873203178	1.850281665	1.947664911	2.178372829
-0.95	-121.645542	-131.117610	-130.956773	-106.4575117	-112.1942897	-104.3773766	-121.2744097	-85.88132281	-91.00335762	-52.46647861
+0.95	2.683103477	3.099489	4.548435	2.45180085	2.589881958	2.437488411	2.873203178	1.800103767	1.908472303	1.042957733
-1	-129.6798705	-137.658334	-140.176574	-111.7548856	-118.0626943	-110.0134407	-128.4412666	-89.53729926	-94.58383239	-55.42689648
+1	2.68E+00	3.072891	2.912794	2.45E+00	2.59E+00	2.44E+00	2.87E+00	1.80E+00	1.91E+00	1.04E+00
(Span 2) -2	-1.02E+01	-11.691539	-11.082410	-9.33E+00	-9.85E+00	-9.27E+00	-1.09E+01	-6.85E+00	-7.26E+00	-3.97E+00
+2	1.29E+02	139.090093	144.853832	112.5462826	119.1734615	111.2517372	130.5210964	97.37551929	102.5803042	56.43204382
-2.05	-1.02E+01	-11.730251	-13.008934	-9.33E+00	-9.85E+00	-9.27E+00	-1.09E+01	-6.85E+00	-7.26E+00	-3.97E+00
+2.05	1.23E+02	133.002761	136.692196	107.862298	114.0000466	106.2920413	124.2502134	91.1319724	96.00097026	53.89354031
-2.1	-10.20849876	-11.877277	-15.911778	-9.328453389	-9.853815661	-9.273998474	-10.93177762	-6.848918539	-7.261232144	-3.968178132
+2.1	114.4481518	124.880805	125.303374	101.4570439	106.9688262	99.57728008	115.8465774	83.02736296	87.45592745	50.46598819
-2.15	-10.20849876	-12.084800	-18.417704	-9.328453389	-9.853815661	-9.273998474	-10.93177762	-6.848918539	-7.261232144	-4.700475249
+2.15	107.5137377	118.042622	116.625394	95.95583765	100.960367	93.85753127	108.749429	76.37141034	80.89062821	47.55475849
-2.2	-11.79993596	-16.254941	-21.601799	-11.1082775	-11.1082775	-9.273998474	-10.93177762	-8.780411371	-9.24886366	-6.976557314
+2.2	98.37528074	109.161049	105.626735	88.69311387	93.06201951	86.35930988	99.51490944	71.26601322	75.47573641	43.75046058

-2.25	-15.11127226	-21.432603	-24.211804	-15.05684785	-15.05684785	-13.16541374	-13.64264606	-12.19128643	-12.86204695	-8.942898387
+2.25	90.7570974	101.855764	96.789903	82.63715291	86.50117348	80.14609254	91.9146295	66.80640384	70.72824379	40.60915171
-2.3	-19.50424384	-28.517939	-27.579944	-20.37986452	-20.37986452	-18.59171794	-19.56909814	-16.64222201	-17.56965125	-11.5523232
+2.3	80.9429057	92.562595	85.806648	74.84506278	78.08904055	72.1976539	82.25315702	60.76457183	64.30313946	36.6063976
-2.35	-24.2666803	-34.624044	-31.768410	-25.01756074	-25.05691142	-23.25268202	-24.67774031	-20.32200077	-21.45652827	-13.73853009
+2.35	73.4542005	85.063273	78.120073	68.31363171	71.07528668	65.18373502	73.89910086	55.57704706	58.79181671	33.37765783
-2.4	-31.93786478	-42.731259	-38.642565	-31.98911414	-32.38209091	-29.40811249	-31.44436518	-25.02896068	-26.42286242	-16.56429061
+2.4	64.11154556	75.693196	68.323232	59.70431821	61.83073127	56.88878023	63.82780024	48.67673637	51.46737729	29.35478377
-2.45	-38.49569831	-49.541372	-44.825817	-37.86256147	-38.58374444	-35.12563236	-38.07449022	-29.10000507	-30.7111774	-18.87676253
+2.45	56.72759739	68.262260	61.277717	53.33285514	55.02270803	50.49893068	56.2087436	42.84356967	45.2809576	26.18126387
-2.5	-47.11778131	-58.383225	-52.982879	-45.48954754	-46.67107571	-42.67802494	-46.94582245	-35.69737809	-37.70471727	-22.31747984
+2.5	47.66300647	58.376892	52.779498	45.48364499	46.66480375	42.67227864	46.93904469	35.69319637	37.70028289	22.31655617
-2.55	-56.0993242	-68.268630	-61.549977	-53.33888725	-55.02914353	-50.50484319	-56.21577274	-42.84834086	-45.28601545	-26.18221341
+2.55	39.01464654	49.535147	44.689180	37.85684703	38.57769925	35.12012171	38.06804782	29.09577977	30.70670067	18.89501092
-2.6	-63.46231576	-75.699544	-68.650481	-59.71041423	-61.83725441	-56.89476141	-63.83495213	-48.68129634	-51.47221481	-29.35575271
+2.6	32.43039844	42.725197	38.556114	31.9836357	32.37631882	29.40340896	31.43918731	25.02594	26.41967677	16.58224499
-2.65	-73.11931296	-85.069529	-78.120071	-68.13652915	-70.89863897	-65.04672741	-73.76332818	-55.5813219	-58.7963562	-33.378642
+2.65	24.71939521	34.618254	31.738615	25.01243387	25.05154197	23.24822686	24.67285075	20.31904585	21.45340832	13.75592083
-2.7	-81.1774307	-92.568698	-86.445784	-74.85106198	-78.09550259	-72.06003662	-82.11681003	-60.76860272	-64.30742337	-36.60737928
+2.7	20.95516318	28.512413	27.552673	20.37566485	20.37566485	18.58751354	19.56449704	16.63934096	17.56660597	11.56909471
-2.75	-91.28061855	-101.861611	-97.427569	-82.64304037	-86.50753947	-80.1519568	-91.92177794	-66.81010433	-70.73218094	-40.61010678
+2.75	16.46116229	21.427470	24.192921	15.05295457	15.05295457	13.16157171	13.6384601	12.18851496	12.85911275	8.958686051
-2.8	-99.30297267	-109.166645	-106.257063	-88.69881654	-93.06820547	-86.36504278	-99.5219377	-71.26945188	-75.47939855	-43.75139439
+2.8	13.00044954	16.250184	21.589561	11.10467673	11.10467673	9.273995718	10.93179898	8.777771379	9.246064323	6.991402487
-2.85	-109.141724	-118.047841	-117.238738	-95.9612525	-100.9662672	-93.8630142	-108.7562038	-76.37675974	-80.89391386	-47.55566572
+2.85	10.20845215	12.084775	18.413354	9.328450793	9.853825992	9.273995718	10.93179898	6.848925749	7.261247731	4.699959644
-2.9	-116.7767385	-124.885662	-125.896916	-101.4621745	-106.974439	-99.58250064	-115.8530732	-83.03262352	-87.46147591	-50.46685641
+2.9	10.20845215	11.877252	15.849896	9.328450793	9.853825992	9.273995718	10.93179898	6.848925749	7.261247731	3.968179682
-2.95	-125.9115084	-133.007079	-136.692192	-107.8669895	-114.0052104	-106.296881	-124.256297	-91.13705641	-96.00632921	-53.8943396
+2.95	10.20845215	11.730226	12.975032	9.328450793	9.853825992	9.273995718	10.93179898	6.848925749	7.261247731	3.968179682
-3	-135.2870791	-140.551132	-146.785948	-113.6535769	-120.4014765	-112.4319448	-132.0233001	-98.90063695	-104.186984	-57.0354537
+3	10.20845215	11.691513	11.082431	9.328450793	9.853825992	9.273995718	10.93179898	6.848925749	7.261247731	3.968179682
(Span 3) -4	-2.683091217	-3.072885	-2.912799	-2.451800168	-2.589884673	-2.437487686	-2.873208793	-1.800105662	-1.9084764	-1.04295814
+4	125.3657973	136.059655	137.858403	110.4715243	116.6382032	108.6437854	126.6940624	88.43168627	93.733296	54.70881948
-3.05	-2.683091217	-3.099483	-4.391781	-2.451800168	-2.589884673	-2.437487686	-2.873208793	-1.800105662	-1.9084764	-1.04295814
+3.05	120.141647	131.112805	130.942615	106.4522149	112.1884376	104.3718795	121.2674503	85.87846004	91.00029524	52.46554149
-3.1	-4.460366822	-4.072500	-7.050549	-2.896030615	-2.896030615	-2.437487686	-2.873208793	-2.195823646	-2.311393311	-2.581191399
+3.1	112.6820404	124.161788	121.104976	100.6863211	105.8300581	98.28271714	113.5821488	82.06083288	86.91926871	49.27265865
-3.15	-6.679235457	-6.747107	-9.159770	-4.965285021	-4.965285021	-3.982472864	-3.982472864	-3.855150138	-4.058052777	-3.898863251
+3.15	106.7385733	118.706662	114.408698	96.07741442	100.7644653	93.44180795	107.5061761	78.89177489	83.53527233	46.73782341
-3.2	-9.939944324	-11.523672	-12.281386	-8.876160363	-8.876160363	-7.096585255	-7.096585255	-6.71529107	-7.068727442	-5.81359999
+3.2	98.38101451	111.146230	105.165242	89.5832103	93.64725031	86.6527038	99.02624912	74.26469624	78.59899175	43.18760707
-3.25	-12.55198915	-15.485694	-14.904964	-11.95839281	-11.95839281	-9.614140064	-9.688836731	-9.057036171	-9.533722285	-7.360675999
+3.25	91.80993089	105.284620	98.040654	84.47141137	88.05920535	81.33088129	92.40769331	70.4972662	74.58308162	40.40832642
-3.3	-16.26463861	-21.597196	-18.560413	-16.38899342	-16.38899342	-14.05212836	-14.73424221	-12.42380435	-13.07768879	-9.560673842
+3.3	82.67668425	97.248658	89.348669	77.36447046	80.3076189	73.95918961	83.27538812	65.08397566	68.81694685	36.56358354
-3.35	-19.20916886	-26.289979	-21.555314	-19.93679647	-19.93679647	-17.64034604	-18.66133652	-15.18426752	-15.98343949	-11.30624075
+3.35	75.56968128	91.079625	82.236836	71.83648946	74.29050242	68.2444661	76.22093004	60.73562919	64.18820052	34.35180947
-3.4	-23.3303987	-32.987174	-25.818254	-24.94374872	- 24.9437487183 038	-22.74578759	- 24.259773846 9141	-18.99406564	-19.9937533077294	-13.75028328
+3.4	65.97410413	82.698442	73.321955	64.23236306	66.02898397	60.40762775	66.57859936	54.55942203	57.6176708	31.5247253
-3.45	-28.17604404	-38.324481	-30.581120	-28.89046511	-28.89760895	-26.79859535	-28.71126263	-22.12736299	-23.29958344	-15.66342878
+3.45	58.891596	76.318310	66.581549	58.37485465	59.67611565	54.38804259	59.19495319	49.64761614	52.39516724	29.26862351
-3.5	-35.28788941	-45.836653	-38.214708	-35.6127492	-36.01331604	-32.47548942	-34.9555105	-26.891949	-28.34910426	-18.31030094
+3.5	51.51763211	67.718450	57.125402	50.38917397	51.02919174	47.04540908	50.58818723	43.48729334	45.89125476	26.08519766
-3.55	-40.94063344	-51.751277	-43.963303	-40.80212224	-41.47454423	-37.37557184	-40.29744044	-30.6364924	-32.31932951	-20.36010925

+3.55	47.67885005	61.220794	50.500079	44.28878652	44.4338855434454	41.9831802741343	44.93903447	38.93228768	41.09750524	23.57006273
-3.6	-48.86678015	-59.987045	-52.135958	-47.89262153	-48.96280529	-44.63564505	-48.71565987	-35.83541271	-37.83373274	-23.18408235
+3.6	42.20245524	52.525258	43.494433	37.5704193	37.5704193	35.11569914	37.28269525	32.46095689	34.28479409	20.27044961
-3.65	-55.07869495	-66.409054	-58.656247	-53.40955057	-54.80292979	-50.08282298	-55.09767782	-39.87427803	-42.11918503	-25.89942571
+3.65	37.82518818	46.000915	40.008275	32.77731108	32.77731108	29.89381783	31.46635193	27.97991827	29.56559254	18.09882282
-3.7	-63.68154254	-75.273286	-67.454930	-61.00063455	-62.85578035	-57.60426068	-63.947304	-45.42378685	-48.00937947	-29.66773061
+3.7	31.62681853	37.328936	36.044212	26.3020035	26.3020035	22.86152635	23.6404917	22.00504668	23.27063525	15.1522953
-3.75	-70.34937446	-82.129995	-74.451346	-66.84963995	-69.07264971	-63.41829434	-70.81433643	-49.69421618	-52.54329494	-32.59362788
+3.75	26.70506657	30.866002	33.260809	21.39807387	21.39807387	17.55207877	17.73705394	17.71254437	18.74595291	12.91148499
-3.8	-79.49129275	-91.523977	-84.123483	-74.82567528	-77.56556264	-71.37021347	-80.23954625	-55.51058487	-58.7202076	-36.61129757
+3.8	19.77672155	22.333271	29.282425	14.81948107	14.81948107	13.27843869	15.80166028	12.51529182	13.26386997	9.893321839
-3.85	-86.93059815	-98.739992	-91.614241	-80.92010495	-84.06585858	-77.46306876	-87.48488635	-59.94976004	-63.43575843	-39.70067115
+3.85	15.4776817	17.294366	26.184441	13.2611378	14.09918601	13.27843869	15.80166028	10.28710125	10.82852764	7.614252089
-3.9	-97.13962892	-108.065566	-103.348466	-89.16554753	-92.87440121	-85.72802639	-97.34332607	-65.94926069	-69.81031704	-43.90488893
+3.9	15.4776817	16.967105	22.219669	13.2611378	14.09918601	13.27843869	15.80166028	10.28710125	10.82852764	6.145680443
-3.95	-104.9617644	-115.561139	-111.746486	-95.4186911	-99.56474401	-92.01169543	-104.8602964	-70.49438536	-74.64069864	-47.11061922
+3.95	15.4776817	16.822843	19.283042	13.2611378	14.09918601	13.27843869	15.80166028	10.28710125	10.82852764	6.145680443
-5	-115.5711353	-125.703697	-123.223882	-103.8179663	-108.5644516	-100.4723375	-115.0097174	-78.04803382	-82.15582508	-51.43857452
+5	15.4776817	16.765224	17.153304	13.2611378	14.09918601	13.27843869	15.80166028	10.28710125	10.82852764	6.145680443

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.501380457	-9.100764868	-8.064381462	-6.975617846	-7.774964009	-10.70792118	-11.83066922	-13.0767782	-14.09925439
End Shear	73.813521	71.04675086	60.83671803	51.28566805	60.69647925	81.53966029	87.9796772	87.76168317	87.07267735
-0.05	-9.501380457	-9.100764868	-8.064381462	-7.717269894	-7.774964009	-10.70792118	-11.83066922	-13.0767782	-14.09925439
+0.05	67.34645682	63.48470307	55.14749763	46.25320867	55.41811657	74.44924996	80.03570468	79.80417506	79.79530994
-0.1	-9.501380457	-9.100764868	-9.594867168	-8.866122075	-7.774964009	-10.70792118	-11.83066922	-13.0767782	-14.09925439
+0.1	61.13827213	56.59983998	49.80371574	41.74958724	50.38234085	67.64274922	72.39159369	72.33368317	72.19869728
-0.15	-9.501380457	-9.100764868	-11.15177071	-10.21603639	-7.774964009	-10.70792118	-11.83066922	-13.0767782	-14.09925439
+0.15	56.5561699	51.87647895	45.87421931	38.43261486	46.65924372	62.61179396	66.76094162	66.61139951	66.60160088
-0.2	-11.59905413	-12.74814359	-14.14408948	-13.2823303	-10.16175001	-11.20319962	-11.83066922	-13.0767782	-14.09925439
+0.2	50.56871161	46.27069739	40.75989691	34.11015263	41.7853952	56.02756568	59.4188773	59.31151156	59.30129932
-0.25	-15.07086164	-16.34647011	-17.44302514	-15.5383768	-12.31898141	-14.80417304	-14.80670027	-14.77022318	-14.7357346
+0.25	46.18550501	42.25037699	37.0319178	30.95653216	38.21040901	51.19932356	54.05611875	53.97794698	53.96748567
-0.3	-19.66875271	-21.62900473	-21.63239695	-18.4475013	-15.16459168	-20.30163669	-20.30473762	-20.26905852	-20.23532603
+0.3	40.50771035	37.8072606	32.22550511	26.8883779	33.56959554	44.93341222	47.12639654	47.08367028	47.07297309
-0.35	-23.08260598	-25.65779104	-24.61883759	-20.55923496	-17.26879303	-24.3926759	-24.39619223	-24.36120856	-24.5144251
+0.35	36.39010015	34.54062125	28.7578849	23.99199726	30.19605933	40.37992192	42.11425529	42.0953663	42.08455391
-0.4	-27.57192536	-31.17576995	-28.39524173	-23.43144002	-20.09763647	-29.78508641	-30.82164301	-30.78101905	-30.7426153
+0.4	31.11088801	30.28911649	24.33783204	20.54560482	25.85939786	34.52836278	35.84857712	35.95789514	36.17805329
-0.45	-30.88086727	-35.46375805	-31.07472768	-25.65331894	-23.76178292	-33.76932257	-35.59989017	-35.56022262	-35.5227192
+0.45	27.2108353	27.18969598	21.65591772	18.51514978	22.74065022	30.19990722	31.70757348	31.69704006	31.93265931
-0.5	-35.19899952	-40.84994124	-34.44557877	-28.496084	-28.76754669	-38.98197975	-41.8702735	-41.83201994	-41.81405603
+0.5	23.21480137	23.19251139	18.47445658	15.88486514	18.77926331	25.0318647	26.41165253	26.40112891	26.68156853
-0.55	-38.50283449	-44.64081446	-36.8236646	-30.53866284	-32.46216628	-43.54083898	-46.48171639	-46.44461818	-46.88817889
+0.55	20.3303064	20.30734845	16.17798491	13.9786061	15.74258622	21.70340848	22.6246541	22.61422203	22.82738353
-0.6	-44.32410673	-49.3630263	-40.5745469	-33.77338382	-37.29009423	-50.08486884	-52.48521212	-52.44979031	-53.42357565
+0.6	16.650756	16.62718618	13.24857941	11.53820494	12.64198195	17.47706269	17.84523184	17.83501311	18.03368537
-0.65	-48.75044373	-52.65508259	-43.22207912	-36.05628375	-40.82466242	-54.87773078	-57.19520137	-57.13835754	-58.13993068
+0.65	14.02710027	14.00330867	11.15987747	9.792414718	10.90106226	14.47934206	14.49879068	14.63645416	14.65718873
-0.7	-54.49423602	-56.71108664	-46.44351815	-39.93974431	-45.40363431	-61.08950269	-64.42751842	-64.30666644	-64.26791148
+0.7	10.72663466	10.70288189	8.532466279	7.589774553	8.692236913	10.73132484	10.74889468	10.87560553	10.78265946
-0.75	-58.66770334	-59.50262718	-48.6340318	-42.79264429	-48.72482116	-65.59715038	-69.69578907	-69.52695239	-69.48973468
+0.75	8.410775073	8.38731696	6.689978953	6.039990445	7.126902349	8.125248611	8.136487951	8.254454662	8.120401581
-0.8	-64.02986977	-62.8901544	-52.42272053	-46.4855758	-52.98371756	-71.38062626	-76.48332769	-76.25075511	-76.41314153
+0.8	5.552010381	5.529335189	4.557602033	4.20890047	5.171746778	5.363904952	5.359338687	5.275054074	5.26871894
-0.85	-67.88376784	-65.17950428	-55.90934803	-49.16807852	-56.03818031	-75.53104115	-81.37665728	-81.64579091	-81.60446061
+0.85	3.528271782	3.569116794	3.086625095	3.111235833	3.811334978	3.382875239	3.465223759	3.387617251	3.381629263
-0.9	-72.7753692	-67.89631207	-60.35731252	-52.62248428	-59.905888	-80.79017746	-87.60910769	-89.06416974	-89.11211946
+0.9	1.691563556	1.713945122	1.615812101	2.096860969	2.148964416	1.951045609	2.110929285	2.314671521	2.446676089
-0.95	-76.24299778	-72.58685619	-63.52862498	-55.18694765	-62.64029013	-84.51131852	-92.04476618	-94.39387745	-94.76277637
+0.95	1.691563556	1.469872297	1.389534782	1.446246575	1.400818519	1.951045609	2.110929285	2.314671521	2.446676089
-1	-80.57511382	-79.05355672	-67.58328908	-58.46542657	-66.04569172	-89.15007656	-97.61182712	-101.1556483	-102.6018625
+1	1.69E+00	1.47E+00	1.39E+00	1.19E+00	1.40E+00	1.95E+00	2.11E+00	2.31E+00	2.45E+00
(Span 2) -2	-6.44E+00	-5.59E+00	-5.29E+00	-4.51E+00	-5.33E+00	-7.42E+00	-8.03E+00	-8.81E+00	-9.31E+00
+2	8.19E+01	86.4635594	75.01017309	64.1884633	66.8325766	90.28171769	99.60471161	104.5654144	108.0155795
-2.05	-6.44E+00	-5.59E+00	-5.29E+00	-4.87E+00	-5.33E+00	-7.42E+00	-8.03E+00	-8.81E+00	-9.31E+00
+2.05	78.16770438	80.79956401	69.74313363	59.85636149	63.84950061	86.21319047	94.77951346	98.77607189	101.2848791
-2.1	-6.435951799	-5.592474892	-5.83085446	-5.756173958	-5.329743958	-7.423212347	-8.031527228	-8.806712547	-9.308955053
+2.1	73.09921407	73.14629551	63.11082036	54.40935012	59.81137623	80.71403847	88.32492687	91.16356533	92.56148644
-2.15	-6.435951799	-5.592474892	-6.873069725	-7.051340377	-5.329743958	-7.423212347	-8.031527228	-8.806712547	-9.308955053
+2.15	68.79992853	67.53796777	58.03937242	50.1953216	56.37234393	76.03642737	82.88309294	84.84054458	85.4102247
-2.2	-7.826830299	-8.12938545	-8.301643578	-9.185285227	-6.568947521	-7.732457431	-8.031527228	-8.806712547	-9.308955053
+2.2	63.18564237	60.65185882	52.17081935	45.32660426	51.86522073	69.91223404	75.81429022	76.73651306	76.71422894
-2.25	-10.60746925	-11.27434824	-10.65901806	-10.85462238	-8.43811206	-10.88040067	-10.88850836	-10.87312567	-10.85858192

+2.25	58.55070876	55.39061237	47.84117882	41.81782482	48.13174359	64.84365358	70.00636001	69.99826331	70.13762548
-2.3	-14.35589637	-15.38297842	-14.20786142	-12.99301027	-10.92022148	-15.16766312	-15.45808351	-15.43975326	-15.42241239
+2.3	52.51775712	51.05320124	42.67900438	37.7137528	43.35751037	58.36707298	62.16272581	62.45176557	62.43161104
-2.35	-17.53849878	-18.78302314	-17.30165519	-14.74665534	-13.62433732	-18.83849184	-19.60841336	-19.58931532	-19.57125512
+2.35	47.27806463	47.24606873	38.54580351	34.59931547	39.49109466	52.63789775	55.97381819	56.10813984	56.54765863
-2.4	-22.03063057	-23.13570514	-21.39302016	-17.67464465	-17.68194467	-23.67333137	-25.12936217	-25.10963152	-25.13332485
+2.4	41.3351972	42.07684975	34.36107727	30.71294458	34.16978961	45.91683292	48.62646356	48.53222579	48.67632829
-2.45	-25.48126655	-26.83861392	-24.51604036	-20.06715997	-21.13375088	-28.27971131	-29.76390941	-29.74390926	-30.23347552
+2.45	36.64503717	37.62153179	31.72275404	27.62378971	30.33860122	40.73000268	42.85321289	42.79164414	42.77037234
-2.5	-30.93207076	-32.08066717	-28.22861166	-23.8078031	-25.65330151	-34.3905534	-35.85353107	-35.82732608	-36.25043759
+2.5	30.92792038	32.07738716	28.22647745	23.80645349	25.64975416	34.38589983	35.84858794	35.8225208	36.24625915
-2.55	-36.64932265	-37.62520931	-31.72475777	-27.62514425	-30.34224666	-40.734799	-42.8583677	-42.79665157	-42.7752385
+2.55	25.47804168	26.8352086	24.51377463	20.06611238	21.13036643	28.27525708	29.7596612	29.73976028	30.22943469
-2.6	-41.33957703	-42.08030576	-34.36297749	-30.71430781	-34.17349544	-45.92169084	-48.6317426	-48.53735145	-48.56926157
+2.6	22.02749834	23.13291086	21.39066773	17.6735493	17.67871994	23.66964169	25.12526042	25.10561666	25.24144854
-2.65	-47.28248425	-47.24924424	-38.54882972	-34.60065688	-39.33232377	-52.52122212	-55.97916015	-55.99826089	-56.44064614
+2.65	17.53550132	18.78029204	17.29918161	14.74587943	13.62135941	18.83498731	19.60455715	19.58554898	19.56760318
-2.7	-52.39732606	-51.05612617	-42.68204459	-37.71506874	-43.36120251	-58.24988504	-62.05001316	-62.34188113	-62.43665449
+2.7	14.35302887	15.38031772	14.20578127	12.99223265	10.91826476	15.16434723	15.45445515	15.43621691	15.41897571
-2.75	-58.55503835	-55.39324123	-47.84419889	-41.81920112	-48.13537595	-64.84843435	-70.01165979	-69.94992138	-70.14328172
+2.75	10.60481096	11.27179177	10.65692814	10.85385123	8.436266721	10.8773585	10.88554758	10.87024627	10.8557839
-2.8	-63.18989043	-60.65624173	-52.17426377	-45.32828582	-51.86877334	-69.91691253	-75.81949978	-76.74228507	-76.71982528
+2.8	7.824361633	8.12695304	8.300053388	9.184517637	6.567214631	7.729661563	8.031530036	8.806692587	9.308948695
-2.85	-68.80400764	-67.54236375	-58.04281642	-50.19698652	-56.37573531	-76.04090798	-82.88812317	-84.84619879	-85.41638355
+2.85	6.435960334	5.592463643	6.87232439	7.067598622	5.32972728	7.42321959	8.031530036	8.806692587	9.308948695
-2.9	-73.10311213	-73.04287531	-63.11473633	-54.41124726	-59.8146182	-80.71830983	-88.32976831	-91.16909832	-92.56757912
+2.9	6.435960334	5.592463643	5.830055495	5.755863883	5.32972728	7.42321959	8.031530036	8.806692587	9.308948695
-2.95	-78.17132978	-80.69638528	-69.74704408	-59.85824603	-63.85249347	-86.21715699	-94.78404812	-98.78133613	-101.2907522
+2.95	6.435960334	5.592463643	5.286820778	4.872023438	5.32972728	7.42321959	8.031530036	8.806692587	9.308948695
-3	-82.82717689	-87.86185479	-76.31828295	-65.26478833	-67.54254103	-91.25089113	-100.7617196	-105.968699	-109.661368
+3	6.435960334	5.592463643	5.286820778	4.510349446	5.32972728	7.42321959	8.031530036	8.806692587	9.308948695
(Span 3) -4	-1.691565799	-1.47E+00	-1.39E+00	-1.19E+00	-1.400814136	-1.951047513	-2.110930023	-2.314666275	-2.446674417
+4	79.5207163	77.46196626	66.56062197	57.66213203	65.2179827	88.0221774	96.25397919	99.49810779	100.6303873
-3.05	-1.691565799	-1.47E+00	-1.39E+00	-1.53E+00	-1.400814136	-1.951047513	-2.110930023	-2.314666275	-2.446674417
+3.05	76.23882454	72.58158008	63.52558474	55.18555184	62.63687298	84.5067975	92.03953069	94.38771121	94.75642393
-3.1	-2.036494025	-2.034026114	-1.822676238	-2.330796613	-2.549258311	-1.951047513	-2.110930023	-2.314666275	-2.446674417
+3.1	71.57581553	67.25101718	59.26479924	51.77092105	58.95833144	79.5014602	86.07838971	87.23526894	87.19599971
-3.15	-3.507486774	-3.571086444	-3.087989107	-3.111743639	-3.812991503	-3.385101935	-3.467381806	-3.389720707	-3.383677965
+3.15	67.87910244	65.17718345	55.90596212	49.16659789	56.03434422	75.52595716	81.37085025	81.63909221	81.59793669
-3.2	-6.243749221	-6.220480149	-5.074447881	-4.630862813	-5.647620745	-6.032097467	-6.027406509	-5.940919516	-5.934423559
+3.2	62.70746595	62.07652126	51.35093353	45.57300101	51.9341731	69.95517376	74.80741033	74.59094819	74.64183714
-3.25	-8.413516396	-8.389675611	-6.691606505	-6.040921446	-7.12883959	-8.127918383	-8.139501564	-8.257391975	-8.123261949
+3.25	58.66261373	59.49977824	48.63196568	42.79103957	48.72061851	65.5916215	69.68951144	69.52089261	69.48381982
-3.3	-11.53257209	-11.50836614	-9.173558575	-8.127313995	-9.23387255	-11.64391786	-11.66186498	-11.79131075	-11.69850997
+3.3	53.07130342	55.72967984	45.66840841	38.97184057	44.26995084	59.55140899	62.63407497	62.5294446	62.68161617
-3.35	-14.03023429	-14.00599809	-11.16185929	-9.793446581	-10.90323312	-14.48295064	-14.50229549	-14.63987364	-14.66050814
+3.35	48.74503094	52.6516924	43.21957887	36.05502355	40.82018007	54.87181754	57.18854588	57.13191514	58.13463046
-3.4	-17.55517786	-17.5312678940157	-13.96807077	-12.13781647	-13.23956268	-18.5136912361411	-19.01402248	-19.00364418	-19.2059315908145
+3.4	42.82296373	48.21441259	39.64429228	32.98136042	36.0901028	48.45826429	50.99585385	50.96011854	51.80989507
-3.45	-20.33378088	-20.31033388	-16.1801823	-13.97973962	-15.74606416	-21.70744102	-22.62910408	-22.61854972	-22.83159356
+3.45	38.35221797	44.63688468	36.8213945	30.5375281	32.45747365	43.53466583	46.47618963	46.43923748	46.88243412
-3.5	-24.20202001	-24.17947817	-19.2598347	-16.53459764	-19.75114404	-26.17380396	-27.71481879	-27.7041698	-27.98848179
+3.5	34.12649293	39.53467657	33.62193766	27.79695885	27.51911718	37.68579192	40.30917492	40.27068864	40.2343325
-3.55	-27.2145869	-27.19293066	-21.65830526	-18.51633278	-22.74453019	-30.08325804	-31.71247343	-31.70182607	-31.93729001
+3.55	30.87681836	35.4593191186742	31.0721629207871	25.6520267485971	23.7569293540822	33.7643980074532	35.594145714687	35.5546390209582	35.51729342

-3.6	*-32.41152621*	-31.34323841	*-25.42303467*	-21.23329251	-26.92927821	*-35.9716045*	-37.26380635	*-37.37665776*	-37.59671673
+3.6	*26.45310718*	29.69443849	*27.47030648*	22.67227021	19.41258846	*28.4397968*	29.21112509	*29.17033346*	29.1318094
-3.65	*-36.39505902*	-34.54405046	*-28.76120312*	-23.99369205	-30.20029809	*-40.38547604*	-42.00216628	*-42.10108981*	-42.09011567
+3.65	*23.0784217*	25.65357664	*24.61595694*	20.55798293	17.26611404	*24.387598*	24.3912835	*24.35640657*	24.32346609
-3.7	*-41.91313926*	-38.91281534	*-33.41181237*	-27.89146649	-34.71962482	*-46.48578238*	-48.83967557	*-48.78830778*	-48.7774595
+3.7	*18.5193358*	*20.25269526*	*20.6043065*	17.72914685	14.45434543	*18.92596991*	*18.92908252*	*18.89330854*	18.85951149
-3.75	*-46.19081568*	*-42.25395483*	*-37.03551668*	-30.958377	-38.21492227	*-51.20523372*	*-54.06247063*	*-53.98412461*	-53.97346921
+3.75	*15.06659762*	*16.34266113*	*17.43985242*	15.53699763	12.31623008	*14.79903309*	*14.80171612*	*14.76533678*	14.7310278
-3.8	*-52.05662226*	*-47.65901979*	*-42.02760261*	-35.18079678	-42.99772478	*-57.66498554*	*-61.24155134*	*-61.12377979*	-61.11348966
+3.8	*10.43472809*	*11.53559013*	*13.01101245*	12.51408319	9.436573799	*10.70796661*	*11.83071464*	*13.07680647*	14.09929883
-3.85	*-56.56176684*	*-51.8810143*	*-45.87803219*	-38.43452588	-46.66396284	*-62.61798881*	*-66.76765405*	*-66.61790266*	-66.60793459
+3.85	*9.501423543*	*9.100763821*	*11.15030341*	10.21477322	7.774978207	*10.70796661*	*11.83071464*	*13.07680647*	14.09929883
-3.9	*-62.68634524*	*-58.30137805*	*-51.13317216*	-42.86953782	-51.63914682	*-69.34109697*	*-74.29598946*	*-74.22677521*	-73.61944081
+3.9	*9.501423543*	*9.100763821*	*9.044470086*	8.585562437	7.774978207	*10.70796661*	*11.83071464*	*13.07680647*	14.09929883
-3.95	*-67.35223256*	*-63.49025864*	*-55.15145569*	-46.25517994	-55.4229854	*-74.45564565*	*-80.04266797*	*-79.8109102*	-79.80186206
+3.95	*9.501423543*	*9.100763821*	*8.064378374*	7.716703919	7.774978207	*10.70796661*	*11.83071464*	*13.07680647*	14.09929883
-5	*-73.64666907*	*-70.62094808*	*-60.591227*	-50.82912017	-60.519394	*-81.34609282*	*-87.80992467*	*-87.62604649*	-87.61510118
+5	*9.501423543*	*9.100763821*	*8.064378374*	*6.975616278*	7.774978207	*10.70796661*	*11.83071464*	*13.07680647*	*14.09929883*

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-15.08562766	-16.72904659	-10.26775037	-12.57924376	-12.80251437
End Shear	102.2115595	105.0780923	81.29423647	93.88184989	96.14616735
-0.05	-15.08562766	-16.72904659	-10.26775037	-12.57924376	-12.80251437
+0.05	91.39358877	93.72603529	74.8732949	84.05569294	88.06202302
-0.1	-15.45073198	-16.72904659	-10.26775037	-12.57924376	-12.80251437
+0.1	81.37983753	82.92762305	68.4968484	75.603478	80.06762757
-0.15	-17.26159723	-18.41882107	-10.99464075	-13.06983534	-14.03655877
+0.15	74.10182457	75.08733762	63.76097551	69.8471586	74.15270196
-0.2	-20.55405956	-22.96891424	-15.81549438	-15.42198872	-16.77940675
+0.2	65.24623417	65.69147609	57.53144538	62.9864802	66.40324633
-0.25	-24.9686122	-26.77350779	-20.58337151	-19.71644977	-21.37471925
+0.25	59.19458105	58.95882943	52.93870239	57.92591891	60.71396051
-0.3	-30.23663198	-32.16193939	-27.4674789	-26.73323223	-27.85825255
+0.3	51.39913293	50.33158842	46.94393306	51.31687604	53.32129077
-0.35	-35.86062891	-38.56687663	-32.63986144	-32.01084046	-33.81169195
+0.35	46.06529551	44.73519761	42.56021636	46.48097867	47.94154746
-0.4	-43.55573904	-45.48179103	-39.15611623	-40.15011308	-42.39333475
+0.4	39.82112701	37.61930043	36.8880813	40.2194163	41.01750567
-0.45	-49.19335391	-50.38779362	-43.75930118	-46.7100136	-48.93742796
+0.45	35.29628456	32.79292017	32.77928384	35.68007878	36.03118757
-0.5	-57.14360305	-57.60339488	-49.75605857	-55.00058934	-57.17283463
+0.5	29.49935126	27.4097085	27.51764101	29.86184192	29.94229157
-0.55	-62.74453188	-62.67874767	-54.75881346	-60.8747119	-62.98258222
+0.55	25.40777329	23.55239925	23.74965829	25.69094428	25.76774409
-0.6	-71.33223499	-68.94203308	-61.07318329	-68.24577398	-70.40229768
+0.6	20.15010899	18.67285471	19.1180116	20.41189016	20.48348123
-0.65	-76.84181827	-74.42440067	-65.53777044	-73.42644139	-76.4739775
+0.65	16.43684298	15.22682312	16.10764464	17.18148762	16.74874273
-0.7	-83.18708779	-82.94608791	-71.12276148	-79.86775163	-84.09524508
+0.7	11.81757313	11.09263587	12.32056971	13.14194102	12.03175355
-0.75	-87.8363518	-89.46702947	-75.03143043	-84.34724493	-89.45076184
+0.75	8.619051227	8.48994855	9.610113709	10.19419185	8.813558183
-0.8	-93.45803741	-98.08843212	-79.8633653	-89.84856093	-96.10404892
+0.8	5.59017852	5.461577758	6.334506979	6.70544498	5.64398464
-0.85	-99.70984785	-105.9225996	-83.19836793	-93.61920337	-100.7237551
+0.85	3.722840985	3.741621351	4.114439726	4.388735708	3.657279757
-0.9	-110.0565521	-117.0488068	-87.25358048	-98.17024801	-106.3828122
+0.9	2.489066157	2.672477544	1.962926959	2.188418645	2.367201812
-0.95	-117.3834952	-124.9436252	-89.9971676	-101.2243581	-110.2470191
+0.95	2.489066157	2.672477544	1.918178025	2.188418645	2.367201812
-1	-126.5558306	-135.3499543	-93.2519868	-104.8148877	-114.8856268
+1	2.49E+00	2.67E+00	1.92E+00	2.19E+00	2.37E+00
(Span 2) -2	-9.47E+00	-1.02E+01	-7.30E+00	-8.33E+00	-9.01E+00
+2	130.0820154	143.3880734	95.56101933	117.0879041	118.5821175
-2.05	-9.47E+00	-1.02E+01	-7.30E+00	-8.33E+00	-9.01E+00
+2.05	122.6846601	134.2111602	89.19690326	108.8102138	110.0795516
-2.1	-9.470238173	-10.16806996	-7.298159892	-8.326353932	-9.006576522
+2.1	112.859895	122.1554602	83.67924359	98.47978722	102.4169824
-2.15	-10.76070466	-10.41236652	-7.298159892	-8.326353932	-9.006576522
+2.15	104.5130946	112.1164585	80.13821073	90.45658273	97.54355274
-2.2	-13.37655719	-12.74185867	-9.863214269	-9.559270989	-9.324965561
+2.2	93.53891495	99.17342698	75.22016419	83.90989916	90.83672767
-2.25	-15.22991465	-16.3298707	-13.34934287	-12.96006736	-13.49539543

+2.25	84.37764222	88.73107637	70.91277273	78.94419821	85.00360507
-2.3	-21.13403245	-21.9209422	-17.92349927	-18.8014167	-19.09976191
+2.3	73.03515582	76.08599726	65.08988356	72.15892138	77.16043723
-2.35	-26.48988844	-26.87285225	-21.72281449	-23.7211084	-23.84107437
+2.35	67.36887898	68.86051701	60.10109796	66.28379791	70.46886053
-2.4	-33.50596868	-33.85978386	-27.70755321	-30.0980977	-31.01267264
+2.4	60.10374329	60.81593562	53.47957166	58.40231777	61.6158745
-2.45	-39.61546762	-39.43934599	-32.93256831	-35.58131317	-36.9551441
+2.45	54.03913593	54.23324663	47.8943502	51.68268891	54.16705418
-2.5	-46.98794174	-46.06517799	-40.58511469	-43.37921642	-45.02797227
+2.5	46.98364502	46.06451904	40.58039448	43.37437278	45.02313544
-2.55	-54.04321484	-54.23407287	-47.8988459	-51.68811516	-54.17286999
+2.55	39.61101297	39.43867021	32.9276489	35.57635277	36.95011578
-2.6	-60.1082427	-60.81675024	-53.48385676	-58.4074755	-61.62145375
+2.6	33.50138264	33.8590561	27.70382783	30.09406143	31.00831744
-2.65	-67.37299837	-68.86130819	-60.10514308	-66.28858725	-70.47411978
+2.65	26.48592199	26.87224536	21.71980323	23.71719586	23.83742357
-2.7	-73.03960777	-76.08717747	-65.09369717	-72.16339366	-77.16542352
+2.7	21.1300836	21.92030806	17.92057465	18.79765044	19.09625276
-2.75	-84.38459962	-88.73237083	-70.91628993	-78.94827332	-85.00822733
+2.75	15.22860865	16.3294425	13.34657246	12.95730873	13.4921296
-2.8	-93.54563746	-99.17473207	-75.22343968	-83.91365645	-90.84103246
+2.8	13.37509797	12.74152698	9.860563911	9.556720411	9.322764912
-2.85	-104.5194442	-112.1177619	-80.14115176	-90.46274277	-97.54745269
+2.85	10.75904665	10.41221731	7.298152085	8.326368706	9.006574304
-2.9	-112.8659443	-122.1566919	-83.68189857	-98.37780136	-102.4205448
+2.9	9.470244827	10.16807144	7.298152085	8.326368706	9.006574304
-2.95	-122.6902838	-134.2123703	-89.20198397	-108.7081194	-110.0860573
+2.95	9.470244827	10.16807144	7.298152085	8.326368706	9.006574304
-3	-132.5415039	-145.6105974	-97.12406718	-119.1295253	-120.6867304
+3	9.470244827	10.16807144	7.298152085	8.326368706	9.006574304
(Span 3) -4	-2.489067906	-2.672477935	-1.918175973	-2.188422527	-2.367201228
+4	124.3211418	132.4881099	92.47939133	103.966307	113.7779919
-3.05	-2.489067906	-2.672477935	-1.918175973	-2.188422527	-2.367201228
+3.05	117.3764026	124.9423486	89.99442356	101.2213186	110.243251
-3.1	-2.489067906	-2.672477935	-2.329745171	-2.460667045	-2.367201228
+3.1	107.5234061	114.3291857	86.2789847	97.08023546	105.017871
-3.15	-3.724571637	-3.741876875	-4.090122341	-4.315612654	-3.647689575
+3.15	99.70188484	105.9211521	83.19500009	93.61541033	100.7192245
-3.2	-6.292927575	-6.081665762	-7.126603255	-7.549008905	-6.348408107
+3.2	92.1097004	95.93350187	78.69270838	88.51967713	94.48837398
-3.25	-8.622080086	-8.490367665	-9.61277811	-10.19702679	-8.816675899
+3.25	87.83191872	89.46590185	75.02745669	84.34270579	89.44547949
-3.3	-12.93870742	-12.01866607	-13.2448292	-14.12781781	-13.15930209
+3.3	81.96015062	80.86876216	69.76197735	78.30257679	82.23544143
-3.35	-16.44041656	-15.22738838	-16.11069363	-17.18473987	-16.67928093
+3.35	76.83656407	74.42330035	65.53320816	73.4211771	76.46794754
-3.4	-21.43649197	-19.86373921	-20.15514189	-21.70401479	-21.77680786
+3.4	69.40294346	67.42859806	59.52820904	66.44688025	68.47309532
-3.45	-25.41179168	-23.55301934	-23.75348841	-25.69517325	-25.771854
+3.45	64.09180837	62.67793536	54.7536974	60.86872156	62.97684327
-3.5	-30.92607295	-28.73135051	-28.8125318	-31.29432349	-31.37581371
+3.5	56.65773411	55.83728834	48.11561836	52.97053302	55.16026842
-3.55	-35.30069053	-32.79359994	-32.78349593	-35.68473704	-36.03611256
+3.55	50.7208122	50.38700452	43.75460151	46.70330501	48.93092837
-3.6	-41.36513977	-39.3637251	-38.29062136	-41.76820512	-42.72533477
+3.6	43.08097137	43.79244061	37.5626577	37.89148003	40.13493718

-3.65	***-46.07001361***	***-44.73609138***	***-42.56471924***	***-46.4859491***	***-47.94690785***
+3.65	***37.32777468***	***38.56597202***	***32.63457767***	***32.00542327***	***33.80533009***
-3.7	***-53.32245925***	***-52.44974206***	***-48.43213188***	***-52.95798105***	***-55.15259796***
+3.7	***28.9474351***	***31.21786727***	***25.68320759***	***24.92336069***	***26.19099066***
-3.75	***-59.20049486***	***-58.95991697***	***-52.94346684***	***-57.93117042***	***-60.71967353***
+3.75	***24.96456648***	***26.77289367***	***20.57845916***	***19.71140481***	***21.37014046***
-3.8	***-67.30516078***	***-67.98279467***	***-59.08321664***	***-64.69581945***	***-68.33003546***
+3.8	***19.11524931***	***21.65057835***	***14.19012727***	***14.86418126***	***15.64029847***
-3.85	***-74.10896995***	***-75.08858391***	***-63.76589206***	***-69.85256776***	***-74.15861688***
+3.85	***17.25987737***	***18.41849167***	***10.99326719***	***13.0678453***	***14.03529504***
-3.9	***-83.85912519***	***-85.59337585***	***-70.09021411***	***-77.69932276***	***-82.06186348***
+3.9	***15.08562754***	***16.72903979***	***10.26777334***	***12.57920884***	***12.80254945***
-3.95	***-91.40112909***	***-93.72742971***	***-74.87828448***	***-84.06240513***	***-88.06811996***
+3.95	***15.08562754***	***16.72903979***	***10.26777334***	***12.57920884***	***12.80254945***
-5	***-101.7210708***	***-105.2541834***	***-81.29926997***	***-93.32201521***	***-96.15234408***
+5	***15.08562754***	***16.72903979***	***10.26777334***	***12.57920884***	***12.80254945***

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.50E-14	-5.05E-14	-9.18E-14	-4.55E-14	-4.85E-14	-5.09E-14	-5.99E-14	-3.43E-14	-3.65E-14	-3.90E-14
End Shear	5.79E-14	4.88E-14	6.92E-14	3.88E-14	3.88E-14	3.11E-14	3.11E-14	3.22E-14	3.38E-14	1.97E-14
-0.05	-26.13500774	-29.33909676	-30.01871495	-23.2069111	-24.6734684	-23.237189	-27.6529087	-18.0024307	-18.949927	-10.7541832
+0.05	180.2823193	204.8129324	197.1334802	166.3260827	173.6453823	160.4941128	183.1587637	123.0330489	130.2783392	82.4413136
-0.1	-52.27001548	-58.67819352	-60.0374299	-46.4138223	-49.3469367	-46.4743779	-55.3058174	-36.0048613	-37.899854	-21.5083664
+0.1	334.7414128	385.0341115	366.4982424	310.4774718	323.5824892	298.7629114	339.7670479	229.9746606	243.4568242	153.662631
-0.15	-78.40502322	-88.01729027	-90.05614486	-69.6207334	-74.0204051	-69.7115669	-82.9587261	-54.007292	-56.849781	-32.26254959
+0.15	455.7613264	532.4010254	496.6336775	425.5976609	442.291332	408.232872	462.3849499	315.4746763	333.8338554	208.6007955
-0.2	-104.540031	-117.356387	-120.0748598	-92.8276445	-98.6938734	-92.9487559	-110.611635	-72.0097226	-75.799708	-43.01673279
+0.2	556.5899452	660.7221821	608.8081884	523.2265997	542.635393	499.4847815	562.2235133	388.5561345	411.0467556	256.2705114
-0.25	-130.6750387	-146.6954838	-150.0935748	-116.034556	-123.367342	-116.185945	-138.264543	-90.0121533	-94.749635	-53.77091599
+0.25	619.6075008	752.355807	682.0700502	590.1429589	610.9766558	562.9516488	643.1263879	438.6731708	463.9507495	285.6803282
-0.3	-156.8100464	-176.0345805	-180.1122897	-139.241467	-148.04081	-139.423134	-165.917452	-108.014584	-113.699562	-64.52509919
+0.3	670.1057525	829.3720317	744.6225321	640.8300668	660.6201257	617.0248992	713.1286094	477.6410672	504.858946	311.4989299
-0.35	-182.9450542	-205.3736773	-210.1310047	-162.448378	-172.714279	-162.660323	-193.570361	-126.017015	-132.649489	-75.27928238
+0.35	684.0875277	872.1666459	769.3032222	665.9121518	692.2596609	656.6143472	752.7420244	497.1199814	525.2568417	320.3253491
-0.4	-209.0800619	-234.7127741	-240.1497196	-185.655289	-197.387747	-185.897512	-221.22327	-144.019445	-151.599416	-86.03346558
+0.4	687.9436092	896.8832711	780.5918792	688.8033053	716.0353081	677.8560385	772.5942611	510.3700607	540.092507	326.406786
-0.45	-235.2150697	-264.0518708	-270.1684346	-208.8622	-222.061215	-209.134701	-248.876178	-162.021876	-170.549343	-96.78764878
+0.45	671.5307271	894.6304549	773.7907396	689.8121453	713.9680157	674.5034993	763.3475529	512.8532514	542.3817932	323.3027221
-0.5	-261.3500774	-293.3909676	-300.1871495	-232.069111	-246.734684	-232.37189	-276.529087	-180.024307	-189.49927	-107.541832
+0.5	645.4774941	885.6353929	770.5632057	677.8812011	702.5547929	662.0010982	747.4366644	503.7967469	532.42162	322.803597
-0.55	-287.4850852	-322.7300643	-330.2058645	-255.276023	-271.408152	-255.609079	-304.181996	-198.026737	-208.449197	-118.2960152
+0.55	648.5330287	853.9835767	763.5561722	650.002307	675.9000797	638.1589212	728.1843324	481.4021454	509.4413334	305.5003553
-0.6	-313.6200929	-352.0691611	-360.2245794	-278.482934	-296.08162	-278.846268	-331.834904	-216.029168	-227.399124	-129.0501984
+0.6	631.9223646	805.7761996	739.8006161	609.1774881	633.5100265	601.1960769	689.1427204	455.2885465	480.9741374	292.2414683
-0.65	-339.7551006	-381.4082579	-390.2432944	-301.689845	-320.755089	-302.083457	-359.487813	-234.031598	-246.349051	-139.8043816
+0.65	584.201873	732.5200761	688.3108639	558.9971203	576.2772182	541.4841904	622.869068	416.9706472	440.7197042	271.3112721
-0.7	-365.8901084	-410.7473546	-420.2620093	-324.896756	-345.428557	-325.320646	-387.140722	-252.034029	-265.298978	-150.5585648
+0.7	522.7548632	646.7979625	626.1325184	494.6165476	509.6511971	469.5659737	541.8579082	369.2851163	390.2917466	250.1754511
-0.75	-392.0251161	-440.0864514	-450.2807243	-348.103667	-370.102025	-348.557835	-414.79363	-270.03646	-284.248905	-161.312748
+0.75	429.6310997	538.7591887	527.2749199	409.9769325	421.5113114	384.2734699	437.6138692	305.9612416	323.3029564	210.4215508
-0.8	-418.1601239	-469.4255481	-480.2994392	-371.310578	-394.775494	-371.795024	-442.446539	-288.03889	-303.198832	-172.0669312
+0.8	333.1672339	422.9932139	425.1677808	316.1724539	322.5003896	290.9771188	321.9880369	237.996271	251.1825498	171.5740536
-0.85	-444.2951316	-500.6995317	-512.0595523	-394.517489	-419.448962	-395.032213	-470.099448	-306.041321	-322.148759	-182.8211144
+0.85	204.0986619	290.2425207	292.3087937	206.6965454	206.6965454	184.7474757	193.7585563	157.6777851	165.9766159	120.9731227
-0.9	-470.4301393	-544.7629638	-555.3301688	-417.7244	-444.12243	-418.269402	-497.752357	-339.251381	-360.287877	-193.5752976
+0.9	141.0531155	169.8807148	227.3570332	118.4702568	118.4702568	94.74347386	94.74347386	89.84600386	94.57474091	83.34171574
-0.95	-496.5651471	-599.623994	-608.3186233	-440.931312	-468.795899	-441.506591	-525.405265	-443.553955	-470.12961	-204.3294808
+0.95	89.21319061	104.3024264	154.7615762	81.52237828	86.1135751	81.04648966	95.53400566	59.85345024	63.45670407	36.38515706
-1	-553.4188338	-663.205481	-675.880757	-464.138232	-493.469357	-464.743781	-553.05817	-551.835595	-584.135432	-227.6768817
+1	93.90862222	107.5511998	101.9477823	85.81303193	90.64587093	85.31209502	100.5621107	63.00363363	66.79653248	36.50352011
(Span 2) -2	-553.4188338	-663.205481	-675.880757	-464.138232	-493.469357	-464.743781	-553.05817	-551.835595	-584.135432	-227.6768817
+2	93.90862222	107.5511998	101.9477823	85.81303193	90.64587093	85.31209502	100.5621107	63.00363363	66.79653248	36.50352011
-2.05	-431.1012597	-471.014848	-489.2778944	-317.409287	-335.285671	-315.556393	-371.964706	-403.366569	-426.783445	-157.0535725
+2.05	74.10409704	83.82248266	146.0115677	64.59080047	68.2284403	64.21374849	75.69231666	47.42234395	50.27722935	43.97986706
-2.1	-324.1279112	-405.1069798	-410.2819823	-296.187062	-312.868217	-294.458053	-347.094863	-278.783711	-295.694626	-125.9934287
+2.1	163.8740632	191.6804482	210.5780471	140.7780363	140.7780363	118.5754156	121.369159	107.9179273	113.5978182	96.40909349
-2.15	-300.9036826	-353.8876522	-347.8584297	-274.964836	-290.450763	-273.359713	-322.22502	-201.878507	-214.032084	-116.9658199
+2.15	243.1105519	336.1099262	272.9678043	248.183805	248.183805	231.0394936	246.7223959	189.5608202	199.5942929	144.243752
-2.2	-277.6794539	-318.1302784	-302.5555343	-253.74261	-268.033309	-252.261372	-297.355178	-186.297201	-197.512746	-107.9382112
+2.2	382.5648349	484.7509221	399.5720242	372.278851	378.9749566	348.8896735	395.9863926	278.9574928	294.3398712	195.2731644

-2.25	-254.4552253	-296.0028823	-300.3545991	-232.520385	-245.615855	-231.163032	-272.485335	-170.715895	-180.993407	-98.91060238
+2.25	504.1262106	622.6812181	539.9348045	480.4751165	494.1727613	463.983185	531.5647646	358.5205545	378.8259665	247.7204555
-2.3	-231.2309967	-274.1941962	-300.35455	-211.298159	-223.198401	-210.064692	-247.615492	-155.134589	-164.474068	-89.8829936
+2.3	603.2069805	743.0470369	652.6272781	572.286722	590.2681856	557.5480234	642.6259861	428.2066316	451.5667751	290.348534
-2.35	-208.006768	-252.3855101	-300.3545009	-190.075934	-200.780946	-188.966352	-222.74565	-139.553283	-147.95473	-80.85538482
+2.35	686.1332616	834.3713394	742.7468962	639.7373933	669.0130874	635.3803296	731.1867465	479.0209461	505.8457309	322.3380972
-2.4	-184.7825394	-230.5768241	-300.3544518	-168.853708	-178.363492	-167.868011	-197.875807	-123.971977	-131.435391	-71.82777605
+2.4	738.796692	901.7055737	802.9235288	694.1535554	724.6202501	685.2157144	788.9733727	515.0667467	544.3118863	340.7780127
-2.45	-161.5583107	-208.768138	-300.3544027	-147.631483	-155.946038	-146.769671	-173.005964	-108.390671	-114.916053	-62.80016727
+2.45	768.4411419	939.5339749	837.2134681	728.6217392	759.7973929	718.5899823	821.761329	538.694495	570.3150111	350.5425077
-2.5	-138.3347246	-186.9597872	-300.3543536	-126.409283	-133.528584	-125.67137	-148.136122	-92.8093646	-98.396714	-53.7725585
+2.5	760.6938627	948.1851859	832.4391688	734.9348003	763.5392606	720.1932367	822.028722	544.7455939	576.4130335	344.6095813
-2.55	-161.5590593	-208.7685306	-300.3543046	-147.631514	-155.945866	-146.769717	-173.005624	-108.390553	-114.915802	-62.80013765
+2.55	736.8441385	939.6403175	835.3373587	728.5537665	759.7353168	718.5558251	821.74434	538.7029989	570.3244726	350.5578391
-2.6	-184.783394	-230.5772741	-300.3542555	-168.853746	-178.363297	-167.868063	-197.875418	-123.971842	-131.435105	-71.8277429
+2.6	717.9570261	901.7578945	802.0837898	694.1637503	724.6356763	685.2142659	788.9465277	515.0555883	544.2995545	340.7817607
-2.65	-208.0077287	-252.3860175	-300.3542064	-190.075977	-200.780727	-188.96641	-222.745212	-139.553132	-147.954408	-80.85534815
+2.65	678.2085359	834.3643278	742.6049965	639.7432051	669.0236364	635.4011746	731.2216113	479.0140944	505.837929	322.351604
-2.7	-231.2320633	-274.1947609	-300.3541573	-211.298209	-223.198158	-210.064756	-247.615006	-155.134422	-164.473711	-89.8829534
+2.7	607.7920284	743.100523	654.1292086	572.3371676	590.3219547	557.5634637	642.6346972	428.1921716	451.5509919	290.3531358
-2.75	-254.456398	-296.0035044	-300.3541082	-232.52044	-245.615588	-231.163103	-272.4848	-170.715712	-180.993014	-98.91055865
+2.75	508.1967341	622.6782184	539.8407176	480.4812043	494.1816428	463.9964871	531.5893372	358.5233135	378.829117	247.7321242
-2.8	-277.6807327	-318.1309563	-302.5554881	-253.742671	-268.033019	-252.261449	-297.354594	-186.297001	-197.512318	-107.9381639
+2.8	382.3409822	484.8117365	399.5720089	372.3314566	379.029723	348.888733	395.9957798	278.9899665	294.3742437	195.279242
-2.85	-300.9050674	-353.8883767	-347.8584746	-274.964903	-290.45045	-273.359796	-322.224389	-201.878291	-214.031621	-116.9657692
+2.85	245.1600657	336.1186823	272.9678447	248.1904393	248.1904393	231.0650934	246.7375614	189.5454833	199.5781068	143.197517
-2.9	-324.1294021	-405.1077539	-410.2819164	-296.187134	-312.86788	-294.458143	-347.094183	-278.782903	-295.696495	-125.9933744
+2.9	166.2712862	191.6526187	210.5780369	140.8366381	140.8366381	118.537818	121.3836455	107.9045287	113.5837144	96.39432759
-2.95	-432.6702274	-471.0156757	-489.2777517	-317.409366	-335.285311	-315.556489	-371.963977	-403.36835	-426.785487	-157.053695
+2.95	75.65531374	83.82230187	145.8117826	64.59077289	68.22850317	64.21373159	75.6924626	47.42239009	50.27733331	43.97788816
-3	-574.0056749	-663.2064007	-675.850813	-464.139833	-493.4715	-464.745355	-553.058106	-551.837055	-584.13721	-227.6767815
+3	93.90819364	107.5509678	101.9479806	85.81300804	90.64596595	85.31206966	100.5623073	63.00369996	66.79667587	36.50353437
(Span 3) -4	-5.74E+02	-663.2064007	-675.850813	-4.64E+02	-4.93E+02	-4.65E+02	-5.53E+02	-5.52E+02	-5.84E+02	-2.28E+02
+4	9.39E+01	107.5509678	101.9479806	8.58E+01	9.06E+01	8.53E+01	1.01E+02	6.30E+01	6.68E+01	3.65E+01
-3.05	-514.6329208	-599.6248665	-608.3103935	-440.932842	-468.797925	-441.508088	-525.405201	-443.555247	-470.131184	-204.3438771
+3.05	89.21278401	104.3022048	154.6585539	81.52235775	86.11366778	81.04646621	95.53419189	59.85351505	63.45684217	36.73280659
-3.1	-487.5469778	-544.7637912	-555.3223735	-417.72585	-444.124349	-418.27082	-497.752295	-339.253116	-360.289889	-193.5889363
+3.1	140.5122543	169.801993	227.0578162	118.4993026	118.4993026	94.76619795	94.76619795	89.82565776	94.55332396	83.33136403
-3.15	-460.4610349	-500.7003104	-512.0521881	-394.518859	-419.450773	-395.033552	-470.09939	-306.041269	-322.148704	-182.8339955
+3.15	204.0987171	290.2255422	292.1216738	206.6836819	206.6836819	184.7620657	193.7692415	157.2541507	165.530685	120.9729679
-3.2	-433.3750919	-469.4262771	-480.2925055	-371.311868	-394.777198	-371.796285	-442.446484	-288.038841	-303.19878	-172.0790548
+3.2	331.2183009	423.0360421	423.9957215	316.2000054	322.5262857	290.9901843	321.9745495	238.0144581	251.2015483	171.5639442
-3.25	-406.2891489	-440.0871344	-450.2742242	-348.104877	-370.103622	-348.559017	-414.793579	-270.036414	-284.248857	-161.324114
+3.25	429.6297923	538.742199	527.2740431	409.9569309	421.4889443	384.2819446	437.5993176	305.9771704	323.3195091	210.4107724
-3.3	-379.2032059	-410.7479916	-420.2559429	-324.897886	-345.430047	-325.321749	-387.140673	-252.033987	-265.298934	-150.5691732
+3.3	523.2783928	646.8373177	624.4879413	494.6366767	509.668083	469.5568947	541.8373772	369.2991917	390.306278	250.1636548
-3.35	-352.117263	-381.4088489	-390.2376616	-301.690895	-320.756471	-302.084482	-359.487768	-234.03156	-246.34901	-139.8142324
+3.35	583.4003626	732.4952866	688.0540771	559.0101593	576.2860823	541.4713094	622.8767484	416.980596	440.729809	271.3113404
-3.4	-325.03132	-352.0697062	-360.2193803	-278.483903	-296.082896	-278.847214	-331.834862	-216.029133	-227.399087	-129.0592917
+3.4	633.2097815	805.8046385	739.0423139	609.1836193	633.5009248	601.1761071	689.1071185	455.2945101	480.979962	292.2269245
-3.45	-297.945377	-322.7305634	-330.2010991	-255.276912	-271.40932	-255.609946	-304.181957	-198.026705	-208.449164	-118.3043509
+3.45	656.274318	853.9446474	763.4613741	649.9920551	675.8834911	638.1664795	728.1738201	481.3981866	509.4366101	305.5838932
-3.5	-270.8594341	-293.3914207	-300.1828178	-232.069921	-246.735745	-232.372678	-276.529051	-180.024278	-189.49924	-107.5494101
+3.5	664.6480503	885.6470483	770.4542419	677.8618954	702.5281442	661.9645592	747.4499814	503.8129409	532.4392858	322.7912731
-3.55	-243.7734911	-264.0522779	-270.1645365	-208.86293	-222.062169	-209.135411	-248.876146	-162.021851	-170.549317	-96.79446933
+3.55	659.0899186	894.6260086	773.4727133	689.7883738	713.951125	674.5059917	763.3349052	512.8354708	542.3636797	323.3026374
-3.6	-216.6875481	-234.7131352	-240.1462552	-185.655939	-197.388594	-185.898143	-221.22324	-144.019424	-151.599394	-86.03952855

+3.6	684.8622769	896.8684695	779.2493427	688.8151351	716.0535923	677.8847316	772.5704873	510.3749716	540.0982426	326.3922492
-3.65	-189.6016051	-205.3739924	-210.1279739	-162.448948	-172.715018	-162.660875	-193.570335	-126.016997	-132.64947	-75.28458777
+3.65	684.7632835	872.1412294	769.2413215	665.9089384	692.2663431	656.5973875	752.7418138	497.1158158	525.252926	320.3258004
-3.7	-162.5156622	-176.0348497	-180.1096926	-139.241957	-148.041443	-139.423608	-165.917429	-108.014569	-113.699547	-64.529647
+3.7	668.6562121	829.3343721	743.485674	640.8160384	660.6109288	617.0323573	713.1509527	477.6302235	504.8479563	311.5111597
-3.75	-135.4297192	-146.695707	-150.0914114	-116.034965	-123.367867	-116.18634	-138.264524	-90.0121423	-94.7496234	-53.77470622
+3.75	619.8436163	752.3657081	681.9018998	590.1177303	610.9557236	562.9446565	643.1345593	438.6554915	463.9325164	286.8680265
-3.8	-108.3437762	-117.3565642	-120.0731301	-92.8279742	-98.6942918	-92.9490721	-110.611618	-72.0097151	-75.7997001	-43.01976545
+3.8	556.4391231	660.6586873	608.135467	523.1890951	542.6014566	499.4659575	562.2146383	388.5309073	411.0205145	256.2790942
-3.85	-81.25783325	-88.01742146	-90.05484881	-69.6209831	-74.0207163	-69.7118044	-82.958713	-54.0072879	-56.8497767	-32.26482467
+3.85	457.2070873	532.3837385	496.5619198	425.5928847	442.2893359	408.2372434	462.3970094	315.4705281	333.8297332	208.5940539
-3.9	-54.17189028	-58.67827872	-60.03656753	-46.4139919	-49.3471408	-46.4745367	-55.3058075	-36.0048607	-37.8998533	-21.5098839
+3.9	340.3929305	384.9422631	366.3756129	310.4135966	323.5205461	298.7185592	339.7280071	229.9333276	243.4134858	153.6670995
-3.95	-27.08594731	-29.33913598	-30.01828625	-23.2070007	-24.6735653	-23.237269	-27.652902	-18.0024335	-18.94993	-10.75494312
+3.95	184.0779583	204.7671376	196.9777017	166.2943974	173.6147006	160.472028	183.1394036	123.0124735	130.2567697	82.4435675
-5	-1.60E-13	-1.16E-13	-1.12E-13	-9.64E-14	-1.05E-13	-1.01E-13	-1.18E-13	-7.70E-14	-8.11E-14	-5.81E-14
+5	8.97E-14	5.64E-14	7.20E-14	5.13E-14	5.55E-14	4.24E-14	5.09E-14	4.23E-14	4.49E-14	3.60E-14

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.34E-14	-2.89E-14	-2.92E-14	-2.83E-14	-4.37E-14	-3.42E-14	-3.45E-14	-3.47E-14	-3.79E-14
End Shear	2.97E-14	2.92E-14	2.32E-14	2.08E-14	2.38E-14	2.65E-14	2.65E-14	2.62E-14	2.61E-14
-0.05	-16.6274158	-15.92633852	-14.11266756	-12.20733123	-13.60618702	-18.73886206	-20.7036711	-22.8843618	-24.6736952
+0.05	117.2259443	111.0982304	96.56383171	81.96798303	96.42781133	129.8174672	139.4865367	139.1157661	139.1379437
-0.1	-33.2548316	-31.85267704	-28.22533512	-24.41466246	-27.21237403	-37.47772413	-41.4073423	-45.7687237	-49.3473904
+0.1	218.0321794	204.0358363	178.9524267	152.5355677	179.624169	241.5363069	258.660748	258.0518104	258.0993778
-0.15	-49.8822474	-47.77901556	-42.33800268	-36.62199369	-40.81856105	-56.21658619	-62.1110134	-68.6530855	-74.0210856
+0.15	297.3775316	273.5922175	241.9524272	207.3250285	244.9948115	329.7677556	352.1308968	368.3132287	368.3382141
-0.2	-66.5096632	-63.70535408	-56.45067023	-48.82932492	-54.42474807	-74.95544826	-82.8146846	-91.5374474	-98.6947808
+0.2	363.7102201	333.5822485	294.1671997	253.9134984	299.6610195	403.4345827	428.4111833	461.6262241	461.6787975
-0.25	-83.137079	-79.6316926	-70.56333779	-61.03665615	-68.03093508	-93.69431032	-103.518356	-114.421809	-123.368476
+0.25	408.0734045	374.0580478	328.9467598	285.1367121	335.0558419	454.0674093	480.6046237	528.0853771	536.7854395
-0.3	-99.7644948	-95.55803112	-84.67600535	-73.24398739	-81.6371221	-112.4331724	-124.222027	-137.306171	-148.042171
+0.3	440.0456092	409.8864552	351.9493445	306.5200528	363.5558664	492.3850645	531.0279285	575.9522943	599.5394623
-0.35	-116.3919106	-111.4843696	-98.78867291	-85.45131862	-95.24330912	-131.1720345	-144.925698	-160.190533	-172.715866
+0.35	456.8209967	429.493018	369.2633064	324.0531129	372.6942793	523.9041061	561.0181873	600.6025254	634.2870961
-0.4	-133.0193264	-127.4107082	-112.9013405	-97.65864985	-108.8494961	-149.9108965	-165.629369	-183.074895	-197.389562
+0.4	470.6057474	440.5138476	378.1216301	332.950383	376.1704156	540.7155561	575.1878146	623.4396685	653.9976508
-0.45	-149.6467422	-143.3370467	-127.014008	-109.8659811	-122.4556831	-168.6497586	-186.33304	-205.959257	-222.063257
+0.45	466.832602	437.8339273	371.1814848	329.2839182	363.0145778	537.2013858	567.8271791	622.5064059	652.5912645
-0.5	-166.274158	-159.2633852	-141.1266756	-122.0733123	-136.0618702	-187.3886206	-207.036711	-228.843618	-246.736952
+0.5	452.9561163	433.5352324	357.4450938	321.0754991	356.0154582	526.3796389	553.1116927	609.2621312	643.822023
-0.55	-182.9015738	-175.1897237	-155.2393431	-134.2806435	-149.6680572	-206.1274827	-227.740383	-251.72798	-271.410647
+0.55	440.6989991	417.9204504	351.0801996	318.0335256	355.1151275	508.4127282	536.346089	581.5574455	619.3355456
-0.6	-199.5289896	-191.1160622	-169.3520107	-146.4879748	-163.2742442	-224.8663448	-248.444054	-274.612342	-296.084342
+0.6	417.1559983	394.7275976	336.7094081	305.5136753	344.6594003	479.8349557	511.1952192	547.0448537	579.3976995
-0.65	-216.1564054	-207.0424008	-183.4646783	-158.695306	-176.8804312	-243.6052068	-269.147725	-297.496704	-320.758037
+0.65	382.9153451	358.0642438	307.1410634	281.8991157	317.5562298	432.7905874	463.6729768	497.3762439	522.1254493
-0.7	-232.7838212	-222.9687393	-197.5773458	-170.9026372	-190.4866182	-262.3440689	-289.851396	-320.381066	-345.431733
+0.7	341.9206666	317.5824379	274.3011753	256.1875398	284.3178204	376.2426321	404.4834375	438.8609398	454.0474539
-0.75	-249.411237	-238.8950778	-211.6900134	-183.1099685	-204.0928052	-281.082931	-310.555067	-343.265428	-370.105428
+0.75	285.1372936	265.5523444	229.7220786	217.8784287	234.7343723	311.434462	327.9588001	359.5316075	363.9592035
-0.8	-266.0386528	-254.8214163	-225.8026809	-195.3172997	-217.6989923	-299.821793	-331.258738	-366.149789	-394.779123
+0.8	219.8440927	211.4163721	176.1397803	172.4196275	182.1182885	236.7788044	247.1996616	267.8532649	267.9983574
-0.85	-282.6660686	-270.7477548	-239.9153485	-209.9724519	-231.3051793	-318.5606551	-351.962409	-389.034151	-419.452818
+0.85	145.5304539	145.6491609	116.0525479	118.7961001	116.2029158	151.6139094	154.4022705	162.395876	162.3842521
-0.9	-299.2934844	-286.6740933	-266.0773305	-240.3502385	-244.9113663	-337.2995172	-372.666081	-411.918513	-444.126513
+0.9	83.36495622	83.18985971	68.69036947	77.4434213	78.46559851	80.53195278	80.4967303	80.60908608	80.39024204
-0.95	-315.9209002	-373.3592745	-346.0741718	-301.3447983	-258.5175533	-356.0383792	-393.369752	-434.802875	-468.800209
+0.95	56.24448823	48.87325388	46.2020315	51.65344407	46.57721576	64.87226649	70.18839873	76.96282807	81.35197994
-1	-332.5483213	-470.7692944	-433.2618932	-377.1833969	-272.1237506	-374.7772416	-414.073414	-457.687236	-493.925229
+1	59.20472501	51.44552907	48.63371689	41.49094807	49.02865009	68.28659663	73.88252437	81.01350429	85.63366364
(Span 2) -2	-332.5483213	-470.7692944	-433.2618932	-377.1833969	-272.1237506	-374.7772416	-414.073414	-457.687236	-493.925229
+2	59.20472501	51.44552907	48.63371689	41.49094807	49.02865009	68.28659663	73.88252437	81.01350429	85.63366364
-2.05	-218.9895769	-349.1539084	-311.0654928	-270.7923247	-181.3489632	-252.5819963	-273.280336	-299.655972	-324.215301
+2.05	44.56293467	38.72264869	49.90315608	49.59601299	41.7556913	51.39878854	55.61079993	60.97823325	64.45579089
-2.1	-204.3477672	-234.7019062	-219.5705723	-196.4201776	-169.2238337	-235.6941717	-255.008605	-279.620747	-295.567842
+2.1	99.29482636	99.96608006	88.34281687	82.49766641	92.73504784	99.3260998	98.53982682	99.37440474	99.29036682
-2.15	-189.7059574	-171.2114217	-158.1346082	-148.0824266	-157.0987041	-218.8063471	-236.736874	-259.585521	-274.389984
+2.15	174.7419605	175.5569648	143.4295021	122.2345287	137.902098	186.7492647	190.3862574	202.4596506	202.4554855
-2.2	-175.0641477	-152.1202552	-143.8064816	-123.133431	-144.9735745	-201.9185226	-218.465143	-239.550296	-253.212126
+2.2	256.9541717	248.6911742	205.1294461	169.2087301	211.5956644	278.0604695	296.2225497	322.344398	328.0591415

-2.25	-160.4223379	-139.3974004	-131.7789643	-120.853815	-132.848445	-185.030698	-200.193413	-219.51507	-232.034267
+2.25	334.7925413	322.7476802	270.1777982	226.4791074	275.6094659	370.6882597	399.884705	430.9799559	450.7254746
-2.3	-145.7805281	-126.6745456	-119.751447	-119.5304061	-120.7233154	-168.1428734	-181.921682	-199.479844	-210.856409
+2.3	399.6789427	380.7452203	323.4548374	273.0496645	328.0861631	446.6469814	482.4950547	522.0417959	552.5366428
-2.35	-131.1387184	-113.9516908	-107.7239298	-118.353821	-108.5981858	-151.2550489	-163.649951	-179.444619	-189.678551
+2.35	448.1511899	422.3932878	366.3714482	311.0238791	367.404012	508.9582777	550.1639282	591.8496221	629.6505693
-2.4	-116.4969086	-101.2288361	-95.69641249	-117.3404709	-96.47305628	-134.3672243	-145.37822	-159.409393	-168.500692
+2.4	484.3777868	447.7912118	394.9964019	335.8365548	390.4154215	549.1872747	591.5941268	643.676975	681.0041156
-2.45	-101.8550989	-88.50598127	-83.66889522	-116.5058784	-84.34792672	-117.4793997	-127.106489	-139.374167	-147.322834
+2.45	505.710889	460.397166	410.1570339	349.9934756	402.0728788	575.2613725	617.1836443	675.3556523	711.6428977
-2.5	-87.2132891	-75.78327474	-71.64137795	-115.8518464	-72.22302496	-100.5915752	-108.834758	-119.339206	-126.145064
+2.5	506.0705713	459.2669785	407.9326034	348.4530297	395.3859505	575.796401	615.0560768	677.8200773	720.8896997
-2.55	-101.8549687	-88.50615512	-83.66875367	-116.5058554	-84.34819246	-117.4792923	-127.106445	-139.374477	-147.322937
+2.55	505.6663039	460.4051775	410.1315635	349.9991424	402.0532942	575.2283106	617.1596479	675.3209221	711.6002782
-2.6	-116.4967591	-101.2290355	-95.696251	-117.340471	-96.47335997	-134.3671004	-145.378169	-159.409748	-168.500809
+2.6	484.3628312	447.7807492	394.9892917	335.8405403	390.3884542	549.1822798	591.5626439	643.6675255	680.9949227
-2.65	-131.1385494	-113.9519159	-107.7237483	-118.3538648	-108.5985275	-151.2549085	-163.649893	-179.445019	-189.678682
+2.65	448.1565373	422.3553562	366.3768536	311.0266121	367.3849552	508.9724591	550.1356506	591.8572317	629.6430619
-2.7	-145.7803398	-126.6747963	-119.7512456	-119.5305271	-120.723695	-168.1427166	-181.921618	-199.48029	-210.856555
+2.7	399.6715677	380.7394865	323.4515215	273.0480087	328.1076415	446.6567258	482.5100974	522.0710699	552.5537494
-2.75	-160.4221301	-139.3976766	-131.778743	-120.8540219	-132.8488625	-185.0305247	-200.193342	-219.515561	-232.034428
+2.75	334.7966986	322.7383492	270.1724006	226.4808768	275.6517657	370.6962157	399.8973378	430.9799646	450.7543922
-2.8	-175.0639205	-152.120557	-143.8062403	-123.1337178	-144.97403	-201.9183328	-218.465067	-239.550832	-253.2123
+2.8	256.9892839	248.6772421	205.1215573	169.2047364	211.6202034	278.1010328	296.2226917	322.3720387	328.0755946
-2.85	-189.7057108	-171.211675	-158.1354342	-148.0827514	-157.0991975	-218.8061409	-236.736791	-259.586103	-274.390173
+2.85	174.7464903	175.5427849	143.4195785	122.229667	137.9344904	186.7402353	190.3952797	202.4608803	202.4566817
-2.9	-204.3475011	-234.7014704	-219.5703796	-196.4204418	-169.224365	-235.693949	-255.008516	-279.621375	-295.568046
+2.9	99.33483954	99.95366866	88.33354455	82.4930863	92.7617522	99.30001526	98.56542842	99.39940822	99.31461142
-2.95	-218.9892915	-349.1544346	-311.065748	-270.7924388	-181.3495325	-252.5817571	-273.28024	-299.656646	-324.216095
+2.95	44.56299873	38.72256661	49.8982794	49.60478752	41.74961002	51.39884595	55.61081914	60.97808895	64.4557487
-3	-332.5498294	-470.7690418	-433.2624949	-377.182534	-272.1242475	-374.7788317	-414.075004	-457.688226	-493.926411
+3	59.20480352	51.44542558	48.63379754	41.49098878	49.02849666	68.28666326	73.8825502	81.01332068	85.63360515
(Span 3) -4	-3.33E+02	-4.71E+02	-4.33E+02	-3.77E+02	-2.72E+02	-3.75E+02	-4.14E+02	-4.58E+02	-4.94E+02
+4	5.92E+01	5.14E+01	4.86E+01	4.15E+01	4.90E+01	6.83E+01	7.39E+01	8.10E+01	8.56E+01
-3.05	-315.9223382	-373.3594204	-346.0754856	-301.3443717	-258.5180356	-356.0398901	-393.371253	-434.803815	-468.801698
+3.05	56.24456337	48.87315424	46.20210764	51.64488053	46.57707193	64.87233011	70.18842266	76.9626547	81.35192492
-3.1	-299.294847	-286.6740644	-266.0777385	-240.3502792	-244.9118238	-337.3009485	-372.667502	-411.919403	-444.127925
+3.1	83.38474843	83.20692509	68.69968488	77.43608641	78.51383277	80.55126826	80.51549127	80.57162179	80.35375485
-3.15	-282.6673558	-270.7477277	-239.9152568	-209.9724975	-231.3056119	-318.562007	-351.963752	-389.034992	-419.454152
+3.15	145.5216804	145.6670028	116.0656482	118.8044396	116.212995	151.6004354	154.4138397	162.3938961	162.3823288
-3.2	-266.0398646	-254.821391	-225.8025946	-195.3172558	-217.6994001	-299.8230654	-331.260001	-366.150581	-394.780379
+3.2	219.8633474	211.4337704	176.1515284	172.4268554	182.08287	236.7921786	247.2100441	267.877372	268.0217817
-3.25	-249.4123734	-238.8950543	-211.6899325	-183.1099273	-204.0931882	-281.0841238	-310.55625	-343.266169	-370.106607
+3.25	285.1229934	265.5401685	229.7119271	217.883825	234.7363614	311.4439878	327.9529768	359.5243234	363.9631575
-3.3	-232.7848822	-222.9687176	-197.5772703	-170.9025988	-190.4869763	-262.3451823	-289.8525	-320.381758	-345.432834
+3.3	341.9326231	317.5999469	274.3069541	256.1910367	284.2764019	376.2485087	404.473006	438.8762502	454.0197457
-3.35	-216.157391	-207.0423809	-183.4646081	-158.6952703	-176.8807645	-243.6062407	-269.148749	-297.497347	-320.759061
+3.35	382.9213916	358.0531928	307.1381054	281.9000336	317.5504159	432.7825773	463.6581384	497.3840223	522.1182921
-3.4	-199.5298998	-191.1160442	-169.351946	-146.4879418	-163.2745526	-224.8672991	-248.444999	-274.612935	-296.085288
+3.4	417.1497954	394.7402966	336.7022122	305.530259	344.6080669	479.8210614	511.173233	547.0364126	579.4206508
-3.45	-182.9024086	-175.1897076	-155.2392838	-134.2806133	-149.6683407	-206.1283576	-227.741248	-251.728524	-271.411515
+3.45	440.6872043	417.9294251	351.068753	318.0376677	355.0981701	508.4224256	536.3454913	581.5419318	619.3243081
-3.5	-166.2749174	-159.2633709	-141.1266217	-122.0732849	-136.0621289	-187.389416	-207.037497	-228.844113	-246.737742
+3.5	452.9784431	433.540429	357.462126	321.0867321	356.0322048	526.3520428	554.0431425	609.281468	643.8302551
-3.55	-149.6474262	-143.3370342	-127.0139595	-109.8659564	-122.455917	-168.6504744	-186.333747	-205.959701	-222.063969
+3.55	466.8187974	437.831940113962	371.1948787	329.2812919	362.9963697	537.1992421	567.8337498	622.4997966	652.585224

-3.6	**-133.019935**	**-127.4106975**	**-112.9012974**	**-97.65862788**	**-108.8497052**	**-149.9115329**	**-165.629996**	**-183.07529**	**-197.390196**
+3.6	**470.616437**	**440.5072544**	**378.1313466**	**332.9361591**	**376.1473077**	**540.7360939**	**575.1578643**	**623.4526799**	**653.9825315**
-3.65	**-116.3924438**	**-111.4843608**	**-98.78863522**	**-85.4512994**	**-95.2434933**	**-131.1725913**	**-144.926245**	**-160.190879**	**-172.716423**
+3.65	**456.8241632**	**429.4816694**	**369.2681529**	**324.0461964**	**372.7060991**	**523.8862735**	**561.0088069**	**600.6054162**	**634.297491**
-3.7	**-99.76495257**	**-95.55802412**	**-84.67597306**	**-73.24397091**	**-81.63728143**	**-112.4336497**	**-124.222495**	**-137.306467**	**-148.04265**
+3.7	**440.0379707**	**409.8695985**	***351.9467258***	**306.5191629**	**363.5213612**	**492.3884598**	**531.038329**	**575.9408317**	**599.5115458**
-3.75	**-83.13746137**	**-79.63168744**	**-70.56331091**	**-61.03664242**	**-68.03106957**	**-93.69470817**	**-103.518744**	**-114.422056**	**-123.368877**
+3.75	**408.0581809**	**374.0686504**	**328.9587217**	**285.1331856**	**335.0550489**	**454.0590266**	**480.602137**	**528.0920414**	**536.7735692**
-3.8	**-66.50997017**	**-63.70535075**	**-56.45064876**	**-48.82931394**	**-54.42485771**	**-74.9557666**	**-82.8149935**	**-91.5376447**	**-98.6951041**
+3.8	**363.686374**	**333.6131864**	**294.1932747**	**253.9070084**	**299.6125238**	**403.4166136**	**428.3984865**	**461.5930679**	**461.6465084**
-3.85	**-49.88247897**	**-47.77901406**	**-42.3379866**	**-36.62198545**	**-40.81864585**	**-56.21682504**	**-62.1112429**	**-68.6532334**	**-74.0213312**
+3.85	**297.3757674**	**273.5891879**	**241.9527823**	**207.3252363**	**244.9791515**	**329.7699935**	**352.1368238**	**368.2965031**	**368.3219764**
-3.9	**-33.25498777**	**-31.85267738**	**-28.22532445**	**-24.41465697**	**-27.21243398**	**-37.47788347**	**-41.4074923**	**-45.7688221**	**-49.3475582**
+3.9	**218.0521346**	**204.0547847**	**178.9660976**	**152.5224992**	**179.6409856**	**241.4976241**	**258.6258749**	**259.7936927**	**258.0661328**
-3.95	**-16.62749657**	**-15.92634069**	**-14.11266229**	**-12.20732848**	**-13.60622212**	**-18.73894191**	**-20.7037417**	**-22.8844108**	**-24.6737853**
+3.95	**117.2049017**	**111.1079747**	**96.55103**	**81.96153863**	**96.43630741**	**129.7982003**	**139.4692318**	**139.0988229**	**139.1214977**
-5	**-6.61E-14**	**-6.72E-14**	**-6.24E-14**	**-5.10E-14**	**-5.60E-14**	**-8.13E-14**	**-8.67E-14**	**-8.65E-14**	**-9.14E-14**
+5	**3.37E-14**	**3.78E-14**	**4.51E-14**	**3.54E-14**	**3.74E-14**	**3.35E-14**	**3.34E-14**	**3.58E-14**	**3.93E-14**

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.00E-14	-6.11E-14	-3.62E-14	-5.49E-14	-5.51E-14
End Shear	3.85E-14	4.75E-14	3.40E-14	3.62E-14	3.05E-14
-0.05	-26.3998484	-29.27583154	-17.9685631	-22.0136766	-22.4044001
+0.05	159.9387803	166.082979	130.7591583	147.0974626	153.9376788
-0.1	-52.79969679	-58.55166307	-35.9371263	-44.0273532	-44.8088003
+0.1	293.4811091	303.550301	244.5693889	271.9247053	286.6793641
-0.15	-79.19954519	-87.82749461	-53.9056894	-66.0410297	-67.2132004
+0.15	394.3867178	404.035295	335.625511	368.5885775	391.4844885
-0.2	-105.5993936	-117.1033261	-71.8742526	-88.0547063	-89.6176006
+0.2	472.2680878	482.9941004	413.7189906	454.2068587	479.0174536
-0.25	-131.999242	-146.3791577	-89.8428157	-110.068383	-112.022001
+0.25	544.4439356	551.1008758	467.4257311	514.7914412	540.4395357
-0.3	-158.3990904	-175.6549892	-107.811379	-132.082059	-134.426401
+0.3	596.1759118	607.8676743	509.4329662	561.6321065	600.3415447
-0.35	-184.7989388	-204.9308207	-125.779942	-154.095736	-156.830801
+0.35	625.2978718	636.864544	530.7102651	602.9582734	638.7648189
-0.4	-211.1987872	-234.2066523	-143.748505	-176.109413	-179.235201
+0.4	641.979586	658.7338388	544.8442111	628.3038685	660.111199
-0.45	-237.5986356	-263.4824838	-161.717068	-198.123089	-201.639601
+0.45	631.6864942	663.3947252	548.2865673	630.6894954	656.9055215
-0.5	-263.998484	-292.7583154	-179.685631	-220.136766	-224.044001
+0.5	618.6899462	650.3821079	539.286325	622.0411997	645.8536432
-0.55	-290.3983324	-322.0341469	-197.654195	-242.150442	-246.448402
+0.55	592.603469	630.7118169	514.0597915	591.8475131	621.451356
-0.6	-316.7981808	-351.3099784	-215.622758	-264.164119	-268.852802
+0.6	568.6837829	589.842249	486.3652761	551.4049443	583.9514849
-0.65	-343.1980292	-380.58581	-233.591321	-286.177796	-291.257202
+0.65	517.9486797	527.8477337	444.7147525	493.9609762	526.0770309
-0.7	-369.5978776	-409.8616415	-251.559884	-308.191472	-313.661602
+0.7	456.0656736	461.2146102	393.4961105	427.3935168	456.0782685
-0.75	-395.997726	-439.137473	-269.528447	-330.205149	-336.066002
+0.75	375.4877262	365.3723889	325.9058021	352.0616164	370.3102642
-0.8	-422.3975744	-468.4133046	-287.49701	-352.218825	-358.470402
+0.8	278.0167359	265.4856752	253.6776424	272.3032328	276.334591
-0.85	-448.7974228	-497.6891361	-305.465573	-374.232502	-380.874802
+0.85	171.8052848	159.4000252	167.00621	178.1818286	174.0437731
-0.9	-526.5204009	-576.3281704	-382.056477	-416.491476	-473.07492
+0.9	83.96749829	84.96735213	95.53323375	101.902116	84.98946767
-0.95	-673.0816199	-716.7478723	-484.683762	-549.531557	-608.45852
+0.95	82.76144972	88.85987834	63.77941932	72.76491993	78.70946023
-1	-824.9900171	-861.6159231	-592.056797	-690.533486	-750.188513
+1	87.11731709	93.53671508	67.13623262	76.59465488	82.8520638
(Span 2) -2	-824.9900171	-861.6159231	-592.056797	-690.533486	-750.188513
+2	87.11731709	93.53671508	67.13623262	76.59465488	82.8520638
-2.05	-582.0384088	-589.1679621	-445.293239	-520.996428	-562.653201
+2.05	66.04689453	72.72482554	50.53291887	57.65219969	62.36210221
-2.1	-399.7375519	-422.1968666	-323.078763	-360.202123	-399.376854
+2.1	115.7916695	117.0079301	117.2423365	121.7388833	111.7721
-2.15	-279.1443387	-308.2611197	-216.780144	-254.654689	-271.155231
+2.15	222.966872	212.4686691	202.2723749	222.3021977	223.5680787
-2.2	-257.5995317	-276.5810726	-198.516578	-226.485034	-244.98726
+2.2	335.8074024	318.1826968	297.4390951	327.1940169	340.7398173

-2.25	**-236.0547247**	**-253.4487101**	**-181.913282**	**-207.542545**	**-224.497304**
+2.25	**464.9495896**	**459.9263934**	**381.8061873**	**442.2236452**	**450.2889647**
-2.3	**-214.5099178**	**-230.3163476**	**-165.309986**	**-188.600056**	**-204.007347**
+2.3	**563.5216281**	**572.5585193**	**452.8209368**	**527.3097868**	**540.6049498**
-2.35	**-192.9651108**	**-207.183985**	**-148.70669**	**-169.657567**	**-183.517391**
+2.35	**636.4793591**	**667.7843625**	**506.5373722**	**589.6156508**	**615.0643988**
-2.4	**-171.4203038**	**-184.0516225**	**-132.103394**	**-150.715079**	**-163.027434**
+2.4	**678.6829244**	**731.9434115**	**545.9557337**	**628.6744837**	**664.4004339**
-2.45	**-149.8754968**	**-160.91926**	**-115.500098**	**-131.77259**	**-142.537478**
+2.45	**708.2501514**	**771.6095157**	**573.8635111**	**655.3051515**	**695.783924**
-2.5	**-128.3306898**	**-137.7868974**	**-98.8969049**	**-112.830101**	**-122.047552**
+2.5	**718.40978**	**786.3585921**	**580.932682**	**662.4806245**	**699.6276386**
-2.55	**-149.8753932**	**-160.9192356**	**-115.500219**	**-131.772352**	**-142.537514**
+2.55	**708.2212495**	**771.6057855**	**573.8721991**	**655.297101**	**695.8126245**
-2.6	**-171.420185**	**-184.0515947**	**-132.103532**	**-150.714807**	**-163.027475**
+2.6	**678.6982654**	**731.9408714**	**545.9601357**	**628.6574759**	**664.4040956**
-2.65	**-192.9649769**	**-207.1839539**	**-148.706846**	**-169.657263**	**-183.517437**
+2.65	**636.4658526**	**667.7820897**	**506.539977**	**589.5926799**	**615.0841585**
-2.7	**-214.5097687**	**-230.316313**	**-165.31016**	**-188.599718**	**-204.007398**
+2.7	**563.5309114**	**572.5600484**	**452.85314**	**527.2796406**	**540.6062385**
-2.75	**-236.0545606**	**-253.4486722**	**-181.913474**	**-207.542173**	**-224.49736**
+2.75	**464.9326068**	**459.9297834**	**381.8091318**	**442.2007686**	**450.3028117**
-2.8	**-257.5993524**	**-276.5810313**	**-198.516787**	**-226.484628**	**-244.987322**
+2.8	**335.8134976**	**318.1838049**	**297.4731482**	**327.1950621**	**340.7432626**
-2.85	**-279.1441443**	**-308.2608679**	**-216.779994**	**-254.654486**	**-271.155926**
+2.85	**222.9780968**	**212.4700507**	**202.256575**	**222.2798292**	**223.546771**
-2.9	**-399.7373968**	**-422.1964767**	**-323.078668**	**-360.203135**	**-399.377486**
+2.9	**115.801535**	**117.0124576**	**117.2270743**	**121.7802079**	**111.7367265**
-2.95	**-582.0376775**	**-589.1679932**	**-445.294178**	**-520.997233**	**-562.653892**
+2.95	**66.03446494**	**72.72724174**	**50.5328618**	**57.6522982**	**62.36208781**
-3	**-824.989344**	**-861.6160526**	**-592.058063**	**-690.533162**	**-750.189208**
+3	**87.11737829**	**93.53672876**	**67.13616081**	**76.59479079**	**82.85204339**
(Span 3) -4	**-8.25E+02**	**-8.62E+02**	**-5.92E+02**	**-6.91E+02**	**-7.50E+02**
+4	**8.71E+01**	**9.35E+01**	**6.71E+01**	**7.66E+01**	**8.29E+01**
-3.05	**-673.0822339**	**-716.747857**	**-484.685516**	**-549.532618**	**-608.460013**
+3.05	**82.76150946**	**88.85989237**	**63.77935285**	**72.76505136**	**78.70944124**
-3.1	**-526.5211974**	**-576.3279768**	**-382.056643**	**-416.4911**	**-473.074606**
+3.1	**83.98444677**	**84.96938611**	**95.49371183**	**101.8599593**	**84.95536954**
-3.15	***-448.7974289***	***-497.6889426***	***-305.466246***	***-374.231463***	***-380.875848***
+3.15	**171.8141143**	**159.3975452**	**167.0262662**	**178.200924**	**174.0515756**
-3.2	**-422.3975807**	**-468.413123**	**-287.497642**	**-352.217847**	**-358.471386**
+3.2	**278.0064877**	**265.4881769**	**253.6964379**	**272.3229163**	**276.3414516**
-3.25	**-395.9977325**	**-439.1373033**	**-269.529039**	**-330.204232**	**-336.066925**
+3.25	**375.4731169**	**365.3719157**	**325.9225017**	**352.0681234**	**370.3273833**
-3.3	**-369.5978843**	**-409.8614837**	**-251.560436**	**-308.190617**	**-313.662463**
+3.3	**456.0433073**	**461.217707**	**393.5109282**	**427.3877755**	**456.0679582**
-3.35	**-343.1980361**	**-380.585664**	**-233.591832**	**-286.177001**	**-291.258002**
+3.35	**517.9551797**	**527.849214**	**444.7254319**	**493.9535303**	**526.0887097**
-3.4	**-316.7981879**	**-351.3098444**	**-215.623229**	**-264.163386**	**-268.85354**
+3.4	**568.7090742**	**589.8399947**	**486.3719265**	**551.3934026**	**583.984069**
-3.45	**-290.3983397**	**-322.0340248**	**-197.654626**	**-242.14977**	**-246.449079**
+3.45	**592.6208176**	**630.7128865**	**514.0561622**	**591.8578632**	**621.4525068**
-3.5	**-263.9984915**	**-292.7582051**	**-179.686022**	**-220.136155**	**-224.044617**
+3.5	**618.6688816**	**650.3766029**	**539.303032**	**622.0194504**	**645.8738391**
-3.55	**-237.5986433**	**-263.4823855**	**-161.717419**	**-198.122539**	**-201.640156**
+3.55	**631.6727488**	**663.3936892**	**548.267542**	**630.6881347**	**656.9128872**
-3.6	**-211.1987951**	**-234.2065659**	**-143.748816**	**-176.108924**	**-179.235694**

+3.6	641.9585806	658.7358952	544.8490182	628.3221606	660.0854054
-3.65	-184.7989469	-204.9307462	-125.780212	-154.095308	-156.831233
+3.65	625.8387256	636.8638001	530.7056554	602.9420327	638.7568668
-3.7	-158.3990987	-175.6549266	-107.811609	-132.081693	-134.426771
+3.7	596.1468247	607.8716375	509.4213941	561.6344358	600.35092
-3.75	-131.9992505	-146.3791069	-89.8430056	-110.068077	-112.022309
+3.75	544.4302226	551.1028061	467.4069549	514.7836904	540.4375908
-3.8	-105.5994023	-117.1032873	-71.8744023	-88.0544619	-89.6178479
+3.8	472.2600482	482.9922045	413.6923259	454.190461	479.006319
-3.85	-79.19955412	-87.82746767	-53.9057989	-66.0408464	-67.2133864
+3.85	394.398851	404.0323823	335.6210107	368.5901026	391.4896521
-3.9	-52.79970592	-58.55164803	-35.9371956	-44.0272309	-44.8089249
+3.9	293.5069315	303.5453222	244.5260971	271.9475758	286.6481771
-3.95	-26.39985772	-29.2758284	-17.9685923	-22.0136155	-22.4044633
+3.95	159.9519864	166.0804526	130.7375877	147.1092262	153.9222548
-5	-1.07E-13	-1.06E-13	-8.13E-14	-1.03E-13	-1.02E-13
+5	5.53E-14	5.68E-14	5.69E-14	5.53E-14	5.26E-14

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-6.649783343	-4.926824193	-4.719089898	-4.181686006	-3.775822562	-4.031612139	-5.552461073	-6.134648288	-6.780802798	-7.310995278
End Shear	49.90928853	38.27509515	36.84042046	31.54613328	27.40215109	31.47341418	42.28138983	45.62078154	45.50774341	45.1504679
-0.05	-6.649783343	-4.926824193	-4.719089898	-4.181686006	-4.162950065	-4.031612139	-5.552461073	-6.134648288	-6.780802798	-7.310995278
+0.05	45.26194779	34.92167842	32.91921341	28.59605789	24.69593588	28.73638401	38.6047446	41.50153212	41.38147527	41.37687837
-0.1	-6.649783343	-4.926824193	-4.719089898	-4.97530058	-4.7680498	-4.031612139	-5.552461073	-6.134648288	-6.780802798	-7.310995278
+0.1	40.79003845	31.70250045	29.34915218	25.82510539	22.27076669	26.12514433	35.0753172	37.5377722	37.50774341	37.43774814
-0.15	-6.649783343	-4.926824193	-4.719089898	-5.782613799	-5.479546578	-4.031612139	-5.552461073	-6.134648288	-6.780802798	-7.310995278
+0.15	37.50779946	29.32650759	26.89991131	23.78751326	20.48787057	24.19457802	32.46657711	34.61806669	34.54052347	34.53544251
-0.2	-9.4342219	-6.014547126	-6.610393358	-7.33424396	-7.090850318	-5.269250718	-5.809281628	-6.134648288	-6.780802798	-7.310995278
+0.2	33.30541346	26.22178461	23.99310209	21.13554416	18.1685774	21.66730371	29.05240637	30.81092938	30.75525619	30.74996076
-0.25	-11.65358177	-7.814810287	-8.476261399	-9.044866551	-8.281126746	-6.387856578	-7.67652219	-7.677832652	-7.658917907	-7.641034277
+0.25	30.36694269	23.94892663	21.90841431	19.20244636	16.47930135	19.8135385	26.54878069	28.03013676	27.98960175	27.98417717
-0.3	-14.45478638	-10.19899026	-11.21545488	-11.21721387	-9.822727483	-7.863412852	-10.52716447	-10.52877242	-10.51027146	-10.4927799
+0.3	26.55923209	21.00477591	19.60449085	16.71014006	14.30367171	17.40710166	23.29966929	24.43681438	24.41465921	24.40911231
-0.35	-16.43779881	-11.96920196	-13.30453256	-12.765796	-10.9469203	-8.954520627	-12.64852263	-12.65034598	-12.63220563	-12.71165419
+0.35	23.71782942	18.86963969	17.91061512	14.91204817	12.75653225	15.65779587	20.93851279	21.83783007	21.82803542	21.82242879
-0.4	-18.92545485	-14.29708341	-16.16581278	-14.72400401	-12.48086732	-10.42138267	-15.4446909	-15.9821846	-15.96111955	-15.94120576
+0.4	20.17801183	16.13216905	15.70604951	12.62008403	10.91479998	13.4090733	17.90425863	18.58883957	18.64552509	18.7596854
-0.45	-20.67448843	-16.01289462	-18.38929637	-16.11341855	-13.67063326	-12.32138082	-17.51066765	-18.45988601	-18.43931689	-18.41986995
+0.45	17.69031787	14.10984459	14.09888306	11.22941028	9.825134256	11.791885	15.65979114	16.44157297	16.436111	16.55828847
-0.5	-23.07717764	-18.25200909	-21.18223554	-17.86133201	-15.20033809	-14.91705817	-20.21362704	-21.71131631	-21.6914804	-21.68216543
+0.5	14.42306043	12.03775026	12.02619206	9.579702661	8.417608239	9.737756449	12.97996614	13.69543818	13.68998129	13.83539981
-0.55	-25.4976544	-19.96517215	-23.14794631	-19.09445922	-16.30517795	-16.83285781	-22.57756753	-24.1025234	-24.08328658	-24.31328954
+0.55	12.14909251	10.5420308	10.53012624	8.388895467	7.4003906	8.163124822	11.25403603	11.73173664	11.72632721	11.83685949
-0.6	-29.53859567	-22.9837214	-25.59659129	-21.03943318	-18.04852146	-19.33632058	-25.97089387	-27.21556242	-27.19719487	-27.70213931
+0.6	9.57260704	8.634045111	8.621823273	6.86988821	6.101721071	6.555344544	9.062516304	9.253425897	9.248127097	9.351146158
-0.65	-32.57486122	-25.27894412	-27.30364666	-22.41227852	-19.28549228	-21.16912752	-28.4561736	-29.65786952	-29.62839385	-30.14774731
+0.65	8.253133774	7.273580645	7.261243803	5.786817457	5.175227976	5.652612007	7.508085074	7.518169917	7.58955362	7.600305277
-0.7	-36.6214809	-28.2573171	-29.40683777	-24.08271618	-21.37483566	-23.54349718	-31.67721166	-33.40809874	-33.34543243	-33.32533652
+0.7	6.579121113	5.562164718	5.549848014	4.424405641	4.009450418	4.507252742	5.564596755	5.57370738	5.639411736	5.591215692
-0.75	-39.54478399	-30.42141734	-30.85435685	-25.21858014	-22.91423456	-25.26565785	-34.01459703	-36.13989581	-36.05234762	-36.03304883
+0.75	5.392905712	4.36130416	4.349140244	3.469006457	3.191455447	3.69556772	4.213247918	4.21907594	4.28024613	4.210734551
-0.8	-43.27987598	-33.20190291	-32.6109175	-27.18315817	-24.91343258	-27.4740563	-37.01354745	-39.65949063	-39.53889298	-39.62309646
+0.8	3.911493301	2.878926825	2.867168882	2.363288583	2.226991812	2.681745802	2.781387064	2.779019283	2.735314532	2.732029525
-0.85	-45.94982705	-35.20029445	-33.79803177	-28.99110606	-26.37056029	-29.05791045	-39.16569414	-42.19686662	-42.33642256	-42.31499124
+0.85	2.880919218	1.829542018	1.850721697	1.600531551	1.649524059	1.976320963	1.754148426	1.79684924	1.756607338	1.75350234
-0.9	-49.52847438	-37.73677428	-35.2067991	-31.29754344	-28.25361005	-31.0634628	-41.89275471	-45.42862727	-46.18313183	-46.20799557
+0.9	1.621950626	0.877139516	0.888745202	0.837859529	1.116094371	1.114319116	1.011690749	1.094596466	1.200244501	1.268693849
-0.95	-52.26446487	-39.53487051	-37.63902317	-32.94198858	-29.6547193	-32.48135345	-43.82230673	-47.72868353	-48.94678633	-49.13807434
+0.95	1.152783449	0.877139516	0.762184235	0.720526203	0.775628418	0.726377246	1.011690749	1.094596466	1.200244501	1.268693849
-1	-55.71637832	-41.7812361	-40.99225135	-35.04448487	-31.45280395	-34.24718264	-46.22767776	-50.61541463	-52.45301958	-53.20293623
+1	1.15E+00	0.877139516	0.762184235	0.720526203	6.39E-01	0.726377246	1.011690749	1.094596466	1.200244501	1.268693849
(Span 2) -2	-4.386035988	-3.337283795	-2.8999092	-2.741411465	-2.432062995	-2.7636733	-3.849215632	-4.164649846	-4.566612677	-4.827044362
+2	57.36797806	42.48346833	44.83461727	38.8956044	34.49395997	34.65521213	46.81447637	51.64880042	54.22111196	56.01015269
-2.05	-4.386035988	-3.337283795	-2.8999092	-2.741411465	-2.621509889	-2.7636733	-3.849215632	-4.164649846	-4.566612677	-4.827044362
+2.05	54.42294322	40.53290349	41.89762199	36.16444575	32.15006888	33.1083747	44.70479153	49.14675315	51.21911946	52.52003065
-2.1	-4.386035988	-3.337283795	-2.8999092	-3.023517998	-3.086301853	-2.7636733	-3.849215632	-4.164649846	-4.566612677	-4.827044362
+2.1	50.514701	37.90470006	37.92911356	32.72534112	29.20804216	31.01445488	41.85327377	45.79980652	47.27174764	47.99662247
-2.15	-4.386035988	-3.337283795	-2.8999092	-3.56394593	-3.767089254	-2.7636733	-3.849215632	-4.164649846	-4.566612677	-4.827044362
+2.15	47.24307554	35.67535833	35.02098407	30.09560405	26.93285604	29.23118689	39.42775596	42.97801034	43.99302286	44.28842349
-2.2	-5.586723063	-4.058506766	-4.215393026	-4.304715363	-4.890671802	-3.406247094	-4.009570874	-4.164649846	-4.566612677	-4.827044362
+2.2	43.00489996	32.76413916	31.45027681	27.0525379	24.30123392	26.89407349	36.25213069	39.31256947	39.7907768	39.77922164
-2.25	-7.073648279	-5.500372958	-5.84617487	-5.52710296	-5.7747472	-4.375479419	-5.641898198	-5.64610234	-5.638125832	-5.630584348

+2.25	39.56210487	30.36075124	28.72212205	24.80745596	22.40101241	24.95812475	33.62388052	36.30093856	36.29674011	36.36900466
-2.3	-9.004516126	-7.444073823	-7.976654612	-7.36731212	-6.913108912	-5.662546787	-7.865005505	-8.015599433	-8.00609451	-7.997102615
+2.3	35.22208992	27.23243823	26.47301075	22.13067378	20.17836302	22.48250473	30.26552916	32.23371834	32.38359635	32.37314547
-2.35	-10.5936521	-9.094373235	-9.739706064	-8.971560897	-7.851481368	-7.064732861	-9.768468673	-10.16770203	-10.15779897	-10.14843408
+2.35	31.75722564	24.51546001	24.49886893	19.98745321	18.49320299	20.47762233	27.29473567	29.02453627	29.09418711	29.32209418
-2.4	-13.72196124	-11.42371303	-11.99673588	-11.09308797	-9.413103197	-9.168755337	-12.27551536	-13.03052225	-13.02029117	-13.03257705
+2.4	27.54523977	21.43385906	21.81843389	17.81751479	16.39726184	17.71832492	23.80961002	25.21465572	25.16578988	25.24051247
-2.45	-16.53950518	-13.21299795	-13.91683377	-12.71249176	-10.69417507	-10.95864707	-14.66409712	-15.43370983	-15.423339	-15.67719758
+2.45	24.37275935	19.00183416	19.50818345	16.44944466	14.73663281	15.73170921	21.12004287	22.22100746	22.18908174	22.17805151
-2.5	-20.24394471	-16.03944556	-16.63503612	-14.63760003	-12.69176602	-13.30220457	-17.83279927	-18.59140838	-18.57782011	-18.79721939
+2.5	20.47819827	16.03729343	16.63333532	14.63649336	12.69106619	13.30036513	17.83038622	18.58884519	18.57532839	18.79505271
-2.55	-24.10282458	-19.00405634	-19.51009038	-16.45048368	-14.73733519	-15.73359951	-21.12252995	-22.22368042	-22.19167829	-22.1805748
+2.55	16.76246897	13.21132573	13.91506798	12.71131689	10.69363186	10.95689211	14.66178744	15.43150697	15.4211876	15.67510225
-2.6	-27.26630108	-21.43613017	-21.82022596	-17.81850012	-16.39796872	-17.72024653	-23.81212903	-25.2173931	-25.16844773	-25.18499433
+2.6	13.93357613	11.42208885	11.99528694	11.09186815	9.412535216	9.167083192	12.27360212	13.02839534	13.01820931	13.08864327
-2.65	-31.41538688	-24.51775175	-24.50051555	-19.98902241	-18.49389856	-20.39529363	-27.23423496	-29.02730627	-29.03721073	-29.26660417
+2.65	10.62057796	9.092818939	9.738289884	8.970278254	7.851079034	7.063188703	9.766651444	10.16570244	10.15584599	10.14654041
-2.7	-34.87752125	-27.16999018	-26.47452744	-22.13225024	-20.17904538	-22.48441925	-30.20476279	-32.17527258	-32.32661713	-32.37576069
+2.7	9.003292453	7.442586919	7.975274939	7.366233481	6.912705688	5.661532154	7.863286095	8.013717991	8.004260776	7.995320566
-2.75	-39.21831087	-30.36299629	-28.72348521	-24.80902198	-22.40172607	-24.96000827	-33.62635953	-36.30368669	-36.271673	-36.37193763
+2.75	7.072465	5.498994537	5.844849246	5.526019257	5.774347334	4.374522542	5.640320714	5.644567061	5.636632755	5.629133472
-2.8	-42.66507956	-32.76634194	-31.45254951	-27.05432397	-24.30210588	-26.89591565	-36.25455667	-39.31527082	-39.79376981	-39.78212356
+2.8	5.585585193	4.05722667	4.214131729	4.30389079	4.890273778	3.405348525	4.008121111	4.164651302	4.566602327	4.827041066
-2.85	-46.89225519	-35.6774735	-35.02326355	-30.0973899	-26.93371936	-29.23294545	-39.43007933	-42.9806187	-43.99595478	-44.29161709
+2.85	4.386025153	3.337288221	2.899903367	3.563559445	3.775519767	2.763664651	3.849219388	4.164651302	4.566602327	4.827041066
-2.9	-50.17260516	-37.90672135	-37.87548629	-32.7273717	-29.2090259	-31.01613596	-41.85548863	-45.80231699	-47.27461671	-47.99978176
+2.9	4.386025153	3.337288221	2.899903367	3.023103705	3.086141069	2.763664651	3.849219388	4.164651302	4.566602327	4.827041066
-2.95	-54.09731832	-40.5347834	-41.84411993	-36.16647347	-32.15104608	-33.10992661	-44.70684832	-49.14910455	-51.22184917	-52.52307609
+2.95	4.386025153	3.337288221	2.899903367	2.741416011	2.621322145	2.763664651	3.849219388	4.164651302	4.566602327	4.827041066
-3	-58.12549048	-42.94901576	-45.55968617	-39.57390871	-35.07688713	-35.02335547	-47.31702937	-52.24875274	-54.94876794	-56.86355613
+3	4.386025153	3.337288221	2.899903367	2.741416011	2.43206529	2.763664651	3.849219388	4.164651302	4.566602327	4.827041066
(Span 3) -4	-1.15E+00	-0.877140679	-0.762182702	-0.720527398	-6.39E-01	-0.726374973	-1.011691736	-1.094596849	-1.200241781	-1.268692983
+4	54.78747649	41.23449121	40.16695165	34.5141934	31.01145339	33.81798429	45.6428195	49.91131926	51.59352232	52.18065196
-3.05	-1.15E+00	-0.877140679	-0.762182702	-0.720527398	-8.20E-01	-0.726374973	-1.011691736	-1.094596849	-1.200241781	-1.268692983
+3.05	52.17208551	39.53270653	37.63628731	32.9404121	29.65399552	32.47958153	43.81996241	47.72596873	48.94358891	49.13478036
-3.1	-1.923900604	-1.055998976	-1.054719271	-0.945126387	-1.238890573	-1.321886601	-1.011691736	-1.094596849	-1.200241781	-1.268692983
+3.1	48.49246261	37.11476045	34.87218936	30.73103409	27.78872211	30.57211897	41.2245062	44.63489225	45.23477778	45.2144152
-3.15	-2.880918503	-1.818764207	-1.851743035	-1.601238842	-1.649787375	-1.977179934	-1.755303051	-1.797968268	-1.757698059	-1.75456467
+3.15	45.85975222	35.19787526	33.79682834	28.98935034	26.36979253	29.0559213	39.1630579	42.19385546	42.33294903	42.31160834
-3.2	-4.270652771	-3.237619508	-3.225553616	-2.631292653	-2.449106566	-2.928504405	-3.127870089	-3.12543765	-3.080590882	-3.077222483
+3.2	42.26896435	32.51618665	32.18901803	26.62739618	24.41872745	26.9298279	36.27439656	38.79046426	38.67822048	38.70460832
-3.25	-5.392906189	-4.36272564	-4.350363293	-3.469850404	-3.191938205	-3.696572253	-4.214632296	-4.220638612	-4.281769238	-4.212217759
+3.25	39.44572756	30.41877819	30.85287957	25.21750878	22.91340245	25.26347862	34.0117301	36.13664062	36.0492054	36.02998176
-3.3	-6.98802948	-5.980073677	-5.96752198	-4.756836181	-4.293603244	-4.788111252	-6.037810659	-6.047116922	-6.114239435	-6.066118732
+3.3	35.52166885	27.51947287	28.89794132	23.68079254	20.85354737	22.95563954	30.87965206	32.47813066	32.42387586	32.50278256
-3.35	-8.253133774	-7.275205748	-7.262638366	-5.787845107	-5.175763033	-5.653737684	-7.509956258	-7.519987289	-7.59132675	-7.602026516
+3.35	32.46817671	25.27613738	27.30188872	22.41098204	19.28483881	21.16680325	28.45310736	29.6544184	29.62505322	30.14499894
-3.4	-10.0238018	-9.103021964	-9.090623746	-7.242971621	-6.420414477	-6.865212692	-9.600047309	-9.859487936	-9.854106395	-9.959000047
+3.4	28.4335716	22.20532213	25.00099175	20.55706107	17.62078763	18.71407975	25.12743805	26.44327397	26.42474386	26.86538505
-3.45	-12.10571173	-10.54383245	-10.5316743	-8.390034895	-7.400978369	-8.164928265	-11.25612705	-11.73404412	-11.72857128	-11.83904255
+3.45	25.39207613	19.8870718	23.14590857	19.09328209	16.30458955	16.8304245	22.57436652	24.09965757	24.08049649	24.31031067
-3.5	-15.16128438	-12.54966036	-12.53797157	-9.986950844	-8.764851511	-10.24171327	-13.57210472	-14.37117905	-14.36565714	-14.51308364
+3.5	22.20859521	17.69587396	20.50022119	17.43424302	14.82333576	14.26970038	19.54150475	20.9018278	20.88187121	20.86301919
-3.55	-17.58996066	-14.11178994	-14.10056036	-11.23064831	-9.825747686	-11.79389691	-15.59930414	-16.44411378	-16.43859273	-16.56068966
+3.55	20.48500539	16.0107951	18.38699462	16.11208863	13.66996321	12.31886407	17.50811408	18.45690729	18.43642158	18.41705648
-3.6	-20.99539427	-16.80659902	-16.25265149	-13.18280253	-11.28445058	-13.96384662	-18.65263391	-19.32268932	-19.38120703	-19.49531591
+3.6	18.13209677	13.71693398	15.39768654	14.24439019	12.0754557	10.06615943	14.74710749	15.14707031	15.12591831	15.10594213

-3.65	-23.66431577	-18.87221106	-17.91239329	-14.9137688	-12.75741106	-15.65999383	-20.94139281	-21.77970769	-21.83100327	-21.82531277
+3.65	16.25142349	11.96703225	13.30234723	12.76430228	10.94627107	8.953131467	12.64588955	12.64780062	12.62971562	12.61263474
-3.7	-27.36049089	-21.73354382	-20.17776269	-17.32528513	-14.83972109	-18.00343522	-24.10463178	-25.32521419	-25.29857806	-25.29295281
+3.7	13.5883216	9.60297423	10.5017865	10.68411019	9.44133168	7.495123377	9.813829357	9.815443362	9.796893203	9.779368156
-3.75	-30.38201535	-23.95168042	-21.91026955	-19.20431251	-16.48025796	-19.8158788	-26.55184533	-28.03343045	-27.99280509	-27.98727986
+3.75	11.47371281	7.812599231	8.474286299	9.043221372	8.280411595	6.386429909	7.673856933	7.675248185	7.65638412	7.638593619
-3.8	-34.31458483	-26.9933224	-24.71299963	-21.79289739	-18.7425933	-22.29594233	-29.90147033	-31.75605462	-31.69498563	-31.68964981
+3.8	8.496980258	5.410800149	5.981638648	6.746700779	6.686519699	4.893219496	5.55248463	6.13467184	6.780817458	7.311018319
-3.85	-37.34934399	-29.32940982	-26.90226305	-23.78949037	-20.48886151	-24.19702507	-32.46978937	-34.62154734	-34.5438956	-34.53872678
+3.85	6.649916949	4.926846535	4.719089355	5.781852947	5.478891576	4.031619501	5.55248463	6.13467184	6.780817458	7.311018319
-3.9	-41.73560856	-32.50523476	-30.23146386	-26.51447869	-22.87333064	-26.77684564	-35.95597458	-38.52527325	-38.48938305	-38.17445725
+3.9	6.649916949	4.926846535	4.719089355	4.68989893	4.619584338	4.031619501	5.55248463	6.13467184	6.780817458	7.311018319
-3.95	-45.0963542	-34.92467335	-32.92209419	-28.59811029	-24.69695805	-28.73890869	-38.60806101	-41.50514284	-41.3849677	-41.38027589
+3.95	6.649916949	4.926846535	4.719089355	4.181684404	4.162656586	4.031619501	5.55248463	6.13467184	6.780817458	7.311018319
-5	-49.6546231	-38.18857613	-36.61962566	-31.41883692	-27.16541379	-31.3815888	-42.1810178	-45.53275845	-45.43741068	-45.43173512
+5	6.649916949	4.926846535	4.719089355	4.181684404	3.775821749	4.031619501	5.55248463	6.13467184	6.780817458	7.311018319

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-6.649783343	-6.876376499	-7.310928067	-6.885348042	-8.193757901	-5.334251092	-5.615001149	-3.186542671
End Shear	49.90928853	53.97726581	56.44887567	52.22191036	59.78486896	40.53070765	42.66390279	26.83190497
-0.05	-6.649783343	-6.876376499	-7.310928067	-6.885348042	-8.193757901	-5.334251092	-5.615001149	-3.186542671
+0.05	45.26194779	49.47405303	51.62364657	47.70746142	54.36914173	36.55148749	38.70134959	24.42796062
-0.1	-6.649783343	-6.876376499	-7.310928067	-6.885348042	-8.193757901	-5.334251092	-5.615001149	-3.186542671
+0.1	40.79003845	45.15699949	47.00575419	43.3708797	49.18354649	33.41314268	35.3661485	22.21644289
-0.15	-6.649783343	-6.876376499	-7.310928067	-6.885348042	-8.193757901	-5.334251092	-5.615001149	-3.948746361
+0.15	37.50779946	41.95608811	43.58700897	40.16357275	45.35951179	31.08375659	32.89122518	20.58564753
-0.2	-9.4342219	-8.542043019	-8.542043019	-6.885348042	-8.193757901	-7.169552665	-7.595142041	-5.523152891
+0.2	33.30541346	37.75308146	39.10515836	35.96327576	40.36700128	28.02178556	29.63873751	18.45690921
-0.25	-11.65358177	-11.09895186	-11.09895186	-9.104842222	-9.201140221	-9.186757433	-9.722735145	-6.69556163
+0.25	30.36694269	34.66017875	35.81264674	32.8810035	36.71544227	25.76596365	27.2431725	16.90040955
-0.3	-14.45478638	-14.4852066	-14.4852066	-12.77271917	-13.27986813	-12.20093985	-12.89967828	-8.241977078
+0.3	26.55923209	30.63114668	31.53137557	28.87786139	31.98979886	22.82378119	24.11958422	14.88701928
-0.35	-16.43779881	-16.99945015	-16.99945015	-15.50446384	-16.32026634	-14.51105703	-15.33341776	-9.385377998
+0.35	23.71782942	27.69120096	28.41350338	25.9662798	28.56605605	20.6740808	21.83801297	13.42924785
-0.4	-18.92545485	-20.30576807	-20.30576807	-19.10819672	-20.33477566	-17.69602993	-18.68744749	-10.88243176
+0.4	20.17801183	23.89607406	24.39735229	22.22115655	24.18105438	17.89510391	18.88951237	11.65733378
-0.45	-20.67448843	-22.96946477	-23.04502976	-21.77315754	-23.30625948	-20.19043781	-21.31332033	-11.9807953
+0.45	17.69031787	21.15403454	21.50252636	19.45164575	20.96620394	15.88409164	16.75658022	10.56871371
-0.5	-23.07717764	-27.17672329	-27.59461497	-25.262945	-27.20121608	-23.31014339	-24.5963889	-13.63278666
+0.5	14.42306043	17.60527246	17.76856755	16.08666119	17.29692526	13.31173872	14.02935705	9.157292408
-0.55	-25.4976544	-30.27347348	-30.94855334	-28.2061665	-30.69961064	-25.74694575	-27.17182997	-14.87562071
+0.55	12.14909251	14.95178884	14.98128143	13.89342765	14.88495691	11.47197213	12.07969971	8.132596239
-0.6	-29.53859567	-34.30851332	-35.32589413	-32.35451702	-35.7901957	-29.11520892	-30.75342898	-16.44190125
+0.6	9.57260704	12.26804604	12.26804604	11.11313239	11.83184516	9.342526862	9.834238802	6.817092492
-0.65	-32.57486122	-37.25362941	-38.52645091	-35.39107571	-39.52804313	-31.49618397	-33.28663088	-17.5464575
+0.65	8.253133774	10.33560575	10.33560575	9.144818055	9.674029189	7.872104588	8.286425882	5.872350293
-0.7	-36.6214809	-41.05652933	-42.66701725	-39.3242673	-44.38572069	-34.47401949	-36.45677466	-19.465846
+0.7	6.579121113	7.904611961	7.904611961	6.689314716	6.98745363	5.991313197	6.30664547	4.674137916
-0.75	-39.54478399	-43.80506279	-45.66578623	-42.17662788	-47.92121618	-36.55763694	-38.67642704	-20.95383494
+0.75	5.392905712	6.198796005	6.198796005	4.983270023	5.021831298	4.695094581	4.942204823	3.825378573
-0.8	-43.27987598	-47.31588776	-49.50503226	-45.83379456	-52.47220974	-39.13296863	-41.42191753	-22.86416971
+0.8	3.911493301	4.093022071	4.093022071	3.272220075	3.272220075	3.095239134	3.258146457	2.765829045
-0.85	-45.94982705	-49.8228918	-52.25360926	-48.45631387	-55.7500284	-40.91018792	-43.31813951	-24.23587007
+0.85	2.880919218	2.572958275	2.572958275	2.06370403	2.06370403	1.997938196	2.103092838	2.029082
-0.9	-49.52847438	-52.98171204	-55.72699538	-51.77658632	-59.92055654	-43.07094211	-45.62578137	-25.97486634
+0.9	1.621950626	1.271351232	1.342951495	1.263929692	1.489864235	0.959440843	1.009937729	1.129568488
-0.95	-52.26446487	-55.20223576	-58.17697159	-54.12360727	-62.88535634	-44.53270563	-47.1886739	-27.20584839
+0.95	1.152783449	1.271351232	1.342951495	1.263929692	1.489864235	0.933421709	0.989614884	0.540812929
-1	-55.71637832	-57.94912396	-61.21996074	-57.04611909	-66.60164202	-46.42846734	-49.04528514	-28.74093673
+1	1.15E+00	1.271351232	1.342951495	1.263929692	1.489864235	0.933421709	0.989614884	0.540812929
(Span 2) -2	-4.386035988	-4.837154985	-5.109575142	-4.808918058	-5.66853908	-3.551422629	-3.765222787	-2.057650056
+2	57.36797806	58.35949318	61.79593545	57.68822256	67.68011222	50.49288011	53.19175744	29.26214354
-2.05	-4.386035988	-4.837154985	-5.109575142	-4.808918058	-5.66853908	-3.551422629	-3.765222787	-2.057650056
+2.05	54.42294322	55.93067046	59.11332465	55.11643315	64.42842282	47.25536552	49.78012458	27.94583371
-2.1	-4.386035988	-4.837154985	-5.109575142	-4.808918058	-5.66853908	-3.551422629	-3.765222787	-2.057650056
+2.1	50.514701	52.6093046	55.46737165	51.63457614	60.07082051	43.05281979	45.34919754	26.16851864
-2.15	-4.386035988	-4.837154985	-5.109575142	-4.808918058	-5.66853908	-3.551422629	-3.765222787	-2.437373736
+2.15	47.24307554	49.75672162	52.35175888	48.66867061	56.39068135	39.60145727	41.94484221	24.65893621
-2.2	-5.586723063	-5.760060927	-5.760060927	-4.808918058	-5.66853908	-4.552974525	-4.795884709	-3.617608148
+2.2	43.00489996	45.99072537	48.25616775	44.78055996	51.60223461	36.95411626	39.13701655	22.68626424
-2.25	-7.073648279	-7.80754361	-7.80754361	-6.826763671	-7.07422663	-6.321641913	-6.669456547	-4.637230172

+2.25	39.56210487	42.85048116	44.85412159	41.55877238	47.66120275	34.64164057	36.67526253	21.05737709
-2.3	-9.004516126	-10.56772855	-10.56772855	-9.640507098	-10.1473156	-8.629619917	-9.110526962	-5.990315377
+2.3	35.22208992	38.80998848	40.49211333	37.4372071	42.6513648	31.50872275	33.34360356	18.98179808
-2.35	-10.5936521	-12.972549	-12.99295381	-12.0573928	-12.79633928	-10.53772402	-11.12601933	-7.12394612
+2.35	31.75722564	35.42319508	36.85521736	33.80022557	38.31947154	28.81879547	30.48577481	17.30757471
-2.4	-13.72196124	-16.58756243	-16.79133571	-15.24921571	-16.30508954	-12.9784603	-13.70125093	-8.589209548
+2.4	27.54523977	30.95894125	32.06156664	29.4989786	33.09712224	25.24072407	26.68777666	15.22156275
-2.45	-16.53950518	-19.63316644	-20.00712701	-18.21396544	-19.74305948	-15.08945039	-15.92490402	-9.788313471
+2.45	24.37275935	27.6550973	28.53134977	26.18560056	29.14635396	22.21600709	23.47988468	13.57597297
-2.5	-20.24394471	-23.58804643	-24.20071336	-22.1301659	-24.34317991	-18.51043717	-19.55131826	-11.57245519
+2.5	20.47819827	23.58498574	24.19746111	22.12718623	24.33966538	18.50826879	19.54901887	11.57197624
-2.55	-24.10282458	-27.65822518	-28.53468682	-26.18866642	-29.14999883	-22.21848113	-23.48250737	-13.57646534
+2.55	16.76246897	19.63020328	20.00399235	18.21110797	19.73971886	15.08725941	15.92258267	9.79777595
-2.6	-27.26630108	-30.96210227	-32.06494914	-29.50208007	-33.10083076	-25.24308859	-26.6902851	-15.22206519
+2.6	13.93357613	16.58472165	16.78834266	15.24677675	16.30240462	12.97689396	13.69959905	8.598519567
-2.65	-31.41538688	-35.33136072	-36.76361886	-33.72918196	-38.24906828	-28.82101214	-30.4881287	-17.30808504
+2.65	10.62057796	12.96989052	12.99016955	12.05508264	12.79380386	10.53619178	11.12440151	7.132963876
-2.7	-34.87752125	-38.81309929	-40.49546414	-37.36584735	-42.58066374	-31.51081292	-33.34582492	-18.98230712
+2.7	9.003292453	10.56555087	10.56555087	9.638326958	10.14492976	8.628125986	9.108947872	5.999012037
-2.75	-39.21831087	-42.85353403	-44.85742259	-41.56181323	-47.66490948	-34.64355941	-36.67730409	-21.05787232
+2.75	7.072465	7.805524795	7.805524795	6.824771433	7.072056056	6.320204799	6.667935052	4.645416671
-2.8	-42.66507956	-45.99368241	-48.25937541	-44.78353268	-51.60587903	-36.95589934	-39.1389155	-22.68674845
+2.8	5.585585193	5.758193795	5.758193795	4.808916629	5.668550159	4.55160559	4.794433147	3.62530593
-2.85	-46.89225519	-49.75952943	-52.35481837	-48.67151371	-56.39419433	-39.60423114	-41.94654595	-24.65940665
+2.85	4.386025153	4.837153639	5.109580499	4.808916629	5.668550159	3.551426367	3.765230869	2.437106375
-2.9	-50.17260516	-52.61196499	-55.47028208	-51.63728319	-60.07418884	-43.05554759	-45.35207462	-26.16896884
+2.9	4.386025153	4.837153639	5.109580499	4.808916629	5.668550159	3.551426367	3.765230869	2.057650859
-2.95	-54.09731832	-55.93310318	-59.11600226	-55.11894272	-64.43157742	-47.25800177	-49.7829034	-27.94624817
+2.95	4.386025153	4.837153639	5.109580499	4.808916629	5.668550159	3.551426367	3.765230869	2.057650859
-3	-58.12549048	-58.93366705	-62.43270757	-58.30020472	-68.45906151	-51.28371115	-54.02488152	-29.57503432
+3	4.386025153	4.837153639	5.109580499	4.808916629	5.668550159	3.551426367	3.765230869	2.057650859
(Span 3) -4	-1.15E+00	-1.271350878	-1.342952903	-1.263929316	-1.489867147	-0.933422692	-0.989617008	-0.54081314
+4	54.78747649	57.28365271	60.48130835	56.33590114	65.69565071	45.8551653	48.60424994	28.36858671
-3.05	-1.15E+00	-1.271350878	-1.342952903	-1.263929316	-1.489867147	-0.933422692	-0.989617008	-0.54081314
+3.05	52.17208551	55.19948921	58.17393705	54.12075681	62.88174761	44.53122118	47.18708594	27.20536245
-3.1	-1.923900604	-1.501701123	-1.501701123	-1.263929316	-1.489867147	-1.138617395	-1.198544626	-1.338445112
+3.1	48.49246261	52.20965573	54.87687741	50.96329642	58.89662887	42.55163748	45.07091974	25.54973225
-3.15	-2.880918503	-2.574687592	-2.574687592	-2.065062413	-2.065062413	-1.999040777	-2.104253449	-2.021707675
+3.15	45.85975222	49.81976376	52.25017645	48.45310239	55.74600783	40.90836136	43.31618996	24.23532456
-3.2	-4.270652771	-4.602623989	-4.602623989	-3.679847164	-3.679847164	-3.482131745	-3.665401837	-3.014570905
+3.2	42.26896435	46.45227394	48.559632	44.93269577	51.3488458	38.50904654	40.75654226	22.39440346
-3.25	-5.392906189	-6.200877788	-6.200877788	-4.985294303	-5.024027343	-4.696414919	-4.943594651	-3.816788177
+3.25	39.44572756	43.80161336	45.66201989	42.17313004	47.91687494	36.55549194	38.67414136	20.9532416
-3.3	-6.98802948	-8.498311342	-8.498311342	-7.286558653	-7.640260415	-6.442211229	-6.781274977	-4.957570051
+3.3	35.52166885	40.1163964	41.64252989	38.35062982	43.18143019	33.74849658	35.68418297	18.95959737
-3.35	-8.253133774	-10.33798106	-10.33798106	-9.147184879	-9.676606961	-7.873615512	-8.288016329	-5.862712342
+3.35	32.46817671	37.24992972	38.52242801	35.3873301	39.52342755	31.49371491	33.28400338	17.81270909
-3.4	-10.0238018	-12.93427468	-12.93427468	-11.79454892	-12.57960791	-9.84913956	-10.36751533	-7.130040591
+3.4	28.4335716	33.30690333	34.23851904	31.32363378	34.52351535	28.2911185	29.87693586	16.3467593
-3.45	-12.10571173	-14.98079601	-14.98450036	-13.89608263	-14.88787277	-11.47387243	-12.08171296	-8.122078703
+3.45	25.39207613	30.26956425	30.94431716	28.2022518	30.69481628	25.74416186	27.16887075	15.17688541
-3.5	-15.16128438	-18.4665539	-18.67426292	-16.83976636	-18.12575084	-13.94449002	-14.70007999	-9.494581769
+3.5	22.20859521	26.12868757	26.46056092	24.39481933	26.23188345	22.54980209	23.79634677	13.52615902
-3.55	-17.58996066	-21.15743958	-21.50611575	-19.38064394	-20.89574303	-15.88617703	-16.75879155	-10.55748471
+3.55	20.48500539	22.96540654	23.04064586	21.76986273	23.30258463	20.18785983	21.31060681	12.22196667
-3.6	-20.99539427	-24.83413095	-25.3890616	-23.14526578	-25.26090738	-18.58201333	-19.61821765	-12.02182128
+3.6	18.13209677	19.4816797	19.4816797	18.20881469	19.33248392	16.83223069	17.77795908	10.5109928

-3.65	**-23.66431577**	**-27.69486677**	**-28.41738646**	**-25.96983302**	**-28.57022443**	**-20.67631736**	**-21.84038632**	**-13.42982925**
+3.65	**16.25142349**	**16.99627227**	**16.99627227**	**15.50107225**	**16.3164905**	**14.50864313**	**15.33087505**	**9.384922387**
-3.7	**-27.36049089**	**-31.63113018**	**-32.59309326**	**-29.8699822**	**-33.15908945**	**-23.55394703**	**-24.89467434**	**-15.38383749**
+3.7	**13.5883216**	**13.63858102**	**13.63858102**	**11.85456383**	**12.25848675**	**11.41044681**	**12.06670223**	**7.85703671**
-3.75	**-30.38201535**	**-34.66406012**	**-35.81677454**	**-32.88477798**	**-36.71990481**	**-25.76832574**	**-27.24568055**	**-16.90102561**
+3.75	**11.47371281**	**11.09570852**	**11.09570852**	**9.10141497**	**9.197331572**	**9.184622436**	**9.720483747**	**6.695092036**
-3.8	**-34.31458483**	**-38.79993533**	**-40.22067028**	**-37.00814803**	**-41.60723166**	**-28.78433232**	**-30.44864278**	**-18.9843389**
+3.8	**8.496980258**	**7.684459977**	**7.684459977**	**6.885371373**	**8.193756951**	**6.489650931**	**6.877816939**	**5.130060585**
-3.85	**-37.34934399**	**-41.96012702**	**-43.59131894**	**-40.16752334**	**-45.36421382**	**-31.0862121**	**-32.89383377**	**-20.58629564**
+3.85	**6.649916949**	**6.876400209**	**7.310959817**	**6.885371373**	**8.193756951**	**5.334250067**	**5.615000071**	**3.948276945**
-3.9	**-41.73560856**	**-46.23570004**	**-48.15888059**	**-44.45321565**	**-50.47618671**	**-34.19717951**	**-36.19928288**	**-22.76634116**
+3.9	**6.649916949**	**6.876400209**	**7.310959817**	**6.885371373**	**8.193756951**	**5.334250067**	**5.615000071**	**3.186767147**
-3.95	**-45.0963542**	**-49.47819087**	**-51.62807571**	**-47.7115351**	**-54.3740194**	**-36.55399811**	**-38.70401796**	**-24.42863325**
+3.95	**6.649916949**	**6.876400209**	**7.310959817**	**6.885371373**	**8.193756951**	**5.334250067**	**5.615000071**	**3.186767147**
-5	**-49.6546231**	**-53.8335319**	**-56.29476358**	**-52.09869717**	**-59.63687706**	**-40.47084979**	**-42.60089452**	**-26.67284134**
+5	**6.649916949**	**6.876400209**	**7.310959817**	**6.885371373**	**8.193756951**	**5.334250067**	**5.615000071**	**3.186767147**

3-Span: Shear (Max and Min) Raw Data Results - 35' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-6.649783343	-8.725059373	-9.675561939	-5.938548506	-7.275444628	-7.404577425
End Shear	49.90928853	59.11599741	60.77391112	47.01806621	54.29835159	55.60796261
-0.05	-6.649783343	-8.725059373	-9.675561939	-5.938548506	-7.275444628	-7.404577425
+0.05	45.26194779	52.85921849	54.20823325	43.30439266	48.61520702	50.93234414
-0.1	-6.649783343	-8.936224394	-9.675561939	-5.938548506	-7.275444628	-7.404577425
+0.1	40.79003845	47.06757521	47.96276637	39.61645367	43.72670792	46.30863364
-0.15	-6.649783343	-9.983572717	-10.65287511	-6.35895937	-7.55918759	-8.118310451
+0.15	37.50779946	42.85819813	43.42818833	36.87737161	40.39743123	42.88762404
-0.2	-9.4342219	-11.88783086	-13.28450795	-9.147191663	-8.919600188	-9.704688695
+0.2	33.30541346	37.73639917	37.99391329	33.2744045	36.42942753	38.40557914
-0.25	-11.65358177	-14.44107126	-15.48496691	-11.90478398	-11.40338333	-12.36247499
+0.25	30.36694269	34.23631061	34.09995919	30.61810433	33.50255576	35.11507259
-0.3	-14.45478638	-17.48793059	-18.6014687	-15.88633829	-15.46167277	-16.11234965
+0.3	26.55923209	29.72766509	29.11023043	27.15091559	29.68009025	30.83938159
-0.35	-16.43779881	-20.74067606	-22.30588585	-18.877884	-18.51407777	-19.55563444
+0.35	23.71782942	26.64273887	25.87345148	24.61550975	26.88315712	27.72790484
-0.4	-18.92545485	-25.19128921	-26.30525797	-22.64668376	-23.22158073	-24.5189906
+0.4	20.17801183	23.03130539	21.75783715	21.33492267	23.26166356	23.72325371
-0.45	-20.67448843	-28.45191088	-29.14273778	-25.30902324	-27.01562383	-28.30389124
+0.45	17.69031787	20.41427678	18.96640843	18.9585216	20.63625146	20.8393219
-0.5	-23.07717764	-33.05008852	-33.31601786	-28.77736181	-31.81063582	-33.06699516
+0.5	14.42306043	17.06151027	15.85292568	15.9153505	17.27116363	17.31769321
-0.55	-25.4976544	-36.28949212	-36.25144458	-31.67080015	-35.20804621	-36.42717306
+0.55	12.14909251	14.69506842	13.62197759	13.7360661	14.85884574	14.90326437
-0.6	-29.53859567	-41.25635338	-39.87393469	-35.32283591	-39.47124001	-40.71850647
+0.6	9.57260704	11.65419838	10.7998003	11.05726524	11.80560449	11.84701054
-0.65	-32.57486122	-44.44292554	-43.04476615	-37.90501471	-42.46757744	-44.23017785
+0.65	8.253133774	9.50656043	8.806722453	9.316162316	9.937239804	9.686953574
-0.7	-36.6214809	-48.11283273	-47.97344587	-41.1352004	-46.1930316	-48.63808275
+0.7	6.579121113	6.834917948	6.415636708	7.125835575	7.60089128	6.958793263
-0.75	-39.54478399	-50.8018229	-51.74495632	-43.39585334	-48.78383165	-51.73554762
+0.75	5.392905712	4.984992034	4.910323048	5.55819185	5.896004538	5.097488828
-0.8	-43.27987598	-54.05323158	-56.73130834	-46.19049468	-51.96562228	-55.58360262
+0.8	3.911493301	3.233185957	3.158807263	3.663682463	3.878221504	3.264305749
-0.85	-45.94982705	-57.66908493	-61.26234794	-48.11935682	-54.14644498	-58.25549744
+0.85	2.880919218	2.153175816	2.164037797	2.379664388	2.53830868	2.115257233
-0.9	-49.52847438	-63.65329794	-67.69740129	-50.46476604	-56.77862811	-61.52852066
+0.9	1.621950626	1.439598703	1.545678163	1.135296101	1.265713502	1.369116143
-0.95	-52.26446487	-67.89097467	-72.26351951	-52.05157177	-58.54503069	-63.76345814
+0.95	1.152783449	1.439598703	1.545678163	1.109414705	1.265713502	1.369116143
-1	-55.71637832	-73.1959691	-78.28221764	-53.9340583	-60.62168173	-66.44628504
+1	1.15E+00	1.439598703	1.545678163	1.109414705	1.265713502	1.369116143
(Span 2) -2	-4.386035988	-5.477292177	-5.880896447	-4.221029434	-4.815704992	-5.209124651
+2	57.36797806	75.23540509	82.93121653	55.26953113	67.72001392	68.58422065
-2.05	-4.386035988	-5.477292177	-5.880896447	-4.221029434	-4.815704992	-5.209124651
+2.05	54.42294322	70.95700409	77.62357441	51.58872369	62.93245446	63.66660011
-2.1	-4.386035988	-5.477292177	-5.880896447	-4.221029434	-4.815704992	-5.209124651
+2.1	50.514701	65.27466454	70.65093131	48.39748039	56.957656	59.23480762
-2.15	-4.386035988	-6.223657986	-6.022190004	-4.221029434	-4.815704992	-5.209124651
+2.15	47.24307554	60.44713396	64.8446839	46.34945676	52.31728324	56.416167
-2.2	-5.586723063	-7.736585998	-7.369496049	-5.704577368	-5.528785997	-5.393271001
+2.2	43.00489996	54.10000865	57.35883573	43.5050111	48.53088442	52.5371473
-2.25	-7.073648279	-8.808510499	-9.444690978	-7.720846078	-7.495701194	-7.805318352

+2.25	**39.56210487**	**48.80141251**	**51.31930386**	**41.01374941**	**45.65887693**	**49.16345001**
-2.3	**-9.004516126**	**-12.2232692**	**-12.67839341**	**-10.36639634**	**-10.87415656**	**-11.04671018**
+2.3	**35.22208992**	**42.24126999**	**44.00578211**	**37.64597082**	**41.73448316**	**44.62720487**
-2.35	**-10.5936521**	**-15.32093027**	**-15.54242466**	**-12.56380248**	**-13.71955373**	**-13.78893833**
+2.35	**31.75722564**	**38.96407113**	**39.82678832**	**34.76061189**	**38.33649388**	**40.75700436**
-2.4	**-13.72196124**	**-19.37881358**	**-19.58344931**	**-16.02518983**	**-17.40780665**	**-17.93676845**
+2.4	**27.54523977**	**34.76214187**	**35.17405183**	**30.93092635**	**33.77809009**	**35.63671169**
-2.45	**-16.53950518**	**-22.91235837**	**-22.81049508**	**-19.04717658**	**-20.57912849**	**-21.37370972**
+2.45	**24.37275935**	**31.25456098**	**31.36682859**	**27.7006074**	**29.89166508**	**31.32854493**
-2.5	**-20.24394471**	**-27.17636885**	**-26.6426709**	**-23.47317218**	**-25.089194**	**-26.04278327**
+2.5	**20.47819827**	**27.17388376**	**26.64228979**	**23.47044215**	**25.08639259**	**26.0399858**
-2.55	**-24.10282458**	**-31.2569201**	**-31.36730646**	**-27.70320757**	**-29.89480345**	**-31.33190861**
+2.55	**16.76246897**	**22.90978194**	**22.81010423**	**19.04433135**	**20.57625955**	**21.37080149**
-2.6	**-27.26630108**	**-34.76474419**	**-35.17452298**	**-30.93340472**	**-33.78107317**	**-35.63993855**
+2.6	**13.93357613**	**19.37616116**	**19.5830284**	**16.02303518**	**17.4054722**	**17.93424953**
-2.65	**-31.41538688**	**-38.96645365**	**-39.82724591**	**-34.76295146**	**-38.33926388**	**-40.76004614**
+2.65	**10.62057796**	**15.3186362**	**15.54207366**	**12.56206086**	**13.71729084**	**13.78682682**
-2.7	**-34.87752125**	**-42.24384486**	**-44.0064647**	**-37.6481765**	**-41.73706979**	**-44.63008879**
+2.7	**9.003292453**	**12.22098531**	**12.67802664**	**10.36470483**	**10.87197828**	**11.0446806**
-2.75	**-39.21831087**	**-48.80543645**	**-51.32005254**	**-41.01578365**	**-45.66123384**	**-49.16612338**
+2.75	**7.072465**	**8.807755146**	**9.444443321**	**7.719243759**	**7.494105684**	**7.803429494**
-2.8	**-42.66507956**	**-54.10389674**	**-57.35959056**	**-43.50690554**	**-48.53305752**	**-52.53963705**
+2.8	**5.585585193**	**7.735742031**	**7.36930421**	**5.703044483**	**5.527310822**	**5.391998214**
-2.85	**-46.89225519**	**-60.45080634**	**-64.84543776**	**-46.35115776**	**-52.32084602**	**-56.41842261**
+2.85	**4.386025153**	**6.222699044**	**6.022103708**	**4.221024919**	**4.815713537**	**5.209123368**
-2.9	**-50.17260516**	**-65.2781633**	**-70.65164365**	**-48.39901595**	**-56.89867054**	**-59.23686799**
+2.9	**4.386025153**	**5.477296025**	**5.880897307**	**4.221024919**	**4.815713537**	**5.209123368**
-2.95	**-54.09731832**	**-70.96025669**	**-77.62427432**	**-51.59166222**	**-62.87340622**	**-63.6703628**
+2.95	**4.386025153**	**5.477296025**	**5.880897307**	**4.221024919**	**4.815713537**	**5.209123368**
-3	**-58.12549048**	**-76.65789702**	**-84.21665552**	**-56.17354955**	**-68.90082438**	**-69.80146353**
+3	**4.386025153**	**5.477296025**	**5.880897307**	**4.221024919**	**4.815713537**	**5.209123368**
(Span 3) -4	**-1.15E+00**	**-1.439599714**	**-1.545678389**	**-1.109413518**	**-1.265715748**	**-1.369115806**
+4	**54.78747649**	**71.90349438**	**76.62701554**	**53.48721303**	**60.13088894**	**65.80566333**
-3.05	**-1.15E+00**	**-1.439599714**	**-1.545678389**	**-1.109413518**	**-1.265715748**	**-1.369115806**
+3.05	**52.17208551**	**67.88687255**	**72.26278112**	**52.04998471**	**58.54327273**	**63.76127876**
-3.1	**-1.923900604**	**-1.439599714**	**-1.545678389**	**-1.347452383**	**-1.423173537**	**-1.369115806**
+3.1	**48.49246261**	**62.1882048**	**66.12445671**	**49.90109005**	**56.14819865**	**60.73908096**
-3.15	**-2.880918503**	**-2.154176771**	**-2.164185584**	**-2.365599966**	**-2.496016572**	**-2.10971057**
+3.15	**45.85975222**	**57.66447937**	**61.26151074**	**48.11740896**	**54.1442512**	**58.25287707**
-3.2	**-4.270652771**	**-3.639634225**	**-3.517446941**	**-4.121806394**	**-4.366112727**	**-3.671722445**
+3.2	**42.26896435**	**53.27339526**	**55.48496349**	**45.51342301**	**51.19703709**	**54.64914632**
-3.25	**-5.392906189**	**-4.986743832**	**-4.910565451**	**-5.559732857**	**-5.897644182**	**-5.099292018**
+3.25	**39.44572756**	**50.79925895**	**51.74430414**	**43.39355506**	**48.78120636**	**51.73249248**
-3.3	**-6.98802948**	**-7.483347265**	**-6.951223872**	**-7.660398613**	**-8.171091853**	**-7.61093238**
+3.3	**35.52166885**	**47.4032103**	**46.77198506**	**40.34816504**	**45.28778299**	**47.56242997**
-3.35	**-8.253133774**	**-9.508627277**	**-8.807049382**	**-9.317925756**	**-9.939120807**	**-9.646779025**
+3.35	**32.46817671**	**44.43988668**	**43.04412975**	**37.90237603**	**42.46453273**	**44.2266903**
-3.4	**-10.0238018**	**-12.39820241**	**-11.48857097**	**-11.65710925**	**-12.55292932**	**-12.59503057**
+3.4	**28.4335716**	**40.14051097**	**38.99861079**	**34.4292707**	**38.43081564**	**39.60271563**
-3.45	**-12.10571173**	**-14.69739253**	**-13.62233623**	**-13.73828133**	**-14.86129164**	**-14.90564141**
+3.45	**25.39207613**	**37.06871508**	**36.25097476**	**31.66784118**	**35.20458158**	**36.42385383**
-3.5	**-15.16128438**	**-17.88668187**	**-16.61732244**	**-16.66427519**	**-18.09966656**	**-18.14679798**
+3.5	**22.20859521**	**32.76907698**	**32.29455659**	**27.82858205**	**30.63651418**	**31.90298925**
-3.55	**-17.58996066**	**-20.41682506**	**-18.96680158**	**-18.96095774**	**-20.63894566**	**-20.84217036**
+3.55	**20.48500539**	**29.3353454**	**29.14228139**	**25.3063051**	**27.01174379**	**28.30013208**
-3.6	**-20.99539427**	**-23.9243145**	**-22.7667583**	**-22.14610836**	**-24.157435**	**-24.71100912**
+3.6	**18.13209677**	**24.9166983**	**25.32819006**	**21.72507675**	**21.91525739**	**23.21280346**

-3.65	**-23.66431577**	**-26.64546767**	**-25.87396841**	**-24.61811408**	**-26.88603187**	**-27.73100512**
+3.65	**16.25142349**	**21.58922769**	**22.30536265**	**18.87482804**	**18.51094463**	**19.55195494**
-3.7	**-27.36049089**	**-30.8400574**	**-30.33530483**	**-28.01164366**	**-30.62925451**	**-31.8985529**
+3.7	**13.5883216**	**16.74229908**	**18.05544666**	**14.85437108**	**14.41489919**	**15.14805706**
-3.75	**-30.38201535**	**-34.23973098**	**-34.10058818**	**-30.62085994**	**-33.50559307**	**-35.11837682**
+3.75	**11.47371281**	**14.43873134**	**15.48461172**	**11.90194284**	**11.40046548**	**12.35982676**
-3.8	**-34.31458483**	**-38.92721849**	**-39.31914093**	**-34.17190089**	**-37.41805636**	**-39.51997424**
+3.8	**8.496980258**	**11.05566762**	**12.52202333**	**8.207129711**	**8.596981642**	**9.045863778**
-3.85	**-37.34934399**	**-42.8623308**	**-43.42890914**	**-36.88021519**	**-40.40055972**	**-42.89104504**
+3.85	**6.649916949**	**9.982578004**	**10.6526846**	**6.358164948**	**7.558036613**	**8.11757955**
-3.9	**-41.73560856**	**-48.50151833**	**-49.50455515**	**-40.538007**	**-44.93887956**	**-47.46203787**
+3.9	**6.649916949**	**8.725059308**	**9.675558006**	**5.938561793**	**7.275424429**	**7.404597713**
-3.95	**-45.0963542**	**-52.86357958**	**-54.20903974**	**-43.30727847**	**-48.61908915**	**-50.93587042**
+3.95	**6.649916949**	**8.725059308**	**9.675558006**	**5.938561793**	**7.275424429**	**7.404597713**
-5	**-49.6546231**	**-58.83231392**	**-60.87575675**	**-47.02097743**	**-53.97456056**	**-55.61153504**
+5	**6.649916949**	**8.725059308**	**9.675558006**	**5.938561793**	**7.275424429**	**7.404597713**

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-11.637121	-8.621942	-8.258407	-7.317951	-6.607689	-7.055321	-9.716807	-10.735635	-11.866405	-12.794242
+0.05	78.715103	60.786074	57.608623	50.071989	43.819289	50.001458	67.315254	72.329031	72.136773	72.148273
-0.1	-23.274242	-17.243885	-16.516815	-14.635901	-13.215379	-14.110642	-19.433614	-21.471269	-23.732810	-25.588483
+0.1	145.674410	113.057910	105.800278	92.793584	81.578169	93.141908	125.245687	134.125355	133.809598	133.834264
-0.15	-34.911363	-25.865827	-24.775222	-21.953852	-19.823068	-21.165964	-29.150421	-32.206904	-35.599215	-38.382725
+0.15	196.671021	154.201468	141.867886	125.461461	111.000421	127.039052	170.997021	182.593154	190.984303	190.997259
-0.2	-46.548483	-34.487769	-33.033629	-29.271802	-26.430758	-28.221285	-38.867228	-42.942538	-47.465620	-51.176967
+0.2	239.136389	188.597470	172.974980	152.536790	136.021279	155.385543	209.196050	222.147360	239.370611	239.397873
-0.25	-58.185604	-43.109712	-41.292037	-36.589753	-33.038447	-35.276606	-48.584034	-53.678173	-59.332024	-63.971209
+0.25	266.258172	211.601454	193.963209	170.571304	152.919596	173.739094	235.451081	249.211628	273.832189	278.343500
-0.3	-69.822725	-51.731654	-49.550444	-43.907703	-39.646137	-42.331927	-58.300841	-64.413807	-71.198429	-76.765450
+0.3	287.907950	228.180248	212.541589	182.499012	164.566695	188.517431	255.320231	275.358013	298.652992	310.883828
-0.35	-81.459846	-60.353596	-57.808851	-51.225654	-46.253826	-49.387249	-68.017648	-75.149442	-83.064834	-89.559692
+0.35	293.915157	236.878920	222.708332	191.476954	174.062204	193.256043	271.664043	290.909094	311.435066	328.901787
-0.4	-93.096967	-68.975539	-66.067259	-58.543604	-52.861516	-56.442570	-77.734455	-85.885076	-94.931239	-102.353934
+0.4	295.571905	244.026833	228.423048	196.070329	178.930857	195.058551	280.381414	298.256580	323.276987	339.122453
-0.45	-104.734088	-77.597481	-74.325666	-65.861555	-59.469205	-63.497891	-87.451262	-96.620711	-106.797644	-115.148176
+0.45	288.520183	242.070315	227.033408	192.471602	177.129665	188.236753	278.559184	294.439813	322.793055	338.393189
-0.5	-116.371209	-86.219423	-82.584073	-73.179505	-66.076895	-70.553212	-97.168069	-107.356345	-118.664049	-127.942417
+0.5	285.206948	234.874833	224.804373	185.348765	172.824426	184.607445	272.947700	286.809278	315.925399	333.846006
-0.55	-128.008329	-94.841366	-90.842481	-80.497456	-72.684584	-77.608534	-106.884876	-118.091980	-130.530454	-140.736659
+0.55	282.240244	228.519056	216.707519	182.048327	171.043108	184.140590	263.631179	278.115680	301.559474	321.148844
-0.6	-139.645450	-103.463308	-99.100888	-87.815406	-79.292274	-84.663855	-116.601683	-128.827614	-142.396859	-153.530901
+0.6	271.548375	216.311122	204.681150	174.596530	164.198282	178.718901	248.812526	265.074005	283.663393	300.439564
-0.65	-151.282571	-112.085250	-107.359295	-95.133357	-85.899963	-91.719176	-126.318489	-139.563249	-154.263264	-166.325143
+0.65	250.999731	198.556051	185.669818	159.264228	151.445356	164.664885	224.418246	240.431930	257.908345	270.741742
-0.7	-162.919692	-120.707193	-115.617702	-102.451307	-92.507653	-98.774497	-136.035296	-150.298883	-166.129669	-179.119384
+0.7	224.599297	177.298764	164.678474	142.235507	137.456175	147.429515	195.095998	209.739921	227.565953	235.440733
-0.75	-174.556813	-129.329135	-123.876110	-109.769258	-99.115342	-105.829819	-145.752103	-161.034518	-177.996073	-191.913626
+0.75	184.589087	147.854443	137.698908	119.119564	116.779621	121.718627	161.490517	170.059010	186.430701	188.726577
-0.8	-186.193934	-137.951077	-132.134517	-117.087208	-105.723032	-112.885140	-155.468910	-171.770152	-189.862478	-204.707868
+0.8	143.143817	113.997455	109.627364	91.335121	92.246812	94.435203	122.778742	128.182350	138.892022	138.967258
-0.85	-197.831054	-146.573020	-140.392924	-124.405159	-113.685738	-119.940461	-165.185717	-182.505787	-201.728883	-217.502110
+0.85	87.690080	75.463030	75.524584	60.177624	63.410938	60.255595	78.617531	80.063402	84.208388	84.202360
-0.9	-209.468175	-155.194962	-148.651332	-137.971133	-130.367888	-126.995782	-174.902524	-193.241421	-213.595288	-230.296351
+0.9	60.602842	43.227875	43.137080	35.618548	41.355754	40.687373	41.758855	41.740591	41.798852	41.685373
-0.95	-221.105296	-163.816904	-193.600868	-179.452513	-163.404402	-134.051104	-184.619331	-203.977056	-225.461693	-243.090593
+0.95	38.330050	29.164889	25.342626	23.957496	27.693755	24.152043	33.638717	36.395333	39.908130	42.184070
-1	-246.620191	-172.438850	-244.111638	-224.662636	-204.524488	-141.106430	-194.336138	-214.712685	-237.328098	-256.118864
+1	40.347421	30.699883	26.676448	25.218417	22.372701	25.423205	35.409176	38.310876	42.008558	44.404285
(Span 2) -2	-246.620191	-172.438850	-244.111638	-224.662636	-204.524488	-141.106430	-194.336138	-214.712685	-237.328098	-256.118864
+2	40.347421	30.699883	26.676448	25.218417	22.372701	25.423205	35.409176	38.310876	42.008558	44.404285
-2.05	-185.894132	-113.554357	-181.049473	-161.299193	-146.833233	-94.036279	-130.973293	-141.706163	-155.382926	-168.117864
+2.05	32.509769	23.107563	20.079154	25.876669	26.490414	21.651901	26.652211	28.836298	31.619514	33.422759
-2.1	-139.260404	-105.962026	-121.701792	-113.855625	-106.314558	-87.748941	-122.216319	-132.231582	-144.993906	-153.263076
+2.1	71.466097	51.488113	51.836184	45.809083	43.781330	48.086621	51.504330	51.096617	51.529378	51.485801
-2.15	-129.282197	-98.369695	-88.779581	-81.998760	-79.946507	-81.461604	-113.459345	-122.757000	-134.604885	-142.281558
+2.15	105.343939	90.610298	91.032909	74.373608	65.008703	71.507440	96.836539	98.722457	104.982966	104.980807
-2.2	-119.303990	-90.777365	-78.880091	-74.569086	-66.391485	-75.174267	-104.702371	-113.282418	-124.215865	-131.300039
+2.2	164.394306	133.240431	128.955755	106.367356	90.418421	109.720334	144.184843	153.602567	167.147730	170.111040

-2.25	-109.325783	-83.185034	-72.282811	-68.332364	-65.195297	-68.886930	-95.945397	-103.807836	-113.826845	-120.318521
+2.25	218.225588	173.602562	167.356847	140.097380	121.513575	142.913905	192.215846	207.355305	223.479365	233.718162
-2.3	-99.347576	-75.592703	-65.685531	-62.095643	-64.509059	-62.599593	-87.188423	-94.333255	-103.437824	-109.337002
+2.3	261.497397	207.248609	197.430760	167.723535	146.817787	170.125052	231.603309	250.191887	270.698364	286.511093
-2.35	-89.369368	-68.000373	-59.088250	-55.858921	-63.898955	-56.312256	-78.431449	-84.858673	-93.048804	-98.355484
+2.35	294.794097	232.383298	219.026854	189.977417	167.408286	190.512840	263.914067	285.280751	306.896356	326.497573
-2.4	-79.391161	-60.408042	-52.490970	-49.622200	-63.373495	-50.024919	-69.674475	-75.384091	-82.659784	-87.373965
+2.4	317.420705	251.168155	232.196636	204.820535	180.915985	202.445124	284.774319	306.763872	333.770793	353.126324
-2.45	-69.412954	-52.815711	-45.893690	-43.385478	-62.940727	-43.737582	-60.917501	-65.909510	-72.270763	-76.392447
+2.45	330.157311	262.230173	238.733298	212.681895	188.643330	208.489955	298.294723	320.033002	350.197383	369.013688
-2.5	-59.434898	-45.223380	-39.296487	-37.148757	-62.601587	-37.450363	-52.160526	-56.434928	-61.881880	-65.410974
+2.5	326.828727	262.416682	238.147254	211.528444	187.971712	205.022531	298.572155	318.929778	351.475280	373.808504
-2.55	-69.413130	-52.815644	-45.893780	-43.385405	-62.940716	-43.737720	-60.917445	-65.909486	-72.270924	-76.392500
+2.55	330.287320	262.207054	238.737453	212.668687	188.646268	208.479800	298.277579	320.020559	350.179374	368.991588
-2.6	-79.391362	-60.407964	-52.491074	-49.622116	-63.373495	-50.025076	-69.674410	-75.384065	-82.659968	-87.374026
+2.6	317.581776	251.160400	232.191210	204.816848	180.918052	202.431140	284.771729	306.747547	333.765893	353.121557
-2.65	-89.369593	-68.000285	-59.088367	-55.858827	-63.898978	-56.312433	-78.431376	-84.858643	-93.049012	-98.355552
+2.65	295.086204	232.386071	219.007185	189.980220	167.409703	190.502958	263.921420	285.266088	306.900302	326.493680
-2.7	-99.347825	-75.592606	-65.685660	-62.095538	-64.509122	-62.599790	-87.188342	-94.333222	-103.438056	-109.337078
+2.7	261.135136	207.244785	197.427787	167.721816	146.816929	170.136190	231.608362	250.199688	270.713544	286.519963
-2.75	-109.326057	-83.184926	-72.282954	-68.332249	-65.195404	-68.887147	-95.945307	-103.807800	-113.827099	-120.318604
+2.75	218.344462	173.604718	167.352009	140.094582	121.514494	142.935839	192.219972	207.361855	223.479370	233.733156
-2.8	-119.304289	-90.777247	-78.880247	-74.568960	-66.391633	-75.174503	-104.702273	-113.282378	-124.216143	-131.300130
+2.8	164.475977	133.258638	128.948531	106.363265	90.416351	109.733059	144.205876	153.602640	167.162063	170.119572
-2.85	-129.282521	-98.369567	-88.779712	-81.999188	-79.946675	-81.461860	-113.459238	-122.756957	-134.605187	-142.281656
+2.85	105.331929	90.612647	91.025556	74.368462	65.006182	71.524237	96.831857	98.727135	104.983604	104.981427
-2.9	-139.260753	-105.961888	-121.701566	-113.855525	-106.314694	-87.749217	-122.216204	-132.231535	-144.994231	-153.263182
+2.9	71.437717	51.508862	51.829748	45.804275	43.778955	48.100468	51.490804	51.109893	51.542343	51.498373
-2.95	-185.894835	-113.554209	-181.049746	-161.299325	-146.833291	-94.036574	-130.973169	-141.706114	-155.383275	-168.118276
+2.95	32.504968	23.107596	20.079112	25.874140	26.494964	21.648748	26.652241	28.836308	31.619439	33.422737
-3	-246.618980	-172.439632	-244.111507	-224.662948	-204.524041	-141.106688	-194.336962	-214.713510	-237.328611	-256.119477
+3	40.347321	30.699924	26.676394	25.218459	22.372722	25.423125	35.409211	38.310889	42.008463	44.404255
(Span 3) -4	-246.618980	-172.439632	-244.111507	-224.662948	-204.524041	-141.106688	-194.336962	-214.713510	-237.328611	-256.119477
+4	40.347321	30.699924	26.676394	25.218459	22.372722	25.423125	35.409211	38.310889	42.008463	44.404255
-3.05	-221.109740	-163.817650	-193.600944	-179.453195	-163.404181	-134.051354	-184.620114	-203.977834	-225.462180	-243.091365
+3.05	38.329955	29.164928	25.342574	23.957536	27.689314	24.151969	33.638750	36.395345	39.908040	42.184042
-3.1	-209.472386	-155.195669	-148.651317	-137.971345	-130.367910	-126.996020	-174.903266	-193.242158	-213.595750	-230.297083
+3.1	60.602871	43.238138	43.145930	35.623378	41.351951	40.712384	41.768871	41.750320	41.779425	41.666453
-3.15	-197.835031	-146.573687	-140.392910	-124.405111	-113.685762	-119.940685	-165.186418	-182.506483	-201.729319	-217.502801
+3.15	87.690104	75.458481	75.533836	60.184417	63.415262	60.260822	78.610545	80.069401	84.207361	84.201363
-3.2	-186.197676	-137.951706	-132.134504	-117.087163	-105.723009	-112.885351	-155.469570	-171.770807	-189.862889	-204.708519
+3.2	142.014372	114.007440	109.636386	91.341213	92.250559	94.416837	122.785677	128.187734	138.904523	138.979405
-3.25	-174.560322	-129.329724	-123.876098	-109.769216	-99.115321	-105.830017	-145.752722	-161.035131	-177.996458	-191.914237
+3.25	184.588776	147.847028	137.692595	119.114300	116.782419	121.719658	161.495456	170.055990	186.426924	188.728627
-3.3	-162.922967	-120.707743	-115.617691	-102.451268	-92.507633	-98.774683	-136.035874	-150.299455	-166.130027	-179.119955
+3.3	224.824229	177.304964	164.687553	142.238504	137.457988	147.408038	195.099045	209.734512	227.573892	235.426365
-3.35	-151.285612	-112.085761	-107.359285	-95.133320	-85.899945	-91.719349	-126.319026	-139.563780	-154.263597	-166.325673
+3.35	250.813425	198.559187	185.664088	159.262694	151.445831	164.661870	224.414092	240.424236	257.912379	270.738031
-3.4	-139.648258	-103.463780	-99.100879	-87.815373	-79.292257	-84.664015	-116.602177	-128.828104	-142.397166	-153.531391
+3.4	272.055760	216.307905	204.687735	174.592799	164.206881	178.692283	248.805321	265.062605	283.659016	300.451465
-3.45	-128.010903	-94.841799	-90.842472	-80.497425	-72.684569	-77.608681	-106.885329	-118.092428	-130.530736	-140.737109
+3.45	281.965335	228.512940	216.712173	182.042392	171.045256	184.131797	263.636207	278.115370	301.551429	321.143017
-3.5	-116.373548	-86.219817	-82.584066	-73.179477	-66.076881	-70.553347	-97.168481	-107.356753	-118.664305	-127.942827
+3.5	285.563072	234.886411	224.807067	185.357597	172.830250	184.616129	272.933390	287.292270	315.935425	333.850275
-3.55	-104.736194	-77.597836	-74.325659	-65.861529	-59.469193	-63.498012	-87.451633	-96.621077	-106.797875	-115.148545
+3.55	288.624759	242.063157	227.032378	192.478547	177.128303	188.227311	278.558072	294.443220	322.789627	338.390057
-3.6	-93.098839	-68.975854	-66.067253	-58.543582	-52.861504	-56.442678	-77.734785	-85.885401	-94.931444	-102.354263

+3.6	**294.564829**	**244.032376**	**228.419629**	**196.075368**	**178.923481**	**195.046569**	**280.392063**	**298.241050**	**323.283733**	**339.114613**
-3.65	**-81.461484**	**-60.353873**	**-57.808847**	**-51.225634**	**-46.253816**	**-49.387344**	**-68.017937**	**-75.149725**	**-83.065014**	**-89.559981**
+3.65	**294.205492**	**236.880562**	**222.702447**	**191.479467**	**174.058617**	**193.262172**	**271.654796**	**290.904230**	**311.436565**	**328.907177**
-3.7	**-69.824130**	**-51.731891**	**-49.550440**	**-43.907686**	**-39.646128**	**-42.332010**	**-58.301089**	**-64.414050**	**-71.198583**	**-76.765699**
+3.7	**287.289455**	**228.176288**	**212.532849**	**182.497654**	**164.566234**	**188.499539**	**255.321991**	**275.363406**	**298.647048**	**310.869352**
-3.75	**-58.186775**	**-43.109910**	**-41.292034**	**-36.589739**	**-33.038440**	**-35.276676**	**-48.584241**	**-53.678374**	**-59.332152**	**-63.971417**
+3.75	**266.313047**	**211.593560**	**193.968706**	**170.577507**	**152.917767**	**173.738682**	**235.446734**	**249.210338**	**273.835645**	**278.337345**
-3.8	**-46.549421**	**-34.487929**	**-33.033628**	**-29.271791**	**-26.430752**	**-28.221342**	**-38.867393**	**-42.942698**	**-47.465722**	**-51.177135**
+3.8	**239.071589**	**188.585104**	**172.991022**	**152.550311**	**136.017914**	**155.360396**	**209.186732**	**222.140776**	**239.353419**	**239.381130**
-3.85	**-34.912066**	**-25.865947**	**-24.775221**	**-21.953843**	**-19.823064**	**-21.166008**	**-29.150544**	**-32.207023**	**-35.599291**	**-38.382853**
+3.85	**196.436987**	**154.200553**	**141.866315**	**125.461645**	**111.000529**	**127.030932**	**170.998182**	**182.596227**	**190.975630**	**190.988839**
-3.9	**-23.274711**	**-17.243966**	**-16.516815**	**-14.635895**	**-13.215376**	**-14.110674**	**-19.433696**	**-21.471347**	**-23.732861**	**-25.588571**
+3.9	**146.248305**	**113.068257**	**105.810104**	**92.800673**	**81.571393**	**93.150628**	**125.225628**	**134.107272**	**134.712830**	**133.817025**
-3.95	**-11.637357**	**-8.621984**	**-8.258408**	**-7.317948**	**-6.607688**	**-7.055339**	**-9.716848**	**-10.735671**	**-11.866430**	**-12.794288**
+3.95	**79.088274**	**60.775163**	**57.613676**	**50.065351**	**43.815947**	**50.005863**	**67.305263**	**72.320058**	**72.127987**	**72.139745**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-11.637121	-12.033659	-12.794124	-12.049359	-14.339076	-9.334939	-9.826252	-5.576450
+0.05	78.715103	86.246348	90.041681	83.222252	94.974728	63.797277	67.554233	42.748931
-0.1	-23.274242	-24.067318	-25.588248	-24.098718	-28.678153	-18.669879	-19.652504	-11.152899
+0.1	145.674410	160.994281	167.789727	154.919840	176.182032	119.250537	126.241547	79.679871
-0.15	-34.911363	-36.100977	-38.382372	-36.148077	-43.017229	-28.004818	-29.478756	-16.729349
+0.15	196.671021	220.688442	229.344740	211.684144	239.764039	163.585520	173.105447	108.167382
-0.2	-46.548483	-48.134635	-51.176496	-48.197436	-57.356305	-37.339758	-39.305008	-22.305799
+0.2	239.136389	271.312730	281.376921	259.001702	291.534101	201.481013	213.143249	132.885928
-0.25	-58.185604	-60.168294	-63.970621	-60.246795	-71.695382	-46.674697	-49.131260	-27.882248
+0.25	266.258172	306.011387	316.814444	291.911666	333.485293	227.468587	240.575966	148.136027
-0.3	-69.822725	-72.201953	-76.764745	-72.296154	-86.034458	-56.009636	-58.957512	-33.458698
+0.3	287.907950	332.294564	342.556456	319.950687	369.784086	247.674912	261.788409	161.523946
-0.35	-81.459846	-84.235612	-89.558869	-84.345514	-100.373534	-65.344576	-68.783764	-39.035148
+0.35	293.915157	345.300571	358.962749	340.479309	390.325136	257.775464	272.365487	166.100777
-0.4	-93.096967	-96.269271	-102.352993	-96.394873	-114.712611	-74.679515	-78.610016	-44.611597
+0.4	295.571905	357.170498	371.291319	351.493927	400.619269	264.646129	280.058339	169.254232
-0.45	-104.734088	-108.302930	-115.147117	-108.444232	-129.051687	-84.014455	-88.436268	-50.188047
+0.45	288.520183	357.693620	370.219350	349.755509	395.824502	265.933758	281.245420	167.644658
-0.5	-116.371209	-120.336589	-127.941241	-120.493591	-143.390763	-93.349394	-98.262520	-55.764497
+0.5	285.206948	351.506975	364.301163	343.272542	387.574107	261.237618	276.080695	167.385842
-0.55	-128.008329	-132.370248	-140.735365	-132.542950	-157.729840	-102.684334	-108.088772	-61.340946
+0.55	282.240244	337.050717	350.479689	330.909474	377.591046	249.625173	264.164549	158.413459
-0.6	-139.645450	-144.403906	-153.529489	-144.592309	-172.068916	-112.019273	-117.915024	-66.917396
+0.6	271.548375	315.881508	328.498847	311.742845	357.346497	236.084287	249.403234	151.538226
-0.65	-151.282571	-156.437565	-166.323614	-156.641668	-186.407992	-121.354212	-127.741276	-72.493846
+0.65	250.999731	289.861094	298.821477	280.779979	322.981109	216.215010	228.529792	140.685129
-0.7	-162.919692	-168.471224	-179.117738	-168.691027	-200.747069	-130.689152	-137.567528	-78.070295
+0.7	224.599297	256.477339	264.273372	243.487671	280.973766	191.488264	202.380994	129.725409
-0.75	-174.556813	-180.504883	-191.911862	-180.740386	-215.086145	-140.024091	-147.393780	-83.646745
+0.75	184.589087	212.588505	218.569516	199.260290	226.919300	158.652446	167.644779	109.111512
-0.8	-186.193934	-192.538542	-204.705986	-192.789745	-229.425221	-149.359031	-157.220032	-89.223195
+0.8	143.143817	163.947345	167.228618	150.882613	166.962944	123.410045	130.247628	88.967619
-0.85	-197.831054	-204.572201	-217.500110	-204.839104	-243.764298	-158.693970	-167.046284	-94.799644
+0.85	87.690080	107.179956	107.179956	95.798536	100.471121	81.761880	86.065137	62.729128
-0.9	-209.468175	-216.605860	-230.294234	-216.888463	-258.103374	-175.914639	-186.822855	-100.376094
+0.9	60.602842	61.431297	61.431297	49.128065	49.128065	46.588542	49.040571	43.215824
-0.95	-221.105296	-228.639519	-243.088358	-228.937822	-272.442450	-229.999458	-243.779938	-105.952544
+0.95	38.330050	42.272428	44.653137	42.025662	49.537986	31.036272	32.904695	18.867077
-1	-246.620191	-240.673182	-255.882477	-240.987182	-286.781525	-286.147573	-302.896257	-118.059052
+1	40.347421	44.497294	47.003304	44.237540	52.145248	32.669761	34.636522	18.928452
(Span 2) -2	-246.620191	-240.673182	-255.882477	-240.987182	-286.781525	-286.147573	-302.896257	-118.059052
+2	40.347421	44.497294	47.003304	44.237540	52.145248	32.669761	34.636522	18.928452
-2.05	-185.894132	-164.588689	-173.858269	-163.627894	-192.877732	-209.160782	-221.303316	-81.438202
+2.05	32.509769	33.492767	35.379020	33.297251	39.249322	24.590274	26.070640	22.805220
-2.1	-139.260404	-153.584165	-162.233973	-152.687608	-179.981780	-144.559871	-153.328818	-65.332346
+2.1	71.466097	72.998722	72.998722	61.485826	62.934487	55.959516	58.904754	49.991752
-2.15	-129.282197	-142.579640	-150.609677	-141.747323	-167.085829	-104.681622	-110.983710	-60.651190
+2.15	105.343939	128.692665	128.692665	119.802693	127.934870	98.294436	103.497170	74.795827
-2.2	-119.303990	-131.575116	-138.985382	-130.807038	-154.189877	-96.602127	-102.417809	-55.970034
+2.2	164.394306	193.040628	196.512811	180.912457	205.333883	144.649983	152.626327	101.256502

-2.25	-109.325783	-120.570591	-127.361086	-119.866752	-141.293925	-88.522632	-93.851909	-51.288879
+2.25	218.225588	249.144473	256.247219	240.592785	275.636383	185.906432	196.435554	128.452401
-2.3	-99.347576	-109.566067	-115.736791	-108.926467	-128.397974	-80.443137	-85.286009	-46.607723
+2.3	261.497397	296.752254	306.076321	289.109683	333.225816	222.041292	234.154408	150.556668
-2.35	-89.369368	-98.561542	-104.112495	-97.986182	-115.502022	-72.363642	-76.720109	-41.926567
+2.35	294.794097	331.727972	346.908523	329.468670	379.147911	248.390431	262.300094	167.144463
-2.4	-79.391161	-87.557017	-92.488199	-87.045896	-102.606070	-64.284147	-68.154209	-37.245411
+2.4	317.420705	359.944804	375.742935	355.310197	409.112457	267.081538	282.246246	176.706255
-2.45	-69.412954	-76.552493	-80.863904	-76.105611	-89.710119	-56.204652	-59.588308	-32.564256
+2.45	330.157311	377.817858	393.983611	372.616014	426.114249	279.333417	295.729848	181.769514
-2.5	-59.434898	-65.547982	-69.239608	-65.165346	-76.814167	-48.125157	-51.022408	-27.883100
+2.5	326.828727	381.091418	395.923910	373.447362	426.252902	282.471140	298.891902	178.693068
-2.55	-69.413130	-76.552509	-80.863814	-76.105635	-89.709942	-56.204591	-59.588178	-32.564240
+2.55	330.287320	377.782612	393.951422	372.598302	426.105439	279.337827	295.734754	181.777464
-2.6	-79.391362	-87.557037	-92.488098	-87.045923	-102.605869	-64.284077	-68.154060	-37.245394
+2.6	317.581776	359.950091	375.750934	355.309446	409.098537	267.075752	282.239852	176.708198
-2.65	-89.369593	-98.561564	-104.112381	-97.986212	-115.501795	-72.363563	-76.719942	-41.926548
+2.65	295.086204	331.730985	346.913993	329.479479	379.165990	248.386878	262.296048	167.151467
-2.7	-99.347825	-109.566092	-115.736665	-108.926501	-128.397722	-80.443050	-85.285824	-46.607702
+2.7	261.135136	296.778412	306.104203	289.117689	333.230333	222.033794	234.146223	150.559054
-2.75	-109.326057	-120.570620	-127.360948	-119.866789	-141.293648	-88.522536	-93.851706	-51.288856
+2.75	218.344462	249.147630	256.251824	240.599682	275.649125	185.907863	196.437188	128.458452
-2.8	-119.304289	-131.575147	-138.985232	-130.807078	-154.189575	-96.602023	-102.417588	-55.970010
+2.8	164.475977	193.067906	196.541210	180.911969	205.338750	144.666822	152.644150	101.259654
-2.85	-129.282521	-142.579675	-150.609515	-141.747366	-167.085501	-104.681509	-110.983469	-60.651164
+2.85	105.331929	128.696105	128.696105	119.815968	127.942733	98.286483	103.488777	74.253314
-2.9	-139.260753	-153.584202	-162.233798	-152.687655	-179.981427	-144.559452	-153.329788	-65.332318
+2.9	71.437717	73.029110	73.029110	61.466330	62.941999	55.952569	58.897441	49.984095
-2.95	-185.894835	-164.588730	-173.858082	-163.627943	-192.877354	-209.161706	-221.304375	-81.438265
+2.95	32.504968	33.492752	35.379053	33.297242	39.249397	24.590298	26.070694	22.804194
-3	-246.618980	-240.674012	-255.883588	-240.987999	-286.781491	-286.148330	-302.897179	-118.059000
+3	40.347321	44.497282	47.003353	44.237526	52.145350	32.669795	34.636596	18.928460
(Span 3) -4	-246.618980	-240.674012	-255.883588	-240.987999	-286.781491	-286.148330	-302.897179	-118.059000
+4	40.347321	44.497282	47.003353	44.237526	52.145350	32.669795	34.636596	18.928460
-3.05	-221.109740	-228.640312	-243.089409	-228.938599	-272.442417	-230.000128	-243.780754	-105.960009
+3.05	38.329955	42.272418	44.653185	42.025650	49.538082	31.036305	32.904766	19.047346
-3.1	-209.472386	-216.606612	-230.295229	-216.889199	-258.103342	-175.915538	-186.823899	-100.383166
+3.1	60.602871	61.446359	61.446359	49.139849	49.139849	46.577992	49.029465	43.210456
-3.15	-197.835031	-204.572911	-217.501049	-204.839799	-243.764267	-158.693943	-167.046256	-94.806324
+3.15	87.690104	107.173286	107.173286	95.806101	100.476661	81.542209	85.833905	62.729047
-3.2	-186.197676	-192.539211	-204.706870	-192.790399	-229.425193	-149.359005	-157.220005	-89.229481
+3.2	142.014372	163.961631	167.242046	150.889388	166.955950	123.419475	130.257479	88.962377
-3.25	-174.560322	-180.505510	-191.912690	-180.740999	-215.086118	-140.024068	-147.393755	-83.652639
+3.25	184.588776	212.578134	218.557918	199.264685	226.911754	158.660705	167.653362	109.105923
-3.3	-162.922967	-168.471810	-179.118510	-168.691599	-200.747043	-130.689130	-137.567505	-78.075796
+3.3	224.824229	256.487776	264.282128	243.482963	280.963120	191.495562	202.388529	129.719292
-3.35	-151.285612	-156.438110	-166.324331	-156.642199	-186.407969	-121.354192	-127.741255	-72.498954
+3.35	250.813425	289.867855	298.826073	280.773300	322.985091	216.220169	228.535032	140.685165
-3.4	-139.648258	-144.404409	-153.530151	-144.592799	-172.068894	-112.019255	-117.915005	-66.922111
+3.4	272.055760	315.884687	328.494127	311.732490	357.328037	236.087379	249.406255	151.530684
-3.45	-128.010903	-132.370709	-140.735971	-132.543400	-157.729819	-102.684317	-108.088755	-61.345269
+3.45	281.965335	337.045401	350.471087	330.913394	377.585595	249.623120	264.162100	158.456776
-3.5	-116.373548	-120.337009	-127.941791	-120.494000	-143.390745	-93.349379	-98.262505	-55.768426
+3.5	285.563072	351.496964	364.287345	343.253596	387.581012	261.246016	276.089855	167.379452
-3.55	-104.736194	-108.303308	-115.147612	-108.444600	-129.051670	-84.014442	-88.436255	-50.191584
+3.55	288.624759	357.681293	370.210591	349.756801	395.817944	265.924538	281.236028	167.644614
-3.6	-93.098839	-96.269608	-102.353432	-96.395200	-114.712595	-74.679504	-78.610004	-44.614741

+3.6	**294.564829**	**357.176632**	**371.300800**	**351.508806**	**400.606942**	**264.648676**	**280.061313**	**169.246694**
-3.65	**-81.461484**	**-84.235908**	**-89.559252**	**-84.345800**	**-100.373521**	**-65.344567**	**-68.783754**	**-39.037899**
+3.65	**294.205492**	**345.298905**	**358.966214**	**340.470515**	**390.325027**	**257.773303**	**272.363457**	**166.101011**
-3.7	**-69.824130**	**-72.202207**	**-76.765073**	**-72.296400**	**-86.034446**	**-56.009629**	**-58.957504**	**-33.461056**
+3.7	**287.289455**	**332.287290**	**342.551687**	**319.954554**	**369.795672**	**247.669289**	**261.782710**	**161.530288**
-3.75	**-58.186775**	**-60.168507**	**-63.970893**	**-60.247000**	**-71.695371**	**-46.674691**	**-49.131254**	**-27.884214**
+3.75	**266.313047**	**305.998305**	**316.803590**	**291.908041**	**333.489530**	**227.459420**	**240.566511**	**148.751893**
-3.8	**-46.549421**	**-48.134806**	**-51.176713**	**-48.197600**	**-57.356297**	**-37.339754**	**-39.305004**	**-22.307371**
+3.8	**239.071589**	**271.293282**	**281.359324**	**258.991941**	**291.529499**	**201.467932**	**213.129642**	**132.890378**
-3.85	**-34.912066**	**-36.101106**	**-38.382534**	**-36.148200**	**-43.017222**	**-28.004816**	**-29.478754**	**-16.730529**
+3.85	**196.436987**	**220.685966**	**229.343705**	**211.686411**	**239.770293**	**163.583370**	**173.103310**	**108.163886**
-3.9	**-23.274711**	**-24.067406**	**-25.588354**	**-24.098800**	**-28.678148**	**-18.669878**	**-19.652504**	**-11.153686**
+3.9	**146.248305**	**160.961160**	**167.757608**	**154.896842**	**176.161787**	**119.229104**	**126.219075**	**79.682188**
-3.95	**-11.637357**	**-12.033705**	**-12.794174**	**-12.049401**	**-14.339073**	**-9.334941**	**-9.826254**	**-5.576844**
+3.95	**79.088274**	**86.229918**	**90.025772**	**83.210800**	**94.964689**	**63.786608**	**67.543049**	**42.750100**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 35' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-11.637121**	**-15.268854**	**-16.932233**	**-10.392460**	**-12.732028**	**-12.958010**
+0.05	**78.715103**	**92.503632**	**96.057246**	**75.627044**	**85.076612**	**89.032781**
-0.1	**-23.274242**	**-30.537708**	**-33.864467**	**-20.784920**	**-25.464056**	**-25.916021**
+0.1	**145.674410**	**169.740375**	**175.564084**	**141.451353**	**157.272820**	**165.806457**
-0.15	**-34.911363**	**-45.806562**	**-50.796700**	**-31.177380**	**-38.196084**	**-38.874031**
+0.15	**196.671021**	**228.101051**	**233.681489**	**194.115391**	**213.180207**	**226.422492**
-0.2	**-46.548483**	**-61.075416**	**-67.728934**	**-41.569840**	**-50.928112**	**-51.832042**
+0.2	**239.136389**	**273.145221**	**279.348815**	**239.282239**	**262.699166**	**277.048845**
-0.25	**-58.185604**	**-76.344270**	**-84.661167**	**-51.962299**	**-63.660140**	**-64.790052**
+0.25	**266.258172**	**314.889494**	**318.739662**	**270.344552**	**297.739411**	**312.573474**
-0.3	**-69.822725**	**-91.613123**	**-101.593400**	**-62.354759**	**-76.392169**	**-77.748063**
+0.3	**287.907950**	**344.809666**	**351.571819**	**294.640235**	**324.830599**	**347.218938**
-0.35	**-81.459846**	**-106.881977**	**-118.525634**	**-72.747219**	**-89.124197**	**-90.706073**
+0.35	**293.915157**	**361.652904**	**368.342709**	**306.946365**	**348.732373**	**369.441769**
-0.4	**-93.096967**	**-122.150831**	**-135.457867**	**-83.139679**	**-101.856225**	**-103.664084**
+0.4	**295.571905**	**371.301091**	**380.991231**	**315.121001**	**363.391480**	**381.787854**
-0.45	**-104.734088**	**-137.419685**	**-152.390101**	**-93.532139**	**-114.588253**	**-116.622094**
+0.45	**288.520183**	**365.347886**	**383.686943**	**317.111953**	**364.771252**	**379.933789**
-0.5	**-116.371209**	**-152.688539**	**-169.322334**	**-103.924599**	**-127.320281**	**-129.580105**
+0.5	**285.206948**	**357.831085**	**376.160849**	**311.906492**	**359.769346**	**373.541725**
-0.55	**-128.008329**	**-167.957393**	**-186.254567**	**-114.317059**	**-140.052309**	**-142.538115**
+0.55	**282.240244**	**342.743475**	**364.784162**	**297.316247**	**342.306254**	**359.428199**
-0.6	**-139.645450**	**-183.226247**	**-203.186801**	**-124.709519**	**-152.784337**	**-155.496126**
+0.6	**271.548375**	**328.909071**	**341.146471**	**281.298598**	**318.915526**	**337.739436**
-0.65	**-151.282571**	**-198.495101**	**-220.119034**	**-135.101979**	**-165.516365**	**-168.454136**
+0.65	**250.999731**	**299.565460**	**305.290766**	**257.209226**	**285.691716**	**304.266646**
-0.7	**-162.919692**	**-213.763955**	**-237.051267**	**-145.494438**	**-178.248393**	**-181.412147**
+0.7	**224.599297**	**263.774247**	**266.752233**	**227.585952**	**247.191161**	**263.781532**
-0.75	**-174.556813**	**-229.032809**	**-253.983501**	**-155.886898**	**-190.980421**	**-194.370157**
+0.75	**184.589087**	**217.170460**	**211.320063**	**188.493813**	**203.621525**	**214.175977**
-0.8	**-186.193934**	**-244.301662**	**-270.915734**	**-166.279358**	**-203.712450**	**-207.328168**
+0.8	**143.143817**	**160.796261**	**153.548684**	**146.719284**	**157.491748**	**159.823361**
-0.85	**-197.831054**	**-259.570516**	**-287.847968**	**-176.671818**	**-216.444478**	**-220.286178**
+0.85	**87.690080**	**99.366851**	**92.192033**	**96.591215**	**103.054846**	**100.661523**
-0.9	**-209.468175**	**-304.523077**	**-333.330347**	**-220.969622**	**-240.885758**	**-273.611868**
+0.9	**60.602842**	**48.564198**	**49.142482**	**55.253461**	**58.937025**	**49.155273**
-0.95	**-221.105296**	**-389.289543**	**-414.544750**	**-280.326062**	**-317.832017**	**-351.913545**
+0.95	**38.330050**	**47.866657**	**51.393799**	**36.888039**	**42.084974**	**45.523112**
-1	**-246.620191**	**-477.148651**	**-498.331939**	**-342.427297**	**-399.383161**	**-433.885780**
+1	**40.347421**	**50.385956**	**54.098736**	**38.829516**	**44.299974**	**47.919065**
(Span 2) -2	**-246.620191**	**-477.148651**	**-498.331939**	**-342.427297**	**-399.383161**	**-433.885780**
+2	**40.347421**	**50.385956**	**54.098736**	**38.829516**	**44.299974**	**47.919065**
-2.05	**-185.894132**	**-336.632972**	**-340.756485**	**-257.543805**	**-301.328183**	**-325.421169**
+2.05	**32.509769**	**38.199476**	**42.061785**	**29.226674**	**33.344245**	**36.068307**
-2.1	**-139.260404**	**-231.195808**	**-244.185579**	**-186.858741**	**-208.329741**	**-230.987191**
+2.1	**71.466097**	**66.970312**	**67.673759**	**67.809333**	**70.409996**	**64.645518**
-2.15	**-129.282197**	**-161.448432**	**-178.288675**	**-125.378915**	**-147.284378**	**-156.827780**
+2.15	**105.343939**	**128.957127**	**122.885292**	**116.988071**	**128.572700**	**129.304846**
-2.2	**-119.303990**	**-148.987583**	**-159.965918**	**-114.815835**	**-130.991922**	**-141.693037**
+2.2	**164.394306**	**194.220591**	**184.027008**	**172.029552**	**189.238876**	**197.073347**

-2.25	**-109.325783**	**-136.526735**	**-146.586877**	**-105.213003**	**-120.036174**	**-129.842281**
+2.25	**218.225588**	**268.912429**	**266.007168**	**220.824863**	**255.768447**	**260.433178**
-2.3	**-99.347576**	**-124.065887**	**-133.207835**	**-95.610171**	**-109.080426**	**-117.991525**
+2.3	**261.497397**	**325.923440**	**331.150098**	**261.897592**	**304.979634**	**312.669144**
-2.35	**-89.369368**	**-111.605038**	**-119.828794**	**-86.007340**	**-98.124678**	**-106.140770**
+2.35	**294.794097**	**368.119930**	**386.225774**	**292.965513**	**341.015414**	**355.734181**
-2.4	**-79.391161**	**-99.144190**	**-106.449753**	**-76.404508**	**-87.168929**	**-94.290014**
+2.4	**317.420705**	**392.529164**	**423.333379**	**315.763871**	**363.605832**	**384.268614**
-2.45	**-69.412954**	**-86.683341**	**-93.070711**	**-66.801676**	**-76.213181**	**-82.439258**
+2.45	**330.157311**	**409.629931**	**446.275024**	**331.904865**	**379.008185**	**402.419852**
-2.5	**-59.434898**	**-74.222493**	**-79.691670**	**-57.198904**	**-65.257433**	**-70.588521**
+2.5	**326.828727**	**415.505946**	**454.805432**	**335.993454**	**383.158256**	**404.642937**
-2.55	**-69.413130**	**-86.683281**	**-93.070697**	**-66.801746**	**-76.213044**	**-82.439279**
+2.55	**330.287320**	**409.613215**	**446.272866**	**331.909890**	**379.003529**	**402.436451**
-2.6	**-79.391362**	**-99.144121**	**-106.449737**	**-76.404588**	**-87.168772**	**-94.290038**
+2.6	**317.581776**	**392.538037**	**423.331909**	**315.766417**	**363.595995**	**384.270732**
-2.65	**-89.369593**	**-111.604961**	**-119.828776**	**-86.007430**	**-98.124501**	**-106.140796**
+2.65	**295.086204**	**368.112118**	**386.224459**	**292.967020**	**341.002128**	**355.745609**
-2.7	**-99.347825**	**-124.065800**	**-133.207816**	**-95.610272**	**-109.080230**	**-117.991555**
+2.7	**261.135136**	**325.928809**	**331.150982**	**261.916217**	**304.962198**	**312.669889**
-2.75	**-109.326057**	**-136.526640**	**-146.586855**	**-105.213114**	**-120.035959**	**-129.842313**
+2.75	**218.344462**	**268.902607**	**266.009129**	**220.826566**	**255.755216**	**260.441187**
-2.8	**-119.304289**	**-148.987480**	**-159.965894**	**-114.815956**	**-130.991688**	**-141.693072**
+2.8	**164.475977**	**194.224117**	**184.027649**	**172.049247**	**189.239481**	**197.075340**
-2.85	**-129.282521**	**-161.448319**	**-178.288530**	**-125.378828**	**-147.284260**	**-156.828181**
+2.85	**105.331929**	**128.963619**	**122.886091**	**116.978933**	**128.559762**	**129.292522**
-2.9	**-139.260753**	**-231.195718**	**-244.185354**	**-186.858686**	**-208.330327**	**-230.987557**
+2.9	**71.437717**	**66.976018**	**67.676378**	**67.800506**	**70.433897**	**64.625059**
-2.95	**-185.894835**	**-336.632549**	**-340.756503**	**-257.544348**	**-301.328648**	**-325.421569**
+2.95	**32.504968**	**38.192287**	**42.063182**	**29.226641**	**33.344302**	**36.068298**
-3	**-246.618980**	**-477.148261**	**-498.332014**	**-342.428029**	**-399.382974**	**-433.886182**
+3	**40.347321**	**50.385991**	**54.098744**	**38.829474**	**44.300053**	**47.919053**
(Span 3) -4	**-246.618980**	**-477.148261**	**-498.332014**	**-342.428029**	**-399.382974**	**-433.886182**
+4	**40.347321**	**50.385991**	**54.098744**	**38.829474**	**44.300053**	**47.919053**
-3.05	**-221.109740**	**-389.289898**	**-414.544741**	**-280.327077**	**-317.832630**	**-351.914409**
+3.05	**38.329955**	**47.866691**	**51.393807**	**36.888000**	**42.085050**	**45.523101**
-3.1	**-209.472386**	**-304.523538**	**-333.330235**	**-220.969718**	**-240.885541**	**-273.611687**
+3.1	**60.602871**	**48.574000**	**49.143659**	**55.230603**	**58.912643**	**49.135552**
-3.15	**-197.835031**	**-259.570520**	**-287.847856**	**-176.672207**	**-216.443877**	**-220.286783**
+3.15	**87.690104**	**99.371957**	**92.190599**	**96.602814**	**103.065890**	**100.666036**
-3.2	**-186.197676**	**-244.301666**	**-270.915629**	**-166.279724**	**-203.711884**	**-207.328737**
+3.2	**142.014372**	**160.790334**	**153.550131**	**146.730155**	**157.503133**	**159.827329**
-3.25	**-174.560322**	**-229.032812**	**-253.983403**	**-155.887241**	**-190.979891**	**-194.370691**
+3.25	**184.588776**	**217.162011**	**211.319789**	**188.503471**	**203.625288**	**214.185878**
-3.3	**-162.922967**	**-213.763959**	**-237.051176**	**-145.494758**	**-178.247899**	**-181.412645**
+3.3	**224.824229**	**263.761311**	**266.754024**	**227.594522**	**247.187840**	**263.775569**
-3.35	**-151.285612**	**-198.495105**	**-220.118950**	**-135.102274**	**-165.515906**	**-168.454599**
+3.35	**250.813425**	**299.569219**	**305.291622**	**257.215403**	**285.687409**	**304.273401**
-3.4	**-139.648258**	**-183.226251**	**-203.186723**	**-124.709791**	**-152.783913**	**-155.496553**
+3.4	**272.055760**	**328.923698**	**341.145168**	**281.302444**	**318.908851**	**337.758282**
-3.45	**-128.010903**	**-167.957397**	**-186.254497**	**-114.317308**	**-140.051920**	**-142.538507**
+3.45	**281.965335**	**342.753509**	**364.784781**	**297.314148**	**342.312240**	**359.428865**
-3.5	**-116.373548**	**-152.688543**	**-169.322270**	**-103.924825**	**-127.319928**	**-129.580461**
+3.5	**285.563072**	**357.818902**	**376.157665**	**311.916155**	**359.756767**	**373.553406**
-3.55	**-104.736194**	**-137.419690**	**-152.390044**	**-93.532342**	**-114.587935**	**-116.622415**
+3.55	**288.624759**	**365.339936**	**383.686344**	**317.100950**	**364.770465**	**379.938049**
-3.6	**-93.098839**	**-122.150836**	**-135.457817**	**-83.139859**	**-101.855942**	**-103.664369**

+3.6	**294.564829**	**371.288942**	**380.992421**	**315.123782**	**363.402059**	**381.772935**
-3.65	**-81.461484**	**-106.881982**	**-118.525591**	**-72.747376**	**-89.123949**	**-90.706323**
+3.65	**294.205492**	**361.965718**	**368.342279**	**306.943699**	**348.722980**	**369.437170**
-3.7	**-69.824130**	**-91.613128**	**-101.593364**	**-62.354892**	**-76.391957**	**-77.748277**
+3.7	**287.289455**	**344.792842**	**351.574111**	**294.633542**	**324.831947**	**347.224361**
-3.75	**-58.186775**	**-76.344274**	**-84.661138**	**-51.962409**	**-63.659964**	**-64.790231**
+3.75	**266.313047**	**314.881563**	**318.740779**	**270.333693**	**297.734928**	**312.572349**
-3.8	**-46.549421**	**-61.075421**	**-67.728911**	**-41.569926**	**-50.927971**	**-51.832185**
+3.8	**239.071589**	**273.140572**	**279.347718**	**239.266817**	**262.689682**	**277.042405**
-3.85	**-34.912066**	**-45.806567**	**-50.796685**	**-31.177443**	**-38.195978**	**-38.874139**
+3.85	**196.436987**	**228.108069**	**233.679805**	**194.112788**	**213.181089**	**226.425478**
-3.9	**-23.274711**	**-30.537713**	**-33.864458**	**-20.784960**	**-25.463986**	**-25.916093**
+3.9	**146.248305**	**169.755310**	**175.561204**	**141.426314**	**157.286047**	**165.788419**
-3.95	**-11.637357**	**-15.268859**	**-16.932232**	**-10.392477**	**-12.731993**	**-12.958047**
+3.95	**79.088274**	**92.511270**	**96.055785**	**75.614568**	**85.083416**	**89.023860**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 40' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-15.79123058	-17.361164	-18.373665	-13.53442449	-14.43814842	-13.59449652	-16.25860157	-11.76610289	-12.3958609	-6.485167517
End Shear	116.9038234	130.144064	131.096646	106.5989181	111.9345256	103.815241	119.8339	84.90059908	89.36905166	53.49448139
-0.05	-15.79123058	-17.411908	-21.457102	-13.53442449	-14.43814842	-13.59449652	-16.25860157	-11.76610289	-12.3958609	-6.485167517
+0.05	108.7376253	120.123041	120.528071	98.43116185	103.1728171	95.6066139	110.5230826	77.27489894	81.34199888	49.33910309
-0.1	-15.79123058	-17.665913	-26.677246	-13.53442449	-14.43814842	-13.59449652	-16.25860157	-11.76610289	-12.3958609	-6.485167517
+0.1	97.97783417	108.842244	107.669636	89.68271736	93.8012559	86.79851391	99.39910505	67.95114073	71.52751656	44.55745833
-0.15	-15.79123058	-17.919959	-29.737963	-13.53442449	-14.43814842	-13.59449652	-16.25860157	-11.76610289	-12.3958609	-7.369372725
+0.15	91.61377304	102.205387	100.164853	84.21460867	87.95091264	81.30433991	92.82515405	62.60435291	65.89931885	41.7314233
-0.2	-17.98892808	-26.253531	-34.716182	-17.39902477	-17.39902477	-13.92046737	-16.25860157	-13.93798935	-14.72656819	-10.70149939
+0.2	81.19960278	91.393559	88.047210	75.23195373	78.35311651	72.29862037	82.07688377	55.64722804	58.90427169	37.11101582
-0.25	-21.32319808	-31.933974	-37.638364	-21.72904253	-21.72904253	-18.58261406	-19.09600157	-17.45299196	-18.43952537	-12.68510615
+0.25	75.08677624	85.493585	81.030786	69.93776884	72.70429625	67.00308919	75.77370786	51.7923795	54.8091975	34.40173378
-0.3	-28.29330457	-41.497104	-42.418013	-28.88753701	-28.88753701	-26.3458299	-27.73181273	-23.20335294	-24.51034861	-15.95314936
+0.3	65.16443406	75.250596	69.908073	61.30640027	63.50850929	58.39082473	65.55234618	45.50126549	48.12754962	30.00925976
-0.35	-32.7540805	-47.275510	-45.239898	-33.13471983	-33.13471983	-30.96394907	-32.87285827	-26.58102682	-28.07433929	-17.88517827
+0.35	59.56355322	69.300371	63.769143	56.25983245	58.14057407	53.36879547	59.61068443	41.81899939	44.21764868	27.45674745
-0.4	-41.18592318	-56.939849	-54.027511	-40.93429153	-41.20975035	-38.56681773	-41.34314762	-32.91389659	-34.75143401	-21.04537476
+0.4	50.10625584	59.737085	53.988253	48.10257221	49.47906622	45.27472507	50.06743096	35.85998425	37.89192238	23.35890539
-0.45	-46.16160749	-62.741135	-59.884287	-46.35017925	-47.06171399	-43.05810949	-46.35085875	-36.72184739	-38.76448291	-22.89956568
+0.45	44.75905251	54.225192	48.406698	43.37731157	44.47137476	40.60102736	44.57798566	32.40366084	34.22396096	21.0031747
-0.5	-56.81901906	-72.379326	-69.575572	-55.22438484	-56.66285024	-51.75107694	-56.79640497	-44.26850642	-46.74786266	-25.90814943
+0.5	36.25896432	45.442127	39.614538	35.81698525	36.47641976	32.92635773	35.64053745	26.86570593	28.34879594	17.56731136
-0.55	-63.10656568	-78.125738	-75.344529	-60.44065469	-62.31406148	-57.1015499	-63.34815059	-49.05535244	-51.83246076	-28.10961108
+0.55	31.4261687	40.427548	34.661539	31.44593138	31.86754319	28.59013701	30.82398545	23.68870296	24.97955884	15.98166291
-0.6	-73.36802192	-87.605981	-84.875041	-68.9207529	-71.51447537	-65.82045887	-74.05206142	-56.5926925	-59.84238238	-32.67847917
+0.6	23.85651229	32.520775	26.974744	24.31924639	24.3691254	22.62211244	24.25645349	18.66073997	19.64956332	13.20294862
-0.65	-79.37413234	-93.217120	-90.538336	-73.86371079	-76.88557146	-70.91553536	-80.32423211	-60.84743864	-64.36616804	-35.35175512
+0.65	19.65753251	28.059822	22.719078	21.06935641	21.06935641	19.23284633	20.5317696	16.05060658	16.89537534	11.60595097
-0.7	-89.39644678	-102.403180	-99.876335	-81.82687509	-85.55298787	-79.14642224	-90.48659559	-67.48626678	-71.42861068	-39.6757505
+0.7	15.38923353	21.120974	18.271030	15.87841709	15.87841709	13.93095711	14.71440571	12.06419929	12.69915715	9.073202413
-0.75	-95.52731342	-107.795975	-106.459409	-86.42282593	-90.5646045	-83.91125846	-96.38847126	-71.19489987	-75.37623553	-42.18209727
+0.75	12.96801988	17.267311	15.796074	12.95789462	12.95789462	10.97199786	11.37797107	9.823310755	10.34032711	7.63691596
-0.8	-105.9630855	-116.547194	-117.208616	-93.74623303	-98.56675266	-91.52937425	-105.8580755	-76.91186138	-81.46561929	-46.19452846
+0.8	9.185571568	11.127600	12.005178	8.439359062	8.439359062	6.748140051	6.748140051	6.389980157	6.726294902	5.393893094
-0.85	-111.9851195	-121.635910	-123.508530	-97.92148717	-103.1395319	-95.88912649	-111.2989366	-80.06036831	-84.82173507	-48.49393194
+0.85	7.077986064	7.949746	9.936328	5.811952424	5.811952424	4.661365531	4.661365531	4.499272329	4.736076136	4.144573154
-0.9	-121.5782173	-129.807196	-133.726851	-104.4823104	-110.3441368	-102.7697323	-119.9245837	-84.8321074	-89.91247883	-52.12810478
+0.9	3.855115264	3.687118	6.840890	2.612401251	2.773600516	2.609755134	3.099916419	1.910619137	2.027408082	2.235046527
-0.95	-127.0453161	-134.503444	-139.672314	-108.163156	-114.3986962	-106.649556	-124.8137098	-90.03583359	-94.85713057	-54.18054395
+0.95	2.925530544	3.319000	5.199933	2.612401251	2.773600516	2.609755134	3.099916419	1.910619137	2.027408082	1.186476556
-1	-135.6312751	-141.945253	-149.238939	-113.8385705	-120.6734851	-112.6679103	-132.4441977	-98.61478406	-103.901855	-57.36977071
+1	2.93E+00	3.280051	3.270047	2.61E+00	2.77E+00	2.61E+00	3.10E+00	1.91E+00	2.03E+00	1.17E+00
(Span 2) -2	-1.09E+01	-12.225950	-12.188665	-9.74E+00	-1.03E+01	-9.73E+00	-1.16E+01	-7.12E+00	-7.56E+00	-4.38E+00
+2	1.32E+02	143.701784	152.981342	114.4346982	121.5218219	113.6178398	134.0543982	106.0752252	111.8231199	58.10646968
-2.05	-1.09E+01	-12.277240	-14.329249	-9.74E+00	-1.03E+01	-9.73E+00	-1.16E+01	-7.12E+00	-7.56E+00	-4.38E+00
+2.05	1.25E+02	136.740749	143.811626	109.3864892	115.9530851	108.2839751	127.3212512	98.47198602	103.7735175	55.3344111
-2.1	-10.90452389	-12.424711	-16.898354	-9.737376746	-10.33822527	-9.727513407	-11.55452426	-7.121577614	-7.556892807	-4.375940368
+2.1	118.3042291	129.351289	134.281132	103.8532994	109.8828463	102.489868	120.0740796	90.68338117	95.53273717	52.33194003
-2.15	-10.90452389	-12.681730	-19.871555	-9.737376746	-10.33822527	-9.727513407	-11.55452426	-7.121577614	-7.556892807	-4.773461346
+2.15	110.7254265	121.609214	124.483710	97.90245222	103.3836085	96.30389778	112.3957665	82.56392363	86.93993803	49.1356191
-2.2	-11.42643536	-16.700039	-23.222626	-11.13770511	-11.13770511	-9.727513407	-11.55452426	-8.677784289	-9.134509778	-6.760161153
+2.2	102.7057148	113.588840	114.680327	91.60127214	96.52787465	89.79442007	104.3691674	74.79933868	78.7416183	45.78199978

-2.25	-15.03064472	-22.452052	-26.885161	-15.48412491	-15.48412491	-13.94068845	-14.60424192	-12.00099637	-12.63262775	-8.901068028
+2.25	94.31859463	105.362939	104.733198	85.01707958	89.38814363	83.02981618	96.07716911	67.98130716	72.01857645	42.30763626
-2.3	-20.5958203	-30.054463	-32.605614	-21.2305326	-21.26557831	-19.75090052	-20.97008683	-16.40290163	-17.27170094	-11.63993336
+2.3	84.33106042	95.320789	93.754934	76.83725735	80.54766684	74.67179659	85.89313764	61.17290481	64.78227346	38.03048548
-2.35	-27.13410785	-36.908231	-38.718110	-27.1452127	-27.48684015	-24.94849698	-26.68243474	-20.64220626	-21.75919615	-14.03565701
+2.35	76.06615055	86.891431	84.698949	69.86741762	73.03835204	67.26700329	76.9894135	55.02974265	58.25899232	34.41914756
-2.4	-34.15983688	-44.172613	-45.122579	-33.41645543	-34.11287768	-31.0710529	-33.80094394	-25.39659269	-26.80982499	-16.50882429
+2.4	67.78519246	78.479227	76.189845	62.1251814	64.74434099	59.75373874	67.86988598	48.48276193	51.31228987	30.80405403
-2.45	-41.5928679	-51.789085	-51.800083	-39.97693534	-41.07118708	-37.56933853	-41.44131204	-30.26112988	-31.97264172	-19.63694306
+2.45	59.56865557	70.150603	67.479943	55.09158384	57.18669057	52.67162628	59.38157509	42.22884197	44.67626897	27.22174967
-2.5	-50.93730479	-61.309014	-60.144806	-48.13650081	-49.75766123	-45.70139052	-51.07260936	-36.22470285	-38.30594599	-23.70953327
+2.5	49.90713689	59.692769	58.659527	46.75468045	48.28431151	44.32073722	49.43244219	35.21679048	37.23529385	23.01773199
-2.55	-59.05068511	-70.155495	-73.033479	-55.09632433	-57.19176136	-52.67630138	-59.38716318	-42.23228655	-44.67992458	-27.22251553
+2.55	42.11560109	51.784291	51.773224	39.97241545	41.06638499	37.56493053	41.43611191	30.25830899	31.96964697	19.63623226
-2.6	-67.84072172	-78.484097	-76.375818	-62.12995258	-64.72612898	-59.75846581	-67.875566	-48.48668217	-51.31644765	-30.80483288
+2.6	34.64601392	44.167938	45.033405	33.41210951	34.10827704	31.06684012	33.79600968	25.44643185	26.8622642	16.52731055
-2.65	-76.79468168	-86.896217	-85.340324	-69.79052946	-72.96182616	-67.14458444	-76.86797794	-55.03343624	-58.26291267	-34.41992992
+2.65	27.57768662	36.903732	38.642157	27.14108743	27.48249108	24.94495475	26.67853714	20.38219434	21.49024763	14.05363925
-2.7	-85.82244687	-95.325474	-94.447588	-76.84196659	-80.55274651	-74.67646132	-85.89880055	-61.17633976	-64.78592222	-38.03126242
+2.7	20.74260538	30.050174	32.543193	21.22667278	21.26152945	19.74755266	20.96641266	16.40048178	17.26913734	11.65724274
-2.75	-94.83388341	-103.703908	-103.635972	-83.67679279	-87.93746178	-81.65687549	-94.3998028	-66.89388292	-70.86228858	-41.60225228
+2.75	16.60027566	23.664244	27.588644	16.39107164	16.39107164	14.86988559	15.62063631	12.69430433	13.36242561	9.36210056
-2.8	-105.4990609	-113.593079	-114.680323	-91.60565527	-96.53263402	-89.79883138	-104.3745875	-74.80387358	-78.74640824	-45.782738
+2.8	11.79099906	16.696378	23.199524	11.13488786	11.13488786	9.727512688	11.55454414	8.675957456	9.132586796	6.775360174
-2.85	-114.1571572	-121.613204	-124.454320	-97.90662531	-103.3881557	-96.30812197	-112.4009888	-82.56837731	-86.94463935	-49.1363281
+2.85	11.09091543	12.681749	19.854763	9.737373116	10.33823281	9.727512688	11.55454414	7.121580465	7.556901734	4.787415212
-2.9	-122.5910251	-129.354958	-134.205973	-103.857216	-109.8871314	-102.4938676	-120.0790588	-90.63534257	-95.48219328	-52.33260915
+2.9	11.09091543	12.424730	16.872568	9.737373116	10.33823281	9.727512688	11.55454414	7.121580465	7.556901734	4.375946853
-2.95	-131.2417517	-136.744059	-143.696070	-109.3901023	-115.9570573	-108.2876968	-127.3259234	-98.47645512	-103.7782472	-55.33503113
+2.95	11.09091543	12.277259	14.320292	9.737373116	10.33823281	9.727512688	11.55454414	7.121580465	7.556901734	4.375946853
-3	-140.0784329	-145.038619	-154.608938	-115.3834115	-122.5725469	-114.6266909	-135.336277	-107.5701877	-113.4064563	-58.63057954
+3	11.09091543	12.225969	12.189060	9.737373116	10.33823281	9.727512688	11.55454414	7.121580465	7.556901734	4.375946853
(Span 3) -4	-2.975536686	-3.280056	-3.270153	-2.612400277	-2.773602538	-2.609754942	-3.099921752	-1.910619902	-2.027410477	-1.174005032
+4	129.3140801	140.494350	146.776134	112.7474758	119.4646015	111.5069677	130.9671643	96.93777048	102.1340619	56.75537784
-3.05	-2.975536686	-3.303175	-4.678637	-2.612400277	-2.773602538	-2.609754942	-3.099921752	-1.910619902	-2.027410477	-1.174005032
+3.05	124.866762	136.028033	140.881753	109.3412145	115.6986438	107.8949443	126.3876589	91.78941244	96.70619164	54.84138968
-3.1	-4.442736999	-4.198367	-7.392681	-2.892285648	-2.892285648	-2.609754942	-3.099921752	-2.19391151	-2.309380537	-2.585532093
+3.1	116.8896857	128.202109	130.972802	103.2073672	108.9420184	101.4295151	118.2402799	83.92301329	88.9421382	51.4212952
-3.15	-6.369349788	-6.951374	-9.237110	-5.027325426	-5.027325426	-4.029976893	-4.029976893	-3.90028641	-4.105564643	-3.730533241
+3.15	111.7822946	123.298182	124.845969	99.26989194	104.6182046	97.3001743	113.0637198	81.0596176	85.88731405	49.24033484
-3.2	-9.867234139	-12.247387	-12.660243	-9.309731382	-9.309731382	-7.444353162	-7.444353162	-7.050928111	-7.422029591	-5.810725849
+3.2	102.7698677	114.818157	114.364196	92.31210161	96.99795736	90.03491522	103.9968441	75.81199742	80.29368239	45.40864808
-3.25	-12.1280055	-15.761892	-14.918739	-12.02162799	-12.02162799	-10.02770149	-10.25471427	-9.111502614	-9.591055383	-7.155936736
+3.25	97.08012429	109.566307	108.204411	87.9171079	92.19565184	85.46309975	98.31394725	72.38147331	76.63967975	43.00073849
-3.3	-16.220214	-22.462299	-19.013908	-16.8884673	-16.8884673	-14.95857396	-15.84089592	-12.83166905	-13.50702005	-9.547950718
+3.3	87.16187823	100.579495	98.019332	80.25822012	83.84407762	77.52275031	88.47877439	66.20033305	70.06022492	38.82415044
-3.35	-18.78165463	-26.626368	-21.795543	-20.0037698	-20.0037698	-18.14052399	-19.33222326	-15.228438	-16.02993473	-11.06712249
+3.35	81.00749833	95.066822	91.848028	75.47940496	78.64264639	72.58330507	82.3802618	62.21669583	65.82239441	36.2293225
-3.4	-25.20680375	-34.060677	-28.450364	-25.64727663	-25.7637312558128	-23.78851645	-25.5391622039086	-19.64113985	-20.6886191874378	-13.72717679
+3.4	70.98725255	85.716083	82.445646	67.24219937	69.6919692	64.09260757	71.92799513	55.12535338	58.28265722	31.77450987
-3.45	-29.74362215	-38.805485	-32.995355	-29.73772487	-30.06600844	-27.37012366	-29.48056671	-22.6586097	-23.88735323	-15.3940582
+3.45	64.82344544	80.026962	76.751888	62.15325521	64.17077335	58.86040188	65.504618	50.60261431	53.47634513	29.03276456
-3.5	-37.78769902	-47.162406	-41.198651	-37.30076288	-38.04365875	-34.3863258	-37.34380602	-27.95286978	-29.50195698	-18.27840259
+3.5	54.33731685	70.450793	67.183048	53.46058286	54.75329415	49.94407059	54.5864248	42.62447093	45.00195498	25.3146066
-3.55	-42.88362467	-52.433006	-46.441804	-41.83790044	-42.84165152	-39.08091309	-42.79626453	-31.27632118	-33.02777822	-20.23717016

+3.55	47.93783964	64.666962	61.397942	48.1352036	48.9916965522897	44.5366572108127	48.00009631	37.9564786	40.06535644	23.50917393
-3.6	-51.78644694	-61.618684	-55.684706	-49.71230569	-51.1867062	-46.86937749	-51.94410952	-37.03607591	-39.14021393	-24.16273734
+3.6	40.44421233	54.999327	51.689988	39.10991825	39.23971955	37.05210582	39.65495451	31.60992278	33.37696035	20.41929474
-3.65	-57.35375828	-67.357386	-61.517080	-54.60754776	-56.38457123	-51.72674712	-57.67119848	-40.61210375	-42.93630857	-26.62188062
+3.65	36.20806469	49.199864	46.157057	34.5359443	34.5359443	32.48971796	34.57204323	27.69055636	29.24476612	18.5228786
-3.7	-66.96910084	-77.273551	-71.981328	-63.01741906	-65.32998231	-60.09572462	-67.57269025	-46.74843925	-49.4519869	-30.87542814
+3.7	28.69972238	39.570389	41.327762	27.45819079	27.45819079	24.79382858	26.00472362	22.0615997	23.3052958	15.3032758
-3.75	-73.28354266	-83.420072	-78.684945	-68.19711979	-70.84840757	-65.26397853	-73.70660481	-50.523709	-53.46161595	-33.51134057
+3.75	24.07881399	33.831685	38.476966	23.16246439	23.16246439	20.13525685	20.82252665	18.61098289	19.66238466	13.34217441
-3.8	-84.18817595	-93.535634	-90.315232	-77.01963653	-80.26190667	-74.08872897	-84.21054229	-56.94760525	-60.28583491	-38.02614351
+3.8	18.3630641	24.365517	33.634849	15.94673552	15.94673552	13.59449795	16.25862237	12.7531475	13.47463907	10.03661225
-3.85	-90.91500486	-100.023454	-97.547653	-82.41007666	-86.02150275	-79.49302402	-90.66056383	-60.86878838	-64.45226584	-40.79882238
+3.85	16.30366074	18.761325	30.590681	13.53442339	14.43815777	13.59449795	16.25862237	11.76608311	12.39584569	8.037063876
-3.9	-102.3885139	-111.083774	-109.986795	-91.52241409	-95.77081765	-88.64880768	-101.615748	-69.76924928	-73.44131503	-45.50820504
+3.9	16.30366074	17.598183	25.547965	13.53442339	14.43815777	13.59449795	16.25862237	11.76608311	12.39584569	6.48570118
-3.95	-109.4073606	-117.852999	-117.661472	-96.5881423	-101.1973837	-94.21430065	-108.2911575	-75.29339278	-79.25620293	-48.37763378
+3.95	16.30366074	17.445779	22.442056	13.53442339	14.43815777	13.59449795	16.25862237	11.76608311	12.39584569	6.48570118
-5	-121.2852744	-129.325887	-130.764982	-105.8639558	-111.1457072	-103.1065	-118.9808126	-84.879883	-89.34724526	-53.21490556
+5	16.30366074	17.361185	18.373665	13.53442339	14.43815777	13.59449795	16.25862237	11.76608311	12.39584569	6.48570118

3-Span: Shear (Max and Min) Raw Data Results - 40' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-9.855213668	-10.23131148	-9.189843282	-7.956778444	-8.035259795	-11.00082804	-12.2567413	-13.58779258	-14.77070483
End Shear	76.39727838	76.44836667	65.64814379	55.61799178	62.62809203	84.16789803	91.57569682	92.93915897	93.20542569
-0.05	-9.855213668	-10.23131148	-9.189843282	-8.623785808	-8.035259795	-11.00082804	-12.2567413	-13.58779258	-14.77070483
+0.05	70.6184644	69.82167917	59.40007566	50.17728978	57.64832235	77.47494755	84.46625685	85.15645528	85.14824063
-0.1	-9.855213668	-10.23131148	-9.189843282	-10.03693989	-8.035259795	-11.00082804	-12.2567413	-13.58779258	-14.77070483
+0.1	63.69869764	61.40467715	52.56316707	44.16168313	52.33575086	70.29708812	75.93319476	75.81506773	75.80634096
-0.15	-9.855213668	-10.23131148	-9.823419305	-11.69693326	-8.035259795	-11.00082804	-12.2567413	-13.58779258	-14.77070483
+0.15	59.6062609	56.74101516	48.90562394	41.09269238	49.02285537	65.82198477	70.89493506	70.67811059	70.6709095
-0.2	-12.25036814	-12.87577931	-12.96555132	-14.57128565	-10.21265389	-11.83239727	-12.2567413	-13.58779258	-14.77070483
+0.2	52.91016635	49.23923687	43.14716749	36.22587272	43.59423913	58.49058042	62.66557577	62.50031929	62.49269465
-0.25	-15.29896595	-16.1234909	-15.86070972	-16.34490607	-12.10579343	-15.46152007	-15.46349443	-15.43476991	-15.40745597
+0.25	48.98028275	44.95637245	39.77921552	33.46239718	40.40318967	54.18203729	57.8447093	57.7084998	57.7006573
-0.3	-20.33897325	-21.43874159	-21.02224278	-19.64609994	-15.22499105	-21.49306657	-21.49553997	-21.46756712	-21.58884412
+0.3	42.60235885	38.94930214	34.33373645	28.98450686	35.21544147	47.17927425	50.03626001	49.94502743	49.93690362
-0.35	-23.32923558	-24.56206576	-23.95385926	-21.7181583	-17.06917385	-25.07856573	-25.76020042	-25.72738516	-25.69618858
+0.35	38.89173131	35.54672132	31.17857418	26.40746697	32.1915865	43.09853909	45.50309984	45.43669348	45.42843616
-0.4	-28.23875042	-30.30642687	-28.56688929	-25.03660776	-22.12715048	-30.97718064	-32.82282415	-32.79106651	-32.76086613
+0.4	32.92649227	30.86950265	26.12939183	22.27855442	27.32028454	36.52647625	38.23277628	38.20385608	38.19546987
-0.45	-31.13075821	-33.74849545	-31.17214714	-26.938806	-25.4681672	-34.45910605	-37.00230827	-36.97125565	-36.94172647
+0.45	29.49182061	28.14004583	23.23700339	19.90471751	24.50896937	32.73477388	33.76692032	33.97152401	34.04557592
-0.5	-36.64848758	-39.87628938	-35.24581422	-29.96741983	-30.95514509	-41.49791536	-43.84569768	-43.81592999	-43.78762372
+0.5	23.77157329	23.73711708	18.88741713	16.35155289	20.02969176	26.50546558	27.85093277	27.84296482	28.05125362
-0.55	-40.69320205	-43.46837929	-37.53020625	-32.61529269	-34.18811718	-45.87588324	-47.86528343	-47.8363534	-47.80884441
+0.55	21.21035089	21.19222214	16.86250436	14.63050999	17.47627095	23.01052197	24.46503867	24.45708792	24.65759734
-0.6	-47.29404894	-49.05625907	-41.07367341	-37.12476829	-39.4572407	-53.01341142	-55.73958479	-55.64898745	-55.61611736
+0.6	17.14893657	17.13020403	13.63044045	11.9615963	13.27375004	18.31690911	19.1076564	19.09982718	19.28634227
-0.65	-51.15735818	-52.16948047	-43.54874614	-39.754249	-42.5368229	-57.18645259	-60.58988899	-60.45668775	-60.42480256
+0.65	14.82877663	14.80983977	11.78416601	10.52583087	11.16170933	15.6472584	16.07769206	16.06999142	16.24749638
-0.7	-57.40861082	-56.95872743	-47.41904868	-44.00932519	-47.51250594	-63.93141347	-68.45433847	-68.25034727	-68.22021804
+0.7	11.17434248	11.15535089	8.876369167	8.246826331	8.740573462	11.46353334	11.47778594	11.60013855	11.6152518
-0.75	-61.03381703	-59.59246712	-50.2257138	-46.57139031	-50.39335097	-67.83829217	-73.02525645	-73.00277946	-72.96755285
+0.75	9.118326704	9.099487857	7.240557361	6.954564422	7.36705255	9.123635439	9.136895301	9.252223251	9.124401872
-0.8	-66.84096746	-63.58207758	-55.45761097	-50.70208285	-55.00001578	-74.08861811	-80.36545783	-81.59338413	-81.56023674
+0.8	5.937402744	5.919139514	4.710032733	4.939200741	5.221042523	5.735919043	5.732291958	5.650097182	5.645202163
-0.85	-70.17136053	-67.38673534	-58.70553413	-53.07860757	-57.63677551	-77.66809847	-84.58666853	-86.56761544	-86.75686922
+0.85	4.157501724	4.167746999	3.316503805	3.81963358	4.025065203	3.962160701	4.040149913	3.963456554	3.958773556
-0.9	-75.43990386	-74.9778974	-64.15244206	-57.2710933	-61.79884129	-83.32173054	-91.28540894	-94.52218234	-96.03357183
+0.9	1.848851507	1.752319887	1.566927046	2.472461852	2.19574729	2.099968524	2.303070705	2.538046247	2.719983712
-0.95	-78.41877229	-79.358925	-67.65977459	-60.21840212	-64.14616562	-86.51257605	-95.08657035	-99.0753695	-101.382329
+0.95	1.848851507	1.63441899	1.547135209	1.922139247	1.523000969	2.099968524	2.303070705	2.538046247	2.719983712
-1	-83.05420758	-86.33777392	-74.29162452	-65.34620023	-67.7880544	-91.46745301	-101.0266405	-106.2624743	-109.8951602
+1	1.85E+00	1.63E+00	1.55E+00	1.33E+00	1.52E+00	2.10E+00	2.30E+00	2.54E+00	2.72E+00
(Span 2) -2	-6.89E+00	-6.09E+00	-5.77E+00	-4.96E+00	-5.68E+00	-7.83E+00	-8.58E+00	-9.46E+00	-1.01E+01
+2	8.41E+01	93.72049594	82.64407991	70.98422295	68.3908978	92.33469591	102.5554181	108.8894444	114.0520413
-2.05	-6.89E+00	-6.09E+00	-5.77E+00	-5.41E+00	-5.68E+00	-7.83E+00	-8.58E+00	-9.46E+00	-1.01E+01
+2.05	80.02083015	87.27749694	76.24392183	65.91523931	65.17474838	87.95474108	97.35270498	102.6539448	106.773606
-2.1	-6.891346822	-6.092078315	-5.766739801	-5.941222416	-5.676782266	-7.827351963	-8.584388294	-9.460228206	-10.13837554
+2.1	75.62416013	80.64943351	70.00004737	60.80182565	61.68182155	83.20412091	91.76257602	96.05689288	99.17252389
-2.15	-6.891346822	-6.092078315	-5.777303788	-6.957429477	-5.676782266	-7.827351963	-8.584388294	-9.460228206	-10.13837554
+2.15	70.94824619	73.47353212	63.77981068	55.81569264	57.95352801	78.13878139	85.84928127	89.17028626	91.32914028
-2.2	-7.846160626	-8.038368605	-7.875673241	-9.124940046	-6.375084093	-7.923498966	-8.584388294	-9.460228206	-10.13837554
+2.2	66.04488368	66.46616268	57.58261881	50.97157732	54.03130454	72.81465067	79.67706825	82.06619836	83.32382465
-2.25	-10.90677211	-11.11671242	-10.56690954	-11.37385587	-8.411635329	-11.41827542	-11.48416359	-11.47051693	-11.45753978

+2.25	60.96587276	60.10352071	51.53406233	46.27032652	49.9565682	67.2876764	73.31018146	74.81662358	75.07114504
-2.3	-14.87906417	-15.19075402	-13.91213197	-14.17350508	-11.5651422	-15.99579434	-16.66163809	-16.64702826	-16.63313615
+2.3	54.71214759	52.57387174	45.1112309	41.25282154	44.92392193	60.46632185	65.34481	65.75961912	65.93679881
-2.35	-18.39615199	-19.10164449	-17.01620521	-16.48102322	-15.02229118	-20.07916289	-21.32852321	-21.31335248	-21.29893147
+2.35	49.03852754	46.45361605	40.28465572	37.37915875	40.65949672	54.41836207	58.27712028	58.48335088	58.72515408
-2.4	-22.50810189	-23.08085495	-20.46884839	-18.89654249	-18.72049146	-25.02167438	-26.26043883	-26.24490758	-26.2301637
+2.4	43.6084788	41.46930537	35.69797458	33.64507642	35.9473405	48.31089598	51.72401852	51.58022562	51.8593679
-2.45	-27.25303368	-27.09761177	-24.30432447	-22.09248876	-22.61831432	-30.28653118	-31.62306505	-31.59632205	-31.78380764
+2.45	38.36478407	36.64367031	32.26576697	29.87056694	31.68915117	42.54949845	45.25254455	45.1498696	45.13290627
-2.5	-33.22337696	-31.92391758	-28.78557887	-26.31005293	-27.5008745	-36.88550474	-38.93096384	-38.86539216	-38.84832617
+2.5	32.20748804	31.11878635	28.05955412	25.60632704	26.67150781	35.76440558	37.68496983	37.6264742	37.60952586
-2.55	-38.36822345	-36.64635991	-32.26757723	-29.87181898	-31.69203989	-42.55329941	-45.25668319	-45.15388537	-45.13682458
+2.55	27.24982181	27.09528464	24.30224285	22.09130391	22.61558934	30.28295724	31.61921796	31.59260212	31.83062047
-2.6	-43.61196898	-41.47231903	-35.70041639	-33.64630321	-35.95027616	-48.31474356	-51.72823305	-51.58431307	-51.7628137
+2.6	22.50504965	23.0785536	20.46701921	18.89554405	18.71789524	25.01826408	26.25716575	26.24174258	26.22706046
-2.65	-48.93016258	-46.45640298	-40.28712181	-37.38036251	-40.66243477	-54.31414117	-58.28136691	-58.38489772	-58.72915162
+2.65	18.39377552	19.09936417	17.01433079	16.4802525	15.01984186	20.07638298	21.32540742	21.31032488	21.29597735
-2.7	-54.71561463	-52.57747051	-45.11407025	-41.25418131	-44.9268216	-60.47012621	-65.24300628	-65.71596235	-65.89420686
+2.7	14.87679856	15.18852294	13.91061888	14.17272368	11.56287852	15.99316076	16.65871192	16.64419179	16.63036178
-2.75	-59.93696955	-58.84583229	-50.46042881	-45.43519533	-49.12982554	-66.16660085	-72.0232949	-73.28745333	-73.36139095
+2.75	11.54545634	11.75893453	11.11502598	11.84206982	8.833230875	12.15141478	12.3088895	12.29513785	12.28204893
-2.8	-66.04819994	-66.47007081	-57.58591901	-50.97310595	-54.03404665	-72.81825609	-79.68113579	-82.07071905	-83.32876456
+2.8	7.844226537	8.03667638	7.874265328	9.161285587	6.373745133	7.92130209	8.584402169	9.460230278	10.13839591
-2.85	-70.95143254	-73.37955867	-63.78314132	-55.81730149	-57.95616169	-78.14223796	-85.85320671	-89.17471731	-91.33403351
+2.85	6.891363044	6.092081426	5.776371353	6.956752751	5.676774308	7.827360449	8.584402169	9.460230278	10.13839591
-2.9	-75.62718083	-80.60460203	-70.00337195	-60.80343177	-61.68430346	-83.20739753	-91.76631606	-96.06114839	-99.17729762
+2.9	6.891363044	6.092081426	5.766732427	5.940902946	5.676774308	7.827360449	8.584402169	9.460230278	10.13839591
-2.95	-80.02364552	-87.28129391	-76.17602695	-65.91689221	-65.17706969	-87.9577944	-97.35621925	-102.6580181	-106.7782089
+2.95	6.891363044	6.092081426	5.766732427	5.410106032	5.676774308	7.827360449	8.584402169	9.460230278	10.13839591
-3	-84.85781824	-94.98385446	-83.83386357	-71.98391626	-68.99933596	-93.16401676	-103.5470187	-110.0905687	-115.4662748
+3	6.891363044	6.092081426	5.766732427	4.960243552	5.676774308	7.827360449	8.584402169	9.460230278	10.13839591
(Span 3) -4	-1.848855859	-1.63E+00	-1.55E+00	-1.33E+00	-1.522998834	-2.099970801	-2.303074427	-2.538046802	-2.719989177
+4	82.15844677	84.97211778	72.76633245	64.15739899	67.08538515	90.51107969	99.87608622	104.8626702	108.2297651
-3.05	-1.848855859	-1.63E+00	-1.55E+00	-1.75E+00	-1.522998834	-2.099970801	-2.303074427	-2.538046802	-2.719989177
+3.05	79.37641783	80.78387058	68.88635132	61.18082603	64.89964018	87.53732815	96.31112749	100.5494046	103.1209585
-3.1	-2.034344453	-2.032254873	-1.820734963	-2.664357833	-2.545804273	-2.099970801	-2.303074427	-2.538046802	-2.719989177
+3.1	74.41235754	73.48323127	63.09904477	56.26898174	60.98798736	82.2200272	89.97676407	92.96182685	94.20757429
-3.15	-3.548696847	-3.612896885	-2.874939076	-3.462911049	-3.64374019	-3.425480359	-3.434264639	-3.429379135	-3.424734297
+3.15	71.25049883	68.92766936	59.83061948	53.85215157	58.49015519	78.82704994	85.95661384	88.1880942	88.64050811
-3.2	-6.550058363	-6.53138604	-5.197086747	-5.32841968	-5.636734934	-6.327700188	-6.324006332	-6.239977904	-6.234983523
+3.2	65.70061606	62.82193741	54.42881574	49.89144912	54.0961463	72.86206626	78.92223154	79.89884263	79.86538073
-3.25	-8.459161204	-8.440128737	-6.715817974	-6.537963699	-6.924681026	-8.375987961	-8.3888587	-8.501703461	-8.376383116
+3.25	62.21559961	60.427996	51.28908134	47.4128188	51.3315754	69.11109818	74.51723408	74.74354468	74.7088459
-3.3	-11.88535594	-11.86604425	-9.4417311	-8.691281111	-9.213567586	-12.27524948	-12.28976497	-12.41431481	-12.42970023
+3.3	56.17440041	56.03815511	46.68162668	43.16971599	46.53080424	62.60049116	66.9000444	66.71037174	66.67998332
-3.35	-14.07853912	-14.05926085	-11.18682131	-10.05901787	-10.66657299	-14.7861175	-15.10335095	-15.09560482	-15.26994443
+3.35	52.42296576	53.16442545	44.35952474	40.61662443	43.54482733	58.55276916	62.18055067	62.03335855	62.00192595
-3.4	-17.94494803	-17.925985494448	-14.26349337	-12.45146867	-14.04991534	-19.2349217435324	-20.1525643	-20.1446007	-20.3339360972255
+3.4	45.98495653	47.97543109	40.38938084	36.23408301	38.4128582	51.59860041	54.09773938	54.02156583	53.98848107
-3.45	-20.38230283	-20.36368201	-16.20312046	-14.06901541	-16.54359942	-22.05170406	-23.36771681	-23.35969445	-23.55741801
+3.45	42.02376865	44.62252603	38.26325736	33.52834211	35.25085299	47.31538132	49.18467155	49.15616608	49.1290373
-3.5	-24.8350212	-24.6046259	-19.57752159	-16.93693638	-20.90681203	-27.68821228	-29.01012118	-29.00205265	-29.2127567
+3.5	35.28345811	38.63543629	34.45565556	29.37458451	29.86325088	40.01969013	42.48623907	42.45631384	42.42784737
-3.55	-28.34848164	-27.24685296	-22.29976952	-19.13340962	-23.59495921	-31.50208705	-32.55284821	-32.5608287	-32.76263904
+3.55	32.08142221	34.8660591361198	32.0114104494997	27.5575079000232	26.5705491332999	35.6049232144642	38.3795469617507	38.3488501606878	38.31967552

-3.6	***-34.10011089***	**-31.79534915**	***-27.11972252***	**-23.08907326**	**-28.27987183**	***-37.82074989***	**-39.66124635**	***-39.62508099***	**-39.61660096**
+3.6	***27.26202553***	**29.12937417**	***27.66902919***	**24.386837**	**21.00291059**	***29.8024383***	**31.41461609**	***31.38276084***	**31.3524574**
-3.65	***-37.67995588***	**-34.60216496**	***-30.14983531***	**-25.56693367**	**-31.20321397**	***-41.76474799***	**-44.02432547**	***-43.96565892***	**-43.95724618**
+3.65	***24.31584988***	**25.58823986**	***24.90115473***	**22.3958741**	**17.6764906**	***26.26274883***	**27.17644893**	***27.14396123***	**27.1130392**
-3.7	***-43.86354149***	**-40.13283855**	***-35.40771531***	**-29.86864022**	**-36.24231576**	***-48.56509892***	**-51.57858355**	***-51.47854433***	**-51.4703522**
+3.7	***19.33272136***	***20.3831702***	***20.01485208***	**18.96675649**	**14.60323882**	***20.28767251***	***20.29014232***	***20.26212658***	**20.38366329**
-3.75	***-47.69097193***	***-43.73776527***	***-38.67558793***	**-32.55589678**	**-39.35552121**	***-52.76749094***	***-56.26451***	***-56.13746904***	**-56.12944311**
+3.75	***16.30826606***	***17.19364645***	***16.91786852***	**16.93190825**	**12.73143269**	***16.66824295***	***16.67039288***	***16.64192485***	**16.61482833**
-3.8	***-54.23992666***	***-50.7149438***	***-44.28807783***	**-37.16839614**	**-44.67324814**	***-59.9474707***	***-64.29824217***	***-64.12278511***	**-64.11510769**
+3.8	***11.22793854***	***11.78126699***	***12.01479648***	**14.00048237**	**9.576621544**	***11.0008375***	***12.2567555***	***13.58779578***	**14.77072477**
-3.85	***-58.25823723***	***-55.2169043***	***-47.74373793***	**-40.10136221**	**-47.93093885**	***-64.3470213***	***-69.23666306***	***-69.03027923***	**-69.02287531**
+3.85	***9.855229864***	***10.2312924***	***10.19591444***	**12.27613596**	**8.035281828**	***11.0008375***	***12.2567555***	***13.58779578***	**14.77072477**
-3.9	***-65.07807296***	***-62.98858811***	***-53.91432485***	**-45.29328567**	**-53.4517253**	***-71.80456978***	***-77.63265685***	***-77.67086129***	**-77.66208012**
+3.9	***9.855229864***	***10.2312924***	***9.189839549***	**9.751794399**	**8.035281828**	***11.0008375***	***12.2567555***	***13.58779578***	**14.77072477**
-3.95	***-69.23058228***	***-68.07751008***	***-58.01722529***	**-48.90798386**	**-56.80858459**	***-76.34004377***	***-82.75332344***	***-83.27660963***	**-83.26815814**
+3.95	***9.855229864***	***10.2312924***	***9.189839549***	**8.913711693**	**8.035281828**	***11.0008375***	***12.2567555***	***13.58779578***	**14.77072477**
-5	***-75.87536357***	***-76.43037967***	***-65.31936016***	**-55.38599905**	**-62.17326468**	***-83.58990735***	***-90.95997994***	***-92.78053574***	**-93.07561276**
+5	***9.855229864***	***10.2312924***	***9.189839549***	***7.956776492***	**8.035281828**	***11.0008375***	***12.2567555***	***13.58779578***	***14.77072477***

3-Span: Shear (Max and Min) Raw Data Results - 40' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-16.93110925	-18.33295765	-11.19347274	-14.23235724	-14.31608855
End Shear	111.4373527	115.7826942	83.56890785	102.3728862	101.4889754
-0.05	-16.93110925	-18.33295765	-11.19347274	-14.23235724	-14.31608855
+0.05	100.3940987	104.8507682	76.89551425	92.63630803	91.45101338
-0.1	-16.93110925	-18.33295765	-11.19347274	-14.23235724	-14.31608855
+0.1	88.25768257	91.40058417	70.20896943	81.14720546	83.04181846
-0.15	-16.93110925	-18.33295765	-11.19347274	-14.23235724	-14.31608855
+0.15	81.55851894	83.82923722	66.02385601	74.68308522	77.79478672
-0.2	-19.41402887	-20.75511143	-15.13405003	-14.91561286	-14.75893964
+0.2	70.74009201	72.20819392	59.13864854	65.50885378	69.19119912
-0.25	-22.06335218	-24.12670141	-18.79441924	-18.64474885	-18.53010517
+0.25	64.48051984	65.49078921	55.07435513	60.30467134	64.13027449
-0.3	-29.19678794	-31.32165169	-25.68433632	-26.18531643	-27.06383498
+0.3	54.91764499	55.35486437	48.43718174	53.00605227	55.89627975
-0.35	-34.92009692	-36.78142242	-29.84918141	-30.9949504	-32.34032431
+0.35	49.79929296	49.67707706	44.54970703	48.72907032	51.09275109
-0.4	-44.12924242	-45.37282906	-37.38628107	-39.80733183	-41.64778497
+0.4	41.6154286	40.77982514	38.25390404	41.7986446	43.34714739
-0.45	-49.38589565	-50.22612872	-41.83478057	-45.09783961	-47.15075945
+0.45	37.39841906	36.15008041	34.59924474	37.77312344	38.87229372
-0.5	-57.69643241	-57.81901799	-49.93978539	-54.49600911	-56.66302554
+0.5	30.95894034	28.8218893	28.738137	31.31271439	31.73390913
-0.55	-62.95439622	-62.4043569	-54.62050166	-60.02086709	-62.19535186
+0.55	27.25970064	25.33526024	25.37230337	27.59974255	27.66220748
-0.6	-71.31171424	-71.73470802	-61.98707715	-68.66999851	-72.05508413
+0.6	21.39599979	19.89061136	20.03923072	21.71116043	21.76920417
-0.65	-75.96693496	-77.6789397	-66.14298561	-73.52285691	-77.69671561
+0.65	18.14723309	16.80466771	17.02083705	18.37183717	18.42705217
-0.7	-84.1063414	-87.56840311	-72.62303835	-81.04751237	-86.52106772
+0.7	12.95487938	11.98851469	12.82857931	13.68381793	13.15237642
-0.75	-88.6012123	-93.11874948	-76.23992909	-85.22300005	-91.46507878
+0.75	10.06477895	9.431113741	10.47045846	11.16848903	10.28457822
-0.8	-100.254696	-106.4040127	-81.80977622	-91.61421775	-99.11373064
+0.8	5.990506758	5.85242891	6.781826797	7.175463868	6.038998798
-0.85	-107.5997724	-114.239514	-84.87343882	-95.10697292	-103.3445516
+0.85	4.209146138	3.893492577	4.774526335	5.038346334	4.263711846
-0.9	-119.1520818	-127.8360192	-89.50939551	-100.355812	-109.7916007
+0.9	2.872948115	3.110633913	2.028967034	2.292089085	2.52221879
-0.95	-125.6592527	-136.0093868	-92.00562582	-105.8251284	-113.2936742
+0.95	2.872948115	3.110633913	2.028967034	2.292089085	2.52221879
-1	-135.7765951	-148.8741339	-95.6840017	-116.6075461	-118.5131802
+1	2.87E+00	3.11E+00	2.03E+00	2.29E+00	2.52E+00
(Span 2) -2	-1.07E+01	-1.16E+01	-7.56E+00	-8.54E+00	-9.40E+00
+2	144.9139741	154.5099046	104.44711	128.50061	130.215503
-2.05	-1.07E+01	-1.16E+01	-7.56E+00	-8.54E+00	-9.40E+00
+2.05	133.0689096	144.0929552	96.6635634	119.0038889	120.3990639
-2.1	-10.70853011	-11.59447224	-7.562703483	-8.543455945	-9.401233382
+2.1	121.0824257	133.0342887	88.86702376	109.0928009	110.3269153
-2.15	-10.70853011	-11.59447224	-7.562703483	-8.543455945	-9.401233382
+2.15	111.1398579	121.4125422	82.21427741	98.87955872	100.5551894
-2.2	-10.70853011	-11.59447224	-9.207569436	-9.58528647	-9.401233382
+2.2	100.957263	109.3062098	77.66510992	89.5543851	94.33994048
-2.25	-14.61438331	-14.89082444	-12.8299069	-13.40755964	-13.49304153

+2.25	90.25051703	96.79393135	72.65683216	80.52629907	87.5429415
-2.3	-21.02457272	-21.0761186	-17.90505551	-19.14817484	-19.7343548
+2.3	77.31405317	82.23206312	66.07218312	72.80927289	78.65603818
-2.35	-26.56043669	-26.66183582	-22.27282248	-24.72708384	-25.20118017
+2.35	68.14352615	71.93542436	60.13213371	65.77556881	70.67269789
-2.4	-32.97193829	-32.90360959	-27.19961668	-30.58930878	-30.8568993
+2.4	61.36629262	64.19691743	53.80417246	58.21219915	62.19264535
-2.45	-39.46812832	-39.1236889	-32.70994211	-36.56376081	-37.01817838
+2.45	54.80602615	56.19581556	47.11052997	50.91407587	53.87999309
-2.5	-47.8928856	-47.96866787	-40.08744132	-43.81354926	-45.70151474
+2.5	46.46439671	46.29827904	38.86324848	42.59893329	44.23447442
-2.55	-54.8096675	-56.19652803	-47.11443401	-50.91804946	-53.88447488
+2.55	39.4646474	39.12305654	32.70643345	36.56034137	37.01445179
-2.6	-61.36974	-64.19763487	-53.80787963	-58.2166759	-62.19749877
+2.6	32.64102515	32.90307032	27.19679786	30.58594125	30.85373043
-2.65	-68.1472245	-71.93609359	-60.13564616	-65.77972618	-70.67728416
+2.65	26.55742051	26.66126295	22.30633579	24.72381633	25.19810694
-2.7	-77.31969488	-82.23314547	-66.07545076	-72.81314528	-78.66034097
+2.7	21.02162279	21.07566852	17.90260759	19.14535126	19.73140083
-2.75	-88.05704741	-94.25078045	-71.60506541	-79.2996294	-86.12007671
+2.75	15.65940276	15.91098171	13.65844996	14.32514069	14.50300498
-2.8	-100.9629354	-109.3073267	-77.66785007	-89.55958458	-94.34357072
+2.8	10.70852422	11.59447344	9.205670929	9.58325582	9.401230381
-2.85	-111.1452298	-121.4135796	-82.21674461	-98.78694838	-100.5584906
+2.85	10.70852422	11.59447344	7.562694141	8.54345748	9.401230381
-2.9	-120.99529	-133.0353182	-88.87140803	-109.0006824	-110.3325535
+2.9	10.70852422	11.59447344	7.562694141	8.54345748	9.401230381
-2.95	-132.9817328	-144.0939026	-96.66801966	-119.0093333	-120.4045942
+2.95	10.70852422	11.59447344	7.562694141	8.54345748	9.401230381
-3	-147.1680479	-156.5102756	-105.9852367	-130.3750511	-132.1441703
+3	10.70852422	11.59447344	7.562694141	8.54345748	9.401230381
(Span 3) -4	-2.872946534	-3.110634236	-2.028964528	-2.292089496	-2.522217984
+4	133.8216926	146.377589	94.99488215	114.4899747	117.5286133
-3.05	-2.872946534	-3.110634236	-2.028964528	-2.292089496	-2.522217984
+3.05	127.7505273	138.6579339	92.78749471	108.0191356	114.3964886
-3.1	-2.872946534	-3.110634236	-2.328015579	-2.455893782	-2.522217984
+3.1	116.9055967	125.036842	88.62703007	99.36055359	108.5595438
-3.15	-3.644798588	-3.348890655	-4.138577638	-4.361388458	-3.688280275
+3.15	*109.9734257*	*116.7802897*	*85.84510217*	*96.2109406*	*104.6909005*
-3.2	*-6.613214549*	*-6.537747514*	*-7.483526305*	*-7.922631122*	*-6.66295929*
+3.2	*97.73197384*	*103.7220176*	*80.73891573*	*90.38938592*	*97.63938496*
-3.25	*-9.143323296*	*-8.685475202*	*-9.671185254*	*-10.25238293*	*-9.321544461*
+3.25	*90.72356117*	*95.47679033*	*77.39665859*	*86.55434566*	*93.04977775*
-3.3	*-13.95936107*	*-12.9180691*	*-13.64385607*	*-14.55344648*	*-14.16156908*
+3.3	*83.32209608*	*85.6534531*	*71.36843315*	*79.5948902*	*84.80964441*
-3.35	*-17.07557761*	*-15.80837049*	*-16.15981178*	*-17.29596256*	*-17.35011952*
+3.35	*78.86053545*	*79.71968537*	*67.48005722*	*75.07981842*	*79.51463184*
-3.4	*-22.54018253*	*-20.95067194*	*-21.07977366*	*-22.86067971*	*-22.91956459*
+3.4	*70.90768453*	*69.84271703*	*60.55347588*	*66.9913923*	*70.1117588*
-3.45	*-26.05917839*	*-24.21806893*	*-24.28031454*	*-26.39458614*	*-26.45611535*
+3.45	*65.96077962*	*64.81675332*	*56.13319109*	*61.8016388*	*64.12692533*
-3.5	*-32.2236947*	*-30.24744557*	*-29.88925133*	*-32.58200678*	*-33.13175951*
+3.5	*57.29012664*	*57.08629059*	*48.33194085*	*52.59321484*	*54.75354027*
-3.55	*-36.08813795*	*-34.64522137*	*-33.40662764*	*-36.45903007*	*-37.41565907*
+3.55	*52.35440114*	*52.56757424*	*43.39395663*	*46.82012699*	*48.93573803*
-3.6	*-43.21988405*	*-42.4067799*	*-39.49689968*	*-43.16733526*	*-44.87269829*
+3.6	*43.67745846*	*44.54069081*	*35.85248018*	*38.00281556*	*39.76406197*

-3.65	***-48.13121512***	***-47.8270766***	***-43.27503859***	***-47.32630368***	***-49.52094326***
+3.65	***38.20205267***	***39.42380167***	***31.20454736***	***32.57865815***	***34.06702717***
-3.7	***-56.66058555***	***-57.28850533***	***-49.75330857***	***-54.45367544***	***-57.52574403***
+3.7	***28.75854685***	***30.38766552***	***24.26318631***	***24.56336977***	***25.27326749***
-3.75	***-62.44128066***	***-63.29861391***	***-53.73628684***	***-58.83358106***	***-62.46700316***
+3.75	***23.52633919***	***26.07721353***	***20.00117633***	***19.87997728***	***19.90344337***
-3.8	***-72.87238016***	***-74.4923719***	***-60.50922454***	***-67.31998108***	***-70.90075332***
+3.8	***18.78394856***	***19.3646081***	***13.90112981***	***14.23231561***	***14.31607731***
-3.85	***-79.36465687***	***-81.46619148***	***-64.64096133***	***-72.82554148***	***-76.06374036***
+3.85	***16.93111008***	***18.3329573***	***11.19349022***	***14.23231561***	***14.31607731***
-3.9	***-90.52837511***	***-94.02765356***	***-71.26452885***	***-83.37013693***	***-84.80762979***
+3.9	***16.93111008***	***18.3329573***	***11.19349022***	***14.23231561***	***14.31607731***
-3.95	***-97.83411891***	***-102.0964214***	***-75.48699851***	***-90.1486359***	***-90.12100383***
+3.95	***16.93111008***	***18.3329573***	***11.19349022***	***14.23231561***	***14.31607731***
-5	***-110.865881***	***-115.9585004***	***-83.48871579***	***-102.3030059***	***-101.3977061***
+5	***16.93111008***	***18.3329573***	***11.19349022***	***14.23231561***	***14.31607731***

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.33E-13	-1.44E-13	-1.35E-13	-1.16E-13	-1.16E-13	-9.28E-14	-1.13E-13	-8.94E-14	-9.41E-14	-7.60E-14
End Shear	9.40E-14	5.71E-14	8.68E-14	5.90E-14	6.58E-14	5.53E-14	6.43E-14	4.57E-14	4.89E-14	3.94E-14
-0.05	-31.58246115	-34.72232858	-36.74733005	-27.068849	-28.8762968	-27.188993	-32.5172031	-23.5322058	-24.7917218	-12.97033503
+0.05	216.3922108	242.3013043	242.4768048	196.8623237	206.3456343	191.2132278	219.9261164	154.5497979	162.6839978	98.67820618
-0.1	-63.1649223	-69.44465717	-73.49466009	-54.137698	-57.7525937	-54.3779861	-65.0344063	-47.0644116	-49.5834436	-25.94067007
+0.1	398.8177539	452.9913319	447.0328552	364.8065775	381.928472	353.6091943	405.8389512	277.702316	292.3182273	182.028731
-0.15	-94.74738345	-104.1669857	-110.2419901	-81.2065469	-86.6288905	-81.5669791	-97.5516094	-70.5966173	-74.3751654	-38.9110051
+0.15	548.6379473	631.4321504	614.6036289	504.5895122	527.196375	487.494766	557.1543658	374.482323	394.8586006	250.3885398
-0.2	-126.3298446	-138.8893143	-146.9893202	-108.275396	-115.505187	-108.755972	-130.068813	-94.1288231	-99.1668872	-51.88134013
+0.2	665.5965016	778.0175312	746.363478	615.9371419	642.1151454	592.9239479	674.579022	455.729546	482.4684967	304.2012676
-0.25	-157.9123058	-173.6116429	-183.7366502	-135.344245	-144.381484	-135.944965	-162.586016	-117.661029	-123.958609	-64.85167517
+0.25	750.8702809	893.3235124	843.7255677	699.6897122	727.6465372	670.8380138	775.0852259	518.4834518	548.7117578	344.0173378
-0.3	-189.4947669	-208.3339715	-220.4839803	-162.413094	-173.257781	-163.133958	-195.103219	-141.193235	-148.750331	-77.8220102
+0.3	805.8702467	978.1085978	908.342125	756.8839666	784.963931	735.6491501	856.0693413	561.8421703	594.36474	370.493829
-0.35	-221.0772281	-243.0563001	-257.2313103	-189.481943	-202.134078	-190.322951	-227.620422	-164.72544	-173.542053	-90.79234524
+0.35	833.8897451	1033.313314	947.8740658	788.7530587	826.4299732	783.688463	906.6977749	586.6717037	620.3550228	384.9208035
-0.4	-252.6596892	-277.7786287	-293.9786404	-216.550792	-231.010375	-217.511944	-260.137625	-188.257646	-198.333774	-103.7626803
+0.4	850.2786722	1060.06073	976.6001349	816.1272413	852.6815976	806.3363104	927.2215594	602.6653431	638.2272756	387.6050687
-0.45	-284.2421504	-312.5009572	-330.7259704	-243.619641	-259.886672	-244.700937	-292.654828	-211.789852	-223.125496	-116.7330153
+0.45	840.0086892	1059.656095	975.0531442	819.6526182	853.0373176	805.6519921	919.365285	606.8067454	642.2522739	379.4670681
-0.5	-315.8246115	-347.2232858	-367.4733005	-270.68849	-288.762968	-271.88993	-325.172031	-235.322058	-247.917218	-129.7033503
+0.5	802.9888659	1047.220733	969.1107848	804.1778226	838.3040444	790.1768298	902.3270141	594.4319959	629.2845161	367.9837407
-0.55	-347.4070727	-381.9456144	-404.2206305	-297.757339	-317.639265	-299.078924	-357.689235	-258.854264	-272.70894	-142.6736854
+0.55	791.6160351	1011.698155	958.8195566	772.1093871	807.7280521	763.6059921	877.4221032	569.5407517	603.2439822	362.57527
-0.6	-378.9895338	-416.667943	-440.9679606	-324.826188	-346.515562	-326.267917	-390.206438	-282.386469	-297.500662	-155.6440204
+0.6	761.3885271	951.4503554	917.1494334	720.6142324	754.129118	715.0209429	826.0535382	536.1501316	566.9226469	352.0754099
-0.65	-410.571995	-451.3902716	-477.7152906	-351.895037	-375.391859	-353.45691	-422.723641	-305.918675	-322.292383	-168.6143554
+0.65	704.2438767	868.2552305	846.1705746	661.3129608	684.8401106	646.3351598	749.1968404	491.6797647	520.0195035	329.4132581
-0.7	-442.1544561	-486.1126002	-514.4626206	-378.963886	-404.268156	-380.645903	-455.240844	-329.450881	-347.084105	-181.5846905
+0.7	625.059437	764.0730336	759.7320922	582.1657178	602.7271746	559.6616255	649.2931583	433.0738138	458.0199045	295.5199722
-0.75	-473.7369173	-520.8349287	-551.2099507	-406.032735	-433.144453	-407.834896	-487.758047	-352.983087	-371.875827	-194.5550255
+0.75	519.5592429	641.0463393	651.6707478	485.2603963	500.902839	457.6869046	529.0258459	361.867808	382.5510926	251.4334858
-0.8	-505.3193784	-555.5572573	-587.9572807	-433.101584	-462.02075	-435.023889	-520.27525	-376.515292	-396.667549	-207.5253605
+0.8	392.5128871	501.5001323	517.0518208	372.8816812	381.770652	346.3212715	391.3200512	279.7398863	295.3920205	198.29826
-0.85	-536.9018396	-593.4860947	-632.8990368	-460.170433	-490.897046	-462.212882	-552.792453	-400.047498	-421.459271	-220.4956956
+0.85	246.3431263	351.1479115	364.1826326	247.5105769	247.9455622	223.9610668	239.342791	188.6287801	198.5566106	142.7083892
-0.9	-568.4843007	-647.861497	-704.4008761	-487.239282	-519.773343	-489.401875	-585.309657	-423.579704	-446.250992	-233.4660306
+0.9	160.9068608	207.7052379	273.7531458	142.3368574	142.3368574	113.8414691	112.944142	107.9756165	113.6585437	95.14752757
-0.95	-600.0667619	-716.0686598	-795.2865713	-514.308131	-548.64964	-516.590868	-617.82686	-489.694171	-519.593798	-246.4363656
+0.95	111.1701607	127.4514334	198.7939603	99.27124754	105.3968196	99.1706951	117.7968239	72.60352721	77.04150712	46.87523719
-1	-637.0729165	-795.5991066	-902.4688033	-541.376991	-577.525941	-543.779859	-650.344054	-620.354021	-657.244006	-259.4066991
+1	117.0212195	131.2020185	130.801898	104.4960496	110.9440191	104.3902045	123.9966562	76.4247636	81.09632131	46.96013361
(Span 2) -2	-637.0729165	-795.5991066	-902.4688033	-541.376991	-577.525941	-543.779859	-650.344054	-620.354021	-657.244006	-259.4066991
+2	117.0212195	131.2020185	130.801898	104.4960496	110.9440191	104.3902045	123.9966562	76.4247636	81.09632131	46.96013361
-2.05	-485.8633804	-569.0679152	-708.172019	-376.530213	-399.764597	-376.148934	-446.797613	-442.140386	-468.384483	-169.2115754
+2.05	89.80189985	103.1722444	183.3143243	79.17887006	84.06463341	79.0986696	93.95489316	57.90866181	61.44840002	52.42667095
-2.1	-400.0333818	-485.916153	-562.0700943	-351.213043	-372.885192	-350.857401	-416.755798	-290.623423	-308.826096	-157.8341136
+2.1	181.2371765	233.415684	245.5975427	168.7174168	168.7174168	146.9886277	153.2071111	128.8160585	135.5958511	107.6287579
-2.15	-371.1970017	-421.8324555	-452.5931331	-325.895873	-346.005786	-325.565868	-386.713983	-238.349053	-252.91863	-146.4566518
+2.15	283.3558034	401.6224845	322.653312	293.2861136	293.4444351	278.0809616	302.1737489	222.6788148	234.3987524	164.8759768
-2.2	-342.3606215	-377.6791307	-378.7812993	-300.578703	-319.126381	-300.274335	-356.672168	-219.832944	-233.270685	-135.07919
+2.2	457.0225105	571.9413948	485.1267336	439.5337695	450.1883456	422.765469	481.6866702	328.9570408	347.363361	227.2797539

-2.25	-313.5242414	-351.1709982	-372.2177478	-275.261533	-292.246976	-274.982802	-326.630354	-201.316835	-213.622741	-123.7017282
+2.25	606.0568943	740.1060541	660.9652789	569.5792899	587.7733861	554.5291464	639.7441564	436.2417037	459.9091074	292.2706068
-2.3	-284.6878613	-325.7562861	-372.2165037	-249.944363	-265.36757	-249.691269	-296.588539	-182.800726	-193.974796	-112.3242663
+2.3	728.5984146	878.5628886	797.1818187	674.1014905	698.364808	662.6835487	768.6696894	530.3010476	559.7700572	341.6593761
-2.35	-255.8514812	-300.3415739	-372.2152595	-224.627193	-238.488165	-224.399736	-266.546724	-164.284616	-174.326852	-100.9468045
+2.35	826.731903	987.6561979	906.63088	754.9435439	791.7462368	749.451562	868.941517	595.383025	629.0581064	378.1500247
-2.4	-227.0151011	-274.9268618	-372.2140154	-199.310022	-211.60876	-199.108203	-236.504909	-145.768507	-154.678907	-89.5693427
+2.4	892.6207412	1065.404743	982.4961395	819.3978683	858.9646157	812.187059	938.3168892	637.1623229	672.4269045	401.1809549
-2.45	-198.178721	-249.5121496	-372.2127713	-173.992852	-184.729355	-173.81667	-206.463095	-127.252398	-135.030963	-78.19188088
+2.45	927.6067102	1110.477007	1024.722811	857.9252773	898.132971	848.2442907	976.7628955	656.3606184	693.1979256	412.8507877
-2.5	-169.3423409	-224.0974375	-372.2115271	-148.675746	-157.849949	-148.525144	-176.42128	-108.736289	-115.383018	-66.81441906
+2.5	930.7611369	1123.462417	1030.882967	869.4497992	908.2729154	857.0975663	982.849973	647.8750473	684.683042	411.5590719
-2.55	-194.8481638	-249.5117956	-372.210283	-173.992925	-184.729224	-173.816679	-206.462738	-127.252356	-135.030813	-78.19176091
+2.55	893.4049031	1110.487476	1024.722778	857.8768866	898.0901082	848.2239844	976.7584235	656.3307942	693.1660584	412.8458668
-2.6	-223.1999259	-274.926458	-372.2090389	-199.310105	-211.608609	-199.108214	-236.504501	-145.768458	-154.678734	-89.56920586
+2.6	865.4569797	1065.430529	982.4469143	819.4076888	858.9794007	812.1924182	938.3184361	637.1385085	672.4013548	401.6664469
-2.65	-251.551688	-300.3411203	-372.2077947	-224.627284	-238.487995	-224.399749	-266.546264	-164.28456	-174.326656	-100.9466508
+2.65	815.5907363	987.6977769	906.1958977	754.948457	791.7556168	749.4702512	868.9494272	595.3763447	629.0505073	378.1528755
-2.7	-279.9034501	-325.7557827	-372.2065506	-249.944464	-265.367381	-249.691284	-296.588027	-182.800662	-193.974577	-112.3240958
+2.7	731.5631424	878.6212892	797.3272248	674.1562441	698.4228678	662.6868602	768.6850445	530.3303499	559.8003263	341.6660983
-2.75	-308.2552122	-351.170445	-372.2053065	-275.261643	-292.246766	-274.982818	-326.62979	-201.316763	-213.622498	-123.7015407
+2.75	614.1813708	740.1824596	660.9651731	569.6463691	587.8432734	554.5422127	639.768092	436.2769636	459.9456729	292.2815161
-2.8	-336.6069744	-377.6785243	-378.7699208	-300.578823	-319.126152	-300.274353	-356.671553	-219.832865	-233.270419	-135.0789857
+2.8	458.0261331	571.9336528	485.1267396	439.535077	450.1920803	422.7773539	481.7084936	328.9568992	347.3634234	227.2901614
-2.85	-364.9587365	-421.8317976	-452.5931268	-325.896003	-346.005538	-325.565888	-386.713316	-238.348967	-252.918341	-146.4564306
+2.85	283.9567736	401.6366903	320.8597227	293.303074	293.4634059	278.1040584	302.1956077	222.6659761	234.385238	163.9923235
-2.9	-393.3104986	-485.9154452	-562.0700006	-351.213182	-372.884924	-350.857423	-416.755079	-290.624635	-308.827261	-157.8338756
+2.9	181.1455131	233.4542096	245.3403266	168.7470589	168.7470589	146.9917411	153.2185255	128.8352726	135.6160764	107.7900345
-2.95	-485.2789587	-569.0671584	-708.1719781	-376.530362	-399.764309	-376.148958	-446.796842	-442.141082	-468.385067	-169.2113206
+2.95	90.18508015	103.1723884	182.9544133	79.17884865	84.06469846	79.09865949	93.955053	57.90869411	61.44848226	52.31871427
-3	-659.7138561	-795.5999434	-902.4688033	-541.376947	-577.526315	-543.779917	-650.344886	-620.35422	-657.244378	-259.4280423
+3	119.0214704	131.2022241	130.8061345	104.4960107	110.9441	104.3901967	123.9968696	76.4247942	81.09641711	46.96020322
(Span 3) -4	-6.60E+02	-795.5999434	-902.4688033	-5.41E+02	-5.78E+02	-5.44E+02	-6.50E+02	-6.20E+02	-6.57E+02	-2.59E+02
+4	1.19E+02	131.2022241	130.8061345	1.04E+02	1.11E+02	1.04E+02	1.24E+02	7.64E+01	8.11E+01	4.70E+01
-3.05	-619.5390748	-716.0694617	-795.2866029	-514.308101	-548.649999	-516.590921	-617.827641	-489.694511	-519.594292	-246.4566399
+3.05	113.070397	127.4516269	198.6698199	99.27121011	105.3968949	99.17068687	117.7970261	72.6035544	77.04159615	46.86526297
-3.1	-586.9317533	-647.8622562	-704.4008844	-487.239254	-519.773684	-489.401925	-585.310396	-423.578989	-446.250442	-233.4852375
+3.1	160.3821015	207.6339077	273.2496757	142.3613007	142.3613007	113.8605384	112.9557913	107.9913845	113.6751416	95.13823279
-3.15	-554.3244319	-593.4868132	-632.8989811	-460.170407	-490.897368	-462.212929	-552.793152	-400.046823	-421.458751	-220.5138352
+3.15	247.6668637	351.1829044	362.8353422	247.5332733	247.9669075	223.9731844	239.3289028	188.5948366	198.5208807	142.6995952
-3.2	-521.7171104	-555.5579334	-587.957249	-433.10156	-462.021053	-435.023933	-520.275907	-376.514657	-396.667059	-207.5424328
+3.2	390.6798749	501.5362786	515.3081035	372.9039631	381.7910892	346.330413	391.3063705	279.7550433	295.4078098	198.2889734
-3.25	-489.1097889	-520.8355629	-551.2099189	-406.032713	-433.144737	-407.834937	-487.758662	-352.982491	-371.875368	-194.5710305
+3.25	516.7114907	641.0819204	649.7246967	485.2804731	500.920502	457.6932484	529.0103208	361.8818599	382.5656667	251.4235386
-3.3	-456.5024674	-486.1131925	-514.4625889	-378.963867	-404.268422	-380.645941	-455.241417	-329.450324	-347.083676	-181.5996281
+3.3	622.3824554	764.1064	759.453193	582.1820378	602.7404032	559.6529975	649.2738068	433.0856633	458.0320998	295.5093257
-3.35	-423.8951459	-451.3908221	-477.7152588	-351.89502	-375.392106	-353.456945	-422.724173	-305.918158	-322.291985	-168.6282257
+3.35	705.1568975	868.2846901	846.0617327	661.3240844	684.8474017	646.3225093	749.1718466	491.6885308	520.0283871	329.4016088
-3.4	-391.2878244	-416.6684517	-440.9679288	-324.826173	-346.515791	-326.267949	-390.206928	-282.385992	-297.500294	-155.6568234
+3.4	774.7345123	951.4744826	916.7189909	720.6188146	754.1208472	715.0029368	826.0213694	536.1550158	566.9273699	352.062583
-3.45	-358.6805029	-381.9460813	-404.2205987	-297.757326	-317.639475	-299.078953	-357.689683	-258.853826	-272.708602	-142.685421
+3.45	816.9416461	1011.715773	958.2221695	772.0998293	807.7127882	763.5813309	877.4279575	569.536892	603.2394072	362.5608901
-3.5	-326.0731815	-347.2237108	-367.4732687	-270.688479	-288.76316	-271.889958	-325.172438	-235.32166	-247.916911	-129.7140187
+3.5	828.9195632	1047.230488	968.5026733	804.1607974	838.2804488	790.1443298	902.3389567	594.4236404	629.2751308	367.9726425
-3.55	-293.46586	-312.5013404	-330.7259386	-243.619633	-259.886844	-244.700962	-292.655194	-211.789493	-223.12522	-116.7426163
+3.55	808.6365589	1059.651984	972.4712356	819.6723221	853.0633592	805.6236943	919.3550426	606.8169753	642.2636142	379.4582995
-3.6	-260.8585385	-277.77897	-293.9786086	-216.550786	-231.010529	-217.511966	-260.137949	-188.257327	-198.333528	-103.771214

+3.6	**830.5337471**	***1060.047982***	***973.7535855***	**816.1382783**	**852.6986005**	**806.2996618**	**927.201788**	**602.6700451**	**638.2327601**	**387.5952871**
-3.65	**-228.251217**	***-243.0565996***	***-257.2312786***	**-189.481939**	**-202.134213**	**-190.32297**	**-227.620704**	**-164.725161**	**-173.541837**	**-90.79981159**
+3.65	**830.4450287**	***1033.290973***	***947.7345922***	**788.7509387**	**826.4369453**	**783.7058092**	**906.6672976**	**586.6682655**	**620.3518561**	**384.9095756**
-3.7	**-195.6438955**	***-208.3342291***	***-220.4839485***	**-162.413092**	**-173.257898**	**-163.133974**	**-195.103459**	**-141.192995**	**-148.750145**	**-77.82840923**
+3.7	**804.0225749**	***978.075707***	***908.1521422***	**756.8723551**	**784.9568427**	**735.656426**	**856.090284**	**561.8327744**	**594.3552561**	**370.5051095**
-3.75	**-163.036574**	***-173.6118587***	***-183.7366185***	**-135.344246**	**-144.381582**	**-135.944978**	**-162.586215**	**-117.660828**	**-123.958454**	**-64.85700688**
+3.75	**754.3141334**	***893.2794505***	***843.0834457***	**699.6678527**	**727.6286354**	**670.8324918**	**775.0935357**	**518.4676799**	**548.6955105**	**344.026942**
-3.8	**-130.4292525**	***-138.8894883***	***-146.9892884***	**-108.275399**	**-115.505266**	**-108.755982**	**-130.06897**	**-94.1286622**	**-99.1667627**	**-51.88560452**
+3.8	**673.50544**	***777.9618083***	***745.4486853***	**615.9042754**	**642.0855934**	**592.9078172**	**674.5720779**	**455.7068199**	**482.4448731**	**304.2091933**
-3.85	**-97.82193106**	***-104.1671179***	***-110.2419584***	**-81.206552**	**-86.6289509**	**-81.5669862**	**-97.5517252**	**-70.596496**	**-74.3750714**	**-38.91420216**
+3.85	**559.1091439**	***631.36403***	***613.6034096***	**504.5450764**	**527.1544968**	**487.4673402**	**557.1340513**	**374.4601083**	**394.8274021**	**250.3945789**
-3.9	**-65.21460957**	***-69.44474744***	***-73.49462832***	**-54.1377052**	**-57.7526354**	**-54.3779903**	**-65.0344805**	**-47.0643298**	**-49.58338**	**-25.9427998**
+3.9	**410.9556128**	***452.9107348***	***446.1499468***	**364.7502294**	**381.8738716**	**353.5701248**	**405.8047392**	**277.7233012**	**292.340317**	**182.0327907**
-3.95	**-32.60728809**	***-34.72237702***	***-36.74729827***	**-27.0688584**	**-28.8763199**	**-27.1889944**	**-32.5172358**	**-23.5321636**	**-24.7916886**	**-12.97139744**
+3.95	**224.2134113**	***242.2077536***	***241.9250957***	**196.8748659**	**206.3590731**	**191.2256401**	**219.9410168**	**154.5472572**	**162.6813233**	**98.68030246**
-5	**-1.63E-13**	***-1.25E-13***	***-1.86E-13***	**-1.01E-13**	**-1.08E-13**	**-9.12E-14**	**-1.20E-13**	**-9.38E-14**	**-9.88E-14**	**-7.42E-14**
+5	**9.74E-14**	***7.95E-14***	***1.33E-13***	**5.90E-14**	**5.90E-14**	**5.43E-14**	**7.70E-14**	**5.98E-14**	**6.29E-14**	**4.10E-14**

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.17E-14	-8.28E-14	-6.63E-14	-5.29E-14	-6.69E-14	-7.89E-14	-9.42E-14	-9.36E-14	-9.33E-14
End Shear	3.78E-14	3.75E-14	3.95E-14	3.15E-14	4.37E-14	4.11E-14	4.12E-14	4.17E-14	4.28E-14
-0.05	-19.71042734	-20.46262296	-18.37968656	-15.91355689	-16.07051959	-22.00165609	-24.5134826	-27.1755852	-29.5414097
+0.05	140.5404701	139.6433583	118.8184502	101.2953638	115.2966447	154.9498951	168.0730162	169.900426	169.9173406
-0.1	-39.42085467	-40.92524592	-36.75937313	-31.82711378	-32.14103918	-44.00331217	-49.0269652	-54.3511703	-59.0828193
+0.1	259.1044811	251.9360507	215.6428931	184.7118042	212.6790394	286.3159476	309.4581221	311.0625238	311.1097037
-0.15	-59.13128201	-61.38786888	-55.13905969	-47.74067066	-48.21155877	-66.00496826	-73.5404478	-81.5267555	-88.624229
+0.15	356.8817719	340.4782674	293.4337437	252.7734716	292.8988319	394.5529512	424.9135743	448.8836539	448.867784
-0.2	-78.84170934	-81.85049184	-73.51874625	-63.65422755	-64.28207836	-88.00662435	-98.0539304	-108.702341	-118.165639
+0.2	433.5318992	406.8387176	354.3798365	306.8690005	356.3400769	479.6343211	514.4418026	558.7756159	560.5074103
-0.25	-98.55213668	-102.3131148	-91.89843282	-79.56778444	-80.35259795	-110.0082804	-122.567413	-135.877926	-147.707048
+0.25	489.8161789	451.3095164	398.7394948	347.8050342	403.2084003	542.3463237	579.0502164	641.2451552	662.4291915
-0.3	-118.262564	-122.7757378	-110.2781194	-95.48134133	-96.42311754	-132.0099365	-147.080896	-163.053511	-177.248458
+0.3	526.647285	483.5174785	426.5676494	375.3766683	434.2011912	589.162447	640.4908391	696.4513614	734.7548568
-0.35	-137.9729913	-143.2383607	-128.6578059	-111.3948982	-112.4936371	-154.0115926	-171.594378	-190.229096	-206.789868
+0.35	550.6480372	499.3247397	451.024578	397.5241806	450.1364412	627.570673	677.9232001	730.8449932	778.228654
-0.4	-157.6834187	-163.7009837	-147.0374925	-127.3084551	-128.5641567	-176.0132487	-196.107861	-217.404681	-236.331277
+0.4	565.9502911	510.4402331	460.448687	409.8579522	451.9533727	645.2156863	693.0433003	755.938467	793.8713539
-0.45	-177.393846	-184.1636066	-165.4171791	-143.222012	-144.6346763	-198.0149048	-220.621343	-244.580266	-265.872687
+0.45	563.5855197	508.4263452	455.0411018	409.8760777	440.7119161	643.7545863	687.0390932	756.172409	799.305155
-0.5	-197.1042734	-204.6262296	-183.7968656	-159.1355689	-160.7051959	-220.0165609	-245.134826	-271.755852	-295.414097
+0.5	549.559142	502.3099425	440.973735	398.4742986	433.1647178	631.1411256	668.1376763	734.9961157	782.9839735
-0.55	-216.8147007	-225.0888526	-202.1765522	-175.0491258	-176.7757155	-242.018217	-269.648309	-298.931437	-324.955506
+0.55	534.4816206	485.2963275	433.7644558	391.9001916	429.8766792	610.9540934	653.4181955	711.7667573	744.5885197
-0.6	-236.525128	-245.5514755	-220.5562388	-190.9626827	-192.8462351	-264.019873	-294.161791	-326.107022	-354.496916
+0.6	502.5112688	456.4322704	411.1456872	373.8242683	412.1071098	572.6663779	617.1734929	665.5254333	705.2444741
-0.65	-256.2355554	-266.0140985	-238.9359253	-206.8762395	-208.9167547	-286.0215291	-318.675274	-353.282607	-384.038326
+0.65	459.7033754	416.8365429	374.2773355	346.7681519	380.5807551	517.8274258	561.0777902	604.4503924	641.5618424
-0.7	-275.9459827	-286.4767214	-257.3156119	-222.7897964	-224.9872743	-308.0231852	-343.188756	-380.458192	-413.579735
+0.7	407.1125323	375.9058757	330.3509903	308.7385302	336.2411735	448.1499028	486.992993	529.9107039	555.1994542
-0.75	-295.65641	-306.9393444	-275.6952984	-238.7033533	-241.0577938	-330.0248413	-367.702239	-407.633777	-443.121145
+0.75	339.8638353	320.0120962	275.6589854	266.7141605	280.3029943	371.2860142	396.9685048	435.544448	448.5401141
-0.8	-315.3668374	-327.4019674	-294.074985	-254.6169102	-257.1283134	-352.0264974	-392.215722	-434.809362	-472.662555
+0.8	259.5996396	251.3907131	208.7683535	213.5087981	214.1013692	281.3351017	295.4743484	323.6798161	323.8738279
-0.85	-335.0772647	-347.8645903	-312.4546716	-273.7598681	-273.198833	-374.0281535	-416.729204	-461.984948	-502.203964
+0.85	173.8470396	174.3254772	138.8507563	155.8886504	139.0926294	182.8382817	188.3144622	202.1916136	202.7317332
-0.9	-354.787692	-368.3272133	-330.8343581	-317.3794561	-289.2693526	-396.0298096	-441.242687	-489.160533	-531.745374
+0.9	100.1724557	100.0195185	79.57561994	109.0543289	89.66624184	96.76524873	96.73487147	96.80095514	97.91941365
-0.95	-374.4981194	-412.428663	-409.5360806	-373.2274175	-305.3398722	-418.0314656	-465.756169	-516.336118	-561.286784
+0.95	70.25635726	62.10792163	58.79113796	75.78215778	57.87403683	79.79880392	87.51668678	96.44575737	103.3593811
-1	-394.2085407	-529.8827212	-518.6356345	-457.7843993	-321.4103878	-440.0331178	-490.269638	-543.511705	-590.828185
+1	73.95405944	65.37675977	61.88540866	53.23058549	60.92003689	83.99873982	92.12282828	101.5218506	108.7993476
(Span 2) -2	-394.2085407	-529.8827212	-518.6356345	-457.7843993	-321.4103878	-440.0331178	-490.269638	-543.511705	-590.828185
+2	73.95405944	65.37675977	61.88540866	53.23058549	60.92003689	83.99873982	92.12282828	101.5218506	108.7993476
-2.05	-266.4791051	-381.8138133	-366.4382469	-340.0386689	-219.5127135	-302.6727786	-331.946494	-365.813507	-392.037196
+2.05	56.03655771	49.53735615	46.89188518	66.44339535	50.71865067	63.64762472	69.80341871	76.92525722	82.43957122
-2.1	-248.5615612	-244.0127386	-258.422287	-255.5763017	-204.7531003	-282.3216414	-309.627048	-341.216908	-365.677366
+2.1	118.873453	119.3243489	102.4441021	98.14043893	103.170192	121.4351004	121.4145554	121.6767386	121.6508359
-2.15	-230.6440173	-203.8932114	-196.0252522	-189.3374701	-189.9934871	-261.9705043	-287.307602	-316.620309	-339.317537
+2.15	206.1736061	206.2709021	168.8198589	146.3887023	160.4474501	223.5738318	232.9448978	249.830835	249.8134291
-2.2	-212.7264733	-188.0537997	-178.0107379	-153.1883553	-175.2338739	-241.6193671	-264.988157	-292.023711	-312.957707
+2.2	304.0029493	290.7119478	244.1898984	203.6195265	250.9688422	336.99967	361.6116403	388.7244457	403.5330266

-2.25	**-194.8089294**	**-172.214388**	**-163.0172336**	**-150.339959**	**-160.4742607**	**-221.2682299**	**-242.668711**	**-267.427112**	**-286.597878**
+2.25	**399.1770664**	**388.6390734**	**328.9093288**	**277.9229663**	**329.2352884**	**443.850733**	**481.508202**	**520.8669971**	**550.2603561**
-2.3	**-176.8913855**	**-156.3749763**	**-148.0237293**	**-149.2045949**	**-145.7146475**	**-200.9170928**	**-220.349266**	**-242.830513**	**-260.238049**
+2.3	**474.1127316**	**460.200312**	**396.9468503**	**337.5228054**	**389.3351649**	**531.236032**	**578.6083635**	**625.9318527**	**668.8832126**
-2.35	**-158.9738416**	**-140.5355646**	**-133.030225**	**-148.2300081**	**-130.9550343**	**-180.5659556**	**-198.02982**	**-218.233914**	**-233.878219**
+2.35	**533.6343921**	**517.8320901**	**445.4864825**	**380.6119627**	**434.0689459**	**602.0177248**	**654.0262271**	**710.4115904**	**759.8621836**
-2.4	**-141.0562977**	**-124.6961529**	**-118.0367207**	**-147.420835**	**-116.1954211**	**-160.2148184**	**-175.710374**	**-193.637316**	**-207.51839**
+2.4	**577.8644033**	**552.1672631**	**475.546971**	**408.2134787**	**462.6076947**	**652.3191067**	**707.2815817**	**773.4224052**	**821.3438851**
-2.45	**-123.1387538**	**-108.8567412**	**-103.0432164**	**-146.7878274**	**-101.4358079**	**-139.8636813**	**-153.390929**	**-169.040717**	**-181.158561**
+2.45	**602.1843737**	**563.3929323**	**493.4394412**	**424.8080318**	**476.4447031**	**680.8592634**	**735.7453536**	**809.1790879**	**860.2545027**
-2.5	**-105.2212098**	**-93.01732949**	**-88.04982617**	**-146.2986399**	**-86.67630202**	**-119.5125441**	**-131.071483**	**-144.444118**	**-154.798731**
+2.5	**606.370906**	**552.552892**	**494.0396353**	**426.4363416**	**475.4769726**	**687.2567589**	**739.2322663**	**817.170654**	**873.8052313**
-2.55	**-123.1384597**	**-108.85668**	**-103.0433497**	**-146.7879119**	**-101.4359359**	**-139.8635263**	**-153.390677**	**-169.040676**	**-181.158193**
+2.55	**602.1535993**	**563.3701245**	**493.4222347**	**424.8137394**	**476.4391827**	**680.8384828**	**735.732706**	**809.1562721**	**860.2236455**
-2.6	**-141.0559614**	**-124.6960837**	**-118.0368731**	**-147.4208264**	**-116.1955698**	**-160.2146414**	**-175.710087**	**-193.637269**	**-207.517969**
+2.6	**577.8407657**	**552.1502789**	**475.5377127**	**408.2176456**	**462.585021**	**652.3203584**	**707.2745162**	**773.4192906**	**821.3372327**
-2.65	**-158.9734631**	**-140.5354873**	**-133.0303966**	**-148.2303618**	**-130.9552037**	**-180.5657565**	**-198.029496**	**-218.233863**	**-233.877746**
+2.65	**533.6393635**	**517.8208268**	**445.4812811**	**380.6163119**	**434.0852886**	**602.0305024**	**654.0448742**	**710.418355**	**759.8785793**
-2.7	**-176.8909649**	**-156.3748909**	**-148.0239201**	**-149.204864**	**-145.7148376**	**-200.9168716**	**-220.348906**	**-242.830456**	**-260.237522**
+2.7	**474.1512939**	**460.1970698**	**396.9476068**	**337.5232176**	**389.362809**	**531.2358111**	**578.6137324**	**625.9649183**	**668.9049435**
-2.75	**-194.8084666**	**-172.2142945**	**-163.0174436**	**-150.3401721**	**-160.4744715**	**-221.2679867**	**-242.668315**	**-267.427049**	**-286.597299**
+2.75	**399.2235449**	**388.6317059**	**328.8785328**	**277.92515**	**329.27483**	**443.8588461**	**481.5210985**	**520.9062367**	**550.2883378**
-2.8	**-212.7259683**	**-188.0536981**	**-178.0109671**	**-153.1884745**	**-175.2341054**	**-241.6191018**	**-264.987725**	**-292.023643**	**-312.957075**
+2.8	**304.0035609**	**290.7100151**	**244.1846855**	**203.6200683**	**251.0063884**	**337.0067638**	**361.6228985**	**388.7215996**	**403.5587012**
-2.85	**-230.6434701**	**-203.8931017**	**-196.0257731**	**-189.3377199**	**-189.9937393**	**-261.9702169**	**-287.307134**	**-316.620236**	**-339.316851**
+2.85	**206.1811082**	**206.2590094**	**168.8107173**	**146.383967**	**160.4420538**	**223.5687526**	**232.9532338**	**249.8358828**	**249.818379**
-2.9	**-248.5609718**	**-244.0134493**	**-258.421938**	**-255.5764985**	**-204.7533732**	**-282.321332**	**-309.626544**	**-341.216829**	**-365.676628**
+2.9	**118.8938016**	**119.3421473**	**102.4355103**	**98.14666457**	**103.172663**	**121.4433379**	**121.4221211**	**121.6845699**	**121.6584774**
-2.95	**-266.4784736**	**-381.813679**	**-366.438386**	**-340.039033**	**-219.513007**	**-302.6724471**	**-331.945953**	**-365.813423**	**-392.036404**
+2.95	**56.03668539**	**49.53737588**	**46.89182674**	**66.43321627**	**50.68149621**	**63.64769041**	**69.80352776**	**76.92527027**	**82.43973308**
-3	**-394.2091885**	**-529.8822388**	**-518.6352245**	**-457.7841867**	**-321.4112691**	**-440.033496**	**-490.270206**	**-543.511833**	**-590.828982**
+3	**73.95423353**	**65.37679316**	**61.88532953**	**53.23054433**	**60.91995149**	**83.99883089**	**92.12297717**	**101.5218728**	**108.7995662**
(Span 3) -4	**-3.94E+02**	**-5.30E+02**	**-5.19E+02**	**-4.58E+02**	**-3.21E+02**	**-4.40E+02**	**-4.90E+02**	**-5.44E+02**	**-5.91E+02**
+4	**7.40E+01**	**6.54E+01**	**6.19E+01**	**5.32E+01**	**6.09E+01**	**8.40E+01**	**9.21E+01**	**1.02E+02**	**1.09E+02**
-3.05	**-374.4987288**	**-412.4287125**	**-409.5361285**	**-373.2274937**	**-305.3407054**	**-418.031821**	**-465.756695**	**-516.336241**	**-561.287533**
+3.05	**70.25652181**	**62.10795351**	**58.79106306**	**75.77312363**	**57.87395382**	**79.79888929**	**87.51682832**	**96.44577918**	**103.3595879**
-3.1	**-354.7882691**	**-368.3265199**	**-330.8342253**	**-317.3795276**	**-289.2701418**	**-396.030146**	**-441.243184**	**-489.16065**	**-531.746083**
+3.1	**100.1891978**	**100.0341246**	**79.58643546**	**109.0602967**	**89.70924988**	**96.78145761**	**96.75078022**	**96.77812175**	**97.91960951**
-3.15	***-335.0778094***	***-347.8639351***	***-312.4545462***	***-273.7597702***	***-273.1995781***	***-374.028471***	***-416.729673***	***-461.985058***	***-502.204634***
+3.15	**173.8654418**	**174.3415281**	**138.8626399**	**155.8946808**	**139.0605009**	**182.8510729**	**188.3237242**	**202.212734**	**202.7524408**
-3.2	**-315.3673496**	**-327.4013503**	**-294.0748671**	**-254.6168483**	**-257.1290145**	**-352.026796**	**-392.216162**	**-434.809467**	**-472.663184**
+3.2	**259.6152554**	**251.4046452**	**208.7779504**	**213.5130767**	**214.0681697**	**281.3450436**	**295.4814241**	**323.6995389**	**323.8549079**
-3.25	**-295.6568899**	**-306.9387655**	**-275.695188**	**-238.7032953**	**-241.0584508**	**-330.025121**	**-367.702651**	**-407.633875**	**-443.121735**
+3.25	**339.8770593**	**320.0207182**	**275.666488**	**266.71695**	**280.2678818**	**371.2935684**	**396.9615987**	**435.5614076**	**448.518835**
-3.3	**-275.9464302**	***-286.4761807***	**-257.3155089**	***-222.7897423***	**-224.9878871**	**-308.023446**	**-343.18914**	**-380.458284**	**-413.580285**
+3.3	**407.1222515**	**375.914844**	**330.3556322**	**308.7393564**	**336.2033314**	**448.1452302**	**486.9831304**	**529.9232514**	**555.1740283**
-3.35	**-256.2359705**	**-266.0135959**	**-238.9358298**	**-206.8761893**	**-208.9173235**	**-286.021771**	**-318.675629**	**-353.282692**	**-384.038835**
+3.35	**459.7086178**	**416.8411735**	**374.2742366**	**346.7654109**	**380.5390348**	**517.8193761**	**561.0635306**	**604.4573274**	**641.5797203**
-3.4	**-236.5255107**	**-245.5510111**	**-220.5561507**	**-190.9626363**	**-192.8467598**	**-264.020096**	**-294.162118**	**-326.1071**	**-354.497386**
+3.4	**502.5057802**	**456.4434188**	**411.1391792**	**373.8379437**	**412.0610138**	**572.6538726**	**617.1536775**	**665.5181746**	**705.2556305**
-3.45	**-216.815051**	**-225.0884263**	**-202.1764716**	**-175.0490833**	**-176.7761962**	**-242.018421**	**-269.648607**	**-298.931509**	**-324.955936**
+3.45	**534.4709147**	**485.3044528**	**433.7538818**	**391.9132691**	**429.8972444**	**610.9360717**	**653.3917843**	**711.7529619**	**744.5846059**
-3.5	**-197.1045913**	**-204.6258415**	**-183.7967925**	**-159.1355303**	**-160.7056325**	**-220.016746**	**-245.135096**	**-271.755917**	**-295.414487**
+3.5	**549.5423637**	**502.3144477**	**440.9586714**	**398.4643498**	**433.1795744**	**631.1166376**	**668.1036778**	**734.9745227**	**783.0015135**
-3.55	**-177.3941315**	**-184.1632567**	**-165.4171134**	**-143.2219774**	**-144.6350689**	**-198.015071**	**-220.621585**	**-244.580326**	**-265.873037**
+3.55	**563.6019639**	***508.42445765 4554***	***455.0548388***	**409.864083**	**440.6966838**	***643.7268093***	**687.0205259**	**756.1932707**	**799.3147263**

-3.6	**-157.6836718**	**-163.7006719**	**-147.0374343**	**-127.3084244**	**-128.5645052**	**-176.0133961**	**-196.108074**	**-217.404734**	**-236.331588**
+3.6	**565.9608183**	**510.4343419**	**460.4585604**	**409.8440112**	**451.9339275**	**645.2348386**	**693.017812**	**755.9514353**	**793.8667116**
-3.65	**-137.9732121**	**-143.2380872**	**-128.6577552**	**-111.3948714**	**-112.4939415**	**-154.0117211**	**-171.594563**	**-190.229143**	**-206.790138**
+3.65	**550.6520134**	**499.3222744**	**451.0300606**	**397.5078127**	**450.1120818**	**627.5824407**	**677.9421734**	**730.8490137**	**778.2150517**
-3.7	**-118.2627524**	**-122.7755024**	**-110.2780761**	**-95.48131841**	**-96.42337789**	**-132.0100461**	**-147.081052**	**-163.053551**	**-177.248689**
+3.7	**526.6415966**	**483.5099424**	***426.5663584***	**375.3756298**	**434.1711424**	**589.1660603**	**640.5011822**	**696.4426376**	**734.7313971**
-3.75	**-98.55229263**	**-102.3129176**	**-91.89839705**	**-79.56776543**	**-80.35281424**	**-110.0083711**	**-122.567541**	**-135.877959**	**-147.707239**
+3.75	**489.8033367**	**451.3018238**	**398.7332919**	**347.8013353**	**403.1723288**	**542.3395045**	**579.048997**	**641.226791**	**662.4446728**
-3.8	**-78.8418329**	**-81.85033278**	**-73.51871795**	**-63.65421244**	**-64.28225058**	**-88.00669608**	**-98.0540301**	**-108.702368**	**-118.165789**
+3.8	**433.5112133**	**406.8242603**	**354.3683003**	**306.8631235**	**356.2974357**	**479.618894**	**514.4312979**	**558.7469599**	**560.1070361**
-3.85	**-59.13137317**	**-61.38774799**	**-55.13903886**	**-47.74065946**	**-48.21168692**	**-66.00502108**	**-73.5405191**	**-81.5267763**	**-88.6243399**
+3.85	**356.8527975**	**340.4725459**	**293.452436**	**252.764536**	**292.8490563**	**394.5283564**	**424.893172**	**448.8950826**	**448.8789767**
-3.9	**-39.42091345**	**-40.9251632**	**-36.75935976**	**-31.82710648**	**-32.14112327**	**-44.00334609**	**-49.0270081**	**-54.3511847**	**-59.0828904**
+3.9	**259.0668945**	**251.9543564**	**215.6573328**	**184.700748**	**212.6942681**	**286.2818829**	**309.427327**	**311.0617198**	**311.0628952**
-3.95	**-19.71045372**	**-20.46257841**	**-18.37968066**	**-15.91355349**	**-16.07055961**	**-22.00167109**	**-24.5134971**	**-27.1755931**	**-29.5414409**
+3.95	**140.5496702**	**139.6403962**	**118.8075952**	**101.2805185**	**115.3043527**	**154.9600095**	**168.0841228**	**169.8882002**	**169.9053985**
-5	**-7.35E-14**	**-8.02E-14**	**-7.38E-14**	**-6.08E-14**	**-7.50E-14**	**-8.00E-14**	**-6.86E-14**	**-6.94E-14**	**-7.88E-14**
+5	**4.28E-14**	**5.38E-14**	**4.38E-14**	**3.93E-14**	**4.91E-14**	**4.34E-14**	**4.03E-14**	**4.14E-14**	**4.12E-14**

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.70E-14	-1.05E-13	-1.01E-13	-1.09E-13	-9.15E-14
End Shear	6.78E-14	6.81E-14	4.22E-14	5.82E-14	5.83E-14
-0.05	-33.8622185	-36.6659153	-22.3869455	-28.4647145	-28.6321771
+0.05	201.3412663	211.5918123	153.7910285	185.8218986	182.9020268
-0.1	-67.724437	-73.33183059	-44.7738909	-56.929429	-57.2643542
+0.1	362.0889746	380.7307047	285.8709709	333.4553956	338.873682
-0.15	-101.5866555	-109.9977459	-67.1608364	-85.3941435	-85.8965313
+0.15	490.5725191	509.4130581	396.0292963	449.3068811	467.0865257
-0.2	-135.448874	-146.6636612	-89.5477819	-113.858858	-114.528708
+0.2	589.7325608	608.6798001	484.3652079	540.7106547	568.1056797
-0.25	-169.3110925	-183.3295765	-111.934727	-142.323572	-143.160885
+0.25	682.9146495	706.3666264	551.4717218	612.2472709	642.8152496
-0.3	-203.173311	-219.9954918	-134.321673	-170.788287	-171.793063
+0.3	743.3267831	770.2244048	598.0913172	672.9993918	713.4527444
-0.35	-237.0355295	-256.6614071	-156.708618	-199.253001	-200.42524
+0.35	773.0185902	809.0226333	625.1156249	708.3395709	760.01652
-0.4	-270.897748	-293.3273224	-179.095564	-227.717716	-229.057417
+0.4	775.9714657	841.2584531	641.9715498	734.9597537	782.8223162
-0.45	-304.7599665	-329.9932377	-201.482509	-256.18243	-257.689594
+0.45	787.8389877	847.270605	647.1499476	740.8626266	782.3733358
-0.5	-338.622185	-366.659153	-223.869455	-284.647145	-286.321771
+0.5	780.286129	840.3862599	634.4573668	727.1204538	767.7366151
-0.55	-372.4844035	-403.3250683	-246.2564	-313.111859	-314.953948
+0.55	743.3861236	804.2417809	606.5980208	694.9036587	740.4408886
-0.6	-406.346622	-439.9909836	-268.643346	-341.576574	-343.586125
+0.6	691.0866707	748.6953651	571.3661681	645.7451784	692.3732212
-0.65	-440.2088405	-476.6568989	-291.030291	-370.041288	-372.218302
+0.65	643.7956757	673.0598496	523.4226994	581.3407631	625.8526858
-0.7	-474.071059	-513.3228141	-313.417237	-398.506003	-400.850479
+0.7	569.0490888	579.5883465	460.782597	515.7345105	542.3392286
-0.75	-507.9332775	-549.9887294	-335.804182	-426.970717	-429.482656
+0.75	467.1025547	464.8159549	385.0739515	429.3991065	443.9476685
-0.8	-541.795496	-586.6546447	-358.191128	-455.435432	-458.114834
+0.8	340.7825628	325.5112844	298.0742412	326.5870514	333.0781881
-0.85	-575.6577145	-623.32056	-380.578073	-483.900146	-486.747011
+0.85	208.0541399	193.7562834	201.7101661	215.4513224	212.321028
-0.9	-611.2997993	-691.0268825	-419.705602	-512.364861	-520.260173
+0.9	103.4261321	111.9828209	114.7471039	122.3969109	101.8269506
-0.95	-783.0046429	-857.1315465	-546.758849	-612.884777	-687.644294
+0.95	109.1720284	118.2040887	77.1007473	87.09938521	95.84431401
-1	-969.2117792	-1036.27376	-678.554425	-784.970591	-861.510473
+1	114.9179246	124.4253594	81.15867833	91.68356175	100.8887512
(Span 2) -2	-969.2117792	-1036.27376	-678.554425	-784.970591	-861.510473
+2	114.9179246	124.4253594	81.15867833	91.68356175	100.8887512
-2.05	-667.5852716	-694.5458631	-499.571193	-577.031827	-630.691032
+2.05	87.07574634	94.27973162	61.49564927	69.4705763	76.44554442
-2.1	-455.0425403	-501.384344	-347.821006	-378.717495	-430.219968
+2.1	136.6307618	133.0742033	136.7780561	145.52031	137.8256166
-2.15	-358.3989144	-388.0503669	-253.112496	-288.85479	-314.645669
+2.15	267.4555323	252.950833	238.5736631	268.4480755	269.1945746
-2.2	-330.5567514	-357.904736	-233.449491	-263.724239	-290.20247
+2.2	411.9407071	398.5651939	350.7141801	394.903778	411.1050483

-2.25	-302.7145884	-327.759105	-213.786486	-241.51125	-265.759271
+2.25	574.6720708	578.6964107	452.8187477	538.8970627	538.0731149
-2.3	-274.8724255	-297.6134741	-194.123482	-219.298261	-241.316072
+2.3	696.3605964	723.5034041	541.8849243	647.2166912	651.9799195
-2.35	-247.0302625	-267.4678431	-174.460477	-197.085271	-216.872873
+2.35	781.0330327	839.3566	602.153668	721.9543689	735.2708995
-2.4	-219.1880996	-237.3222122	-154.797472	-174.872282	-192.429674
+2.4	836.3494241	919.4555913	644.5478633	763.1929029	791.8479033
-2.45	-191.3459366	-207.1765813	-135.134467	-152.659292	-167.986475
+2.45	877.170114	970.7902269	672.7784999	780.7433431	822.87911
-2.5	-163.5038582	-177.0309503	-115.471612	-130.446303	-143.543317
+2.5	893.3252667	992.2167763	683.6248266	777.3121791	829.0877511
-2.55	-191.3460365	-207.1765465	-135.134641	-152.659278	-167.986524
+2.55	877.1572844	970.7880928	672.7862405	780.7351269	822.8614095
-2.6	-219.1882148	-237.3221743	-154.79767	-174.872264	-192.42973
+2.6	836.3402184	919.4534753	644.537286	763.1790798	791.8411207
-2.65	-247.0303931	-267.4678021	-174.460699	-197.085249	-216.872937
+2.65	781.0211337	839.353508	602.1439014	721.9348592	735.268592
-2.7	-274.8725713	-297.6134299	-194.123728	-219.298235	-241.316144
+2.7	696.342439	723.4998018	541.8705575	647.1914431	651.9853209
-2.75	-302.7147496	-327.7590578	-213.786758	-241.51122	-265.759351
+2.75	574.6492264	578.6998522	452.8533024	538.8666358	538.0899011
-2.8	-330.5569279	-357.9046856	-233.449787	-263.724206	-290.202557
+2.8	411.9206334	398.5679212	350.7141246	394.8777265	411.1176713
-2.85	-358.3991062	-388.0503134	-253.112816	-288.855673	-314.645764
+2.85	267.4649265	252.9521418	238.5843991	268.4446994	269.2078087
-2.9	-455.0426952	-501.3841784	-347.820724	-378.717305	-430.219721
+2.9	136.6241302	133.0729775	136.7665197	145.5416126	137.8386274
-2.95	-667.58589	-694.5460289	-499.570687	-577.031941	-630.690767
+2.95	87.07569301	94.27972817	61.49558032	69.47060224	76.44551501
-3	-969.2162757	-1036.273462	-678.554528	-784.970254	-861.510156
+3	114.9178614	124.4253723	81.15857806	91.68357821	100.888719
(Span 3) -4	-9.69E+02	-1.04E+03	-6.79E+02	-7.85E+02	-8.62E+02
+4	1.15E+02	1.24E+02	8.12E+01	9.17E+01	1.01E+02
-3.05	-783.0056867	-857.131723	-546.759562	-612.885284	-687.644862
+3.05	109.1719683	118.2041039	77.10064901	87.09939922	95.84428303
-3.1	-611.2997328	-691.0270406	-419.70506	-512.363348	-520.262303
+3.1	103.4260752	111.9828354	114.7099923	122.3573251	101.8412773
-3.15	*-575.6577528*	*-623.3205368*	*-380.578661*	*-483.898717*	*-486.746633*
+3.15	209.1534417	193.7502669	201.7259818	215.4678742	212.3127756
-3.2	-541.7955327	-586.6546222	-358.19168	-455.434086	-458.114479
+3.2	340.7721706	325.5095951	298.0899875	326.5784746	333.07076
-3.25	-507.9333125	-549.9887076	-335.8047	-426.969454	-429.482324
+3.25	467.0879308	464.8132681	385.0886316	429.3893267	443.9396928
-3.3	-474.0710924	-513.322793	-313.417719	-398.504823	-400.850169
+3.3	569.0285155	579.591209	460.7950692	515.7201147	542.3293484
-3.35	-440.2088722	-476.6568784	-291.030739	-370.040192	-372.218015
+3.35	643.8140258	673.0636414	523.432063	581.333208	625.8396073
-3.4	-406.3466521	-439.9909637	-268.643759	-341.575561	-343.58586
+3.4	691.1095607	748.6976639	571.3716341	645.7345684	692.4027731
-3.45	-372.4844319	-403.3250491	-246.256778	-313.11093	-314.953706
+3.45	743.372449	804.2386103	606.5944349	694.8889576	740.4653658
-3.5	-338.6222118	-366.6591345	-223.869798	-284.646298	-286.321551
+3.5	780.2651917	840.383383	634.4727296	727.1007186	767.7550876
-3.55	-304.7599916	-329.9932199	-201.482817	-256.181667	-257.689396
+3.55	787.8553573	847.2660731	647.1602875	740.837068	782.3570319
-3.6	-270.8977714	-293.3273053	-179.095837	-227.717036	-229.057242

+3.6	**775.9540461**	**841.2606665**	**641.9760977**	**734.9763633**	**782.7992476**
-3.65	**-237.0355513**	**-256.6613907**	**-156.708856**	**-199.252405**	**-200.425087**
+3.65	**773.003585**	**809.0184583**	**625.1117805**	**708.3493182**	**759.9859869**
-3.7	**-203.1733311**	**-219.9954761**	**-134.321876**	**-170.787773**	**-171.792932**
+3.7	**743.349778**	**770.2195358**	**598.0812729**	**673.0120042**	**713.4616826**
-3.75	**-169.311111**	**-183.3295615**	**-111.934896**	**-142.323142**	**-143.160778**
+3.75	**682.927968**	**706.3695291**	**551.454921**	**612.251213**	**642.8139692**
-3.8	**-135.4488908**	**-146.6636469**	**-89.5479151**	**-113.858511**	**-114.528623**
+3.8	**589.7352209**	**608.6807652**	**484.3412132**	**540.7031269**	**568.0959766**
-3.85	**-101.5866707**	**-109.9977323**	**-67.1609347**	**-85.3938797**	**-85.8964686**
+3.85	**490.5618757**	**509.4107536**	**395.9980466**	**449.2946616**	**467.0678217**
-3.9	**-67.72445051**	**-73.3318177**	**-44.7739542**	**-56.9292485**	**-57.264314**
+3.9	**362.1134151**	**380.7265275**	**285.8319115**	**333.4805179**	**338.8455874**
-3.95	**-33.86223036**	**-36.66590309**	**-22.3869738**	**-28.4646173**	**-28.6321593**
+3.95	**201.3088728**	**211.5854926**	**153.7990502**	**185.7859703**	**182.9118428**
-5	**-1.29E-13**	**-1.18E-13**	**-1.15E-13**	**-1.17E-13**	**-1.17E-13**
+5	**7.95E-14**	**7.28E-14**	**5.98E-14**	**6.58E-14**	**6.71E-14**

3-Span: Shear (Max and Min) Raw Data Results - 40' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.004622649	-5.110300061	-5.305320964	-4.765280416	-4.308051707	-4.166585323	-5.704344331	-6.355582731	-7.045783032	-7.65916766
End Shear	52.36450815	39.61487082	39.64136203	34.04103904	29.76200544	32.47502828	43.64423025	47.48545337	48.19245993	48.33052927
-0.05	-7.004622649	-5.110300061	-5.305320964	-4.765280416	-4.656168477	-4.166585323	-5.704344331	-6.355582731	-7.045783032	-7.65916766
+0.05	48.17865931	36.61833778	36.20517457	30.80118002	26.84379637	29.89282984	40.17368294	43.79894055	44.15683447	44.15257487
-0.1	-7.004622649	-5.110300061	-5.305320964	-4.765280416	-5.400196428	-4.166585323	-5.704344331	-6.355582731	-7.045783032	-7.65916766
+0.1	43.14994533	33.03017767	31.84064151	27.255985	23.61167149	27.13806111	36.45169205	39.37422596	39.31297264	39.30844748
-0.15	-7.004622649	-5.110300061	-5.305320964	-5.093813485	-6.27222168	-4.166585323	-5.704344331	-6.355582731	-7.045783032	-7.65916766
+0.15	40.18928557	30.90809484	29.42235684	25.35941091	21.95710399	25.42019983	34.13118215	36.76169824	36.64926658	36.64553254
-0.2	-8.527705591	-6.352278008	-6.676577294	-6.723127468	-7.788919729	-5.295646299	-6.135544344	-6.355582731	-7.045783032	-7.65916766
+0.2	35.36826301	27.43591721	25.5324018	22.37343401	19.33565216	22.60525752	30.32957242	32.49446501	32.40877329	32.40481963
-0.25	-10.00433952	-7.933090979	-8.360638266	-8.224376314	-8.728810486	-6.27731057	-8.017381421	-8.018405202	-8.003510452	-7.989347146
+0.25	32.55341882	25.39812432	23.31157503	20.62702387	17.84845141	20.950578	28.09543028	29.99466388	29.92403412	29.91996749
-0.3	-13.14540793	-10.54652489	-11.11679626	-10.90082592	-10.48162371	-7.894732203	-11.14496581	-11.14624837	-11.13174339	-11.19463009
+0.3	28.06379006	22.09093018	20.19668247	17.80333754	15.44345588	18.26053486	24.46423347	25.94568836	25.89838083	25.89416833
-0.35	-15.0829691	-12.09708871	-12.73635767	-12.42097965	-11.58503131	-8.851010554	-13.00418239	-13.35763569	-13.34061973	-13.32444313
+0.35	25.59121513	20.16682982	18.43231595	16.16726688	14.06169456	16.69255198	22.34821835	23.59507381	23.56063961	23.55635787
-0.4	-18.11893637	-14.64285736	-15.7150256	-14.81300975	-13.36117561	-11.47376224	-16.06283673	-17.01987252	-17.00340498	-16.98774495
+0.4	21.50600274	17.07362835	16.00700163	13.54907536	11.85204057	14.16659816	18.94035585	19.82513678	19.81014056	19.805792
-0.45	-19.83312889	-16.1424725	-17.49986801	-16.16393422	-14.38497187	-13.20620545	-17.86834641	-19.1870927	-19.17099075	-19.15567875
+0.45	19.20711806	15.29262153	14.59167531	12.04926284	10.5841152	12.70882519	16.97421513	17.509422	17.61551673	17.65391544
-0.5	-24.41203827	-19.00362332	-20.67736032	-18.27628427	-16.02461401	-16.05141047	-21.51823457	-22.73564827	-22.72021259	-22.70553473
+0.5	15.55317548	12.3264575	12.30859065	9.793838282	8.686796765	10.38615077	13.74408379	14.44175928	14.4376276	14.5456332
-0.55	-27.11345464	-21.10096036	-22.53999445	-19.46082772	-17.44312237	-17.72782846	-23.78837607	-24.81995511	-24.8049538	-24.79068935
+0.55	13.47600516	10.99836707	10.98896663	8.743844625	7.765421409	9.062105756	11.93182368	12.68604546	12.6819227	12.78589439
-0.6	-31.52224357	-24.52374848	-25.43752091	-21.29824911	-19.86364438	-20.46006778	-27.48945368	-28.90307741	-28.85609927	-28.83905489
+0.6	10.24984416	8.89237053	8.882657005	7.067897562	6.339617628	6.882940129	9.498008354	9.908040654	9.903980906	10.00069602
-0.65	-34.10274214	-26.52702006	-27.05184365	-22.58166769	-21.28013366	-22.05694732	-29.65333295	-31.41814311	-31.34907324	-31.33253957
+0.65	8.445771217	7.68928008	7.679460603	6.110534616	5.573687328	5.78776735	8.113693753	8.336889842	8.332896771	8.424939788
-0.7	-38.40878487	-29.76853037	-29.53524886	-24.58856556	-23.58074934	-24.63702667	-33.15084961	-35.49615684	-35.39037971	-35.37475656
+0.7	6.611915588	5.794318115	5.784470257	4.602732262	4.362075513	4.532317066	5.944274481	5.951664992	6.015109439	6.022946229
-0.75	-41.04288439	-31.64833654	-30.90094225	-26.0439273	-24.96914737	-26.1308535	-35.1767136	-37.86635025	-37.85469508	-37.83642875
+0.75	5.571651936	4.728196372	4.71842772	3.754502132	3.677423492	3.820094659	4.730949152	4.73782489	4.797626783	4.731346576
-0.8	-45.52656736	-34.65956311	-32.96970577	-28.75686335	-27.21609049	-28.51958298	-38.41774338	-41.67252156	-42.30924767	-42.2920595
+0.8	3.946539879	3.078767303	3.069297129	2.442329652	2.613344451	2.707307505	2.974290404	2.972409623	2.929788531	2.927250279
-0.85	-48.1139074	-36.38649755	-34.94256434	-30.44103403	-28.51437558	-29.88684237	-40.27383898	-43.86137855	-44.88857425	-44.98670947
+0.85	3.041025162	2.15582148	2.161134042	1.719732334	2.024337923	2.087148148	2.054529791	2.094970139	2.055201739	2.052773428
-0.9	-52.23553911	-39.11843602	-38.87886824	-33.26546127	-30.80280503	-32.04503048	-43.20546048	-47.33492815	-49.01331726	-49.79702973
+0.9	1.656333089	0.958699252	0.908643965	0.812510784	1.316185861	1.138577802	1.088912898	1.194229041	1.316072723	1.410414163
-0.95	-54.58445373	-40.66309167	-41.15059632	-35.08414549	-32.40227254	-33.2622067	-44.86003425	-49.30597373	-51.37431657	-52.57056211
+0.95	1.278472337	0.958699252	0.847507903	0.80224797	1.027563433	0.789733456	1.088912898	1.194229041	1.316072723	1.410414163
-1	-58.27337274	-43.06673974	-44.76939275	-38.52300986	-35.1835637	-35.15066342	-47.42932487	-52.38612418	-55.10110153	-56.98478622
+1	1.28E+00	0.958699252	0.847507903	0.80224797	7.19E-01	0.789733456	1.088912898	1.194229041	1.316072723	1.410414163
(Span 2) -2	-4.76533483	-3.573423294	-3.158972421	-2.990272129	-2.680675854	-2.943625754	-4.058777269	-4.451329165	-4.905485199	-5.257130176
+2	59.53909577	43.60199322	48.59761262	42.85407307	38.19441742	35.46326046	47.87902303	53.17885307	56.46328462	59.14028586
-2.05	-4.76533483	-3.573423294	-3.158972421	-2.990272129	-2.916312502	-2.943625754	-4.058777269	-4.451329165	-4.905485199	-5.257130176
+2.05	56.34740916	41.49381911	45.25667459	39.53534967	35.44417057	33.79556566	45.60785122	50.48105003	53.22994283	55.3661426
-2.1	-4.76533483	-3.573423294	-3.158972421	-2.990272129	-3.198154955	-2.943625754	-4.058777269	-4.451329165	-4.905485199	-5.257130176
+2.1	52.94288398	39.21397984	41.81977366	36.29766522	32.67514654	31.98435133	43.14447545	47.58235728	49.80912257	51.42469478
-2.15	-4.76533483	-3.573423294	-3.158972421	-2.995749955	-3.736484439	-2.943625754	-4.058777269	-4.451329165	-4.905485199	-5.257130176
+2.15	49.36438939	36.78934208	38.09879809	33.07223784	29.97697611	30.05109049	40.51790583	44.51609088	46.23815725	47.3576045
-2.2	-5.066899091	-4.06853027	-4.168197358	-4.083833674	-4.877187042	-3.305721594	-4.108633117	-4.451329165	-4.905485199	-5.257130176
+2.2	45.6508247	34.24676364	34.46521269	29.85876008	27.35782604	28.01726966	37.7571432	41.3155656	42.55441968	43.20654636
-2.25	-6.783016664	-5.65557278	-5.764434754	-5.47934122	-6.065937883	-4.361750236	-5.920806543	-5.954972045	-5.947895739	-5.941166596

+2.25	41.84105413	31.61310488	31.16594281	26.72235537	24.81859315	25.90436516	34.89119855	38.01409461	38.79524168	38.92722066
-2.3	-8.912991127	-7.715356062	-7.876979008	-7.213965241	-7.55303457	-5.996962507	-8.294422785	-8.639687888	-8.632112139	-8.624908557
+2.3	37.1971001	28.37031247	27.26153577	23.39187498	22.10332831	23.29474822	31.35406889	33.88374903	34.0988432	34.19071756
-2.35	-11.65804849	-9.539098779	-9.90492325	-8.823544314	-8.78629276	-7.789624673	-10.41180342	-11.05964387	-11.05177728	-11.04429944
+2.35	33.31256343	25.42832644	24.08795232	20.88911367	20.00735086	21.08348287	28.21797359	30.21888529	30.32582363	30.45120771
-2.4	-14.67662165	-11.67129992	-11.96829398	-10.61387005	-10.08240252	-9.707281027	-12.97468207	-13.61702817	-13.60897463	-13.60132938
+2.4	29.32206256	22.61264133	21.50339921	18.51074648	17.99060005	18.64005211	25.05102203	26.82085482	26.74629277	26.89103858
-2.45	-17.87019029	-14.13172605	-14.05113393	-12.60270908	-11.79021702	-11.72844922	-15.70470893	-16.39775216	-16.38388491	-16.48110326
+2.45	25.59340733	19.8935878	19.00112539	16.73101735	15.95991015	16.43202031	22.06352007	23.46515144	23.4119106	23.40311448
-2.5	-21.88498595	-17.22757426	-16.55375555	-14.92640854	-14.04731657	-14.26024086	-19.12652566	-20.18717337	-20.15317198	-20.14432262
+2.5	21.4423789	16.70079753	16.13626463	14.54993732	13.67000215	13.83018295	18.54519345	19.54107847	19.51074628	19.50195793
-2.55	-25.37086363	-19.89537125	-19.00252005	-16.73195604	-15.96055937	-16.43351822	-22.06549101	-23.46729748	-23.41399293	-23.40514627
+2.55	18.09478027	14.13006057	14.04992722	12.60162969	11.78960263	11.72703622	15.70285571	16.3957573	16.38195599	16.50537748
-2.6	-29.14746368	-22.61445112	-21.5049619	-18.51201265	-17.99123618	-18.64157436	-25.05301714	-26.82304021	-26.74841227	-26.84097159
+2.6	14.88550545	11.66971722	11.96710065	10.61292155	10.08188479	9.705934788	12.97291371	13.61533096	13.60733346	13.59972023
-2.65	-32.99449266	-25.37213512	-24.08939745	-20.89039244	-20.00797505	-21.08500636	-28.16393112	-30.22108733	-30.27477196	-30.45328059
+2.65	11.84863013	9.537866487	9.903740821	8.822572357	8.785893118	7.788354605	10.41036193	11.05802822	11.05020735	11.04276762
-2.7	-36.87323174	-28.37211026	-27.26340187	-23.39334729	-22.1040334	-23.2962518	-31.35604159	-33.83095996	-34.07620552	-34.16863202
+2.7	8.932917349	7.714181261	7.87582211	7.213180648	7.552629388	5.995788708	8.293057174	8.638170557	8.630641323	8.623469942
-2.75	-40.74495528	-31.07957975	-30.51378392	-26.16563589	-24.36599063	-25.47566789	-34.30987858	-37.34679538	-38.00230922	-38.04064866
+2.75	7.132234442	5.986754649	6.097451145	5.763560272	6.313981035	4.58036343	6.300966958	6.382623541	6.375492792	6.368705693
-2.8	-45.32720123	-34.24848325	-34.46723921	-29.86047135	-27.35861869	-28.01869155	-37.75901275	-41.31767477	-42.55676383	-43.20910789
+2.8	5.065950186	4.067527372	4.167319876	4.083103618	4.896033578	3.305027292	4.107493954	4.45133636	4.905486273	5.257140737
-2.85	-49.04711374	-36.79099432	-38.05006931	-33.0739649	-29.97781036	-30.05245615	-40.51969819	-44.51812637	-46.24045492	-47.36014182
+2.85	4.765162375	3.573431706	3.158974035	2.995266452	3.736133531	2.943621627	4.058781669	4.45133636	4.905486273	5.257140737
-2.9	-52.67068747	-39.21554619	-41.79652685	-36.29938913	-32.67597937	-31.9856383	-43.1461745	-47.58429664	-49.81132922	-51.42717014
+2.9	4.765162375	3.573431706	3.158974035	2.990268305	3.197989298	2.943621627	4.058781669	4.45133636	4.905486273	5.257140737
-2.95	-56.38743362	-41.49527898	-45.25864346	-39.50014361	-35.44502766	-33.79676935	-45.60943448	-50.48287231	-53.23205503	-55.3685294
+2.95	4.765162375	3.573431706	3.158974035	2.990268305	2.916217078	2.943621627	4.058781669	4.45133636	4.905486273	5.257140737
-3	-60.18407429	-44.0019799	-49.25271167	-43.47102078	-38.73760814	-35.7787586	-48.30905717	-53.69303535	-57.08611288	-59.87361927
+3	4.765162375	3.573431706	3.158974035	2.990268305	2.680673866	2.943621627	4.058781669	4.45133636	4.905486273	5.257140737
(Span 3) -4	-1.28E+00	-0.958701508	-0.847508336	-0.802246944	-7.19E-01	-0.789732348	-1.088914079	-1.194230971	-1.316073011	-1.410416996
+4	57.49156503	42.60225396	44.06124853	37.73208838	34.54231338	34.7863029	46.93340922	51.78951839	54.37525029	56.12121604
-3.05	-1.28E+00	-0.958701508	-0.847508336	-0.802246944	-9.36E-01	-0.789732348	-1.088914079	-1.194230971	-1.316073011	-1.410416996
+3.05	55.27450322	41.15966701	41.88948436	35.7201718	32.92543628	33.65291168	45.39140687	49.94095281	52.13865936	53.47210709
-3.1	-1.920360565	-1.054884342	-1.053800816	-0.944119763	-1.417180167	-1.320095552	-1.088914079	-1.194230971	-1.316073011	-1.410416996
+3.1	51.35534158	38.58561449	38.10382747	32.71923504	30.25984935	31.62457213	42.63418574	46.65634642	48.20421408	48.85018112
-3.15	-2.751373291	-1.840133185	-1.873423327	-1.490764364	-1.837005897	-1.889416744	-1.776240788	-1.780795768	-1.77826245	-1.775853926
+3.15	48.87915009	36.94607147	35.74159676	31.02443323	28.93794141	30.32935193	40.87479903	44.57174687	45.72885362	45.9634473
-3.2	-4.260234833	-3.396452353	-3.386770049	-2.694885531	-2.818472439	-2.922859701	-3.281151251	-3.279235848	-3.235663938	-3.233074163
+3.2	44.56345146	34.06824789	32.57554442	28.22339421	26.77423757	28.05089256	37.78172998	40.92415429	41.43056398	41.41321272
-3.25	-5.235498428	-4.386394195	-4.376525142	-3.482404964	-3.457080178	-3.590708336	-4.343265731	-4.349939694	-4.408453959	-4.343470633
+3.25	41.87050342	32.2611354	31.33419549	26.59532348	25.42595169	26.61735826	35.83671153	38.63999693	38.75734751	38.73935489
-3.3	-6.968942642	-6.163005415	-6.152991575	-4.895893752	-4.597945635	-4.777582362	-6.365179923	-6.372706751	-6.437290543	-6.445268465
+3.3	37.58578682	29.12854571	29.05789739	24.20618443	23.12597181	24.12797731	32.46071619	34.69019674	34.5918443	34.57608676
-3.35	-8.069454193	-7.300253625	-7.290257115	-5.800788855	-5.325078532	-5.531020475	-7.667159709	-7.83165722	-7.827640559	-7.918042223
+3.35	34.87172338	27.18328533	27.56776015	23.00208698	21.74557123	22.57963564	30.36181963	32.2429612	32.16663653	32.15033754
-3.4	-10.82999087	-9.305132502	-9.295299712	-7.396159385	-6.601385433	-7.285411116	-9.974032535	-10.44986482	-10.44573539	-10.54391294
+3.4	30.56885723	23.84493468	24.87707083	20.9434176	19.38472893	19.91851605	26.7558208	28.05171863	28.01221977	27.99506408
-3.45	-12.77921467	-10.56899291	-10.55933731	-8.401929197	-7.465261078	-8.578480383	-11.43464042	-12.11704268	-12.11288279	-12.21540991
+3.45	27.92177624	21.79090934	23.13846307	19.84094237	17.93238076	18.27889706	24.53481012	25.50410762	25.48932646	25.47525917
-3.5	-16.23531644	-12.87789536	-12.75842671	-10.15168348	-9.000645038	-10.84097072	-14.35738257	-15.0428422	-15.03865836	-15.14791636
+3.5	23.41811905	18.29580405	20.03393119	17.8665572	15.70269934	15.48522213	20.75171902	22.03071769	22.01520033	22.00043939
-3.55	-18.42475818	-14.69975714	-14.12852111	-11.56327172	-10.17251546	-12.23487644	-16.33502051	-16.87987981	-16.88401799	-16.98866427
+3.55	20.66943516	16.63542764	18.07936694	16.5991239	14.71895667	13.77783206	18.46249583	19.90124292	19.88532547	19.87019731
-3.6	-22.24981608	-17.68219388	-16.48708797	-14.06259918	-12.28535245	-14.66418036	-19.61148555	-20.5658524	-20.54709929	-20.54270208
+3.6	17.37667554	14.13638866	15.10467937	14.34743541	13.01246022	10.89080145	15.45368852	16.28966351	16.27314537	16.25743189

-3.65	**-24.64178659**	**-19.53847855**	**-17.94252785**	**-15.63382697**	**-13.61140708**	**-16.18004354**	**-21.65659735**	**-22.82827351**	**-22.79785269**	**-22.79349037**
+3.65	**15.5566336**	**12.60868544**	**13.26846765**	**12.91218809**	**11.94682529**	**9.165927195**	**13.618226**	**14.09201396**	**14.07516786**	**14.05913362**
-3.7	**-28.91650594**	**-22.74490095**	**-20.81039074**	**-18.3602361**	**-15.9177909**	**-18.79300791**	**-25.18283584**	**-26.7454413**	**-26.69356719**	**-26.68931927**
+3.7	**12.33070779**	**10.02474532**	**10.56944268**	**10.37845584**	**10.120425**	**7.572330215**	**10.51992352**	**10.52120421**	**10.50667699**	**10.56969836**
-3.75	**-31.48594744**	**-24.72956802**	**-22.67968124**	**-20.05475132**	**-17.3610566**	**-20.40732238**	**-27.36193464**	**-29.17527094**	**-29.1093954**	**-29.10523366**
+3.75	**10.3453551**	**8.456451157**	**8.915554289**	**8.772553032**	**9.040665134**	**6.601728127**	**8.643112755**	**8.644227574**	**8.629465828**	**8.615415259**
-3.8	**-36.17107452**	**-28.1254481**	**-26.29761151**	**-22.96503906**	**-19.84320536**	**-23.1647644**	**-31.08502499**	**-33.34106413**	**-33.25008302**	**-33.24610199**
+3.8	**7.889608637**	**5.822109694**	**6.109031369**	**6.230125214**	**7.486943923**	**4.965839535**	**5.704349234**	**6.355590097**	**7.045784694**	**7.659178**
-3.85	**-39.06122658**	**-30.20909371**	**-28.63204786**	**-24.75692918**	**-21.422751**	**-24.85399992**	**-33.36635795**	**-35.90182166**	**-35.79480385**	**-35.79096464**
+3.85	**7.004795163**	**5.110308459**	**5.305311068**	**5.286966266**	**6.577061257**	**4.166596748**	**5.704349234**	**6.355590097**	**7.045784694**	**7.659178**
-3.9	**-43.99076858**	**-33.74543581**	**-32.66195909**	**-27.95661128**	**-24.22026029**	**-27.71673596**	**-37.23337816**	**-40.25546116**	**-40.27527161**	**-40.27071824**
+3.9	**7.004795163**	**5.110308459**	**5.305311068**	**4.76527848**	**5.249335894**	**4.166596748**	**5.704349234**	**6.355590097**	**7.045784694**	**7.659178**
-3.95	**-47.0063848**	**-35.89866854**	**-35.30075711**	**-30.08411993**	**-26.16230117**	**-29.45739414**	**-39.58519252**	**-42.91071996**	**-43.18206359**	**-43.17768117**
+3.95	**7.004795163**	**5.110308459**	**5.305311068**	**4.76527848**	**4.808005812**	**4.166596748**	**5.704349234**	**6.355590097**	**7.045784694**	**7.659178**
-5	**-52.10967752**	**-39.3442383**	**-39.63203509**	**-33.87055233**	**-29.64170845**	**-32.23918314**	**-43.34452028**	**-47.16618094**	**-48.1102078**	**-48.26321636**
+5	**7.004795163**	**5.110308459**	**5.305311068**	**4.76527848**	**4.308050695**	**4.166596748**	**5.704349234**	**6.355590097**	**7.045784694**	**7.659178**

3-Span: Shear (Max and Min) Raw Data Results - 40’ Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**							
-0	-7.004622649	-7.018109666	-7.486724617	-7.049259281	-8.430698249	-6.101168208	-6.427721493	-3.362804001
End Shear	52.36450815	55.27556032	58.04227412	53.83211875	62.13839769	44.02416338	46.34122461	27.73890661
-0.05	-7.004622649	-7.018109666	-7.486724617	-7.049259281	-8.430698249	-6.101168208	-6.427721493	-3.362804001
+0.05	48.17865931	51.0402706	53.49899774	49.57563593	57.31038767	40.06995019	42.17889493	25.5841862
-0.1	-7.004622649	-7.018109666	-7.486724617	-7.049259281	-8.430698249	-6.101168208	-6.427721493	-3.362804001
+0.1	43.14994533	46.50387211	48.63948971	45.00830382	51.54218566	35.23522983	37.08971561	23.10472301
-0.15	-7.004622649	-7.018109666	-7.486724617	-7.049259281	-8.430698249	-6.101168208	-6.427721493	-3.821297757
+0.15	40.18928557	43.66845147	45.60586603	42.15936734	48.13334408	32.46271864	34.17128278	21.63931724
-0.2	-8.527705591	-9.022050699	-9.022050699	-7.218287463	-8.430698249	-7.227373267	-7.636281145	-5.549131132
+0.2	35.36826301	39.01060603	40.62904667	37.48956203	42.55996047	28.85518696	30.54408695	19.24346167
-0.25	-10.00433952	-11.26732825	-11.26732825	-9.635786395	-9.901997186	-9.050034719	-9.561589508	-6.577706069
+0.25	32.55341882	36.26537145	37.69992027	34.74362935	39.29152598	26.85630257	28.4206365	17.83859672
-0.3	-13.14540793	-14.97927768	-14.97927768	-13.66130666	-14.37999104	-12.03181381	-12.70954037	-8.272309755
+0.3	28.06379006	31.78968124	32.93155784	30.27784533	33.99136437	23.59412263	24.95595002	15.56093324
-0.35	-15.0829691	-17.18160219	-17.18160219	-16.05597567	-17.0458171	-13.78326514	-14.55760399	-9.274139624
+0.35	25.59121513	29.17284545	30.14808093	27.67373372	30.91038861	21.68472875	22.92851889	14.23735932
-0.4	-18.11893637	-21.22597435	-21.36881014	-19.99834987	-21.43798165	-17.06709701	-18.01992948	-10.91282072
+0.4	21.50600274	24.9429983	25.65676236	23.47665288	25.96185168	18.5947546	19.64839118	12.11247363
-0.45	-19.83312889	-24.03431644	-24.40327404	-22.32725408	-24.03466879	-19.04166315	-20.10084672	-11.87428866
+0.45	19.20711806	22.4927724	23.06008543	21.0531643	23.11536721	16.80252053	17.74641481	10.8909384
-0.5	-24.41203827	-28.6359268	-29.38182538	-26.83488563	-29.45107854	-22.95489055	-24.24053029	-13.43435283
+0.5	15.55317548	18.572458	18.91439967	17.07355858	18.48096316	13.93088199	14.69992011	9.109313645
-0.55	-27.11345464	-31.3407595	-32.31219159	-29.6093077	-32.8484058	-25.43705079	-26.87708621	-14.57589374
+0.55	13.47600516	16.30590167	16.5245233	14.82506456	15.98339925	12.28348611	12.95284358	8.287095107
-0.6	-31.52224357	-35.73801032	-37.08295326	-34.13039091	-38.39878736	-29.34544594	-31.03053273	-16.9450242
+0.6	10.24984416	12.61044666	12.63631081	11.73041869	12.57788618	9.676297623	10.18903984	6.846226923
-0.65	-34.10274214	-38.30112045	-39.8680692	-36.77238027	-41.65114447	-31.55169232	-33.37628626	-18.33121862
+0.65	8.445771217	10.92525611	10.92525611	9.972956352	10.64649707	8.322844997	8.760889471	6.018123395
-0.7	-38.40878487	-42.43032154	-44.36245158	-41.04040562	-46.92071329	-34.99417515	-37.03842918	-20.57337335
+0.7	6.611915588	8.23355825	8.23355825	7.223726789	7.629974441	6.255742439	6.584992041	4.704797725
-0.75	-41.04288439	-44.81349543	-46.96116386	-43.51115295	-49.98105847	-36.91724131	-39.08542159	-21.8730087
+0.75	5.571651936	6.719157179	6.719157179	5.689394792	5.899907219	5.093757197	5.361849681	3.960029017
-0.8	-45.52656736	-48.61095827	-51.11057955	-47.46143337	-54.89140549	-39.88170152	-42.24299678	-23.95360563
+0.8	3.946539879	4.376126037	4.376126037	3.499165181	3.499165181	3.313445764	3.487837647	2.796937046
-0.85	-48.1139074	-50.77598505	-53.48173809	-49.72212937	-57.71269725	-41.51432114	-43.98326941	-25.14593308
+0.85	3.041025162	3.01371658	3.01371658	2.417093871	2.417093871	2.333042431	2.455834138	2.149117529
-0.9	-52.23553911	-54.1780194	-57.21759752	-53.28998305	-62.18542063	-43.98864786	-46.6230121	-27.03038879
+0.9	1.656333089	1.354628598	1.438216498	1.353256487	1.607423603	0.990728098	1.051287572	1.158955938
-0.95	-54.58445373	-56.08667669	-59.32003953	-55.30181802	-64.72061695	-46.68697619	-49.18700056	-28.09465592
+0.95	1.278472337	1.354628598	1.438216498	1.353256487	1.607423603	0.990728098	1.051287572	0.615232853
-1	-58.27337274	-59.02959323	-62.57375426	-58.42256175	-68.67731277	-51.13548564	-53.87703139	-29.74839031
+1	1.28E+00	1.354628598	1.438216498	1.353256487	1.607423603	0.990728098	1.051287572	0.608764994
(Span 2) -2	-4.76533483	-5.049197172	-5.360759798	-5.044082658	-5.991456705	-3.692806644	-3.918533994	-2.269090157
+2	59.53909577	59.33870791	63.01364891	58.91513602	69.51226246	55.0040058	57.98450602	30.13039652
-2.05	-4.76533483	-5.049197172	-5.360759798	-5.044082658	-5.991456705	-3.692806644	-3.918533994	-2.269090157
+2.05	56.34740916	56.72102112	60.1260488	56.14932594	66.02087175	51.06143947	53.81048355	28.69297957
-2.1	-4.76533483	-5.049197172	-5.360759798	-5.044082658	-5.991456705	-3.692806644	-3.918533994	-2.269090157
+2.1	52.94288398	53.85185345	56.97840101	53.14486286	62.26293989	47.02275404	49.53732807	27.13608505
-2.15	-4.76533483	-5.049197172	-5.360759798	-5.044082658	-5.991456705	-3.692806644	-3.918533994	-2.47521978
+2.15	49.36438939	50.76611471	53.608301	49.93720393	58.28144489	42.81250901	45.08163756	25.47867208
-2.2	-5.066899091	-5.775320254	-5.775320254	-5.044082658	-5.991456705	-4.499758511	-4.736587907	-3.505398576
+2.2	45.6508247	47.49871514	50.05334439	46.56179418	54.11935046	38.78627881	40.83049951	23.73969395
-2.25	-6.783016664	-8.029102882	-8.029102882	-7.228772852	-7.572850361	-6.222969337	-6.550494039	-4.615539553

+2.25	41.84105413	44.08456291	46.35112452	43.05409188	49.81963656	35.25087226	37.34434869	21.9381054
-2.3	-8.912991127	-11.00883204	-11.02700457	-10.241587	-10.87378109	-8.505523274	-8.956028486	-6.035744547
+2.3	37.1971001	39.84301651	41.7670038	38.72014342	44.53883207	31.72045881	33.59205261	19.72024137
-2.35	-11.65804849	-14.0758168	-14.25296352	-12.93673683	-13.83584897	-10.70376265	-11.28296404	-7.278017636
+2.35	33.31256343	36.22889169	37.8731408	34.88047876	39.92191522	28.53499749	30.20948526	17.84762642
-2.4	-14.67662165	-17.32769273	-17.68881394	-16.11151304	-17.52706453	-13.16909136	-13.90190562	-8.560448165
+2.4	29.32206256	32.21425014	33.5723832	30.98456767	35.19309618	25.140141	26.60735799	15.97306406
-2.45	-17.87019029	-20.72954905	-21.29695985	-19.48111928	-21.48888361	-15.6915374	-16.57902086	-10.18249575
+2.45	25.59340733	28.56706447	29.65345635	27.31222519	30.79158677	21.89724759	23.16633081	14.11550411
-2.5	-21.88498595	-24.96059155	-25.80122439	-23.69789501	-26.4830746	-18.78387495	-19.86307804	-12.29428741
+2.5	21.4423789	24.24406557	25.03723698	22.98197419	25.63258605	18.26123437	19.30790451	11.93556235
-2.55	-25.37086363	-28.5695226	-29.65608575	-27.31464941	-30.79448441	-21.89903373	-23.16822638	-14.11590123
+2.55	18.09478027	20.72720532	21.29446979	19.47883357	21.48618715	15.69007466	16.57746796	10.18212718
-2.6	-29.14746368	-32.21672418	-33.56293958	-30.98701883	-35.19604148	-25.1421738	-26.60951395	-15.97346792
+2.6	14.88550545	17.32543921	17.68642833	16.10932855	17.52450593	13.19493484	13.92909733	8.570033992
-2.65	-32.99449266	-36.18902228	-37.83345925	-34.81699997	-39.8589463	-28.53691275	-30.21151811	-17.84803211
+2.65	11.84863013	14.07367769	14.25070836	12.93490005	13.83382792	10.56893665	11.14350409	7.287342107
-2.7	-36.87323174	-39.84545843	-41.76963781	-38.72256226	-44.5417685	-31.72223996	-33.59394463	-19.72064424
+2.7	8.932917349	11.00683058	11.02490508	10.239851	10.87187589	8.504268486	8.954699168	6.044720115
-2.75	-40.74495528	-43.38957365	-45.59889125	-42.34217034	-48.94985886	-34.68700178	-36.74476981	-21.5723372
+2.75	7.132234442	8.499388973	8.499388973	7.710596622	8.099889193	6.582475668	6.928921756	4.854602313
-2.8	-45.32720123	-47.50098795	-50.0558123	-46.56408161	-54.12216101	-38.78863032	-40.83298327	-23.74007675
+2.8	5.065950186	5.773859403	5.773859403	5.044082286	5.991467015	4.498811229	4.735590768	3.513279841
-2.85	-49.04711374	-50.76827862	-53.61065889	-49.93939433	-58.28415289	-42.81481841	-45.08407537	-25.47903972
+2.85	4.765162375	5.04919529	5.360763706	5.044082286	5.991467015	3.692808123	3.918538623	2.482455386
-2.9	-52.67068747	-53.85388436	-56.980623	-53.14693681	-62.2655218	-46.99784422	-49.51111915	-27.13643202
+2.9	4.765162375	5.04919529	5.360763706	5.044082286	5.991467015	3.692808123	3.918538623	2.26909352
-2.95	-56.38743362	-56.72289464	-60.12810851	-56.15125578	-66.02329447	-51.06375687	-53.81293609	-28.69330108
+2.95	4.765162375	5.04919529	5.360763706	5.044082286	5.991467015	3.692808123	3.918538623	2.26909352
-3	-60.18407429	-59.83065157	-63.55848946	-59.43826335	-70.176965	-55.77920025	-58.80552571	-30.40216725
+3	4.765162375	5.04919529	5.360763706	5.044082286	5.991467015	3.692808123	3.918538623	2.26909352
(Span 3) -4	-1.28E+00	-1.354628093	-1.438217546	-1.353256387	-1.607426369	-0.990728495	-1.051288814	-0.608765897
+4	57.49156503	58.46381945	61.94690251	57.82056921	67.91141525	50.26589084	52.96036396	29.42980443
-3.05	-1.28E+00	-1.354628093	-1.438217546	-1.353256387	-1.607426369	-0.990728495	-1.051288814	-0.608765897
+3.05	55.27450322	56.69754448	59.99411136	55.94759883	65.53676892	47.59627298	50.14580847	28.43732937
-3.1	-1.920360565	-1.499759216	-1.499759216	-1.353256387	-1.607426369	-1.13762588	-1.197500927	-1.340695926
+3.1	51.35534158	53.51691323	56.49054621	52.59502986	61.31204557	43.51724827	46.11985387	26.66388136
-3.15	-2.751373291	-2.606857882	-2.606857882	-2.089695044	-2.089695044	-2.022445637	-2.128890144	-1.934422215
+3.15	48.87915009	51.47518379	54.24848566	50.45381089	58.6278039	42.03246959	44.53581232	25.53297114
-3.2	-4.260234833	-4.827446918	-4.827446918	-3.860177942	-3.860177942	-3.656172212	-3.848602329	-3.013080554
+3.2	44.56345146	47.86730703	50.2971	46.68649999	53.92628681	39.31138057	41.63530329	23.54609701
-3.25	-5.235498428	-6.23366761	-6.23366761	-5.199741505	-5.317456195	-4.724657824	-4.973324026	-3.710623145
+3.25	41.87050342	45.588337	47.80692343	44.3158412	50.97949041	37.5325244	39.74056508	22.29750505
-3.3	-6.968942642	-8.75730739	-8.75730739	-7.756584888	-8.21410211	-6.653704458	-7.003899429	-4.950972631
+3.3	37.58578682	41.61691476	43.47631715	40.19847048	45.87958226	34.32737	36.32886955	20.13178659
-3.35	-8.069454193	-10.37270925	-10.37270925	-9.406546017	-10.02448704	-7.896519573	-8.312125866	-5.738720501
+3.35	34.87172338	39.13891883	40.77917884	37.63718179	42.71727342	32.26170383	34.13139456	18.78627042
-3.4	-10.82999087	-13.29908044	-13.35946656	-12.33524317	-13.24301903	-10.18467195	-10.7278295	-7.118059003
+3.4	30.56885723	34.86761699	36.13791506	33.23443483	37.29737886	28.58457526	30.2217564	16.47628202
-3.45	-12.77921467	-15.42013216	-15.59035958	-14.19244162	-15.28678595	-11.7493439	-12.38649377	-7.982399896
+3.45	27.92177624	32.22880747	33.27496674	30.5213388	33.9666155	26.23936444	27.72950227	15.05458364
-3.5	-16.23531644	-19.34185267	-19.72707221	-17.83060711	-19.36417217	-14.49461746	-15.29787762	-9.478041272
+3.5	23.41811905	27.72132894	28.39164851	25.89788467	28.30512046	22.10239613	23.33521129	13.12657848
-3.55	-18.42475818	-21.69452966	-22.21501245	-20.26492771	-22.19147759	-16.21795239	-17.12614893	-10.49373615
+3.55	20.66943516	24.9599189	25.40404281	23.09393685	24.88986067	19.68186601	20.77539872	12.19039353
-3.6	-22.24981608	-25.77770583	-26.54223811	-24.30354031	-26.93498031	-19.20460249	-20.29567743	-12.52929081
+3.6	17.37667554	20.27996798	20.34727485	19.21291461	20.56258984	16.3909374	17.30721304	10.58817461

-3.65	**-24.64178659**	**-28.31607351**	**-29.23752721**	**-26.8222697**	**-29.90469198**	**-21.05890783**	**-22.26409571**	**-13.80444937**
+3.65	**15.5566336**	**17.90818994**	**17.90818994**	**16.84714439**	**17.9269086**	**14.35859806**	**15.16451445**	**9.604811306**
-3.7	**-28.91650594**	**-32.67690903**	**-33.87606031**	**-31.16190024**	**-35.03898898**	**-24.24082927**	**-25.64272072**	**-16.01007422**
+3.7	**12.33070779**	**14.23810774**	**14.23810774**	**12.85653543**	**13.48443019**	**11.43977169**	**12.08467503**	**7.935325796**
-3.75	**-31.48594744**	**-35.36277925**	**-36.73757199**	**-33.84183486**	**-38.21965507**	**-26.19844905**	**-27.72186463**	**-17.37689426**
+3.75	**10.3453551**	**12.01061156**	**12.01061156**	**10.44089025**	**10.79726557**	**9.650496703**	**10.19568818**	**6.918420749**
-3.8	**-36.17107452**	**-39.937587**	**-41.61882638**	**-38.41780087**	**-43.6663429**	**-29.52948159**	**-31.2604796**	**-19.71798989**
+3.8	**7.889608637**	**8.268983937**	**8.268983937**	**7.049260022**	**8.430709032**	**6.612988074**	**6.98710867**	**5.204362068**
-3.85	**-39.06122658**	**-42.73273355**	**-44.60539422**	**-41.22013172**	**-47.01092239**	**-31.56276296**	**-33.42093121**	**-21.15572849**
+3.85	**7.004795163**	**7.018109096**	**7.486729461**	**7.049260022**	**8.430709032**	**6.101157952**	**6.427713605**	**4.167520807**
-3.9	**-43.99076858**	**-47.45782426**	**-49.66078177**	**-45.96775094**	**-52.69159864**	**-36.1779877**	**-38.08209232**	**-23.59772105**
+3.9	**7.004795163**	**7.018109096**	**7.486729461**	**7.049260022**	**8.430709032**	**6.101157952**	**6.427713605**	**3.363080726**
-3.95	**-47.0063848**	**-50.08459544**	**-52.47466096**	**-48.85366899**	**-56.15305032**	**-39.0424645**	**-41.09733105**	**-25.08562809**
+3.95	**7.004795163**	**7.018109096**	**7.486729461**	**7.049260022**	**8.430709032**	**6.101157952**	**6.427713605**	**3.363080726**
-5	**-52.10967752**	**-54.89445466**	**-57.63324202**	**-53.46460979**	**-61.69603973**	**-44.01342131**	**-46.32991717**	**-27.59393599**
+5	**7.004795163**	**7.018109096**	**7.486729461**	**7.049260022**	**8.430709032**	**6.101157952**	**6.427713605**	**3.363080726**

3-Span: Shear (Max and Min) Raw Data Results - 40' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.004622649	-9.792428716	-10.60321437	-6.473957626	-8.231554218	-8.27998181
End Shear	52.36450815	64.45191017	66.96512099	48.33366562	59.20930374	58.69807713
-0.05	-7.004622649	-9.792428716	-10.60321437	-6.473957626	-8.231554218	-8.27998181
+0.05	48.17865931	58.06483441	60.64243386	44.47398164	53.57796879	52.89243111
-0.1	-7.004622649	-9.792428716	-10.60321437	-6.473957626	-8.231554218	-8.27998181
+0.1	43.14994533	51.04550756	52.86326441	40.6066914	46.93302803	48.02881345
-0.15	-7.004622649	-9.792428716	-10.60321437	-6.473957626	-8.231554218	-8.27998181
+0.15	40.18928557	47.17091899	48.48423206	38.18615154	43.19438127	44.99409295
-0.2	-8.527705591	-11.22847245	-12.00411303	-8.753065375	-8.626728088	-8.536113149
+0.2	35.36826301	40.91387624	41.76298087	34.20396098	37.88829021	40.01804461
-0.25	-10.00433952	-12.76075893	-13.95413615	-10.87010945	-10.78354474	-10.71723838
+0.25	32.55341882	37.29353374	37.87784223	31.85329967	34.87835242	37.09096269
-0.3	-13.14540793	-16.88651702	-18.11547235	-14.8550239	-15.14477526	-15.65288316
+0.3	28.06379006	31.76266338	32.01553752	28.01456434	30.65705742	32.32867539
-0.35	-15.0829691	-20.19670152	-21.27323448	-17.26384119	-17.92651845	-18.70464101
+0.35	25.59121513	28.80236724	28.73168135	25.76616948	28.18338364	29.55046333
-0.4	-18.11893637	-25.52298579	-26.24223774	-21.62306597	-23.02332668	-24.08778772
+0.4	21.50600274	24.0690738	23.58578666	22.1248722	24.17504026	25.07064627
-0.45	-19.83312889	-28.56327105	-29.04923581	-24.19594018	-26.08319237	-27.27053756
+0.45	19.20711806	21.63008621	20.90808583	20.01113056	21.84680361	22.48252962
-0.5	-24.41203827	-33.36982789	-33.44072758	-28.8836237	-31.51880226	-32.77213739
+0.5	15.55317548	17.90569135	16.66968728	16.62124754	18.11030329	18.35390927
-0.55	-27.11345464	-36.41087115	-36.09274546	-31.59080489	-34.71420885	-35.97186342
+0.55	13.47600516	15.76616578	14.65312911	14.67455371	15.96283548	15.99896326
-0.6	-31.52224357	-41.24448481	-41.4891313	-35.85140379	-39.71659833	-41.67442691
+0.6	10.24984416	12.37478299	11.50411299	11.59006982	12.55706213	12.59063283
-0.65	-34.10274214	-43.93692016	-44.92709063	-38.25505241	-42.52334119	-44.93737166
+0.65	8.445771217	10.49579705	9.71929885	9.844324491	10.62570108	10.65763573
-0.7	-38.40878487	-48.64450052	-50.64684969	-42.00291402	-46.87536864	-50.04110337
+0.7	6.611915588	7.492700626	6.933785248	7.419652581	7.914296087	7.606926792
-0.75	-41.04288439	-51.24419451	-53.85699796	-44.09481151	-49.29034127	-52.9005661
+0.75	5.571651936	5.821156131	5.454663818	6.055788584	6.459507823	5.948281214
-0.8	-45.52656736	-57.98420819	-61.54078235	-47.31623841	-52.98682345	-57.32430922
+0.8	3.946539879	3.4647234	3.384863453	3.922398379	4.150065858	3.492769692
-0.85	-48.1139074	-62.23237272	-66.07259341	-49.08816589	-55.00692477	-59.77128489
+0.85	3.041025162	2.43443964	2.251875406	2.761438019	2.914023328	2.465998754
-0.9	-52.23553911	-68.91387032	-73.9363905	-51.76945952	-58.04269059	-63.50005824
+0.9	1.656333089	1.661624127	1.799094224	1.173491633	1.32567327	1.458773158
-0.95	-54.58445373	-72.67741628	-78.66361295	-53.21320175	-61.20597364	-65.52554898
+0.95	1.278472337	1.661624127	1.799094224	1.173491633	1.32567327	1.458773158
-1	-58.27337274	-78.52897344	-86.10418386	-55.34066032	-67.44218974	-68.54434946
+1	1.28E+00	1.661624127	1.799094224	1.173491633	1.32567327	1.458773158
(Span 2) -2	-4.76533483	-6.193481844	-6.705883306	-4.374033247	-4.941270067	-5.437381944
+2	59.53909577	83.8137502	89.36373893	60.4089705	74.32076921	75.31261015
-2.05	-4.76533483	-6.193481844	-6.705883306	-4.374033247	-4.941270067	-5.437381944
+2.05	56.34740916	76.9629321	83.33889832	55.90720844	68.82816018	69.63508612
-2.1	-4.76533483	-6.193481844	-6.705883306	-4.374033247	-4.941270067	-5.437381944
+2.1	52.94288398	70.03032139	76.94290847	51.39793161	63.09589412	63.80966759
-2.15	-4.76533483	-6.193481844	-6.705883306	-4.374033247	-4.941270067	-5.437381944
+2.15	49.36438939	64.27984842	70.22125054	47.55018936	57.18887144	58.15800426
-2.2	-5.066899091	-6.193481844	-6.705883306	-5.325372722	-5.543832545	-5.437381944
+2.2	45.6508247	58.39055121	63.21932321	44.91909191	51.79548011	54.56329698
-2.25	-6.783016664	-8.452506253	-8.612391234	-7.420420416	-7.754516851	-7.80395693

+2.25	41.84105413	52.19810123	55.98260923	42.02245932	46.57391502	50.63212348
-2.3	-8.912991127	-12.15996109	-12.18977363	-10.35572904	-11.07471072	-11.41373904
+2.3	37.1971001	44.71605157	47.56047607	38.21410244	42.11062631	45.4922141
-2.35	-11.65804849	-15.36173319	-15.42037931	-12.88191005	-14.30137874	-14.57558136
+2.35	33.31256343	39.41210304	41.60521941	34.77856201	38.04254992	40.87489757
-2.4	-14.67662165	-19.06994696	-19.03042775	-15.73141508	-17.69190791	-17.84667397
+2.4	29.32206256	35.49236126	37.1295069	31.11866539	33.66813138	35.97029806
-2.45	-17.87019029	-22.82714188	-22.6279288	-18.91841649	-21.14734576	-21.41016679
+2.45	25.59340733	31.6981065	32.50191762	27.24727008	29.44712312	31.16251769
-2.5	-21.88498595	-27.69976032	-27.74359044	-23.18533333	-25.34039865	-26.43233935
+2.5	21.4423789	26.87356663	26.77748933	22.47729814	24.63790242	25.58384871
-2.55	-25.37086363	-31.70021255	-32.50232969	-27.24952806	-29.44942132	-31.16510982
+2.55	18.09478027	22.82512863	22.62756306	18.91638719	21.14536806	21.40801145
-2.6	-29.14746368	-35.49435512	-37.12992185	-31.1208095	-33.67072059	-35.97310513
+2.6	14.88550545	18.87855706	19.03011586	15.72978477	17.68996024	17.8448412
-2.65	-32.99449266	-39.41424205	-41.60560647	-34.7805935	-38.04495441	-40.87755012
+2.65	11.84863013	15.35998873	15.42004797	12.90129311	14.29948891	14.5738039
-2.7	-36.87323174	-44.71931456	-47.56110206	-38.21599234	-42.11286598	-45.4947027
+2.7	8.932917349	12.15825494	12.18951332	10.35431324	11.07307765	11.41203055
-2.75	-40.74495528	-50.9294664	-54.51172958	-41.41415004	-45.86444731	-49.8091826
+2.75	7.132234442	9.056913107	9.202418574	7.899624038	8.285217286	8.388088481
-2.8	-45.32720123	-58.39383192	-63.2199692	-44.92067673	-51.79848732	-54.5653966
+2.8	5.065950186	6.193478436	6.705884002	5.324274684	5.54265808	5.437380209
-2.85	-49.04711374	-64.28295533	-70.22185055	-47.55161632	-57.13530849	-58.15991358
+2.85	4.765162375	6.193478436	6.705884002	4.374027843	4.941270954	5.437380209
-2.9	-52.67068747	-69.9799248	-76.9435039	-51.40046734	-63.04261561	-63.81292858
+2.9	4.765162375	6.193478436	6.705884002	4.374027843	4.941270954	5.437380209
-2.95	-56.38743362	-76.91251174	-83.33944626	-55.90978581	-68.83130903	-69.63828469
+2.95	4.765162375	6.193478436	6.705884002	4.374027843	4.941270954	5.437380209
-3	-60.18407429	-85.11743658	-90.52069153	-61.29857533	-75.40488786	-76.42809158
+3	4.765162375	6.193478436	6.705884002	4.374027843	4.941270954	5.437380209
(Span 3) -4	-1.28E+00	-1.661623212	-1.799094411	-1.173490184	-1.325673508	-1.458772692
+4	57.49156503	77.39831842	84.6602597	54.94209494	66.21745208	67.97490649
-3.05	-1.28E+00	-1.661623212	-1.799094411	-1.173490184	-1.325673508	-1.458772692
+3.05	55.27450322	73.88694463	80.19545052	53.66541047	62.47491936	66.16338267
-3.1	-1.920360565	-1.661623212	-1.799094411	-1.346452041	-1.420412829	-1.458772692
+3.1	51.35534158	67.61457301	72.3174332	51.25912671	57.46706396	62.78747472
-3.15	-2.751373291	-2.108038513	-1.936894537	-2.393625008	-2.522491878	-2.133186972
+3.15	48.87915009	63.60522018	67.54209929	49.65014585	55.64542545	60.54997137
-3.2	-4.260234833	-3.824878281	-3.781230488	-4.328239621	-4.582204235	-3.853649098
+3.2	44.56345146	56.52514392	59.98959951	46.6968859	52.27841869	56.47159338
-3.25	-5.235498428	-5.288214746	-5.023409602	-5.593513739	-5.929660459	-5.391292343
+3.25	41.87050342	52.4716953	55.22081569	44.76382799	50.06035029	53.81710685
-3.3	-6.968942642	-8.073661695	-7.471410697	-7.891183386	-8.417262279	-8.190612537
+3.3	37.58578682	48.19091734	49.53930196	41.27728927	46.035217	49.05126918
-3.35	-8.069454193	-9.875984734	-9.143071426	-9.346334168	-10.00344856	-10.03477127
+3.35	34.87172338	45.61048898	46.10739466	39.02837318	43.42383945	45.98879805
-3.4	-10.82999087	-13.03654282	-12.11721917	-12.1918876	-13.22190845	-13.25596564
+3.4	30.56885723	41.01080655	40.39486237	35.02225326	38.74574453	40.55046778
-3.45	-12.77921467	-15.07182093	-14.0069803	-14.04298123	-15.26581038	-15.30139696
+3.45	27.92177624	38.14967011	37.48800076	32.46569757	35.74415199	37.08902564
-3.5	-16.23531644	-18.63718606	-17.49418483	-17.28701639	-18.84442266	-19.16238259
+3.5	23.41811905	33.13483322	33.01694077	27.95369627	30.41828505	31.6677503
-3.55	-18.42475818	-20.87226024	-20.03772202	-19.3213578	-21.08677274	-21.6400573
+3.55	20.66943516	30.2801626	30.40345532	25.09771928	27.07931	28.30291384
-3.6	-22.24981608	-24.99704109	-24.52676686	-22.84378235	-24.9666485	-25.95297761
+3.6	17.37667554	25.26168795	25.76095478	20.73596309	21.97965041	22.99830073

-3.65	**-24.64178659**	**-27.83760273**	**-27.66169844**	**-25.02894077**	**-27.3720669**	**-28.6413784**
+3.65	**15.5566336**	**22.09488298**	**22.80150472**	**18.04774283**	**18.84248592**	**19.70331242**
-3.7	**-28.91650594**	**-32.77072617**	**-33.13389551**	**-28.77577129**	**-31.49431778**	**-33.27110702**
+3.7	**12.33070779**	**16.63305197**	**17.5752837**	**14.03307479**	**14.20669159**	**14.61727443**
-3.75	**-31.48594744**	**-36.11410102**	**-36.60995599**	**-31.07940245**	**-34.02751941**	**-36.12897811**
+3.75	**10.3453551**	**13.60690526**	**15.0822519**	**11.56806034**	**11.49796257**	**11.51153463**
-3.8	**-36.17107452**	**-42.1471256**	**-43.0840786**	**-34.99665965**	**-38.9357901**	**-41.00679775**
+3.8	**7.889608637**	**10.86405353**	**11.19988901**	**8.039982537**	**8.231530139**	**8.279975309**
-3.85	**-39.06122658**	**-45.90205719**	**-47.11751965**	**-37.38632813**	**-42.12003556**	**-43.99290941**
+3.85	**7.004795163**	**9.792429195**	**10.60321417**	**6.473967736**	**8.231530139**	**8.279975309**
-3.9	**-43.99076858**	**-52.35880573**	**-54.38267991**	**-41.21719425**	**-48.21870268**	**-49.05010398**
+3.9	**7.004795163**	**9.792429195**	**10.60321417**	**6.473967736**	**8.231530139**	**8.279975309**
-3.95	**-47.0063848**	**-56.58422146**	**-59.04940511**	**-43.6593398**	**-52.13917635**	**-52.12319481**
+3.95	**7.004795163**	**9.792429195**	**10.60321417**	**6.473967736**	**8.231530139**	**8.279975309**
-5	**-52.10967752**	**-64.12138866**	**-67.06680185**	**-48.28728502**	**-59.16888716**	**-58.64528983**
+5	**7.004795163**	**9.792429195**	**10.60321417**	**6.473967736**	**8.231530139**	**8.279975309**

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-14.009245	-10.220600	-10.610642	-9.530561	-8.616103	-8.333171	-11.408689	-12.711165	-14.091566	-15.318335
+0.05	96.357319	72.875535	72.410349	61.611849	54.245364	59.785660	80.347366	87.152199	88.099780	88.108551
-0.1	-28.018491	-20.441200	-21.221284	-19.061122	-17.232207	-16.666341	-22.817377	-25.422331	-28.183132	-30.636671
+0.1	175.590192	134.355448	130.638346	111.818975	99.021336	110.282105	148.465620	160.465710	161.297653	161.322118
-0.15	-42.027736	-30.661800	-31.831926	-28.591682	-25.848310	-24.999512	-34.226066	-38.133496	-42.274698	-45.955006
+0.15	239.671061	185.056662	176.550826	152.156465	135.636783	151.879094	204.590589	220.333718	232.763108	232.754879
-0.2	-56.036981	-40.882400	-42.442568	-38.122243	-34.464414	-33.332683	-45.634755	-50.844662	-56.366264	-61.273341
+0.2	289.221249	224.802644	210.961222	183.759314	164.811764	184.775772	248.708489	266.757481	289.746236	290.644237
-0.25	-70.046226	-51.103001	-53.053210	-47.652804	-43.080517	-41.665853	-57.043443	-63.555827	-70.457830	-76.591677
+0.25	324.425485	253.988166	234.021009	206.761470	186.964553	209.078766	281.227028	300.259381	332.509803	343.494525
-0.3	-84.055472	-61.323601	-63.663852	-57.183365	-51.696620	-49.999024	-68.452132	-76.266993	-84.549396	-91.910012
+0.3	346.238559	273.086484	250.722053	221.191418	201.988902	225.149697	305.502954	332.118662	361.136304	380.998111
-0.35	-98.064717	-71.544201	-74.274494	-66.713926	-60.312724	-58.332195	-79.860821	-88.978158	-98.640962	-107.228347
+0.35	358.277012	285.531780	258.918714	233.873258	214.002142	233.412726	325.419068	351.528753	378.970699	403.540915
-0.4	-112.073962	-81.764801	-84.885135	-76.244487	-68.928827	-66.665365	-91.269509	-101.689324	-112.732529	-122.546683
+0.4	365.318441	293.466576	264.682517	238.760014	220.728091	234.354873	334.568673	359.369095	391.982612	411.652245
-0.45	-126.083208	-91.985401	-95.495777	-85.775047	-77.544931	-74.998536	-102.678198	-114.400489	-126.824095	-137.865018
+0.45	360.905989	292.240352	263.638240	235.955977	220.869417	228.525754	333.811038	356.255687	392.103920	414.469876
-0.5	-140.092453	-102.206001	-106.106419	-95.305608	-86.161034	-83.331706	-114.086887	-127.111655	-140.915661	-153.183353
+0.5	355.807469	284.967146	260.466654	228.661517	214.890595	224.612247	327.270483	346.454590	381.123213	406.006727
-0.55	-154.101698	-112.426601	-116.717061	-104.836169	-94.777138	-91.664877	-125.495575	-139.822820	-155.007227	-168.501689
+0.55	350.528709	277.148883	251.644453	224.923234	211.216607	222.907275	316.802745	338.821984	369.077914	386.097236
-0.6	-168.110944	-122.647201	-127.327703	-114.366730	-103.393241	-99.998048	-136.904264	-152.533986	-169.098793	-183.820024
+0.6	332.279091	260.571049	236.677351	213.194549	201.379997	213.693083	296.949120	320.027738	345.100043	365.695864
-0.65	-182.120189	-132.867802	-137.938345	-123.897291	-112.009344	-108.331218	-148.312953	-165.245151	-183.190359	-199.138359
+0.65	302.575242	238.373542	216.145472	194.076918	186.688322	197.345478	268.513055	290.940000	313.430330	332.674017
-0.7	-196.129434	-143.088402	-148.548987	-133.427852	-120.625448	-116.664389	-159.721641	-177.956316	-197.281925	-214.456694
+0.7	268.554001	211.103206	194.921377	171.299451	166.107975	174.353733	232.382630	252.524238	274.778690	287.891861
-0.75	-210.138679	-153.309002	-159.159629	-142.958412	-129.241551	-124.997560	-171.130330	-190.667482	-211.373491	-229.775030
+0.75	223.226313	176.232219	165.938344	142.939583	143.257703	145.347677	192.525805	205.843145	225.846227	232.584970
-0.8	-224.147925	-163.529602	-169.770271	-152.488973	-137.857655	-133.330730	-182.539019	-203.378647	-225.465057	-245.093365
+0.8	168.641412	134.612206	130.355568	108.254267	114.411169	111.019637	145.882863	153.214596	167.840195	167.940797
-0.85	-238.157170	-173.750202	-180.380913	-162.019534	-148.290396	-141.663901	-193.947707	-216.089813	-239.556623	-260.411700
+0.85	105.840226	90.146248	90.394336	71.999355	83.218977	72.124775	94.808546	97.648153	104.843979	105.124051
-0.9	-252.166415	-183.970802	-190.991555	-171.550095	-172.143894	-149.997072	-205.356396	-228.800978	-253.648189	-275.730036
+0.9	69.132915	51.943197	51.863893	41.262961	58.149848	46.495329	50.176432	50.160680	50.194947	50.774910
-0.95	-266.175661	-194.191402	-213.859820	-212.359907	-202.951112	-158.330242	-216.765085	-241.512144	-267.739755	-291.048371
+0.95	48.581949	36.430572	32.205300	30.485423	40.527556	30.009871	41.378690	45.380704	50.010763	53.595738
-1	-283.442701	-204.411999	-274.764180	-268.932141	-249.146742	-166.663411	-228.173771	-254.223302	-281.831322	-306.366702
+1	51.138895	38.347970	33.900316	32.089919	28.767506	31.589337	43.556515	47.769162	52.642909	56.416566
(Span 2) -2	-283.442701	-204.411999	-274.764180	-268.932141	-249.146742	-166.663411	-228.173771	-254.223302	-281.831322	-306.366702
+2	51.138895	38.347970	33.900316	32.089919	28.767506	31.589337	43.556515	47.769162	52.642909	56.416566
-2.05	-208.749036	-138.179469	-197.984866	-190.012054	-184.789406	-113.825623	-156.947254	-172.126779	-189.688103	-203.286075
+2.05	38.749024	29.057069	25.686988	24.315211	35.502978	26.299534	33.003694	36.195706	39.888648	42.748028
-2.1	-171.872559	-128.888546	-126.529810	-134.001704	-138.434316	-106.172207	-146.394421	-160.553305	-176.933839	-189.617509
+2.1	77.867745	61.640370	61.874176	53.121131	52.231826	53.497636	62.968681	62.958027	63.093979	63.080548
-2.15	-159.483137	-119.597624	-105.726322	-101.646488	-102.373669	-98.518790	-135.841589	-148.979830	-164.179574	-175.948943
+2.15	121.875529	106.908792	106.959244	87.539465	78.052996	83.198056	115.931466	120.790717	129.546712	129.537687
-2.2	-147.093715	-110.306701	-97.512989	-92.305283	-82.798733	-90.865374	-125.288757	-137.406356	-151.425310	-162.280377
+2.2	196.786321	157.636997	150.745112	126.621674	109.080060	130.136812	174.747042	187.509277	201.568289	209.247097

-2.25	-134.704293	-101.015779	-89.299657	-84.530585	-81.273286	-83.211958	-114.735924	-125.832881	-138.671046	-148.611811
+2.25	264.075569	206.988367	201.524020	170.551895	149.406765	170.720917	230.153349	249.680167	270.089187	285.330752
-2.3	-122.314871	-91.724856	-81.086324	-76.755888	-80.684557	-75.558542	-104.183092	-114.259407	-125.916781	-134.943245
+2.3	314.572063	245.845337	238.631222	205.831916	181.820101	201.884970	275.465923	300.030264	324.569278	346.841178
-2.35	-109.925448	-82.433934	-72.872992	-68.981190	-80.179197	-67.905125	-93.630260	-102.685932	-113.162517	-121.274679
+2.35	355.201677	276.709563	268.515473	231.001547	205.337064	225.081123	312.168901	339.137271	368.375209	394.017207
-2.4	-97.536026	-73.143012	-64.659659	-61.206492	-79.759610	-60.251709	-83.077427	-91.112457	-100.408253	-107.606114
+2.4	383.510523	299.644492	286.319556	246.589044	220.488138	239.879541	338.252065	366.752181	401.048693	425.897788
-2.45	-85.146604	-63.852089	-56.446327	-53.431795	-79.431372	-52.598293	-72.524595	-79.538983	-87.653989	-93.937548
+2.45	398.542088	312.255314	292.140489	255.866965	229.596724	247.054552	353.051213	381.511721	419.589882	446.074412
-2.5	-72.759811	-54.561167	-48.232994	-45.657156	-79.177710	-44.944932	-61.971763	-67.965508	-74.899724	-80.268982
+2.5	399.950980	314.426189	286.519519	256.178188	230.609786	246.552747	356.368555	383.319817	423.733811	453.100976
-2.55	-85.149681	-63.851937	-56.446295	-53.431864	-79.431416	-52.598359	-72.524515	-79.538852	-87.653967	-93.937357
+2.55	398.777729	312.239357	292.128662	255.858042	229.599683	247.051689	353.040437	381.505163	419.578051	446.058411
-2.6	-97.539552	-73.142837	-64.659623	-61.206572	-79.759606	-60.251786	-83.077335	-91.112308	-100.408229	-107.605895
+2.6	383.472006	299.632235	286.310749	246.584243	220.490298	239.867784	338.252714	366.748518	401.047078	425.894339
-2.65	-109.929422	-82.433738	-72.872952	-68.981279	-80.179380	-67.905213	-93.630156	-102.685764	-113.162490	-121.274434
+2.65	355.464713	276.712141	268.509633	230.998849	205.339319	225.089597	312.175526	339.146940	368.378717	394.025709
-2.7	-122.319293	-91.724638	-81.086280	-76.755987	-80.684697	-75.558640	-104.182977	-114.259220	-125.916752	-134.942972
+2.7	314.312843	245.865333	238.629541	205.832308	181.820315	201.899305	275.465808	300.033048	324.586424	346.852447
-2.75	-134.709164	-101.015539	-89.299608	-84.530694	-81.273397	-83.212067	-114.735798	-125.832676	-138.671013	-148.611511
+2.75	263.880288	207.012468	201.520200	170.535926	149.407897	170.741421	230.157556	249.686854	270.109534	285.345262
-2.8	-147.099034	-110.306439	-97.512937	-92.305402	-82.798795	-90.865494	-125.288619	-137.406132	-151.425275	-162.280049
+2.8	196.788886	157.637314	150.744109	126.618971	109.080340	130.156281	174.750720	187.515115	201.566813	209.260410
-2.85	-159.488905	-119.597340	-105.726265	-101.646758	-102.373798	-98.518921	-135.841440	-148.979587	-164.179537	-175.948588
+2.85	122.000762	106.912682	106.953077	87.534725	78.050541	83.195257	115.928832	120.795040	129.549330	129.540254
-2.9	-171.878775	-128.888241	-126.530179	-134.001523	-138.434418	-106.172348	-146.394261	-160.553043	-176.933798	-189.617126
+2.9	77.828362	61.650921	61.883405	53.116676	52.235054	53.498918	62.972952	62.961950	63.098040	63.084510
-2.95	-208.749424	-138.179141	-197.984796	-190.012127	-184.789595	-113.825775	-156.947082	-172.126499	-189.688060	-203.285665
+2.95	38.747618	29.057135	25.686998	24.315181	35.497700	26.280268	33.003728	36.195762	39.888655	42.748112
-3	-283.443118	-204.412335	-274.763930	-268.931929	-249.146632	-166.663868	-228.173967	-254.223597	-281.831389	-306.367116
+3	51.137044	38.348060	33.900334	32.089878	28.767484	31.589293	43.556563	47.769239	52.642921	56.416679
(Span 3) -4	-283.443118	-204.412335	-274.763930	-268.931929	-249.146632	-166.663868	-228.173967	-254.223597	-281.831389	-306.367116
+4	51.137044	38.348060	33.900334	32.089878	28.767484	31.589293	43.556563	47.769239	52.642921	56.416679
-3.05	-266.182202	-194.191718	-213.859846	-212.359932	-202.951151	-158.330674	-216.765269	-241.512416	-267.739819	-291.048759
+3.05	48.580192	36.430657	32.205317	30.485384	40.522872	30.009828	41.378734	45.380777	50.010775	53.595845
-3.1	-252.172612	-183.971101	-190.991195	-171.550026	-172.143931	-149.997481	-205.356570	-228.801236	-253.648250	-275.730403
+3.1	69.132944	51.951879	51.871467	41.268569	58.152943	46.517630	50.184837	50.168929	50.183107	50.775011
-3.15	-238.163021	-173.750485	-180.380573	-162.019469	-148.290345	-141.664287	-193.947872	-216.090056	-239.556680	-260.412047
+3.15	106.147463	90.155790	90.402659	72.005517	83.222104	72.108116	94.815179	97.652955	104.854931	105.134789
-3.2	-224.153431	-163.529868	-169.769951	-152.488912	-137.857622	-133.331094	-182.539173	-203.378876	-225.465111	-245.093691
+3.2	168.274741	134.620304	130.362792	108.259243	114.413388	111.002421	145.888018	153.218265	167.850422	167.930987
-3.25	-210.143841	-153.309251	-159.159329	-142.958355	-129.241521	-124.997900	-171.130475	-190.667696	-211.373542	-229.775335
+3.25	222.984561	176.239077	165.942815	142.943473	143.259150	145.329469	192.529722	205.839564	225.855021	232.573936
-3.3	-196.134250	-143.088634	-148.548707	-133.427798	-120.625420	-116.664707	-159.721777	-177.956515	-197.281972	-214.456979
+3.3	267.403848	211.108246	194.926027	171.301857	166.108403	174.334110	232.380208	252.519124	274.785196	287.878677
-3.35	-182.124660	-132.868017	-137.938084	-123.897241	-112.009318	-108.331513	-148.313078	-165.245335	-183.190403	-199.138623
+3.35	302.967518	238.376260	216.147873	194.075311	186.686901	197.323845	268.508881	290.932606	313.433927	332.683288
-3.4	-168.115070	-122.647400	-127.327462	-114.366684	-103.393217	-99.998320	-136.904380	-152.534155	-169.098833	-183.820267
+3.4	332.861230	260.568203	236.683131	213.191174	201.387088	213.669180	296.942636	320.017463	345.096279	365.701649
-3.45	-154.105479	-112.426783	-116.716840	-104.836127	-94.777116	-91.665126	-125.495681	-139.822975	-155.007264	-168.501911
+3.45	350.995337	277.143331	251.648666	224.917750	211.223388	222.917938	316.793400	338.808288	369.070761	386.095207
-3.5	-140.095889	-102.206166	-106.106218	-95.305570	-86.161014	-83.331933	-114.086983	-127.111795	-140.915695	-153.183555
+3.5	356.141595	284.958446	260.468990	228.653706	214.885436	224.619950	327.257785	346.436960	381.112016	406.015822
-3.55	-126.086299	-91.985549	-95.495596	-85.775013	-77.544913	-74.998739	-102.678284	-114.400615	-126.824125	-137.865199
+3.55	360.520076	292.248879	263.637261	235.963100	220.863197	228.517855	333.796634	356.246060	392.114737	414.474839
-3.6	-112.076708	-81.764932	-84.884974	-76.244456	-68.928811	-66.665546	-91.269586	-101.689434	-112.732556	-122.546843

+3.6	**364.817441**	**293.472034**	**264.679462**	**238.765134**	**220.720862**	**234.344790**	**334.578604**	**359.355879**	**391.989336**	**411.649838**
-3.65	**-98.067118**	**-71.544315**	**-74.274352**	**-66.713900**	**-60.312710**	**-58.332352**	**-79.860887**	**-88.978254**	**-98.640987**	**-107.228487**
+3.65	**357.151223**	**285.533842**	**258.917436**	**233.876101**	**213.993654**	**233.400094**	**325.425170**	**351.538591**	**378.972784**	**403.533861**
-3.7	**-84.057528**	**-61.323698**	**-63.663730**	**-57.183343**	**-51.696609**	**-49.999159**	**-68.452189**	**-76.267074**	**-84.549417**	**-91.910131**
+3.7	**345.697540**	**273.083535**	**250.718145**	**221.190748**	**201.988363**	**225.134116**	**305.504828**	**332.124025**	**361.131780**	**380.985946**
-3.75	**-70.047937**	**-51.103081**	**-53.053107**	**-47.652786**	**-43.080507**	**-41.665965**	**-57.043490**	**-63.555894**	**-70.457848**	**-76.591775**
+3.75	**324.087705**	**253.981507**	**234.017020**	**206.758253**	**186.962635**	**209.060062**	**281.223492**	**300.258749**	**332.500281**	**343.502553**
-3.8	**-56.038347**	**-40.882465**	**-42.442485**	**-38.122229**	**-34.464406**	**-33.332772**	**-45.634792**	**-50.844714**	**-56.366278**	**-61.273419**
+3.8	**289.368610**	**224.791918**	**210.953726**	**183.753332**	**164.808716**	**184.753661**	**248.700489**	**266.752034**	**289.731377**	**290.436627**
-3.85	**-42.028757**	**-30.661848**	**-31.831863**	**-28.591672**	**-25.848304**	**-24.999578**	**-34.226093**	**-38.133533**	**-42.274709**	**-45.955063**
+3.85	**240.218751**	**185.041637**	**176.547859**	**152.166158**	**135.632149**	**151.853283**	**204.577836**	**220.323138**	**232.769034**	**232.760683**
-3.9	**-28.019166**	**-20.441231**	**-21.221241**	**-19.061115**	**-17.232203**	**-16.666385**	**-22.817395**	**-25.422353**	**-28.183140**	**-30.636707**
+3.9	**176.565247**	**134.335958**	**130.647838**	**111.826462**	**99.015603**	**110.290002**	**148.447956**	**160.449742**	**161.297236**	**161.297846**
-3.95	**-14.009576**	**-10.220614**	**-10.610619**	**-9.530558**	**-8.616102**	**-8.333191**	**-11.408696**	**-12.711173**	**-14.091570**	**-15.318351**
+3.95	**96.332293**	**72.880306**	**72.408813**	**61.606220**	**54.237666**	**59.789657**	**80.352611**	**87.157958**	**88.093441**	**88.102359**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-14.009245	-14.036219	-14.973449	-14.098519	-16.861396	-12.202336	-12.855443	-6.725608
+0.05	96.357319	102.080541	106.997995	99.151272	114.039988	80.139900	84.357790	51.168372
-0.1	-28.018491	-28.072439	-29.946898	-28.197037	-33.722793	-24.404673	-25.710886	-13.451216
+0.1	175.590192	189.165972	198.044320	183.359707	210.442806	143.999127	151.578028	94.388764
-0.15	-42.027736	-42.108658	-44.920348	-42.295556	-50.584189	-36.607009	-38.566329	-20.176824
+0.15	239.671061	261.648697	273.371208	252.784426	288.905557	194.183211	204.749080	129.835903
-0.2	-56.036981	-56.144877	-59.893797	-56.394074	-67.445586	-48.809346	-51.421772	-26.902432
+0.2	289.221249	319.386643	332.960926	307.453434	349.794670	236.312961	250.178116	157.739833
-0.25	-70.046226	-70.181097	-74.867246	-70.492593	-84.306982	-61.011682	-64.277215	-33.628040
+0.25	324.425485	362.815511	377.312179	347.854817	401.910929	268.853229	284.527746	178.385967
-0.3	-84.055472	-84.217316	-89.840695	-84.591111	-101.168379	-73.214018	-77.132658	-40.353648
+0.3	346.238559	392.472889	407.033410	381.461836	443.904248	291.336360	308.200539	192.115027
-0.35	-98.064717	-98.253535	-104.814145	-98.689630	-118.029775	-85.416355	-89.988101	-47.079256
+0.35	358.277012	408.998216	428.535117	406.372032	470.157000	304.211410	321.677481	199.595957
-0.4	-112.073962	-112.289755	-119.787594	-112.788148	-134.891172	-97.618691	-102.843544	-53.804864
+0.4	365.318441	423.192762	442.147575	418.115795	480.799357	312.504715	330.944919	200.987850
-0.45	-126.083208	-126.325974	-134.761043	-126.886667	-151.752568	-109.821028	-115.698987	-60.530472
+0.45	360.905989	425.020803	442.332029	417.760950	476.725582	314.652188	333.032032	196.767990
-0.5	-140.092453	-140.362193	-149.734492	-140.985186	-168.613965	-122.023364	-128.554430	-67.256080
+0.5	355.807469	416.996538	434.692271	409.736495	467.890596	308.235414	326.307761	190.813451
-0.55	-154.101698	-154.398413	-164.707942	-155.083704	-185.475361	-134.225701	-141.409873	-73.981688
+0.55	350.528709	400.367844	418.837465	395.958513	454.976460	295.328365	312.804761	188.008955
-0.6	-168.110944	-168.434632	-179.681391	-169.182223	-202.336758	-146.428037	-154.265316	-80.707296
+0.6	332.279091	373.665664	391.044396	370.765332	428.339921	278.014069	293.970779	182.564382
-0.65	-182.120189	-182.470851	-194.654840	-183.280741	-219.198154	-158.630373	-167.120759	-87.432904
+0.65	302.575242	342.915717	355.115432	335.149162	388.486824	254.954506	269.649730	170.813201
-0.7	-196.129434	-196.507071	-209.628289	-197.379260	-236.059551	-170.832710	-179.976202	-94.158512
+0.7	268.554001	301.874886	312.536777	290.205665	336.682996	224.565110	237.500599	153.238254
-0.75	-210.138679	-210.543290	-224.601739	-211.477778	-252.920947	-183.035046	-192.831645	-100.884120
+0.75	223.226313	251.625821	259.737018	237.327926	274.319858	187.642109	198.367173	130.377747
-0.8	-224.147925	-224.579509	-239.575188	-225.576297	-269.782344	-195.237383	-205.687088	-107.609728
+0.8	168.641412	193.353218	197.962485	179.580644	202.914209	145.055684	153.171906	102.825128
-0.85	-238.157170	-238.615729	-254.548637	-239.674816	-286.643740	-207.439719	-218.542531	-114.335336
+0.85	105.840226	128.343571	128.569127	116.132262	124.108266	97.811138	102.959093	73.999683
-0.9	-252.166415	-252.651948	-269.522086	-253.773334	-303.505137	-219.642055	-231.397974	-121.060944
+0.9	69.132915	73.807030	73.807030	59.031096	58.565798	55.989430	58.936243	49.337582
-0.95	-266.175661	-266.688167	-284.495535	-267.871853	-320.366533	-253.924901	-269.428985	-127.786552
+0.95	48.581949	51.475887	54.652227	51.423746	61.082097	37.647668	39.948928	24.306579
-1	-283.442701	-280.724393	-299.468987	-281.970370	-337.227925	-321.676962	-340.805811	-134.512159
+1	51.138895	54.185144	57.528659	54.130259	64.296944	39.629123	42.051502	24.350601
(Span 2) -2	-283.442701	-280.724393	-299.468987	-281.970370	-337.227925	-321.676962	-340.805811	-134.512159
+2	51.138895	54.185144	57.528659	54.130259	64.296944	39.629123	42.051502	24.350601
-2.05	-208.749036	-195.245120	-207.293024	-195.047412	-231.681417	-229.266469	-242.875023	-87.742585
+2.05	38.749024	41.057231	43.590684	41.015644	48.719156	30.027826	31.863313	27.185207
-2.1	-171.872559	-182.117212	-193.355038	-181.932798	-216.103603	-150.699208	-160.137981	-81.842942
+2.1	77.867745	87.486345	87.486345	76.219148	79.443667	66.795986	70.311564	55.809571
-2.15	-159.483137	-168.989304	-179.417053	-168.818184	-200.525789	-123.592975	-131.147851	-75.943299
+2.15	121.875529	152.079914	152.162009	144.195469	156.688488	115.467366	121.544596	85.494414
-2.2	-147.093715	-155.861396	-165.479067	-155.703570	-184.947974	-113.991674	-120.959650	-70.043656
+2.2	196.786321	227.914840	233.439640	219.219844	249.772709	170.576635	180.121006	117.853126

-2.25	-134.704293	-142.733489	-151.541082	-142.588956	-169.370160	-104.390373	-110.771450	-64.144013
+2.25	264.075569	295.348348	304.782674	287.544281	331.731479	226.207780	238.480222	151.553335
-2.3	-122.314871	-129.605581	-137.603096	-129.474342	-153.792346	-94.789072	-100.583249	-58.244369
+2.3	314.572063	349.547052	362.128498	343.626419	398.584231	274.981098	290.261891	177.163275
-2.35	-109.925448	-116.477673	-123.665110	-116.359728	-138.214532	-85.187771	-90.395049	-52.344726
+2.35	355.201677	391.466707	410.550291	388.618907	450.578956	308.728558	326.190358	196.085053
-2.4	-97.536026	-103.349765	-109.727125	-103.245115	-122.636717	-75.586470	-80.206848	-46.445083
+2.4	383.510523	424.888705	445.405557	421.149629	486.552704	330.392701	348.678716	208.027459
-2.45	-85.146604	-90.221858	-95.789139	-90.130501	-107.058903	-65.985169	-70.018648	-40.545440
+2.45	398.542088	444.866620	465.715826	439.846664	506.488408	340.347741	359.449274	214.078708
-2.5	-72.759811	-77.093983	-81.851153	-77.015890	-91.481089	-56.383868	-59.830448	-34.645797
+2.5	399.950980	450.842520	470.973770	444.437421	509.644788	335.947652	355.033986	213.408904
-2.55	-85.149681	-90.221895	-95.789071	-90.130505	-107.058718	-65.985147	-70.018570	-40.545378
+2.55	398.777729	444.841528	465.693600	439.836134	506.486089	340.332276	359.432750	214.076156
-2.6	-97.539552	-103.349808	-109.727047	-103.245120	-122.636505	-75.586444	-80.206759	-46.445012
+2.6	383.472006	424.893798	445.413223	421.152408	486.553506	330.380352	348.665468	208.279205
-2.65	-109.929422	-116.477721	-123.665022	-116.359735	-138.214293	-85.187742	-90.394947	-52.344647
+2.65	355.464713	391.469254	410.555155	388.628598	450.583058	308.725094	326.186418	196.086531
-2.7	-122.319293	-129.605633	-137.602998	-129.474350	-153.792080	-94.789039	-100.583136	-58.244281
+2.7	314.312843	349.575444	362.158604	343.628136	398.592193	274.996292	290.277587	177.166761
-2.75	-134.709164	-142.733546	-151.540973	-142.588965	-169.369868	-104.390336	-110.771324	-64.143915
+2.75	263.880288	295.383132	304.818913	287.551057	331.743890	226.226064	238.499182	151.558992
-2.8	-147.099034	-155.861459	-165.478948	-155.703580	-184.947655	-113.991633	-120.959512	-70.043550
+2.8	196.788886	227.915518	233.441576	219.226007	249.784026	170.576562	180.121039	117.858523
-2.85	-159.488905	-168.989371	-179.416924	-168.818195	-200.525443	-123.592931	-131.147701	-75.943184
+2.85	122.000762	152.088708	152.171846	144.207445	156.699822	115.460708	121.537588	85.036206
-2.9	-171.878775	-182.117284	-193.354899	-181.932809	-216.103230	-150.699837	-160.138585	-81.842819
+2.9	77.828362	87.501716	87.501716	76.220763	79.449585	66.805949	70.322052	55.893199
-2.95	-208.749424	-195.245197	-207.292875	-195.047424	-231.681017	-229.266830	-242.875327	-87.742453
+2.95	38.747618	41.057220	43.590717	41.015639	48.719239	30.027842	31.863356	27.129227
-3	-283.443118	-280.724370	-299.469181	-281.970400	-337.228357	-321.677065	-340.806003	-134.523226
+3	51.137044	54.185123	57.528701	54.130255	64.297054	39.629139	42.051552	24.350637
(Span 3) -4	-283.443118	-280.724370	-299.469181	-281.970400	-337.228357	-321.677065	-340.806003	-134.523226
+4	51.137044	54.185123	57.528701	54.130255	64.297054	39.629139	42.051552	24.350637
-3.05	-266.182202	-266.688152	-284.495722	-267.871880	-320.366939	-253.925077	-269.429241	-127.797065
+3.05	48.580192	51.475867	54.652266	51.423742	61.082202	37.647682	39.948974	24.301407
-3.1	-252.172612	-252.651934	-269.522263	-253.773360	-303.505520	-219.641685	-231.397688	-121.070904
+3.1	69.132944	73.819705	73.819705	59.040984	58.571839	55.997607	58.944849	49.332763
-3.15	-238.163021	-238.615715	-254.548804	-239.674840	-286.644102	-207.439369	-218.542261	-114.344742
+3.15	106.147463	128.355340	128.580196	116.138545	124.101064	97.793537	102.940566	73.995123
-3.2	-224.153431	-224.579497	-239.575345	-225.576320	-269.782684	-195.237053	-205.686834	-107.618581
+3.2	168.274741	193.364772	197.973082	179.585384	202.907115	145.063543	153.180093	102.820313
-3.25	-210.143841	-210.543279	-224.601886	-211.477800	-252.921266	-183.034737	-192.831407	-100.892419
+3.25	222.984561	251.636232	259.746177	237.331215	274.311808	187.649396	198.374730	130.372589
-3.3	-196.134250	-196.507061	-209.628427	-197.379280	-236.059848	-170.832421	-179.975979	-94.166258
+3.3	267.403848	301.883349	312.543637	290.201191	336.672962	224.571254	237.506922	153.232733
-3.35	-182.124660	-182.470843	-194.654968	-183.280760	-219.198430	-158.630105	-167.120552	-87.440096
+3.35	302.967518	342.921485	355.119213	335.142603	388.473864	254.959051	269.654336	170.807160
-3.4	-168.115070	-168.434624	-179.681509	-169.182240	-202.337012	-146.427789	-154.265125	-80.713935
+3.4	332.861230	373.668040	391.040107	370.755995	428.323241	278.016601	293.973228	182.557730
-3.45	-154.105479	-154.398406	-164.708050	-155.083720	-185.475594	-134.225474	-141.409698	-73.987773
+3.45	350.995337	400.362888	418.829551	395.945725	454.979496	295.326363	312.802389	188.001499
-3.5	-140.095889	-140.362188	-149.734591	-140.985200	-168.614176	-122.023158	-128.554271	-67.261612
+3.5	356.141595	416.987709	434.680036	409.719642	467.896789	308.231081	326.302894	190.807696
-3.55	-126.086299	-126.325970	-134.761133	-126.886680	-151.752758	-109.820842	-115.698843	-60.535451
+3.55	360.520076	425.031020	442.345532	417.746277	476.720271	314.657493	333.037912	196.763443
-3.6	-112.076708	-112.289752	-119.787674	-112.788160	-134.891340	-97.618526	-102.843416	-53.809289

+3.6	364.817441	423.198485	442.156391	418.096791	480.789104	312.507153	330.947763	200.982778
-3.65	-98.067118	-98.253533	-104.814215	-98.689640	-118.029922	-85.416210	-89.987989	-47.083128
+3.65	357.151223	408.997116	428.538732	406.381026	470.141197	304.209627	321.675839	199.590135
-3.7	-84.057528	-84.217315	-89.840756	-84.591119	-101.168504	-73.213894	-77.132562	-40.356966
+3.7	345.697540	392.466868	407.029734	381.465608	443.915107	291.331488	308.195622	192.120876
-3.75	-70.047937	-70.181097	-74.867297	-70.492599	-84.307086	-61.011578	-64.277135	-33.630805
+3.75	324.087705	362.804176	377.302896	347.851953	401.915238	268.845050	284.519321	178.390947
-3.8	-56.038347	-56.144879	-59.893838	-56.394079	-67.445668	-48.809262	-51.421707	-26.904643
+3.8	289.368610	319.369601	332.945602	307.445070	349.791070	236.301177	250.165866	157.743943
-3.85	-42.028757	-42.108661	-44.920379	-42.295559	-50.584250	-36.606946	-38.566280	-20.178482
+3.85	240.218751	261.625655	273.349493	252.770205	288.895023	194.171692	204.732902	129.839035
-3.9	-28.019166	-28.072442	-29.946920	-28.197039	-33.722831	-24.404630	-25.710853	-13.452320
+3.9	176.565247	189.136754	198.016008	183.339448	210.425066	144.010008	151.589483	94.390869
-3.95	-14.009576	-14.036224	-14.973461	-14.098519	-16.861413	-12.202315	-12.855426	-6.726159
+3.95	96.332293	102.087045	107.004964	99.157708	114.047714	80.138583	84.356403	51.169459
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 40' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-14.009245	-19.584857	-21.206429	-12.947915	-16.463108	-16.559964
+0.05	96.357319	116.449547	122.378145	88.947963	107.473626	105.784862
-0.1	-28.018491	-39.169715	-42.412857	-25.895831	-32.926217	-33.119927
+0.1	175.590192	209.421038	220.202837	165.338907	192.860264	195.994032
-0.15	-42.027736	-58.754572	-63.619286	-38.843746	-49.389325	-49.679891
+0.15	239.671061	283.731937	294.628721	229.051068	259.865171	270.148367
-0.2	-56.036981	-78.339430	-84.825715	-51.791661	-65.852434	-66.239854
+0.2	289.221249	341.083031	352.041527	280.141821	312.730280	328.574714
-0.25	-70.046226	-97.924287	-106.032144	-64.739576	-82.315542	-82.799818
+0.25	324.425485	394.976663	408.540559	318.954148	354.104841	371.784413
-0.3	-84.055472	-117.509145	-127.238572	-77.687492	-98.778651	-99.359782
+0.3	346.238559	429.917168	445.473918	345.917477	389.241985	412.638950
-0.35	-98.064717	-137.094002	-148.445001	-90.635407	-115.241759	-115.919745
+0.35	358.277012	447.089989	467.913611	361.547499	409.681649	439.569994
-0.4	-112.073962	-156.678859	-169.651430	-103.583322	-131.704867	-132.479709
+0.4	365.318441	448.797840	486.557810	371.296443	425.077937	452.760160
-0.45	-126.083208	-176.263717	-190.857859	-116.531237	-148.167976	-149.039673
+0.45	360.905989	455.661647	490.035052	374.291468	428.491976	452.500483
-0.5	-140.092453	-195.848574	-212.064287	-129.479153	-164.631084	-165.599636
+0.5	355.807469	451.293308	486.053360	366.950472	420.543929	444.035058
-0.55	-154.101698	-215.433432	-233.270716	-142.427068	-181.094193	-182.159600
+0.55	350.528709	429.951488	465.148514	350.837490	401.910734	428.248056
-0.6	-168.110944	-235.018289	-254.477145	-155.374983	-197.557301	-198.719563
+0.6	332.279091	399.703106	433.022189	330.460479	373.478993	400.447207
-0.65	-182.120189	-254.603147	-275.683574	-168.322898	-214.020410	-215.279527
+0.65	302.575242	372.351461	389.276952	302.731463	336.229476	361.973792
-0.7	-196.129434	-274.188004	-296.890002	-181.270814	-230.483518	-231.839491
+0.7	268.554001	329.120352	335.215932	266.502370	298.284853	313.672197
-0.75	-210.138679	-293.772861	-318.096431	-194.218729	-246.946627	-248.399454
+0.75	223.226313	270.157637	268.835139	222.714836	248.351132	256.765569
-0.8	-224.147925	-313.357719	-339.302860	-207.166644	-263.409735	-264.959418
+0.8	168.641412	197.098070	188.265636	172.396901	188.887826	192.642098
-0.85	-238.157170	-332.942576	-360.509289	-220.114559	-279.872843	-281.519382
+0.85	105.840226	120.332065	112.062628	116.662907	124.610366	122.799901
-0.9	-252.166415	-353.556853	-399.668527	-242.744709	-296.335952	-300.902356
+0.9	69.132915	59.818469	64.767392	66.366168	70.790579	58.893552
-0.95	-266.175661	-452.865612	-495.738315	-316.228368	-354.473555	-397.712142
+0.95	48.581949	63.141717	68.365581	44.592682	50.375584	55.433380
-1	-283.442701	-560.562047	-599.348618	-392.454844	-454.002655	-498.270950
+1	51.138895	66.464965	71.963771	46.939664	53.026930	58.350926
(Span 2) -2	-283.442701	-560.562047	-599.348618	-392.454844	-454.002655	-498.270950
+2	51.138895	66.464965	71.963771	46.939664	53.026930	58.350926
-2.05	-208.749036	-386.110626	-401.703796	-288.936491	-333.737320	-364.772141
+2.05	38.749024	50.361912	54.528474	35.567177	40.179628	44.213733
-2.1	-171.872559	-263.182499	-289.985161	-201.168887	-219.038459	-248.825892
+2.1	77.867745	79.022997	76.965994	79.108187	84.164436	79.714064
-2.15	-159.483137	-207.286821	-224.436302	-146.392421	-167.064656	-181.981301
+2.15	121.875529	154.687989	146.298920	137.983611	155.262045	155.693797
-2.2	-147.093715	-191.183778	-207.001004	-135.019949	-152.529925	-167.844112
+2.2	196.786321	238.253735	230.517752	202.842209	228.400103	237.770415

-2.25	**-134.704293**	**-175.080734**	**-189.565706**	**-123.647476**	**-139.682620**	**-153.706924**
+2.25	**264.075569**	**332.372511**	**334.700064**	**261.896326**	**311.681355**	**311.204809**
-2.3	**-122.314871**	**-158.977690**	**-172.130407**	**-112.275004**	**-126.835316**	**-139.569735**
+2.3	**314.572063**	**402.753381**	**418.451940**	**313.409441**	**374.330070**	**377.084974**
-2.35	**-109.925448**	**-142.874646**	**-154.695109**	**-100.902531**	**-113.988011**	**-125.432546**
+2.35	**355.201677**	**451.725294**	**485.457837**	**348.267014**	**417.556026**	**425.257894**
-2.4	**-97.536026**	**-126.771602**	**-137.259810**	**-89.530059**	**-101.140707**	**-111.295358**
+2.4	**383.510523**	**483.718580**	**531.784610**	**372.786503**	**441.407116**	**457.980280**
-2.45	**-85.146604**	**-110.668558**	**-119.824512**	**-78.157587**	**-88.293402**	**-97.158169**
+2.45	**398.542088**	**507.328001**	**561.474972**	**389.114228**	**451.557746**	**475.927767**
-2.5	**-72.759811**	**-94.565563**	**-102.389214**	**-66.785201**	**-75.446098**	**-83.021004**
+2.5	**399.950980**	**516.671641**	**573.867424**	**395.387407**	**449.573267**	**479.518653**
-2.55	**-85.149681**	**-110.668616**	**-119.824492**	**-78.157687**	**-88.293394**	**-97.158198**
+2.55	**398.777729**	**507.320581**	**561.473738**	**389.118705**	**451.552994**	**475.917530**
-2.6	**-97.539552**	**-126.771668**	**-137.259789**	**-89.530174**	**-101.140696**	**-111.295391**
+2.6	**383.472006**	**483.713255**	**531.783387**	**372.780385**	**441.399121**	**457.976357**
-2.65	**-109.929422**	**-142.874721**	**-154.695085**	**-100.902660**	**-113.987998**	**-125.432584**
+2.65	**355.464713**	**451.718412**	**485.456049**	**348.261366**	**417.544742**	**425.256560**
-2.7	**-122.319293**	**-158.977774**	**-172.130382**	**-112.275147**	**-126.835301**	**-139.569777**
+2.7	**314.312843**	**402.742880**	**418.449856**	**313.401132**	**374.315467**	**377.088098**
-2.75	**-134.709164**	**-175.080827**	**-189.565678**	**-123.647633**	**-139.682603**	**-153.706970**
+2.75	**263.880288**	**332.359298**	**334.702054**	**261.916311**	**311.663757**	**311.214518**
-2.8	**-147.099034**	**-191.183880**	**-207.000975**	**-135.020119**	**-152.529905**	**-167.844163**
+2.8	**196.788886**	**238.242125**	**230.519330**	**202.842177**	**228.385036**	**237.777716**
-2.85	**-159.488905**	**-207.286932**	**-224.436271**	**-146.392606**	**-167.065167**	**-181.981356**
+2.85	**122.000762**	**154.693422**	**146.299677**	**137.989820**	**155.260092**	**155.701451**
-2.9	**-171.878775**	**-263.182588**	**-289.985066**	**-201.168724**	**-219.038349**	**-248.825749**
+2.9	**77.828362**	**79.019161**	**76.965285**	**79.101515**	**84.176757**	**79.721589**
-2.95	**-208.749424**	**-386.110983**	**-401.703892**	**-288.936198**	**-333.737386**	**-364.771988**
+2.95	**38.747618**	**50.361881**	**54.528472**	**35.567137**	**40.179643**	**44.213716**
-3	**-283.443118**	**-560.564648**	**-599.348445**	**-392.454903**	**-454.002460**	**-498.270767**
+3	**51.137044**	**66.464929**	**71.963778**	**46.939606**	**53.026939**	**58.350907**
(Span 3) -4	**-283.443118**	**-560.564648**	**-599.348445**	**-392.454903**	**-454.002460**	**-498.270767**
+4	**51.137044**	**66.464929**	**71.963778**	**46.939606**	**53.026939**	**58.350907**
-3.05	**-266.182202**	**-452.866216**	**-495.738417**	**-316.228781**	**-354.473849**	**-397.712471**
+3.05	**48.580192**	**63.141682**	**68.365589**	**44.592625**	**50.375592**	**55.433362**
-3.1	**-252.172612**	**-353.556815**	**-399.668618**	**-242.744396**	**-296.335077**	**-300.903588**
+3.1	**69.132944**	**59.818436**	**64.767400**	**66.344703**	**70.767684**	**58.901838**
-3.15	**-238.163021**	**-332.942599**	**-360.509275**	**-220.114899**	**-279.872017**	**-281.519163**
+3.15	**106.147463**	**120.967867**	**112.059148**	**116.672054**	**124.619939**	**122.795128**
-3.2	**-224.153431**	**-313.357740**	**-339.302847**	**-207.166964**	**-263.408956**	**-264.959213**
+3.2	**168.274741**	**197.092059**	**188.264659**	**172.406008**	**188.882866**	**192.637802**
-3.25	**-210.143841**	**-293.772882**	**-318.096418**	**-194.219028**	**-246.945896**	**-248.399262**
+3.25	**222.984561**	**270.149179**	**268.833585**	**222.723327**	**248.345475**	**256.760956**
-3.3	**-196.134250**	**-274.188023**	**-296.889990**	**-181.271093**	**-230.482836**	**-231.839311**
+3.3	**267.403848**	**329.108453**	**335.217588**	**266.509583**	**298.276527**	**313.666483**
-3.35	**-182.124660**	**-254.603165**	**-275.683562**	**-168.323157**	**-214.019776**	**-215.279361**
+3.35	**302.967518**	**372.362074**	**389.279145**	**302.736879**	**336.225106**	**361.966227**
-3.4	**-168.115070**	**-235.018307**	**-254.477133**	**-155.375222**	**-197.556715**	**-198.719410**
+3.4	**332.861230**	**399.716345**	**433.023519**	**330.463640**	**373.472856**	**400.464299**
-3.45	**-154.105479**	**-215.433448**	**-233.270705**	**-142.427286**	**-181.093655**	**-182.159460**
+3.45	**350.995337**	**429.943580**	**465.146680**	**350.835416**	**401.902231**	**428.262213**
-3.5	**-140.095889**	**-195.848590**	**-212.064277**	**-129.479351**	**-164.630595**	**-165.599509**
+3.5	**356.141595**	**451.281198**	**486.051696**	**366.959358**	**420.532515**	**444.045742**
-3.55	**-126.086299**	**-176.263731**	**-190.857848**	**-116.531415**	**-148.167534**	**-149.039558**
+3.55	**360.520076**	**455.671115**	**490.032431**	**374.297448**	**428.477194**	**452.491054**
-3.6	**-112.076708**	**-156.678873**	**-169.651420**	**-103.583480**	**-131.704474**	**-132.479608**

+3.6	**364.817441**	**448.787765**	**486.559090**	**371.299073**	**425.087544**	**452.746818**
-3.65	**-98.067118**	**-137.094015**	**-148.444992**	**-90.635544**	**-115.241414**	**-115.919657**
+3.65	**357.151223**	**447.081310**	**467.911196**	**361.545275**	**409.687286**	**439.552335**
-3.7	**-84.057528**	**-117.509156**	**-127.238563**	**-77.687609**	**-98.778354**	**-99.359706**
+3.7	**345.697540**	**429.930467**	**445.471102**	**345.911667**	**389.249279**	**412.644119**
-3.75	**-70.047937**	**-97.924298**	**-106.032135**	**-64.739674**	**-82.315293**	**-82.799756**
+3.75	**324.087705**	**394.984366**	**408.542238**	**318.944431**	**354.107121**	**371.783672**
-3.8	**-56.038347**	**-78.339439**	**-84.825707**	**-51.791738**	**-65.852233**	**-66.239805**
+3.8	**289.368610**	**341.084570**	**352.042085**	**280.127943**	**312.725927**	**328.569102**
-3.85	**-42.028757**	**-58.754581**	**-63.619278**	**-38.843803**	**-49.389173**	**-49.679855**
+3.85	**240.218751**	**283.725781**	**294.627388**	**229.032994**	**259.858104**	**270.137549**
-3.9	**-28.019166**	**-39.169723**	**-42.412850**	**-25.895867**	**-32.926113**	**-33.119904**
+3.9	**176.565247**	**209.435174**	**220.200421**	**165.316317**	**192.874793**	**195.977783**
-3.95	**-14.009576**	**-19.584864**	**-21.206422**	**-12.947932**	**-16.463052**	**-16.559953**
+3.95	**96.332293**	**116.430811**	**122.374490**	**88.952603**	**107.452846**	**105.790540**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 45' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-16.5426364	-17.934361	-19.386658	-13.7291835	-14.67648592	-13.82035722	-16.57837755	-13.06221147	-13.77773249	-6.736970569
End Shear	120.2714577	133.460741	137.788262	108.5833428	114.3713759	106.2837628	123.4468465	91.55445628	96.42650107	54.91562401
-0.05	-16.5426364	-18.009893	-23.071333	-13.7291835	-14.67648592	-13.82035722	-16.57837755	-13.06221147	-13.77773249	-6.736970569
+0.05	110.5026704	122.175727	125.635343	99.59202676	104.7196211	97.22819751	112.5418415	82.14360486	86.48552713	50.2906327
-0.1	-16.5426364	-18.274416	-27.834271	-13.7291835	-14.67648592	-13.82035722	-16.57837755	-13.06221147	-13.77773249	-6.736970569
+0.1	100.8450694	111.846548	113.799775	91.34836792	95.88123775	88.91713825	102.5563107	73.30125297	77.15921365	45.97387497
-0.15	-16.5426364	-19.388858	-31.758314	-13.7291835	-14.67648592	-13.82035722	-16.57837755	-13.06221147	-13.77773249	-7.769786091
+0.15	93.69803464	103.758106	104.586613	84.82374798	88.89358249	82.35105335	95.17171782	66.57714127	70.08120133	42.56945819
-0.2	-18.0464843	-27.790174	-36.789827	-18.1175737	-18.1175737	-15.20363343	-16.57837755	-13.77669744	-14.50178678	-10.73687956
+0.2	84.32939876	93.891141	93.422258	77.18165935	80.71822619	74.6744199	85.49890023	58.57004654	61.65268057	38.39022547
-0.25	-22.00082995	-34.608758	-40.853253	-23.25697619	-23.25697619	-20.76906892	-21.69575023	-18.03084101	-19.01119766	-13.08962774
+0.25	76.99042335	86.210549	84.796568	70.85566347	73.95873654	68.33214194	77.92763382	52.40505897	55.41651007	35.11904506
-0.3	-26.88306272	-43.226265	-45.775073	-29.62176119	-29.62176119	-27.67703164	-29.3819438	-23.26044029	-24.53874305	-15.99452967
+0.3	68.22896347	76.899871	74.428659	63.11577489	65.69904286	60.58870786	68.70642325	46.70112996	49.43074971	31.13537778
-0.35	-33.58469662	-50.174760	-52.302570	-35.00337012	-35.12110156	-33.14722676	-35.47239483	-27.3476779	-28.85641247	-18.28229327
+0.35	61.09484176	70.061753	66.489058	57.07854447	59.26520308	54.56240967	61.5491098	42.30203684	44.75837161	28.04385812
-0.4	-43.30289716	-58.899727	-61.457271	-43.13469633	-43.90123351	-40.03601724	-43.14755888	-32.32348829	-34.10989684	-21.08692103
+0.4	52.69915592	61.386702	57.320653	49.75307952	51.47015159	47.26827307	52.91118611	36.95887811	39.08456077	24.31377982
-0.45	-50.98514468	-65.889410	-68.673007	-49.54314789	-50.82863297	-46.40712477	-50.91944978	-37.26586715	-39.36090179	-23.27923417
+0.45	46.2403737	54.729480	50.494375	44.09017949	45.45410816	41.64485631	46.27316046	32.82382156	34.6946972	21.44835289
-0.5	-60.43955006	-74.608769	-77.555160	-57.40521007	-59.33712744	-54.45676574	-60.75902647	-43.87614838	-46.38717499	-26.97658298
+0.5	38.52209405	46.783063	42.420304	37.2861076	38.23889629	34.90861703	38.35016023	27.84941898	29.41521088	18.02991043
-0.55	-67.85984646	-81.547443	-84.548646	-63.55546262	-66.00113863	-60.7663516	-68.48843156	-49.51668619	-52.37869689	-30.29687598
+0.55	32.65612461	40.741620	36.347151	32.08309123	32.73278398	29.48729906	32.0491031	24.04034556	25.37376248	15.71128968
-0.6	-76.9231765	-90.143778	-93.212199	-71.04129867	-74.12280578	-68.46251346	-77.93823258	-56.49430855	-59.79053951	-34.35151326
+0.6	25.74251149	33.604889	29.263521	25.61022711	25.8994333	23.57748795	25.41061614	19.51213957	20.57098414	13.24897801
-0.65	-84.44421316	-96.935781	-100.497903	-76.84778623	-80.43127994	-74.44587154	-85.30315738	-61.73826552	-65.36337656	-37.50746322
+0.65	20.26100761	28.242331	24.021198	21.00978958	21.0136303	19.52568564	20.95080618	16.09099902	16.94385486	11.36310209
-0.7	-94.24289123	-105.287338	-109.993901	-83.85043993	-88.05093652	-81.67994362	-94.23153307	-67.8655185	-71.87812097	-41.32765374
+0.7	15.45113699	21.991998	18.786792	16.38222391	16.38222391	14.76478821	15.71750309	12.46929653	13.12557529	9.120596061
-0.75	-101.8359271	-111.833536	-117.441529	-89.22759133	-93.91172034	-87.2501761	-101.126647	-72.42140546	-76.72474898	-44.27283221
+0.75	12.59534056	17.367960	15.827662	12.90903856	12.90903856	11.21627445	11.76569358	9.7907341	10.30603589	7.425795071
-0.8	-110.9827025	-119.814216	-126.551877	-95.64010175	-100.9141774	-93.91352102	-109.4019161	-77.6788279	-82.32104256	-47.80053997
+0.8	9.250193024	11.845988	12.436842	8.874965228	8.874965228	7.128931028	7.186021567	6.725347746	7.079313417	5.441171951
-0.85	-117.9969572	-126.011991	-133.670973	-100.5023673	-106.2351405	-98.98373256	-115.7218909	-83.4320276	-87.86412233	-50.48852051
+0.85	6.766105912	8.034930	9.976370	5.780861353	5.780861353	4.631490419	4.631490419	4.472249404	4.707630951	3.967913044
-0.9	-126.348652	-133.491368	-142.523026	-106.2177774	-112.5052135	-104.9677496	-123.2124166	-91.6911688	-96.57905319	-53.66571701
+0.9	3.917662709	3.863531	7.223189	2.729057616	2.906964322	2.735535658	3.265124393	2.182181522	2.297033181	2.279261508
-0.95	-132.6695652	-139.234648	-149.581046	-110.4795713	-117.1941864	-109.4510414	-128.8519205	-97.9993205	-103.2333135	-56.05007033
+0.95	3.117576141	3.489713	5.283526	2.729057616	2.906964322	2.735535658	3.265124393	2.182181522	2.297033181	1.274808047
-1	-140.0829962	-146.077949	-158.051460	-115.3909231	-122.6166899	-114.6470984	-135.4260273	-105.8345657	-111.5111643	-58.81871244
+1	3.12E+00	3.455307	3.581627	2.73E+00	2.91E+00	2.74E+00	3.27E+00	2.18E+00	2.30E+00	1.27E+00
(Span 2) -2	-1.15E+01	-12.700831	-13.165153	-1.00E+01	-1.07E+01	-1.01E+01	-1.20E+01	-8.02E+00	-8.44E+00	-4.69E+00
+2	1.34E+02	148.161657	160.033017	115.8611805	123.2941794	115.4083522	136.7266067	113.3104417	119.5332548	59.3839775
-2.05	-1.15E+01	-12.746265	-15.056757	-1.00E+01	-1.07E+01	-1.01E+01	-1.20E+01	-8.02E+00	-8.44E+00	-4.69E+00
+2.05	1.29E+02	141.733813	151.713738	111.4742761	118.4586239	110.7793363	130.8888222	106.4655597	112.2817284	56.9540034
-2.1	-11.45941934	-12.912887	-17.783826	-10.03132372	-10.68526417	-10.05513577	-12.00176931	-8.021145948	-8.443311524	-4.685871392
+2.1	121.210412	133.577621	141.635959	105.6862316	112.1110697	104.7223914	123.3152599	97.98058738	103.2975276	53.7841848
-2.15	-11.45941934	-13.219019	-20.983671	-10.03132372	-10.68526417	-10.05513577	-12.00176931	-8.021145948	-8.443311524	-4.829586961
+2.15	113.1487068	125.026841	131.226830	99.40355833	105.2517409	98.19560484	115.2162814	89.30035268	94.11169765	50.37906635
-2.2	-11.75537373	-18.126653	-24.626945	-11.91138042	-11.91138042	-10.55134539	-12.00176931	-9.079536217	-9.557406544	-6.959901057
+2.2	104.554663	116.172987	121.229613	92.70753003	97.96816281	91.28154678	106.6919744	79.95427889	84.22955577	46.7827634

-2.25	-15.72646351	-24.455171	-29.029744	-16.63458314	-16.63458314	-15.4054885	-16.30273496	-12.86267275	-13.53965553	-9.262118858
+2.25	95.71324362	107.105377	111.090711	85.67942254	90.3478635	84.06273337	97.84235576	71.2193058	74.96769031	43.03935631
-2.3	-22.33439018	-31.392207	-35.785173	-22.4459518	-22.69071365	-20.67692605	-22.09242459	-16.87662859	-17.79013343	-11.70730978
+2.3	86.9907415	97.911149	100.887921	78.40051932	82.47837901	76.62169862	88.76746862	63.15778972	66.48188391	39.19295674
-2.35	-28.33980647	-37.590467	-41.967095	-27.80646733	-28.3526892	-25.79206802	-27.97945864	-20.80405474	-21.95594584	-13.833303
+2.35	79.61282454	90.213894	92.856595	72.20179647	75.79324372	70.31062238	81.10514933	56.43085622	59.40090129	35.94075508
-2.4	-36.02779358	-45.470460	-49.702638	-34.5948119	-35.54930958	-32.51016428	-35.87311226	-25.99693866	-27.46884853	-16.99813913
+2.4	70.71238673	81.006507	83.667102	64.23419727	67.2542537	62.03981066	71.18619154	48.48373103	51.35272039	32.02004115
-2.45	-44.14969207	-53.766627	-57.630419	-41.69446615	-43.10208949	-39.57691927	-44.23347186	-31.38275405	-33.18615424	-20.5665391
+2.45	61.85243839	71.907414	74.604937	56.49879454	58.92193665	54.42238846	61.94949114	42.16535718	44.64369216	28.12127899
-2.5	-52.76679574	-62.406868	-66.057514	-49.02415657	-50.92350264	-46.90976377	-52.96045524	-36.72853626	-38.86534011	-24.28915241
+2.5	53.13006751	62.403005	66.054036	49.02039227	50.91948025	46.90604547	52.95601786	36.72617138	38.86282727	24.28854328
-2.55	-62.12064063	-71.911289	-75.006607	-56.50259569	-58.92600963	-54.42617812	-61.95403689	-42.16775278	-44.64623871	-28.12190324
+2.55	44.6423464	53.762820	57.517292	41.69079835	43.09818143	39.57331539	44.22919557	31.38044398	33.18370073	20.56595124
-2.6	-71.72108077	-81.010376	-84.120921	-64.09163292	-67.11197553	-62.04363121	-71.1141801	-48.48654771	-51.3557112	-32.02067309
+2.6	36.48636822	45.466732	49.601692	34.59128339	35.54556241	32.50673227	35.86906554	26.09086171	27.56769466	16.99758905
-2.65	-81.45932006	-90.217690	-93.358701	-72.20558225	-75.79732137	-70.19907181	-80.99440543	-56.33815431	-59.30332033	-35.94138591
+2.65	28.50185042	37.586876	41.879322	27.8031173	28.34914467	25.78881369	27.97564998	20.80193472	21.95369653	13.85117941
-2.7	-89.60128218	-97.914840	-101.426256	-78.40425199	-82.48240817	-76.62546533	-88.77204894	-63.16130101	-66.48558001	-39.19358459
+2.7	22.48803441	31.388779	35.709031	22.44278389	22.68737418	20.67419448	22.0894206	16.87461867	17.78800211	11.72458982
-2.75	-99.30958255	-107.108941	-111.666402	-85.68307117	-90.35181305	-84.06641338	-97.84685339	-71.22285156	-74.9714227	-43.03996997
+2.75	15.83636606	24.451941	28.930233	16.63210071	16.63210071	15.4029573	16.29995937	12.86103855	13.53793532	9.278495322
-2.8	-108.8474222	-116.176358	-121.834587	-92.71103467	-97.97196784	-91.28509871	-106.6963387	-79.86196254	-84.13239912	-46.78336176
+2.8	11.83484929	18.123685	24.585346	11.9090941	11.9090941	10.54903994	12.00178316	9.078043675	9.555835448	6.975175785
-2.85	-118.1060042	-125.029984	-131.851528	-99.40687429	-105.2553532	-98.19898702	-115.2204627	-89.20801977	-94.0145257	-50.37963777
+2.85	11.83484929	13.219022	20.961022	10.03131751	10.68526695	10.05513324	12.00178316	8.021154795	8.443320837	4.84355771
-2.9	-127.696535	-133.580496	-141.635957	-105.6893206	-112.1144484	-104.7255607	-123.3192047	-97.98436621	-103.3015275	-53.78471261
+2.9	11.83484929	12.912890	17.777370	10.03131751	10.68526695	10.05513324	12.00178316	8.021154795	8.443320837	4.685872682
-2.95	-136.024133	-141.736370	-151.690506	-111.477087	-118.4617134	-110.7822527	-130.8924829	-106.4692325	-112.2856182	-56.95449519
+2.95	11.83484929	12.746267	15.007826	10.03131751	10.68526695	10.05513324	12.00178316	8.021154795	8.443320837	4.685872682
-3	-143.7369651	-149.403888	-161.589638	-116.6889347	-124.2096613	-116.2865458	-137.8402767	-114.6523802	-120.9553616	-59.8448799
+3	11.83484929	12.700834	13.165553	10.03131751	10.68526695	10.05513324	12.00178316	8.021154795	8.443320837	4.685872682
(Span 3) -4	-3.21971318	-3.455307	-3.581736	-2.729055926	-2.906965079	-2.735534968	-3.265128161	-2.182183929	-2.297035715	-1.274808398
+4	132.2091963	144.738383	155.796270	114.4441238	121.5694912	113.6425419	134.1513235	104.1826335	109.7585859	58.28404927
-3.05	-3.21971318	-3.489713	-5.257381	-2.729055926	-2.906965079	-2.735534968	-3.265128161	-2.182183929	-2.297035715	-1.274808398
+3.05	127.0147465	139.231805	148.978911	110.4764199	117.1907147	109.4477788	128.8478083	97.99528507	103.2290571	56.04950437
-3.1	-4.431238455	-4.597681	-7.702951	-3.075785175	-3.075785175	-2.735534968	-3.265128161	-2.408222716	-2.53497128	-2.589421814
+3.1	120.0053407	132.017948	140.116661	105.1048966	111.2828365	103.8002992	121.7480266	90.06739457	94.8659023	53.04668781
-3.15	-6.724736084	-8.037698	-9.953650	-5.783004721	-5.783004721	-4.633179335	-4.633179335	-4.473658115	-4.709113805	-3.953280062
+3.15	114.0064047	126.008653	133.069279	100.4987483	106.2311763	98.98000939	115.7172423	83.42759378	87.85944296	50.4878795
-3.2	-9.844814462	-12.858624	-13.011113	-9.655732164	-9.655732164	-7.916636392	-8.04447466	-7.31836307	-7.703540074	-5.809700407
+3.2	106.0476861	118.234148	124.157094	94.38262151	99.5397569	92.60494844	107.7742284	76.66380772	81.24028273	47.10875966
-3.25	-12.53120192	-17.276276	-15.821539	-12.91158046	-12.91158046	-11.21883001	-11.65289816	-9.79240376	-10.30779343	-7.40877981
+3.25	99.33431697	111.829741	116.863777	89.22355586	93.90731892	87.24604383	101.1215258	72.41852612	76.72168519	44.27214377
-3.3	-16.18777583	-23.204394	-19.536916	-17.28573123	-17.28573123	-15.69156903	-16.73556521	-13.15623338	-13.84866672	-9.540188796
+3.3	90.57411624	103.626968	107.555272	82.46978706	86.54754751	80.25206934	92.46699797	66.67521065	70.61223977	40.57473533
-3.35	-20.45709433	-28.246069	-23.959432	-21.01266892	-21.0172138	-19.52864065	-20.95405626	-16.09317159	-16.94615767	-11.34402637
+3.35	83.70393995	96.931603	99.964073	76.84343047	80.42654512	74.44144709	85.29770624	61.73493375	65.35983517	37.50671773
-3.4	-26.96267682	-34.998289	-30.536399	-26.81450206	- 27.1692277411 124	-24.62550862	- 26.564914949 3366	-20.39836429	-21.5107858918233	-13.71233253
+3.4	74.84634533	88.428601	91.043611	69.55897784	72.51360778	66.93709447	76.06322141	55.13260451	58.34380703	33.5490749
-3.45	-32.52534942	-40.745754	-36.218325	-32.08693612	-32.73684755	-29.46732749	-31.97729171	-24.04278665	-25.376352	-15.69046024
+3.45	67.56894418	81.542942	84.131328	63.55081478	65.99610033	60.7616519	68.48266993	49.51290085	52.37467705	30.29608684
-3.5	-39.89350117	-48.342257	-43.821787	-38.6251604	-39.65761731	-36.23234877	-39.90438556	-28.82857042	-30.45427805	-18.69896856
+3.5	58.26595131	72.863378	75.406890	55.84263708	57.64518288	52.85558681	58.79994439	42.57382881	45.00269222	26.13624493
-3.55	-46.0952986	-54.733943	-50.487340	-44.09440334	-45.45859085	-41.64896959	-46.27800644	-32.82648884	-34.69752841	-21.44903397

+3.55	***50.68314048***	***65.884672***	***68.317750***	***49.53832031***	***50.8234126536368***	***46.4022198346927***	**50.91346279**	***37.26232445***	***39.35713693***	***23.27870384***
-3.6	***-54.19868861***	***-63.095601***	***-59.031272***	***-51.20151454***	**-53.01034776**	***-48.70875183***	**-54.61468403**	***-38.01542473***	***-40.20637047***	***-25.04780997***
+3.6	***41.06208694***	***57.147885***	***59.321753***	***41.51337509***	**42.14970056**	***38.6930978***	**41.65086237**	***31.33823646***	***33.06991154***	***20.5308561***
-3.65	***-61.14208237***	***-70.066483***	***-66.406561***	***-57.08304512***	**-59.2699953**	***-54.56686674***	**-61.55439457**	***-42.3048946***	***-44.76140652***	***-28.0445883***
+3.65	***33.27563424***	***50.169806***	***52.018823***	***34.99837945***	**35.11571671**	***33.14315152***	**35.46785654**	***27.34503008***	***28.85361598***	***18.28173536***
-3.7	***-70.46919885***	***-78.739874***	***-76.334798***	***-64.65208647***	**-67.33755489**	***-62.12417813***	**-70.53282212**	***-47.8195487***	***-50.61878804***	***-31.92275692***
+3.7	***27.37149019***	***41.490795***	***44.685872***	***28.35130984***	**28.35130984**	***26.29682143***	***27.84579903***	***22.22211504***	***23.44154014***	***15.41669273***
-3.75	***-78.19190673***	***-86.215469***	***-84.628335***	***-70.86042373***	**-73.96381947**	***-68.3368191***	***-77.93321***	***-52.40902064***	***-55.41970343***	***-35.11982553***
+3.75	***23.2808631***	***34.603701***	***40.750799***	***23.2530608***	**23.2530608**	***20.76489965***	***21.69111301***	***18.02806909***	***19.00826679***	***13.08905043***
-3.8	***-88.13426507***	***-95.846617***	***-95.403020***	***-78.7844402***	**-82.43199934**	***-76.28303608***	***-87.42172147***	***-60.150111***	***-63.31590632***	***-39.21934389***
+3.8	***18.05264356***	***26.093129***	***35.692747***	***16.82386653***	**16.82386653**	***13.82036763***	***16.57840514***	***13.06219555***	***13.77772103***	***10.14489605***
-3.85	***-96.29189596***	**-103.763136**	**-104.325504**	***-84.82870477***	**-88.89888808**	***-82.35596216***	***-95.17756779***	***-66.5833286***	***-70.08771432***	***-42.57027651***
+3.85	***16.90131999***	***19.383766***	***31.642164***	***13.72919087***	**14.6765023**	***13.82036763***	***16.57840514***	***13.06219555***	***13.77772103***	***7.769197447***
-3.9	***-106.7063068***	***-113.898855***	***-115.825097***	***-92.99519108***	**-97.64601806**	***-90.57603632***	***-104.5476235***	***-74.99034937***	***-78.93720987***	***-46.83308185***
+3.9	***16.90131999***	***18.206411***	***26.793867***	***13.72919087***	**14.6765023**	***13.82036763***	***16.57840514***	***13.06219555***	***13.77772103***	***6.736973409***
-3.95	***-115.1842456***	**-122.180848**	***-125.277737***	***-99.59705824***	**-104.7250186**	***-97.23319793***	***-112.5478559***	***-82.14842883***	***-86.49062183***	***-50.29147782***
+3.95	***16.90131999***	***18.009910***	***23.027700***	***13.72919087***	**14.6765023**	***13.82036763***	***16.57840514***	***13.06219555***	***13.77772103***	***6.736973409***
-5	***-125.9275901***	**-132.724560**	***-137.376798***	***-107.9075895***	**-113.6456131**	***-105.6279701***	***-122.6563609***	***-91.49471512***	***-96.3633865***	***-54.65956249***
+5	***16.90131999***	***17.934378***	***19.386658***	***13.72919087***	**14.6765023**	***13.82036763***	***16.57840514***	***13.06219555***	***13.77772103***	***6.736973409***

3-Span: Shear (Max and Min) Raw Data Results - 45’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.107827	-11.29495646	-10.22578184	-8.870612348	-8.217213172	-11.20854803	-12.56262993	-13.9592585	-15.25577441
End Shear	78.46867369	81.85739687	71.13594998	60.45990338	64.15998801	86.2609627	94.46315808	97.12503962	98.82828853
-0.05	-10.107827	-11.29495646	-10.22578184	-9.700168157	-8.217213172	-11.20854803	-12.56262993	-13.9592585	-15.25577441
+0.05	71.68757378	73.68967546	63.44653015	54.30627344	58.66868918	78.8721128	86.10571905	87.93034522	89.29208194
-0.1	-10.107827	-11.29495646	-10.22578184	-11.22903966	-8.217213172	-11.20854803	-12.56262993	-13.9592585	-15.25577441
+0.1	65.46743764	66.00496399	56.36290761	48.36486511	53.65058591	72.09392216	78.42933604	79.90910511	80.11474342
-0.15	-10.107827	-11.29495646	-10.22578184	-13.61398211	-8.217213172	-11.20854803	-12.56262993	-13.9592585	-15.25577441
+0.15	60.86455143	60.1486285	51.1931104	43.86197543	49.6870075	67.07326316	72.75657872	73.28090312	73.27400084
-0.2	-12.75595481	-12.76157236	-12.33078734	-16.47466145	-10.24888206	-12.72570388	-12.72706698	-13.9592585	-15.25577441
+0.2	54.83147751	52.9083985	45.23772765	38.60428046	45.054226	60.48582744	65.33199235	65.18700442	65.1797863
-0.25	-16.37434883	-16.68217911	-15.5734258	-18.67489358	-12.49486546	-17.05136574	-17.05302341	-17.02993777	-17.00788016
+0.25	50.10594128	47.52737509	41.05658736	34.89071455	41.22774138	55.32023135	59.52562224	59.34762362	59.34152872
-0.3	-20.85546296	-21.51190891	-19.84848234	-21.32554183	-15.26811209	-22.41728398	-23.02719872	-23.00032223	-22.97464676
+0.3	44.34650694	41.07744617	36.11312682	30.65975674	36.55732412	49.0167211	52.46077079	52.32632602	52.319995
-0.35	-24.39569958	-25.28818066	-23.47062296	-23.4399115	-18.81259127	-26.66378351	-28.10482194	-28.07852667	-28.05340222
+0.35	39.87279818	36.52005903	32.28639849	27.4251578	32.92381911	44.1138157	46.9830209	46.88101988	46.87454052
-0.4	-28.75014946	-29.88724729	-27.95116137	-26.38321926	-23.82687819	-32.00811259	-34.3746807	-34.34919971	-34.32484814
+0.4	34.4692987	31.42460028	27.68184757	23.60811488	28.52753476	38.1831147	40.37995143	40.31533831	40.30872459
-0.45	-32.88992399	-33.74194361	-31.31713059	-28.64766017	-27.78648874	-37.21979033	-39.31299155	-39.28822514	-39.26455696
+0.45	30.31324721	28.08912022	24.15526142	20.74010018	25.13966113	33.61400146	35.31246328	35.27502435	35.26835973
-0.5	-38.98080026	-38.80798787	-35.25379132	-32.90286818	-32.65415434	-43.80707869	-45.63858343	-45.59756805	-45.56917367
+0.5	25.34797251	24.1684805	19.96215111	17.3575656	21.08332802	28.14496439	29.01344422	29.03293052	29.21402682
-0.55	-43.76114872	-43.08777378	-38.18817639	-36.33228489	-36.47014175	-48.97252242	-51.61743925	-51.52542395	-51.49788307
+0.55	21.34704204	21.14690467	16.81564412	14.84052603	17.99374704	23.73621047	24.95760793	24.95136964	25.13752663
-0.6	-49.59981857	-48.34394261	-41.58974792	-40.54813687	-41.12537497	-55.27580288	-58.93165653	-58.77597329	-58.74960054
+0.6	17.54389205	17.52864257	13.9373035	12.46862379	14.1681234	18.98986877	20.13717513	20.13099659	20.30592716
-0.65	-54.14548521	-52.24590042	-44.45230716	-43.7944188	-44.74508456	-60.1784951	-64.6358921	-64.42949368	-64.40411364
+0.65	14.78763549	14.7721728	11.74457239	10.65939584	11.44007386	15.80374246	16.49618672	16.49010481	16.65539501
-0.7	-59.64965549	-56.74464153	-49.37878971	-47.69394923	-49.12206461	-66.10890422	-71.55580027	-72.24920637	-72.22025114
+0.7	11.52981688	11.51428668	9.153046235	8.556056182	8.779426174	12.05423721	12.23546777	12.22958239	12.38199183
-0.75	-63.89480426	-61.38708368	-53.19031061	-50.68657465	-52.4928467	-70.67774658	-76.90376725	-78.4664269	-78.48261633
+0.75	9.084715097	9.069311587	7.208227557	6.968965712	7.158630738	9.254470719	9.265306144	9.374685223	9.255438903
-0.8	-68.98217834	-68.5265525	-58.34271746	-54.63833683	-56.52575052	-76.14639934	-83.32731073	-85.97704545	-87.14135825
+0.8	6.244811147	6.229795807	4.949673401	5.115364924	5.259866984	6.032671065	6.032107778	6.027318536	6.022744435
-0.85	-72.8609839	-74.05500273	-63.09748685	-58.310983	-59.59495138	-80.31029561	-88.23736814	-91.75477069	-93.83947571
+0.85	4.077658645	4.142715237	3.289694835	3.847665329	3.849614398	3.936766856	4.013374227	3.940290422	3.936591227
-0.9	-77.44927073	-80.70880657	-69.69714956	-63.38972143	-63.21797512	-85.22833704	-94.06248837	-98.65881287	-101.8929763
+0.9	1.965692545	1.91094518	1.664782366	2.535026293	2.182376721	2.209036361	2.445839824	2.705186142	2.925427048
-0.95	-80.89588309	-86.38359382	-75.33204246	-67.84531877	-65.93293955	-88.91618789	-98.45298191	-103.9055077	-108.0558534
+0.95	1.965692545	1.91094518	1.664782366	1.922494622	1.61157997	2.209036361	2.445839824	2.705186142	2.925427048
-1	-84.90279732	-93.48311993	-82.10940472	-73.20882075	-69.08025665	-93.1947372	-103.5776184	-110.0885449	-115.3764874
+1	1.97E+00	1.91E+00	1.66E+00	1.45E+00	1.61E+00	2.21E+00	2.45E+00	2.71E+00	2.93E+00
(Span 2) -2	-7.23E+00	-7.02E+00	-6.12E+00	-5.31E+00	-5.92E+00	-8.12E+00	-8.99E+00	-9.94E+00	-1.08E+01
+2	8.57E+01	99.6317346	89.80439477	77.55530397	69.56293295	93.88890612	104.8012495	112.1982528	118.7030358
-2.05	-7.23E+00	-7.02E+00	-6.12E+00	-5.94E+00	-5.92E+00	-8.12E+00	-8.99E+00	-9.94E+00	-1.08E+01
+2.05	82.18416755	93.83328245	83.5768121	72.54684841	66.76713981	90.08508002	100.2776523	106.7796061	112.360338
-2.1	-7.225387571	-7.024149956	-6.119317814	-6.875214348	-5.92375953	-8.119857666	-8.990286932	-9.943578706	-10.75312819
+2.1	77.5717717	86.61822318	76.0511273	66.90639367	63.10984565	85.11509361	94.41906696	99.86194836	104.3602954
-2.15	-7.225387571	-7.024149956	-6.119317814	-8.228440227	-5.92375953	-8.119857666	-8.990286932	-9.943578706	-10.75312819
+2.15	72.62117264	79.20943812	69.04926261	61.48763237	59.16994908	79.7666207	88.16437284	92.57338752	96.0276546
-2.2	-8.389945223	-8.410517759	-7.438490171	-10.06760162	-6.574503471	-8.684911999	-8.990286932	-9.943578706	-10.75312819
+2.2	67.39488564	71.16408096	62.11300032	55.99706971	54.99744944	74.10721833	81.59108797	85.0008721	87.45941299
-2.25	-11.71569875	-11.91489687	-10.59619714	-12.44294437	-8.880304896	-12.51145502	-12.91157821	-12.90031391	-12.8895577

+2.25	**61.95547037**	**63.55322312**	**55.22125564**	**50.47918825**	**50.64236701**	**68.20440045**	**74.77677488**	**77.23136429**	**78.70969046**
-2.3	**-15.29056578**	**-15.50423086**	**-13.82568839**	**-14.92449583**	**-12.39458321**	**-16.65531309**	**-17.64248845**	**-17.63060727**	**-17.6192579**
+2.3	**56.36543838**	**56.23515748**	**48.45921708**	**44.97789783**	**46.15471944**	**62.12569431**	**67.79899984**	**69.21993917**	**69.70320649**
-2.35	**-18.66984616**	**-18.65202381**	**-16.55387028**	**-16.97492279**	**-15.5582628**	**-20.76526173**	**-21.85096002**	**-21.83872782**	**-21.82703664**
+2.35	**51.5366539**	**50.5143403**	**43.25609076**	**40.77971567**	**42.34981683**	**56.97446033**	**61.53304166**	**62.41265714**	**62.57690735**
-2.4	**-23.58944537**	**-22.79910199**	**-19.85053705**	**-20.34132745**	**-19.59352838**	**-26.21146325**	**-27.36088494**	**-27.33864828**	**-27.325133**
+2.4	**45.45851627**	**43.78933345**	**37.56461355**	**36.18074698**	**37.48940217**	**50.22969631**	**54.25120042**	**54.29335051**	**54.46337139**
-2.45	**-28.79092196**	**-27.22581894**	**-23.67856449**	**-24.00194641**	**-23.84210974**	**-31.94885973**	**-33.71885617**	**-33.6624171**	**-33.64860436**
+2.45	**39.78660902**	**37.29413739**	**32.64934674**	**32.05214612**	**32.77687798**	**44.02396853**	**47.23987619**	**47.10046961**	**47.08669296**
-2.5	**-34.21176413**	**-31.64376703**	**-27.84624888**	**-27.82889776**	**-28.25401645**	**-37.90989564**	**-40.3721596**	**-40.27644034**	**-40.26251673**
+2.5	**34.20902407**	**31.64184752**	**27.84430836**	**27.82778147**	**28.25172128**	**37.9068712**	**40.36886048**	**40.27323013**	**40.2593752**
-2.55	**-39.78941155**	**-37.29690521**	**-32.65133255**	**-32.05321117**	**-32.77921922**	**-44.02705415**	**-47.24328165**	**-47.10376449**	**-47.08989978**
+2.55	**28.78829093**	**27.22388784**	**23.67696746**	**24.000974**	**23.83988531**	**31.94593199**	**33.71566629**	**33.65932776**	**33.64558113**
-2.6	**-45.46135057**	**-43.79222102**	**-37.56663295**	**-36.1817687**	**-37.36772973**	**-50.23281027**	**-54.25463764**	**-54.26318749**	**-54.4239385**
+2.6	**23.58693833**	**22.79716512**	**19.84918205**	**20.34043356**	**19.59140225**	**26.20867877**	**27.35787575**	**27.33570118**	**27.32226432**
-2.65	**-51.43849248**	**-50.51730971**	**-43.2584619**	**-40.78087048**	**-42.35217001**	**-56.87951261**	**-61.44094064**	**-62.37218735**	**-62.53751394**
+2.65	**18.66749539**	**18.6503408**	**16.5525304**	**16.96664648**	**15.55625969**	**20.76262597**	**21.84843976**	**21.83626033**	**21.82462192**
-2.7	**-56.36824848**	**-56.23818654**	**-48.46193505**	**-44.97927889**	**-46.15704912**	**-62.12876961**	**-67.80243012**	**-69.1796861**	**-69.66420618**
+2.7	**15.28874016**	**15.50261717**	**13.82436199**	**14.92385474**	**12.3927008**	**16.65316833**	**17.64009237**	**17.62826747**	**17.61698064**
-2.75	**-61.9582243**	**-63.55650746**	**-55.22406406**	**-50.48059357**	**-50.64465467**	**-68.20740791**	**-74.78016435**	**-77.23510754**	**-78.6706896**
+2.75	**11.71399075**	**11.91338308**	**10.59489542**	**12.44225908**	**8.878598915**	**12.50946237**	**12.90937295**	**12.89816059**	**12.88744477**
-2.8	**-67.39755223**	**-71.07830307**	**-62.11584438**	**-55.99846061**	**-54.99964727**	**-74.11012432**	**-81.59436462**	**-85.00456306**	**-87.4634554**
+2.8	**8.388372134**	**8.409135194**	**7.437223123**	**10.06705481**	**6.573420867**	**8.683091494**	**8.990300736**	**9.94358591**	**10.75311526**
-2.85	**-72.62370502**	**-79.1236344**	**-69.05210714**	**-61.48899664**	**-59.17204177**	**-79.76939038**	**-88.16751626**	**-92.57695008**	**-96.03161653**
+2.85	**7.225402582**	**7.024157045**	**6.119316807**	**8.340824016**	**5.923754026**	**8.119863437**	**8.990300736**	**9.94358591**	**10.75311526**
-2.9	**-77.57415441**	**-86.62144373**	**-75.98760119**	**-66.90772019**	**-63.11180581**	**-85.1176922**	**-94.42205309**	**-99.86535657**	**-104.3641045**
+2.9	**7.225402582**	**7.024157045**	**6.119316807**	**6.874922571**	**5.923754026**	**8.119863437**	**8.990300736**	**9.94358591**	**10.75311526**
-2.95	**-82.18638062**	**-93.83640032**	**-83.51353402**	**-72.54836051**	**-66.76895094**	**-90.08747461**	**-100.2804129**	**-106.7828189**	**-112.363994**
+2.95	**7.225402582**	**7.024157045**	**6.119316807**	**5.938615133**	**5.923754026**	**8.119863437**	**8.990300736**	**9.94358591**	**10.75311526**
-3	**-86.39783172**	**-100.7659536**	**-91.02798368**	**-78.54959844**	**-70.09344768**	**-94.61122351**	**-105.6650758**	**-113.2423727**	**-119.9342864**
+3	**7.225402582**	**7.024157045**	**6.119316807**	**5.312832971**	**5.923754026**	**8.119863437**	**8.990300736**	**9.94358591**	**10.75311526**
(Span 3) -4	**-1.965696629**	**-1.91E+00**	**-1.66E+00**	**-1.45E+00**	**-1.611578472**	**-2.209037931**	**-2.445843579**	**-2.705188101**	**-2.925423531**
+4	**84.12695401**	**92.08859002**	**80.77577484**	**72.15353696**	**68.47166804**	**92.3671334**	**102.5834082**	**108.8833377**	**113.9440464**
-3.05	**-1.965696629**	**-1.91E+00**	**-1.66E+00**	**-1.92E+00**	**-1.611578472**	**-2.209037931**	**-2.445843579**	**-2.705188101**	**-2.925423531**
+3.05	**80.89339109**	**86.3797745**	**75.32861867**	**67.84365228**	**65.93090888**	**88.91350312**	**98.4498435**	**103.9018236**	**108.0516183**
-3.1	**-2.172412192**	**-2.230774726**	**-1.819782853**	**-2.728613631**	**-2.49229631**	**-2.209037931**	**-2.445843579**	**-2.705188101**	**-2.925423531**
+3.1	**76.55313954**	**79.39884032**	**68.25761299**	**62.2522695**	**62.51102308**	**84.26850006**	**92.92323493**	**97.30388547**	**100.3078927**
-3.15	**-4.079137329**	**-4.144020149**	**-3.290666499**	**-3.848142614**	**-3.850651723**	**-3.938202435**	**-3.966768722**	**-3.941663824**	**-3.937931671**
+3.15	***72.85815504***	***74.05143614***	***63.09461671***	***58.30963599***	***59.59264597***	***80.30723703***	***88.2338484***	***91.75068374***	***93.83487921***
-3.2	***-6.794422931***	***-6.779115265***	***-5.386513209***	***-5.47455289***	***-5.628965584***	***-6.646046059***	***-6.65587139***	***-6.650982595***	***-6.646313415***
+3.2	***67.98226724***	***67.11441672***	***57.1286818***	***53.70119317***	***55.73364312***	***75.07214252***	***82.06344949***	***84.49534702***	***85.42917859***
-3.25	***-9.086459618***	***-9.07085822***	***-7.20937197***	***-6.969587217***	***-7.159837792***	***-9.256489086***	***-9.267272976***	***-9.376615653***	***-9.25732337***
+3.25	***63.89169259***	***61.38327903***	***53.18798939***	***50.68550364***	***52.49030046***	***70.67435628***	***76.89992453***	***78.46204501***	***78.47767588***
-3.3	***-12.16583402***	***-12.15008464***	***-9.658707403***	***-8.967105795***	***-9.199311967***	***-12.78469499***	***-13.06312856***	***-13.05714927***	***-13.21214207***
+3.3	***58.5624652***	***55.87626325***	***48.40490278***	***46.92700241***	***48.25799998***	***64.93808051***	***70.18783335***	***70.66369417***	***70.63455858***
-3.35	***-14.78962158***	***-14.7739336***	***-11.74588343***	***-10.6600833***	***-11.4420977***	***-15.80606786***	***-16.49876834***	***-16.4926325***	***-16.6578552***
+3.35	***54.1421349***	***52.24342938***	***44.44983733***	***43.7932242***	***44.74231749***	***60.17486915***	***64.63173866***	***64.42549064***	***64.40019624***
-3.4	***-18.25470512***	***-18.2392930887304***	***-14.50251968***	***-12.93412625***	***-14.87821555***	***-19.8133487595193***	***-21.08076808***	***-21.07451699***	***-21.2517129792087***
+3.4	***48.44185862***	**47.32367226**	***40.93136986***	***39.71773433***	***40.20256236***	**54.02621319**	***57.48005827***	***57.33723553***	**57.31072552**
-3.45	***-21.34976183***	**-21.1488527**	***-16.81708802***	***-14.84129529***	***-17.99604612***	**-23.73132248**	***-24.96050027***	***-24.9542014***	**-25.14030576**
+3.45	***43.75760913***	**43.08491307**	***38.1864344***	***36.33095532***	***36.46722114***	**48.96867462**	***51.61308349***	***51.52120196***	**51.49378489**
-3.5	***-26.32241127***	**-24.94235245**	***-20.78271658***	***-18.0211378***	***-21.88030513***	**-29.21927398**	***-30.16195548***	***-30.2100777***	**-30.39133508**
+3.5	***37.76858086***	**37.81526239**	***34.48851573***	***32.04015955***	***31.68577225***	**42.49654719**	***44.16472689***	***44.14079928***	**44.11794085**
-3.55	***-30.31626759***	**-28.091224**	***-24.15736546***	***-20.7411898***	***-25.14221584***	***-33.61734252***	***-35.26807821***	***-35.27854083***	**-35.2718104**
+3.55	***32.88624404***	***33.7392181841255***	***31.3151117096462***	***28.6467922236597***	***27.7834515941265***	***37.2157774811868***	***39.3093993062429***	***39.2846939205019***	**39.26111492**

-3.6	***-35.53531125***	**-32.42655083**	***-28.5881193***	**-24.35993654**	**-29.39565156**	***-39.35398838***	**-41.6813135**	***-41.60940383***	**-41.60272854**
+3.6	***27.88375274***	**28.97643495**	***27.07724718***	**25.80608516**	**22.82615422**	***30.96658616***	**33.12500772**	***33.09941671***	**33.07501153**
-3.65	***-39.87606999***	**-36.52277505**	***-32.28869733***	**-27.42636905**	**-32.9265681**	***-44.11744072***	**-46.98694929**	***-46.88485395***	**-46.8782724**
+3.65	***24.39306414***	**25.2857339**	***23.46834899***	**23.43896928**	**18.8094827**	***26.66062052***	**28.10112446**	***28.0749211***	**28.04987889**
-3.7	***-45.48759394***	**-42.34475968**	***-37.09059187***	**-31.49552372**	**-37.4833679**	***-50.26635833***	**-53.8592993**	***-53.71629531***	**-53.70993057**
+3.7	***19.96107333***	***20.55279837***	***19.00766554***	**20.8029138**	**14.71527999**	***21.34546278***	***21.74715056***	***21.72022913***	**21.69452073**
-3.75	***-50.10941786***	***-47.53082401***	***-41.05905841***	**-34.89203763**	**-41.23064542**	***-55.32403955***	***-59.52980731***	***-59.35170613***	**-59.34552416**
+3.75	***16.37167351***	***16.6796198***	***15.57126645***	**18.67404098**	**12.49314569**	***17.04812602***	***17.04987659***	***17.026855***	**17.00485732**
-3.8	***-56.03112968***	***-54.28574718***	***-46.41326215***	**-39.60749135**	**-46.02499278**	***-61.79635506***	***-66.80726283***	***-66.79186611***	**-66.7846156**
+3.8	***11.84519858***	***11.85081951***	***11.56484876***	**15.91175581**	**9.682588842**	***11.63787924***	***12.56265317***	***13.95927626***	**15.25577404**
-3.85	***-60.86818371***	***-60.0633057***	***-51.1960839***	**-43.82835138**	**-49.69002699**	***-67.07724373***	***-72.76095048***	***-73.28557727***	**-73.27856224**
+3.85	***10.10784931***	***11.29494319***	***10.22576263***	**13.61300667**	**8.217215741**	***11.20856349***	***12.56265317***	***13.95927626***	**15.25577404**
-3.9	***-66.70817364***	***-67.47299548***	***-57.76079568***	**-49.53816731**	**-54.65215841**	***-73.44660433***	***-79.95953908***	***-81.58988265***	**-81.93715249**
+3.9	***10.10784931***	***11.29494319***	***10.22576263***	**10.87110764**	**8.217215741**	***11.20856349***	***12.56265317***	***13.95927626***	**15.25577404**
-3.95	***-71.69129933***	***-73.69386682***	***-63.45005608***	**-54.30813657**	**-58.67178408**	***-78.87619205***	***-86.11026674***	***-87.93524294***	**-89.29725685**
+3.95	***10.10784931***	***11.29494319***	***10.22576263***	**9.699653537**	**8.217215741**	***11.20856349***	***12.56265317***	***13.95927626***	**15.25577404**
-5	***-77.98349774***	***-81.8055838***	***-70.79115426***	**-60.44081565**	**-63.74166829**	***-85.72576685***	***-93.88731886***	***-96.5223046***	**-98.20503724**
+5	***10.10784931***	***11.29494319***	***10.22576263***	***8.870613824***	**8.217215741**	***11.20856349***	***12.56265317***	***13.95927626***	***15.25577404***

3-Span: Shear (Max and Min) Raw Data Results - 45' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.89237189	-19.98466999	-12.6505072	-15.87539244	-16.14303339
End Shear	121.5150958	124.8147002	90.03251726	110.1025092	110.3899151
-0.05	-18.89237189	-19.98466999	-12.6505072	-15.87539244	-16.14303339
+0.05	107.6070992	112.2025661	80.86478874	98.92326535	98.68835278
-0.1	-18.89237189	-19.98466999	-12.6505072	-15.87539244	-16.14303339
+0.1	95.61094096	99.78581515	72.13593178	88.23165128	87.53484218
-0.15	-18.89237189	-19.98466999	-12.6505072	-15.87539244	-16.14303339
+0.15	86.49741471	90.2101357	66.27188599	79.69307571	78.7578675
-0.2	-18.89237189	-19.98466999	-15.10942599	-15.87539244	-16.14303339
+0.2	75.95726904	78.65476287	60.42398075	69.85100408	71.43063361
-0.25	-20.96715857	-22.98880451	-19.55247124	-19.97095618	-20.17479244
+0.25	68.25648009	70.07264927	55.57683261	62.60518431	65.37514583
-0.3	-28.96511229	-30.94041819	-24.99957905	-27.0310842	-27.37785547
+0.3	58.99057287	60.1480175	49.63789636	54.7152554	57.97936483
-0.35	-35.39501875	-37.01853929	-29.42236602	-32.83447676	-33.18761615
+0.35	51.89441874	52.62475905	44.99838858	49.24936586	52.22151848
-0.4	-43.46345083	-44.48641289	-35.82396802	-39.93062115	-41.0472001
+0.4	44.21734714	44.33283469	39.35961914	43.05342618	45.24951152
-0.45	-50.12314731	-50.78547301	-41.7686906	-45.87289584	-47.44036588
+0.45	38.50096049	38.0170526	34.99275257	38.25261086	39.87206978
-0.5	-57.99873972	-58.17073057	-49.45748138	-53.66544908	-55.80216329
+0.5	32.12789859	31.10388835	29.73541596	32.46948705	33.42726543
-0.55	-63.93872845	-65.7163401	-55.2787863	-60.23614898	-63.38829655
+0.55	27.70776878	26.04107513	25.70618222	28.03437613	28.51294755
-0.6	-71.58187261	-74.70210819	-62.13816888	-68.32143377	-72.65542317
+0.6	22.4464319	20.83125222	20.91152205	22.75270483	22.8006725
-0.65	-77.47811785	-81.52653307	-67.28807227	-74.36125971	-79.62977254
+0.65	18.4655202	17.13727972	17.28493284	18.75421917	18.79949575
-0.7	-85.15135951	-90.48718457	-73.29834886	-81.37385548	-87.79301573
+0.7	13.87666778	12.80574113	13.23225404	14.11440431	14.01680719
-0.75	-94.9801837	-100.8757179	-77.76110658	-86.55287932	-93.87573813
+0.75	10.40053897	9.585160587	10.42771066	11.12289137	10.56800362
-0.8	-106.6335624	-114.3347662	-82.90260327	-92.48618799	-100.9137547
+0.8	6.407446372	6.301893372	7.138295083	7.551990933	6.555324446
-0.85	-115.4375177	-125.1119754	-86.66244105	-98.91826629	-106.0877815
+0.85	4.186704481	3.954916898	4.746238479	5.005408083	4.226867473
-0.9	-125.7769957	-137.8997338	-90.91546776	-109.102082	-111.9792525
+0.9	3.162578983	3.529952229	2.10896908	2.614702851	2.63486469
-0.95	-133.5035626	-147.5626714	-95.71992914	-116.9486165	-118.2674873
+0.95	3.162578983	3.529952229	2.10896908	2.614702851	2.63486469
-1	-143.0522704	-158.9049246	-103.8163592	-126.8341845	-129.347873
+1	3.16E+00	3.53E+00	2.11E+00	2.61E+00	2.63E+00
(Span 2) -2	-1.16E+01	-1.30E+01	-7.75E+00	-9.61E+00	-9.69E+00
+2	159.2578166	163.2952246	112.7085139	138.033304	141.0136158
-2.05	-1.16E+01	-1.30E+01	-7.75E+00	-9.61E+00	-9.69E+00
+2.05	147.7801957	153.6285635	105.5877238	129.3994596	131.6482026
-2.1	-11.62483853	-12.97520939	-7.7520355	-9.610984772	-9.685094818
+2.1	133.4783281	141.5598873	96.8235969	118.7552002	120.1053989
-2.15	-11.62483853	-12.97520939	-7.7520355	-9.610984772	-9.685094818
+2.15	119.9489607	128.7208297	87.62483469	107.6606794	108.4342435
-2.2	-11.62483853	-12.97520939	-9.820418624	-10.2518681	-9.889860376
+2.2	106.9983555	115.2065805	78.45716069	96.25068995	97.28753143
-2.25	-14.73168531	-14.58174257	-13.65133133	-14.73739191	-14.90768229

+2.25	94.34783616	101.5244519	72.56933484	85.52803136	87.62280872
-2.3	-20.80441364	-20.37404342	-18.08711596	-20.132902	-20.12399256
+2.3	82.54173603	88.15324799	66.29494672	75.51826312	79.16266137
-2.35	-26.06183023	-25.51537339	-22.37224887	-24.75388093	-24.99273011
+2.35	73.33870035	77.73538818	60.66919814	67.33929122	71.6028662
-2.4	-32.4698519	-31.68160796	-27.94255715	-30.66903506	-31.54761211
+2.4	63.20112963	66.05545775	53.46540292	58.02810993	62.51546296
-2.45	-39.29243493	-38.65311379	-33.42666701	-37.26407114	-38.42159002
+2.45	54.30999707	56.77971708	46.00660101	50.52593541	53.72380189
-2.5	-46.64189677	-47.22656032	-39.25146218	-43.90337565	-45.61931196
+2.5	46.63891535	47.2259404	39.24851091	43.90049628	45.61586358
-2.55	-54.31327697	-56.7803834	-46.00949666	-50.52879715	-53.72719598
+2.55	39.28936174	38.6526148	33.42427153	37.26120028	38.41868722
-2.6	-63.20509064	-66.05609845	-53.46864484	-58.03139741	-62.51920018
+2.6	32.46719085	31.16877535	27.94024364	30.66621471	31.63238087
-2.65	-73.34319659	-77.73623053	-60.67222898	-67.34346723	-71.60681459
+2.65	25.79459167	25.00098339	22.47034408	24.75144491	24.99013322
-2.7	-82.54636997	-88.15412838	-66.29777879	-75.52253663	-79.16640389
+2.7	20.54194162	20.37361049	18.08502183	20.13057284	20.1217182
-2.75	-94.35299206	-101.5253478	-72.57193806	-85.53237448	-87.62624278
+2.75	14.72962683	14.58139068	13.64962655	14.86135449	14.90557564
-2.8	-107.0036191	-115.2075479	-78.46074863	-96.16619609	-97.29213962
+2.8	11.6248506	12.97520722	9.818847922	10.25019268	9.887952894
-2.85	-119.868801	-128.721719	-87.52836171	-107.5761918	-108.439104
+2.85	11.6248506	12.97520722	7.75202493	9.610973882	9.685089753
-2.9	-133.3981004	-141.5607681	-96.82741433	-118.7598415	-120.022684
+2.9	11.6248506	12.97520722	7.75202493	9.610973882	9.685089753
-2.95	-147.785921	-153.6293621	-105.5914634	-129.4039985	-131.6530169
+2.95	11.6248506	12.97520722	7.75202493	9.610973882	9.685089753
-3	-161.5399613	-165.5556826	-114.1101337	-139.7311926	-142.8635661
+3	11.6248506	12.97520722	7.75202493	9.610973882	9.685089753
(Span 3) -4	-3.162582268	-3.52995164	-2.108966205	-2.614699888	-2.634863312
+4	140.7300568	156.7024378	102.2297124	124.7105371	127.1701578
-3.05	-3.162582268	-3.52995164	-2.108966205	-2.614699888	-2.634863312
+3.05	133.4988979	147.5617233	95.71561476	116.9435934	118.2617452
-3.1	-3.162582268	-3.52995164	-2.554929948	-2.67320527	-2.634863312
+3.1	123.764115	135.4033176	90.10270573	107.0922026	110.8495394
-3.15	-4.187958604	-3.955142834	-4.747712393	-5.006975204	-4.228154521
+3.15	115.4322129	125.1108791	86.66010641	98.91285671	106.0846166
-3.2	-7.175504737	-6.920118797	-7.767873339	-8.222337435	-7.327455687
+3.2	104.354348	111.5655292	81.91080802	91.3446832	99.55321977
-3.25	-10.40260609	-9.615785803	-10.39452937	-11.0715717	-10.57011706
+3.25	94.97423692	100.8746768	77.75830462	86.54964772	93.87201538
-3.3	-14.7852637	-13.67893834	-13.96148564	-14.97490852	-14.97106397
+3.3	83.8395128	88.6006031	72.13145785	80.01562691	86.20588175
-3.35	-18.46791846	-17.17273481	-17.30650011	-18.75671879	-18.80808306
+3.35	78.18317859	81.52585971	67.28482133	74.3574683	79.62545643
-3.4	-23.4766501	-21.82267854	-21.85031186	-23.7872455	-23.8358101
+3.4	71.19601676	72.94438368	60.80012941	66.74780153	70.84601313
-3.45	-27.71045143	-26.04159983	-25.70872062	-28.03717251	-28.51597847
+3.45	65.0132478	65.7155721	55.27509696	60.23178822	63.38343528
-3.5	-33.2632568	-32.4110812	-30.77060345	-33.60852693	-34.69343894
+3.5	57.61315705	57.4431347	47.95225169	52.13501734	54.00431033
-3.55	-38.50444512	-38.0176709	-34.99552172	-38.25565581	-39.87538969
+3.55	51.33246834	51.54643014	41.76457206	45.86874065	47.43607342
-3.6	-45.68706728	-45.95769147	-40.47491647	-44.27919607	-46.62603114
+3.6	43.03257502	43.67238118	34.42644019	38.52272471	39.4964819

-3.65	***-51.89872438***	***-52.62546074***	***-45.00134698***	***-49.25262082***	***-52.22512701***
+3.65	***36.57316108***	***37.01793235***	***29.41905544***	***32.83074409***	***33.18354989***
-3.7	***-60.814306***	***-62.09655955***	***-50.81700405***	***-56.27036555***	***-59.44544152***
+3.7	***28.55246621***	***29.38083763***	***23.9175305***	***25.56036584***	***25.94374265***
-3.75	***-68.26116416***	***-70.07350396***	***-55.5799397***	***-62.60936482***	***-65.3789359***
+3.75	***22.07612053***	***22.98811601***	***19.54962015***	***19.96809486***	***20.17107796***
-3.8	***-77.92433553***	***-80.92755432***	***-61.65060776***	***-71.78701788***	***-72.96553495***
+3.8	***18.89235846***	***19.98467079***	***13.98497449***	***15.8753777***	***16.14303194***
-3.85	***-86.50294091***	***-90.21110836***	***-66.2750922***	***-79.68832444***	***-78.76180104***
+3.85	***18.89235846***	***19.98467079***	***12.65051968***	***15.8753777***	***16.14303194***
-3.9	***-97.93829574***	***-102.22305***	***-73.84379489***	***-90.3204614***	***-89.73535792***
+3.9	***18.89235846***	***19.98467079***	***12.65051968***	***15.8753777***	***16.14303194***
-3.95	***-107.613576***	***-112.1873878***	***-80.86930282***	***-98.92877639***	***-98.69408743***
+3.95	***18.89235846***	***19.98467079***	***12.65051968***	***15.8753777***	***16.14303194***
-5	***-121.1539874***	***-124.9776971***	***-89.99540619***	***-110.0573046***	***-110.3810193***
+5	***18.89235846***	***19.98467079***	***12.65051968***	***15.8753777***	***16.14303194***

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.17E-13	-1.01E-13	-1.43E-13	-7.89E-14	-7.89E-14	-8.27E-14	-1.03E-13	-6.06E-14	-6.38E-14	-4.13E-14
End Shear	1.23E-13	1.01E-13	9.80E-14	7.97E-14	7.97E-14	6.42E-14	8.54E-14	6.12E-14	6.44E-14	3.94E-14
-0.05	-37.2209319	-40.35231175	-43.61998132	-30.8906629	-33.0220933	-31.0958037	-37.3013495	-29.3899758	-30.9998981	-15.15818378
+0.05	249.2306463	278.6671185	285.0465688	224.6636997	236.3364925	219.4644441	254.3017946	183.79137	193.5027936	113.1539236
-0.1	-74.44186381	-80.70462351	-87.23996264	-61.7813257	-66.0441866	-62.1916075	-74.602699	-58.7799516	-61.9997962	-30.31636756
+0.1	463.2151322	523.2685605	530.5983656	419.2974893	440.490153	408.7068947	472.3227924	335.583626	353.2459221	210.7451732
-0.15	-111.6627957	-121.0569353	-130.859944	-92.6719886	-99.0662799	-93.2874112	-111.904048	-88.1699275	-92.9996943	-45.47455134
+0.15	633.6363022	725.3725326	724.7144576	576.4240143	604.2812494	560.6500702	646.4848283	451.4697449	475.2313105	287.747864
-0.2	-148.8837276	-161.409247	-174.4799253	-123.562651	-132.088373	-124.383215	-149.205398	-117.559903	-123.999592	-60.63273512
+0.2	775.4460397	899.4305061	889.7961986	709.1038906	742.1792181	687.0153925	787.9637831	541.1345527	569.6153186	352.9667517
-0.25	-186.1046595	-201.7615588	-218.0999066	-154.453314	-165.110467	-155.479019	-186.506747	-146.949879	-154.999491	-75.7909189
+0.25	869.7596351	1027.473891	1001.601648	803.371318	839.7870112	777.9077084	905.301341	598.0796514	629.5575278	396.1269347
-0.3	-223.3255914	-242.1138705	-261.7198879	-185.343977	-198.13256	-186.574822	-223.808097	-176.339855	-185.999389	-90.94910268
+0.3	943.1577472	1132.195165	1088.593077	873.7553891	910.3516743	854.8810303	1000.084917	654.4966756	690.4832389	431.1007639
-0.35	-260.5465233	-282.4661823	-305.3398692	-216.23464	-231.154653	-217.670626	-261.109446	-205.729831	-216.999287	-106.1072865
+0.35	988.287174	1194.000529	1138.317035	912.4807047	959.271014	907.9077207	1055.767151	680.8751683	719.3957431	445.5431218
-0.4	-297.7674552	-322.818494	-348.9598505	-247.125303	-264.176746	-248.76643	-298.410796	-235.119807	-247.999185	-121.2654702
+0.4	1017.133174	1229.245118	1180.094596	944.1444611	990.1892712	935.8297048	1083.251582	696.8160152	737.0805878	452.1154768
-0.45	-334.9883871	-363.1708058	-392.5798319	-278.015966	-297.19884	-279.862234	-335.712145	-264.509782	-278.999083	-136.423654
+0.45	1001.494701	1229.583457	1175.503714	945.5477118	988.3637718	932.3729963	1073.925095	698.2077267	739.45707	440.3395435
-0.5	-372.209319	-403.5231175	-436.1998132	-308.906629	-330.220933	-310.958037	-373.013495	-293.899758	-309.998981	-151.5818378
+0.5	963.9308266	1214.952123	1174.084643	930.8367178	974.4609492	918.6334777	1057.566619	686.166419	726.8488475	428.2652238
-0.55	-409.4302509	-443.8754293	-479.8197945	-339.797292	-363.243026	-342.053841	-410.314844	-323.289734	-340.998879	-166.7400216
+0.55	930.5558686	1170.654647	1150.340035	891.8475911	935.5848433	883.2023376	1023.854643	656.6707507	695.8159495	423.3716554
-0.6	-446.6511829	-484.227741	-523.4397758	-370.687954	-396.26512	-373.149645	-447.616194	-352.67971	-371.998777	-181.8982054
+0.6	891.8818513	1102.835602	1101.63275	832.7003189	875.5096035	829.4726868	963.8410826	617.4663967	653.3601665	411.6219913
-0.65	-483.8721148	-524.5800528	-567.0597571	-401.578617	-429.287213	-404.245449	-484.917543	-382.069686	-402.998675	-197.0563891
+0.65	822.9149868	1003.598133	1006.646237	761.249854	792.335301	748.1732755	870.9302921	565.7582755	597.3616052	377.704811
-0.7	-521.0930467	-564.9323645	-610.6797385	-432.46928	-462.309306	-435.341252	-522.218893	-411.459661	-433.998573	-212.2145729
+0.7	732.3985691	886.0390594	908.241725	670.8743643	697.2199868	650.7863842	758.2552139	506.2295119	533.8245576	341.1661443
-0.75	-558.3139786	-605.2846763	-654.2997198	-463.359943	-495.3314	-466.437056	-559.520242	-440.849637	-464.998472	-227.3727567
+0.75	603.7923271	740.7875866	768.7668576	557.0339144	577.3081844	532.9517225	617.6324138	417.098199	439.0507358	283.8344726
-0.8	-595.5349105	-645.636988	-697.9197011	-494.250606	-528.353493	-497.53286	-596.821592	-470.239613	-495.99837	-242.5309405
+0.8	457.8335721	583.095725	614.4413725	431.3136516	443.1995149	403.7015827	462.91606	322.6144147	340.8380483	226.0421768
-0.85	-632.7558424	-690.6745581	-764.7184887	-525.141269	-561.375586	-528.628664	-634.122941	-499.629589	-526.998268	-257.6891243
+0.85	282.8953035	406.9910197	427.0884573	286.2033071	288.1374729	260.897764	287.6827936	216.8122953	228.4431689	156.197648
-0.9	-669.9767743	-756.2488565	-875.2612801	-556.031932	-594.39768	-559.724467	-671.424291	-529.019565	-557.998166	-272.847308
+0.9	180.7794408	247.3259215	321.8660838	166.6591987	166.6591987	137.7805353	141.689584	126.4836794	133.1407151	106.9682192
-0.95	-707.1977062	-839.1184176	-1025.841682	-586.922594	-627.419773	-590.820271	-708.72564	-558.409541	-588.998064	-288.0054918
+0.95	133.27638	151.2173231	230.0441493	116.6672131	124.2727248	116.9441494	139.5840678	93.28826008	98.19816851	54.49804401
-1	-744.4186203	-936.2583559	-1217.888018	-617.813263	-660.441868	-621.916078	-746.027006	-676.347374	-716.991947	-303.1636771
+1	140.2909261	155.4887925	161.173214	122.8075885	130.8133954	123.0991042	146.9305978	98.19816606	103.3664906	57.36636262
(Span 2) -2	-744.4186203	-936.2583559	-1217.888018	-617.813263	-660.441868	-621.916078	-746.027006	-676.347374	-716.991947	-303.1636771
+2	140.2909261	155.4887925	161.173214	122.8075885	130.8133954	123.0991042	146.9305978	98.19816606	103.3664906	57.36636262
-2.05	-526.3774072	-672.8800131	-955.9401775	-434.682961	-463.020282	-435.714943	-520.068326	-469.385535	-497.71992	-203.0509854
+2.05	106.7721245	123.1139775	219.4763488	93.4659666	99.55899774	93.68783203	111.8254226	74.73631416	78.66980438	60.44265191
-2.1	-478.2177288	-570.6839087	-741.9174729	-405.341357	-431.765876	-406.303678	-484.96311	-324.11552	-341.174231	-189.3448078
+2.1	208.4005811	277.1171309	290.7693445	197.3642209	197.3642209	178.7378845	189.6898419	150.1215756	158.0227112	123.5295474
-2.15	-443.6007946	-492.5387483	-574.5691242	-375.999753	-400.51147	-376.892413	-449.857895	-300.653642	-316.477518	-175.6386302
+2.15	338.3138817	469.0744259	396.3877841	345.1778335	347.6645707	328.3283139	364.854414	260.8657357	274.8529829	185.5341299
-2.2	-408.9838604	-439.4042474	-458.7214425	-346.65815	-369.257064	-347.481148	-414.752679	-277.191764	-291.780805	-161.9324526
+2.2	533.5396966	664.8671222	576.1930668	511.6353407	526.0213799	494.5649013	566.1926567	381.4917085	403.0794455	259.8286677

-2.25	**-374.3669262**	***-408.4155662***	***-447.8276729***	**-317.316546**	**-338.002658**	**-318.069884**	**-379.647463**	**-253.729887**	**-267.084091**	**-148.226275**
+2.25	**705.2740427**	***856.3922814***	***780.6054768***	**657.0062948**	**680.9094084**	**642.2714671**	**745.6790976**	**521.4945027**	**550.2230957**	**333.9198294**
-2.3	**-339.7499921**	***-379.4360821***	***-447.8265025***	**-287.974942**	**-306.748252**	**-288.658619**	**-344.542247**	**-230.268009**	**-242.387378**	**-134.5200974**
+2.3	**860.6481969**	***1019.157296***	***949.7055001***	**777.3069659**	**810.3256638**	**769.9592049**	**896.5019932**	**638.2162618**	**674.142231**	**394.3514799**
-2.35	**-305.1330579**	***-350.4565979***	***-447.8253321***	**-258.633338**	**-275.493847**	**-259.247354**	**-309.437032**	**-206.806131**	**-217.690664**	**-120.8139198**
+2.35	**978.6299314**	***1146.276413***	***1086.042997***	**872.9138416**	**918.8274391**	**870.6987556**	**1013.432422**	**719.0023891**	**760.1414333**	**438.8412728**
-2.4	**-270.5161237**	***-321.4771138***	***-447.8241617***	**-229.291735**	**-244.239441**	**-229.83609**	**-274.331816**	**-183.344253**	**-192.993951**	**-107.1077422**
+2.4	**1054.451701**	***1235.742423***	***1175.76184***	**945.6805847**	**994.6126458**	**940.431161**	**1092.459149**	**777.1231656**	**820.5799854**	**465.8153245**
-2.45	**-235.8991895**	***-292.4976297***	***-447.8229913***	**-199.950131**	**-212.985035**	**-200.424825**	**-239.2266**	**-159.882375**	**-168.297237**	**-93.40156465**
+2.45	**1092.807442**	***1289.737422***	***1222.61609***	**988.1695417**	**1037.615251**	**979.0298058**	**1135.198363**	**800.893708**	**846.2837152**	**477.3156949**
-2.5	**-201.2822554**	***-263.5181455***	***-447.8218209***	**-170.60863**	**-181.730629**	**-171.013617**	**-204.121384**	**-136.420498**	**-143.600524**	**-79.6953756**
+2.5	**1095.253264**	***1304.283254***	***1229.396321***	**999.1397613**	**1046.691087**	**986.8776005**	**1142.277833**	**790.3315222**	**835.6641275**	**475.3457993**
-2.55	**-228.4158913**	***-292.4975796***	***-447.8206505***	**-199.950252**	**-212.984979**	**-200.424889**	**-239.22633**	**-159.882205**	**-168.297058**	**-93.40154942**
+2.55	**1058.36039**	***1289.761255***	***1222.616151***	**988.1369946**	**1037.587869**	**979.0203801**	**1135.184867**	**800.8754892**	**846.2640747**	**477.8045949**
-2.6	**-261.9346929**	***-321.4770555***	***-447.8194801***	**-229.291874**	**-244.239377**	**-229.836161**	**-274.331505**	**-183.344057**	**-192.993744**	**-107.1077232**
+2.6	**1019.687616**	***1235.747417***	***1175.761954***	**945.6900224**	**994.6267799**	**940.4535846**	**1092.495142**	**777.1308906**	**820.5876351**	**465.8104738**
-2.65	**-295.4534945**	***-350.4565315***	***-447.8183097***	**-258.633496**	**-275.493775**	**-259.247434**	**-309.43668**	**-206.805909**	**-217.69043**	**-120.8138971**
+2.65	**961.363441**	***1146.352105***	***1086.043134***	**872.919255**	**918.8371313**	**870.7170439**	**1013.463212**	**719.0002704**	**760.1386509**	**438.8526006**
-2.7	**-328.972296**	***-379.4360075***	***-447.8171393***	**-287.975118**	**-306.748172**	**-288.658706**	**-344.541855**	**-230.26776**	**-242.387116**	**-134.5200709**
+2.7	**859.212252**	***1019.219589***	***949.5139315***	**777.3649337**	**810.3306737**	**769.9683591**	**896.5226008**	**638.2494454**	**674.1766049**	**394.3600185**
-2.75	**-362.4910976**	***-408.4154834***	***-447.8159689***	**-317.31674**	**-338.00257**	**-318.069978**	**-379.647031**	**-253.729612**	**-267.083803**	**-148.2262447**
+2.75	**716.2671329**	***856.4382177***	***780.6056246***	**657.0503546**	**680.9563086**	**642.2830069**	**745.6882446**	**521.5165772**	**550.245799**	**333.9245741**
-2.8	**-396.0098992**	***-439.4041564***	***-458.7081439***	**-346.658362**	**-369.256968**	**-347.48125**	**-414.752206**	**-277.191464**	**-291.780489**	**-161.9324185**
+2.8	**536.9482928**	***664.8983131***	***576.1931609***	**511.6668981**	**526.0554156**	**494.5758048**	**566.1920451**	**381.5113045**	**403.1002972**	**259.8298732**
-2.85	**-429.5287008**	***-492.5386343***	***-574.5691011***	**-375.999984**	**-400.511366**	**-376.892522**	**-449.857381**	**-300.653316**	**-316.477175**	**-175.6385924**
+2.85	**338.3355317**	***469.092787***	***396.3878353***	**345.1985776**	**347.6874968**	**328.3405188**	**364.8757967**	**260.8783901**	**274.8665009**	**184.8991587**
-2.9	**-463.0475024**	***-570.6837716***	***-741.9174949***	**-405.341605**	**-431.765763**	**-406.303794**	**-484.962556**	**-324.115168**	**-341.173861**	**-189.3447662**
+2.9	**208.3185159**	***277.1250332***	***290.76305***	**197.3702886**	**197.3702886**	**178.7626677**	**189.706448**	**150.1255811**	**158.0269274**	**122.3204902**
-2.95	**-523.6213275**	***-672.8798622***	***-955.9400537***	**-434.683227**	**-463.020161**	**-435.715066**	**-520.067731**	**-469.386018**	**-497.720344**	**-203.05094**
+2.95	**110.2701522**	***123.1140104***	***219.3235582***	**93.46590613**	**99.55902352**	**93.68782225**	**111.8255571**	**74.73640227**	**78.66989712**	**59.18384653**
-3	**-760.5593846**	***-936.2591259***	***-1217.888018***	**-617.813596**	**-660.442605**	**-621.916546**	**-746.028247**	**-676.348822**	**-716.993573**	**-303.1638049**
+3	**144.8870916**	***155.4888267***	***161.1781129***	**122.8075125**	**130.8134295**	**123.0990731**	**146.9307674**	**98.19827436**	**103.3666046**	**57.36637842**
(Span 3) -4	**-7.61E+02**	***-936.2591259***	***-1217.888018***	**-6.18E+02**	**-6.60E+02**	**-6.22E+02**	**-7.46E+02**	**-6.76E+02**	**-7.17E+02**	**-3.03E+02**
+4	**1.45E+02**	***155.4888267***	***161.1781129***	**1.23E+02**	**1.31E+02**	**1.23E+02**	**1.47E+02**	**9.82E+01**	**1.03E+02**	**5.74E+01**
-3.05	**-722.5314146**	***-839.1191405***	***-1025.841714***	**-586.922916**	**-627.420475**	**-590.820719**	**-708.726836**	**-558.408864**	**-588.997579**	**-288.0056148**
+3.05	**137.6427369**	***151.217356***	***229.8956876***	**116.6671366**	**124.2727581**	**116.9441194**	**139.584229**	**93.28836052**	**98.19827423**	**54.49805952**
-3.1	**-684.5034446**	***-756.2495422***	***-875.2613286***	**-556.032237**	**-594.398345**	**-559.724892**	**-671.425424**	**-529.018924**	**-557.997706**	**-272.8474246**
+3.1	**180.2688633**	***247.2608364***	***321.142366***	**166.6803325**	**166.6803325**	**137.8165923**	**141.6786593**	**126.6770527**	**133.344266**	**106.9599579**
-3.15	***-646.4754746***	***-690.675202***	***-764.7184596***	***-525.141557***	***-561.376215***	***-528.629065***	***-634.124013***	***-499.628984***	***-526.997834***	***-257.6892344***
+3.15	***282.9073697***	***406.9748246***	***427.0848455***	**286.1862409**	**288.1534286**	**260.908987**	**287.6715771**	**216.8244656**	**228.4558321**	**156.2249546**
-3.2	**-608.4475047**	***-645.6375884***	***-697.919686***	**-494.250878**	**-528.354085**	**-497.533237**	**-596.822601**	**-470.239044**	**-495.997962**	**-242.5310443**
+3.2	**454.1476619**	***583.1269496***	***612.3785272***	**431.3319617**	**443.2158695**	**403.7078848**	**462.9023101**	**322.6272049**	**340.8513344**	**226.0336156**
-3.25	**-570.4195347**	***-605.2852382***	***-654.2997047***	**-463.360198**	**-495.331954**	**-466.43741**	**-559.52119**	**-440.849104**	**-464.998089**	**-227.3728541**
+3.25	**593.7331716**	***740.7718287***	***768.0580663***	**557.0146632**	**577.3215904**	**532.946318**	**617.6180941**	**417.1044528**	**439.0573187**	**283.825671**
-3.3	**-532.3915647**	***-564.9328879***	***-610.6797234***	**-432.469519**	**-462.309824**	**-435.341583**	**-522.219778**	**-411.459164**	**-433.998217**	**-212.2146639**
+3.3	**723.6063715**	***886.0681279***	***906.0278106***	**670.8879076**	**697.2305684**	**650.7781071**	**758.236771**	**506.2392914**	**533.8354078**	**341.1564606**
-3.35	**-494.3635947**	***-524.5805377***	***-567.0597421***	**-401.578839**	**-429.287694**	**-404.245756**	**-484.918366**	**-382.069224**	**-402.998345**	**-197.0564737**
+3.35	**827.6626326**	***1003.577052***	***1006.048524***	**761.2584214**	**792.3402412**	**748.1619862**	**870.9351461**	**566.6369021**	**598.2391863**	**377.7047771**
-3.4	**-456.3356247**	***-484.2281874***	***-523.4397607***	**-370.68816**	**-396.265564**	**-373.149929**	**-447.616955**	**-352.679284**	**-371.998472**	**-181.8982836**
+3.4	**919.024267**	***1102.856622***	***1100.583249***	**832.7037108**	**875.5019548**	**829.4561708**	**963.8115263**	**617.4703525**	**653.3639435**	**411.6102178**
-3.45	**-418.3076548**	***-443.8758372***	***-479.8197794***	**-339.79748**	**-363.243434**	**-342.054102**	**-410.315543**	**-323.289344**	**-340.9986**	**-166.7400934**
+3.45	**968.1623607**	***1170.669522***	***1149.297109***	**891.8393285**	**935.5713529**	**883.2082739**	**1023.845746**	**656.6675288**	**695.8120881**	**423.3693504**
-3.5	**-380.2796848**	***-403.5234869***	***-436.1997981***	**-308.906801**	**-330.221304**	**-310.958274**	**-373.014132**	**-293.899404**	**-309.998728**	**-151.5819032**
+3.5	**994.2015797**	***1214.960474***	***1173.130164***	**930.8214862**	**974.4397806**	**918.6040468**	**1057.577302**	**686.1589073**	**726.8404021**	**428.2507508**
-3.55	**-342.2517148**	***-363.1711367***	***-392.5798168***	**-278.016121**	**-297.199173**	**-279.862447**	**-335.71272**	**-264.509464**	**-278.998855**	**-136.4237131**
+3.55	**976.3779669**	***1229.580303***	***1174.219038***	**945.5296042**	**988.3516019**	**932.3764404**	**1073.917314**	**698.1933924**	**739.4425206**	**440.3427017**
-3.6	**-304.2237448**	***-322.8187864***	***-348.9598355***	**-247.125442**	**-264.177043**	**-248.76662**	**-298.411309**	**-235.119524**	**-247.998983**	**-121.2655229**

+3.6	978.5052394	1229.234043	1176.585294	944.1547649	990.2051007	935.7971377	1083.234699	696.8096048	737.0731558	452.1068968
-3.65	-266.1957748	-282.4664362	-305.3398542	-216.234763	-231.154913	-217.670793	-261.109897	-205.729584	-216.999111	-106.1073327
+3.65	976.7739718	1193.980889	1137.755689	912.4822043	959.2775781	907.8952296	1055.768848	680.8708162	719.4068854	445.5441278
-3.7	-228.1678049	-242.1140859	-261.7198728	-185.344083	-198.132783	-186.574966	-223.808486	-176.339644	-185.999239	-90.94914255
+3.7	953.0450633	1132.166075	1086.851265	873.7455024	910.3460467	854.8880824	1000.047135	654.4860065	690.4711667	431.089573
-3.75	-190.1398349	-201.7617356	-218.0998915	-154.453404	-165.110653	-155.479139	-186.507074	-146.949704	-154.999366	-75.79095237
+3.75	887.0786533	1027.481996	1001.280725	803.3522087	839.7716236	777.9034874	905.3092593	597.8599707	629.326285	397.0975096
-3.8	-152.1118649	-161.4093854	-174.4799102	-123.562724	-132.088523	-124.383312	-149.205662	-117.559764	-123.999494	-60.6327622
+3.8	793.208433	899.3808017	887.8238305	709.074796	742.1531777	687.0012718	787.9582026	541.124246	569.6044694	352.9741101
-3.85	-114.0838949	-121.0570351	-130.8599289	-92.6720447	-99.0663924	-93.2874844	-111.904251	-88.1698243	-92.9996216	-45.47457203
+3.85	651.9753403	725.3593222	723.2280617	576.4209484	604.2805684	560.6543472	646.4669264	451.474852	475.2366863	287.7426997
-3.9	-76.05592493	-80.70468488	-87.23994757	-61.7813652	-66.0442622	-62.1916572	-74.6028393	-58.7798843	-61.9997492	-30.31638186
+3.9	480.1783537	523.1967729	529.1831849	419.2466914	440.4409717	408.671407	472.2918169	335.5611025	353.2222132	210.7488641
-3.95	-38.02795495	-40.35233463	-43.61996625	-30.8906857	-33.022132	-31.0958301	-37.3014277	-29.3899443	-30.9998769	-15.15819169
+3.95	259.1644425	278.6312254	284.2418488	224.6385202	236.3121429	219.4468823	254.2865064	183.802182	193.5142124	113.1557981
-5	-2.31E-13	-2.19E-13	-2.56E-13	-1.93E-13	-2.02E-13	-1.72E-13	-2.01E-13	-1.42E-13	-1.50E-13	-9.02E-14
+5	1.45E-13	1.20E-13	1.41E-13	1.10E-13	1.19E-13	8.51E-14	1.02E-13	8.57E-14	9.11E-14	4.97E-14

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.51E-14	-5.62E-14	-6.08E-14	-4.92E-14	-5.89E-14	-6.72E-14	-6.18E-14	-6.04E-14	-5.91E-14
End Shear	7.62E-14	5.67E-14	6.13E-14	5.16E-14	4.61E-14	5.42E-14	6.81E-14	6.80E-14	6.83E-14
-0.05	-22.74261076	-25.41365204	-23.00800914	-19.95887778	-18.48872964	-25.21923306	-28.2659173	-31.4083316	-34.3254924
+0.05	161.6233138	164.9053439	142.7546928	122.8701111	132.0700388	177.9936932	194.3073231	199.1346877	201.4259954
-0.1	-45.48522151	-50.82730409	-46.01601827	-39.91775557	-36.97745927	-50.43846613	-56.5318347	-62.8166632	-68.6509848
+0.1	300.5920567	301.9638664	259.9082466	225.2066012	245.9209101	331.3292582	360.7051634	367.6837068	374.2230546
-0.15	-68.22783227	-76.24095613	-69.02402741	-59.87663335	-55.46618891	-75.65769919	-84.797752	-94.2249949	-102.976477
+0.15	411.585279	407.4634144	348.3822677	303.2742423	337.3483735	454.1813481	493.251174	527.2989515	533.8420808
-0.2	-90.97044303	-101.6546082	-92.03203654	-79.83551113	-73.95491855	-100.8769323	-113.063669	-125.633326	-137.30197
+0.2	504.1283583	490.3043012	418.8255371	367.2659834	413.3978296	556.4390014	601.5859827	656.9792284	669.7551548
-0.25	-113.7130538	-127.0682602	-115.0400457	-99.79438892	-92.44364818	-126.0961653	-141.329587	-157.041658	-171.627462
+0.25	568.6823422	544.0208323	467.8671079	412.9251688	464.8816004	629.3582479	679.8680166	750.9811117	786.2911155
-0.3	-136.4556645	-152.4819123	-138.0480548	-119.7532667	-110.9323778	-151.3153984	-169.595504	-188.44999	-205.952955
+0.3	614.6235912	582.4613216	505.2340917	448.9573306	505.5492227	686.5093588	751.0645098	818.8326641	871.8124944
-0.35	-159.1982753	-177.8955643	-161.0560639	-139.7121445	-129.4211075	-176.5346315	-197.861421	-219.858321	-240.278447
+0.35	644.3010168	604.2986936	531.9689139	474.8972589	521.9364639	728.8802882	792.8034264	861.2169904	920.3360975
-0.4	-181.9408861	-203.3092164	-184.0640731	-159.6710223	-147.9098371	-201.7538645	-226.127339	-251.266653	-274.603939
+0.4	662.5197038	607.1909897	544.2624795	488.4700039	528.843072	750.6298582	812.5439108	890.1367323	940.929125
-0.45	-204.6834968	-228.7228684	-207.0720822	-179.6299	-166.3985667	-226.9730976	-254.393256	-282.674985	-308.929432
+0.45	658.0968792	594.5625143	536.0344288	485.2962759	515.2443098	746.9997905	803.88497	888.1634093	947.0612864
-0.5	-227.4261076	-254.1365204	-230.0800914	-199.5887778	-184.8872964	-252.1923306	-282.659173	-314.083316	-343.254924
+0.5	646.5023286	574.4495882	526.0029629	473.447159	510.3946224	736.1089057	788.4635707	869.6615055	928.2895891
-0.55	-250.1687183	-279.5501725	-253.0881005	-219.5476556	-203.376026	-277.4115637	-310.925091	-345.491648	-377.580417
+0.55	625.2337769	558.7435672	512.6075472	458.547749	501.6902948	708.5019945	765.4011451	837.8776987	885.9002263
-0.6	-272.9113291	-304.9638245	-276.0961096	-239.5065334	-221.8647556	-302.6307968	-339.191008	-376.899979	-411.905909
+0.6	588.3258817	540.2883362	485.9581618	439.4657607	480.0436969	666.027286	723.5934606	784.6793688	837.2742154
-0.65	-295.6539398	-330.3774766	-299.1041188	-259.4654112	-240.3534853	-327.8500298	-367.456926	-408.308311	-446.231402
+0.65	535.4151031	505.4309618	440.8469753	405.0742175	439.1971796	601.1304638	654.7819914	709.9515521	758.4185075
-0.7	-318.3965506	-355.7911286	-322.1121279	-279.424289	-258.8422149	-353.0692629	-395.722843	-439.716643	-480.556894
+0.7	473.138006	449.4590405	387.099211	360.0231152	389.1521652	522.2423533	570.570321	622.0259909	657.727919
-0.75	-341.1391614	-381.2047807	-345.120137	-299.3831667	-277.3309445	-378.288496	-423.98876	-471.124974	-514.882386
+0.75	392.4183259	380.6715209	320.5349241	306.0116962	320.9407142	430.2300029	465.2507151	509.5949852	530.7247785
-0.8	-363.8817721	-406.6184327	-368.1281462	-319.3420445	-295.8196742	-403.507729	-452.254678	-502.533306	-549.207879
+0.8	300.9868678	292.9257158	243.7976161	242.9983078	247.6384836	327.620976	347.2427004	381.650547	388.3162104
-0.85	-386.6243829	-432.0320848	-391.1361553	-348.4834443	-314.3084038	-428.7269621	-480.520595	-533.941638	-583.533371
+0.85	197.5275808	197.6573999	157.386949	182.3996136	158.9972767	211.1497851	220.66453	239.5051358	239.4786579
-0.9	-409.3669936	-457.4457368	-414.1441644	-410.3568019	-332.7971335	-453.9461952	-508.786512	-565.349969	-617.858864
+0.9	117.299487	117.1638293	93.14568436	128.7069216	100.9139498	115.6105465	116.3876125	116.0454476	118.4797954
-0.95	-432.1096044	-482.8593889	-466.0877868	-487.4312106	-351.2858631	-479.1654282	-537.05243	-596.758301	-652.184356
+0.95	84.03335631	81.69290643	71.16944614	85.57782911	68.89504371	94.43630442	104.5596525	115.6467076	125.0620063
-1	-454.8522125	-578.033187	-591.2588663	-573.4276164	-369.7745882	-504.3846639	-565.318353	-628.166633	-686.509836
+1	88.45616417	85.99253322	74.91520742	65.04189488	72.52110064	99.4066351	110.0627926	121.7333765	131.6442181
(Span 2) -2	-454.8522125	-578.033187	-591.2588663	-573.4276164	-369.7745882	-504.3846639	-565.318353	-628.166633	-686.509836
+2	88.45616417	85.99253322	74.91520742	65.04189488	72.52110064	99.4066351	110.0627926	121.7333765	131.6442181
-2.05	-313.0953923	-404.2167138	-411.3215016	-435.5473065	-256.6915948	-351.854696	-389.573003	-430.881312	-465.960317
+2.05	67.32190552	65.4468946	57.01620282	82.24884617	58.20637264	75.65605143	83.7662033	92.64840878	100.1913182
-2.1	-291.9610897	-283.8292425	-285.7654185	-317.0946346	-239.3646143	-328.1040954	-363.276374	-401.796323	-434.507455
+2.1	138.9644955	139.0599858	112.042476	119.1680453	117.8016338	145.8072519	145.8239295	147.5713966	147.5688769
-2.15	-270.8267872	-263.2835832	-229.3678319	-232.7962301	-222.0376338	-304.3534949	-336.979744	-372.711334	-403.054593
+2.15	237.7986028	238.0143517	192.0662314	172.2602078	189.5930736	260.7394919	276.1779106	298.4081908	301.7760963
-2.2	-249.6924846	-242.7379238	-211.4688302	-184.720821	-204.7106532	-280.6028943	-310.683114	-343.626345	-371.601731
+2.2	355.6177789	339.7427041	287.4496748	241.8946538	291.3088495	395.3938027	425.7257096	460.438856	481.7715602

-2.25	-228.5581821	-222.1922644	-193.5698286	-177.4146458	-187.3836727	-256.8522938	-284.386485	-314.541357	-340.148869
+2.25	462.9325015	456.7614896	394.3815536	334.6564499	379.4891243	515.6280178	561.2500264	609.8777855	649.0128721
-2.3	-207.4238795	-201.6466051	-175.6708269	-173.805514	-170.0566922	-233.1016932	-258.089855	-285.456368	-308.696007
+2.3	550.2225653	551.3832587	480.6612508	410.8589026	451.824988	618.5727978	676.5616657	732.0833771	787.8198493
-2.35	-186.289577	-181.1009457	-157.7718252	-172.0808597	-152.7297117	-209.3510927	-231.793225	-256.371379	-277.243145
+2.35	622.198324	620.8997184	539.6949524	463.6405153	505.5931455	700.3065374	765.6619421	833.3586572	893.7547075
-2.4	-165.1552744	-160.5552864	-139.8728236	-171.2919942	-135.4027311	-185.6004921	-205.496596	-227.28639	-245.790282
+2.4	672.7507766	661.636777	569.604646	492.1826893	538.4756533	756.6150258	825.3804105	905.1289992	964.5100049
-2.45	-144.0209719	-140.009627	-121.9738219	-170.9587606	-118.0757506	-161.8498916	-179.199966	-198.201401	-214.33742
+2.45	699.9435104	675.6273188	581.7487386	504.8973597	553.676024	787.5007548	855.9703035	944.868598	1011.256872
-2.5	-122.8866693	-119.4639677	-104.0748386	-170.7746061	-100.7488656	-138.099291	-152.903336	-169.116413	-182.884781
+2.5	703.4885389	662.5140583	583.0166987	507.1651458	552.0195443	792.4562828	859.5643912	951.8671003	1024.98182
-2.55	-144.0206809	-140.0094916	-121.9738432	-170.9587331	-118.0758623	-161.8497853	-179.199689	-198.201268	-214.337681
+2.55	699.9235708	675.6149381	581.7428053	504.9052255	553.6595567	787.4895903	855.9666686	944.8551295	1011.2354
-2.6	-165.1549396	-160.5551302	-139.8728478	-171.2918257	-135.4028589	-185.600369	-205.496279	-227.286236	-245.790581
+2.6	672.7594439	661.6142036	569.5942532	492.1891054	538.4686109	756.631118	825.3654805	905.1404847	964.505242
-2.65	-186.2891982	-181.1007689	-157.7718524	-172.0807566	-152.7298555	-209.3509526	-231.792868	-256.371204	-277.243481
+2.65	622.2038605	620.8687215	539.6764261	463.6469333	505.6346183	700.3192407	765.6803885	833.3661318	893.7885964
-2.7	-207.4234568	-201.6464075	-175.670857	-173.8057998	-170.0568521	-233.1015363	-258.089457	-285.456172	-308.696381
+2.7	550.2634086	551.3462805	480.6377901	410.8617849	451.8572894	618.5778242	676.5720632	732.1196637	787.8452611
-2.75	-228.5577155	-222.1920461	-193.5698616	-177.414726	-187.3838488	-256.85212	-284.386047	-314.541139	-340.149281
+2.75	462.9633986	456.7574199	394.3788723	334.6550412	379.5097763	515.6351586	561.2510183	609.9039528	649.028581
-2.8	-249.6919741	-242.7376847	-211.4688663	-184.7209129	-204.7108454	-280.6027036	-310.682636	-343.626107	-371.602181
+2.8	355.6396548	339.7352092	287.445686	241.8926387	291.3185179	395.4003734	425.7363523	460.4561913	481.7791067
-2.85	-270.8262328	-263.2833234	-229.3678709	-232.7964435	-222.037842	-304.3532873	-336.979225	-372.711075	-403.055081
+2.85	237.8083974	238.0229905	192.0577169	172.2637277	189.5928293	260.7375259	276.1856271	298.4162429	301.7753519
-2.9	-291.9604914	-283.828962	-285.7660717	-317.0947593	-239.3648386	-328.103871	-363.275814	-401.796042	-434.507981
+2.9	138.9687023	139.0636961	112.0343138	119.1692525	117.8293687	145.8007536	145.8175809	147.5709469	147.5684385
-2.95	-313.0947501	-404.2176448	-411.321557	-435.5476807	-256.6918353	-351.8544547	-389.572404	-430.88101	-465.960881
+2.95	67.32205363	65.44696656	57.01619467	82.24138632	58.18225364	75.65611397	83.7663306	92.64848647	100.1912009
-3	-454.8532163	-578.0344078	-591.2594898	-573.4275772	-369.7747037	-504.3853595	-565.319399	-628.167432	-686.509819
+3	88.45634795	85.99262	74.91519509	65.0418884	72.52103326	99.40670577	110.0629616	121.7334647	131.6440598
(Span 3) -4	-4.55E+02	-5.78E+02	-5.91E+02	-5.73E+02	-3.70E+02	-5.04E+02	-5.65E+02	-6.28E+02	-6.87E+02
+4	8.85E+01	8.60E+01	7.49E+01	6.50E+01	7.25E+01	9.94E+01	1.10E+02	1.22E+02	1.32E+02
-3.05	-432.1105554	-482.8588015	-466.0886694	-487.4316277	-351.2859683	-479.1660917	-537.053429	-596.75906	-652.184328
+3.05	84.03353053	81.69298901	71.16943538	85.5784756	68.8949817	94.43637042	104.5598135	115.6467915	125.0618569
-3.1	-409.3678944	-457.4451794	-414.1433877	-410.3571861	-332.7972329	-453.9468239	-508.787459	-565.350689	-617.858836
+3.1	117.31403	117.3429541	93.15526801	128.6958241	100.9380346	115.6357727	116.3659384	116.064837	118.4796539
-3.15	*-386.6252335*	*-432.0315572*	*-391.1354218*	*-348.483723*	*-314.3084975*	*-428.727556*	*-480.52149*	*-533.942317*	*-583.533345*
+3.15	197.5189998	197.6710131	157.3970827	182.3971932	158.9987784	211.1596925	220.6706641	239.5006551	239.4742831
-3.2	-363.8825725	-406.617935	-368.1274559	-319.3420994	-295.8197621	-403.5082882	-452.25552	-502.533946	-549.207853
+3.2	300.9996056	292.9374127	243.8045231	243.0013717	247.6074211	327.6283809	347.2369503	381.6669606	388.2977068
-3.25	-341.1399116	-381.2043128	-345.1194899	-299.3832183	-277.3310266	-378.2890203	-423.98955	-471.125574	-514.882361
+3.25	392.4044778	380.6785351	320.5247282	306.0138232	320.9402529	430.2349097	465.2443945	509.5863254	530.7265824
-3.3	-318.3972506	*-355.7906906*	-322.111524	*-279.4243372*	-258.8422912	-353.0697525	-395.723581	-439.717203	-480.55687
+3.3	473.1459851	449.4560682	387.1028909	360.0370171	389.117094	522.2377541	570.5607481	622.0366053	657.7042532
-3.35	-295.6545897	-330.3770684	-299.1035581	-259.4654561	-240.3535558	-327.8504846	-367.457611	-408.308831	-446.231378
+3.35	535.4188526	505.4231629	440.8441708	405.080234	439.1912833	601.1233304	654.7691601	709.9566925	758.412228
-3.4	-272.9119287	-304.9634463	-276.0955922	-239.506575	-221.8648204	-302.6312168	-339.191641	-376.900459	-411.905887
+3.4	588.3208465	540.2741593	485.9521377	439.4788384	480.0015379	666.0158009	723.5752045	784.672854	837.2841549
-3.45	-250.1692678	-279.5498241	-253.0876263	-219.5476939	-203.376085	-277.4119489	-310.925672	-345.492088	-377.580395
+3.45	625.2244101	558.7355101	512.5981482	458.5500039	501.6761764	708.5097423	765.4006673	837.8655389	885.8976598
-3.5	-227.4266068	-254.1362019	-230.0796604	-199.5888127	-184.8873496	-252.1926811	-282.659702	-314.083716	-343.254903
+3.5	646.487262	574.4635963	525.9892588	473.4384616	510.4078662	736.0867526	788.4326521	869.6420567	928.3065218
-3.55	-204.6839459	-228.7225797	-207.0716944	-179.6299316	-166.3986141	-226.9734132	-254.393733	-282.675345	-308.929412
+3.55	658.0875185	*594.57278423 3463*	*536.0314942*	485.2943506	515.2317329	*746.9994159*	803.8928425	888.1602831	947.0705571

-3.6	**-181.9412849**	**-203.3089575**	**-184.0637285**	**-159.6710505**	**-147.9098787**	**-201.7541454**	**-226.127763**	**-251.266973**	**-274.60392**
+3.6	**662.5298982**	**607.2056882**	**544.2722147**	**488.458113**	**528.8263629**	**750.6477368**	**812.5217723**	**890.1494224**	**940.9263787**
-3.65	**-159.198624**	**-177.8953354**	**-161.0557626**	**-139.7121694**	**-129.4211433**	**-176.5348775**	**-197.861793**	**-219.858601**	**-240.278429**
+3.65	**644.3050182**	**604.3082201**	**531.9744145**	**474.8917111**	**521.9475358**	**728.867018**	**792.7976795**	**861.2212016**	**920.3251365**
-3.7	**-136.455963**	**-152.4817132**	**-138.0477967**	**-119.7532883**	**-110.9324079**	**-151.3156097**	**-169.595824**	**-188.45023**	**-205.952937**
+3.7	**614.6192924**	**582.4652553**	*505.2396099*	**448.9430876**	**505.5226825**	**686.5130544**	**751.0745518**	**818.8257092**	**871.7920032**
-3.75	**-113.7133021**	**-127.068091**	**-115.0398308**	**-99.79440723**	**-92.44367247**	**-126.0963418**	**-141.329854**	**-157.041858**	**-171.627446**
+3.75	**568.671512**	**544.0160941**	**467.8621205**	**412.893989**	**464.8819671**	**629.352763**	**679.8693145**	**750.9884701**	**786.2832566**
-3.8	**-90.97064111**	**-101.6544688**	**-92.03186486**	**-79.83552613**	**-73.95493705**	**-100.877074**	**-113.063884**	**-125.633487**	**-137.301954**
+3.8	**504.110311**	**490.2927287**	**418.8186297**	**367.2624637**	**413.359698**	**556.4254659**	**601.577134**	**656.9535492**	**669.7594255**
-3.85	**-68.22798016**	**-76.24084663**	**-69.02389894**	**-59.87664503**	**-55.46620164**	**-75.65780615**	**-84.7979148**	**-94.2251151**	**-102.976462**
+3.85	**411.5847062**	**407.4665287**	**348.3859415**	**303.2674908**	**337.3364256**	**454.1838301**	**493.2570132**	**527.2864977**	**533.8448079**
-3.9	**-45.4853192**	**-50.82722445**	**-46.01593303**	**-39.91776392**	**-36.97746622**	**-50.43853831**	**-56.5319451**	**-62.8167435**	**-68.6509708**
+3.9	**300.5583774**	**301.9810854**	**259.9235459**	**225.2147511**	**245.9346885**	**331.2983208**	**360.6774122**	**367.6833206**	**374.2252363**
-3.95	**-22.74265825**	**-25.41360227**	**-23.00796711**	**-19.95888282**	**-18.4887308**	**-25.21927046**	**-28.2659755**	**-31.4083719**	**-34.3254792**
+3.95	**161.6065334**	**164.9147296**	**142.7625945**	**122.8742715**	**132.0445202**	**177.9783794**	**194.2935089**	**199.1346621**	**201.4270397**
-5	**-1.56E-13**	**-1.18E-13**	**-1.23E-13**	**-1.06E-13**	**-1.12E-13**	**-1.44E-13**	**-1.43E-13**	**-1.43E-13**	**-1.56E-13**
+5	**7.26E-14**	**7.25E-14**	**7.05E-14**	**5.75E-14**	**5.82E-14**	**7.06E-14**	**7.70E-14**	**8.35E-14**	**8.33E-14**

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-7.49E-14	-7.69E-14	-7.44E-14	-8.12E-14	-8.14E-14
End Shear	7.79E-14	6.71E-14	6.50E-14	7.08E-14	6.16E-14
-0.05	-42.50783676	-44.96550748	-28.4636412	-35.719633	-36.3218251
+0.05	242.7121632	254.8053101	180.960354	221.7099996	221.5584904
-0.1	-85.01567352	-89.93101496	-56.9272824	-71.439266	-72.6436502
+0.1	441.1017078	464.8914467	330.7573849	405.0471107	402.5512245
-0.15	-127.5235103	-134.8965224	-85.3909236	-107.158899	-108.965475
+0.15	593.0400251	622.4343825	450.4666053	545.1728235	538.2476307
-0.2	-170.031347	-179.8620299	-113.854565	-142.878532	-145.2873
+0.2	727.7202839	756.7093661	555.273429	656.560812	657.7455763
-0.25	-212.5391838	-224.8275374	-142.318206	-178.598165	-181.609126
+0.25	825.4193564	872.2675475	629.9465029	748.5793486	745.4378011
-0.3	-255.0470206	-269.7930449	-170.781847	-214.317798	-217.930951
+0.3	895.0531988	948.9136385	687.2069889	808.5107804	827.0617945
-0.35	-297.5548573	-314.7585524	-199.245488	-250.037431	-254.252776
+0.35	929.0961068	1005.853891	718.6888663	836.1961724	878.370094
-0.4	-340.0626941	-359.7240599	-227.70913	-285.757064	-290.574601
+0.4	939.1233559	1041.807031	739.4910291	850.1242518	906.275858
-0.45	-382.5705309	-404.6895673	-256.172771	-321.476697	-326.896426
+0.45	959.3045252	1053.311133	743.3691482	845.2606854	903.1770173
-0.5	-425.0783676	-449.6550748	-284.636412	-357.19633	-363.218251
+0.5	948.4871092	1042.523716	730.4045605	832.5068261	889.9420938
-0.55	-467.5862044	-494.6205823	-313.100053	-392.915963	-399.540076
+0.55	900.265063	987.7422368	698.2256765	793.5809984	854.8613669
-0.6	-510.0940411	-539.5860898	-341.563694	-428.635596	-435.861901
+0.6	839.6210604	928.4460569	656.8670741	750.8431238	801.4668954
-0.65	-552.6018779	-584.5515973	-370.027335	-464.355229	-472.183727
+0.65	774.2019582	828.6027065	599.4244652	692.6360904	723.4342814
-0.7	-595.1097147	-629.5171047	-398.490977	-500.074862	-508.505552
+0.7	682.6211939	710.790215	528.8682528	622.5709498	629.5067784
-0.75	-637.6175514	-674.4826122	-426.954618	-535.794495	-544.827377
+0.75	558.562091	568.1808857	439.9726696	519.2414088	516.1006772
-0.8	-680.1253882	-719.4481197	-455.418259	-571.514128	-581.149202
+0.8	410.083172	397.2737896	343.5861237	389.0232314	391.6283911
-0.85	-722.633225	-764.4136272	-483.8819	-607.233761	-617.471027
+0.85	246.457492	228.5138721	232.0317683	249.3651963	253.6667612
-0.9	-765.1410617	-809.3791347	-512.345541	-642.953394	-653.792852
+0.9	128.0844488	142.9630653	134.3380547	143.293925	127.1648915
-0.95	-872.3764022	-976.5708887	-593.938428	-678.673027	-747.966001
+0.95	135.2002515	150.9054578	90.15842818	111.7785469	112.6404655
-1	-1092.39856	-1189.65845	-749.567063	-862.001277	-953.198814
+1	142.3160556	158.8478509	94.90360779	117.661629	118.568911
(Span 2) -2	-1092.39856	-1189.65845	-749.567063	-862.001277	-953.198814
+2	142.3160556	158.8478509	94.90360779	117.661629	118.568911
-2.05	-734.7367925	-780.8944562	-539.400758	-616.66127	-681.924198
+2.05	108.313403	120.8953635	72.22890396	89.54949859	90.24000869
-2.1	-493.5456608	-558.7764279	-358.711807	-388.356289	-443.44506
+2.1	166.6490036	154.5238276	159.3979783	170.4743275	170.5275584
-2.15	-435.729493	-486.3443492	-290.565968	-360.24419	-363.022225
+2.15	311.936197	291.6241678	279.3469546	315.8414781	321.0171914
-2.2	-401.726805	-448.3918681	-267.891295	-332.132092	-334.693338
+2.2	491.0607922	488.9712218	406.3160814	464.7774062	479.6719337

-2.25	**-367.724117**	**-410.4393869**	**-245.216622**	**-304.019993**	**-306.36445**
+2.25	**691.9893426**	**708.0398731**	**537.2177699**	**639.8494085**	**642.1510878**
-2.3	**-333.721429**	**-372.4869058**	**-222.54195**	**-275.907894**	**-278.035563**
+2.3	**844.5563805**	**895.4022376**	**650.1964504**	**774.2264249**	**794.3614085**
-2.35	**-299.718741**	**-334.5344247**	**-199.867277**	**-247.795796**	**-249.706675**
+2.35	**954.5315344**	**1031.235378**	**726.2935328**	**866.9650058**	**900.2021883**
-2.4	**-265.716053**	**-296.5819435**	**-177.192604**	**-219.683697**	**-221.377788**
+2.4	**1033.08434**	**1132.8531**	**771.4480861**	**918.1087497**	**958.2653359**
-2.45	**-231.713365**	**-258.6294624**	**-154.517931**	**-191.571599**	**-193.0489**
+2.45	**1089.215546**	**1187.415902**	**790.6445198**	**932.3387893**	**980.9551024**
-2.5	**-197.710677**	**-220.6770238**	**-131.843431**	**-163.459676**	**-164.720112**
+2.5	**1096.403062**	**1198.612241**	**782.8119016**	**917.4574346**	**974.6189152**
-2.55	**-231.7131239**	**-258.6295112**	**-154.518134**	**-191.571806**	**-193.049015**
+2.55	**1089.20897**	**1187.413477**	**790.6218063**	**932.3338642**	**980.9532842**
-2.6	**-265.7157766**	**-296.5819987**	**-177.192838**	**-219.683936**	**-221.377917**
+2.6	**1033.074249**	**1132.855688**	**771.4138928**	**918.1068279**	**958.2578183**
-2.65	**-299.7184293**	**-334.5344862**	**-199.867542**	**-247.796067**	**-249.706819**
+2.65	**954.5136207**	**1031.237347**	**726.288928**	**866.9512342**	**900.1828141**
-2.7	**-333.721082**	**-372.4869736**	**-222.542246**	**-275.908197**	**-278.035722**
+2.7	**844.5447951**	**895.399627**	**650.1848941**	**774.207019**	**794.3724874**
-2.75	**-367.7237347**	**-410.4394611**	**-245.21695**	**-304.020328**	**-306.364624**
+2.75	**691.9717649**	**708.0365265**	**537.2386172**	**639.8248358**	**642.1509358**
-2.8	**-401.7263874**	**-448.3919486**	**-267.891654**	**-332.132458**	**-334.693526**
+2.8	**490.96732**	**489.0823156**	**406.3366767**	**464.7738736**	**479.6800422**
-2.85	**-435.7290401**	**-486.344436**	**-290.566357**	**-360.244589**	**-363.022429**
+2.85	**311.9227851**	**291.6255083**	**279.3603341**	**315.851102**	**321.030091**
-2.9	**-493.5462298**	**-558.7762756**	**-358.711074**	**-388.356719**	**-443.446641**
+2.9	**166.6324681**	**154.5257525**	**159.4021567**	**170.4872434**	**170.540095**
-2.95	**-734.7369475**	**-780.8941651**	**-539.40029**	**-616.6606**	**-681.923626**
+2.95	**108.3135151**	**120.8953489**	**72.2287984**	**89.54938751**	**90.23997507**
-3	**-1092.398875**	**-1189.658201**	**-749.568428**	**-862.000806**	**-953.200462**
+3	**142.3162035**	**158.8478244**	**94.90347837**	**117.6614957**	**118.568849**
(Span 3) -4	**-1.09E+03**	**-1.19E+03**	**-7.50E+02**	**-8.62E+02**	**-9.53E+02**
+4	**1.42E+02**	**1.59E+02**	**9.49E+01**	**1.18E+02**	**1.19E+02**
-3.05	**-872.3765992**	**-976.5710648**	**-593.938319**	**-678.672402**	**-747.965932**
+3.05	**135.2003934**	**150.9054332**	**90.15830441**	**111.778421**	**112.6404066**
-3.1	**-765.1405216**	**-809.3791742**	**-512.346023**	**-642.952802**	**-653.79278**
+3.1	**128.0845833**	**142.963042**	**134.3034244**	**143.2569861**	**127.1566343**
-3.15	***-722.632715***	***-764.4136649***	***-483.882354***	***-607.233203***	***-617.470959***
+3.15	**246.4520274**	**228.5132377**	**232.0443825**	**249.3601193**	**253.6794527**
-3.2	**-680.1249085**	**-719.4481556**	**-455.418684**	**-571.513603**	**-581.149137**
+3.2	**410.0709497**	**397.2719886**	**343.599439**	**389.0148581**	**391.6209814**
-3.25	**-637.617102**	**-674.4826463**	**-426.955015**	**-535.794003**	**-544.827315**
+3.25	**558.5445451**	**568.6543096**	**439.9846215**	**519.2490293**	**516.1141969**
-3.3	**-595.1092955**	**-629.517137**	**-398.491346**	**-500.074403**	**-508.505493**
+3.3	**682.6017772**	**710.7866253**	**528.8790341**	**622.5499015**	**629.4973759**
-3.35	**-552.6014889**	**-584.5516278**	**-370.027677**	**-464.354803**	**-472.183671**
+3.35	**774.197122**	**828.6020125**	**599.4321338**	**692.6397312**	**723.4434102**
-3.4	**-510.0936824**	**-539.5861185**	**-341.564007**	**-428.635204**	**-435.861849**
+3.4	**839.6303086**	**928.4482589**	**656.8715636**	**750.8187847**	**801.4507486**
-3.45	**-467.5858759**	**-494.6206092**	**-313.100338**	**-392.915604**	**-399.540027**
+3.45	**900.2542069**	**987.7411169**	**698.2227031**	**793.5894872**	**854.8621347**
-3.5	**-425.0780693**	**-449.6550999**	**-284.636669**	**-357.196004**	**-363.218205**
+3.5	**948.4688625**	**1042.521301**	**730.3971443**	**832.4888634**	**889.9590683**
-3.55	**-382.5702628**	**-404.6895906**	**-256.172999**	**-321.476404**	**-326.896384**
+3.55	**959.2994173**	**1053.311167**	**743.3536531**	**845.2595455**	**903.1840818**
-3.6	**-340.0624563**	**-359.7240813**	**-227.70933**	**-285.756804**	**-290.574562**

+3.6	939.1308033	1041.805584	739.4953625	850.1073321	906.2552755
-3.65	-297.5546497	-314.7585721	-199.245661	-250.037205	-254.25274
+3.65	929.10629	1005.850719	718.6857893	836.1947417	878.3643013
-3.7	-255.0468432	-269.7930628	-170.781992	-214.317605	-217.930918
+3.7	895.0760459	948.9102801	687.1980405	808.5331671	827.0703003
-3.75	-212.5390367	-224.8275535	-142.318322	-178.598005	-181.609096
+3.75	825.7543653	872.2665459	629.9315976	748.5707806	745.4372229
-3.8	-170.0312302	-179.8620442	-113.854653	-142.878405	-145.287274
+3.8	727.7294876	756.7107057	555.2517221	656.5644322	657.7369527
-3.85	-127.5234236	-134.8965349	-85.3909837	-107.158805	-108.965452
+3.85	593.0352547	622.4332091	450.4632763	545.1637304	538.2405149
-3.9	-85.0156171	-89.93102565	-56.9273144	-71.4392054	-72.6436305
+3.9	441.0850187	464.8881248	330.7771449	405.0267995	402.5326747
-3.95	-42.50781057	-44.96551637	-28.4636451	-35.7196056	-36.3218086
+3.95	242.7053745	254.8037116	180.9705248	221.7002376	221.5497195
-5	-1.79E-13	-1.82E-13	-1.41E-13	-1.52E-13	-1.61E-13
+5	1.11E-13	1.20E-13	9.49E-14	1.09E-13	1.15E-13

3-Span: Shear (Max and Min) Raw Data Results - 45' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.261604552	-5.241289605	-5.856861013	-5.302453636	-4.805292071	-4.260935013	-5.81205498	-6.514197528	-7.238402125	-7.910694535
End Shear	54.35439968	40.68896743	42.44614823	36.88667357	32.38613567	33.26937413	44.72956324	48.98271096	50.36299695	51.24619576
-0.05	-7.261604552	-5.241289605	-5.856861013	-5.302453636	-5.238794666	-4.260935013	-5.81205498	-6.514197528	-7.238402125	-7.910694535
+0.05	49.41009961	37.17271132	38.21087657	32.89941931	29.07453287	30.42192854	40.89816583	44.64906355	45.59520105	46.30131291
-0.1	-7.261604552	-5.241289605	-5.856861013	-5.302453636	-6.043292488	-4.260935013	-5.81205498	-6.514197528	-7.238402125	-7.910694535
+0.1	45.09150228	33.94733608	34.22606378	29.22629381	25.88134865	27.81985269	37.38341828	40.66856938	41.43588546	41.54251668
-0.15	-7.261604552	-5.241289605	-5.856861013	-5.302453636	-7.29537393	-4.260935013	-5.81205498	-6.514197528	-7.238402125	-7.910694535
+0.15	41.51678089	31.56056595	31.1893329	26.54555893	23.46258117	25.76458776	34.7800172	37.72703071	37.99891269	37.99533359
-0.2	-8.327756166	-6.614443768	-6.617356683	-6.393978399	-8.8054865	-5.314431972	-6.598757519	-6.599464342	-7.238402125	-7.910694535
+0.2	37.143522	28.43218953	27.43500052	23.45746832	20.63895026	23.36231579	31.36418327	33.87710259	33.80192088	33.79817802
-0.25	-10.1239676	-8.490717569	-8.650339183	-8.075408764	-9.97373488	-6.479059092	-8.841776374	-8.842635941	-8.830665162	-8.819227464
+0.25	33.7328848	25.98182073	24.64473689	21.28938935	18.64142314	21.37813916	28.68562683	30.86628065	30.77398165	30.77082122
-0.3	-12.31848053	-10.81434429	-11.15473628	-10.29218685	-11.38973191	-7.917092086	-11.62420741	-11.9404712	-11.92653473	-11.91322103
+0.3	29.39315164	22.99533676	21.30020543	18.72601857	16.36498767	18.95635163	25.41701898	27.20288867	27.13317398	27.12989111
-0.35	-14.4295152	-12.65009052	-13.11287564	-12.1704034	-12.52514373	-9.75503825	-13.8261776	-14.57341039	-14.5597753	-14.54674733
+0.35	26.41538524	20.67555	18.93702827	16.74171558	14.62750937	17.07224221	22.87467757	24.3624687	24.30957733	24.30621754
-0.4	-18.60489674	-14.90803705	-15.49766517	-14.49373159	-14.10726831	-12.35513518	-16.59741384	-17.82456868	-17.81135582	-17.79872862
+0.4	22.61959512	17.87363168	16.2948407	14.35408222	12.58007694	14.79260293	19.79938538	20.9385281	20.90502376	20.90159429
-0.45	-21.90554014	-17.05466632	-17.49647063	-16.2391136	-15.33177043	-14.40834262	-19.29986535	-20.38526915	-20.37242683	-20.36015399
+0.45	19.84284036	15.7185622	14.56526846	12.52541427	11.04395909	13.03586266	17.4301278	18.31084433	18.29143083	18.28797497
-0.5	-25.96758327	-20.21301543	-20.12340569	-18.2804207	-17.60792411	-16.93241086	-22.71562286	-23.66532716	-23.64405914	-23.62933558
+0.5	16.52495605	13.14387996	12.53226886	10.35112839	9.235594967	10.93250092	14.59422577	15.04456532	15.0546697	15.14857497
-0.55	-29.15568054	-22.69180644	-22.34263613	-19.80201005	-19.44721532	-18.91114428	-25.3941003	-26.76558945	-26.71787605	-26.70359506
+0.55	14.00367082	11.06924659	10.96546781	8.719545821	7.892176155	9.330436632	12.30812054	12.9414612	12.93822641	13.03475584
-0.6	-33.04969989	-25.71937701	-25.06815795	-21.56585321	-21.71591522	-21.32505832	-28.66258899	-30.55828703	-30.47755939	-30.46388413
+0.6	11.06015531	9.097169846	9.089262417	7.227017632	6.620816825	7.346706457	9.846963324	10.44188495	10.43868114	10.52938925
-0.65	-36.28107977	-28.07647665	-27.09147027	-23.05019816	-23.470228	-23.20201429	-31.20481986	-33.51614835	-33.40912299	-33.39596248
+0.65	8.838320493	7.667946843	7.659928855	6.090003834	5.654408897	5.932109855	8.194836642	8.553895109	8.550741413	8.636450614
-0.7	-40.49103812	-30.93059657	-29.42423725	-25.60476521	-25.58685923	-25.47164356	-34.27996071	-37.10438178	-37.463939	-37.44892462
+0.7	6.638512135	5.978644997	5.970592004	4.746199759	4.534265384	4.552463663	6.250576724	6.344551604	6.341499815	6.420529856
-0.75	-43.75335213	-33.13186635	-31.83151863	-27.58118258	-27.21875022	-27.21952123	-36.64907782	-39.87750441	-40.68780238	-40.69619721
+0.75	5.411531925	4.710767486	4.702780185	3.737737909	3.692152803	3.712020087	4.79879218	4.804410756	4.861127935	4.79929422
-0.8	-47.68322344	-35.76986172	-35.53360254	-30.2528999	-29.37323147	-29.310734	-39.48478057	-43.20835402	-44.58234143	-45.18608154
+0.8	3.974304199	3.238170157	3.230384136	2.566592378	2.712274192	2.727439452	3.128167521	3.127875436	3.125392033	3.123020189
-0.85	-50.69686667	-37.78116873	-38.40031254	-32.71842719	-31.36581855	-30.90223043	-41.64391787	-45.75440402	-47.57830993	-48.65930812
+0.85	2.907027245	2.114419831	2.148154129	1.705830871	2.043857506	1.996170287	2.041362124	2.081085936	2.043189226	2.041271053
-0.9	-54.28513514	-40.16036854	-41.85056083	-36.14060128	-34.11406296	-32.78090491	-44.19410788	-48.7749486	-51.15831624	-52.83535196
+0.9	1.68320632	1.019285738	0.990897163	0.863252458	1.353871441	1.131644657	1.145468686	1.268260215	1.402741064	1.516944282
-0.95	-57.0008873	-41.94756707	-44.7931521	-39.06250581	-36.51953659	-34.18871639	-46.10639766	-51.05158512	-53.87892546	-56.03103626
+0.95	1.383322632	1.019285738	0.990897163	0.863252458	1.032080879	0.835665009	1.145468686	1.268260215	1.402741064	1.516944282
-1	-60.18603489	-44.02530325	-48.4745242	-42.57682381	-39.42325042	-35.82071903	-48.32498688	-53.70890245	-57.08506346	-59.82706116
+1	1.38E+00	1.019285738	0.990897163	0.863252458	7.83E-01	0.835665009	1.145468686	1.268260215	1.402741064	1.516944282
(Span 2) -2	-5.084743266	-3.746636023	-3.642286729	-3.173097129	-2.878668666	-3.071692782	-4.21045251	-4.66180292	-5.156120667	-5.575902612
+2	61.19816264	44.45132217	51.66281286	46.56696643	41.77821262	36.0710049	48.68493965	54.34340135	58.17902661	61.55200195
-2.05	-5.084743266	-3.746636023	-3.642286729	-3.173097129	-3.205303824	-3.071692782	-4.21045251	-4.66180292	-5.156120667	-5.575902612
+2.05	58.41360308	42.61559116	48.65609668	43.33772989	39.05909236	34.62128069	46.71251233	51.99774556	55.36925387	58.26307387
-2.1	-5.084743266	-3.746636023	-3.642286729	-3.173097129	-3.6982177	-3.071692782	-4.21045251	-4.66180292	-5.156120667	-5.575902612
+2.1	54.83181758	40.22388992	44.91481627	39.43537843	35.9928142	32.7248357	44.13538689	48.95984805	51.78218738	54.11475003
-2.15	-5.084743266	-3.746636023	-3.642286729	-3.173097129	-4.413480199	-3.071692782	-4.21045251	-4.66180292	-5.156120667	-5.575902612
+2.15	51.03216622	37.65681755	41.07308173	35.80464745	33.0476737	30.6818507	41.36200192	45.71655319	48.00279363	49.79396142
-2.2	-5.084743266	-4.350503097	-4.361170733	-3.85713776	-5.387614172	-3.409128064	-4.503454498	-4.66180292	-5.156120667	-5.575902612
+2.2	47.06156025	34.94679058	36.90126055	32.2079338	30.07219707	28.51825223	38.42738829	42.30805702	44.07615872	45.35100492
-2.25	-6.756804943	-6.075031762	-6.178323498	-5.494527944	-6.647290889	-4.604773086	-6.487661406	-6.695140372	-6.689299411	-6.683721906

+2.25	42.96690707	32.12624857	32.95474365	28.63430419	27.09006709	26.25997771	35.36655455	38.77457863	40.04737583	40.81394372
-2.3	-9.595871184	-7.928735172	-8.039528579	-7.169140986	-7.970072819	-6.427058962	-8.636408136	-9.148295801	-9.142134962	-9.136249885
+2.3	38.7951101	29.22760611	29.16005055	25.12793211	24.12457218	23.93296315	32.2145161	35.15633904	35.89314969	36.14374202
-2.35	-12.17607152	-9.68101953	-9.671777966	-8.583806213	-9.069742787	-8.067546176	-10.76757155	-11.33054707	-11.32420421	-11.31814189
+2.35	35.29352921	26.7236992	26.19359103	22.42991483	21.86004244	21.95997762	29.54340696	31.90720335	32.36331716	32.44848709
-2.4	-15.47918092	-12.2320173	-11.82219444	-10.29325229	-10.86710581	-10.1599836	-13.59163249	-14.18765099	-14.17612045	-14.16911227
+2.4	31.1021319	23.57195555	22.70642129	19.4786692	19.37818672	19.43966926	26.04599238	28.13129397	28.15315038	28.24131262
-2.45	-18.9687184	-14.92917914	-14.11761418	-12.27822893	-12.82600498	-12.36303331	-16.566689	-17.48449892	-17.45523313	-17.44807071
+2.45	26.79004025	20.63085767	19.33841711	16.92991794	17.1492094	16.99604769	22.82808842	24.49565786	24.42337029	24.41622658
-2.5	-22.67101858	-17.74009029	-16.40848692	-14.43933051	-14.88027484	-14.65077337	-19.65771099	-20.93448774	-20.88485369	-20.87763377
+2.5	22.82709668	17.73866947	16.40749159	14.43832427	14.879696	14.64958324	19.6561427	20.93277702	20.88318908	20.87600477
-2.55	-26.68985634	-20.63231089	-19.33985232	-16.93094765	-17.14976167	-16.99726172	-22.82968844	-24.49742372	-24.42507881	-24.41788944
+2.55	19.18038514	14.92781484	14.11661283	12.27740081	12.82550075	12.36187986	16.56517086	17.48284485	17.45363119	17.44650305
-2.6	-30.81464265	-23.57342524	-22.7079186	-19.47971633	-19.37871652	-19.37657751	-26.04760709	-28.1330763	-28.13750972	-28.22086518
+2.6	15.67620547	12.23071731	11.82119011	10.29254968	10.86664229	10.15888112	13.59018863	14.18609061	14.17459227	14.16762474
-2.65	-34.99863375	-26.6727988	-26.19513078	-22.43114436	-21.86064126	-21.96119783	-29.49417299	-31.8594455	-32.34233204	-32.42806012
+2.65	12.24569298	9.679800566	9.670905266	8.583111432	9.065451209	8.066507487	10.76620481	11.32924022	11.32292472	11.31688977
-2.7	-38.49679148	-29.22906325	-29.16162123	-25.12934148	-24.12528831	-23.93417118	-32.21611077	-35.15811777	-35.87227695	-36.12351889
+2.7	9.661883742	7.927788519	8.038691816	7.168453195	7.969740389	6.42608286	8.635295999	9.147053342	9.140921685	9.135069036
-2.75	-42.66791946	-32.12767659	-32.9564467	-28.63576047	-27.0907958	-26.26116395	-35.36811403	-38.77633619	-40.04931685	-40.7937203
+2.75	6.804024085	6.0741461	6.177538542	5.493852955	6.646935537	4.60388847	6.486628141	6.693996863	6.688182833	6.682626273
-2.8	-46.76580977	-34.94817331	-36.85678147	-32.20940855	-30.0729183	-28.51939189	-38.42889516	-42.30975609	-44.07807263	-45.35310106
+2.8	5.084790243	4.349687391	4.360453821	3.856480748	5.38733063	3.408566693	4.502510497	4.661810079	5.156124402	5.575895907
-2.85	-50.74371823	-37.65813068	-41.02858927	-35.80612245	-33.04838113	-30.68293584	-41.3634381	-45.71818318	-48.00464096	-49.79601583
+2.85	5.084790243	3.746643807	3.642290405	3.173096607	4.471755433	3.071689928	4.210455503	4.661810079	5.156124402	5.575895907
-2.9	-54.86424705	-40.22512544	-44.91648625	-39.40243774	-35.99350205	-32.72585212	-44.13673435	-48.96139647	-51.78395466	-54.11672516
+2.9	5.084790243	3.746643807	3.642290405	3.173096607	3.698066401	3.071689928	4.210455503	4.661810079	5.156124402	5.575895907
-2.95	-58.4421624	-42.61673872	-48.65771341	-43.30491782	-39.05987645	-34.62221983	-46.71375401	-51.99917701	-55.37091982	-58.26496964
+2.95	5.084790243	3.746643807	3.642290405	3.173096607	3.205173096	3.071689928	4.210455503	4.661810079	5.156124402	5.575895907
-3	-61.75594636	-44.80053499	-52.25094819	-47.20144344	-42.31860384	-36.3460968	-49.05948847	-54.79132785	-58.72044213	-62.19045188
+3	5.084790243	3.746643807	3.642290405	3.173096607	2.878668392	3.071689928	4.210455503	4.661810079	5.156124402	5.575895907
(Span 3) -4	-1.38E+00	-1.019287856	-0.990898163	-0.863252316	-7.83E-01	-0.835664233	-1.1454695	-1.268262162	-1.40274208	-1.516942458
+4	59.51498741	43.62299922	47.75140784	41.88528641	38.85123394	35.50514288	47.89584309	53.19336695	56.46011805	59.08428642
-3.05	-1.38E+00	-1.019287856	-0.990898163	-0.863252316	-1.03E+00	-0.835664233	-1.1454695	-1.268262162	-1.40274208	-1.516942458
+3.05	56.94417279	41.94627487	44.79117164	39.06073045	36.51867246	34.18766341	46.10500551	51.04995774	53.87701508	56.02884021
-3.1	-1.917804718	-1.126477673	-1.156740848	-0.943626058	-1.455740799	-1.292349655	-1.1454695	-1.268262162	-1.40274208	-1.516942458
+3.1	53.52367715	39.69569071	41.17129392	35.39414726	33.50092621	32.41432361	43.69639619	48.18420271	50.45573527	52.01342636
-3.15	-2.907028198	-2.115186585	-2.148830775	-1.706334715	-2.044104996	-1.996708179	-2.042106526	-2.056919223	-2.043901387	-2.041966124
+3.15	50.63356967	37.77970186	38.39846313	32.71693892	31.36512007	30.90103498	41.64233188	45.75257889	47.57619069	48.65692466
-3.2	-4.252809525	-3.5231646	-3.515226998	-2.793110298	-2.901824227	-2.918831	-3.446225595	-3.451320399	-3.448785375	-3.446364229
+3.2	46.84471423	35.2513701	34.80135687	29.62337662	28.86577262	28.89999643	38.92773789	42.55299429	43.8140249	44.2982518
-3.25	-5.411531448	-4.711672086	-4.703582173	-3.73833133	-3.692475074	-3.71264599	-4.799838779	-4.805430633	-4.862128936	-4.800271387
+3.25	43.68452866	33.13025283	31.82954578	27.57997894	27.21819487	27.21820091	36.64731983	39.87551181	40.68553021	40.6936354
-3.3	-6.955411911	-6.308443878	-6.300277232	-5.00840415	-4.752803171	-4.770190286	-6.629346636	-6.773724947	-6.77062446	-6.850994073
+3.3	39.58883536	30.36684739	28.97395035	25.0997681	25.1697494	25.02359345	33.67284444	36.39503933	36.64179112	36.62668322
-3.35	-8.789299389	-7.668976706	-7.6608419	-6.090683658	-5.654765364	-5.933159293	-8.196042445	-8.555233779	-8.552052113	-8.637726318
+3.35	36.2077874	28.07473938	27.09018895	23.04891746	23.46960855	23.20057946	31.20293967	33.51399464	33.40704726	33.39393116
-3.4	-11.58439391	-9.465753237	-9.457761519	-7.520103541	-6.869932568	-7.714916024	-10.27396876	-10.93117349	-10.92793206	-11.01981487
+3.4	32.21354319	25.1189311	24.53910928	21.22445935	21.26824331	20.84654517	28.0146296	29.80557857	29.73151959	29.71777315
-3.45	-13.9743714	-11.0706569	-10.96647794	-8.720294539	-7.892575039	-9.331628788	-12.30558594	-12.94296099	-12.93969479	-13.03619692
+3.45	29.08806913	22.68997103	22.34115275	19.80110677	19.44652589	18.90962984	25.39210507	26.76333082	26.71568678	26.70147
-3.5	-17.14006495	-13.64916322	-12.93355066	-10.77662254	-9.589967557	-11.34576361	-15.15129581	-15.64011174	-15.66506492	-15.75905371
+3.5	25.09239434	19.58443394	19.60864008	17.88359644	17.14605048	16.43026821	22.03606284	22.90107695	22.88866958	22.87681662
-3.55	-19.80463957	-15.72012838	-14.56635935	-12.52650529	-11.0445241	-13.03718737	-17.43186026	-18.28782899	-18.29325426	-18.28976427
+3.55	21.83534779	17.05275813	17.49505739	16.23806674	15.33132036	14.40676774	19.29778454	20.38340643	20.37059576	20.35836916
-3.6	-23.37122917	-18.4263994	-16.81438985	-14.8240183	-12.98293007	-15.24275425	-20.40652755	-21.61333342	-21.57604555	-21.57258415
+3.6	17.70255102	14.45877767	15.02537462	14.04057411	13.79619571	11.83622205	16.0573431	17.1765661	17.1632962	17.15064119

-3.65	**-26.31184666**	**-20.67724656**	**-18.93843664**	**-16.74290761**	**-14.62813744**	**-17.07366767**	**-22.87655728**	**-24.36450572**	**-24.31156544**	**-24.30815266**
+3.65	**14.35768172**	**12.64872395**	**13.1116069**	**12.16922426**	**12.52465515**	**9.75342634**	**13.82453748**	**14.57149311**	**14.55790568**	**14.54492035**
-3.7	**-30.27677716**	**-23.58703341**	**-21.95735529**	**-19.23287108**	**-16.81422067**	**-19.43654026**	**-26.06500302**	**-27.92807845**	**-27.85392549**	**-27.85062514**
+3.7	**11.76003875**	**10.35056953**	**10.65740128**	**9.856191619**	**11.10977382**	**7.630427786**	**11.06842768**	**11.27671795**	**11.26275817**	**11.24942739**
-3.75	**-33.59480418**	**-25.98362347**	**-24.64652529**	**-21.29067068**	**-18.6421092**	**-21.37964502**	**-28.68760153**	**-30.86845077**	**-30.77609859**	**-30.77289301**
+3.75	**10.00251906**	**8.489330312**	**8.649012084**	**8.074289059**	**9.973292773**	**6.478167328**	**8.840096459**	**8.841004193**	**8.82906663**	**8.817660006**
-3.8	**-37.86649412**	**-29.05425444**	**-28.14920777**	**-24.0670273**	**-21.17795303**	**-23.86569499**	**-32.04374128**	**-34.64208599**	**-34.63410221**	**-34.63034255**
+3.8	**7.756237833**	**6.142182305**	**6.145096973**	**5.99681035**	**8.507586746**	**5.020787577**	**6.034679411**	**6.514209578**	**7.238411336**	**7.910694342**
-3.85	**-41.37138387**	**-31.56244942**	**-31.14508981**	**-26.5471008**	**-23.44514583**	**-25.76615348**	**-34.78208127**	**-37.72929763**	**-38.00133641**	**-37.99769885**
+3.85	**7.261576796**	**5.241301173**	**5.856854131**	**5.302443676**	**7.294868127**	**4.260936345**	**5.812062996**	**6.514209578**	**7.238411336**	**7.910694342**
-3.9	**-45.84588905**	**-34.59070451**	**-34.98729348**	**-29.95115151**	**-26.51154824**	**-28.33920581**	**-38.08483502**	**-41.46203738**	**-42.30743202**	**-42.48750453**
+3.9	**7.261576796**	**5.241301173**	**5.856854131**	**5.302443676**	**5.854677347**	**4.260936345**	**5.812062996**	**6.514209578**	**7.238411336**	**7.910694342**
-3.95	**-49.48839766**	**-37.17464316**	**-38.21304995**	**-32.90124764**	**-29.07549898**	**-30.42353336**	**-40.90028108**	**-44.65142169**	**-45.5977407**	**-46.30399629**
+3.95	**7.261576796**	**5.241301173**	**5.856854131**	**5.302443676**	**5.238527818**	**4.260936345**	**5.812062996**	**6.514209578**	**7.238411336**	**7.910694342**
-5	**-54.10422774**	**-40.4373854**	**-42.4192812**	**-36.70788398**	**-32.37623797**	**-33.05245957**	**-44.452044**	**-48.6841166**	**-50.0504561**	**-50.92301646**
+5	**7.261576796**	**5.241301173**	**5.856854131**	**5.302443676**	**4.805292836**	**4.260936345**	**5.812062996**	**6.514209578**	**7.238411336**	**7.910694342**

3-Span: Shear (Max and Min) Raw Data Results - 45' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.261604552	-7.119099557	-7.610311597	-7.16637657	-8.596514154	-6.773249403	-7.144274042	-3.493373383
End Shear	54.35439968	56.30455941	59.30587292	55.11214042	64.01184678	47.47443935	50.00077836	28.47582266
-0.05	-7.261604552	-7.119099557	-7.610311597	-7.16637657	-8.596514154	-6.773249403	-7.144274042	-3.493373383
+0.05	49.41009961	51.64222285	54.30107395	50.41648821	58.35719033	42.59455787	44.84600836	26.0775902
-0.1	-7.261604552	-7.119099557	-7.610311597	-7.16637657	-8.596514154	-6.773249403	-7.144274042	-3.493373383
+0.1	45.09150228	47.36757476	49.71803876	46.10689046	53.17931592	38.00946485	40.009963	23.83918847
-0.15	-7.261604552	-7.119099557	-7.610311597	-7.16637657	-8.596514154	-6.773249403	-7.144274042	-4.028927193
+0.15	41.51678089	43.98431319	46.09467591	42.70212774	49.35012591	34.52275928	36.33974661	22.07386995
-0.2	-8.327756166	-9.394645426	-9.394645426	-7.883657468	-8.596514154	-7.143737328	-7.519723503	-5.567477088
+0.2	37.143522	40.02160195	41.85544526	38.72150371	44.3344051	30.37077861	31.96924064	19.90678013
-0.25	-10.1239676	-12.05961949	-12.05961949	-10.76954572	-11.25006494	-9.349671253	-9.85802316	-6.78746577
+0.25	33.7328848	36.74133444	38.35039489	35.43279333	40.40841785	27.17399998	28.73555098	18.21054968
-0.3	-12.31848053	-15.36000062	-15.36000062	-14.35158498	-15.23564625	-12.06141576	-12.72426396	-8.293767004
+0.3	29.39315164	32.72791024	34.06743213	31.41753065	35.62687231	24.21629762	25.63170843	16.14486792
-0.35	-14.4295152	-18.15056786	-18.21161605	-17.18808751	-18.39377486	-14.18080264	-14.96313843	-9.480058736
+0.35	26.41538524	29.59737852	30.7312435	28.29266771	31.91553529	21.93520189	23.20890413	14.54179835
-0.4	-18.60489674	-22.36696725	-22.76444569	-20.76018524	-22.37363696	-16.76094804	-17.68726826	-10.93436403
+0.4	22.61959512	25.79884859	26.68921524	24.51038271	27.436446	19.16457252	20.26681917	12.60761204
-0.45	-21.90554014	-25.68999113	-26.35656363	-24.06384484	-26.40365558	-19.32375792	-20.41011242	-12.07116109
+0.45	19.84284036	22.86242131	23.56966978	21.59442899	23.99437929	17.02038971	17.99050931	11.12178008
-0.5	-25.96758327	-29.76676695	-30.76853899	-28.23788734	-31.50584727	-22.7514381	-24.05350012	-13.98837593
+0.5	16.52495605	19.33425336	19.82831024	18.10143481	19.88600479	14.44097432	15.25289649	9.349188711
-0.55	-29.15568054	-32.95590491	-34.22408018	-31.50964563	-35.5138354	-25.67626974	-27.16033025	-15.7100731
+0.55	14.00367082	16.63629309	16.97318329	15.29027693	16.61866897	12.46582606	13.15725304	8.146896387
-0.6	-33.04969989	-36.83759329	-38.43547097	-35.50039588	-40.41391371	-29.29443015	-31.00365025	-17.81255549
+0.6	11.06015531	13.27986887	13.42983318	12.22581693	13.17636305	10.11778044	10.66683129	6.870094897
-0.65	-36.28107977	-39.84847614	-41.70665281	-38.60299276	-44.23290505	-32.01361966	-33.89337649	-19.4490346
+0.65	8.838320493	10.89436846	10.89636002	10.12480458	10.86378335	8.343790002	8.786027931	5.892197091
-0.7	-40.49103812	-43.47961624	-45.65773218	-42.35413203	-48.86260465	-35.19083148	-37.27151722	-21.42994749
+0.7	6.638512135	8.494801096	8.494801096	7.656099667	8.150118274	6.465800636	6.806105933	4.729373119
-0.75	-43.75335213	-46.26787209	-48.69676969	-45.2425077	-52.43798132	-37.55323073	-39.78467668	-22.95713363
+0.75	5.411531925	6.693823472	6.693823472	5.81606142	6.100955968	5.076864973	5.344068392	3.850554872
-0.8	-47.68322344	-49.59300065	-52.32780782	-48.69770341	-56.72902055	-40.27940259	-42.68656601	-24.78638319
+0.8	3.974304199	4.602004266	4.602004266	3.696619667	3.726223265	3.487346511	3.670891064	2.821452918
-0.85	-50.69686667	-52.11426877	-55.0869279	-51.32679936	-60.00616588	-43.26265367	-45.56086198	-26.18020249
+0.85	2.907027245	2.997594687	2.997594687	2.401602499	2.401602499	2.319030025	2.441084237	2.057512598
-0.9	-54.28513514	-55.07792452	-58.33819733	-54.42973792	-63.89028601	-47.54532994	-50.07988239	-27.82769873
+0.9	1.68320632	1.415119324	1.507370662	1.418478433	1.69309017	1.131543439	1.191098357	1.181883074
-0.95	-57.0008873	-57.2878254	-60.76960664	-56.75449384	-66.81458154	-50.81634457	-53.53036736	-29.06407588
+0.95	1.383322632	1.415119324	1.507370662	1.418478433	1.69309017	1.131543439	1.191098357	0.661036063
-1	-60.18603489	-59.83454656	-63.58137924	-59.44884545	-70.2235039	-54.87921479	-57.82274527	-30.49972126
+1	1.38E+00	1.415119324	1.507370662	1.418478433	1.69309017	1.131543439	1.191098357	0.661036063
(Span 2) -2	-5.084743266	-5.201619767	-5.54071256	-5.213967214	-6.223370135	-4.159266761	-4.378175537	-2.429801085
+2	61.19816264	60.07839281	63.93268311	59.84358422	70.89790341	58.75573849	61.98250183	30.79283251
-2.05	-5.084743266	-5.201619767	-5.54071256	-5.213967214	-6.223370135	-4.159266761	-4.378175537	-2.429801085
+2.05	58.41360308	57.80361739	61.42526517	57.44326486	67.87079189	55.20640895	58.22231185	29.53279927
-2.1	-5.084743266	-5.201619767	-5.54071256	-5.213967214	-6.223370135	-4.159266761	-4.378175537	-2.429801085
+2.1	54.83181758	54.80229795	58.13381886	54.30251046	63.94361416	50.80663074	53.56366483	27.88912875
-2.15	-5.084743266	-5.201619767	-5.54071256	-5.213967214	-6.223370135	-4.159266761	-4.378175537	-2.504323029
+2.15	51.03216622	51.54449485	54.57699811	50.9181254	59.7439883	46.3056016	48.80046546	26.12344638
-2.2	-5.084743266	-6.176500088	-6.176500088	-5.471270619	-6.223370135	-4.708082042	-4.955875833	-3.608971251
+2.2	47.06156025	48.07235158	50.80018813	47.33292547	55.32381351	41.45930977	43.67620211	24.25862764
-2.25	-6.756804943	-8.625658877	-8.625658877	-7.988326937	-8.453583075	-6.669781049	-7.020822157	-4.802758028

+2.25	42.96690707	44.42801272	46.84877547	43.5896984	50.73495243	36.9298967	38.87357548	22.31752985
-2.3	-9.595871184	-11.63907275	-11.765991	-10.72176616	-11.45575556	-8.751168573	-9.224855289	-6.070681762
+2.3	38.7951101	40.65362682	42.7681509	39.73124118	46.02928111	32.74969651	34.47336475	20.32302657
-2.35	-12.17607152	-14.41870227	-14.70193892	-13.37416024	-14.50840479	-10.78768719	-11.38498617	-7.173089449
+2.35	35.29352921	37.43935518	39.30165606	36.45871007	42.05607951	29.26152773	30.80160813	18.63663732
-2.4	-15.47918092	-17.93871501	-18.43365807	-16.85774658	-18.60156197	-13.48039339	-14.24363419	-8.81417637
+2.4	31.1021319	33.30785443	34.87386762	32.16998219	36.91272571	25.14064352	26.62832273	16.60359925
-2.45	-18.9687184	-21.62015356	-22.35005937	-20.52212563	-22.93672381	-16.27314184	-17.20827288	-10.66452637
+2.45	26.79004025	29.29675631	30.5532469	28.22006142	32.12314812	21.86432833	23.14943851	14.58194399
-2.5	-22.67101858	-25.42087455	-26.40575714	-24.32448212	-27.4619939	-19.04513159	-20.15314499	-12.5948418
+2.5	22.82709668	25.41892262	26.40367138	24.32255404	27.45969295	19.0439053	20.15184198	12.59452594
-2.55	-26.68985634	-29.29872735	-30.55535889	-28.22202651	-32.12550526	-21.86557053	-23.15075899	-14.58226769
+2.55	19.18038514	21.61825167	22.34803289	20.52025688	22.93450639	16.27194399	17.20700064	10.66422154
-2.6	-30.81464265	-33.23392944	-34.80009102	-32.17196329	-36.87538507	-25.14210408	-26.62987358	-16.60392693
+2.6	15.67620547	17.93688534	18.43171502	16.85596696	18.59946359	13.52909604	14.29488964	8.813891131
-2.65	-34.99863375	-37.44131825	-39.30377048	-36.4008669	-41.99865462	-29.21345829	-30.75100873	-18.63696443
+2.65	12.24569298	14.41696515	14.70010094	13.37247275	14.50642986	10.78658787	11.38381982	7.18235904
-2.7	-38.49679148	-40.65556235	-42.77024017	-39.73319436	-46.03165618	-32.75151725	-34.47528131	-20.32335213
+2.7	9.661883742	11.63743007	11.76425936	10.72034974	11.45419787	8.75012635	9.223750119	6.079642117
-2.75	-42.66791946	-44.42990467	-46.85082346	-43.59160663	-50.73728462	-36.93173532	-38.87551086	-22.31784805
+2.75	6.804024085	8.624371643	8.624371643	7.987014418	8.452143824	6.668933653	7.019930161	4.811249843
-2.8	-46.76580977	-48.07416887	-50.80216118	-47.33476729	-55.32607661	-41.41144026	-43.62582272	-24.25893791
+2.8	5.084790243	6.175314543	6.175314543	5.470075158	6.223377317	4.707308102	4.95506116	3.616891773
-2.85	-50.74371823	-51.5462143	-54.57887125	-50.91987919	-59.74615645	-46.2577235	-48.75007814	-26.12374269
+2.85	5.084790243	5.201616547	5.540714003	5.213965899	6.223377317	4.159271348	4.378180366	2.511567389
-2.9	-54.86424705	-54.80389974	-58.13557088	-54.30415387	-63.94565967	-50.8085902	-53.56573892	-27.88940244
+2.9	5.084790243	5.201616547	5.540714003	5.213965899	6.223377317	4.159271348	4.378180366	2.429801754
-2.95	-58.4421624	-57.80507493	-61.42686721	-57.44477713	-67.87269015	-55.20831344	-58.22432888	-29.53305429
+2.95	5.084790243	5.201616547	5.540714003	5.213965899	6.223377317	4.159271348	4.378180366	2.429801754
-3	-61.75594636	-60.50761458	-64.407395	-60.29896074	-71.47538331	-59.45158425	-62.71991786	-31.03182779
+3	5.084790243	5.201616547	5.540714003	5.213965899	6.223377317	4.159271348	4.378180366	2.429801754
(Span 3) -4	-1.38E+00	-1.415118447	-1.507371055	-1.418478075	-1.693092124	-1.131544687	-1.191099671	-0.661036245
+4	59.51498741	59.34359545	63.03836721	58.927945	69.56252189	54.0226256	56.9139673	30.22247823
-3.05	-1.38E+00	-1.415118447	-1.507371055	-1.418478075	-1.693092124	-1.131544687	-1.191099671	-0.661036245
+3.05	56.94417279	57.28619128	60.76780645	56.75280209	66.81244919	50.81425205	53.5281603	29.0637824
-3.1	-1.917804718	-1.594910643	-1.594910643	-1.418478075	-1.693092124	-1.248754325	-1.314478237	-1.342712893
+3.1	53.52367715	54.50085383	57.70434873	53.82437087	63.13094456	46.70334175	49.19154903	27.50670874
-3.15	-2.907028198	-2.998706103	-2.998706103	-2.402478266	-2.402478266	-2.319760495	-2.441853153	-2.049924844
+3.15	50.63356967	52.11239217	55.08487232	51.32486875	60.00375541	43.26035457	45.55843555	26.17987011
-3.2	-4.252809525	-5.006861376	-5.006861376	-4.105074614	-4.171363578	-3.794847327	-3.994576134	-3.012548824
+3.2	46.84471423	48.94094971	51.61511895	48.01915916	55.88500304	39.75307634	42.12615127	24.427669
-3.25	-5.411531448	-6.695141542	-6.695141542	-5.817386576	-6.042467287	-5.077730755	-5.344979742	-3.841731817
+3.25	43.68452866	46.26577955	48.69448738	45.24036496	52.43532578	37.55173768	39.78308799	22.95677665
-3.3	-6.955411911	-8.963303724	-8.963303724	-8.136670487	-8.67802189	-6.82200331	-7.181056116	-4.946947781
+3.3	39.58883536	42.76369565	44.87816827	41.61372535	47.94762664	34.57361195	36.61511007	21.03953089
-3.35	-8.789299389	-10.89586151	-10.8982182	-10.12633687	-10.86546863	-8.344916562	-8.787222023	-5.882305612
+3.35	36.2077874	39.84621751	41.70419763	38.60069852	44.23007842	32.01189202	33.89154014	19.44864803
-3.4	-11.58439391	-13.90433086	-14.08826951	-12.76925518	-13.77491053	-10.57732138	-11.15415395	-7.110361695
+3.4	32.21354319	36.06895403	37.60104111	34.70940859	39.44164968	28.58833524	30.25346489	17.39646093
-3.45	-13.9743714	-16.63828682	-16.9752904	-15.27992092	-16.58143205	-12.46709186	-13.1585958	-8.136095536
+3.45	29.08806913	32.95349483	34.22146763	31.50720866	35.51084777	25.6743069	27.15824581	15.7096639
-3.5	-17.14006495	-20.02860275	-20.5639706	-18.78783965	-20.69192925	-14.94870128	-15.79169201	-9.69612059
+3.5	25.09239434	28.95651391	29.89120191	27.40761566	30.48998932	22.07613628	23.33559358	13.55262895
-3.55	-19.80463957	-22.86461153	-23.57199422	-21.59656188	-23.99689211	-17.0217728	-17.9919774	-11.12213325
+3.55	21.83534779	25.68748785	26.3538567	24.06130144	26.40055109	19.3219209	20.40816019	12.0708861
-3.6	-23.37122917	-26.54991679	-27.48786505	-25.2573253	-28.31977394	-19.7124318	-20.84851982	-12.98823437
+3.6	17.70255102	21.52625102	21.85620978	20.06383085	21.59754336	16.25005779	17.14799665	10.64602338

-3.65	**-26.31184666**	**-29.59971228**	**-30.73372844**	**-28.29497886**	**-31.91827564**	**-21.93668375**	**-23.21047784**	**-14.54217698**
+3.65	**14.35768172**	**18.14798001**	**18.20882381**	**17.18597434**	**18.39142159**	**14.17942965**	**14.96168835**	**9.479769436**
-3.7	**-30.27677716**	**-33.52454575**	**-34.91706243**	**-32.21372991**	**-36.57392902**	**-24.79623993**	**-26.24775112**	**-16.55315371**
+3.7	**11.76003875**	**14.70122367**	**14.70122367**	**13.63589392**	**14.43909724**	**11.52300495**	**12.15532286**	**7.994136756**
-3.75	**-33.59480418**	**-36.74380281**	**-38.35303058**	**-35.43521861**	**-40.41130931**	**-27.17605426**	**-28.73720686**	**-18.21095439**
+3.75	**10.00251906**	**12.05758922**	**12.05758922**	**10.7673838**	**11.24766036**	**9.34823391**	**9.856503393**	**6.787166413**
-3.8	**-37.86649412**	**-40.85270428**	**-42.74410129**	**-39.55563188**	**-45.33146045**	**-31.19010164**	**-32.83168593**	**-20.3367093**
+3.8	**7.756237833**	**8.723809454**	**8.723809454**	**7.166381968**	**8.596528461**	**6.773241143**	**7.1442681**	**5.260511305**
-3.85	**-41.37138387**	**-43.98688347**	**-46.09742705**	**-42.70467315**	**-49.35315934**	**-34.52596764**	**-36.34312384**	**-22.07429428**
+3.85	**7.261576796**	**7.119103383**	**7.610320092**	**7.166381968**	**8.596528461**	**6.773241143**	**7.1442681**	**4.028621958**
-3.9	**-45.84588905**	**-48.22151469**	**-50.63314393**	**-46.96709169**	**-54.2118867**	**-38.88532506**	**-40.93192111**	**-24.28471965**
+3.9	**7.261576796**	**7.119103383**	**7.610320092**	**7.166381968**	**8.596528461**	**6.773241143**	**7.1442681**	**3.493374856**
-3.95	**-49.48839766**	**-51.64483186**	**-54.30387273**	**-50.41908112**	**-58.36030901**	**-42.59705928**	**-44.84865016**	**-26.07802843**
+3.95	**7.261576796**	**7.119103383**	**7.610320092**	**7.166381968**	**8.596528461**	**6.773241143**	**7.1442681**	**3.493374856**
-5	**-54.10422774**	**-55.95415581**	**-58.92953752**	**-54.77208716**	**-63.60195019**	**-47.4434613**	**-49.96805108**	**-28.34304511**
+5	**7.261576796**	**7.119103383**	**7.610320092**	**7.166381968**	**8.596528461**	**6.773241143**	**7.1442681**	**3.493374856**

3-Span: Shear (Max and Min) Raw Data Results - 45' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.261604552	-10.92676223	-11.55851359	-7.316661189	-9.181834844	-9.336630067
End Shear	54.35439968	70.28056439	72.18895325	52.07201692	63.6798781	63.84610474
-0.05	-7.261604552	-10.92676223	-11.55851359	-7.316661189	-9.181834844	-9.336630067
+0.05	49.41009961	62.23661031	64.8944859	46.76968695	57.21415	57.07828385
-0.1	-7.261604552	-10.92676223	-11.55851359	-7.316661189	-9.181834844	-9.336630067
+0.1	45.09150228	55.29840425	57.71302207	41.72118669	51.03045187	50.62743909
-0.15	-7.261604552	-10.92676223	-11.55851359	-7.316661189	-9.181834844	-9.336630067
+0.15	41.51678089	50.0274232	52.17474592	38.32960439	46.09200446	45.55110902
-0.2	-8.327756166	-10.92676223	-11.55851359	-8.73882359	-9.181834844	-9.336630067
+0.2	37.143522	43.93132969	45.4914765	34.94735729	40.39965534	41.31326409
-0.25	-10.1239676	-12.12675452	-13.29601187	-11.30854323	-11.55058194	-11.66847452
+0.25	33.7328848	39.4774321	40.52784805	32.14391707	36.20889781	37.81095768
-0.3	-12.31848053	-16.75252302	-17.89497871	-14.45898152	-15.63394112	-15.83450288
+0.3	29.39315164	34.11831861	34.7877487	28.70902045	31.64560752	33.53346723
-0.35	-14.4295152	-20.47138158	-21.41037553	-17.0169844	-18.99044347	-19.19468835
+0.35	26.41538524	30.01412304	30.43652924	26.02567298	28.48430645	30.20330739
-0.4	-18.60489674	-25.13791257	-25.72956211	-20.71947254	-23.0946334	-23.74042805
+0.4	22.61959512	25.57394283	25.64073724	22.76438354	24.90076702	26.1709147
-0.45	-21.90554014	-28.98967456	-29.37274321	-24.15771579	-26.53146087	-27.43803695
+0.45	19.84284036	22.26776199	21.98788467	20.23872329	22.12412427	23.0607691
-0.5	-25.96758327	-33.54467306	-33.64414723	-28.60467402	-31.03843209	-32.27424135
+0.5	16.52495605	18.58178056	17.98952478	17.19804278	18.77934473	19.33329406
-0.55	-29.15568054	-36.9801784	-38.00829387	-31.97153632	-34.83872122	-36.66182565
+0.55	14.00367082	16.02531451	15.06135057	14.86765889	16.21421407	16.49100494
-0.6	-33.04969989	-41.40073604	-43.20538357	-35.93879056	-39.51499929	-42.0216444
+0.6	11.06015531	12.98232036	12.0481505	12.09457608	13.15945913	13.18720214
-0.65	-36.28107977	-44.8109415	-47.15241936	-38.91733503	-43.00824737	-46.05539187
+0.65	8.838320493	10.67988444	9.911671324	9.997069309	10.84685898	10.87304554
-0.7	-40.49103812	-49.2489066	-52.3349824	-42.39349269	-47.06411537	-50.77675866
+0.7	6.638512135	8.025834461	7.406443683	7.653125531	8.1633339	8.106886747
-0.75	-43.75335213	-54.93359381	-58.34338805	-44.97461341	-50.05950221	-54.29481673
+0.75	5.411531925	6.015349317	5.543759738	6.031064581	6.433135553	6.112205677
-0.8	-47.68322344	-61.67354677	-66.12768433	-47.9482957	-53.49114401	-58.36538735
+0.8	3.974304199	3.705868347	3.644819764	4.128568585	4.367837439	3.79139644
-0.85	-50.69686667	-66.76548159	-72.36088804	-50.12286932	-57.2112587	-61.35788405
+0.85	2.907027245	2.421460081	2.287401329	2.7450772	2.894972865	2.444689111
-0.9	-54.28513514	-72.74551514	-79.75693104	-52.58268812	-63.10126198	-64.76532822
+0.9	1.68320632	1.829137642	2.041614939	1.219762337	1.512263072	1.523924054
-0.95	-57.0008873	-77.21432191	-85.34567458	-55.36143964	-67.63945428	-68.4022483
+0.95	1.383322632	1.829137642	2.041614939	1.219762337	1.512263072	1.523924054
-1	-60.18603489	-82.73699848	-91.90568226	-60.04416382	-73.35696039	-74.81079987
+1	1.38E+00	1.829137642	2.041614939	1.219762337	1.512263072	1.523924054
(Span 2) -2	-5.084743266	-6.723446227	-7.504458873	-4.483537016	-5.558695646	-5.601558599
+2	61.19816264	92.10978405	94.44489567	65.1871104	79.83418395	81.55790388
-2.05	-5.084743266	-6.723446227	-7.504458873	-4.483537016	-5.558695646	-5.601558599
+2.05	58.41360308	85.47148394	88.85399855	61.06866616	74.84063598	76.14123923
-2.1	-5.084743266	-6.723446227	-7.504458873	-4.483537016	-5.558695646	-5.601558599
+2.1	54.83181758	77.19972705	81.87385038	55.99976686	68.6843263	69.4652394
-2.15	-5.084743266	-6.723446227	-7.504458873	-4.483537016	-5.558695646	-5.601558599
+2.15	51.03216622	69.37476038	74.44813746	50.67948797	62.26759944	62.71500493
-2.2	-5.084743266	-6.723446227	-7.504458873	-5.679825693	-5.929362693	-5.71998865
+2.2	47.06156025	61.88453183	66.63191472	45.37718952	55.66841524	56.26809221
-2.25	-6.756804943	-8.520350092	-8.433627858	-7.895506844	-8.523650613	-8.622141292

+2.25	42.96690707	54.5678636	58.71859567	41.97185358	49.46676192	50.67831621
-2.3	-9.595871184	-12.0326279	-11.7837151	-10.46102716	-11.64424639	-11.63909344
+2.3	38.7951101	47.73958128	50.98510584	38.342942	43.67742228	45.78522925
-2.35	-12.17607152	-15.07335467	-14.75730097	-12.93941519	-14.31687735	-14.45502031
+2.35	35.29352921	42.41683074	44.95973868	35.08918342	38.94695849	41.41287808
-2.4	-15.47918092	-18.77955575	-18.3236599	-16.16110882	-17.73801912	-18.24616085
+2.4	31.1021319	36.5535741	38.20442901	30.92273159	33.56165988	36.15700576
-2.45	-18.9687184	-22.72552628	-22.35576275	-19.33294795	-21.55238354	-22.22185657
+2.45	26.79004025	31.41121866	32.83962815	26.6087918	29.22263471	31.07218155
-2.5	-22.67101858	-26.97622717	-27.31437844	-22.70182891	-25.39235145	-26.38479581
+2.5	22.82709668	26.97450281	27.3140199	22.70012198	25.39068611	26.38280137
-2.55	-26.68985634	-31.41311565	-32.84001353	-26.61046655	-29.22428985	-31.07414458
+2.55	19.18038514	22.72374884	22.35547415	19.33156248	21.55072313	22.22017769
-2.6	-30.81464265	-36.55586503	-38.20479957	-30.92460662	-33.56356126	-36.15916725
+2.6	15.67620547	18.77801669	18.02705341	16.15977076	17.73638792	18.29518847
-2.65	-34.99863375	-42.41943123	-44.96022587	-35.09093637	-38.94937376	-41.41516171
+2.65	12.24569298	14.91879217	14.45979375	12.99615042	14.31546843	14.45351835
-2.7	-38.49679148	-47.7422614	-50.98561503	-38.34457998	-43.67989394	-45.7873938
+2.7	9.661883742	11.88082222	11.78346471	10.45981598	11.64289927	11.63777802
-2.75	-42.66791946	-54.57084561	-58.7191138	-41.9733592	-49.46927384	-50.68030236
+2.75	6.804024085	8.51915953	8.433424335	7.894520849	8.595346725	8.620922868
-2.8	-46.76580977	-61.88757613	-66.6324742	-45.37926468	-55.61954661	-56.27075744
+2.8	5.084790243	6.723453211	7.50445762	5.678917248	5.928393685	5.718885422
-2.85	-50.74371823	-69.32839852	-74.4486518	-50.62369099	-62.21873439	-62.7178161
+2.85	5.084790243	6.723453211	7.50445762	4.483530902	5.558689348	5.60155567
-2.9	-54.86424705	-77.15332583	-81.87435978	-56.00197474	-68.68701069	-69.41739965
+2.9	5.084790243	6.723453211	7.50445762	4.483530902	5.558689348	5.60155567
-2.95	-58.4421624	-85.47479526	-88.85446044	-61.07082902	-74.84326113	-76.14402368
+2.95	5.084790243	6.723453211	7.50445762	4.483530902	5.558689348	5.60155567
-3	-61.75594636	-93.42970581	-95.75227451	-65.99776384	-80.81619002	-82.62785777
+3	5.084790243	6.723453211	7.50445762	4.483530902	5.558689348	5.60155567
(Span 3) -4	-1.38E+00	-1.829139542	-2.041614598	-1.219760674	-1.512261358	-1.523923257
+4	59.51498741	81.39390214	90.63183215	59.12649648	72.12870858	73.55127694
-3.05	-1.38E+00	-1.829139542	-2.041614598	-1.219760674	-1.512261358	-1.523923257
+3.05	56.94417279	77.211624	85.34512626	55.35894434	67.63654912	68.39892725
-3.1	-1.917804718	-1.829139542	-2.041614598	-1.477692277	-1.546099057	-1.523923257
+3.1	53.52367715	71.58132734	78.31308129	52.11261176	61.93881006	64.11193718
-3.15	-2.907028198	-2.422185427	-2.287532004	-2.745929666	-2.895879239	-2.4454335
+3.15	50.63356967	66.76241347	72.36025397	50.12151903	57.20812997	61.35605354
-3.2	-4.252809525	-4.150089495	-4.002382185	-4.492697131	-4.755545075	-4.237973214
+3.2	46.84471423	60.35531984	64.5260435	47.37467208	52.83093303	57.57849611
-3.25	-5.411531448	-6.016544874	-5.561472414	-6.011873549	-6.403453845	-6.113428026
+3.25	43.68452866	54.93015438	58.34278587	44.97299284	50.05763315	54.29266361
-3.3	-6.955411911	-8.551338175	-7.911473878	-8.074890482	-8.661022858	-8.658799288
+3.3	39.58883536	48.49017513	51.24384216	41.7185991	46.27855807	49.85880957
-3.35	-8.789299389	-10.68127152	-9.93217745	-10.00954315	-10.84830468	-10.87801218
+3.35	36.2077874	45.21872677	47.15202991	38.91545479	43.00605454	46.05289556
-3.4	-11.58439391	-13.57816663	-12.62156075	-12.63754301	-13.75780538	-13.78589364
+3.4	32.21354319	41.17756898	42.1887702	35.16491001	38.60485918	40.97513773
-3.45	-13.9743714	-16.02686607	-15.06165404	-14.86912702	-16.21583141	-16.49275794
+3.45	29.08806913	37.60164708	38.00784968	31.96940252	34.83619909	36.65901404
-3.5	-17.14006495	-19.23843655	-18.7455646	-17.79676313	-19.43813009	-20.06560956
+3.5	25.09239434	33.321664	33.22332834	27.73409583	30.15327781	31.23441893
-3.55	-19.80463957	-22.2697774	-21.98824228	-20.24032488	-22.12588538	-23.06268923
+3.55	21.83534779	29.68910835	29.81285722	24.15533376	26.52905763	27.43555432
-3.6	-23.37122917	-26.42398339	-26.58050403	-23.40943694	-25.60971433	-26.96705098
+3.6	17.70255102	24.88870736	25.25875141	19.91118576	22.28034974	22.84354072

-3.65	**-26.31184666**	**-30.01661329**	**-30.43693507**	**-26.02738402**	**-28.48618902**	**-30.20539445**
+3.65	**14.35768172**	**21.15278258**	**21.41002449**	**17.01506966**	**18.98828461**	**19.19233654**
-3.7	**-30.27677716**	**-35.17310931**	**-35.91472502**	**-29.39097979**	**-32.54503502**	**-34.38140053**
+3.7	**11.76003875**	**16.51386131**	**16.99296566**	**13.83315819**	**14.78332321**	**15.00505648**
-3.75	**-33.59480418**	**-39.48014121**	**-40.52834237**	**-32.14571411**	**-36.21131568**	**-37.81314974**
+3.75	**10.00251906**	**12.76814374**	**13.29561365**	**11.30689424**	**11.54892705**	**11.66632618**
-3.8	**-37.86649412**	**-45.06901997**	**-46.80598862**	**-35.65680033**	**-41.5193857**	**-42.20100344**
+3.8	**7.756237833**	**10.92675446**	**11.55851405**	**8.088475704**	**9.181826314**	**9.336629232**
-3.85	**-41.37138387**	**-50.03061938**	**-52.17530848**	**-38.33145876**	**-46.08925647**	**-45.55338406**
+3.85	**7.261576796**	**10.92675446**	**11.55851405**	**7.316668411**	**9.181826314**	**9.336629232**
-3.9	**-45.84588905**	**-56.64447411**	**-59.12264316**	**-42.70896176**	**-52.23855488**	**-51.90014917**
+3.9	**7.261576796**	**10.92675446**	**11.55851405**	**7.316668411**	**9.181826314**	**9.336629232**
-3.95	**-49.48839766**	**-62.24035626**	**-64.88570724**	**-46.77229775**	**-57.21733741**	**-57.0816006**
+3.95	**7.261576796**	**10.92675446**	**11.55851405**	**7.316668411**	**9.181826314**	**9.336629232**
-5	**-54.10422774**	**-70.07171047**	**-72.28322561**	**-52.05055303**	**-63.65373313**	**-63.84095967**
+5	**7.261576796**	**10.92675446**	**11.55851405**	**7.316668411**	**9.181826314**	**9.336629232**

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-16.338610	-11.792902	-13.177937	-11.930521	-10.811907	-9.587104	-13.077124	-14.656944	-16.286405	-17.799063
+0.05	111.172724	83.807785	85.509642	74.023693	65.887351	68.483297	92.296445	100.755677	103.258848	104.446977
-0.1	-32.677220	-23.585803	-26.355875	-23.861041	-21.623814	-19.174208	-26.154247	-29.313889	-32.572810	-35.598125
+0.1	205.959023	155.868321	156.579656	134.772231	120.879125	127.519269	171.806719	187.039234	190.657872	194.048771
-0.15	-49.015831	-35.378705	-39.533812	-35.791562	-32.435721	-28.761311	-39.231371	-43.970833	-48.859214	-53.397188
+0.15	280.287936	213.422494	211.285151	180.649348	163.032262	174.927858	235.510162	255.769341	273.424398	276.817257
-0.2	-65.354441	-47.171606	-52.711749	-47.722083	-43.247629	-38.348415	-52.308495	-58.627778	-65.145619	-71.196251
+0.2	340.976732	261.409571	254.241276	217.176841	197.638393	214.362369	288.534613	311.945026	340.668514	347.293313
-0.25	-81.693051	-58.964508	-65.889686	-59.652603	-54.059536	-47.935519	-65.385619	-73.284722	-81.432024	-88.995314
+0.25	380.998849	294.883247	282.095324	242.606745	222.484080	241.058647	326.345993	352.537214	389.412036	407.721605
-0.3	-98.031661	-70.757410	-79.067624	-71.583124	-64.871443	-57.522623	-78.462742	-87.941667	-97.718429	-106.794376
+0.3	409.887406	318.705518	302.028168	261.982936	242.089671	262.146343	355.981000	389.455281	424.595626	452.067666
-0.35	-114.370272	-82.550311	-92.245561	-83.513645	-75.683350	-67.109726	-91.539866	-102.598611	-114.004833	-124.593439
+0.35	424.613179	334.094383	313.351669	275.845950	256.207735	270.643746	377.951925	411.098484	446.573498	477.228985
-0.4	-130.708882	-94.343213	-105.423498	-95.444165	-86.495257	-76.696830	-104.616990	-117.255556	-130.291238	-142.392502
+0.4	437.006734	343.541459	314.851434	282.220627	263.664828	274.225083	389.229898	421.334670	461.569475	487.907247
-0.45	-147.047492	-106.136115	-118.601436	-107.374686	-97.307164	-86.283934	-117.694113	-131.912500	-146.577643	-160.191564
+0.45	430.287734	341.248058	308.303093	277.954072	262.183920	267.173612	387.347571	416.844682	460.546232	491.087004
-0.5	-163.386102	-117.929016	-131.779373	-119.305207	-108.119072	-95.871038	-130.771237	-146.569444	-162.864048	-177.990627
+0.5	426.844221	335.235846	297.873782	272.752379	255.956374	264.658866	381.700236	408.848105	450.952297	481.353170
-0.55	-179.724713	-129.721918	-144.957310	-131.235728	-118.930979	-105.458142	-143.848361	-161.226389	-179.150453	-195.789690
+0.55	416.213836	324.207299	289.729617	265.806351	247.892814	260.145343	367.385011	396.889367	434.471195	459.372687
-0.6	-196.063323	-141.514819	-158.135247	-143.166248	-129.742886	-115.045245	-156.925484	-175.883333	-195.436857	-213.588752
+0.6	394.321938	305.069163	280.159884	251.987639	237.412308	248.920766	345.360273	375.210506	406.885854	434.158266
-0.65	-212.401933	-153.307721	-171.313185	-155.096769	-140.554793	-124.632349	-170.002608	-190.540278	-211.723262	-231.387815
+0.65	355.656896	277.632929	262.085020	228.595787	218.738897	227.740306	311.708822	339.529163	368.136662	393.268606
-0.7	-228.740543	-165.100623	-184.491122	-167.027290	-151.366700	-134.219453	-183.079732	-205.197222	-228.009667	-249.186878
+0.7	314.671780	245.339905	233.061468	200.725544	194.289983	201.790078	270.802361	295.862235	322.543941	341.056738
-0.75	-245.079154	-176.893524	-197.669059	-178.957810	-162.178607	-143.806557	-196.156856	-219.854167	-244.296072	-266.985941
+0.75	259.416682	203.483705	197.392544	166.209450	164.940483	166.419867	223.090486	241.250047	264.244224	275.200818
-0.8	-261.417764	-188.686426	-210.846996	-190.888331	-172.990515	-153.393660	-209.233979	-234.511111	-260.582477	-284.785003
+0.8	196.706153	156.073045	151.893034	126.418261	130.675002	128.409896	169.883835	180.058439	197.900206	201.356604
-0.85	-277.756374	-200.479327	-224.024934	-202.818852	-188.771496	-162.980764	-222.311103	-249.168055	-276.868881	-302.584066
+0.85	121.547105	102.425502	102.492818	81.611070	97.614898	82.446086	109.489129	114.422883	124.192448	124.178718
-0.9	-294.094984	-212.272229	-237.202871	-214.749372	-222.435158	-172.567868	-235.388227	-263.825000	-293.155286	-320.383129
+0.9	77.671081	60.824209	60.753865	48.299551	68.797622	52.327690	59.948430	60.351368	60.173942	61.436243
-0.95	-310.433595	-224.065131	-250.380808	-241.684100	-264.747443	-182.154972	-248.465350	-278.481944	-309.441691	-338.182191
+0.95	59.137043	43.574465	42.360854	36.904043	45.969952	35.724679	48.968786	54.218124	59.967180	64.849368
-1	-326.772198	-235.858031	-299.732013	-306.590027	-312.318401	-191.742073	-261.542475	-293.138892	-325.728096	-355.981248
+1	62.249518	45.867858	44.590372	38.846361	35.241847	37.604926	51.546090	57.071710	63.123348	68.262493
(Span 2) -2	-326.772198	-235.858031	-299.732013	-306.590027	-312.318401	-191.742073	-261.542475	-293.138892	-325.728096	-355.981248
+2	62.249518	45.867858	44.590372	38.846361	35.241847	37.604926	51.546090	57.071710	63.123348	68.262493
-2.05	-226.155707	-162.351772	-209.601615	-213.285715	-236.639246	-133.104275	-182.449933	-202.008298	-223.428215	-241.618002
+2.05	47.376644	34.908948	33.936684	29.565052	44.013862	30.182200	39.230517	43.435936	48.041695	51.952978
-2.1	-205.464115	-151.392839	-147.176169	-148.180150	-171.973043	-124.119582	-170.134351	-188.372504	-208.346551	-225.308507
+2.1	89.538381	72.058333	72.107849	58.098250	63.522126	61.084591	75.606560	75.615208	76.521336	76.520030
-2.15	-190.591104	-140.433906	-136.522470	-118.935873	-126.082747	-115.134889	-157.818768	-174.736709	-193.264887	-208.999011
+2.15	145.383904	123.307546	123.419420	99.593586	92.058025	98.311161	135.203263	143.208665	154.735904	156.482290
-2.2	-175.718093	-129.474973	-125.868770	-109.654566	-100.083593	-106.150196	-145.503186	-161.100915	-178.183223	-192.689516
+2.2	230.651933	184.401234	176.169408	149.053500	129.855590	151.054628	205.026602	220.754840	238.754916	249.816728

-2.25	**-160.845081**	**-118.516039**	**-115.215071**	**-100.373258**	**-96.206044**	**-97.165503**	**-133.187604**	**-147.465120**	**-163.101559**	**-176.380020**
+2.25	**307.797236**	**240.047966**	**236.848063**	**204.501713**	**180.202491**	**196.779427**	**267.372579**	**291.029311**	**316.244639**	**336.537657**
-2.3	**-145.972070**	**-107.557106**	**-104.561372**	**-91.091951**	**-94.334573**	**-88.180810**	**-120.872021**	**-133.829326**	**-148.019895**	**-160.070525**
+2.3	**369.773661**	**285.311157**	**285.913020**	**249.240991**	**221.627484**	**234.288301**	**320.753330**	**350.822746**	**379.612848**	**408.514311**
-2.35	**-131.099058**	**-96.598173**	**-93.907672**	**-81.810643**	**-93.440274**	**-79.196117**	**-108.556439**	**-120.193531**	**-132.938231**	**-143.761029**
+2.35	**420.463988**	**322.633303**	**321.959927**	**279.852192**	**250.482982**	**262.169119**	**363.135358**	**397.024601**	**432.127901**	**463.445531**
-2.4	**-116.226047**	**-85.639240**	**-83.253973**	**-72.529336**	**-93.031218**	**-70.211424**	**-96.240857**	**-106.557737**	**-117.856567**	**-127.451534**
+2.4	**453.040473**	**348.846656**	**343.083628**	**295.361496**	**266.343890**	**279.219939**	**392.333433**	**427.990879**	**469.343531**	**500.134822**
-2.45	**-101.353035**	**-74.680307**	**-72.600273**	**-63.248028**	**-92.858424**	**-61.226731**	**-83.925274**	**-92.921942**	**-102.774903**	**-111.142038**
+2.45	**469.519846**	**362.947115**	**350.338252**	**301.658667**	**273.573355**	**287.101905**	**408.348849**	**443.852893**	**489.950012**	**524.374836**
-2.5	**-86.480024**	**-63.721374**	**-61.946574**	**-53.966730**	**-92.762933**	**-52.242087**	**-71.609692**	**-79.286148**	**-87.693240**	**-94.832658**
+2.5	**470.599862**	**364.785346**	**343.538532**	**302.316152**	**274.961431**	**286.242958**	**410.918477**	**445.716563**	**493.578999**	**531.491740**
-2.55	**-101.352097**	**-74.680156**	**-72.600203**	**-63.248039**	**-92.858409**	**-61.226789**	**-83.925219**	**-92.921799**	**-102.774835**	**-111.142173**
+2.55	**469.455428**	**362.936775**	**350.331832**	**301.655590**	**273.577434**	**287.093366**	**408.343060**	**443.851008**	**489.943028**	**524.363702**
-2.6	**-116.224971**	**-85.639066**	**-83.253892**	**-72.529348**	**-93.031130**	**-70.211490**	**-96.240793**	**-106.557573**	**-117.856487**	**-127.451688**
+2.6	**453.345626**	**348.851151**	**343.071923**	**295.356107**	**266.347218**	**279.216288**	**392.341778**	**427.983137**	**469.349486**	**500.132353**
-2.65	**-131.097845**	**-96.597977**	**-93.907580**	**-81.810657**	**-93.440221**	**-79.196192**	**-108.556366**	**-120.193346**	**-132.938140**	**-143.761204**
+2.65	**420.807230**	**322.636173**	**321.943854**	**279.842585**	**250.486311**	**262.190624**	**363.141945**	**397.034166**	**432.131777**	**463.463104**
-2.7	**-145.970719**	**-107.556887**	**-104.561269**	**-91.091966**	**-94.334721**	**-88.180893**	**-120.871940**	**-133.829120**	**-148.019793**	**-160.070719**
+2.7	**370.028430**	**285.332335**	**285.893845**	**249.228826**	**221.628979**	**234.305050**	**320.755937**	**350.828138**	**379.631664**	**408.527488**
-2.75	**-160.843593**	**-118.515798**	**-115.214958**	**-100.373275**	**-96.206085**	**-97.165594**	**-133.187514**	**-147.464893**	**-163.101446**	**-176.380234**
+2.75	**307.740981**	**240.063987**	**236.845953**	**204.500323**	**180.201761**	**196.790136**	**267.376281**	**291.029825**	**316.258207**	**336.545803**
-2.8	**-175.716467**	**-129.474708**	**-125.868646**	**-109.654585**	**-100.083641**	**-106.150296**	**-145.503087**	**-161.100667**	**-178.183099**	**-192.689749**
+2.8	**230.697440**	**184.412577**	**176.165522**	**149.051432**	**129.854546**	**151.059641**	**205.030010**	**220.760359**	**238.763905**	**249.820641**
-2.85	**-190.589341**	**-140.433618**	**-136.522335**	**-118.935894**	**-126.082857**	**-115.134997**	**-157.818661**	**-174.736440**	**-193.264752**	**-208.999264**
+2.85	**145.389082**	**123.312625**	**123.423900**	**99.589171**	**92.059852**	**98.311034**	**135.202243**	**143.212666**	**154.740079**	**156.481904**
-2.9	**-205.462215**	**-151.392529**	**-147.176024**	**-148.180488**	**-171.973107**	**-124.119699**	**-170.134234**	**-188.372214**	**-208.346405**	**-225.308779**
+2.9	**89.503122**	**72.060515**	**72.109772**	**58.094018**	**63.522752**	**61.098973**	**75.603191**	**75.611916**	**76.521103**	**76.519802**
-2.95	**-226.156058**	**-162.351439**	**-209.602097**	**-213.285744**	**-236.639438**	**-133.104400**	**-182.449808**	**-202.007987**	**-223.428058**	**-241.618294**
+2.95	**47.377079**	**34.909024**	**33.936721**	**29.565048**	**44.009994**	**30.169693**	**39.230549**	**43.436002**	**48.041735**	**51.952917**
-3	**-326.770949**	**-235.858551**	**-299.732646**	**-306.590350**	**-312.318380**	**-191.742133**	**-261.542836**	**-293.139434**	**-325.728510**	**-355.981239**
+3	**62.250093**	**45.867953**	**44.590417**	**38.846355**	**35.241843**	**37.604892**	**51.546127**	**57.071798**	**63.123394**	**68.262411**
(Span 3) -4	**-326.770949**	**-235.858551**	**-299.732646**	**-306.590350**	**-312.318380**	**-191.742133**	**-261.542836**	**-293.139434**	**-325.728510**	**-355.981239**
+4	**62.250093**	**45.867953**	**44.590417**	**38.846355**	**35.241843**	**37.604892**	**51.546127**	**57.071798**	**63.123394**	**68.262411**
-3.05	**-310.432402**	**-224.065624**	**-250.380504**	**-241.684558**	**-264.747659**	**-182.155026**	**-248.465694**	**-278.482463**	**-309.442085**	**-338.182177**
+3.05	**59.137588**	**43.574556**	**42.360897**	**36.904037**	**45.970287**	**35.724647**	**48.968821**	**54.218208**	**59.967224**	**64.849291**
-3.1	**-294.093854**	**-212.272696**	**-237.202582**	**-214.748970**	**-222.435358**	**-172.567920**	**-235.388553**	**-263.825491**	**-293.155659**	**-320.383114**
+3.1	**77.671124**	**60.831750**	**60.846748**	**48.304521**	**68.791868**	**52.340179**	**59.961510**	**60.340129**	**60.183996**	**61.436170**
-3.15	**-277.755306**	**-200.479768**	**-224.024660**	**-202.818471**	**-188.771641**	**-162.980813**	**-222.311411**	**-249.168519**	**-276.869234**	**-302.584052**
+3.15	**121.549890**	**102.421053**	**102.499877**	**81.616325**	**97.613643**	**82.446865**	**109.494266**	**114.426064**	**124.190124**	**124.176450**
-3.2	**-261.416758**	**-188.686841**	**-210.846738**	**-190.887973**	**-172.990543**	**-153.393706**	**-209.234269**	**-234.511548**	**-260.582808**	**-284.784990**
+3.2	**196.511473**	**156.079650**	**151.899099**	**126.421842**	**130.676590**	**128.393788**	**169.887675**	**180.055458**	**197.908717**	**201.347009**
-3.25	**-245.078210**	**-176.893913**	**-197.668817**	**-178.957475**	**-162.178634**	**-143.806599**	**-196.157127**	**-219.854576**	**-244.296383**	**-266.985928**
+3.25	**259.333037**	**203.476525**	**197.396181**	**166.204163**	**164.941586**	**166.419628**	**223.093031**	**241.246769**	**264.239733**	**275.201754**
-3.3	**-228.739663**	**-165.100986**	**-184.490895**	**-167.026976**	**-151.366725**	**-134.219492**	**-183.079986**	**-205.197605**	**-228.009957**	**-249.186865**
+3.3	**314.757410**	**245.344042**	**233.059926**	**200.727452**	**194.297191**	**201.771892**	**270.799976**	**295.857272**	**322.549445**	**341.044466**
-3.35	**-212.401115**	**-153.308058**	**-171.312973**	**-155.096478**	**-140.554816**	**-124.632386**	**-170.002844**	**-190.540633**	**-211.723532**	**-231.387803**
+3.35	**355.601561**	**277.634873**	**262.080976**	**228.594333**	**218.742017**	**227.737248**	**311.705123**	**339.522510**	**368.139327**	**393.265350**
-3.4	**-196.062567**	**-141.515130**	**-158.135051**	**-143.165980**	**-129.742907**	**-115.045279**	**-156.925702**	**-175.883662**	**-195.437106**	**-213.588741**
+3.4	**394.854680**	**305.066552**	**280.152533**	**251.984515**	**237.419089**	**248.898905**	**345.354317**	**375.201039**	**406.882475**	**434.163420**
-3.45	**-179.724019**	**-129.722203**	**-144.957129**	**-131.235482**	**-118.930999**	**-105.458172**	**-143.848561**	**-161.226690**	**-179.150681**	**-195.789679**
+3.45	**415.966643**	**324.202442**	**289.725439**	**265.801477**	**247.893983**	**260.138023**	**367.389029**	**396.889120**	**434.464889**	**459.371356**
-3.5	**-163.385471**	**-117.929275**	**-131.779208**	**-119.304983**	**-108.119090**	**-95.871065**	**-130.771419**	**-146.569719**	**-162.864255**	**-177.990616**
+3.5	**427.154277**	**335.228033**	**297.881046**	**272.745273**	**255.951864**	**264.665733**	**381.688749**	**408.832073**	**450.942212**	**481.361951**
-3.55	**-147.046924**	**-106.136347**	**-118.601286**	**-107.374485**	**-97.307181**	**-86.283959**	**-117.694277**	**-131.912747**	**-146.577830**	**-160.191554**
+3.55	**429.984667**	**341.243204**	**308.308418**	**277.952551**	**262.182921**	**267.167090**	**387.347377**	**416.848765**	**460.544611**	**491.091811**
-3.6	**-130.708376**	**-94.343420**	**-105.423364**	**-95.443987**	**-86.495272**	**-76.696852**	**-104.617135**	**-117.255775**	**-130.291404**	**-142.392492**

+3.6	436.569196	343.546745	314.859055	282.225675	263.658662	274.216418	389.239169	421.323190	461.576055	487.905823
-3.65	-114.369828	-82.550492	-92.245442	-83.513489	-75.683363	-67.109745	-91.539994	-102.598804	-114.004979	-124.593429
+3.65	424.730124	334.096457	313.356609	275.848802	256.204859	270.649487	377.945044	411.095504	446.575681	477.223301
-3.7	-98.031280	-70.757564	-79.067520	-71.582990	-64.871454	-57.522638	-78.462852	-87.941832	-97.718553	-106.794367
+3.7	409.471563	318.703289	302.030208	261.985797	242.082286	262.132581	355.982916	389.460488	424.592019	452.057041
-3.75	-81.692732	-58.964637	-65.889599	-59.652492	-54.059545	-47.935531	-65.385710	-73.284861	-81.432128	-88.995305
+3.75	381.129389	294.877631	282.092867	242.604159	222.467913	241.058837	326.343149	352.537887	389.415852	407.717530
-3.8	-65.354185	-47.171709	-52.711677	-47.721994	-43.247636	-38.348425	-52.308568	-58.627889	-65.145702	-71.196243
+3.8	340.798467	261.400213	254.235275	217.173259	197.636569	214.342597	288.527594	311.940438	340.655198	347.295528
-3.85	-49.015637	-35.378782	-39.533755	-35.791495	-32.435728	-28.761318	-39.231427	-43.970918	-48.859277	-53.397180
+3.85	280.118299	213.422197	211.286766	180.651253	163.028762	174.921662	235.511449	255.772369	273.417940	276.818671
-3.9	-32.677089	-23.585854	-26.355833	-23.860997	-21.623819	-19.174211	-26.154285	-29.313946	-32.572851	-35.598118
+3.9	206.306489	155.850857	156.588585	134.780164	120.883352	127.526414	171.790677	187.024844	190.657672	194.049902
-3.95	-16.338541	-11.792926	-13.177911	-11.930499	-10.811910	-9.587104	-13.077143	-14.656975	-16.286426	-17.799056
+3.95	111.348847	83.799084	85.514508	74.027791	65.889509	68.470065	92.288504	100.748514	103.258834	104.447519
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-16.338610	-16.017974	-17.123201	-16.124347	-19.342157	-15.239811	-16.074617	-7.860090
+0.05	111.172724	116.496603	122.549387	113.800593	131.865074	95.302759	100.338498	58.674578
-0.1	-32.677220	-32.035948	-34.246402	-32.248695	-38.684314	-30.479622	-32.149233	-15.720180
+0.1	205.959023	217.421566	228.410761	211.929943	244.917186	174.012770	183.171336	109.279322
-0.15	-49.015831	-48.053922	-51.369603	-48.373042	-58.026471	-45.719433	-48.223850	-23.580270
+0.15	280.287936	298.897596	313.342623	290.718211	335.226771	234.104094	246.425362	149.208122
-0.2	-65.354441	-64.071896	-68.492804	-64.497389	-77.368627	-60.959245	-64.298466	-31.440360
+0.2	340.976732	367.697117	384.847922	356.243398	408.588946	280.598679	295.367031	183.026576
-0.25	-81.693051	-80.089870	-85.616005	-80.621736	-96.710784	-76.199056	-80.373083	-39.300451
+0.25	380.998849	416.578334	435.461245	403.374492	469.432897	310.126861	326.449327	205.406759
-0.3	-98.031661	-96.107844	-102.739207	-96.746084	-116.052941	-91.438867	-96.447700	-47.160541
+0.3	409.887406	453.075130	472.051685	443.288063	518.581756	339.381216	358.041607	223.542009
-0.35	-114.370272	-112.125818	-119.862408	-112.870431	-135.395098	-106.678678	-112.522316	-55.020631
+0.35	424.613179	473.155667	497.418208	470.784403	547.455095	353.059460	373.033831	231.030916
-0.4	-130.708882	-128.143792	-136.985609	-128.994778	-154.737255	-121.918489	-128.596933	-62.880721
+0.4	437.006734	489.574520	513.450491	485.263005	561.706809	361.325390	382.204090	234.438930
-0.45	-147.047492	-144.161766	-154.108810	-145.119126	-174.079412	-137.158300	-144.671549	-70.740811
+0.45	430.287734	490.302158	512.503900	483.470571	556.870674	362.047045	383.436386	228.332665
-0.5	-163.386102	-160.179740	-171.232011	-161.243473	-193.421568	-152.398112	-160.746166	-78.600901
+0.5	426.844221	482.673953	505.294762	476.346112	548.388187	355.803173	376.898547	222.071674
-0.55	-179.724713	-176.197714	-188.355212	-177.367820	-212.763725	-167.637923	-176.820783	-86.460991
+0.55	416.213836	462.456620	485.136035	457.973730	530.907256	340.508556	360.806819	219.534174
-0.6	-196.063323	-192.215688	-205.478413	-193.492167	-232.105882	-182.877734	-192.895399	-94.321081
+0.6	394.321938	431.786528	453.984757	430.112879	499.787961	320.179620	338.791893	213.441530
-0.65	-212.401933	-208.233662	-222.601614	-209.616515	-251.448039	-198.117545	-208.970016	-102.181171
+0.65	355.656896	394.736766	410.855743	387.956067	451.610211	293.367008	309.754527	195.854193
-0.7	-228.740543	-224.251636	-239.724815	-225.740862	-270.790196	-213.357356	-225.044632	-110.041262
+0.7	314.671780	347.873666	361.534865	337.457290	393.183933	262.499099	276.808171	176.907516
-0.75	-245.079154	-240.269610	-256.848016	-241.865209	-290.132353	-228.597167	-241.119249	-117.901352
+0.75	259.416682	288.843098	299.356072	276.355573	320.265706	216.281151	227.664369	147.178881
-0.8	-261.417764	-256.287584	-273.971217	-257.989557	-309.474510	-243.836979	-257.193865	-125.761442
+0.8	196.706153	223.652399	229.815668	209.334500	240.039440	167.287744	176.737386	117.211396
-0.85	-277.756374	-272.305558	-291.094419	-274.113904	-328.816666	-259.076790	-273.268482	-133.621532
+0.85	121.547105	148.407211	149.410149	135.285333	149.174381	112.425354	118.456401	80.994373
-0.9	-294.094984	-288.323532	-308.217620	-290.238251	-348.158823	-274.316601	-289.343099	-141.481622
+0.9	77.671081	86.419082	86.419082	71.444405	73.471394	65.586559	69.038483	55.467057
-0.95	-310.433595	-304.341506	-325.340821	-306.362598	-367.500980	-289.556412	-305.417715	-149.341712
+0.95	59.137043	60.496351	64.440096	60.639953	72.379605	48.373482	50.919455	28.259292
-1	-326.772198	-320.359483	-342.464023	-322.486947	-386.843145	-350.711628	-371.787372	-157.201803
+1	62.249518	63.680367	67.831680	63.831529	76.189058	50.919453	53.599425	29.746623
(Span 2) -2	-326.772198	-320.359483	-342.464023	-322.486947	-386.843145	-350.711628	-371.787372	-157.201803
+2	62.249518	63.680367	67.831680	63.831529	76.189058	50.919453	53.599425	29.746623
-2.05	-226.155707	-225.399513	-240.093483	-225.934634	-269.675046	-243.394107	-258.086554	-105.289596
+2.05	47.376644	48.465630	51.625096	48.580675	57.985700	38.753598	40.793261	31.341795
-2.1	-205.464115	-210.184785	-223.886894	-210.683784	-251.471667	-168.066124	-176.911709	-98.182426
+2.1	89.538381	102.340794	102.340794	92.682336	98.361339	77.843700	81.940737	64.054730
-2.15	-190.591104	-194.970056	-207.680306	-195.432934	-233.268289	-155.900255	-164.105532	-91.075255
+2.15	145.383904	178.987728	180.277195	170.250617	189.190777	135.268725	142.521640	96.206445
-2.2	-175.718093	-179.755328	-191.473717	-180.182084	-215.064910	-143.734386	-151.299354	-83.968085
+2.2	230.651933	265.302225	272.761929	256.450558	293.592251	197.817842	209.011898	134.730966

-2.25	-160.845081	-164.540599	-175.267129	-164.931233	-196.861531	-131.568518	-138.493177	-76.860915
+2.25	307.797236	340.682549	353.077215	333.041984	386.662742	270.414572	285.311432	173.150028
-2.3	-145.972070	-149.325871	-159.060541	-149.680383	-178.658153	-119.402649	-125.686999	-69.753745
+2.3	369.773661	403.062985	420.184425	399.252893	464.870103	330.939208	349.568178	204.486119
-2.35	-131.099058	-134.111143	-142.853952	-134.429533	-160.454774	-107.236780	-112.880821	-62.646575
+2.35	420.463988	452.638756	476.446689	451.490151	525.502941	372.829862	394.162008	227.555755
-2.4	-116.226047	-118.896414	-126.647364	-119.178683	-142.251395	-95.070912	-100.074644	-55.539405
+2.4	453.040473	490.371058	515.744177	487.649033	566.481280	402.967677	425.501678	241.542818
-2.45	-101.353035	-103.681686	-110.440775	-103.927832	-124.048017	-82.905043	-87.268466	-48.432235
+2.45	469.519846	512.403185	538.042650	507.663887	588.643175	415.293600	438.830031	247.506194
-2.5	-86.480024	-88.467011	-94.234187	-88.677012	-105.844638	-70.739174	-74.462289	-41.325059
+2.5	470.599862	518.091657	542.748813	511.733264	592.314147	409.816708	433.323374	246.484729
-2.55	-101.352097	-103.681749	-110.440746	-103.927866	-124.047876	-82.904955	-87.268373	-48.432227
+2.55	469.455428	512.386308	538.028451	507.658999	588.636177	415.284153	438.819847	247.759707
-2.6	-116.224971	-118.896486	-126.647331	-119.178720	-142.251234	-95.070810	-100.074537	-55.539395
+2.6	453.345626	490.375951	515.751506	487.660661	566.499944	402.971683	425.505644	241.540303
-2.65	-131.097845	-134.111224	-142.853915	-134.429574	-160.454592	-107.236665	-112.880700	-62.646563
+2.65	420.807230	452.641563	476.451714	451.499634	525.518907	372.828763	394.160566	227.561629
-2.7	-145.970719	-149.325962	-159.060499	-149.680428	-178.657949	-119.402520	-125.686864	-69.753731
+2.7	370.028430	403.093043	420.187023	399.257640	464.880789	330.956415	349.586002	204.490546
-2.75	-160.843593	-164.540700	-175.267083	-164.931282	-196.861307	-131.568376	-138.493027	-76.860900
+2.75	307.740981	340.705395	353.101534	333.047968	386.667485	270.426019	285.323204	173.152489
-2.8	-175.716467	-179.755438	-191.473668	-180.182136	-215.064665	-143.734231	-151.299190	-83.968068
+2.8	230.697440	265.318589	272.779578	256.456212	293.591934	197.828003	209.022711	134.731591
-2.85	-190.589341	-194.970176	-207.680252	-195.432990	-233.268022	-155.900086	-164.105354	-91.075236
+2.85	145.389082	178.998485	180.289083	170.256945	189.201865	135.275287	142.528650	95.877189
-2.9	-205.462215	-210.184913	-223.886836	-210.683845	-251.471380	-168.065941	-176.911517	-98.182404
+2.9	89.503122	102.343940	102.343940	92.695187	98.369950	77.845777	81.942923	63.427789
-2.95	-226.156058	-225.399651	-240.093420	-225.934699	-269.674738	-243.394357	-258.086774	-105.289572
+2.95	47.377079	48.465598	51.625109	48.580670	57.985770	38.753644	40.793309	30.689057
-3	-326.770949	-320.359655	-342.464405	-322.487190	-386.843789	-350.712378	-371.788215	-157.201869
+3	62.250093	63.680328	67.831698	63.831513	76.189146	50.919510	53.599484	29.746631
(Span 3) -4	-326.770949	-320.359655	-342.464405	-322.487190	-386.843789	-350.712378	-371.788215	-157.201869
+4	62.250093	63.680328	67.831698	63.831513	76.189146	50.919510	53.599484	29.746631
-3.05	-310.432402	-304.341673	-325.341185	-306.362831	-367.501600	-289.556061	-305.417464	-149.341776
+3.05	59.137588	60.496311	64.440113	60.639937	72.379688	48.373534	50.919510	28.259300
-3.1	-294.093854	-288.323690	-308.217965	-290.238471	-348.159411	-274.316269	-289.342860	-141.481682
+3.1	77.671124	86.430040	86.430040	71.463102	73.465729	65.686831	69.144032	55.462773
-3.15	-277.755306	-272.305708	-291.094744	-274.114112	-328.817222	-259.076476	-273.268257	-133.621589
+3.15	121.549890	148.398362	149.418423	135.291152	149.168565	112.431665	118.462967	81.008532
-3.2	-261.416758	-256.287725	-273.971524	-257.989752	-309.475033	-243.836683	-257.193654	-125.761496
+3.2	196.511473	223.661894	229.824148	209.337768	240.032310	167.294376	176.744275	117.206956
-3.25	-245.078210	-240.269742	-256.848304	-241.865393	-290.132844	-228.596891	-241.119051	-117.901402
+3.25	259.333037	288.833115	299.363023	276.352771	320.258281	216.284393	227.667783	147.174317
-3.3	-228.739663	-224.251760	-239.725084	-225.741034	-270.790655	-213.357098	-225.044448	-110.041309
+3.3	314.757410	347.880688	361.540352	337.452998	393.174369	262.504170	276.813797	176.902494
-3.35	-212.401115	-208.233777	-222.601864	-209.616674	-251.448466	-198.117306	-208.969844	-102.181215
+3.35	355.601561	394.741209	410.858305	387.950213	451.612728	293.822609	310.209586	195.854175
-3.4	-196.062567	-192.215795	-205.478643	-193.492315	-232.106277	-182.877513	-192.895241	-94.321122
+3.4	394.854680	431.788287	453.980791	430.104315	499.772635	320.181671	338.793852	213.435425
-3.45	-179.724019	-176.197812	-188.355423	-177.367955	-212.764088	-167.637721	-176.820638	-86.461028
+3.45	415.966643	462.452335	485.129040	457.976808	530.902642	340.506886	360.804816	219.532979
-3.5	-163.385471	-160.179829	-171.232203	-161.243596	-193.421899	-152.397928	-160.746035	-78.600935
+3.5	427.154277	482.666055	505.283786	476.330851	548.393727	355.799278	376.894168	222.064169
-3.55	-147.046924	-144.161847	-154.108983	-145.119236	-174.079710	-137.158135	-144.671431	-70.740842
+3.55	429.984667	490.292769	512.497590	483.472357	556.866640	362.039612	383.428841	228.334302
-3.6	-130.708376	-128.143864	-136.985763	-128.994877	-154.737521	-121.918343	-128.596828	-62.880748

+3.6	**436.569196**	**489.579863**	**513.458699**	**485.246118**	**561.698055**	**361.322066**	**382.200236**	**234.434481**
-3.65	**-114.369828**	**-112.125882**	**-119.862542**	**-112.870518**	**-135.395332**	**-106.678550**	**-112.522225**	**-55.020655**
+3.65	**424.730124**	**473.156445**	**497.421612**	**470.777926**	**547.455975**	**353.057203**	**373.039609**	**231.031438**
-3.7	**-98.031280**	**-96.107899**	**-102.739322**	**-96.746158**	**-116.053143**	**-91.438758**	**-96.447622**	**-47.160561**
+3.7	**409.471563**	**453.070004**	**472.048767**	**443.291720**	**518.562165**	**339.375684**	**358.035347**	**223.536206**
-3.75	**-81.692732**	**-80.089916**	**-85.616102**	**-80.621799**	**-96.710954**	**-76.198965**	**-80.373019**	**-39.300468**
+3.75	**381.129389**	**416.568426**	**435.453266**	**403.372304**	**469.437002**	**310.012948**	**326.329419**	**205.910039**
-3.8	**-65.354185**	**-64.071934**	**-68.492882**	**-64.497439**	**-77.368765**	**-60.959173**	**-64.298415**	**-31.440374**
+3.8	**340.798467**	**367.682031**	**384.834419**	**356.236076**	**408.586053**	**280.593335**	**295.361405**	**183.030392**
-3.85	**-49.015637**	**-48.053951**	**-51.369662**	**-48.373080**	**-58.026576**	**-45.719380**	**-48.223812**	**-23.580281**
+3.85	**280.118299**	**298.896006**	**313.342270**	**290.720429**	**335.217488**	**234.106742**	**246.428150**	**149.205444**
-3.9	**-32.677089**	**-32.035968**	**-34.246441**	**-32.248720**	**-38.684386**	**-30.479587**	**-32.149209**	**-15.720188**
+3.9	**206.306489**	**217.395225**	**228.385259**	**211.911541**	**244.901124**	**174.001090**	**183.159042**	**109.281236**
-3.95	**-16.338541**	**-16.017986**	**-17.123221**	**-16.124361**	**-19.342197**	**-15.239795**	**-16.074606**	**-7.860094**
+3.95	**111.348847**	**116.483547**	**122.536761**	**113.791487**	**131.857146**	**95.308365**	**100.344419**	**58.675550**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 45' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-16.338610**	**-24.585215**	**-26.006656**	**-16.462488**	**-20.659128**	**-21.007418**
+0.05	**111.172724**	**140.377191**	**147.371492**	**104.661859**	**128.230191**	**128.142562**
-0.1	**-32.677220**	**-49.170430**	**-52.013311**	**-32.924975**	**-41.318257**	**-42.014835**
+0.1	**205.959023**	**255.119553**	**268.878801**	**191.299818**	**234.266692**	**232.823149**
-0.15	**-49.015831**	**-73.755645**	**-78.019967**	**-49.387463**	**-61.977385**	**-63.022253**
+0.15	**280.287936**	**342.995966**	**359.996751**	**260.535920**	**315.311060**	**311.305744**
-0.2	**-65.354441**	**-98.340860**	**-104.026622**	**-65.849951**	**-82.636514**	**-84.029671**
+0.2	**340.976732**	**420.890852**	**437.657239**	**321.152938**	**379.734420**	**380.419651**
-0.25	**-81.693051**	**-122.926075**	**-130.033278**	**-82.312438**	**-103.295642**	**-105.037088**
+0.25	**380.998849**	**477.396967**	**504.492509**	**364.341529**	**432.955089**	**431.138115**
-0.3	**-98.031661**	**-147.511290**	**-156.039933**	**-98.774926**	**-123.954770**	**-126.044506**
+0.3	**409.887406**	**517.671023**	**548.822232**	**397.459219**	**467.617571**	**478.346903**
-0.35	**-114.370272**	**-172.096505**	**-182.046589**	**-115.237414**	**-144.613899**	**-147.051924**
+0.35	**424.613179**	**537.360386**	**581.754708**	**415.667360**	**483.629944**	**508.022032**
-0.4	**-130.708882**	**-196.681720**	**-208.053245**	**-131.699901**	**-165.273027**	**-168.059341**
+0.4	**437.006734**	**543.159836**	**602.548890**	**427.698687**	**491.685513**	**524.161861**
-0.45	**-147.047492**	**-221.266935**	**-234.059900**	**-148.162389**	**-185.932156**	**-189.066759**
+0.45	**430.287734**	**554.831998**	**609.202506**	**429.941670**	**488.872577**	**522.369588**
-0.5	**-163.386102**	**-245.852150**	**-260.066556**	**-164.624877**	**-206.591284**	**-210.074177**
+0.5	**426.844221**	**548.575540**	**602.963399**	**422.443355**	**481.496140**	**514.714918**
-0.55	**-179.724713**	**-270.437365**	**-286.073211**	**-181.087364**	**-227.250412**	**-231.081594**
+0.55	**416.213836**	**520.685404**	**571.279489**	**403.832086**	**458.982648**	**494.425313**
-0.6	**-196.063323**	**-295.022580**	**-312.079867**	**-197.549852**	**-247.909541**	**-252.089012**
+0.6	**394.321938**	**485.610793**	**536.984417**	**379.911552**	**434.264386**	**463.543606**
-0.65	**-212.401933**	**-319.607795**	**-338.086522**	**-214.012340**	**-268.568669**	**-273.096429**
+0.65	**355.656896**	**447.774412**	**479.238118**	**346.688528**	**400.599243**	**418.411962**
-0.7	**-228.740543**	**-344.193010**	**-364.093178**	**-230.474827**	**-289.227798**	**-294.103847**
+0.7	**314.671780**	**394.806937**	**411.099025**	**305.881002**	**360.075737**	**364.087206**
-0.75	**-245.079154**	**-368.778225**	**-390.099834**	**-246.937315**	**-309.886926**	**-315.111265**
+0.75	**259.416682**	**323.054998**	**328.618210**	**254.466553**	**300.313134**	**298.496632**
-0.8	**-261.417764**	**-393.363440**	**-416.106489**	**-263.399803**	**-330.546054**	**-336.118682**
+0.8	**196.706153**	**237.179394**	**229.770844**	**198.719563**	**224.998977**	**226.505721**
-0.85	**-277.756374**	**-417.948655**	**-442.113145**	**-279.862290**	**-351.205183**	**-357.126100**
+0.85	**121.547105**	**142.543373**	**132.165340**	**134.199982**	**144.225099**	**146.712991**
-0.9	**-294.094984**	**-442.533870**	**-468.119800**	**-296.324778**	**-371.864311**	**-378.133518**
+0.9	**77.671081**	**74.080075**	**82.685405**	**77.696966**	**82.876764**	**73.548231**
-0.95	**-310.433595**	**-504.555467**	**-564.818328**	**-343.515574**	**-392.523440**	**-432.600347**
+0.95	**59.137043**	**78.195634**	**87.279039**	**52.144840**	**64.649246**	**65.147753**
-1	**-326.772198**	**-631.809462**	**-688.061567**	**-433.526352**	**-498.554816**	**-551.300644**
+1	**62.249518**	**82.311195**	**91.872673**	**54.889305**	**68.051839**	**68.576582**
(Span 2) -2	**-326.772198**	**-631.809462**	**-688.061567**	**-433.526352**	**-498.554816**	**-551.300644**
+2	**62.249518**	**82.311195**	**91.872673**	**54.889305**	**68.051839**	**68.576582**
-2.05	**-226.155707**	**-424.948984**	**-451.645145**	**-311.972677**	**-356.657762**	**-394.403816**
+2.05	**47.376644**	**62.645114**	**69.922130**	**41.774959**	**51.792654**	**52.192024**
-2.1	**-205.464115**	**-285.451510**	**-323.178964**	**-207.467789**	**-224.613238**	**-256.474875**
+2.1	**89.538381**	**96.384617**	**89.371792**	**92.190849**	**98.597066**	**98.627853**
-2.15	**-190.591104**	**-252.012431**	**-281.286495**	**-168.054348**	**-208.354072**	**-209.960801**
+2.15	**145.383904**	**180.414226**	**168.666378**	**161.565619**	**182.672920**	**185.666392**
-2.2	**-175.718093**	**-232.346330**	**-259.335956**	**-154.940020**	**-192.094905**	**-193.576251**
+2.2	**230.651933**	**284.014339**	**282.805796**	**235.000625**	**268.812843**	**277.427376**

-2.25	-160.845081	-212.680230	-237.385418	-141.825693	-175.835739	-177.191701
+2.25	307.797236	400.225184	409.508313	310.710104	370.069062	371.400282
-2.3	-145.972070	-193.014129	-215.434879	-128.711365	-159.576573	-160.807150
+2.3	369.773661	488.465229	517.872896	376.053470	447.788563	459.434013
-2.35	-131.099058	-173.348028	-193.484340	-115.597037	-143.317406	-144.422600
+2.35	420.463988	552.071448	596.434574	420.065664	501.425683	520.649039
-2.4	-116.226047	-153.681928	-171.533802	-102.482709	-127.058240	-128.038050
+2.4	453.040473	597.503956	655.207114	446.181658	531.005639	554.230964
-2.45	-101.353035	-134.015827	-149.583263	-89.368381	-110.799074	-111.653499
+2.45	469.519846	629.968506	686.764547	457.284280	539.235853	567.354021
-2.5	-86.480024	-114.349726	-127.632749	-76.254153	-94.540009	-95.269007
+2.5	470.599862	634.125542	693.240163	452.754136	530.628938	563.689367
-2.55	-101.352097	-134.015688	-149.583292	-89.368499	-110.799194	-111.653565
+2.55	469.455428	629.964702	686.763145	457.271143	539.233004	567.352969
-2.6	-116.224971	-153.681768	-171.533834	-102.482845	-127.058379	-128.038124
+2.6	453.345626	597.498120	655.208611	446.161881	531.004527	554.226616
-2.65	-131.097845	-173.347848	-193.484376	-115.597190	-143.317563	-144.422683
+2.65	420.807230	552.061088	596.435712	420.063001	501.417718	520.637833
-2.7	-145.970719	-193.013928	-215.434918	-128.711536	-159.576748	-160.807242
+2.7	370.028430	488.458528	517.871386	376.046787	447.777339	459.440421
-2.75	-160.843593	-212.680009	-237.385460	-141.825882	-175.835933	-177.191801
+2.75	307.740981	400.215017	409.506377	310.722161	370.054850	371.400194
-2.8	-175.716467	-232.346089	-259.336003	-154.940228	-192.095118	-193.576360
+2.8	230.697440	283.960278	282.870050	235.012537	268.810800	277.432066
-2.85	-190.589341	-252.012169	-281.286545	-168.054573	-208.354302	-209.960919
+2.85	145.389082	180.406469	168.667153	161.573357	182.678486	185.673853
-2.9	-205.462215	-285.451839	-323.178875	-207.467365	-224.613487	-256.475790
+2.9	89.503122	96.375054	89.372905	92.193266	98.604536	98.635104
-2.95	-226.156058	-424.949073	-451.644977	-311.972406	-356.657374	-394.403485
+2.95	47.377079	62.645179	69.922122	41.774898	51.792590	52.192004
-3	-326.770949	-631.809645	-688.061423	-433.527142	-498.554544	-551.301598
+3	62.250093	82.311280	91.872657	54.889230	68.051762	68.576547
(Span 3) -4	-326.770949	-631.809645	-688.061423	-433.527142	-498.554544	-551.301598
+4	62.250093	82.311280	91.872657	54.889230	68.051762	68.576547
-3.05	-310.432402	-504.555581	-564.818430	-343.515511	-392.523078	-432.600308
+3.05	59.137588	78.195716	87.279024	52.144768	64.649173	65.147719
-3.1	-294.093854	-442.533558	-468.119823	-296.325057	-371.863969	-378.133476
+3.1	77.671124	74.080152	82.685392	77.676937	82.855400	73.543455
-3.15	-277.755306	-417.948360	-442.113166	-279.862553	-351.204860	-357.126060
+3.15	121.549890	142.540212	132.164973	134.207277	144.222163	146.720331
-3.2	-261.416758	-393.363163	-416.106510	-263.400049	-330.545751	-336.118645
+3.2	196.511473	237.172325	229.769803	198.727264	224.994134	226.501435
-3.25	-245.078210	-368.777965	-390.099853	-246.937545	-309.886641	-315.111229
+3.25	259.333037	323.044850	328.892024	254.473465	300.317542	298.504452
-3.3	-228.739663	-344.192768	-364.093197	-230.475041	-289.227532	-294.103813
+3.3	314.757410	394.795707	411.096949	305.887238	360.063564	364.081767
-3.35	-212.401115	-319.607570	-338.086540	-214.012537	-268.568423	-273.096397
+3.35	355.601561	447.771615	479.237717	346.692963	400.601348	418.417241
-3.4	-196.062567	-295.022373	-312.079883	-197.550033	-247.909314	-252.088982
+3.4	394.854680	485.616141	536.985691	379.914149	434.250309	463.534268
-3.45	-179.724019	-270.437175	-286.073227	-181.087529	-227.250205	-231.081566
+3.45	415.966643	520.679125	571.278841	403.830366	458.987558	494.425758
-3.5	-163.385471	-245.851978	-260.066570	-164.625025	-206.591095	-210.074150
+3.5	427.154277	548.564987	602.962002	422.439066	481.485751	514.724736
-3.55	-147.046924	-221.266780	-234.059914	-148.162521	-185.931986	-189.066734
+3.55	429.984667	554.829044	609.202526	429.932709	488.871918	522.373674
-3.6	-130.708376	-196.681583	-208.053257	-131.700017	-165.272877	-168.059319

+3.6	**436.569196**	**543.164143**	**602.548053**	**427.701193**	**491.675727**	**524.149957**
-3.65	**-114.369828**	**-172.096385**	**-182.046600**	**-115.237513**	**-144.613768**	**-147.051903**
+3.65	**424.730124**	**537.366275**	**581.752874**	**415.665581**	**483.629116**	**508.018682**
-3.7	**-98.031280**	**-147.511188**	**-156.039944**	**-98.775010**	**-123.954659**	**-126.044487**
+3.7	**409.471563**	**517.684237**	**548.820289**	**397.454043**	**467.630519**	**478.351822**
-3.75	**-81.692732**	**-122.925990**	**-130.033287**	**-82.312506**	**-103.295549**	**-105.037071**
+3.75	**381.129389**	**477.590726**	**504.491929**	**364.332908**	**432.950133**	**431.137781**
-3.8	**-65.354185**	**-98.340792**	**-104.026631**	**-65.850002**	**-82.636440**	**-84.029655**
+3.8	**340.798467**	**420.896176**	**437.658014**	**321.140383**	**379.736514**	**380.414663**
-3.85	**-49.015637**	**-73.755595**	**-78.019974**	**-49.387498**	**-61.977331**	**-63.022240**
+3.85	**280.118299**	**342.993207**	**359.996072**	**260.533994**	**315.305801**	**311.301628**
-3.9	**-32.677089**	**-49.170397**	**-52.013317**	**-32.924994**	**-41.318222**	**-42.014824**
+3.9	**206.306489**	**255.109901**	**268.876880**	**191.311246**	**234.254945**	**232.812420**
-3.95	**-16.338541**	**-24.585200**	**-26.006661**	**-16.462490**	**-20.659113**	**-21.007408**
+3.95	**111.348847**	**140.373265**	**147.370568**	**104.667741**	**128.224545**	**128.137490**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 50' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-17.08445068**	***-18.493287***	***-20.258361***	**-13.870737**	**-14.84928796**	**-13.98484908**	**-16.81070343**	**-14.06714175**	**-14.85012703**	**-6.925573855**
End Shear	**123.0073376**	***136.632283***	***143.690245***	**110.1930885**	**116.3488963**	**108.2901161**	**126.3860349**	**97.54577942**	**102.7987183**	**56.08714042**
-0.05	**-17.08445068**	***-18.561490***	***-23.585715***	**-13.870737**	**-14.84928796**	**-13.98484908**	**-16.81070343**	**-14.06714175**	**-14.85012703**	**-6.925573855**
+0.05	**114.1455679**	***126.166087***	***132.394341***	**102.0410984**	**107.592933**	**100.070108**	**116.4751747**	**88.29207209**	**93.0186198**	**51.87502144**
-0.1	**-17.08445068**	***-18.868508***	***-28.761872***	**-13.870737**	**-14.84928796**	**-13.98484908**	**-16.81070343**	**-14.06714175**	**-14.85012703**	**-6.925573855**
+0.1	**103.6224587**	***114.668143***	***119.187103***	**93.08125208**	**97.97943873**	**91.02613987**	**105.592445**	**78.53877241**	**82.71332115**	**47.15544449**
-0.15	**-17.08445068**	***-19.993243***	***-32.326172***	**-13.870737**	**-14.84928796**	**-13.98484908**	**-16.81070343**	**-14.06714175**	**-14.85012703**	**-7.55221828**
+0.15	**96.69689312**	***107.174054***	***110.615913***	**87.16827888**	**91.64118687**	**85.0670887**	**98.43479879**	**71.9536969**	**75.75740218**	**44.05036755**
-0.2	**-18.08840512**	***-29.148934***	***-37.825614***	**-18.69044649**	**-18.69044649**	**-16.25083914**	**-16.81070343**	**-14.21088729**	**-14.95882873**	**-10.76275854**
+0.2	**86.47940012**	***96.216850***	***98.145462***	**78.41953842**	**82.27259094**	**76.26470723**	**87.88192719**	**62.68566155**	**65.98490689**	**39.47117132**
-0.25	**-21.65270025**	***-35.350582***	***-41.583454***	**-23.32342829**	**-23.32342829**	**-21.26992225**	**-22.38856896**	**-17.73313671**	**-18.66645969**	**-12.88361253**
+0.25	**80.21599396**	***89.116746***	***90.109952***	**72.68522537**	**76.51845026**	**70.86188715**	**81.41721707**	**56.8236772**	**59.81439706**	**36.48024696**
-0.3	**-28.61837495**	***-44.769270***	***-48.971481***	**-30.29861286**	**-30.29861286**	**-28.73875619**	**-30.69921242**	**-23.1352886**	**-24.37203082**	**-16.02483992**
+0.3	**70.42669599**	***78.799391***	***78.508518***	**64.60715499**	**67.50648609**	**62.40619555**	**71.32067309**	**48.48686175**	**51.03880184**	**32.10313579**
-0.35	**-35.69684346**	***-51.107645***	***-56.144367***	**-36.1076546**	**-36.56644783**	**-33.66341713**	**-36.18213783**	**-27.09982394**	**-28.57301665**	**-18.0859889**
+0.35	**64.07944588**	***72.157635***	***71.095294***	**59.11999164**	**61.64991034**	**56.91537679**	**64.77933088**	**43.69445559**	**46.2602553**	**29.26750431**
-0.4	**-46.20797061**	***-60.672159***	***-66.778926***	**-44.89466421**	**-46.0563638**	**-42.04029194**	**-46.12048784**	**-33.44488725**	**-35.3260483**	**-21.11741777**
+0.4	**54.86309333**	***62.890813***	***60.490483***	**51.12231554**	**53.12482083**	**48.92945849**	**55.28923581**	**37.86820312**	**40.0718356**	**25.1541779**
-0.45	**-53.12327911**	***-67.067442***	***-73.716245***	**-50.66006137**	**-52.28909265**	**-47.93254198**	**-53.3097731**	**-37.60541263**	**-39.75476314**	**-23.74106012**
+0.45	**48.94294449**	***56.760810***	***53.870470***	**45.96361516**	**47.6336769**	**43.79035569**	**49.19889917**	**34.10652794**	**36.07718215**	**22.51496892**
-0.5	**-63.32198519**	***-76.655480***	***-83.890770***	**-59.13890527**	**-61.46469171**	**-56.61272133**	**-63.9204616**	**-44.05120743**	**-46.61319033**	**-28.31977573**
+0.5	**40.43490988**	***47.987324***	***44.857068***	**38.51553687**	**39.71801568**	**36.38976579**	**40.45531886**	**28.66972861**	**30.30501778**	**18.72712935**
-0.55	**-69.98389911**	***-83.024428***	***-90.517451***	**-64.66093658**	**-67.44703686**	**-62.27606941**	**-70.85697372**	**-48.72675397**	**-51.58330023**	**-31.31031677**
+0.55	**35.0320964**	***42.432374***	***39.198614***	**33.761156**	**34.67399525**	**31.67939852**	**34.90934566**	**25.19514249**	**26.61707388**	**16.32548442**
-0.6	**-80.60966052**	***-92.508571***	***-101.035393***	**-72.71783492**	**-76.18578655**	**-70.55513379**	**-81.01848821**	**-56.11194686**	**-59.42900761**	**-35.68676924**
+0.6	**27.2700107**	***34.562647***	***31.263510***	**26.87642478**	**27.39026608**	**24.71187865**	**26.73926133**	**20.23015715**	**21.34878277**	**13.28745806**
-0.65	**-87.83342776**	***-98.764526***	***-108.158065***	**-77.92063591**	**-81.83604783**	**-75.91255915**	**-87.60886916**	**-61.01745149**	**-64.6398313**	**-38.52190144**
+0.65	**22.59206221**	***29.636860***	***26.357140***	**22.44336822**	**22.70196369**	**20.66797796**	**22.28644537**	**17.0975662**	**18.02595917**	**11.58686298**
-0.7	**-98.35637704**	***-108.012217***	***-118.591092***	**-85.44180912**	**-90.01541704**	**-83.67495441**	**-97.1811438**	**-67.89244074**	**-71.94600008**	**-42.63438869**
+0.7	**15.89619826**	***22.749503***	***19.598767***	**16.79210741**	**16.79210741**	**15.45198742**	**16.54433734**	**12.77773413**	**13.45024646**	**9.15953476**
-0.75	**-105.1394998**	***-114.065106***	***-125.373265***	**-90.24952467**	**-95.25190412**	**-88.64941444**	**-103.3320084**	**-73.06508622**	**-76.91061707**	**-45.27297824**
+0.75	**12.92609573**	***18.503585***	***16.527555***	**13.63610793**	**13.63610793**	**12.20462923**	**12.97421906**	**10.30560277**	**10.84800292**	**7.629989567**
-0.8	**-114.9253532**	***-122.938681***	***-135.389432***	**-97.12118476**	**-102.7493512**	**-95.77959512**	**-112.1749884**	**-82.19374227**	**-86.52890385**	**-49.05979748**
+0.8	**9.302785495**	***12.462673***	***12.804037***	**9.230383353**	**9.230383353**	**7.703748004**	**7.882952097**	**6.998713593**	**7.36706694**	**5.479475432**
-0.85	**-121.1663153**	***-128.695012***	***-141.863230***	**-101.4579653**	**-107.49038**	**-100.2940702**	**-117.7929794**	**-88.36254302**	**-93.04166184**	**-51.46070303**
+0.85	**7.05870706**	***8.958508***	***10.555640***	**6.403638666**	**6.403638666**	**5.128660545**	**5.128660545**	**4.943614392**	**5.203804623**	**4.14796638**
-0.9	**-130.0627791**	***-137.051666***	***-151.252745***	**-107.5663293**	**-114.1833699**	**-106.6764845**	**-125.7666019**	**-98.02274635**	**-103.2780834**	**-54.86015297**
+0.9	**3.967961422**	***4.274459***	***7.540781***	**2.815880422**	**3.006239764**	**2.829478308**	**3.388341785**	**2.460369927**	**2.591748184**	**2.314755808**
-0.95	**-135.6600669**	***-142.414530***	***-157.288775***	**-111.3563265**	**-118.3472578**	**-110.6539246**	**-130.7583252**	**-104.2403574**	**-109.8722242**	**-56.98224954**
+0.95	**3.331132871**	***3.656330***	***5.772979***	**2.815880422**	**3.006239764**	**2.829478308**	**3.388341785**	**2.460369927**	**2.591748184**	**1.352315645**
-1	**-143.5148443**	***-150.106337***	***-165.990401***	**-116.5876052**	**-124.1132478**	**-116.1730252**	**-137.7225325**	**-113.1632367**	**-119.3383101**	**-59.9326269**
+1	**3.33E+00**	***3.609716***	***3.839749***	**2.82E+00**	**3.01E+00**	**2.83E+00**	**3.39E+00**	**2.46E+00**	**2.59E+00**	**1.35E+00**
(Span 2) -2	**-1.21E+01**	***-13.137594***	***-13.974801***	**-1.02E+01**	**-1.09E+01**	**-1.03E+01**	**-1.23E+01**	**-8.95E+00**	**-9.43E+00**	**-4.92E+00**
+2	**1.36E+02**	***152.517335***	***166.471311***	**116.9723974**	**124.6735548**	**116.8043069**	**138.808223**	**119.187922**	**125.8013131**	**60.38289438**
-2.05	**-1.21E+01**	***-13.195203***	***-16.041795***	**-1.02E+01**	**-1.09E+01**	**-1.03E+01**	**-1.23E+01**	**-8.95E+00**	**-9.43E+00**	**-4.92E+00**
+2.05	**1.30E+02**	***145.267867***	***157.618915***	**112.2868636**	**119.5155446**	**111.8709123**	**132.5987094**	**111.7665986**	**117.9362361**	**57.7763544**
-2.1	**-12.12368907**	***-13.402914***	***-18.973895***	**-10.2484231**	**-10.94123764**	**-10.29791258**	**-12.33190122**	**-8.954539308**	**-9.432691792**	**-4.921765387**
+2.1	**122.3041841**	***136.331570***	***147.407542***	**106.2276198**	**112.8786588**	**105.5431316**	**124.7012126**	**102.7474889**	**108.3828811**	**54.44428505**
-2.15	**-12.12368907**	***-13.718102***	***-21.911269***	**-10.2484231**	**-10.94123764**	**-10.29791258**	**-12.33190122**	**-8.954539308**	**-9.432691792**	**-4.921765387**
+2.15	**115.033222**	***128.341004***	***138.331119***	**100.5933622**	**106.7318255**	**99.69741023**	**117.4552005**	**94.79583853**	**99.96433288**	**51.37529369**
-2.2	**-12.12368907**	***-19.377816***	***-25.804640***	**-12.5423948**	**-12.5423948**	**-11.407001**	**-12.33190122**	**-9.555103268**	**-10.05800344**	**-7.120013479**
+2.2	**105.9849998**	***118.727655***	***127.449455***	**93.58890348**	**99.11537615**	**92.46937373**	**108.5473965**	**85.14816947**	**89.75620943**	**47.59133592**
-2.25	**-16.65646289**	***-25.181806***	***-30.825010***	**-17.05205455**	**-17.1265249**	**-15.84202625**	**-16.86013509**	**-12.95142698**	**-13.63308103**	**-9.19486054**

+2.25	98.27996079	110.313609	118.652827	87.28298524	92.27809534	85.99270382	100.6059497	76.57484378	80.68701988	44.21014898
-2.3	-23.84395676	-32.588123	-38.189014	-23.47716182	-23.90808554	-21.72248976	-23.49353362	-17.58160419	-18.55186201	-11.76067771
+2.3	89.1268679	100.384304	108.420680	79.65652186	84.03015344	78.19265249	91.08570432	67.17401989	70.7486458	40.1495914
-2.35	-30.52139465	-39.426876	-45.131585	-29.37672297	-30.1597967	-27.55646422	-30.34387739	-21.89477989	-23.12907363	-14.41961077
+2.35	81.13718214	91.848136	99.574313	72.9559986	76.80079296	71.36637856	82.78984761	59.68205933	62.82322035	36.60642925
-2.4	-38.81601829	-47.909109	-53.885088	-36.63440622	-37.876337	-34.7732387	-38.87394231	-27.35548437	-28.92907232	-18.08413233
+2.4	71.74663454	81.945040	89.211236	64.69754009	67.93623867	62.74710954	72.47890504	50.71487293	53.38407677	32.44455633
-2.45	-46.42039793	-55.553611	-62.022369	-43.1090876	-44.78028784	-41.24235249	-46.56350431	-32.30259933	-34.18199466	-21.38590557
+2.45	63.71882202	73.571926	80.435141	57.64567634	60.33811852	55.8558236	64.05776681	43.72157747	46.02271313	28.88968024
-2.5	-56.126006	-64.835160	-72.075294	-50.87610833	-53.08370488	-49.03603062	-55.87375658	-37.95779265	-40.19154001	-25.38056702
+2.5	54.47677243	63.485120	70.363055	49.75265528	51.8813128	47.90665512	54.52171524	37.1410031	39.32342239	24.80177547
-2.55	-64.72230736	-73.575084	-80.753457	-57.64881753	-60.34148835	-55.85894107	-64.06151552	-43.72434118	-46.0256223	-28.89018837
+2.55	46.74164086	55.550499	61.793179	43.10605438	44.77704964	41.23936672	46.55994716	32.3006715	34.17994654	21.38541427
-2.6	-74.96386251	-83.355904	-91.056594	-65.83669658	-69.16124825	-63.90125723	-73.87247673	-51.90583328	-54.63771924	-33.03970788
+2.6	38.0340125	46.663916	52.487478	35.57323789	36.746516	33.71567203	37.62053178	26.57945329	28.10492923	17.54676237
-2.65	-83.83415717	-91.851218	-99.974474	-72.95911968	-76.80415623	-71.36949908	-82.79363139	-59.64084029	-62.77983189	-36.60694638
+2.65	30.67512674	39.423940	45.035195	29.37392815	30.15683058	27.55372367	30.34064945	21.89299742	23.12718161	14.41916856
-2.7	-94.17902966	-101.809706	-110.327273	-80.7635681	-85.22607836	-79.32278515	-92.4622903	-68.51129322	-72.16206099	-40.73603733
+2.7	22.91759469	31.488031	36.990021	22.52458408	22.90070332	20.78373879	22.39573249	16.88450569	17.81231506	11.40256576
-2.75	-102.9524555	-110.316469	-119.118150	-87.28595642	-92.28131225	-85.99569969	-100.6096144	-76.5781085	-80.69047217	-44.21065141
+2.75	16.78889337	25.179187	30.759043	17.04962449	17.12396677	15.83992436	16.85782609	12.99423165	13.67813858	9.210894685
-2.8	-112.9680264	-120.119200	-129.510137	-94.61753337	-100.2323474	-93.52840275	-109.8493856	-86.50414281	-91.19081805	-48.14403024
+2.8	12.39436061	18.460373	25.197228	11.85689301	11.85689301	10.70162065	12.33190914	9.033812097	9.509275891	6.801856081
-2.85	-121.9528591	-128.343533	-138.835463	-100.5960578	-106.7347612	-99.70016812	-117.4586085	-94.79907646	-99.96776006	-51.37575782
+2.85	12.39436061	13.718096	21.903268	10.24841477	10.94123645	10.29790788	12.33190914	8.954553553	9.432684364	4.921766744
-2.9	-131.1687769	-137.638160	-149.404453	-107.1315242	-113.8668057	-106.4840501	-125.8716286	-104.0586013	-109.7713386	-54.9381412
+2.9	12.39436061	13.363133	18.477787	10.24841477	10.94123645	10.29790788	12.33190914	8.954553553	9.432684364	4.921766744
-2.95	-138.5965425	-145.269950	-158.126745	-112.2891542	-119.5180592	-111.8732869	-132.6016841	-111.7696595	-117.939479	-57.77675392
+2.95	12.39436061	13.195197	16.012574	10.24841477	10.94123645	10.29790788	12.33190914	8.954553553	9.432684364	4.921766744
-3	-146.6011937	-153.685190	-177.277422	-117.7052633	-125.4830013	-117.5800938	-139.7900692	-120.3941161	-127.0800257	-60.79285679
+3	12.39436061	13.137588	13.974963	10.24841477	10.94123645	10.29790788	12.33190914	8.954553553	9.432684364	4.921766744
(Span 3) -4	-3.40550324	-3.609714	-3.839793	-2.815878135	-3.006239436	-2.829477017	-3.388343962	-2.46037384	-2.591746143	-1.352316018
+4	134.4085124	148.853582	164.073816	115.7526167	123.1911845	115.2894488	136.6041294	111.7080404	117.794272	59.46065097
-3.05	-3.40550324	-3.640527	-5.330945	-2.815878135	-3.006239436	-2.829477017	-3.388343962	-2.46037384	-2.591746143	-1.352316018
+3.05	129.8304268	143.724679	158.264446	112.264289	119.3463235	111.6092354	131.9603453	105.7585166	111.482556	57.49335996
-3.1	-4.423608266	-5.008724	-7.966696	-3.314410406	-3.314410406	-2.829477017	-3.388343962	-2.587265139	-2.723436988	-2.592903459
+3.1	122.3916702	135.681372	149.206050	106.5799977	113.1012553	105.6437901	124.4736365	96.43314879	101.5924562	54.31069818
-3.15	-6.4766772	-8.131957	-10.022405	-5.761978011	-5.761978011	-4.615178223	-4.615178223	-4.454131383	-4.68855935	-3.814248929
+3.15	*117.0700064*	130.109285	142.947189	*102.5069719*	*108.6384221*	*101.3880535*	*119.1569329*	*89.97200452*	*94.74189009*	*52.04402976*
-3.2	*-9.82949828*	-13.387908	-13.381122	*-9.938180712*	*-9.938180712*	*-8.423829236*	*-8.66968428*	*-7.536354068*	*-7.933004282*	*-5.809729113*
+3.2	*108.5756478*	121.475779	133.244869	*96.00255784*	*101.5276991*	*94.61709872*	*110.7308755*	*80.6274616*	*84.87101221*	*48.44315272*
-3.25	*-12.25880784*	-17.446464	-15.853213	*-12.87594565*	*-12.87594565*	*-11.42508687*	*-11.98722483*	*-9.76876662*	*-10.28291223*	*-7.242732033*
+3.25	*102.5901405*	115.559148	126.576162	*91.42069279*	*96.52858742*	*89.86291053*	*104.8346721*	*74.59282465*	*78.51876279*	*45.91824178*
-3.3	*-16.84567107*	-23.857603	-20.605439	*-17.60939143*	*-17.60939143*	*-16.29552966*	*-17.47236451*	*-13.39906624*	*-14.10428025*	*-9.535459057*
+3.3	*93.5005775*	106.480777	116.401213	*84.20987237*	*88.67467245*	*82.40199603*	*95.60932574*	*66.7844377*	*70.76822229*	*41.96082471*
-3.35	*-21.29593323*	-28.449709	-25.089279	*-21.41390837*	*-21.61600143*	*-19.77350736*	*-21.30116109*	*-16.33966302*	*-17.222184*	*-11.15312713*
+3.35	*87.38168897*	100.314744	109.461401	*79.19501554*	*83.22096459*	*77.2263127*	*89.22690299*	*62.20086144*	*65.89717443*	*39.21882379*
-3.4	*-28.47735368*	-35.837957	-32.411246	*-27.97993055*	*-28.5573835048306*	*-25.79621329*	*-28.0078082479613*	*-21.03799091*	*-22.205825735862*	*-13.70260017*
+3.4	*77.89697942*	90.931798	98.805681	*71.39160628*	74.74643079	*69.1909889*	79.34232896	*54.84249573*	58.08083108	*34.96660225*
-3.45	*-33.58127221*	-41.084979	-37.816968	*-32.60386658*	-33.44738003	*-30.40396094*	-33.43339385	*-24.34853965*	-25.71861425	*-15.74197275*
+3.45	*71.39064524*	84.608185	92.154354	*66.01961965*	68.91982414	*63.67088221*	72.56710689	*49.86707265*	52.79565828	*32.04860865*
-3.5	*-41.67548731*	-49.416902	-46.270620	*-39.73467728*	-41.01259637	*-37.59936924*	-41.88204988	*-29.55984244*	-31.24991742	*-19.34395869*
+3.5	*61.39244304*	75.055705	81.885958	*57.73740502*	59.94720754	*55.17674114*	62.16341664	*42.85402646*	45.34078873	*27.56329912*
-3.55	*-47.34276331*	-55.266475	-52.256025	*-44.70081399*	-46.29051603	*-42.53386032*	-47.71203622	*-33.18489304*	*-35.09857809*	*-21.86955171*
+3.55	*54.58890216*	68.662912	75.124670	*52.08413878*	*53.8293870107436*	*49.389242543228*	55.08876756	*38.63313089*	*40.84881564*	*24.51046545*

-3.6	-56.6088491	-64.460867	-62.097385	-52.43803356	-54.52634216	-50.24173131	-56.84660161	-38.82680901	-41.08992383	-25.82786954
+3.6	44.21257785	59.070915	64.753978	43.4368984	44.48121968	40.55174564	44.30591426	32.39293864	34.20637765	20.61726741
-3.65	-63.20276243	-70.531996	-69.138117	-57.77054149	-60.21051792	-55.56642397	-63.17424401	-42.71151152	-45.21610553	-28.57045172
+3.65	37.2020769	52.693857	57.689139	37.57821034	38.15387818	35.00291366	37.67393034	28.16242465	29.70385498	18.5960814
-3.7	-73.47010222	-80.493976	-80.209924	-66.00046198	-68.99449842	-63.80177316	-72.98520366	-49.84966298	-52.47332946	-32.82340151
+3.7	27.10582762	43.187208	46.979466	29.15579275	29.15579275	27.49674442	29.31681298	22.18237909	23.36406639	15.50468791
-3.75	-80.54228558	-87.372774	-87.912355	-71.6234867	-75.00324118	-69.43963071	-79.71712375	-55.40842603	-58.32465898	-35.74183642
+3.75	23.34408344	36.907373	42.444115	24.47335753	24.47335753	22.51696313	23.77576506	18.60766215	19.58701279	13.41030416
-3.8	-91.45089405	-98.022205	-99.914296	-79.87020331	-83.8252337	-77.72294436	-89.62844108	-64.16202476	-67.53897343	-40.22773822
+3.8	17.56632259	27.605848	36.773988	17.52457659	17.52457659	14.98909407	16.8107023	14.06716287	14.85012903	10.22935765
-3.85	-98.89982521	-105.327574	-108.194545	-85.70338306	-90.07170638	-83.59190335	-96.6645497	-70.33905428	-74.05207767	-43.28086861
+3.85	17.34366259	21.501393	33.131408	13.87074761	14.84930615	13.98486262	16.8107023	14.06716287	14.85012903	8.088767469
-3.9	-110.2974045	-116.567909	-120.998578	-94.57191575	-99.57809084	-92.52960031	-107.3999628	-80.21564041	-84.48486945	-47.93799866
+3.9	17.34366259	18.800302	27.822397	13.87074761	14.84930615	13.98486262	16.8107023	14.06716287	14.85012903	6.925574426
-3.95	-118.0215576	-124.233824	-129.769689	-100.5458085	-105.9878031	-98.55959593	-114.6559508	-86.57759583	-91.6591694	-51.08473729
+3.95	17.34366259	18.595616	24.390949	13.87074761	14.84930615	13.98486262	16.8107023	14.06716287	14.85012903	6.925574426
-5	-129.7558246	-135.963349	-143.242971	-109.5685641	-115.6778278	-107.6810271	-125.6510985	-97.01853137	-102.2414214	-55.8513678
+5	17.34366259	18.493302	20.258361	13.87074761	14.84930615	13.98486262	16.8107023	14.06716287	14.85012903	6.925574426

3-Span: Shear (Max and Min) Raw Data Results - 50' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.29570366	-12.13240472	-11.11475778	-9.673429108	-8.349298449	-11.36017463	-12.78904497	-14.23289551	-15.61834281
End Shear	80.16162405	86.75151094	75.98425909	64.53492228	65.40327965	87.96418928	96.8253905	100.5644423	103.4788201
-0.05	-10.29570366	-12.13240472	-11.11475778	-10.39880812	-8.349298449	-11.36017463	-12.78904497	-14.23289551	-15.61834281
+0.05	73.99262263	78.73349819	68.74268687	58.72351207	60.41680275	81.25347807	89.21621794	92.16635322	94.30367333
-0.1	-10.29570366	-12.13240472	-11.11475778	-11.98179247	-8.349298449	-11.36017463	-12.78904497	-14.23289551	-15.61834281
+0.1	67.20808144	70.26981026	60.7262303	52.00293349	54.95205072	73.87307825	80.83672196	82.9222965	84.21196928
-0.15	-10.29570366	-12.13240472	-11.11475778	-13.79614466	-8.349298449	-11.36017463	-12.78904497	-14.23289551	-15.61834281
+0.15	62.74324179	64.54711586	55.55262785	47.65932027	51.35205363	69.01195764	75.32905846	76.86825041	78.03515247
-0.2	-13.15905427	-13.16376928	-12.13537242	-17.37744165	-10.27558631	-13.4517272	-13.45286082	-14.23289551	-15.61834281
+0.2	56.15661134	56.48460609	48.08007683	41.37615447	46.03549763	61.83419927	67.54823936	68.34711978	68.39771967
-0.25	-16.4208632	-16.42648453	-14.96415948	-19.64608366	-12.30058	-17.35231355	-17.35366644	-17.3346367	-17.41594203
+0.25	52.11923074	51.13658048	43.68231643	37.7057803	42.77300164	57.43033992	62.24711633	62.56454391	62.55867689
-0.3	-21.26498979	-21.41836203	-19.09426195	-22.88265554	-16.11014458	-23.15364621	-24.26812719	-24.24603182	-24.22484417
+0.3	45.80975956	43.86771263	37.61867633	32.53381322	37.66827841	50.5410912	54.49531465	54.323114	54.31805917
-0.35	-24.45243126	-24.88466217	-22.19717271	-24.93627612	-19.76582969	-26.9767361	-28.84110329	-28.81946024	-28.79870155
+0.35	41.71925837	39.22769199	34.10373781	29.43937498	34.35439314	46.06962582	49.47757045	49.3368332	49.33165333
-0.4	-29.81170783	-29.94473311	-26.88481894	-27.87212199	-25.1893455	-33.72200068	-35.61023327	-35.58934325	-35.5693051
+0.4	35.78057297	32.78550939	29.0170647	25.0774614	29.53613642	39.56971643	42.20511732	42.10833849	42.10300687
-0.45	-34.27125863	-33.2176513	-30.16690114	-31.08728236	-28.75412047	-38.5436098	-40.17857744	-40.17857744	-40.17857744
+0.45	31.96644909	29.16893303	25.76178839	22.3257647	26.43656825	35.38933823	37.54313168	37.47337353	37.46797694
-0.5	-40.84819869	-38.21706405	-34.76998581	-35.90825741	-34.00626131	-45.64908045	-48.22763506	-48.13436329	-48.1110193
+0.5	26.48610351	24.51886716	21.10318726	18.37879124	21.97479739	29.37331329	30.74957661	30.82570176	30.82026668
-0.55	-45.14428479	-41.81466252	-37.626909	-38.99838799	-37.43345169	-50.28672551	-53.59866823	-53.45923878	-53.43656117
+0.55	22.93785235	21.78434392	18.1589956	16.16768498	19.13622465	25.54703833	26.36754281	26.35793773	26.50392938
-0.6	-51.43225939	-47.44143589	-42.35521469	-43.4569722	-42.44420208	-57.06899047	-61.47139294	-61.40947274	-61.38382083
+0.6	17.87546067	17.8522356	14.19563746	12.76022222	15.10095501	19.89222823	20.99018607	20.98520613	21.14944009
-0.65	-55.50652088	-52.12984217	-45.9913076	-46.3570153	-45.68712321	-61.45965497	-66.58043497	-67.28563145	-67.26079989
+0.65	15.36638183	15.3535391	12.20796419	11.19517486	12.41714392	16.6413672	17.65810641	17.65317969	17.80955804
-0.7	-61.41798266	-60.24152685	-51.28095523	-50.61426505	-50.38646609	-67.82416992	-74.0058843	-75.8637174	-76.39155502
+0.7	11.81895097	11.80601671	9.386034668	8.965949619	8.891809366	12.54013831	12.96775023	12.96296179	13.1067407
-0.75	-65.21206556	-65.51048576	-55.76588198	-54.17742834	-53.39844509	-71.90481869	-78.78056233	-81.40608061	-82.74810404
+0.75	9.597142547	9.584272799	7.618764112	7.552452423	7.348681485	9.982821776	10.05963335	10.09723702	10.0853097
-0.8	-70.65947887	-73.17523745	-62.87015285	-59.78875808	-57.71636157	-77.75704657	-85.65017888	-89.42261061	-91.98578435
+0.8	6.495580383	6.483018907	5.151980555	5.555010321	5.291313609	6.431703144	6.4398224	6.43592738	6.43218628
-0.85	-74.11500797	-78.44575427	-68.23990704	-64.00756162	-60.45071815	-81.46466356	-90.01811257	-94.55002543	-97.92502232
+0.85	4.522693274	4.579348068	3.637836327	4.327374552	4.016892934	4.359361464	4.433253469	4.362481863	4.359445436
-0.9	-79.0108381	-86.67463745	-76.04111496	-70.11573538	-64.31719235	-86.71006192	-96.22333616	-101.8832732	-106.4688772
+0.9	2.053971965	2.128385715	1.90434401	2.751352596	2.214220984	2.290669321	2.553732243	2.831806628	3.081735182
-0.95	-82.06945382	-91.94450675	-81.05441514	-74.03552476	-66.72724925	-89.98160628	-100.1121405	-106.5145852	-111.9003166
+0.95	2.053971965	2.128385715	1.90434401	2.165223487	1.677407936	2.290669321	2.553732243	2.831806628	3.081735182
-1	-86.32615245	-99.49105826	-88.26133856	-79.67677468	-70.07226487	-94.52563653	-105.5443995	-113.0428333	-119.6145975
+1	2.05E+00	2.13E+00	1.90E+00	1.65E+00	1.68E+00	2.29E+00	2.55E+00	2.83E+00	3.08E+00
(Span 2) -2	-7.48E+00	-7.75E+00	-6.93E+00	-6.01E+00	-6.10E+00	-8.34E+00	-9.29E+00	-1.03E+01	-1.12E+01
+2	8.70E+01	104.4409543	96.46811738	84.24933661	70.47226495	95.10056563	106.557115	114.7935006	122.3653676
-2.05	-7.48E+00	-7.75E+00	-6.93E+00	-6.53E+00	-6.10E+00	-8.34E+00	-9.29E+00	-1.03E+01	-1.12E+01
+2.05	83.22342603	98.15223498	89.57891727	78.76053473	67.48929222	91.04551355	101.7371874	109.0342921	115.6226925
-2.1	-7.475449876	-7.746279525	-6.930877855	-7.678393154	-6.104941719	-8.336912128	-9.294332059	-10.30638659	-11.2160037
+2.1	78.39693881	90.48113866	81.23680966	72.21112722	63.66435039	85.85193392	95.6179411	101.8263218	107.2854283
-2.15	-7.475449876	-7.746279525	-6.930877855	-8.910071166	-6.104941719	-8.336912128	-9.294332059	-10.30638659	-11.2160037
+2.15	73.95426392	83.69549759	73.80292202	66.5201858	60.1318049	81.05975945	90.0121325	95.30121845	99.81614053
-2.2	-8.833493466	-8.851043028	-7.15229321	-11.02970231	-6.734655562	-9.314319816	-9.439733911	-10.30638659	-11.2160037
+2.2	68.478299	75.42175538	66.07899533	60.22330362	55.76515123	75.14048795	83.13022907	87.37261119	90.82396976
-2.25	-11.85147617	-11.9971113	-9.76679232	-12.88199103	-9.323044254	-12.80395156	-13.4132006	-13.40384991	-13.39489981

+2.25	63.58552577	68.07586899	59.65005748	55.12539995	51.85352383	69.84140935	77.00289485	80.37799937	82.95862512
-2.3	-15.70561175	-15.82280664	-13.39907667	-15.65273234	-13.113558	-17.48242431	-18.45308483	-18.44324577	-18.4338181
+2.3	57.70877573	59.98040096	52.22740472	49.17477885	47.1440507	63.465007	69.66675074	72.05427213	73.5201783
-2.35	-19.98585259	-19.24263836	-16.53678587	-18.79888079	-16.62111421	-22.21369236	-23.13386069	-23.11965137	-23.10867111
+2.35	52.57905147	53.14939003	46.00253401	44.05612372	43.02383075	57.88921529	63.06412892	64.64548054	65.35326655
-2.4	-25.30673728	-23.39252905	-20.3995315	-22.65377006	-20.96388328	-28.07478537	-29.63084664	-29.58150144	-29.57015322
+2.4	46.11959193	45.75065621	39.13302719	38.1807326	37.99372861	50.85483256	55.26682771	56.0318877	55.97601436
-2.45	-30.09609154	-27.66389419	-24.49785361	-25.93203558	-24.85956126	-33.33503957	-35.50152384	-35.41748326	-35.40596702
+2.45	40.96960533	39.67766232	33.94886021	33.52576402	33.667078	45.23553557	48.89529813	48.94956948	48.93645163
-2.5	-35.88659978	-33.82816035	-29.48294016	-29.85508097	-29.55569842	-39.67902575	-42.62371574	-42.49445981	-42.48292146
+2.5	35.04627266	32.87623706	28.7579314	29.27112937	28.87497394	38.75931016	41.58863778	41.46621762	41.45471225
-2.55	-40.97191838	-39.68006708	-33.95078084	-33.52691799	-33.6690105	-45.23807653	-48.89810785	-48.95258701	-48.93941592
+2.55	30.09388985	27.66204655	24.49626431	25.93123959	24.85772254	33.33261051	35.4988522	35.41490378	35.4034331
-2.6	-46.98336272	-46.78264989	-40.01435958	-38.95282373	-38.69004694	-51.79637496	-56.33709354	-57.21986922	-57.37542101
+2.6	24.52545338	22.78945905	19.73367055	22.10432284	20.32721692	27.21538113	28.67511829	28.63125439	28.61998373
-2.65	-52.53578954	-53.15211205	-46.0048637	-44.05737015	-43.02576688	-57.89176306	-62.97992849	-64.60856936	-65.31710634
+2.65	19.98385962	19.24123697	16.53559248	18.79804378	16.61942862	22.21146835	23.13146105	23.11733195	23.10639261
-2.7	-58.55919765	-61.13353633	-53.28161726	-50.02827384	-47.82634011	-64.38851951	-70.72682923	-73.2497408	-74.84832522
+2.7	15.06752555	15.26623618	12.87653725	15.27844453	12.5494277	16.72179168	17.70699304	17.69726585	17.68793454
-2.75	-63.58777245	-68.07867599	-59.65249186	-55.12662166	-51.85538402	-69.84385948	-77.00565558	-80.38106445	-82.96199501
+2.75	11.85006767	12.03676195	9.765618252	12.91477681	9.321610038	12.80229958	13.4113542	13.40205624	13.39313778
-2.8	-69.27953256	-76.58405372	-67.15423844	-61.10962121	-56.4048971	-76.00738353	-84.13543863	-88.52558282	-92.12630428
+2.8	8.350850822	8.368162784	6.930885774	10.72548685	6.416683196	8.758464564	9.294342918	10.30639345	11.21599765
-2.85	-73.95633312	-83.69826514	-73.74422206	-66.52154723	-60.1335076	-81.06201881	-90.01470793	-95.30411619	-99.81938294
+2.85	7.475461689	7.746279765	6.930885774	8.909599843	6.104936765	8.336914858	9.294342918	10.30639345	11.21599765
-2.9	-79.11334519	-91.59804813	-82.41526064	-73.15538208	-64.23307298	-86.62375222	-96.52410079	-102.8875183	-108.5067128
+2.9	7.475461689	7.746279765	6.930885774	7.500057384	6.104936765	8.336914858	9.294342918	10.30639345	11.21599765
-2.95	-83.22522052	-98.15483409	-89.58156461	-78.76182133	-67.49075247	-91.04746351	-101.7394427	-109.03689	-115.6256596
+2.95	7.475461689	7.746279765	6.930885774	6.527452508	6.104936765	8.336914858	9.294342918	10.30639345	11.21599765
-3	-87.59879664	-105.4607915	-97.60174359	-85.15097805	-70.9414567	-95.73883494	-107.3200607	-115.7133633	-123.4503681
+3	7.475461689	7.746279765	6.930885774	6.009543345	6.104936765	8.336914858	9.294342918	10.30639345	11.21599765
(Span 3) -4	-2.053975211	-2.13E+00	-1.90E+00	-1.65E+00	-1.677406575	-2.290670071	-2.553735227	-2.831808514	-3.081733521
+4	85.64353754	98.26176609	87.08507582	78.75561363	69.53663963	93.79775568	104.6714382	111.9884499	118.3634446
-3.05	-2.053975211	-2.13E+00	-1.90E+00	-1.99E+00	-1.677406575	-2.290670071	-2.553735227	-2.831808514	-3.081733521
+3.05	82.8051261	93.2299205	82.27970805	74.99451311	67.30613549	90.76773798	101.0491951	107.6354467	113.2196693
-3.1	-2.33924175	-2.39662455	-1.904346186	-2.935558654	-2.493168327	-2.290670071	-2.553735227	-2.831808514	-3.081733521
+3.1	78.21776379	85.32601462	74.76057682	69.11506399	63.69148821	85.86100785	95.21665384	100.6892726	105.0734399
-3.15	-4.062959627	-4.125932228	-3.277163024	-4.039382536	-3.711864068	-3.92290149	-3.929001858	-3.925852856	-3.922835611
+3.15	74.95327985	79.83926011	69.55903437	65.04269869	61.11335551	82.36342709	91.07912257	95.79966125	99.37663899
-3.2	-6.993817936	-6.981043768	-5.548058652	-5.877545308	-5.623259493	-7.000449071	-7.008720203	-7.004741354	-7.000945339
+3.2	69.7705569	71.91603986	61.50528751	58.71470203	57.01227628	76.80262306	84.52795761	88.10938111	90.46874794
-3.25	-9.061962233	-9.048962764	-7.19291339	-7.209477785	-6.995106888	-9.368381761	-9.377355732	-9.480882213	-9.369303362
+3.25	66.13836233	66.80551214	56.87956471	55.07286459	54.13319682	72.90053792	79.94751583	82.76423279	84.30941881
-3.3	-12.39427134	-12.38116745	-9.843486065	-9.329316734	-9.458535645	-13.20389224	-13.72476134	-13.71989626	-13.86580243
+3.3	60.44787	58.90291151	50.41203302	49.9192012	49.61570435	66.78020061	72.78622664	74.45156141	74.7756158
-3.35	-14.75964624	-14.74660456	-11.7250959	-10.81577571	-11.80925022	-15.93855	-16.8522573	-16.84728922	-17.00161767
+3.35	56.50632308	53.49440011	46.88512447	47.08107495	46.48235259	62.53657511	67.83524698	68.73205677	68.70749655
-3.4	-18.67264811	-18.4942232374311	-14.70626048	-13.18211365	-15.75589846	-20.7718316373342	-21.84979967	-21.8447505	-22.0108472737137
+3.4	50.39554686	46.47627828	41.43156265	42.72712326	41.61846395	55.95124591	60.17247219	59.97571539	59.9539718
-3.45	-21.95296936	-21.11602261	-17.44591855	-15.35715189	-18.44656036	-24.50644469	-25.37208428	-25.36701078	-25.54041493
+3.45	46.20304328	42.68681727	38.31325903	39.75488111	38.27754827	51.42913942	54.92333454	54.77249587	54.75003262
-3.5	-27.38074193	-25.21737142	-21.8616799	-19.0216654	-22.70395683	-30.35626257	-31.83950577	-31.90972673	-31.90423504
+3.5	39.75955436	37.2904812	34.02764606	35.11931832	33.13727973	44.47339375	46.86756222	46.7859913	46.76254251
-3.55	-31.0348939	-28.28809161	-24.96793736	-21.65339247	-25.67893785	-34.36757206	-36.40558896	-36.34219475	-36.33676092
+3.55	35.37438822	34.0206357498153	30.9588810577941	31.9054621816233	29.6354230031769	39.7358315199167	41.3926402125878	41.3572654426316	41.33319774

-3.6	-36.75545838	-33.71234951	-29.85030936	-25.78040361	-30.3278086	-40.63750011	-43.39785006	-43.29389426	-43.28853827
+3.6	28.68575913	29.11159418	26.03552832	27.39364724	24.28879154	32.50413757	34.48767198	34.46671352	34.44661402
-3.65	-40.71514917	-38.09771572	-33.24190461	-28.64471587	-33.54040754	-44.97138507	-48.24683956	-48.11359373	-48.10833766
+3.65	25.2409669	25.7379057	22.96186046	25.43660276	20.67269814	28.01631577	29.97437376	29.95296025	29.93234628
-3.7	-46.85028152	-45.05695322	-38.51374794	-33.28662788	-38.51073379	-51.67786537	-55.77266644	-55.59223235	-55.58715695
+3.7	20.46027228	20.53880406	18.41415944	22.35575506	15.18972116	22.1891882	23.11560412	23.09351265	23.07226679
-3.75	-51.05715114	-49.90238953	-42.62947186	-36.83404174	-41.91432165	-56.27129589	-60.9412428	-61.14295988	-61.13701974
+3.75	17.2305105	17.23657125	15.66053763	20.19823276	12.80251337	18.3211974	18.49748448	18.4749686	18.45333917
-3.8	-57.24700471	-57.76931624	-49.30280759	-42.40425163	-46.91622333	-63.02305174	-68.55689896	-69.81592862	-69.98546928
+3.8	12.33827998	12.34299474	11.41756022	16.79482356	9.765323796	12.47090391	12.78904803	14.23291799	15.6183544
-3.85	-61.63862977	-63.1428174	-54.28525735	-46.59363138	-50.46102158	-67.80880164	-73.96728027	-75.74747768	-76.41123704
+3.85	10.29570884	12.1324039	11.11475421	14.40748568	8.349304688	11.36019139	12.78904803	14.23291799	15.6183544
-3.9	-68.33522674	-71.72596962	-62.04481728	-53.10824765	-55.86047477	-75.09976393	-82.22793874	-84.45419458	-85.88115739
+3.9	10.29570884	12.1324039	11.11475421	11.70320228	8.349304688	11.36019139	12.78904803	14.23291799	15.6183544
-3.95	-72.85874269	-77.24670588	-67.40529568	-57.58923223	-59.50405616	-80.02059054	-87.81489362	-90.61764241	-92.60974778
+3.95	10.29570884	12.1324039	11.11475421	10.6365402	8.349304688	11.36019139	12.78904803	14.23291799	15.6183544
-5	-79.70945392	-86.29492908	-75.63364243	-64.49044022	-65.01664672	-87.46686017	-96.28618909	-99.99533868	-102.8845386
+5	10.29570884	12.1324039	11.11475421	9.673427151	8.349304688	11.36019139	12.78904803	14.23291799	15.6183544

3-Span: Shear (Max and Min) Raw Data Results - 50' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-20.92145578	-22.26216641	-13.83924064	-17.20431332	-17.74545739
End Shear	131.1638996	132.4326594	96.54140145	117.8383695	118.6320219
-0.05	-20.92145578	-22.26216641	-13.83924064	-17.20431332	-17.74545739
+0.05	118.5986601	120.7811131	87.57715852	106.9524191	107.3249761
-0.1	-20.92145578	-22.26216641	-13.83924064	-17.20431332	-17.74545739
+0.1	103.5997172	106.9799016	77.25179335	94.39815311	94.66523224
-0.15	-20.92145578	-22.26216641	-13.83924064	-17.20431332	-17.74545739
+0.15	94.17783957	98.06995879	70.86694383	86.6208147	86.43889213
-0.2	-20.92145578	-22.26216641	-15.08843365	-17.20431332	-17.74545739
+0.2	81.58993631	85.1183075	61.67355763	75.1408612	74.67541249
-0.25	-20.92145578	-22.26216641	-18.97569534	-20.08261717	-20.17587886
+0.25	73.64464512	76.78939091	56.81088959	67.90752918	67.76457179
-0.3	-28.7972283	-29.57535419	-24.98267817	-27.53593988	-28.08265255
+0.3	62.96204597	64.80586266	50.62289877	57.66900812	59.694626
-0.35	-34.18916611	-35.36229917	-29.12292895	-32.82486522	-33.25796122
+0.35	56.33372613	57.71013912	46.41414274	51.8469375	54.45266082
-0.4	-42.95354002	-43.05844319	-35.77619554	-40.61019313	-40.85589407
+0.4	46.83621534	47.56028016	40.2709995	44.07446311	46.82604589
-0.45	-48.55028681	-48.84551019	-40.86960477	-45.66528656	-46.61431514
+0.45	41.17961883	41.61132854	36.30235131	39.71749942	41.91630804
-0.5	-57.52718705	-59.27395718	-48.63866978	-53.39060623	-56.08875347
+0.5	33.62781616	33.59663631	30.56256931	33.4130486	34.84303952
-0.55	-63.19726606	-66.37124613	-54.12075468	-58.92567952	-62.64709635
+0.55	29.06303917	28.36036502	26.89163428	29.37875682	30.33886036
-0.6	-71.17330275	-76.49121265	-61.86736339	-67.56876972	-72.65834668
+0.6	23.30991417	21.74043007	21.64163211	23.60544672	23.92892318
-0.65	-77.11118883	-82.88117407	-66.71093786	-73.2719453	-79.19939624
+0.65	19.67567017	18.26651591	18.32601465	19.95666423	19.99496863
-0.7	-89.75820051	-96.17047342	-73.48969424	-81.21567973	-88.3778439
+0.7	14.55122397	13.51185448	13.65221557	14.80877391	14.82387709
-0.75	-98.62858222	-106.5310734	-77.68130996	-86.97723924	-94.07136778
+0.75	11.36753337	10.55784566	11.01271369	11.7468946	11.60522614
-0.8	-111.4197262	-121.9598418	-83.47201586	-98.6115459	-101.9676626
+0.8	7.038678128	6.672155742	7.428845015	7.860272611	7.177146096
-0.85	-119.451523	-131.7382208	-86.99818423	-106.1331161	-106.799182
+0.85	4.633535944	4.52157973	5.246983046	5.537411086	4.670737574
-0.9	-132.1988392	-145.6150076	-95.7523123	-117.4694489	-119.2000051
+0.9	3.528730396	3.852265373	2.290005489	2.966140721	2.982811977
-0.95	-141.7123576	-154.3217489	-102.0718225	-125.4440373	-127.443533
+0.95	3.528730396	3.852265373	2.290005489	2.966140721	2.982811977
-1	-155.4428611	-166.5355344	-111.6506358	-136.9223979	-139.2585719
+1	3.53E+00	3.85E+00	2.29E+00	2.97E+00	2.98E+00
(Span 2) -2	-1.28E+01	-1.40E+01	-8.33E+00	-1.08E+01	-1.09E+01
+2	171.747153	175.1437276	119.5375342	145.9016587	150.3357061
-2.05	-1.28E+01	-1.40E+01	-8.33E+00	-1.08E+01	-1.09E+01
+2.05	159.0034445	160.9927687	111.7429915	136.487134	140.0543337
-2.1	-12.84284727	-14.02035541	-8.334496104	-10.79529663	-10.855972
+2.1	143.8452776	146.3995257	102.3355313	125.1062797	127.7196875
-2.15	-12.84284727	-14.02035541	-8.334496104	-10.79529663	-10.855972
+2.15	130.3446705	134.519913	94.09621278	115.1226223	116.7750302
-2.2	-12.84284727	-14.02035541	-10.14712717	-10.79537177	-10.855972
+2.2	114.9307344	119.8741411	83.88374036	102.8929008	103.6269179
-2.25	-14.96045678	-14.08987322	-13.82081138	-15.14961137	-15.26896332

+2.25	103.076843	107.5921179	75.40362098	92.41464375	93.52554993
-2.3	-20.74994204	-19.78497318	-18.80952641	-20.93506261	-20.92747384
+2.3	89.47396839	93.64973357	66.3112863	80.79368814	81.58630772
-2.35	-26.16514811	-25.07449081	-23.37089409	-25.98536901	-26.35158157
+2.35	78.15332908	82.29764527	59.65342248	71.46544985	71.26569116
-2.4	-33.24558481	-32.87923525	-29.37063962	-32.16321433	-33.63846552
+2.4	66.45058066	69.9646196	51.7946827	61.03145275	61.506063
-2.45	-39.39920749	-40.33041439	-34.35527074	-37.64760423	-39.96067353
+2.45	57.1663257	59.74804318	45.65527538	52.42226627	54.08853909
-2.5	-48.75938845	-50.41125361	-40.31312281	-44.82937543	-47.42001616
+2.5	47.38665854	48.93354923	39.45306982	43.76795966	46.34021481
-2.55	-57.16961658	-59.74871524	-45.65775796	-52.42559275	-54.09146131
+2.55	39.39621601	40.36705509	34.3532772	37.6453974	39.9582202
-2.6	-68.10005572	-71.70311894	-52.80080701	-62.50267838	-62.73068686
+2.6	32.22904172	31.71137231	28.55227366	31.26241344	32.62425315
-2.65	-78.1572224	-82.29836365	-59.6560639	-71.46906349	-71.22543527
+2.65	26.1628406	25.06783477	23.43468646	25.98331879	26.34933908
-2.7	-91.40034908	-95.59382753	-67.58010029	-82.44251461	-83.25287273
+2.7	19.64740606	18.49933471	18.07171678	20.11710233	20.1095876
-2.75	-103.0813454	-107.5929163	-75.40688359	-92.41861526	-93.52950207
+2.75	14.95871256	14.08959895	13.81918951	15.14781852	15.3484176
-2.8	-116.9197459	-122.0152214	-85.27466272	-104.5824458	-105.4259957
+2.8	12.84284472	14.0203558	9.593644858	10.79528766	10.85598052
-2.85	-130.2705065	-134.5207012	-94.09951232	-115.1266251	-116.6985045
+2.85	12.84284472	14.0203558	8.334501174	10.79528766	10.85598052
-2.9	-146.0193607	-148.3144984	-103.6988609	-126.7568007	-129.5024572
+2.9	12.84284472	14.0203558	8.334501174	10.79528766	10.85598052
-2.95	-159.0083716	-160.9936058	-111.7461348	-136.4909347	-140.0584128
+2.95	12.84284472	14.0203558	8.334501174	10.79528766	10.85598052
-3	-173.8467497	-177.4878857	-120.8093511	-147.4364495	-152.0190812
+3	12.84284472	14.0203558	8.334501174	10.79528766	10.85598052
(Span 3) -4	-3.528729695	-3.852265481	-2.290006882	-2.966138254	-2.982814316
+4	153.1969689	164.5710588	110.0852967	135.0474896	137.3329108
-3.05	-3.528729695	-3.852265481	-2.290006882	-2.966138254	-2.982814316
+3.05	144.0419404	156.4278503	103.6984098	127.3940318	129.4550652
-3.1	-3.528729695	-3.852265481	-2.74530602	-2.966138254	-2.982814316
+3.1	129.7732503	143.3686345	94.19584094	115.4335015	117.0909501
-3.15	-4.172182567	-4.00967732	-4.727289439	-4.98422336	-4.208622393
+3.15	*121.3920739*	*134.11677*	*87.84650214*	*107.9772296*	*108.5103559*
-3.2	*-7.742904565*	*-7.234962416*	*-7.999631815*	*-8.468035758*	*-7.884605441*
+3.2	*109.3445386*	*119.4500738*	*82.5462983*	*96.69608945*	*100.702537*
-3.25	*-10.68326462*	*-9.873372868*	*-10.37617037*	*-11.06791506*	*-10.83728624*
+3.25	*100.8165228*	*109.1635619*	*78.68558834*	*88.93883983*	*95.438046*
-3.3	*-15.37878867*	*-14.30610664*	*-14.40692018*	*-15.64044762*	*-15.65605958*
+3.3	*87.62935136*	*93.5983175*	*72.3980972*	*79.93964225*	*86.89763895*
-3.35	*-18.79570459*	*-17.47791061*	*-17.52336969*	*-19.07300905*	*-19.11076825*
+3.35	*78.99393947*	*84.43289404*	*67.87865801*	*74.64361857*	*80.77833778*
-3.4	*-24.24641722*	*-22.80870358*	*-22.49621213*	*-24.54554803*	*-24.96945676*
+3.4	*70.53011062*	*74.84820785*	*60.6132201*	*66.08861457*	*70.9666793*
-3.45	*-28.08246763*	*-27.22269438*	*-25.99678044*	*-28.39503856*	*-29.24344593*
+3.45	*65.58622021*	*68.10135711*	*55.44855145*	*60.27091121*	*64.24397175*
-3.5	*-34.85690766*	*-34.61390595*	*-31.50259172*	*-34.44583083*	*-35.99896876*
+3.5	*57.16020654*	*57.45565845*	*47.22536713*	*51.96844514*	*54.40664612*
-3.55	*-39.89224599*	*-40.18177008*	*-35.32966432*	*-38.64939892*	*-40.71519874*
+3.55	*51.19100802*	*51.07052283*	*42.1282246*	*46.90803909*	*48.1629383*
-3.6	*-48.38363913*	*-49.20998823*	*-41.28202738*	*-45.18413854*	*-48.07899901*
+3.6	*42.59410089*	*42.37551998*	*34.67341756*	*39.32593737*	*39.60138854*

-3.65	*-54.71629697*	*-55.97753445*	*-45.37799452*	*-50.4670613*	*-53.16410597*
+3.65	*36.78748473*	*36.79301814*	*30.23738825*	*34.13522526*	*34.53559746*
-3.7	*-64.65773563*	*-66.75897777*	*-51.69045499*	*-59.33907358*	*-61.02625362*
+3.7	*28.45785247*	*28.28584886*	*23.99033118*	*26.29658252*	*26.77321024*
-3.75	*-71.70434081*	*-74.74911936*	*-55.72669626*	*-66.1658508*	*-66.40690169*
+3.75	*23.02324252*	*23.04603609*	*19.98531736*	*21.32715459*	*21.50152977*
-3.8	*-83.62091673*	*-87.24089257*	*-63.16877543*	*-76.96787961*	*-76.59970972*
+3.8	*20.92143989*	*22.26216351*	*14.14770641*	*17.20430756*	*17.74545666*
-3.85	*-91.89757293*	*-95.8764428*	*-69.30014868*	*-84.71808043*	*-84.44318108*
+3.85	*20.92143989*	*22.26216351*	*13.83924973*	*17.20430756*	*17.74545666*
-3.9	*-105.9846675*	*-109.2397441*	*-78.94834937*	*-96.46217833*	*-96.74379097*
+3.9	*20.92143989*	*22.26216351*	*13.83924973*	*17.20430756*	*17.74545666*
-3.95	*-115.9856608*	*-118.4312549*	*-85.83291618*	*-104.8328743*	*-105.1914823*
+3.95	*20.92143989*	*22.26216351*	*13.83924973*	*17.20430756*	*17.74545666*
-5	*-130.5080555*	*-132.5782701*	*-96.02432737*	*-117.2107109*	*-118.0057688*
+5	*20.92143989*	*22.26216351*	*13.83924973*	*17.20430756*	*17.74545666*

3-Span: Moment (Max and Min) Raw Data Results - 50' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem*	*HL-93 Truck Train*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.98E-13	*-1.11E-13*	*-1.83E-13*	-9.35E-14	-9.99E-14	-7.36E-14	-9.76E-14	-6.96E-14	-7.40E-14	-7.76E-14
End Shear	1.40E-13	*1.36E-13*	*1.76E-13*	9.04E-14	9.90E-14	7.95E-14	9.27E-14	7.72E-14	8.16E-14	6.83E-14
-0.05	-42.7111267	*-46.23321861*	*-50.64590256*	-34.6768425	-37.1232199	-34.9621227	-42.0267586	-35.1678544	-37.1253176	-17.31393464
+0.05	285.3639198	*318.6960606*	*333.3523956*	255.1027459	268.9823324	250.1752701	291.3224532	220.7301802	232.5465495	129.6875536
-0.1	-85.4222534	*-92.46643721*	*-101.2918051*	-69.353685	-74.2464398	-69.9242454	-84.0535171	-70.3357088	-74.2506352	-34.62786928
+0.1	527.8262512	*595.8556861*	*616.7587294*	473.8964204	499.1958359	463.970654	539.0784891	399.0892203	420.3387692	239.68653
-0.15	-128.1333801	*-138.6996558*	*-151.9377077*	-104.030527	-111.36966	-104.886368	-126.080276	-105.503563	-111.375953	-51.94180392
+0.15	727.8694683	*831.0945181*	*851.2452307*	656.2833199	690.224805	640.8882116	742.259283	538.4151308	566.8887515	330.3777567
-0.2	-170.8445068	*-184.9328744*	*-202.5836102*	-138.70737	-148.49288	-139.848491	-168.107034	-140.671418	-148.50127	-69.25573855
+0.2	885.8633375	*1024.932714*	*1038.12572*	802.5809576	842.639033	781.5440649	902.0343844	640.9613875	674.6961973	402.2706308
-0.25	-213.5556335	*-231.166093*	*-253.2295128*	-173.384212	-185.616099	-174.810613	-210.133793	-175.839272	-185.626588	-86.56967319
+0.25	1003.179054	*1178.110313*	*1179.001617*	913.7987476	957.5804414	887.0482763	1038.694159	727.8666487	767.1618871	456.003087
-0.3	-256.2667602	*-277.3993116*	*-303.8754154*	-208.061055	-222.739319	-209.772736	-252.160551	-211.007126	-222.751905	-103.8836078
+0.3	1092.471831	*1291.587507*	*1275.762029*	991.183237	1036.446306	974.5369054	1144.842663	791.7054516	835.8801566	492.6516454
-0.35	-298.9778869	*-323.6325302*	*-354.5213179*	-242.737897	-259.862539	-244.734859	-294.18731	-246.174981	-259.877223	-121.1975425
+0.35	1159.24835	*1366.544088*	*1348.600482*	1037.785367	1094.79466	1036.132756	1211.813543	823.900295	868.8029927	513.1073998
-0.4	-341.6890136	*-369.8657489*	*-405.1672205*	-277.41474	-296.985759	-279.696982	-336.214069	-281.342835	-297.002541	-138.5114771
+0.4	1185.520811	*1404.380168*	*1390.025522*	1072.651998	1128.301911	1065.944061	1240.241028	840.35087	887.2539395	518.0081449
-0.45	-384.4001403	*-416.0989675*	*-455.813123*	-312.091582	-334.108979	-314.659104	-378.240827	-316.510689	-334.127858	-155.8254117
+0.45	1173.877916	*1406.715597*	*1391.016794*	1076.666832	1129.054171	1065.538947	1232.403522	824.5801415	871.4840729	508.4964446
-0.5	-427.111267	*-462.3321861*	*-506.4590256*	-346.768425	-371.232199	-349.621227	-420.267586	-351.678544	-371.253176	-173.1393464
+0.5	1127.226088	*1388.746125*	*1384.918611*	1057.820865	1110.994084	1047.392794	1213.211345	790.3412054	835.9766973	496.2096782
-0.55	-469.8223937	*-508.5654047*	*-557.1049282*	-381.445267	-408.355419	-384.58335	-462.294344	-386.846398	-408.378493	-190.453281
+0.55	1075.010997	*1340.228423*	*1358.572495*	1014.859641	1068.507826	1009.529161	1174.252131	777.1654039	820.7563415	491.6830344
-0.6	-512.5335204	*-554.7986233*	*-607.7508307*	-416.12211	-445.478639	-419.545472	-504.321103	-422.014253	-445.503811	-207.7672157
+0.6	1034.273316	*1259.820571*	*1292.231427*	945.8920351	997.5109674	944.4686413	1102.409987	749.6392779	790.9616142	471.2685991
-0.65	-555.2446471	*-601.0318419*	*-658.3967333*	-450.798952	-482.601859	-454.507595	-546.347861	-457.182107	-482.629129	-225.0811503
+0.65	957.0222334	*1149.774804*	*1188.589774*	864.9077222	902.5410812	854.64439	999.4524352	686.8667814	725.6045523	436.073989
-0.7	-597.9557738	*-647.2650605*	*-709.0426358*	-485.475795	-519.725078	-489.469718	-588.37462	-492.349961	-519.754446	-242.3950849
+0.7	844.7819351	*1012.563137*	*1061.609355*	760.5332929	792.8870264	742.7301851	868.4447642	609.4767411	643.1551794	387.3355466
-0.75	-640.6669005	*-693.4982791*	*-759.6885384*	-520.152637	-556.848298	-524.43184	-630.401379	-527.517816	-556.879764	-259.7090196
+0.75	700.059627	*850.8778133*	*905.3101478*	634.9490668	659.7782288	611.6405256	712.8039689	499.1356867	525.9774721	326.4181142
-0.8	-683.3780272	*-739.7314977*	*-810.334441*	-554.82948	-593.971518	-559.393963	-672.428137	-562.68567	-594.005081	-277.0229542
+0.8	526.1459175	*667.6306837*	*716.4926733*	491.079494	506.3092247	464.5305894	536.2388115	366.9938879	387.2355251	254.81498
-0.85	-726.0891539	*-792.3202526*	*-897.0550259*	-589.506322	-631.094738	-594.356086	-714.454896	-597.853524	-631.130399	-294.3368889
+0.85	333.7153634	*472.3091507*	*510.5109078*	332.0860042	335.8297979	304.7963327	342.7499334	251.0225863	264.6220502	178.025983
-0.9	-768.8002806	*-870.0107655*	*-1072.388097*	-624.183165	-668.217958	-629.318209	-756.481654	-633.021379	-668.255716	-311.6508235
+0.9	200.6677726	*288.5816136*	*370.7305038*	191.2987211	191.2987211	164.1064635	170.9068217	145.2280566	152.8716385	118.8008844
-0.95	-811.5114073	*-968.8448987*	*-1290.051606*	-658.860007	-705.341178	-664.280331	-798.508413	-668.189233	-705.381034	-328.9647581
+0.95	158.2288114	*175.8106394*	*276.1379551*	133.7543201	142.7963888	134.4002196	160.9462348	116.8675715	123.1080387	64.23499316
-1	-854.2225268	*-1085.258684*	*-1543.372627*	-693.536831	-742.464388	-699.242464	-840.535168	-722.866636	-766.702344	-346.2787038
+1	166.5566411	*180.4857859*	*191.9874309*	140.7940226	150.31199	141.4739133	169.4170864	123.0184953	129.5874093	67.61578317
(Span 2) -2	-854.2225268	*-1085.258684*	*-1543.372627*	-693.536831	-742.464388	-699.242464	-840.535168	-722.866636	-766.702344	-346.2787038
+2	166.5566411	*180.4857859*	*191.9874309*	140.7940226	150.31199	141.4739133	169.4170864	123.0184953	129.5874093	67.61578317
-2.05	-595.0766051	*-782.5632358*	*-1208.15135*	-492.04569	-525.309377	-494.421957	-592.078207	-487.703467	-517.558237	-236.3032929
+2.05	127.1546516	*143.6620291*	*249.4031783*	107.4866476	114.7529677	108.0056974	129.3384074	93.91624257	98.93116097	64.49857547
-2.1	-554.7949331	*-659.544457*	*-922.8764829*	-458.738342	-489.750359	-460.953757	-551.999502	-400.822688	-422.224722	-220.307551
+2.1	236.9039151	*325.3430339*	*337.8919797*	229.2262174	229.2262174	213.079452	226.6552856	175.0505436	184.2637301	139.8339804
-2.15	-514.5132611	*-566.1342784*	*-687.812596*	-425.430994	-454.19134	-427.485556	-511.920797	-371.720389	-391.568498	-204.3118091
+2.15	396.884158	*538.3550488*	*471.1114904*	398.4038391	403.5996556	383.186296	429.517149	299.9778534	316.308623	206.2098253
-2.2	-474.2315891	*-503.4111441*	*-539.6680661*	-392.123646	-418.632322	-394.017355	-471.842092	-342.61809	-360.912273	-188.3160672
+2.2	620.8286628	*761.5475611*	*682.1367338*	584.6256815	603.4069775	571.4705869	658.8594247	440.1193073	464.0502053	298.1801274

-2.25	**-433.9499171**	***-467.8410127***	***-524.390966***	**-358.816298**	**-383.073303**	**-360.549155**	**-431.763388**	**-313.515791**	**-330.256049**	**-172.3203253**
+2.25	**814.5702994**	***976.8101136***	***907.0325839***	**745.949497**	**775.9242673**	**735.0954543**	**854.1062093**	**612.3152954**	**646.4230984**	**376.9279137**
-2.3	**-393.6682451**	***-435.3255198***	***-524.3879876***	**-325.50895**	**-347.514285**	**-327.080954**	**-391.684683**	**-284.413492**	**-299.599825**	**-156.3245834**
+2.3	**995.569226**	***1164.724788***	***1111.57359***	**881.537343**	**925.6451105**	**878.1042654**	**1025.641993**	**751.0984627**	**793.7714444**	**448.1260935**
-2.35	**-353.3865731**	***-402.8100269***	***-524.3850092***	**-292.201602**	**-311.955266**	**-293.612754**	**-351.605978**	**-255.311192**	**-268.943601**	**-140.3288414**
+2.35	**1122.820427**	***1309.034181***	***1262.804473***	**989.7611318**	**1043.559364**	**986.6952155**	**1152.902632**	**850.3930746**	**897.7765502**	**495.7632641**
-2.4	**-313.1049011**	***-370.294534***	***-524.3820309***	**-258.894254**	**-276.396248**	**-260.144553**	**-311.527274**	**-226.208893**	**-238.287377**	**-124.3330995**
+2.4	**1221.148653**	***1415.877037***	***1378.35677***	**1072.713687**	**1131.203524**	**1069.619922**	**1248.523067**	**922.5183071**	**974.4873298**	**532.3693145**
-2.45	**-272.8232291**	***-337.7790411***	***-524.3790525***	**-225.586906**	**-240.83723**	**-226.676352**	**-271.448569**	**-197.106594**	**-207.631152**	**-108.3373576**
+2.45	**1263.445784**	***1475.723648***	***1432.04504***	**1119.088524**	**1177.920506**	**1110.62903**	**1296.203279**	**950.927995**	**1005.19717**	**545.2146803**
-2.5	**-232.5415571**	***-305.2636372***	***-524.3760742***	**-192.279728**	**-205.278233**	**-193.208246**	**-231.369864**	**-168.004295**	**-176.975074**	**-92.34161569**
+2.5	**1271.033958**	***1493.271156***	***1444.298245***	**1135.536487**	**1193.788564**	**1125.727895**	**1305.944761**	**945.0051882**	**999.3679467**	**545.2999761**
-2.55	**-266.865243**	***-337.7791484***	***-524.3730958***	**-225.587103**	**-240.837256**	**-226.676462**	**-271.448382**	**-197.106285**	**-207.631322**	**-108.3373294**
+2.55	**1226.274671**	***1475.75828***	***1432.045072***	**1119.068969**	**1177.905766**	**1110.628542**	**1296.191537**	**950.9191514**	**1005.187415**	**545.2169938**
-2.6	**-306.2672325**	***-370.2946596***	***-524.3701175***	**-258.894478**	**-276.396278**	**-260.144677**	**-311.527061**	**-226.208538**	**-238.287571**	**-124.3330669**
+2.6	**1182.370036**	***1415.949532***	***1378.356886***	**1072.72271**	**1131.216991**	**1069.640956**	**1248.556849**	**922.5267993**	**974.4958061**	**532.3803135**
-2.65	**-345.669222**	***-402.8101708***	***-524.3671391***	**-292.201853**	**-311.9553**	**-293.612893**	**-351.60574**	**-255.31079**	**-268.943819**	**-140.3288045**
+2.65	**1103.761895**	***1309.060326***	***1262.804543***	**989.7658424**	**1043.568109**	**986.7118075**	**1152.905772**	**850.3968818**	**897.7800898**	**495.7641381**
-2.7	**-385.0712114**	***-435.325682***	***-524.3641608***	**-325.509228**	**-347.514323**	**-327.081109**	**-391.684419**	**-284.413043**	**-299.600067**	**-156.324542**
+2.7	**989.9048225**	***1164.790107***	***1111.57354***	**881.5975488**	**925.6510079**	**878.1181899**	**1025.666769**	**751.1347977**	**793.8091574**	**448.1357977**
-2.75	**-424.4732009**	***-467.8411932***	***-524.3611824***	**-358.816603**	**-383.073345**	**-360.549325**	**-431.763098**	**-313.515296**	**-330.256316**	**-172.3202795**
+2.75	**822.1602444**	***976.8311259***	***907.0327589***	**745.9744284**	**775.9520391**	**735.1066696**	**854.1272943**	**612.3264414**	**646.4343176**	**377.1144128**
-2.8	**-463.8751904**	***-503.4113438***	***-539.6336007***	**-392.123978**	**-418.632367**	**-394.017541**	**-471.841777**	**-342.617549**	**-360.912564**	**-188.316017**
+2.8	**627.5756781**	***761.610256***	***682.1368902***	**584.6818491**	**603.4003276**	**571.4819871**	**658.8802783**	**440.1490518**	**464.0810279**	**298.1892077**
-2.85	**-503.2771798**	***-566.1344872***	***-687.8125156***	**-425.431353**	**-454.19139**	**-427.485757**	**-511.920456**	**-371.719801**	**-391.568812**	**-204.3117545**
+2.85	**397.4002349**	***538.3765249***	***470.6216588***	**398.4272983**	**403.6253749**	**383.1979327**	**429.5133133**	**299.9924702**	**316.3242168**	**205.812092**
-2.9	**-542.6791693**	***-659.5446789***	***-922.8764368***	**-458.738729**	**-489.750412**	**-460.953973**	**-551.999135**	**-400.822054**	**-422.225061**	**-220.307492**
+2.9	**236.6175129**	***325.32565***	***337.800056***	**229.2126657**	**229.2126657**	**213.1025941**	**226.6709222**	**175.084768**	**184.2997558**	**139.2327031**
-2.95	**-582.0811588**	***-782.5634799***	***-1208.151363***	**-492.046104**	**-525.309434**	**-494.422189**	**-592.077814**	**-487.703937**	**-517.558697**	**-236.3032295**
+2.95	**129.9934909**	***143.6619509***	***249.3363932***	**107.4865741**	**114.7529551**	**108.0056538**	**129.3384781**	**93.91639607**	**98.93108943**	**64.38160258**
-3	**-867.183127**	***-1085.259399***	***-1543.372627***	**-693.537362**	**-742.465298**	**-699.243141**	**-840.535112**	**-722.866942**	**-766.702716**	**-346.2787323**
+3	**170.2751609**	***180.4857085***	***191.9896588***	**140.7939083**	**150.3119736**	**141.4738487**	**169.4171952**	**123.018691**	**129.5873073**	**67.6158018**
(Span 3) -4	**-8.67E+02**	***-1085.259399***	***-1543.372627***	**-6.94E+02**	**-7.42E+02**	**-6.99E+02**	**-8.41E+02**	**-7.23E+02**	**-7.67E+02**	**-3.46E+02**
+4	**1.70E+02**	***180.4857085***	***191.9896588***	**1.41E+02**	**1.50E+02**	**1.41E+02**	**1.69E+02**	**1.23E+02**	**1.30E+02**	**6.76E+01**
-3.05	**-823.8239705**	***-968.8455721***	***-1290.051507***	**-658.860493**	**-705.342033**	**-664.280985**	**-798.508356**	**-668.19023**	**-705.381147**	**-328.9647962**
+3.05	**161.7614028**	***175.8105647***	***275.6293796***	**133.7542129**	**142.796375**	**134.4001562**	**160.9463353**	**116.8677564**	**123.1079419**	**64.23501176**
-3.1	**-780.464814**	***-870.0114042***	***-1072.38796***	**-624.183624**	**-668.218767**	**-629.318828**	**-756.4816**	**-633.022323**	**-668.255824**	**-311.6508602**
+3.1	**200.1691801**	***288.5220001***	***370.5425366***	**191.2683449**	**191.2683449**	**164.1318214**	**170.8968213**	**145.2403217**	**152.8845491**	**117.0101382**
-3.15	***-737.1056575***	***-792.320858***	***-897.0548627***	***-589.506755***	***-631.095502***	***-594.356672***	***-714.454845***	***-597.854416***	***-631.130502***	***-294.3369241***
+3.15	***335.7008041***	***472.3355947***	***510.4194947***	**332.1013917**	**335.8434472**	**304.7897532**	**342.7358428**	**251.0335239**	**264.6334035**	**176.3241773**
-3.2	**-693.7465011**	***-739.7320701***	***-810.3344385***	**-554.829886**	**-593.972237**	**-559.394515**	**-672.428089**	**-562.686509**	**-594.005179**	**-277.0229881**
+3.2	**520.2083167**	***667.6582291***	***714.2562924***	**491.0947289**	**506.3224447**	**464.5249026**	**536.2251571**	**367.0036889**	**387.2468099**	**254.8068988**
-3.25	**-650.3873446**	***-693.4988157***	***-759.6885359***	**-520.153017**	**-556.848971**	**-524.432359**	**-630.401333**	**-527.518601**	**-556.879857**	**-259.709052**
+3.25	**685.2955623**	***850.9051029***	***902.9542381***	**634.9631041**	**659.7898585**	**611.6343591**	**712.789106**	**499.149835**	**525.9928816**	**326.409914**
-3.3	**-607.0281881**	***-647.2655614***	***-709.0426333***	**-485.476147**	**-519.725706**	**-489.470202**	**-588.374577**	**-492.350694**	**-519.754534**	**-242.3951159**
+3.3	**833.0056695**	***1012.588789***	***1059.284974***	**760.5446344**	**792.8955235**	**742.7221873**	**868.427106**	**609.4857075**	**643.1651568**	**387.3265415**
-3.35	**-563.6690317**	***-601.032307***	***-658.3967308***	**-450.799278**	**-482.602441**	**-454.508045**	**-546.347822**	**-457.182787**	**-482.629211**	**-225.0811799**
+3.35	**964.5577003**	***1149.797487***	***1187.199272***	**864.9152008**	**902.545195**	**854.6333838**	**999.4307236**	**686.8695211**	**725.6079935**	**436.064338**
-3.4	**-520.3098752**	***-554.7990527***	***-607.7508282***	**-416.122409**	**-445.479175**	**-419.545889**	**-504.321066**	**-422.01488**	**-445.503889**	**-207.7672438**
+3.4	**1065.132398**	***1259.839178***	***1290.74992***	**945.8891042**	**997.5038016**	**944.4533654**	**1102.382624**	**749.63029**	**790.952644**	**471.2578427**
-3.45	**-476.9507187**	***-508.5657983***	***-557.1049257***	**-381.44554**	**-408.35591**	**-384.583732**	**-462.29431**	**-386.846973**	**-408.378566**	**-190.4533077**
+3.45	**1131.424867**	***1340.24183***	***1357.148076***	**1014.851747**	**1068.49513**	**1009.508485**	**1174.269458**	**777.1489682**	**820.7395375**	**491.6710109**
-3.5	**-433.5915623**	***-462.332544***	***-506.4590231***	**-346.768671**	**-371.232644**	**-349.621576**	**-420.267554**	**-351.679066**	**-371.253244**	**-173.1393717**
+3.5	**1160.447701**	***1388.753422***	***1383.721114***	**1057.806899**	**1110.974632**	**1047.365798**	**1213.220921**	**790.3500136**	**835.98548**	**496.1966635**
-3.55	**-390.2324058**	***-416.0992896***	***-455.8131205***	**-312.091802**	**-334.109379**	**-314.659419**	**-378.240799**	**-316.511158**	**-334.127921**	**-155.8254356**
+3.55	**1149.530668**	***1406.712626***	***1388.585943***	**1076.683741**	**1129.076629**	**1065.516623**	**1232.396745**	**824.5953452**	**871.4995212**	**508.4899583**
-3.6	**-346.8732493**	***-369.8660353***	***-405.167218***	**-277.414933**	**-296.986114**	**-279.697263**	**-336.214043**	**-281.343251**	**-297.002599**	**-138.5114995**

+3.6	1136.998354	1404.370194	1386.944522	1072.661657	1128.316707	1065.914727	1240.226168	840.3604357	887.2633847	518.0006307
-3.65	-303.5140928	-323.632781	-354.5213154	-242.738064	-259.862848	-244.735106	-294.187287	-246.175344	-259.877276	-121.1975635
+3.65	1139.264724	1366.526416	1344.886071	1037.787055	1094.801026	1036.147672	1211.789559	823.903144	868.8052878	513.0988292
-3.7	-260.1549364	-277.3995266	-303.8754129	-208.061195	-222.739583	-209.77295	-252.160531	-211.007437	-222.751953	-103.8836274
+3.7	1104.62153	1291.561132	1272.868245	991.1746373	1036.441691	974.5435283	1144.808652	791.6978081	835.8713398	492.6417077
-3.75	-216.7957799	-231.1662723	-253.2295103	-173.384326	-185.616317	-174.810793	-210.133776	-175.83953	-185.626631	-86.56969134
+3.75	1030.358623	1178.075028	1176.079315	913.7816589	957.5667828	887.0446869	1038.701925	727.8511335	767.1447019	456.0112722
-3.8	-173.4366234	-184.9330179	-202.5836077	-138.707457	-148.493052	-139.848637	-168.10702	-140.671623	-148.501308	-69.25575528
+3.8	914.5088364	1024.887959	1035.368388	802.5548364	842.6157385	781.5314174	902.0296729	640.9530312	674.6874012	402.2773927
-3.85	-130.077467	-138.6997636	-151.9377052	-104.030588	-111.369787	-104.88648	-126.080264	-105.503715	-111.375986	-51.94181922
+3.85	755.8634696	831.0398299	848.8571611	656.2473085	690.1910018	640.8661836	742.2433151	538.4006543	566.8736193	330.3828006
-3.9	-86.7183105	-92.46650923	-101.2918026	-69.3537192	-74.2465213	-69.9243235	-84.0535084	-70.3358082	-74.250663	-34.62788315
+3.9	551.48699	595.7909015	614.9513506	473.8505943	499.1515228	463.9387262	539.0507281	399.0652533	420.313621	239.6899182
-3.95	-43.35915403	-46.23325489	-50.64590006	-34.6768501	-37.1232559	-34.962167	-42.0267526	-35.167901	-37.1253405	-17.31394709
+3.95	299.9150293	318.6211189	332.3409855	255.1131083	268.9934451	250.1856833	291.2824589	220.7406042	232.5575656	129.6892156
-5	-1.85E-13	-1.11E-13	-1.62E-13	-9.43E-14	-1.00E-13	-1.01E-13	-1.22E-13	-7.03E-14	-7.46E-14	-7.56E-14
+5	1.83E-13	1.33E-13	2.64E-13	1.03E-13	1.18E-13	1.09E-13	1.32E-13	1.28E-13	1.35E-13	8.41E-14

3-Span: Moment (Max and Min) Raw Data Results - 50’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.45E-14	-5.85E-14	-7.74E-14	-6.86E-14	-7.18E-14	-6.45E-14	-7.27E-14	-7.14E-14	-7.69E-14
End Shear	7.69E-14	7.13E-14	8.07E-14	6.86E-14	6.03E-14	8.76E-14	7.36E-14	7.42E-14	6.23E-14
-0.05	-25.73925915	-30.3310118	-27.78689445	-24.18357277	-20.87324612	-28.40043658	-31.9726124	-35.5822388	-39.045857
+0.05	184.9815566	196.8337455	171.8567172	147.4896311	151.0420069	203.1336952	223.0405449	231.2153026	236.6078773
-0.1	-51.47851829	-60.66202361	-55.57378889	-48.36714554	-41.74649224	-56.80087315	-63.9452248	-71.1644775	-78.091714
+0.1	342.274011	356.7961746	310.2089737	268.3982239	279.3183936	376.4959408	412.2419786	425.2994619	438.0820434
-0.15	-77.21777744	-90.99303541	-83.36068334	-72.55071831	-62.61973837	-85.20130973	-95.9178373	-106.746716	-117.137571
+0.15	472.3055738	482.7832774	417.6621127	363.666634	385.9637023	519.8509928	567.527932	608.9404466	623.838901
-0.2	-102.9570366	-121.3240472	-111.1475778	-96.73429108	-83.49298449	-113.6017463	-127.89045	-142.328955	-156.183428
+0.2	575.2319377	576.7053759	495.2143274	434.4494142	470.7109815	633.6464769	689.4563965	755.871833	780.1184079
-0.25	-128.6962957	-151.655059	-138.9344722	-120.9178639	-104.3662306	-142.0021829	-159.863062	-177.911194	-195.229285
+0.25	651.9406674	642.5625763	557.6760032	492.5841286	534.2386179	718.8061771	781.9165554	866.7484164	914.2040939
-0.3	-154.4355549	-181.9860708	-166.7213667	-145.1014366	-125.2394767	-170.4026195	-191.835675	-213.493433	-234.275142
+0.3	703.5017492	691.8641655	598.1799847	532.5092138	577.3708488	784.2506004	862.3822849	942.4478	1010.088171
-0.35	-180.174814	-212.3170826	-194.5082611	-169.2850094	-146.1127229	-198.803056	-223.808287	-249.075671	-273.320999
+0.35	740.0027299	720.0165295	622.2466573	560.4308732	601.0776126	833.6391474	911.9789894	994.0375947	1068.007011
-0.4	-205.9140732	-242.6480944	-222.2951556	-193.4685822	-166.985969	-227.2034926	-255.780899	-284.65791	-312.366856
+0.4	759.9133523	721.8591936	629.0677312	572.8384789	606.4749673	856.7067887	933.1411227	1025.481757	1090.044224
-0.45	-231.6533323	-272.9791062	-250.08205	-217.6521549	-187.8592151	-255.6039292	-287.753512	-320.240149	-351.412713
+0.45	757.1920084	699.727423	622.8934117	573.3955524	594.8246722	855.6749142	926.5946563	1025.361693	1099.688492
-0.5	-257.3925915	-303.310118	-277.8689445	-241.8357277	-208.7324612	-284.0043658	-319.726124	-355.822388	-390.45857
+0.5	743.6344962	665.5162309	611.1569823	557.9889282	587.813655	841.3233447	908.9499246	1004.605561	1075.346513
-0.55	-283.1318506	-333.6411298	-305.6558389	-266.0193005	-229.6057073	-312.4048023	-351.698737	-391.404626	-429.504427
+0.55	719.5613152	666.5047051	595.6704901	533.7925139	577.0855317	811.770706	882.9829186	968.8369358	1029.346547
-0.6	-308.8711098	-363.9721417	-333.4427334	-290.2028732	-250.4789535	-340.8052389	-383.671349	-426.986865	-468.550284
+0.6	674.6099734	649.1709255	561.2221397	497.4847852	548.4637255	759.8612129	830.5382388	904.5099846	969.9651024
-0.65	-334.6103689	-394.3031535	-361.2296278	-314.386446	-271.3521996	-369.2056755	-415.643961	-462.569104	-507.596141
+0.65	613.0974238	603.2313781	516.1550009	459.6981133	503.3549357	687.5700587	753.7825388	818.1908193	879.7176179
-0.7	-360.3496281	-424.6341653	-389.0165223	-338.5700188	-292.2254457	-397.6061121	-447.616574	-498.151343	-546.641998
+0.7	540.0271768	530.7731497	454.9584429	413.0564341	442.8919893	597.069318	655.1087973	715.2751021	761.6168876
-0.75	-386.0888872	-454.9651771	-416.8034167	-362.7535916	-313.0986918	-426.0065486	-479.589186	-533.733581	-585.687855
+0.75	449.5462439	444.5137885	377.6806299	352.200585	368.6606858	492.1556078	537.1359841	588.7079248	619.0521224
-0.8	-411.8281464	-485.2961889	-444.5903112	-386.9371643	-333.971938	-454.4069852	-511.561799	-569.31582	-624.733712
+0.8	343.7931179	335.8583178	282.4864989	277.6328689	282.3924592	375.3114975	402.7094781	441.5057006	454.9677325
-0.85	-437.5674055	-515.6272007	-472.3772056	-424.7686853	-354.8451841	-482.8074218	-543.534411	-604.898059	-663.779569
+0.85	226.2796819	226.6626802	180.4512026	217.7005219	185.9650896	244.8104095	256.3211569	281.8505285	282.2485043
-0.9	-463.3066647	-545.9582125	-500.1641001	-501.4279775	-375.7184302	-511.2078584	-575.507024	-640.480298	-702.825426
+0.9	134.6489376	134.5270419	106.9619796	157.7230634	112.216216	136.1391782	136.2598203	139.4723507	139.4283199
-0.95	-489.0459238	-576.2892243	-531.920505	-599.5290129	-396.5916763	-539.608295	-607.479636	-676.062537	-741.871283
+0.95	97.56366833	101.0983214	90.45634047	103.4009174	79.67687697	108.8067928	121.3022816	134.5108148	146.3824211
-1	-514.7851889	-617.8808151	-653.0833262	-718.2406544	-417.4649397	-568.0087406	-639.452231	-711.644778	-780.91714
+1	102.6985939	106.4192849	95.21720314	82.55988953	83.8703952	114.5334631	127.6866094	141.5903296	154.0867615
(Span 2) -2	-514.7851889	-617.8808151	-653.0833262	-718.2406544	-417.4649397	-568.0087406	-639.452231	-711.644778	-780.91714
+2	102.6985939	106.4192849	95.21720314	82.55988953	83.8703952	114.5334631	127.6866094	141.5903296	154.0867615
-2.05	-358.9110095	-418.8824078	-445.8639529	-540.4116019	-293.1095202	-400.2709997	-446.23893	-494.829364	-538.501179
+2.05	78.40338178	81.24387646	72.69185011	96.50324781	64.02933461	87.43849869	97.48003026	108.0945732	117.6347495
-2.1	-334.615759	-346.7380894	-316.2793652	-394.4644208	-273.2684757	-373.1760264	-416.032315	-461.333585	-502.049187
+2.1	161.3999684	162.1520825	129.2668022	143.3619227	134.185543	172.4969593	172.4333436	178.529255	178.4359393
-2.15	-310.3205085	-321.5626802	-287.7141231	-290.0196806	-253.4274312	-346.0810531	-385.825701	-427.837807	-465.597195
+2.15	269.5568599	269.8171259	214.6192841	199.4717844	220.664606	304.1452269	320.2064588	347.8461823	357.3108153
-2.2	-286.025258	-296.387271	-265.1887443	-231.4931094	-233.5863867	-318.9860798	-355.619087	-394.342028	-429.145202
+2.2	408.4244343	392.9068545	333.0551988	283.7603492	337.1037288	457.2965409	495.3842343	534.2816501	565.5121248

-2.25	-261.7300076	-271.2118617	-242.6633655	-219.0962721	-213.7453422	-291.8911065	-325.412472	-360.846249	-392.69321
+2.25	528.4252753	532.6456413	465.0304111	396.6175633	431.0434134	590.8921663	645.5778461	701.1680864	750.2085883
-2.3	-237.4347571	-246.0364525	-220.1379868	-213.7019834	-193.9042977	-264.7961332	-295.205858	-327.35047	-356.241218
+2.3	628.9130083	649.4933622	568.8495377	488.3862589	515.2323597	706.7508134	775.7390156	841.4910055	908.7127107
-2.35	-213.1395066	-220.8610432	-197.612608	-209.8308767	-174.0632532	-237.7011599	-264.999243	-293.854692	-319.789225
+2.35	709.8340509	729.3270657	637.2078157	550.3005632	572.8688305	795.1387889	872.2304207	955.0466695	1027.518034
-2.4	-188.8442561	-195.685634	-175.0872292	-209.0884638	-154.2222087	-210.6061866	-234.792629	-260.358913	-283.337233
+2.4	768.6581764	778.7231555	678.5208012	588.937972	616.9456781	861.7755328	944.869074	1038.288954	1111.494157
-2.45	-164.5490056	-170.5102248	-152.5618505	-208.8273725	-134.3811643	-183.5112134	-204.586014	-226.863134	-246.88524
+2.45	798.6309886	791.6873147	695.9237455	606.7726559	633.4457479	894.8935885	978.6655291	1081.904773	1163.96597
-2.5	-140.2537551	-145.3348155	-130.0364717	-208.5665415	-114.5402107	-156.4162401	-174.3794	-193.367356	-210.433359
+2.5	806.5611926	783.0536891	710.9865064	619.1549499	634.1152191	906.1482869	986.6700159	1095.070569	1182.343813
-2.55	-164.5487392	-170.5102081	-152.5616802	-208.8276347	-134.3812713	-183.5111455	-204.585762	-226.862991	-246.885371
+2.55	798.6200053	791.6832477	695.9229617	606.7722424	633.4313127	894.8903213	978.6483337	1081.899128	1163.962501
-2.6	-188.8439513	-195.6856166	-175.0870332	-209.0887279	-154.2223319	-210.6061099	-234.792341	-260.358747	-283.337383
+2.6	768.6666563	778.6979685	678.5068446	588.9466242	616.9283027	861.7907185	944.8474478	1038.300016	1111.48989
-2.65	-213.1391634	-220.861025	-197.6123862	-209.8310113	-174.0633924	-237.7010743	-264.99892	-293.854504	-319.789395
+2.65	709.8391538	729.3181036	637.2055464	550.2993241	572.8779958	795.1503444	872.2475609	955.0534034	1027.529646
-2.7	-237.4343755	-246.0364335	-220.1377393	-213.7019699	-193.904453	-264.7960387	-295.205499	-327.35026	-356.241407
+2.7	628.9160143	649.4606961	568.8288787	488.3913659	515.268407	706.7601644	775.7533628	841.495035	908.7408232
-2.75	-261.7295876	-271.2118419	-242.6630923	-219.0965566	-213.7455136	-291.8910031	-325.412078	-360.846017	-392.693419
+2.75	528.4432191	532.6296236	465.021665	396.6206938	431.0484189	590.899277	645.589474	701.1828399	750.2138107
-2.8	-286.0247997	-296.3872504	-265.1884453	-231.493475	-233.5865742	-318.9859676	-355.618658	-394.341773	-429.145431
+2.8	408.4634818	392.9013692	333.0291942	283.762568	337.1367066	457.3037392	495.3955652	534.3152895	565.5361586
-2.85	-310.3200118	-321.5626589	-287.7137984	-290.0198745	-253.4276348	-346.080932	-385.825237	-427.837529	-465.597443
+2.85	269.5683411	269.8273024	214.6121864	199.4760821	220.6682656	304.1525783	320.2175916	347.856325	357.3124946
-2.9	-334.6152239	-346.7380673	-316.279389	-394.4643735	-273.2686954	-373.1758964	-416.031816	-461.333286	-502.049455
+2.9	161.3906619	162.1837851	129.2605309	143.3747053	134.1524789	172.5215315	172.4574332	178.5580362	178.464382
-2.95	-358.9104359	-418.8820167	-445.8640957	-540.4117321	-293.109756	-400.2708608	-446.238395	-494.829042	-538.501467
+2.95	78.4034993	81.24386759	72.6919372	96.50226781	64.02928061	87.43851953	97.48013074	108.094653	117.6346832
-3	-514.7854479	-617.8815018	-653.0830955	-718.24097	-417.4652517	-568.0095787	-639.452384	-711.645903	-780.917719
+3	102.6987562	106.4192882	95.21731194	82.55980327	83.87032713	114.5335006	127.6867586	141.5904239	154.0866785
(Span 3) -4	-5.15E+02	-6.18E+02	-6.53E+02	-7.18E+02	-4.17E+02	-5.68E+02	-6.39E+02	-7.12E+02	-7.81E+02
+4	1.03E+02	1.06E+02	9.52E+01	8.26E+01	8.39E+01	1.15E+02	1.28E+02	1.42E+02	1.54E+02
-3.05	-489.0461758	-576.2891812	-531.9215389	-599.529147	-396.59199	-539.6091003	-607.479764	-676.063608	-741.871833
+3.05	97.56381814	101.0983238	90.45644648	103.4017207	79.67681069	108.8068254	121.3024206	134.5109026	146.3823447
-3.1	-463.3069037	-545.9581715	-500.163956	-501.4283299	-375.7187283	-511.2086218	-575.507144	-640.481313	-702.825947
+3.1	134.661663	134.5384032	106.9705601	157.7120723	112.1930204	136.1620725	136.2821408	139.4894212	139.4450908
-3.15	*-437.5676316*	*-515.6271617*	*-472.3770705*	*-424.7687145*	*-354.8454666*	*-482.8081433*	*-543.534524*	*-604.899018*	*-663.780061*
+3.15	226.293865	226.6753435	180.4607029	217.6894899	185.9363555	244.8163323	256.3263367	281.8661322	282.2637868
-3.2	-411.8283595	-485.296152	-444.5901849	-386.9370968	-333.9722049	-454.4076648	-511.561904	-569.316723	-624.734175
+3.2	343.8035441	335.867932	282.4914291	277.6212396	282.3633093	375.3169329	402.7034737	441.5192319	454.9499306
-3.25	-386.0890874	-454.9651422	-416.8032994	-362.753529	-313.0989431	-426.0071863	-479.589284	-533.734428	-585.688289
+3.25	449.5551806	444.5199405	377.6765101	352.2129264	368.6302105	492.1595929	537.1289772	588.7196381	619.0328197
-3.3	-360.3498153	*-424.6341325*	-389.0164139	*-338.5699611*	-292.2256814	-397.6067078	-447.616664	-498.152133	-546.642403
+3.3	540.0336524	530.7700981	454.9536976	413.0662176	442.8595461	597.0647632	655.0995735	715.2838133	761.5944311
-3.35	-334.6105432	-394.3031227	-361.2295283	-314.3863932	-271.3524197	-369.2062294	-415.644044	-462.569838	-507.596517
+3.35	613.1005707	603.2238283	516.146502	459.7078689	503.3197028	687.5629507	753.7700289	818.195317	879.7318476
-3.4	-308.8712711	-363.9721129	-333.4426428	-290.2028253	-250.479158	-340.8057509	-383.671424	-426.987543	-468.550631
+3.4	674.6052174	649.1580371	561.2163583	497.4918143	548.4250081	759.8505619	830.5214517	904.5040359	969.9740004
-3.45	-283.131999	-333.6411032	-305.6557573	-266.0192575	-229.6058963	-312.4052724	-351.698804	-391.405248	-429.504745
+3.45	719.5524854	666.4858012	595.6615239	533.7976561	577.1017926	811.7556001	882.9607151	968.8255767	1029.349047
-3.5	-257.3927269	-303.3100934	-277.8688718	-241.8356896	-208.7326345	-284.0047939	-319.726184	-355.822953	-390.458859
+3.5	743.6208564	665.5040939	611.1441749	557.9813337	587.8255424	841.3030328	908.9216628	1004.587944	1075.362663
-3.55	-231.6534548	-272.9790837	-250.0819862	-217.6521217	-187.8593728	-255.6043154	-287.753563	-320.240658	-351.412973
+3.55	757.2067373	*699.7468872154*	*622.9063336*	573.3860098	594.8137087	*855.6529869*	926.5810034	1025.338491	1099.697885

-3.6	**-205.9141827**	**-242.6480739**	**-222.2951007**	**-193.4685538**	**-166.9861111**	**-227.2038369**	**-255.780943**	**-284.658363**	**-312.367087**
+3.6	**759.9230953**	**721.8748025**	**629.0772782**	**572.8267798**	**606.4603222**	**856.6869223**	**933.1213484**	**1025.493815**	**1090.045909**
-3.65	**-180.1749106**	**-212.3170642**	**-194.5082152**	**-169.2849859**	**-146.1128494**	**-198.8033585**	**-223.808323**	**-249.076068**	**-273.321201**
+3.65	**740.0068233**	**720.0271172**	**622.2575431**	**560.4279842**	**601.058601**	**833.6494588**	**911.9524649**	**994.0420201**	**1067.997584**
-3.7	**-154.4356385**	**-181.9860544**	**-166.7213296**	**-145.1014181**	**-125.2395877**	**-170.40288**	**-191.835703**	**-213.493773**	**-234.275315**
+3.7	**703.4982733**	**691.8690656**	***598.1861807***	**532.5119073**	**577.3469855**	**784.2541676**	**862.3918926**	**942.4421188**	**1010.070165**
-3.75	**-128.6963664**	**-151.6550447**	**-138.9344441**	**-120.9178502**	**-104.3663259**	**-142.0024015**	**-159.863083**	**-177.911478**	**-195.229429**
+3.75	**651.9310818**	**642.5593552**	**557.6810484**	**492.5867928**	**534.2098481**	**718.8014125**	**781.9181838**	**866.7344513**	**914.2182262**
-3.8	**-102.9570943**	**-121.3240349**	**-111.1475586**	**-96.73428232**	**-83.49306421**	**-113.601923**	**-127.890463**	**-142.329183**	**-156.183543**
+3.8	**575.2157703**	**576.6956519**	**495.2117816**	**434.4645976**	**470.6765971**	**633.6343472**	**689.4487059**	**755.8490818**	**780.1226936**
-3.85	**-77.21782223**	**-90.99302517**	**-83.36067307**	**-72.55071444**	**-62.61980249**	**-85.20144452**	**-95.9178429**	**-106.746888**	**-117.137657**
+3.85	**472.2823526**	**482.7681878**	**417.6532885**	**363.6783645**	**385.9234975**	**519.8312329**	**567.5117147**	**608.9505059**	**623.8320389**
-3.9	**-51.47855013**	**-60.66201542**	**-55.57378754**	**-48.36714657**	**-41.74654077**	**-56.80096604**	**-63.9452228**	**-71.1645928**	**-78.0917712**
+3.9	**342.2435158**	**356.8135573**	**310.2240573**	**268.4062581**	**279.3023517**	**376.4681053**	**412.2170062**	**425.2998321**	**438.0843059**
-3.95	**-25.73927803**	**-30.33100567**	**-27.78690201**	**-24.18357869**	**-20.87327905**	**-28.40048755**	**-31.9726028**	**-35.5822979**	**-39.0458852**
+3.95	**184.9892813**	**196.8427873**	**171.8644641**	**147.4938001**	**151.0484714**	**203.1421869**	**223.049919**	**231.2054514**	**236.5991048**
-5	**-6.62E-14**	**-6.90E-14**	**-7.69E-14**	**-6.91E-14**	**-6.59E-14**	**-8.14E-14**	**-7.50E-14**	**-7.52E-14**	**-7.92E-14**
+5	**1.04E-13**	**1.10E-13**	**1.00E-13**	**9.74E-14**	**9.06E-14**	**9.03E-14**	**8.80E-14**	**9.31E-14**	**9.32E-14**

3-Span: Moment (Max and Min) Raw Data Results - 50' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.07E-13	-1.14E-13	-7.43E-14	-8.24E-14	-8.45E-14
End Shear	9.59E-14	1.39E-13	9.28E-14	1.01E-13	7.99E-14
-0.05	-52.30363945	-55.65541604	-34.5981016	-43.0107833	-44.3636435
+0.05	295.0053883	304.1278783	217.84999	266.0529923	266.9758222
-0.1	-104.6072789	-111.3108321	-69.1962032	-86.0215666	-88.7272869
+0.1	530.8465	551.2860109	392.6057987	480.8423208	482.4409519
-0.15	-156.9109184	-166.9662481	-103.794305	-129.03235	-133.09093
+0.15	714.7088996	743.1781121	530.0218604	648.9768842	648.3914391
-0.2	-209.2145578	-222.6216641	-138.392406	-172.043133	-177.454574
+0.2	880.3065308	907.5594352	632.2487123	784.9228646	787.0829025
-0.25	-261.5181973	-278.2770802	-172.990508	-215.053916	-221.818217
+0.25	992.2272987	1046.019909	726.7743578	895.90131	891.4093799
-0.3	-313.8218367	-333.9324962	-207.58861	-258.0647	-266.181861
+0.3	1065.42909	1135.377173	786.3467185	964.6470375	963.3192147
-0.35	-366.1254762	-389.5879122	-242.186711	-301.075483	-310.545504
+0.35	1098.032052	1213.422522	821.165697	994.8697437	1015.933716
-0.4	-418.4291156	-445.2433283	-276.784813	-344.086266	-354.909148
+0.4	1126.923265	1249.281023	837.2935939	988.6507127	1034.348529
-0.45	-470.7327551	-500.8987443	-311.382914	-387.09705	-399.272791
+0.45	1135.733336	1267.557286	843.0106331	971.3703865	1034.400946
-0.5	-523.0363945	-556.5541604	-345.981016	-430.107833	-443.636435
+0.5	1118.480956	1247.519241	826.9689777	938.1247267	1012.455962
-0.55	-575.340034	-612.2095764	-380.579118	-473.118616	-488.000078
+0.55	1063.929062	1183.606087	791.3757559	916.9466302	974.5389171
-0.6	-627.6436734	-667.8649924	-415.177219	-516.1294	-532.363722
+0.6	990.5765747	1110.312649	742.7920355	880.0501736	911.1375546
-0.65	-679.9473129	-723.5204085	-449.775321	-559.140183	-576.727365
+0.65	913.2599685	994.2897682	680.3996574	831.1284169	841.3082341
-0.7	-732.2509523	-779.1758245	-484.373422	-602.150966	-621.091009
+0.7	811.2158593	848.174058	606.5897859	742.1618968	739.5442553
-0.75	-784.5545918	-834.8312405	-518.971524	-645.161749	-665.454652
+0.75	666.3020176	680.9439812	507.7615472	615.1350129	613.6729097
-0.8	-836.8582312	-890.4866566	-553.569626	-688.172533	-709.818295
+0.8	484.4881435	476.2019093	389.9395791	454.1870062	453.4647322
-0.85	-889.1618707	-946.1420726	-588.167727	-731.183316	-754.181939
+0.85	287.0159482	267.7518601	268.4722858	290.516077	298.5031996
-0.9	-941.4655101	-1001.797489	-622.765829	-774.194099	-798.545582
+0.9	158.7928678	173.3519418	154.1915571	164.4709942	153.3511233
-0.95	-993.7691496	-1078.000282	-657.36393	-817.204883	-842.909226
+0.95	167.6146938	182.9826052	108.7752607	140.8916842	141.6835689
-1	-1198.278608	-1324.455771	-808.692191	-925.805211	-1029.64376
+1	176.4365198	192.613268	114.5002744	148.3070341	149.1406006
(Span 2) -2	-1198.278608	-1324.455771	-808.692191	-925.805211	-1029.64376
+2	176.4365198	192.613268	114.5002744	148.3070341	149.1406006
-2.05	-793.8437314	-864.313274	-568.065107	-643.910072	-718.805939
+2.05	134.6972661	147.0471129	87.41316207	113.22232	113.8586916
-2.1	-574.869918	-627.5775474	-373.067984	-483.217416	-485.934132
+2.1	199.1490344	185.1173601	185.9661955	203.6022735	203.654345
-2.15	-533.1306727	-582.0113911	-345.980856	-448.132731	-450.652195
+2.15	359.7047605	335.0096768	320.9071863	363.573719	373.8245727
-2.2	-491.3914274	-536.4452348	-318.893727	-413.048046	-415.370258
+2.2	581.703736	589.5816653	463.455816	546.051486	554.0913324

-2.25	**-449.652182**	**-490.8790784**	**-291.806598**	**-377.963361**	**-380.088321**
+2.25	**818.467782**	**859.4971118**	**627.2595983**	**748.2317905**	**762.5481456**
-2.3	**-407.9129367**	**-445.3129221**	**-264.719469**	**-342.878676**	**-344.806385**
+2.3	**1005.905446**	**1084.227646**	**763.7459278**	**911.0906782**	**944.0531217**
-2.35	**-366.1736914**	**-399.7467657**	**-237.63234**	**-307.793991**	**-309.524448**
+2.35	**1158.194952**	**1259.063171**	**855.6818728**	**1017.714035**	**1067.283139**
-2.4	**-324.4344461**	**-354.1806094**	**-210.545212**	**-272.709307**	**-274.242511**
+2.4	**1266.916377**	**1375.575032**	**918.2414626**	**1081.023261**	**1145.187843**
-2.45	**-282.6952007**	**-308.6144531**	**-183.458083**	**-237.624622**	**-238.960575**
+2.45	**1335.851186**	**1427.514294**	**941.7463406**	**1102.212724**	**1165.479832**
-2.5	**-240.9560164**	**-263.0482967**	**-156.370954**	**-202.540107**	**-203.678638**
+2.5	**1347.740426**	**1452.672719**	**929.9909879**	**1092.850571**	**1147.867705**
-2.55	**-282.69527**	**-308.6144378**	**-183.457961**	**-237.624821**	**-238.960398**
+2.55	**1335.851964**	**1427.438906**	**941.7341175**	**1102.19732**	**1165.473236**
-2.6	**-324.4345236**	**-354.1805929**	**-210.545074**	**-272.709535**	**-274.242308**
+2.6	**1266.930436**	**1375.578271**	**918.2025133**	**1081.015712**	**1145.175528**
-2.65	**-366.1737772**	**-399.746748**	**-237.632186**	**-307.794249**	**-309.524217**
+2.65	**1158.179286**	**1259.061687**	**855.677459**	**1017.704298**	**1067.275287**
-2.7	**-407.9130308**	**-445.3129031**	**-264.719298**	**-342.878963**	**-344.806126**
+2.7	**1005.921777**	**1084.225673**	**763.7819367**	**911.0748903**	**944.0689523**
-2.75	**-449.6522845**	**-490.8790581**	**-291.806411**	**-377.963677**	**-380.088035**
+2.75	**818.4747802**	**859.4942529**	**627.2691054**	**748.2307654**	**762.5585253**
-2.8	**-491.3915381**	**-536.4452132**	**-318.893523**	**-413.048391**	**-415.369944**
+2.8	**581.6841361**	**589.5852637**	**463.4482931**	**546.0660574**	**554.1033155**
-2.85	**-533.1307917**	**-582.0113683**	**-345.980635**	**-448.133105**	**-450.651853**
+2.85	**359.6942128**	**335.0083977**	**320.9225499**	**363.5825267**	**373.8369015**
-2.9	**-574.8700453**	**-627.5775233**	**-373.067748**	**-483.217819**	**-485.933762**
+2.9	**199.1220019**	**185.1191836**	**186.0020691**	**203.614388**	**203.6663002**
-2.95	**-793.8439423**	**-864.3133151**	**-568.064828**	**-643.911176**	**-718.805341**
+2.95	**134.6972525**	**147.0471103**	**87.41320546**	**113.2222272**	**113.858792**
-3	**-1198.278272**	**-1324.456032**	**-808.692477**	**-925.804566**	**-1029.64428**
+3	**176.4364847**	**192.6132733**	**114.5003441**	**148.3069108**	**149.1407176**
(Span 3) -4	**-1.20E+03**	**-1.32E+03**	**-8.09E+02**	**-9.26E+02**	**-1.03E+03**
+4	**1.76E+02**	**1.93E+02**	**1.15E+02**	**1.48E+02**	**1.49E+02**
-3.05	**-993.7683982**	**-1078.000461**	**-657.364359**	**-817.204596**	**-842.909181**
+3.05	**167.6146605**	**182.9826096**	**108.7753269**	**140.8915652**	**141.6836818**
-3.1	**-941.4647985**	**-1001.797359**	**-622.766235**	**-774.193827**	**-798.54554**
+3.1	**158.7928362**	**173.3519459**	**154.1855795**	**164.4367983**	**153.3433528**
-3.15	***-889.1611988***	***-946.1419503***	***-588.16811***	***-731.183058***	***-754.181898***
+3.15	**287.5886596**	**267.7505365**	**268.4836743**	**290.5106083**	**298.4951577**
-3.2	**-836.8575991**	**-890.4865415**	**-553.569986**	**-688.172289**	**-709.818256**
+3.2	**484.4743661**	**476.1998934**	**389.951138**	**453.3997102**	**453.4556108**
-3.25	**-784.5539993**	**-834.8311327**	**-518.971862**	**-645.16152**	**-665.454615**
+3.25	**666.2839883**	**680.9413821**	**507.7772534**	**615.1215056**	**613.6577038**
-3.3	**-732.2503996**	**-779.175724**	**-484.373737**	**-602.150751**	**-621.090973**
+3.3	**811.1911993**	**848.1702113**	**606.599519**	**742.1422776**	**739.5292673**
-3.35	**-679.9467999**	**-723.5203152**	**-449.775613**	**-559.139982**	**-576.727331**
+3.35	**913.2273588**	**994.2928461**	**680.4118906**	**831.1415776**	**841.2932484**
-3.4	**-627.6432002**	**-667.8649064**	**-415.177489**	**-516.129214**	**-532.36369**
+3.4	**990.571588**	**1110.314644**	**742.7958585**	**880.0549934**	**911.1226089**
-3.45	**-575.3396005**	**-612.2094976**	**-380.579364**	**-473.118445**	**-488.000048**
+3.45	**1063.919452**	**1183.602925**	**791.372774**	**916.9584588**	**974.559467**
-3.5	**-523.0360007**	**-556.5540889**	**-345.98124**	**-430.107676**	**-443.636406**
+3.5	**1118.464875**	**1247.516891**	**826.9622011**	**938.1081086**	**1012.47146**
-3.55	**-470.732401**	**-500.8986801**	**-311.383116**	**-387.096907**	**-399.272765**
+3.55	**1135.709875**	**1267.553564**	**843.0194697**	**971.3618623**	**1034.421007**
-3.6	**-418.4288013**	**-445.2432713**	**-276.784991**	**-344.086138**	**-354.909123**

+3.6	**1126.93966**	**1249.280144**	**837.2976872**	**988.6472887**	**1034.362159**
-3.65	**-366.1252016**	**-389.5878625**	**-242.186867**	**-301.075369**	**-310.545481**
+3.65	**1098.035614**	**1213.419877**	**821.1540591**	**994.8598639**	**1015.948618**
-3.7	**-313.8216019**	**-333.9324537**	**-207.588743**	**-258.0646**	**-266.18184**
+3.7	**1065.458812**	**1135.374345**	**786.3366068**	**964.6295052**	**963.3322895**
-3.75	**-261.5180021**	**-278.277045**	**-172.990618**	**-215.053831**	**-221.818198**
+3.75	**992.2474919**	**1046.0155**	**726.7567632**	**895.9157435**	**891.4266517**
-3.8	**-209.2144024**	**-222.6216362**	**-138.392494**	**-172.043062**	**-177.454556**
+3.8	**880.3210388**	**907.5609744**	**631.3210265**	**784.9275595**	**787.0903928**
-3.85	**-156.9108027**	**-166.9662274**	**-103.79437**	**-129.032294**	**-133.090915**
+3.85	**714.711189**	**743.1770655**	**530.0035633**	**648.969708**	**648.3864143**
-3.9	**-104.607203**	**-111.3108186**	**-69.1962455**	**-86.0215246**	**-88.7272731**
+3.9	**530.8342789**	**551.2829227**	**392.6259486**	**480.8258804**	**482.4249168**
-3.95	**-52.30360327**	**-55.65540986**	**-34.5981212**	**-43.0107557**	**-44.3636314**
+3.95	**295.0195746**	**304.1222575**	**218.9531957**	**266.0656552**	**266.9883971**
-5	**-1.12E-13**	**-1.22E-13**	**-6.91E-14**	**-8.76E-14**	**-9.87E-14**
+5	**1.38E-13**	**1.87E-13**	**1.20E-13**	**1.46E-13**	**1.48E-13**

3-Span: Shear (Max and Min) Raw Data Results - 50' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.451440768	-5.338710738	-6.291109526	-5.763421197	-5.244910672	-4.329426211	-5.890679093	-6.631602265	-7.380293236	-8.098699927
End Shear	55.9920764	41.56682606	44.98393101	39.40070474	34.61262835	33.91406775	45.61275047	50.20761758	52.146457	53.65767182
-0.05	-7.451440768	-5.338710738	-6.291109526	-5.763421197	-5.62406892	-4.329426211	-5.890679093	-6.631602265	-7.380293236	-8.098699927
+0.05	51.47700616	38.3679661	40.82628892	35.64567637	31.47815464	31.32839137	42.13299355	46.26197456	47.79173099	48.90001209
-0.1	-7.451440768	-5.338710738	-6.291109526	-5.763421197	-6.458509119	-4.329426211	-5.890679093	-6.631602265	-7.380293236	-8.098699927
+0.1	46.50073451	34.84992556	36.43754745	31.48884122	27.85801204	28.49471129	38.30597783	41.91688979	42.99833887	43.66708285
-0.15	-7.451440768	-5.338710738	-6.291109526	-5.763421197	-7.4144255	-4.329426211	-5.890679093	-6.631602265	-7.380293236	-8.098699927
+0.15	43.23670584	32.53473777	33.47011452	28.80613318	25.52154293	26.62797699	35.78530342	39.06095849	39.85908759	40.46417032
-0.2	-8.065532627	-6.823466048	-6.825910956	-6.292648391	-9.303132823	-5.328279134	-6.975227999	-6.975815825	-7.380293236	-8.098699927
+0.2	38.63536365	29.11932141	29.28939906	24.93133359	22.14628199	23.87114214	32.06336493	35.02631027	35.4405599	35.46679786
-0.25	-9.723362872	-8.514837023	-8.517751895	-7.759481195	-10.50658468	-6.378314754	-8.997829168	-8.998530691	-8.988663054	-9.030822933
+0.25	35.50764581	27.02578726	26.51624603	22.65092892	20.17088179	22.1794149	29.77979773	32.277478	32.44207618	32.43903391
-0.3	-12.29575723	-11.0266994	-11.10622869	-9.901095125	-12.23431901	-8.353717696	-12.006039	-12.58393943	-12.57248215	-12.56149555
+0.3	30.75963209	23.75408844	22.74706385	19.50670279	17.38959929	19.53242334	26.20746238	28.25787641	28.16858387	28.16596275
-0.35	-15.33698967	-12.67950804	-12.90363607	-11.51007141	-13.3379764	-10.24932833	-13.98845533	-14.95520005	-14.94397731	-14.93321315
+0.35	27.92360839	21.63300927	20.34103811	17.68407457	15.72454586	17.81404882	23.8888389	25.65598675	25.58300918	25.58032322
-0.4	-19.8530486	-15.45849512	-15.52747374	-13.94079281	-14.92703918	-13.06162588	-17.48612947	-18.4652493	-18.45441703	-18.4440265
+0.4	23.6694144	18.55357686	17.00052341	15.04644267	13.38057288	15.31560095	20.51839068	21.88494546	21.83476199	21.83199734
-0.45	-22.82418007	-17.77094044	-17.22460529	-15.64267624	-16.64428283	-14.91009617	-19.98631568	-20.83410808	-20.83410808	-20.83410808
+0.45	21.00428582	16.57580974	15.12519213	13.35845911	11.90452793	13.70835792	18.35070689	19.46753004	19.43135781	19.42855947
-0.5	-27.20600868	-21.18133196	-19.8169894	-18.02954929	-19.22738158	-17.63352933	-23.67077026	-25.0078481	-24.95948317	-24.94737843
+0.5	17.34690149	13.73404382	12.71395756	10.94279868	9.792242439	11.39476142	15.23117101	15.94481546	15.98428922	15.98147093
-0.55	-30.0682703	-23.40901467	-21.68247992	-19.51097174	-20.89050702	-19.41065683	-26.07556417	-27.79293141	-27.72063198	-27.70887279
+0.55	15.02463806	11.89414174	11.29600411	9.416124239	8.607228466	9.922854369	13.2471031	13.67256563	13.66758503	13.74328721
-0.6	-34.63358132	-26.6695667	-24.60017417	-21.96277661	-23.30124987	-22.00891993	-29.59242441	-31.87523616	-31.8431282	-31.82982672
+0.6	11.73078836	9.269100683	9.257057607	7.360973533	6.790257048	7.830414838	10.31487074	10.8842033	10.88162102	10.96678252
-0.65	-37.73724071	-28.78222499	-27.03128969	-23.84822795	-24.87580123	-23.69049687	-31.86914958	-34.52446719	-34.89013816	-34.87726206
+0.65	9.706578821	7.968048657	7.961389212	6.330289959	5.950242442	6.438757543	8.629176668	9.156394302	9.153839613	9.234927687
-0.7	-42.25837896	-31.84754092	-31.2375042	-26.59110979	-27.19650693	-26.12728343	-35.16939068	-38.37484278	-39.33819933	-39.61190304
+0.7	6.829730724	6.128571932	6.121865031	4.867013051	4.758593986	4.610738587	6.502534773	6.724267686	6.721784697	6.796339487
-0.75	-45.17271741	-33.81491603	-33.96965816	-28.9167135	-29.12403216	-27.68910816	-37.285361	-40.85069346	-42.21212373	-42.9080135
+0.75	5.553639412	4.97648045	4.969807	3.950616599	4.006284894	3.810568569	5.176469679	5.216299379	5.235798298	5.229613535
-0.8	-49.3771657	-36.63960533	-37.94412105	-32.60054594	-32.15981962	-29.92811074	-40.31996192	-44.41284878	-46.36899695	-47.69809922
+0.8	3.99690032	3.368203466	3.361689866	2.671496269	2.947764943	2.743745714	3.335080707	3.339290848	3.337271133	3.335331232
-0.85	-52.05856726	-38.43142752	-40.67708285	-35.38496606	-34.43541629	-31.34597778	-42.2425012	-46.67778718	-49.02775496	-50.77781816
+0.85	3.032742023	2.345187075	2.374564723	1.886355368	2.299929247	2.082910518	2.26049337	2.298809162	2.262111415	2.260536912
-0.9	-55.8808933	-40.97010013	-44.9440692	-39.43018666	-37.74012706	-33.35089051	-44.96243812	-49.89542969	-52.83032056	-55.20812924
+0.9	1.704816937	1.065061947	1.103648283	0.987474208	1.47122248	1.148157108	1.187798455	1.324206504	1.468398563	1.597995946
-0.95	-58.28574302	-42.55610776	-47.67669523	-42.02977192	-39.86759563	-34.60059593	-46.65885729	-51.91192144	-55.23183056	-58.02453543
+0.95	1.463130071	1.065061947	1.103648283	0.987474208	1.162954213	0.869799293	1.187798455	1.324206504	1.468398563	1.597995946
-1	-61.66051314	-44.76336658	-51.58986687	-45.76683358	-42.93960334	-36.33511271	-49.01510839	-54.72875265	-58.61697347	-62.02468112
+1	1.46E+00	1.065061947	1.103648283	0.987474208	8.94E-01	0.869799293	1.187798455	1.324206504	1.468398563	1.597995946
(Span 2) -2	-5.325075465	-3.876302762	-4.016738152	-3.593921626	-3.254984707	-3.165642582	-4.323003437	-4.819461789	-5.344250241	-5.815921024
+2	62.49748087	45.11424321	54.15657467	50.02235799	45.4256417	36.54252785	49.31323082	55.25388383	59.52476048	63.45105915
-2.05	-5.325075465	-3.876302762	-4.016738152	-3.593921626	-3.526223949	-3.165642582	-4.323003437	-4.819461789	-5.344250241	-5.815921024
+2.05	59.52652171	43.15448588	50.8956365	46.45004784	42.43317118	34.99574395	47.21053334	52.75456954	56.53839361	59.95472777
-2.1	-5.325075465	-3.876302762	-4.016738152	-3.593921626	-4.132098611	-3.165642582	-4.323003437	-4.819461789	-5.344250241	-5.815921024
+2.1	55.78048118	40.65177019	46.91788367	42.12435036	38.8725752	33.01236733	44.51746638	49.58150952	52.80078911	55.63154178
-2.15	-5.325075465	-3.876302762	-4.016738152	-3.593921626	-4.784735217	-3.165642582	-4.323003437	-4.819461789	-5.344250241	-5.815921024
+2.15	52.36857723	38.34807567	43.3992728	38.26959918	35.7867003	31.18060923	42.03254314	46.67468629	49.41727687	51.75843429
-2.2	-5.325075465	-4.580499593	-4.589599703	-3.70873384	-5.908028366	-3.492172965	-4.829826194	-4.894858134	-5.344250241	-5.815921024
+2.2	48.2013252	35.50858128	39.10902535	34.26445182	32.37202957	28.91633457	38.96317757	43.10615975	45.30599492	47.09565453
-2.25	-7.156375032	-6.145437473	-6.220954786	-5.064450256	-6.896569635	-4.834350145	-6.639331897	-6.955250503	-6.950401819	-6.945760857

+2.25	44.50830672	32.97149379	35.29990614	30.93080502	29.60776172	26.88800821	36.21540542	39.92890581	41.67902482	43.01717662
-2.3	-10.24444974	-8.143952162	-8.204722137	-6.947926716	-8.375178961	-6.799874512	-9.065296507	-9.568620599	-9.563518676	-9.558630073
+2.3	40.10632802	29.9241772	31.10210058	27.08187955	26.39033142	24.44596873	32.90900026	36.12483834	37.36285825	38.1229859
-2.35	-13.11338116	-10.36341851	-9.978033891	-8.574947299	-10.05069302	-8.618674728	-11.51863747	-11.99577946	-11.98841139	-11.98271771
+2.35	36.29202508	27.26422166	27.55996372	23.85404927	23.63136087	22.30947926	30.01774192	32.70112985	33.52112032	33.88813407
-2.4	-16.67712923	-13.12249794	-12.12990876	-10.57792662	-12.11103591	-10.87056431	-14.5578353	-15.36471176	-15.33912442	-15.33323994
+2.4	31.84177802	23.91474821	23.72344113	20.29195084	20.4725021	19.70118154	26.37014911	28.65793503	29.0546475	29.02567506
-2.45	-19.94431705	-15.6059588	-14.34477272	-12.70306125	-13.8723596	-12.89062031	-17.28547554	-18.40887936	-18.36530115	-18.35932954
+2.45	27.9017256	21.24428589	20.5743647	17.60376469	17.97127245	17.45764999	23.45633164	25.35405659	25.38219833	25.37539623
-2.5	-24.11428829	-18.60855576	-17.54117726	-15.28801668	-15.9886382	-15.32574458	-20.57507169	-22.10200453	-22.03498045	-22.02899739
+2.5	23.59938836	18.17281445	17.04756913	14.91207229	15.67343125	14.97276326	20.09816446	21.56527756	21.50179809	21.49583212
-2.55	-27.80765085	-21.24548529	-20.57561166	-17.60476061	-17.97187083	-17.45865206	-23.45764922	-25.35551354	-25.38376303	-25.37693333
+2.55	20.08233764	15.60481714	14.34381465	12.70223713	13.87194684	12.88966686	17.28421598	18.40749401	18.36396359	18.35801561
-2.6	-32.20788937	-24.36264595	-24.25856878	-20.74895493	-20.88822696	-20.06224887	-26.85837437	-29.21290824	-29.67066073	-29.7513202
+2.6	16.34114393	12.71737277	11.81719422	10.2326526	11.81668125	10.54042879	14.11220178	14.86913056	14.84638547	14.84054121
-2.65	-36.01897193	-27.24178872	-27.56137519	-23.8552573	-23.6320072	-22.31048321	-30.01906303	-32.65746875	-33.50198048	-33.86938363
+2.65	13.19362833	10.36238508	9.977307216	8.574328483	10.050259	8.617800686	11.51748424	11.99453516	11.98720869	11.98153623
-2.7	-40.46360028	-30.36515305	-31.70004477	-27.62852852	-26.8511079	-24.79976153	-33.38787633	-36.67452903	-37.98275385	-38.81168018
+2.7	9.846442403	7.813080398	7.916119355	6.676970313	8.174491698	6.507351672	8.670879794	9.181743862	9.17669995	9.171861314
-2.75	-44.23306359	-32.97265878	-35.30136167	-30.93206733	-29.60839523	-26.88897279	-36.2166759	-39.93033735	-41.68061418	-43.01892404
+2.75	7.213273201	6.144707115	6.241515142	5.063841458	6.913570294	4.83360645	6.638475282	6.954293079	6.949471733	6.944847175
-2.8	-48.53620899	-35.92405111	-39.71172088	-34.82200593	-32.85242682	-29.24806694	-39.41269564	-43.62739882	-45.9038542	-47.7709641
+2.8	5.325181789	4.330231175	4.339208081	3.593925732	5.746277279	3.327292297	4.541594277	4.819467419	5.344253799	5.81591789
-2.85	-52.3965023	-38.34914863	-43.40070788	-38.23916104	-35.78740626	-31.18149215	-42.03371471	-46.67602174	-49.41877946	-51.7601156
+2.85	5.325181789	3.876308887	4.016738276	3.593925732	4.784490817	3.165640013	4.323004852	4.819467419	5.344253799	5.81591789
-2.9	-56.35608029	-41.02325392	-47.49704336	-42.73542165	-39.38525668	-33.30727144	-44.91768329	-50.0513875	-53.35105955	-56.26482383
+2.9	5.325181789	3.876308887	4.016738276	3.593925732	4.037862469	3.165640013	4.323004852	4.819467419	5.344253799	5.81591789
-2.95	-59.54738666	-43.15541639	-50.89698423	-46.45142059	-42.43383834	-34.99650115	-47.21154447	-52.755739	-56.53974073	-59.95626635
+2.95	5.325181789	3.876308887	4.016738276	3.593925732	3.526089381	3.165640013	4.323004852	4.819467419	5.344253799	5.81591789
-3	-62.98654938	-45.4232806	-54.68539877	-50.61018594	-45.91798883	-36.78582147	-49.64419753	-55.64949996	-60.00174401	-64.01367285
+3	5.325181789	3.876308887	4.016738276	3.593925732	3.254981451	3.165640013	4.323004852	4.819467419	5.344253799	5.81591789
(Span 3) -4	-1.46E+00	-1.06506363	-1.103648318	-0.987475336	-8.94E-01	-0.869798587	-1.187798844	-1.324208051	-1.46839954	-1.597995085
+4	61.07504844	44.409405	50.95243251	45.15689698	42.43713456	36.05737082	48.63767471	54.27608929	58.07023588	61.37591113
-3.05	-1.46E+00	-1.06506363	-1.103648318	-0.987475336	-1.07E+00	-0.869798587	-1.187798844	-1.324208051	-1.46839954	-1.597995085
+3.05	58.82231829	42.93758159	48.34323075	42.66513251	40.38897915	34.90077028	47.06649623	52.39781958	55.81303952	58.70866959
-3.1	-1.915532542	-1.212985092	-1.242740238	-0.987475336	-1.568225821	-1.292801829	-1.187798844	-1.324208051	-1.46839954	-1.597995085
+3.1	55.21207074	40.55886118	44.24475739	38.76617932	37.19791471	33.02643931	44.52217156	49.37342694	52.21118621	54.48454236
-3.15	-2.801359177	-2.106797836	-2.139451505	-1.699332654	-2.148243006	-1.924741544	-2.034172409	-2.037335679	-2.035702803	-2.034138248
+3.15	52.66131624	38.86610311	41.39966819	36.06898334	34.99463442	31.68958025	42.70854399	47.22796088	49.67573827	51.53053616
-3.2	-4.2473526	-3.626558432	-3.619934544	-2.876877704	-3.118304795	-2.915872177	-3.629996926	-3.63428582	-3.632222636	-3.630254259
+3.2	48.6367494	36.17866575	37.2911796	31.89281178	31.5813623	29.56301596	39.82505733	43.83093472	45.68803791	46.91145862
-3.25	-5.285341263	-4.698969268	-4.692228553	-3.729796935	-3.824133448	-3.627226802	-4.857859352	-4.862512695	-4.91619508	-4.858337237
+3.25	45.8315938	34.29523585	34.64117819	29.49420001	29.6088555	28.07010465	37.80167899	41.45580287	42.91637687	43.71761411
-3.3	-7.237667483	-6.426897247	-6.420102384	-5.104218857	-4.95239892	-4.904607542	-6.846716226	-7.116806502	-7.114283773	-7.189941629
+3.3	41.45813902	31.34450091	30.54338165	26.14054085	26.81666344	25.72761439	34.62805321	37.74240427	38.60594318	38.7739776
-3.35	-9.149702784	-7.653433362	-7.646670761	-6.079904539	-5.746983457	-6.123541727	-8.264739435	-8.738531138	-8.735955004	-8.815980125
+3.35	38.44219963	29.30066014	27.73886446	24.31170572	25.26953928	24.1028533	32.4275733	35.17513455	35.64016426	35.62742886
-3.4	-12.23516807	-9.682472445	-9.589952418	-7.625750835	-7.016747625	-8.170027722	-10.77097829	-11.32994538	-11.3273272	-11.41345464
+3.4	33.78528685	26.13199215	24.09970354	21.48382818	22.90570757	21.58074356	29.01283169	31.20169676	31.09967093	31.08839606
-3.45	-14.42804392	-11.38344276	-10.9494543	-9.046366892	-8.177962651	-9.565237415	-12.70751604	-13.15638283	-13.15375202	-13.24366862
+3.45	30.86836338	23.95802089	22.13472505	19.86687012	21.29861543	19.84835275	26.66794888	28.47982087	28.40160532	28.38995728
-3.5	-17.90568735	-14.19794759	-13.07615837	-11.33610573	-10.1358681	-11.77285809	-15.74086729	-16.50998484	-16.54639706	-16.54354941
+3.5	26.42551076	20.61682881	19.33652123	17.64461813	18.80374603	17.1829296	23.06113236	24.30259903	24.26030143	24.24814234
-3.55	-20.34060722	-16.09276324	-14.66844263	-12.9468174	-11.54426639	-13.31549798	-17.82088258	-18.87767122	-18.84479894	-18.84198129
+3.55	23.503119	18.34295474	17.64098302	16.05334771	17.08174078	15.36708478	20.60452762	21.46364543	21.44530228	21.43282227
-3.6	-24.32173968	-19.05909172	-17.48112497	-15.47851147	-13.7580641	-15.72611284	-21.0720768	-22.50342238	-22.44951738	-22.44674009
+3.6	19.04586107	14.87464824	15.09545978	13.50040359	14.6671091	12.59465468	16.8546215	17.88315892	17.87229117	17.86186882

-3.65	-27.15478515	-21.11234077	-19.75510279	-17.23718155	-15.29808476	-17.39196657	-23.31935964	-25.01780636	-24.94871337	-24.9459879
+3.65	16.03428946	13.08839352	13.34607503	11.90659085	13.60782629	10.71957384	14.5275166	15.54284353	15.53173983	15.5210507
-3.7	-31.56610192	-24.29363833	-23.36372996	-19.97083119	-17.79580218	-19.96926823	-26.79692267	-28.92023149	-28.82666961	-28.82403782
+3.7	11.64589801	10.60942301	10.6501447	9.548436318	11.95212929	7.876443433	11.50593114	11.98631274	11.97485748	11.9638407
-3.75	-34.60463398	-26.47505893	-25.87627147	-22.1049893	-19.70154888	-21.73415693	-29.17878967	-31.60033332	-31.70493123	-31.70185104
+3.75	10.02968139	8.934669691	8.93781242	8.120579533	10.80040325	6.638586139	9.500231996	9.591643493	9.57996816	9.568752486
-3.8	-39.29146898	-29.68473151	-29.95556974	-25.56536562	-22.69817527	-24.32783165	-32.67982979	-35.54933832	-36.2021927	-36.29010593
+3.8	7.547292199	6.397863614	6.400308393	5.920435683	8.994997449	5.063688772	6.466634124	6.631603855	7.380304897	8.098705939
-3.85	-42.49186905	-31.96195477	-32.7419328	-28.14895377	-24.94866008	-26.16594326	-35.16142164	-38.35482513	-39.27792465	-39.62210892
+3.85	7.45162732	5.338713425	6.291109101	5.763419347	7.73595795	4.329429447	5.890687785	6.631603855	7.380304897	8.098705939
-3.9	-47.38878819	-35.43439292	-37.19262101	-32.17257831	-28.45294851	-28.96576343	-38.94206063	-42.63828817	-43.79268581	-44.53261985
+3.9	7.45162732	5.338713425	6.291109101	5.763419347	6.311026941	4.329429447	5.890687785	6.631603855	7.380304897	8.098705939
-3.95	-50.70743614	-37.78000658	-40.05533102	-34.95218858	-30.86668712	-30.85509783	-41.49369486	-45.53533504	-46.98866602	-48.0216478
+3.95	7.45162732	5.338713425	6.291109101	5.763419347	5.748853356	4.329429447	5.890687785	6.631603855	7.380304897	8.098705939
-5	-55.74901164	-41.33235879	-44.74717608	-39.21889678	-34.58956272	-33.71358398	-45.35486656	-49.92802131	-51.85135529	-53.34951443
+5	7.45162732	5.338713425	6.291109101	5.763419347	5.244909657	4.329429447	5.890687785	6.631603855	7.380304897	8.098705939

3-Span: Shear (Max and Min) Raw Data Results - 50' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.451440768	-7.192500386	-7.699915975	-7.251671807	-8.716983887	-7.294343662	-7.700351067	-3.591171302
End Shear	55.9920764	57.13927329	60.33129185	56.15251029	65.53592682	50.58116641	53.3050134	29.08329812
-0.05	-7.451440768	-7.192500386	-7.699915975	-7.251671807	-8.716983887	-7.294343662	-7.700351067	-3.591171302
+0.05	51.47700616	52.91215887	55.79099453	51.89012602	60.39677194	45.78277007	48.23366336	26.89915553
-0.1	-7.451440768	-7.192500386	-7.699915975	-7.251671807	-8.716983887	-7.294343662	-7.700351067	-3.591171302
+0.1	46.50073451	48.26614056	50.80603512	47.20048736	54.75366606	40.72531626	42.88997726	24.45187684
-0.15	-7.451440768	-7.192500386	-7.699915975	-7.251671807	-8.716983887	-7.294343662	-7.700351067	-3.916110075
+0.15	43.23670584	45.2000409	47.51941243	44.11049453	51.04215649	37.31070619	39.28307087	22.84177732
-0.2	-8.065532627	-9.691701577	-9.691701577	-8.426673137	-8.716983887	-7.368881146	-7.756716996	-5.580896311
+0.2	38.63536365	40.66348894	42.66144202	39.54612768	45.57009447	32.50488024	34.21566341	20.46729132
-0.25	-9.723362872	-12.09407741	-12.09407741	-11.02925707	-11.60931758	-9.195300341	-9.679263517	-6.680639113
+0.25	35.50764581	37.6900313	39.67770301	36.74456165	42.2178984	29.46522023	31.01602129	18.91638422
-0.3	-12.29575723	-15.71097374	-15.71097374	-14.90212921	-15.91869973	-11.99651989	-12.63781738	-8.309484014
+0.3	30.75963209	33.50124708	35.00465963	32.35996658	36.98245947	25.14226691	26.46554412	16.64668696
-0.35	-15.33698967	-18.72318102	-18.96108262	-17.45575169	-18.76180339	-14.05228101	-14.81618701	-9.378267514
+0.35	27.92360839	30.65594588	31.96780417	29.51276992	33.59052677	22.65722354	23.98768748	15.17630506
-0.4	-19.8530486	-23.27957698	-23.88196204	-21.79947728	-23.91521278	-17.3424357	-18.31788867	-10.95017774
+0.4	23.6694144	26.50884913	27.54722366	25.37177003	28.66955448	19.63609184	20.77875842	13.04339015
-0.45	-22.82418007	-26.2691529	-27.11386707	-24.85483121	-27.64312839	-19.49982506	-20.61434438	-12.31063527
+0.45	21.00428582	23.83386837	24.69985839	22.70695135	25.51148518	17.68552136	18.70737991	11.67486073
-0.5	-27.20600868	-30.66575332	-31.87176132	-29.35583165	-33.14517065	-22.84221282	-24.17069761	-14.68487204
+0.5	17.34690149	19.97175881	20.59528944	18.86946632	20.97760895	14.86633581	15.71429494	9.710723023
-0.55	-30.0682703	-33.52913486	-34.97383296	-32.29249127	-36.74201385	-25.26666009	-26.74788708	-16.23558039
+0.55	15.02463806	17.50643298	17.97977457	16.4269632	18.10181263	13.06463184	13.8019569	8.465379528
-0.6	-34.63358132	-37.70694058	-39.50520433	-36.58549846	-42.01114245	-29.09616119	-30.81618232	-18.50493608
+0.6	11.73078836	13.93644013	14.20288622	12.8140413	13.8653157	10.49009964	11.07014922	6.890048255
-0.65	-37.73724071	-40.40478917	-42.43507795	-39.36352562	-45.42850358	-31.6398504	-33.51819098	-19.97505908
+0.65	9.706578821	11.63773307	11.77182457	10.71712624	11.55636265	8.865733057	9.347139834	6.008225556
-0.7	-42.25837896	-44.3048012	-46.67638944	-43.38862038	-50.39208908	-35.20479167	-37.30671511	-22.10753886
+0.7	6.829730724	8.707341153	8.707341153	8.012438383	8.578863025	6.62573717	6.974460179	4.749564304
-0.75	-45.17271741	-46.79778308	-49.39170553	-45.96806557	-53.58154439	-37.88700349	-39.8810563	-23.47574708
+0.75	5.553639412	7.070836363	7.070836363	6.328560659	6.727622019	5.343843803	5.62509874	3.956437421
-0.8	-49.3771657	-50.36099806	-53.2794147	-49.66533322	-58.16696316	-42.62055601	-44.86850083	-25.43935571
+0.8	3.99690032	4.786301972	4.786301972	3.994683954	4.087608036	3.629097015	3.820102121	2.841314717
-0.85	-52.05856726	-52.60978236	-55.73781694	-52.00625885	-61.0801034	-45.81931191	-48.24561153	-26.68431581
+0.85	3.032742023	3.320528217	3.320528217	2.659403964	2.659403964	2.563450553	2.698369003	2.150877044
-0.9	-55.8808933	-55.77719954	-59.2083847	-55.31578143	-65.21472745	-50.82849176	-53.55358225	-28.44705884
+0.9	1.704816937	1.460140224	1.558848724	1.467191241	1.756983036	1.275794621	1.343919203	1.200288208
-0.95	-58.28574302	-57.74245604	-61.36751764	-57.37823419	-67.80312429	-54.05255762	-56.97289303	-29.54744597
+0.95	1.463130071	1.460140224	1.558848724	1.467191241	1.756983036	1.275794621	1.343919203	0.701226676
-1	-61.66051314	-60.45507143	-64.35740098	-60.24009603	-71.41432848	-58.67940716	-61.88141567	-31.07732792
+1	1.46E+00	1.460140224	1.558848724	1.467191241	1.756983036	1.275794621	1.343919203	0.701226676
(Span 2) -2	-5.325075465	-5.314193983	-5.67344446	-5.339856148	-6.394555986	-4.643266429	-4.891206529	-2.55212102
+2	62.49748087	60.65460067	64.64794129	60.5674394	71.97729996	61.80343378	65.2327265	31.3108086
-2.05	-5.325075465	-5.314193983	-5.67344446	-5.339856148	-6.394555986	-4.643266429	-4.891206529	-2.55212102
+2.05	59.52652171	58.22497462	61.97331844	58.00928818	68.75743295	57.95519762	61.15438738	29.95921929
-2.1	-5.325075465	-5.314193983	-5.67344446	-5.339856148	-6.394555986	-4.643266429	-4.891206529	-2.55212102
+2.1	55.78048118	55.08302815	58.53184277	54.72809522	64.66228292	53.278449	56.20061246	28.23141563
-2.15	-5.325075465	-5.314193983	-5.67344446	-5.339856148	-6.394555986	-4.643266429	-4.891206529	-2.55212102
+2.15	52.36857723	52.16145304	55.34447782	51.69686815	60.9049523	49.15521832	51.83527761	26.64002784
-2.2	-5.325075465	-6.503704848	-6.503704848	-5.914960331	-6.394555986	-4.954681498	-5.215454208	-3.691995581
+2.2	48.2013252	48.52937697	51.39506153	47.94885856	56.2859199	44.15253797	46.54198052	24.67790299
-2.25	-7.156375032	-8.842133551	-8.880749233	-8.214688228	-8.742616069	-6.715803462	-7.069266802	-4.767882053

+2.25	44.50830672	45.25952048	47.8496735	44.59046088	52.16798015	39.70694518	41.83926361	22.92463001
-2.3	-10.24444974	-12.17379405	-12.39724425	-11.26393039	-12.18228344	-9.116725014	-9.619840298	-6.098355048
+2.3	40.10632802	41.30491152	43.57280448	40.54584003	47.23137377	34.83226336	36.68584174	20.81907773
-2.35	-13.11338116	-15.23293905	-15.63899232	-14.28906623	-15.73444511	-11.35326932	-11.99329719	-7.477112147
+2.35	36.29202508	37.83043744	39.82410835	37.00615948	42.92965912	30.94739919	32.57620967	18.98181449
-2.4	-16.67712923	-18.99632161	-19.64030957	-18.03123604	-20.15760555	-14.18485059	-15.0008153	-9.377304811
+2.4	31.84177802	33.54811516	35.22750255	32.53674335	37.58304643	26.29757476	27.68165765	16.82372638
-2.45	-19.94431705	-22.35368815	-23.22026852	-21.38571558	-24.14493353	-16.75011633	-17.7246537	-11.08939879
+2.45	27.9017256	29.89145779	31.28759062	28.96335162	33.21636858	22.67128725	23.8645129	14.98038903
-2.5	-24.11428829	-26.3811814	-27.52590349	-25.42703169	-28.97265055	-19.6825474	-20.84082967	-13.16078145
+2.5	23.59938836	25.79862861	26.90241784	24.84140789	28.27156611	19.2590112	20.39067793	12.86065619
-2.55	-27.80765085	-29.89308661	-31.28933801	-28.96496815	-33.21831243	-22.67272034	-23.86602141	-14.98065251
+2.55	20.08233764	22.35211531	23.21858939	21.38416734	24.14308901	16.74911667	17.72359167	11.08914403
-2.6	-32.20788937	-34.13881078	-35.86271623	-33.13521246	-38.30566592	-26.91513263	-28.33171856	-17.13233491
+2.6	16.34114393	18.44606579	19.05445476	17.48284782	19.50766491	13.7824492	14.57346603	9.098658214
-2.65	-36.01897193	-37.83205583	-39.82585233	-37.00777759	-42.93162115	-30.92602556	-32.55371112	-18.98208264
+2.65	13.19362833	15.23148984	15.63745428	14.28764515	15.7327713	11.35234505	11.9923161	7.476882843
-2.7	-40.46360028	-41.87895675	-44.19293666	-41.13185645	-47.94518553	-35.52569003	-37.41875084	-21.12317207
+2.7	9.846442403	11.67984655	11.87487857	10.7771526	11.61303215	8.755253145	9.236357306	5.912660493
-2.75	-44.23306359	-45.26106115	-47.85134159	-44.59201436	-52.16988043	-39.70863806	-41.84105375	-22.92489054
+2.75	7.213273201	8.840873472	8.879422749	8.213598321	8.741418768	6.737999301	7.092630844	4.776196362
-2.8	-48.53620899	-49.06276037	-51.97425324	-48.49800506	-56.96105035	-44.8556613	-47.2858792	-24.96449585
+2.8	5.325181789	6.14824631	6.14824631	5.54919401	6.394560094	4.68437236	4.930918274	3.527018969
-2.85	-52.3965023	-52.16285081	-55.34600011	-51.69829822	-60.90671947	-49.15689731	-51.83705474	-26.64026851
+2.85	5.325181789	5.314189667	5.673443842	5.339853711	6.394560094	4.643273815	4.891202678	2.552121724
-2.9	-56.35608029	-55.55173668	-59.04423423	-55.21599696	-65.26918776	-53.95831025	-56.92058004	-28.48749868
+2.9	5.325181789	5.314189667	5.673443842	5.339853711	6.394560094	4.643273815	4.891202678	2.552121724
-2.95	-59.54738666	-58.22616239	-61.97462233	-58.0105195	-68.75897543	-57.95678479	-61.15606897	-29.95942645
+2.95	5.325181789	5.314189667	5.673443842	5.339853711	6.394560094	4.643273815	4.891202678	2.552121724
-3	-62.98654938	-61.03461929	-65.06766986	-60.96971417	-72.48642429	-62.42889091	-65.89578723	-31.52338957
+3	5.325181789	5.314189667	5.673443842	5.339853711	6.394560094	4.643273815	4.891202678	2.552121724
(Span 3) -4	-1.46E+00	-1.460139038	-1.558848554	-1.467190571	-1.756984165	-1.27579665	-1.343918145	-0.70122687
+4	61.07504844	60.02209836	63.8792764	59.78192832	70.83439432	57.92483298	61.08077366	30.8325906
-3.05	-1.46E+00	-1.460139038	-1.558848554	-1.467190571	-1.756984165	-1.27579665	-1.343918145	-0.70122687
+3.05	58.82231829	58.21326887	61.88557089	57.87359884	68.42641706	54.83978043	57.80791083	29.812476
-3.1	-1.915532542	-1.718646827	-1.718646827	-1.467190571	-1.756984165	-1.341594575	-1.412204816	-1.344518257
+3.1	55.21207074	55.26574938	58.64726744	54.78029042	64.54427615	50.00422545	52.67952098	28.1621458
-3.15	-2.801359177	-2.987802961	-2.987802961	-2.39314401	-2.39314401	-2.309635148	-2.431194893	-1.977831957
+3.15	52.66131624	53.15373184	56.33312012	52.57353046	61.78736476	46.65387841	49.12724402	26.98679272
-3.2	-4.2473526	-5.153321603	-5.153321603	-4.368073236	-4.495558351	-3.907883883	-4.113561982	-3.012563709
+3.2	48.6367494	49.7809478	52.645942	49.06253499	57.41813609	41.8083804	44.00882147	25.11960214
-3.25	-5.285341263	-6.676663544	-6.676663544	-5.924338538	-6.215828274	-5.065474006	-5.332077901	-3.755629781
+3.25	45.8315938	47.40507793	50.05371398	46.59730906	54.36073225	38.67919349	40.71494052	23.81034057
-3.3	-7.237667483	-9.131133745	-9.131133745	-8.449846857	-9.060080118	-6.947921305	-7.313601374	-4.944495233
+3.3	41.45813902	43.66599553	45.9811628	42.72854344	49.57704213	34.6302503	36.69599289	21.75827053
-3.35	-9.149702784	-11.1039193	-11.20871218	-10.2533095	-11.04545558	-8.472731665	-8.930352086	-5.783317153
+3.35	38.44219963	41.06560308	43.15320953	40.04475639	46.26751516	32.2534931	34.17017082	20.33643961
-3.4	-12.23516807	-14.50864949	-14.80808064	-13.37630972	-14.52310513	-10.90899192	-11.51455833	-7.105315098
+3.4	33.78528685	37.01924101	38.75884407	35.87813788	41.14199065	28.43790289	30.11710194	18.13150233
-3.45	-14.42804392	-16.90633476	-17.3437283	-15.7656007	-17.33647594	-12.62563632	-13.33607169	-8.162806717
+3.45	30.86836338	34.23366329	35.73752872	33.01575432	37.62878242	25.85795833	27.37654046	16.61841257
-3.5	-17.90568735	-20.6039291	-21.26657836	-19.49669134	-21.71742281	-15.32789341	-16.20426104	-10.0305723
+3.5	26.42551076	29.93902257	31.08488854	28.61122175	32.23407656	22.22142933	23.51090938	14.29261038
-3.55	-20.34060722	-23.17905833	-24.00337881	-22.05541111	-24.74049065	-17.2076189	-18.19993678	-11.34018756
+3.55	23.503119	27.00759076	27.9125678	25.6101854	28.56560413	20.03273575	21.18165187	12.70960096
-3.6	-24.32173968	-27.19109855	-28.27396534	-26.05223299	-29.47710739	-20.13316516	-21.30667557	-13.39272468
+3.6	19.04586107	22.52367042	23.0651904	21.02760988	22.97428792	16.79696066	17.7372972	10.69083091

-3.65	**-27.15478515**	**-29.95620508**	**-31.2214249**	**-28.813287**	**-32.75822868**	**-22.14752995**	**-23.44625643**	**-14.814857**
+3.65	**16.03428946**	**19.48571965**	**19.78422514**	**18.15033117**	**19.53535408**	**14.60327957**	**15.40256934**	**9.642769717**
-3.7	**-31.56610192**	**-34.22372931**	**-35.77625016**	**-33.08362622**	**-37.84558137**	**-25.84893077**	**-27.20940081**	**-17.0201719**
+3.7	**11.64589801**	**15.1183784**	**15.1183784**	**14.25809926**	**15.20187347**	**11.50240036**	**12.1151498**	**8.039765576**
-3.75	**-34.60463398**	**-37.13947975**	**-38.89200994**	**-36.00706804**	**-41.33633588**	**-28.7313591**	**-30.2435359**	**-18.5334905**
+3.75	**10.02968139**	**12.6903591**	**12.6903591**	**11.6758948**	**12.32863109**	**9.648774772**	**10.15660502**	**6.953748591**
-3.8	**-39.29146898**	**-41.41571341**	**-43.46654586**	**-40.30227864**	**-46.47572781**	**-33.27043026**	**-35.02150554**	**-20.8595998**
+3.8	**7.547292199**	**9.087154051**	**9.087154051**	**7.772410721**	**8.716983303**	**7.294354612**	**7.700352103**	**5.304307831**
-3.85	**-42.49186905**	**-44.44043716**	**-46.70557759**	**-43.34555528**	**-50.12421556**	**-36.47345309**	**-38.39879578**	**-22.44276309**
+3.85	**7.45162732**	**7.192505891**	**7.69992541**	**7.251678827**	**8.716983303**	**7.294354612**	**7.700352103**	**4.19433107**
-3.9	**-47.38878819**	**-49.03910591**	**-51.63499655**	**-47.98008831**	**-55.69093221**	**-41.59483558**	**-43.80859189**	**-24.8576607**
+3.9	**7.45162732**	**7.192505891**	**7.69992541**	**7.251678827**	**8.716983303**	**7.294354612**	**7.700352103**	**3.591171598**
-3.95	**-50.70743614**	**-52.13679466**	**-54.95867417**	**-51.10686852**	**-59.45343573**	**-44.89374946**	**-47.52873705**	**-26.48936339**
+3.95	**7.45162732**	**7.192505891**	**7.69992541**	**7.251678827**	**8.716983303**	**7.294354612**	**7.700352103**	**3.591171598**
-5	**-55.74901164**	**-56.81543381**	**-59.98331749**	**-55.83667466**	**-65.15483461**	**-50.30776841**	**-53.01603392**	**-28.96104112**
+5	**7.45162732**	**7.192505891**	**7.69992541**	**7.251678827**	**8.716983303**	**7.294354612**	**7.700352103**	**3.591171598**

3-Span: Shear (Max and Min) Raw Data Results - 50’ Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	-7.451440768	-12.10032145	-12.87574691	-8.004187762	-9.950441479	-10.26342243
End Shear	55.9920764	75.86113334	76.59494472	55.83655376	68.15405989	68.61308381
-0.05	-7.451440768	-12.10032145	-12.87574691	-8.004187762	-9.950441479	-10.26342243
+0.05	51.47700616	68.5937884	69.85605156	50.65191354	61.85796361	62.07343907
-0.1	-7.451440768	-12.10032145	-12.87574691	-8.004187762	-9.950441479	-10.26342243
+0.1	46.50073451	59.9188648	61.87385864	44.68004242	54.59696536	54.75143565
-0.15	-7.451440768	-12.10032145	-12.87574691	-8.004187762	-9.950441479	-10.26342243
+0.15	43.23670584	54.46954284	56.72062394	40.9872434	50.09879392	49.99357555
-0.2	-8.065532627	-12.10032145	-12.87574691	-8.726682272	-9.950441479	-10.26342243
+0.2	38.63536365	47.18908982	49.22979034	35.67007382	43.45914471	43.1899436
-0.25	-9.723362872	-12.10032145	-12.87574691	-10.97495392	-11.6151632	-11.66910287
+0.25	35.50764581	42.59377971	44.41260319	32.85765737	39.27560971	39.19292759
-0.3	-12.29575723	-16.65542412	-17.10546801	-14.44920658	-15.925934	-16.24213565
+0.3	30.75963209	36.41529553	37.48170194	29.27871531	33.35396652	34.52552111
-0.35	-15.33698967	-19.77395379	-20.45245759	-16.84379928	-18.98488445	-19.23537375
+0.35	27.92360839	32.58168082	33.37775542	26.8445013	29.98666137	31.49373096
-0.4	-19.8530486	-24.84299596	-24.90366871	-20.69184242	-23.48767677	-23.62978257
+0.4	23.6694144	27.088615	27.50739165	23.29149769	25.49130313	27.08273331
-0.45	-22.82418007	-28.0799808	-28.25072886	-23.63771242	-26.4113861	-26.96027481
+0.45	21.00428582	23.81701494	24.06670245	20.9961546	22.9713704	24.24309314
-0.5	-27.20600868	-33.27194161	-34.28221931	-28.13109877	-30.87947151	-32.43999622
+0.5	17.34690149	19.44928638	19.43125293	17.67644263	19.32507149	20.1521339
-0.55	-30.0682703	-36.55133954	-38.38707122	-31.30176673	-34.08078631	-36.23313843
+0.55	15.02463806	16.80916088	16.40275594	15.55328761	16.99176218	17.54705631
-0.6	-34.63358132	-41.1644319	-44.24014612	-35.78216506	-39.07968173	-42.02333527
+0.6	11.73078836	13.48173173	12.57399078	12.51684911	13.6526586	13.83974736
-0.65	-37.73724071	-44.59872113	-47.93590172	-38.58353838	-42.37822169	-45.80647556
+0.65	9.706578821	11.37979767	10.56478653	10.59919876	11.54231592	11.56447
-0.7	-42.25837896	-51.91336062	-55.62202049	-42.50416092	-46.97263142	-51.11500515
+0.7	6.829730724	8.41597685	7.814837756	7.896018258	8.564935751	8.573670961
-0.75	-45.17271741	-57.04371441	-61.61427031	-44.92846151	-50.30493883	-54.40796286
+0.75	5.553639412	6.574628899	6.10633063	6.369412197	6.794039677	6.712103029
-0.8	-49.3771657	-64.44171558	-70.53779168	-48.27762629	-57.03386113	-58.97493498
+0.8	3.99690032	4.070953226	3.858968041	4.296613658	4.546138005	4.151038806
-0.85	-52.05856726	-69.08705782	-76.19330294	-50.31705276	-61.38410416	-61.76933601
+0.85	3.032742023	2.679893548	2.615141544	3.034692335	3.202666909	2.701409817
-0.9	-55.8808933	-76.45971036	-84.21920627	-55.38016906	-67.94068764	-68.94158766
+0.9	1.704816937	2.040908268	2.22803087	1.324468183	1.715523841	1.725165978
-0.95	-58.28574302	-81.96203448	-89.25491549	-59.03517783	-72.55294233	-73.70938864
+0.95	1.463130071	2.040908268	2.22803087	1.324468183	1.715523841	1.725165978
-1	-61.66051314	-89.90333205	-96.31899042	-64.5752665	-79.19167029	-80.5428409
+1	1.46E+00	2.040908268	2.22803087	1.324468183	1.715523841	1.725165978
(Span 2) -2	-5.325075465	-7.427904723	-8.108938928	-4.820414173	-6.243664913	-6.278757666
+2	62.49748087	99.33322901	101.2977025	69.13680406	84.38499637	86.94951194
-2.05	-5.325075465	-7.427904723	-8.108938928	-4.820414173	-6.243664913	-6.278757666
+2.05	59.52652171	91.9626631	93.11322653	64.62868221	78.93992711	81.00308484
-2.1	-5.325075465	-7.427904723	-8.108938928	-4.820414173	-6.243664913	-6.278757666
+2.1	55.78048118	83.19564929	84.67294722	59.18769885	72.35759384	73.86910786
-2.15	-5.325075465	-7.427904723	-8.108938928	-4.820414173	-6.243664913	-6.278757666
+2.15	52.36857723	75.38731667	77.80214751	54.42233244	66.58335589	67.53905737
-2.2	-5.325075465	-7.427904723	-8.108938928	-5.868783789	-6.243708369	-6.278757666
+2.2	48.2013252	66.47237388	69.33148706	48.51575498	59.51006408	59.9345968
-2.25	-7.156375032	-8.65266442	-8.149145878	-7.993528847	-8.762065568	-8.831095037

+2.25	44.50830672	59.61645055	62.22794556	43.61111682	53.44976504	54.09227873
-2.3	-10.24444974	-12.00112322	-11.44301514	-10.87884697	-12.10819122	-12.10380211
+2.3	40.10632802	51.74896957	54.1641027	38.35239231	46.72856457	47.18699116
-2.35	-13.11338116	-15.13311053	-14.50230816	-13.51700063	-15.02913188	-15.24093787
+2.35	36.29202508	45.20146274	47.59840675	34.50169027	41.33340072	41.21786649
-2.4	-16.67712923	-19.22821562	-19.01633039	-16.98706745	-18.60220609	-19.45544564
+2.4	31.84177802	38.43295585	40.46536703	29.95643881	35.29870026	35.57320011
-2.45	-19.94431705	-22.78728021	-23.32586142	-19.87002356	-21.77420719	-23.11201477
+2.45	27.9017256	33.0632306	34.55641595	26.40559594	30.31941369	31.28313424
-2.5	-24.11428829	-28.20091871	-29.15630631	-23.3158605	-25.92792101	-27.4262673
+2.5	23.59938836	27.40697429	28.30164791	22.81843251	25.31403104	26.80174367
-2.55	-27.80765085	-33.06513394	-34.55680465	-26.40703178	-30.32133762	-31.28482436
+2.55	20.08233764	22.78555004	23.34705326	19.86887056	21.77293083	23.11059584
-2.6	-32.20788937	-39.38696109	-41.47086116	-30.53834992	-36.14961156	-36.28148459
+2.6	16.34114393	18.64027861	18.34087467	16.51374995	18.08121078	18.86885665
-2.65	-36.01897193	-45.20371452	-47.59882224	-34.50321799	-41.33549074	-41.19458373
+2.65	13.19362833	15.13177594	14.49845851	13.55389616	15.02794609	15.23964088
-2.7	-40.46360028	-52.86312844	-55.28850638	-39.08623499	-47.68219468	-48.1508807
+2.7	9.846442403	11.36345058	10.6994417	10.45212075	11.63510835	11.63076206
-2.75	-44.23306359	-59.61905458	-62.22840735	-43.61300381	-53.45206203	-54.09456453
+2.75	7.213273201	8.651655614	8.14898725	7.992590809	8.761028641	8.877048929
-2.8	-48.53620899	-67.62275642	-70.56982151	-49.32022136	-60.48724455	-60.97512762
+2.8	5.325181789	7.427903248	8.108939154	5.548666777	6.243659721	6.278762589
-2.85	-52.3965023	-75.34442248	-77.80260334	-54.42424079	-66.58567095	-67.49479731
+2.85	5.325181789	7.427903248	8.108939154	4.820417104	6.243659721	6.278762589
-2.9	-56.35608029	-84.45307154	-85.78050804	-59.9762064	-73.31220398	-74.90020659
+2.9	5.325181789	7.427903248	8.108939154	4.820417104	6.243659721	6.278762589
-2.95	-59.54738666	-91.9655128	-93.11371067	-64.63050019	-78.94212535	-81.00544407
+2.95	5.325181789	7.427903248	8.108939154	4.820417104	6.243659721	6.278762589
-3	-62.98654938	-100.5475707	-102.6534909	-69.87238349	-85.27267179	-87.9231239
+3	5.325181789	7.427903248	8.108939154	4.820417104	6.243659721	6.278762589
(Span 3) -4	-1.46E+00	-2.040907863	-2.228030932	-1.324468989	-1.715522414	-1.725167331
+4	61.07504844	88.60437761	95.18279863	63.6699229	78.10728142	79.42909818
-3.05	-1.46E+00	-2.040907863	-2.228030932	-1.324468989	-1.715522414	-1.725167331
+3.05	58.82231829	83.30939296	90.47301926	59.97594554	73.68075868	74.87279653
-3.1	-1.915532542	-2.040907863	-2.228030932	-1.587799896	-1.715522414	-1.725167331
+3.1	55.21207074	75.05682494	82.9199737	54.47995427	66.76315877	67.72177563
-3.15	-2.801359177	-2.413061057	-2.31907306	-2.734117663	-2.882720278	-2.434136722
+3.15	52.66131624	70.20941233	77.56898206	50.80769355	62.45068226	62.75902599
-3.2	-4.2473526	-4.478255966	-4.184477973	-4.626739049	-4.897649369	-4.56021136
+3.2	48.6367494	63.24149139	69.08621965	47.74221995	55.9260205	58.24322556
-3.25	-5.285341263	-6.178869072	-5.710452786	-6.001255273	-6.401338958	-6.267950401
+3.25	45.8315938	58.30915143	63.13682006	45.509305	51.4394678	55.19840717
-3.3	-7.237667483	-8.894614614	-8.274208586	-8.332516011	-9.045950041	-9.054979517
+3.3	41.45813902	50.68210026	54.13436524	41.87281504	46.2346109	50.25890049
-3.35	-9.149702784	-10.87085286	-10.10868167	-10.13497379	-11.03123716	-11.05307591
+3.35	38.44219963	45.68764573	48.83336844	39.25891152	43.17155498	46.7196864
-3.4	-12.23516807	-14.02337607	-13.19184707	-13.0111117	-14.19638405	-14.44155972
+3.4	33.78528685	40.79242951	43.28988308	35.05680746	38.22360588	41.0449273
-3.45	-14.42804392	-16.2420287	-15.74476251	-15.03573189	-16.42281004	-16.91350256
+3.45	30.86836338	37.93303656	39.38771377	32.06972322	34.85882661	37.15672166
-3.5	-17.90568735	-20.16015481	-20.01961015	-18.22012245	-19.92240071	-20.82068754
+3.5	26.42551076	33.05969146	33.23057169	27.31368834	30.05693762	31.46711748
-3.55	-20.34060722	-23.0724384	-23.23989016	-20.4335826	-22.35361418	-23.54840876
+3.55	23.503119	29.60729209	29.53760719	24.36565911	27.13015563	27.85595043
-3.6	-24.32173968	-27.98359695	-28.46153166	-23.87624487	-26.133105	-27.80740255
+3.6	19.04586107	24.63510751	24.50868709	20.05402982	22.74490305	22.90421547

-3.65	**-27.15478515**	**-31.64620993**	**-32.37567059**	**-26.24522528**	**-29.18858375**	**-30.74847078**
+3.65	**16.03428946**	**21.27674073**	**21.27994109**	**17.48836799**	**19.74275608**	**19.97431895**
-3.7	**-31.56610192**	**-37.39602986**	**-38.61132317**	**-29.89615673**	**-34.31988062**	**-35.29569325**
+3.7	**11.64589801**	**16.45913966**	**16.3596581**	**13.87526384**	**15.20912812**	**15.48479482**
-3.75	**-34.60463398**	**-41.47156785**	**-43.23257337**	**-32.23059356**	**-38.26827692**	**-38.40769328**
+3.75	**10.02968139**	**13.31592974**	**13.32911283**	**11.558888**	**12.33496506**	**12.43581826**
-3.8	**-39.29146898**	**-48.36374594**	**-50.45742775**	**-36.53486144**	**-44.51583552**	**-44.30289746**
+3.8	**7.547292199**	**12.10031225**	**12.87574523**	**8.1825948**	**9.950438147**	**10.26342201**
-3.85	**-42.49186905**	**-53.15070731**	**-55.45196229**	**-40.08105765**	**-48.99831141**	**-48.83931815**
+3.85	**7.45162732**	**12.10031225**	**12.87574523**	**8.004193018**	**9.950438147**	**10.26342201**
-3.9	**-47.38878819**	**-61.29824609**	**-63.18088149**	**-45.66127783**	**-55.79073356**	**-55.95360959**
+3.9	**7.45162732**	**12.10031225**	**12.87574523**	**8.004193018**	**9.950438147**	**10.26342201**
-3.95	**-50.70743614**	**-67.0825106**	**-68.49696637**	**-49.64309785**	**-60.63208464**	**-60.83949238**
+3.95	**7.45162732**	**12.10031225**	**12.87574523**	**8.004193018**	**9.950438147**	**10.26342201**
-5	**-55.74901164**	**-75.48181348**	**-76.67916145**	**-55.53749414**	**-67.79104158**	**-68.25087842**
+5	**7.45162732**	**12.10031225**	**12.87574523**	**8.004193018**	**9.950438147**	**10.26342201**

3-Span: Moment (Max and Min) Raw Data Results - 50' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-18.628602	-13.346777	-15.727774	-14.408553	-13.112277	-10.823566	-14.726698	-16.579006	-18.450733	-20.246750
+0.05	128.692515	95.919915	102.065722	89.114191	79.164939	78.320978	105.332484	115.654936	119.893857	122.690110
-0.1	-37.257204	-26.693554	-31.455548	-28.817106	-26.224553	-21.647131	-29.453395	-33.158011	-36.901466	-40.493500
+0.1	236.619411	177.481987	185.012276	160.855055	144.236456	144.837124	195.227348	213.763017	220.533815	227.162066
-0.15	-55.885806	-40.040331	-47.183321	-43.225659	-39.336830	-32.470697	-44.180093	-49.737017	-55.352199	-60.740249
+0.15	324.609700	244.908257	250.341342	216.573561	195.702422	200.136740	269.562350	294.284642	315.758593	323.484004
-0.2	-74.514408	-53.387107	-62.911095	-57.634212	-52.449107	-43.294262	-58.906791	-66.316023	-73.802932	-80.986999
+0.2	393.362304	298.279460	299.043493	256.787310	234.161514	244.081401	328.569602	357.509150	391.948060	404.520823
-0.25	-93.143010	-66.733884	-78.638869	-72.042765	-65.561383	-54.117828	-73.633489	-82.895028	-92.253665	-101.233749
+0.25	443.182097	338.055830	333.192936	289.176045	265.751956	277.022877	372.728119	405.453231	449.441751	474.049310
-0.3	-111.771612	-80.080661	-94.366643	-86.451318	-78.673660	-64.941393	-88.360186	-99.474034	-110.704399	-121.480499
+0.3	474.962403	364.792196	358.757669	310.178888	287.589868	299.388566	406.663521	447.177747	488.694737	523.768821
-0.35	-130.400213	-93.427438	-110.094417	-100.859871	-91.785937	-75.764959	-103.086884	-116.053040	-129.155132	-141.727249
+0.35	498.065886	383.719331	373.355732	322.658365	302.893401	311.681417	432.273346	472.895509	515.445992	553.801924
-0.4	-149.028815	-106.774215	-125.822191	-115.268424	-104.898213	-86.588524	-117.813582	-132.632045	-147.605865	-161.973999
+0.4	509.353732	394.043740	374.311223	326.195349	309.842161	314.480149	444.234788	483.868874	531.750976	565.229051
-0.45	-167.657417	-120.120992	-141.549964	-129.676977	-118.010490	-97.412090	-132.540280	-149.211051	-166.056598	-182.220748
+0.45	504.351414	392.632620	362.835065	322.993732	310.335823	308.439031	443.699722	480.474284	531.688718	570.229967
-0.5	-186.286019	-133.467768	-157.277738	-144.085530	-131.122767	-108.235655	-147.266977	-165.790057	-184.507331	-202.467498
+0.5	498.294172	385.602539	345.095271	316.907950	302.241556	304.803555	436.257892	471.324825	520.925881	557.607733
-0.55	-204.914621	-146.814545	-173.005512	-158.494083	-144.235043	-119.059221	-161.993675	-182.369062	-202.958064	-222.714248
+0.55	485.716325	373.119686	345.607833	308.877620	289.279300	299.240618	420.933734	457.859953	502.378499	533.755015
-0.6	-223.543223	-160.161322	-188.733286	-172.902636	-157.347320	-129.882786	-176.720373	-198.948068	-221.408797	-242.960998
+0.6	458.940747	349.810720	336.619614	291.014851	269.726720	284.399132	394.016704	430.665408	469.022548	502.963496
-0.65	-242.171825	-173.508099	-204.461060	-187.311189	-170.459597	-140.706352	-191.447071	-215.527074	-239.859530	-263.207748
+0.65	413.942774	317.914143	312.798226	267.645839	249.097102	261.008523	356.531013	390.864682	424.262805	456.166771
-0.7	-260.800427	-186.854876	-220.188833	-201.719742	-183.571874	-151.529917	-206.173768	-232.106079	-258.310263	-283.454497
+0.7	362.956793	280.024463	275.225901	235.913115	223.565678	229.656204	309.602965	339.698624	370.897123	394.927087
-0.75	-279.429029	-200.201653	-235.916607	-216.128295	-196.684150	-162.353483	-220.900466	-248.685085	-276.760996	-303.701247
+0.75	300.777498	233.106686	230.497168	195.841654	190.353521	191.164473	255.201249	278.525270	305.267267	321.001878
-0.8	-298.057631	-213.548430	-251.644381	-230.536848	-209.796427	-173.177048	-235.627164	-265.264091	-295.211729	-323.947997
+0.8	226.056248	178.269701	174.155208	146.479906	149.721093	146.431143	194.613170	208.820056	228.937361	235.917932
-0.85	-316.686233	-226.895206	-267.372155	-244.945401	-230.267276	-184.000614	-250.353861	-281.843096	-313.662463	-344.194747
+0.85	143.379318	117.334551	117.533150	93.570756	116.649101	96.429914	126.943432	132.912189	146.150131	146.356497
-0.9	-335.314835	-240.241983	-283.099929	-259.353954	-271.983977	-194.824180	-265.080559	-298.422102	-332.113196	-364.441497
+0.9	86.216014	69.820554	69.757346	55.463821	84.355756	58.188341	70.593300	70.655857	72.321675	72.298844
-0.95	-353.943436	-253.588760	-298.827703	-275.820848	-325.755846	-205.647745	-279.807257	-315.001108	-350.563929	-384.688247
+0.95	69.498678	50.590442	52.423293	46.905025	55.621568	41.315466	56.420427	62.899809	69.748932	75.904807
-1	-372.572037	-266.935540	-320.394511	-338.648341	-390.993996	-216.471320	-294.533959	-331.580104	-369.014663	-404.934996
+1	73.156503	53.253095	55.182414	49.373712	44.717357	43.489964	59.389921	66.210324	73.419927	79.899799
(Span 2) -2	-372.572037	-266.935540	-320.394511	-338.648341	-390.993996	-216.471320	-294.533959	-331.580104	-369.014663	-404.934996
+2	73.156503	53.253095	55.182414	49.373712	44.717357	43.489964	59.389921	66.210324	73.419927	79.899799
-2.05	-255.672011	-186.108898	-217.206330	-231.197279	-293.614124	-151.988343	-207.555613	-231.391719	-256.587692	-279.233176
+2.05	55.850008	40.655111	42.128015	37.693466	51.756628	33.201625	45.340160	50.547073	56.051114	60.998055
-2.1	-238.365170	-173.510894	-179.796780	-164.002782	-213.925058	-141.700013	-193.505847	-215.728450	-239.218867	-260.331443
+2.1	101.784711	83.691972	84.081972	67.029713	76.501533	69.580266	89.446181	89.413193	92.574153	92.525766
-2.15	-221.058329	-160.912890	-166.742380	-149.190626	-157.068447	-131.411683	-179.456081	-200.065181	-221.850042	-241.429709
+2.15	170.621299	139.775401	139.910358	111.288195	106.828145	114.422922	157.710774	166.039128	180.371368	185.279137
-2.2	-203.751488	-148.314886	-153.687981	-137.510368	-125.381796	-121.123353	-165.406316	-184.401912	-204.481217	-222.527976
+2.2	269.489811	211.783476	203.737026	172.701685	152.605082	174.801000	237.125507	256.875413	277.045191	293.239370

-2.25	-186.444648	-135.716882	-140.633581	-125.830109	-118.818226	-110.835023	-151.356550	-168.738642	-187.112393	-203.626243
+2.25	353.262450	274.008439	276.196858	241.135811	213.871760	223.512270	306.399879	334.756467	363.582103	389.011454
-2.3	-169.137807	-123.118878	-127.579182	-114.149851	-116.021084	-100.546693	-137.306784	-153.075373	-169.743568	-184.724510
+2.3	427.741880	326.115120	336.786810	294.969944	263.817535	267.167415	366.476958	402.249943	436.344830	471.201820
-2.35	-151.830966	-110.520875	-114.524783	-102.469592	-114.013769	-90.258363	-123.257018	-137.412104	-152.374743	-165.822777
+2.35	482.414792	368.075733	378.183596	330.416290	297.755426	297.054099	412.309458	452.284377	495.227726	532.806862
-2.4	-134.524125	-97.922871	-101.470383	-90.789333	-113.628800	-79.970033	-109.207253	-121.748835	-135.005918	-146.921044
+2.4	524.661075	398.578261	403.797332	351.838632	319.102316	319.909608	446.863123	489.950259	538.391990	576.351650
-2.45	-117.217284	-85.324867	-88.415984	-79.109075	-113.493414	-69.681703	-95.157487	-106.085566	-117.637093	-128.019311
+2.45	542.833849	414.120295	410.519738	360.862715	329.134953	328.465516	464.036084	507.474996	561.008438	603.560265
-2.5	-99.910443	-72.726863	-75.361584	-67.428816	-113.358164	-59.393420	-81.107721	-90.422297	-100.268268	-109.117635
+2.5	546.176572	418.232405	406.042877	368.673325	335.819268	328.812662	469.872070	511.625624	567.835400	613.089869
-2.55	-117.214945	-85.324729	-88.415975	-79.108986	-113.493550	-69.681759	-95.157452	-106.085435	-117.637019	-128.019378
+2.55	542.925383	414.114600	410.517629	360.862308	329.134739	328.458031	464.034390	507.466079	561.005511	603.558466
-2.6	-134.521440	-97.922713	-101.470374	-90.789232	-113.628937	-79.970097	-109.207213	-121.748686	-135.005832	-146.921121
+2.6	524.959296	398.582658	403.784272	351.831395	319.106803	319.900598	446.870997	489.939045	538.397727	576.349438
-2.65	-151.827935	-110.520697	-114.524773	-102.469477	-114.013839	-90.258435	-123.256974	-137.411937	-152.374645	-165.822865
+2.65	482.548878	368.078379	378.178949	330.415113	297.754784	297.058852	412.315450	452.293265	495.231218	532.812883
-2.7	-169.134430	-123.118681	-127.579172	-114.149722	-116.021077	-100.546774	-137.306735	-153.075188	-169.743459	-184.724608
+2.7	427.940629	326.116678	336.769871	294.959232	263.820184	267.186107	366.481807	402.257383	436.346920	471.216398
-2.75	-186.440926	-135.716665	-140.633571	-125.829967	-118.818374	-110.835112	-151.356496	-168.738438	-187.112272	-203.626351
+2.75	353.237484	274.017744	276.188553	241.131276	213.873384	223.514866	306.403566	334.762496	363.589754	389.014162
-2.8	-203.747421	-148.314649	-153.687970	-137.510213	-125.381986	-121.123450	-165.406257	-184.401689	-204.481085	-222.528095
+2.8	269.635093	211.803724	203.734182	172.688200	152.606234	174.818100	237.129240	256.881289	277.062634	293.251832
-2.85	-221.053916	-160.912632	-166.742369	-149.190458	-157.068547	-131.411789	-179.456019	-200.064940	-221.849899	-241.429838
+2.85	170.741239	139.781354	139.915635	111.284515	106.830374	114.424820	157.714586	166.044901	180.376627	185.280008
-2.9	-238.360412	-173.510616	-179.796768	-164.002794	-213.925033	-141.700127	-193.505780	-215.728191	-239.218712	-260.331581
+2.9	101.661660	83.687146	84.098411	67.026461	76.508161	69.563121	89.458922	89.425685	92.589078	92.540514
-2.95	-255.666907	-186.108600	-217.206127	-231.197353	-293.614191	-151.988466	-207.555541	-231.391442	-256.587525	-279.233325
+2.95	55.851124	40.655172	42.128010	37.693512	51.756120	33.201597	45.340171	50.547125	56.051155	60.998021
-3	-372.581365	-266.935674	-320.394867	-338.648222	-390.994160	-216.471481	-294.534394	-331.580184	-369.015246	-404.935297
+3	73.157964	53.253179	55.182415	49.373768	44.717313	43.489929	59.389941	66.210401	73.419976	79.899755
(Span 3) -4	-372.581365	-266.935674	-320.394867	-338.648222	-390.994160	-216.471481	-294.534394	-331.580184	-369.015246	-404.935297
+4	73.157964	53.253179	55.182415	49.373768	44.717313	43.489929	59.389941	66.210401	73.419976	79.899755
-3.05	-353.952297	-253.588891	-298.827680	-275.821384	-325.755915	-205.647908	-279.807674	-315.001174	-350.564484	-384.688532
+3.05	69.500066	50.590520	52.423295	46.905080	55.621984	41.315432	56.420444	62.899881	69.748977	75.904768
-3.1	-335.323228	-240.242107	-283.099907	-259.353879	-271.984159	-194.824334	-265.080955	-298.422164	-332.113722	-364.441767
+3.1	85.526250	69.827152	69.763237	55.468271	84.350057	58.176313	70.605171	70.667431	72.330527	72.307540
-3.15	-316.694160	-226.895324	-267.372135	-244.945331	-230.267291	-184.000760	-250.354236	-281.843155	-313.662960	-344.195002
+3.15	143.896873	117.341906	117.539717	93.575682	116.643381	96.415015	126.946504	132.914875	146.158223	146.364421
-3.2	-298.065092	-213.548540	-251.644362	-230.536782	-209.796392	-173.177187	-235.627516	-265.264145	-295.212197	-323.948237
+3.2	226.026033	178.275107	174.160193	146.482463	149.715063	146.416028	194.615988	208.816943	228.944377	235.908701
-3.25	-279.436023	-200.201757	-235.916589	-216.128234	-196.684118	-162.353613	-220.900797	-248.685136	-276.761435	-303.701472
+3.25	300.809665	233.111320	230.500358	195.839518	190.359920	191.148670	255.203315	278.521637	305.273341	320.991869
-3.3	-260.806955	-186.854973	-220.188816	-201.719686	-183.571844	-151.530040	-206.174077	-232.106126	-258.310673	-283.454707
+3.3	363.153233	280.027821	275.224318	235.910655	223.570751	229.639381	309.600603	339.693842	370.901640	394.915443
-3.35	-242.177887	-173.508189	-204.461044	-187.311137	-170.459569	-140.706466	-191.447358	-215.527116	-239.859911	-263.207943
+3.35	414.417916	317.915774	312.794311	267.641432	249.102161	260.990253	356.527327	390.858195	424.265137	456.174150
-3.4	-223.548819	-160.161406	-188.733271	-172.902589	-157.347295	-129.882892	-176.720638	-198.948107	-221.409148	-242.961178
+3.4	457.629387	349.808254	336.612931	291.011853	269.730365	284.379055	394.011181	430.656703	469.019464	502.968110
-3.45	-204.919750	-146.814622	-173.005498	-158.494041	-144.235021	-119.059319	-161.993919	-182.369097	-202.958386	-222.714413
+3.45	486.111651	373.115108	345.598030	308.872971	289.281966	299.249050	420.925901	457.848439	502.372609	533.756312
-3.5	-186.290682	-133.467839	-157.277725	-144.085492	-131.122747	-108.235745	-147.267199	-165.790087	-184.507624	-202.467648
+3.5	498.581182	385.595466	345.088978	316.901309	302.237618	304.809719	436.247360	471.310170	520.916746	557.616107
-3.55	-167.661614	-120.121055	-141.549953	-129.676944	-118.010473	-97.412172	-132.540480	-149.211078	-166.056862	-182.220883
+3.55	504.064907	392.640258	362.845158	323.000432	310.330875	308.433346	443.688352	480.467204	531.676687	570.234838
-3.6	-149.032545	-106.774272	-125.822180	-115.268395	-104.898199	-86.588598	-117.813760	-132.632068	-147.606099	-161.974118

+3.6	**508.964554**	**394.048792**	**374.319317**	**326.200300**	**309.836095**	**314.472555**	**444.224487**	**483.858620**	**531.757229**	**565.229924**
-3.65	**-130.403477**	**-93.427488**	**-110.094407**	**-100.859847**	**-91.785925**	**-75.765024**	**-103.087041**	**-116.053058**	**-129.155337**	**-141.727354**
+3.65	**497.560187**	**383.721454**	**373.361222**	**322.664010**	**302.891903**	**311.671559**	**432.278693**	**472.881755**	**515.448286**	**553.797036**
-3.7	**-111.774409**	**-80.080704**	**-94.366634**	**-86.451299**	**-78.673650**	**-64.941451**	**-88.360321**	**-99.474049**	**-110.704575**	**-121.480589**
+3.7	**474.595716**	**364.790393**	**358.760210**	**310.182100**	**287.591265**	**299.376192**	**406.665371**	**447.182729**	**488.691791**	**523.759484**
-3.75	**-93.145340**	**-66.733921**	**-78.638862**	**-72.042750**	**-65.561376**	**-54.117877**	**-73.633602**	**-82.895039**	**-92.253813**	**-101.233824**
+3.75	**442.688990**	**338.050859**	**333.191265**	**289.178661**	**265.753337**	**277.007959**	**372.725648**	**405.454075**	**449.434509**	**474.056638**
-3.8	**-74.516272**	**-53.387137**	**-62.911089**	**-57.634202**	**-52.449102**	**-43.294303**	**-58.906883**	**-66.316030**	**-73.803050**	**-80.987059**
+3.8	**392.914645**	**298.271076**	**299.038451**	**256.785990**	**234.169387**	**244.063571**	**328.563312**	**357.505163**	**391.936262**	**404.523046**
-3.85	**-55.887204**	**-40.040354**	**-47.183316**	**-43.225654**	**-39.336828**	**-32.470730**	**-44.180163**	**-49.737020**	**-55.352288**	**-60.740294**
+3.85	**324.753370**	**244.896216**	**250.333517**	**216.568985**	**195.708504**	**200.115892**	**269.552104**	**294.276233**	**315.763809**	**323.480445**
-3.9	**-37.258136**	**-26.693570**	**-31.455543**	**-28.817105**	**-26.224554**	**-21.647156**	**-29.453444**	**-33.158010**	**-36.901526**	**-40.493529**
+3.9	**236.943927**	**177.466174**	**185.021290**	**160.862877**	**144.240622**	**144.828806**	**195.212914**	**213.750068**	**220.534007**	**227.163239**
-3.95	**-18.629067**	**-13.346787**	**-15.727771**	**-14.408557**	**-13.112280**	**-10.823583**	**-14.726724**	**-16.579001**	**-18.450764**	**-20.246764**
+3.95	**128.857155**	**95.923921**	**102.070411**	**89.118208**	**79.167101**	**78.324331**	**105.336887**	**115.659797**	**119.888748**	**122.685561**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 50' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**							
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-18.628602**	**-17.981251**	**-19.249790**	**-18.129180**	**-21.792460**	**-18.235859**	**-19.250878**	**-8.977928**
+0.05	**128.692515**	**132.280397**	**139.477486**	**129.725315**	**151.061682**	**114.456925**	**120.584158**	**67.247889**
-0.1	**-37.257204**	**-35.962502**	**-38.499580**	**-36.258359**	**-43.584919**	**-36.471718**	**-38.501755**	**-17.955857**
+0.1	**236.619411**	**245.733171**	**258.851872**	**240.586287**	**279.532533**	**206.942816**	**217.961509**	**124.286508**
-0.15	**-55.885806**	**-53.943753**	**-57.749370**	**-54.387539**	**-65.377379**	**-54.707577**	**-57.752633**	**-26.933785**
+0.15	**324.609700**	**340.307659**	**357.907599**	**332.324714**	**384.889439**	**279.188556**	**293.953203**	**171.313330**
-0.2	**-74.514408**	**-71.925004**	**-76.999160**	**-72.516718**	**-87.169839**	**-72.943437**	**-77.003511**	**-35.911713**
+0.2	**393.362304**	**416.168503**	**436.940126**	**405.260080**	**467.738856**	**332.362659**	**349.855430**	**208.592497**
-0.25	**-93.143010**	**-89.906255**	**-96.248950**	**-90.645898**	**-108.962299**	**-91.179296**	**-96.254388**	**-44.889641**
+0.25	**443.182097**	**473.839122**	**496.541582**	**459.967994**	**538.602105**	**377.426315**	**397.802379**	**236.454803**
-0.3	**-111.771612**	**-107.887506**	**-115.498740**	**-108.775077**	**-130.754758**	**-109.415155**	**-115.505266**	**-53.867570**
+0.3	**474.962403**	**513.965899**	**537.436508**	**505.334149**	**593.644108**	**410.529143**	**433.435394**	**255.458463**
-0.35	**-130.400213**	**-125.868757**	**-134.748530**	**-126.904257**	**-152.547218**	**-127.651014**	**-134.756144**	**-62.845498**
+0.35	**498.065886**	**538.130862**	**567.692331**	**537.273921**	**628.371036**	**427.223383**	**450.507126**	**266.065543**
-0.4	**-149.028815**	**-143.850008**	**-153.998319**	**-145.033436**	**-174.339678**	**-145.886873**	**-154.007021**	**-71.823426**
+0.4	**509.353732**	**556.210525**	**585.067105**	**552.732207**	**643.111759**	**435.753627**	**460.074638**	**268.606764**
-0.45	**-167.657417**	**-161.831259**	**-173.248109**	**-163.162616**	**-196.132137**	**-164.122732**	**-173.257899**	**-80.801354**
+0.45	**504.351414**	**558.292368**	**585.457180**	**552.522140**	**639.047717**	**427.575910**	**451.897367**	**263.674589**
-0.5	**-186.286019**	**-179.812510**	**-192.497899**	**-181.291795**	**-217.924597**	**-182.358592**	**-192.508777**	**-89.779283**
+0.5	**498.294172**	**548.520024**	**576.092343**	**543.112675**	**629.095849**	**409.821730**	**433.485454**	**257.303437**
-0.55	**-204.914621**	**-197.793761**	**-211.747689**	**-199.420975**	**-239.717057**	**-200.594451**	**-211.759654**	**-98.757211**
+0.55	**485.716325**	**526.243008**	**554.061616**	**523.478953**	**608.894027**	**402.989579**	**425.593125**	**254.956201**
-0.6	**-223.543223**	**-215.775012**	**-230.997479**	**-217.550154**	**-261.509517**	**-218.830310**	**-231.010532**	**-107.735139**
+0.6	**458.940747**	**490.480703**	**517.247066**	**489.742619**	**571.641165**	**388.716245**	**410.143435**	**244.370547**
-0.65	**-242.171825**	**-233.756263**	**-250.247269**	**-235.679334**	**-283.301976**	**-237.066169**	**-250.261410**	**-116.713067**
+0.65	**413.942774**	**448.487281**	**468.001598**	**443.165356**	**518.253791**	**356.166337**	**376.253333**	**226.120814**
-0.7	**-260.800427**	**-251.737514**	**-269.497059**	**-253.808513**	**-305.094436**	**-255.302028**	**-269.512287**	**-125.690996**
+0.7	**362.956793**	**394.365202**	**411.141834**	**385.133619**	**450.321371**	**316.036682**	**333.500223**	**200.848093**
-0.75	**-279.429029**	**-269.718764**	**-288.746849**	**-271.937693**	**-326.886896**	**-273.537887**	**-288.763165**	**-134.668924**
+0.75	**300.777498**	**329.245044**	**342.119901**	**317.158686**	**369.615747**	**258.820683**	**272.739161**	**169.260106**
-0.8	**-298.057631**	**-287.700015**	**-307.996639**	**-290.066872**	**-348.679355**	**-291.773746**	**-308.014043**	**-143.646852**
+0.8	**226.056248**	**254.643243**	**262.540433**	**240.876634**	**278.060053**	**190.300175**	**200.796228**	**132.131180**
-0.85	**-316.686233**	**-305.681266**	**-327.246429**	**-308.196052**	**-370.471815**	**-310.009606**	**-327.264920**	**-152.624780**
+0.85	**143.379318**	**172.199121**	**174.140419**	**158.048397**	**177.728770**	**130.164680**	**137.216516**	**92.313188**
-0.9	**-335.314835**	**-323.662517**	**-346.496219**	**-326.325231**	**-392.264275**	**-328.245465**	**-346.515798**	**-161.602709**
+0.9	**86.216014**	**99.195603**	**99.195603**	**85.095392**	**88.621634**	**75.306226**	**79.269711**	**61.602740**
-0.95	**-353.943436**	**-341.643768**	**-365.746009**	**-344.454411**	**-414.056735**	**-346.481324**	**-365.766676**	**-170.580637**
+0.95	**69.498678**	**69.356661**	**74.045314**	**69.691584**	**83.456694**	**60.600245**	**63.836162**	**33.308267**
-1	**-372.572037**	**-359.625010**	**-384.995794**	**-362.583596**	**-435.849193**	**-374.833620**	**-397.564088**	**-179.558571**
+1	**73.156503**	**73.007012**	**77.942437**	**73.359561**	**87.849150**	**63.789731**	**67.195960**	**35.061334**
(Span 2) -2	**-372.572037**	**-359.625010**	**-384.995794**	**-362.583596**	**-435.849193**	**-374.833620**	**-397.564088**	**-179.558571**
+2	**73.156503**	**73.007012**	**77.942437**	**73.359561**	**87.849150**	**63.789731**	**67.195960**	**35.061334**
-2.05	**-255.672011**	**-255.144252**	**-272.392729**	**-256.376436**	**-307.014885**	**-252.892645**	**-268.373470**	**-122.532172**
+2.05	**55.850008**	**55.735882**	**59.503743**	**56.005028**	**67.066843**	**48.699115**	**51.299539**	**33.444944**
-2.1	**-238.365170**	**-237.873136**	**-253.954036**	**-239.021912**	**-286.232565**	**-207.841684**	**-218.939446**	**-114.237776**
+2.1	**101.784711**	**118.862441**	**118.862441**	**110.489734**	**117.529316**	**90.770310**	**95.547695**	**72.509194**
-2.15	**-221.058329**	**-220.602019**	**-235.515344**	**-221.667387**	**-265.450245**	**-192.751044**	**-203.043037**	**-105.943380**
+2.15	**170.621299**	**206.587420**	**209.281647**	**198.696550**	**222.720845**	**155.549833**	**164.017953**	**106.927573**
-2.2	**-203.751488**	**-203.330903**	**-217.076651**	**-204.312863**	**-244.667925**	**-177.660404**	**-187.146629**	**-97.648985**
+2.2	**269.489811**	**303.150470**	**312.889281**	**296.329057**	**341.643466**	**228.218464**	**240.627537**	**154.617644**

-2.25	-186.444648	-186.059786	-198.637959	-186.958338	-223.885604	-162.569764	-171.250220	-89.354589
+2.25	353.262450	386.802954	402.346003	381.174724	442.886289	317.508579	335.194762	195.451342
-2.3	-169.137807	-168.788670	-180.199266	-169.603813	-203.103284	-147.479124	-155.353811	-81.060194
+2.3	427.741880	457.110367	479.981908	455.330187	531.834065	389.472887	411.600438	232.370284
-2.35	-151.830966	-151.517554	-161.760574	-152.249289	-182.320964	-132.388485	-139.457403	-72.765798
+2.35	482.414792	513.228484	541.124897	511.638691	597.823507	440.960889	465.531009	257.071954
-2.4	-134.524125	-134.246437	-143.321881	-134.894764	-161.538643	-117.297845	-123.560994	-64.471402
+2.4	524.661075	556.242513	586.571700	554.638280	647.406309	478.360543	505.308442	276.053572
-2.45	-117.217284	-116.975321	-124.883189	-117.540240	-140.756323	-102.207205	-107.664585	-56.177007
+2.45	542.833849	580.289616	610.796218	575.903049	672.130297	493.092038	521.232652	282.714379
-2.5	-99.910443	-99.704292	-106.444508	-100.185764	-119.974003	-87.116565	-91.768252	-47.882611
+2.5	546.176572	588.818505	619.024404	583.732380	677.181623	490.020839	518.209980	282.758608
-2.55	-117.214945	-116.975423	-124.883202	-117.540296	-140.756226	-102.207044	-107.664673	-56.176992
+2.55	542.925383	580.279476	610.788575	575.902796	672.124209	493.087452	521.227594	282.715579
-2.6	-134.521440	-134.246553	-143.321897	-134.894829	-161.538533	-117.297660	-123.561094	-64.471386
+2.6	524.959296	556.247192	586.578683	554.649186	647.423827	478.364946	505.312837	276.059276
-2.65	-151.827935	-151.517684	-161.760591	-152.249361	-182.320840	-132.388276	-139.457516	-72.765779
+2.65	482.548878	513.230927	541.129432	511.647295	597.825135	440.962863	465.532844	257.072408
-2.7	-169.134430	-168.788814	-180.199286	-169.603894	-203.103147	-147.478892	-155.353937	-81.060172
+2.7	427.940629	457.141586	479.984967	455.337407	531.846912	389.491728	411.619993	232.375316
-2.75	-186.440926	-186.059945	-198.637980	-186.958426	-223.885454	-162.569508	-171.250358	-89.354565
+2.75	353.237484	386.815882	402.360404	381.180539	442.897223	317.514359	335.200580	195.548049
-2.8	-203.747421	-203.331075	-217.076675	-204.312959	-244.667761	-177.660124	-187.146779	-97.648959
+2.8	269.635093	303.179595	312.885832	296.334969	341.654280	228.233887	240.643520	154.622353
-2.85	-221.053916	-220.602206	-235.515369	-221.667491	-265.450068	-192.750740	-203.043201	-105.943352
+2.85	170.741239	206.599584	209.294983	198.702584	222.718856	155.557413	164.026039	106.721334
-2.9	-238.360412	-237.873336	-253.954064	-239.022024	-286.232375	-207.841356	-218.939622	-114.237745
+2.9	101.661660	118.855414	118.855414	110.501734	117.537424	90.788057	95.566376	72.197409
-2.95	-255.666907	-255.144466	-272.392758	-256.376556	-307.014682	-252.892890	-268.373708	-122.532139
+2.95	55.851124	55.735843	59.503736	56.005006	67.066880	48.699194	51.299502	33.384290
-3	-372.581365	-359.625285	-384.996266	-362.583947	-435.849164	-374.833779	-397.564281	-179.558586
+3	73.157964	73.006953	77.942429	73.359527	87.849207	63.789832	67.195907	35.061344
(Span 3) -4	-372.581365	-359.625285	-384.996266	-362.583947	-435.849164	-374.833779	-397.564281	-179.558586
+4	73.157964	73.006953	77.942429	73.359527	87.849207	63.789832	67.195907	35.061344
-3.05	-353.952297	-341.644020	-365.746452	-344.454750	-414.056705	-346.481841	-365.766734	-170.580657
+3.05	69.500066	69.356605	74.045307	69.691551	83.456746	60.600340	63.836112	33.308277
-3.1	-335.323228	-323.662755	-346.496639	-326.325553	-392.264247	-328.245954	-346.515854	-161.602728
+3.1	85.526250	99.179852	99.179852	85.108541	88.616449	75.312586	79.276406	60.674171
-3.15	-316.694160	-305.681491	-327.246825	-308.196356	-370.471789	-310.010068	-327.264974	-152.624799
+3.15	143.896873	172.207100	174.147497	158.044985	177.721464	130.170352	137.222403	91.430738
-3.2	-298.065092	-287.700226	-307.997012	-290.067158	-348.679330	-291.774181	-308.014093	-143.646870
+3.2	226.026033	254.651143	262.547288	240.873686	278.052972	190.305257	200.802079	132.126989
-3.25	-279.436023	-269.718961	-288.747198	-271.937961	-326.886872	-273.538295	-288.763213	-134.668941
+3.25	300.809665	329.252323	342.125931	317.155488	369.608040	258.828019	272.747151	169.255854
-3.3	-260.806955	-251.737696	-269.497384	-253.808764	-305.094414	-255.302408	-269.512333	-125.691012
+3.3	363.153233	394.371083	411.146240	385.129472	450.312215	316.041331	333.505396	200.843423
-3.35	-242.177887	-233.756432	-250.247571	-235.679567	-283.301956	-237.066522	-250.261453	-116.713083
+3.35	414.417916	448.491159	468.003731	443.159649	518.242532	356.167758	376.255117	226.115809
-3.4	-223.548819	-215.775167	-230.997757	-217.550370	-261.509497	-218.830635	-231.010572	-107.735154
+3.4	457.629387	490.479183	517.243351	489.734698	571.626977	388.711584	410.138784	244.364969
-3.45	-204.919750	-197.793902	-211.747944	-199.421173	-239.717039	-200.594749	-211.759692	-98.757225
+3.45	486.111651	526.238915	554.055032	523.468232	608.903012	402.981057	425.584411	254.949967
-3.5	-186.290682	-179.812637	-192.498130	-181.291976	-217.924581	-182.358862	-192.508812	-89.779296
+3.5	498.581182	548.512782	576.082257	543.098677	629.100815	409.826297	433.490008	257.296688
-3.55	-167.661614	-161.831373	-173.248317	-163.162779	-196.132123	-164.122976	-173.257932	-80.801367
+3.55	504.064907	558.301136	585.468825	552.510564	639.044203	427.583793	451.905378	263.671225
-3.6	-149.032545	-143.850108	-153.998503	-145.033582	-174.339664	-145.887089	-154.007051	-71.823438

+3.6	**508.964554**	**556.215534**	**585.074777**	**552.716996**	**643.104054**	**435.758587**	**460.079536**	**268.602868**
-3.65	**-130.403477**	**-125.868843**	**-134.748690**	**-126.904385**	**-152.547206**	**-127.651203**	**-134.756171**	**-62.845509**
+3.65	**497.560187**	**538.131737**	**567.695632**	**537.281655**	**628.358599**	**427.224861**	**450.508316**	**266.061099**
-3.7	**-111.774409**	**-107.887579**	**-115.498876**	**-108.775188**	**-130.754748**	**-109.415316**	**-115.505291**	**-53.867580**
+3.7	**474.595716**	**513.961440**	**537.434115**	**505.337583**	**593.626472**	**410.525179**	**433.430822**	**255.453310**
-3.75	**-93.145340**	**-89.906314**	**-96.249063**	**-90.645991**	**-108.962290**	**-91.179429**	**-96.254411**	**-44.889651**
+3.75	**442.688990**	**473.830261**	**496.534500**	**459.966133**	**538.606132**	**377.418270**	**397.793467**	**236.459047**
-3.8	**-74.516272**	**-71.925049**	**-76.999249**	**-72.516794**	**-87.169831**	**-72.943543**	**-77.003530**	**-35.911722**
+3.8	**392.914645**	**416.154958**	**436.928047**	**405.253522**	**467.736413**	**332.358326**	**349.850869**	**208.596003**
-3.85	**-55.887204**	**-53.943784**	**-57.749436**	**-54.387597**	**-65.377373**	**-54.707656**	**-57.752650**	**-26.933793**
+3.85	**324.753370**	**340.288986**	**357.890071**	**332.313292**	**384.881159**	**279.181050**	**293.945356**	**171.315945**
-3.9	**-37.258136**	**-35.962520**	**-38.499622**	**-36.258400**	**-43.584915**	**-36.471770**	**-38.501770**	**-17.955864**
+3.9	**236.943927**	**245.709409**	**258.828894**	**240.569731**	**279.518137**	**206.930388**	**217.948468**	**124.288265**
-3.95	**-18.629067**	**-17.981255**	**-19.249809**	**-18.129202**	**-21.792457**	**-18.235883**	**-19.250890**	**-8.977935**
+3.95	**128.857155**	**132.285770**	**139.483249**	**129.730715**	**151.040943**	**114.462330**	**120.589871**	**67.248751**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 50' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-18.628602	-30.250804	-32.189367	-20.010469	-24.876104	-25.658556
+0.05	128.692515	170.621971	175.898137	125.997681	153.876803	154.410539
-0.1	-37.257204	-60.501607	-64.378735	-40.020939	-49.752207	-51.317112
+0.1	236.619411	307.025159	318.846739	227.071023	278.104292	279.028891
-0.15	-55.885806	-90.752411	-96.568102	-60.031408	-74.628311	-76.975668
+0.15	324.609700	413.365471	429.831181	306.548213	375.348111	375.009508
-0.2	-74.514408	-121.003214	-128.757469	-80.041878	-99.504415	-102.634224
+0.2	393.362304	509.142007	524.904242	365.673055	453.975052	455.224351
-0.25	-93.143010	-151.254018	-160.946836	-100.052347	-124.380518	-128.292780
+0.25	443.182097	573.873510	604.985488	420.343758	518.161544	515.563551
-0.3	-111.771612	-181.504822	-193.136204	-120.062816	-149.256622	-153.951336
+0.3	474.962403	616.211157	656.666960	454.798565	557.921942	557.153970
-0.35	-130.400213	-211.755625	-225.325571	-140.073286	-174.132726	-179.609893
+0.35	498.065886	635.067699	701.805970	474.936783	575.401818	587.584567
-0.4	-149.028815	-242.006429	-257.514938	-160.083755	-199.008830	-205.268449
+0.4	509.353732	651.777481	722.545415	484.264658	571.804923	598.235124
-0.45	-167.657417	-272.257233	-289.704306	-180.094225	-223.884933	-230.927005
+0.45	504.351414	656.872953	733.115839	487.571216	561.810519	598.265440
-0.5	-186.286019	-302.508036	-321.893673	-200.104694	-248.761037	-256.585561
+0.5	498.294172	646.894711	721.526455	478.293220	542.582259	585.573142
-0.55	-204.914621	-332.758840	-354.083040	-220.115163	-273.637141	-282.244117
+0.55	485.716325	615.343587	684.561068	457.707204	530.333505	563.643098
-0.6	-223.543223	-363.009643	-386.272407	-240.125633	-298.513244	-307.902673
+0.6	458.940747	572.918782	642.170416	429.607886	508.993738	526.973716
-0.65	-242.171825	-393.260447	-418.461775	-260.136102	-323.389348	-333.561229
+0.65	413.942774	528.201254	575.066378	393.522069	480.698911	486.586602
-0.7	-260.800427	-423.511251	-450.651142	-280.146572	-348.265452	-359.219785
+0.7	362.956793	469.182105	490.557581	350.832728	429.243434	427.729471
-0.75	-279.429029	-453.762054	-482.840509	-300.157041	-373.141555	-384.878341
+0.75	300.777498	385.368431	393.836889	293.673538	355.775022	354.929387
-0.8	-298.057631	-484.012858	-515.029877	-320.167510	-398.017659	-410.536897
+0.8	226.056248	280.212923	275.420422	225.528964	262.687684	262.269943
-0.85	-316.686233	-514.263661	-547.219244	-340.177980	-422.893763	-436.195453
+0.85	143.379318	166.001127	154.859375	155.276047	168.025493	172.644997
-0.9	-335.314835	-544.514465	-579.408611	-360.188449	-447.769867	-461.854009
+0.9	86.216014	91.840872	100.261389	89.179617	95.124924	88.693536
-0.95	-353.943436	-574.765269	-623.481945	-380.198919	-472.645970	-487.512566
+0.95	69.498678	96.943143	105.831466	62.912239	81.487382	81.945384
-1	-372.572037	-693.047199	-766.024159	-467.722493	-535.457033	-595.514030
+1	73.156503	102.045413	111.401543	66.223409	85.776191	86.258300
(Span 2) -2	-372.572037	-693.047199	-766.024159	-467.722493	-535.457033	-595.514030
+2	73.156503	102.045413	111.401543	66.223409	85.776191	86.258300
-2.05	-255.672011	-459.134605	-499.892003	-328.551247	-372.417624	-415.735072
+2.05	55.850008	77.904723	85.047492	50.557063	65.484280	65.852338
-2.1	-238.365170	-332.486939	-362.971398	-215.770957	-279.477973	-281.049237
+2.1	101.784711	115.181628	107.066142	107.557082	117.757243	117.787360
-2.15	-221.058329	-308.346254	-336.617346	-200.104601	-259.186079	-260.643259
+2.15	170.621299	208.042082	193.759212	185.602768	210.279768	216.208544
-2.2	-203.751488	-284.205568	-310.263294	-184.438246	-238.894185	-240.237281
+2.2	269.489811	336.439408	340.995758	268.048477	315.819252	320.469250

-2.25	-186.444648	-260.064883	-283.909241	-168.771890	-218.602291	-219.831302
+2.25	353.262450	473.376392	497.106485	362.787506	432.754072	441.034208
-2.3	-169.137807	-235.924197	-257.555189	-153.105534	-198.310397	-199.425324
+2.3	427.741880	581.784526	627.083659	441.726968	526.946604	546.011059
-2.35	-151.830966	-211.783512	-231.201137	-137.439179	-178.018503	-179.019345
+2.35	482.414792	669.864056	728.203106	494.899869	588.614248	617.283481
-2.4	-134.524125	-187.642826	-204.847085	-121.772823	-157.726609	-158.613367
+2.4	524.661075	732.745157	795.589955	531.082396	625.230342	662.341147
-2.45	-117.217284	-163.502140	-178.493032	-106.106468	-137.434715	-138.207389
+2.45	542.833849	772.614914	825.630014	544.676889	637.485670	674.077404
-2.5	-99.910443	-139.361490	-152.138980	-90.440112	-117.142919	-117.801410
+2.5	546.176572	779.491282	840.180867	537.877957	632.070891	663.891096
-2.55	-117.214945	-163.502180	-178.493024	-106.106398	-137.434830	-138.207287
+2.55	542.925383	772.615364	825.586412	544.669819	637.476761	674.073590
-2.6	-134.521440	-187.642871	-204.847075	-121.772744	-157.726741	-158.613249
+2.6	524.959296	732.753289	795.591828	531.059869	625.225976	662.334024
-2.65	-151.827935	-211.783561	-231.201127	-137.439090	-178.018652	-179.019211
+2.65	482.548878	669.854995	728.202248	494.897316	588.608617	617.278940
-2.7	-169.134430	-235.924252	-257.555178	-153.105436	-198.310563	-199.425174
+2.7	427.940629	581.793972	627.082518	441.747795	526.937473	546.020215
-2.75	-186.440926	-260.064942	-283.909230	-168.771782	-218.602474	-219.831136
+2.75	353.237484	473.380440	497.104831	362.793005	432.753479	441.040211
-2.8	-203.747421	-284.205632	-310.263281	-184.438128	-238.894385	-240.237099
+2.8	269.635093	336.428072	340.997839	268.044126	315.827679	320.476180
-2.85	-221.053916	-308.346323	-336.617333	-200.104474	-259.186296	-260.643061
+2.85	170.741239	208.035982	193.758472	185.611654	210.284862	216.215675
-2.9	-238.360412	-332.487013	-362.971384	-215.770820	-279.478206	-281.049023
+2.9	101.661660	115.165993	107.067197	107.577831	117.764250	117.794274
-2.95	-255.666907	-459.134727	-499.892027	-328.551086	-372.418262	-415.734726
+2.95	55.851124	77.904715	85.047490	50.557088	65.484226	65.852396
-3	-372.581365	-693.047005	-766.024310	-467.722659	-535.456661	-595.514331
+3	73.157964	102.045393	111.401546	66.223449	85.776120	86.258368
(Span 3) -4	-372.581365	-693.047005	-766.024310	-467.722659	-535.456661	-595.514331
+4	73.157964	102.045393	111.401546	66.223449	85.776120	86.258368
-3.05	-353.952297	-574.764834	-623.482048	-380.199167	-472.645804	-487.512540
+3.05	69.500066	96.943123	105.831469	62.912277	81.487314	81.945449
-3.1	-335.323228	-544.514054	-579.408536	-360.188684	-447.769709	-461.853985
+3.1	85.526250	91.840854	100.261392	89.176159	95.105147	88.689042
-3.15	-316.694160	-514.263273	-547.219173	-340.178201	-422.893614	-436.195430
+3.15	143.896873	166.332365	154.858610	155.282634	168.022330	172.640346
-3.2	-298.065092	-484.012492	-515.029810	-320.167719	-398.017518	-410.536875
+3.2	226.026033	280.204954	275.419256	225.535650	262.232337	262.264668
-3.25	-279.436023	-453.761712	-482.840447	-300.157236	-373.141423	-384.878320
+3.25	300.809665	385.358004	393.835386	293.682622	355.767210	354.920592
-3.3	-260.806955	-423.510931	-450.651084	-280.146754	-348.265328	-359.219765
+3.3	363.153233	469.167842	490.555356	350.838357	429.232087	427.720802
-3.35	-242.177887	-393.260150	-418.461721	-260.136271	-323.389232	-333.561210
+3.35	414.417916	528.182394	575.068159	393.529144	480.706523	486.577934
-3.4	-223.548819	-363.009370	-386.272358	-240.125789	-298.513137	-307.902654
+3.4	457.629387	572.915898	642.171570	429.610097	508.996526	526.965072
-3.45	-204.919750	-332.758589	-354.082995	-220.115306	-273.637041	-282.244099
+3.45	486.111651	615.338029	684.559239	457.705479	530.340346	563.654984
-3.5	-186.290682	-302.507808	-321.893631	-200.104824	-248.760946	-256.585544
+3.5	498.581182	646.885410	721.525096	478.289301	542.572648	585.582105
-3.55	-167.661614	-272.257028	-289.704268	-180.094341	-223.884851	-230.926989
+3.55	504.064907	656.859384	733.113687	487.576327	561.805588	598.277043
-3.6	-149.032545	-242.006247	-257.514905	-160.083859	-199.008755	-205.268434

+3.6	**508.964554**	**651.786964**	**722.544907**	**484.267026**	**571.802943**	**598.243007**
-3.65	**-130.403477**	**-211.755467**	**-225.325542**	**-140.073376**	**-174.132660**	**-179.609879**
+3.65	**497.560187**	**635.069759**	**701.804440**	**474.930052**	**575.396104**	**587.593186**
-3.7	**-111.774409**	**-181.504686**	**-193.136179**	**-120.062893**	**-149.256565**	**-153.951324**
+3.7	**474.595716**	**616.228347**	**656.665324**	**454.792716**	**557.911802**	**557.161532**
-3.75	**-93.145340**	**-151.253905**	**-160.946816**	**-100.052411**	**-124.380469**	**-128.292769**
+3.75	**442.688990**	**573.885189**	**604.982938**	**420.333582**	**518.169892**	**515.573541**
-3.8	**-74.516272**	**-121.003125**	**-128.757453**	**-80.041928**	**-99.504374**	**-102.634214**
+3.8	**392.914645**	**509.150398**	**524.905133**	**365.136510**	**453.977767**	**455.228683**
-3.85	**-55.887204**	**-90.752344**	**-96.568090**	**-60.031446**	**-74.628278**	**-76.975659**
+3.85	**324.753370**	**413.366795**	**429.830576**	**306.537631**	**375.343961**	**375.006602**
-3.9	**-37.258136**	**-60.501563**	**-64.378727**	**-40.020963**	**-49.752183**	**-51.317104**
+3.9	**236.943927**	**307.018091**	**318.844952**	**227.082677**	**278.094783**	**279.019616**
-3.95	**-18.629067**	**-30.250783**	**-32.189364**	**-20.010481**	**-24.876088**	**-25.658549**
+3.95	**128.857155**	**170.630176**	**175.894886**	**126.635741**	**153.884127**	**154.417812**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-17.48529319**	***-19.042802***	***-21.034588***	**-13.97671102**	**-14.97849805**	**-14.10827123**	**-16.98643405**	**-14.84941583**	**-15.68593027**	**-7.069995733**
End Shear	**125.2723827**	***139.696722***	***148.989139***	**111.5241514**	**117.9845363**	**109.9513869**	**128.8212885**	**102.737334**	**108.3244338**	**57.06672588**
-0.05	**-17.48529319**	***-19.136043***	***-24.838492***	**-13.97671102**	**-14.97849805**	**-14.10827123**	**-16.98643405**	**-14.84941583**	**-15.68593027**	**-7.069995733**
+0.05	**115.5538997**	***128.091453***	***136.330594***	**102.700765**	**108.5039822**	**101.043851**	**118.0733338**	**92.46156404**	**97.46037234**	**52.47780503**
-0.1	**-17.48529319**	***-19.453083***	***-29.586739***	**-13.97671102**	**-14.97849805**	**-14.10827123**	**-16.98643405**	**-14.84941583**	**-15.68593027**	**-7.069995733**
+0.1	**105.9316137**	***117.354279***	***123.997374***	**94.52134936**	**99.72358584**	**92.78126825**	**108.1210122**	**82.95344904**	**87.41027302**	**48.15202444**
-0.15	**-17.48529319**	***-21.970079***	***-33.684295***	**-13.97671102**	**-14.97849805**	**-14.10827123**	**-16.98643405**	**-14.84941583**	**-15.68593027**	**-7.86123865**
+0.15	**98.01263868**	***108.619039***	***113.994499***	**87.77332628**	**92.48596307**	**85.97426154**	**99.93513908**	**75.6276617**	**79.66861952**	**44.59295356**
-0.2	**-18.11983575**	***-30.378257***	***-38.754971***	**-19.15731137**	**-19.15731137**	**-17.10857836**	**-17.87230206**	**-14.84941583**	**-15.68593027**	**-10.78224409**
+0.2	**88.66071956**	***98.414957***	***102.351736***	**79.78382098**	**83.92442496**	**77.92677**	**90.27377929**	**66.66353596**	**70.19793991**	**40.39124234**
-0.25	**-22.17067519**	***-37.506111***	***-43.096153***	**-24.42377235**	**-24.42377235**	**-22.81595003**	**-24.2199807**	**-18.56842612**	**-19.5457117**	**-13.19277921**
+0.25	**81.58664209**	***90.161170***	***92.973816***	**73.23665975**	**76.91506464**	**71.34227012**	**82.38281637**	**59.46646541**	**62.59627938**	**36.95865994**
-0.3	**-30.98430107**	***-46.177907***	***-52.148749***	**-31.61269499**	**-31.92483203**	**-29.60421653**	**-31.77370935**	**-23.77113492**	**-25.0539024**	**-16.04769201**
+0.3	**72.42563726**	***80.578179***	***82.139311***	**65.53932809**	**68.68251489**	**63.93116395**	**73.51757265**	**51.59021358**	**54.30548798**	**32.93645056**
-0.35	**-39.03339001**	***-53.481461***	***-60.400450***	**-38.35310485**	**-39.19920878**	**-35.68277665**	**-38.81203466**	**-28.64014868**	**-30.23540397**	**-18.38799988**
+0.35	**65.15023873**	***72.877070***	***73.482595***	**59.58722706**	**62.32312392**	**57.64766295**	**66.0160871**	**45.35009576**	**47.7369429**	**29.67654955**
-0.4	**-48.58290073**	***-62.310009***	***-70.376745***	**-46.33101236**	**-47.81653988**	**-43.82466036**	**-48.73179786**	**-34.39986592**	**-36.36559611**	**-21.73293162**
+0.4	**56.69086314**	***63.998106***	***63.569544***	**52.27414527**	**54.51839461**	**50.33104899**	**57.30044294**	**38.63177562**	**40.90107811**	**25.88927342**
-0.45	**-56.42508532**	***-69.698091***	***-78.725061***	**-52.86645936**	**-54.8821376**	**-50.50432921**	**-56.88331366**	**-39.11543864**	**-41.38518545**	**-25.26180027**
+0.45	**49.89188791**	***56.916675***	***55.726471***	**46.37492336**	**48.23044232**	**44.44118112**	**50.30129366**	**34.33430937**	**36.33650809**	**22.84824464**
-0.5	**-65.66550074**	***-78.571462***	***-88.567136***	**-60.54728244**	**-63.19387146**	**-58.36688978**	**-66.49474922**	**-44.6540303**	**-47.28172509**	**-29.41963974**
+0.5	**42.0650417**	***49.090065***	***47.000547***	**39.55621692**	**40.97245681**	**37.64884339**	**42.25138148**	**29.36236307**	**31.05664031**	**19.35132779**
-0.55	**-73.99882287**	***-85.948697***	***-97.286556***	**-66.79255002**	**-69.9589177**	**-64.7705205**	**-74.33687788**	**-49.45548903**	**-52.39063472**	**-32.80930562**
+0.55	**35.75008232**	***42.681489***	***40.416262***	**34.11158611**	**35.18601377**	**32.23913561**	**35.85944932**	**25.38819634**	**26.83732882**	**16.57536964**
-0.6	**-84.04586452**	***-94.749901***	***-107.697383***	**-74.07401494**	**-77.85491325**	**-72.24990448**	**-83.51410336**	**-55.70000668**	**-58.95791986**	**-36.7723821**
+0.6	**28.67817382**	***35.426522***	***33.024695***	**27.88952241**	**28.58490618**	**25.82729763**	**28.31287276**	**20.84120976**	**22.01113332**	**13.42424871**
-0.65	**-92.19841036**	***-102.016679***	***-116.137152***	**-79.94387553**	**-84.22762461**	**-78.29094809**	**-90.94193755**	**-63.05856336**	**-66.37743512**	**-39.97665093**
+0.65	**23.13791196**	***29.757164***	***27.307029***	**22.74756028**	**23.14097504**	**20.9982931**	**22.64802123**	**17.25201893**	**18.20269353**	**11.39261502**
-0.7	**-101.6822063**	***-110.623651***	***-125.973118***	**-86.72372663**	**-91.59776022**	**-85.28330851**	**-99.55907686**	**-71.68892969**	**-75.46203125**	**-43.68953746**
+0.7	**17.04153583**	***23.422471***	***20.997706***	**17.24160539**	**17.32572794**	**16.02753129**	**17.23678315**	**13.20401553**	**13.90891863**	**9.192146846**
-0.75	**-109.3083448**	***-117.676151***	***-133.919382***	**-92.13296081**	**-97.48636226**	**-90.87522242**	**-106.4677161**	**-78.94456303**	**-83.09954003**	**-46.66221641**
+0.75	**12.6282395**	***18.546675***	***16.534292***	**13.53973547**	**13.53973547**	**12.31276876**	**13.14790912**	**10.23177945**	**10.77029415**	**7.459555231**
-0.8	**-118.3708703**	***-125.961780***	***-143.144617***	**-98.30892349**	**-104.2204962**	**-97.27669336**	**-114.398872**	**-87.95003983**	**-92.64438205**	**-50.06948276**
+0.8	**9.34648705**	***13.003083***	***13.124349***	**9.52581508**	**9.52581508**	**8.188556364**	**8.472000182**	**7.22574084**	**7.606042989**	**5.51117624**
-0.85	**-125.0777345**	***-132.691957***	***-150.565582***	**-103.172306**	**-109.5332075**	**-102.3329343**	**-120.6834155**	**-95.45491167**	**-100.6004317**	**-52.76438041**
+0.85	**6.806873054**	***8.986001***	***10.557353***	**6.33043791**	**6.33043791**	**5.069167329**	**5.069167329**	**4.884177459**	**5.14123943**	**4.003815224**
-0.9	**-133.0244724**	***-140.524054***	***-159.177329***	**-108.6421147**	**-115.5212075**	**-108.0396791**	**-127.802725**	**-104.1369042**	**-109.806543**	**-55.81058913**
+0.9	**4.009323715**	***4.693974***	***7.811470***	**2.981161992**	**3.081899907**	**2.901164308**	**3.482269177**	**2.729696081**	**2.878766582**	**2.343899046**
-0.95	**-139.2556868**	***-146.819642***	***-166.120442***	**-112.8744232**	**-120.1662504**	**-112.4737016**	**-133.3582692**	**-111.0749659**	**-117.1653667**	**-58.18151172**
+0.95	**3.493141117**	***3.791979***	***5.805153***	**2.882069551**	**3.081899907**	**2.901164308**	**3.482269177**	**2.729696081**	**2.878766582**	**1.412603509**
-1	**-146.2286181**	***-154.060953***	***-174.074451***	**-117.5358114**	**-125.2979831**	**-117.3818545**	**-139.5398338**	**-119.0098676**	**-125.5839516**	**-60.81123568**
+1	**3.49E+00**	***3.749803***	***4.058586***	**2.88E+00**	**3.08E+00**	**2.90E+00**	**3.48E+00**	**2.73E+00**	**2.88E+00**	**1.41E+00**
(Span 2) -2	**-1.26E+01**	***-13.548255***	***-14.663904***	**-1.04E+01**	**-1.11E+01**	**-1.05E+01**	**-1.26E+01**	**-9.86E+00**	**-1.04E+01**	**-5.10E+00**
+2	**1.38E+02**	***156.798449***	***173.118319***	**117.8599628**	**125.7743111**	**117.919634**	**140.4698246**	**124.0017355**	**130.9375109**	**61.18107115**
-2.05	**-1.26E+01**	***-13.618428***	***-16.878633***	**-1.04E+01**	**-1.11E+01**	**-1.05E+01**	**-1.26E+01**	**-9.86E+00**	**-1.04E+01**	**-5.10E+00**
+2.05	**1.31E+02**	***148.780447***	***164.010384***	**112.9393394**	**120.3640013**	**112.7490549**	**133.9738175**	**116.1490155**	**122.613323**	**58.43704591**
-2.1	**-12.62091937**	***-13.826307***	***-19.566788***	**-10.41308261**	**-11.13508094**	**-10.48207292**	**-12.58163814**	**-9.862548319**	**-10.40114858**	**-5.103817585**
+2.1	**124.2152472**	***140.346313***	***154.441436***	**107.481956**	**114.391114**	**107.0574461**	**126.8788922**	**107.9285962**	**113.9035944**	**55.42655092**
-2.15	**-12.62091937**	***-14.191012***	***-22.706862***	**-10.41308261**	**-11.13508094**	**-10.48207292**	**-12.58163814**	**-9.862548319**	**-10.40114858**	**-5.103817585**
+2.15	**116.5357087**	***131.580333***	***145.014073***	**101.5580048**	**107.9312392**	**100.9161108**	**119.2714752**	**99.43240108**	**104.905656**	**52.18764364**
-2.2	**-12.62091937**	***-19.646630***	***-26.276242***	**-12.43750044**	**-12.43750044**	**-11.47521257**	**-12.58163814**	**-9.862548319**	**-10.40114858**	**-6.946906004**
+2.2	**108.4098563**	***122.564569***	***135.669184***	**95.23771144**	**101.0600053**	**94.39635158**	**111.2379942**	**90.75229076**	**95.7167719**	**48.75836963**

-2.25	-17.51221331	-25.863928	-32.403623	-17.58592348	-17.78508936	-16.20573122	-17.32516693	-13.22593349	-13.94264874	-9.139506205
+2.25	100.3724424	113.378870	126.061492	88.59130028	93.85303897	87.56946528	102.86487	81.57035452	86.00286921	45.17680133
-2.3	-24.15775865	-32.663757	-39.256869	-23.4804382	-24.02209044	-21.89070793	-23.91749493	-17.53942194	-18.51917079	-11.48343052
+2.3	92.07768449	104.100866	116.235528	81.68895657	86.38592329	80.50675837	94.23853468	72.58410047	76.49569746	41.48098716
-2.35	-32.3896251	-41.077778	-47.893706	-30.70404295	-31.69351509	-29.05942671	-32.3726873	-22.81302052	-24.1174273	-15.13321452
+2.35	82.39031807	93.481098	104.957679	73.57728269	77.63056438	72.23778919	84.18066669	62.68887563	66.03408835	37.16611932
-2.4	-40.10605616	-48.938235	-56.149153	-37.37201868	-38.79662602	-35.71055966	-40.2647352	-27.69753351	-29.30820641	-18.53833054
+2.4	73.82625862	84.256494	95.034223	66.24085817	69.73852343	64.52553399	74.91845215	54.24381007	57.11003966	33.35364634
-2.45	-48.72333121	-57.201283	-65.395815	-44.29063231	-46.18512584	-42.64025991	-48.52707208	-33.06847382	-35.01151338	-22.10103038
+2.45	65.26820098	75.169200	85.012633	58.59622132	61.51293567	57.04753403	65.81375198	46.39497317	48.83681386	29.54652572
-2.5	-57.69777015	-65.805083	-75.166850	-51.38965023	-53.78337769	-49.77722653	-57.07327373	-39.02298962	-41.07683117	-25.78326613
+2.5	56.79993719	65.802484	74.945261	51.38705069	53.78059235	49.77464019	57.07017043	39.02067676	41.07439659	25.78283306
-2.55	-66.93543452	-75.171821	-85.271384	-58.59884839	-61.51575605	-57.05015657	-65.8169105	-46.39739078	-48.83935872	-29.54696809
+2.55	48.5052813	57.198701	65.211790	44.28808537	46.18240268	42.63773662	48.52405734	33.06684583	35.00978339	22.10061698
-2.6	-76.34232731	-84.259091	-95.328614	-66.12136409	-69.61922953	-64.43164669	-74.82511691	-54.24646056	-57.11283976	-33.35407992
+2.6	40.46801942	48.935710	56.002218	37.3695529	38.79399612	35.70812372	40.26183748	27.77757545	29.39244574	18.53792554
-2.65	-85.8245127	-93.483653	-105.285277	-73.57987328	-77.63335677	-72.24040729	-84.18384301	-62.69160715	-66.03697548	-37.16656047
+2.65	32.53643758	41.075335	47.788640	30.70168104	31.69100242	29.05710394	32.36993826	22.81150541	24.11581849	15.13283178
-2.7	-96.63297344	-104.103339	-116.596871	-81.6915044	-86.38867609	-80.50932906	-94.24166755	-72.58688768	-76.49864494	-41.4814153
+2.7	24.29261672	32.661435	39.186400	23.47822476	24.01974418	21.88854536	23.91495395	17.5379886	18.51764964	11.48308309
-2.75	-105.9601048	-113.381231	-126.447615	-88.59376847	-93.85571142	-87.57196641	-102.8679305	-81.49099024	-85.91934302	-45.17722685
+2.75	17.63616338	25.861742	32.360557	17.58388257	17.7829342	16.20396993	17.3232295	13.22460949	13.94124442	9.155061538
-2.8	-115.3792125	-122.566817	-136.074640	-95.24007505	-101.0625711	-94.39875504	-111.240948	-90.75507964	-95.71972355	-48.75877771
+2.8	12.82248537	19.644604	26.265130	12.43591688	12.43591688	11.47358368	12.58164149	9.862554794	10.4011598	6.961463816
-2.85	-124.4750051	-131.582433	-145.432472	-101.5602408	-107.9336732	-100.9183936	-119.2742941	-99.43515141	-104.9085681	-52.18802777
+2.85	12.82248537	14.191022	22.707800	10.4130936	11.13507692	10.48206653	12.58164149	9.862554794	10.4011598	5.103819
-2.9	-132.8276847	-140.348239	-154.865388	-107.4840234	-114.3933717	-107.0595812	-126.8815439	-107.9312919	-113.90645	-55.42691931
+2.9	12.82248537	13.826317	19.537830	10.4130936	11.13507692	10.48206653	12.58164149	9.862554794	10.4011598	5.103819
-2.95	-140.6717255	-148.782170	-164.431548	-112.9412361	-120.3660812	-112.7510162	-133.9762708	-116.1515907	-122.6160521	-58.4373808
+2.95	12.82248537	13.618439	16.860765	10.4130936	11.13507692	10.48206653	12.58164149	9.862554794	10.4011598	5.103819
-3	-148.8930264	-157.906357	-174.783841	-118.5166542	-126.4987058	-118.6133352	-141.3460899	-125.0906114	-132.0921147	-61.54939691
+3	12.82248537	13.548265	14.663962	10.4130936	11.13507692	10.48206653	12.58164149	9.862554794	10.4011598	5.103819
(Span 3) -4	-3.548929293	-3.749806	-4.058602	-2.882072592	-3.081898793	-2.901162541	-3.482270105	-2.729697873	-2.878769687	-1.412603901
+4	136.127859	152.877730	172.353264	116.7898002	124.4753657	116.5942897	138.5452502	117.7155999	124.2105903	60.38956375
-3.05	-3.548929293	-3.791982	-5.770353	-2.882072592	-3.081898793	-2.901162541	-3.482270105	-2.729697873	-2.878769687	-1.412603901
+3.05	130.9782817	146.817775	165.686873	112.8723567	120.1639797	112.4715524	133.3555711	111.0719222	117.162138	58.18113274
-3.1	-4.418471428	-5.370402	-8.237516	-3.514295918	-3.514295918	-2.901162541	-3.482270105	-2.729697873	-2.878769687	-2.596016336
+3.1	124.2705268	139.236703	157.316982	107.7571308	114.5513229	107.1147404	126.6466808	102.7127852	108.2962785	55.31734241
-3.15	-6.760769778	-8.987916	-10.542550	-6.33192168	-6.33192168	-5.070343605	-5.070343605	-4.88517934	-5.142294042	-3.989864508
+3.15	118.2621658	132.689737	150.127602	103.1698967	109.5305731	102.330442	120.6803134	95.45158557	100.5969053	52.76394736
-3.2	-9.818825478	-13.855730	-13.640934	-10.1730504	-10.1730504	-8.851357947	-9.197555576	-7.717421889	-8.123601988	-5.810363458
+3.2	110.5775526	124.593394	141.198415	97.30208081	103.1217754	96.23174204	113.1024122	86.4183933	91.02085138	49.51391024
-3.25	-12.6282395	-18.548917	-16.496076	-13.54149744	-13.54149744	-12.31456229	-13.14986953	-10.2771978	-10.81810295	-7.44335236
+3.25	103.8284733	117.673617	133.495095	92.13027956	97.48344148	90.87244882	106.4642858	78.68704362	82.82846696	46.66173971
-3.3	-17.91464338	-24.444444	-21.918373	-18.13280003	-18.26584284	-16.80135072	-18.0890929	-13.85966758	-14.60425394	-9.532633659
+3.3	95.85431614	109.196494	123.946218	85.61208344	90.38857315	84.13568936	98.14322485	70.26383123	73.96192761	43.08089016
-3.35	-23.10624897	-29.759713	-27.296253	-22.74996737	-23.14352038	-21.00063657	-22.65076285	-17.25357983	-18.20434947	-11.37445235
+3.35	88.94356789	102.013899	115.742132	79.94093687	84.22443263	78.28794746	90.93824449	63.05529388	66.37399356	39.97613737
-3.4	-29.78672552	-36.604620	-34.182013	-28.90434615	-29.660610345764	-26.82849554	-29.4928714156017	-21.5830318	-22.7984039452221	-13.935571
+3.4	80.36322404	93.285418	105.610059	72.8746921	76.55369803	71.01694182	81.99985789	54.62408422	57.88525774	36.11988149
-3.45	-35.70463837	-42.684316	-40.358786	-34.1142905	-35.18888504	-32.24178683	-35.86257626	-25.38992252	-26.8391612	-16.57580922
+3.45	72.99800795	85.945686	96.933791	66.7894232	69.95552948	64.76733162	74.33297013	49.45309808	52.38809337	32.80875738
-3.5	-43.19585776	-50.413126	-48.275443	-40.67460473	-42.1620874	-38.76163733	-43.56845874	-30.17798978	-31.92269167	-19.92243196
+3.5	63.93312966	77.090207	86.660653	59.27732813	61.81898749	57.06596863	64.90318383	43.73881844	46.30729675	28.73255132
-3.55	-50.09551833	-56.919692	-55.605174	-46.37785323	-48.23356298	-44.44407597	-50.30472885	-34.33619939	-36.33851536	-22.84873004

HDR

+3.55	56.21477382	69.694894	78.459832	52.86316108	54.8785703745284	50.5010018202574	56.8792501	39.11335062	41.38296267	25.26123064
-3.6	-58.89888658	-65.452700	-65.026639	-53.47900154	-55.80354158	-51.53538676	-58.73353708	-39.50882101	-41.83273371	-26.51092384
+3.6	46.7870014	60.831744	68.473178	45.00755605	46.38643475	42.47313008	47.08394176	33.44492832	35.34917156	21.02050023
-3.65	-66.53993942	-72.880272	-73.292768	-59.59037426	-62.32648483	-57.65076778	-66.01979018	-45.3528198	-47.73981031	-29.67707039
+3.65	38.81696906	53.478151	60.188364	38.3497127	39.19554663	35.67934894	38.80786229	28.63797068	30.23308606	18.38762186
-3.7	-76.0398829	-82.153308	-83.682295	-66.81221529	-70.04326735	-64.89072456	-75.04563553	-52.87125725	-55.653955	-33.59939033
+3.7	29.14795346	44.721491	50.326063	30.25278762	30.45786744	28.47557094	30.51749537	22.78880151	24.00859849	15.57475869
-3.75	-84.20438969	-90.164480	-92.709858	-73.23995427	-76.91859008	-71.34556093	-82.3867566	-59.46942462	-62.59939433	-36.95921039
+3.75	22.36389889	37.502697	43.096979	24.42110085	24.42110085	22.81310565	24.21681672	18.56662612	19.54381697	13.19238882
-3.8	-94.26405279	-100.096909	-103.957699	-81.10938889	-85.34430676	-79.2609953	-91.87430593	-68.13695643	-71.75443327	-41.08622271
+3.8	17.68042824	28.961732	37.794790	18.09652003	18.09652003	15.96012484	16.98643842	14.84941558	15.68593391	10.29690514
-3.85	-102.8380229	-108.622450	-113.653432	-87.77671377	-92.48959476	-85.97766498	-99.93922843	-75.63106234	-79.67221272	-44.5935244
+3.85	17.68042824	21.966603	33.603459	13.97672255	14.97851593	14.10828547	16.98643842	14.84941558	15.68593391	7.860841345
-3.9	-113.3205552	-119.128576	-125.645286	-95.88255907	-101.1842468	-94.15541308	-109.7749792	-84.52270652	-89.06881399	-48.86980109
+3.9	17.68042824	19.384727	28.725421	13.97672255	14.97851593	14.10828547	16.98643842	14.84941558	15.68593391	7.069997567
-3.95	-122.1898425	-128.094923	-135.911997	-102.7042471	-108.5077217	-101.0473286	-118.077526	-92.46516021	-97.46417391	-52.47839115
+3.95	17.68042824	19.136055	24.803583	13.97672255	14.97851593	14.10828547	16.98643842	14.84941558	15.68593391	7.069997567
-5	-132.9583895	-139.083981	-148.529003	-110.9441512	-117.3610847	-109.3834943	-128.1355441	-102.2214528	-107.7789654	-56.84849846
+5	17.68042824	19.042814	21.034588	13.97672255	14.97851593	14.10828547	16.98643842	14.84941558	15.68593391	7.069997567

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.43755025	-12.79122312	-12.06433988	-10.52187661	-8.44750642	-11.47475945	-12.96117169	-14.44222881	-15.89220337
End Shear	81.5688509	90.99707507	80.44833581	68.038313	66.4317805	89.37566264	98.7902175	103.4337073	107.3757127
-0.05	-10.43755025	-12.79122312	-12.06433988	-11.72234055	-8.44750642	-11.47475945	-12.96117169	-14.44222881	-15.89220337
+0.05	74.87289699	82.10307217	72.14394885	61.19814502	61.02997577	82.10101704	90.52350975	94.28637099	97.34671165
-0.1	-10.43755025	-12.79122312	-12.06433988	-13.19346266	-8.44750642	-11.47475945	-12.96117169	-14.44222881	-15.89220337
+0.1	68.66459404	73.8626049	64.62761396	54.88812736	56.03473479	75.35549439	82.85197443	85.80382334	88.05540898
-0.15	-10.43755025	-12.79122312	-12.06433988	-14.39980712	-8.44750642	-11.47475945	-12.96117169	-14.44222881	-15.89220337
+0.15	63.55553293	67.17620148	58.54525954	49.84039549	51.9201986	69.80013047	76.54568597	78.85307765	80.46747265
-0.2	-13.4875733	-13.49158556	-12.06433988	-17.32595298	-10.29584852	-14.0458712	-14.04682972	-14.44222881	-15.89220337
+0.2	57.52234767	59.71650742	51.49155334	44.04730793	47.05676057	63.23465924	69.10726154	70.68203407	71.94373212
-0.25	-17.19534034	-17.2002263	-15.05603331	-20.26871987	-12.59779534	-18.4809376	-18.98452647	-18.96557444	-18.94733062
+0.25	52.59199634	53.45339262	45.83936431	39.3962625	43.07828069	57.86473628	63.03587943	64.36435107	64.73242528
-0.3	-21.59731704	-21.60321013	-18.93222793	-23.60696638	-17.21872105	-23.75341371	-25.28244218	-25.26397005	-25.24618917
+0.3	47.04978147	46.3737234	39.5929228	34.21379121	38.60132594	51.82300804	56.21958508	56.60332827	56.59838251
-0.35	-25.28296998	-25.22907243	-22.06269426	-26.23599295	-21.37536901	-28.58177563	-30.47405977	-30.45603834	-30.43868862
+0.35	42.35736515	40.93761906	34.94862736	30.34079956	34.80643644	46.70266903	50.45626451	50.34398554	50.33891583
-0.4	-31.34779734	-29.89183902	-26.08502279	-30.16006185	-26.30275607	-35.24384107	-36.72529436	-36.72529436	-36.72529436
+0.4	36.90193217	34.70885615	30.16800973	26.25846134	30.38878374	40.74323097	43.76586318	43.64052834	43.63615603
-0.45	-36.40868658	-33.65747826	-29.54755579	-33.79057409	-30.34570286	-40.71115626	-42.89818454	-42.82488837	-42.80463197
+0.45	32.51786615	29.81237806	26.41140881	23.046523	26.83363966	35.9483449	38.39821955	38.3055986	38.30114689
-0.5	-42.37191411	-38.02103317	-34.56545413	-38.35490261	-35.10518979	-47.14875188	-50.34203523	-50.205471	-50.18594654
+0.5	27.4717867	25.01361822	22.10263608	19.46054872	22.73514631	30.42192776	32.23141809	32.17486977	32.17037447
-0.55	-47.23383991	-42.87223254	-38.88536256	-42.07112028	-38.98200171	-52.3936069	-56.41871245	-56.29540647	-56.2731647
+0.55	23.46162494	21.69893133	18.69196303	16.66989394	19.47218469	26.02328975	27.10343084	27.2329557	27.30698035
-0.6	-52.91896069	-50.49955141	-43.94736119	-46.31998549	-43.51065671	-58.52176225	-63.53373723	-64.4435088	-64.42218089
+0.6	18.72081117	18.12035677	14.83296161	13.49855474	15.75578348	20.81377124	21.70730854	21.70321639	21.85772039
-0.65	-57.51634798	-56.76258038	-48.26834592	-49.81212682	-47.16888497	-63.47334505	-69.29573511	-71.06711838	-71.65907983
+0.65	15.28846243	15.2775989	12.14828786	11.28038	12.69668336	16.89372082	17.89093829	17.88687779	18.03318046
-0.7	-62.8446832	-64.09702113	-54.57352408	-54.81660138	-51.40377647	-69.20709383	-75.98436186	-78.78750812	-80.47650494
+0.7	12.05877791	12.04783553	9.579123509	9.116010612	9.436227426	12.94654631	13.58792864	13.58396577	13.71974028
-0.75	-67.11196962	-70.25304216	-60.66496219	-59.52440346	-54.79098667	-73.79459659	-81.35037325	-85.00911836	-87.61108258
+0.75	9.529733736	9.518846645	7.567448608	7.493336764	7.181323271	10.02499308	10.24852693	10.24468046	10.29384227
-0.8	-72.00484685	-77.92709277	-68.13530335	-65.3658476	-58.66918274	-79.04895798	-87.51502855	-92.19240078	-95.88521782
+0.8	6.703982066	6.693317831	5.319961394	5.781634831	5.317342495	6.776034428	6.782964529	6.795224941	6.776628661
-0.85	-75.87645719	-84.31309152	-74.17437623	-70.12780729	-61.73292071	-83.20157234	-92.40373262	-97.92083256	-102.5162305
+0.85	4.462249726	4.524290699	3.59472993	4.501315474	3.874671193	4.30879223	4.378547292	4.311469019	4.308969057
-0.9	-80.25519299	-91.68862585	-81.17020144	-75.74654578	-65.19149085	-87.89158897	-97.94685118	-104.4576168	-110.1250993
+0.9	2.121893152	2.349971707	2.125519025	3.080582285	2.240654278	2.35305966	2.636758864	2.929417833	3.202436576
-0.95	-83.66557343	-97.57188613	-86.76921038	-80.23171822	-67.87931972	-91.53850517	-102.2769465	-109.6017285	-116.1508809
+0.95	2.121893152	2.349971707	2.125519025	2.31860683	1.727460825	2.35305966	2.636758864	2.929417833	3.202436576
-1	-87.4514846	-104.2865057	-93.63731548	-85.66066226	-70.85533283	-95.57919609	-107.100941	-115.3826232	-122.9724626
+1	2.12E+00	2.35E+00	2.13E+00	1.84E+00	1.73E+00	2.35E+00	2.64E+00	2.93E+00	3.20E+00
(Span 2) -2	-7.67E+00	-8.49E+00	-7.68E+00	-6.66E+00	-6.24E+00	-8.50E+00	-9.53E+00	-1.06E+01	-1.16E+01
+2	8.80E+01	108.3837848	102.1980302	90.32378723	71.19591144	96.06835711	107.9616147	116.8734655	125.3072582
-2.05	-7.67E+00	-8.49E+00	-7.68E+00	-7.20E+00	-6.24E+00	-8.50E+00	-9.53E+00	-1.06E+01	-1.16E+01
+2.05	84.0590945	101.7268477	94.76038838	84.25218039	68.06703148	91.81783243	102.9134711	110.8568852	118.2665452
-2.1	-7.666521515	-8.490582585	-7.679622131	-8.189177238	-6.241414886	-8.501739242	-9.526761109	-10.58415463	-11.57058709
+2.1	79.71243702	94.73433508	87.12850217	77.98439511	64.62394529	87.14539888	97.40936019	104.3833206	110.7762253
-2.15	-7.666521515	-8.490582585	-7.679622131	-9.512148883	-6.241414886	-8.501739242	-9.526761109	-10.58415463	-11.57058709
+2.15	75.0381906	87.48540957	79.16065175	71.75821446	60.90987331	82.10939649	91.51626062	97.52787386	102.9200279
-2.2	-8.759050514	-8.773891711	-7.679622131	-11.08807893	-6.576227668	-9.329779633	-9.58206634	-10.58415463	-11.57058709
+2.2	70.09038459	80.05917946	71.0754487	65.56549097	56.96800278	76.76816235	85.30118931	90.36565449	94.7817529
-2.25	-11.96331701	-11.98014289	-9.64505985	-13.29442843	-9.716732548	-13.04723833	-13.8370491	-13.82918077	-13.82161284

+2.25	64.92304494	72.15516731	63.52657486	59.39630545	52.8415485	71.18003121	78.83111879	82.9717595	86.44511848
-2.3	-15.8452975	-15.57697886	-12.48696528	-16.00175762	-13.21369508	-17.6321509	-18.44772113	-18.43949536	-18.43158195
+2.3	59.59017033	64.45416094	56.57654794	53.5727826	48.57372727	65.40334418	72.17302936	75.42129964	77.9576529
-2.35	-21.13155057	-19.72798524	-16.97114454	-19.89445649	-17.52963611	-23.4537497	-24.66901746	-24.63488108	-24.62550594
+2.35	53.36207285	55.92051949	48.75553435	46.85500259	43.57851917	58.64535914	64.33947641	66.51181267	67.97582382
-2.4	-26.05784085	-23.92474307	-21.18139239	-23.7691317	-21.53706716	-28.86203599	-30.69833292	-30.62900236	-30.61938472
+2.4	47.46269358	48.61696169	42.10137046	41.20814004	39.15323034	52.33440014	57.09605624	58.61984816	59.30722126
-2.45	-31.20832186	-29.29216012	-25.60926649	-27.76963333	-25.71483433	-34.50262928	-37.02291394	-36.9139812	-36.90423843
+2.45	41.96379722	41.81627952	35.73904122	36.11047724	34.40691118	46.24524783	50.28759974	50.97618632	51.04010074
-2.5	-36.5289637	-35.40977306	-30.26786768	-31.74029592	-30.01972158	-40.31719251	-43.57579796	-43.59386549	-43.5827656
+2.5	36.52704462	35.40775905	30.26625443	31.73945147	30.01813247	40.31508451	43.57346099	43.59136883	43.58031665
-2.55	-41.96573657	-41.81837671	-35.74072271	-36.11130875	-34.40852247	-46.24738697	-50.28996821	-50.97875144	-51.0428416
+2.55	31.20646603	29.29025088	25.60791403	27.76886605	25.713284	34.50057442	37.02065981	36.9117696	36.90209683
-2.6	-47.4646448	-48.61925706	-42.103341	-41.16188451	-39.04673561	-52.25450724	-57.09844525	-58.58550002	-59.29478446
+2.6	26.05605584	23.92321786	21.18009917	23.76831337	21.53558096	28.86005427	30.69615731	30.62689362	30.61731631
-2.65	-53.36401765	-55.92287884	-48.75757303	-46.85611727	-43.5801314	-58.64749775	-64.26133539	-66.47747728	-67.94241878
+2.65	21.12984449	19.72680375	16.9699246	19.89372763	17.52821131	23.45186224	24.66697168	24.63288477	24.62354776
-2.7	-59.59208482	-64.45656133	-56.57863432	-53.57392747	-48.57529935	-65.40544606	-72.17540017	-75.42392652	-77.9242529
+2.7	15.84371669	15.57585562	12.4858372	16.00113861	13.21237033	17.63039607	18.44605508	18.43786052	18.42997833
-2.75	-64.92491225	-72.08145995	-63.52869197	-59.39740366	-52.84308717	-71.18207756	-78.83342315	-82.97434968	-86.44795213
+2.75	11.96214325	11.97907791	9.64426485	13.29395691	9.715511634	13.04585573	13.83549931	13.82766972	13.82013084
-2.8	-70.09219419	-80.06156911	-71.07778251	-65.5666788	-56.96948244	-76.77013051	-85.30341652	-90.36817649	-94.78451556
+2.8	8.757962551	8.772904483	7.679626665	11.08774914	6.575493122	9.328498051	9.58065052	10.58415969	11.57058338
-2.85	-75.0399047	-87.4877599	-79.10574676	-71.75937558	-60.91127791	-82.11126733	-91.51840251	-97.53029098	-102.9227312
+2.85	7.66653011	8.490590222	7.679626665	9.511869075	6.241422482	8.501739502	9.526768708	10.58415969	11.57058338
-2.9	-79.71404477	-94.73663238	-87.13082719	-77.98557876	-64.6252604	-87.14715092	-97.4113651	-104.3856187	-110.7788185
+2.9	7.66653011	8.490590222	7.679626665	8.188950446	6.241422482	8.501739502	9.526768708	10.58415969	11.57058338
-2.95	-84.06058575	-101.7290351	-94.76266665	-84.25331694	-68.06823892	-91.81944345	-102.9153289	-110.8590418	-118.2690028
+2.95	7.66653011	8.490590222	7.679626665	7.197634909	6.241422482	8.501739502	9.526768708	10.58415969	11.57058338
-3	-88.5576211	-109.3048259	-103.24184	-91.17326382	-71.61579261	-96.63916149	-108.6433246	-117.6932563	-126.2737577
+3	7.66653011	8.490590222	7.679626665	6.658338002	6.241422482	8.501739502	9.526768708	10.58415969	11.57058338
(Span 3) -4	-2.121895532	-2.35E+00	-2.13E+00	-1.84E+00	-1.727462928	-2.353059732	-2.636760967	-2.929419235	-3.202435548
+4	86.84310281	103.1924113	92.33352753	84.63214384	70.37771343	94.93050514	106.3243335	114.4478253	121.8653241
-3.05	-2.121895532	-2.35E+00	-2.13E+00	-2.32E+00	-1.727462928	-2.353059732	-2.636760967	-2.929419235	-3.202435548
+3.05	83.6639384	97.56930729	86.76688053	80.2305909	67.87798885	91.53673687	102.2748932	109.5993123	116.1480879
-3.1	-2.479064066	-2.534992195	-2.12552028	-3.308440598	-2.494271929	-2.393362623	-2.636760967	-2.929419235	-3.202435548
+3.1	79.54476546	90.47977659	80.02205556	74.82566443	64.6308463	87.13118096	97.04637966	103.3923728	108.8817998
-3.15	-4.463278541	-4.525218757	-3.59542797	-4.501672258	-3.87537704	-4.309792064	-4.315035909	-4.312426182	-4.309914014
+3.15	75.87458135	84.31026305	74.17185192	70.12657547	61.73138691	83.19952493	92.40139192	97.91811674	102.5131798
-3.2	-7.159588617	-7.148769749	-5.682185248	-6.047865543	-5.618958134	-7.298625796	-7.305663751	-7.318889013	-7.299217624
+3.2	71.20554195	76.622714	66.90383982	64.39288653	58.03604637	78.19103717	86.50703038	91.01501311	94.5261473
-3.25	-9.530948086	-9.519930595	-7.568272319	-7.493781371	-7.182144455	-10.02640486	-10.25009659	-10.24623051	-10.24248218
+3.25	67.10987675	70.0346934	60.66228071	59.52307295	54.78927573	73.79232074	81.34777286	85.00617312	87.60777468
-3.3	-12.58398301	-12.57291919	-9.996747067	-9.450737341	-9.962736896	-13.55465423	-14.28493752	-14.28092816	-14.41846191
+3.3	61.96962899	62.88678293	53.5331166	53.99589579	50.70865155	68.26585214	74.8851114	77.51622615	79.02203372
-3.35	-15.28982681	-15.27883648	-12.14922187	-11.28090777	-12.69812055	-16.89562218	-17.89275557	-17.88865543	-18.03492388
+3.35	57.51409978	56.75979924	48.26608552	49.81098708	47.16705319	63.47088522	69.29292289	71.0639604	71.65557383
-3.4	-19.46007791	-18.7058018866967	-15.45894445	-14.01368087	-16.36091924	-21.6269120617236	-22.4963657	-22.49223872	-22.6482675180816
+3.4	51.98132237	49.22932874	43.1119566	45.62651918	42.76405181	57.51137323	62.35953429	63.09664131	63.07522856
-3.45	-23.46355703	-21.70030111	-18.69337107	-16.67064672	-19.47380707	-26.02544475	-27.10577655	-27.15670771	-27.30920535
+3.45	47.23143975	42.870041	38.88354407	42.07013842	38.98004605	52.39099482	56.41576229	56.29210928	56.26992017
-3.5	-28.29766187	-25.79670077	-22.80637215	-20.0345896	-23.40651824	-31.32706985	-33.23978799	-33.17741567	-33.17285661
+3.5	41.38481366	37.3044326	33.68968605	37.59095878	34.31762396	46.08344013	49.10918297	48.98323262	48.96366353
-3.55	-32.51999898	-29.81420705	-26.41297019	-23.01583916	-26.835419	-35.95070087	-38.40078837	-38.30811216	-38.30361258
+3.55	36.40620342	33.6558149646461	29.5459400568947	33.7895897720604	30.3436554413285	40.7084321572949	42.8951057002441	42.8218880935438	42.80168401

-3.6	-37.79920233	-35.72578496	-30.93792032	-26.90936053	-31.11587811	-41.72395188	-44.86542776	-44.73318226	-44.72877957
+3.6	30.32437396	29.12359891	25.38602412	29.41822482	25.48474043	34.13780153	35.70711309	35.70711309	35.70711309
-3.65	-42.35964533	-40.93999936	-34.95055554	-30.34182707	-34.80834931	-46.70519839	-50.45904636	-50.34693349	-50.34178867
+3.65	25.21320454	25.22728912	22.06140067	26.23530107	21.37325031	28.57897146	30.47151515	30.45356089	30.43627043
-3.7	-48.00529397	-47.48851521	-40.54551608	-35.00699252	-39.18094387	-52.60512473	-57.39400565	-57.88174587	-57.87675084
+3.7	20.86606408	20.87196893	18.29372278	23.06399365	16.38077618	22.87698443	24.2348278	24.2163163	24.19850938
-3.75	-52.59440609	-53.45596681	-45.84168066	-39.39752348	-43.08028397	-57.8674194	-63.03883621	-64.36752245	-64.73575737
+3.75	17.19349492	17.19855893	15.05465098	20.26789969	12.62936676	18.47872761	18.98194966	18.9630319	18.94485664
-3.8	-58.52203936	-60.99764731	-52.64982562	-44.99868061	-47.86305919	-64.32299599	-70.33911179	-72.03300576	-73.41260805
+3.8	12.74077156	12.7912245	12.06433999	16.71829827	9.831588375	13.15320512	13.15415952	14.44223373	15.89221986
-3.85	-63.55805593	-67.17914426	-58.54777564	-49.84174059	-51.92228103	-69.80290779	-76.54873993	-78.85639501	-80.47099536
+3.85	10.43755845	12.7912245	12.06433999	14.39938774	8.447513922	11.47476057	12.96117911	14.44223373	15.89221986
-3.9	-69.69654635	-75.22341468	-65.86722137	-55.92455463	-56.86544947	-76.47717206	-84.12649269	-87.21100364	-89.59436266
+3.9	10.43755845	12.7912245	12.06433999	12.95538953	8.447513922	11.47476057	12.96117911	14.44223373	15.89221986
-3.95	-74.87546402	-82.10618702	-72.14661844	-61.19959244	-61.0321111	-82.10385658	-90.5266634	-94.28981924	-97.35038095
+3.95	10.43755845	12.7912245	12.06433999	11.72195624	8.447513922	11.47476057	12.96117911	14.44223373	15.89221986
-5	-81.14616449	-90.5508092	-80.06715615	-67.9674226	-66.07274037	-88.91180274	-98.28424116	-102.896201	-106.8101476
+5	10.43755845	12.7912245	12.06433999	10.52187667	8.447513922	11.47476057	12.96117911	14.44223373	15.89221986

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-22.58466987	-24.20976686	-14.78789933	-18.25839545	-19.02438864
End Shear	140.692037	141.0508149	102.2842804	124.6374533	126.4641598
-0.05	-22.58466987	-24.20976686	-14.78789933	-18.25839545	-19.02438864
+0.05	124.9011542	126.436388	91.76757383	111.8962238	113.0331289
-0.1	-22.58466987	-24.20976686	-14.78789933	-18.25839545	-19.02438864
+0.1	111.8157157	113.158112	82.05498302	100.1171915	101.1420663
-0.15	-22.58466987	-24.20976686	-14.78789933	-18.25839545	-19.02438864
+0.15	100.4933309	102.8099079	74.59759024	91.06426284	91.38159864
-0.2	-22.58466987	-24.20976686	-15.46407232	-18.25839545	-19.02438864
+0.2	87.5175889	90.7455366	65.5900281	80.11617818	80.18551186
-0.25	-22.58466987	-24.20976686	-19.71488777	-21.72326082	-21.72443729
+0.25	77.65866155	81.02153013	58.64165943	71.49852177	71.28513193
-0.3	-28.9051787	-28.52214351	-25.57087642	-28.49740975	-28.52440904
+0.3	66.91468236	69.79296428	51.20248816	61.66309527	61.12946591
-0.35	-35.09066911	-34.52058577	-30.67730553	-34.07794075	-34.46974288
+0.35	58.71961635	60.83774622	46.64311188	53.97889987	55.13416566
-0.4	-42.36501367	-42.02382621	-36.71571773	-41.0341194	-42.02712604
+0.4	49.8519467	51.09667774	41.03418116	45.84269348	48.15103085
-0.45	-48.95690825	-49.57503656	-41.65762233	-46.83552279	-48.38392025
+0.45	42.81537279	43.58482616	36.5033745	39.95225842	42.5277408
-0.5	-56.61341688	-59.69975723	-48.29542937	-53.58363856	-56.6088107
+0.5	35.30993857	35.61299828	31.25836584	34.1972544	36.04043268
-0.55	-63.75467713	-68.03240106	-54.09718215	-59.34824149	-63.66984553
+0.55	29.78158301	29.7983114	27.06318525	29.59196247	30.87151065
-0.6	-74.33267841	-77.9811914	-61.36667444	-66.67710998	-72.36760325
+0.6	24.03189698	23.16357991	22.25975705	24.31608086	24.97887914
-0.65	-82.95746201	-88.64073135	-67.0439587	-74.66704809	-79.96990634
+0.65	19.8765821	18.45647472	18.46491595	20.19007495	20.34671483
-0.7	-94.51496025	-102.4695736	-73.39541204	-85.72968177	-88.54699648
+0.7	15.18442352	14.10336533	14.18072504	15.43331347	15.46332941
-0.75	-104.5855631	-113.9607014	-78.30032142	-94.72218977	-95.19006511
+0.75	11.53657748	10.71900454	10.93332527	11.76774808	11.76506919
-0.8	-117.9204305	-127.9705349	-85.75908264	-105.5370508	-106.1040543
+0.8	7.495763971	6.982084477	7.670132544	8.117269719	7.701679428
-0.85	-129.3033458	-139.0836042	-93.43914269	-114.7502276	-115.8455184
+0.85	4.520648027	4.524074973	5.184124246	5.470557135	4.613773296
-0.9	-142.5305102	-151.6608507	-102.7180635	-125.8737584	-127.4105092
+0.9	3.939488632	4.113578332	2.609498221	3.287652804	3.340999695
-0.95	-153.6164078	-161.4898317	-110.1581522	-134.78612	-137.2493874
+0.95	3.939488632	4.113578332	2.609498221	3.287652804	3.340999695
-1	-167.5819104	-172.4766729	-118.699078	-145.0086186	-148.6218255
+1	3.94E+00	4.11E+00	2.61E+00	3.29E+00	3.34E+00
(Span 2) -2	-1.42E+01	-1.49E+01	-9.43E+00	-1.19E+01	-1.21E+01
+2	182.3569733	188.1606386	125.1920961	152.4119735	158.11087
-2.05	-1.42E+01	-1.49E+01	-9.43E+00	-1.19E+01	-1.21E+01
+2.05	168.665032	172.8079655	116.8920414	142.4128373	147.1438298
-2.1	-14.23359825	-14.86259442	-9.428266585	-11.87847821	-12.07122359
+2.1	154.6414091	157.2397163	108.258051	131.9963259	135.7977416
-2.15	-14.23359825	-14.86259442	-9.428266585	-11.87847821	-12.07122359
+2.15	140.2940393	140.51766	99.3871145	121.27882	124.1986752
-2.2	-14.23359825	-14.86259442	-10.05834635	-11.87847821	-12.07122359
+2.2	125.5564865	126.4510172	90.2900767	110.3001167	112.0974623
-2.25	-15.38656562	-14.86259442	-14.17808054	-15.56172912	-15.56558603

+2.25	**111.1355013**	**112.9516783**	**80.67645447**	**98.79507244**	**99.91166676**
-2.3	**-20.40879421**	**-19.69242678**	**-18.74180404**	**-20.69886041**	**-20.93779367**
+2.3	**97.96624226**	**100.0742055**	**71.6841021**	**87.70870658**	**88.76696582**
-2.35	**-27.09088892**	**-27.1410901**	**-24.31266083**	**-27.0057228**	**-27.79286258**
+2.35	**83.65766677**	**86.60822094**	**61.60752913**	**75.45331871**	**75.87766879**
-2.4	**-33.92595744**	**-34.76792139**	**-29.81123098**	**-32.65709681**	**-34.38706976**
+2.4	**71.55866722**	**75.13319612**	**53.30647433**	**65.33474253**	**65.21828551**
-2.45	**-42.1983025**	**-43.5730493**	**-35.12589325**	**-38.86912038**	**-41.2462999**
+2.45	**60.79681845**	**63.97190398**	**46.06382559**	**55.83745285**	**55.14411509**
-2.5	**-50.96139945**	**-53.24400197**	**-40.56178352**	**-46.74471952**	**-48.06980736**
+2.5	**50.95866161**	**53.24349072**	**40.5600495**	**46.74193468**	**48.06766993**
-2.55	**-60.8000032**	**-63.9724617**	**-46.06556239**	**-55.84038259**	**-55.14716255**
+2.55	**42.19569101**	**43.57260137**	**35.12420214**	**38.86682868**	**41.24421457**
-2.6	**-71.56228734**	**-75.13375232**	**-53.30898006**	**-65.33780281**	**-65.2215017**
+2.6	**33.92380779**	**34.79969193**	**29.80958743**	**32.65529047**	**34.46048237**
-2.65	**-83.66143226**	**-86.60879313**	**-61.60866312**	**-75.4566455**	**-75.80606186**
+2.65	**27.08886096**	**27.1708977**	**24.31108324**	**27.00397545**	**27.79092574**
-2.7	**-97.97012029**	**-100.0748488**	**-71.68691215**	**-87.7121202**	**-88.77035573**
+2.7	**20.68113777**	**19.69213211**	**18.74030925**	**20.77319405**	**20.93600133**
-2.75	**-111.139793**	**-112.6462996**	**-80.67929887**	**-98.72254296**	**-99.91528968**
+2.75	**15.38507198**	**14.86259492**	**14.17669791**	**15.56019351**	**15.56407161**
-2.8	**-125.4864612**	**-126.4516768**	**-90.20744287**	**-110.2275799**	**-112.0261808**
+2.8	**14.23360421**	**14.86259492**	**10.05723023**	**11.87847825**	**12.07122731**
-2.85	**-140.2245258**	**-141.6299125**	**-99.38993725**	**-121.2822331**	**-124.202304**
+2.85	**14.23360421**	**14.86259492**	**9.428273206**	**11.87847825**	**12.07122731**
-2.9	**-154.6457382**	**-157.2404764**	**-108.2608353**	**-131.9996863**	**-135.8013384**
+2.9	**14.23360421**	**14.86259492**	**9.428273206**	**11.87847825**	**12.07122731**
-2.95	**-168.6692822**	**-172.8087217**	**-116.8947151**	**-142.4160619**	**-147.147328**
+2.95	**14.23360421**	**14.86259492**	**9.428273206**	**11.87847825**	**12.07122731**
-3	**-184.2809403**	**-190.326961**	**-126.3474597**	**-153.8026412**	**-159.6426229**
+3	**14.23360421**	**14.86259492**	**9.428273206**	**11.87847825**	**12.07122731**
(Span 3) -4	**-3.939490282**	**-4.113578471**	**-2.609500054**	**-3.287652815**	**-3.341000724**
+4	**165.2001681**	**170.9891457**	**117.303442**	**143.3388866**	**146.7606478**
-3.05	**-3.939490282**	**-4.113578471**	**-2.609500054**	**-3.287652815**	**-3.341000724**
+3.05	**153.1484267**	**161.4891441**	**110.1549293**	**134.7822609**	**137.2451792**
-3.1	**-3.939490282**	**-4.113578471**	**-2.904123112**	**-3.287652815**	**-3.341000724**
+3.1	**140.3563363**	**149.6225059**	**101.1938123**	**124.047108**	**125.5151615**
-3.15	**-4.580738203**	**-4.524233065**	**-5.185177091**	**-5.471676075**	**-4.614693102**
+3.15	***129.2985179***	***139.0828217***	***93.43567866***	***114.746073***	***115.8412343***
-3.2	***-8.221598285***	***-7.590789333***	***-8.192118882***	***-8.673095057***	***-8.353953853***
+3.2	***115.6027975***	***125.6798272***	***84.32317291***	***103.8138791***	***104.1464869***
-3.25	***-11.5380812***	***-10.74121609***	***-10.93456755***	***-11.76929059***	***-11.76660095***
+3.25	***104.5812931***	***113.9598904***	***78.29821817***	***94.71824375***	***95.18725175***
-3.3	***-15.94481668***	***-14.83140646***	***-14.87497706***	***-16.19716596***	***-16.22758005***
+3.3	***92.46822413***	***100.1194619***	***72.3696996***	***83.9013704***	***87.16017902***
-3.35	***-19.87832246***	***-18.48200338***	***-18.46653921***	***-20.14714162***	***-20.34867***
+3.35	***82.95377647***	***88.63993122***	***67.04152845***	***74.66291763***	***79.96665088***
-3.4	***-24.89016938***	***-24.15712537***	***-23.0436842***	***-25.17735011***	***-25.93844232***
+3.4	***72.58221082***	***76.09404088***	***60.18695552***	***65.48418245***	***70.94948835***
-3.45	***-29.783884***	***-29.5018851***	***-27.06498977***	***-29.59394416***	***-30.87371325***
+3.45	***64.00009431***	***68.03181867***	***54.09442409***	***59.34548092***	***63.6665757***
-3.5	***-36.45113878***	***-36.87544498***	***-32.11899646***	***-35.14176345***	***-37.10306921***
+3.5	***56.26352058***	***57.98676776***	***47.16913166***	***52.47348585***	***55.22236183***
-3.55	***-42.81832628***	***-43.58535884***	***-36.505327***	***-39.9544006***	***-42.53014246***
+3.55	***49.91924999***	***49.57446595***	***41.65544973***	***46.83299199***	***48.38117133***
-3.6	***-51.30185432***	***-52.64257682***	***-41.95853783***	***-47.08074664***	***-49.30023717***
+3.6	***42.0255096***	***41.36794681***	***35.71475599***	***39.85293947***	***40.74127351***

-3.65	***-58.72284758***	***-60.83837969***	***-46.64521122***	***-53.98221034***	***-55.13673983***
+3.65	***36.0022992***	***35.10886776***	***30.67506834***	***34.07548656***	***34.46716529***
-3.7	***-68.67356031***	***-71.62969937***	***-52.17660673***	***-63.24379392***	***-62.7481168***
+3.7	***28.58913573***	***27.91084729***	***24.54048564***	***27.37118779***	***27.3725996***
-3.75	***-77.66259991***	***-81.02222201***	***-58.64461812***	***-71.42618568***	***-71.28890818***
+3.75	***22.5846716***	***24.20976306***	***19.76549431***	***21.72076278***	***21.72197834***
-3.8	***-89.60459864***	***-92.7281929***	***-66.99919689***	***-81.83098518***	***-82.01015453***
+3.8	***22.5846716***	***24.20976306***	***14.78791499***	***18.25840899***	***19.02439966***
-3.85	***-100.4236172***	***-102.8106327***	***-74.60101988***	***-91.06842769***	***-91.38570191***
+3.85	***22.5846716***	***24.20976306***	***14.78791499***	***18.25840899***	***19.02439966***
-3.9	***-113.503974***	***-115.2577484***	***-83.65544903***	***-102.0590363***	***-103.1856521***
+3.9	***22.5846716***	***24.20976306***	***14.78791499***	***18.25840899***	***19.02439966***
-3.95	***-124.9060798***	***-126.437215***	***-91.77120363***	***-111.900624***	***-113.0377038***
+3.95	***22.5846716***	***24.20976306***	***14.78791499***	***18.25840899***	***19.02439966***
-5	***-139.9853262***	***-141.0766156***	***-101.772852***	***-124.0181032***	***-125.8390102***
+5	***22.5846716***	***24.20976306***	***14.78791499***	***18.25840899***	***19.02439966***

3-Span: Moment (Max and Min) Raw Data Results - 55’ Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.86E-13	*-1.08E-13*	*-1.85E-13*	-8.09E-14	-8.09E-14	-6.85E-14	-8.94E-14	-6.65E-14	-7.00E-14	-7.65E-14
End Shear	1.32E-13	*1.08E-13*	*1.90E-13*	8.32E-14	8.44E-14	8.14E-14	9.73E-14	6.12E-14	6.46E-14	5.89E-14
-0.05	-48.08455628	*-52.36770583*	*-57.84511746*	-38.4359553	-41.1908696	-38.7977459	-46.7126936	-40.8358935	-43.1363083	-19.44248827
+0.05	318.5934922	*357.4166871*	*378.4583738*	283.2113344	299.3094689	278.7640732	325.9864377	254.6766303	268.4547457	144.3139638
-0.1	-96.16911256	*-104.7354117*	*-115.6902349*	-76.8719106	-82.3817393	-77.5954918	-93.4253873	-81.671787	-86.2726165	-38.88497653
+0.1	592.5863566	*670.7458437*	*705.3258207*	528.5706769	558.0020304	519.3495001	606.0225823	465.3650877	490.4129538	268.7806607
-0.15	-144.2536688	*-157.1031175*	*-173.5353524*	-115.307866	-123.572609	-116.393238	-140.138081	-122.507681	-129.408925	-58.3274648
+0.15	813.2459036	*931.4755244*	*968.4521018*	728.2335655	767.512349	714.3806093	832.4826288	626.7719949	660.2977906	368.4305084
-0.2	-192.3382251	*-209.4708233*	*-231.3804699*	-153.743821	-164.763479	-155.190984	-186.850775	-163.343574	-172.545233	-77.76995307
+0.2	996.6818424	*1154.504071*	*1190.912719*	896.2788832	943.3795771	876.3803617	1016.585366	749.2764202	789.0718755	451.9421633
-0.25	-240.4227814	*-261.8385291*	*-289.2255873*	-192.179777	-205.954348	-193.988729	-233.563468	-204.179468	-215.681541	-97.21244133
+0.25	1123.255222	*1321.710125*	*1348.475561*	1018.314481	1070.778434	995.2656482	1169.754518	856.1224447	903.0515932	509.5245541
-0.3	-288.5073377	*-314.206235*	*-347.0707048*	-230.615732	-247.145218	-232.786475	-280.276162	-245.015361	-258.81785	-116.6549296
+0.3	1249.207663	*1456.253733*	*1469.088826*	1109.007928	1163.043119	1094.500905	1290.033862	933.1764855	985.7619244	554.8159196
-0.35	-336.591894	*-366.5739408*	*-404.9158222*	-269.051687	-288.336087	-271.584221	-326.988855	-285.851255	-301.954158	-136.0974179
+0.35	1318.074427	*1538.630271*	*1550.904668*	1162.771289	1228.375627	1161.402925	1362.096667	975.4322009	1029.471971	575.5647418
-0.4	-384.6764502	*-418.9416466*	*-462.7609397*	-307.487643	-329.526957	-310.381967	-373.701549	-326.687148	-345.090466	-155.5399061
+0.4	1355.022927	*1585.425134*	*1606.00575*	1201.519623	1266.856647	1196.506658	1397.918037	994.6345771	1050.695182	584.8464896
-0.45	-432.7610065	*-471.3093524*	*-520.6060572*	-345.923598	-370.717827	-349.179713	-420.414243	-367.523042	-388.226774	-174.9823944
+0.45	1339.103018	*1588.762045*	*1605.071127*	1203.703693	1265.759731	1193.450889	1389.188095	974.1553644	1029.962413	572.1063746
-0.5	-480.8455628	*-523.6770583*	*-578.4511746*	-384.359553	-411.908696	-387.977459	-467.126936	-408.358935	-431.363083	-194.4248827
+0.5	1292.210995	*1568.543373*	*1601.507115*	1185.079673	1247.848983	1176.428357	1369.235243	929.191127	982.4480383	564.1328031
-0.55	-528.9301191	*-576.0447641*	*-636.2962921*	-422.795508	-453.099566	-426.775205	-513.83963	-449.194829	-474.499391	-213.8673709
+0.55	1230.256989	*1511.02245*	*1561.975486*	1135.333832	1197.221497	1129.896325	1321.809623	927.5500037	979.9428285	552.5416302
-0.6	-577.0146754	*-628.4124699*	*-694.1414096*	-461.231464	-494.290436	-465.572951	-560.552324	-490.030722	-517.635699	-233.3098592
+0.6	1181.786451	*1422.329459*	*1488.624588*	1059.94505	1120.010001	1059.915901	1241.635044	889.8541979	939.3626188	531.1456343
-0.65	-625.0992316	*-680.7801757*	*-751.986527*	-499.667419	-535.481305	-504.370697	-607.265017	-530.866616	-560.772007	-252.7523475
+0.65	1086.376959	*1295.327011*	*1360.952951*	966.4993647	1012.047507	957.5955193	1122.990368	810.4384189	856.3410664	485.1564762
-0.7	-673.1837879	*-733.1478816*	*-809.8316445*	-538.103374	-576.672175	-543.168442	-653.977711	-571.702509	-603.908316	-272.1948357
+0.7	958.7427597	*1143.556644*	*1219.886293*	850.9542638	889.5015665	835.3208002	979.6088698	713.8155306	753.6576687	434.0482519
-0.75	-721.2683442	*-785.5155874*	*-867.6767619*	-576.53933	-617.863045	-581.966188	-700.690404	-612.538403	-647.044624	-291.637324
+0.75	789.3844152	*958.1533214*	*1032.443944*	708.9065252	739.1654269	688.8332075	803.9365175	578.9559976	610.5482762	360.2355615
-0.8	-769.3529005	*-837.8832932*	*-925.5218794*	-614.975285	-659.053914	-620.763934	-747.403098	-653.374296	-690.180932	-311.0798123
+0.8	601.121814	*755.0084022*	*822.9007886*	551.8805662	570.7279522	527.3239536	610.8902142	418.437247	440.5338655	284.4998141
-0.85	-817.4374568	*-898.4698791*	*-1030.882436*	-653.41124	-700.244784	-659.56168	-794.115792	-694.21019	-733.31724	-330.5223005
+0.85	376.5559527	*532.2528747*	*581.2571064*	373.7794945	380.0642186	349.5884308	394.5907782	281.4124685	296.8783657	191.5245772
-0.9	-865.522013	*-989.1775744*	*-1261.481332*	-691.847196	-741.435653	-698.359426	-840.828485	-735.046083	-776.453549	-349.9647888
+0.9	220.5689698	*331.345835*	*420.3363169*	216.1372369	216.1372369	190.7687599	200.4627648	164.1430409	172.7821483	130.6432739
-0.95	-913.6065693	*-1105.304733*	*-1542.589078*	-730.283151	-782.626523	-737.157172	-887.541179	-775.881977	-819.589857	-369.4072771
+0.95	182.5166234	*201.1460564*	*308.3438288*	150.5881341	161.0292701	151.5858351	181.9485645	142.6266202	150.4155539	73.80853335
-1	-961.6911147	*-1242.648335*	*-1868.636178*	-768.719096	-823.817405	-775.954904	-934.253862	-816.717868	-862.726165	-388.8497555
+1	192.1227576	*206.2391867*	*223.2222193*	158.5138262	169.5044972	159.5640376	191.5248017	150.1332859	158.3321635	77.69319587
(Span 2) -2	-961.6911147	*-1242.648335*	*-1868.636178*	-768.719096	-823.817405	-775.954904	-934.253862	-816.717868	-862.726165	-388.8497555
+2	192.1227576	*206.2391867*	*223.2222193*	158.5138262	169.5044972	159.5640376	191.5248017	150.1332859	158.3321635	77.69319587
-2.05	-675.7761817	*-898.2041425*	*-1454.767318*	-548.795397	-586.845669	-552.430434	-663.083156	-519.780665	-548.166461	-268.9836849
+2.05	147.0029709	*164.935244*	*290.5762858*	121.2870559	129.6965828	122.090627	146.5454454	114.8746757	121.1480574	73.91325994
-2.1	-629.9357965	*-752.555717*	*-1092.894822*	-511.568588	-547.037769	-514.957046	-618.103788	-484.522031	-510.982314	-250.737532
+2.1	254.2824503	*370.5434133*	*375.6491809*	257.9673691	257.9673691	242.9451148	258.8736869	196.6934216	207.0457069	150.2502648
-2.15	-584.0954113	*-642.6669973*	*-795.5906192*	-474.341778	-507.229869	-477.483658	-573.12442	-449.263398	-473.798168	-232.4913791
+2.15	457.4902845	*609.3879414*	*548.2286936*	452.6373005	461.1655399	438.9324957	495.9644514	339.8499761	358.6436305	226.8979208
-2.2	-538.2550261	*-569.7456309*	*-621.7118542*	-437.114968	-467.421969	-440.01027	-528.145051	-414.004764	-436.614022	-214.2452262
+2.2	698.0906266	*856.3631268*	*781.0011866*	656.7967777	680.3873306	645.0060138	745.5930716	508.8481428	536.7989306	329.8862113

-2.25	**-492.4146409**	***-529.4908807***	***-602.0244767***	**-399.888159**	**-427.614069**	**-402.536882**	**-483.165683**	**-378.746131**	**-399.429875**	**-195.9990732**
+2.25	**932.4653419**	***1101.235195***	***1042.157829***	**836.0391654**	**873.6141009**	**828.7785702**	**967.1364914**	**707.8719573**	**747.6260556**	**423.8439069**
-2.3	**-446.5742557**	***-493.4618131***	***-602.0211594***	**-362.661349**	**-387.806169**	**-365.063495**	**-438.186315**	**-343.487498**	**-362.245729**	**-177.7529203**
+2.3	**1128.897511**	***1312.455857***	***1276.229196***	**985.7553387**	**1039.607908**	**985.0627661**	**1153.925926**	**866.4325898**	**915.8894021**	**500.9174191**
-2.35	**-400.7338704**	***-457.4327454***	***-602.0178531***	**-325.434539**	**-347.998269**	**-327.590107**	**-393.206946**	**-308.228864**	**-325.061583**	**-159.5067674**
+2.35	**1280.670222**	***1480.455304***	***1457.86628***	**1107.937328**	**1171.224631**	**1108.755405**	**1300.324045**	**987.6728412**	**1043.016094**	**559.1588103**
-2.4	**-354.8934852**	***-421.4036778***	***-602.0145026***	**-288.20773**	**-308.190369**	**-290.116719**	**-348.227578**	**-272.970231**	**-287.877437**	**-141.2606145**
+2.4	**1382.475805**	***1598.841701***	***1581.60222***	**1196.957064**	**1263.772766**	**1195.705456**	**1401.862047**	**1068.467288**	**1129.002204**	**596.4164131**
-2.45	**-309.0531**	***-385.3746102***	***-602.011152***	**-250.98092**	**-268.382469**	**-252.643331**	**-303.24821**	**-237.711598**	**-250.69329**	**-123.0144615**
+2.45	**1435.94158**	***1668.377343***	***1648.922527***	**1250.506902**	**1318.835078**	**1245.560131**	**1458.085773**	**1105.090009**	**1168.482511**	**613.9785324**
-2.5	**-263.2127148**	***-349.3455425***	***-602.0078015***	**-213.754111**	**-228.574646**	**-215.170069**	**-258.268841**	**-202.452964**	**-213.509144**	**-104.7683086**
+2.5	**1440.449214**	***1687.899393***	***1659.153658***	**1266.361244**	**1333.576492**	**1257.184144**	**1467.975211**	**1097.839186**	**1161.33487**	**611.8474699**
-2.55	**-304.1948965**	***-385.3743364***	***-602.0044509***	**-250.980647**	**-268.382561**	**-252.64348**	**-303.248118**	**-237.711427**	**-250.693004**	**-123.0144307**
+2.55	**1396.381015**	***1668.421003***	***1648.922482***	**1250.49811**	**1318.830835**	**1245.536521**	**1458.07528**	**1105.088995**	**1168.481011**	**613.983468**
-2.6	**-349.3146833**	***-421.4033658***	***-602.0011004***	**-288.207418**	**-308.190475**	**-290.116891**	**-348.227474**	**-272.970037**	**-287.87711**	**-141.2605785**
+2.6	**1341.057635**	***1598.892828***	***1581.602187***	**1196.964745**	**1263.773146**	**1195.715552**	**1401.88421**	**1068.468091**	**1129.002602**	**596.4233152**
-2.65	**-394.43447**	***-457.4323952***	***-601.9977498***	**-325.434188**	**-347.99839**	**-327.590301**	**-393.206831**	**-308.228647**	**-325.061217**	**-159.5067264**
+2.65	**1256.284601**	***1480.514348***	***1457.866271***	**1107.939192**	**1171.230346**	**1108.769105**	**1300.348923**	**987.6757126**	**1043.018662**	**559.1676682**
-2.7	**-439.5542567**	***-493.4614246***	***-601.9943993***	**-362.660958**	**-387.806304**	**-365.063712**	**-438.186187**	**-343.487257**	**-362.245323**	**-177.7528743**
+2.7	**1119.399374**	***1312.515803***	***1276.229304***	**985.7573987**	**1039.613635**	**985.0759361**	**1153.94941**	**866.4316084**	**915.8926482**	**500.9265243**
-2.75	**-484.6740435**	***-529.490454***	***-601.9910487***	**-399.887729**	**-427.614218**	**-402.537123**	**-483.165543**	**-378.745868**	**-399.429429**	**-195.9990221**
+2.75	**934.1495628**	***1101.235566***	***1042.157754***	**836.047851**	**873.617641**	**828.7897406**	**967.1572546**	**707.8736259**	**747.6273166**	**423.8392969**
-2.8	**-529.7938302**	***-569.7451679***	***-621.67283***	**-437.114499**	**-467.422133**	**-440.010533**	**-528.1449**	**-414.004478**	**-436.613535**	**-214.24517**
+2.8	**707.2170456**	***856.3744882***	***781.0010294***	**656.8130609**	**680.4061027**	**645.01646**	**745.6125043**	**508.8531977**	**536.8037849**	**331.2268818**
-2.85	**-574.913617**	***-642.6664982***	***-795.5627171***	**-474.341269**	**-507.230047**	**-477.483944**	**-573.124256**	**-449.263088**	**-473.797641**	**-232.4913179**
+2.85	**458.3070898**	***609.4120288***	***547.9256358***	**452.6629767**	**461.1696449**	**438.9437494**	**495.9641593**	**339.8445338**	**358.6381227**	**226.7288422**
-2.9	**-620.0334037**	***-752.5551796***	***-1092.894771***	**-511.56804**	**-547.037961**	**-514.957355**	**-618.103612**	**-484.521698**	**-510.981747**	**-250.7374657**
+2.9	**254.282445**	***370.5286642***	***375.5310494***	**257.9974325**	**257.9974325**	**242.9525561**	**258.8741318**	**196.7135181**	**207.0668612**	**150.850191**
-2.95	**-665.1531904**	***-898.2035651***	***-1454.767427***	**-548.79481**	**-586.845876**	**-552.430765**	**-663.082969**	**-519.780309**	**-548.165854**	**-268.9836136**
+2.95	**149.3507521**	***164.9353512***	***290.0201979***	**121.2871759**	**129.6965312**	**122.0905474**	**146.5454738**	**114.8747364**	**121.1481725**	**73.58289621**
-3	**-972.4235271**	***-1242.649008***	***-1868.636178***	**-768.71973**	**-823.818389**	**-775.955687**	**-934.254103**	**-816.717854**	**-862.726364**	**-388.8498563**
+3	**195.191112**	***206.2393495***	***223.2231107***	**158.5139935**	**169.504436**	**159.5639404**	**191.5248528**	**150.1333845**	**158.3323344**	**77.69321742**
(Span 3) -4	**-9.72E+02**	***-1242.649008***	***-1868.636178***	**-7.69E+02**	**-8.24E+02**	**-7.76E+02**	**-9.34E+02**	**-8.17E+02**	**-8.63E+02**	**-3.89E+02**
+4	**1.95E+02**	***206.2393495***	***223.2231107***	**1.59E+02**	**1.70E+02**	**1.60E+02**	**1.92E+02**	**1.50E+02**	**1.58E+02**	**7.77E+01**
-3.05	**-923.8023495**	***-1105.305388***	***-1542.589188***	**-730.283743**	**-782.62747**	**-737.157902**	**-887.541397**	**-775.881917**	**-819.590046**	**-369.407363**
+3.05	**185.4315565**	***201.146209***	***308.3042277***	**150.5882939**	**161.0292143**	**151.5857434**	**181.94861**	**142.6267154**	**150.4157177**	**73.80855669**
-3.1	**-875.1811718**	***-989.1781936***	***-1261.481341***	**-691.847756**	**-741.436551**	**-698.360117**	**-840.828691**	**-735.046069**	**-776.453728**	**-349.9648697**
+3.1	**220.0810776**	***331.2904255***	***420.0410751***	**216.0942034**	**216.0942034**	**190.7519227**	**200.4533978**	**164.154134**	**172.7938253**	**128.8743015**
-3.15	***-826.5599942***	***-898.4704677***	***-1030.92071***	***-653.411769***	***-700.245632***	***-659.562332***	***-794.115986***	***-694.210136***	***-733.31741***	***-330.5223764***
+3.15	***376.357816***	***532.2379266***	***580.7919937***	**373.791634**	**380.0745221**	**349.5825673**	**394.6000493**	**281.4214667**	**296.8876654**	**191.5680867**
-3.2	**-777.9388165**	***-837.8838507***	***-925.5218545***	**-614.975782**	**-659.054714**	**-620.764547**	**-747.40328**	**-653.374283**	**-690.181091**	**-311.0798831**
+3.2	**588.2882272**	***755.033025***	***820.5661154***	**551.8936629**	**570.7390012**	**527.3181836**	**610.8766441**	**418.444559**	**440.5415369**	**284.4921824**
-3.25	**-729.3176389**	***-785.5161112***	***-867.676737***	**-576.539795**	**-617.863795**	**-581.966762**	**-700.690574**	**-612.53839**	**-647.044773**	**-291.6373898**
+3.25	**766.4876149**	***958.1393012***	***1031.444381***	**708.9180079**	**739.1745156**	**688.8277171**	**803.9456439**	**578.9485835**	**610.540978**	**360.2365768**
-3.3	**-680.6964612**	***-733.1483718***	***-809.8316196***	**-538.103808**	**-576.672876**	**-543.168976**	**-653.977869**	**-571.702497**	**-603.908455**	**-272.1948965**
+3.3	**948.5517267**	***1143.579558***	***1217.504051***	**850.9639145**	**889.5084666**	**835.3131773**	**979.5921148**	**713.8235555**	**753.6666384**	**434.0400132**
-3.35	**-632.0752836**	***-680.7806323***	***-751.9865021***	**-499.667821**	**-535.481957**	**-504.371191**	**-607.265163**	**-530.866604**	**-560.772137**	**-252.7524031**
+3.35	**1092.030217**	***1295.308836***	***1360.349254***	**966.5052907**	**1012.050221**	**957.5854294**	**1122.993496**	**810.440581**	**856.3438725**	**485.1563352**
-3.4	**-583.4541059**	***-628.4128928***	***-694.1413847***	**-461.231834**	**-494.291038**	**-465.573406**	**-560.552457**	**-490.030712**	**-517.635818**	**-233.3099098**
+3.4	**1212.691008**	***1422.346131***	***1486.82368***	**1059.942217**	**1120.003203**	**1059.901617**	**1241.60946**	**889.8459978**	**939.354469**	**531.1357427**
-3.45	**-534.8329283**	***-576.0451533***	***-636.2962672***	**-422.795847**	**-453.10012**	**-426.775621**	**-513.839752**	**-449.194819**	**-474.4995**	**-213.8674165**
+3.45	**1285.469832**	***1511.034198***	***1560.337863***	**1135.326721**	**1197.209927**	**1129.901005**	**1321.801551**	**927.5553541**	**979.9489326**	**552.5396078**
-3.5	**-486.2117506**	***-523.6774139***	***-578.4511497***	**-384.35986**	**-411.909201**	**-387.977836**	**-467.127046**	**-408.358926**	**-431.363182**	**-194.4249232**
+3.5	**1327.530449**	***1568.54987***	***1600.12862***	**1185.066878**	**1247.831144**	**1176.403468**	**1369.243887**	**929.168836**	**982.4250399**	**564.1208727**
-3.55	**-437.590573**	***-471.3096744***	***-520.6060323***	**-345.923873**	**-370.718282**	**-349.180051**	**-420.41434**	**-367.523033**	**-388.226864**	**-174.9824299**
+3.55	**1318.389684**	***1588.75972***	***1603.173851***	**1203.689007**	**1265.750226**	**1193.454487**	**1389.182686**	**974.1513302**	**1029.957645**	**572.1095581**
-3.6	**-388.9693953**	***-418.9419349***	***-462.7609148***	**-307.487886**	**-329.527363**	**-310.382266**	**-373.701635**	**-326.68714**	**-345.090546**	**-155.5399366**

+3.6	1301.393085	1585.416089	1603.2323	1201.528724	1266.870561	1196.479769	1397.904778	994.6451716	1050.705752	584.8397764
-3.65	-340.3482177	-366.5741954	-404.9157973	-269.051899	-288.336444	-271.584481	-326.988929	-285.851247	-301.954227	-136.0974433
+3.65	1296.930496	1538.614193	1550.064381	1162.772825	1228.381522	1161.392892	1362.098934	975.4360649	1029.475386	575.5658968
-3.7	-291.72704	-314.206456	-347.0706799	-230.615912	-247.145526	-232.786696	-280.276223	-245.015355	-258.817909	-116.65495
+3.7	1257.941809	1456.229689	1465.88748	1109.000293	1163.039174	1094.507187	1290.002777	933.1707909	985.7552077	554.8068486
-3.75	-243.1058623	-261.8387165	-289.2255624	-192.179925	-205.954607	-193.988911	-233.563518	-204.179462	-215.681591	-97.21245668
+3.75	1166.505186	1321.716995	1347.786264	1018.299113	1070.76626	995.2626913	1169.737893	856.1296259	903.0583592	510.3782603
-3.8	-194.4846847	-209.470977	-231.380445	-153.743938	-164.763688	-155.191126	-186.850812	-163.343569	-172.545273	-77.76996337
+3.8	1037.13026	1154.463614	1187.548623	896.2549076	943.3582399	876.3690001	1016.581423	749.271996	789.0673563	451.9485069
-3.85	-145.863507	-157.1032375	-173.5353275	-115.307951	-123.572769	-116.393341	-140.138106	-122.507676	-129.408954	-58.32747006
+3.85	851.2002908	931.464733	967.3798633	728.2311949	767.5120054	714.384506	832.4681451	626.7797727	660.3060932	368.4263035
-3.9	-97.24232939	-104.7354981	-115.69021	-76.8719635	-82.3818503	-77.5955559	-93.4254006	-81.6717832	-86.2726361	-38.88497676
+3.9	623.2628984	670.6866167	703.2164655	528.5286122	557.9613477	519.3199358	605.9968838	465.3433877	490.390196	268.7838021
-3.95	-48.62115174	-52.36775859	-57.84509257	-38.4359765	-41.1909315	-38.7977708	-46.7126949	-40.8358904	-43.1363178	-19.44248345
+3.95	336.0219717	357.3870591	377.3071308	283.190489	299.2893384	278.7494916	325.9738325	254.6660655	268.4436695	144.3155595
-5	-1.18E-13	-8.37E-14	-1.34E-13	-8.52E-14	-9.37E-14	-4.93E-14	-6.55E-14	-5.91E-14	-6.31E-14	-3.94E-14
+5	2.77E-13	2.40E-13	2.98E-13	2.16E-13	2.30E-13	1.61E-13	1.71E-13	1.77E-13	1.86E-13	9.94E-14

3-Span: Moment (Max and Min) Raw Data Results - 55' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.70E-14	-5.98E-14	-7.83E-14	-6.88E-14	-6.85E-14	-5.82E-14	-5.82E-14	-5.82E-14	-5.82E-14
End Shear	6.97E-14	5.79E-14	5.16E-14	6.46E-14	6.47E-14	7.19E-14	6.02E-14	5.91E-14	5.88E-14
-0.05	-28.70326319	-35.17586357	-33.17693467	-28.93516068	-23.23064265	-31.55558848	-35.6432221	-39.7161292	-43.7035593
+0.05	206.4050478	226.0275769	198.5184106	169.3160064	168.0656062	226.4735724	249.7071058	260.7505433	269.4867485
-0.1	-57.40652637	-70.35172714	-66.35386933	-57.87032135	-46.46128531	-63.11117695	-71.2864443	-79.4322585	-87.4071185
+0.1	384.0882368	413.9278071	362.2741147	311.0778472	312.9246513	421.7684328	463.9758181	483.2869402	502.3101781
-0.15	-86.10978956	-105.5275907	-99.530804	-86.80548203	-69.69192796	-94.66676543	-106.929666	-119.148388	-131.110678
+0.15	527.3633932	559.0065812	487.7658935	421.5493274	430.5013181	579.80034	636.5374469	688.3802211	711.9087719
-0.2	-114.8130527	-140.7034543	-132.7077387	-115.7406427	-92.92257062	-126.2223539	-142.572889	-158.864517	-174.814237
+0.2	646.6858064	670.530961	581.8024819	507.6340627	528.2046547	711.135915	777.8270043	855.2400207	890.9777929
-0.25	-143.5163159	-175.8793178	-165.8846733	-144.6758034	-116.1532133	-157.7779424	-178.216111	-198.580646	-218.517796
+0.25	732.1124007	747.0290142	657.8552339	576.7990675	596.3835933	806.8706147	883.7688707	978.015352	1039.880217
-0.3	-172.2195791	-211.0551814	-199.061608	-173.6109641	-139.3838559	-189.3335309	-213.859333	-238.296775	-262.221356
+0.3	793.0047774	807.0230745	706.8236785	626.2409035	649.5276877	882.2767701	974.2244381	1066.917292	1149.213246
-0.35	-200.9228423	-246.231045	-232.2385427	-202.5461247	-162.6144986	-220.8891193	-249.502555	-278.012905	-305.924915
+0.35	834.6621198	834.589776	722.7787228	647.8826741	673.9431194	935.916782	1028.49385	1125.808884	1213.02183
-0.4	-229.6261055	-281.4069085	-265.4154773	-231.4812854	-185.8451412	-252.4447078	-285.145777	-317.729034	-349.628474
+0.4	857.8900712	840.0430247	724.3183304	658.2456203	684.6306904	963.3316062	1054.508216	1161.639762	1242.001894
-0.45	-258.3293687	-316.5827721	-298.592412	-260.4164461	-209.0757839	-284.0002963	-320.788999	-357.445163	-393.332033
+0.45	853.5138975	813.8601042	717.8697319	649.4824251	671.0907869	959.9886903	1045.588163	1159.646655	1249.96255
-0.5	-287.0326319	-351.7586357	-331.7693467	-289.3516068	-232.3064265	-315.5558848	-356.432221	-397.161292	-437.035593
+0.5	840.9803316	779.0080507	710.8062608	640.4670012	665.439816	946.771225	1029.662601	1139.858437	1225.543112
-0.55	-315.7358951	-386.9344993	-364.9462813	-318.2867674	-255.5370692	-347.1114732	-392.075444	-436.877422	-480.739152
+0.55	810.9209836	782.271223	677.9906525	619.0519581	649.5072283	909.9787212	995.707593	1095.86088	1172.338821
-0.6	-344.4391582	-422.1103628	-398.123216	-347.2219281	-278.7677118	-378.6670617	-427.718666	-476.593551	-524.442711
+0.6	761.3129522	758.1874835	648.8035649	579.2822011	617.3089864	854.0929939	937.9775471	1024.94071	1103.335051
-0.65	-373.1424214	-457.2862264	-431.3001506	-376.1570888	-301.9983545	-410.2226502	-463.361888	-516.30968	-568.14627
+0.65	690.2127698	698.4349276	600.9562466	526.5887168	563.3723445	771.8702777	848.7275158	925.5075466	998.5178507
-0.7	-401.8456846	-492.46209	-464.4770853	-405.0922495	-325.2289972	-441.7782387	-499.00511	-556.025809	-611.84983
+0.7	607.6898367	616.3564592	537.8776599	469.8363964	497.305532	672.4807371	740.4574099	809.5500055	866.712355
-0.75	-430.5489478	-527.6379535	-497.65402	-434.0274101	-348.4596398	-473.3338271	-534.648332	-595.741938	-655.553389
+0.75	504.4250114	508.008743	441.3195117	390.0855089	411.4242639	553.8444069	607.3818128	665.5315883	704.4900911
-0.8	-459.252211	-562.8138171	-530.8309546	-462.9625708	-371.6902825	-504.8894156	-570.291554	-635.458068	-699.256948
+0.8	387.7744352	381.9649157	323.8736981	308.6568106	318.0976212	424.1232295	459.3474528	502.9297295	523.4264017
-0.85	-487.9554742	-597.9896807	-564.0078893	-508.9198092	-394.9209251	-536.4450041	-605.934777	-675.174197	-742.960508
+0.85	254.0115147	250.5500684	200.1323926	240.8565384	208.5487765	278.7235124	294.1414273	320.9860616	322.547834
-0.9	-516.6587374	-633.1655442	-597.184824	-602.2719444	-418.1515678	-568.0005926	-641.577999	-714.890326	-786.664067
+0.9	152.1589019	152.0482905	120.9031922	182.2960478	123.5306799	156.8911301	157.0019168	163.3476859	163.3087974
-0.95	-545.3620006	-668.3414078	-630.3617586	-731.1652845	-441.3822104	-599.556181	-677.221221	-754.606455	-830.367626
+0.95	110.8689172	122.7860217	111.0583691	124.8322589	90.25982813	122.9473672	137.7706506	153.0620818	167.3273111
-1	-574.0652754	-703.5172595	-706.2537851	-875.6462547	-464.6128407	-631.1117867	-712.864437	-794.322573	-874.071182
+1	116.704123	129.2484425	116.9035449	101.3569441	95.01034686	129.4182803	145.0217357	161.1179845	176.1340151
(Span 2) -2	-574.0652754	-703.5172595	-706.2537851	-875.6462547	-464.6128407	-631.1117867	-712.864437	-794.322573	-874.071182
+2	116.704123	129.2484425	116.9035449	101.3569441	95.01034686	129.4182803	145.0217357	161.1179845	176.1340151
-2.05	-404.0448057	-447.4747611	-472.0409094	-653.9501126	-328.9381621	-448.0623778	-502.083912	-557.810989	-609.797915
+2.05	89.29630863	98.89460974	89.44889582	111.7300305	72.69728865	99.0245625	110.9635648	123.2796317	134.7691663
-2.1	-376.6369606	-417.1209011	-377.2803588	-476.8118801	-306.6250767	-417.6686591	-468.025714	-519.972618	-568.433079
+2.1	181.7098951	182.2002221	145.1283283	163.3880945	144.5314342	196.1551924	196.5944625	206.4197361	206.3699713
-2.15	-349.2291154	-386.767041	-349.8256935	-350.3605404	-284.3119914	-387.2749404	-433.967515	-482.134247	-527.068244
+2.15	306.6910188	301.708293	241.7040782	226.8694259	252.7192439	349.2660321	369.8911738	397.9190491	413.8900073
-2.2	-321.8212703	-356.413181	-322.3710282	-280.8970514	-261.998906	-356.8812217	-399.909317	-444.295877	-485.703408
+2.2	461.1607847	447.1350505	386.2491321	331.9825257	376.3919458	517.3090931	561.9892157	607.6656463	645.636794

-2.25	-294.4134251	-326.059321	-294.9163629	-261.2259386	-239.6858206	-326.4875029	-365.851119	-406.457506	-444.338573
+2.25	595.2676363	615.2345048	541.5326562	463.8754254	485.9183997	666.9423804	731.6198324	794.2337164	854.330093
-2.3	-267.00558	-295.7054609	-267.4616975	-250.723836	-217.3727352	-296.0937842	-331.792921	-368.619135	-402.973737
+2.3	708.8955524	749.3550439	659.1601945	568.7996814	577.2936093	793.9687218	874.2690623	952.5299297	1029.525105
-2.35	-239.5977348	-265.3516009	-240.0070322	-241.0620542	-195.0596499	-265.7000655	-297.734723	-330.780764	-361.608901
+2.35	799.4690412	844.872234	742.7807833	644.5560991	646.7938737	894.2300749	985.5776173	1079.830633	1165.346551
-2.4	-212.1898897	-234.9977408	-212.5523669	-234.9054446	-172.7465645	-235.3063468	-263.676525	-292.942393	-320.244066
+2.4	862.0735804	900.2039356	794.8877526	692.8028845	691.9429331	964.3453033	1062.087579	1169.302031	1257.953009
-2.45	-184.7820445	-204.6438808	-185.0977016	-233.2036766	-150.4334791	-204.9126281	-229.618327	-255.104022	-278.87923
+2.45	898.0088825	917.2732087	834.2814344	728.0196169	713.8293934	1004.129296	1103.585725	1220.281305	1317.953924
-2.5	-157.3741994	-174.2900207	-157.6430362	-232.0251352	-128.1203937	-174.5189094	-195.560128	-217.265651	-237.514473
+2.5	905.2781203	902.5660572	843.0996077	736.6255174	712.6056713	1012.73968	1109.59526	1232.120284	1336.527702
-2.55	-184.7818355	-204.6437177	-185.0975954	-233.2037935	-150.4332935	-204.9126154	-229.618145	-255.103896	-278.879322
+2.55	898.0053951	917.2549594	834.2651264	728.0218339	713.8166252	1004.106602	1103.570171	1220.257364	1317.96004
-2.6	-212.18965	-234.9975504	-212.5522445	-234.9054362	-172.7463517	-235.3063332	-263.676316	-292.942249	-320.244171
+2.6	862.0811058	900.1819073	794.8738195	692.8055291	691.9702978	964.351421	1062.099591	1169.304782	1257.979747
-2.65	-239.5974644	-265.3513831	-240.0068936	-241.0623711	-195.05941	-265.700051	-297.734487	-330.780602	-361.60902
+2.65	799.472332	844.8466497	742.7659473	644.5625051	646.8268517	894.2393657	985.5921867	1079.835658	1165.374651
-2.7	-267.0052788	-295.7052159	-267.4615427	-250.7241087	-217.3724682	-296.0937688	-331.792658	-368.618955	-402.973869
+2.7	708.8986186	749.3297768	659.1463402	568.8051218	577.3269493	793.9776467	874.2827619	952.5339273	1029.551718
-2.75	-294.4130932	-326.0590486	-294.9161918	-261.2261775	-239.6855264	-326.4874866	-365.850829	-406.457307	-444.338718
+2.75	595.2745506	615.2392666	541.5194991	463.8795186	485.9501285	666.9496164	731.6313378	794.2386526	854.3541055
-2.8	-321.8209076	-356.4128814	-322.3708409	-280.8970718	-261.9985846	-356.8812043	-399.909	-444.29566	-485.703567
+2.8	461.1727089	447.1462254	386.2372363	331.9760767	376.3908541	517.3157017	561.9998881	607.674854	645.6373727
-2.85	-349.228722	-386.7667141	-349.8254901	-350.3604844	-284.3116428	-387.2749221	-433.967171	-482.134013	-527.068415
+2.85	306.7090786	301.7199629	241.7062093	226.8710517	252.7261314	349.2732723	369.9020741	397.931085	413.893876
-2.9	-376.6365365	-417.1205469	-377.2801392	-476.8120488	-306.624701	-417.6686399	-468.025342	-519.972366	-568.433264
+2.9	181.73055	182.2188378	145.1423252	163.3859148	144.5386841	196.1660643	196.5926274	206.4355221	206.3853579
-2.95	-404.0443509	-447.4743796	-472.0409982	-653.9503167	-328.9377593	-448.0623577	-502.083513	-557.810718	-609.798113
+2.95	89.29640689	98.89471968	89.44895171	111.7225373	72.69737464	99.02455912	110.9636547	123.279687	134.7691255
-3	-574.0657265	-703.5173357	-706.254323	-875.6463998	-464.6132533	-631.1118486	-712.864845	-794.322844	-874.072089
+3	116.7042539	129.2485587	116.9036139	101.3569813	95.01046251	129.4182843	145.0218514	161.1180616	176.1339586
(Span 3) -4	-5.74E+02	-7.04E+02	-7.06E+02	-8.76E+02	-4.65E+02	-6.31E+02	-7.13E+02	-7.94E+02	-8.74E+02
+4	1.17E+02	1.29E+02	1.17E+02	1.01E+02	9.50E+01	1.29E+02	1.45E+02	1.61E+02	1.76E+02
-3.05	-545.3624408	-668.3414683	-630.361772	-731.165363	-441.38259	-599.556257	-677.221602	-754.606701	-830.368485
+3.05	110.8690412	122.7861307	111.0584332	124.8336315	90.25993945	122.94737	137.7707587	153.0621587	167.3272608
-3.1	-516.659155	-633.1656009	-597.184837	-602.2721703	-418.1519267	-568.0006655	-641.57836	-714.890558	-786.66488
+3.1	152.1702579	152.0585663	120.9109226	182.2833427	123.5093436	156.9120345	157.0222515	163.3630224	163.3237448
-3.15	*-487.9558693*	*-597.9897335*	*-564.007902*	*-508.9200562*	*-394.9212634*	*-536.4450739*	*-605.935117*	*-675.174416*	*-742.961275*
+3.15	254.0200827	250.5610533	200.1376164	240.8520217	208.5481338	278.7272653	294.1355398	320.9806197	322.5508021
-3.2	-459.2525836	-562.8138661	-530.830967	-462.9625822	-371.6906001	-504.8894823	-570.291875	-635.458273	-699.257671
+3.2	387.7830743	381.9724049	323.8773956	308.6460355	318.0700198	424.1272801	459.3413237	502.9413139	523.4090371
-3.25	-430.5492978	-527.6379988	-497.6540321	-434.0274214	-348.4599368	-473.3338908	-534.648632	-595.74213	-655.554066
+3.25	504.4321633	508.0118068	441.3155034	390.0894623	411.4225428	553.8417678	607.3752752	665.5224537	704.4902561
-3.3	-401.8460121	*-492.4621314*	-464.4770971	*-405.0922605*	-325.2292736	-441.7782992	-499.00539	-556.025987	-611.850462
+3.3	607.695197	616.3507405	537.8693375	469.8318496	497.275323	672.4763185	740.4485592	809.5573224	866.7287745
-3.35	-373.1427264	-457.286264	-431.3001621	-376.1570997	-301.9986103	-410.2227076	-463.362147	-516.309845	-568.146857
+3.35	690.2149717	698.4279951	600.9572181	526.5892569	563.3665977	771.8637835	848.716117	925.510815	998.5118275
-3.4	-344.4394406	-422.1103966	-398.1232272	-347.2219388	-278.767947	-378.6671161	-427.718905	-476.593702	-524.443252
+3.4	761.3085024	758.1753715	648.7914449	579.2928256	617.3163438	854.0830067	937.9617794	1024.935068	1103.343024
-3.45	-315.7361549	-386.9345293	-364.9462922	-318.286778	-255.5372837	-347.1115245	-392.075662	-436.877559	-480.739648
+3.45	810.9129656	782.2723955	677.9924485	619.0515159	649.4949056	909.9850002	995.7068617	1095.850532	1172.340707
-3.5	-287.0328691	-351.7586619	-331.7693572	-289.3516172	-232.3066204	-315.5559329	-356.432419	-397.161416	-437.036043
+3.5	840.9676941	778.9841729	710.8197596	640.4727234	665.4505011	946.7524964	1029.636379	1139.842094	1225.535108
-3.55	-258.3295834	-316.5827945	-298.5924223	-260.4164563	-209.0759571	-284.0003413	-320.789177	-357.445273	-393.332438
+3.55	853.5069491	*813.86118310 8906*	*717.8681662*	649.4890559	671.0814367	*959.9890579*	1045.595941	1159.645092	1249.952609

-3.6	**-229.6262977**	**-281.4069271**	**-265.4154873**	**-231.4812955**	**-185.8452938**	**-252.4447498**	**-285.145934**	**-317.729131**	**-349.628834**
+3.6	**857.8993659**	**840.0588149**	**724.3332804**	**658.253493**	**684.6176896**	**963.3063042**	**1054.490554**	**1161.651281**	**1242.003846**
-3.65	**-200.9230119**	**-246.2310598**	**-232.2385523**	**-202.5461346**	**-162.6146306**	**-220.8891582**	**-249.502692**	**-278.012988**	**-305.925229**
+3.65	**834.6660246**	**834.5819157**	**722.780314**	**647.8830285**	**673.9263221**	**935.9060961**	**1028.489744**	**1125.813161**	**1213.013823**
-3.7	**-172.2197262**	**-211.0551924**	**-199.0616173**	**-173.6109738**	**-139.3839673**	**-189.3335666**	**-213.859449**	**-238.296845**	**-262.221624**
+3.7	**793.0019568**	**807.0314447**	***706.8347109***	**626.2463399**	**649.506116**	**882.2802204**	**974.2334479**	**1066.91252**	**1149.196964**
-3.75	**-143.5164404**	**-175.879325**	**-165.8846824**	**-144.6758129**	**-116.153304**	**-157.7779751**	**-178.216207**	**-198.580702**	**-218.51802**
+3.75	**732.1039513**	**747.0309796**	**657.8608783**	**576.8015345**	**596.3843174**	**806.8665302**	**883.7705755**	**978.0028823**	**1039.874533**
-3.8	**-114.8131547**	**-140.7034576**	**-132.7077474**	**-115.7406521**	**-92.9226407**	**-126.2223835**	**-142.572964**	**-158.86456**	**-174.814415**
+3.8	**646.6711803**	**670.5247945**	**581.8011555**	**507.6482225**	**528.1735506**	**711.1249927**	**777.8202468**	**855.2191268**	**890.9820248**
-3.85	**-86.10986896**	**-105.5275902**	**-99.53081244**	**-86.80549126**	**-69.69197741**	**-94.66679194**	**-106.929722**	**-119.148417**	**-131.110811**
+3.85	**527.3632**	**559.0121453**	**487.7726804**	**421.5525737**	**430.4915382**	**579.8026977**	**636.5427733**	**688.3701559**	**711.9027719**
-3.9	**-57.40658322**	**-70.35172287**	**-66.35387747**	**-57.87033041**	**-46.46131413**	**-63.11120037**	**-71.2864791**	**-79.4322742**	**-87.407206**
+3.9	**384.0604077**	**413.9065497**	**362.2696428**	**311.0855824**	**312.8822906**	**421.7426634**	**463.9527086**	**483.2873297**	**502.3124189**
-3.95	**-28.70329748**	**-35.17585549**	**-33.1769425**	**-28.93516957**	**-23.23065084**	**-31.5556088**	**-35.6432365**	**-39.7161315**	**-43.7036014**
+3.95	**206.3911111**	**226.0171961**	**198.5114678**	**169.319926**	**168.0445177**	**226.4608518**	**249.6957831**	**260.7507361**	**269.4878269**
-5	**-4.28E-14**	**-4.82E-14**	**-5.70E-14**	**-6.27E-14**	**-4.30E-14**	**-4.05E-14**	**-4.28E-14**	**-4.28E-14**	**-4.29E-14**
+5	**1.42E-13**	**1.57E-13**	**1.16E-13**	**1.22E-13**	**9.13E-14**	**1.30E-13**	**1.48E-13**	**1.61E-13**	**1.62E-13**

3-Span: Moment (Max and Min) Raw Data Results - 55' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-1.22E-13**	**-1.12E-13**	**-7.29E-14**	**-7.95E-14**	**-6.65E-14**
End Shear	**1.01E-13**	**1.02E-13**	**7.71E-14**	**8.43E-14**	**7.29E-14**
-0.05	**-62.10784213**	**-66.57685885**	**-40.6667232**	**-50.2105875**	**-52.3170688**
+0.05	**344.741041**	**350.6859997**	**252.6054894**	**308.6634329**	**311.8211572**
-0.1	**-124.2156843**	**-133.1537177**	**-81.3334463**	**-100.421175**	**-104.634138**
+0.1	**626.2024144**	**639.1591664**	**460.2438382**	**562.8715431**	**566.3034137**
-0.15	**-186.3235264**	**-199.7305766**	**-122.000169**	**-150.631762**	**-156.951206**
+0.15	**849.2482914**	**863.1403179**	**617.9235359**	**758.1191262**	**760.6905455**
-0.2	**-248.4313685**	**-266.3074354**	**-162.666893**	**-200.84235**	**-209.268275**
+0.2	**1044.424006**	**1060.532846**	**748.0652798**	**925.4349944**	**929.0368043**
-0.25	**-310.5392107**	**-332.8842943**	**-203.333616**	**-251.052937**	**-261.585344**
+0.25	**1174.401029**	**1218.225359**	**857.1870554**	**1045.89792**	**1049.55998**
-0.3	**-372.6470528**	**-399.4611531**	**-244.000339**	**-301.263525**	**-313.902413**
+0.3	**1253.859272**	**1343.251992**	**929.1811542**	**1126.013686**	**1151.731907**
-0.35	**-434.7548949**	**-466.038012**	**-284.667062**	**-351.474112**	**-366.219481**
+0.35	**1314.232754**	**1422.703515**	**960.6990159**	**1160.963815**	**1199.594591**
-0.4	**-496.8627371**	**-532.6148708**	**-325.333785**	**-401.6847**	**-418.53655**
+0.4	**1349.168226**	**1469.340167**	**974.195875**	**1162.404794**	**1209.994522**
-0.45	**-558.9705792**	**-599.1917297**	**-366.000508**	**-451.895287**	**-470.853619**
+0.45	**1339.963848**	**1478.453696**	**949.1026691**	**1136.430349**	**1186.694134**
-0.5	**-621.0784213**	**-665.7685885**	**-406.667232**	**-502.105875**	**-523.170688**
+0.5	**1313.740681**	**1454.646203**	**923.7175097**	**1080.764616**	**1149.508718**
-0.55	**-683.1862635**	**-732.3454474**	**-447.333955**	**-552.316462**	**-575.487756**
+0.55	**1263.411398**	**1384.135861**	**886.3826363**	**1079.440169**	**1115.322846**
-0.6	**-745.2941056**	**-798.9223063**	**-488.000678**	**-602.52705**	**-627.804825**
+0.6	**1195.192965**	**1294.055524**	**864.8345433**	**1041.715693**	**1074.118817**
-0.65	**-807.4019477**	**-865.4991651**	**-528.667401**	**-652.737637**	**-680.121894**
+0.65	**1075.655031**	**1162.808967**	**799.8703436**	**972.3819455**	**997.1539857**
-0.7	**-869.5097899**	**-932.076024**	**-569.334124**	**-702.948225**	**-732.438963**
+0.7	**949.5303379**	**998.4625423**	**715.8396961**	**862.5354519**	**880.6710156**
-0.75	**-931.617632**	**-998.6528828**	**-610.000847**	**-753.158812**	**-784.756031**
+0.75	**779.6234969**	**790.6481181**	**590.0854844**	**709.6514512**	**712.2185795**
-0.8	**-993.7254741**	**-1065.229742**	**-650.667571**	**-803.3694**	**-837.0731**
+0.8	**563.4417685**	**559.1044497**	**436.9356664**	**522.6067097**	**523.0319431**
-0.85	**-1055.833316**	**-1131.806601**	**-691.334294**	**-853.579987**	**-889.390169**
+0.85	**329.3521889**	**309.2003941**	**300.8061839**	**329.6390762**	**341.6467153**
-0.9	**-1117.941158**	**-1198.383459**	**-732.001017**	**-903.790575**	**-941.707238**
+0.9	**195.0046873**	**203.6221274**	**174.2562463**	**185.8504318**	**179.8419944**
-0.95	**-1180.049001**	**-1264.960318**	**-772.66774**	**-954.001162**	**-994.024306**
+0.95	**205.838281**	**214.9344678**	**136.3462821**	**171.779859**	**174.5672341**
-1	**-1290.226108**	**-1443.902106**	**-858.661786**	**-1004.21176**	**-1094.2536**
+1	**216.6718721**	**226.2468116**	**143.5224021**	**180.8209054**	**183.7549838**
(Span 2) -2	**-1290.226108**	**-1443.902106**	**-858.661786**	**-1004.21176**	**-1094.2536**
+2	**216.6718721**	**226.2468116**	**143.5224021**	**180.8209054**	**183.7549838**
-2.05	**-839.5561831**	**-933.3708048**	**-588.115877**	**-661.513261**	**-744.560751**
+2.05	**165.7867584**	**173.1130366**	**109.816349**	**138.3553458**	**140.6003594**
-2.1	**-699.2604653**	**-730.1611637**	**-463.186871**	**-583.559163**	**-593.028429**
+2.1	**228.6009368**	**212.4223643**	**208.8987528**	**232.1043054**	**232.1057316**
-2.15	**-648.3753303**	**-677.0273869**	**-429.480795**	**-541.093604**	**-549.873792**
+2.15	**412.4911364**	**398.7890377**	**363.2832602**	**411.5504856**	**427.5403735**
-2.2	**-597.4901952**	**-623.8936101**	**-395.774718**	**-498.628044**	**-506.719154**
+2.2	**673.4861038**	**689.4833605**	**523.0469271**	**626.2008804**	**626.8148626**

-2.25	**-546.6050602**	**-570.7598332**	**-362.068641**	**-456.162484**	**-463.564516**
+2.25	**956.4139888**	**1021.625039**	**722.543239**	**865.4263125**	**889.8165242**
-2.3	**-495.7199252**	**-517.6260564**	**-328.362564**	**-413.696924**	**-420.409879**
+2.3	**1193.001695**	**1288.326069**	**880.0456149**	**1051.726**	**1098.241353**
-2.35	**-444.8347901**	**-464.4922795**	**-294.656488**	**-371.231365**	**-377.255241**
+2.35	**1376.852264**	**1499.317166**	**991.4840612**	**1181.568079**	**1247.955554**
-2.4	**-393.9496551**	**-411.3585027**	**-260.950411**	**-328.765805**	**-334.100603**
+2.4	**1508.811227**	**1634.419192**	**1067.14209**	**1256.095019**	**1336.429741**
-2.45	**-343.06452**	**-358.2247259**	**-227.244334**	**-286.300245**	**-290.945966**
+2.45	**1592.344009**	**1697.695168**	**1098.33516**	**1289.456922**	**1365.845287**
-2.5	**-292.179385**	**-305.090949**	**-193.538258**	**-243.834691**	**-247.791328**
+2.5	**1605.087845**	**1735.644411**	**1084.845273**	**1270.468419**	**1351.30659**
-2.55	**-343.0643789**	**-358.2247138**	**-227.244181**	**-286.30025**	**-290.945884**
+2.55	**1592.350836**	**1697.50439**	**1098.331625**	**1289.453447**	**1365.841255**
-2.6	**-393.9494926**	**-411.3584889**	**-260.950234**	**-328.76581**	**-334.100508**
+2.6	**1508.817505**	**1635.249749**	**1067.140662**	**1256.091975**	**1336.42032**
-2.65	**-444.8346064**	**-464.4922639**	**-294.656287**	**-371.231369**	**-377.255133**
+2.65	**1376.873252**	**1500.921531**	**991.4810417**	**1181.560386**	**1247.975062**
-2.7	**-495.7197201**	**-517.626039**	**-328.362341**	**-413.696929**	**-420.409757**
+2.7	**1193.018561**	**1286.319745**	**880.0802984**	**1051.716922**	**1098.257703**
-2.75	**-546.6048338**	**-570.759814**	**-362.068394**	**-456.162489**	**-463.564381**
+2.75	**956.5149665**	**1021.624325**	**722.5430252**	**865.4181283**	**889.8282408**
-2.8	**-597.4899476**	**-623.893589**	**-395.774447**	**-498.628048**	**-506.719006**
+2.8	**673.7025643**	**690.5177933**	**523.0499776**	**626.2157608**	**626.8229854**
-2.85	**-648.3750613**	**-677.0273641**	**-429.4805**	**-541.093608**	**-549.87363**
+2.85	**412.4883378**	**398.7882863**	**363.2775873**	**411.5586526**	**427.5363593**
-2.9	**-699.260175**	**-730.1611391**	**-463.186553**	**-583.559167**	**-593.028254**
+2.9	**228.6012817**	**212.427056**	**208.9197972**	**232.104659**	**232.1060781**
-2.95	**-839.5558669**	**-933.3709193**	**-588.115635**	**-661.513613**	**-744.562045**
+2.95	**165.7868304**	**173.1130426**	**109.8164328**	**138.3553523**	**140.6004107**
-3	**-1290.226116**	**-1443.902287**	**-858.66293**	**-1004.21251**	**-1094.25319**
+3	**216.6719629**	**226.2468193**	**143.5225029**	**180.8209061**	**183.7550404**
(Span 3) -4	**-1.29E+03**	**-1.44E+03**	**-8.59E+02**	**-1.00E+03**	**-1.09E+03**
+4	**2.17E+02**	**2.26E+02**	**1.44E+02**	**1.81E+02**	**1.84E+02**
-3.05	**-1180.049089**	**-1264.960118**	**-772.668555**	**-954.001884**	**-994.024876**
+3.05	**205.8383646**	**214.9344785**	**136.3463777**	**171.7798608**	**174.5672884**
-3.1	**-1117.941242**	**-1198.383269**	**-732.001789**	**-903.791259**	**-941.707777**
+3.1	**195.0047663**	**203.6221377**	**174.2677843**	**185.8181187**	**179.8347258**
-3.15	***-1055.833395***	***-1131.806421***	***-691.335023***	***-853.580634***	***-889.390678***
+3.15	**329.3435635**	**309.1988696**	**300.8154332**	**329.6344768**	**341.6569549**
-3.2	**-993.7255483**	**-1065.229572**	**-650.668256**	**-803.370009**	**-837.073579**
+3.2	**563.4272296**	**559.1022933**	**436.9456668**	**522.5967835**	**522.0942115**
-3.25	**-931.6177014**	**-998.652724**	**-610.00149**	**-753.159385**	**-784.75648**
+3.25	**779.6204872**	**790.6487711**	**590.078604**	**709.6546555**	**712.2218914**
-3.3	**-869.5098545**	**-932.0758756**	**-569.334724**	**-702.94876**	**-732.439381**
+3.3	**949.5012095**	**998.4652744**	**715.8486644**	**862.5165466**	**880.6571737**
-3.35	**-807.4020076**	**-865.4990272**	**-528.667958**	**-652.738135**	**-680.122282**
+3.35	**1075.657896**	**1162.810549**	**799.8727405**	**972.3753388**	**997.1509505**
-3.4	**-745.2941607**	**-798.9221787**	**-488.001191**	**-602.52751**	**-627.805183**
+3.4	**1195.205904**	**1294.057239**	**864.8261494**	**1041.720141**	**1074.098393**
-3.45	**-683.1863138**	**-732.3453303**	**-447.334425**	**-552.316886**	**-575.488084**
+3.45	**1263.408144**	**1384.136779**	**886.2661213**	**1079.432892**	**1115.313382**
-3.5	**-621.0784669**	**-665.7684819**	**-406.667659**	**-502.106261**	**-523.170985**
+3.5	**1313.72093**	**1454.644188**	**923.7112483**	**1080.748526**	**1149.496606**
-3.55	**-558.97062**	**-599.1916334**	**-366.000893**	**-451.895636**	**-470.853886**
+3.55	**1340.165264**	**1478.453392**	**949.1059754**	**1136.439751**	**1186.686312**
-3.6	**-496.8627731**	**-532.614785**	**-325.334127**	**-401.685012**	**-418.536787**

+3.6	**1349.157893**	**1469.341649**	**974.2044567**	**1162.408405**	**1209.980245**
-3.65	**-434.7549262**	**-466.0379366**	**-284.66736**	**-351.474387**	**-366.219688**
+3.65	**1314.231436**	**1422.702518**	**960.7011728**	**1160.956948**	**1199.59909**
-3.7	**-372.6470793**	**-399.4610882**	**-244.000594**	**-301.263762**	**-313.902589**
+3.7	**1253.86225**	**1343.249166**	**929.1737694**	**1125.999029**	**1151.746405**
-3.75	**-310.5392324**	**-332.8842397**	**-203.333828**	**-251.053137**	**-261.585489**
+3.75	**1174.408809**	**1218.22501**	**857.1936001**	**1045.8969**	**1049.494347**
-3.8	**-248.4313855**	**-266.3073913**	**-162.667062**	**-200.842513**	**-209.26839**
+3.8	**1044.439233**	**1060.530982**	**748.0426249**	**925.4432858**	**929.0452902**
-3.85	**-186.3235386**	**-199.7305429**	**-122.000295**	**-150.631888**	**-156.951291**
+3.85	**849.2515274**	**863.1394726**	**617.9303886**	**758.1155487**	**760.687165**
-3.9	**-124.2156917**	**-133.1536945**	**-81.3335292**	**-100.421263**	**-104.634192**
+3.9	**626.1918387**	**639.1564857**	**460.2206027**	**562.857164**	**566.2902464**
-3.95	**-62.10784481**	**-66.57684602**	**-40.666763**	**-50.2106384**	**-52.3170932**
+3.95	**344.7370781**	**350.684928**	**252.5939519**	**308.656443**	**311.8149949**
-5	**-8.15E-14**	**-7.54E-14**	**-5.18E-14**	**-5.56E-14**	**-7.38E-14**
+5	**2.10E-13**	**2.26E-13**	**1.69E-13**	**2.07E-13**	**1.97E-13**

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.596327219	-5.412263547	-6.632731717	-6.255815337	-5.708149855	-4.380350749	-5.950095642	-6.720856464	-7.488840451	-8.240706959
End Shear	57.35984659	42.29652627	47.18541616	41.71549692	36.54272885	34.44738424	46.34465265	51.2264545	53.63427915	55.67835762
-0.05	-7.596327219	-5.412263547	-6.632731717	-6.255815337	-6.334766928	-4.380350749	-5.950095642	-6.720856464	-7.488840451	-8.240706959
+0.05	52.44237744	38.82442157	42.57354014	37.40935901	32.85110277	31.64634471	42.57247448	46.93985468	48.89104018	50.47794226
-0.1	-7.596327219	-5.412263547	-6.632731717	-6.255815337	-7.111646398	-4.380350749	-5.950095642	-6.720856464	-7.488840451	-8.240706959
+0.1	47.87630098	35.60518229	38.30054701	33.51185582	29.44429555	29.05612382	39.07466652	42.96187422	44.49251923	45.66005132
-0.15	-7.596327219	-5.412263547	-6.632731717	-6.255815337	-7.756445773	-4.380350749	-5.950095642	-6.720856464	-7.488840451	-8.240706959
+0.15	44.12965822	32.95594137	34.8333946	30.35792561	26.72206027	26.92258159	36.19400076	39.69182575	40.88829538	41.7254201
-0.2	-7.785106659	-6.993815557	-6.995896064	-6.255815337	-9.305899992	-5.338785856	-7.283314079	-7.283811105	-7.488840451	-8.240706959
+0.2	39.71893116	29.82750722	30.96526182	26.70031285	23.60139086	24.4007055	32.78955626	35.83472208	36.65130105	37.30553908
-0.25	-9.69738007	-8.916432635	-8.918966192	-7.807121241	-10.86607162	-6.532432117	-9.583063313	-9.844193141	-9.834365798	-9.824905686
+0.25	36.12624478	27.27093406	27.71760053	23.76943962	21.09982418	22.33771361	30.00504863	32.68648143	33.37534409	33.56620445
-0.3	-13.31226684	-11.19902361	-11.2020794	-9.817074375	-12.64699989	-8.928556418	-12.31704108	-13.10990001	-13.10032152	-13.09110146
+0.3	32.03145821	24.39708658	24.04652497	20.53042406	18.31356665	20.01624368	26.87218462	29.15197567	29.35096099	29.34839643
-0.35	-16.77052202	-13.1101737	-13.08222578	-11.44033926	-14.05910878	-11.08393519	-14.82072887	-15.80194958	-15.79260479	-15.78360831
+0.35	28.63628013	21.96389171	21.2276998	18.12218167	16.23007367	18.04845032	24.21709569	26.16347654	26.10525566	26.10262682
-0.4	-20.87342674	-16.25501547	-15.50004616	-13.52606834	-16.16106224	-13.63897125	-18.27526112	-19.04345053	-19.04345053	-19.04345053
+0.4	24.70595194	19.1350439	17.99785126	15.64325109	14.03153083	15.75773074	21.12690224	22.69425106	22.62926022	22.62699301
-0.45	-24.24278639	-18.87927746	-17.45267216	-15.32152232	-18.10656744	-15.73539168	-21.11027029	-22.24432696	-22.20632013	-22.19581642
+0.45	21.56249985	16.86174029	15.45884266	13.6953118	12.30490712	13.91425442	18.64057293	19.91092536	19.8628979	19.86058952
-0.5	-28.21288968	-21.97143589	-19.71533999	-17.9234919	-20.55701937	-18.2033652	-24.44840647	-26.10424435	-26.03343065	-26.02330648
+0.5	18.04774447	14.24515774	12.97050465	11.4610506	10.38024741	11.78903101	15.77491717	16.71320617	16.68388373	16.68155274
-0.55	-31.79326439	-24.49252783	-22.23086987	-20.16352738	-22.56033204	-20.21363843	-27.16806166	-29.25523072	-29.19129192	-29.17975873
+0.55	15.37374028	12.16573759	11.25171446	9.692487962	8.885441092	10.09706232	13.49405743	14.05415133	14.12131486	14.15969943
-0.6	-36.10993105	-27.44047741	-26.18592243	-22.78836463	-24.86272518	-22.56191688	-30.34574138	-32.94463948	-33.41639036	-33.40533103
+0.6	12.33414384	9.707446806	9.396088552	7.69145015	7.191306149	8.1699681	10.79272556	11.25605836	11.25393642	11.33405257
-0.65	-39.61263603	-29.82439615	-29.43353922	-25.02895822	-26.76230257	-24.45884624	-32.91332385	-35.93245274	-36.85098179	-37.15793613
+0.65	9.9527466	7.927644509	7.922011353	6.299345532	6.005809091	6.583709288	8.760031536	9.277126414	9.275020891	9.350884343
-0.7	-43.68730667	-32.58733897	-33.23672343	-28.29843095	-29.47082526	-26.65479724	-35.88648889	-39.40075803	-40.85429511	-41.73010368
+0.7	7.321819905	6.252931245	6.247257212	4.967136899	4.848143582	4.893039889	6.713272652	7.045853587	7.043798687	7.114202892
-0.75	-46.96384309	-34.80008796	-36.42885256	-31.4570714	-32.0121292	-28.4111935	-38.26528213	-42.18323736	-44.08043472	-45.42965133
+0.75	5.425666809	4.941526438	4.935881071	3.924007575	3.982796785	3.723787022	5.19833709	5.314247826	5.312253286	5.337745538
-0.8	-50.85751677	-37.33722938	-40.40813729	-35.3307251	-35.16754219	-30.42218446	-40.98986673	-45.37984369	-47.80523764	-49.72010258
+0.8	4.015676498	3.4762676	3.470737791	2.758600671	3.07274642	2.757242673	3.513629467	3.517222986	3.523580472	3.5139376
-0.85	-53.7390911	-39.34480539	-43.71951855	-38.4622122	-37.7470063	-32.01084818	-43.14315392	-47.91482116	-50.77564561	-53.15853281
+0.85	2.924542665	2.313844815	2.3460154	1.864003075	2.395000758	2.00916318	2.234271314	2.270441946	2.235659331	2.234363006
-0.9	-57.15337159	-41.61534508	-47.54401133	-42.08981148	-40.79817602	-33.80424726	-45.57510447	-50.78913725	-54.16521481	-57.10401829
+0.9	1.722588062	1.100281645	1.21854898	1.102161797	1.647066676	1.161863769	1.2201502	1.367258939	1.519013655	1.660584172
-0.95	-59.83058508	-43.38375599	-50.59470372	-44.99310883	-43.24272278	-35.19798793	-47.4661681	-53.03445502	-56.83263083	-60.22861338
+0.95	1.524752148	1.100281645	1.21854898	1.102161797	1.246709159	0.895753604	1.2201502	1.367258939	1.519013655	1.660584172
-1	-62.82647393	-45.34689375	-54.07648728	-48.55448041	-46.20483857	-36.74116299	-49.56141877	-55.53587815	-59.83024276	-63.76586081
+1	1.52E+00	1.100281645	1.21854898	1.102161797	9.98E-01	0.895753604	1.2201502	1.367258939	1.519013655	1.660584172
(Span 2) -2	-5.509017057	-3.975380615	-4.402687366	-3.982173778	-3.606353196	-3.236409067	-4.408472513	-4.939985019	-5.488283446	-5.999785892
+2	63.53727642	45.64384905	56.20108104	52.99353396	48.75170021	36.91776585	49.81506721	55.98216991	60.60330073	64.97654042
-2.05	-5.509017057	-3.975380615	-4.402687366	-3.982173778	-3.889162679	-3.236409067	-4.408472513	-4.939985019	-5.488283446	-5.999785892
+2.05	60.42377659	43.58781151	52.74920805	49.13683608	45.43276801	35.29532356	47.61100982	53.36451704	57.48347692	61.32566515
-2.1	-5.509017057	-3.975380615	-4.402687366	-3.982173778	-4.41247206	-3.236409067	-4.408472513	-4.939985019	-5.488283446	-5.999785892
+2.1	57.05079272	41.33390564	49.12332646	45.17941518	42.01821118	33.50995348	45.18817676	50.51042789	54.12668946	57.44165171
-2.15	-5.509017057	-3.975380615	-4.402687366	-3.982173778	-5.114641824	-3.236409067	-4.408472513	-4.939985019	-5.488283446	-5.999785892
+2.15	53.45881312	38.91013254	45.36448513	41.04778416	38.63217649	31.58406705	42.57681954	47.45463346	50.5718817	53.36791699
-2.2	-5.509017057	-4.541898115	-4.549593835	-3.982173778	-5.955677843	-3.410022125	-4.837842693	-4.968662868	-5.488283446	-5.999785892
+2.2	49.68831817	36.34450847	41.51370467	36.85530137	35.27118838	29.54005848	39.80718815	44.23188453	46.85800077	49.14791439
-2.25	-7.524044385	-6.203431168	-6.212156023	-5.001327379	-7.131959112	-5.038492377	-6.765485263	-7.175031942	-7.170951919	-7.16702766

+2.25	45.77980647	33.66504794	37.4151762	32.94092552	31.93075457	27.40033627	36.90953135	40.87690889	43.0239873	44.82505495
-2.3	-10.37927332	-8.216384496	-8.07725116	-6.474962553	-8.576919389	-6.851799365	-9.14293539	-9.565839323	-9.561573948	-9.557470549
+2.3	41.77376231	30.89975127	33.42191389	29.33707438	28.77846204	25.18730997	33.91410121	37.42443835	39.10878903	40.42398387
-2.35	-13.91605804	-10.95750613	-10.22970456	-8.800178659	-10.65389108	-9.089777607	-12.16165398	-12.79181616	-12.77411516	-12.76925379
+2.35	37.12793153	27.67024779	28.99689888	25.2815838	25.15500391	22.59710613	30.40983103	33.36244564	34.48888393	35.24802894
-2.4	-17.23138826	-13.51197348	-12.40588181	-10.983351	-12.72464718	-11.16778178	-14.96605444	-15.91824367	-15.88229316	-15.87730605
+2.4	33.0492261	24.61119709	25.20972864	21.8311488	22.11479929	20.30242693	27.13736071	29.60645903	30.39660262	30.75303151
-2.45	-20.93376207	-16.18269218	-15.18909003	-13.27937075	-14.87065151	-13.33411166	-17.89091484	-19.19777752	-19.14129178	-19.13623979
+2.45	28.84727079	21.75981188	21.68331839	18.53204108	19.36937793	17.8412814	23.97990554	26.07601749	26.43307562	26.46621765
-2.5	-24.78958976	-18.94164568	-18.36130312	-15.6950312	-17.01133269	-15.56635809	-20.90598523	-22.59569508	-22.60506378	-22.59930806
+2.5	24.87563198	18.94065057	18.36025877	15.69419467	17.0108948	15.56553408	20.90489215	22.59448327	22.60376916	22.59803819
-2.55	-28.75851107	-21.76081751	-21.68440586	-18.53291299	-19.36980911	-17.84211691	-23.98101476	-26.07724564	-26.43440572	-26.46763889
+2.55	21.01628973	16.18172986	15.18810002	13.27866945	14.87025364	13.33330775	17.88984933	19.19660866	19.14014498	19.13512929
-2.6	-32.80014063	-24.61220886	-25.21091888	-21.8321706	-22.09081406	-20.2472054	-27.09593323	-29.60769782	-30.37879182	-30.74658255
+2.6	17.38690416	13.51104788	12.40509093	10.98268041	12.72422284	11.16701113	14.96502684	15.91711553	15.8811997	15.8762335
-2.65	-36.87411931	-27.67125624	-28.99812229	-25.28264093	-25.15558192	-22.59794213	-30.41093998	-33.32192657	-34.47107974	-35.23070717
+2.65	13.99166919	10.95662146	10.22909191	8.799546072	10.65351313	9.089038791	12.16067526	12.79075534	12.77307999	12.7682384
-2.7	-41.51792629	-30.90074401	-33.42315859	-29.33815624	-28.7790557	-25.18812515	-33.91519111	-37.42566771	-39.11015116	-40.40666471
+2.7	10.4483453	8.215564786	8.076668715	6.474377598	8.576598408	6.851112436	9.142025442	9.564975411	9.560726222	9.55663901
-2.75	-45.52528672	-33.66601621	-37.37695616	-32.94202332	-31.93132404	-27.40113413	-36.91059246	-40.87810378	-43.0253304	-44.82652431
+2.75	7.58702617	6.202822529	6.211603789	5.000915141	7.13171461	5.037859286	6.764768331	7.174228316	7.170168382	7.166259188
-2.8	-49.57216433	-36.34544682	-41.5149438	-36.85651154	-35.27180432	-29.54082574	-39.80820871	-44.23303942	-46.85930853	-49.14934693
+2.8	5.509123684	4.541333965	4.54908192	3.982176129	5.955506834	3.409641235	4.837178144	4.967928711	5.488286073	5.999783967
-2.85	-53.48013109	-38.91102136	-45.36570386	-41.01931385	-38.63277858	-31.58479539	-42.57778965	-47.45574411	-50.57313507	-53.36931873
+2.85	5.509123684	3.975385071	4.402691326	3.982176129	5.114496732	3.236413006	4.408472648	4.939988959	5.488286073	5.999783967
-2.9	-57.06882264	-41.33473932	-49.1245177	-45.18062079	-42.01882496	-33.51063542	-45.18908526	-50.51146751	-54.12788112	-57.44299639
+2.9	5.509123684	3.975385071	4.402691326	3.982176129	4.412354458	3.236413006	4.408472648	4.939988959	5.488286073	5.999783967
-2.95	-60.43897979	-43.58858478	-52.75034228	-49.13801745	-45.43335736	-35.29594966	-47.61184519	-53.36548035	-57.48459519	-61.32693949
+2.95	5.509123684	3.975385071	4.402691326	3.982176129	3.889109455	3.236413006	4.408472648	4.939988959	5.488286073	5.999783967
-3	-63.97122509	-45.92046725	-56.67867558	-53.5347887	-49.2169979	-37.13549007	-50.11105081	-56.33566221	-61.02839321	-65.47770689
+3	5.509123684	3.975385071	4.402691326	3.982176129	3.606354462	3.236413006	4.408472648	4.939988959	5.488286073	5.999783967
(Span 3) -4	-1.52E+00	-1.100282879	-1.218550076	-1.102162448	-9.98E-01	-0.895754694	-1.220150237	-1.367260029	-1.519014382	-1.660583639
+4	62.30866008	45.03142484	53.50915803	47.87841718	45.64670094	36.49349932	49.22504804	55.13317783	59.34551482	63.19176777
-3.05	-1.52E+00	-1.100282879	-1.218550076	-1.102162448	-1.25E+00	-0.895754694	-1.220150237	-1.367260029	-1.519014382	-1.660583639
+3.05	59.79253369	43.38290817	50.5933665	44.99190072	43.24213822	35.19729782	47.46525116	53.03339032	56.83137789	60.22716511
-3.1	-1.914474487	-1.285488238	-1.314489082	-1.102162448	-1.766704242	-1.293374088	-1.241048806	-1.367260029	-1.519014382	-1.660583639
+3.1	56.55838707	41.24696161	46.91717738	41.49445453	40.2973367	33.51353191	45.18080423	50.32220879	53.61284565	56.4593206
-3.15	-2.924543381	-2.314378294	-2.346496633	-1.864365035	-2.395185762	-2.009529188	-2.234789766	-2.237508898	-2.236155656	-2.234853002
+3.15	53.69615579	39.3438327	43.71805188	38.46090325	37.74636754	32.01005284	43.14209227	47.91360743	50.77423735	53.15695092
-3.2	-4.243232727	-3.712516784	-3.706906793	-2.946427404	-3.214087185	-2.91364176	-3.784612806	-3.788262251	-3.795120048	-3.784919691
+3.2	50.07608128	36.92275963	39.73176769	34.6921648	34.64150323	30.09387937	40.54500242	44.85715861	47.19471771	49.01537324
-3.25	-5.425666809	-4.942156124	-4.93644314	-3.9244347	-3.983027329	-3.724212836	-5.19906915	-5.315061755	-5.313057045	-5.311113392
+3.25	46.91674324	34.79900272	36.31563049	31.45568095	32.01143927	28.41030631	38.26410202	42.18188896	44.0789075	45.42793605
-3.3	-7.696946674	-6.525269904	-6.519532894	-5.183690468	-5.027091608	-5.166054911	-7.028599549	-7.407278984	-7.405199981	-7.476516416
+3.3	42.96953873	32.13359035	32.60916927	27.75894042	29.02582601	26.29434874	35.39841957	38.8307552	40.19508745	40.97590548
-3.35	-9.92749687	-7.92835199	-7.922653088	-6.299829854	-6.006082763	-6.584454524	-8.761017462	-9.278068741	-9.275942665	-9.351788374
+3.35	39.56207186	29.82323038	29.43209709	25.02778611	26.76171156	24.45789639	32.91204834	35.9309945	36.84934426	37.15611814
-3.4	-12.79773384	-10.0907845	-9.699663929	-8.016045863	-7.466133991	-8.483753818	-11.21436975	-11.66521426	-11.66307427	-11.74398108
+3.4	35.34653278	26.95427657	25.52726406	22.35517584	24.48604021	22.17477408	29.82181655	32.33577095	32.71798876	32.70688543
-3.45	-15.34033872	-12.16673945	-11.25242474	-9.69321808	-8.88583144	-10.09790359	-13.49517488	-14.05536767	-14.0817774	-14.16085318
+3.45	31.73997536	24.49128325	22.22973347	20.16258443	22.5598229	20.21262435	27.16670719	29.25370095	29.1895822	29.17807631
-3.5	-18.55890774	-14.67340517	-13.37656249	-11.8259643	-10.68816974	-12.13716269	-16.24426749	-17.236084	-17.2037416	-17.20137755
+3.5	27.50932511	21.45958707	19.34375556	17.46937312	20.14633412	17.79498261	23.89600214	25.46496395	25.39965394	25.38950662
-3.55	-21.52331615	-16.86284624	-15.45979105	-13.69612144	-12.28899639	-13.91517708	-18.64179459	-19.91225739	-19.86420127	-19.86186808
+3.55	24.19391593	18.87798985	17.45180968	15.3206845	18.10605703	15.73433002	21.10885774	22.24273046	22.20476437	22.19428779
-3.6	-25.30564407	-19.60031233	-18.52516721	-16.04247878	-14.3820237	-16.1347566	-21.63544303	-23.26441678	-23.1958425	-23.19355954
+3.6	20.14404113	15.72433184	15.10168468	13.16361116	15.76455681	13.21479929	17.7017379	18.51548514	18.51548514	18.51548514

-3.65	-28.58858837	-21.96507406	-21.22893407	-18.12318151	-16.23060647	-18.04944221	-24.21840726	-26.16491903	-26.10678428	-26.1041165
+3.65	16.72021262	13.07399769	13.08130107	11.43966848	14.05875002	11.08283656	14.8192748	15.8006301	15.79132014	15.78235438
-3.7	-32.67019674	-24.89255586	-24.62458658	-21.02437961	-18.74069939	-20.31679744	-27.27774163	-29.76095704	-30.01386874	-30.01127863
+3.7	12.56639283	10.81984137	10.82290326	9.485985367	12.35646395	8.494050393	11.86257943	12.56667244	12.55707353	12.54783997
-3.75	-36.17804068	-27.27218361	-27.71893534	-23.77064074	-21.10047805	-22.33875238	-30.00643993	-32.68801463	-33.37698857	-33.56793226
+3.75	9.608549471	8.915475719	8.918101597	7.80640445	10.86564633	6.548803091	9.58191735	9.842856966	9.833047393	9.823622836
-3.8	-40.50013009	-30.34588507	-31.62958118	-27.30092073	-24.11348913	-24.81880176	-33.35389992	-36.47348291	-37.35183083	-38.06720667
+3.8	7.59631718	6.60657068	6.632732435	6.255815395	8.984771716	5.098049456	6.82043304	6.820927936	7.488843001	8.240715512
-3.85	-44.18389811	-32.95724964	-34.83492054	-30.35923031	-26.72275775	-26.92366141	-36.19544091	-39.69340935	-40.89001556	-41.72724675
+3.85	7.59631718	5.412267799	6.632732435	6.255815395	7.756228301	4.380354639	5.950096225	6.72086031	7.488843001	8.240715512
-3.9	-48.68767141	-36.14028849	-39.00617821	-34.15463903	-30.003505	-29.48688072	-39.65629871	-43.62276002	-45.2221953	-46.45805686
+3.9	7.59631718	5.412267799	6.632732435	6.255815395	6.985167273	4.380354639	5.950096225	6.72086031	7.488843001	8.240715512
-3.95	-52.49832118	-38.82575267	-42.57515531	-37.41074329	-32.85185331	-31.64745196	-42.57394689	-46.94148996	-48.89282823	-50.47984493
+3.95	7.59631718	5.412267799	6.632732435	6.255815395	6.334567648	4.380354639	5.950096225	6.72086031	7.488843001	8.240715512
-5	-57.12497939	-42.07734741	-46.95401048	-41.51784089	-36.5059695	-34.26120838	-46.1041238	-50.96408668	-53.35556181	-55.38509081
+5	7.59631718	5.412267799	6.632732435	6.255815395	5.708149887	4.380354639	5.950096225	6.72086031	7.488843001	8.240715512

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.596327219	-7.247451918	-7.766916282	-7.315670849	-8.808106843	-7.69998228	-8.133746577	-3.666059494
End Shear	57.35984659	57.82947958	61.17943287	57.01394188	66.79869771	53.27318332	56.17030531	29.59125013
-0.05	-7.596327219	-7.247451918	-7.766916282	-7.315670849	-8.808106843	-7.69998228	-8.133746577	-3.666059494
+0.05	52.44237744	53.25422092	56.26340794	52.39504849	61.22547773	47.94480894	50.53687962	27.21172156
-0.1	-7.596327219	-7.247451918	-7.766916282	-7.315670849	-8.808106843	-7.69998228	-8.133746577	-3.666059494
+0.1	47.87630098	49.01288533	51.71044119	48.11058763	56.06482352	43.01449263	45.32552399	24.96864114
-0.15	-7.596327219	-7.247451918	-7.766916282	-7.315670849	-8.808106843	-7.69998228	-8.133746577	-4.076348794
+0.15	44.12965822	45.5137808	47.95746076	44.58089787	51.82013953	39.21579554	41.31118461	23.12312863
-0.2	-7.785106659	-9.933788631	-9.933788631	-8.871443277	-9.267462826	-7.69998228	-8.133746577	-5.591000307
+0.2	39.71893116	41.37092091	43.51798027	40.40796992	46.81036001	34.56755818	36.40027996	20.94438286
-0.25	-9.69738007	-12.66464732	-12.66464732	-11.83093079	-12.55897366	-9.628429411	-10.13518885	-6.840953699
+0.25	36.12624478	37.97597083	39.88336253	36.99365834	42.71859806	30.83560561	32.45853222	19.1644594
-0.3	-13.31226684	-16.3923749	-16.55422973	-15.35090305	-16.47586691	-12.32623019	-12.99139352	-8.321333684
+0.3	32.03145821	33.98461399	35.61447492	33.15072022	38.12163477	26.75147191	28.15944412	17.0787921
-0.35	-16.77052202	-19.88753168	-20.32626849	-18.50286578	-20.1255041	-14.8509975	-15.67819755	-9.534871602
+0.35	28.63628013	30.89822507	32.3168908	29.89248792	34.23183153	23.51573542	24.75340571	15.38841045
-0.4	-20.87342674	-24.02437768	-24.79467974	-22.72473962	-25.26927553	-17.83762817	-18.85693342	-11.26934489
+0.4	24.70595194	27.10611629	28.26984424	26.09854757	29.71244124	20.03203299	21.20875194	13.42456491
-0.45	-24.24278639	-27.41325349	-28.4584587	-26.1883999	-29.49614398	-20.28283051	-21.45977986	-13.09919641
+0.45	21.56249985	24.04714719	25.00930377	23.04442889	26.08311831	17.80363462	18.84185019	11.84767676
-0.5	-28.21288968	-31.39605001	-32.76840625	-30.26543416	-34.4800359	-23.15479922	-24.5173581	-15.25519302
+0.5	18.04774447	20.51139068	21.24576449	19.52234555	21.90893517	15.2254929	16.10403957	10.03439346
-0.55	-31.79326439	-34.63445684	-36.27633793	-33.58595826	-38.54647544	-25.6445367	-27.16652047	-17.01286265
+0.55	15.37374028	17.68814421	18.24527548	16.71720799	18.59447722	13.16473754	13.91616739	8.59495444
-0.6	-36.10993105	-38.41017109	-40.37070949	-37.464301	-43.30521305	-28.88255467	-30.57190555	-19.06786731
+0.6	12.33414384	14.46176946	14.82235218	13.39242812	14.68129259	10.80695347	11.41360296	6.960979369
-0.65	-39.61263603	-41.45391524	-43.67520073	-40.59681	-47.15682528	-32.6982439	-34.41920411	-20.72940157
+0.65	9.9527466	11.79546812	11.99946852	10.88840711	11.74385338	8.945822623	9.438783266	5.907500656
-0.7	-43.68730667	-44.96952379	-47.49689407	-44.22261266	-51.62513708	-37.17341441	-39.1299099	-22.6546733
+0.7	7.321819905	8.94042281	8.984043524	8.310879591	8.937922295	6.846780154	7.212299007	4.766474901
-0.75	-46.96384309	-47.77441577	-50.55035637	-47.12223097	-55.20752712	-40.935734	-43.09024632	-24.19611947
+0.75	5.425666809	7.020863609	7.020863609	6.384635082	6.817686864	5.305563622	5.584803813	3.868060789
-0.8	-50.85751677	-50.9768854	-54.04225883	-50.44163514	-59.32013067	-45.60541344	-48.03960697	-25.96291561
+0.8	4.015676498	4.939494467	4.939494467	4.246075377	4.393051689	3.746819207	3.944020217	2.857752782
-0.85	-53.7390911	-53.49873271	-56.79710009	-53.06348679	-62.57890356	-49.4969726	-52.16511886	-27.36032171
+0.85	2.924542665	3.282570863	3.282570863	2.628554488	2.628554488	2.532630261	2.665926591	2.076129232
-0.9	-57.15337159	-56.33503486	-59.90210396	-56.02264927	-66.2705341	-53.99891325	-56.93883485	-28.93989584
+0.9	1.722588062	1.545844953	1.598081362	1.504363136	1.805687932	1.415450392	1.49274907	1.215400076
-0.95	-59.83058508	-58.52964647	-62.31073395	-58.32185718	-69.15129331	-57.59655997	-60.75466252	-30.16930865
+0.95	1.524752148	1.494461784	1.598081362	1.504363136	1.805687932	1.415450392	1.49274907	0.732488208
-1	-62.82647393	-60.94675206	-64.97173096	-60.86691961	-72.35666778	-61.71110582	-65.12001639	-31.53291972
+1	1.52E+00	1.494461784	1.598081362	1.504363136	1.805687932	1.415450392	1.49274907	0.732488208
(Span 2) -2	-5.509017057	-5.399576153	-5.773959524	-5.43535023	-6.524054	-5.114103354	-5.393387907	-2.646521952
+2	63.53727642	61.11483679	65.21872495	61.14577856	72.83890307	64.29957764	67.89603884	31.72469336
-2.05	-5.509017057	-5.399576153	-5.773959524	-5.43535023	-6.524054	-5.114103354	-5.393387907	-2.646521952
+2.05	60.42377659	58.56330797	62.41327524	58.46463826	69.47047835	60.22764611	63.57963341	30.30181276
-2.1	-5.509017057	-5.399576153	-5.773959524	-5.43535023	-6.524054	-5.114103354	-5.393387907	-2.646521952
+2.1	57.05079272	55.73344877	59.31610784	55.51332437	65.79149196	55.96504857	59.06331057	28.74075754
-2.15	-5.509017057	-5.399576153	-5.773959524	-5.43535023	-6.524054	-5.114103354	-5.393387907	-2.646521952
+2.15	53.45881312	52.66165665	55.96641909	52.32881036	61.84675927	51.55945091	54.39754008	27.06126193
-2.2	-5.509017057	-6.449313165	-6.449313165	-5.950330606	-6.524054	-5.114103354	-5.393387907	-3.602232826
+2.2	49.68831817	49.38434609	52.40342509	48.94806926	57.68109627	47.05848626	49.63275701	25.283054
-2.25	-7.524044385	-9.118964728	-9.222239751	-8.403282977	-8.983752619	-6.858145444	-7.229789338	-4.739178742

+2.25	45.77980647	45.93793118	48.66634118	45.40807118	53.33931553	42.29730595	44.59573203	23.42587572
-2.3	-10.37927332	-12.17549297	-12.4563601	-11.35115786	-12.40212338	-9.094851927	-9.602888667	-5.954591921
+2.3	41.77376231	42.35880559	44.79436002	41.74579122	48.86623525	37.63759423	39.66590483	21.50945666
-2.35	-13.91605804	-15.92120453	-16.43428317	-15.06840898	-16.78645958	-11.82941173	-12.50579585	-7.847142607
+2.35	37.12793153	38.15259668	40.25437613	37.45801877	43.65085128	32.50654686	34.24116586	19.27203491
-2.4	-17.23138826	-19.37880149	-20.11751414	-18.51727231	-20.87878413	-14.36221597	-15.19741064	-9.61282372
+2.4	33.0492261	34.34838381	36.16205519	33.45892351	38.84804363	28.12746179	29.61370996	17.29512385
-2.45	-20.93376207	-22.96636365	-23.94873002	-22.11058331	-25.16311749	-17.14725114	-18.15479045	-11.46021798
+2.45	28.84727079	30.38435122	31.89677763	29.58129843	34.12691314	24.05754378	25.32373029	15.32098819
-2.5	-24.78958976	-26.64747225	-27.88871023	-25.81136973	-29.59464544	-20.2348922	-21.29988653	-13.36959613
+2.5	24.87563198	26.64612429	27.88726593	25.81002862	29.59303626	20.2336929	21.29862411	13.36937156
-2.55	-28.75851107	-30.38571345	-31.89824011	-29.58265832	-34.12855095	-24.0587974	-25.32504989	-15.32121757
+2.55	21.01628973	22.96504297	23.94731796	22.10927489	25.16155423	17.14640696	18.15389339	11.46000362
-2.6	-32.80014063	-34.28642162	-36.1001968	-33.4102394	-38.79964579	-28.12883617	-29.61516192	-17.29534868
+2.6	17.38690416	19.37752289	20.11615044	18.51600919	20.87728156	14.40372074	15.24109191	9.612613708
-2.65	-36.87411931	-38.15394	-40.2558241	-37.45937635	-43.65249832	-32.50796326	-34.24266294	-19.27226366
+2.65	13.99166919	15.9199798	16.43298026	15.06720453	16.7850341	11.82862609	12.50496162	7.846944145
-2.7	-41.51792629	-42.36012673	-44.79578745	-41.74712422	-48.86785976	-37.6390395	-39.66743321	-21.50967866
+2.7	10.4483453	12.17434522	12.45514347	11.35003648	12.40080578	9.094108687	9.602099889	5.954411765
-2.75	-45.52528672	-45.93921103	-48.66772695	-45.40936811	-53.34090249	-42.25615258	-44.55242054	-23.42609637
+2.75	7.58702617	9.117906439	9.22112222	8.402369683	8.982747991	6.857458903	7.229061144	4.74724477
-2.8	-49.57216433	-49.38557171	-52.40475555	-48.94931555	-57.68262795	-47.0599324	-49.63428756	-25.2832656
+2.8	5.509123684	6.448492028	6.448492028	5.949485961	6.52405574	5.114106712	5.393393725	3.6097816
-2.85	-53.48013109	-52.66281608	-55.96768122	-52.32999407	-61.84822093	-51.56087706	-54.39905008	-27.06146112
+2.85	5.509123684	5.399581851	5.773957438	5.435346918	6.52405574	5.114106712	5.393393725	2.646522686
-2.9	-57.06882264	-55.7345208	-59.31727856	-55.51443154	-65.79286695	-55.96644643	-59.06479127	-28.74094856
+2.9	5.509123684	5.399581851	5.773957438	5.435346918	6.52405574	5.114106712	5.393393725	2.646522686
-2.95	-60.43897979	-58.56429146	-62.41435377	-58.46565527	-69.47175047	-60.22898145	-63.58104853	-30.30198641
+2.95	5.509123684	5.399581851	5.773957438	5.435346918	6.52405574	5.114106712	5.393393725	2.646522686
-3	-63.97122509	-61.45535607	-65.59435096	-61.5054888	-73.29327971	-64.8642009	-68.49474448	-31.91568416
+3	5.509123684	5.399581851	5.773957438	5.435346918	6.52405574	5.114106712	5.393393725	2.646522686
(Span 3) -4	-1.52E+00	-1.494463361	-1.598080785	-1.50436222	-1.805688413	-1.415451321	-1.492750681	-0.732488411
+4	62.30866008	60.55991711	64.54517278	60.45853756	71.84093865	61.03997923	64.40787675	31.31426692
-3.05	-1.52E+00	-1.494463361	-1.598080785	-1.50436222	-1.805688413	-1.415451321	-1.492750681	-0.732488411
+3.05	59.79253369	58.52857489	62.30955647	58.32074274	69.14989427	57.59498168	60.75298832	30.16911213
-3.1	-1.914474487	-1.822295005	-1.822295005	-1.50436222	-1.805688413	-1.415451321	-1.492750681	-1.346132401
+3.1	56.55838707	55.87613733	59.39918221	55.54303364	65.67108155	53.26045381	56.15570574	28.68412881
-3.15	-2.924543381	-3.283340254	-3.283340254	-2.629164431	-2.629164431	-2.533149775	-2.666473447	-2.06889526
+3.15	53.69615579	53.49748337	56.79573407	53.06219446	62.57729497	49.4952479	52.16329029	27.36009715
-3.2	-4.243232727	-5.275110398	-5.275110398	-4.589763001	-4.769279531	-4.001774378	-4.212394082	-3.012892641
+3.2	50.07608128	50.45479949	53.47253066	49.89978846	58.64786735	44.81119694	47.19774507	25.6748303
-3.25	-5.425666809	-7.021777259	-7.021777259	-6.385565097	-6.818703413	-5.329114753	-5.609594477	-3.859658989
+3.25	46.91674324	47.77302544	50.54884184	47.12079275	55.20574841	40.80220047	42.94968471	24.19587229
-3.3	-7.696946674	-9.40254085	-9.471528568	-8.712134155	-9.379877055	-7.186760475	-7.572856596	-4.943030158
+3.3	42.96953873	44.39309486	46.86988496	43.62752883	50.8909644	36.4344471	38.35204958	22.33906672
-3.35	-9.92749687	-11.79671629	-12.00078837	-10.88962228	-11.74527501	-8.946632009	-9.439641934	-5.898082631
+3.35	39.56207186	41.45239143	43.67354557	40.59525406	47.15491029	32.69654855	34.41741953	20.72913527
-3.4	-12.79773384	-14.98799385	-15.38014537	-13.911587	-15.29316641	-11.19161618	-11.82183248	-7.226119266
+3.4	35.34653278	37.78827695	39.69598031	36.82496335	42.52001965	28.32464829	30.01568978	18.72952113
-3.45	-15.34033872	-17.68954654	-18.24676435	-16.71858275	-18.59609866	-13.16563263	-13.91711755	-8.595182381
+3.45	31.73997536	34.63283547	36.27458101	33.5843047	38.54444912	25.6432969	27.16520268	17.01257837
-3.5	-18.55890774	-21.09131695	-21.86263282	-20.09937119	-22.59188941	-15.64842612	-16.55311987	-10.33053252
+3.5	27.50932511	30.73753079	32.05547705	29.59085747	33.6547492	22.68022735	24.01208024	14.89891175
-3.55	-21.52331615	-24.04866644	-25.01092195	-23.04592998	-26.08489958	-17.80461467	-18.84289103	-11.84792846
+3.55	24.19391593	27.41154321	28.45660896	26.18667452	29.49403687	20.28174779	21.45862726	13.09890103
-3.6	-25.30564407	-27.73087972	-28.93624142	-26.72304214	-30.45555462	-20.48681411	-21.69185051	-13.7469141
+3.6	20.14404113	23.33811566	24.05311628	22.02392019	24.41479998	17.342457	18.32987895	10.89992234

-3.65	**-28.58858837**	**-30.89985702**	**-32.31863357**	**-29.89409789**	**-34.23375172**	**-23.51714794**	**-24.75489257**	**-15.38868052**
+3.65	**16.72021262**	**19.88577272**	**20.32436952**	**18.50108838**	**20.12334057**	**14.84986812**	**15.67699562**	**9.534675584**
-3.7	**-32.67019674**	**-34.64465403**	**-36.32007641**	**-33.6482886**	**-38.91399302**	**-27.41574138**	**-28.85867513**	**-17.42255137**
+3.7	**12.56639283**	**15.68721162**	**15.79355325**	**14.76565774**	**15.82447258**	**11.81685326**	**12.44936401**	**8.076099918**
-3.75	**-36.17804068**	**-37.97767917**	**-39.88519061**	**-36.99536475**	**-42.72064123**	**-30.83714007**	**-32.46014744**	**-19.16474482**
+3.75	**9.608549471**	**12.66326204**	**12.66326204**	**11.82945587**	**12.55733301**	**9.627496042**	**10.13420636**	**6.840751267**
-3.8	**-40.50013009**	**-42.05827788**	**-44.25424255**	**-41.09981607**	**-47.64029346**	**-35.33158228**	**-37.20738048**	**-21.3047564**
+3.8	**7.59631718**	**9.383728304**	**9.383728304**	**8.275926805**	**8.808109113**	**7.69998215**	**8.13374846**	**5.339333754**
-3.85	**-44.18389811**	**-45.51553734**	**-47.95934392**	**-44.58266268**	**-51.82226001**	**-39.2175589**	**-41.31304782**	**-23.12342463**
+3.85	**7.59631718**	**7.247457897**	**7.766925552**	**7.315678233**	**8.808109113**	**7.69998215**	**8.13374846**	**4.076142777**
-3.9	**-48.68767141**	**-49.71872391**	**-52.46784899**	**-48.82313356**	**-56.9224678**	**-43.82821184**	**-46.18554005**	**-25.34083541**
+3.9	**7.59631718**	**7.247457897**	**7.766925552**	**7.315678233**	**8.808109113**	**7.69998215**	**8.13374846**	**3.666060444**
-3.95	**-52.49832118**	**-53.25602648**	**-56.265347**	**-52.39685176**	**-61.22765157**	**-47.94667369**	**-50.53885088**	**-27.21202548**
+3.95	**7.59631718**	**7.247457897**	**7.766925552**	**7.315678233**	**8.808109113**	**7.69998215**	**8.13374846**	**3.666060444**
-5	**-57.12497939**	**-57.52872762**	**-60.85614969**	**-56.71946812**	**-66.44311336**	**-53.00567945**	**-55.88745937**	**-29.47809098**
+5	**7.59631718**	**7.247457897**	**7.766925552**	**7.315678233**	**8.808109113**	**7.69998215**	**8.13374846**	**3.666060444**

3-Span: Shear (Max and Min) Raw Data Results - 55' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.596327219	-13.06227291	-14.00217863	-8.552862539	-10.56008991	-11.00311662
End Shear	57.35984659	81.37191264	81.57941869	59.1580569	72.08643913	73.14294957
-0.05	-7.596327219	-13.06227291	-14.00217863	-8.552862539	-10.56008991	-11.00311662
+0.05	52.44237744	72.23895556	73.12688722	53.07551986	64.717307	65.37485766
-0.1	-7.596327219	-13.06227291	-14.00217863	-8.552862539	-10.56008991	-11.00311662
+0.1	47.87630098	64.67074363	65.44714401	47.45805843	57.90467989	58.49743568
-0.15	-7.596327219	-13.06227291	-14.00217863	-8.552862539	-10.56008991	-11.00311662
+0.15	44.12965822	58.12222726	59.46206355	43.14493363	52.66874658	52.85228377
-0.2	-7.785106659	-13.06227291	-14.00217863	-8.943940035	-10.56008991	-11.00311662
+0.2	39.71893116	50.61746033	52.48440521	37.93523892	46.33671381	46.37681426
-0.25	-9.69738007	-13.06227291	-14.00217863	-11.40247992	-12.56406062	-12.56474106
+0.25	36.12624478	44.91536238	46.86034131	33.91651789	41.35252849	41.22911043
-0.3	-13.31226684	-16.71785928	-16.49632361	-14.78940221	-16.48201836	-16.49763391
+0.3	32.03145821	38.70137788	40.36608692	29.61393185	35.66402271	35.35538804
-0.35	-16.77052202	-20.29535518	-19.96563665	-17.74280251	-19.70962449	-19.9362307
+0.35	28.63628013	33.96160575	35.18666641	26.97692995	31.21972231	31.88789222
-0.4	-20.87342674	-24.50261056	-24.30527831	-21.23523293	-23.73286258	-24.30718683
+0.4	24.70595194	28.83282053	29.55273438	23.7328983	26.51399276	27.84906353
-0.45	-24.24278639	-28.31515804	-28.67266429	-24.09347735	-27.08821445	-27.98375954
+0.45	21.56249985	24.76308432	25.2081123	21.11242019	23.10714772	24.59672689
-0.5	-28.21288968	-32.74344528	-34.52848886	-27.93257916	-30.99111542	-32.7407812
+0.5	18.04774447	20.42217384	20.59745418	18.07886978	19.77863181	20.84466899
-0.55	-31.79326439	-36.87372882	-39.34783173	-31.28813311	-34.32518305	-36.82466485
+0.55	15.37374028	17.22474437	17.23441955	15.65250737	17.11507372	17.85512473
-0.6	-36.10993105	-42.99171684	-45.10190364	-35.49258209	-38.56397338	-41.85517828
+0.6	12.33414384	13.89930421	13.39709654	12.87435341	14.06366736	14.44700933
-0.65	-39.61263603	-47.9800243	-51.2670511	-38.77614731	-43.18510589	-46.25211471
+0.65	9.9527466	11.4959989	10.67465282	10.67953496	11.67731345	11.7679091
-0.7	-43.68730667	-54.66452299	-59.26522473	-42.44963103	-49.58339026	-51.21283776
+0.7	7.321819905	8.782199837	8.156949296	8.201691751	8.92615007	8.943510356
-0.75	-46.96384309	-60.48904747	-65.91133687	-45.28647856	-54.78437812	-55.05498271
+0.75	5.425666809	6.672398774	6.199539932	6.323496399	6.806100683	6.804551296
-0.8	-50.85751677	-68.2015214	-74.01419022	-49.60039482	-61.0393585	-61.36729571
+0.8	4.015676498	4.335317508	4.038221213	4.436166885	4.694777166	4.454412625
-0.85	-53.7390911	-74.78504673	-80.44164497	-54.04230347	-66.36797433	-67.00145654
+0.85	2.924542665	2.614602676	2.616584715	2.998336753	3.164000656	2.668463445
-0.9	-57.15337159	-82.43522859	-87.71593448	-59.4089436	-72.8014797	-73.69028873
+0.9	1.722588062	2.278478098	2.379166184	1.509252875	1.901476462	1.932330651
-0.95	-59.83058508	-88.84696809	-93.4007124	-63.71206027	-77.95611338	-79.38079084
+0.95	1.524752148	2.278478098	2.379166184	1.509252875	1.901476462	1.932330651
-1	-62.82647393	-96.92418182	-99.75516075	-68.65186697	-83.86848967	-85.95825648
+1	1.52E+00	2.278478098	2.379166184	1.509252875	1.901476462	1.932330651
(Span 2) -2	-5.509017057	-8.232271976	-8.596063862	-5.453017111	-6.870143556	-6.981621511
+2	63.53727642	105.4696202	108.8262803	72.40722735	88.1503606	91.4464257
-2.05	-5.509017057	-8.232271976	-8.596063862	-5.453017111	-6.870143556	-6.981621511
+2.05	60.42377659	97.55062579	99.94677012	67.60673302	82.36717024	85.10342961
-2.1	-5.509017057	-8.232271976	-8.596063862	-5.453017111	-6.870143556	-6.981621511
+2.1	57.05079272	89.43979706	90.94257739	62.61310061	76.34258293	78.54120391
-2.15	-5.509017057	-8.232271976	-8.596063862	-5.453017111	-6.870143556	-6.981621511
+2.15	53.45881312	81.14172313	81.27105841	57.48242597	70.14390979	71.83266349
-2.2	-5.509017057	-8.232271976	-8.596063862	-5.817435717	-6.870143556	-6.981621511
+2.2	49.68831817	72.61797948	73.1353483	52.22098132	63.79416815	64.8336971
-2.25	-7.524044385	-8.899112565	-8.596063862	-8.200162256	-9.000421701	-9.002652416

+2.25	**45.77980647**	**64.27732869**	**65.32774919**	**46.66076025**	**57.14000719**	**57.78581074**
-2.3	**-10.37927332**	**-11.80381389**	**-11.38948917**	**-10.83967845**	**-11.97157919**	**-12.10977077**
+2.3	**41.77376231**	**56.66063751**	**57.87981813**	**41.45986241**	**50.72799686**	**51.3400612**
-2.35	**-13.91605804**	**-15.66853032**	**-15.69756513**	**-14.06168932**	**-15.61927287**	**-16.07453012**
+2.35	**37.12793153**	**48.38500102**	**50.09151008**	**35.63188498**	**43.63986045**	**43.88529138**
-2.4	**-17.23138826**	**-19.62172206**	**-20.1086879**	**-17.24189184**	**-18.8878524**	**-19.88841513**
+2.4	**33.0492261**	**41.38731476**	**43.45471147**	**30.83081222**	**37.78758967**	**37.72023454**
-2.45	**-20.93376207**	**-24.40618999**	**-25.20130093**	**-20.31572773**	**-22.48069426**	**-23.8555812**
+2.45	**28.84727079**	**35.16299506**	**36.9993661**	**26.64188872**	**32.29465174**	**31.89364667**
-2.5	**-24.78958976**	**-29.47449361**	**-30.79468014**	**-23.45967815**	**-27.03569666**	**-27.80208639**
+2.5	**24.87563198**	**29.47291013**	**30.79438445**	**23.45867525**	**27.03408599**	**27.80085016**
-2.55	**-28.75851107**	**-35.16483702**	**-36.99968866**	**-26.64289323**	**-32.2963462**	**-31.89540923**
+2.55	**21.01628973**	**24.40467959**	**25.20104186**	**20.31474965**	**22.47936881**	**23.85437511**
-2.6	**-32.80014063**	**-41.38940852**	**-43.45503315**	**-30.83226146**	**-37.78935964**	**-37.72209468**
+2.6	**17.38690416**	**19.62047877**	**20.127063**	**17.24094126**	**18.88680768**	**19.93087471**
-2.65	**-36.87411931**	**-48.38717886**	**-50.09184102**	**-35.63254085**	**-43.64178456**	**-43.84387615**
+2.65	**13.99166919**	**15.66735741**	**15.71480492**	**14.06077689**	**15.61826226**	**16.07340991**
-2.7	**-41.51792629**	**-56.66288044**	**-57.88019014**	**-41.46148765**	**-50.7299712**	**-51.34202182**
+2.7	**10.4483453**	**11.96132896**	**11.38931875**	**10.83881391**	**12.01457146**	**12.10873414**
-2.75	**-45.52528672**	**-64.27981085**	**-65.15112756**	**-46.66240536**	**-57.09805839**	**-57.78790612**
+2.75	**7.58702617**	**8.898248687**	**8.596064153**	**8.199362583**	**8.999533549**	**9.001776526**
-2.8	**-49.57216433**	**-72.57747903**	**-73.13572976**	**-52.17318847**	**-63.75221509**	**-64.7924701**
+2.8	**5.509123684**	**8.232275424**	**8.596064153**	**5.816790184**	**6.870143581**	**6.981623662**
-2.85	**-53.48013109**	**-81.10151869**	**-81.91435081**	**-57.48405856**	**-70.14588383**	**-71.83476228**
+2.85	**5.509123684**	**8.232275424**	**8.596064153**	**5.45302094**	**6.870143581**	**6.981623662**
-2.9	**-57.06882264**	**-89.44230086**	**-90.94301701**	**-62.61471097**	**-76.34452646**	**-78.54328422**
+2.9	**5.509123684**	**8.232275424**	**8.596064153**	**5.45302094**	**6.870143581**	**6.981623662**
-2.95	**-60.43897979**	**-97.553084**	**-99.94720746**	**-67.60827942**	**-82.36903524**	**-85.10545288**
+2.95	**5.509123684**	**8.232275424**	**8.596064153**	**5.45302094**	**6.870143581**	**6.981623662**
-3	**-63.97122509**	**-106.582383**	**-110.079214**	**-73.07545386**	**-88.95467973**	**-92.33234408**
+3	**5.509123684**	**8.232275424**	**8.596064153**	**5.45302094**	**6.870143581**	**6.981623662**
(Span 3) -4	**-1.52E+00**	**-2.278479053**	**-2.379166264**	**-1.509253935**	**-1.901476469**	**-1.932331246**
+4	**62.30866008**	**95.54665592**	**98.89482113**	**67.8446744**	**82.90276842**	**84.88180904**
-3.05	**-1.52E+00**	**-2.278479053**	**-2.379166264**	**-1.509253935**	**-1.901476469**	**-1.932331246**
+3.05	**59.79253369**	**88.57630231**	**93.40031467**	**63.71019623**	**77.95388136**	**79.37835698**
-3.1	**-1.914474487**	**-2.278479053**	**-2.379166264**	**-1.679654778**	**-1.901476469**	**-1.932331246**
+3.1	**56.55838707**	**81.17775379**	**86.53701903**	**58.52736397**	**71.74500173**	**72.59407835**
-3.15	**-2.924543381**	**-2.649356971**	**-2.616676151**	**-2.998945686**	**-3.164647817**	**-2.668995432**
+3.15	**53.69615579**	**74.78225442**	**80.44119242**	**54.04029998**	**66.36557144**	**66.99897877**
-3.2	**-4.243232727**	**-4.755117574**	**-4.390277231**	**-4.738067601**	**-5.01624931**	**-4.831667931**
+3.2	**50.07608128**	**66.86107433**	**72.6893159**	**48.76990914**	**60.04272938**	**60.23509941**
-3.25	**-5.425666809**	**-6.67326848**	**-6.212386403**	**-6.32421489**	**-6.806992824**	**-6.80543722**
+3.25	**46.91674324**	**60.48657786**	**65.9108678**	**45.2852621**	**54.78209586**	**55.05335555**
-3.3	**-7.696946674**	**-9.221987669**	**-8.578025712**	**-8.603225599**	**-9.367938672**	**-9.385529239**
+3.3	**42.96953873**	**53.48075427**	**57.90599302**	**41.85639075**	**48.52595165**	**50.41074553**
-3.35	**-9.92749687**	**-11.49700547**	**-10.6894178**	**-10.68047381**	**-11.65248214**	**-11.7690399**
+3.35	**39.56207186**	**47.97789269**	**51.26658833**	**38.77474173**	**43.18271697**	**46.25023186**
-3.4	**-12.79773384**	**-14.39570236**	**-13.97173243**	**-13.32775258**	**-14.56179879**	**-15.00199093**
+3.4	**35.34653278**	**41.97930065**	**44.01043429**	**34.81026924**	**37.87402108**	**41.03498459**
-3.45	**-15.34033872**	**-17.22607519**	**-17.06297577**	**-15.65355105**	**-17.11621987**	**-17.85639864**
+3.45	**31.73997536**	**37.01567051**	**39.34749489**	**31.28653793**	**34.32358642**	**36.82277369**
-3.5	**-18.55890774**	**-21.08220866**	**-21.32761421**	**-18.57663184**	**-20.32490656**	**-21.45926501**
+3.5	**27.50932511**	**32.5410761**	**33.53774885**	**27.28116348**	**30.34903751**	**31.93890216**
-3.55	**-21.52331615**	**-24.76479253**	**-25.20842038**	**-21.11354945**	**-23.1083867**	**-24.59811594**
+3.55	**24.19391593**	**28.87174667**	**28.67233427**	**24.09222078**	**27.08675072**	**27.98216965**
-3.6	**-25.30564407**	**-29.67140215**	**-30.44683448**	**-24.26751754**	**-27.23004433**	**-28.51372884**
+3.6	**20.14404113**	**24.30625194**	**23.925938**	**20.65630769**	**23.04970472**	**23.5634896**

-3.65	**-28.58858837**	**-33.9634746**	**-35.18703279**	**-26.97814414**	**-31.22163698**	**-31.88938104**
+3.65	**16.72021262**	**20.82261376**	**20.30588072**	**17.74150858**	**19.70820506**	**19.9347399**
-3.7	**-32.67019674**	**-39.71865836**	**-41.42839755**	**-30.17733183**	**-36.57824981**	**-36.29156553**
+3.7	**12.56639283**	**16.53506983**	**16.14276882**	**14.19345612**	**15.83064649**	**15.83146304**
-3.75	**-36.17804068**	**-44.9176402**	**-46.86074147**	**-33.9182291**	**-41.31069154**	**-41.2312945**
+3.75	**9.608549471**	**13.06227392**	**14.00217644**	**11.43174917**	**12.56261584**	**12.56331888**
-3.8	**-40.50013009**	**-51.82452206**	**-53.63111215**	**-38.75025846**	**-47.32850502**	**-47.43213102**
+3.8	**7.59631718**	**13.06227392**	**14.00217644**	**8.552871597**	**10.56009774**	**11.003123**
-3.85	**-44.18389811**	**-58.08190701**	**-59.46248278**	**-43.14691722**	**-52.6711554**	**-52.85465697**
+3.85	**7.59631718**	**13.06227392**	**14.00217644**	**8.552871597**	**10.56009774**	**11.003123**
-3.9	**-48.68767141**	**-65.64717985**	**-66.66150861**	**-48.38371835**	**-59.02778269**	**-59.67938234**
+3.9	**7.59631718**	**13.06227392**	**14.00217644**	**8.552871597**	**10.56009774**	**11.003123**
-3.95	**-52.49832118**	**-72.24180442**	**-73.12736554**	**-53.07761922**	**-64.71985194**	**-65.37750365**
+3.95	**7.59631718**	**13.06227392**	**14.00217644**	**8.552871597**	**10.56009774**	**11.003123**
-5	**-57.12497939**	**-80.96317304**	**-81.59434102**	**-58.86226257**	**-71.72822625**	**-72.78138243**
+5	**7.59631718**	**13.06227392**	**14.00217644**	**8.552871597**	**10.56009774**	**11.003123**

3-Span: Moment (Max and Min) Raw Data Results - 55' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-20.889900	-14.883725	-18.240012	-17.203492	-15.697412	-12.045965	-16.362763	-18.482355	-20.594311	-22.661944
+0.05	144.216538	107.028804	117.203825	102.939285	91.044745	87.148357	117.435091	129.482554	135.208993	139.739045
-0.1	-41.779800	-29.767450	-36.480024	-34.406984	-31.394824	-24.091929	-32.725526	-36.964711	-41.188622	-45.323888
+0.1	267.478264	199.164240	214.637183	187.852795	167.429435	162.263236	218.702843	240.588965	250.602510	260.466776
-0.15	-62.669700	-44.651174	-54.720037	-51.610477	-47.092236	-36.137894	-49.088289	-55.447066	-61.782934	-67.985832
+0.15	365.848169	273.457813	289.866000	252.925016	227.210509	223.231173	300.648348	330.068679	356.951113	369.151554
-0.2	-83.559599	-59.534899	-72.960049	-68.813969	-62.789648	-48.183858	-65.451052	-73.929421	-82.377245	-90.647777
+0.2	446.176034	335.330986	347.695598	301.686535	273.973955	273.894039	368.750799	403.332644	443.474213	462.005597
-0.25	-104.449499	-74.418624	-91.200061	-86.017461	-78.487061	-60.229823	-81.813815	-92.411776	-102.971556	-113.309721
+0.25	501.050763	379.627898	387.362724	341.122755	311.585500	309.247391	418.392852	458.267498	507.137854	539.217120
-0.3	-125.339399	-89.302349	-109.440073	-103.220953	-94.184473	-72.275787	-98.176578	-110.894132	-123.565867	-135.971665
+0.3	540.797354	411.202892	418.471908	366.514741	338.597657	336.804609	457.493788	505.172122	553.236864	595.910420
-0.35	-146.229299	-104.186073	-127.680086	-120.424445	-109.881885	-84.321752	-114.539341	-129.376487	-144.160179	-158.633609
+0.35	566.304802	432.803796	432.766283	374.788034	350.816048	349.464931	485.308158	533.312860	583.774376	628.997579
-0.4	-167.119199	-119.069798	-145.920098	-137.627937	-125.579297	-96.367716	-130.902104	-147.858842	-164.754490	-181.295553
+0.4	582.179561	444.848365	435.593998	375.586378	356.813762	355.006840	499.523778	546.802290	602.354038	644.024835
-0.45	-188.009099	-133.953523	-164.160110	-154.831430	-141.276709	-108.413681	-147.264867	-166.341197	-185.348801	-203.957497
+0.45	575.339643	442.579153	422.017166	372.242537	352.515468	347.985889	497.790350	542.176906	601.320537	648.152735
-0.5	-208.898999	-148.837248	-182.400122	-172.034922	-156.974121	-120.459646	-163.627630	-184.823553	-205.943112	-226.619441
+0.5	570.101518	436.080027	403.945061	368.579860	347.714202	345.055647	490.936596	533.918901	591.059599	635.490336
-0.55	-229.788898	-163.720972	-200.640134	-189.238414	-172.671533	-132.505610	-179.990393	-203.305908	-226.537424	-249.281386
+0.55	552.509662	420.493121	405.637139	351.563730	336.104883	336.794000	471.858295	516.311949	568.245206	607.901904
-0.6	-250.678798	-178.604697	-218.880147	-206.441906	-188.368945	-144.551575	-196.353156	-221.788263	-247.131735	-271.943330
+0.6	520.576574	394.769485	393.148812	336.429124	314.605772	320.097997	442.879437	486.376742	531.470423	572.120846
-0.65	-271.568698	-193.488422	-237.120159	-223.645398	-204.066357	-156.597539	-212.715919	-240.270619	-267.726046	-294.605274
+0.65	469.241818	357.901358	362.164857	311.618484	286.026837	292.129813	400.243857	440.097234	479.910576	517.769173
-0.7	-292.458598	-208.372147	-255.360171	-240.848890	-219.763769	-168.643504	-229.078682	-258.752974	-288.320357	-317.267218
+0.7	411.919553	315.110105	319.604075	278.909857	254.971063	257.871678	348.706631	383.955100	419.782217	449.423052
-0.75	-313.348498	-223.255871	-273.600183	-258.052383	-235.461182	-180.689468	-245.441445	-277.235329	-308.914669	-339.929162
+0.75	339.155495	261.563397	263.421697	228.840815	211.611280	213.339001	287.189218	314.950383	345.103235	365.304688
-0.8	-334.238398	-238.139596	-291.840196	-275.255875	-251.158594	-192.735433	-261.804208	-295.717684	-329.508980	-362.591106
+0.8	258.269308	201.075673	198.063218	167.940730	167.009308	164.945616	219.923894	238.188983	260.788037	271.416335
-0.85	-355.128298	-253.023321	-310.080208	-292.459367	-276.046751	-204.781398	-278.166971	-314.200040	-350.103291	-385.253050
+0.85	161.785587	131.714553	129.919662	103.776195	129.459962	108.140408	144.528656	152.523426	166.443382	167.253220
-0.9	-376.018197	-267.907046	-328.320220	-309.662859	-326.845532	-216.827362	-294.529734	-332.682395	-370.697602	-407.914994
+0.9	94.766475	78.900131	78.842774	62.692866	97.664192	64.055318	81.353969	81.411417	84.701937	84.681772
-0.95	-396.908097	-282.790770	-346.560232	-326.866351	-397.200033	-228.873327	-310.892497	-351.164750	-391.291914	-430.576939
+0.95	79.668300	57.489716	63.669184	57.587954	67.184986	46.803126	63.752848	71.439280	79.368463	86.765523
-1	-417.797986	-297.674501	-364.800238	-366.219230	-476.577349	-240.919285	-327.255269	-369.647102	-411.886219	-453.238881
+1	83.861368	60.515490	67.020193	60.618898	54.897945	49.266449	67.108260	75.199241	83.545753	91.332131
(Span 2) -2	-417.797986	-297.674501	-364.800238	-366.219230	-476.577349	-240.919285	-327.255269	-369.647102	-411.886219	-453.238881
+2	83.861368	60.515490	67.020193	60.618898	54.897945	49.266449	67.108260	75.199241	83.545753	91.332131
-2.05	-290.344224	-209.512474	-232.032544	-244.771019	-355.361459	-170.566846	-232.337245	-260.349449	-289.246041	-316.203223
+2.05	64.166633	46.303505	51.280586	46.382627	60.043065	37.696287	51.347971	57.538794	63.925140	69.882897
-2.1	-270.649107	-195.300472	-216.292923	-195.634098	-258.651677	-158.996669	-216.576956	-242.688988	-269.625418	-294.753995
+2.1	109.251321	94.223435	94.477688	75.254513	87.363207	74.945001	101.713867	101.941645	107.036420	107.010615
-2.15	-250.953990	-181.088471	-200.553301	-181.397819	-189.809372	-147.426493	-200.816666	-225.028528	-250.004795	-273.304767
+2.15	196.719731	159.030863	156.447131	125.332683	121.764624	131.044461	181.107613	191.802527	206.336038	214.617582
-2.2	-231.258873	-166.876469	-184.813680	-167.161539	-152.155339	-135.856316	-185.056376	-207.368067	-230.384172	-251.855540
+2.2	303.819013	239.129264	231.856391	200.284746	178.757656	195.173423	268.244280	291.412609	315.097561	334.787033

-2.25	**-211.563755**	**-152.664467**	**-169.074058**	**-152.925259**	**-141.767896**	**-124.286140**	**-169.296087**	**-189.707607**	**-210.763550**	**-230.406312**
+2.25	**401.155591**	**308.668725**	**319.022300**	**280.805111**	**250.450443**	**251.967021**	**345.834784**	**379.372482**	**411.840143**	**443.002382**
-2.3	**-191.868638**	**-138.452466**	**-153.334437**	**-138.688980**	**-136.322160**	**-112.715963**	**-153.535797**	**-172.047146**	**-191.142927**	**-208.957084**
+2.3	**485.025783**	**367.589086**	**388.568859**	**341.799427**	**307.712252**	**299.348514**	**411.702734**	**453.341489**	**493.922701**	**533.847604**
-2.35	**-172.173521**	**-124.240464**	**-137.594815**	**-124.452700**	**-131.312162**	**-101.145787**	**-137.775507**	**-154.386685**	**-171.522304**	**-187.507857**
+2.35	**550.234252**	**414.554857**	**438.098125**	**385.159857**	**349.214869**	**335.387023**	**463.692027**	**511.059174**	**559.932918**	**604.276148**
-2.4	**-152.478404**	**-110.028462**	**-121.855194**	**-110.216420**	**-128.119727**	**-89.575610**	**-122.015217**	**-136.726225**	**-151.901682**	**-166.058629**
+2.4	**593.974567**	**447.017672**	**466.789700**	**412.179286**	**375.817516**	**358.798513**	**500.049418**	**550.732476**	**606.327213**	**652.296090**
-2.45	**-132.783287**	**-95.816461**	**-106.115572**	**-95.980141**	**-127.237296**	**-78.005434**	**-106.254928**	**-119.065764**	**-132.281059**	**-144.609401**
+2.45	**616.945899**	**465.651482**	**475.640762**	**432.606396**	**395.029641**	**370.147469**	**520.678919**	**572.250830**	**632.761890**	**683.408828**
-2.5	**-113.088170**	**-81.604459**	**-90.375951**	**-81.743861**	**-126.626178**	**-66.435257**	**-90.494638**	**-101.405304**	**-112.660436**	**-123.160214**
+2.5	**618.930594**	**469.420856**	**468.014549**	**437.178951**	**399.809099**	**369.512923**	**525.143728**	**575.367000**	**638.900847**	**693.040032**
-2.55	**-132.780727**	**-95.816352**	**-106.115488**	**-95.980086**	**-127.237357**	**-78.005338**	**-106.254921**	**-119.065670**	**-132.280994**	**-144.609449**
+2.55	**617.153794**	**465.649673**	**475.631299**	**432.597940**	**395.030791**	**370.140848**	**520.667152**	**572.242764**	**632.749476**	**683.411999**
-2.6	**-152.475463**	**-110.028338**	**-121.855095**	**-110.216357**	**-128.119723**	**-89.575500**	**-122.015210**	**-136.726117**	**-151.901607**	**-166.058684**
+2.6	**594.299744**	**447.021574**	**466.778277**	**412.172061**	**375.818887**	**358.812703**	**500.052591**	**550.738704**	**606.328640**	**652.309954**
-2.65	**-172.170199**	**-124.240324**	**-137.594702**	**-124.452628**	**-131.312326**	**-101.145662**	**-137.775500**	**-154.386563**	**-171.522220**	**-187.507918**
+2.65	**550.522767**	**414.556563**	**438.084859**	**385.152164**	**349.218191**	**335.404123**	**463.696845**	**511.066729**	**559.935524**	**604.290719**
-2.7	**-191.864935**	**-138.452309**	**-153.334310**	**-138.688900**	**-136.322301**	**-112.715825**	**-153.535789**	**-172.047009**	**-191.142834**	**-208.957153**
+2.7	**485.199719**	**367.590676**	**388.555757**	**341.792243**	**307.715073**	**299.365802**	**411.707362**	**453.348593**	**493.924774**	**533.861404**
-2.75	**-211.559671**	**-152.664295**	**-169.073917**	**-152.925171**	**-141.768020**	**-124.285987**	**-169.296078**	**-189.707456**	**-210.763447**	**-230.406387**
+2.75	**401.353196**	**308.672310**	**319.024769**	**280.798288**	**250.452566**	**251.983473**	**345.838536**	**379.378448**	**411.842703**	**443.014833**
-2.8	**-231.254407**	**-166.876281**	**-184.813524**	**-167.161442**	**-152.155349**	**-135.856150**	**-185.056367**	**-207.367902**	**-230.384060**	**-251.855622**
+2.8	**303.852651**	**239.135447**	**231.862186**	**200.278577**	**178.754312**	**195.172857**	**268.247706**	**291.418143**	**315.102335**	**334.787334**
-2.85	**-250.949143**	**-181.088267**	**-200.553132**	**-181.397713**	**-189.809344**	**-147.426312**	**-200.816657**	**-225.028349**	**-250.004674**	**-273.304856**
+2.85	**196.909598**	**159.040227**	**156.453183**	**125.333788**	**121.765467**	**131.048033**	**181.111368**	**191.808179**	**206.342279**	**214.619588**
-2.9	**-270.643879**	**-195.300252**	**-216.292739**	**-195.633985**	**-258.651764**	**-158.996474**	**-216.576946**	**-242.688795**	**-269.625287**	**-294.754091**
+2.9	**109.251319**	**94.234146**	**94.487341**	**75.261771**	**87.362077**	**74.948760**	**101.719504**	**101.940693**	**107.044606**	**107.018594**
-2.95	**-290.338615**	**-209.512238**	**-232.032346**	**-244.771065**	**-355.361565**	**-170.566637**	**-232.337235**	**-260.349242**	**-289.245900**	**-316.203325**
+2.95	**64.167885**	**46.303556**	**51.280643**	**46.382656**	**60.039179**	**37.696331**	**51.347969**	**57.538841**	**63.925168**	**69.882876**
-3	**-417.797434**	**-297.674735**	**-364.800278**	**-366.219509**	**-476.577425**	**-240.919499**	**-327.255301**	**-369.647314**	**-411.886359**	**-453.239351**
+3	**83.862991**	**60.515558**	**67.020253**	**60.618934**	**54.897964**	**49.266509**	**67.108263**	**75.199301**	**83.545793**	**91.332102**
(Span 3) -4	**-417.797434**	**-297.674735**	**-364.800278**	**-366.219509**	**-476.577425**	**-240.919499**	**-327.255301**	**-369.647314**	**-411.886359**	**-453.239351**
+4	**83.862991**	**60.515558**	**67.020253**	**60.618934**	**54.897964**	**49.266509**	**67.108263**	**75.199301**	**83.545793**	**91.332102**
-3.05	**-396.907562**	**-282.790999**	**-346.560264**	**-326.866358**	**-397.200074**	**-228.873523**	**-310.892537**	**-351.164948**	**-391.292041**	**-430.577384**
+3.05	**79.669842**	**57.489780**	**63.669241**	**57.587987**	**67.185697**	**46.803184**	**63.752849**	**71.439336**	**79.368503**	**86.765497**
-3.1	**-376.017689**	**-267.907262**	**-328.320249**	**-309.662866**	**-326.845649**	**-216.827548**	**-294.529772**	**-332.682582**	**-370.697723**	**-407.915416**
+3.1	**93.969672**	**78.906019**	**78.848103**	**62.696875**	**97.657604**	**64.044254**	**81.364809**	**81.421961**	**84.709890**	**84.689523**
-3.15	**-355.127817**	**-253.023526**	**-310.080235**	**-292.459374**	**-276.046879**	**-204.781573**	**-278.167007**	**-314.200216**	**-350.103404**	**-385.253448**
+3.15	**161.739517**	**131.718995**	**129.925358**	**103.778904**	**129.457620**	**108.140075**	**144.530602**	**152.520373**	**166.440560**	**167.254759**
-3.2	**-334.237945**	**-238.139789**	**-291.840221**	**-275.255881**	**-251.158600**	**-192.735598**	**-261.804243**	**-295.717851**	**-329.509086**	**-362.591481**
+3.2	**256.669447**	**201.080153**	**198.067101**	**167.942647**	**167.003721**	**164.931304**	**219.925994**	**238.185804**	**260.794044**	**271.407331**
-3.25	**-313.348073**	**-223.256053**	**-273.600207**	**-258.052389**	**-235.461187**	**-180.689622**	**-245.441478**	**-277.235485**	**-308.914768**	**-339.929513**
+3.25	**339.044658**	**261.567106**	**263.423286**	**228.838737**	**211.613330**	**213.338109**	**287.187849**	**314.946993**	**345.098498**	**365.304774**
-3.3	**-292.458200**	**-208.372316**	**-255.360193**	**-240.848897**	**-219.763775**	**-168.643647**	**-229.078714**	**-258.753119**	**-288.320450**	**-317.267546**
+3.3	**412.222503**	**315.112884**	**319.601110**	**278.905542**	**254.968705**	**257.856014**	**348.704339**	**383.950510**	**419.786011**	**449.431566**
-3.35	**-271.568328**	**-193.488580**	**-237.120178**	**-223.645404**	**-204.066363**	**-156.597672**	**-212.715949**	**-240.270753**	**-267.726131**	**-294.605578**
+3.35	**469.185915**	**357.902500**	**362.161263**	**311.618988**	**286.027118**	**292.126833**	**400.240489**	**440.091323**	**479.912271**	**517.766050**
-3.4	**-250.678456**	**-178.604843**	**-218.880164**	**-206.441912**	**-188.368951**	**-144.551697**	**-196.353184**	**-221.788387**	**-247.131813**	**-271.943610**
+3.4	**521.027286**	**394.767178**	**393.142531**	**336.422839**	**314.611281**	**320.101812**	**442.874258**	**486.368566**	**531.467497**	**572.124980**
-3.45	**-229.788584**	**-163.721107**	**-200.640150**	**-189.238420**	**-172.671539**	**-132.505721**	**-179.990420**	**-203.306021**	**-226.537495**	**-249.281643**
+3.45	**552.296383**	**420.488963**	**405.637747**	**351.564661**	**336.104654**	**336.787610**	**471.861551**	**516.311569**	**568.239840**	**607.902882**
-3.5	**-208.898711**	**-148.837371**	**-182.400136**	**-172.034927**	**-156.974126**	**-120.459746**	**-163.627655**	**-184.823655**	**-205.943177**	**-226.619675**
+3.5	**570.367540**	**436.073474**	**403.932680**	**368.586860**	**347.717170**	**345.061188**	**490.926884**	**533.905304**	**591.051125**	**635.486185**
-3.55	**-188.008839**	**-133.953634**	**-164.160122**	**-154.831435**	**-141.276714**	**-108.413771**	**-147.264891**	**-166.341290**	**-185.348858**	**-203.957707**
+3.55	**575.089729**	**442.575550**	**422.017725**	**372.241725**	**352.518906**	**347.981041**	**497.790541**	**542.180939**	**601.319726**	**648.147581**
-3.6	**-167.118967**	**-119.069898**	**-145.920107**	**-137.627943**	**-125.579302**	**-96.367796**	**-130.902126**	**-147.858924**	**-164.754540**	**-181.295740**

+3.6	581.828803	444.853184	435.602186	375.594130	356.817845	355.000098	499.510658	546.793131	602.360011	644.025847
-3.65	-146.229095	-104.186161	-127.680093	-120.424450	-109.881890	-84.321820	-114.539361	-129.376558	-144.160222	-158.633772
+3.65	566.424644	432.805820	432.762207	374.788859	350.816232	349.456221	485.302617	533.310730	583.776594	628.993426
-3.7	-125.339222	-89.302425	-109.440079	-103.220958	-94.184478	-72.275845	-98.176597	-110.894192	-123.565904	-135.971804
+3.7	540.469091	411.201429	418.476248	366.520462	338.600476	336.793423	457.495577	505.176794	553.234390	595.901978
-3.75	-104.449350	-74.418688	-91.200065	-86.017466	-78.487065	-60.229870	-81.813832	-92.411826	-102.971585	-113.309837
+3.75	501.183753	379.623516	387.363744	341.125682	311.586779	309.247766	418.390734	458.268382	507.131388	539.214173
-3.8	-83.559478	-59.534952	-72.960051	-68.813973	-62.789653	-48.183895	-65.451067	-73.929460	-82.377267	-90.647869
+3.8	445.598393	335.323402	347.692401	301.685847	273.981298	273.877911	368.745135	403.329140	443.463379	462.007791
-3.85	-62.669606	-44.651215	-54.720036	-51.610481	-47.092241	-36.137919	-49.088303	-55.447094	-61.782949	-67.985901
+3.85	365.714411	273.457713	289.868885	252.928535	227.212192	223.226102	300.649571	330.071441	356.945894	369.148443
-3.9	-41.779733	-29.767479	-36.480022	-34.406989	-31.394829	-24.091944	-32.725538	-36.964729	-41.188631	-45.323934
+3.9	267.782126	199.149810	214.626160	187.850476	167.433446	162.241271	218.689481	240.576981	250.602712	260.467938
-3.95	-20.889861	-14.883743	-18.240008	-17.203496	-15.697417	-12.045969	-16.362774	-18.482363	-20.594312	-22.661966
+3.95	144.370342	107.021577	117.198442	102.935685	91.046777	87.137422	117.428495	129.476683	135.209093	139.739604
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 55' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-20.889900	-19.930493	-21.359020	-20.118095	-24.222294	-21.174951	-22.367803	-10.081664
+0.05	144.216538	146.855761	155.203251	144.549688	169.036265	132.059440	139.203913	74.832234
-0.1	-41.779800	-39.860986	-42.718040	-40.236190	-48.444588	-42.349903	-44.735606	-20.163327
+0.1	267.478264	274.083836	289.345103	269.302308	314.245570	241.309353	254.297617	139.372912
-0.15	-62.669700	-59.791478	-64.077059	-60.354285	-72.666881	-63.524854	-67.103409	-30.244991
+0.15	365.848169	377.616575	397.984106	370.433295	431.673647	325.004923	342.389313	191.045117
-0.2	-83.559599	-79.721971	-85.436079	-80.472379	-96.889175	-84.699805	-89.471212	-40.326654
+0.2	446.176034	464.754412	489.177898	454.436278	527.137862	388.528089	409.163534	234.349061
-0.25	-104.449499	-99.652464	-106.795099	-100.590474	-121.111469	-105.874756	-111.839015	-50.408318
+0.25	501.050763	528.034473	555.239011	516.082784	606.561845	443.931784	468.266317	264.207702
-0.3	-125.339399	-119.582957	-128.154119	-120.708569	-145.333763	-127.049708	-134.206819	-60.489982
+0.3	540.797354	575.062446	603.081731	567.540008	668.931222	483.887211	511.154744	287.692984
-0.35	-146.229299	-139.513449	-149.513138	-140.826664	-169.556057	-148.224659	-156.574622	-70.571645
+0.35	566.304802	602.940777	636.959101	602.231229	706.298505	505.798393	533.820052	298.452031
-0.4	-167.119199	-159.443942	-170.872158	-160.944759	-193.778351	-169.399610	-178.942425	-80.653309
+0.4	582.179561	623.033250	656.912962	620.433839	724.873237	515.755549	544.825088	303.264967
-0.45	-188.009099	-179.374435	-192.231178	-181.062854	-218.000644	-190.574561	-201.310228	-90.734972
+0.45	575.339643	624.165773	656.344169	618.849307	720.346432	505.136305	534.074365	296.658737
-0.5	-208.898999	-199.304928	-213.590198	-201.180948	-242.222938	-211.749513	-223.678031	-100.816636
+0.5	570.101518	614.508516	647.056771	610.022482	710.000126	481.820652	509.436369	292.524140
-0.55	-229.788898	-219.235421	-234.949218	-221.299043	-266.445232	-232.924464	-246.045834	-110.898300
+0.55	552.509662	588.713421	620.804509	585.893868	685.408153	480.969667	508.137324	286.513679
-0.6	-250.678798	-239.165913	-256.308237	-241.417138	-290.667526	-254.099415	-268.413637	-120.979963
+0.6	520.576574	549.621493	580.767436	549.606378	643.834609	461.422970	487.094954	275.419048
-0.65	-271.568698	-259.096406	-277.667257	-261.535233	-314.889820	-275.274366	-290.781440	-131.061627
+0.65	469.241818	501.166380	524.784810	496.549401	582.312869	420.242893	444.045147	251.571935
-0.7	-292.458598	-279.026899	-299.026277	-281.653328	-339.112113	-296.449318	-313.149243	-141.143291
+0.7	411.919553	441.251887	461.240117	433.145346	507.964153	370.140280	390.799932	225.070392
-0.75	-313.348498	-298.957392	-320.385297	-301.771423	-363.334407	-317.624269	-335.517046	-151.224954
+0.75	339.155495	367.594776	383.285158	357.186003	416.871412	300.210525	316.592313	186.795728
-0.8	-334.238398	-318.887884	-341.744316	-321.889517	-387.556701	-338.799220	-357.884849	-161.306618
+0.8	258.269308	286.170893	295.943973	273.437363	316.769621	216.975498	228.433428	147.523886
-0.85	-355.128298	-338.818377	-363.103336	-342.007612	-411.778995	-359.974172	-380.252652	-171.388281
+0.85	161.785587	193.818768	197.077635	181.274789	204.610204	145.922981	153.942632	99.312718
-0.9	-376.018197	-358.748870	-384.462356	-362.125707	-436.001289	-381.149123	-402.620456	-181.469945
+0.9	94.766475	112.075311	112.075311	98.920798	103.947506	85.114359	89.594062	67.743466
-0.95	-396.908097	-378.679363	-405.821376	-382.243802	-460.223583	-402.324074	-424.988259	-191.551609
+0.95	79.668300	78.085628	83.499751	78.602974	94.347194	73.957283	77.996139	38.272509
-1	-417.797986	-398.609850	-427.180402	-402.361889	-484.445871	-423.499024	-447.356062	-201.633267
+1	83.861368	82.195399	87.894476	82.739973	99.312835	77.849772	82.101200	40.286853
(Span 2) -2	-417.797986	-398.609850	-427.180402	-402.361889	-484.445871	-423.499024	-447.356062	-201.633267
+2	83.861368	82.195399	87.894476	82.739973	99.312835	77.849772	82.101200	40.286853
-2.05	-290.344224	-284.571116	-304.301617	-286.456020	-343.833630	-269.525883	-284.244989	-139.478188
+2.05	64.166633	62.891914	67.252571	63.308596	75.989342	59.566853	62.819838	38.326814
-2.1	-270.649107	-265.267611	-283.659719	-267.024654	-320.510131	-251.242951	-264.963606	-130.016869
+2.1	109.251321	133.765812	133.765812	125.976207	134.235772	101.992959	107.361010	77.910430
-2.15	-250.953990	-245.964106	-263.017821	-247.593289	-297.186632	-232.960020	-245.682223	-120.555550
+2.15	196.719731	234.709515	239.131729	227.603057	257.176278	176.225033	185.970252	117.655131
-2.2	-231.258873	-226.660601	-242.375924	-228.161924	-273.863133	-214.677088	-226.400841	-111.094232
+2.2	303.819013	340.573906	352.806498	334.459950	386.618134	263.856958	278.350496	171.058445

-2.25	-211.563755	-207.357096	-221.734026	-208.730559	-250.539633	-196.394157	-207.119458	-101.632913
+2.25	401.155591	433.517846	453.001867	429.752953	501.496755	367.058313	387.672313	219.779055
-2.3	-191.868638	-188.053590	-201.092128	-189.299193	-227.216134	-178.111225	-187.838076	-92.171595
+2.3	485.025783	511.151329	539.075918	510.792204	598.354123	449.277983	474.923206	259.744578
-2.35	-172.173521	-168.750085	-180.450230	-169.867828	-203.892635	-159.828294	-168.556693	-82.710276
+2.35	550.234252	574.507300	607.324154	574.931504	674.267070	512.145627	540.843191	289.944937
-2.4	-152.478404	-149.446580	-159.808332	-150.436463	-180.569136	-141.545362	-149.275311	-73.248957
+2.4	593.974567	620.667391	655.313853	620.018385	726.918355	554.040595	585.430233	309.264409
-2.45	-132.783287	-130.143075	-139.166434	-131.005098	-157.245636	-123.262431	-129.993928	-63.787639
+2.45	616.945899	648.435002	683.865739	645.869915	756.072478	573.030858	605.902261	318.371031
-2.5	-113.088170	-110.839570	-118.524577	-111.573798	-133.922137	-104.979499	-110.712546	-54.326320
+2.5	618.930594	656.656077	691.509719	651.897404	761.200524	569.271033	602.195940	317.265994
-2.55	-132.780727	-130.142934	-139.166482	-131.005175	-157.245589	-123.262342	-129.993780	-63.787623
+2.55	617.153794	648.430444	683.863539	645.857672	756.067037	573.030332	605.901483	318.373590
-2.6	-152.475463	-149.446418	-159.808387	-150.436552	-180.569082	-141.545262	-149.275142	-73.248939
+2.6	594.299744	620.671374	655.314050	620.023620	726.929847	554.041012	585.430439	309.267988
-2.65	-172.170199	-168.749903	-180.450293	-169.867929	-203.892575	-159.828181	-168.556503	-82.710255
+2.65	550.522767	574.508267	607.327118	574.938608	674.279971	512.147116	540.844523	289.949530
-2.7	-191.864935	-188.053388	-201.092198	-189.299306	-227.216068	-178.111101	-187.837865	-92.171571
+2.7	485.199719	511.152398	539.078888	510.799033	598.366300	449.277474	474.924889	259.749300
-2.75	-211.559671	-207.356873	-221.734103	-208.730683	-250.539561	-196.394020	-207.119227	-101.632887
+2.75	401.353196	433.522350	453.003703	429.758745	501.507521	367.059179	387.672967	219.776664
-2.8	-231.254407	-226.660357	-242.376009	-228.162060	-273.863054	-214.676940	-226.400589	-111.094203
+2.8	303.852651	340.582349	352.816232	334.465367	386.628211	263.859579	278.353013	171.753633
-2.85	-250.949143	-245.963842	-263.017914	-247.593437	-297.186547	-232.959859	-245.681950	-120.555519
+2.85	196.909598	234.722830	239.133858	227.608893	257.176126	176.222211	185.967396	117.567458
-2.9	-270.643879	-265.267327	-283.659819	-267.024814	-320.510040	-251.242779	-264.963312	-130.016835
+2.9	109.251319	133.781401	133.781401	125.980065	134.236003	102.003380	107.371979	78.221515
-2.95	-290.338615	-284.570812	-304.301725	-286.456192	-343.833533	-269.525698	-284.244674	-139.478151
+2.95	64.167885	62.891976	67.252544	63.308555	75.989356	59.566884	62.819898	38.155507
-3	-417.797434	-398.610179	-427.180912	-402.362295	-484.445996	-423.499017	-447.356165	-201.633319
+3	83.862991	82.195485	87.894444	82.739922	99.312861	77.849823	82.101288	40.286864
(Span 3) -4	-417.797434	-398.610179	-427.180912	-402.362295	-484.445996	-423.499017	-447.356165	-201.633319
+4	83.862991	82.195485	87.894444	82.739922	99.312861	77.849823	82.101288	40.286864
-3.05	-396.907562	-378.679670	-405.821867	-382.244180	-460.223696	-402.324043	-424.988357	-191.551653
+3.05	79.669842	78.085711	83.499722	78.602926	94.347218	73.957332	77.996224	38.272521
-3.1	-376.017689	-358.749160	-384.462821	-362.126065	-436.001396	-381.149115	-402.620549	-181.469987
+3.1	93.969672	112.052996	112.052996	98.912068	103.942649	85.120111	89.600117	66.826187
-3.15	-355.127817	-338.818651	-363.103776	-342.007950	-411.779095	-359.974144	-380.252740	-171.388321
+3.15	161.739517	193.825063	197.082978	181.271749	204.615011	145.927647	153.947454	99.335280
-3.2	-334.237945	-318.888142	-341.744731	-321.889835	-387.556795	-338.799213	-357.884932	-161.306654
+3.2	256.669447	286.177684	295.949702	273.434371	316.762584	216.979289	228.437406	147.519929
-3.25	-313.348073	-298.957633	-320.385686	-301.771720	-363.334495	-317.624262	-335.517124	-151.224988
+3.25	339.044658	367.600730	383.289871	357.183156	416.876144	300.206681	316.588529	186.796254
-3.3	-292.458200	-279.027124	-299.026640	-281.653605	-339.112195	-296.449312	-313.149316	-141.143322
+3.3	412.222503	441.256891	461.243695	433.141393	507.955465	370.144442	390.804583	225.066120
-3.35	-271.568328	-259.096614	-277.667595	-261.535489	-314.889895	-275.274361	-290.781507	-131.061656
+3.35	469.185915	501.169453	524.786218	496.544169	582.314491	420.244014	444.046602	251.571862
-3.4	-250.678456	-239.166105	-256.308550	-241.417374	-290.667595	-254.099410	-268.413699	-120.979990
+3.4	521.027286	549.620024	580.763911	549.598972	643.821343	461.418718	487.090728	275.413919
-3.45	-229.788584	-219.235596	-234.949505	-221.299259	-266.445295	-232.924459	-246.045891	-110.898323
+3.45	552.296383	588.709733	620.798510	585.896295	685.403967	480.972442	508.140489	286.512630
-3.5	-208.898711	-199.305087	-213.590459	-201.181144	-242.222995	-211.749508	-223.678082	-100.816657
+3.5	570.367540	614.501881	647.047521	610.009576	710.004608	481.809093	509.424444	292.517953
-3.55	-188.008839	-179.374577	-192.231414	-181.063029	-218.000695	-190.574557	-201.310274	-90.734991
+3.55	575.089729	624.158157	656.339241	618.851173	720.343628	505.134213	534.071893	296.660388
-3.6	-167.118967	-159.444068	-170.872369	-160.944914	-193.778395	-169.399606	-178.942466	-80.653325

+3.6	581.828803	623.037969	656.920177	620.419896	724.866361	515.761043	544.830569	303.261486
-3.65	-146.229095	-139.513559	-149.513323	-140.826799	-169.556095	-148.224655	-156.574658	-70.571658
+3.65	566.424644	602.941574	636.962158	602.226027	706.299681	505.800397	533.821823	298.452630
-3.7	-125.339222	-119.583050	-128.154278	-120.708683	-145.333795	-127.049704	-134.206849	-60.489992
+3.7	540.469091	575.058488	603.079686	567.543265	668.915104	483.884258	511.151261	287.688280
-3.75	-104.449350	-99.652541	-106.795233	-100.590568	-121.111495	-105.874753	-111.839041	-50.408326
+3.75	501.183753	528.026504	555.232699	516.081250	606.553224	443.935507	468.269826	264.650381
-3.8	-83.559478	-79.722031	-85.436188	-80.472453	-96.889195	-84.699802	-89.471233	-40.326660
+3.8	445.598393	464.741980	489.166834	454.430386	527.135817	388.525795	409.161191	234.352350
-3.85	-62.669606	-59.791522	-64.077142	-60.354338	-72.666895	-63.524851	-67.103425	-30.244994
+3.85	365.714411	377.615346	397.983928	370.435316	431.666137	325.008957	342.393618	191.042937
-3.9	-41.779733	-39.861013	-42.718097	-40.236223	-48.444595	-42.349901	-44.735616	-20.163327
+3.9	267.782126	274.062023	289.324007	269.286977	314.232245	241.298101	254.285816	139.374541
-3.95	-20.889861	-19.930504	-21.359052	-20.118108	-24.222294	-21.174950	-22.367808	-10.081661
+3.95	144.370342	146.844952	155.192812	144.542127	169.029729	132.053962	139.198169	74.833062
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 55' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-20.889900**	**-35.921251**	**-38.505991**	**-23.520372**	**-29.040247**	**-30.258571**
+0.05	**144.216538**	**199.387531**	**202.825911**	**146.099184**	**178.521361**	**180.347691**
-0.1	**-41.779800**	**-71.842501**	**-77.011982**	**-47.040744**	**-58.080494**	**-60.517141**
+0.1	**267.478264**	**362.176064**	**369.669848**	**266.190768**	**325.547451**	**327.532339**
-0.15	**-62.669700**	**-107.763752**	**-115.517974**	**-70.561116**	**-87.120742**	**-90.775712**
+0.15	**365.848169**	**491.178885**	**499.213602**	**357.387817**	**438.472600**	**439.959830**
-0.2	**-83.559599**	**-143.685002**	**-154.023965**	**-94.081488**	**-116.160989**	**-121.034283**
+0.2	**446.176034**	**604.062467**	**613.379321**	**432.657767**	**535.242912**	**537.326087**
-0.25	**-104.449499**	**-179.606253**	**-192.529956**	**-117.601860**	**-145.201236**	**-151.292854**
+0.25	**501.050763**	**679.237148**	**704.583782**	**495.770420**	**604.914933**	**607.032956**
-0.3	**-125.339399**	**-215.527503**	**-231.035947**	**-141.122232**	**-174.241483**	**-181.551424**
+0.3	**540.797354**	**725.193333**	**776.895311**	**537.409574**	**651.251409**	**666.126031**
-0.35	**-146.229299**	**-251.448754**	**-269.541939**	**-164.642604**	**-203.281731**	**-211.809995**
+0.35	**566.304802**	**760.111483**	**822.847608**	**555.638529**	**671.465480**	**693.808323**
-0.4	**-167.119199**	**-287.370004**	**-308.047930**	**-188.162976**	**-232.321978**	**-242.068566**
+0.4	**582.179561**	**780.317077**	**849.820802**	**563.444693**	**672.298897**	**699.823321**
-0.45	**-188.009099**	**-323.291255**	**-346.553921**	**-211.683348**	**-261.362225**	**-272.327136**
+0.45	**575.339643**	**774.993550**	**855.091785**	**548.931561**	**657.276084**	**686.347099**
-0.5	**-208.898999**	**-359.212505**	**-385.059912**	**-235.203720**	**-290.402472**	**-302.585707**
+0.5	**570.101518**	**759.826883**	**841.322269**	**534.249572**	**625.080749**	**664.840207**
-0.55	**-229.788898**	**-395.133756**	**-423.565904**	**-258.724092**	**-319.442720**	**-332.844278**
+0.55	**552.509662**	**730.717986**	**800.541273**	**512.656238**	**624.314731**	**645.068159**
-0.6	**-250.678798**	**-431.055006**	**-462.071895**	**-282.244464**	**-348.482967**	**-363.102849**
+0.6	**520.576574**	**691.262559**	**748.441599**	**500.193489**	**602.496063**	**621.237025**
-0.65	**-271.568698**	**-466.976257**	**-500.577886**	**-305.764836**	**-377.523214**	**-393.361419**
+0.65	**469.241818**	**622.125524**	**672.532659**	**462.620210**	**562.395573**	**576.722953**
-0.7	**-292.458598**	**-502.897507**	**-539.083877**	**-329.285208**	**-406.563461**	**-423.619990**
+0.7	**411.919553**	**549.178911**	**577.479782**	**414.019489**	**498.863766**	**509.352814**
-0.75	**-313.348498**	**-538.818758**	**-577.589869**	**-352.805580**	**-435.603709**	**-453.878561**
+0.75	**339.155495**	**450.910062**	**457.286361**	**341.287151**	**410.440400**	**411.925147**
-0.8	**-334.238398**	**-574.740008**	**-616.095860**	**-376.325952**	**-464.643956**	**-484.137131**
+0.8	**258.269308**	**325.877252**	**323.368681**	**252.710044**	**302.259520**	**302.505462**
-0.85	**-355.128298**	**-610.661259**	**-654.601851**	**-399.846324**	**-493.684203**	**-514.395702**
+0.85	**161.785587**	**190.487096**	**178.831923**	**173.976972**	**190.653023**	**197.597869**
-0.9	**-376.018197**	**-646.582509**	**-693.107842**	**-423.366696**	**-522.724450**	**-544.654273**
+0.9	**94.766475**	**112.784666**	**117.768726**	**100.784411**	**107.490128**	**104.015034**
-0.95	**-396.908097**	**-682.503760**	**-731.613834**	**-446.887068**	**-551.764698**	**-574.912843**
+0.95	**79.668300**	**119.050481**	**124.311433**	**78.858463**	**99.352145**	**100.964277**
-1	**-417.797986**	**-746.226783**	**-835.108216**	**-496.623358**	**-580.804953**	**-632.882361**
+1	**83.861368**	**125.316294**	**130.854142**	**83.008908**	**104.581206**	**106.278186**
(Span 2) -2	**-417.797986**	**-746.226783**	**-835.108216**	**-496.623358**	**-580.804953**	**-632.882361**
+2	**83.861368**	**125.316294**	**130.854142**	**83.008908**	**104.581206**	**106.278186**
-2.05	**-290.344224**	**-485.573270**	**-539.832738**	**-340.147991**	**-382.598763**	**-430.630857**
+2.05	**64.166633**	**95.885922**	**100.123214**	**63.514372**	**80.020443**	**81.318889**
-2.1	**-270.649107**	**-404.430576**	**-422.302582**	**-267.892927**	**-337.512529**	**-342.989259**
+2.1	**109.251321**	**132.215695**	**122.858510**	**120.820563**	**134.241935**	**134.242760**
-2.15	**-250.953990**	**-375.000191**	**-391.571652**	**-248.398377**	**-312.951766**	**-318.029955**
+2.15	**196.719731**	**238.572086**	**230.647217**	**210.111776**	**238.028043**	**247.276098**
-2.2	**-231.258873**	**-345.569806**	**-360.840723**	**-228.903828**	**-288.391003**	**-293.070650**
+2.2	**303.819013**	**389.523484**	**398.775801**	**302.514128**	**362.175177**	**362.530285**

-2.25	-211.563755	-316.139422	-330.109794	-209.409278	-263.830240	-268.111345
+2.25	401.155591	553.160202	590.876252	417.896610	500.535750	514.642293
-2.3	-191.868638	-286.709037	-299.378864	-189.914728	-239.269476	-243.152041
+2.3	485.025783	689.995196	745.127860	508.991102	608.285714	635.188752
-2.35	-172.173521	-257.278652	-268.647935	-170.420178	-214.708713	-218.192736
+2.35	550.234252	796.328666	867.158569	573.443644	683.382347	721.778805
-2.4	-152.478404	-227.848268	-237.917006	-150.925628	-190.147950	-193.233432
+2.4	593.974567	872.649640	945.297392	617.201903	726.486419	772.949532
-2.45	-132.783287	-198.417883	-207.186076	-131.431078	-165.587186	-168.274127
+2.45	616.945899	920.962411	981.894256	635.243008	745.781910	789.962572
-2.5	-113.088170	-168.987499	-176.455147	-111.936528	-141.026426	-143.314822
+2.5	618.930594	928.333051	1003.842921	627.440875	734.799548	781.553841
-2.55	-132.780727	-198.417802	-207.186069	-131.430990	-165.587189	-168.274080
+2.55	617.153794	920.966359	981.783915	635.240963	745.779900	789.960240
-2.6	-152.475463	-227.848174	-237.916998	-150.925526	-190.147952	-193.233377
+2.6	594.299744	872.653271	945.777761	617.201077	726.484659	772.944083
-2.65	-172.170199	-257.278546	-268.647926	-170.420062	-214.708716	-218.192674
+2.65	550.522767	796.340805	868.086484	573.441898	683.377898	721.790088
-2.7	-191.864935	-286.708919	-299.378854	-189.914598	-239.269479	-243.151971
+2.7	485.199719	690.004951	743.967464	509.011162	608.280464	635.198209
-2.75	-211.559671	-316.139291	-330.109783	-209.409135	-263.830242	-268.111267
+2.75	401.353196	553.218604	590.875839	417.896486	500.531017	514.649069
-2.8	-231.254407	-345.569663	-360.840711	-228.903671	-288.391005	-293.070564
+2.8	303.852651	389.648678	399.374085	302.515892	362.183783	362.534983
-2.85	-250.949143	-375.000035	-391.571639	-248.398207	-312.951769	-318.029861
+2.85	196.909598	238.570467	230.646782	210.108495	238.032766	247.273776
-2.9	-270.643879	-404.430408	-422.302567	-267.892743	-337.512532	-342.989158
+2.9	109.251319	132.215895	122.861224	120.832734	134.242139	134.242960
-2.95	-290.338615	-485.573087	-539.832805	-340.147851	-382.598966	-430.631605
+2.95	64.167885	95.885963	100.123217	63.514420	80.020447	81.318919
-3	-417.797434	-746.226788	-835.108321	-496.624020	-580.805384	-632.882122
+3	83.862991	125.316346	130.854146	83.008966	104.581207	106.278219
(Span 3) -4	-417.797434	-746.226788	-835.108321	-496.624020	-580.805384	-632.882122
+4	83.862991	125.316346	130.854146	83.008966	104.581207	106.278219
-3.05	-396.907562	-682.503811	-731.613718	-446.887539	-551.765115	-574.913173
+3.05	79.669842	119.050529	124.311439	78.858518	99.352146	100.964308
-3.1	-376.017689	-646.582558	-693.107732	-423.367142	-522.724846	-544.654585
+3.1	93.969672	112.784712	117.768732	100.791084	107.471439	104.010830
-3.15	-355.127817	-610.661304	-654.601747	-399.846745	-493.684577	-514.395997
+3.15	161.739517	190.482107	178.831041	173.982321	190.650363	197.603791
-3.2	-334.237945	-574.740051	-616.095762	-376.326348	-464.644308	-484.137408
+3.2	256.669447	325.868843	323.367434	252.715828	302.253779	301.963107
-3.25	-313.348073	-538.818798	-577.589777	-352.805952	-435.604040	-453.878820
+3.25	339.044658	450.908321	457.286739	341.283172	410.442253	411.927063
-3.3	-292.458200	-502.897545	-539.083792	-329.285555	-406.563771	-423.620232
+3.3	412.222503	549.162064	577.481362	414.024676	498.852832	509.344808
-3.35	-271.568328	-466.976291	-500.577806	-305.765158	-377.523502	-393.361644
+3.35	469.185915	622.127181	672.533574	462.621597	562.391752	576.721197
-3.4	-250.678456	-431.055038	-462.071821	-282.244761	-348.483233	-363.103055
+3.4	521.027286	691.270043	748.442591	500.188635	602.498636	621.225213
-3.45	-229.788584	-395.133785	-423.565836	-258.724364	-319.442965	-332.844467
+3.45	552.296383	730.716104	800.541804	512.588850	624.310522	645.062685
-3.5	-208.898711	-359.212531	-385.059851	-235.203967	-290.402696	-302.585879
+3.5	570.367540	759.815460	841.321104	534.245950	625.071443	664.833202
-3.55	-188.008839	-323.291278	-346.553865	-211.683570	-261.362427	-272.327291
+3.55	575.089729	775.110043	855.091609	548.933473	657.281522	686.342575
-3.6	-167.118967	-287.370025	-308.047880	-188.163173	-232.322158	-242.068703

+3.6	**581.828803**	**780.311101**	**849.821659**	**563.449657**	**672.300986**	**699.815064**
-3.65	**-146.229095**	**-251.448772**	**-269.541895**	**-164.642776**	**-203.281889**	**-211.810114**
+3.65	**566.424644**	**760.110721**	**822.847032**	**555.639776**	**671.461509**	**693.810926**
-3.7	**-125.339222**	**-215.527518**	**-231.035910**	**-141.122379**	**-174.241621**	**-181.551526**
+3.7	**540.469091**	**725.195055**	**776.893676**	**537.405303**	**651.242932**	**666.134416**
-3.75	**-104.449350**	**-179.606265**	**-192.529925**	**-117.601983**	**-145.201352**	**-151.292938**
+3.75	**501.183753**	**679.241648**	**704.583580**	**495.774205**	**604.914343**	**606.994995**
-3.8	**-83.559478**	**-143.685012**	**-154.023939**	**-94.081586**	**-116.161083**	**-121.034350**
+3.8	**445.598393**	**604.071274**	**613.378243**	**432.644664**	**535.247707**	**537.330995**
-3.85	**-62.669606**	**-107.763759**	**-115.517954**	**-70.561189**	**-87.120814**	**-90.775761**
+3.85	**365.714411**	**491.180756**	**499.213113**	**357.391781**	**438.470531**	**439.957875**
-3.9	**-41.779733**	**-71.842505**	**-77.011969**	**-47.040792**	**-58.080545**	**-60.517173**
+3.9	**267.782126**	**362.169947**	**369.668297**	**266.177330**	**325.539135**	**327.524723**
-3.95	**-20.889861**	**-35.921252**	**-38.505984**	**-23.520395**	**-29.040277**	**-30.258585**
+3.95	**144.370342**	**199.385239**	**202.825291**	**146.092511**	**178.517318**	**180.344127**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-17.79175603**	***-19.585848***	***-21.741610***	**-14.05807653**	**-15.07830571**	**-14.20321499**	**-17.12115078**	**-15.46559401**	**-16.34304842**	**-7.182506538**
End Shear	**127.1775499**	***142.679903***	***153.820385***	**112.6425624**	**119.3591711**	**111.3486384**	**130.8705207**	**107.2442583**	**113.12383**	**57.89654176**
-0.05	**-17.79175603**	***-19.671481***	***-25.235200***	**-14.05807653**	**-15.07830571**	**-14.20321499**	**-17.12115078**	**-15.46559401**	**-16.34304842**	**-7.182506538**
+0.05	**118.2266023**	***131.743599***	***141.902259***	**104.5183422**	**110.6268239**	**103.1411486**	**120.9602623**	**97.61197472**	**102.9373882**	**53.66120052**
-0.1	**-17.79175603**	***-20.031110***	***-30.339160***	**-14.05807653**	**-15.07830571**	**-14.20321499**	**-17.12115078**	**-15.46559401**	**-16.34304842**	**-7.182506538**
+0.1	**107.880479**	***119.937200***	***128.354954***	**95.73639971**	**101.1954249**	**94.26359561**	**110.2576599**	**87.20668422**	**91.93567788**	**49.00186127**
-0.15	**-17.79175603**	***-22.447236***	***-34.126203***	**-14.05807653**	**-15.07830571**	**-14.20321499**	**-17.12115078**	**-15.46559401**	**-16.34304842**	**-7.669627332**
+0.15	**100.5771407**	***111.712708***	***118.936873***	**89.52355669**	**94.52827356**	**87.99110813**	**102.7066167**	**79.96032466**	**84.27546295**	**45.71357838**
-0.2	**-18.14398139**	***-31.510659***	***-39.609294***	**-19.54480538**	**-19.54480538**	**-17.82329674**	**-18.76051807**	**-15.46559401**	**-16.34304842**	**-10.79727757**
+0.2	**90.50793564**	***100.515682***	***106.146984***	**80.93814854**	**85.32245888**	**79.33474226**	**92.30150524**	**70.11321331**	**73.8681768**	**41.18123075**
-0.25	**-22.53068361**	***-38.107714***	***-44.327310***	**-24.37679233**	**-24.37679233**	**-23.0600436**	**-24.58485206**	**-18.53174739**	**-19.50710251**	**-13.00935407**
+0.25	**83.4484487**	***92.760010***	***97.314705***	**74.9044009**	**78.85813054**	**73.25956798**	**85.01061916**	**63.65027263**	**67.03913099**	**38.00463865**
-0.3	**-32.96070903**	***-47.486555***	***-54.907807***	**-32.81178442**	**-33.39337831**	**-30.40840019**	**-32.76158727**	**-24.56847384**	**-25.92174489**	**-16.06534746**
+0.3	**73.78511636**	***82.264772***	***85.406244***	**66.62393209**	**69.99464419**	**64.93448187**	**75.0364446**	**54.4870727**	**57.35932606**	**33.65802116**
-0.35	**-40.34507663**	***-54.268509***	***-62.553335***	**-38.9934187**	**-40.06509302**	**-36.60326434**	**-40.29864602**	**-29.03336663**	**-30.67323416**	**-18.21247792**
+0.35	**67.06159137**	***75.041843***	***77.246470***	**60.84673066**	**63.81654769**	**59.13525078**	**68.443204**	**48.46625585**	**51.01711142**	**30.63507581**
-0.4	**-50.55724922**	***-63.848112***	***-73.345466***	**-47.52373202**	**-49.27894917**	**-45.30847536**	**-50.90504002**	**-35.19150951**	**-37.22746582**	**-22.6501848**
+0.4	**58.25240341**	***65.334952***	***66.338168***	**53.25533307**	**55.7064927**	**51.52750346**	**59.02019136**	**40.584853**	**42.7208979**	**26.53293623**
-0.45	**-57.73996168**	***-70.730977***	***-81.094559***	**-53.50997077**	**-55.75018953**	**-51.42575266**	**-58.36943296**	**-39.51072869**	**-41.82508475**	**-25.8876218**
+0.45	**51.94699612**	***58.704501***	***58.933791***	**47.80428786**	**49.88938517**	**46.07460288**	**52.52511751**	**35.31373587**	**37.39167708**	**23.7055865**
-0.5	**-68.34122256**	***-80.390823***	***-92.647025***	**-61.71252176**	**-64.62500277**	**-59.81985706**	**-68.62811369**	**-45.42568619**	**-48.12215074**	**-30.33403339**
+0.5	**43.37929983**	***50.115275***	***49.139078***	**40.44688381**	**42.04754125**	**38.72964786**	**43.79713838**	**29.9540507**	**31.69890811**	**19.90665673**
-0.55	**-76.17732653**	***-87.286424***	***-101.239658***	**-67.42592083**	**-70.81236706**	**-65.67558806**	**-75.79647042**	**-50.15349752**	**-52.79315528**	**-33.43870812**
+0.55	**37.59136573**	***44.124866***	***42.713454***	**35.40563104**	**36.68169998**	**33.70832362**	**37.84617687**	**26.27821047**	**27.79543611**	**17.31686804**
-0.6	**-86.88939397**	***-96.900140***	***-112.963804***	**-75.19229847**	**-79.23138696**	**-73.64849317**	**-85.57399191**	**-59.7695641**	**-62.91533063**	**-37.66988236**
+0.6	**29.9014944**	***36.218667***	***34.590714***	**28.6761435**	**29.53000566**	**26.95613367**	**29.88019365**	**21.36625496**	**22.58051747**	**13.87988382**
-0.65	**-94.33177875**	***-103.716125***	***-121.084429***	**-80.55542167**	**-85.05148262**	**-79.16405515**	**-92.35101237**	**-66.49821272**	**-69.99811866**	**-40.59984024**
+0.65	**24.72571286**	***30.926166***	***29.198482***	**23.98126895**	**24.55797571**	**22.2929625**	**24.37832689**	**18.03824046**	**19.04817439**	**11.56960903**
-0.7	**-104.4201344**	***-113.151493***	***-132.088125***	**-87.77720751**	**-92.89795088**	**-86.60566765**	**-101.5139283**	**-76.01173167**	**-80.03122998**	**-44.55703955**
+0.7	**18.05107699**	***24.030764***	***22.245575***	**17.92454417**	**18.13796283**	**16.51630744**	**17.82474726**	**13.65246007**	**14.39455872**	**9.219876741**
-0.75	**-111.3651976**	***-119.791324***	***-139.680291***	**-92.71261756**	**-98.26738381**	**-91.70241582**	**-107.8042855**	**-83.27424589**	**-87.72762116**	**-47.27031915**
+0.75	**13.57084632**	***19.483362***	***17.719092***	**14.10266289**	**14.10266289**	**13.07184071**	**14.02939643**	**10.70902522**	**11.27266051**	**7.627673995**
-0.8	**-120.6847588**	***-128.910269***	***-149.923360***	**-99.28139868**	**-105.4245482**	**-98.50264439**	**-116.2191522**	**-93.14682126**	**-98.1919801**	**-50.89480832**
+0.8	**9.383410267**	***13.484888***	***13.409741***	**9.775226291**	**9.775226291**	**8.602426406**	**8.975646658**	**7.417266799**	**7.807649262**	**5.537870063**
-0.85	**-127.0288958**	***-135.273233***	***-156.956490***	**-103.711665**	**-110.2599315**	**-103.1019416**	**-121.9275279**	**-99.96407439**	**-105.4193548**	**-53.34945766**
+0.85	**7.047730757**	***9.738111***	***11.022188***	**6.815172773**	**6.815172773**	**5.67720558**	**5.771875904**	**5.25019077**	**5.5265166**	**4.151136595**
-0.9	**-135.4346169**	***-143.931828***	***-166.393493***	**-109.5190199**	**-116.61103**	**-109.1506935**	**-129.4608992**	**-109.1423467**	**-115.1519803**	**-56.58249089**
+0.9	**4.043956502**	***5.066472***	***8.047190***	**3.191708383**	**3.191708383**	**2.957023509**	**3.555293903**	**2.944673762**	**3.108046067**	**2.368264752**
-0.95	**-141.0741944**	***-149.913027***	***-172.833247***	**-113.3666966**	**-120.8289607**	**-113.1739026**	**-134.491976**	**-115.4129974**	**-121.8030358**	**-58.73655667**
+0.95	**3.618610822**	***3.934032***	***6.186947***	**2.933545076**	**3.140654457**	**2.957023509**	**3.555293903**	**2.944673762**	**3.108046067**	**1.460186296**
-1	**-148.4210303**	***-157.961491***	***-181.413480***	**-118.3042197**	**-126.2572492**	**-118.3610843**	**-141.0104052**	**-123.7550921**	**-130.6537078**	**-61.5193994**
+1	**3.62E+00**	***3.879738***	***4.248735***	**2.93E+00**	**3.14E+00**	**2.96E+00**	**3.56E+00**	**2.94E+00**	**3.11E+00**	**1.46E+00**
(Span 2) -2	**-1.30E+01**	***-13.940441***	***-15.266298***	**-1.05E+01**	**-1.13E+01**	**-1.06E+01**	**-1.28E+01**	**-1.06E+01**	**-1.12E+01**	**-5.25E+00**
+2	**1.39E+02**	***161.024424***	***179.605853***	**118.5837323**	**126.6711513**	**118.8291141**	**141.8234605**	**127.9868672**	**135.1909159**	**61.83093665**
-2.05	**-1.30E+01**	***-14.004532***	***-17.285457***	**-1.05E+01**	**-1.13E+01**	**-1.06E+01**	**-1.28E+01**	**-1.06E+01**	**-1.12E+01**	**-5.25E+00**
+2.05	**1.33E+02**	***153.396741***	***171.019260***	**114.1468702**	**121.7965178**	**114.1728832**	**135.9805634**	**120.8560289**	**127.6305803**	**59.35153422**
-2.1	**-13.0021733**	***-14.231482***	***-20.091368***	**-10.54063647**	**-11.28480948**	**-10.62499794**	**-12.77466719**	**-10.58062393**	**-11.16764355**	**-5.246653289**
+2.1	**125.7707012**	***144.257788***	***161.664546***	**108.5127856**	**115.6333437**	**108.3020155**	**128.6676588**	**112.2843007**	**118.5467269**	**56.23571036**
-2.15	**-13.0021733**	***-14.765845***	***-23.407172***	**-10.54063647**	**-11.28480948**	**-10.62499794**	**-12.77466719**	**-10.58062393**	**-11.16764355**	**-5.246653289**
+2.15	**117.7587309**	***134.763787***	***151.828256***	**102.3549556**	**108.9216636**	**101.9234499**	**120.7721149**	**103.3632705**	**109.0968261**	**52.86066207**
-2.2	**-13.0021733**	***-20.719908***	***-28.011509***	**-12.99892599**	**-13.02323914**	**-12.1329093**	**-12.89999435**	**-10.58062393**	**-11.16764355**	**-7.080537075**
+2.2	**109.4548451**	***125.010708***	***141.568073***	**95.75393727**	**101.7482319**	**95.11898974**	**112.3930874**	**94.19836185**	**99.39250278**	**49.27004507**

-2.25	-18.26931085	-26.512253	-33.807728	-18.05201118	-18.36194008	-16.66201959	-17.96678392	-13.53315877	-14.2777387	-9.093138793
+2.25	102.108402	116.337450	132.377548	89.67780821	95.1608841	88.88002604	104.7427767	85.9472755	90.65962228	45.98572631
-2.3	-25.36122466	-33.744677	-41.179876	-24.30042434	-24.98774859	-22.84722791	-25.2410757	-18.09914631	-19.12373123	-11.92308792
+2.3	93.43468806	106.347112	121.712681	82.4629329	87.35549069	81.4974967	95.72446934	76.14125825	80.28345732	42.10854921
-2.35	-33.00928397	-41.571128	-49.278580	-30.97666302	-32.08982034	-29.49104195	-33.10400523	-22.96768028	-24.29330051	-15.32825584
+2.35	84.55675628	96.357418	110.768964	75.03646842	79.33776035	73.92425716	86.50775033	66.8698832	70.47757293	38.14128058
-2.4	-41.54914111	-49.926838	-58.441811	-38.00017006	-39.58140104	-36.51165748	-41.45641559	-28.08045873	-29.72442318	-18.94339583
+2.4	75.57073325	86.453106	99.586652	67.47897023	71.19444448	66.02023218	76.96989878	57.76976235	60.85681824	34.12756674
-2.45	-50.72560366	-58.744101	-68.396610	-45.29038739	-47.37573678	-43.82726951	-50.19915033	-34.20609853	-36.0064195	-22.72485568
+2.45	66.57271747	76.715975	88.313401	59.39573949	62.50172262	58.05213748	67.29594132	48.94631718	51.53281599	30.11105354
-2.5	-60.26736294	-67.952313	-78.923515	-52.76675948	-55.38607472	-51.35607539	-59.23305408	-41.81521684	-44.01601772	-26.62899238
+2.5	57.65880974	66.780192	77.398921	51.82258257	54.3735725	50.40391972	58.08864781	40.84048327	42.98998239	26.13539156
-2.55	-68.83132473	-76.718182	-88.528093	-59.39796302	-62.50411145	-58.05435726	-67.2986186	-48.94856438	-51.53519009	-30.11143514
+2.55	50.00368927	58.741917	68.245966	45.2882227	47.37342003	43.82512196	50.19657877	34.20417536	36.00439512	22.72449508
-2.6	-78.7675024	-86.455281	-99.833984	-67.42455904	-71.14020435	-65.93301325	-76.88315155	-57.77209597	-60.85928482	-34.12795138
+2.6	41.50652228	49.924702	58.325013	37.99807196	39.57916076	36.50958424	41.45394388	28.07910183	29.72298156	18.94304754
-2.65	-88.7591112	-96.359565	-111.046558	-75.03867962	-79.34014475	-73.92647873	-86.51044839	-66.87227655	-70.48010374	-38.14166259
+2.65	33.14864931	41.569079	49.199551	30.97465726	32.08768361	29.48906771	33.10166233	22.96638118	24.29192079	15.32793302
-2.7	-98.69833775	-106.349195	-122.017234	-82.46509576	-87.35782783	-81.49967621	-95.72712582	-76.14366368	-80.28600194	-42.10892522
+2.7	25.48964925	33.742711	41.128299	24.29852088	24.98572678	22.84537531	25.23888957	18.09792812	19.122438	11.9227814
-2.75	-107.2674725	-115.093592	-131.385760	-88.79237235	-94.20205942	-87.97255877	-103.6323248	-84.63072774	-89.26721625	-45.50786096
+2.75	19.24052833	27.379816	34.657141	18.80512975	19.1592672	17.40557816	18.83847691	14.08422211	14.86245528	9.405214543
-2.8	-117.4047197	-125.012592	-141.910761	-95.75593091	-101.7503956	-95.12102531	-112.3955874	-94.20076968	-99.39505178	-49.27039181
+2.8	13.15627557	20.718182	28.004139	12.99731258	13.02153798	12.13153288	12.89848185	10.58062135	11.16764453	7.094677373
-2.85	-126.5669306	-134.765552	-152.182877	-102.3568325	-108.9237058	-101.925376	-120.7744919	-103.3656296	-109.0993245	-52.86099246
+2.85	13.15627557	14.764290	23.377587	10.54064225	11.28480354	10.62500647	12.77466718	10.58062135	11.16764453	5.246654514
-2.9	-135.2523466	-144.259388	-162.023946	-108.5145219	-115.6352388	-108.3038078	-128.6698832	-112.286567	-118.5491281	-56.23601775
+2.9	13.15627557	14.231486	20.074223	10.54064225	11.28480354	10.62500647	12.77466718	10.58062135	11.16764453	5.246654514
-2.95	-143.3532017	-153.398171	-171.375333	-114.1484324	-121.79823	-114.1745167	-135.9826047	-120.8581927	-127.6328739	-59.35182162
+2.95	13.15627557	14.004536	17.272122	10.54064225	11.28480354	10.62500647	12.77466718	10.58062135	11.16764453	5.246654514
-3	-150.7616656	-162.083004	-181.137792	-119.1780388	-127.3259607	-119.4556992	-142.6135011	-128.9750634	-136.2389162	-62.16475945
+3	13.15627557	13.940445	15.266452	10.54064225	11.28480354	10.62500647	12.77466718	10.58062135	11.16764453	5.246654514
(Span 3) -4	-3.661498691	-3.879740	-4.248778	-2.933546686	-3.140652803	-2.957025885	-3.555293899	-2.944673045	-3.10804634	-1.460186637
+4	137.6438994	156.835217	179.849282	117.6305425	125.5153644	117.6514208	140.1160891	122.5936773	129.4212948	61.13882917
-3.05	-3.661498691	-3.918248	-5.836895	-2.933546686	-3.140652803	-2.957025885	-3.555293899	-2.944673045	-3.10804634	-1.460186637
+3.05	132.8598678	151.085398	173.712247	114.1030536	121.6372772	113.9456072	135.459243	116.6342502	123.0985524	59.15076597
-3.1	-4.415016604	-5.693754	-8.431619	-3.684047173	-3.684047173	-2.957025885	-3.555293899	-2.944673045	-3.10804634	-2.598809514
+3.1	125.7838414	142.712604	164.691177	108.7168939	115.7328105	108.3137251	128.4164812	107.8561929	113.7879791	56.13546661
-3.15	-6.553275032	-9.031035	-10.548887	-6.272743442	-6.272743442	-5.121312624	-5.163755347	-4.836636851	-5.091196685	-3.871490619
+3.15	120.3386168	136.527037	157.949714	104.5681311	111.1956111	103.9925164	123.0346918	101.2994678	106.8352399	53.82583908
-3.2	-9.81130297	-14.276320	-13.878957	-10.37140365	-10.37140365	-9.216157982	-9.648520131	-7.870194832	-8.284415612	-5.81134306
+3.2	112.1980129	127.619756	148.107721	98.36636685	104.4267325	97.55413472	115.0437405	91.756189	96.717843	50.38970961
-3.25	-12.60549495	-18.614337	-16.857667	-13.4629282	-13.4629282	-12.40913127	-13.29960361	-10.21956639	-10.7574383	-7.303369432
+3.25	106.2275608	121.105390	140.797081	93.67375234	99.31379814	92.6961716	109.0323293	84.70354948	89.24245428	47.80049228
-3.3	-18.85787054	-24.980442	-23.174322	-18.75169864	-19.01254203	-17.23090385	-18.61256262	-14.25986375	-15.03894433	-9.531046058
+3.3	97.78559661	111.810474	130.180881	86.76480028	91.79726481	85.56138191	100.2266322	74.53693049	78.4684611	44.00228353
-3.35	-23.68769291	-29.906152	-28.124792	-23.02131018	-23.53225267	-21.42298701	-23.35616957	-17.39302762	-18.36344893	-11.21490476
+3.35	91.50497035	105.070164	122.332572	81.60577158	86.19198934	80.24530224	93.68091753	67.82553513	71.39530014	41.17539982
-3.4	-30.92480418	-37.315336	-35.647791	-29.61506254	- 30.5269835357 869	-27.88702127	- 30.978349932 7424	-22.05179029	-23.3082426596311	-14.35713254
+3.4	82.39521796	95.528613	110.983717	74.09803999	78.04454822	72.52419636	84.19392038	58.40624705	61.48026005	37.07384764
-3.45	-36.41196662	-42.963034	-41.430229	-34.42247019	-35.63601768	-32.73023121	-36.68869182	-25.56078991	-27.03367401	-16.8124209
+3.45	75.68365418	88.660924	102.625490	68.54999777	72.03028642	66.82863485	77.20921764	51.53698415	54.249457	34.05128875
-3.5	-44.83053536	-51.099077	-50.375055	-41.47959083	-43.14751646	-39.7594656	-45.01929271	-30.70649454	-32.4980333	-20.43774495
+3.5	66.03506103	79.007889	90.635580	60.55190362	63.36869459	58.6313047	67.17436417	44.58922296	47.23158859	29.7051352
-3.55	-51.34892603	-57.412278	-57.346789	-46.73548918	-48.74949251	-45.0064729	-51.2543088	-34.53528835	-36.56477287	-23.15157838

+3.55	*58.98466077*	*72.107331*	*82.410302*	*54.69235795*	*57.028918858784*	*52.6349025586057*	59.84599534	*40.36384547*	*42.73325063*	*26.52881983*
-3.6	*-60.89264945*	*-66.694458*	*-67.675202*	*-54.36633102*	-56.89277594	*-52.63989395*	-60.34664204	*-41.68574906*	*-43.87973586*	*-27.10946169*
+3.6	*48.92616383*	*62.472105*	*71.588533*	*46.31231324*	47.96992754	*44.07143981*	49.39673052	*34.31744915*	*36.29712749*	*21.99680173*
-3.65	*-67.98369793*	*-73.628396*	*-75.439911*	*-59.70909493*	-62.6005782	*-57.99418264*	-67.07809495	*-47.31602583*	*-49.80634298*	*-30.03987431*
+3.65	*41.62902303*	*55.628872*	*63.899019*	*40.21866493*	41.3879928	*37.85283153*	41.82001099	*29.91835439*	*31.61508548*	*18.70872418*
-3.7	*-78.25660427*	*-83.739983*	*-86.823089*	*-67.7965136*	-71.24920148	*-66.11244597*	-76.44649787	*-55.77095877*	*-58.71540521*	*-34.27161181*
+3.7	*31.28956401*	*46.134901*	*53.225334*	*31.56508715*	32.04835913	*29.3745772*	*31.61094211*	*23.66801918*	*24.96354825*	*15.63178653*
-3.75	*-85.81669312*	*-91.237071*	*-95.300758*	*-73.7117141*	-77.58088998	*-72.05951714*	*-83.57161717*	*-62.31691459*	*-65.63041282*	*-37.37662551*
+3.75	*23.83778469*	*39.435145*	*45.688858*	*25.33611788*	25.33611788	*24.10058905*	*25.74242127*	*19.26119392*	*20.27494097*	*13.44873256*
-3.8	*-96.67372832*	*-102.094434*	*-107.623947*	*-82.15825975*	-86.630197	*-80.56408637*	*-93.77804552*	*-71.49998414*	*-75.33367084*	*-41.82346285*
+3.8	*17.94122764*	*30.200015*	*38.722939*	*18.57186447*	18.57186447	*16.76976445*	*17.58904498*	*15.46560704*	*16.34304948*	*10.35209868*
-3.85	*-104.5992448*	*-110.092778*	*-116.730638*	*-88.29126132*	-93.20639174	*-86.74776895*	*-101.2109556*	*-78.53442707*	*-82.76828564*	*-45.06116046*
+3.85	*17.94122764*	*23.725567*	*34.821669*	*14.05808791*	15.0783068	*14.20321783*	*17.12115783*	*15.46560704*	*16.34304948*	*8.117864673*
-3.9	*-115.8953534*	*-121.606434*	*-129.873812*	*-96.98852468*	-102.5396345	*-95.52851314*	*-111.781527*	*-88.67844881*	*-93.49165361*	*-49.66435788*
+3.9	*17.94122764*	*19.962638*	*29.542546*	*14.05808791*	15.0783068	*14.20321783*	*17.12115783*	*15.46560704*	*16.34304948*	*7.182599132*
-3.95	*-124.082634*	*-130.040095*	*-139.521998*	*-103.2619277*	-109.276982	*-101.8702107*	*-119.4269602*	*-96.11157506*	*-101.35084*	*-52.99274292*
+3.95	*17.94122764*	*19.705748*	*25.915411*	*14.05808791*	15.0783068	*14.20321783*	*17.12115783*	*15.46560704*	*16.34304948*	*7.182599132*
-5	*-135.6727562*	*-142.114703*	*-153.359861*	*-112.1014916*	-118.7774035	*-110.8170741*	*-130.2282738*	*-106.7428094*	*-112.5934912*	*-57.69356366*
+5	*17.94122764*	*19.585859*	*21.741610*	*14.05808791*	15.0783068	*14.20321783*	*17.12115783*	*15.46560704*	*16.34304948*	*7.182599132*

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.54698786	-13.31264531	-12.85506755	-11.25062637	-8.522498255	-11.56352072	-13.0940021	-14.6041497	-16.10518881
End Shear	82.75580853	94.68549722	85.3019881	72.01641488	67.29628798	90.56355875	100.4482431	105.8600804	110.681551
-0.05	-10.54698786	-13.31264531	-12.85506755	-12.05344736	-8.522498255	-11.56352072	-13.0940021	-14.6041497	-16.10518881
+0.05	76.57861601	86.35575654	76.95128531	65.19936264	62.31813708	83.858629	92.8182734	97.40200696	101.3848125
-0.1	-10.54698786	-13.31264531	-12.85506755	-14.06666743	-8.522498255	-11.56352072	-13.0940021	-14.6041497	-16.10518881
+0.1	69.89963214	77.347209	68.08737163	57.7046811	56.94892285	76.60860397	84.56123868	88.25368856	91.33650069
-0.15	-10.54698786	-13.31264531	-12.85506755	-15.39148861	-8.522498255	-11.56352072	-13.0940021	-14.6041497	-16.10518881
+0.15	65.18514083	71.06661821	62.35393754	52.84281618	53.15585958	71.48757085	78.73859307	81.82094704	84.29190808
-0.2	-13.76024709	-13.76370232	-12.85506755	-17.53999878	-10.31160027	-14.54060837	-14.54142828	-14.6041497	-16.10518881
+0.2	58.68554373	62.52172368	54.57316287	46.26520142	47.92209822	64.42246878	70.71951958	72.9881618	74.64947156
-0.25	-17.16210703	-17.16625021	-14.35503969	-19.69041119	-12.7539986	-18.60991155	-19.38704037	-19.37091614	-19.35535661
+0.25	54.12897321	56.90638206	49.21033403	41.74602815	44.24961074	59.46569658	65.10379045	66.82219987	67.94097414
-0.3	-21.87220234	-21.87727232	-18.63021097	-23.62626459	-18.14447651	-24.31756856	-26.12609024	-26.11041623	-26.09529142
+0.3	47.89216953	48.93377388	42.00518748	35.80886218	39.21801258	52.67559343	57.42611092	58.71541791	59.15221283
-0.35	-26.03465285	-25.19485064	-21.58642288	-26.50546532	-21.95807373	-29.3859308	-30.88509299	-30.86977894	-30.85500457
+0.35	43.55309383	43.48706846	37.11449356	31.83684948	35.71375422	47.94741592	52.35428072	52.89088942	52.88667709
-0.4	-32.62844317	-29.77400823	-26.16022677	-31.73551904	-27.22806296	-36.51010363	-38.36732618	-38.31072214	-38.29302091
+0.4	37.86850518	36.62417837	31.24933275	27.06751696	31.11774498	41.74723174	45.11102568	45.02434317	45.0200329
-0.45	-37.26621001	-33.27374983	-30.26590371	-35.31776385	-30.93177031	-41.51779424	-44.14853409	-44.04337165	-44.02612896
+0.45	33.80007237	31.9567795	27.66799431	24.11282892	27.82435203	37.30517911	40.12255902	40.00360324	39.99987992
-0.5	-43.63614999	-39.62629048	-35.9148312	-40.12326741	-36.01455465	-48.39137764	-52.09757832	-51.93810205	-51.91869371
+0.5	28.32919949	25.93030231	22.9789451	20.23590219	23.38949449	31.32482261	33.42539835	33.34747968	33.34369295
-0.55	-48.08423054	-45.552046	-39.86666403	-43.74635645	-39.56071975	-53.1878986	-57.65470477	-58.27663978	-58.25780004
+0.55	24.59616904	22.37274701	19.79042619	17.45746143	20.35863963	27.23870071	28.86393352	28.81286881	28.80907155
-0.6	-54.14691762	-53.74784686	-45.70168511	-48.87699822	-44.3895838	-59.72081591	-65.23832989	-66.95490265	-67.61325647
+0.6	19.46615868	18.34620671	15.5710316	14.05078144	16.3246975	21.74516968	22.60885661	22.59283284	22.59860269
-0.65	-58.34574632	-59.47517979	-50.6247083	-53.03074058	-47.73055147	-64.24183935	-70.49749739	-72.99433185	-74.48309524
+0.65	16.13702913	15.72648491	12.74421959	11.82555299	13.60403036	17.95830916	18.78012185	18.77671949	18.91549451
-0.7	-64.01777039	-67.5741668	-58.71817588	-59.58629633	-52.23878461	-70.34401469	-77.61225359	-81.19585317	-83.84504162
+0.7	12.2609408	12.25156572	9.741763801	9.436777707	9.916435922	13.2913454	14.11900411	14.11567595	14.24408315
-0.75	-67.90776013	-73.77340804	-64.55170108	-64.26095687	-55.32690387	-74.52519505	-82.49957941	-86.8533364	-90.3275981
+0.75	9.926368715	9.917021902	7.884755377	7.928933267	7.561624993	10.58555723	11.01226496	11.00900987	11.12953064
-0.8	-73.10571644	-82.1898279	-72.49050777	-70.55332316	-59.44779034	-80.10655369	-89.04204842	-94.46215592	-99.08269099
+0.8	6.879892359	6.87073135	5.461643054	5.948377544	5.339263782	7.069469281	7.075459935	7.107394462	7.070110616
-0.85	-76.62730377	-87.99345107	-77.97899627	-74.86755161	-62.235403	-83.88355148	-93.48365175	-99.65485858	-105.0855956
+0.85	4.80275479	4.863334608	3.864949118	4.685045271	4.012139887	4.764089032	4.769537173	4.766934472	4.764419427
-0.9	-81.26778038	-95.79491571	-85.59908377	-80.92909584	-65.90223358	-88.85401726	-99.35038732	-106.5550194	-113.1045135
+0.9	2.251186689	2.532701491	2.303393282	3.155453771	2.262960594	2.401756763	2.701768202	3.005949741	3.297189695
-0.95	-84.36138394	-101.1156478	-91.56733308	-85.5108304	-68.34169103	-92.16249306	-103.2723884	-111.20013	-118.5353917
+0.95	2.175066297	2.532701491	2.303393282	2.447814529	1.76636206	2.401756763	2.701768202	3.005949741	3.297189695
-1	-88.36098434	-108.1799782	-99.96015012	-92.21373228	-71.48774502	-96.43198963	-108.359963	-117.27567	-125.6888036
+1	2.18E+00	2.53E+00	2.30E+00	2.00E+00	1.77E+00	2.40E+00	2.70E+00	3.01E+00	3.30E+00
(Span 2) -2	-7.82E+00	-9.10E+00	-8.28E+00	-7.19E+00	-6.35E+00	-8.63E+00	-9.71E+00	-1.08E+01	-1.18E+01
+2	8.89E+01	111.6501835	107.0963895	95.60262946	71.78402808	96.85719224	109.1070886	118.5718417	127.7124776
-2.05	-7.82E+00	-9.10E+00	-8.28E+00	-7.79E+00	-6.35E+00	-8.63E+00	-9.71E+00	-1.08E+01	-1.18E+01
+2.05	85.2826502	105.6039425	100.2404901	89.86543156	68.96469719	93.02900813	104.5623507	113.163704	121.3841655
-2.1	-7.815316559	-9.100349825	-8.2764136	-9.213647712	-6.34678535	-8.629847085	-9.707830307	-10.80079664	-11.84726241
+2.1	80.79452861	98.31256271	92.15070766	83.37843588	65.4110728	88.20851031	98.88371805	106.4906731	113.6592621
-2.15	-7.815316559	-9.100349825	-8.2764136	-10.9053696	-6.34678535	-8.629847085	-9.707830307	-10.80079664	-11.84726241
+2.15	75.93495219	90.70138274	83.88456958	76.66519298	61.55130803	82.9770284	92.76179488	99.37505712	105.501049
-2.2	-9.102532071	-9.115471017	-8.2764136	-12.5694333	-7.074429588	-9.814367632	-10.24543309	-10.80079664	-11.84726241
+2.2	70.76591355	82.86119067	75.14091498	69.773323	57.43499459	77.40149179	86.27341157	91.90303259	97.00561959
-2.25	-12.05700334	-12.07149674	-9.712852317	-14.01936578	-10.06524484	-13.40149483	-14.19903803	-14.19232615	-14.18585622

+2.25	66.03785218	75.77836479	67.73809241	63.63325721	53.66172674	72.29327859	80.35589613	85.14037533	89.37102144
-2.3	-16.57505669	-15.83546205	-13.19692234	-16.50592323	-13.78982603	-18.42274691	-19.22307263	-19.20890997	-19.20120513
+2.3	60.45558105	67.35830594	59.52820256	56.79389821	49.19797446	66.25303483	73.38757277	77.23232085	80.50230658
-2.35	-21.49301901	-19.66435206	-17.38943914	-20.29779886	-17.79383317	-23.82362633	-25.22996648	-25.18178703	-25.17375189
+2.35	54.74202278	59.37064287	52.12958938	50.6281276	44.62016944	60.06115988	66.27376065	69.1298837	71.35371299
-2.4	-26.70962283	-24.81763085	-21.86524565	-24.31594245	-22.02769821	-29.53720272	-31.6245679	-31.53718399	-31.52894764
+2.4	48.68671172	51.51147028	44.93458819	44.6347889	39.97790259	53.59598784	58.6419135	60.81638108	62.18991235
-2.45	-32.16290931	-31.06804215	-26.56976528	-28.79997006	-26.44185021	-35.49654405	-38.33000828	-38.25366687	-38.2442407
+2.45	42.80831147	43.87157464	37.97838546	38.94095039	35.03038133	47.09790036	51.47094431	52.70662937	53.3741998
-2.5	-37.79088765	-37.68638369	-32.18989893	-33.97289263	-30.98672871	-41.63472154	-45.26943388	-45.86063956	-45.90693902
+2.5	37.07832232	36.8399771	31.46670414	33.32918496	30.41180821	40.85816946	44.38986296	44.89324569	44.88380407
-2.55	-42.80996498	-43.8735231	-37.98004909	-38.94187468	-35.03174795	-47.09971214	-51.47294986	-52.70882043	-53.37658079
+2.55	32.1613175	31.06636591	26.56858188	28.7991875	26.44052886	35.49479395	38.32808726	38.25159817	38.24218625
-2.6	-48.61068671	-51.51348824	-44.93632216	-44.63572091	-39.97927425	-53.52177727	-58.64394796	-60.78425019	-62.15845041
+2.6	26.70808907	24.81604892	21.86411156	24.31522456	22.02642197	29.53551438	31.62271111	31.53537629	31.5271524
-2.65	-54.7436753	-59.37270732	-52.13137157	-50.62913193	-44.62152927	-60.06297573	-66.27577299	-69.09797731	-71.32227115
+2.65	21.49156458	19.66311187	17.38836234	20.29716898	17.79261817	23.82202053	25.22823412	25.18008843	25.17204148
-2.7	-60.45720497	-67.36037587	-59.53018758	-56.86231397	-49.19930882	-66.25481722	-73.389557	-77.23453255	-80.50476124
+2.7	16.57369735	15.83450662	13.19593821	16.53557035	13.78868079	18.42124181	19.22144897	19.20731694	19.19962308
-2.75	-65.35095069	-74.63781076	-66.70553258	-62.75451032	-53.11299143	-71.55056578	-79.49737711	-84.16294213	-88.27147906
+2.75	12.56428676	12.50871654	10.06166091	14.25385122	10.5127856	14.00471018	14.78749178	14.78075673	14.77425704
-2.8	-70.76743764	-82.86325328	-75.09022417	-69.77442339	-57.4362422	-77.4031588	-86.27528327	-91.90514958	-97.00800029
+2.8	9.101594006	9.114632506	8.276412427	12.56916164	7.073472265	9.813286122	10.24421868	10.80079968	11.84725921
-2.85	-75.93639871	-90.70339861	-83.8602412	-76.6662572	-61.55249028	-82.9786073	-92.76357543	-99.37708807	-105.5033512
+2.85	7.815322407	9.100349612	8.276412427	10.90508083	6.346790107	8.629845526	9.707835119	10.80079968	11.84725921
-2.9	-80.79587794	-98.31449398	-92.15271589	-83.37947396	-65.41216381	-88.20998121	-98.88538671	-106.4925942	-113.6614741
+2.9	7.815322407	9.100349612	8.276412427	9.21334151	6.346790107	8.629845526	9.707835119	10.80079968	11.84725921
-2.95	-85.28389199	-105.6057805	-100.2424592	-89.86641441	-68.96569932	-93.03035	-104.5638855	-113.1654925	-121.3862308
+2.95	7.815322407	9.100349612	8.276412427	7.786372657	6.346790107	8.629845526	9.707835119	10.80079968	11.84725921
-3	-89.33845088	-112.4864533	-108.0565818	-96.4043295	-72.16351633	-97.37278367	-109.7222031	-119.3096562	-128.5815874
+3	7.815322407	9.100349612	8.276412427	7.192860729	6.346790107	8.629845526	9.707835119	10.80079968	11.84725921
(Span 3) -4	-2.175067924	-2.53E+00	-2.30E+00	-2.00E+00	-1.766363384	-2.40175633	-2.701769542	-3.005950586	-3.297188805
+4	87.81292366	107.1975381	98.78478493	91.26633957	71.05723542	95.84757191	107.6615115	116.4376725	124.6982322
-3.05	-2.175067924	-2.53E+00	-2.30E+00	-2.36E+00	-1.766363384	-2.40175633	-2.701769542	-3.005950586	-3.297188805
+3.05	84.95556372	102.1509067	92.7891715	86.47709781	68.80965128	92.79737258	104.0269114	112.097305	119.5878929
-3.1	-2.597866852	-2.65210203	-2.303392956	-3.34775627	-2.495489603	-2.508288488	-2.701769542	-3.005950586	-3.297188805
+3.1	80.62497475	94.70261377	84.56320061	80.12228239	65.39477731	88.16600688	98.53668271	105.594816	111.9854084
-3.15	-4.420785011	-4.480253083	-3.560215166	-4.453069164	-3.757868516	-4.325527961	-4.330845598	-4.328246454	-4.325753397
+3.15	77.30985397	89.12943405	79.05489541	75.71129171	62.77520463	84.61512507	94.34552619	100.6654495	106.2568395
-3.2	-7.299572408	-7.290285739	-5.795331138	-6.221919462	-5.615649462	-7.552698888	-7.558761758	-7.592701845	-7.553349538
+3.2	72.38010332	81.00511274	71.3717393	69.67130994	58.87292728	79.327848	88.12787095	93.3963419	97.85354138
-3.25	-9.475976978	-9.466545705	-7.526396023	-7.636823334	-7.111080525	-10.06460524	-10.41558061	-10.41232358	-10.40919322
+3.25	68.66679879	74.99269337	65.7005114	65.17670871	55.92903583	75.34062644	83.45409441	87.96080464	91.59918579
-3.3	-12.74405431	-12.73458542	-10.12593569	-9.74753624	-10.40746468	-13.85233373	-14.76456652	-14.76120925	-14.89113547
+3.3	63.22129331	66.3145285	57.53431965	58.63208834	51.60607161	69.48751284	76.6124491	80.04103879	82.52439892
-3.35	-15.49425922	-15.21700206	-12.1995787	-11.39537069	-12.94771322	-17.25166325	-18.09444123	-18.09102122	-18.22834334
+3.35	59.16938236	60.6042021	51.59542606	53.84212229	48.38551258	65.12829133	71.52990733	74.18216152	75.83659699
-3.4	-20.15457858	-18.8842658230582	-16.15667689	-14.51028594	-16.88661643	-22.5019047313578	-23.44722155	-23.42659435	-23.434245614196
+3.4	53.29152656	52.58663601	44.70381157	48.02668916	43.70856992	58.7994161	64.16770397	65.72765919	66.21960039
-3.45	-23.8697661	-21.68241588	-19.17097108	-16.88575125	-19.76840724	-26.44302061	-27.84814132	-27.93120029	-27.92737056
+3.45	48.96058148	46.73193767	40.64625043	44.45587909	40.25899714	54.13253221	58.75024124	59.52826418	59.50958934
-3.5	-29.0955282	-26.66249394	-23.63444467	-20.77566909	-24.01121302	-32.16308524	-34.36262263	-34.27905388	-34.27527226
+3.5	42.73378216	38.71650752	35.11414374	39.45064363	35.2947941	47.41797102	50.97091176	50.80773471	50.79108381
-3.55	-33.00376336	-31.0500483	-26.98419781	-23.54945856	-27.1793584	-36.43526841	-39.14691962	-39.03401503	-39.03026609
+3.55	38.18338216	34.1333384302534	31.0788107285318	36.018192626023	31.6638604477991	42.5077674928566	45.2924786717632	45.177683366438	45.16054849

-3.6	-38.69907414	-37.58377551	-32.06908889	-27.73421554	-31.78970431	-42.65361978	-46.13016088	-46.12877355	-46.12442495
+3.6	31.69104443	29.11088625	25.3313386	31.00286031	26.47910942	35.4975951	37.19945669	37.15261881	37.13487503
-3.65	-42.91291496	-42.48643605	-36.25900724	-31.14129135	-35.02436694	-47.01727715	-51.30448728	-51.74839107	-51.74414319
+3.65	26.98073275	25.85150172	22.16641775	27.26715716	22.71446619	30.40840921	31.82824029	31.81303571	31.79832253
-3.7	-48.77407924	-50.05169956	-43.01360883	-36.63911026	-39.92990376	-53.63618665	-58.51107693	-59.90202614	-60.43621057
+3.7	21.20217551	21.20727788	18.02787073	23.06580347	17.37588208	23.51475343	25.16618436	25.15045516	25.13528353
-3.75	-53.22938594	-55.74711792	-48.16077857	-40.8803997	-43.52427942	-58.48673632	-63.99568952	-65.6075173	-66.62172496
+3.75	17.83751728	17.84194805	14.97400899	20.20575112	13.52518301	19.41830975	20.3521246	20.33609055	20.32061858
-3.8	-59.60806134	-63.72586307	-55.66804099	-47.18875582	-48.66532455	-65.42566596	-71.85705819	-74.23912445	-76.01285845
+3.8	13.07530413	13.31264512	12.85506955	17.12511814	9.885750735	13.72176744	13.72259291	14.60415759	16.10519113
-3.85	-64.25109476	-69.83003916	-61.22635844	-51.88751262	-52.40409457	-70.47262947	-77.58550906	-80.54888638	-82.9010031
+3.85	10.54699709	13.31264512	12.85506955	15.64575506	8.522506059	11.56352406	13.09401135	14.60415759	16.10519113
-3.9	-70.85081712	-78.62210414	-69.25246383	-58.6935576	-57.71393544	-77.64147234	-85.73653772	-89.55397837	-92.76260627
+3.9	10.54699709	13.31264512	12.85506955	13.79043861	8.522506059	11.56352406	13.09401135	14.60415759	16.10519113
-3.95	-75.62197354	-85.05744698	-75.64859187	-64.09982483	-61.54944675	-82.82054369	-91.63498349	-96.08910093	-99.94064357
+3.95	10.54699709	13.31264512	12.85506955	12.35275182	8.522506059	11.56352406	13.09401135	14.60415759	16.10519113
-5	-82.35939291	-94.25205032	-84.91987929	-71.92881901	-66.96136777	-90.12925401	-99.97223652	-105.351759	-110.1434345
+5	10.54699709	13.31264512	12.85506955	11.25062409	8.522506059	11.56352406	13.09401135	14.60415759	16.10519113

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-23.93017484	-25.80254618	-15.54634086	-19.09767807	-20.04408871
End Shear	149.880005	150.6379738	107.3293278	130.5952633	133.3857029
-0.05	-23.93017484	-25.80254618	-15.54634086	-19.09767807	-20.04408871
+0.05	134.796693	135.3472629	97.41908575	118.6099233	120.6915627
-0.1	-23.93017484	-25.80254618	-15.54634086	-19.09767807	-20.04408871
+0.1	118.5802307	119.7445122	86.7289117	105.6703282	107.0013745
-0.15	-23.93017484	-25.80254618	-15.54634086	-19.09767807	-20.04408871
+0.15	107.7381307	108.9349623	79.30658983	96.6786254	97.51795299
-0.2	-23.93017484	-25.80254618	-15.77588844	-19.09767807	-20.04408871
+0.2	93.87891602	95.65147136	69.60466645	84.91461421	85.22793635
-0.25	-23.93017484	-25.80254618	-19.72361669	-22.04905514	-22.05006476
+0.25	83.95919887	86.52576934	62.67923393	76.50868973	76.70707405
-0.3	-29.00907901	-27.83338917	-26.35615111	-29.29604189	-29.37245756
+0.3	71.12178216	74.19771936	53.70326862	65.3900995	65.35887754
-0.35	-34.57472499	-33.52914197	-31.03823819	-34.4106731	-35.13351359
+0.35	63.01356663	65.74291693	47.4971571	57.99499082	57.62886455
-0.4	-42.44977158	-42.49625048	-37.4938084	-41.4609507	-43.41702644
+0.4	52.52841031	54.44604631	41.68210751	48.27061515	49.27880144
-0.45	-48.55915215	-50.23537168	-42.02008786	-46.66760189	-49.23718212
+0.45	45.90022482	47.1264633	37.50148522	42.08968762	44.07548946
-0.5	-58.86325376	-61.40659938	-48.21638698	-53.95951844	-57.22246368
+0.5	37.09696567	37.73637655	31.85111196	34.85926679	37.06443021
-0.55	-67.08213092	-70.26651121	-53.29727983	-59.93084625	-63.4764904
+0.55	31.6144801	31.9232445	27.97365497	30.60652253	32.26962321
-0.6	-78.36476122	-83.2802524	-60.74634049	-70.90107861	-72.47651923
+0.6	24.77584103	24.40419941	22.78886166	24.9172157	25.8828592
-0.65	-87.59471217	-93.26080212	-66.11996293	-79.51833986	-79.01661473
+0.65	20.79786036	19.91771272	19.27335447	21.05752311	21.57139681
-0.7	-100.8400061	-107.6163714	-74.12447951	-91.30967332	-91.28700823
+0.7	15.72350455	14.6056901	14.63645439	15.96337685	15.98929692
-0.75	-111.7745251	-118.1607762	-81.10104006	-99.68262026	-100.5505215
+0.75	12.33613458	11.46331193	11.54169644	12.56086297	12.558536
-0.8	-126.6919008	-132.7976535	-91.60967317	-112.2869845	-113.5099717
+0.8	7.949540824	7.41119828	7.87366762	8.334781399	8.149425211
-0.85	-137.0326054	-143.0222534	-98.88576337	-121.0086542	-122.7366022
+0.85	5.085497216	4.963764803	5.572907312	5.885150967	5.268325714
-0.9	-152.348149	-156.4924527	-108.7106651	-132.777544	-135.7398492
+0.9	4.296662246	4.536531387	2.868588261	3.577753873	3.678767698
-0.95	-163.7044877	-166.1119148	-115.4449144	-140.838292	-144.6770008
+0.95	4.296662246	4.536531387	2.868588261	3.577753873	3.678767698
-1	-178.996287	-183.1496682	-124.4364317	-151.592123	-156.6464451
+1	4.30E+00	4.54E+00	2.87E+00	3.58E+00	3.68E+00
(Span 2) -2	-1.54E+01	-1.63E+01	-1.03E+01	-1.29E+01	-1.32E+01
+2	191.356658	199.3209396	129.9074206	157.8389756	164.6266798
-2.05	-1.54E+01	-1.63E+01	-1.03E+01	-1.29E+01	-1.32E+01
+2.05	178.7784258	185.1273315	122.3342317	148.7330212	154.606236
-2.1	-15.43850703	-16.30039009	-10.30723793	-12.85536896	-13.2183256
+2.1	163.9625826	168.559753	113.2845721	137.8370447	142.6931367
-2.15	-15.43850703	-16.30039009	-10.30723793	-12.85536896	-13.2183256
+2.15	148.8472303	151.8131844	103.9206303	126.547212	130.4267259
-2.2	-15.43850703	-16.30039009	-10.56832926	-12.85536896	-13.2183256
+2.2	133.2314435	135.0861724	94.35359198	114.9969488	117.8465331
-2.25	-15.74758829	-16.30039009	-14.48619061	-15.91058232	-15.94204376

+2.25	119.4570806	120.1672693	85.54293129	104.4614507	106.3830089
-2.3	-21.05065321	-20.874661	-19.3119403	-21.22716268	-21.85677815
+2.3	104.4080494	105.8534523	75.65510871	92.37589435	93.7273347
-2.35	-27.80816571	-28.2720367	-24.45049664	-27.1355713	-28.20503018
+2.35	90.28029309	91.8641679	66.13486833	80.83268648	81.50090504
-2.4	-35.75566859	-36.83542462	-30.14437911	-33.07040039	-35.02244189
+2.4	77.14385097	79.63120283	56.84941508	69.55450593	69.80207122
-2.45	-44.69209693	-46.54825137	-35.77481756	-40.91098391	-42.33409961
+2.45	64.51543861	67.68742879	48.12737766	58.93570933	58.84060708
-2.5	-54.74945589	-57.5816918	-41.49094332	-50.30421051	-49.67814134
+2.5	53.4022997	56.16938324	40.77017498	49.09772685	48.61703704
-2.55	-64.51847046	-67.68792763	-48.12948756	-58.93828226	-58.84330911
+2.55	44.68982693	46.54777159	35.77335682	40.90863475	42.33229535
-2.6	-77.14707636	-79.63171864	-56.85177019	-69.55736928	-69.80491169
+2.6	35.75351633	36.83503507	30.18273926	33.06867389	35.09086763
-2.65	-90.28360096	-91.86471672	-66.13729974	-80.8356363	-81.47849857
+2.65	27.80641386	28.29935678	24.4491364	27.13407699	28.20336886
-2.7	-104.4117229	-104.9658921	-75.65758669	-92.37889687	-93.73046001
+2.7	21.31090906	20.87437459	19.31066322	21.2257476	21.85522971
-2.75	-117.4911184	-118.5781881	-84.17656711	-102.8599692	-104.680371
+2.75	16.38833823	16.30038898	15.06901015	16.55310216	16.65356675
-2.8	-133.1666391	-135.0869228	-94.35607937	-114.9999542	-117.7795409
+2.8	15.43796743	16.30038898	10.56722235	12.85536225	13.21832055
-2.85	-148.8510096	-151.8138953	-103.9230819	-126.5501698	-130.4298575
+2.85	15.43796743	16.30038898	10.30723971	12.85536225	13.21832055
-2.9	-163.9663405	-168.5604643	-113.2869586	-137.8399195	-142.6962458
+2.9	15.43796743	16.30038898	10.30723971	12.85536225	13.21832055
-2.95	-178.7820828	-185.1280659	-122.3365224	-148.7357781	-154.609215
+2.95	15.43796743	16.30038898	10.30723971	12.85536225	13.21832055
-3	-193.1202306	-201.3179285	-130.9605175	-159.1042387	-166.0242331
+3	15.43796743	16.30038898	10.30723971	12.85536225	13.21832055
(Span 3) -4	-4.296512078	-4.536531076	-2.868588756	-3.577752005	-3.678766292
+4	176.8534295	180.6854339	123.1821306	150.0926511	154.9739854
-3.05	-4.296512078	-4.536531076	-2.868588756	-3.577752005	-3.678766292
+3.05	165.9294179	169.3607956	116.7587663	142.4103187	146.4233008
-3.1	-4.296512078	-4.536531076	-3.038528849	-3.577752005	-3.678766292
+3.1	150.0320344	154.6289209	107.3317091	131.1263383	133.9124422
-3.15	-4.612538586	-4.536531076	-5.133827771	-5.417736123	-4.721174771
+3.15	139.0625515	145.0068203	100.3130773	122.7189738	124.6233511
-3.2	-8.551013904	-7.968546975	-8.354526345	-8.846834011	-8.754233143
+3.2	124.5868827	130.6930726	90.12748427	110.5097528	111.7334613
-3.25	-11.68481374	-10.87702509	-10.94675806	-11.90647674	-11.90412046
+3.25	113.9304447	120.2288007	82.62049161	101.5056422	102.3752589
-3.3	-16.42662497	-15.27747244	-15.27895481	-16.66948999	-16.69570552
+3.3	98.91728658	105.5987319	72.73619849	89.64298379	89.40747231
-3.35	-20.05168718	-19.05125169	-18.59150881	-20.30869269	-20.53044332
+3.35	89.49715596	95.34398265	67.15624531	81.21973121	80.41078947
-3.4	-25.72467085	-25.40991055	-23.51274015	-25.71174621	-26.77263451
+3.4	76.76737222	81.28983138	59.63313179	69.15659739	71.15083519
-3.45	-30.61011988	-30.80891421	-27.21663989	-29.77603037	-31.33520081
+3.45	68.7075886	72.02212978	54.29626238	61.27764987	64.70757325
-3.5	-38.32137009	-39.03956558	-32.64459261	-35.72935726	-38.04732356
+3.5	57.2021246	59.619359	47.34031988	52.93339899	56.09218695
-3.55	-44.61024995	-45.74761121	-36.68101019	-40.98754476	-43.05579793
+3.55	49.88708847	51.77190769	42.91394937	47.7244625	50.38786721
-3.6	-53.88883981	-56.01987683	-42.53339778	-49.626329	-50.33981057
+3.6	42.17129673	40.93808319	36.57768251	40.46056665	42.24031192

-3.65	*-61.43260269*	*-64.3035217*	*-46.625948*	*-56.57324466*	*-56.12576819*
+3.65	*36.56808176*	*35.2026958*	*31.96612107*	*35.42417551*	*36.32298192*
-3.7	*-72.80077426*	*-75.92545591*	*-54.93259557*	*-66.88622262*	*-66.94675236*
+3.7	*28.1884618*	*27.25348245*	*25.41174803*	*28.26428541*	*28.34084465*
-3.75	*-82.06669488*	*-84.73216602*	*-61.32545536*	*-74.8645793*	*-75.05359581*
+3.75	*23.93017653*	*25.80254592*	*20.673793*	*23.08739793*	*23.08847967*
-3.8	*-95.86252886*	*-97.50689142*	*-71.02015097*	*-86.6317798*	*-86.95438784*
+3.8	*23.93017653*	*25.80254592*	*15.54634049*	*19.09768953*	*20.04410093*
-3.85	*-105.6930255*	*-106.918785*	*-77.84842189*	*-94.91134109*	*-95.74653873*
+3.85	*23.93017653*	*25.80254592*	*15.54634049*	*19.09768953*	*20.04410093*
-3.9	*-120.8621856*	*-121.9420533*	*-88.23875394*	*-107.4986212*	*-108.9326467*
+3.9	*23.93017653*	*25.80254592*	*15.54634049*	*19.09768953*	*20.04410093*
-3.95	*-132.446633*	*-133.0879471*	*-95.87536518*	*-116.7421134*	*-118.712449*
+3.95	*23.93017653*	*25.80254592*	*15.54634049*	*19.09768953*	*20.04410093*
-5	*-149.1745178*	*-150.3004554*	*-106.8281596*	*-129.9893516*	*-132.7687946*
+5	*23.93017653*	*25.80254592*	*15.54634049*	*19.09768953*	*20.04410093*

3-Span: Moment (Max and Min) Raw Data Results - 60' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.54E-13	*-1.53E-13*	*-2.23E-13*	-1.59E-13	-1.74E-13	-1.26E-13	-1.54E-13	-1.06E-13	-1.12E-13	-8.17E-14
End Shear	2.91E-13	*1.91E-13*	*3.44E-13*	1.55E-13	1.70E-13	1.45E-13	1.98E-13	1.14E-13	1.20E-13	1.13E-13
-0.05	-53.37526809	*-58.75754416*	*-65.22483015*	-42.1742296	-45.2349171	-42.609645	-51.3634523	-46.396782	-49.0291453	-21.54751961
+0.05	354.679807	*399.9422234*	*429.2555802*	313.5550267	331.883831	309.4694153	363.3218355	292.8359242	308.8121646	160.9836016
-0.1	-106.7505362	*-117.5150883*	*-130.4496603*	-84.3484592	-90.4698343	-85.2192899	-102.726905	-92.793564	-98.0582905	-43.09503923
+0.1	657.4538481	*747.9339486*	*796.1885593*	583.2993582	616.8809143	574.8109878	673.1020978	532.8835715	561.8258713	297.9831012
-0.15	-160.1258043	*-176.2726325*	*-195.6744904*	-126.522689	-135.704751	-127.828935	-154.090357	-139.190346	-147.087436	-64.64255884
+0.15	908.2057214	*1043.783169*	*1101.916699*	808.5740706	854.0216158	795.1366505	928.7170266	722.2781632	761.2814763	411.4222054
-0.2	-213.5010724	*-235.0301767*	*-260.8993206*	-168.696918	-180.939669	-170.43858	-205.453809	-185.587128	-196.116581	-86.19007846
+0.2	1107.793814	*1288.130019*	*1347.895776*	990.1393845	1044.32628	971.4412209	1131.485794	862.2570107	908.5198983	501.8757708
-0.25	-266.8763405	*-293.7877208*	*-326.1241507*	-210.871148	-226.174586	-213.048225	-256.817262	-231.98391	-245.145726	-107.7375981
+0.25	1269.938609	*1481.873263*	*1535.919357*	1129.171587	1189.115414	1105.002589	1303.783386	992.2558014	1047.231964	570.0695797
-0.3	-320.2516086	*-352.545265*	*-391.3489809*	-253.045377	-271.409503	-255.65787	-308.180714	-278.380692	-294.174872	-129.2851177
+0.3	1406.440463	*1626.170464*	*1668.118838*	1227.125779	1290.009788	1214.695916	1435.547987	1077.640811	1138.793744	617.4178869
-0.35	-373.6268767	*-411.3028092*	*-456.573811*	-295.219607	-316.64442	-298.267515	-359.544166	-324.777474	-343.204017	-150.8326373
+0.35	1490.693886	*1722.437701*	*1772.007629*	1288.656181	1364.625789	1290.197869	1519.225456	1131.339753	1194.455475	644.5155806
-0.4	-427.0021447	*-470.0603533*	*-521.7986412*	-337.393837	-361.879337	-340.87716	-410.907619	-371.174256	-392.233162	-172.3801569
+0.4	1525.361402	*1772.350053*	*1827.797561*	1330.659476	1405.744379	1327.403674	1556.105346	1152.075278	1217.459859	652.3606426
-0.45	-480.3774128	*-528.8178975*	*-587.0234713*	-379.568066	-407.114254	-383.486805	-462.271071	-417.571038	-441.262307	-193.9276765
+0.45	1513.478059	*1777.840978*	*1832.601676*	1335.473217	1407.272219	1327.671867	1548.879195	1131.741057	1196.875059	642.2735662
-0.5	-533.7526809	*-587.5754416*	*-652.2483015*	-421.742296	-452.349171	-426.09645	-513.634523	-463.96782	-490.291453	-215.4751961
+0.5	1459.378665	*1754.30108*	*1823.759932*	1312.56593	1384.972211	1305.702486	1525.590952	1091.659023	1154.429985	632.1231763
-0.55	-587.127949	*-646.3329858*	*-717.4731316*	-463.916525	-497.584088	-468.706095	-564.997976	-510.364602	-539.320598	-237.0227158
+0.55	1392.495949	*1692.11978*	*1781.677592*	1258.982252	1330.928901	1256.895884	1473.136515	1083.874447	1145.402796	621.0641225
-0.6	-640.5032171	*-705.09053*	*-782.6979618*	-506.090755	-542.819006	-511.31574	-616.361428	-556.761384	-588.349743	-258.5702354
+0.6	1330.036427	*1590.308801*	*1690.585152*	1174.325274	1242.908128	1175.732631	1381.401092	1031.033267	1088.803218	591.2840077
-0.65	-693.8784852	*-763.8480741*	*-847.9227919*	-548.264985	-588.053923	-553.925385	-667.72488	-603.158166	-637.378889	-280.117755
+0.65	1222.742745	*1451.593456*	*1553.795723*	1071.054691	1124.075185	1065.16402	1252.983369	936.3827334	989.3567678	544.1697831
-0.7	-747.2537533	*-822.6056183*	*-913.1476221*	-590.439214	-633.28884	-596.53503	-719.088333	-649.554948	-686.408034	-301.6652746
+0.7	1074.233108	*1278.958886*	*1382.989411*	941.9858152	986.8782893	928.4250932	1091.549372	819.6753146	865.7778675	481.2596937
-0.75	-800.6290214	*-881.3631625*	*-978.3724522*	-632.613444	-678.523757	-639.144675	-770.451785	-695.95173	-735.437179	-323.2127942
+0.75	888.8218891	*1075.648295*	*1177.590435*	788.2775139	823.2175142	769.0335811	901.2495899	665.3388701	702.0462383	404.2431512
-0.8	-854.0042895	*-940.1207066*	*-1043.597282*	-674.787673	-723.758674	-681.75432	-821.815237	-742.348512	-784.466324	-344.7603138
+0.8	670.340371	*845.1636192*	*933.3476163*	613.4937881	636.1760805	590.7904444	686.5779685	476.926361	502.4103383	314.9602985
-0.85	-907.3795576	*-1009.147125*	*-1166.878541*	-716.961903	-768.993591	-724.363965	-873.17869	-788.745294	-833.49547	-366.3078334
+0.85	430.6747909	*601.5343318*	*670.2413154*	421.4773993	429.8385832	397.7795044	452.3712334	316.636384	334.1746612	215.4024175
-0.9	-960.7548257	*-1113.775755*	*-1442.306814*	-759.136132	-814.228508	-766.97361	-924.542142	-835.142076	-882.524615	-387.8553531
+0.9	240.4806199	*375.5405258*	*470.7015488*	241.1369358	241.1369358	217.6483305	230.2702507	183.1850203	192.8263371	142.4933422
-0.95	-1014.130094	*-1248.524247*	*-1790.236315*	-801.310362	-859.463425	-809.583254	-975.905594	-881.538858	-931.55376	-409.4028727
+0.95	206.2608168	*227.3926814*	*355.4935382*	167.2120693	179.0173041	168.55034	202.6517525	167.8464044	177.1586258	83.23061886
-1	-1067.5054	*-1408.459628*	*-2182.85652*	-843.484601	-904.698342	-852.192898	-1027.26903	-927.935655	-980.582915	-430.9503883
+1	217.1166482	*232.7843033*	*254.9241086*	176.0127051	188.4392652	177.4214118	213.3176327	176.6804266	186.48277	87.61118134
(Span 2) -2	-1067.5054	*-1408.459628*	*-2182.85652*	-843.484601	-904.698342	-852.192898	-1027.26903	-927.935655	-980.582915	-430.9503883
+2	217.1166482	*232.7843033*	*254.9241086*	176.0127051	188.4392652	177.4214118	213.3176327	176.6804266	186.48277	87.61118134
-2.05	-755.1900955	*-1019.842369*	*-1685.325179*	-605.048819	-647.764783	-609.891439	-733.285203	-607.343653	-641.03968	-301.1658949
+2.05	166.4081723	*186.9046659*	*326.4118934*	134.9042228	144.4285082	135.9839199	163.4964307	135.4159933	142.9289601	80.95594145
-2.1	-703.8806207	*-849.7575654*	*-1246.662041*	-563.940314	-603.754049	-568.453914	-683.464001	-566.07923	-597.485866	-280.7039422
+2.1	277.7569187	*418.05642*	*419.6324191*	287.3714917	287.3714917	274.3730923	295.5063981	218.6504777	230.1583975	165.041375
-2.15	-652.571146	*-722.1758675*	*-904.8898226*	-522.831809	-559.743315	-527.016389	-633.642799	-524.814807	-553.932053	-260.2419896
+2.15	519.734289	*682.1296621*	*628.0323246*	507.816288	521.4100047	495.3600421	563.9746979	380.3170763	401.5838703	251.6507031
-2.2	-601.2616713	*-638.4365084*	*-705.2861514*	-481.723304	-515.732581	-485.578863	-583.821597	-483.550383	-510.378239	-239.780037
+2.2	795.8148448	*958.1642599*	*895.1637866*	731.3287721	759.8849923	720.0996139	837.8682378	585.6536956	618.2743399	369.911688

-2.25	-549.9521966	-593.3940068	-680.9275671	-440.6148	-471.721848	-444.141338	-534.000395	-442.28596	-466.824425	-219.3180844
+2.25	1054.429713	1233.981229	1189.202586	928.1299535	973.0428873	923.1241948	1081.205359	809.8192121	855.7960744	472.9637182
-2.3	-498.6427219	-553.8693641	-680.9244458	-399.506295	-427.711114	-402.703813	-484.179193	-401.021537	-423.270612	-198.8561318
+2.3	1263.849519	1466.348059	1446.594244	1091.64789	1154.090827	1092.528306	1282.971654	987.1269445	1043.658148	554.435588
-2.35	-447.3332472	-514.3447214	-680.9215379	-358.39779	-383.70038	-361.266288	-434.357991	-359.757113	-379.716798	-178.3941792
+2.35	1427.230216	1653.503271	1646.463934	1226.831612	1298.192634	1226.733013	1441.089851	1127.570607	1191.235522	616.9916449
-2.4	-396.0237725	-474.8200787	-680.9185402	-317.289285	-339.689646	-319.828762	-384.536789	-318.49269	-336.162984	-157.9322266
+2.4	1545.531723	1788.186617	1791.811353	1324.867786	1401.172337	1322.350146	1556.050377	1220.448313	1290.09156	661.2490181
-2.45	-344.7142978	-435.295436	-680.915487	-276.18078	-295.678912	-278.391237	-334.715587	-277.228267	-292.609171	-137.470274
+2.45	1610.037178	1867.659308	1872.865278	1382.45603	1462.191811	1381.180859	1620.636388	1265.0227	1337.662326	683.4057428
-2.5	-293.4048231	-395.7707934	-680.9124338	-235.072276	-251.668305	-236.953712	-284.894385	-235.963907	-249.055357	-117.0083214
+2.5	1619.249947	1890.360861	1888.674035	1403.792	1481.977316	1397.063106	1633.135118	1261.507465	1334.539808	683.3761593
-2.55	-340.6765862	-435.2953483	-680.9093806	-276.1806	-295.679062	-278.391	-334.71559	-277.22834	-292.609138	-137.4702447
+2.55	1568.060283	1867.710337	1872.865343	1382.456355	1462.196435	1381.15906	1620.626977	1264.998748	1337.636704	683.4129059
-2.6	-391.3850621	-474.8199753	-680.9063274	-317.289082	-339.689819	-319.828492	-384.536792	-318.492773	-336.162948	-157.9321926
+2.6	1501.939316	1788.21966	1791.81133	1324.875284	1401.183784	1322.350933	1556.062579	1220.456926	1290.100192	661.2522216
-2.65	-442.0935379	-514.3446023	-680.9032742	-358.397564	-383.700576	-361.265984	-434.357994	-359.757206	-379.716758	-178.3941404
+2.65	1402.089198	1653.518778	1646.464	1226.835982	1298.20065	1226.747832	1441.089142	1127.575491	1191.240225	617.4646095
-2.7	-492.8020138	-553.8692293	-680.900221	-399.506046	-427.711332	-402.703476	-484.179196	-401.02164	-423.270568	-198.8560882
+2.7	1250.739578	1466.346726	1446.594316	1091.655942	1154.096148	1092.540666	1282.993777	987.1308544	1043.661782	554.4309702
-2.75	-543.5104896	-593.3938563	-680.8971678	-440.614529	-471.722089	-444.140967	-534.000398	-442.286073	-466.824378	-219.318036
+2.75	1053.909871	1234.034822	1189.202656	928.1247023	973.0467061	923.1350204	1081.225333	809.8499272	855.8279228	472.9720072
-2.8	-594.2189655	-638.4363365	-705.2503349	-481.723011	-515.732846	-485.578459	-583.8216	-483.550506	-510.378188	-239.7799839
+2.8	802.4287985	958.2034959	892.9334736	731.3227077	759.8814326	720.1011958	837.8785431	585.6742711	618.2955457	369.9164396
-2.85	-644.9274413	-722.1756789	-904.8675537	-522.831493	-559.743603	-527.015951	-633.642802	-524.81494	-553.931998	-260.2419317
+2.85	520.7335451	682.1556903	627.0860616	507.8107824	521.4140268	495.3708354	563.977202	380.312379	401.5791441	251.6521426
-2.9	-695.6359172	-849.7573629	-1246.643113	-563.939975	-603.75436	-568.453443	-683.464004	-566.079373	-597.485807	-280.7038795
+2.9	277.7569597	418.0711386	419.3307354	287.3828574	287.3828574	274.3670288	295.5194151	218.6581978	230.166524	164.3232381
-2.95	-746.344393	-1019.842148	-1685.325504	-605.048457	-647.765117	-609.890935	-733.285206	-607.343806	-641.039617	-301.1658274
+2.95	168.3804493	186.9047332	326.1134105	134.9042675	144.4284255	135.9840152	163.4964328	135.4159658	142.9289662	79.54398208
-3	-1076.473679	-1408.460263	-2182.85652	-843.485284	-904.698407	-852.193072	-1027.26945	-927.936438	-980.582978	-430.9559483
+3	219.6899189	232.7843704	254.926674	176.0128016	188.4391659	177.4215544	213.3176325	176.6803836	186.4827864	87.61120181
(Span 3) -4	-1.08E+03	-1408.460263	-2182.85652	-8.43E+02	-9.05E+02	-8.52E+02	-1.03E+03	-9.28E+02	-9.81E+02	-4.31E+02
+4	2.20E+02	232.7843704	254.926674	1.76E+02	1.88E+02	1.77E+02	2.13E+02	1.77E+02	1.86E+02	8.76E+01
-3.05	-1022.649996	-1248.524842	-1790.236318	-801.31102	-859.463487	-809.583418	-975.905979	-881.539617	-931.553829	-409.4081509
+3.05	208.7054228	227.3927426	355.1574484	167.2121616	179.0172075	168.5504767	202.6517508	167.8463645	177.1586474	83.23064189
-3.1	-968.8263132	-1113.776316	-1442.306997	-759.136757	-814.228566	-766.973765	-924.542506	-835.142795	-882.524681	-387.8603535
+3.1	238.4108935	375.4888011	469.9725416	241.0967236	241.0967236	217.6327482	230.2616182	183.1950867	192.8369334	140.7432924
-3.15	-915.0026303	-1009.147656	-1166.897739	-716.962493	-768.993646	-724.364111	-873.179032	-788.745974	-833.495533	-366.3125561
+3.15	432.3043251	601.5555062	669.3924743	421.4882853	429.847594	397.7729454	452.3574335	316.6444635	334.1829915	215.3951067
-3.2	-861.1789473	-940.1212043	-1043.597302	-674.788229	-723.758726	-681.754458	-821.815559	-742.349153	-784.466384	-344.7647587
+3.2	657.9567445	845.1856707	930.9602312	613.5050673	636.1852943	590.7847834	686.5648218	476.9401696	502.4253356	314.9527999
-3.25	-807.3552644	-881.3636284	-978.372472	-632.613966	-678.523805	-639.144804	-770.452085	-695.952332	-735.437236	-323.2169613
+3.25	867.6806729	1075.67031	1175.115964	788.2878276	823.2255242	769.0276946	901.2357546	665.3498581	702.0582907	404.23563
-3.3	-753.5315815	-822.6060525	-913.1476419	-590.439702	-633.288885	-596.535151	-719.088612	-649.555511	-686.408087	-301.6691639
+3.3	1065.782751	1278.979792	1380.580927	941.9942622	986.8840796	928.4177934	1091.533421	819.6823422	865.7857635	481.2517218
-3.35	-699.7078986	-763.8484766	-847.9228117	-548.265438	-588.053964	-553.925497	-667.725138	-603.15869	-637.378939	-280.1213665
+3.35	1231.832561	1451.61204	1551.736547	1071.060059	1124.072482	1065.154231	1252.964067	936.3804616	989.3594177	544.1610606
-3.4	-645.8842157	-705.0909007	-782.6979816	-506.091174	-542.819044	-511.315844	-616.361665	-556.761869	-588.34979	-258.5735691
+3.4	1361.4077	1590.323727	1688.540901	1174.322699	1242.901865	1175.719252	1381.377089	1031.025788	1088.795807	591.2743821
-3.45	-592.0605327	-646.3333248	-717.4731514	-463.916911	-497.584123	-468.70619	-564.998191	-510.365047	-539.320642	-237.0257717
+3.45	1450.461089	1692.130634	1779.808225	1258.975469	1330.917939	1256.878128	1473.150947	1083.860821	1145.388913	621.0539388
-3.5	-538.2368498	-587.5757489	-652.2483213	-421.742647	-452.349203	-426.096537	-513.634718	-463.968226	-490.291494	-215.4779743
+3.5	1495.316775	1754.306927	1822.243619	1312.55403	1384.955588	1305.679448	1525.598878	1091.638477	1154.408803	632.1117333
-3.55	-484.4131669	-528.818173	-587.0234911	-379.568383	-407.114283	-383.486883	-462.271244	-417.571405	-441.262345	-193.9301769
+3.55	1492.673148	1777.838648	1830.648887	1335.487844	1407.291711	1327.653257	1548.87423	1131.757424	1196.891808	642.2682424
-3.6	-430.589484	-470.060597	-521.798661	-337.39412	-361.879362	-340.87723	-410.907771	-371.174584	-392.233197	-172.3823795

+3.6	1467.710698	1772.341884	1825.254777	1330.667852	1405.75723	1327.379155	1556.093516	1152.086358	1217.470981	652.3543948
-3.65	-376.7658011	-411.3030211	-456.5738308	-295.219856	-316.644442	-298.267576	-359.544297	-324.777763	-343.204048	-150.8345821
+3.65	1463.163471	1722.422952	1768.902923	1288.657903	1364.631609	1290.211001	1519.205668	1131.344544	1194.459917	644.5082236
-3.7	-322.9421182	-352.5454452	-391.3490007	-253.045592	-271.409521	-255.657923	-308.180824	-278.380942	-294.1749	-129.2867848
+3.7	1412.506275	1626.148469	1665.261093	1227.118889	1290.006395	1214.701895	1435.519627	1077.636591	1138.788631	617.4095822
-3.75	-269.1184352	-293.7878693	-326.1241705	-210.871328	-226.174601	-213.048269	-256.81735	-231.984121	-245.145751	-107.7389874
+3.75	1312.646291	1481.843782	1532.221526	1129.157512	1189.104324	1105.000061	1303.790392	992.2443769	1047.219207	570.0769052
-3.8	-215.2947523	-235.0302934	-260.8993404	-168.697065	-180.939681	-170.438616	-205.453877	-185.5873	-196.116603	-86.19118996
+3.8	1160.863965	1288.092459	1344.049057	990.1174847	1044.306872	971.4309475	1131.482429	862.253872	908.5167393	501.8815868
-3.85	-161.4710694	-176.2727175	-195.6745102	-126.522801	-135.70476	-127.828962	-154.090403	-139.190478	-147.087455	-64.64339257
+3.85	955.795488	1043.737688	1098.7124	808.5437939	853.9932717	795.1181763	928.7038607	722.2670943	761.2699437	411.4266478
-3.9	-107.6473865	-117.5151416	-130.4496801	-84.3485372	-90.4698398	-85.219309	-102.72693	-92.7936572	-98.0583062	-43.09559517
+3.9	695.3721034	747.8794864	793.8402452	583.2605014	616.8433462	574.7838453	673.0785789	532.8639772	561.8053295	297.9861236
-3.95	-53.82370356	-58.75756568	-65.22484993	-42.1742735	-45.2349194	-42.6096555	-51.3634563	-46.3968361	-49.0291577	-21.54779778
+3.95	377.1901927	399.8790354	427.9766478	313.563851	331.8899477	309.4336123	363.2878559	292.8452921	308.8220721	160.9851544
-5	-2.41E-13	-1.69E-13	-2.58E-13	-1.51E-13	-1.64E-13	-1.18E-13	-1.12E-13	-1.46E-13	-1.54E-13	-8.19E-14
+5	2.64E-13	2.20E-13	2.38E-13	1.59E-13	1.59E-13	1.64E-13	1.82E-13	1.30E-13	1.37E-13	8.43E-14

3-Span: Moment (Max and Min) Raw Data Results - 60’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.75E-14	-9.34E-14	-9.96E-14	-7.98E-14	-8.95E-14	-9.82E-14	-1.02E-13	-1.03E-13	-9.89E-14
End Shear	1.48E-13	1.06E-13	1.22E-13	9.97E-14	1.42E-13	1.19E-13	1.01E-13	9.06E-14	9.11E-14
-0.05	-31.64096359	-39.93793592	-38.56520266	-33.75187912	-25.56749476	-34.69056217	-39.2820063	-43.8124491	-48.3155664
+0.05	229.735848	259.0672696	230.8538559	196.6190698	186.9544112	251.575887	278.4548202	293.1880116	305.2173404
-0.1	-63.28192718	-79.87587183	-77.13040532	-67.50375824	-51.13498953	-69.38112433	-78.5640126	-87.6248982	-96.6311328
+0.1	425.9962165	472.2207207	415.9458428	356.3532632	346.5731626	467.1166495	515.8492895	541.4255058	566.7998533
-0.15	-94.92289078	-119.8138077	-115.695608	-101.2556374	-76.70248429	-104.0716865	-117.846019	-131.437347	-144.946699
+0.15	588.7060904	641.6586115	562.9274605	484.6434679	479.507915	645.9332115	711.5574241	770.4766006	802.9502208
-0.2	-126.5638544	-159.7517437	-154.2608106	-135.0075165	-102.2699791	-138.7622487	-157.128025	-175.249796	-193.262266
+0.2	718.391618	768.1710846	671.0548906	581.7672998	585.8306316	788.8303647	866.5565574	954.9499203	1002.197097
-0.25	-158.204818	-199.6896796	-192.8260133	-168.7593956	-127.8374738	-173.4528108	-196.410032	-219.062245	-241.577832
+0.25	816.0665286	861.2175161	763.3312007	664.3513637	666.3210891	896.8688957	986.6239167	1094.980675	1169.120308
-0.3	-189.8457816	-239.6276155	-231.391216	-202.5112747	-153.4049686	-208.143373	-235.692038	-262.874695	-289.893399
+0.3	882.9589204	930.0430398	819.1393959	717.8753031	721.9307218	980.5156386	1086.450389	1192.003294	1288.954832
-0.35	-221.4867451	-279.5655514	-269.9564186	-236.2631538	-178.9724633	-242.8339352	-274.974044	-306.687144	-338.208965
+0.35	931.3053347	961.0532559	841.22417	744.7545746	753.7823276	1041.211756	1149.03468	1259.926867	1362.28764
-0.4	-253.1277087	-319.5034873	-308.5216213	-270.015033	-204.5399581	-277.5244973	-314.25605	-350.499593	-386.524531
+0.4	956.2952001	960.7180877	832.687055	747.3210726	763.1705203	1070.267081	1176.437692	1298.396076	1394.577635
-0.45	-284.7686723	-359.4414232	-347.0868239	-303.7669121	-230.1074529	-312.2150595	-353.538057	-394.312042	-434.840098
+0.45	953.7296505	935.4429625	849.9472697	747.4350008	751.5612447	1069.698477	1170.023066	1298.798413	1404.330935
-0.5	-316.4096359	-399.3793592	-385.6520266	-337.5187912	-255.6749476	-346.9056217	-392.820063	-438.124491	-483.155664
+0.5	938.5293329	904.4850413	837.6866692	746.2065642	743.2603904	1052.424476	1150.606618	1275.402695	1376.206102
-0.55	-348.0505995	-439.3172951	-424.2172293	-371.2706703	-281.2424424	-381.5961838	-432.102069	-481.93694	-531.471231
+0.55	905.8636375	904.0342741	799.7670963	716.8667682	725.5018352	1013.833056	1113.917567	1227.665819	1316.689228
-0.6	-379.6915631	-479.255231	-462.7824319	-405.0225494	-306.8099372	-416.286746	-471.384076	-525.749389	-579.786797
+0.6	848.3737485	867.6481391	748.9492259	662.7654293	686.5825232	948.6532545	1045.851003	1145.882095	1237.325324
-0.65	-411.3325267	-519.1931669	-501.3476346	-438.7744285	-332.3774319	-450.9773082	-510.666082	-569.561838	-628.102364
+0.65	768.8120378	803.735546	702.8608894	617.5306875	628.3205216	859.2845643	949.0629091	1034.986172	1121.533922
-0.7	-442.9734903	-559.1311028	-539.9128372	-472.5263077	-357.9449267	-485.6678703	-549.948088	-613.374287	-676.41793
+0.7	676.0136586	707.7133948	621.7462993	545.3021138	552.2637293	748.3585652	826.4757399	904.7067171	972.9030746
-0.75	-474.6144539	-599.0690387	-578.4780399	-506.2781868	-383.5124215	-520.3584325	-589.230095	-657.186736	-724.733496
+0.75	563.104311	578.7608747	508.3265098	446.2385869	460.2987503	618.7381518	681.2775874	747.0242804	795.5485464
-0.8	-506.2554175	-639.0069747	-617.0432426	-540.0300659	-409.0799162	-555.0489947	-628.512101	-700.999185	-773.049063
+0.8	432.7167124	430.399278	366.8812434	349.1339478	354.5523665	473.8310054	516.9226856	565.6412274	593.3526053
-0.85	-537.8963811	-678.9449106	-655.6084452	-593.8169906	-434.647411	-589.7395568	-667.794107	-744.811635	-821.364629
+0.85	287.6981497	279.7030971	227.7420257	274.5649089	237.3713443	316.0241152	337.1309677	364.7299727	371.4442618
-0.9	-569.5373447	-718.8828465	-694.1736479	-707.5290105	-460.2149057	-624.430119	-707.076114	-788.624084	-869.680196
+0.9	169.7884307	169.6871767	135.0650542	201.3342782	134.854759	177.8089289	177.9114362	187.558382	187.5233177
-0.95	-601.1783082	-758.8207824	-732.7388506	-866.7487362	-485.7824005	-659.1206812	-746.35812	-832.436533	-917.995762
+0.95	123.9787789	144.363985	131.2934171	142.0325115	100.6826374	136.9001355	154.0007875	171.3391352	187.9398126
-1	-632.8192582	-798.7587124	-771.7594048	-1048.97348	-511.3498947	-693.8112391	-785.640113	-876.248973	-966.311338
+1	130.5039736	151.9620898	138.2036002	120.109916	105.9817236	144.1054063	162.1060914	180.3569849	197.8313814
(Span 2) -2	-632.8192582	-798.7587124	-771.7594048	-1048.97348	-511.3498947	-693.8112391	-785.640113	-876.248973	-966.311338
+2	130.5039736	151.9620898	138.2036002	120.109916	105.9817236	144.1054063	162.1060914	180.3569849	197.8313814
-2.05	-448.6113234	-522.3738199	-491.4522733	-792.8037239	-364.3153406	-495.3661849	-557.244397	-619.982232	-680.050586
+2.05	100.024239	116.4707255	105.9255871	134.4194115	81.22926073	110.4490027	124.2455532	138.233878	151.6270581
-2.1	-418.131566	-486.8824564	-442.8005747	-568.3959876	-339.5628592	-461.7097873	-519.38384	-577.859113	-633.846275
+2.1	202.3484384	202.5393898	161.1882317	193.641918	157.1882791	220.219682	226.8731849	234.7758926	234.762596
-2.15	-387.6518087	-451.3910929	-410.5225662	-410.4014413	-314.8103778	-428.0533898	-481.523283	-535.735995	-587.641964
+2.15	346.3440699	333.665001	276.7105052	266.4071475	285.4959709	395.0224516	420.5816558	448.8197362	471.4704439
-2.2	-357.1720513	-415.8997295	-378.2445577	-331.4762756	-290.0578964	-394.3969922	-443.662726	-493.612876	-541.437653
+2.2	515.9905774	508.7553659	442.409668	384.0457179	423.2940216	577.9440183	631.0985935	684.0944257	732.3718882

-2.25	-326.6922939	-380.408366	-345.9665493	-303.778962	-265.305415	-360.7405947	-405.802169	-451.489757	-495.233342
+2.25	663.7194183	701.1768761	622.8476316	535.6925065	543.8750352	743.6001636	818.6203796	889.5171087	962.3420837
-2.3	-296.2125365	-344.9170025	-313.6885408	-284.5355584	-240.5529335	-327.0841971	-367.941612	-409.366638	-449.029032
+2.3	789.4536628	852.0589653	758.2614849	657.0232674	639.9030748	881.65551	973.5319898	1064.400455	1151.518576
-2.35	-265.7327791	-309.425639	-281.4105323	-265.3495877	-215.8004521	-293.4277996	-330.081055	-367.24352	-402.824721
+2.35	889.1265917	960.3213382	853.5711466	744.0479101	714.6322776	990.8255119	1094.463418	1204.056486	1301.396368
-2.4	-235.2530217	-273.9342755	-249.1325239	-246.8618111	-191.0479707	-259.771402	-292.220498	-325.120401	-356.62041
+2.4	959.2142881	1025.141941	926.7375576	810.1501582	767.5560341	1068.030949	1180.10055	1303.047921	1405.689487
-2.45	-204.7732643	-238.442912	-216.8545154	-241.9497645	-166.2954893	-226.1150045	-254.359941	-282.997282	-310.416099
+2.45	999.0343846	1050.478616	979.3358822	855.9511953	794.681275	1115.026182	1229.175537	1361.615102	1472.914252
-2.5	-174.2935069	-202.9515485	-184.5765302	-238.2924042	-141.5430079	-192.45863	-216.499384	-240.874163	-264.211852
+2.5	1009.880478	1042.722075	991.7613068	867.2439386	795.7449565	1127.544784	1238.24456	1377.438635	1496.30554
-2.55	-204.7731068	-238.4429177	-216.8545433	-241.9498589	-166.2953679	-226.1150336	-254.359829	-282.997191	-310.416176
+2.55	999.0065226	1050.462943	979.3207296	855.9559467	794.6698658	1115.005249	1229.161512	1361.59317	1472.919987
-2.6	-235.2528414	-273.934282	-249.1325563	-246.8618372	-191.0478308	-259.7714373	-292.220367	-325.120298	-356.620499
+2.6	959.2216524	1025.13946	926.7320597	810.1507098	767.5718232	1068.044028	1180.104757	1303.057445	1405.707959
-2.65	-265.7325759	-309.4256463	-281.4105693	-265.3497937	-215.8002936	-293.4278409	-330.080905	-367.243405	-402.824823
+2.65	889.1315294	960.3124031	853.5776197	744.0441856	714.6359826	990.8359484	1094.478716	1204.062829	1301.404007
-2.7	-296.2123105	-344.9170106	-313.6885824	-284.5357069	-240.5527565	-327.0842445	-367.941443	-409.366512	-449.029146
+2.7	789.4566872	852.0398072	758.2523075	657.0298069	639.9344307	881.6639297	973.5448559	1064.404325	1151.543799
-2.75	-326.6920451	-380.4083749	-345.9665954	-303.7789823	-265.3052194	-360.7406482	-405.801982	-451.489619	-495.233469
+2.75	663.716924	701.182495	622.8301427	535.6973349	543.9050264	743.6073016	818.6317455	889.5490358	962.365351
-2.8	-357.1717797	-415.8997393	-378.2446085	-331.4762193	-290.0576822	-394.3970518	-443.66252	-493.612725	-541.437793
+2.8	515.9871609	508.75846	442.4099988	384.0460196	423.3132697	577.9433136	631.1019754	684.1179878	732.3871257
-2.85	-387.6515143	-451.3911036	-410.5226215	-410.4015399	-314.8101451	-428.0534554	-481.523058	-535.735832	-587.642116
+2.85	346.3407503	333.6776438	276.712879	266.4031226	285.5053876	395.029478	420.592243	448.8362169	471.479219
-2.9	-418.1312488	-486.8824679	-442.8006345	-568.3961502	-339.562608	-461.7098591	-519.383596	-577.858939	-633.84644
+2.9	202.3563861	202.5465411	161.1935824	193.6395521	157.2095106	220.2187479	226.8819804	234.7800598	234.7667347
-2.95	-448.6109834	-522.3738322	-491.4523472	-792.8039594	-364.3150708	-495.3662627	-557.244134	-619.982046	-680.050763
+2.95	100.0243096	116.4707229	105.9255692	134.4175915	81.22932491	110.4489711	124.2456285	138.2339053	151.6270105
-3	-632.8198119	-798.7587013	-771.7595964	-1048.973741	-511.3503629	-693.8114392	-785.640668	-876.249446	-966.311477
+3	130.5040712	151.9620863	138.2035806	120.1099048	105.981803	144.1053803	162.1061717	180.3570356	197.8313281
(Span 3) -4	-6.33E+02	-7.99E+02	-7.72E+02	-1.05E+03	-5.11E+02	-6.94E+02	-7.86E+02	-8.76E+02	-9.66E+02
+4	1.31E+02	1.52E+02	1.38E+02	1.20E+02	1.06E+02	1.44E+02	1.62E+02	1.80E+02	1.98E+02
-3.05	-601.1788206	-758.820766	-732.7389707	-866.7488048	-485.7828448	-659.1208671	-746.358634	-832.436974	-917.995904
+3.05	123.9788675	144.363982	131.2934017	142.0248599	100.6827129	136.9001113	154.0008631	171.3391838	187.9397617
-3.1	-569.5378293	-718.8828306	-694.173762	-707.5289925	-460.2153266	-624.4302949	-707.0766	-788.624501	-869.68033
+3.1	169.7890834	169.6965014	134.9444881	201.3240796	134.8351095	177.8281591	177.9299111	187.5722672	187.5371078
-3.15	*-537.896838*	*-678.9448952*	*-655.6085534*	*-593.8171304*	*-434.6478084*	*-589.7397227*	*-667.794566*	*-744.812028*	*-821.364757*
+3.15	287.7056304	279.7134198	227.7464816	274.5548076	237.3946288	316.0205666	337.1243523	364.7420079	371.4375797
-3.2	-506.2558467	-639.0069234	-617.0433447	-540.0299616	-409.0802902	-555.0491506	-628.512532	-700.999555	-773.049184
+3.2	432.7240714	430.4051469	366.8837156	349.1233497	354.5264786	473.8339341	516.9164544	565.6509335	593.33567
-3.25	-474.6148555	-599.0690245	-578.4781361	-506.2780893	-383.5127721	-520.3585784	-589.230498	-657.187082	-724.73361
+3.25	563.1106167	578.7632509	508.3218976	446.23593	460.2719233	618.7350503	681.2707694	747.0327665	795.5305182
-3.3	-442.9738642	*-559.1310892*	-539.9129275	*-472.5262171*	-357.9452539	-485.6680062	-549.948464	-613.37461	-676.418037
+3.3	676.0181401	707.7077114	621.7382398	545.2974667	552.2355507	748.3542439	826.4672529	904.7129149	972.9180136
-3.35	-411.3328729	-519.1931538	-501.3477188	-438.7743448	-332.3777357	-450.977434	-510.66643	-569.562137	-628.102463
+3.35	768.8138996	803.7252501	702.8484081	617.5235992	628.2900833	859.2781696	949.051848	1034.989025	1121.545579
-3.4	-379.6918816	-479.2551924	-462.7825102	-405.0224725	-306.8102175	-416.2868619	-471.384396	-525.749664	-579.78689
+3.4	848.3694964	867.6368253	748.9319441	662.7758905	686.5990149	948.643888	1045.836227	1145.876762	1237.332524
-3.45	-348.0508904	-439.3172831	-424.2173015	-371.2706003	-281.2426993	-381.5962897	-432.102361	-481.937191	-531.471317
+3.45	905.8559406	904.0178469	799.7544605	716.8760122	725.5151267	1013.820069	1113.898551	1227.656049	1316.691103
-3.5	-316.4098991	-399.3793477	-385.6520929	-337.518728	-255.6751812	-346.9057175	-392.820327	-438.124719	-483.155743
+3.5	938.517612	904.4630956	837.6997395	746.2135576	743.2701515	1052.407137	1150.582555	1275.387618	1376.19876
-3.55	-284.7689078	-359.4413941	-347.0868842	-303.7668557	-230.107663	-312.2151453	-353.538293	-394.312246	-434.84017
+3.55	953.7427719	*935.42776759086*	*849.9313781*	747.439234	751.5528109	*1069.680188*	1170.012322	1298.779402	1404.33977

-3.6	**-253.1279165**	**-319.5034614**	**-308.5216756**	**-270.0149835**	**-204.5401448**	**-277.5245732**	**-314.256259**	**-350.499773**	**-386.524597**
+3.6	**956.3040008**	**960.7337535**	**832.6805046**	**747.3310504**	**763.1588456**	**1070.243995**	**1176.421841**	**1298.407046**	**1394.579709**
-3.65	**-221.4869252**	**-279.5655286**	**-269.9564669**	**-236.2631112**	**-178.9726266**	**-242.834001**	**-274.974225**	**-306.6873**	**-338.209023**
+3.65	**931.3093152**	**961.0673828**	**841.2138004**	**744.7627117**	**753.7669603**	**1041.220926**	**1149.013028**	**1259.931254**	**1362.280378**
-3.7	**-189.845934**	**-239.6276063**	**-231.3912583**	**-202.5112389**	**-153.4051085**	**-208.1434288**	**-235.692191**	**-262.874827**	**-289.89345**
+3.7	**882.95654**	**930.0517891**	*819.1507108*	**717.8815484**	**721.911103**	**980.518995**	**1086.459005**	**1191.999203**	**1288.939869**
-3.75	**-158.2049427**	**-199.6896709**	**-192.8260497**	**-168.7593667**	**-127.8375903**	**-173.4528566**	**-196.410157**	**-219.062355**	**-241.577876**
+3.75	**816.0588486**	**861.2202104**	**763.3373357**	**664.3546803**	**666.297141**	**896.8653087**	**986.6257426**	**1094.969428**	**1169.097433**
-3.8	**-126.5639514**	**-159.7517355**	**-154.260841**	**-135.0074944**	**-102.2700721**	**-138.7622845**	**-157.128123**	**-175.249882**	**-193.262303**
+3.8	**718.3782245**	**768.1661566**	**671.0544344**	**581.7668932**	**585.8018096**	**788.8204604**	**866.5506242**	**954.9310159**	**1002.201401**
-3.85	**-94.92296012**	**-119.8138002**	**-115.6956324**	**-101.2556221**	**-76.70255394**	**-104.0717123**	**-117.846089**	**-131.437409**	**-144.94673**
+3.85	**588.6866874**	**641.6467555**	**562.9211032**	**484.6545385**	**479.4742809**	**645.9166503**	**711.5441377**	**770.485595**	**802.9448007**
-3.9	**-63.28196885**	**-79.87586489**	**-77.13042373**	**-67.50374986**	**-51.13503576**	**-69.38114012**	**-78.564055**	**-87.6249363**	**-96.6311562**
+3.9	**425.9702806**	**472.2014577**	**415.9343275**	**356.3609066**	**346.5339684**	**467.093006**	**515.8283189**	**541.4259302**	**566.8020556**
-3.95	**-31.64097757**	**-39.93793214**	**-38.56521509**	**-33.75187759**	**-25.56751759**	**-34.69056795**	**-39.282021**	**-43.8124636**	**-48.3155828**
+3.95	**229.7423905**	**259.0753816**	**230.8615581**	**196.6234383**	**186.9598088**	**251.5830432**	**278.4628813**	**293.1796749**	**305.2100057**
-5	**-1.15E-13**	**-1.25E-13**	**-1.13E-13**	**-1.07E-13**	**-8.30E-14**	**-8.28E-14**	**-9.84E-14**	**-9.93E-14**	**-9.99E-14**
+5	**1.15E-13**	**1.13E-13**	**9.28E-14**	**1.04E-13**	**8.05E-14**	**1.27E-13**	**1.32E-13**	**1.41E-13**	**1.49E-13**

3-Span: Moment (Max and Min) Raw Data Results - 60' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.32E-13	-1.90E-13	-1.09E-13	-1.16E-13	-1.27E-13
End Shear	1.50E-13	1.92E-13	1.54E-13	1.69E-13	1.41E-13
-0.05	-71.79052451	-77.40763854	-46.6390226	-57.2930342	-60.1322661
+0.05	404.3900789	408.8498417	292.2572572	355.8297699	362.0746882
-0.1	-143.581049	-154.8152771	-93.2780451	-114.586068	-120.264532
+0.1	728.0147332	737.6305163	529.9465136	646.9024589	655.5957885
-0.15	-215.3715735	-232.2229156	-139.917068	-171.879103	-180.396798
+0.15	997.2419021	1010.999149	716.1178934	874.3360746	882.0985241
-0.2	-287.162098	-309.6305542	-186.55609	-229.172137	-240.529065
+0.2	1212.918551	1249.261405	868.8043303	1069.588525	1081.745888
-0.25	-358.9526225	-387.0381927	-233.195113	-286.465171	-300.661331
+0.25	1365.891826	1438.166872	996.7676752	1211.688847	1229.498517
-0.3	-430.7431471	-464.4458312	-279.834135	-343.758205	-360.793597
+0.3	1465.241477	1578.189412	1076.579236	1298.07333	1345.609889
-0.35	-502.5336716	-541.8534698	-326.473158	-401.05124	-420.925863
+0.35	1546.678493	1674.967152	1119.769446	1334.521457	1403.782871
-0.4	-574.3241961	-619.2611083	-373.112181	-458.344274	-481.058129
+0.4	1588.435175	1725.584173	1134.225505	1341.966289	1406.653435
-0.45	-646.1147206	-696.6687469	-419.751203	-515.637308	-541.190395
+0.45	1608.046926	1718.495424	1107.832655	1316.092252	1377.191054
-0.5	-717.9052451	-774.0763854	-466.390226	-572.930342	-601.322661
+0.5	1560.323054	1681.430957	1045.951795	1266.748268	1304.87641
-0.55	-789.6957696	-851.4840239	-513.029248	-630.223376	-661.454928
+0.55	1517.931647	1614.357566	1050.597888	1257.225581	1304.124236
-0.6	-861.4862941	-928.8916625	-559.668271	-687.516411	-721.587194
+0.6	1406.063273	1518.595784	1013.146248	1203.485841	1258.596843
-0.65	-933.2768186	-1006.299301	-606.307293	-744.809445	-781.71946
+0.65	1270.248728	1370.397723	931.5135536	1117.447662	1168.8428
-0.7	-1005.067343	-1083.70694	-652.946316	-802.102479	-841.851726
+0.7	1102.72637	1173.297722	825.8721355	990.0006957	1023.408535
-0.75	-1076.857868	-1161.114578	-699.585339	-859.395513	-901.983992
+0.75	902.6392174	934.5496566	678.5377968	815.9085579	825.6625222
-0.8	-1148.648392	-1238.522217	-746.224361	-916.688548	-962.116258
+0.8	646.2990187	647.7074413	493.532304	594.8425491	595.6063973
-0.85	-1220.438917	-1315.929855	-792.863384	-973.981582	-1022.24852
+0.85	375.9800517	360.308982	338.1811974	371.3232117	388.0671498
-0.9	-1292.229441	-1393.337494	-839.502406	-1031.27462	-1082.38079
+0.9	232.0197613	244.9726949	194.4744329	206.7538802	206.5591997
-0.95	-1364.019966	-1470.745132	-886.141429	-1088.56765	-1142.51306
+0.95	244.909748	258.5822891	163.5095309	203.9319708	209.6897588
-1	-1435.810498	-1550.565145	-932.780443	-1145.86068	-1202.64535
+1	257.7997369	272.1918832	172.1152923	214.6652343	220.7260622
(Span 2) -2	-1435.810498	-1550.565145	-932.780443	-1145.86068	-1202.64535
+2	257.7997369	272.1918832	172.1152923	214.6652343	220.7260622
-2.05	-886.1626665	-990.2538728	-601.418967	-737.917223	-761.587513
+2.05	197.5895595	208.6203619	131.9170644	164.5292954	169.1745924
-2.1	-825.9545936	-872.095446	-551.452907	-687.78131	-707.20012
+2.1	261.4629591	242.3825376	232.1692666	265.2693253	265.3142259
-2.15	-765.7465206	-808.523929	-511.254672	-637.645398	-655.64867
+2.15	469.8565883	464.2434956	406.1220125	459.7096413	481.9960639
-2.2	-705.5384476	-744.952412	-471.056437	-587.509485	-604.09722
+2.2	777.7892207	810.4133581	599.2176489	715.5386662	723.8733917

-2.25	**-645.3303746**	**-681.380895**	**-430.858202**	**-537.373572**	**-552.54577**
+2.25	**1103.804901**	**1194.004691**	**825.8901225**	**987.9357189**	**1022.956123**
-2.3	**-585.1223017**	**-617.809378**	**-390.659968**	**-487.237659**	**-500.994319**
+2.3	**1386.907683**	**1504.620088**	**1001.758296**	**1197.018648**	**1257.60236**
-2.35	**-524.9142287**	**-554.237861**	**-350.461733**	**-437.101747**	**-449.442869**
+2.35	**1596.362307**	**1746.730159**	**1134.074711**	**1346.999075**	**1427.151812**
-2.4	**-464.7061557**	**-490.666344**	**-310.263498**	**-386.965834**	**-397.891419**
+2.4	**1757.567095**	**1903.561227**	**1222.874572**	**1442.97473**	**1533.798144**
-2.45	**-404.4980828**	**-427.094827**	**-270.065263**	**-336.829921**	**-346.339969**
+2.45	**1855.392022**	**1987.350248**	**1260.736851**	**1484.236041**	**1574.503345**
-2.5	**-344.3020374**	**-363.52331**	**-229.867028**	**-286.694155**	**-294.788636**
+2.5	**1872.208743**	**2031.504489**	**1250.829206**	**1467.272875**	**1566.719987**
-2.55	**-404.5122149**	**-427.0948517**	**-270.065215**	**-336.830094**	**-346.340106**
+2.55	**1855.403802**	**1985.734415**	**1260.709315**	**1484.212211**	**1574.500723**
-2.6	**-464.7223923**	**-490.6663731**	**-310.263443**	**-386.966033**	**-397.891576**
+2.6	**1757.566304**	**1902.079585**	**1222.866444**	**1442.966432**	**1533.791083**
-2.65	**-524.9325697**	**-554.2378944**	**-350.461671**	**-437.101972**	**-449.443046**
+2.65	**1596.365118**	**1746.728582**	**1134.078022**	**1346.994125**	**1427.152898**
-2.7	**-585.1427472**	**-617.8094158**	**-390.659899**	**-487.237911**	**-500.994515**
+2.7	**1386.924683**	**1504.621525**	**1001.760689**	**1197.015244**	**1257.618957**
-2.75	**-645.3529246**	**-681.3809372**	**-430.858127**	**-537.37385**	**-552.545985**
+2.75	**1103.798495**	**1194.002731**	**825.9202679**	**987.9556966**	**1022.96861**
-2.8	**-705.563102**	**-744.9524585**	**-471.056355**	**-587.509789**	**-604.097455**
+2.8	**777.7772113**	**810.4105025**	**599.2375571**	**715.5481915**	**723.8761679**
-2.85	**-765.7732795**	**-808.5239799**	**-511.254582**	**-637.645728**	**-655.648925**
+2.85	**469.8562994**	**464.243447**	**406.1170261**	**459.7174033**	**481.9942999**
-2.9	**-825.9834569**	**-872.0955012**	**-551.45281**	**-687.781667**	**-707.200395**
+2.9	**261.4530457**	**242.38105**	**232.1774625**	**265.2796938**	**265.3244411**
-2.95	**-886.1936343**	**-990.2538599**	**-601.418683**	**-737.917606**	**-761.588468**
+2.95	**197.5826469**	**208.620343**	**131.9170857**	**164.5292066**	**169.1745322**
-3	**-1435.810599**	**-1550.660159**	**-932.780421**	**-1145.86136**	**-1202.64608**
+3	**257.7907268**	**272.1918646**	**172.115322**	**214.6651223**	**220.7259779**
(Span 3) -4	**-1.44E+03**	**-1.55E+03**	**-9.33E+02**	**-1.15E+03**	**-1.20E+03**
+4	**2.58E+02**	**2.72E+02**	**1.72E+02**	**2.15E+02**	**2.21E+02**
-3.05	**-1364.02007**	**-1470.745136**	**-886.1414**	**-1088.5683**	**-1142.51378**
+3.05	**244.9011906**	**258.5822713**	**163.5095558**	**203.9318662**	**209.689679**
-3.1	**-1292.22954**	**-1393.337498**	**-839.502378**	**-1031.27523**	**-1082.38147**
+3.1	**232.0116544**	**244.9726781**	**194.4850037**	**206.7651104**	**206.552418**
-3.15	***-1220.439011***	***-1315.92986***	***-792.863357***	***-973.982159***	***-1022.24917***
+3.15	**378.2153713**	**360.8512756**	**338.1897721**	**371.3182963**	**388.0593152**
-3.2	**-1148.648481**	**-1238.522223**	**-746.224335**	**-916.68909**	**-962.116868**
+3.2	**646.2831263**	**647.709234**	**493.5482366**	**594.8317477**	**595.595505**
-3.25	**-1076.857951**	**-1161.114585**	**-699.585314**	**-859.396021**	**-901.984565**
+3.25	**902.6183661**	**934.5520325**	**678.5504932**	**815.8932752**	**825.654975**
-3.3	**-1005.067422**	**-1083.706947**	**-652.946293**	**-802.102953**	**-841.852262**
+3.3	**1102.698549**	**1173.299704**	**825.8801904**	**989.9796118**	**1023.395555**
-3.35	**-933.2768923**	**-1006.299309**	**-606.307271**	**-744.809884**	**-781.71996**
+3.35	**1270.261317**	**1370.395129**	**931.5159831**	**1117.458595**	**1168.857169**
-3.4	**-861.4863627**	**-928.8916715**	**-559.66825**	**-687.516816**	**-721.587657**
+3.4	**1407.13499**	**1518.59291**	**1013.138622**	**1203.489765**	**1258.603036**
-3.45	**-789.6958331**	**-851.4840337**	**-513.029228**	**-630.223747**	**-661.455354**
+3.45	**1517.946878**	**1614.355178**	**1050.583678**	**1257.218675**	**1304.117727**
-3.5	**-717.9053035**	**-774.0763959**	**-466.390207**	**-572.930678**	**-601.323051**
+3.5	**1560.328736**	**1681.427663**	**1045.960077**	**1266.733394**	**1304.880208**
-3.55	**-646.1147739**	**-696.6687581**	**-419.751185**	**-515.63761**	**-541.190748**
+3.55	**1608.0313**	**1718.491874**	**1107.847359**	**1316.103176**	**1377.198516**
-3.6	**-574.3242443**	**-619.2611204**	**-373.112164**	**-458.344541**	**-481.058446**

+3.6	**1588.409898**	**1725.635565**	**1134.235177**	**1341.971038**	**1406.649729**
-3.65	**-502.5337147**	**-541.8534826**	**-326.473142**	**-401.051473**	**-420.926143**
+3.65	**1546.66191**	**1675.998174**	**1119.773029**	**1334.516221**	**1403.771783**
-3.7	**-430.7431851**	**-464.4458448**	**-279.834121**	**-343.758404**	**-360.79384**
+3.7	**1466.308842**	**1578.187897**	**1076.573612**	**1298.064492**	**1345.590418**
-3.75	**-358.9526555**	**-387.038207**	**-233.195099**	**-286.465335**	**-300.661537**
+3.75	**1366.629234**	**1438.164317**	**996.7551243**	**1211.671562**	**1229.504437**
-3.8	**-287.1621259**	**-309.6305693**	**-186.556078**	**-229.172267**	**-240.529234**
+3.8	**1212.937665**	**1249.259869**	**868.7840349**	**1069.597322**	**1081.757026**
-3.85	**-215.3715963**	**-232.2229315**	**-139.917056**	**-171.879198**	**-180.396932**
+3.85	**997.2490861**	**1010.99528**	**716.1053866**	**874.3336693**	**882.0978559**
-3.9	**-143.5810668**	**-154.8152937**	**-93.2780349**	**-114.58613**	**-120.264629**
+3.9	**728.0075439**	**737.6285004**	**529.9251687**	**646.889491**	**655.5843791**
-3.95	**-71.79053716**	**-77.40765595**	**-46.6390134**	**-57.293061**	**-60.132326**
+3.95	**404.4042013**	**408.8457123**	**292.2667934**	**355.8413104**	**362.0866519**
-5	**-1.74E-13**	**-1.62E-13**	**-1.09E-13**	**-1.67E-13**	**-1.52E-13**
+5	**1.66E-13**	**1.92E-13**	**1.37E-13**	**1.65E-13**	**1.66E-13**

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.708283262	-5.469011078	-6.903108792	-6.665837466	-6.109290433	-4.419236845	-5.996121712	-6.789734044	-7.572802539	-8.351147943
End Shear	58.51747465	42.91200857	49.09800219	44.23229873	38.71899908	34.89566398	46.9606216	52.08620334	54.89244509	57.39255951
-0.05	-7.708283262	-5.469011078	-6.903108792	-6.665837466	-6.529377539	-4.419236845	-5.996121712	-6.789734044	-7.572802539	-8.351147943
+0.05	53.97119605	39.70890123	44.77871742	39.90214431	35.03902229	32.31430494	43.48386259	48.1297762	50.50661497	52.57184987
-0.1	-7.708283262	-5.469011078	-6.903108792	-6.665837466	-7.589242261	-4.419236845	-5.996121712	-6.789734044	-7.572802539	-8.351147943
+0.1	49.04764636	36.24559613	40.10744568	35.30587069	30.99499714	29.53016482	39.72445111	43.84819221	45.76286677	47.36142115
-0.15	-7.708283262	-5.469011078	-6.903108792	-6.665837466	-8.295163443	-4.419236845	-5.996121712	-6.789734044	-7.572802539	-8.351147943
+0.15	45.58131959	33.80095454	36.85072243	32.33286883	28.36882805	27.56331842	37.06900225	40.82893081	42.42724762	43.70853414
-0.2	-7.795480728	-7.135207205	-7.136998872	-6.665837466	-9.446315194	-5.34695373	-7.539853966	-7.540279118	-7.572802539	-8.351147943
+0.2	40.81560732	30.43066825	32.41987228	28.29824364	24.82147063	24.84941572	33.40548031	36.6707387	37.84711527	38.70856705
-0.25	-9.680207779	-8.899199911	-8.901348308	-7.443629602	-10.595327	-6.613429402	-9.649941174	-10.05291178	-10.04455076	-10.03648256
+0.25	37.48428434	28.06791455	29.50810581	25.51741459	22.3879905	22.94509242	30.83520694	33.7587713	34.64983141	35.22995807
-0.3	-14.16142171	-11.34156201	-11.34419099	-9.660467189	-12.69405437	-9.408595545	-12.60957664	-13.54736336	-13.5392358	-13.53139301
+0.3	33.03439331	24.83389657	25.37400771	21.7812743	19.19350067	20.33601897	27.31428231	29.77760483	30.44615914	30.67265379
-0.35	-17.33408233	-13.49994962	-13.0644805	-11.19337458	-14.23560873	-11.38608957	-15.23771367	-16.01508581	-16.0071449	-15.99948383
+0.35	29.87791407	22.58392213	22.54968549	19.245265	17.05838226	18.51892882	24.8625439	27.14766955	27.4259214	27.42373715
-0.4	-21.72169677	-16.91907865	-15.43894645	-13.56506444	-17.02557591	-14.11877778	-18.93186603	-19.89490598	-19.86555465	-19.85637589
+0.4	25.60815092	19.63624847	18.99101808	16.20395787	14.48960625	16.13572464	21.64751452	23.39176856	23.34682042	23.34458538
-0.45	-24.80771716	-19.32393571	-17.25369449	-15.69401281	-18.94578612	-16.03928976	-21.52854251	-22.89268037	-22.83814967	-22.82920869
+0.45	22.67550682	17.52661258	16.5707957	14.34689879	12.89611003	14.42797616	19.34414266	20.80506042	20.74337736	20.74144668
-0.5	-29.36250164	-22.62698988	-20.54772646	-18.62319482	-21.53487421	-18.67490518	-25.0927548	-27.01455967	-26.93186521	-26.92180125
+0.5	18.7503625	14.68975861	13.44583993	11.91544988	10.80934627	12.12833523	16.24310221	17.33232997	17.2919262	17.28996264
-0.55	-32.72924878	-24.93348745	-23.62045424	-20.67236921	-23.4896421	-20.51372556	-27.57993186	-29.89613937	-30.21863613	-30.20886702
+0.55	16.16326753	12.7540415	11.60111331	10.26208254	9.320619314	10.55672265	14.12429386	14.96703838	14.9405594	14.93859038
-0.6	-37.33164081	-28.07721941	-27.87028616	-23.69804776	-26.26545154	-23.01767374	-30.96749593	-33.82853507	-34.7186428	-35.0600241
+0.6	12.85830244	10.09393761	9.513200266	8.07416728	7.49582115	8.46497148	11.27569079	11.72354504	11.71523611	11.71822799
-0.65	-40.52922825	-30.25447048	-30.84012434	-26.250821	-28.5078538	-24.7500915	-33.31181714	-36.55561182	-37.85031468	-38.62229465
+0.65	10.63375454	8.36765835	8.154775686	6.608358618	6.30642625	7.054202934	9.312060752	9.738201633	9.736437383	9.808397467
-0.7	-44.8636453	-33.19562893	-35.03975463	-30.44758926	-32.03925921	-27.08778045	-36.47602525	-40.2448813	-42.10311287	-43.47681702
+0.7	7.755564765	6.35776033	6.352899001	5.051472025	5.026174402	5.142046109	6.89206399	7.321236249	7.319510476	7.386094453
-0.75	-47.84756075	-35.21273535	-38.25429507	-33.47249213	-34.56315475	-28.68908679	-38.64412499	-42.77914411	-45.03673134	-46.8382671
+0.75	5.830653629	5.147196637	5.142349962	4.088543104	4.220147734	3.920987811	5.489010748	5.710274803	5.708586917	5.771081481
-0.8	-51.85166867	-37.90807179	-42.61852626	-37.58906288	-37.97315091	-30.82592188	-41.53827	-46.17166109	-48.9821913	-51.37811303
+0.8	4.031540394	3.567483722	3.562733394	2.832067957	3.166637531	2.768609687	3.665786508	3.668892888	3.685452145	3.666119065
-0.85	-54.57739886	-39.73414766	-45.62792381	-40.43505122	-40.3202481	-32.2714042	-43.49678583	-48.47479997	-51.67480352	-54.49084555
+0.85	3.028026104	2.490409536	2.521822457	2.004121917	2.497498928	2.080445884	2.470359882	2.473184948	2.47183535	2.470531204
-0.9	-58.18887944	-42.14040984	-49.67327753	-44.38635404	-43.62369947	-34.17279418	-46.07415984	-51.51692368	-55.25279718	-58.64895696
+0.9	1.737467885	1.167325221	1.313301266	1.194396309	1.690975842	1.173430435	1.245401485	1.400968733	1.558698336	1.709717239
-0.95	-60.61189878	-43.74455999	-52.43227783	-47.48111645	-46.11814444	-35.4377449	-47.78972935	-53.55062918	-57.66146227	-61.46507218
+0.95	1.573122411	1.127853926	1.313301266	1.194396309	1.318620813	0.915925361	1.245401485	1.400968733	1.558698336	1.709717239
-1	-63.76843408	-45.81850368	-56.09539964	-51.8331087	-49.76513053	-37.06909257	-50.00362439	-56.18872856	-60.81185894	-65.1743861
+1	1.57E+00	1.127853926	1.313301266	1.194396309	1.08E+00	0.915925361	1.245401485	1.400968733	1.558698336	1.709717239
(Span 2) -2	-5.652448253	-4.052536458	-4.718874682	-4.291632668	-3.898399704	-3.291047628	-4.474901263	-5.033876229	-5.600620503	-6.14325248
+2	64.38508068	46.07536329	57.89483201	55.53351799	51.66513194	37.22272652	50.22410798	56.57614136	61.48397286	66.22373739
-2.05	-5.652448253	-4.052536458	-4.718874682	-4.291632668	-4.209075479	-3.291047628	-4.474901263	-5.033876229	-5.600620503	-6.14325248
+2.05	61.58038262	44.2222713	54.75962797	51.97847556	48.51933387	35.76079709	48.23905011	54.21952332	58.67964948	62.94226887
-2.1	-5.652448253	-4.052536458	-4.718874682	-4.291632668	-4.959148832	-3.291047628	-4.474901263	-5.033876229	-5.600620503	-6.14325248
+2.1	58.09733661	41.89501095	50.97877247	47.78361818	44.96714116	33.91810879	45.73944014	51.27493806	55.21943119	58.93661505
-2.15	-5.652448253	-4.052536458	-4.718874682	-4.291632668	-5.854709603	-3.291047628	-4.474901263	-5.033876229	-5.600620503	-6.14325248
+2.15	54.36259898	39.37513725	47.03208854	43.49731376	41.30591439	31.91667515	43.02671942	48.10048995	51.5297159	54.70627381
-2.2	-5.652448253	-4.720006259	-4.726715591	-4.291632668	-6.745151593	-3.668358614	-5.089119851	-5.312643551	-5.600620503	-6.14325248
+2.2	50.42261144	36.69479572	42.96665319	38.963399	37.56128575	29.78221135	40.13559336	44.73601844	47.65518931	50.30107316
-2.25	-7.849327968	-6.252011063	-6.25952644	-5.03648033	-7.529319592	-5.219209145	-6.949180622	-7.362736857	-7.359256496	-7.355901594

+2.25	46.84325234	34.24311754	39.29394078	35.12475624	34.23606912	27.82562963	37.48679211	41.66756346	44.14849641	46.34224602
-2.3	-10.89633713	-8.594792164	-8.211284446	-6.843102069	-8.865633464	-7.150545	-9.552889245	-9.967888321	-9.960544447	-9.956549196
+2.3	42.64357172	31.34849938	34.92782263	30.86761864	30.53804726	25.51100568	34.35469787	38.05422493	40.04787184	41.7434828
-2.35	-14.18229172	-11.14494115	-10.19670835	-9.017080187	-10.89001222	-9.226773745	-12.35344896	-13.08268938	-13.05770652	-13.05354
+2.35	38.37214653	28.38580388	30.785918	27.03115861	27.20051455	23.13724109	31.14397712	34.36544498	35.84645253	36.99959191
-2.4	-17.85140327	-13.84994702	-12.86887781	-11.33795471	-13.04336918	-11.42219249	-15.31615386	-16.39853145	-16.3532196	-16.34894874
+2.4	34.07540991	25.24589666	26.71064054	23.30027907	23.96404403	20.7300506	27.79154153	30.40804434	31.5355878	32.24781558
-2.45	-21.7940295	-16.67768178	-16.10995185	-13.7774256	-15.45026745	-13.71109682	-18.40629715	-19.87555524	-19.83596934	-19.83108151
+2.45	29.65712262	22.19772438	22.74906645	19.69322554	20.89483853	18.16457419	24.42203804	26.68962629	27.33037561	27.67653606
-2.5	-25.89360384	-19.59600085	-19.54181161	-16.69167692	-18.22653127	-16.06778777	-21.58917373	-23.47390919	-23.78047164	-23.80447966
+2.5	25.45535048	19.22650885	19.10291787	16.31667314	17.88033855	15.7696698	21.18650218	23.01781849	23.27884142	23.27394559
-2.55	-29.57307185	-22.19858179	-22.75007679	-19.6940882	-20.89531781	-18.16528283	-24.42297752	-26.69066625	-27.33151176	-27.6777707
+2.55	21.87204807	16.67685637	16.10908266	13.77681197	15.44986166	13.71041165	18.40538966	19.87455912	19.83489664	19.83001621
-2.6	-33.84210629	-25.20647483	-26.71168693	-23.3011782	-23.96452732	-20.73076186	-27.75306055	-30.40909928	-31.51892673	-32.23150138
+2.6	17.92514787	13.84915171	12.86805752	11.33736664	13.04299693	11.42153071	15.31527839	16.39756863	16.35228224	16.34801784
-2.65	-38.13495648	-28.38666077	-30.7869885	-27.03208275	-27.20103533	-23.13794621	-31.14491871	-34.36648846	-35.82990786	-36.98328813
+2.65	14.25313672	11.14418697	10.19606527	9.016521825	10.8896856	9.226143725	12.3526163	13.08179109	13.05682573	13.05265309
-2.7	-42.40530086	-31.34934144	-34.92889597	-30.86864795	-30.57352341	-25.5116976	-34.3556221	-38.05525382	-40.04901869	-41.74475563
+2.7	10.96143099	8.594087298	8.210789018	6.842591761	8.881006616	7.149951147	9.552108797	9.967046392	9.959718402	9.955728848
-2.75	-46.08699139	-33.88693321	-38.70252049	-34.58933502	-33.76086648	-27.54108967	-37.1016675	-41.22238896	-43.64166043	-45.77209181
+2.75	8.275479979	6.515056654	6.4862414	5.217350745	7.656181947	5.451275913	7.261970537	7.667872325	7.664379947	7.661009615
-2.8	-50.44241448	-36.69558602	-42.96772273	-38.93711391	-37.56185635	-29.78285828	-40.13645776	-44.73698899	-47.65628705	-50.30230764
+2.8	5.652535152	4.719519837	4.726280791	4.29163206	6.745010723	3.667862207	5.088559047	5.312013835	5.600622077	6.143250823
-2.85	-54.37891753	-39.37588732	-47.03313384	-43.48469857	-41.30646623	-31.9172882	-43.02753814	-48.10141324	-51.53076903	-54.70746755
+2.85	5.652535152	4.05253949	4.718874572	4.29163206	5.854559865	3.291050095	4.474900454	5.033878724	5.600622077	6.143250823
-2.9	-58.1105678	-41.89571062	-50.97977391	-47.78465952	-44.96767945	-33.91867452	-45.74020286	-51.27580332	-55.22042736	-58.93776205
+2.9	5.652535152	4.05253949	4.718874572	4.29163206	4.958990053	3.291050095	4.474900454	5.033878724	5.600622077	6.143250823
-2.95	-61.59106411	-44.22291521	-54.76058104	-51.97949658	-48.51984352	-35.76131674	-48.23974592	-54.22031915	-58.68057689	-62.94333981
+2.95	5.652535152	4.05253949	4.718874572	4.29163206	4.208997368	3.291050095	4.474900454	5.033878724	5.600622077	6.143250823
-3	-64.77407761	-46.32535695	-58.32846942	-56.03141395	-52.10565569	-37.41950548	-50.49146158	-56.89510143	-61.86655753	-66.67440364
+3	5.652535152	4.05253949	4.718874572	4.29163206	3.898399357	3.291050095	4.474900454	5.033878724	5.600622077	6.143250823
(Span 3) -4	-1.57E+00	-1.12785477	-1.313301235	-1.19439614	-1.08E+00	-0.915926048	-1.24540126	-1.400969428	-1.558698774	-1.709716777
+4	63.30522374	45.53431354	55.58596739	51.22363751	49.24905964	36.8458571	49.70058175	55.8265551	60.37732565	64.66073744
-3.05	-1.57E+00	-1.12785477	-1.313301235	-1.19439614	-1.27E+00	-0.915926048	-1.24540126	-1.400969428	-1.558698774	-1.709716777
+3.05	61.04828095	44.05266462	52.96909861	48.11468577	46.64330317	35.68039994	48.11893834	53.94187786	58.12668134	62.01083376
-3.1	-1.913269343	-1.347091964	-1.375214949	-1.19439614	-1.792175517	-1.294005498	-1.300642203	-1.400969428	-1.558698774	-1.709716777
+3.1	57.65390801	41.80709088	49.10687777	43.84920955	43.18200781	33.90965896	45.71740051	51.09498715	54.75489551	58.06865876
-3.15	-2.835226687	-2.292343796	-2.323180235	-1.846105868	-2.374862708	-1.948596586	-2.242949422	-2.245706818	-2.244359063	-2.243066319
+3.15	55.07225275	40.08807569	46.21697384	40.99294551	40.78022335	32.55131171	43.87613434	48.92171439	52.19883304	55.09817968
-3.2	-4.239945	-3.78510366	-3.780288172	-3.005097816	-3.31176697	-2.911926089	-3.916359289	-3.919503115	-3.937102331	-3.916696675
+3.2	51.25444514	37.53181401	42.00420676	37.00893923	37.49426939	30.5278337	41.13448172	45.69762559	48.42952652	50.7407526
-3.25	-5.415894715	-4.913651531	-4.90876106	-3.902720261	-4.064379445	-3.687363508	-5.218877488	-5.400871458	-5.399182568	-5.397559357
+3.25	48.39259619	35.60632553	38.88654051	34.06819362	35.05852039	29.00131492	39.06695693	43.27409614	45.61099541	47.49763329
-3.3	-8.102200018	-6.608272911	-6.603362934	-5.250679644	-5.192689562	-5.396663042	-7.182957598	-7.655984712	-7.654243842	-7.721615489
+3.3	44.2136797	32.78262552	34.38658465	29.83371514	31.52502948	26.7596949	36.03189673	39.72644496	41.50429805	42.79201396
-3.35	-10.17731167	-8.034357903	-7.89058961	-6.32594177	-6.076846903	-6.71387774	-8.945638191	-9.382650368	-9.380876959	-9.452083659
+3.35	41.11615245	30.68155684	31.425565	26.75417478	28.94688425	25.08971355	33.77147593	37.09095532	38.46624917	39.32413637
-3.4	-13.28670427	-10.4509093	-9.792204212	-8.377846457	-7.741800597	-8.756347644	-11.66808646	-12.15826889	-12.14757291	-12.15154038
+3.4	36.6384456	27.63366687	27.26815453	23.18061269	25.80743122	22.66454235	30.48971537	33.27337515	34.08227077	34.33736085
-3.45	-15.64423915	-12.37737418	-11.24315057	-9.940871705	-9.015209227	-10.25066489	-13.71170371	-14.44031181	-14.48338102	-14.48139515
+3.45	33.34975719	25.38790847	24.23227258	21.07661417	23.87341159	20.87580873	28.06976003	30.46421635	30.8676506	30.85796699
-3.5	-19.26123968	-15.08712896	-13.82550891	-12.25535114	-11.09948804	-12.45071974	-16.677773	-17.81831612	-17.77498256	-17.77302165
+3.5	28.63558667	22.15907813	20.07596968	18.20800816	21.17153365	18.30168219	24.58800675	26.43034055	26.3457271	26.33709298
-3.55	-22.06183718	-17.11369632	-16.10062137	-13.99232451	-12.59239042	-14.09352263	-18.89306114	-20.29915458	-20.2406093	-20.23866533
+3.55	25.37780101	19.79952406	17.69942361	16.11553577	19.32220608	16.41890612	22.04188099	23.48585879	23.42633309	23.41744801
-3.6	-26.1622554	-20.06692981	-19.4886054	-16.62903235	-14.84828242	-16.48416091	-22.11751091	-23.92022861	-23.91950923	-23.91725431
+3.6	21.05692207	16.43300204	15.09509269	13.13525465	16.6338205	13.73041712	18.40684216	19.28932159	19.26503438	19.25583356

-3.65	**-29.20889277**	**-22.25196524**	**-22.03081983**	**-18.80166307**	**-16.68333051**	**-18.1614555**	**-24.38023186**	**-26.60331205**	**-26.83349291**	**-26.83129022**
+3.65	**17.92214931**	**13.99052774**	**13.40497885**	**11.4941238**	**14.64100809**	**11.77830759**	**15.76790729**	**16.50414327**	**16.49625912**	**16.48862978**
-3.7	**-33.62260119**	**-25.29120002**	**-25.95369436**	**-22.30417881**	**-19.63983422**	**-20.7051614**	**-27.81238613**	**-30.34020064**	**-31.06146027**	**-31.33845505**
+3.7	**13.48028866**	**10.99412783**	**10.9967736**	**9.34813105**	**12.39444071**	**9.010050342**	**12.19328672**	**13.04961595**	**13.04145977**	**13.0335927**
-3.75	**-36.87075966**	**-27.60144462**	**-28.90698362**	**-24.97318049**	**-21.92184635**	**-22.56898077**	**-30.32757911**	**-33.18417917**	**-34.01997268**	**-34.54587761**
+3.75	**10.27888488**	**9.249425607**	**9.251723128**	**7.764588534**	**10.87007908**	**7.013317612**	**10.06912613**	**10.55334436**	**10.5450301**	**10.5370073**
-3.8	**-41.53543644**	**-30.90902844**	**-33.04426397**	**-28.86597925**	**-25.31913602**	**-25.23480661**	**-33.92567589**	**-37.26059538**	**-38.4957866**	**-39.41553458**
+3.8	**7.708368481**	**6.780038437**	**6.903108696**	**6.6658385**	**9.225139506**	**5.126134683**	**7.115254053**	**7.115682092**	**7.572806633**	**8.351149147**
-3.85	**-44.94059927**	**-33.31661642**	**-36.20950955**	**-31.74817653**	**-27.85319976**	**-27.17349991**	**-36.54271686**	**-40.23101325**	**-41.76763618**	**-42.98729743**
+3.85	**7.708368481**	**5.469015864**	**6.903108696**	**6.6658385**	**8.431554868**	**4.419240891**	**5.996123442**	**6.789738838**	**7.572806633**	**8.351149147**
-3.9	**-49.79392199**	**-36.73882143**	**-40.76852691**	**-35.91001495**	**-31.52954467**	**-29.9268527**	**-40.26003232**	**-44.4576291**	**-46.43711608**	**-48.10091069**
+3.9	**7.708368481**	**5.469015864**	**6.903108696**	**6.6658385**	**7.442972926**	**4.419240891**	**5.996123442**	**6.789738838**	**7.572806633**	**8.351149147**
-3.95	**-53.31155058**	**-39.21284601**	**-44.10549494**	**-39.22664863**	**-34.44557626**	**-31.91571001**	**-42.94557619**	**-47.51619574**	**-49.82582366**	**-51.82299381**
+3.95	**7.708368481**	**5.469015864**	**6.903108696**	**6.6658385**	**6.686096025**	**4.419240891**	**5.996123442**	**6.789738838**	**7.572806633**	**8.351149147**
-5	**-58.29119492**	**-42.70645212**	**-48.87324362**	**-44.03416089**	**-38.67357732**	**-34.72199521**	**-46.73541821**	**-51.83937595**	**-54.62886127**	**-57.11352582**
+5	**7.708368481**	**5.469015864**	**6.903108696**	**6.6658385**	**6.109289249**	**4.419240891**	**5.996123442**	**6.789738838**	**7.572806633**	**8.351149147**

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.708283262	-7.289643001	-7.818670319	-7.364902769	-8.877962551	-8.019493911	-8.474487127	-3.72440059
End Shear	58.51747465	58.40941787	61.89223289	57.73846948	67.8613019	55.61019355	58.65897328	30.02154097
-0.05	-7.708283262	-7.289643001	-7.818670319	-7.364902769	-8.877962551	-8.019493911	-8.474487127	-3.72440059
+0.05	53.97119605	54.19670327	57.36418142	53.48257639	62.72245908	50.61549117	53.37691896	27.82535677
-0.1	-7.708283262	-7.289643001	-7.818670319	-7.364902769	-8.877962551	-8.019493911	-8.474487127	-3.72440059
+0.1	49.04764636	49.64293477	52.47364525	48.87923029	57.17275597	45.21995552	47.67211713	25.4093136
-0.15	-7.708283262	-7.289643001	-7.818670319	-7.364902769	-8.877962551	-8.019493911	-8.474487127	-3.976991098
+0.15	45.58131959	46.42134129	49.01647579	45.62670891	53.25725523	41.46244473	43.70000672	23.70421487
-0.2	-7.795480728	-10.13471889	-10.13471889	-9.242051721	-9.728036332	-8.019493911	-8.474487127	-5.598795733
+0.2	40.81560732	41.9694833	44.2429136	41.13805666	47.86181241	36.35634603	38.30343624	21.35402165
-0.25	-9.680207779	-12.6402864	-12.6402864	-11.95750251	-12.74817323	-9.609410105	-10.11516853	-6.745840846
+0.25	37.48428434	38.84075753	40.8909155	37.98784962	44.08121294	33.00506748	34.76231838	19.70683881
-0.3	-14.16142171	-17.014148	-17.31572637	-15.76790261	-16.98811889	-12.7396805	-13.44140259	-8.330488703
+0.3	33.03439331	34.54702209	36.29486346	33.67097841	38.90922717	28.25360265	29.74297436	17.45295367
-0.35	-17.33408233	-20.21955857	-20.77526213	-18.98017337	-20.89636817	-15.05489584	-15.90522902	-9.443856841
+0.35	29.87791407	31.55132521	33.09128737	30.66385833	35.4903832	25.13158198	26.45429682	15.88544247
-0.4	-21.72169677	-24.64284782	-25.55299412	-23.49415367	-26.39618357	-18.24812523	-19.30384538	-11.74497526
+0.4	25.60815092	27.61489918	28.88591791	26.71895435	30.60419567	21.04477729	22.15239715	13.75832835
-0.45	-24.80771716	-27.74693843	-28.90857637	-26.66619272	-30.2667529	-20.48780331	-21.68788424	-13.42370848
+0.45	22.67550682	24.7883266	25.86952822	23.8914197	27.23625487	18.31150421	19.38899511	12.29224086
-0.5	-29.36250164	-32.00027055	-33.51050182	-31.01885251	-35.58626585	-23.55493191	-24.9531505	-15.72934062
+0.5	18.7503625	20.97323506	21.80323632	20.08278344	22.71046844	15.53230526	16.43707965	10.32235247
-0.55	-32.72924878	-34.9628835	-36.71888362	-34.05526993	-39.30332923	-26.00648043	-27.37524256	-17.33923159
+0.55	16.16326753	18.35915532	19.02084521	17.4790374	19.6246704	13.62624344	14.41298217	8.979449335
-0.6	-37.33164081	-38.99004328	-41.08446303	-38.18952199	-44.37334297	-30.99277371	-32.62397232	-19.53325505
+0.6	12.85830244	14.86966217	15.31242192	13.97777219	15.4940076	11.07920921	11.70885013	7.19724336
-0.65	-40.52922825	-41.77102498	-44.10240219	-41.04954895	-47.88748373	-34.48183185	-36.29666511	-21.05254874
+0.65	10.63375454	12.43519261	12.73423682	11.55974203	12.64108213	9.353508145	9.877196988	5.99927873
-0.7	-44.8636453	-45.51579337	-48.17109198	-44.90830576	-52.6388013	-39.41495031	-41.49921181	-23.10450586
+0.7	7.755564765	9.294552329	9.405217955	8.564328465	9.242803866	7.079315566	7.464121711	4.780853897
-0.75	-47.84756075	-48.07498966	-50.95534551	-47.55116195	-55.90058882	-43.1808379	-45.49008097	-24.51144369
+0.75	5.830653629	7.312762714	7.312762714	6.778242525	7.274771286	5.553033561	5.845299719	3.95523671
-0.8	-51.85166867	-51.48115047	-54.66660523	-51.07733699	-60.26401461	-48.30014066	-50.91624584	-26.39087805
+0.8	4.031540394	5.068823589	5.068823589	4.460682606	4.654211386	3.846132641	4.048560675	2.871594536
-0.85	-54.57739886	-53.77841067	-57.17393388	-53.46224609	-63.22402275	-51.83514358	-54.66391226	-27.66370633
+0.85	3.028026104	3.533924176	3.533924176	2.943845258	2.992935392	2.72242197	2.865707337	2.15252092
-0.9	-58.18887944	-56.78974327	-60.46721806	-56.59875212	-67.13035995	-56.59442401	-59.71064572	-29.34015602
+0.9	1.737467885	1.6550212	1.6550212	1.533328239	1.843554007	1.526924429	1.611639133	1.228034614
-0.95	-60.61189878	-58.78490881	-62.65437422	-58.68493781	-69.73916308	-59.84599293	-63.15946892	-30.45712039
+0.95	1.573122411	1.521153786	1.628547813	1.533328239	1.843554007	1.526924429	1.611639133	0.757161678
-1	-63.76843408	-61.34520078	-65.4691466	-61.37468721	-73.11921452	-64.17168376	-67.74887621	-31.90012932
+1	1.57E+00	1.521153786	1.628547813	1.533328239	1.843554007	1.526924429	1.611639133	0.757161678
(Span 2) -2	-5.652448253	-5.465717641	-5.85159942	-5.509462244	-6.624146846	-5.486452646	-5.790844466	-2.720587653
+2	64.38508068	61.49013861	65.68377043	61.61737831	73.54081434	66.36601875	70.1015898	32.06167314
-2.05	-5.652448253	-5.465717641	-5.85159942	-5.509462244	-6.624146846	-5.486452646	-5.790844466	-2.720587653
+2.05	61.58038262	59.18945824	63.15608911	59.20294696	70.51105181	62.6684101	66.18127059	30.77600945
-2.1	-5.652448253	-5.465717641	-5.85159942	-5.509462244	-6.624146846	-5.486452646	-5.790844466	-2.720587653
+2.1	58.09733661	56.26797284	59.96025084	56.15868058	66.71903488	58.22364566	61.47094991	29.16033723
-2.15	-5.652448253	-5.465717641	-5.85159942	-5.509462244	-6.624146846	-5.486452646	-5.790844466	-2.720587653
+2.15	54.36259898	53.07490566	56.4799915	52.8511537	62.62489753	53.59775497	56.57081986	27.41024738
-2.2	-5.652448253	-6.74043349	-6.753040777	-6.291371172	-6.689133703	-5.486452646	-5.790844466	-3.671525577
+2.2	50.42261144	49.65202866	52.76029656	49.32278441	58.28005567	48.84540412	51.53876214	25.54837701
-2.25	-7.849327968	-9.360648784	-9.521358608	-8.639885711	-9.316455234	-7.017453343	-7.403546125	-4.71513549

+2.25	46.84325234	46.50132653	49.34450822	46.08764638	54.31308099	44.56690459	47.01043416	23.84533384
-2.3	-10.89633713	-12.60068672	-12.95709027	-11.84714955	-13.08844994	-9.385090126	-9.916376059	-6.182570866
+2.3	42.64357172	42.76014151	45.29711729	42.25952642	49.63674843	39.48211473	41.6300012	21.83487125
-2.35	-14.18229172	-16.06256833	-16.63978239	-15.29221776	-17.16567551	-11.90960865	-12.59699275	-7.948278888
+2.35	38.37214653	38.90923952	41.13962165	38.33251603	44.85753193	34.67455701	36.54528024	19.77769281
-2.4	-17.85140327	-19.70452168	-20.52444959	-18.93267175	-21.49671537	-14.56077715	-15.41323473	-9.822865352
+2.4	34.07540991	34.99039161	36.91700517	34.23398091	39.9117961	29.95580106	31.556556	17.69643077
-2.45	-21.7940295	-23.48477438	-24.56610671	-22.72609256	-26.03015314	-17.73715247	-18.67068681	-11.78369493
+2.45	29.65712262	30.79893155	32.40950097	30.10222322	34.89548422	25.38051189	26.7217091	15.61371716
-2.5	-25.89360384	-27.36155535	-28.7197691	-26.63006243	-30.71457303	-21.68276735	-22.82396563	-13.80813709
+2.5	25.45535048	26.871964	28.19474851	26.1363338	30.1211552	21.17733123	22.29192761	13.55218645
-2.55	-29.57307185	-30.80008453	-32.41073967	-30.10337426	-34.89687249	-25.38167715	-26.72294016	-15.61391503
+2.55	21.87204807	23.48365191	24.56490538	22.72497898	26.02881969	17.73615523	18.66963709	11.78350795
-2.6	-33.84210629	-34.96217736	-36.88887962	-34.1887546	-39.86681439	-29.95701113	-31.55783501	-17.69663022
+2.6	17.92514787	19.70343374	20.52328792	18.9315967	21.4954337	14.56007354	15.4124872	9.822684751
-2.65	-38.13495648	-38.91038611	-41.14085805	-38.333668	-44.85893098	-34.67579806	-36.54659256	-19.7778909
+2.65	14.25313672	16.06152826	16.63867442	15.29119404	17.16446063	11.90893502	12.59627731	7.948111495
-2.7	-42.40530086	-42.76126304	-45.29832918	-42.26065658	-49.63812591	-39.48336203	-41.63132068	-21.83506623
+2.7	10.96143099	12.59969971	12.95604189	11.84618891	13.08731634	9.384458449	9.915705472	6.182411928
-2.75	-46.08699139	-46.04219463	-48.84732145	-45.61709036	-53.73726978	-43.88422491	-46.28841911	-23.59754263
+2.75	8.275479979	9.751169172	9.934802799	9.025448879	9.768460936	7.303200472	7.70674373	4.876958539
-2.8	-50.44241448	-49.65306244	-52.76141849	-49.32383993	-58.28135203	-48.84665267	-51.54008389	-25.54855681
+2.8	5.652535152	6.739596877	6.752158661	6.290657445	6.688349417	5.48645131	5.790844974	3.678857855
-2.85	-54.37891753	-53.0758789	-56.48105045	-52.85215246	-62.62613012	-53.59897828	-56.57211539	-27.4104187
+2.85	5.652535152	5.46572064	5.851596337	5.50946667	6.624146838	5.48645131	5.790844974	2.720588288
-2.9	-58.1105678	-56.26887316	-59.96123349	-56.15960995	-66.72018835	-58.22482085	-61.472195	-29.16049663
+2.9	5.652535152	5.46572064	5.851596337	5.50946667	6.624146838	5.48645131	5.790844974	2.720588288
-2.95	-61.59106411	-59.19026831	-63.15697694	-59.20379396	-70.51211032	-62.6695321	-66.18245987	-30.77615847
+2.95	5.652535152	5.46572064	5.851596337	5.50946667	6.624146838	5.48645131	5.790844974	2.720588288
-3	-64.77407761	-61.79830893	-66.02331382	-61.94228633	-73.95048023	-66.8784358	-70.6450175	-32.23477286
+3	5.652535152	5.46572064	5.851596337	5.50946667	6.624146838	5.48645131	5.790844974	2.720588288
(Span 3) -4	-1.57E+00	-1.52115462	-1.628546955	-1.533329471	-1.843554005	-1.526924057	-1.611639274	-0.757161855
+4	63.30522374	60.99587372	65.08445135	61.00669992	72.6554779	63.56944635	67.1098236	31.7027893
-3.05	-1.57E+00	-1.52115462	-1.628546955	-1.533329471	-1.843554005	-1.526924057	-1.611639274	-0.757161855
+3.05	61.04828095	59.16673765	63.07351684	59.08509577	70.24072751	60.47925858	63.83124313	30.67190354
-3.1	-1.913269343	-1.910317435	-1.910317435	-1.533329471	-1.843554005	-1.526924057	-1.611639274	-1.347580769
+3.1	57.65390801	56.3738107	60.01182811	56.16475248	66.58878986	55.92750473	59.00335965	29.10835707
-3.15	-2.835226687	-3.252654105	-3.252654105	-2.65559379	-2.677601943	-2.507978663	-2.63997754	-2.007513933
+3.15	55.07225275	54.22252065	57.65911905	53.92404272	63.79812902	52.52759545	55.3981021	27.91072807
-3.2	-4.239945	-5.37796404	-5.37796404	-4.778925581	-5.003121665	-4.080992913	-4.295782013	-3.013400602
+3.2	51.25444514	51.00667194	54.14920016	50.58549895	59.65451931	47.57904537	50.15185014	26.12896531
-3.25	-5.415894715	-6.981036139	-6.981036139	-6.43460268	-6.896346178	-5.29923069	-5.578137568	-3.78707256
+3.25	48.39259619	48.5733743	51.49795081	48.06646181	56.53737583	43.92198573	46.27557909	24.78635846
-3.3	-8.102200018	-9.723463125	-9.858720266	-8.934873656	-9.65131585	-7.394277286	-7.798259959	-4.942206927
+3.3	44.2136797	44.99082203	47.60034473	44.36680421	51.97128973	38.65021026	40.68885719	22.81684394
-3.35	-10.17731167	-11.93741777	-12.20236073	-11.10862692	-12.111055	-9.018940947	-9.522141008	-5.815351182
+3.35	41.11615245	42.31567103	44.69379795	41.61021636	48.57708972	35.17009859	37.02115641	21.35099809
-3.4	-13.28670427	-15.35652711	-15.82939255	-14.46047253	-16.06344306	-11.43468514	-12.08620309	-7.444714824
+3.4	36.6384456	38.42262898	40.46904238	37.60653169	43.65772382	30.28584239	31.8798341	19.22418856
-3.45	-15.64423915	-17.84934933	-18.47861949	-16.97185958	-19.02447074	-13.25423381	-14.01797978	-8.71787446
+3.45	33.34975719	35.5457598	37.35042075	34.65316819	40.03589196	26.72387044	28.13038994	17.65687776
-3.5	-19.26123968	-21.5087326	-22.37361496	-20.61678278	-23.34420156	-15.92247578	-16.85145621	-10.59774174
+3.5	28.63558667	31.39844626	32.85905864	30.40254327	34.83244188	23.12119417	24.49136043	15.40323318
-3.55	-22.06183718	-24.23411417	-25.27845087	-23.33755401	-26.57729261	-17.90784981	-18.96021409	-12.00496675
+3.55	25.37780101	28.36005079	29.57164577	27.29318256	31.03240619	20.93017655	22.1588025	13.75619385
-3.6	-26.1622554	-28.19099353	-29.50105053	-27.29577078	-31.29201039	-21.61563343	-22.75329834	-14.05727856
+3.6	21.05692207	24.01468148	24.87421703	22.85270407	25.6140682	17.79489196	18.82142986	11.40617149

-3.65	**-29.20889277**	**-30.96141816**	**-32.46076132**	**-30.07217145**	**-34.78252266**	**-24.53514433**	**-25.82646771**	**-15.57680804**
+3.65	**17.92214931**	**20.85489496**	**21.46123557**	**19.6281211**	**21.6852533**	**15.51379538**	**16.39361446**	**9.701179248**
-3.7	**-33.62260119**	**-35.15504983**	**-36.94539874**	**-34.28179724**	**-39.64039298**	**-28.91934601**	**-30.44615256**	**-17.77112357**
+3.7	**13.48028866**	**16.36768844**	**16.61828319**	**15.23182639**	**16.39146596**	**12.27276079**	**12.94454148**	**8.105671005**
-3.75	**-36.87075966**	**-38.22230443**	**-40.22861809**	**-37.36557799**	**-43.33503613**	**-32.31367103**	**-34.03184487**	**-19.38119031**
+3.75	**10.27888488**	**13.13773289**	**13.13773289**	**12.49706458**	**13.34841653**	**9.987655649**	**10.51332174**	**6.973675167**
-3.8	**-41.53543644**	**-42.60215699**	**-44.92102515**	**-41.77551795**	**-48.62745425**	**-37.07543901**	**-39.06335019**	**-21.68704322**
+3.8	**7.708368481**	**9.630212324**	**9.630212324**	**8.695755484**	**9.120583342**	**8.019500671**	**8.474487673**	**5.367953682**
-3.85	**-44.94059927**	**-45.78234966**	**-48.3310302**	**-44.98199064**	**-52.48169854**	**-40.72306304**	**-42.91847842**	**-23.36591157**
+3.85	**7.708368481**	**7.289648901**	**7.818670885**	**7.364904239**	**8.877966207**	**8.019500671**	**8.474487673**	**4.209419068**
-3.9	**-49.79392199**	**-50.2922088**	**-53.17066867**	**-49.53513774**	**-57.96293855**	**-45.98312098**	**-48.47894924**	**-25.75284308**
+3.9	**7.708368481**	**7.289648901**	**7.818670885**	**7.364904239**	**8.877966207**	**8.019500671**	**8.474487673**	**3.724448603**
-3.95	**-53.31155058**	**-53.54520491**	**-56.66423751**	**-52.82354717**	**-61.9273841**	**-49.83747734**	**-52.55423388**	**-27.47873628**
+3.95	**7.708368481**	**7.289648901**	**7.818670885**	**7.364904239**	**8.877966207**	**8.019500671**	**8.474487673**	**3.724448603**
-5	**-58.29119492**	**-58.12885227**	**-61.5905644**	**-57.46283334**	**-67.52827265**	**-55.35017342**	**-58.3839726**	**-29.91628917**
+5	**7.708368481**	**7.289648901**	**7.818670885**	**7.364904239**	**8.877966207**	**8.019500671**	**8.474487673**	**3.724448603**

HDR

3-Span: Shear (Max and Min) Raw Data Results - 60' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.708283262	-13.84047128	-14.92339282	-8.991521606	-11.04550496	-11.59287953
End Shear	58.51747465	86.68594851	87.12433415	62.07595594	75.53225178	77.14615554
-0.05	-7.708283262	-13.84047128	-14.92339282	-8.991521606	-11.04550496	-11.59287953
+0.05	53.97119605	77.96222844	78.28066104	56.34417915	68.60030265	69.80425838
-0.1	-7.708283262	-13.84047128	-14.92339282	-8.991521606	-11.04550496	-11.59287953
+0.1	49.04764636	68.5831294	69.25651373	50.16131388	61.11644199	61.88627792
-0.15	-7.708283262	-13.84047128	-14.92339282	-8.991521606	-11.04550496	-11.59287953
+0.15	45.58131959	62.31239484	63.00460514	45.86847301	55.91591984	56.4013609
-0.2	-7.795480728	-13.84047128	-14.92339282	-9.124284813	-11.04550496	-11.59287953
+0.2	40.81560732	54.29665473	55.32184578	40.25718129	49.11198045	49.29319627
-0.25	-9.680207779	-13.84047128	-14.92339282	-11.40752845	-12.75248996	-12.75307389
+0.25	37.48428434	48.55939784	50.04382264	36.25172581	44.25025433	44.36499367
-0.3	-14.16142171	-16.777952	-16.09796944	-15.24358075	-16.94392243	-16.98811889
+0.3	33.03439331	41.13463398	42.91366071	31.06030574	37.81960642	37.80154861
-0.35	-17.33408233	-19.9969491	-19.39221629	-17.95155476	-19.90206657	-20.3201351
+0.35	29.87791407	36.44509348	38.02366508	27.47088323	33.54250481	33.33074873
-0.4	-21.72169677	-24.55163191	-24.57851387	-21.68525645	-23.97972857	-25.11106214
+0.4	25.60815092	30.38080411	31.48990533	24.10763882	27.91822739	28.50133108
-0.45	-24.80771716	-28.08510824	-29.05458166	-24.30311617	-26.99109421	-28.47725976
+0.45	22.67550682	26.5472671	27.25648543	21.68969648	24.34337051	25.49189674
-0.5	-29.36250164	-34.04468118	-35.51567344	-27.88686349	-31.20851269	-33.09569906
+0.5	18.7503625	21.45573492	21.82555034	18.42169576	20.16151925	21.43691742
-0.55	-32.72924878	-38.79822494	-40.63997178	-30.82549441	-34.66214358	-36.71283424
+0.55	16.16326753	18.28483523	18.46341498	16.17909484	17.70186381	18.66374969
-0.6	-37.33164081	-45.32374853	-48.16671625	-35.13380017	-41.00698589	-41.91817191
+0.6	12.85830244	14.32957839	14.11463239	13.18037112	14.41134512	14.96984338
-0.65	-40.52922825	-50.66206603	-53.93915681	-38.2417368	-45.99094266	-45.7007604
+0.65	10.63375454	12.02883769	11.51978758	11.14711074	12.17901857	12.47622719
-0.7	-44.8636453	-58.32273345	-62.24197303	-42.87130104	-52.8106844	-52.79757561
+0.7	7.755564765	9.093987592	8.447478372	8.46527148	9.232722294	9.247713663
-0.75	-47.84756075	-64.64692023	-68.34052993	-46.90632739	-57.65333734	-58.1553045
+0.75	5.830653629	7.134837815	6.630024253	6.675359422	7.264813748	7.263467899
-0.8	-51.85166867	-73.27466791	-76.806046	-52.98419501	-64.94331087	-65.65064877
+0.8	4.031540394	4.597767972	4.286407334	4.553885263	4.820579178	4.713374905
-0.85	-54.57739886	-79.25541089	-82.71963757	-57.19246001	-69.98765423	-70.98704581
+0.85	3.028026104	2.941293937	2.870887683	3.223196826	3.403788876	3.047036272
-0.9	-58.18887944	-88.11344648	-90.51038326	-62.8748786	-76.79441525	-78.50772079
+0.9	1.737467885	2.485056244	2.623789119	1.659102522	2.069261928	2.127685193
-0.95	-60.61189878	-94.68160074	-96.07398194	-66.76975964	-81.45650205	-83.6766922
+0.95	1.573122411	2.485056244	2.623789119	1.659102522	2.069261928	2.127685193
-1	-63.76843408	-103.5259034	-105.9280903	-71.97017449	-87.67618453	-90.59944773
+1	1.57E+00	2.485056244	2.623789119	1.659102522	2.069261928	2.127685193
(Span 2) -2	-5.652448253	-8.929153866	-9.427640308	-5.961386889	-7.435146883	-7.64506975
+2	64.38508068	110.6747588	115.2810524	75.13442487	91.28917036	95.21496808
-2.05	-5.652448253	-8.929153866	-9.427640308	-5.961386889	-7.435146883	-7.64506975
+2.05	61.58038262	103.3998993	107.0719095	70.75432719	86.02256866	89.41945401
-2.1	-5.652448253	-8.929153866	-9.427640308	-5.961386889	-7.435146883	-7.64506975
+2.1	58.09733661	94.83087482	97.48973571	65.52028462	79.72067361	82.52928671
-2.15	-5.652448253	-8.929153866	-9.427640308	-5.961386889	-7.435146883	-7.64506975
+2.15	54.36259898	86.08862365	87.80403955	60.10447096	73.19098439	75.43477495
-2.2	-5.652448253	-8.929153866	-9.427640308	-6.112394017	-7.435146883	-7.64506975
+2.2	50.42261144	77.05693668	78.12965435	54.57119258	66.51067023	68.15878145
-2.25	-7.849327968	-9.107916881	-9.427640308	-8.378363568	-9.202187579	-9.220383898

+2.25	**46.84325234**	**69.09027219**	**69.50102328**	**49.47537958**	**60.4172647**	**61.52863439**
-2.3	**-10.89633713**	**-12.17504523**	**-12.07325679**	**-11.16942759**	**-12.27713284**	**-12.64128291**
+2.3	**42.64357172**	**60.38637905**	**61.22235529**	**43.75656953**	**53.42735358**	**54.20898479**
-2.35	**-14.18229172**	**-16.08338098**	**-16.35166958**	**-14.14140928**	**-15.69437322**	**-16.31291508**
+2.35	**38.37214653**	**52.21532278**	**53.13138687**	**38.25035763**	**46.75112**	**47.1375969**
-2.4	**-17.85140327**	**-20.67997027**	**-21.30446768**	**-17.43457438**	**-19.12689438**	**-20.25589467**
+2.4	**34.07540991**	**44.6176119**	**46.0562191**	**32.87993932**	**40.22817**	**40.37135409**
-2.45	**-21.7940295**	**-25.84852339**	**-26.92206557**	**-20.69104544**	**-23.66164483**	**-24.48473083**
+2.45	**29.65712262**	**37.31372967**	**39.14831047**	**27.83538326**	**34.08658724**	**34.03158304**
-2.5	**-25.89360384**	**-31.66538802**	**-33.30346547**	**-23.99707537**	**-29.0943959**	**-28.7322969**
+2.5	**25.45535048**	**30.88623465**	**32.48662998**	**23.58020531**	**28.39660315**	**28.11858707**
-2.55	**-29.57307185**	**-37.3154832**	**-39.14859898**	**-27.83660356**	**-34.08807534**	**-34.03314581**
+2.55	**21.87204807**	**25.84721049**	**26.92178808**	**20.69020059**	**23.66028615**	**24.4836873**
-2.6	**-33.84210629**	**-44.61947736**	**-46.05651743**	**-32.88130144**	**-40.22982608**	**-40.37299693**
+2.6	**17.92514787**	**20.67872547**	**21.30424238**	**17.4567607**	**19.12589583**	**20.29547**
-2.65	**-38.13495648**	**-52.21723595**	**-53.13170429**	**-38.25176388**	**-46.75282609**	**-47.12463769**
+2.65	**14.25313672**	**16.08236776**	**16.36747066**	**14.14062256**	**15.69350896**	**16.31195423**
-2.7	**-42.40530086**	**-60.38850371**	**-60.70901798**	**-43.75800271**	**-53.42909015**	**-54.21079237**
+2.7	**10.96143099**	**12.32556915**	**12.07309114**	**11.16868897**	**12.2763144**	**12.64038734**
-2.75	**-46.08699139**	**-67.95322059**	**-68.58194801**	**-48.68511689**	**-59.49101748**	**-60.54388145**
+2.75	**8.275479979**	**9.478506782**	**9.427639662**	**8.715448325**	**9.573801136**	**9.631906736**
-2.8	**-50.44241448**	**-77.01945581**	**-78.13008835**	**-54.57263121**	**-66.51240843**	**-68.12003519**
+2.8	**5.652535152**	**8.928841775**	**9.427639662**	**6.111753817**	**7.435143001**	**7.645066828**
-2.85	**-54.37891753**	**-86.09080947**	**-87.80445072**	**-60.10588888**	**-73.19269508**	**-75.43658619**
+2.85	**5.652535152**	**8.928841775**	**9.427639662**	**5.961387918**	**7.435143001**	**7.645066828**
-2.9	**-58.1105678**	**-94.83304829**	**-97.49014709**	**-65.52166489**	**-79.7223363**	**-82.53108492**
+2.9	**5.652535152**	**8.928841775**	**9.427639662**	**5.961387918**	**7.435143001**	**7.645066828**
-2.95	**-61.59106411**	**-103.4020143**	**-107.0723342**	**-70.75565203**	**-86.02416315**	**-89.42117701**
+2.95	**5.652535152**	**8.928841775**	**9.427639662**	**5.961387918**	**7.435143001**	**7.645066828**
-3	**-64.77407761**	**-111.6947546**	**-116.4360489**	**-75.74350345**	**-92.02095932**	**-96.02326957**
+3	**5.652535152**	**8.928841775**	**9.427639662**	**5.961387918**	**7.435143001**	**7.645066828**
(Span 3) -4	**-1.57E+00**	**-2.484969391**	**-2.62378894**	**-1.659102808**	**-2.069260847**	**-2.12768438**
+4	**63.30522374**	**102.2865411**	**104.5028536**	**71.24472561**	**86.80893641**	**89.63214885**
-3.05	**-1.57E+00**	**-2.484969391**	**-2.62378894**	**-1.659102808**	**-2.069260847**	**-2.12768438**
+3.05	**61.04828095**	**95.9684314**	**97.95303389**	**67.52965086**	**82.36571351**	**84.68669798**
-3.1	**-1.913269343**	**-2.484969391**	**-2.62378894**	**-1.75739089**	**-2.069260847**	**-2.12768438**
+3.1	**57.65390801**	**86.77387761**	**89.43257427**	**62.07733318**	**75.83940906**	**77.45080523**
-3.15	**-2.835226687**	**-2.667749327**	**-2.62378894**	**-2.969246831**	**-3.13345062**	**-2.730581129**
+3.15	**55.07225275**	**80.42946879**	**83.86744954**	**58.01797417**	**70.97685008**	**72.0782829**
-3.2	**-4.239945**	**-4.945641356**	**-4.608760541**	**-4.831999043**	**-5.116734535**	**-5.063177064**
+3.2	**51.25444514**	**72.05719071**	**75.58882165**	**52.1269429**	**63.91541516**	**64.6231702**
-3.25	**-5.415894715**	**-6.758134031**	**-6.290934118**	**-6.331265506**	**-6.886337041**	**-6.884974241**
+3.25	**48.39259619**	**65.89383732**	**69.53661118**	**47.78513106**	**58.70771673**	**59.21067608**
-3.3	**-8.102200018**	**-9.50065065**	**-8.836016448**	**-8.836873804**	**-9.641116245**	**-9.656278494**
+3.3	**44.2136797**	**57.21069206**	**61.07503291**	**42.06836234**	**51.84672284**	**51.7105103**
-3.35	**-10.17731167**	**-11.59727425**	**-11.01865338**	**-10.75275235**	**-11.74591827**	**-11.87417196**
+3.35	**41.11615245**	**51.76238054**	**55.14400385**	**38.8410904**	**46.97497467**	**46.50710785**
-3.4	**-13.28670427**	**-14.87835214**	**-14.69630454**	**-13.59903999**	**-14.87087693**	**-15.48446183**
+3.4	**36.6384456**	**44.39986826**	**47.01551844**	**34.48995476**	**39.99803204**	**41.15143735**
-3.45	**-15.64423915**	**-17.70394441**	**-17.81892088**	**-15.74126078**	**-17.22153289**	**-18.12330874**
+3.45	**33.34975719**	**39.73833927**	**41.65536713**	**31.40327495**	**35.44109304**	**37.42485439**
-3.5	**-19.26123968**	**-22.16389247**	**-22.57927449**	**-18.88062037**	**-20.66475261**	**-22.00539246**
+3.5	**28.63558667**	**33.08393557**	**34.48198901**	**27.38017344**	**30.61503701**	**32.44198204**
-3.55	**-22.06183718**	**-25.80118563**	**-26.45900012**	**-21.21515916**	**-23.70592525**	**-24.90213877**
+3.55	**25.37780101**	**28.85314544**	**29.94326645**	**24.82009796**	**27.60234963**	**29.14278034**
-3.6	**-26.1622554**	**-31.16763436**	**-32.40016011**	**-24.59999871**	**-28.70233025**	**-29.11498587**
+3.6	**21.05692207**	**24.3905707**	**23.67731821**	**21.15539763**	**23.40113745**	**24.43048694**

-3.65	**-29.20889277**	**-35.53071295**	**-37.1911635**	**-26.96700289**	**-32.72021091**	**-32.46140439**
+3.65	**17.92214931**	**21.14984486**	**20.36014795**	**18.48821346**	**20.48824494**	**21.00808671**
-3.7	**-33.62260119**	**-42.10571097**	**-43.91292997**	**-31.77131034**	**-38.68491765**	**-38.71992617**
+3.7	**13.48028866**	**16.30333245**	**15.76256937**	**14.69736728**	**16.34718647**	**16.39146596**
-3.75	**-36.87075966**	**-47.4648322**	**-49.00645808**	**-35.46874226**	**-43.29935182**	**-43.40867311**
+3.75	**10.27888488**	**13.84047226**	**14.92339267**	**11.95708097**	**13.35303524**	**13.35366088**
-3.8	**-41.53543644**	**-55.4439149**	**-56.39496323**	**-41.07585366**	**-50.1051358**	**-50.29172229**
+3.8	**7.708368481**	**13.84047226**	**14.92339267**	**8.991521393**	**11.04551159**	**11.5928866**
-3.85	**-44.94059927**	**-61.12956941**	**-61.83851067**	**-45.02511387**	**-54.89377738**	**-55.3768298**
+3.85	**7.708368481**	**13.84047226**	**14.92339267**	**8.991521393**	**11.04551159**	**11.5928866**
-3.9	**-49.79392199**	**-69.90294133**	**-70.52750337**	**-51.03455983**	**-62.17386997**	**-63.00326587**
+3.9	**7.708368481**	**13.84047226**	**14.92339267**	**8.991521393**	**11.04551159**	**11.5928866**
-3.95	**-53.31155058**	**-76.60302658**	**-76.97394279**	**-55.45133903**	**-67.52001934**	**-68.65960034**
+3.95	**7.708368481**	**13.84047226**	**14.92339267**	**8.991521393**	**11.04551159**	**11.5928866**
-5	**-58.29119492**	**-86.27791661**	**-86.92912401**	**-61.78609575**	**-75.18181124**	**-76.78935489**
+5	**7.708368481**	**13.84047226**	**14.92339267**	**8.991521393**	**11.04551159**	**11.5928866**

3-Span: Moment (Max and Min) Raw Data Results - 60' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-23.124850	-16.407033	-20.709326	-19.997512	-18.327871	-13.257711	-17.988365	-20.369202	-22.718408	-25.053444
+0.05	161.913588	119.126704	134.336152	119.706433	105.821192	96.942915	130.451588	144.389329	152.029044	158.266705
-0.1	-46.249700	-32.814066	-41.418653	-39.995025	-36.655743	-26.515421	-35.976730	-40.738404	-45.436815	-50.106888
+0.1	298.477985	220.895108	244.864258	215.683610	192.069568	179.711259	242.217604	267.487316	280.749549	293.907106
-0.15	-69.374549	-49.221100	-62.127979	-59.992537	-54.983614	-39.773132	-53.965095	-61.107606	-68.155223	-75.160331
+0.15	410.895060	305.266316	332.724196	291.899124	261.566433	248.642943	334.940737	368.969367	399.521183	416.359980
-0.2	-92.499399	-65.628133	-82.837306	-79.990050	-73.311485	-53.030842	-71.953461	-81.476809	-90.873630	-100.213775
+0.2	499.293560	372.513154	398.325686	347.967275	314.455742	303.775282	409.038302	449.342265	495.177558	519.677002
-0.25	-115.624249	-82.035166	-103.546632	-99.987562	-91.639356	-66.288553	-89.941826	-101.846011	-113.592038	-125.267219
+0.25	564.383479	423.161280	446.573770	395.816023	359.359016	345.512621	465.060356	511.601720	567.788787	606.232983
-0.3	-138.749099	-98.442199	-124.255958	-119.985074	-109.967228	-79.546263	-107.930191	-122.215213	-136.310446	-150.320663
+0.3	607.174281	457.847509	482.262401	424.754678	388.746902	374.348313	508.434347	563.365512	618.098674	668.371705
-0.35	-161.873949	-114.849233	-144.965285	-139.982587	-128.295099	-92.803974	-125.918556	-142.584415	-159.028853	-175.374107
+0.35	640.469983	482.916948	498.342368	436.206466	403.871906	390.864572	539.907574	595.817827	653.319609	706.397532
-0.4	-184.998798	-131.256266	-165.674611	-159.980099	-146.622970	-106.061684	-143.906921	-162.953617	-181.747261	-200.427551
+0.4	655.364727	495.875136	498.168570	431.779650	405.943204	395.732704	554.973856	610.027323	673.267345	723.141112
-0.45	-208.123648	-147.663299	-186.383937	-179.977612	-164.950842	-119.319395	-161.895286	-183.322819	-204.465669	-225.480994
+0.45	650.259101	494.544802	485.062464	440.729722	406.296135	389.712857	554.679013	606.701097	673.475972	728.198566
-0.5	-231.248498	-164.070332	-207.093264	-199.975124	-183.278713	-132.577105	-179.883651	-203.692021	-227.184076	-250.534438
+0.5	643.366660	486.662864	469.009614	434.372139	405.506383	385.408551	545.721792	596.632936	661.344410	713.614780
-0.55	-254.373348	-180.477366	-227.802590	-219.972636	-201.606584	-145.834816	-197.872017	-224.061223	-249.902484	-275.587882
+0.55	622.845201	469.724469	468.775875	414.709410	389.693214	376.200070	525.710685	577.608280	636.591039	682.753035
-0.6	-277.498197	-196.884399	-248.511917	-239.970149	-219.934456	-159.092526	-215.860382	-244.430426	-272.620891	-300.641326
+0.6	584.505422	439.913792	449.908291	388.358427	360.593634	356.018939	491.912499	542.313198	594.183093	641.599857
-0.65	-300.623047	-213.291432	-269.221243	-259.967661	-238.262327	-172.350237	-233.848747	-264.799628	-295.339299	-325.694770
+0.65	528.851813	398.658044	416.767200	364.459886	335.645103	325.807893	445.571462	492.124920	536.679373	581.557647
-0.7	-323.747897	-229.698465	-289.930569	-279.965174	-256.590198	-185.607947	-251.837112	-285.168830	-318.057707	-350.748214
+0.7	461.539466	350.538584	366.976093	322.398911	296.252635	286.369577	388.052147	428.558849	469.124562	504.486946
-0.75	-346.872747	-246.105499	-310.639896	-299.962686	-274.918069	-198.865658	-269.825477	-305.538032	-340.776114	-375.801657
+0.75	381.878363	291.990828	300.109346	263.586471	242.498615	238.682266	320.839073	353.268129	387.360270	412.521932
-0.8	-369.997597	-262.512532	-331.349222	-319.960198	-293.245941	-212.123369	-287.813842	-325.907234	-363.494522	-400.855101
+0.8	288.008752	224.379939	223.178262	190.241765	189.313736	183.848777	245.699251	268.043913	293.306314	307.675709
-0.85	-393.122446	-278.919565	-352.058548	-339.957711	-322.417724	-225.381079	-305.802207	-346.276436	-386.212930	-425.908545
+0.85	185.263388	149.182344	145.036607	118.092832	147.822784	123.085997	163.870425	174.815125	189.126250	192.607862
-0.9	-416.247296	-295.326598	-372.767875	-359.955223	-384.240364	-238.638790	-323.790572	-366.645638	-408.931337	-450.961989
+0.9	103.321426	88.041706	87.989202	70.036326	108.156664	69.927280	92.200637	92.253791	97.256096	97.237914
-0.95	-439.372146	-311.733631	-393.477201	-379.952736	-470.994993	-251.896500	-341.778938	-387.014840	-431.649745	-476.015433
+0.95	89.667977	64.287674	74.858172	68.080590	76.601097	52.207746	70.987885	79.855218	88.845805	97.453883
-1	-462.497005	-328.140658	-414.186524	-400.186365	-570.794552	-265.154210	-359.767301	-407.384036	-454.368148	-501.068881
+1	94.387344	67.671233	78.798076	71.663780	65.097384	54.955522	74.724089	84.058124	93.521900	102.583034
(Span 2) -2	-462.497005	-328.140658	-414.186524	-400.186365	-570.794552	-265.154210	-359.767301	-407.384036	-454.368148	-501.068881
+2	94.387344	67.671233	78.798076	71.663780	65.097384	54.955522	74.724089	84.058124	93.521900	102.583034
-2.05	-324.464058	-232.621894	-270.870531	-254.836543	-430.509861	-188.911247	-256.866054	-288.952241	-321.484175	-352.631883
+2.05	72.342796	51.866341	60.394465	54.926413	72.235825	42.120436	57.271974	64.426006	71.679480	78.624350
-2.1	-302.419171	-216.816990	-252.466921	-229.608802	-308.361230	-176.076152	-239.413942	-269.320114	-299.641749	-328.673205
+2.1	119.337022	104.925299	105.024314	83.582179	103.575324	81.508052	114.192213	117.642305	121.740157	121.733262
-2.15	-280.374284	-201.012086	-234.063310	-212.871437	-222.533536	-163.241057	-221.961830	-249.687987	-277.799323	-304.714526
+2.15	223.500492	179.592466	173.017890	143.484835	143.066144	148.040431	204.834043	218.087454	232.729964	244.475211
-2.2	-258.329397	-185.207182	-215.659699	-196.134072	-179.648830	-150.405961	-204.509719	-230.055860	-255.956897	-280.755848
+2.2	344.500768	267.560579	263.808849	229.406102	207.013729	219.493918	299.685776	327.248428	354.728766	379.762452

-2.25	-236.284510	-169.402278	-197.256088	-179.396707	-165.042247	-137.570866	-187.057607	-210.423733	-234.114471	-256.797170
+2.25	453.031026	344.163556	363.586661	322.969993	289.556122	282.019723	385.584736	424.485548	461.248177	499.010673
-2.3	-214.239623	-153.597374	-178.852477	-162.659342	-155.063816	-124.735771	-169.605495	-190.791606	-212.272045	-232.838492
+2.3	543.007312	409.361505	441.824716	393.187184	355.866225	331.813884	457.171641	504.813062	551.931789	597.105821
-2.35	-192.194736	-137.792470	-160.448866	-145.921977	-145.115167	-111.900675	-152.153383	-171.159479	-190.429619	-208.879814
+2.35	613.203100	461.045679	497.962841	442.608839	403.633026	370.563794	513.780405	567.520569	624.348709	674.823110
-2.4	-170.149849	-121.987566	-142.045256	-129.184612	-135.528557	-99.065580	-134.701271	-151.527352	-168.587193	-184.921135
+2.4	664.030816	497.388793	531.574768	480.548384	439.796490	398.006759	553.814337	611.926653	675.679503	728.903027
-2.45	-148.104961	-106.182662	-123.641645	-112.447247	-132.981476	-86.230484	-117.249160	-131.895225	-146.744766	-160.962457
+2.45	691.745297	518.037016	544.712790	507.822599	464.678725	412.072219	578.183138	637.373885	706.048796	763.761603
-2.5	-126.060074	-90.377758	-105.238034	-95.709894	-131.084996	-73.395389	-99.797060	-112.263098	-124.902340	-137.003813
+2.5	695.796580	523.661124	540.690731	514.265650	470.912822	412.623778	584.674506	642.076515	714.253894	775.890869
-2.55	-148.102686	-106.182581	-123.641648	-112.447261	-132.981525	-86.230422	-117.249175	-131.895167	-146.744719	-160.962497
+2.55	691.958428	518.022568	544.704663	507.814742	464.681189	412.066303	578.172284	637.366612	706.037423	763.764577
-2.6	-170.147235	-121.987473	-142.045259	-129.184629	-135.528571	-99.065507	-134.701290	-151.527284	-168.587139	-184.921182
+2.6	664.316666	497.392612	531.573482	480.545533	439.796776	398.014946	553.821119	611.928834	675.684441	728.912605
-2.65	-192.191783	-137.792365	-160.448870	-145.921996	-145.115274	-111.900593	-152.153405	-171.159401	-190.429559	-208.879867
+2.65	613.227579	461.048239	497.958207	442.612196	403.631095	370.565716	513.785817	567.528502	624.351998	674.827071
-2.7	-214.236331	-153.597257	-178.852482	-162.659363	-155.063893	-124.735679	-169.605520	-190.791518	-212.271979	-232.838551
+2.7	543.157966	409.363073	441.814782	393.182425	355.869616	331.830143	457.176007	504.819733	551.933796	597.118900
-2.75	-236.280879	-169.402149	-197.256093	-179.396731	-165.042258	-137.570765	-187.057635	-210.423636	-234.114399	-256.797236
+2.75	453.080160	344.162263	363.589575	322.960924	289.558626	282.035274	385.588437	424.491442	461.264732	499.022738
-2.8	-258.325427	-185.207042	-215.659704	-196.134098	-179.648800	-150.405850	-204.509749	-230.055753	-255.956819	-280.755921
+2.8	344.759956	267.558808	263.810454	229.406274	207.013885	219.503899	299.685410	327.250182	354.740984	379.770353
-2.85	-280.369975	-201.011934	-234.063315	-212.871466	-222.533587	-163.240936	-221.961864	-249.687870	-277.799239	-304.714605
+2.85	223.730846	179.590744	173.024446	143.486066	143.064057	148.045314	204.837686	218.092944	232.738510	244.479761
-2.9	-302.414524	-216.816826	-252.466927	-229.608833	-308.361314	-176.076022	-239.413979	-269.319988	-299.641659	-328.673290
+2.9	119.337040	104.929420	105.028022	83.584953	103.574097	81.519062	114.191728	117.646866	121.742318	121.735408
-2.95	-324.459072	-232.621718	-270.870538	-254.836581	-430.509983	-188.911108	-256.866094	-288.952105	-321.484079	-352.631975
+2.95	72.343909	51.866378	60.394464	54.926404	72.234881	42.120469	57.271958	64.426045	71.679495	78.624325
-3	-462.502118	-328.140945	-414.186519	-400.186464	-570.794688	-265.154453	-359.767404	-407.384324	-454.368393	-501.068954
+3	94.388794	67.671284	78.798074	71.663770	65.097378	54.955563	74.724076	84.058165	93.521927	102.583007
(Span 3) -4	-462.502118	-328.140945	-414.186519	-400.186464	-570.794688	-265.154453	-359.767404	-407.384324	-454.368393	-501.068954
+4	94.388794	67.671284	78.798074	71.663770	65.097378	54.955563	74.724076	84.058165	93.521927	102.583007
-3.05	-439.377012	-311.733897	-393.477193	-379.952798	-470.995029	-251.896730	-341.779034	-387.015107	-431.649973	-476.015506
+3.05	89.669355	64.287720	74.858171	68.080582	76.597129	52.207785	70.987872	79.855257	88.845830	97.453856
-3.1	-416.251907	-295.326850	-372.767867	-359.955282	-384.240355	-238.639008	-323.790664	-366.645890	-408.931553	-450.962059
+3.1	102.432178	88.042045	87.994038	69.973808	108.151376	69.917091	92.210609	92.263371	97.263296	97.245065
-3.15	-393.126801	-278.919802	-352.058540	-339.957767	-322.417797	-225.381285	-305.802293	-346.276674	-386.213134	-425.908611
+3.15	185.737626	149.186223	145.041960	118.095142	147.817546	123.098070	163.868585	174.811694	189.132490	192.604397
-3.2	-370.001696	-262.512754	-331.349195	-319.960251	-293.245887	-212.123562	-287.813923	-325.907457	-363.494714	-400.855164
+3.2	288.270433	224.383755	223.181305	190.243047	189.308240	183.835353	245.700770	268.040682	293.311347	307.666928
-3.25	-346.876591	-246.105707	-310.639888	-299.962736	-274.918019	-198.865840	-269.825553	-305.538241	-340.776294	-375.801716
+3.25	382.156818	291.994097	300.110579	263.584080	242.497237	238.668355	320.837465	353.264594	387.364670	412.512584
-3.3	-323.751485	-229.698659	-289.930562	-279.965220	-256.590151	-185.608117	-251.837182	-285.169024	-318.057874	-350.748269
+3.3	461.907265	350.540907	366.973146	322.394732	296.250225	286.354965	388.049906	428.554448	469.127775	504.494692
-3.35	-300.626380	-213.291612	-269.221236	-259.967705	-238.262283	-172.350394	-233.848812	-264.799808	-295.339454	-325.694822
+3.35	529.251369	398.659009	416.761862	364.453414	335.641427	325.792110	445.568146	492.119185	536.680853	581.563691
-3.4	-277.501274	-196.884564	-248.511896	-239.970189	-219.934416	-159.092672	-215.860442	-244.430591	-272.621034	-300.641374
+3.4	584.922750	439.911587	449.902424	388.349465	360.599059	356.027490	491.907642	542.305537	594.180328	641.603590
-3.45	-254.376169	-180.477516	-227.802584	-219.972674	-201.606548	-145.834949	-197.872071	-224.061375	-249.902614	-275.587927
+3.45	623.184141	469.720477	468.767356	414.702857	389.698007	376.206962	525.703951	577.598419	636.585973	682.754007
-3.5	-231.251063	-164.070469	-207.093258	-199.975158	-183.278680	-132.577226	-179.883701	-203.692158	-227.184194	-250.534479
+3.5	642.456187	486.656786	468.998235	434.378916	405.510009	385.413612	545.712801	596.620459	661.336592	713.610972
-3.55	-208.125958	-147.663421	-186.383922	-179.977643	-164.950812	-119.319504	-161.895331	-183.322942	-204.465774	-225.481032
+3.55	650.031085	494.551606	485.054585	440.721482	406.298330	389.708484	554.669530	606.695526	673.466114	728.203148
-3.6	-185.000852	-131.256374	-165.674598	-159.980127	-146.622945	-106.061781	-143.906960	-162.953725	-181.747354	-200.427584

+3.6	**655.045119**	**495.879700**	**498.176694**	**431.776253**	**405.948378**	**395.726651**	**554.961885**	**610.019104**	**673.273034**	**723.142188**
-3.65	**-161.875747**	**-114.849326**	**-144.965273**	**-139.982612**	**-128.295077**	**-92.804058**	**-125.918590**	**-142.584509**	**-159.028935**	**-175.374137**
+3.65	**640.046870**	**482.919012**	**498.349693**	**436.201089**	**403.876126**	**390.856604**	**539.912329**	**595.806600**	**653.321885**	**706.393766**
-3.7	**-138.750642**	**-98.442278**	**-124.255953**	**-119.985096**	**-109.967209**	**-79.546336**	**-107.930220**	**-122.215292**	**-136.310515**	**-150.320690**
+3.7	**606.877025**	**457.846274**	**482.266938**	**424.760545**	**388.750140**	**374.338140**	**508.436088**	**563.369979**	**618.096554**	**668.363946**
-3.75	**-115.625536**	**-82.035231**	**-103.546627**	**-99.987581**	**-91.639342**	**-66.288613**	**-89.941849**	**-101.846076**	**-113.592095**	**-125.267242**
+3.75	**563.972628**	**423.157298**	**446.575167**	**395.819204**	**359.360735**	**345.500203**	**465.058496**	**511.602667**	**567.782954**	**606.221122**
-3.8	**-92.500431**	**-65.628183**	**-82.837301**	**-79.990065**	**-73.311474**	**-53.030890**	**-71.953479**	**-81.476859**	**-90.873675**	**-100.213795**
+3.8	**498.760028**	**372.506209**	**398.323130**	**347.967039**	**314.455531**	**303.760337**	**409.033166**	**449.339188**	**495.167755**	**519.679233**
-3.85	**-69.375325**	**-49.221136**	**-62.127975**	**-59.992550**	**-54.983606**	**-39.773168**	**-53.965109**	**-61.107643**	**-68.155255**	**-75.160347**
+3.85	**410.653271**	**305.256255**	**332.718048**	**291.895827**	**261.572174**	**248.625502**	**334.932149**	**368.962477**	**399.525847**	**416.357169**
-3.9	**-46.250220**	**-32.814088**	**-41.418649**	**-39.995034**	**-36.655738**	**-26.515445**	**-35.976738**	**-40.738426**	**-45.436835**	**-50.106900**
+3.9	**298.763525**	**220.881660**	**244.854269**	**215.677639**	**192.073532**	**179.690935**	**242.205344**	**267.476442**	**280.749769**	**293.908248**
-3.95	**-23.125114**	**-16.407040**	**-20.709324**	**-19.997519**	**-18.327871**	**-13.257722**	**-17.988368**	**-20.369210**	**-22.718415**	**-25.053452**
+3.95	**162.058085**	**119.130096**	**134.340359**	**119.710427**	**105.823458**	**96.945714**	**130.455299**	**144.393509**	**152.024721**	**158.262902**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 60' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-23.124850	-21.868929	-23.456011	-22.094708	-26.633888	-24.058482	-25.423461	-11.173202
+0.05	161.913588	162.590110	172.094286	160.471566	188.396078	151.846474	160.130757	83.476070
-0.1	-46.249700	-43.737858	-46.912022	-44.189417	-53.267775	-48.116963	-50.846923	-22.346404
+0.1	298.477985	302.462721	319.876025	298.061181	349.028830	276.320234	291.327908	154.515479
-0.15	-69.374549	-65.606787	-70.368033	-66.284125	-79.901663	-72.175445	-76.270384	-33.519605
+0.15	410.895060	419.276158	442.842425	412.308349	481.574813	374.528475	394.753164	213.337934
-0.2	-92.499399	-87.475716	-93.824044	-88.378833	-106.535551	-96.233927	-101.693846	-44.692807
+0.2	499.293560	513.424622	541.522572	503.728919	586.718068	447.112788	471.101840	260.241520
-0.25	-115.624249	-109.344645	-117.280055	-110.473542	-133.169438	-120.292409	-127.117307	-55.866009
+0.25	564.383479	585.518064	616.601200	572.985527	676.060869	514.522065	543.029279	295.602582
-0.3	-138.749099	-131.213574	-140.736066	-132.568250	-159.803326	-144.350890	-152.540768	-67.039211
+0.3	607.174281	636.311008	668.918739	629.865655	744.385786	558.797413	590.507516	320.154466
-0.35	-161.873949	-153.082503	-164.192077	-154.662958	-186.437214	-168.409372	-177.964230	-78.212412
+0.35	640.469983	668.216843	707.609950	669.016266	787.775710	586.642340	619.370223	334.205642
-0.4	-184.998798	-174.951432	-187.648088	-176.757666	-213.071101	-192.467854	-203.387691	-89.385614
+0.4	655.364727	689.997136	728.931490	688.308879	806.899324	597.394492	631.298864	338.273603
-0.45	-208.123648	-196.820361	-211.104099	-198.852375	-239.704989	-216.526336	-228.811152	-100.558816
+0.45	650.259101	692.493242	729.723733	688.447948	803.152292	586.850431	620.624868	333.043073
-0.5	-231.248498	-218.689290	-234.560110	-220.947083	-266.338877	-240.584817	-254.234614	-111.732018
+0.5	643.366660	680.614950	718.160338	677.055995	791.076459	566.066385	598.615497	327.779713
-0.55	-254.373348	-240.558219	-258.016121	-243.041791	-292.972764	-264.643299	-279.658075	-122.905219
+0.55	622.845201	652.829791	690.136842	651.747930	763.876855	562.029788	593.934558	322.045176
-0.6	-277.498197	-262.427148	-281.472131	-265.136500	-319.606652	-288.701781	-305.081537	-134.078421
+0.6	584.505422	608.931954	644.494751	609.661722	716.308578	534.629643	564.585542	306.603063
-0.65	-300.623047	-284.296077	-304.928142	-287.231208	-346.240540	-312.760263	-330.504998	-145.251623
+0.65	528.851813	555.382261	582.875388	552.327726	649.719144	485.549771	513.018806	282.172561
-0.7	-323.747897	-306.165006	-328.384153	-309.325916	-372.874427	-336.818744	-355.928459	-156.424825
+0.7	461.539466	488.455180	511.733622	481.423434	566.009527	425.032572	448.938485	249.551306
-0.75	-346.872747	-328.033935	-351.840164	-331.420625	-399.508315	-360.877226	-381.351921	-167.598027
+0.75	381.878363	408.751628	426.869336	398.772923	467.331911	345.003303	364.037458	209.615323
-0.8	-369.997597	-349.902864	-375.296175	-353.515333	-426.142202	-384.935708	-406.775382	-178.771228
+0.8	288.008752	318.119672	329.881297	306.347132	356.016577	247.304310	260.518713	163.318796
-0.85	-393.122446	-371.771793	-398.752186	-375.610041	-452.776090	-408.994189	-432.198843	-189.944430
+0.85	185.263388	218.551931	222.887520	206.263679	234.571550	164.187910	173.282168	111.694279
-0.9	-416.247296	-393.640722	-422.208197	-397.704750	-479.409978	-433.052671	-457.622305	-201.117632
+0.9	103.321426	125.038598	125.038598	112.858870	119.403812	94.988343	99.987730	73.888173
-0.95	-439.372146	-415.509651	-445.664208	-419.799458	-506.043865	-457.111153	-483.045766	-212.290834
+0.95	89.667977	86.705766	92.827225	87.399710	105.082578	87.034692	91.863431	43.158216
-1	-462.497005	-437.378585	-469.120219	-441.894165	-532.677744	-481.169642	-508.469232	-223.464033
+1	94.387344	91.269227	97.712868	91.999695	110.613240	91.615466	96.698351	45.429703
(Span 2) -2	-462.497005	-437.378585	-469.120219	-441.894165	-532.677744	-481.169642	-508.469232	-223.464033
+2	94.387344	91.269227	97.712868	91.999695	110.613240	91.615466	96.698351	45.429703
-2.05	-324.464058	-313.740637	-335.890476	-316.251719	-380.236040	-314.930595	-332.403256	-156.165878
+2.05	72.342796	69.952929	74.891630	70.512792	84.779067	70.218301	74.114058	41.978710
-2.1	-302.419171	-292.424327	-313.069250	-294.764798	-354.401867	-293.533435	-309.818961	-145.555583
+2.1	119.337022	149.012959	149.012959	142.272799	153.231215	113.378521	119.345812	85.580179
-2.15	-280.374284	-271.108016	-290.248024	-273.277878	-328.567695	-272.136275	-287.234666	-134.945289
+2.15	223.500492	263.321902	270.370757	256.862869	292.442156	197.208751	208.236386	130.490383
-2.2	-258.329397	-249.791706	-267.426799	-251.790958	-302.733522	-250.739115	-264.650370	-124.334995
+2.2	344.500768	379.221557	394.029034	373.398815	434.466289	303.683534	320.598569	191.813165

-2.25	-236.284510	-228.475395	-244.605573	-230.304038	-276.899349	-229.341955	-242.066075	-113.724700
+2.25	453.031026	481.270393	504.559444	478.674719	560.645765	419.921811	443.762548	245.249530
-2.3	-214.239623	-207.159085	-221.784347	-208.817118	-251.065177	-207.944795	-219.481779	-103.114406
+2.3	543.007312	566.060612	598.439630	566.517141	665.269201	511.862559	541.176120	287.495768
-2.35	-192.194736	-185.842774	-198.963122	-187.330198	-225.231004	-186.547635	-196.897484	-92.504112
+2.35	613.203100	636.158471	673.161853	636.107344	747.259451	584.687896	617.700556	319.933443
-2.4	-170.149849	-164.526464	-176.141896	-165.843278	-199.396831	-165.150475	-174.313189	-81.893817
+2.4	664.030816	686.993926	726.560714	685.688434	806.870820	632.848490	668.961141	342.882561
-2.45	-148.104961	-143.210153	-153.320670	-144.356358	-173.562659	-143.753314	-151.728893	-71.283523
+2.45	691.745297	716.855603	758.201613	716.194379	840.361103	655.961991	693.628378	354.371658
-2.5	-126.060074	-121.893843	-130.499510	-122.869438	-147.728486	-122.356187	-129.144598	-60.673229
+2.5	695.796580	727.919108	768.461144	724.429922	846.842167	654.139209	692.009234	354.356318
-2.55	-148.102686	-143.210059	-153.320747	-144.356235	-173.562660	-143.753352	-151.728877	-71.283508
+2.55	691.958428	716.855771	758.204011	716.183075	840.356223	655.949571	693.615091	354.375373
-2.6	-170.147235	-164.526358	-176.141985	-165.843138	-199.396833	-165.150518	-174.313170	-81.893800
+2.6	664.316666	686.997814	726.566650	685.688842	806.877148	632.852956	668.965617	342.884222
-2.65	-192.191783	-185.842657	-198.963223	-187.330041	-225.231005	-186.547683	-196.897463	-92.504091
+2.65	613.227579	636.160738	673.166010	636.115028	747.259083	584.690428	617.702995	320.178693
-2.7	-214.236331	-207.158956	-221.784461	-208.816943	-251.065178	-207.944848	-219.481757	-103.114383
+2.7	543.157966	566.064787	598.442390	566.523550	665.280673	511.864586	541.178004	287.493373
-2.75	-236.280879	-228.475255	-244.605698	-230.303846	-276.899351	-229.342014	-242.066050	-113.724675
+2.75	453.080160	481.267670	504.561424	478.680332	560.656123	419.937738	443.779063	245.253828
-2.8	-258.325427	-249.791553	-267.426936	-251.790749	-302.733523	-250.739179	-264.650344	-124.334967
+2.8	344.759956	379.218412	394.027188	373.399635	434.471632	303.694203	320.609565	191.815629
-2.85	-280.369975	-271.107852	-290.248174	-273.277652	-328.567696	-272.136344	-287.234637	-134.945259
+2.85	223.730846	263.319047	270.372843	256.868465	292.443454	197.206315	208.233935	130.491129
-2.9	-302.414524	-292.424151	-313.069412	-294.764554	-354.401869	-293.533510	-309.818930	-145.555551
+2.9	119.337040	149.018853	149.018853	142.269655	153.237965	113.382524	119.350025	85.207798
-2.95	-324.459072	-313.740450	-335.890649	-316.251457	-380.236042	-314.930675	-332.403224	-156.165843
+2.95	72.343909	69.952952	74.891587	70.512842	84.779068	70.218287	74.114061	41.246555
-3	-462.502118	-437.378939	-469.120253	-441.894255	-532.677963	-481.170048	-508.469265	-223.466916
+3	94.388794	91.269277	97.712816	91.999769	110.613240	91.615444	96.698360	45.429713
(Span 3) -4	-462.502118	-437.378939	-469.120253	-441.894255	-532.677963	-481.170048	-508.469265	-223.466916
+4	94.388794	91.269277	97.712816	91.999769	110.613240	91.615444	96.698360	45.429713
-3.05	-439.377012	-415.509992	-445.664240	-419.799543	-506.044065	-457.111546	-483.045802	-212.293571
+3.05	89.669355	86.705814	92.827175	87.399781	105.082578	87.034672	91.863442	43.158228
-3.1	-416.251907	-393.641046	-422.208227	-397.704830	-479.410166	-433.053044	-457.622339	-201.120225
+3.1	102.432178	125.017746	125.017746	112.850790	119.399335	94.993563	99.993224	72.980706
-3.15	-393.126801	-371.772099	-398.752215	-375.610117	-452.776268	-408.994542	-432.198876	-189.946879
+3.15	185.737626	218.557576	222.892193	206.260278	234.564394	164.192099	173.286488	111.690488
-3.2	-370.001696	-349.903152	-375.296202	-353.515405	-426.142369	-384.936040	-406.775413	-178.773533
+3.2	288.270433	318.125521	329.886074	306.344197	356.009760	247.311470	260.526490	163.314908
-3.25	-346.876591	-328.034206	-351.840189	-331.420692	-399.508470	-360.877538	-381.351950	-167.600187
+3.25	382.156818	408.756976	426.873489	398.769870	467.324737	345.009001	364.043708	209.611423
-3.3	-323.751485	-306.165259	-328.384177	-309.325979	-372.874572	-336.819036	-355.928487	-156.426842
+3.3	461.907265	488.459560	511.736624	481.419649	566.001255	425.036216	448.942579	249.547172
-3.35	-300.626380	-284.296312	-304.928164	-287.231266	-346.240673	-312.760534	-330.505024	-145.253496
+3.35	529.251369	555.385045	582.873986	552.322650	649.709135	485.548593	513.020180	282.168038
-3.4	-277.501274	-262.427366	-281.472151	-265.136554	-319.606775	-288.702032	-305.081561	-134.080150
+3.4	584.922750	608.930619	644.491504	609.654784	716.296131	534.625765	564.581699	306.598072
-3.45	-254.376169	-240.558419	-258.016139	-243.041841	-292.972876	-264.643530	-279.658098	-122.906804
+3.45	623.184141	652.826274	690.131158	651.738724	763.884339	562.022723	593.927359	322.039896
-3.5	-231.251063	-218.689472	-234.560126	-220.947128	-266.338977	-240.585028	-254.234635	-111.733458
+3.5	642.456187	680.608779	718.151718	677.044049	791.080569	566.055731	598.604513	327.773779
-3.55	-208.125958	-196.820525	-211.104113	-198.852416	-239.705079	-216.526526	-228.811172	-100.560112
+3.55	650.031085	692.500827	729.733840	688.438298	803.149717	586.858919	620.633554	333.040312
-3.6	-185.000852	-174.951579	-187.648101	-176.757703	-213.071180	-192.468024	-203.387709	-89.386767

+3.6	655.045119	690.001479	728.938154	688.296165	806.893190	597.400237	631.304631	338.270363
-3.65	-161.875747	-153.082632	-164.192088	-154.662990	-186.437281	-168.409522	-177.964246	-78.213421
+3.65	640.046870	668.217736	707.612968	669.023075	787.765449	586.644825	619.372526	334.201827
-3.7	-138.750642	-131.213685	-140.736075	-132.568277	-159.803383	-144.351020	-152.540783	-67.040075
+3.7	606.877025	636.307435	668.916979	629.868755	744.371080	558.795225	590.504865	320.150159
-3.75	-115.625536	-109.344739	-117.280063	-110.473565	-133.169484	-120.292518	-127.117320	-55.866729
+3.75	563.972628	585.510766	616.595449	572.984216	676.064502	514.516140	543.022664	295.606381
-3.8	-92.500431	-87.475792	-93.824050	-88.378852	-106.535586	-96.234016	-101.693857	-44.693383
+3.8	498.760028	513.413267	541.512508	503.723592	586.716323	447.111160	471.100202	260.244536
-3.85	-69.375325	-65.606845	-70.368037	-66.284139	-79.901687	-72.175514	-76.270394	-33.520038
+3.85	410.653271	419.260458	442.827727	412.298769	481.567986	374.522735	394.747184	213.340237
-3.9	-46.250220	-43.737898	-46.912025	-44.189426	-53.267788	-48.117012	-50.846931	-22.346692
+3.9	298.763525	302.442573	319.856545	298.047107	349.016634	276.310074	291.317257	154.517046
-3.95	-23.125114	-21.868952	-23.456012	-22.094714	-26.633890	-24.058510	-25.423468	-11.173346
+3.95	162.058085	162.594686	172.097458	160.453001	188.378458	151.851331	160.135894	83.476875
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 60' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-23.124850	-41.521414	-44.770178	-26.974565	-33.136515	-34.778639
+0.05	161.913588	233.886685	236.466074	169.032537	205.800908	209.412775
-0.1	-46.249700	-83.042828	-89.540357	-53.949130	-66.273030	-69.557277
+0.1	298.477985	421.061153	426.622624	306.504635	374.148328	379.176280
-0.15	-69.374549	-124.564241	-134.310535	-80.923694	-99.409545	-104.335916
+0.15	410.895060	576.773801	584.730566	414.180389	505.688881	510.178441
-0.2	-92.499399	-166.085655	-179.080714	-107.898259	-132.546060	-139.114554
+0.2	499.293560	701.514489	722.534069	502.489491	618.616845	625.648287
-0.25	-115.624249	-207.607069	-223.850892	-134.872824	-165.682574	-173.893193
+0.25	564.383479	789.989489	831.791135	576.499523	700.803266	711.103827
-0.3	-138.749099	-249.128483	-268.621071	-161.847389	-198.819089	-208.671832
+0.3	607.174281	847.450247	912.775831	622.660056	750.765373	778.259045
-0.35	-161.873949	-290.649897	-313.391249	-188.821954	-231.955604	-243.450470
+0.35	640.469983	894.550892	968.749076	647.639934	771.845840	811.904494
-0.4	-184.998798	-332.171311	-358.161428	-215.796519	-265.092119	-278.229109
+0.4	655.364727	918.701663	998.024391	656.000870	776.151700	813.564740
-0.45	-208.123648	-373.692724	-402.931606	-242.771083	-298.228634	-313.007747
+0.45	650.259101	930.044492	993.924479	640.736064	761.186959	796.524612
-0.5	-231.248498	-415.214138	-447.701784	-269.745648	-331.365149	-347.786386
+0.5	643.366660	902.442484	972.487540	604.946093	732.647928	754.700064
-0.55	-254.373348	-456.735552	-492.471963	-296.720213	-364.501664	-382.565025
+0.55	622.845201	877.924608	933.694370	607.633249	727.140301	754.265029
-0.6	-277.498197	-498.256966	-537.242141	-323.694778	-397.638179	-417.343663
+0.6	584.505422	813.223408	878.308724	585.972382	696.058902	727.933397
-0.65	-300.623047	-539.778380	-582.012320	-350.669343	-430.774693	-452.122302
+0.65	528.851813	734.672486	792.595560	538.758562	646.297086	676.022441
-0.7	-323.747897	-581.299794	-626.782498	-377.643907	-463.911208	-486.900940
+0.7	461.539466	637.782747	678.599030	477.658841	572.585712	591.907770
-0.75	-346.872747	-622.821207	-671.552677	-404.618472	-497.047723	-521.679579
+0.75	381.878363	522.058541	540.514550	392.445227	471.896216	477.537607
-0.8	-369.997597	-664.342621	-716.322855	-431.593037	-530.184238	-556.458218
+0.8	288.008752	373.799317	374.613905	285.443785	344.038490	344.480276
-0.85	-393.122446	-705.864035	-761.093034	-458.567602	-563.320753	-591.236856
+0.85	185.263388	217.455206	208.391545	195.593521	214.761834	224.446009
-0.9	-416.247296	-747.385449	-805.863212	-485.542167	-596.457268	-626.015495
+0.9	103.321426	134.193037	141.684612	112.477983	119.580035	119.467438
-0.95	-439.372146	-788.906863	-850.633391	-512.516732	-629.593783	-660.794133
+0.95	89.667977	141.648206	149.555980	94.568844	117.947930	121.278056
-1	-462.497005	-830.428281	-896.798812	-539.491292	-662.730293	-695.572785
+1	94.387344	149.103376	157.427347	99.546149	124.155717	127.661112
(Span 2) -2	-462.497005	-830.428281	-896.798812	-539.491292	-662.730293	-695.572785
+2	94.387344	149.103376	157.427347	99.546149	124.155717	127.661112
-2.05	-324.464058	-512.529015	-572.732142	-347.842086	-426.788446	-440.478608
+2.05	72.342796	114.279676	120.659550	76.296741	95.158644	97.845340
-2.1	-302.419171	-477.706532	-504.392971	-318.943266	-397.791388	-409.022626
+2.1	119.337022	151.222070	140.186546	134.279506	153.423554	153.449523
-2.15	-280.374284	-442.884049	-467.625176	-295.693853	-368.794331	-379.206865
+2.15	223.500492	271.750485	268.504046	234.888382	265.881805	278.771581
-2.2	-258.329397	-408.061566	-430.857381	-272.444440	-339.797273	-349.391105
+2.2	344.500768	449.849173	468.717963	346.568912	413.845382	418.665929

-2.25	-236.284510	-373.239083	-394.089586	-249.195027	-310.800215	-319.575344
+2.25	453.031026	638.406536	690.575298	477.669244	571.391393	591.646109
-2.3	-214.239623	-338.416600	-357.321792	-225.945615	-281.803158	-289.759583
+2.3	543.007312	802.144409	870.225615	579.385943	692.318478	727.358219
-2.35	-192.194736	-303.594117	-320.553997	-202.696202	-252.806100	-259.943823
+2.35	613.203100	923.286470	1010.254574	655.913656	779.062507	825.420366
-2.4	-170.149849	-268.771634	-283.786202	-179.446789	-223.809042	-230.128062
+2.4	664.030816	1016.522322	1100.960802	707.272743	834.571851	887.101298
-2.45	-148.104961	-233.949151	-247.018408	-156.197376	-194.811984	-200.312301
+2.45	691.745297	1073.101227	1149.421774	729.171111	858.436114	910.643924
-2.5	-126.060074	-199.133625	-210.250613	-132.947963	-165.815012	-170.496608
+2.5	695.796580	1082.827498	1174.959218	723.440836	848.625145	906.142271
-2.55	-148.102686	-233.957325	-247.018422	-156.197348	-194.812085	-200.312381
+2.55	691.958428	1073.108040	1148.487227	729.155185	858.422331	910.642408
-2.6	-170.147235	-268.781025	-283.786219	-179.446757	-223.809157	-230.128153
+2.6	664.316666	1016.521865	1100.103867	707.268042	834.567052	887.097214
-2.65	-192.191783	-303.604725	-320.554016	-202.696166	-252.806230	-259.943925
+2.65	613.227579	923.288096	1010.253662	655.915571	779.059644	825.420994
-2.7	-214.236331	-338.428425	-357.321814	-225.945575	-281.803303	-289.759697
+2.7	543.157966	802.154241	870.226446	579.387327	692.316509	727.367818
-2.75	-236.280879	-373.252125	-394.089611	-249.194984	-310.800376	-319.575469
+2.75	453.080160	638.402831	690.574165	477.686679	571.402948	591.653331
-2.8	-258.325427	-408.075825	-430.857408	-272.444392	-339.797449	-349.391241
+2.8	344.759956	449.842227	468.716311	346.580426	413.850892	418.667535
-2.85	-280.369975	-442.899525	-467.625205	-295.693801	-368.794522	-379.207013
+2.85	223.730846	271.750318	268.504018	234.885498	265.886295	278.770561
-2.9	-302.414524	-477.723226	-504.393002	-318.943210	-397.791594	-409.022785
+2.9	119.337040	151.216336	140.185685	134.284247	153.429551	153.455432
-2.95	-324.459072	-512.546926	-572.732134	-347.841922	-426.788667	-440.479160
+2.95	72.343909	114.275678	120.659539	76.296753	95.158593	97.845305
-3	-462.502118	-830.428340	-896.853765	-539.491279	-662.730691	-695.573209
+3	94.388794	149.098165	157.427336	99.546167	124.155652	127.661063
(Span 3) -4	-462.502118	-830.428340	-896.853765	-539.491279	-662.730691	-695.573209
+4	94.388794	149.098165	157.427336	99.546167	124.155652	127.661063
-3.05	-439.377012	-788.906923	-850.633393	-512.516715	-629.594156	-660.794550
+3.05	89.669355	141.643257	149.555970	94.568858	117.947869	121.278010
-3.1	-416.251907	-747.385506	-805.863215	-485.542151	-596.457621	-626.015890
+3.1	102.432178	134.188348	141.684603	112.484097	119.586530	119.463515
-3.15	-393.126801	-705.864089	-761.093037	-458.567586	-563.321087	-591.237230
+3.15	185.737626	218.748046	208.705191	195.598480	214.758991	224.441478
-3.2	-370.001696	-664.342673	-716.322859	-431.593022	-530.184552	-556.458570
+3.2	288.270433	373.790125	374.614942	285.453000	344.032243	344.473976
-3.25	-346.876591	-622.821256	-671.552681	-404.618458	-497.048017	-521.679910
+3.25	382.156818	522.046481	540.515924	392.452570	471.887377	477.533242
-3.3	-323.751485	-581.299839	-626.782503	-377.643894	-463.911482	-486.901251
+3.3	461.907265	637.766657	678.600176	477.663499	572.573518	591.900263
-3.35	-300.626380	-539.778422	-582.012325	-350.669330	-430.774948	-452.122591
+3.35	529.251369	734.679767	792.594060	538.759967	646.303410	676.030751
-3.4	-277.501274	-498.257006	-537.242147	-323.694766	-397.638413	-417.343931
+3.4	584.922750	813.843256	878.307062	585.967971	696.061171	727.936979
-3.45	-254.376169	-456.735589	-492.471969	-296.720201	-364.501878	-382.565271
+3.45	623.184141	877.933417	933.692989	607.625031	727.136307	754.261265
-3.5	-231.251063	-415.214172	-447.701791	-269.745637	-331.365343	-347.786611
+3.5	642.456187	902.445770	972.485635	604.950883	732.639326	754.702260
-3.55	-208.125958	-373.692755	-402.931613	-242.771073	-298.228808	-313.007952
+3.55	650.031085	930.035454	993.922426	640.744568	761.193277	796.528928
-3.6	-185.000852	-332.171339	-358.161435	-215.796509	-265.092274	-278.229292

+3.6	**655.045119**	**918.687043**	**998.054115**	**656.006465**	**776.154447**	**813.562596**
-3.65	**-161.875747**	**-290.649922**	**-313.391257**	**-188.821945**	**-231.955739**	**-243.450632**
+3.65	**640.046870**	**894.541301**	**969.345387**	**647.642006**	**771.842812**	**811.898082**
-3.7	**-138.750642**	**-249.128505**	**-268.621079**	**-161.847380**	**-198.819204**	**-208.671972**
+3.7	**606.877025**	**848.067578**	**912.774955**	**622.656803**	**750.760261**	**778.247784**
-3.75	**-115.625536**	**-207.607088**	**-223.850901**	**-134.872816**	**-165.682669**	**-173.893312**
+3.75	**563.972628**	**790.415983**	**831.789657**	**576.492264**	**700.793269**	**711.107251**
-3.8	**-92.500431**	**-166.085671**	**-179.080723**	**-107.898252**	**-132.546135**	**-139.114653**
+3.8	**498.760028**	**701.525544**	**722.533180**	**502.477753**	**618.621933**	**625.654729**
-3.85	**-69.375325**	**-124.564255**	**-134.310545**	**-80.923688**	**-99.409600**	**-104.335993**
+3.85	**410.653271**	**576.777956**	**584.728329**	**414.173156**	**505.687489**	**510.178054**
-3.9	**-46.250220**	**-83.042838**	**-89.540367**	**-53.949124**	**-66.273065**	**-69.557333**
+3.9	**298.763525**	**421.056995**	**426.621458**	**306.492290**	**374.140828**	**379.169681**
-3.95	**-23.125114**	**-41.521421**	**-44.770189**	**-26.974560**	**-33.136530**	**-34.778673**
+3.95	**162.058085**	**233.894853**	**236.463686**	**169.038053**	**205.807583**	**209.419695**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-18.02961285	-20.124295	-22.398178	-14.12189004	-15.15683491	-14.27856074	-17.22657176	-15.95692256	-16.867564	-7.272146667
End Shear	128.8016942	145.599993	158.283094	113.595146	120.5301959	112.5396119	132.6178868	111.1756222	117.3117804	58.60768719
-0.05	-18.02961285	-20.235126	-26.288493	-14.12189004	-15.15683491	-14.27856074	-17.22657176	-15.95692256	-16.867564	-7.272146667
+0.05	119.1311303	133.612633	145.147312	104.9024643	111.184781	103.7514074	122.0016239	100.7165826	106.2489576	54.05605699
-0.1	-18.02961285	-20.604476	-31.038327	-14.12189004	-15.15683491	-14.27856074	-17.22657176	-15.95692256	-16.867564	-7.272146667
+0.1	109.5465179	122.439667	132.352681	96.77492434	102.4535776	95.5314875	112.0858943	90.95600162	95.92673711	49.73402296
-0.15	-18.02961285	-24.124169	-35.278834	-14.12189004	-15.15683491	-14.27856074	-17.22657176	-15.95692256	-16.867564	-7.920992502
+0.15	101.4255235	113.111330	121.683326	89.87466146	95.04603282	88.56091067	103.6883455	82.78557636	87.28766015	46.07271283
-0.2	-18.16291968	-32.568707	-40.408500	-19.87140787	-19.87140787	-18.4276129	-19.51188451	-15.95692256	-16.867564	-10.80911892
+0.2	92.09145509	102.540376	109.612332	81.92708575	86.52042495	80.54202886	94.04116131	73.51517791	77.48734217	41.86549032
-0.25	-25.00232244	-39.955097	-47.475918	-25.74955411	-25.92497373	-24.22834823	-25.96366721	-19.40620541	-20.44514757	-13.2593175
+0.25	84.23585966	93.764565	99.612093	75.22367868	79.33498241	73.78703367	85.92623415	65.82065667	69.35463708	38.32566432
-0.3	-34.63424743	-48.718887	-57.344571	-33.82580901	-34.63594975	-31.56430512	-34.47884667	-25.24166766	-26.6545674	-16.07927071
+0.3	75.27051864	83.879339	88.377423	67.55545746	71.12200505	66.07011817	76.66993162	57.47227632	60.53277663	34.28708846
-0.35	-42.80942485	-56.333878	-65.907185	-40.66728054	-42.02028609	-38.53758788	-42.96424728	-30.18266137	-31.91277247	-19.17895161
+0.35	67.78164655	75.725316	79.140666	61.13409287	64.25040409	59.61720448	68.94247406	50.35270532	53.01126818	30.91488184
-0.4	-52.22260976	-65.310335	-75.986562	-48.52898395	-50.51199384	-46.56040081	-52.73972586	-35.8577697	-37.95290772	-23.42698508
+0.4	59.60042596	66.603710	68.849776	53.8446086	56.45708481	52.30319261	60.50570805	42.72583662	44.97456486	27.09877948
-0.45	-60.49095528	-73.060087	-84.992576	-55.14396043	-57.66251584	-53.3194444	-60.98675281	-40.63050546	-43.0332333	-27.00884788
+0.45	52.2823673	59.135747	60.466357	48.03845878	50.25578048	46.48703874	53.26005062	36.65451993	38.58370519	23.94033799
-0.5	-70.79317421	-82.136821	-96.263044	-62.69171958	-65.82791732	-61.04184614	-70.42295861	-46.62994903	-49.08415687	-31.10469148
+0.5	44.60097664	50.849849	51.221476	41.21690042	42.97794154	39.66613157	45.13906402	30.46485288	32.25349857	20.40053803
-0.55	-79.43932956	-89.922509	-105.916775	-68.99501001	-72.65288115	-67.50014182	-78.32675346	-54.35598344	-57.21682467	-34.53303612
+0.55	38.13639576	44.349120	43.776794	35.60561429	36.99874532	34.06688649	38.48856669	26.37657114	27.9113168	17.50199177
-0.6	-89.27736637	-98.981318	-117.134230	-76.12944406	-80.38495075	-74.82121675	-87.30136535	-63.20257745	-66.52902889	-38.42285803
+0.6	30.97110334	36.954775	35.997357	29.35965128	30.35256576	27.84876639	31.12309346	21.82154919	23.07443094	14.29232511
-0.65	-97.46866212	-106.699127	-126.553201	-82.03585857	-86.79261311	-80.89225716	-94.75707029	-70.91820062	-74.66830042	-41.65154057
+0.65	25.1770666	31.022158	29.910173	24.28432604	24.96066166	22.60637934	24.93327569	18.11623979	19.14078488	11.69981877
-0.7	-106.7095463	-115.616001	-137.165303	-88.65757702	-93.98431483	-87.71106269	-103.1477325	-80.48690558	-84.80744942	-45.28151223
+0.7	18.85334192	24.588483	23.366589	18.52250818	18.85107354	17.10659121	18.46384914	14.0439809	14.81878145	9.243761888
-0.75	-114.3320112	-123.157159	-145.930332	-94.08192719	-99.88293463	-93.30834048	-110.05049	-88.46921398	-93.26703837	-48.26440004
+0.75	13.91242238	19.503354	18.251477	14.08119882	14.15225386	13.10533225	14.10542399	10.78328424	11.35924599	7.484509237
-0.8	-122.8427799	-131.802280	-155.759266	-100.0915453	-106.4272387	-99.52396499	-117.7348862	-97.49258437	-102.83166	-51.58069366
+0.8	9.415036224	13.920710	13.669162	9.988574311	9.988574311	8.959589128	9.41080756	7.580987436	7.979986775	5.560668682
-0.85	-129.7824445	-139.053010	-163.834568	-104.9486417	-111.7250734	-104.5609734	-123.9798398	-104.9517359	-110.7397917	-54.27163967
+0.85	6.836313184	9.740193	11.010307	6.723987391	6.723987391	5.700906335	5.837246842	5.177374213	5.449867593	4.029282643
-0.9	-137.4301302	-147.290746	-172.835965	-110.2467714	-117.5149468	-110.0724888	-130.8356323	-113.2997071	-119.5921704	-57.22042393
+0.9	4.073389974	5.401792	8.257012	3.37266604	3.37266604	3.001310558	3.613222798	3.118021109	3.292901885	2.388948063
-0.95	-143.5730268	-154.132316	-180.181274	-114.4514267	-122.1202562	-114.4627233	-136.3179281	-120.1242251	-126.8308107	-59.57329617
+0.95	3.717563464	4.052106	6.197761	2.974235734	3.187219669	3.001310558	3.613222798	3.118021109	3.292901885	1.498275597
-1	-150.2246601	-161.821226	-188.305545	-118.9386751	-127.0486601	-119.1692061	-142.2227861	-127.6667436	-134.8332429	-62.10074214
+1	3.72E+00	4.002180	4.417660	2.97E+00	3.19E+00	3.00E+00	3.61E+00	3.12E+00	3.29E+00	1.50E+00
(Span 2) -2	-1.33E+01	-14.318830	-15.805315	-1.06E+01	-1.14E+01	-1.07E+01	-1.29E+01	-1.12E+01	-1.18E+01	-5.36E+00
+2	1.40E+02	165.208481	188.582595	119.1842698	127.4146849	119.5835854	142.9453263	131.3228025	138.7522309	62.36872154
-2.05	-1.33E+01	-14.395188	-17.954728	-1.06E+01	-1.14E+01	-1.07E+01	-1.29E+01	-1.12E+01	-1.18E+01	-5.36E+00
+2.05	1.34E+02	156.836168	177.436417	114.5381119	122.3154244	114.7161214	136.8475497	123.8567204	130.8357242	59.77107047
-2.1	-13.30054012	-14.623058	-20.566463	-10.64109382	-11.40309875	-10.73796081	-12.92723488	-11.15552294	-11.78120392	-5.360466533
+2.1	127.0588359	148.090668	168.452788	109.373955	116.6705097	109.3416154	130.16089	115.9767115	122.4839266	56.91212911
-2.15	-13.30054012	-15.421569	-24.037299	-10.64109382	-11.40309875	-10.73796081	-12.92723488	-11.15552294	-11.78120392	-5.360466533
+2.15	118.7718255	137.904416	157.784827	103.023878	109.7525834	102.7691935	122.0314331	106.7199785	112.6769562	53.42615542
-2.2	-13.30054012	-20.968532	-28.836941	-13.08857153	-13.18220504	-12.1400601	-12.95091236	-11.15552294	-11.78120392	-6.936677301
+2.2	111.2784758	128.626005	148.082516	96.96900187	103.1743386	96.53048441	114.3518952	98.23520721	103.691164	50.12573563

-2.25	-19.73814852	-27.946391	-35.900022	-19.16353051	-19.61441512	-17.87400149	-19.54430946	-14.31503667	-15.11563393	-9.345146545
+2.25	102.5863019	118.032079	136.718345	89.77753775	95.37944734	89.14900494	105.3032342	88.50837899	93.3935807	46.23011577
-2.3	-26.41405041	-34.754186	-42.904519	-25.01145883	-25.82731167	-23.68086747	-26.399878	-18.58305166	-19.64667258	-12.32264175
+2.3	94.58105501	108.556485	126.258359	83.11758045	88.17548294	82.33617431	96.98243326	79.29278137	83.64341023	42.64291894
-2.35	-34.65081726	-43.031831	-51.711415	-32.01242454	-33.28590374	-30.66482807	-34.6900809	-23.68329856	-25.06350193	-15.92137131
+2.35	85.3591356	97.920312	114.132367	75.40606143	79.84967607	74.47195476	87.41010323	69.4764395	73.25567914	38.51169705
-2.4	-42.82234233	-50.884172	-60.519474	-38.54062814	-40.25731037	-37.20280331	-42.48648419	-28.54033984	-30.10849407	-19.30370474
+2.4	77.05333246	88.561425	103.207386	68.42667369	72.32761563	67.29206259	78.71662342	60.91352837	64.20002191	34.7924223
-2.45	-52.47408922	-60.205995	-71.106811	-46.14624368	-48.39620817	-44.84611442	-51.6373715	-36.19864735	-38.10383931	-23.27085148
+2.45	67.6848957	78.223865	91.203304	60.07693815	63.34456864	58.90949145	68.56206246	51.52549747	54.27564522	30.59964511
-2.5	-61.36753721	-68.864762	-81.039436	-53.06911111	-55.81854343	-51.82515145	-60.02303575	-43.49210205	-45.78698925	-26.90331748
+2.5	59.41920705	68.862891	80.886195	53.06720559	55.81649859	51.82328156	60.02078511	43.49018158	45.78496038	26.90301079
-2.55	-70.46851596	-78.225738	-91.384377	-60.07884618	-63.34661949	-58.91138138	-68.5643438	-51.52750223	-54.27776405	-30.59996477
+2.55	51.2902651	60.204143	70.981707	46.14438414	48.39421617	44.84428194	51.63517312	36.19693103	38.10203266	23.27055062
-2.6	-80.8497895	-88.563278	-103.418545	-68.42857594	-72.32966415	-67.21214656	-78.63710808	-60.91560103	-64.20221345	-34.79274431
+2.6	42.26040262	50.882360	60.425530	38.53882399	40.25538187	37.20101807	42.484351	28.53874573	30.10723792	19.30340589
-2.65	-90.11073814	-97.922132	-114.368539	-75.40795628	-79.85172016	-74.47384221	-87.41239657	-69.47855048	-73.257912	-38.51201652
+2.65	34.60469885	43.030072	51.643959	32.0106879	33.28405117	30.6631302	34.6880609	23.68215898	25.06229137	15.92108579
-2.7	-100.4570123	-108.558252	-126.519519	-83.11941969	-88.17747011	-82.33802671	-96.9846913	-79.24989714	-83.59528815	-42.6432252
+2.7	26.53679405	34.752511	42.867027	25.00981113	25.82555867	23.67926198	26.39797739	18.58197608	19.64553047	12.32237063
-2.75	-109.6245958	-118.033776	-136.998275	-89.77931909	-95.38137573	-89.15080436	-105.3054353	-88.51050959	-93.39583587	-46.23041868
+2.75	19.85046012	27.944806	35.882720	19.16199939	19.61279089	17.87250692	19.54255046	14.31402811	15.11456345	9.344903277
-2.8	-119.9155686	-128.627592	-148.378807	-96.97069618	-103.176177	-96.53219045	-114.3539909	-98.23730683	-103.6933872	-50.12602292
+2.8	13.42096152	20.967069	28.636987	13.08718023	13.18073516	12.13887997	12.94961427	11.15552606	11.78121035	6.950251661
-2.85	-128.3265935	-137.905910	-158.090641	-103.0254896	-109.7543362	-102.7708103	-122.033427	-106.7220319	-112.6791311	-53.42643341
+2.85	13.42096152	15.420231	24.017438	10.64109606	11.40310535	10.73796545	12.92723252	11.15552606	11.78121035	5.360467399
-2.9	-137.2804617	-148.092014	-168.762812	-109.3754381	-116.672128	-109.3431208	-130.1627567	-115.9786737	-122.4860058	-56.91238797
+2.9	13.42096152	14.623057	20.555386	10.64109606	11.40310535	10.73796545	12.92723252	11.15552606	11.78121035	5.360467399
-2.95	-144.6937585	-156.837376	-177.743618	-114.5394541	-122.3168939	-114.7174919	-136.8492594	-123.8585926	-130.8377088	-59.77130978
+2.95	13.42096152	14.395187	17.944074	10.64109606	11.40310535	10.73796545	12.92723252	11.15552606	11.78121035	5.360467399
-3	-152.3102254	-166.225797	-190.439443	-119.7266512	-128.0116364	-120.1543896	-143.6638025	-132.2245788	-139.7086712	-62.67355842
+3	13.42096152	14.318830	15.805512	10.64109606	11.40310535	10.73796545	12.92723252	11.15552606	11.78121035	5.360467399
(Span 3) -4	-3.751221747	-4.002180	-4.417715	-2.974236362	-3.187221511	-3.001311854	-3.613222136	-3.118021984	-3.292903684	-1.498275839
+4	138.7558655	160.742423	186.847613	118.3248839	126.3735232	118.5238925	141.4111303	126.6161488	133.7184292	61.7543303
-3.05	-3.751221747	-4.052105	-6.186934	-2.974236362	-3.187221511	-3.001311854	-3.613222136	-3.118021984	-3.292903684	-1.498275839
+3.05	133.6602903	154.130984	179.845607	114.4499522	122.1186396	114.4612241	136.3160528	120.1220266	126.8284785	59.57303635
-3.1	-4.451295805	-5.986845	-8.607808	-3.829950171	-3.829950171	-3.06716266	-3.613222136	-3.118021984	-3.292903684	-2.601317572
+3.1	127.0261724	146.128497	171.237231	109.5136007	116.7129353	109.3085869	129.883793	112.1295097	118.3511317	56.81200597
-3.15	-6.789562184	-9.741567	-10.982452	-6.725076522	-6.725076522	-5.702011755	-5.838457862	-5.178120322	-5.450652971	-4.016265684
+3.15	121.0222816	139.051445	163.492652	104.9469264	111.7232011	104.559235	123.9776814	104.9493545	110.7372667	54.27133082
-3.2	-9.805942025	-14.659807	-14.134223	-10.54114989	-10.54114989	-9.530857272	-10.03790919	-8.000815499	-8.421911052	-5.812488666
+3.2	113.5340596	130.577011	154.042724	99.25323251	105.5136845	98.65592358	116.6603755	96.22144239	101.4841518	51.11794885
-3.25	-13.80337905	-19.504975	-18.229812	-14.08274511	-14.15388746	-13.10664143	-14.10685767	-10.71275267	-11.28501068	-7.469401571
+3.25	107.1466201	123.155361	145.596965	94.07999736	99.88083487	93.30639004	110.0480824	88.46664357	93.26431408	48.2640568
-3.3	-19.69231529	-25.476609	-24.223509	-19.29386477	-19.66816758	-17.86875956	-19.3586677	-14.60958783	-15.4189897	-9.530253985
+3.3	99.39705618	114.347334	135.351167	87.72834853	92.97453909	86.75332793	101.9680622	79.13338993	83.37313507	44.7721528
-3.35	-25.13651845	-31.023996	-29.851851	-24.18165808	-24.85810474	-22.60810474	-24.93530898	-18.11742079	-19.14203851	-11.70011102
+3.35	92.47296992	106.697131	126.241152	82.0337461	86.7903204	80.89012181	94.75444565	70.91546571	74.66540276	41.65116991
-3.4	-31.92042731	-37.982207	-36.972391	-30.23301447	-31.2812332311934	-28.71715751	-32.1502951132526	-22.45862107	-23.7508525602587	-14.73927389
+3.4	84.09662231	97.687990	115.240248	75.12352836	79.29427625	73.7882359	86.03404703	61.94853174	65.20898078	37.87457558
-3.45	-38.2208674	-44.351154	-43.666411	-35.60759469	-37.00085401	-34.06881321	-38.4908525	-26.37786715	-27.91269315	-17.50231726
+3.45	76.68594273	89.920363	105.636863	68.99274459	72.65042752	67.49786154	78.32396162	54.35347836	57.21418775	34.53264014
-3.5	-46.36744717	-52.006855	-52.366235	-42.17595791	-44.00058228	-40.62415573	-46.27847033	-31.16311397	-32.99520179	-20.89645604
+3.5	67.80099878	80.836774	94.393726	61.62334656	64.67166903	59.94810902	69.08555661	45.32848535	48.00772002	30.52518389
-3.55	-53.70286339	-59.137929	-60.300240	-48.04061179	-50.25807893	-46.48914621	-53.2625621	-36.65644193	-38.58572835	-23.94068937

+3.55	***60.00503878***	***73.057809***	***84.753454***	***55.14157615***	***57.6599377261561***	***53.3170785730003***	**60.98386421**	***40.62897026***	***43.03159907***	***27.0084393***
-3.6	***-62.63817567***	***-67.882485***	***-70.088452***	***-54.87385779***	**-57.55697216**	***-53.33510682***	**-61.73981427**	***-43.7676089***	***-46.07116726***	***-27.63597094***
+3.6	***50.72968946***	***64.020709***	***74.352476***	***47.41238305***	**49.30549518**	***45.42031861***	**51.34970635**	***35.05209113***	***37.09536101***	***22.82394939***
-3.65	***-70.59266798***	***-75.727630***	***-78.913629***	***-61.13639623***	**-64.25286801**	***-59.61948484***	**-68.94520259**	***-50.2834218***	***-52.93834661***	***-30.91526112***
+3.65	***42.64970498***	***56.331519***	***65.737305***	***40.66480655***	**42.01761494**	***38.53513148***	**42.96125643**	***30.18106033***	***31.91106856***	***19.17853006***
-3.7	***-80.18375141***	***-85.269782***	***-89.691508***	***-68.64221429***	**-72.28551133**	***-67.16302142***	**-77.97987821**	***-58.68950508***	***-61.81890259***	***-34.85785544***
+3.7	***33.1021442***	***47.455923***	***55.780322***	***32.67520774***	**33.39452284**	***30.39232176***	***33.05371833***	***24.41064877***	***25.77024964***	***15.67904712***
-3.75	***-88.6433473***	***-93.766953***	***-99.320995***	***-75.22609713***	**-79.33757397**	***-73.78939512***	***-85.92906875***	***-65.82314217***	***-69.35726385***	***-38.32607623***
+3.75	***24.83952908***	***39.952656***	***47.351714***	***25.7470195***	**25.92224121**	***24.22629676***	***25.9613851***	***19.40455197***	***20.44338829***	***13.25903952***
-3.8	***-98.75723778***	***-104.031518***	***-110.984591***	***-83.0571221***	**-87.73222755**	***-81.68149932***	***-95.41111277***	***-74.82348416***	***-78.87030833***	***-42.46215851***
+3.8	***18.14644953***	***31.347855***	***39.583448***	***18.97301099***	**18.97301099**	***17.4546877***	***18.43000993***	***15.95692986***	***16.86757447***	***10.39798545***
-3.85	***-107.6080144***	***-113.113788***	***-121.327046***	***-89.87716073***	**-95.04871513**	***-88.56336313***	***-103.6912984***	***-82.78819392***	***-87.2904276***	***-46.07313747***
+3.85	***18.14644953***	***24.121674***	***35.209230***	***14.12190083***	**15.15683786**	***14.27856208***	***17.22657983***	***15.95692986***	***16.86757447***	***7.920695877***
-3.9	***-118.1117475***	***-124.019677***	***-133.767218***	***-97.93400672***	**-103.6983481**	***-96.70307549***	***-113.4983354***	***-92.33877819***	***-97.3889672***	***-50.34887447***
+3.9	***18.14644953***	***20.535913***	***30.296808***	***14.12190083***	**15.15683786**	***14.27856208***	***17.22657983***	***15.95692986***	***16.86757447***	***7.2721473***
-3.95	***-127.239644***	***-133.615139***	***-144.726817***	***-104.9050131***	**-111.1875199**	***-103.7539235***	***-122.004661***	***-100.7193512***	***-106.2518859***	***-54.05648857***
+3.95	***18.14644953***	***20.235135***	***26.258677***	***14.12190083***	**15.15683786**	***14.27856208***	***17.22657983***	***15.95692986***	***16.86757447***	***7.2721473***
-5	***-138.0002563***	***-145.075548***	***-157.829076***	***-113.0882918***	**-119.9850989**	***-112.0403205***	***-132.0143605***	***-110.6900808***	***-116.7981709***	***-58.41805343***
+5	***18.14644953***	***20.124304***	***22.398178***	***14.12190083***	**15.15683786**	***14.27856208***	***17.22657983***	***15.95692986***	***16.86757447***	***7.2721473***

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.63364403	-13.73109042	-13.50686149	-11.87544441	-8.581402613	-11.63315319	-13.19861301	-14.7317237	-16.27379176
End Shear	83.76972452	97.90456411	89.67374361	75.95843247	68.03285331	91.57656927	101.8650162	107.9366747	113.5174998
-0.05	-10.63364403	-13.73109042	-13.50686149	-12.84605451	-8.581402613	-11.63315319	-13.19861301	-14.7317237	-16.27379176
+0.05	77.14916014	88.86519782	80.48451291	68.25409076	62.70372278	84.39572778	93.68270507	98.85224003	103.5116086
-0.1	-10.63364403	-13.73109042	-13.50686149	-14.85292571	-8.581402613	-11.63315319	-13.19861301	-14.7317237	-16.27379176
+0.1	70.95919814	80.4208897	71.93663552	60.91541898	57.73075177	77.68115514	86.02790464	90.35954701	94.16539266
-0.15	-10.63364403	-13.73109042	-13.50686149	-16.8933405	-8.581402613	-11.63315319	-13.19861301	-14.7317237	-16.27379176
+0.15	65.7146778	73.34534089	64.84373546	54.8532632	53.51420691	71.98866032	79.54811162	83.1891041	86.29550762
-0.2	-13.9900791	-13.99308632	-13.50686149	-19.20606653	-10.3241017	-14.95869442	-15.24220938	-15.22809545	-16.27379176
+0.2	59.68702269	65.30875193	57.33880515	48.47534385	48.66425545	65.44191706	72.10771271	74.97802656	77.30904277
-0.25	-17.75794223	-17.76160994	-14.19941928	-21.2604365	-13.95030046	-19.46613866	-20.62041433	-20.6065828	-20.59319877
+0.25	54.61439294	58.63068541	51.25570834	43.36352625	44.57937123	59.92867309	65.85232439	68.094522	69.79830554
-0.3	-22.34980975	-22.10765265	-18.24512433	-24.02708875	-18.9281455	-25.30624043	-26.83828178	-26.8248176	-26.81179592
+0.3	48.82550942	51.37626332	44.42678927	37.64388823	39.91360566	53.63233683	58.72114489	60.27134813	61.29013313
-0.35	-27.63043001	-25.77824258	-21.93725454	-27.47300656	-23.15025748	-31.01232273	-32.30070921	-32.27623916	-32.26052696
+0.35	43.99030896	45.18121347	38.82491414	32.96695679	36.01280363	48.36911641	52.77143873	54.03253382	54.52855472
-0.4	-33.71079422	-29.9831017	-27.31273254	-32.65855149	-28.00833442	-37.57889466	-39.87184721	-39.78440004	-39.76917142
+0.4	38.70848296	38.35400435	32.72075106	27.86630618	31.59238112	42.40577196	46.27986053	46.69299151	46.68935048
-0.45	-38.83769803	-35.11461099	-31.85228641	-36.90729533	-32.10157533	-43.11255627	-46.26184466	-46.12054555	-46.10576471
+0.45	34.16975255	33.0674372	28.20204051	24.17304678	28.0780315	37.66556895	40.70884934	40.6467663	40.64306356
-0.5	-44.70049837	-42.35575801	-37.05182867	-41.64013755	-36.77871762	-49.43668091	-53.57638464	-54.1118844	-54.09524821
+0.5	29.07948457	27.22105719	23.75024772	20.57577321	23.95759661	32.10895301	34.46999694	34.37287388	34.36966595
-0.55	-49.60814222	-48.94811222	-41.60104702	-45.66293528	-40.69066908	-54.72714205	-59.70579745	-61.10086673	-61.51932912
+0.55	24.90799066	22.75837244	20.17622756	17.71992575	20.57613954	27.5498651	29.36564144	29.29972699	29.29649413
-0.6	-55.17690567	-56.48785511	-48.08123532	-51.55518951	-45.12572477	-60.72625175	-66.66891749	-69.06474513	-70.54880288
+0.6	20.28439582	18.53907469	16.2288599	14.50574575	16.8221862	22.48978211	23.52411974	23.51631287	23.64937777
-0.65	-59.79976143	-63.06691996	-54.78244451	-57.29214606	-48.80396022	-65.70273357	-72.45647571	-75.70594025	-78.10169159
+0.65	16.3952183	15.63555599	13.05003291	11.8330722	13.78106233	18.22660789	18.97909878	18.97274272	19.03339736
-0.7	-64.99803623	-71.2456331	-62.46451053	-63.77805357	-52.93576714	-71.29423924	-78.97335605	-83.21092647	-86.66520478
+0.7	12.4336842	12.42555862	9.880645207	9.338842845	10.341082	13.75765909	14.57839809	14.57556041	14.69724428
-0.75	-69.27056119	-78.06080582	-68.87927767	-69.1029164	-56.32785901	-75.88596298	-84.33778572	-89.4132147	-93.76788325
+0.75	9.845567535	9.837465411	7.821944313	7.783844177	7.700837631	10.58057414	11.11456596	11.11179647	11.22534556
-0.8	-74.02188845	-85.75547544	-76.13831178	-75.04147785	-60.09526297	-80.98730047	-90.31360238	-96.35300213	-101.7468989
+0.8	7.030346999	7.022388362	5.582737934	6.080016809	5.357987432	7.322358779	7.379177476	7.376635814	7.373969169
-0.85	-77.87854068	-92.1077625	-82.53752107	-80.15950846	-63.14879401	-85.12348769	-95.1736388	-102.0252848	-108.2977659
+0.85	4.737872481	4.795883482	3.811747957	4.721952366	3.892471466	4.757149055	4.761845895	4.759634518	4.757491663
-0.9	-82.10646314	-99.20638003	-90.79329428	-86.69264842	-66.49062599	-89.65207945	-100.5135801	-108.2935665	-115.573718
+0.9	2.378024164	2.680739811	2.461014809	3.266341191	2.282039885	2.440363377	2.753487631	3.066901005	3.372723862
-0.95	-85.48171098	-104.9997805	-97.6078478	-92.05439908	-69.15317819	-93.26195406	-104.7879426	-113.3447219	-121.4711678
+0.95	2.217362997	2.680739811	2.461014809	2.543063328	1.797095272	2.440363377	2.753487631	3.066901005	3.372723862
-1	-89.10976767	-111.390347	-105.221304	-98.02750956	-72.00828083	-97.13522633	-109.3971899	-118.8352058	-127.9255244
+1	2.22E+00	2.68E+00	2.46E+00	2.15E+00	1.80E+00	2.44E+00	2.75E+00	3.07E+00	3.37E+00
(Span 2) -2	-7.93E+00	-9.59E+00	-8.80E+00	-7.68E+00	-6.43E+00	-8.73E+00	-9.85E+00	-1.10E+01	-1.21E+01
+2	8.95E+01	114.3859023	111.2895643	100.3344153	72.2705157	97.5112573	110.0569122	119.9811104	129.7095639
-2.05	-7.93E+00	-9.59E+00	-8.80E+00	-8.04E+00	-6.43E+00	-8.73E+00	-9.85E+00	-1.10E+01	-1.21E+01
+2.05	85.80910738	108.052403	104.0431259	94.41177467	69.32201321	93.50955624	105.3114032	114.3480846	123.1255677
-2.1	-7.933186716	-9.591036596	-8.804914097	-9.448499719	-6.429570922	-8.731027922	-9.85131075	-10.97262763	-12.06678768
+2.1	81.69858799	101.3475318	96.52676072	88.2039846	66.0674409	89.09646064	100.1159891	108.2534033	116.0740303
-2.15	-7.933186716	-9.591036596	-8.804914097	-11.57976607	-6.429570922	-8.731027922	-9.85131075	-10.97262763	-12.06678768
+2.15	76.68804973	93.44938946	87.84519952	80.92724155	62.08866411	83.70541359	93.80849858	100.9292828	107.6761249
-2.2	-9.0188647	-9.591036596	-8.804914097	-13.43123811	-7.180962196	-9.79199712	-10.31644164	-10.97262763	-12.06678768
+2.2	71.94482135	86.19203194	79.86317699	74.38193954	58.3129344	78.59259115	87.85737887	94.07818572	99.88157306
-2.25	-12.92604345	-12.55424862	-10.17991059	-15.62943685	-10.79326829	-14.39521661	-15.059376	-15.05355753	-15.04792404

+2.25	66.3461037	77.85341568	70.68647631	67.14458714	53.84673205	72.54785505	80.85301777	86.07496763	90.83942434
-2.3	-17.22111398	-15.92201137	-13.83219951	-17.52394789	-14.29334365	-19.11429775	-20.10693888	-20.07943839	-20.07270691
+2.3	61.18991125	69.90244628	62.89883665	60.68540215	49.72562627	66.97264505	74.41872076	78.77297011	82.64256385
-2.35	-22.40730283	-20.6002518	-18.27202931	-20.89802459	-18.50581176	-24.79659117	-26.4532768	-26.3878389	-26.38084268
+2.35	55.25021076	61.48320605	54.31379496	53.29058688	44.96974073	60.54120654	67.02406248	70.40254263	73.18244806
-2.4	-27.27826616	-26.00744334	-22.46532581	-24.75713689	-22.45148358	-30.12120097	-32.43261492	-32.32901368	-32.32187317
+2.4	49.7563055	54.09426472	47.48149371	47.55870488	40.67901751	54.67038141	60.03439812	62.6995143	64.67281699
-2.45	-32.98873518	-32.67828276	-27.89736951	-29.77710296	-27.06636835	-36.35122971	-39.46164512	-39.8289281	-39.82076922
+2.45	43.53308797	45.97508482	40.05969967	41.09334198	35.56232584	47.82650153	52.48690683	54.19735747	55.39606151
-2.5	-38.21584547	-39.01048419	-33.72625342	-35.29398135	-31.28185719	-42.04405666	-45.9115812	-46.92146273	-47.43229529
+2.5	38.21443369	39.00881714	33.72483661	35.29304108	31.28070344	42.04253076	45.90984959	46.91959342	47.43027151
-2.55	-43.53451865	-45.97682077	-40.06119552	-41.09424505	-35.5635012	-47.82804465	-52.48866507	-54.19926596	-55.3981419
+2.55	32.98734405	32.67679073	27.89617538	29.77632635	27.06523697	36.34973537	39.45996705	39.82710297	39.81897074
-2.6	-49.68523094	-54.09605505	-47.48304332	-47.55958164	-40.68018555	-54.60239084	-59.96662869	-62.66943076	-64.64315804
+2.6	27.27693452	26.00605172	22.46433356	24.75652228	22.45039052	30.11974652	32.43100248	32.32742338	32.3203177
-2.65	-55.25164513	-61.48502573	-54.31551861	-53.29152859	-44.97089792	-60.54274966	-67.02580813	-70.3722361	-73.15302054
+2.65	22.40602979	20.59914868	18.27107731	20.89739859	18.50476453	24.79520891	26.4517392	26.38633294	26.37935887
-2.7	-61.19131188	-69.89866516	-62.90061022	-60.68640086	-49.72676426	-66.97416046	-74.42045426	-78.7749011	-82.644677
+2.7	17.21992436	15.98745953	13.83132976	17.52367271	14.29236818	19.11299242	20.10548614	20.07802484	20.071314
-2.75	-66.34746558	-77.85524451	-70.68828822	-67.14555337	-53.84784263	-72.54932815	-80.8547076	-86.07684994	-90.84151041
+2.75	12.9249404	12.55346046	10.17910304	15.6291359	10.79235558	14.39400285	15.05820747	15.05240583	15.04678917
-2.8	-71.94612556	-86.19382999	-79.81554278	-74.38291326	-58.31399803	-78.59398882	-87.8590128	-94.08001855	-99.88362121
+2.8	9.018056932	9.59104115	8.804914215	13.43091298	7.180132092	9.791070682	10.31537646	10.97262894	12.06678435
-2.85	-76.68928946	-93.45114413	-87.84701813	-80.92824319	-62.08967108	-83.70673937	-93.81004498	-100.9310295	-107.6781034
+2.85	7.933190392	9.59104115	8.804914215	11.57945876	6.42957355	8.731025129	9.851313409	10.97262894	12.06678435
-2.9	-81.69974544	-101.3492038	-96.52851195	-88.20491089	-66.06836544	-89.09769602	-100.1174282	-108.2550591	-116.0758936
+2.9	7.933190392	9.59104115	8.804914215	9.448161248	6.42957355	8.731025129	9.851313409	10.97262894	12.06678435
-2.95	-85.81017317	-108.053994	-104.0448413	-94.41266747	-69.32286183	-93.51068217	-105.3127324	-114.3496285	-123.1273236
+2.95	7.933190392	9.59104115	8.804914215	8.041903702	6.42957355	8.731025129	9.851313409	10.97262894	12.06678435
-3	-89.98517707	-115.1494032	-112.1741339	-101.0535573	-72.61637155	-97.98093176	-110.616637	-120.6507921	-130.497535
+3	7.933190392	9.59104115	8.804914215	7.675733209	6.42957355	8.731025129	9.851313409	10.97262894	12.06678435
(Span 3) -4	-2.217364025	-2.68E+00	-2.46E+00	-2.15E+00	-1.797096006	-2.440362596	-2.753488375	-3.066901371	-3.372722932
+4	88.61159262	110.5010868	104.1551466	97.19201845	71.61674265	96.6039091	108.7632313	118.0768743	127.0309146
-3.05	-2.217364025	-2.68E+00	-2.46E+00	-2.54E+00	-1.797096006	-2.440362596	-2.753488375	-3.066901371	-3.372722932
+3.05	85.48054046	104.9979156	97.60579139	92.05334384	69.15224681	93.26072089	104.7864855	113.343006	121.4691888
-3.1	-2.700029409	-2.752462111	-2.461014842	-3.465704457	-2.496717788	-2.607088261	-2.753488375	-3.066901371	-3.372722932
+3.1	81.51988191	98.21205773	89.63114679	85.77644648	66.02738082	89.02421408	99.77186594	107.4203765	114.5575711
-3.15	-4.73862842	-4.796574614	-3.812265457	-4.722238755	-3.892976637	-4.758020023	-4.762704414	-4.760486803	-4.758331485
+3.15	77.87718938	92.10573569	82.53529647	80.15835067	63.14771728	85.12205979	95.17195251	102.0233486	108.2955734
-3.2	-7.41934302	-7.411281725	-5.892041823	-6.316073511	-5.613048959	-7.771644937	-7.892966877	-7.890278808	-7.887685058
+3.2	73.35786387	84.67215848	75.11530468	74.21016964	59.56906872	80.27470859	89.4777329	95.38017511	100.6262043
-3.25	-9.846465349	-9.838283698	-7.822557268	-7.784170625	-7.701755522	-10.58160242	-11.11574771	-11.11296124	-11.19248301
+3.25	69.26906644	78.05861228	68.87733936	69.101838	56.32665603	75.88436244	84.33592026	89.41109246	93.76547654
-3.3	-12.88916721	-12.87276446	-10.23633194	-9.6063081	-10.80072453	-14.37672037	-15.17944635	-15.17657855	-15.29956292
+3.3	64.26749538	70.08931479	61.3775075	62.86839826	52.35538047	70.50874072	78.0568945	82.15367673	85.4569404
-3.35	-16.39651593	-15.63647334	-13.0509702	-11.83359403	-13.78212672	-18.22801047	-18.98065472	-18.974268	-19.03470334
+3.35	59.79812935	63.06458085	54.78039478	57.29095024	48.80264362	65.7009828	72.45446009	75.70365894	78.09913121
-3.4	-20.92947732	-19.036869770487	-16.77844804	-14.94517281	-17.34637561	-23.1962408496399	-24.30939783	-24.29837393	-24.4311648828632
+3.4	54.39079265	55.41965655	47.16311792	50.73069574	44.49990425	59.87966684	65.68544896	67.93829876	69.26990281
-3.45	-24.90944409	-22.75964984	-20.17729874	-17.72051509	-20.577332	-27.55143327	-29.36740002	-29.30144988	-29.29817929
+3.45	49.60639494	48.94597562	41.59931183	45.66182591	40.68926372	54.72527366	59.7036612	61.09845616	61.51666101
-3.5	-29.79391037	-28.03566171	-24.36322081	-21.06507515	-24.53627995	-32.88922667	-35.3449695	-35.2423608	-35.23912312
+3.5	43.86975239	41.24459775	36.3147337	40.97778638	36.11621775	48.54086495	52.53948218	52.93145128	52.91476516
-3.55	-34.17134916	-33.06910247	-28.20338523	-24.17379269	-28.07933737	-37.66728618	-40.71077267	-40.64882645	-40.64509361
+3.55	38.83589038	35.1129335377072	31.8509121374497	36.9064196092403	32.1000100149677	43.1106191886379	46.2596193170445	46.1183512363785	46.10360244

-3.6	*-39.28844639*	-39.2602074	*-33.49546414*	-28.51650959	-32.2159999	*-43.24697059*	-47.22911203	*-47.72545714*	-47.72177002
+3.6	*32.84640236*	29.3868899	*26.54822757*	31.93200145	27.31790707	*36.64563855*	38.79505722	*38.71666656*	38.70138569
-3.65	*-43.99201616*	-45.11690794	*-38.82658492*	-32.9679259	-36.01420637	*-48.37097579*	-52.77350141	*-54.03476879*	-54.53092765
+3.65	*27.62855582*	25.7770613	*21.93582937*	27.47200284	23.1487295	*31.01031228*	32.29838491	*32.27397966*	32.25830879
-3.7	*-49.64496208*	-52.434618	*-45.3854017*	-38.44508729	-40.57437158	*-54.52391416*	-59.73007914	*-61.37649715*	-62.49006315
+3.7	*21.48504126*	*21.48946492*	*17.67474831*	23.63918698	18.21855104	*24.34736194*	*25.95264535*	*25.93916326*	25.92611433
-3.75	*-54.61619833*	*-58.63284395*	*-51.25754986*	-43.3645582	-44.58084648	*-59.93060029*	*-65.85452408*	*-68.09689557*	-69.80084354
+3.75	*17.75659856*	*17.76038581*	*14.19833963*	21.25991821	13.94873898	*19.46454482*	*20.61851473*	*20.60471396*	20.59135044
-3.8	*-60.54319089*	*-66.44351681*	*-58.37374474*	-49.34608422	-49.35341227	*-66.37207369*	*-73.16403812*	*-76.14220657*	-78.58137279
+3.8	*13.35759878*	*13.73109822*	*13.50687134*	18.87918622	9.930814554	*14.20252509*	*14.34062649*	*14.73173299*	16.27379727
-3.85	*-65.71652783*	*-73.3476088*	*-64.84586447*	-54.85451363	-53.51573396	*-71.9906629*	*-79.55038999*	*-83.19158493*	-86.29815682
+3.85	*10.63364481*	*13.73109822*	*13.50687134*	16.89290605	8.5814031	*11.63315757*	*13.1986229*	*14.73173299*	16.27379727
-3.9	*-71.84110647*	*-81.61772321*	*-73.14271776*	-61.94806885	-58.43954068	*-78.63806835*	*-87.11804886*	*-91.56755299*	-95.49312524
+3.9	*10.63364481*	*13.73109822*	*13.50687134*	14.50642962	8.5814031	*11.63315757*	*13.1986229*	*14.73173299*	16.27379727
-3.95	*-77.15106278*	*-88.86759202*	*-80.48679722*	-68.25539907	-62.70526462	*-84.39778332*	*-93.68503369*	*-98.85479364*	-103.5143769
+3.95	*10.63364481*	*13.73109822*	*13.50687134*	12.84582446	8.5814031	*11.63315757*	*13.1986229*	*14.73173299*	16.27379727
-5	*-83.39676592*	*-97.4851114*	*-89.29479127*	-75.85552278	-67.7191754	*-91.16854705*	*-101.4160221*	*-107.4551184*	-113.0052371
+5	*10.63364481*	*13.73109822*	*13.50687134*	*11.8754443*	8.5814031	*11.63315757*	*13.1986229*	*14.73173299*	*16.27379727*

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.02249032	-27.10397196	-16.1578278	-19.77253676	-20.86491086
End Shear	158.0893741	160.4707759	111.7667555	135.8262572	139.4985397
-0.05	-25.02249032	-27.10397196	-16.1578278	-19.77253676	-20.86491086
+0.05	141.5136473	143.0221637	100.963304	122.7770231	125.627784
-0.1	-25.02249032	-27.10397196	-16.1578278	-19.77253676	-20.86491086
+0.1	126.1126515	126.3885701	90.89478006	110.6065566	112.7045557
-0.15	-25.02249032	-27.10397196	-16.1578278	-19.77253676	-20.86491086
+0.15	113.3365581	114.1324218	82.48873855	100.4382361	101.9368439
-0.2	-25.02249032	-27.10397196	-16.1578278	-19.77253676	-20.86491086
+0.2	99.15657375	100.2950631	72.9783502	88.92484491	89.78115304
-0.25	-25.02249032	-27.10397196	-20.89802705	-23.28438266	-23.28528447
+0.25	88.36222283	89.67638352	65.10950785	79.39028836	80.15725508
-0.3	-29.7048762	-27.94302788	-27.0185546	-29.96960092	-30.32055713
+0.3	75.80224884	78.09167565	56.60127124	69.07097882	69.26464512
-0.35	-35.36569725	-35.25038305	-32.19941017	-35.62723632	-36.95553583
+0.35	65.71519614	68.5382231	49.59919358	60.31761862	60.44100283
-0.4	-43.78891171	-45.13105593	-38.14819538	-42.12205669	-44.58818918
+0.4	55.45802085	57.87475227	42.04278986	51.06541413	50.65709798
-0.45	-51.5476895	-53.68436332	-43.14950038	-47.5812181	-51.01770255
+0.45	47.42926346	49.18312849	37.59444545	43.56765799	44.4571633
-0.5	-62.31956035	-65.23503054	-48.85109602	-55.70980559	-58.36261434
+0.5	39.13820386	40.11428871	32.36176175	36.00251416	37.94913358
-0.55	-71.39349184	-75.54101863	-53.72513536	-64.36041836	-64.60881567
+0.55	32.42799447	33.00493479	28.05153267	30.76292378	32.60496811
-0.6	-83.34099846	-88.45777318	-61.2829401	-75.68098016	-74.48443031
+0.6	25.88520312	26.15097545	23.24636829	25.43226367	26.66790976
-0.65	-94.01603852	-99.29664824	-69.1985227	-85.1850404	-85.16483733
+0.65	20.89307092	20.45637656	19.33492087	21.14115986	21.85430773
-0.7	-108.3832373	-112.2390393	-78.67348567	-96.55490712	-97.35716319
+0.7	16.18780617	15.03739142	15.03272864	16.41869741	16.58426536
-0.75	-120.4063132	-123.5102102	-87.16168928	-106.7352373	-107.6764406
+0.75	12.41622508	11.27446946	11.58473767	12.6313313	12.62929926
-0.8	-134.4168581	-136.7390187	-96.779963	-118.2643892	-120.3485558
+0.8	8.342242333	7.517951842	8.047657589	8.52126179	8.535743454
-0.85	-147.2473565	-148.6941173	-104.7515928	-127.8139559	-130.873977
+0.85	5.147034356	4.970854798	5.495758399	5.804124375	5.322745029
-0.9	-162.2375714	-165.0675741	-113.6986018	-138.524902	-142.7154394
+0.9	4.668681866	4.970854798	3.079517538	3.813406687	3.960701605
-0.95	-174.6222638	-179.2454272	-121.0360697	-147.302599	-152.4524348
+0.95	4.668681866	4.970854798	3.079517538	3.813406687	3.960701605
-1	-188.4733876	-195.1766773	-129.1746213	-157.0307089	-163.2848857
+1	4.67E+00	4.97E+00	3.08E+00	3.81E+00	3.96E+00
(Span 2) -2	-1.67E+01	-1.78E+01	-1.10E+01	-1.36E+01	-1.42E+01
+2	199.0196443	208.8927002	133.8745262	162.404229	170.1280288
-2.05	-1.67E+01	-1.78E+01	-1.10E+01	-1.36E+01	-1.42E+01
+2.05	185.7606762	193.8736903	125.9211435	152.8537573	159.5987759
-2.1	-16.70341115	-17.78451242	-11.01776684	-13.6434436	-14.17042946
+2.1	172.0307541	178.4510391	117.573657	142.8172386	148.6005604
-2.15	-16.70341115	-17.78451242	-11.01776684	-13.6434436	-14.17042946
+2.15	156.195616	160.8123035	107.8203772	131.0756417	135.8083383
-2.2	-16.70341115	-17.78451242	-11.01776684	-13.6434436	-14.17042946
+2.2	141.864474	145.0496487	98.92531875	120.354151	124.1904588
-2.25	-16.70341115	-17.78451242	-15.2965048	-16.8068675	-17.10546274

+2.25	125.1988572	127.4244383	88.62819369	107.9751063	110.5958766
-2.3	-22.06983466	-22.15564484	-19.80319474	-21.76487834	-22.65426399
+2.3	110.7939339	111.377757	79.16529462	96.5088668	98.53510112
-2.35	-29.50420607	-30.28347159	-25.18231544	-27.919136	-29.32326547
+2.35	95.1949373	96.46500325	69.07547541	84.28350471	85.51604202
-2.4	-37.42890906	-38.78217333	-30.35389565	-34.22035396	-35.56701351
+2.4	82.18284967	83.55575312	60.28137292	73.62657087	74.21667269
-2.45	-47.23892023	-49.67832506	-36.32824811	-43.46847372	-43.26522414
+2.45	68.66285774	70.95613761	50.69751928	61.9932487	62.21656268
-2.5	-57.19599746	-60.10008359	-42.8089749	-52.39513249	-52.2411389
+2.5	57.19357846	60.09971983	42.80718479	52.39295143	52.23879685
-2.55	-68.66563978	-70.95651846	-50.69954112	-61.99570503	-62.2189969
+2.55	47.23662195	49.67794922	36.32698876	43.46638245	43.26364157
-2.6	-82.18572397	-83.55614789	-60.28347821	-73.62912333	-74.21934999
+2.6	37.4270005	38.78186964	30.42745952	34.2186835	35.63092593
-2.65	-95.19814096	-95.64630562	-69.07763259	-84.2861168	-85.51877474
+2.65	29.50242018	30.28316569	25.18113295	27.91783843	29.32180794
-2.7	-110.7972288	-112.0263945	-79.16746837	-96.4952434	-98.53791022
+2.7	22.0683838	22.17914767	19.80207745	21.76364045	22.65289421
-2.75	-125.1368058	-127.4249763	-88.55557962	-107.911255	-110.5332335
+2.75	16.70341379	17.78337194	15.29544763	16.80570476	17.10417634
-2.8	-141.8024374	-145.0501993	-98.92748067	-120.3567585	-124.1932762
+2.8	16.70341379	17.78337194	11.01776226	13.6434465	14.17043598
-2.85	-156.1989794	-160.8128516	-107.8225007	-131.0781987	-135.811072
+2.85	16.70341379	17.78337194	11.01776226	13.6434465	14.17043598
-2.9	-172.0339992	-178.4515859	-117.5757268	-142.8197286	-148.603237
+2.9	16.70341379	17.78337194	11.01776226	13.6434465	14.17043598
-2.95	-185.7638267	-193.8742271	-125.9231326	-152.8561471	-159.6013381
+2.95	16.70341379	17.78337194	11.01776226	13.6434465	14.17043598
-3	-200.6399657	-210.7344233	-134.8385147	-163.5608926	-171.4080087
+3	16.70341379	17.78337194	11.01776226	13.6434465	14.17043598
(Span 3) -4	-4.668682606	-4.970536014	-3.079516259	-3.813407497	-3.960703428
+4	186.5325919	192.9427928	128.0389725	155.6738093	161.7710846
-3.05	-4.668682606	-4.970536014	-3.079516259	-3.813407497	-3.960703428
+3.05	174.6184492	179.2447872	121.0337504	147.2998256	152.4494011
-3.1	-4.668682606	-4.970536014	-3.15371127	-3.813407497	-3.960703428
+3.1	160.12655	162.6603832	112.4427053	137.0218904	141.0513159
-3.15	-5.220093537	-4.970536014	-5.49653815	-5.804956027	-5.323722321
+3.15	*147.2432363*	*149.2004135*	*104.7490734*	*127.8109385*	*130.8706744*
-3.2	*-8.902958209*	*-8.294597062*	*-8.493370698*	*-9.101337248*	*-9.099341546*
+3.2	*132.4945527*	*134.794045*	*95.4234705*	*116.6388454*	*118.5596422*
-3.25	*-12.41736603*	*-11.55579512*	*-11.58580245*	*-12.63251464*	*-12.63045477*
+3.25	*120.4025559*	*123.5096425*	*87.1590076*	*106.7320225*	*107.6729121*
-3.3	*-16.8416047*	*-15.73511459*	*-15.63049146*	*-17.07506314*	*-17.31475279*
+3.3	*106.3482363*	*110.3813256*	*77.23603036*	*94.83039171*	*95.63142895*
-3.35	*-20.89437372*	*-20.45660365*	*-19.33613374*	*-21.14250666*	*-21.85580176*
+3.35	*94.01214638*	*99.29611503*	*69.19598334*	*85.18199245*	*85.16148884*
-3.4	*-26.77615786*	*-26.89085372*	*-23.91860777*	*-26.16956886*	*-27.49702395*
+3.4	*81.54741549*	*86.62891355*	*59.94585655*	*74.07509524*	*72.68256734*
-3.45	*-32.43002798*	*-33.00524684*	*-28.05289413*	*-30.70275161*	*-32.60662169*
+3.45	*71.39066793*	*75.54047814*	*53.72332474*	*64.35725465*	*64.60661592*
-3.5	*-40.29512585*	*-41.34602221*	*-33.09770386*	*-36.99197466*	*-38.8631513*
+3.5	*60.78927502*	*63.58965009*	*48.04457552*	*54.43860496*	*57.32260945*
-3.55	*-47.4315645*	*-49.18355201*	*-37.65684301*	*-43.57001286*	*-44.52288341*
+3.55	*51.54476098*	*53.68395499*	*43.14791748*	*47.57947844*	*51.01568907*
-3.6	*-56.89020767*	*-59.36502061*	*-42.84976799*	*-52.35436037*	*-52.02208821*
+3.6	*42.54051101*	*43.69442018*	*37.30381042*	*41.20025732*	*43.50385585*

-3.65	***-65.71825357***	***-68.53868267***	***-49.60135444***	***-60.28284532***	***-60.44375259***
+3.65	***35.57118802***	***35.2500447***	***32.19773837***	***35.62543614***	***36.95344379***
-3.7	***-77.53144836***	***-79.71917924***	***-57.83965912***	***-70.57368881***	***-70.77509429***
+3.7	***28.75267879***	***27.17967035***	***26.14707626***	***29.01783821***	***29.20559722***
-3.75	***-88.30072071***	***-89.67686612***	***-65.111985***	***-79.39329054***	***-80.16038426***
+3.75	***25.02249432***	***27.10475311***	***20.89631923***	***23.28251295***	***23.28345333***
-3.8	***-101.0339644***	***-102.2399183***	***-74.31860164***	***-90.54801074***	***-91.49231109***
+3.8	***25.02249432***	***27.10475311***	***16.15783916***	***19.77254368***	***20.86492003***
-3.85	***-113.3404879***	***-114.1329788***	***-82.4914288***	***-100.4414918***	***-101.9402049***
+3.85	***25.02249432***	***27.10475311***	***16.15783916***	***19.77254368***	***20.86492003***
-3.9	***-128.2854818***	***-128.8131557***	***-92.31948088***	***-112.329246***	***-114.5314743***
+3.9	***25.02249432***	***27.10475311***	***16.15783916***	***19.77254368***	***20.86492003***
-3.95	***-141.517864***	***-143.0228509***	***-100.9661299***	***-122.7804379***	***-125.6313569***
+3.95	***25.02249432***	***27.10475311***	***16.15783916***	***19.77254368***	***20.86492003***
-5	***-157.3920164***	***-160.143747***	***-111.2784321***	***-135.2366051***	***-138.8941041***
+5	***25.02249432***	***27.10475311***	***16.15783916***	***19.77254368***	***20.86492003***

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.17E-13	-1.04E-13	-1.84E-13	-8.01E-14	-8.29E-14	-9.26E-14	-1.10E-13	-9.76E-14	-1.03E-13	-7.63E-14
End Shear	2.19E-13	2.07E-13	1.78E-13	1.58E-13	1.58E-13	1.27E-13	1.37E-13	1.41E-13	1.48E-13	7.73E-14
-0.05	-58.59624176	-65.40395796	-72.79407977	-45.8961412	-49.2597135	-46.4053224	-55.9863582	-51.8599983	-54.819583	-23.63447667
+0.05	388.1569998	441.0377144	476.6965925	341.8601021	362.4191165	338.2214573	397.9318476	328.0325564	346.0612924	175.6821852
-0.1	-117.1924835	-130.8079159	-145.5881595	-91.7922824	-98.5194269	-92.8106448	-111.972716	-103.719997	-109.639166	-47.26895333
+0.1	722.4009635	827.4164903	889.2770162	638.0682338	675.8136262	630.3335585	740.2818515	601.2881112	634.1932085	327.2648924
-0.15	-175.7887253	-196.2118739	-218.3822393	-137.688428	-147.77914	-139.215967	-167.959075	-155.579995	-164.458749	-70.90343
+0.15	993.7347312	1150.591137	1225.500294	880.5481669	931.3771496	868.7736028	1019.415743	814.1268131	858.480827	449.8373696
-0.2	-234.384967	-261.6158318	-291.1763191	-183.584565	-197.038854	-185.62129	-223.945433	-207.439993	-219.278332	-94.53790667
+0.2	1219.126763	1425.799962	1508.909006	1084.122867	1145.428636	1066.670821	1246.648097	977.7278798	1030.655587	552.0025862
-0.25	-292.9812088	-327.0197898	-363.9703989	-229.480706	-246.298567	-232.026612	-279.931791	-259.299992	-274.097915	-118.1723833
+0.25	1408.717285	1634.862237	1715.356097	1234.148469	1302.894834	1213.843491	1435.402889	1124.706324	1187.359022	624.3304696
-0.3	-351.5774506	-392.4237477	-436.7644786	-275.376856	-295.558281	-278.431934	-335.918149	-311.15999	-328.917498	-141.80686
+0.3	1564.0587	1801.320576	1872.562362	1345.466425	1417.256847	1335.068575	1581.309178	1224.285539	1294.120443	680.3432869
-0.35	-410.1736923	-457.8277057	-509.5585584	-321.272989	-344.817994	-324.837257	-391.904507	-363.019988	-383.737081	-165.4413367
+0.35	1650.586464	1905.801788	1985.28596	1413.988324	1498.621452	1416.070416	1670.15543	1286.856564	1359.317635	707.8852179
-0.4	-468.7699341	-523.2316637	-582.3526382	-367.16913	-394.077708	-371.242579	-447.890866	-414.879986	-438.556664	-189.0758133
+0.4	1696.343348	1965.132527	2055.244046	1460.009924	1544.889072	1458.556797	1714.681889	1311.844937	1386.67705	720.3745829
-0.45	-527.3661759	-588.6356216	-655.146718	-413.065271	-443.337421	-417.647902	-503.877224	-466.739985	-493.376247	-212.71029
+0.45	1680.802454	1971.860358	2058.816511	1463.169064	1544.765466	1456.218604	1706.895126	1288.068388	1362.465592	707.2523034
-0.5	-585.9624176	-654.0395796	-727.9407977	-458.961412	-492.597135	-464.053224	-559.863582	-518.599983	-548.19583	-236.3447667
+0.5	1625.653546	1945.988178	2051.601211	1440.240043	1522.318051	1435.179051	1682.230161	1254.433851	1326.748459	700.2147858
-0.55	-644.5586594	-719.4435375	-800.7348775	-504.857553	-541.856848	-510.458546	-615.84994	-570.459981	-603.015413	-259.9792433
+0.55	1550.792166	1874.520422	1996.359859	1379.936289	1460.203621	1377.809774	1621.492344	1235.344016	1305.768329	682.3115632
-0.6	-703.1549011	-784.8474955	-873.5289573	-550.753712	-591.116561	-556.863869	-671.836299	-622.31998	-657.834996	-283.61372
+0.6	1479.000563	1763.720167	1897.945587	1288.969514	1366.128622	1291.851765	1521.611907	1173.204802	1239.306977	651.6761915
-0.65	-761.7511429	-850.2514534	-946.3230371	-596.649836	-640.376275	-603.269191	-727.822657	-674.179978	-712.654579	-307.2481967
+0.65	1354.037942	1607.119556	1736.774819	1173.773002	1235.795302	1168.821652	1377.706228	1062.72542	1122.291836	594.0742271
-0.7	-820.3473847	-915.6554114	-1019.117117	-642.545977	-689.635988	-649.674513	-783.809015	-726.039976	-767.474162	-330.8826733
+0.7	1191.208985	1418.727025	1550.796532	1033.510104	1084.871732	1021.941355	1204.113769	927.1240372	979.5831729	528.9088071
-0.75	-878.9436264	-981.0593693	-1091.911197	-688.442118	-738.895702	-696.079836	-839.795373	-777.899975	-822.293745	-354.51715
+0.75	982.1908886	1190.198248	1313.959142	863.7831749	904.5388015	847.1589039	994.0066162	749.5815491	791.3056584	439.2438033
-0.8	-937.5398682	-1046.463327	-1164.705276	-734.33826	-788.155415	-742.485158	-895.781731	-829.759973	-877.113328	-378.1516267
+0.8	745.4652265	938.0510131	1047.550644	675.7525726	702.443847	654.7892869	763.0865844	540.2017307	569.4685296	346.0719097
-0.85	-996.13611	-1124.3698	-1306.075697	-780.234401	-837.415129	-788.890481	-951.76809	-881.619971	-931.932911	-401.7861033
+0.85	477.5064075	665.2899357	746.9515121	465.1743348	476.6043639	443.7598572	506.3220104	348.3212444	367.8499735	232.5985944
-0.9	-1054.732352	-1243.839874	-1616.588593	-826.130542	-886.674842	-835.295803	-1007.75445	-933.47997	-986.752494	-425.42058
+0.9	260.4008028	419.7557173	521.891404	266.2724152	266.2724152	244.6937683	260.2698621	202.3240172	212.9726496	154.3496557
-0.95	-1113.328593	-1398.518596	-2023.602111	-872.02671	-935.934556	-881.701125	-1063.74081	-985.339968	-1041.57208	-449.0550567
+0.95	229.5595439	254.4238477	388.7881765	183.6590566	196.8108145	185.3309269	223.1165078	192.5378035	203.3366914	92.51851812
-1	-1171.924841	-1582.715146	-2483.187377	-917.92282	-985.194281	-928.106451	-1119.72718	-1037.19996	-1096.39165	-472.6895405
+1	241.6416245	260.1417169	287.1478824	193.3253204	207.1692733	195.0851836	234.8594846	202.671369	214.0386193	97.38791318
(Span 2) -2	-1171.924841	-1582.715146	-2483.187377	-917.92282	-985.194281	-928.106451	-1119.72718	-1037.19996	-1096.39165	-472.6895405
+2	241.6416245	260.1417169	287.1478824	193.3253204	207.1692733	195.0851836	234.8594846	202.671369	214.0386193	97.38791318
-2.05	-833.5382635	-1147.472741	-1900.758286	-660.888623	-708.214862	-666.904925	-802.874141	-692.838443	-731.697939	-332.9236058
+2.05	185.4468425	209.5843528	358.5392337	148.366699	158.991181	149.7172991	180.2419172	155.5392846	164.2630328	85.29928282
-2.1	-776.8347011	-951.1710693	-1397.097175	-615.929992	-660.036742	-621.537021	-748.256583	-645.706345	-681.922325	-310.2756311
+2.1	306.2729177	468.2917156	468.924542	318.1747374	318.1747374	308.7830199	333.1392147	241.8664439	254.5962567	181.3368003
-2.15	-720.1311387	-804.6659109	-1015.993031	-570.971361	-611.858622	-576.169117	-693.639026	-598.574247	-632.146712	-287.6276563
+2.15	583.4216886	756.5429585	710.2306939	563.7360805	582.1979857	552.3210186	632.8415609	421.1537179	444.9313409	279.2409435
-2.2	-663.4275763	-709.4913104	-791.0573718	-526.01273	-563.680501	-530.801213	-639.021469	-551.44215	-582.371098	-264.9796816
+2.2	890.2733621	1059.150385	1005.648737	805.3253648	841.0926778	798.1462475	929.6256614	662.7078796	699.9204471	406.8666441

-2.25	-606.7240139	-659.5578541	-761.2609305	-481.0541	-515.502381	-485.433309	-584.403911	-504.310052	-532.595484	-242.3317068
+2.25	1168.687693	1365.888849	1333.220523	1019.262122	1071.176643	1013.509824	1191.610857	911.9492089	963.9469404	518.3760909
-2.3	-550.0204514	-616.5536168	-761.2583688	-436.095469	-467.324261	-440.065405	-529.786354	-457.177954	-482.81987	-219.683732
+2.3	1400.065116	1626.302565	1622.346203	1198.104975	1268.978811	1200.390247	1412.613822	1111.422346	1174.645659	609.2606827
-2.35	-493.316889	-573.5493794	-761.255984	-391.136838	-419.146141	-394.697501	-475.168797	-410.045857	-433.044257	-197.0357573
+2.35	1587.283594	1836.162186	1853.76306	1344.903937	1424.583954	1347.982057	1589.483723	1269.054729	1340.949326	681.4536283
-2.4	-436.6133266	-530.5451421	-761.2537435	-346.178207	-370.968021	-349.329597	-420.551239	-362.913759	-383.268643	-174.3877825
+2.4	1710.172748	1983.860492	2008.671252	1453.125767	1539.289543	1452.627589	1710.903023	1375.489452	1454.21485	726.7033602
-2.45	-379.9097642	-487.5409048	-761.2512972	-301.219576	-322.789901	-303.961693	-365.933682	-315.781662	-333.493029	-151.7398077
+2.45	1785.178167	2073.542069	2103.602631	1518.163333	1607.575183	1517.155465	1783.706719	1427.921953	1510.174934	753.3522165
-2.5	-323.2062018	-444.5366675	-761.2488508	-256.260945	-274.611781	-258.593789	-311.316189	-268.649564	-283.717415	-129.091833
+2.5	1791.516002	2098.564596	2118.012419	1535.249521	1622.525319	1529.492349	1796.684422	1420.169433	1502.677826	751.5360234
-2.55	-376.5009774	-487.5408899	-761.2464044	-301.219515	-322.789741	-303.961545	-365.933757	-315.781559	-333.492833	-151.739769
+2.55	1744.298591	2073.599132	2103.602628	1518.171384	1607.587255	1517.135541	1783.698263	1427.899968	1510.151397	753.3610129
-2.6	-432.6957594	-530.5451275	-761.243958	-346.178136	-370.967834	-349.329429	-420.551324	-362.913644	-383.268419	-174.3877401
+2.6	1664.558047	1983.877979	2008.671093	1453.132871	1539.300399	1452.644409	1710.906443	1375.498433	1454.223882	726.7034068
-2.65	-488.8905414	-573.5493652	-761.2415117	-391.136757	-419.145926	-394.697314	-475.168891	-410.045728	-433.044006	-197.0357112
+2.65	1557.632534	1836.206258	1853.763088	1344.907865	1424.584037	1347.990138	1589.501732	1269.055067	1340.949234	681.459987
-2.7	-545.0853234	-616.5536028	-761.2390653	-436.095379	-467.324018	-440.065198	-529.786459	-457.177813	-482.819593	-219.6836823
+2.7	1384.895401	1626.308024	1622.346137	1198.10693	1268.983954	1200.401697	1412.634397	1111.424528	1174.653755	609.2581471
-2.75	-601.2801054	-659.5578405	-761.2366189	-481.054	-515.50211	-485.433083	-584.404026	-504.309897	-532.595179	-242.3316534
+2.75	1166.590353	1365.922617	1333.220388	1019.257963	1071.179929	1013.509881	1191.619519	911.9702081	963.9685839	518.3799535
-2.8	-657.4748873	-709.4913022	-791.029466	-526.012622	-563.680202	-530.800967	-639.021594	-551.441981	-582.370766	-264.9796245
+2.8	891.5388959	1059.14752	1004.952493	805.3305379	841.0959408	798.155748	929.643305	662.7076151	699.9197308	406.8739421
-2.85	-713.6696693	-804.6658996	-1015.977155	-570.971243	-611.858295	-576.168852	-693.639161	-598.574066	-632.146352	-287.6275956
+2.85	584.3572534	756.5707778	709.5656288	563.7316465	582.202087	552.3312207	632.8464411	421.149676	444.9273069	279.2432171
-2.9	-769.8644513	-951.1710609	-1397.079979	-615.929864	-660.036387	-621.536736	-748.256728	-645.70615	-681.921939	-310.2755667
+2.9	306.2729177	468.2860058	468.4134712	318.170191	318.170191	308.8014624	333.1513932	241.8633212	254.5929697	180.4912003
-2.95	-826.0592333	-1147.472731	-1900.758349	-660.888486	-708.214479	-666.90462	-802.874296	-692.838235	-731.697525	-332.9235378
+2.95	187.1258599	209.584334	358.4847507	148.3667326	158.9912998	149.7173475	180.2418921	155.5393146	164.2631083	85.40295561
-3	-1179.519219	-1582.715743	-2483.187377	-917.923553	-985.194473	-928.106538	-1119.7277	-1037.20044	-1096.39234	-472.6895817
+3	243.8294202	260.1417154	287.1514596	193.3253612	207.169393	195.0852678	234.8594416	202.6714259	214.0387362	97.38792892
(Span 3) -4	-1.18E+03	-1582.715743	-2483.187377	-9.18E+02	-9.85E+02	-9.28E+02	-1.12E+03	-1.04E+03	-1.10E+03	-4.73E+02
+4	2.44E+02	260.1417154	287.1514596	1.93E+02	2.07E+02	1.95E+02	2.35E+02	2.03E+02	2.14E+02	9.74E+01
-3.05	-1120.543258	-1398.519179	-2023.602411	-872.027376	-935.93475	-881.701211	-1063.74132	-985.340414	-1041.57272	-449.055103
+3.05	231.6379495	254.4238506	388.7083158	183.659093	196.8109231	185.3310043	223.1164696	192.5378544	203.3367993	92.51853245
-3.1	-1061.567297	-1243.840429	-1616.590231	-826.131198	-886.675027	-835.295885	-1007.75493	-933.480392	-986.753101	-425.4206242
+3.1	260.400945	419.772817	521.5376094	266.2347614	266.2347614	244.679283	260.2618184	202.3332696	212.982389	152.6163596
-3.15	-1002.591336	-1124.370316	-1306.074381	-780.23502	-837.415304	-788.890558	-951.768547	-881.62037	-931.933484	-401.7861455
+3.15	477.1978028	665.2765282	746.1630574	465.1834536	476.6115555	443.7539196	506.328562	348.3283404	367.85726	231.9662635
-3.2	-943.6153753	-1046.4638	-1164.705278	-734.338843	-788.15558	-742.485231	-895.782162	-829.760348	-877.113867	-378.1516668
+3.2	728.8902772	938.071204	1045.138482	675.7623753	702.4515968	654.7837984	763.0738853	540.2137112	569.4815878	346.0649821
-3.25	-884.6394143	-981.0598118	-1091.911198	-688.442665	-738.895857	-696.079904	-839.795778	-777.900326	-822.29425	-354.5171881
+3.25	961.6282425	1190.185456	1312.731257	863.7918452	904.545169	847.1536827	994.013414	749.5735606	791.2977254	438.7816514
-3.3	-825.6634534	-915.655824	-1019.117118	-642.546487	-689.636134	-649.674578	-783.809393	-726.040304	-767.474633	-330.8827093
+3.3	1184.345275	1418.745914	1548.380909	1033.517476	1084.876551	1021.934456	1204.098783	927.1301785	979.5901247	528.9013611
-3.35	-766.6874924	-850.2518361	-946.3230383	-596.65031	-640.376411	-603.269251	-727.823009	-674.180282	-712.655016	-307.2482306
+3.35	1362.069344	1607.103549	1736.137707	1173.777318	1235.792958	1168.812678	1377.708172	1062.723397	1122.293694	594.0739784
-3.4	-707.7115314	-784.8478483	-873.5289586	-550.754132	-591.116688	-556.863924	-671.836624	-622.320259	-657.835399	-283.6137519
+3.4	1511.057822	1763.733812	1895.711255	1288.967006	1366.122611	1291.839349	1521.589618	1173.19777	1239.300021	651.667421
-3.45	-648.7355705	-719.4438605	-800.7348788	-504.857954	-541.856965	-510.458597	-615.85024	-570.460237	-603.015782	-259.9792731
+3.45	1606.421636	1874.530054	1994.457126	1379.930143	1460.193574	1377.813585	1621.485125	1235.348987	1305.774001	682.3098193
-3.5	-589.7596095	-654.0398727	-727.940799	-458.961776	-492.597242	-464.05327	-559.863856	-518.600215	-548.196165	-236.3447944
+3.5	1663.689227	1945.993422	2049.976999	1440.228928	1522.302522	1435.1577	1682.237197	1254.414674	1326.728702	700.2043629
-3.55	-530.7836486	-588.6358849	-655.1467192	-413.065599	-443.337519	-417.647944	-503.877471	-466.740193	-493.376548	-212.7103157
+3.55	1662.47364	1971.858442	2057.054893	1463.156604	1544.757597	1456.222033	1706.891137	1288.067356	1362.464048	707.2551963
-3.6	-471.8076876	-523.2318971	-582.3526395	-367.169421	-394.077796	-371.242617	-447.891087	-414.880171	-438.556931	-189.075837

+3.6	**1635.451212**	***1965.125094***	***2052.880078***	**1460.017856**	**1544.901243**	**1458.534394**	**1714.671233**	**1311.856319**	**1386.688519**	**720.3689634**
-3.65	**-412.8317266**	***-457.8279092***	***-509.5585597***	**-321.273243**	**-344.818073**	**-324.83729**	**-391.904702**	**-363.020149**	**-383.737314**	**-165.4413582**
+3.65	**1623.890615**	***1905.788144***	***1984.244727***	**1413.989894**	**1498.626838**	**1416.062263**	**1670.157802**	**1286.861737**	**1359.322509**	**707.8863111**
-3.7	**-353.8557657**	***-392.4239214***	***-436.7644799***	**-275.377066**	**-295.55835**	**-278.431963**	**-335.918318**	**-311.160127**	**-328.917697**	**-141.8068795**
+3.7	**1567.988694**	***1801.300291***	***1869.969037***	**1345.460196**	**1417.253905**	**1335.07418**	**1581.283222**	**1224.282352**	**1294.116453**	**680.335643**
-3.75	**-294.8798047**	***-327.0199336***	***-363.9704001***	**-229.480888**	**-246.298627**	**-232.026637**	**-279.931933**	**-259.300105**	**-274.09808**	**-118.1724008**
+3.75	**1450.015256**	***1634.868221***	***1714.392272***	**1234.135615**	**1302.884811**	**1213.841433**	**1435.389025**	**1124.696502**	**1187.348001**	**625.1121964**
-3.8	**-235.9038438**	***-261.6159458***	***-291.1763204***	**-183.58471**	**-197.038904**	**-185.62131**	**-223.945549**	**-207.440083**	**-219.278463**	**-94.53792207**
+3.8	**1285.101839**	***1425.765742***	***1504.814863***	**1084.10251**	**1145.410617**	**1066.661532**	**1246.645235**	**977.7103668**	**1030.636407**	**552.0080836**
-3.85	**-176.9278828**	***-196.211958***	***-218.3822406***	**-137.688533**	**-147.779181**	**-139.215983**	**-167.959164**	**-155.580061**	**-164.458846**	**-70.90344334**
+3.85	**1052.52363**	***1150.582058***	***1224.652565***	**880.5464177**	**931.377198**	**868.7771339**	**1019.403724**	**814.1169647**	**858.4705816**	**449.8338715**
-3.9	**-117.9519219**	***-130.8079702***	***-145.5881608***	**-91.7923549**	**-98.5194581**	**-92.8106563**	**-111.97278**	**-103.720039**	**-109.639229**	**-47.26896462**
+3.9	**767.7263254**	***827.3663414***	***886.7349954***	**638.031994**	**675.7786046**	**630.3086538**	**740.2602846**	**601.2698451**	**634.1740691**	**327.267668**
-3.95	**-58.9759609**	***-65.40398235***	***-72.79408104***	**-45.8961773**	**-49.259735**	**-46.4053295**	**-55.9863956**	**-51.8600171**	**-54.819612**	**-23.63448589**
+3.95	**413.5287334**	***441.0125832***	***475.3298984***	**341.8420402**	**362.4016646**	**338.208952**	**397.9210226**	**328.0235808**	**346.0518892**	**175.6835321**
-5	**-2.63E-13**	***-1.33E-13***	***-2.70E-13***	**-1.09E-13**	**-1.17E-13**	**-1.10E-13**	**-1.34E-13**	**-1.27E-13**	**-1.33E-13**	**-7.66E-14**
+5	**2.81E-13**	***2.45E-13***	***3.39E-13***	**2.16E-13**	**2.31E-13**	**1.66E-13**	**2.08E-13**	**1.93E-13**	**2.03E-13**	**9.94E-14**

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.88E-14	-8.60E-14	-8.28E-14	-6.98E-14	-6.80E-14	-6.90E-14	-6.78E-14	-8.71E-14	-8.55E-14
End Shear	1.12E-13	1.23E-13	1.43E-13	1.06E-13	7.09E-14	1.08E-13	1.13E-13	1.13E-13	1.14E-13
-0.05	-34.55934311	-44.62604387	-43.89729984	-38.59519433	-27.88955849	-37.80774788	-42.8954923	-47.878102	-52.8898232
+0.05	251.3650725	289.3223924	262.1522454	223.2550285	204.1382888	275.0977907	305.3759669	322.8480545	338.342133
-0.1	-69.11868623	-89.25208774	-87.79459969	-77.19038866	-55.77911699	-75.61549576	-85.7909846	-95.756204	-105.779646
+0.1	467.972669	531.248586	476.3091743	407.6164335	380.25286	512.5206929	567.8248673	599.6756081	631.4810707
-0.15	-103.6780293	-133.8781316	-131.6918995	-115.785583	-83.66867548	-113.4232436	-128.686477	-143.634306	-158.66947
+0.15	643.9129057	720.5824753	639.3739481	549.9710858	524.0604672	706.0215116	780.9380503	850.474352	891.8195689
-0.2	-138.2373725	-178.5041755	-175.5891994	-154.3807773	-111.558234	-151.2309915	-171.581969	-191.512408	-211.559293
+0.2	790.2845747	867.5505981	768.9583817	664.6568492	643.5562317	866.6783785	955.5521694	1054.913571	1113.685717
-0.25	-172.7967156	-223.1302194	-219.4864992	-192.9759716	-139.4477925	-189.0387394	-214.477461	-239.39051	-264.449116
+0.25	896.9251804	975.8102297	867.6389717	753.6565629	728.6929646	985.5001297	1088.913823	1207.180729	1295.492347
-0.3	-207.3560587	-267.7562632	-263.3837991	-231.571166	-167.337351	-226.8464873	-257.372954	-287.268612	-317.338939
+0.3	973.2495173	1055.222197	933.8474828	816.8234933	794.5198849	1078.917516	1198.965877	1317.548924	1429.158176
-0.35	-241.9154018	-312.3823071	-307.2810989	-270.1663603	-195.2269095	-264.6542352	-300.268446	-335.146714	-370.228763
+0.35	1026.49449	1089.863699	959.6102263	845.8848965	827.2846562	1144.038669	1266.151851	1392.440602	1508.845783
-0.4	-276.4747449	-357.008351	-351.1783988	-308.7615546	-223.1164679	-302.461983	-343.163938	-383.024816	-423.118586
+0.4	1055.024446	1090.265443	968.6067932	853.4617838	842.0006652	1177.439725	1298.790579	1435.605603	1547.628109
-0.45	-311.034088	-401.6343949	-395.0756986	-347.356749	-251.0060264	-340.2697309	-386.059431	-430.902918	-476.008409
+0.45	1051.03454	1062.715039	981.2697939	864.345013	828.7720293	1174.609338	1290.269513	1434.092318	1556.032788
-0.5	-345.5934311	-446.2604387	-438.9729984	-385.9519433	-278.8955849	-378.0774788	-428.954923	-478.78102	-528.898232
+0.5	1036.260195	1033.955459	965.6772468	853.649516	821.2537053	1158.25391	1271.765415	1411.206837	1527.249355
-0.55	-380.1527742	-490.8864826	-482.8702983	-424.5471376	-306.7851434	-415.8852267	-471.850415	-526.659122	-581.788055
+0.55	997.7045407	1022.889082	919.2719732	817.3623118	798.4062041	1112.522298	1227.320652	1355.402183	1460.613692
-0.6	-414.7121174	-535.5125265	-526.7675981	-463.1423319	-334.6747019	-453.6929746	-514.745907	-574.537224	-634.677879
+0.6	935.7355186	985.4862065	862.1041989	763.224689	756.1589851	1043.483926	1154.095833	1267.252279	1371.858648
-0.65	-449.2714605	-580.1385703	-570.664898	-501.7375263	-362.5642604	-491.5007224	-557.6414	-622.415326	-687.567702
+0.65	847.3130274	909.8219751	800.8297246	706.4524182	689.3176379	944.2265687	1044.940836	1143.807957	1241.838992
-0.7	-483.8308036	-624.7646142	-614.5621978	-540.3327206	-390.4538189	-529.3084703	-600.536892	-670.293428	-740.457525
+0.7	744.894077	800.2230401	706.5950138	622.5962883	607.6637913	824.6117129	913.0459863	1000.60835	1079.934379
-0.75	-518.3901467	-669.3906581	-658.4594977	-578.9279149	-418.3433774	-567.1162182	-643.432384	-718.17153	-793.347348
+0.75	619.7060274	651.7345344	574.4780555	507.0783555	504.4518925	682.7170217	752.7908378	825.8463443	883.4361535
-0.8	-552.9494898	-714.016702	-702.3567975	-617.5231092	-446.2329359	-604.9239661	-686.327877	-766.049632	-846.237172
+0.8	478.4455158	481.0070435	414.912732	374.4786389	391.605277	525.5228248	575.253658	629.4084267	664.4738683
-0.85	-587.5088329	-758.6427458	-746.2540973	-674.4233942	-474.1224944	-642.731714	-729.223369	-813.927734	-899.126995
+0.85	318.9953375	303.9156272	254.0760673	298.0326163	261.7476438	353.6195576	378.0731887	408.3267003	419.9540418
-0.9	-622.068176	-803.2687897	-790.1513972	-808.9848035	-502.0120529	-680.5394618	-772.118861	-861.805836	-952.016818
+0.9	187.5092862	187.4159317	149.042708	225.5241891	146.1864425	198.8535329	198.9911989	212.0259398	211.9943589
-0.95	-656.6275192	-847.8948336	-834.048697	-1011.406225	-529.9016114	-718.3472097	-815.014354	-909.683938	-1004.90664
+0.95	136.9221651	165.5356833	151.9676644	160.8152565	110.970633	150.6924385	170.0278612	189.3811371	208.2656985
-1	-691.1868608	-892.5208894	-877.9460136	-1237.536394	-557.7911659	-756.1549597	-857.909859	-957.562065	-1057.79645
+1	144.1285927	174.2480847	159.9659601	139.4512214	116.8111923	158.6236172	178.9766994	199.3485631	219.2270507
(Span 2) -2	-691.1868608	-892.5208894	-877.9460136	-1237.536394	-557.7911659	-756.1549597	-857.909859	-957.562065	-1057.79645
+2	144.1285927	174.2480847	159.9659601	139.4512214	116.8111923	158.6236172	178.9766994	199.3485631	219.2270507
-2.05	-492.7082076	-595.6726553	-546.8485117	-930.2779894	-399.3227817	-542.2594951	-611.837444	-681.479213	-749.434125
+2.05	110.6108788	133.725955	122.7651981	152.6017983	89.64625511	121.7350242	137.3549114	152.9892113	168.2448727
-2.1	-459.1904782	-555.1505064	-509.6477492	-666.0704921	-372.1578334	-505.3709139	-570.215645	-635.119856	-698.451961
+2.1	224.0033785	224.0447059	178.2880224	219.7943848	173.7748126	246.7942433	257.5332234	267.8483529	268.3758266
-2.15	-425.6727488	-514.6283575	-472.4469866	-475.6536282	-344.9928852	-468.4823327	-528.593846	-588.760499	-647.469797
+2.15	386.9566153	365.6713494	312.4316687	304.2409756	318.8413483	441.2773298	472.3616415	505.2741748	534.6475668
-2.2	-392.1550194	-474.1062087	-435.246224	-383.785324	-317.8279369	-431.5937516	-486.972046	-542.401142	-596.487633
+2.2	570.916565	576.7599168	503.881853	439.6548509	466.879262	641.7221438	702.2016311	760.5095418	817.047111

-2.25	-358.63729	-433.5840598	-398.0454615	-350.1686045	-290.6629887	-394.7051704	-445.350247	-496.041784	-545.50547
+2.25	732.1033552	786.671443	704.6553088	609.0668237	597.4785495	817.5179628	902.5348315	984.6660423	1067.712199
-2.3	-325.1195606	-393.061911	-360.8446989	-322.2680224	-263.4980404	-357.8165892	-403.728448	-449.682427	-494.523306
+2.3	870.4645118	957.1034629	860.8442555	749.3715537	702.9921162	969.7093713	1073.373308	1176.92447	1275.559347
-2.35	-291.6018312	-352.5397621	-323.6439364	-297.337867	-236.3330922	-320.9280081	-362.106649	-403.32307	-443.541142
+2.35	978.3642828	1080.439292	979.5468177	856.5741322	789.3146898	1089.296562	1207.755047	1328.847811	1441.052915
-2.4	-258.0841018	-312.0176133	-286.4431738	-272.7734335	-209.1681439	-284.0394269	-320.48485	-356.963712	-392.558978
+2.4	1056.845322	1155.22255	1064.261376	932.9744244	843.6747035	1174.599245	1299.909229	1438.650058	1555.014932
-2.45	-224.5663724	-271.4954644	-249.2424112	-248.6555824	-182.0031957	-247.1508457	-278.863051	-310.604355	-341.576814
+2.45	1101.962004	1188.181456	1127.590993	987.9854418	875.8979239	1226.249582	1355.287745	1503.538565	1630.746645
-2.5	-191.048643	-230.9733155	-212.0416605	-240.7008948	-154.8382474	-210.2623125	-237.241252	-264.244998	-290.594729
+2.5	1109.484313	1178.885731	1137.508273	998.5068695	875.3782589	1234.996591	1362.679024	1515.803649	1652.191996
-2.55	-224.5662599	-271.4953411	-249.2424226	-248.6556856	-182.0031164	-247.1509055	-278.862968	-310.604306	-341.576907
+2.55	1101.936067	1188.166296	1127.576819	987.9926981	875.8876249	1226.23045	1355.274653	1503.517898	1630.750958
-2.6	-258.0839738	-312.0174707	-286.4431846	-272.773479	-209.1680535	-284.0394984	-320.484756	-356.963658	-392.559085
+2.6	1056.852441	1155.21822	1064.271923	932.970994	843.6803791	1174.611491	1299.926778	1438.659243	1555.016908
-2.65	-291.6016877	-352.5396004	-323.6439467	-297.3380646	-236.3329906	-320.9280914	-362.106544	-403.323009	-443.541263
+2.65	978.3689171	1080.418759	979.5506294	856.5763297	789.3389482	1089.301433	1207.764945	1328.849226	1441.075285
-2.7	-325.1194016	-393.06173	-360.8447087	-322.268031	-263.4979278	-357.8166844	-403.728331	-449.682361	-494.523441
+2.7	870.4674964	957.1121117	860.8391607	749.3685517	702.9895522	969.7172053	1073.385774	1176.928298	1275.560577
-2.75	-358.6371154	-433.5838596	-398.0454708	-350.1686127	-290.6628649	-394.7052773	-445.350119	-496.041713	-545.505619
+2.75	732.1049009	786.6772354	704.6400634	609.0683836	597.4951271	817.5243209	902.5373904	984.6686997	1067.72636
-2.8	-392.1548293	-474.1059892	-435.2462329	-383.7854558	-317.8278021	-431.5938703	-486.971907	-542.401065	-596.487797
+2.8	570.9210213	576.7643176	503.8878933	439.6470649	466.9066672	641.728335	702.2117982	760.5124039	817.0683519
-2.85	-425.6725432	-514.6281188	-472.4469949	-475.6537554	-344.9927392	-468.4824633	-528.593695	-588.760416	-647.469975
+2.85	386.9542061	365.6850992	312.4341313	304.2376964	318.8527564	441.2840379	472.360731	505.2709459	534.6580248
-2.9	-459.1902571	-555.1502485	-509.647757	-666.0704265	-372.1576764	-505.3710562	-570.215483	-635.119768	-698.452152
+2.9	224.0002218	224.0418133	178.3077039	219.7929857	173.753809	246.813929	257.5418774	267.8655759	268.3967404
-2.95	-492.707971	-595.6723781	-546.848519	-930.2779143	-399.3226135	-542.2596492	-611.837271	-681.47912	-749.43433
+2.95	110.6109217	133.7260242	122.7652144	152.5991473	89.64628679	121.734966	137.3549409	152.9892174	168.2448249
-3	-691.1869114	-892.5213962	-877.9466536	-1237.536869	-557.7911976	-756.1552441	-857.910502	-957.562669	-1057.79681
+3	144.1286595	174.2481674	159.9659623	139.4512226	116.81124	158.6235664	178.9767477	199.3485868	219.2269902
(Span 3) -4	-6.91E+02	-8.93E+02	-8.78E+02	-1.24E+03	-5.58E+02	-7.56E+02	-8.58E+02	-9.58E+02	-1.06E+03
+4	1.44E+02	1.74E+02	1.60E+02	1.39E+02	1.17E+02	1.59E+02	1.79E+02	1.99E+02	2.19E+02
-3.05	-656.6275657	-847.895327	-834.0493218	-1011.406558	-529.9016375	-718.347482	-815.014977	-909.684537	-1004.90697
+3.05	136.9222264	165.5357589	151.967664	160.8102477	110.970678	150.692388	170.0279105	189.3811574	208.2656407
-3.1	-622.0682201	-803.2692578	-790.1519899	-808.9850427	-502.0120774	-680.5397199	-772.119453	-861.806405	-952.017127
+3.1	187.4830606	187.4245023	149.0492075	225.5128624	146.1681692	198.8710282	198.9861581	212.0387923	212.0069311
-3.15	*-587.5088744*	*-758.6431886*	*-746.2546581*	*-674.4236462*	*-474.1225173*	*-642.7319578*	*-729.223928*	*-813.928272*	*-899.127285*
+3.15	319.001338	303.9250268	254.0794397	298.0284682	261.7459961	353.6163582	378.0668477	408.3284583	419.9536915
-3.2	-552.9495288	-714.0171194	-702.3573262	-617.5231166	-446.2329573	-604.9241957	-686.328404	-766.05014	-846.237444
+3.2	478.451722	481.0114858	414.9097389	374.4670867	391.5806815	525.5199492	575.2473736	629.4167998	664.4573593
-3.25	-518.3901832	-669.3910502	-658.4599944	-578.9279227	-418.3433972	-567.1164336	-643.432879	-718.172008	-793.347603
+3.25	619.7110691	651.7322192	574.473429	507.0756338	504.4495134	682.7142955	752.784396	825.8532675	883.4352458
-3.3	-483.8308375	*-624.7649809*	-614.5626626	*-540.3327287*	-390.4538371	-529.3086715	-600.537355	-670.293876	-740.457762
+3.3	744.8978511	800.2171003	706.5869563	622.5917183	607.6371996	824.6075746	913.0376578	1000.613743	1079.947922
-3.35	-449.2714919	-580.1389117	-570.6653307	-501.7375347	-362.564277	-491.5009094	-557.641831	-622.415744	-687.567921
+3.35	847.3117232	909.8122374	800.8300436	706.4525705	689.3121985	944.2207062	1044.947125	1143.809945	1241.833035
-3.4	-414.7121462	-535.5128425	-526.7679989	-463.1423408	-334.674717	-453.6931473	-514.746306	-574.537611	-634.67808
+3.4	935.7314558	985.4713661	862.0876841	763.2294107	756.1738977	1043.475218	1154.081825	1267.247255	1371.865174
-3.45	-380.1528006	-490.8867733	-482.870667	-424.5471468	-306.7851569	-415.8853852	-471.850782	-526.659479	-581.788239
+3.45	997.69744	1022.890479	919.2744078	817.3629967	798.3954319	1112.527486	1227.319781	1355.393229	1460.615041
-3.5	-345.593455	-446.2607041	-438.9733352	-385.9519529	-278.8955968	-378.0776231	-428.955257	-478.781347	-528.898398
+3.5	1036.249259	1033.9652	965.6897829	853.6559831	821.2624645	1158.237822	1271.742672	1411.192717	1527.242532
-3.55	-311.0341093	-401.6346349	-395.0760033	-347.3567589	-251.0060367	-340.269861	-386.059733	-430.903215	-476.008556
+3.55	1051.028991	*1062.71679848392*	*981.2692832*	864.3447314	828.7645847	*1174.61001*	1290.259851	1434.091548	1556.024658

-3.6	**-276.4747637**	**-357.0085657**	**-351.1786715**	**-308.7615649**	**-223.1164766**	**-302.4620989**	**-343.164208**	**-383.025082**	**-423.118715**
+3.6	**1055.032809**	**1090.251572**	**968.6152106**	**853.4667128**	**841.99015**	**1177.418638**	**1298.775793**	**1435.616047**	**1547.630177**
-3.65	**-241.915418**	**-312.3824965**	**-307.2813396**	**-270.166371**	**-195.2269166**	**-264.6543368**	**-300.268684**	**-335.14695**	**-370.228874**
+3.65	**1026.498253**	**1089.861573**	**959.6136271**	**845.8864693**	**827.2704751**	**1144.029908**	**1266.14888**	**1392.444843**	**1508.839399**
-3.7	**-207.3560724**	**-267.7564272**	**-263.3840078**	**-231.571177**	**-167.3373565**	**-226.8465747**	**-257.37316**	**-287.268818**	**-317.339033**
+3.7	**973.2475104**	**1055.231309**	***933.858733***	**816.829555**	**794.5019974**	**1078.9207**	**1198.974188**	**1317.545353**	**1429.144613**
-3.75	**-172.7967267**	**-223.130358**	**-219.4866759**	**-192.9759831**	**-139.4477964**	**-189.0388126**	**-214.477635**	**-239.390686**	**-264.449192**
+3.75	**896.9182593**	**975.8133722**	**867.6329995**	**753.6598029**	**728.6938722**	**985.4970611**	**1088.915613**	**1207.170441**	**1295.487802**
-3.8	**-138.2373811**	**-178.5042888**	**-175.5893441**	**-154.3807891**	**-111.5582363**	**-151.2310505**	**-171.582111**	**-191.512553**	**-211.559351**
+3.8	**790.272156**	**867.5465693**	**768.9617397**	**664.6588212**	**643.5299045**	**866.6694173**	**955.546785**	**1054.895941**	**1113.689815**
-3.85	**-103.6780355**	**-133.8782196**	**-131.6920123**	**-115.7855951**	**-83.66867627**	**-113.4232884**	**-128.686586**	**-143.634421**	**-158.66951**
+3.85	**643.9129768**	**720.5881965**	**639.3702669**	**549.9689909**	**524.0523172**	**706.0237118**	**780.9256414**	**850.4659321**	**891.8146784**
-3.9	**-69.11868982**	**-89.25215039**	**-87.79468042**	**-77.19040117**	**-55.77911619**	**-75.61552627**	**-85.7910618**	**-95.756289**	**-105.779669**
+3.9	**467.9486981**	**531.230601**	**476.2988016**	**407.6247168**	**380.2168546**	**512.4989895**	**567.804998**	**599.6761601**	**631.4832118**
-3.95	**-34.55934418**	**-44.62608117**	**-43.89734857**	**-38.59520721**	**-27.88955611**	**-37.80776417**	**-42.8955374**	**-47.8781568**	**-52.8898275**
+3.95	**251.3529856**	**289.313518**	**262.1471648**	**223.2591941**	**204.1201763**	**275.0869006**	**305.3659954**	**322.8483301**	**338.3432024**
-5	**-8.36E-14**	**-1.09E-13**	**-9.49E-14**	**-1.02E-13**	**-6.90E-14**	**-9.03E-14**	**-9.34E-14**	**-1.06E-13**	**-1.07E-13**
+5	**1.64E-13**	**1.71E-13**	**1.70E-13**	**1.43E-13**	**1.30E-13**	**1.34E-13**	**1.40E-13**	**1.49E-13**	**1.50E-13**

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.26E-13	-1.49E-13	-8.18E-14	-1.01E-13	-1.01E-13
End Shear	1.92E-13	1.49E-13	1.37E-13	1.67E-13	1.47E-13
-0.05	-81.32309355	-88.08790886	-52.5129404	-64.2607445	-67.8109603
+0.05	461.7627925	465.7034279	328.7191583	400.3049263	409.644287
-0.1	-162.6461871	-176.1758177	-105.025881	-128.521489	-135.621921
+0.1	837.1241687	841.1823197	600.9074485	732.35658	746.8000344
-0.15	-243.9692807	-264.2637266	-157.538821	-192.782233	-203.432881
+0.15	1149.236376	1165.969107	810.8963877	991.6069626	1009.913028
-0.2	-325.2923742	-352.3516355	-210.051761	-257.042978	-271.243841
+0.2	1399.66288	1442.594075	991.4393067	1216.158982	1237.966252
-0.25	-406.6154678	-440.4395443	-262.564702	-321.303722	-339.054801
+0.25	1564.62909	1675.853506	1133.25762	1376.152593	1410.264042
-0.3	-487.9385613	-528.5274532	-315.077642	-385.564467	-406.865762
+0.3	1707.270613	1833.3576	1227.277572	1478.556022	1543.638215
-0.35	-569.2616549	-616.615362	-367.590583	-449.825211	-474.676722
+0.35	1797.199841	1956.414543	1280.098859	1525.384951	1608.043333
-0.4	-650.5847484	-704.7032709	-420.103523	-514.085956	-542.487682
+0.4	1859.488836	2001.813201	1297.887381	1537.500477	1616.079477
-0.45	-731.907842	-792.7911798	-472.616463	-578.3467	-610.298643
+0.45	1872.977622	1990.57791	1266.771775	1494.535714	1587.588982
-0.5	-813.2309355	-880.8790886	-525.129404	-642.607445	-678.109603
+0.5	1829.324699	1972.938651	1211.158991	1452.926058	1525.164343
-0.55	-894.5540291	-968.9669975	-577.642344	-706.868189	-745.920563
+0.55	1768.335903	1870.17945	1209.868963	1432.152086	1512.689712
-0.6	-975.8771226	-1057.054906	-630.155284	-771.128934	-813.731524
+0.6	1638.8644	1766.392765	1162.145484	1375.039598	1451.826164
-0.65	-1057.200216	-1145.142815	-682.668225	-835.389678	-881.542484
+0.65	1477.307441	1599.036797	1062.682679	1270.740793	1338.026853
-0.7	-1138.52331	-1233.230724	-735.181165	-899.650423	-949.353444
+0.7	1269.589977	1363.564163	937.180635	1123.795871	1168.153542
-0.75	-1219.846403	-1321.318633	-787.694105	-963.911167	-1017.1644
+0.75	1025.550076	1082.947587	764.5574391	919.2637722	938.5981932
-0.8	-1301.169497	-1409.406542	-840.207046	-1028.17191	-1084.97536
+0.8	735.7578821	742.2837256	556.4405008	670.2737509	672.5649118
-0.85	-1382.49259	-1497.494451	-892.719986	-1092.43266	-1152.78633
+0.85	423.7700305	412.82658	371.7483189	410.795898	432.2496476
-0.9	-1463.815684	-1585.58236	-945.232927	-1156.6934	-1220.59729
+0.9	273.1178891	290.7950057	214.7954504	233.4369062	233.4493734
-0.95	-1545.138778	-1673.670268	-997.745867	-1220.95415	-1288.40825
+0.95	288.2911052	306.9502838	190.160208	235.4778629	244.5733241
-1	-1626.461894	-1761.758176	-1050.2588	-1285.21489	-1356.21921
+1	303.464323	323.1055589	200.1686396	247.8714326	257.4456011
(Span 2) -2	-1626.461894	-1761.758176	-1050.2588	-1285.21489	-1356.21921
+2	303.464323	323.1055589	200.1686396	247.8714326	257.4456011
-2.05	-1037.402176	-1104.475341	-684.282302	-847.356203	-880.086024
+2.05	232.8924109	247.9659939	153.6185747	190.2278834	197.5755366
-2.1	-966.8302532	-1029.340595	-637.732256	-789.712642	-820.215932
+2.1	294.5395663	273.3390012	256.7968902	298.9991356	299.0431406
-2.15	-896.25833	-954.2058483	-591.182211	-732.069081	-760.34584
+2.15	528.8460461	532.2220292	449.2984798	508.0085263	536.9172153
-2.2	-825.6864067	-879.0711019	-544.632165	-674.425519	-700.475748
+2.2	884.2572162	938.3971585	675.2980587	808.8340595	827.6731819

-2.25	**-755.1144834**	**-803.9363554**	**-498.08212**	**-616.781958**	**-640.605656**
+2.25	**1263.124642**	**1369.314278**	**928.7645332**	**1110.833383**	**1156.943612**
-2.3	**-684.5425601**	**-728.801609**	**-451.532074**	**-559.138396**	**-580.735564**
+2.3	**1586.456561**	**1726.497065**	**1127.879296**	**1347.039162**	**1421.262521**
-2.35	**-613.9706369**	**-653.6668625**	**-404.982029**	**-501.494835**	**-520.865472**
+2.35	**1827.080775**	**2000.523605**	**1279.388366**	**1519.363875**	**1616.968828**
-2.4	**-543.3987136**	**-578.5321161**	**-358.431983**	**-443.851273**	**-460.99538**
+2.4	**2013.072343**	**2178.89426**	**1382.039246**	**1633.945674**	**1736.092504**
-2.45	**-472.8267903**	**-503.3973696**	**-311.881937**	**-386.207712**	**-401.125288**
+2.45	**2123.541575**	**2281.734917**	**1428.232217**	**1684.881559**	**1791.768709**
-2.5	**-402.2548671**	**-428.2900909**	**-265.332009**	**-328.56415**	**-341.255196**
+2.5	**2141.895026**	**2328.617356**	**1413.742271**	**1663.88544**	**1782.680568**
-2.55	**-472.82671**	**-503.4296559**	**-311.882074**	**-386.207609**	**-401.125108**
+2.55	**2123.557795**	**2281.522447**	**1428.20731**	**1684.860161**	**1791.741346**
-2.6	**-543.3986221**	**-578.5692209**	**-358.432139**	**-443.851158**	**-460.995173**
+2.6	**2013.065836**	**2178.894153**	**1382.046932**	**1633.932373**	**1736.087382**
-2.65	**-613.9705342**	**-653.7087858**	**-404.982204**	**-501.494707**	**-520.865237**
+2.65	**1827.098908**	**2001.964616**	**1279.392038**	**1519.360437**	**1616.985617**
-2.7	**-684.5424463**	**-728.8483508**	**-451.532269**	**-559.138256**	**-580.735302**
+2.7	**1586.474081**	**1727.267811**	**1127.886307**	**1347.031473**	**1421.279169**
-2.75	**-755.1143584**	**-803.9879158**	**-498.082334**	**-616.781805**	**-640.605366**
+2.75	**1263.129956**	**1369.313197**	**928.785097**	**1110.845455**	**1156.948717**
-2.8	**-825.6862704**	**-879.1274808**	**-544.632399**	**-674.425355**	**-700.475431**
+2.8	**885.0299896**	**938.3964545**	**675.2959281**	**808.8508519**	**827.6833026**
-2.85	**-896.2581825**	**-954.2670457**	**-591.182463**	**-732.068904**	**-760.345495**
+2.85	**528.8482031**	**532.2228674**	**449.2942096**	**508.0157661**	**536.9173653**
-2.9	**-966.8300946**	**-1029.406611**	**-637.732528**	**-789.712453**	**-820.21556**
+2.9	**294.5203024**	**273.3403042**	**256.7936509**	**299.0090999**	**299.0528674**
-2.95	**-1037.402007**	**-1104.546176**	**-684.282593**	**-847.356002**	**-880.085624**
+2.95	**232.8924424**	**247.9500949**	**153.618518**	**190.2279026**	**197.5756323**
-3	**-1626.462153**	**-1761.808958**	**-1050.25953**	**-1285.21534**	**-1356.21981**
+3	**303.4643711**	**323.0848372**	**200.1685564**	**247.8714853**	**257.4457195**
(Span 3) -4	**-1.63E+03**	**-1.76E+03**	**-1.05E+03**	**-1.29E+03**	**-1.36E+03**
+4	**3.03E+02**	**3.23E+02**	**2.00E+02**	**2.48E+02**	**2.57E+02**
-3.05	**-1545.139047**	**-1673.71851**	**-997.746557**	**-1220.95457**	**-1288.40882**
+3.05	**288.2911526**	**306.9305951**	**190.1601286**	**235.4779109**	**244.5734334**
-3.1	**-1463.81594**	**-1585.628062**	**-945.23358**	**-1156.6938**	**-1220.59782**
+3.1	**273.1179341**	**290.7763531**	**214.8051973**	**233.4304271**	**233.4429208**
-3.15	***-1382.492834***	***-1497.537615***	***-892.720603***	***-1092.43303***	***-1152.78683***
+3.15	**423.7612531**	**412.8249998**	**371.755697**	**410.7916694**	**432.2579969**
-3.2	**-1301.169727**	**-1409.447167**	**-840.207625**	**-1028.17227**	**-1084.97584**
+3.2	**735.7411784**	**742.2850093**	**556.4546664**	**670.2625452**	**672.5533948**
-3.25	**-1219.846621**	**-1321.35672**	**-787.694648**	**-963.911501**	**-1017.16485**
+3.25	**1025.542325**	**1082.949441**	**764.550153**	**919.2646298**	**938.5906523**
-3.3	**-1138.523514**	**-1233.266272**	**-735.181671**	**-899.650734**	**-949.353865**
+3.3	**1269.577128**	**1363.564853**	**937.1877462**	**1123.807866**	**1168.140592**
-3.35	**-1057.200408**	**-1145.175824**	**-682.668694**	**-835.389967**	**-881.542874**
+3.35	**1477.303208**	**1599.037614**	**1062.684409**	**1270.746149**	**1338.023889**
-3.4	**-975.8773011**	**-1057.085377**	**-630.155716**	**-771.1292**	**-813.731884**
+3.4	**1639.653548**	**1766.389257**	**1162.138413**	**1375.034294**	**1451.831972**
-3.45	**-894.5541946**	**-968.9949293**	**-577.642739**	**-706.868433**	**-745.920894**
+3.45	**1768.335075**	**1870.178198**	**1209.874299**	**1432.694483**	**1512.684107**
-3.5	**-813.231088**	**-880.9044817**	**-525.129762**	**-642.607666**	**-678.109904**
+3.5	**1829.330972**	**1972.936004**	**1211.138774**	**1452.912316**	**1525.149963**
-3.55	**-731.9079815**	**-792.8140341**	**-472.616784**	**-578.346899**	**-610.298914**
+3.55	**1872.964697**	**1990.576625**	**1266.76865**	**1494.530667**	**1587.581538**
-3.6	**-650.584875**	**-704.7235865**	**-420.103807**	**-514.086132**	**-542.487924**

+3.6	**1859.46609**	**2001.811308**	**1297.897725**	**1537.510692**	**1616.081492**
-3.65	**-569.2617684**	**-616.6331389**	**-367.59083**	**-449.825365**	**-474.676934**
+3.65	**1797.191972**	**1956.414053**	**1280.1031**	**1525.38797**	**1608.034721**
-3.7	**-487.9386619**	**-528.5426913**	**-315.077853**	**-385.564598**	**-406.865944**
+3.7	**1707.252793**	**1833.357521**	**1227.273452**	**1478.549094**	**1543.621009**
-3.75	**-406.6155554**	**-440.4522437**	**-262.564875**	**-321.303831**	**-339.054954**
+3.75	**1565.140051**	**1675.851637**	**1133.246821**	**1376.154179**	**1410.254456**
-3.8	**-325.2924488**	**-352.3617961**	**-210.051898**	**-257.043064**	**-271.243963**
+3.8	**1399.682487**	**1442.593224**	**991.4208335**	**1216.168077**	**1237.977809**
-3.85	**-243.9693423**	**-264.2713485**	**-157.538921**	**-192.782297**	**-203.432973**
+3.85	**1149.244225**	**1165.968993**	**810.9037505**	**991.6054455**	**1009.914234**
-3.9	**-162.6462358**	**-176.1809009**	**-105.025944**	**-128.52153**	**-135.621983**
+3.9	**837.118397**	**841.1807918**	**600.8878287**	**732.3448843**	**746.7897045**
-3.95	**-81.32312923**	**-88.09045332**	**-52.5129664**	**-64.2607633**	**-67.8109932**
+3.95	**461.7602039**	**465.777637**	**328.7095972**	**400.299333**	**409.6394384**
-5	**-1.45E-13**	**-1.51E-13**	**-1.34E-13**	**-1.31E-13**	**-1.38E-13**
+5	**2.46E-13**	**2.78E-13**	**2.01E-13**	**2.34E-13**	**2.15E-13**

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.796478702	-5.513945572	-7.12008837	-7.00381721	-6.456514608	-4.449780977	-6.032228776	-6.843978746	-7.638954471	-8.438574935
End Shear	59.50887179	43.43776226	50.7672098	46.49921888	40.87656917	35.27760088	47.48590577	52.82085359	55.9692376	58.86310595
-0.05	-7.796478702	-5.513945572	-7.12008837	-7.00381721	-6.964723187	-4.449780977	-6.032228776	-6.843978746	-7.638954471	-8.438574935
+0.05	54.62608794	40.00474988	46.07995739	41.73425611	36.71280377	32.51424567	43.76236856	48.57801663	51.25861552	53.6746739
-0.1	-7.796478702	-5.513945572	-7.12008837	-7.00381721	-8.02172648	-4.449780977	-6.032228776	-6.843978746	-7.638954471	-8.438574935
+0.1	50.0557292	36.79502107	41.70126507	37.30185923	32.75010627	29.9355726	40.28060936	44.60871384	46.85483381	48.82830835
-0.15	-7.796478702	-5.513945572	-7.12008837	-7.00381721	-9.102876769	-4.449780977	-6.032228776	-6.843978746	-7.638954471	-8.438574935
+0.15	46.19259832	34.07553943	38.0323261	33.62392298	29.48089587	27.74913503	37.32883605	41.24869672	43.13668867	44.74747608
-0.2	-7.803617477	-7.254383769	-7.255943125	-7.00381721	-10.33962623	-5.353436196	-7.756647352	-7.903660554	-7.896341947	-8.438574935
+0.2	41.76364415	30.94997288	33.86505156	29.7323335	26.03753365	25.23425224	33.9341027	37.39056921	38.87893522	40.08765505
-0.25	-10.74213639	-9.208162943	-9.210064787	-7.362934552	-11.44600671	-7.233757044	-10.09392723	-10.69246271	-10.68529054	-10.67835041
+0.25	38.14191008	28.31962299	30.40222215	26.57801833	23.27910336	23.11608568	31.07527772	34.14691438	35.30957843	36.19305447
-0.3	-14.88045002	-11.58921947	-11.46365188	-9.460785236	-12.9389049	-9.814957478	-13.1222403	-13.91666154	-13.90967985	-13.90292762
+0.3	33.90598046	25.31786851	26.64053063	23.03696618	20.1978557	20.69671022	27.81038985	30.4491288	31.25296766	31.78124612
-0.35	-18.39287856	-14.32742028	-13.36699123	-11.37529403	-14.78441497	-12.00428181	-16.08105923	-16.74913623	-16.73644758	-16.72830021
+0.35	30.37832905	22.81063467	23.42816359	20.1321826	17.68248982	18.67399722	25.08121152	27.36398171	28.01790709	28.27511264
-0.4	-22.4372115	-17.4803185	-15.5473693	-14.16268216	-17.55173565	-14.52337797	-19.48607449	-20.67505689	-20.62971223	-20.62181562
+0.4	26.39775669	20.07180864	19.88799811	16.96694377	14.94234587	16.38184139	21.98899246	23.99785353	24.21207753	24.21018952
-0.45	-25.98966929	-20.13881153	-18.20825045	-16.51661209	-19.83044583	-16.64587779	-22.35548679	-23.98851162	-23.9152427	-23.90757828
+0.45	23.11352888	17.71830571	17.14671361	14.62382189	12.95395558	14.55951854	19.53101838	21.10907407	21.07688167	21.07496166
-0.5	-30.41597173	-23.17889467	-21.96305834	-19.2127709	-22.38226558	-19.07115251	-25.63478398	-27.78137653	-28.05905336	-28.05042687
+0.5	19.44558996	15.07880974	14.11514503	12.31539939	11.01261185	12.42291761	16.6497034	17.87399375	17.82363178	17.82196834
-0.55	-34.13075384	-25.72369314	-25.38144269	-21.57171222	-24.55984305	-21.09964692	-28.37808766	-30.9597083	-31.68310434	-31.90009288
+0.55	16.45387935	12.91573278	11.80107464	10.46213511	9.474480113	10.66950456	14.28564434	15.22719286	15.19301374	15.19133738
-0.6	-38.3576225	-28.61130706	-29.2910838	-24.93193431	-27.73095387	-23.3993906	-31.48885235	-34.57034871	-35.81267572	-36.58221565
+0.6	13.31662039	10.51822443	9.613209589	8.415276067	7.749877047	8.722938139	11.66180042	12.1981435	12.19409534	12.26309452
-0.65	-41.8769762	-31.00843216	-32.70257711	-28.40676407	-30.81231993	-25.30669444	-34.0693459	-37.57141598	-39.25638592	-40.49867337
+0.65	10.82649483	8.501539177	8.107625609	6.766934359	6.321660478	7.146000687	9.451183766	9.841378676	9.838082821	9.869534541
-0.7	-45.84728091	-33.70393375	-36.9435484	-32.3902051	-34.30794686	-27.44919219	-36.96875252	-40.95066427	-43.14800439	-44.93917801
+0.7	8.10861265	6.447334301	6.443120879	5.123487274	4.987063461	5.362241119	7.133865225	7.559449359	7.557977913	7.621075594
-0.75	-49.12223898	-35.91939912	-40.47747256	-35.71650385	-37.18924242	-29.20811979	-39.3497345	-43.73232342	-46.36412481	-48.62218473
+0.75	5.977410258	5.105298177	5.10109692	4.055973198	4.152019121	3.993174815	5.486426827	5.763321731	5.761885646	5.820765131
-0.8	-52.77885282	-38.38314154	-44.46744902	-39.48058687	-40.41606911	-31.16166086	-41.99497043	-46.83100979	-49.96266639	-52.75960534
+0.8	4.045128345	3.645500129	3.641373275	2.89486022	3.242294697	2.778318606	3.796919253	3.826381891	3.825063943	3.823681187
-0.85	-55.76044875	-40.3829612	-47.76134949	-42.79881829	-43.20219243	-32.74503189	-44.13973953	-49.35112201	-52.90395892	-56.15647702
+0.85	2.937191486	2.456765611	2.486846503	1.976535109	2.521446241	2.018393293	2.466761242	2.46919673	2.468050048	2.466938897
-0.9	-59.04624282	-42.57529849	-51.44225047	-47.07974813	-46.75042729	-34.47789785	-46.48798519	-52.12008302	-56.15429943	-59.92933262
+0.9	1.750113845	1.233095237	1.390064719	1.276129017	1.753528068	1.183323767	1.26542047	1.427787208	1.590303866	1.748884554
-0.95	-61.68551096	-44.32549182	-54.44634718	-50.6133512	-49.67324848	-35.8585316	-48.35984136	-54.3365012	-58.77351407	-62.98738283
+0.95	1.611678223	1.149786361	1.390064719	1.276129017	1.372160234	0.931861691	1.26542047	1.427787208	1.590303866	1.748884554
-1	-64.54335559	-46.20677608	-57.76009698	-54.56121544	-52.94200376	-37.33901002	-50.36827914	-56.72656981	-61.62053712	-66.33421021
+1	1.61E+00	1.149786361	1.390064719	1.276129017	1.16E+00	0.931861691	1.26542047	1.427787208	1.590303866	1.748884554
(Span 2) -2	-5.766193739	-4.113656581	-4.973314283	-4.565680113	-4.163602821	-3.33397507	-4.527367343	-5.108276251	-5.689721353	-6.257084615
+2	65.0876088	46.43289973	59.31340542	57.70783732	54.29483552	37.4749887	50.56326539	57.06866071	62.21473185	67.259302
-2.05	-5.766193739	-4.113656581	-4.973314283	-4.565680113	-4.35696327	-3.33397507	-4.527367343	-5.108276251	-5.689721353	-6.257084615
+2.05	62.15952445	44.49525921	56.02924707	53.95028568	51.02860985	35.94607892	48.48823243	54.60793526	59.29379548	63.84525161
-2.1	-5.766193739	-4.113656581	-4.973314283	-4.565680113	-5.096328639	-3.33397507	-4.527367343	-5.108276251	-5.689721353	-6.257084615
+2.1	58.97235964	42.36379984	52.55251841	50.05276677	47.62123656	34.25846041	46.19987588	51.91391709	56.13347332	60.18876342
-2.15	-5.766193739	-4.113656581	-4.973314283	-4.565680113	-6.22197908	-3.33397507	-4.527367343	-5.108276251	-5.689721353	-6.257084615
+2.15	55.12249264	39.76564673	48.45703369	45.55104979	43.64517094	32.19531455	43.40441462	48.64324531	52.33564052	55.83413271
-2.2	-5.766193739	-4.676621571	-4.973314283	-4.565680113	-7.209286057	-3.723599791	-5.077519896	-5.349464162	-5.689721353	-6.257084615
+2.2	51.50580128	37.30610389	44.69382004	41.41207	40.07993758	30.23745626	40.75322331	45.55736524	48.78308826	51.79236353
-2.25	-8.480407526	-6.702641148	-6.509851503	-5.278667665	-8.390834136	-5.596716769	-7.46446285	-7.808854549	-7.805837454	-7.802916278

+2.25	47.26532257	34.40295759	40.36993294	36.65360452	36.14548817	27.92156186	37.61879961	41.92533978	44.63311777	47.10366831
-2.3	-11.34867902	-8.929797244	-8.25616353	-7.172517245	-9.420741046	-7.411637881	-9.911484442	-10.42620632	-10.41194627	-10.40845575
+2.3	43.38371907	31.72927729	36.24705537	32.61541958	32.64519232	25.78461305	34.72784291	38.58891406	40.84675661	42.85328693
-2.35	-14.88756918	-11.6190318	-10.68200767	-9.474736483	-11.23619392	-9.595961503	-12.85796794	-13.71702193	-13.68308992	-13.67946211
+2.35	38.9378036	28.64931851	31.8813617	28.1637516	28.65326019	23.31850699	31.39289942	34.75450479	36.50637419	37.94786002
-2.4	-18.3984285	-14.14481004	-13.48584047	-11.64911891	-13.30726582	-11.64194119	-15.61897899	-16.81753431	-16.76381316	-16.76011053
+2.4	34.95590303	25.80052139	28.04991689	24.62094566	25.55254349	21.09360514	28.34865513	31.13010014	32.51206342	33.5352953
-2.45	-22.54525853	-17.10590364	-16.94492236	-14.46583848	-16.00223081	-14.03493303	-18.84948391	-20.46235163	-20.65280171	-20.64857102
+2.45	30.35630406	22.57354834	23.83981583	20.77246548	22.06862387	18.44040749	24.79984523	27.21644119	28.10337437	28.72494763
-2.5	-26.36628881	-19.81635752	-20.22840767	-17.48833468	-18.95655717	-16.22082302	-21.80142943	-23.8068868	-24.33054847	-24.59543443
+2.5	26.44355292	19.81562545	20.22754324	17.4876	18.9560696	16.22022476	21.80063819	23.8059889	24.32957917	24.59438502
-2.55	-30.27648376	-22.5742902	-23.84071598	-20.77324113	-22.06909215	-18.44101696	-24.8006454	-27.2173529	-28.10436399	-28.72602639
+2.55	22.61928941	17.10518229	16.94414868	14.46521928	16.0018281	14.03434637	18.84870903	20.46148149	20.65185531	20.64763844
-2.6	-34.73675167	-25.76366655	-28.05084524	-24.62174919	-25.55299813	-21.09421081	-28.31339945	-31.09495913	-32.49646397	-33.51991602
+2.6	18.46815662	14.14411954	13.48511886	11.64860439	13.30694712	11.6413744	15.6182248	16.8166982	16.76298853	16.75930397
-2.65	-38.71567697	-28.65006229	-31.88230528	-28.16464537	-28.65374851	-23.31910704	-31.39369959	-34.75540997	-36.49065912	-37.93260074
+2.65	14.95296384	11.61837168	10.68143566	9.474242837	11.23586932	9.595418474	12.85725119	13.71622463	13.68230902	13.6786927
-2.7	-43.16090754	-31.73000357	-36.24509472	-32.61633924	-32.64571019	-25.78520314	-34.72862871	-38.58981294	-40.84775789	-42.85438268
+2.7	11.41027078	8.92918038	8.290100873	7.172066249	9.420598349	7.41113206	9.910807579	10.42545301	10.4112133	10.40773347
-2.75	-47.09971893	-34.40366377	-40.37088126	-36.65454406	-36.14598921	-27.92213774	-37.61956347	-41.92621602	-44.63409383	-47.10475002
+2.75	8.536599145	6.702069171	6.509442808	5.27824892	8.39067808	5.596243494	7.46383347	7.808248623	7.805240254	7.802327805
-2.8	-51.52118953	-37.30678017	-44.6947524	-41.38736986	-40.08044249	-30.23800779	-40.75394805	-45.5582125	-48.78403866	-51.79342557
+2.8	5.766256291	4.676202713	4.973316645	4.565680174	7.209117457	3.72316935	5.077039503	5.348911829	5.689722031	6.25708289
-2.85	-55.13494886	-39.76628958	-48.45794355	-45.55199281	-43.64569034	-32.1958367	-43.40510208	-48.64404717	-52.3365463	-55.83515864
+2.85	5.766256291	4.113658487	4.973316645	4.565680174	6.221819722	3.333976432	4.527365895	5.10827763	5.689722031	6.25708289
-2.9	-58.98193844	-42.36440002	-52.55338542	-50.05367485	-47.62171688	-34.25893982	-46.20051647	-51.91466329	-56.13433192	-60.18972964
+2.9	5.766256291	4.113658487	4.973316645	4.565680174	5.096153126	3.333976432	4.527365895	5.10827763	5.689722031	6.25708289
-2.95	-62.16702836	-44.49581186	-56.03007207	-53.95117514	-51.02907281	-35.94651897	-48.48881627	-54.60862451	-59.29459605	-63.84616208
+2.95	5.766256291	4.113658487	4.973316645	4.565680174	4.356859261	3.333976432	4.527365895	5.10827763	5.689722031	6.25708289
-3	-65.43940941	-46.66070888	-59.70930941	-58.16652002	-54.6925498	-37.654328	-50.80680931	-57.35889915	-62.5619871	-67.66789474
+3	5.766256291	4.113658487	4.973316645	4.565680174	4.163602857	3.333976432	4.527365895	5.10827763	5.689722031	6.25708289
(Span 3) -4	-1.61E+00	-1.149786894	-1.390065379	-1.276129034	-1.16E+00	-0.931862072	-1.265420066	-1.427787594	-1.590304055	-1.748884072
+4	64.12497793	45.94845352	57.29898199	54.00837264	52.48395807	37.13598271	50.09277112	56.3978384	61.22731361	65.87032129
-3.05	-1.61E+00	-1.149786894	-1.390065379	-1.276129034	-1.37E+00	-0.931862072	-1.265420066	-1.427787594	-1.590304055	-1.748884072
+3.05	61.65831772	44.32488487	54.44538016	50.61228488	49.6727013	35.85804864	48.35920192	54.33574563	58.77262432	62.98635664
-3.1	-1.912320841	-1.400067104	-1.427255437	-1.276129034	-1.858388331	-1.294642358	-1.351873612	-1.427787594	-1.590304055	-1.748884072
+3.1	58.56085416	42.271134	50.92665685	46.47713082	46.25201289	34.23768775	46.16241332	51.73547625	55.70151751	59.40242213
-3.15	-2.93701846	-2.457157594	-2.487204882	-1.976803452	-2.521594741	-2.018655244	-2.467212871	-2.469641905	-2.46849199	-2.467374376
+3.15	55.72949425	40.3822605	47.76029852	42.79766475	43.20159207	32.74447357	44.13899911	49.35024761	52.90295495	56.15534011
-3.2	-4.237360917	-3.84720924	-3.843029155	-3.055245954	-3.367984694	-2.91057763	-4.029891074	-4.092801077	-4.091407212	-4.090062255
+3.2	52.2351266	38.03881974	43.90570831	38.9501191	39.96347811	30.88880929	41.62546466	46.39757993	49.45821888	52.17848289
-3.25	-5.93056028	-5.105763728	-5.101521233	-4.056291038	-4.152188393	-3.993650776	-5.486960032	-5.763934515	-5.762489622	-5.803724659
+3.25	49.08805917	35.91862403	40.47633512	35.71549876	37.18868323	29.207496	39.34890456	43.73135611	46.36302435	48.62093676
-3.3	-8.460715483	-6.683519424	-6.675013981	-5.30792426	-5.131125914	-5.60058311	-7.454871856	-7.871115556	-7.869628495	-7.933400527
+3.3	45.25391308	33.32512076	36.34395374	31.82655302	33.81681587	27.14823981	36.56144191	40.47544439	42.59978052	44.31264734
-3.35	-10.7997931	-8.502212044	-8.108101291	-6.767420379	-6.321931063	-7.146552615	-9.451911057	-9.842185489	-9.838873737	-9.870211739
+3.35	41.84009267	31.00758587	32.7013642	28.40570121	30.81169986	25.30601173	34.06843806	37.5703708	39.25520298	40.49734571
-3.4	-13.71446931	-10.85272353	-9.871335116	-8.70025825	-7.985440483	-8.99475012	-12.02812593	-12.60533981	-12.59962351	-12.66848062
+3.4	37.72329866	28.20367781	28.73718255	24.4558558	27.28631465	23.07487905	31.04986613	34.06038318	35.22857079	35.91905772
-3.45	-16.42142531	-12.91648643	-11.80173702	-10.46269056	-9.474785703	-10.67012289	-14.28645749	-15.22810475	-15.19390712	-15.1922112
+3.45	34.0916902	25.72278711	25.38033478	21.57081246	24.5592678	21.09891818	28.37711883	30.95860057	31.68185437	31.89870937
-3.5	-19.92156699	-15.44926646	-14.5375482	-12.63324906	-11.27657918	-12.72298675	-17.05430473	-18.32770003	-18.27449354	-18.27281468
+3.5	29.74937408	22.74812154	21.38687983	18.83055935	22.02424531	18.72762134	25.17026961	27.24370349	27.44695425	27.43830187
-3.55	-23.07319587	-17.7191336	-17.14757712	-14.62451918	-12.95434236	-14.56019568	-19.53190883	-21.11007139	-21.07794993	-21.07601432
+3.55	25.94894715	20.13787419	18.20738063	16.51589947	19.82999173	16.64511279	22.35448234	23.9873577	23.91410487	23.90645706
-3.6	-26.91221296	-20.37254156	-20.35789857	-17.36866173	-15.2924614	-16.70521125	-22.42518568	-24.49007624	-24.7474499	-24.74553799
+3.6	21.82685165	17.03209871	15.23821099	13.76625749	17.16314055	14.16536535	19.00214599	20.11670066	20.07605214	20.06812844

-3.65	**-30.32982513**	**-22.81151992**	**-23.39481874**	**-20.13304896**	**-17.68299234**	**-18.67472459**	**-25.08217567**	**-27.36505129**	**-28.019066**	**-28.27634309**
+3.65	**18.35575357**	**14.32644844**	**13.36637869**	**11.37455503**	**14.7838945**	**12.0034895**	**16.08001674**	**16.74793099**	**16.73527595**	**16.72715001**
-3.7	**-34.45059137**	**-25.74278563**	**-27.18932746**	**-23.53404288**	**-20.62911891**	**-21.03934228**	**-28.27270633**	**-30.97229927**	**-31.82602912**	**-32.4034551**
+3.7	**14.25406316**	**11.14080439**	**11.14309822**	**9.165023756**	**12.72876245**	**9.447005982**	**12.62502564**	**13.45742564**	**13.45043467**	**13.44366831**
-3.75	**-38.08521903**	**-28.32055916**	**-30.40334143**	**-26.57897322**	**-23.27963846**	**-23.11685065**	**-31.07627705**	**-34.148055**	**-35.31080921**	**-36.19437052**
+3.75	**10.70429937**	**9.207466197**	**9.209430029**	**7.362374709**	**11.44573796**	**7.232947357**	**10.09310076**	**10.69147769**	**10.68432147**	**10.67739198**
-3.8	**-42.43060699**	**-31.39392838**	**-34.45346996**	**-30.26898872**	**-26.50780667**	**-25.59160605**	**-34.416424**	**-37.93831378**	**-39.48260646**	**-40.74740616**
+3.8	**7.79654115**	**6.926418867**	**7.120092414**	**7.003822316**	**10.16407573**	**5.149501972**	**7.36454503**	**7.436155817**	**7.638959292**	**8.438577791**
-3.85	**-46.23330372**	**-34.07649875**	**-38.0335021**	**-33.62502695**	**-29.48154426**	**-27.74992687**	**-37.32987446**	**-41.24987814**	**-43.13797507**	**-44.74884979**
+3.85	**7.79654115**	**5.513945975**	**7.120092414**	**7.003822316**	**9.102651488**	**4.449781229**	**6.032231045**	**6.843983874**	**7.638959292**	**8.438577791**
-3.9	**-50.74618583**	**-37.25232381**	**-42.3218684**	**-37.92725837**	**-33.30734797**	**-30.30310639**	**-40.77680495**	**-45.17399474**	**-47.48123048**	**-49.51678778**
+3.9	**7.79654115**	**5.513945975**	**7.120092414**	**7.003822316**	**7.839016954**	**4.449781229**	**6.032231045**	**6.843983874**	**7.638959292**	**8.438577791**
-3.95	**-54.66794585**	**-40.00573647**	**-46.08119887**	**-41.73544061**	**-36.71348217**	**-32.51504517**	**-43.76343444**	**-48.57922411**	**-51.25993966**	**-53.67610934**
+3.95	**7.79654115**	**5.513945975**	**7.120092414**	**7.003822316**	**6.964603898**	**4.449781229**	**6.032231045**	**6.843983874**	**7.638959292**	**8.438577791**
-5	**-59.29119499**	**-43.24436916**	**-50.54970775**	**-46.30271779**	**-40.82320661**	**-35.11494706**	**-47.27433085**	**-52.58803321**	**-55.71953248**	**-58.5974784**
+5	**7.79654115**	**5.513945975**	**7.120092414**	**7.003822316**	**6.45651455**	**4.449781229**	**6.032231045**	**6.843983874**	**7.638959292**	**8.438577791**

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.796478702	-7.322732715	-7.859390671	-7.40397238	-8.932627305	-8.274266298	-8.746468239	-3.770882378
End Shear	59.50887179	58.90336841	62.49945343	58.35603416	68.76737714	57.64875406	60.83058357	30.3902967
-0.05	-7.796478702	-7.322732715	-7.859390671	-7.40397238	-8.932627305	-8.274266298	-8.746468239	-3.770882378
+0.05	54.62608794	54.39588505	57.65350326	53.79901859	63.26244434	52.22534746	55.09409263	28.03010474
-0.1	-7.796478702	-7.322732715	-7.859390671	-7.40397238	-8.932627305	-8.274266298	-8.746468239	-3.770882378
+0.1	50.0557292	50.18144897	53.12604488	49.53668006	58.12076446	47.16411803	49.7416319	25.78896705
-0.15	-7.796478702	-7.322732715	-7.859390671	-7.40397238	-8.932627305	-8.274266298	-8.746468239	-4.107333421
+0.15	46.19259832	46.60340236	49.2849535	45.92217302	53.76631866	42.92744431	45.2619446	23.89043963
-0.2	-7.803617477	-10.3040746	-10.3040746	-9.555412444	-10.11764818	-8.274266298	-8.746468239	-5.60493592
+0.2	41.76364415	42.48228455	44.8641042	41.7640803	48.76388971	38.12039301	40.18011002	21.70883605
-0.25	-10.74213639	-13.35211517	-13.44307686	-12.56331254	-13.46314089	-10.06284958	-10.60158028	-6.875456313
+0.25	38.14191008	39.0063151	41.13818118	38.26136047	44.55599385	34.13049348	35.96299563	19.87330273
-0.3	-14.88045002	-17.539958	-17.96004654	-16.36728293	-17.87858266	-13.08875689	-13.82139871	-8.337708433
+0.3	33.90598046	35.03005313	36.8794426	34.25984867	39.75625181	29.80154333	31.3885282	17.7791488
-0.35	-18.39287856	-21.08751908	-21.7891035	-19.98319309	-22.27858298	-15.65084852	-16.54797639	-9.945009907
+0.35	30.37832905	31.70033335	33.31625828	30.9137695	35.74927356	26.10977719	27.48834233	16.03053245
-0.4	-22.4372115	-25.16410887	-26.1923743	-24.14332425	-27.34753739	-18.59360628	-19.68001438	-12.14777551
+0.4	26.39775669	27.92046077	29.27512824	27.12117844	31.37449212	22.15495806	23.32100849	14.05173942
-0.45	-25.98966929	-28.59422372	-29.9001897	-27.64814332	-31.62393197	-21.06844981	-22.31435484	-14.0051065
+0.45	23.11352888	24.90975306	26.05951801	24.10528325	27.61734541	19.00675133	20.00710666	12.41396836
-0.5	-30.41597173	-32.50802156	-34.1342584	-31.65249994	-36.51696065	-24.17938762	-25.45198697	-16.12895591
+0.5	19.44558996	21.37251772	22.28568397	20.56838557	23.4063075	15.79717546	16.72465573	10.57844855
-0.55	-34.13075384	-35.77651543	-37.6732596	-35.00136988	-40.61537644	-28.18562792	-29.66908202	-17.90668194
+0.55	16.45387935	18.46285418	19.18524517	17.66496577	19.95777376	13.67724715	14.47307068	9.075442972
-0.6	-38.3576225	-39.47598862	-41.68262937	-38.79762341	-45.26905126	-32.77292064	-34.4978112	-19.92370134
+0.6	13.31662039	15.22408674	15.73895035	14.44063593	16.13849803	11.31529645	11.9649629	7.411109727
-0.65	-41.8769762	-42.53868736	-45.00524403	-41.94568689	-49.13511553	-36.77376231	-38.71833052	-21.59789503
+0.65	10.82649483	12.59233914	12.94304468	11.72226048	12.92884402	9.39395374	9.92521902	6.066797394
-0.7	-45.84728091	-45.97229817	-48.73441267	-45.48149478	-53.4859904	-41.7354968	-43.97586177	-23.48017227
+0.7	8.10861265	9.604619228	9.77499276	8.870412864	9.574202301	7.282333887	7.684097201	4.793239247
-0.75	-49.12223898	-48.78502836	-51.79306955	-48.38389447	-57.06533059	-45.87462483	-48.36247777	-25.02691213
+0.75	5.977410258	7.301632784	7.3384775	6.79560915	7.314194448	5.591539661	5.890197558	3.881000382
-0.8	-52.77885282	-51.90124205	-55.18653808	-51.60693025	-61.0499799	-50.55358277	-53.3220949	-26.74653547
+0.8	4.045128345	5.179452586	5.179452586	4.645884951	4.879858729	3.931027968	4.137924177	2.88341648
-0.85	-55.76044875	-54.41982975	-57.93366521	-54.21880915	-64.28822389	-54.42143422	-57.42275948	-28.14189249
+0.85	2.937191486	3.486641115	3.486641115	2.956134993	3.02683269	2.684663839	2.825961936	2.08933505
-0.9	-59.04624282	-57.16710987	-60.935933	-57.07673776	-67.84321094	-58.75017219	-62.01305181	-29.67094837
+0.9	1.750113845	1.748854571	1.748854571	1.556292745	1.873592324	1.616811568	1.707493848	1.23875969
-0.95	-61.68551096	-59.34738226	-63.32395964	-59.35323998	-70.68598813	-62.28894223	-65.76655987	-30.89100138
+0.95	1.611678223	1.542253427	1.652693632	1.556292745	1.873592324	1.616811568	1.707493848	0.776912417
-1	-64.54335559	-61.67418983	-65.879523	-61.79372887	-73.74787975	-66.20002259	-69.91612284	-32.20157746
+1	1.61E+00	1.542253427	1.652693632	1.556292745	1.873592324	1.616811568	1.707493848	0.776912417
(Span 2) -2	-5.766193739	-5.517808564	-5.91293687	-5.568037754	-6.70325895	-5.784559469	-6.108998662	-2.779604114
+2	65.0876088	61.80153995	66.06932067	62.00860015	74.12254412	68.09582706	71.94826595	32.34053489
-2.05	-5.766193739	-5.517808564	-5.91293687	-5.568037754	-6.70325895	-5.784559469	-6.108998662	-2.779604114
+2.05	62.15952445	59.39233182	63.42516174	59.48463645	70.96061689	64.22438184	67.84325857	30.99355482
-2.1	-5.766193739	-5.517808564	-5.91293687	-5.568037754	-6.70325895	-5.784559469	-6.108998662	-2.779604114
+2.1	58.97235964	56.71452165	60.4980605	56.69775233	67.49333163	60.13829999	63.51253646	29.51108588
-2.15	-5.766193739	-5.517808564	-5.91293687	-5.568037754	-6.70325895	-5.784559469	-6.108998662	-2.779604114
+2.15	55.12249264	53.42176716	56.91085478	53.28970365	63.27790153	55.33833472	58.42725236	27.70347701
-2.2	-5.766193739	-6.786918088	-6.835470596	-6.295079131	-6.715536615	-5.784559469	-6.108998662	-3.596928857
+2.2	51.50580128	50.28208549	53.49978666	50.05469765	59.29577142	50.93866073	53.76778016	25.99208485
-2.25	-8.480407526	-9.937013485	-10.17081416	-9.268344045	-10.13446174	-7.42288653	-7.838026408	-4.845811016

+2.25	**47.26532257**	**46.55304005**	**49.4578415**	**46.22712208**	**54.60369934**	**45.89493336**	**48.42809474**	**23.97205899**
-2.3	**-11.34867902**	**-12.96938493**	**-13.3924354**	**-12.27942311**	**-13.68933264**	**-9.636013305**	**-10.18754088**	**-6.389754602**
+2.3	**43.38371907**	**43.09960096**	**45.7223142**	**42.6944124**	**50.28905017**	**41.11629835**	**43.37226354**	**22.11196211**
-2.35	**-14.88756918**	**-16.59964975**	**-17.25999675**	**-15.90087014**	**-17.98811558**	**-12.28068372**	**-12.99637124**	**-8.255831634**
+2.35	**38.9378036**	**39.10088744**	**41.40506926**	**38.6165179**	**45.32543595**	**36.02615478**	**37.9858331**	**19.96976772**
-2.4	**-18.3984285**	**-19.98476958**	**-20.87493408**	**-19.29105694**	**-22.0308448**	**-14.79924285**	**-15.61238998**	**-10.00969911**
+2.4	**34.95590303**	**35.48181161**	**37.50459716**	**34.89347295**	**40.81753872**	**31.58596234**	**33.29013322**	**18.04118346**
-2.45	**-22.54525853**	**-23.92856815**	**-25.09525962**	**-23.25440209**	**-26.77592507**	**-18.77036419**	**-19.7582781**	**-12.06681435**
+2.45	**30.35630406**	**31.15215875**	**32.84654843**	**30.5467936**	**35.5520158**	**26.71791417**	**28.14396952**	**15.86707032**
-2.5	**-26.36628881**	**-27.51833607**	**-28.94402045**	**-26.87329606**	**-31.12420832**	**-22.55229559**	**-23.74228118**	**-13.950385**
+2.5	**26.44355292**	**27.51734799**	**28.94296012**	**26.87232645**	**31.12304128**	**22.55129975**	**23.74122913**	**13.95022597**
-2.55	**-30.27648376**	**-31.15314814**	**-32.84761187**	**-30.5477736**	**-35.55319876**	**-26.71895371**	**-28.14506822**	**-15.86723607**
+2.55	**22.61928941**	**23.92760391**	**25.09422669**	**23.25345188**	**26.77478513**	**18.76947422**	**19.75734128**	**12.06665834**
-2.6	**-34.73675167**	**-35.482798**	**-37.5056594**	**-34.85203348**	**-40.77630702**	**-31.58703709**	**-33.29126961**	**-18.04135043**
+2.6	**18.46815662**	**19.98383406**	**20.87393408**	**19.29013123**	**22.02973866**	**14.79841624**	**15.61173861**	**10.00954415**
-2.65	**-38.71567697**	**-39.10186999**	**-41.4061292**	**-38.61749661**	**-45.32662513**	**-36.02724941**	**-37.98699092**	**-19.96993338**
+2.65	**14.95296384**	**16.59874923**	**17.25903613**	**15.89998973**	**17.98706814**	**12.28009281**	**12.99574351**	**8.255683583**
-2.7	**-43.16090754**	**-43.10055467**	**-45.72334462**	**-42.69537294**	**-50.29022105**	**-41.09406126**	**-43.34731042**	**-22.11212092**
+2.7	**11.41027078**	**12.96853053**	**13.3915264**	**12.27859061**	**13.6883471**	**9.635455576**	**10.18694865**	**6.389614017**
-2.75	**-47.09971893**	**-46.55396375**	**-49.45884145**	**-46.22805515**	**-54.60484071**	**-45.89603816**	**-48.42926413**	**-23.97221607**
+2.75	**8.536599145**	**9.936219542**	**10.16997194**	**9.267569056**	**10.13354963**	**7.422363553**	**7.837471324**	**4.845684873**
-2.8	**-51.52118953**	**-50.28296405**	**-53.50073997**	**-50.05558229**	**-59.29685811**	**-50.93974946**	**-53.76893295**	**-25.99223382**
+2.8	**5.766256291**	**6.786196648**	**6.834708405**	**6.294467187**	**6.714863504**	**5.784561091**	**6.109001999**	**3.603967675**
-2.85	**-55.13494886**	**-53.42260284**	**-56.91176364**	**-53.290542**	**-63.27893546**	**-55.33939949**	**-58.42838016**	**-27.70362116**
+2.85	**5.766256291**	**5.517809729**	**5.912940288**	**5.568040159**	**6.703257721**	**5.784561091**	**6.109001999**	**2.779604563**
-2.9	**-58.98193844**	**-56.71529071**	**-60.49889966**	**-56.69853295**	**-67.49429958**	**-60.13931745**	**-63.51361462**	**-29.5112201**
+2.9	**5.766256291**	**5.517809729**	**5.912940288**	**5.568040159**	**6.703257721**	**5.784561091**	**6.109001999**	**2.779604563**
-2.95	**-62.16702836**	**-59.39302778**	**-63.42592373**	**-59.48534713**	**-70.96150343**	**-64.22535264**	**-67.84428768**	**-30.99367891**
+2.95	**5.766256291**	**5.517809729**	**5.912940288**	**5.568040159**	**6.703257721**	**5.784561091**	**6.109001999**	**2.779604563**
-3	**-65.43940941**	**-62.08278519**	**-66.37886251**	**-62.30458368**	**-74.4951011**	**-68.56343207**	**-72.44421634**	**-32.49860432**
+3	**5.766256291**	**5.517809729**	**5.912940288**	**5.568040159**	**6.703257721**	**5.784561091**	**6.109001999**	**2.779604563**
(Span 3) -4	**-1.61E+00**	**-1.542253753**	**-1.652694587**	**-1.556293417**	**-1.873591981**	**-1.616812022**	**-1.70749478**	**-0.776912543**
+4	**64.12497793**	**61.35591593**	**65.52943906**	**61.45910939**	**73.32700557**	**65.6552496**	**69.33804989**	**32.02194986**
-3.05	**-1.61E+00**	**-1.542253753**	**-1.652694587**	**-1.556293417**	**-1.873591981**	**-1.616812022**	**-1.70749478**	**-0.776912543**
+3.05	**61.65831772**	**59.34661766**	**63.32312139**	**59.35246257**	**70.6850157**	**62.28780222**	**65.76535056**	**30.89086666**
-3.1	**-1.912320841**	**-1.985973643**	**-1.985973643**	**-1.590439544**	**-1.873591981**	**-1.616812022**	**-1.70749478**	**-1.348881292**
+3.1	**58.56085416**	**56.78693323**	**60.52005979**	**56.68062584**	**67.34964637**	**58.14338073**	**61.36952644**	**29.45916825**
-3.15	**-2.93701846**	**-3.487205871**	**-3.487205871**	**-2.956708196**	**-3.027460649**	**-2.685050724**	**-2.826369184**	**-2.082585265**
+3.15	**55.72949425**	**54.4189403**	**57.93269439**	**54.21790771**	**64.28710469**	**54.42019939**	**57.4214502**	**28.14173234**
-3.2	**-4.237360917**	**-5.46598387**	**-5.46598387**	**-4.942109034**	**-5.20503458**	**-4.148724656**	**-4.367078585**	**-3.013994641**
+3.2	**52.2351266**	**51.46654525**	**54.71282578**	**51.15681803**	**60.49280557**	**49.8944477**	**52.62336106**	**26.50658483**
-3.25	**-5.93056028**	**-7.302434593**	**-7.339324586**	**-6.796288009**	**-7.314937863**	**-5.554966381**	**-5.851703748**	**-3.873166487**
+3.25	**49.08805917**	**48.78402767**	**51.79198075**	**48.38288309**	**57.06408215**	**45.87329197**	**48.36106512**	**25.02673414**
-3.3	**-8.460715483**	**-10.00459672**	**-10.19868684**	**-9.265625907**	**-10.03819948**	**-7.575622418**	**-7.99532782**	**-4.941796207**
+3.3	**45.25391308**	**45.49045814**	**48.21080586**	**44.98487318**	**52.87428685**	**41.03364788**	**43.23211567**	**23.21605019**
-3.35	**-10.7997931**	**-12.53910193**	**-12.88986504**	**-11.72315517**	**-12.92989836**	**-9.394566132**	**-9.925869073**	**-6.066948937**
+3.35	**41.84009267**	**42.53759196**	**45.00405517**	**41.94457962**	**49.13375455**	**36.77234416**	**38.71682798**	**21.59770283**
-3.4	**-13.71446931**	**-15.6769585**	**-16.22049947**	**-14.89092948**	**-16.67114084**	**-11.64564225**	**-12.31571302**	**-7.642869529**
+3.4	**37.72329866**	**38.95438339**	**41.1170735**	**38.26198387**	**44.6118989**	**32.12265063**	**33.81331645**	**19.63939621**
-3.45	**-16.42142531**	**-18.46388109**	**-19.18633861**	**-17.66596485**	**-19.95895904**	**-13.67791919**	**-14.47378437**	**-9.075611752**
+3.45	**34.0916902**	**35.77534073**	**37.67198731**	**35.00018747**	**40.61392876**	**28.18432894**	**29.66771468**	**17.90647661**
-3.5	**-19.92156699**	**-21.86982521**	**-22.81596177**	**-21.06515723**	**-23.99713266**	**-16.15925018**	**-17.10925682**	**-10.83560075**
+3.5	**29.74937408**	**31.95402985**	**33.53470004**	**31.08535599**	**35.82346726**	**23.50452961**	**24.89381386**	**15.82845937**
-3.55	**-23.07319587**	**-24.91086948**	**-26.06070984**	**-24.10637605**	**-27.61864771**	**-19.00774795**	**-20.00815574**	**-12.41415057**
+3.55	**25.94894715**	**28.59298737**	**29.89885285**	**27.64691655**	**31.62243412**	**21.06765375**	**22.31350743**	**14.00489463**
-3.6	**-26.91221296**	**-28.45416531**	**-29.84546132**	**-27.65626488**	**-32.01442275**	**-22.69515628**	**-23.88963819**	**-14.33029346**
+3.6	**21.82685165**	**24.58510918**	**25.56675923**	**23.55214862**	**26.62675984**	**18.17583154**	**19.23534405**	**11.83507876**

-3.65	**-30.32982513**	**-31.70152773**	**-33.31753592**	**-30.91495195**	**-35.75068841**	**-26.07385108**	**-27.45052974**	**-16.03072912**
+3.65	**18.35575357**	**21.08623622**	**21.78771841**	**19.98191936**	**22.27703211**	**15.65001832**	**16.54709285**	**9.944791319**
-3.7	**-34.45059137**	**-35.59357754**	**-37.4827645**	**-34.82656024**	**-40.43550853**	**-30.43272236**	**-32.05543302**	**-18.07511301**
+3.7	**14.25406316**	**16.94332784**	**17.31631986**	**15.75956534**	**17.13959986**	**12.65784225**	**13.36284658**	**8.130177401**
-3.75	**-38.08521903**	**-39.00756916**	**-41.13952501**	**-38.26258497**	**-44.5574637**	**-34.1317823**	**-35.96435772**	**-19.87351632**
+3.75	**10.70429937**	**13.35080088**	**13.44165995**	**12.56224877**	**13.46195753**	**10.06199221**	**10.60066803**	**6.875312171**
-3.8	**-42.43060699**	**-43.06825102**	**-45.49246956**	**-42.35493872**	**-49.47426123**	**-38.79879915**	**-40.89723014**	**-22.01823101**
+3.8	**7.79654115**	**9.838221929**	**9.838221929**	**9.050914026**	**9.556655398**	**8.274270084**	**8.746473667**	**5.391747708**
-3.85	**-46.23330372**	**-46.60469833**	**-49.28634438**	**-45.92344471**	**-53.76784985**	**-42.92880162**	**-45.26337962**	**-23.89065982**
+3.85	**7.79654115**	**7.322738309**	**7.859392199**	**7.403973079**	**8.93263149**	**8.274270084**	**8.746473667**	**4.10717961**
-3.9	**-50.74618583**	**-50.78247691**	**-53.77150539**	**-50.14419263**	**-58.85316846**	**-47.88113984**	**-50.49985336**	**-26.10779076**
+3.9	**7.79654115**	**7.322738309**	**7.859392199**	**7.403973079**	**8.93263149**	**8.274270084**	**8.746473667**	**3.770882707**
-3.95	**-54.66794585**	**-54.39720667**	**-57.65492348**	**-53.80032331**	**-63.26401918**	**-52.22678311**	**-55.09561102**	**-28.03032853**
+3.95	**7.79654115**	**7.322738309**	**7.859392199**	**7.403973079**	**8.93263149**	**8.274270084**	**8.746473667**	**3.770882707**
-5	**-59.29119499**	**-58.64054539**	**-62.21680008**	**-58.09713276**	**-68.45442596**	**-57.39698252**	**-60.56425767**	**-30.29196444**
+5	**7.79654115**	**7.322738309**	**7.859392199**	**7.403973079**	**8.93263149**	**8.274270084**	**8.746473667**	**3.770882707**

3-Span: Shear (Max and Min) Raw Data Results - 65' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Force Y (kips)**					
-0	-7.796478702	-14.47223269	-15.67609714	-9.3451867	-11.4358223	-12.06761762
End Shear	59.50887179	91.4339931	92.81132211	64.64242652	78.55769646	80.68163082
-0.05	-7.796478702	-14.47223269	-15.67609714	-9.3451867	-11.4358223	-12.06761762
+0.05	54.62608794	81.84710661	82.71958574	58.39404509	71.01042401	72.65921575
-0.1	-7.796478702	-14.47223269	-15.67609714	-9.3451867	-11.4358223	-12.06761762
+0.1	50.0557292	72.93964804	73.09923081	52.570723	63.97140346	65.18482112
-0.15	-7.796478702	-14.47223269	-15.67609714	-9.3451867	-11.4358223	-12.06761762
+0.15	46.19259832	65.55035169	66.01065457	47.70892918	58.0903621	58.95711042
-0.2	-7.803617477	-14.47223269	-15.67609714	-9.3451867	-11.4358223	-12.06761762
+0.2	41.76364415	57.34908835	58.00755529	42.20841538	51.43137357	51.92663565
-0.25	-10.74213639	-14.47223269	-15.67609714	-12.08677099	-13.4669651	-13.46748668
+0.25	38.14191008	51.10597041	51.86604021	37.65732091	45.91688164	46.36047142
-0.3	-14.88045002	-17.18037953	-16.16138108	-15.62669439	-17.3334881	-17.53647029
+0.3	33.90598046	43.84167081	45.16580431	32.73642062	39.94851291	40.06052349
-0.35	-18.39287856	-20.45442293	-20.38772877	-18.62314064	-20.60568902	-21.37393628
+0.35	30.37832905	38.00763224	39.64038351	28.68663596	34.88584073	34.95720233
-0.4	-22.4372115	-25.32614905	-26.10240366	-22.06373359	-24.36209178	-25.78842636
+0.4	26.39775669	32.07520003	33.47296256	24.31624631	29.53465247	29.29849507
-0.45	-25.98966929	-29.8135856	-31.0493715	-24.95633336	-27.5195015	-29.50705757
+0.45	23.11352888	27.43161565	28.44599681	21.7434618	25.19818276	25.71264505
-0.5	-30.41597173	-36.04370177	-37.72991934	-28.25395953	-32.22082452	-33.75512686
+0.5	19.44558996	22.6363238	23.20086102	18.71703976	20.82273809	21.94860242
-0.55	-34.13075384	-41.29178244	-43.69058336	-31.07295278	-37.22407077	-37.36773607
+0.55	16.45387935	18.75534672	19.08903111	16.22413688	17.79232144	18.85770278
-0.6	-38.3576225	-48.20184989	-51.16123376	-35.44415275	-43.77153277	-43.07948543
+0.6	13.31662039	14.97119903	15.1249135	13.44497877	14.70923289	15.42389229
-0.65	-41.8769762	-54.37596213	-57.43010309	-40.02228034	-49.26838658	-49.25670175
+0.65	10.82649483	12.08390452	11.83133405	11.18271884	12.22739147	12.63985409
-0.7	-45.84728091	-62.68550449	-64.91558086	-45.50230519	-55.84436502	-56.30836506
+0.7	8.10861265	9.362525258	8.697161031	8.694464224	9.496065593	9.591824963
-0.75	-49.12223898	-69.63927887	-71.43447668	-50.41161902	-61.73235241	-62.27671521
+0.75	5.977410258	7.181159677	6.520803621	6.700253136	7.305570445	7.304395176
-0.8	-52.77885282	-77.74254375	-79.08560941	-55.97453036	-68.40045646	-69.60587377
+0.8	4.045128345	4.824894351	4.348150285	4.654515668	4.928433655	4.936809401
-0.85	-55.76044875	-85.16330627	-86.00006785	-60.5850739	-73.92362979	-75.69345111
+0.85	2.937191486	2.976885111	2.874988316	3.178576286	3.356925607	3.078510717
-0.9	-59.04624282	-93.83318186	-95.46996769	-65.75974655	-80.11850898	-82.54218591
+0.9	1.750113845	2.700220859	2.874988316	1.781097477	2.20555621	2.290747025
-0.95	-61.68551096	-100.996104	-103.6699984	-70.00351055	-85.19525678	-88.17376217
+0.95	1.611678223	2.700220859	2.874988316	1.781097477	2.20555621	2.290747025
-1	-64.54335559	-109.0071646	-112.8841395	-74.71059646	-90.82169398	-94.43891598
+1	1.61E+00	2.700220859	2.874988316	1.781097477	2.20555621	2.290747025
(Span 2) -2	-5.766193739	-9.660735191	-10.28601065	-6.372334781	-7.890944823	-8.19573711
+2	65.0876088	115.1067926	120.817062	77.42887575	93.92957144	98.3967778
-2.05	-5.766193739	-9.660735191	-10.28601065	-6.372334781	-7.890944823	-8.19573711
+2.05	62.15952445	107.4382164	112.1305322	72.82888577	88.40587468	92.30698432
-2.1	-5.766193739	-9.660735191	-10.28601065	-6.372334781	-7.890944823	-8.19573711
+2.1	58.97235964	99.49725512	103.210549	68.00095836	82.60106338	85.94595743
-2.15	-5.766193739	-9.660735191	-10.28601065	-6.372334781	-7.890944823	-8.19573711
+2.15	55.12249264	90.33870211	93.00885104	62.35996369	75.81008775	78.54733274
-2.2	-5.766193739	-9.660735191	-10.28601065	-6.372334781	-7.890944823	-8.19573711
+2.2	51.50580128	82.05001388	83.8922202	57.21533762	69.60910989	71.82791142
-2.25	-8.480407526	-9.660735191	-10.28601065	-8.847024178	-9.720571142	-9.893269372

+2.25	47.26532257	72.41113774	73.69834488	51.2597997	62.44945422	63.9652265
-2.3	-11.34867902	-12.76450819	-12.81413813	-11.45355393	-12.58813091	-13.102524
+2.3	43.38371907	64.07977669	64.41744186	45.78675224	55.81773673	56.98964784
-2.35	-14.88756918	-17.06431815	-17.51502116	-14.56467058	-16.14756275	-16.95966771
+2.35	38.9378036	55.05780064	55.79236741	39.9511136	48.74696629	49.45982766
-2.4	-18.3984285	-21.64772068	-22.43040679	-17.55575226	-19.79199188	-20.57085802
+2.4	34.95590303	47.53201253	48.32605733	34.86487734	42.58332613	42.92462273
-2.45	-22.54525853	-27.32152703	-28.73240316	-21.01113251	-25.14081765	-25.0232644
+2.45	30.35630406	39.71246833	41.03883031	29.3218735	35.85497322	35.9841311
-2.5	-26.36628881	-33.08039182	-34.76002521	-24.75938398	-30.30372035	-30.21465524
+2.5	26.44355292	33.07899275	34.75981482	24.75834863	30.3024589	30.21330067
-2.55	-30.27648376	-39.71407737	-41.03905058	-29.32304287	-35.85639389	-35.98553898
+2.55	22.61928941	27.32019777	28.73218578	21.01040414	25.13960813	25.02234909
-2.6	-34.73675167	-47.533367494	-48.32628565	-34.86609497	-42.58480239	-42.92617119
+2.6	18.46815662	21.64661683	22.43023114	17.59829932	19.79102574	20.60782298
-2.65	-38.71567697	-55.05965354	-55.31885808	-39.95236124	-48.74847704	-49.46140818
+2.65	14.95296384	17.06328524	17.51484424	14.56398667	16.14681228	16.95882472
-2.7	-43.16090754	-64.08168235	-64.79259367	-45.78800947	-55.80985738	-56.99127254
+2.7	11.41027078	12.76366906	12.82773145	11.45290772	12.58741495	13.10173176
-2.75	-47.09971893	-72.37524917	-73.69865606	-51.21780198	-62.41252456	-63.92899564
+2.75	8.536599145	9.660736722	10.28535104	8.846412743	9.719898646	9.892525356
-2.8	-51.52118953	-82.01413385	-83.89253862	-57.21658801	-69.61061799	-71.82954088
+2.8	5.766256291	9.660736722	10.28535104	6.372332133	7.890946499	8.195740881
-2.85	-55.13494886	-90.34064742	-93.0091681	-62.36119187	-75.81156663	-78.5489138
+2.85	5.766256291	9.660736722	10.28535104	6.372332133	7.890946499	8.195740881
-2.9	-58.98193844	-99.49913198	-103.2108652	-68.00215547	-82.60250351	-85.94750547
+2.9	5.766256291	9.660736722	10.28535104	6.372332133	7.890946499	8.195740881
-2.95	-62.16702836	-107.4400386	-112.1308427	-72.8300362	-88.40725683	-92.30846621
+2.95	5.766256291	9.660736722	10.28535104	6.372332133	7.890946499	8.195740881
-3	-65.43940941	-116.0439362	-121.8822575	-77.98641682	-94.59854977	-99.13707848
+3	5.766256291	9.660736722	10.28535104	6.372332133	7.890946499	8.195740881
(Span 3) -4	-1.61E+00	-2.700221287	-2.874803941	-1.781096737	-2.205556679	-2.290748078
+4	64.12497793	107.8846685	111.59213	74.05377239	90.03690531	93.56338033
-3.05	-1.61E+00	-2.700221287	-2.874803941	-1.781096737	-2.205556679	-2.290748078
+3.05	61.65831772	100.9938977	103.6696282	70.00216912	85.19365274	88.17200755
-3.1	-1.912320841	-2.700221287	-2.874803941	-1.824008832	-2.205556679	-2.290748078
+3.1	58.56085416	92.61223252	94.07772306	65.03337495	79.24921366	81.57970846
-3.15	-2.93701846	-3.019140276	-2.874803941	-3.17902727	-3.357406609	-3.079075952
+3.15	55.72949425	85.16092323	86.2928939	60.58361676	73.92188461	75.69154101
-3.2	-4.237360917	-5.149195031	-4.797337803	-4.912302313	-5.263931318	-5.262777065
+3.2	52.2351266	76.6307419	77.96069691	55.18997716	67.4602923	68.57122161
-3.25	-5.93056028	-7.181819566	-6.683513662	-6.700868972	-7.30625485	-7.305063485
+3.25	49.08805917	69.63710579	71.43414833	50.41006802	61.73049305	62.27467441
-3.3	-8.460715483	-9.740662058	-9.100702481	-9.040191705	-9.875687185	-10.01431624
+3.3	45.25391308	61.50852302	63.84113683	44.6709256	54.84695877	55.31025387
-3.35	-10.7997931	-12.08465802	-11.83146538	-11.18342033	-12.22817042	-12.6407182
+3.35	41.84009267	54.37371104	57.4297947	40.02081165	49.26662374	49.25476509
-3.4	-13.71446931	-15.48649963	-15.55283616	-13.83378125	-15.13566736	-15.90342623
+3.4	37.72329866	47.1644971	50.10347805	34.67082507	42.84273872	42.03734375
-3.45	-16.42142531	-18.75652283	-19.08921159	-16.22492431	-17.75751973	-18.85865916
+3.45	34.0916902	41.29014918	43.69027076	31.07190557	37.22224098	37.36646381
-3.5	-19.92156699	-23.30545162	-23.9132575	-19.14268587	-21.39501137	-22.47724193
+3.5	29.74937408	35.15863217	36.77828229	27.78749307	31.48560148	33.15362027
-3.55	-23.07319587	-27.4329465	-28.44624177	-21.77955061	-25.19954474	-25.75065553
+3.55	25.94894715	29.81189184	31.04913533	24.95541786	27.51849534	29.50589304
-3.6	-26.91221296	-32.90353249	-34.33488757	-24.78297744	-30.28013902	-30.08796311
+3.6	21.82685165	24.60411279	25.27149808	21.57536751	23.8289516	25.16128158

-3.65	**-30.32982513**	**-38.00940056**	**-39.64064932**	**-28.68788574**	**-34.86572893**	**-34.9587927**
+3.65	**18.35575357**	**20.57327242**	**20.38753309**	**18.62217372**	**20.60464785**	**21.37272631**
-3.7	**-34.45059137**	**-44.84178621**	**-46.10710193**	**-33.45266577**	**-40.81763378**	**-40.93412047**
+3.7	**14.25406316**	**16.62965806**	**15.71987875**	**15.12265834**	**16.78301805**	**16.89161204**
-3.75	**-38.08521903**	**-51.07039949**	**-51.86631933**	**-37.65875362**	**-45.91861801**	**-46.36228124**
+3.75	**10.70429937**	**14.472235**	**15.67654893**	**12.08578325**	**13.46588372**	**13.46642761**
-3.8	**-42.43060699**	**-58.43491289**	**-59.13239926**	**-42.98357527**	**-52.37016237**	**-52.91631642**
+3.8	**7.79654115**	**14.472235**	**15.67654893**	**9.345193267**	**11.43582631**	**12.06762292**
-3.85	**-46.23330372**	**-65.55262458**	**-66.01097675**	**-47.71048514**	**-58.09224511**	**-58.95905433**
+3.85	**7.79654115**	**14.472235**	**15.67654893**	**9.345193267**	**11.43582631**	**12.06762292**
-3.9	**-50.74618583**	**-74.19634573**	**-74.501536**	**-53.39472578**	**-64.9677536**	**-66.24145418**
+3.9	**7.79654115**	**14.472235**	**15.67654893**	**9.345193267**	**11.43582631**	**12.06762292**
-3.95	**-54.66794585**	**-81.84954538**	**-82.71998317**	**-58.39567955**	**-71.01239899**	**-72.66128218**
+3.95	**7.79654115**	**14.472235**	**15.67654893**	**9.345193267**	**11.43582631**	**12.06762292**
-5	**-59.29119499**	**-91.03066305**	**-92.62217874**	**-64.35999542**	**-78.21665995**	**-80.33204404**
+5	**7.79654115**	**14.472235**	**15.67654893**	**9.345193267**	**11.43582631**	**12.06762292**

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-25.338556	-17.920323	-23.140287	-22.762406	-20.983672	-14.461788	-19.604744	-22.242931	-24.826602	-27.425369
+0.05	177.631609	130.342273	150.024575	135.935829	120.302291	105.853404	142.648582	158.348959	167.408895	175.443159
-0.1	-50.677112	-35.840646	-46.280574	-45.524812	-41.967345	-28.923576	-39.209487	-44.485862	-49.653204	-54.850737
+0.1	329.581163	242.661482	275.472432	246.984275	219.915717	197.175452	265.761313	294.438614	310.954425	327.446757
-0.15	-76.015667	-53.760969	-69.420862	-68.287218	-62.951017	-43.385365	-58.814231	-66.728793	-74.479806	-82.276106
+0.15	452.322895	333.893132	373.649196	331.539512	297.219803	271.745122	366.098787	404.945839	441.003034	462.442089
-0.2	-101.354223	-71.681292	-92.561149	-91.049624	-83.934690	-57.847153	-78.418974	-88.971724	-99.306408	-109.701474
+0.2	552.634121	409.792364	449.857712	398.733929	359.655473	333.708183	449.405433	495.489847	547.012482	577.488056
-0.25	-126.692779	-89.601616	-115.701436	-113.812030	-104.918362	-72.308941	-98.023718	-111.214655	-124.133010	-137.126843
+0.25	623.526976	465.089541	505.994415	449.903537	408.244702	377.854791	511.018994	564.642895	625.968747	671.761652
-0.3	-152.031335	-107.521939	-138.841723	-136.574436	-125.902035	-86.770729	-117.628461	-133.457586	-148.959612	-164.552211
+0.3	673.951189	504.666589	547.172516	484.235148	442.917605	411.988532	559.459433	621.709036	683.198820	741.072427
-0.35	-177.369890	-125.442262	-161.982010	-159.336842	-146.885707	-101.232517	-137.233205	-155.700516	-173.786214	-191.977580
+0.35	709.167116	532.276116	565.135441	497.594102	459.378250	428.978302	593.227207	656.547498	722.032980	782.393457
-0.4	-202.708446	-143.362585	-185.122298	-182.099247	-167.869380	-115.694305	-156.837948	-177.943447	-198.612816	-219.402948
+0.4	728.826358	547.069975	565.343761	502.259162	464.177311	436.609108	610.546915	673.471910	744.415661	802.503556
-0.45	-228.047002	-161.282908	-208.262585	-204.861653	-188.853052	-130.156094	-176.442692	-200.186378	-223.439418	-246.828317
+0.45	722.149282	545.001058	551.057837	508.825405	470.163579	429.749561	609.079252	669.053416	743.630966	806.861700
-0.5	-253.385558	-179.203231	-231.402872	-227.624059	-209.836725	-144.617882	-196.047435	-222.429309	-248.266020	-274.253685
+0.5	714.566094	537.340003	536.144910	500.740081	464.439411	425.851027	600.598346	659.458343	731.763981	791.936404
-0.55	-278.724114	-197.123554	-254.543159	-250.386465	-230.820397	-159.079670	-215.652179	-244.672240	-273.092622	-301.679054
+0.55	690.381772	517.347441	530.406576	476.677196	444.917722	414.003736	576.884780	636.412057	702.827162	757.383299
-0.6	-304.062669	-215.043877	-277.683446	-273.148871	-251.804070	-173.541458	-235.256922	-266.915171	-297.919224	-329.104422
+0.6	648.830973	485.214166	511.011774	447.033549	415.618864	392.096959	541.085780	598.442226	657.118112	711.360460
-0.65	-329.401225	-232.964200	-300.823734	-295.911277	-272.787742	-188.003246	-254.861666	-289.158102	-322.745826	-356.529791
+0.65	585.263788	439.363768	471.777016	415.260422	384.426587	357.437199	489.617096	541.841242	593.107574	643.940364
-0.7	-354.739781	-250.884524	-323.964021	-318.673683	-293.771415	-202.465034	-274.466409	-311.401033	-347.572428	-383.955160
+0.7	511.797631	386.255679	414.945834	366.396170	338.669254	315.096599	427.592280	473.448787	518.853176	559.986714
-0.75	-380.078337	-268.804847	-347.104308	-341.436089	-314.755087	-216.926823	-294.071153	-333.643964	-372.399030	-411.380528
+0.75	421.993937	321.340953	337.948942	297.888543	275.966827	261.577336	354.014530	390.350447	428.232483	458.094972
-0.8	-405.416892	-286.725170	-370.244595	-364.198495	-335.738760	-231.388611	-313.675896	-355.886895	-397.225632	-438.805897
+0.8	320.285812	248.092049	249.420297	215.147904	203.885797	203.062109	272.503409	298.290722	326.372013	344.554767
-0.85	-430.755448	-304.645493	-393.384882	-386.960901	-366.768264	-245.850399	-333.280640	-378.129826	-422.052235	-466.231265
+0.85	205.158499	165.411116	157.591718	131.748026	160.949272	135.726027	183.365080	196.045211	211.732798	217.762013
-0.9	-456.094004	-322.565816	-416.525170	-409.723307	-439.909557	-260.312187	-352.885383	-400.372757	-446.878837	-493.656634
+0.9	111.880044	97.230638	97.182231	77.284267	121.375052	75.803185	103.113058	103.184443	109.943448	109.927072
-0.95	-481.432560	-340.486139	-439.665457	-432.485713	-549.798823	-274.773975	-372.490127	-422.615688	-471.705439	-521.082002
+0.95	99.521130	70.999308	85.836496	78.800967	86.877906	57.542459	78.139714	88.165860	98.201264	107.993621
-1	-506.771122	-358.406461	-462.805750	-455.248127	-673.289821	-289.235761	-392.094872	-444.858625	-496.532053	-548.507364
+1	104.759087	74.736112	90.354205	82.948385	75.643523	60.571010	82.252329	92.806170	103.369750	113.677496
(Span 2) -2	-506.771122	-358.406461	-462.805750	-455.248127	-673.289821	-289.235761	-392.094872	-444.858625	-496.532053	-548.507364
+2	104.759087	74.736112	90.354205	82.948385	75.643523	60.571010	82.252329	92.806170	103.369750	113.677496
-2.05	-358.125999	-255.487792	-308.878743	-283.561582	-505.216330	-207.063926	-281.182004	-317.260795	-353.372680	-388.609865
+2.05	80.396919	57.355913	69.341952	63.658386	82.127936	46.484965	63.124202	71.223703	79.330677	87.241313
-2.1	-333.763567	-238.107585	-287.866480	-264.271584	-361.422596	-192.977876	-262.053883	-295.678322	-329.333604	-362.173690
+2.1	131.588794	116.154202	116.175632	92.449065	117.708098	90.108796	127.972125	133.540691	138.889475	139.162990
-2.15	-309.401134	-220.727378	-266.854217	-244.981585	-258.098433	-178.891825	-242.925762	-274.095849	-305.294529	-335.737515
+2.15	250.862190	200.651602	189.614389	162.007606	163.553806	165.331267	228.818942	244.937330	262.003720	277.234932
-2.2	-285.038701	-203.347171	-245.841954	-225.691586	-208.149729	-164.805775	-223.797641	-252.513376	-281.255453	-309.301340
+2.2	382.847334	296.041776	299.071774	261.281749	237.217738	242.094510	332.757140	364.118035	394.352887	423.669749

-2.25	**-260.676268**	**-185.966964**	**-224.829691**	**-206.401587**	**-190.411178**	**-150.719724**	**-204.669521**	**-230.930903**	**-257.216378**	**-282.865164**
+2.25	**502.121458**	**379.623207**	**407.918819**	**365.390360**	**329.629065**	**309.815167**	**423.913903**	**467.998357**	**510.586488**	**553.649053**
-2.3	**-236.313835**	**-168.586757**	**-203.817429**	**-187.111589**	**-175.943674**	**-136.633674**	**-185.541400**	**-209.348430**	**-233.177302**	**-256.428989**
+2.3	**601.531736**	**451.368686**	**496.294251**	**446.380221**	**406.368413**	**364.527932**	**502.830890**	**556.584552**	**610.279736**	**661.425640**
-2.35	**-211.951402**	**-151.206550**	**-182.805166**	**-167.821590**	**-163.016448**	**-122.547624**	**-166.413279**	**-187.765957**	**-209.138226**	**-229.992814**
+2.35	**681.969321**	**507.318788**	**560.248531**	**507.931977**	**465.057877**	**409.289442**	**564.841360**	**626.266553**	**689.057719**	**747.240298**
-2.4	**-187.588970**	**-133.826343**	**-161.792903**	**-148.531591**	**-150.278862**	**-108.461573**	**-147.285158**	**-166.183484**	**-185.099151**	**-203.556639**
+2.4	**734.768098**	**548.014168**	**599.026471**	**551.859671**	**506.888164**	**437.477160**	**609.074019**	**674.051973**	**745.994326**	**806.333903**
-2.45	**-163.226537**	**-116.446136**	**-140.780640**	**-129.241593**	**-137.772847**	**-94.375523**	**-128.157037**	**-144.601012**	**-161.060075**	**-177.120464**
+2.45	**766.993842**	**571.408869**	**616.116908**	**584.698467**	**536.743377**	**454.186116**	**635.856667**	**702.767822**	**779.641465**	**845.603653**
-2.5	**-138.864104**	**-99.065928**	**-119.768377**	**-109.951600**	**-133.648041**	**-80.289472**	**-109.028941**	**-123.018539**	**-137.021000**	**-150.684329**
+2.5	**769.772923**	**575.309470**	**611.296723**	**589.840950**	**542.640788**	**453.916650**	**640.392321**	**706.600479**	**786.001373**	**856.723876**
-2.55	**-163.224767**	**-116.446077**	**-140.780576**	**-129.241598**	**-137.772900**	**-94.375482**	**-128.157068**	**-144.600968**	**-161.060050**	**-177.120512**
+2.55	**767.210304**	**571.395420**	**616.109046**	**584.691117**	**536.747140**	**454.180775**	**635.846746**	**702.761033**	**779.630748**	**845.605889**
-2.6	**-187.586935**	**-133.826276**	**-161.792829**	**-148.531597**	**-150.278886**	**-108.461526**	**-147.285195**	**-166.183436**	**-185.099123**	**-203.556694**
+2.6	**734.849305**	**548.017859**	**599.024226**	**551.865140**	**506.886385**	**437.480103**	**609.080369**	**674.061072**	**745.999089**	**806.334927**
-2.65	**-211.949104**	**-151.206475**	**-182.805082**	**-167.821595**	**-163.016550**	**-122.547571**	**-166.413322**	**-187.765903**	**-209.138195**	**-229.992877**
+2.65	**682.237350**	**507.321191**	**560.237884**	**507.933954**	**465.059017**	**409.302021**	**564.843885**	**626.271685**	**689.058453**	**747.251898**
-2.7	**-236.311273**	**-168.586674**	**-203.817335**	**-187.111594**	**-175.943678**	**-136.633616**	**-185.541449**	**-209.348370**	**-233.177268**	**-256.429059**
+2.7	**601.661158**	**451.370234**	**496.298736**	**446.377579**	**406.366856**	**364.526602**	**502.834952**	**556.591016**	**610.281721**	**661.426278**
-2.75	**-260.673441**	**-185.966873**	**-224.829588**	**-206.401592**	**-190.411182**	**-150.719660**	**-204.669576**	**-230.930837**	**-257.216341**	**-282.865242**
+2.75	**502.349024**	**379.624009**	**407.921823**	**365.382454**	**329.629873**	**309.823763**	**423.917200**	**467.999684**	**510.587866**	**553.656396**
-2.8	**-285.035610**	**-203.347073**	**-245.841840**	**-225.691591**	**-208.149798**	**-164.805705**	**-223.797703**	**-252.513304**	**-281.255413**	**-309.301424**
+2.8	**383.045713**	**296.044087**	**299.074056**	**261.284881**	**237.213701**	**242.108720**	**332.760350**	**364.123307**	**394.354371**	**423.680763**
-2.85	**-309.397778**	**-220.727272**	**-266.854093**	**-244.981589**	**-258.098499**	**-178.891750**	**-242.925830**	**-274.095771**	**-305.294486**	**-335.737607**
+2.85	**251.066489**	**200.650353**	**189.621519**	**162.008883**	**163.552106**	**165.337182**	**228.822420**	**244.936858**	**262.002046**	**277.240355**
-2.9	**-333.759947**	**-238.107471**	**-287.866346**	**-264.271588**	**-361.422562**	**-192.977794**	**-262.053957**	**-295.678239**	**-329.333559**	**-362.173789**
+2.9	**131.588794**	**116.152565**	**116.174132**	**92.459271**	**117.707373**	**90.097905**	**127.982333**	**133.545179**	**138.898406**	**139.173835**
-2.95	**-358.122115**	**-255.487670**	**-308.878599**	**-283.561586**	**-505.216291**	**-207.063839**	**-281.182084**	**-317.260706**	**-353.372632**	**-388.609972**
+2.95	**80.397792**	**57.355936**	**69.341988**	**63.658395**	**82.126561**	**46.484981**	**63.124172**	**71.223718**	**79.330681**	**87.241289**
-3	**-506.775175**	**-358.406488**	**-462.806013**	**-455.248459**	**-673.290068**	**-289.235778**	**-392.095019**	**-444.858959**	**-496.532367**	**-548.507549**
+3	**104.760224**	**74.736147**	**90.354248**	**82.948386**	**75.643524**	**60.571034**	**82.252303**	**92.806195**	**103.369762**	**113.677464**
(Span 3) -4	**-506.775175**	**-358.406488**	**-462.806013**	**-455.248459**	**-673.290068**	**-289.235778**	**-392.095019**	**-444.858959**	**-496.532367**	**-548.507549**
+4	**104.760224**	**74.736147**	**90.354248**	**82.948386**	**75.643524**	**60.571034**	**82.252303**	**92.806195**	**103.369762**	**113.677464**
-3.05	**-481.436416**	**-340.486163**	**-439.665713**	**-432.486037**	**-549.798997**	**-274.773989**	**-372.490268**	**-422.616011**	**-471.705749**	**-521.082171**
+3.05	**99.522212**	**70.999340**	**85.836536**	**78.800967**	**86.875309**	**57.542483**	**78.139688**	**88.165886**	**98.201274**	**107.993591**
-3.1	**-456.097657**	**-322.565839**	**-416.525412**	**-409.723614**	**-439.909682**	**-260.312200**	**-352.885517**	**-400.373063**	**-446.879131**	**-493.656794**
+3.1	**110.910202**	**97.217039**	**97.186675**	**77.287637**	**121.369179**	**75.793710**	**103.122130**	**103.181829**	**109.950113**	**109.933591**
-3.15	**-430.758898**	**-304.645514**	**-393.385112**	**-386.961192**	**-366.768395**	**-245.850411**	**-333.280766**	**-378.130116**	**-422.052514**	**-466.231416**
+3.15	**205.086775**	**165.414228**	**157.596592**	**131.749774**	**160.947121**	**135.725173**	**183.363421**	**196.041923**	**211.733709**	**217.761831**
-3.2	**-405.420140**	**-286.725190**	**-370.244812**	**-364.198769**	**-335.738764**	**-231.388622**	**-313.676015**	**-355.887168**	**-397.225896**	**-438.806038**
+3.2	**320.674392**	**248.095267**	**249.422601**	**215.146352**	**203.879806**	**203.049355**	**272.501918**	**298.287464**	**326.376355**	**344.546207**
-3.25	**-380.081381**	**-268.804866**	**-347.104511**	**-341.436347**	**-314.755091**	**-216.926833**	**-294.071264**	**-333.644221**	**-372.399278**	**-411.380660**
+3.25	**421.868448**	**321.343567**	**337.947741**	**297.886144**	**275.965414**	**261.576102**	**354.013117**	**390.347107**	**428.236073**	**458.094501**
-3.3	**-354.742622**	**-250.884541**	**-323.964211**	**-318.673924**	**-293.771419**	**-202.465044**	**-274.466514**	**-311.401273**	**-347.572661**	**-383.955282**
+3.3	**512.131267**	**386.257636**	**414.942754**	**366.391992**	**338.666884**	**315.082810**	**427.590135**	**473.444469**	**518.855973**	**559.993737**
-3.35	**-329.403864**	**-232.964217**	**-300.823911**	**-295.911502**	**-272.787747**	**-188.003255**	**-254.861763**	**-289.158325**	**-322.746043**	**-356.529905**
+3.35	**585.207022**	**439.363092**	**471.771966**	**415.260588**	**384.426665**	**357.434378**	**489.614056**	**541.844504**	**593.108605**	**643.937275**
-3.4	**-304.065105**	**-215.043892**	**-277.683610**	**-273.149079**	**-251.804074**	**-173.541466**	**-235.257012**	**-266.915378**	**-297.919425**	**-329.104527**
+3.4	**649.219258**	**485.212059**	**511.004079**	**447.024985**	**415.621313**	**392.104692**	**541.081264**	**598.434963**	**657.115507**	**711.363844**
-3.45	**-278.726346**	**-197.123568**	**-254.543310**	**-250.386656**	**-230.820402**	**-159.079677**	**-215.652261**	**-244.672430**	**-273.092807**	**-301.679149**
+3.45	**690.191895**	**517.343759**	**530.407300**	**476.678459**	**444.918077**	**413.998150**	**576.887470**	**636.411605**	**702.822519**	**757.383998**
-3.5	**-253.387587**	**-179.203243**	**-231.403010**	**-227.624234**	**-209.836730**	**-144.617888**	**-196.047510**	**-222.429483**	**-248.266190**	**-274.253771**
+3.5	**714.796660**	**537.334332**	**536.149961**	**500.746582**	**464.442765**	**425.855569**	**600.590004**	**659.446550**	**731.756659**	**791.932866**
-3.55	**-228.048829**	**-161.282919**	**-208.262709**	**-204.861811**	**-188.853058**	**-130.156099**	**-176.442759**	**-200.186535**	**-223.439572**	**-246.828393**
+3.55	**721.945313**	**544.998180**	**551.058750**	**508.825140**	**470.163433**	**429.745701**	**609.079601**	**669.048406**	**743.630567**	**806.857484**
-3.6	**-202.710070**	**-143.362595**	**-185.122409**	**-182.099389**	**-167.869385**	**-115.694310**	**-156.838008**	**-177.943587**	**-198.612954**	**-219.403015**

+3.6	**728.532687**	**547.074311**	**565.336568**	**502.263526**	**464.179867**	**436.603656**	**610.535980**	**673.464243**	**744.421077**	**802.504629**
-3.65	**-177.371311**	**-125.442270**	**-161.982109**	**-159.336966**	**-146.885713**	**-101.232521**	**-137.233257**	**-155.700640**	**-173.786337**	**-191.977638**
+3.65	**709.282450**	**532.278067**	**565.134339**	**497.595866**	**459.379067**	**428.970949**	**593.222664**	**656.545958**	**722.035179**	**782.390148**
-3.7	**-152.032552**	**-107.521946**	**-138.841808**	**-136.574544**	**-125.902041**	**-86.770732**	**-117.628506**	**-133.457692**	**-148.959719**	**-164.552260**
+3.7	**673.679353**	**504.665549**	**547.177241**	**484.240982**	**442.920749**	**411.979257**	**559.461084**	**621.713346**	**683.196968**	**741.065394**
-3.75	**-126.693794**	**-89.601621**	**-115.701508**	**-113.812121**	**-104.918368**	**-72.308943**	**-98.023756**	**-111.214745**	**-124.133101**	**-137.126882**
+3.75	**622.992591**	**465.085952**	**505.996045**	**449.900440**	**408.246383**	**377.855262**	**511.017403**	**564.643823**	**625.963413**	**671.759296**
-3.8	**-101.355035**	**-71.681297**	**-92.561208**	**-91.049699**	**-83.934696**	**-57.847154**	**-78.419005**	**-88.971797**	**-99.306484**	**-109.701504**
+3.8	**552.138277**	**409.785925**	**449.855623**	**398.735670**	**359.656496**	**333.694532**	**449.400787**	**495.487055**	**547.003340**	**577.490182**
-3.85	**-76.016276**	**-53.760972**	**-69.420907**	**-68.287276**	**-62.951024**	**-43.385365**	**-58.814254**	**-66.728849**	**-74.479866**	**-82.276126**
+3.85	**452.212086**	**333.893169**	**373.652163**	**331.537603**	**297.218718**	**271.740896**	**366.099928**	**404.939404**	**440.998668**	**462.439553**
-3.9	**-50.677517**	**-35.840648**	**-46.280607**	**-45.524854**	**-41.967352**	**-28.923576**	**-39.209503**	**-44.485902**	**-49.653248**	**-54.850749**
+3.9	**329.850194**	**242.649053**	**275.463107**	**246.978896**	**219.920014**	**197.156782**	**265.750059**	**294.428311**	**310.954711**	**327.447867**
-3.95	**-25.338759**	**-17.920324**	**-23.140307**	**-22.762431**	**-20.983679**	**-14.461787**	**-19.604752**	**-22.242954**	**-24.826630**	**-27.425371**
+3.95	**177.670777**	**130.336005**	**150.019973**	**135.933194**	**120.304451**	**105.844012**	**142.642935**	**158.343788**	**167.409038**	**175.443714**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-25.338556	-23.798881	-25.543020	-24.062910	-29.031039	-26.891365	-28.426022	-12.255368
+0.05	177.631609	177.267359	187.927984	175.380585	206.342674	170.097255	179.445835	91.097840
-0.1	-50.677112	-47.597761	-51.086039	-48.125820	-58.062077	-53.782731	-56.852044	-24.510735
+0.1	329.581163	330.862449	350.434859	326.851729	383.864066	311.790568	328.853103	169.699192
-0.15	-76.015667	-71.396644	-76.629059	-72.188731	-87.093116	-80.674096	-85.278065	-36.766103
+0.15	452.322895	456.597442	482.954187	450.491886	528.605519	422.155464	445.154694	233.257646
-0.2	-101.354223	-95.195522	-102.172079	-96.251641	-116.124155	-107.565462	-113.704087	-49.021471
+0.2	552.634121	562.158603	593.947958	553.109059	646.434067	506.988789	534.433802	286.234164
-0.25	-126.692779	-118.994403	-127.715098	-120.314551	-145.155194	-134.456827	-142.130109	-61.276839
+0.25	623.526976	639.952538	675.600121	629.423641	744.310547	583.202657	615.690445	323.738900
-0.3	-152.031335	-142.793288	-153.258118	-144.377461	-174.186232	-161.348193	-170.556131	-73.532206
+0.3	673.951189	697.675097	734.901139	692.283420	819.968461	634.838237	671.050268	352.783659
-0.35	-177.369890	-166.592164	-178.801138	-168.440372	-203.217271	-188.239558	-198.982152	-85.787574
+0.35	709.167116	733.206287	777.091757	734.285930	866.038595	667.283673	704.857472	367.065189
-0.4	-202.708446	-190.391045	-204.344157	-192.503282	-232.248310	-215.130924	-227.408174	-98.042942
+0.4	728.826358	757.070223	801.083262	756.316721	889.127243	680.241087	719.044361	373.541396
-0.45	-228.047002	-214.189925	-229.887177	-216.566192	-261.279349	-242.022289	-255.834196	-110.298310
+0.45	722.149282	758.708356	801.019168	755.104280	885.089513	667.912050	706.489807	366.736999
-0.5	-253.385558	-237.988806	-255.430197	-240.629102	-290.310387	-268.913655	-284.260218	-122.553677
+0.5	714.566094	746.818793	789.379337	744.194478	872.299798	650.471274	687.969126	363.087781
-0.55	-278.724114	-261.787687	-280.973216	-264.692013	-319.341426	-295.805020	-312.686240	-134.809045
+0.55	690.381772	715.549022	757.170662	714.446344	840.804949	640.572474	677.090137	353.804285
-0.6	-304.062669	-285.586576	-306.516236	-288.754923	-348.372465	-322.696386	-341.112261	-147.064413
+0.6	648.830973	668.379317	708.389226	669.873874	789.013174	608.350947	642.627419	337.918689
-0.65	-329.401225	-309.385448	-332.059256	-312.817833	-377.403504	-349.587751	-369.538283	-159.319780
+0.65	585.263788	608.645580	640.806483	606.078119	714.392651	551.063220	581.950654	308.049897
-0.7	-354.739781	-333.184328	-357.602276	-336.880743	-406.434542	-376.479117	-397.964305	-171.575148
+0.7	511.797631	535.913977	562.546918	529.915144	624.378413	480.748788	507.950829	274.259169
-0.75	-380.078337	-356.983209	-383.145295	-360.943654	-435.465581	-403.370482	-426.390327	-183.830516
+0.75	421.993937	447.904161	469.037491	439.283850	515.429928	388.686310	410.321835	227.764482
-0.8	-405.416892	-380.782089	-408.688315	-385.006564	-464.496620	-430.261848	-454.816348	-196.085884
+0.8	320.285812	350.403201	364.243633	339.532946	395.689180	280.114976	295.290915	179.451340
-0.85	-430.755448	-404.580970	-434.231335	-409.069474	-493.527659	-457.153213	-483.242370	-208.341251
+0.85	205.158499	241.210441	247.137342	230.106226	262.547063	180.617705	190.744088	120.611146
-0.9	-456.094004	-428.379851	-459.774354	-433.132384	-522.558697	-484.044578	-511.668392	-220.596619
+0.9	111.880044	138.072292	138.072292	126.882950	134.959742	104.912635	110.434353	80.036119
-0.95	-481.432560	-452.178745	-485.317374	-457.195294	-551.589736	-510.935944	-540.094414	-232.851987
+0.95	99.521130	95.234149	102.053832	96.101077	115.694326	99.838114	105.437745	47.974342
-1	-506.771122	-475.977609	-510.860400	-481.258206	-580.620781	-537.827307	-568.520433	-245.107358
+1	104.759087	100.246472	107.425083	101.159027	121.783503	105.092750	110.987098	50.499307
(Span 2) -2	-506.771122	-475.977609	-510.860400	-481.258206	-580.620781	-537.827307	-568.520433	-245.107358
+2	104.759087	100.246472	107.425083	101.159027	121.783503	105.092750	110.987098	50.499307
-2.05	-358.125999	-342.695682	-367.236122	-345.815362	-416.320529	-359.262869	-379.412984	-172.633449
+2.05	80.396919	76.933730	82.442925	77.634067	93.462233	80.652987	85.176579	44.230896
-2.1	-333.763567	-319.382936	-342.253950	-322.290392	-387.999265	-334.823098	-353.602450	-160.889619
+2.1	131.588794	164.985604	164.985604	160.115644	172.745250	125.416875	132.017763	94.029972
-2.15	-309.401134	-296.070190	-317.271777	-298.765422	-359.678002	-310.383328	-327.791917	-149.145790
+2.15	250.862190	292.318424	301.891618	286.399284	328.152222	218.384090	230.713685	144.796963
-2.2	-285.038701	-272.757444	-292.289604	-275.240453	-331.356738	-285.943557	-301.981383	-137.401961
+2.2	382.847334	417.591581	436.138283	413.868938	482.045974	343.639035	362.935155	210.975703

-2.25	**-260.676268**	**-249.444698**	**-267.307431**	**-251.715483**	**-303.035474**	**-261.503786**	**-276.170850**	**-125.658132**
+2.25	**502.121458**	**528.525861**	**555.445498**	**525.543077**	**617.895181**	**472.880067**	**499.842852**	**268.797558**
-2.3	**-236.313835**	**-226.131952**	**-242.325259**	**-228.190513**	**-274.714210**	**-237.064016**	**-250.360317**	**-113.914302**
+2.3	**601.531736**	**621.262626**	**658.013384**	**622.447626**	**732.493556**	**576.314413**	**609.098086**	**315.924648**
-2.35	**-211.951402**	**-202.819205**	**-217.343086**	**-204.665544**	**-246.392946**	**-212.624245**	**-224.549783**	**-102.170473**
+2.35	**681.969321**	**697.383426**	**738.700521**	**698.979547**	**824.207272**	**658.052750**	**695.332811**	**353.359413**
-2.4	**-187.588970**	**-179.506459**	**-192.360913**	**-181.140574**	**-218.071682**	**-188.184475**	**-198.739250**	**-90.426644**
+2.4	**734.768098**	**753.500528**	**798.179695**	**753.242203**	**887.167759**	**713.243169**	**754.065258**	**376.823106**
-2.45	**-163.226537**	**-156.193713**	**-167.378740**	**-157.615604**	**-189.750418**	**-163.744704**	**-172.928716**	**-78.682814**
+2.45	**766.993842**	**787.224959**	**833.588376**	**786.702341**	**924.919222**	**740.431399**	**783.082673**	**390.641543**
-2.5	**-138.864104**	**-132.880967**	**-142.396568**	**-134.090635**	**-161.429188**	**-139.304933**	**-147.118183**	**-66.938985**
+2.5	**769.772923**	**796.084792**	**841.340585**	**793.099481**	**931.648650**	**736.411425**	**779.195139**	**389.699779**
-2.55	**-163.224767**	**-156.193681**	**-167.378658**	**-157.615528**	**-189.750457**	**-163.744651**	**-172.928614**	**-78.682794**
+2.55	**767.210304**	**787.229133**	**833.594636**	**786.692010**	**924.914837**	**740.419999**	**783.070468**	**390.646105**
-2.6	**-187.586935**	**-179.506423**	**-192.360816**	**-181.140487**	**-218.071726**	**-188.184415**	**-198.739134**	**-90.426622**
+2.6	**734.849305**	**753.504211**	**798.185325**	**753.250925**	**887.169532**	**713.247826**	**754.069941**	**376.823130**
-2.65	**-211.949104**	**-202.819164**	**-217.342974**	**-204.665447**	**-246.392995**	**-212.624179**	**-224.549653**	**-102.170449**
+2.65	**682.237350**	**697.385463**	**738.700564**	**698.983738**	**824.216610**	**658.052926**	**695.332763**	**353.362710**
-2.7	**-236.311273**	**-226.131905**	**-242.325132**	**-228.190406**	**-274.714264**	**-237.063942**	**-250.360172**	**-113.914277**
+2.7	**601.661158**	**621.263640**	**658.016051**	**622.453563**	**732.504225**	**576.315545**	**609.102284**	**315.923333**
-2.75	**-260.673441**	**-249.444646**	**-267.307291**	**-251.715366**	**-303.035533**	**-261.503706**	**-276.170692**	**-125.658104**
+2.75	**502.349024**	**528.523704**	**555.447202**	**525.543106**	**617.899673**	**472.890956**	**499.854075**	**268.799561**
-2.8	**-285.035610**	**-272.757387**	**-292.289449**	**-275.240325**	**-331.356802**	**-285.943470**	**-301.981211**	**-137.401931**
+2.8	**383.045713**	**417.594264**	**436.139975**	**413.873865**	**482.055123**	**343.638898**	**362.934784**	**210.979488**
-2.85	**-309.397778**	**-296.070129**	**-317.271607**	**-298.765285**	**-359.678072**	**-310.383234**	**-327.791730**	**-149.145759**
+2.85	**251.066489**	**292.316125**	**301.893745**	**286.404574**	**328.154753**	**218.381994**	**230.711593**	**144.798142**
-2.9	**-333.759947**	**-319.382870**	**-342.253766**	**-322.290244**	**-387.999341**	**-334.822997**	**-353.602250**	**-160.889586**
+2.9	**131.588794**	**164.983247**	**164.983247**	**160.125207**	**172.751565**	**125.415256**	**132.016059**	**93.591496**
-2.95	**-358.122115**	**-342.695611**	**-367.235924**	**-345.815204**	**-416.320610**	**-359.262761**	**-379.412769**	**-172.633413**
+2.95	**80.397792**	**76.933748**	**82.442987**	**77.634093**	**93.462220**	**80.653002**	**85.176618**	**44.284654**
-3	**-506.775175**	**-475.977990**	**-510.860499**	**-481.258252**	**-580.621053**	**-537.827553**	**-568.520786**	**-245.107380**
+3	**104.760224**	**100.246493**	**107.425145**	**101.159071**	**121.783480**	**105.092780**	**110.987159**	**50.499315**
(Span 3) -4	**-506.775175**	**-475.977990**	**-510.860499**	**-481.258252**	**-580.621053**	**-537.827553**	**-568.520786**	**-245.107380**
+4	**104.760224**	**100.246493**	**107.425145**	**101.159071**	**121.783480**	**105.092780**	**110.987159**	**50.499315**
-3.05	**-481.436416**	**-452.179090**	**-485.317475**	**-457.195339**	**-551.590000**	**-510.936175**	**-540.094746**	**-232.852011**
+3.05	**99.522212**	**95.234168**	**102.053888**	**96.101117**	**115.694306**	**99.838141**	**105.437801**	**47.974349**
-3.1	**-456.097657**	**-428.380191**	**-459.774450**	**-433.132427**	**-522.558948**	**-484.044797**	**-511.668707**	**-220.596642**
+3.1	**110.910202**	**138.052767**	**138.052767**	**126.875438**	**134.955571**	**104.917433**	**110.439403**	**79.137340**
-3.15	**-430.758898**	**-404.581291**	**-434.231425**	**-409.069514**	**-493.527896**	**-457.153420**	**-483.242667**	**-208.341273**
+3.15	**205.086775**	**241.215169**	**247.141071**	**230.103147**	**262.550460**	**180.621385**	**190.747866**	**120.283258**
-3.2	**-405.420140**	**-380.782392**	**-408.688401**	**-385.006602**	**-464.496843**	**-430.262042**	**-454.816628**	**-196.085904**
+3.2	**320.674392**	**350.408284**	**364.247652**	**339.530100**	**395.682595**	**280.121188**	**295.297686**	**179.447748**
-3.25	**-380.081381**	**-356.983492**	**-383.145376**	**-360.943689**	**-435.465791**	**-403.370664**	**-426.390589**	**-183.830536**
+3.25	**421.868448**	**447.908657**	**469.040793**	**439.281142**	**515.433453**	**388.682168**	**410.317721**	**227.524839**
-3.3	**-354.742622**	**-333.184593**	**-357.602351**	**-336.880777**	**-406.434739**	**-376.479286**	**-397.964549**	**-171.575167**
+3.3	**512.131267**	**535.917799**	**562.549417**	**529.911566**	**624.370642**	**480.751972**	**507.954433**	**274.255308**
-3.35	**-329.403864**	**-309.385693**	**-332.059327**	**-312.817864**	**-377.403686**	**-349.587908**	**-369.538510**	**-159.319798**
+3.35	**585.207022**	**608.647818**	**640.805267**	**606.073465**	**714.393659**	**551.062171**	**581.951617**	**308.049768**
-3.4	**-304.065105**	**-285.586794**	**-306.516302**	**-288.754952**	**-348.372634**	**-322.696531**	**-341.112470**	**-147.064429**
+3.4	**649.219258**	**668.378017**	**708.386109**	**669.867435**	**789.001617**	**608.347301**	**642.623812**	**337.914141**
-3.45	**-278.726346**	**-261.787894**	**-280.973277**	**-264.692039**	**-319.341582**	**-295.805153**	**-312.686431**	**-134.809060**
+3.45	**690.191895**	**715.545835**	**757.165452**	**714.448320**	**840.801206**	**640.575052**	**677.093078**	**353.803381**
-3.5	**-253.387587**	**-237.988995**	**-255.430253**	**-240.629127**	**-290.310529**	**-268.913775**	**-284.260392**	**-122.553692**
+3.5	**714.796660**	**746.813030**	**789.371285**	**744.183407**	**872.303447**	**650.461329**	**687.958881**	**363.082376**
-3.55	**-228.048829**	**-214.190095**	**-229.887228**	**-216.566214**	**-261.279477**	**-242.022397**	**-255.834352**	**-110.298323**
+3.55	**721.945313**	**758.701895**	**801.015088**	**755.106058**	**885.087445**	**667.911514**	**706.489006**	**366.738500**
-3.6	**-202.710070**	**-190.391196**	**-204.344203**	**-192.503302**	**-232.248425**	**-215.131020**	**-227.408313**	**-98.042954**

+3.6	**728.532687**	**757.074335**	**801.089574**	**756.305105**	**889.121718**	**680.246989**	**719.050308**	**373.538482**
-3.65	**-177.371311**	**-166.592296**	**-178.801179**	**-168.440389**	**-203.217372**	**-188.239642**	**-198.982273**	**-85.787585**
+3.65	**709.282450**	**733.207101**	**777.094549**	**734.281703**	**866.039825**	**667.286356**	**704.860000**	**367.065756**
-3.7	**-152.032552**	**-142.793397**	**-153.258154**	**-144.377476**	**-174.186320**	**-161.348264**	**-170.556234**	**-73.532217**
+3.7	**673.679353**	**697.671867**	**734.899614**	**692.286326**	**819.955002**	**634.836584**	**671.048200**	**352.779696**
-3.75	**-126.693794**	**-118.994497**	**-127.715129**	**-120.314564**	**-145.155267**	**-134.456886**	**-142.130194**	**-61.276848**
+3.75	**622.992591**	**639.945872**	**675.594924**	**629.422573**	**744.303357**	**583.197564**	**615.684729**	**324.144255**
-3.8	**-101.355035**	**-95.195598**	**-102.172105**	**-96.251651**	**-116.124215**	**-107.565509**	**-113.704155**	**-49.021479**
+3.8	**552.138277**	**562.148048**	**593.938614**	**553.104243**	**646.432582**	**506.979708**	**534.423856**	**286.237015**
-3.85	**-76.016276**	**-71.396698**	**-76.629080**	**-72.188739**	**-87.093163**	**-80.674131**	**-85.278116**	**-36.766110**
+3.85	**452.212086**	**456.596535**	**482.954212**	**450.493717**	**528.599287**	**422.150358**	**445.149381**	**233.255832**
-3.9	**-50.677517**	**-47.597799**	**-51.086056**	**-48.125826**	**-58.062110**	**-53.782753**	**-56.852076**	**-24.510741**
+3.9	**329.850194**	**330.843658**	**350.416699**	**326.838814**	**383.852883**	**311.781097**	**328.843178**	**169.700632**
-3.95	**-25.338759**	**-23.798899**	**-25.543031**	**-24.062914**	**-29.031058**	**-26.891375**	**-28.426037**	**-12.255373**
+3.95	**177.670777**	**177.257993**	**187.918934**	**175.374100**	**206.337061**	**170.092601**	**179.440959**	**91.098539**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 65' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-25.338556	-47.034756	-50.947316	-30.371857	-37.166422	-39.219757
+0.05	177.631609	267.069284	269.348426	190.120971	231.523960	236.925556
-0.1	-50.677112	-94.069512	-101.894631	-60.743714	-74.332845	-78.439515
+0.1	329.581163	484.166668	486.513777	347.546240	423.572342	431.925989
-0.15	-76.015667	-141.104269	-152.841947	-91.115570	-111.499267	-117.659272
+0.15	452.322895	664.682693	674.360386	468.997332	573.514727	584.102387
-0.2	-101.354223	-188.139025	-203.789263	-121.487427	-148.665690	-156.879029
+0.2	552.634121	809.521620	834.351692	573.417760	703.388653	716.001303
-0.25	-126.692779	-235.173781	-254.736579	-151.859284	-185.832112	-196.098786
+0.25	623.526976	904.932961	969.261716	655.441076	795.923998	815.653003
-0.3	-152.031335	-282.208537	-305.683894	-182.231141	-222.998535	-235.318544
+0.3	673.951189	987.432396	1060.357201	709.819301	855.150967	892.792490
-0.35	-177.369890	-329.243294	-356.631210	-212.602997	-260.164957	-274.538301
+0.35	709.167116	1039.444674	1131.529522	740.369496	882.235368	930.042414
-0.4	-202.708446	-376.278050	-407.578526	-242.974854	-297.331380	-313.758058
+0.4	728.826358	1075.470698	1157.786698	750.657826	889.242612	934.690270
-0.45	-228.047002	-423.312806	-458.525841	-273.346711	-334.497802	-352.977815
+0.45	722.149282	1083.272193	1151.288554	732.661524	864.393126	918.212251
-0.5	-253.385558	-470.347562	-509.473157	-303.718568	-371.664225	-392.197573
+0.5	714.566094	1058.024696	1141.086553	700.496814	840.327391	882.107775
-0.55	-278.724114	-517.382319	-560.420473	-334.090425	-408.830647	-431.417330
+0.55	690.381772	1022.750667	1081.653817	699.750702	828.312369	874.892835
-0.6	-304.062669	-564.417075	-611.367789	-364.462281	-445.997070	-470.637087
+0.6	648.830973	947.868363	1021.626816	672.148921	795.280276	839.691246
-0.65	-329.401225	-611.451831	-662.315104	-394.834138	-483.163492	-509.856844
+0.65	585.263788	854.428826	924.833312	614.622718	734.957081	773.873252
-0.7	-354.739781	-658.486587	-713.262420	-425.205995	-520.329915	-549.076602
+0.7	511.797631	734.291485	788.643241	542.036226	649.968693	675.623795
-0.75	-380.078337	-705.521344	-764.209736	-455.577852	-557.496337	-588.296359
+0.75	421.993937	593.146371	626.343312	442.196321	531.673668	542.856098
-0.8	-405.416892	-752.556100	-815.157051	-485.949708	-594.662760	-627.516116
+0.8	320.285812	425.539550	429.313896	321.827936	387.665559	388.990695
-0.85	-430.755448	-799.590856	-866.104367	-516.321565	-631.829182	-666.735873
+0.85	205.158499	245.095449	238.766096	215.007703	237.591612	249.999796
-0.9	-456.094004	-846.625612	-917.051683	-546.693422	-668.995605	-705.955631
+0.9	111.880044	157.962920	168.186816	124.231030	135.012670	135.019881
-0.95	-481.432560	-893.660369	-967.998999	-577.065279	-706.162027	-745.175388
+0.95	99.521130	166.738638	177.530529	109.982769	136.193096	141.453629
-1	-506.771122	-940.695138	-1018.946313	-607.437129	-743.328448	-784.395147
+1	104.759087	175.514357	186.874239	115.771336	143.361152	148.898555
(Span 2) -2	-506.771122	-940.695138	-1018.946313	-607.437129	-743.328448	-784.395147
+2	104.759087	175.514357	186.874239	115.771336	143.361152	148.898555
-2.05	-358.125999	-600.001259	-638.794298	-395.767670	-490.084560	-509.014473
+2.05	80.396919	134.697751	143.415844	88.848221	110.021911	114.271565
-2.1	-333.763567	-559.184646	-595.338690	-368.844567	-456.745311	-474.387468
+2.1	131.588794	170.352554	158.090805	148.523360	172.931831	172.957282
-2.15	-309.401134	-518.368034	-551.883082	-341.921464	-423.406062	-439.760463
+2.15	250.862190	305.868159	307.820722	259.860312	293.816383	310.536273
-2.2	-285.038701	-477.551421	-508.427474	-314.998360	-390.066813	-405.133458
+2.2	382.847334	511.426961	542.739826	390.571463	467.804546	478.700510

-2.25	-260.676268	-436.734808	-464.971865	-288.075257	-356.727564	-370.506452
+2.25	502.121458	730.552136	791.968929	537.168614	642.471592	669.140319
-2.3	-236.313835	-395.918196	-421.516257	-261.152154	-323.388315	-335.879447
+2.3	601.531736	917.557294	998.552380	652.330420	779.085692	822.014182
-2.35	-211.951402	-355.101583	-378.060649	-234.229051	-290.049066	-301.252442
+2.35	681.969321	1056.726880	1157.040835	739.958569	878.752964	935.204643
-2.4	-187.588970	-314.284970	-334.605041	-207.305947	-256.709817	-266.625437
+2.4	734.768098	1164.298637	1260.204893	799.328656	945.023524	1004.102085
-2.45	-163.226537	-273.468358	-291.149433	-180.382844	-223.370568	-231.998431
+2.45	766.993842	1228.190616	1319.684741	826.045238	974.483261	1036.303476
-2.5	-138.864104	-232.651745	-247.709711	-153.459809	-190.031319	-197.371426
+2.5	769.772923	1238.805683	1346.800090	817.664703	962.339757	1031.047176
-2.55	-163.224767	-273.468311	-291.168106	-180.382923	-223.370508	-231.998327
+2.55	767.210304	1228.199997	1319.561855	826.030833	974.470886	1036.287650
-2.6	-187.586935	-314.284917	-334.626501	-207.306038	-256.709750	-266.625317
+2.6	734.849305	1164.294873	1260.204831	799.333101	945.015832	1004.099122
-2.65	-211.949104	-355.101524	-378.084896	-234.229152	-290.048992	-301.252306
+2.65	682.237350	1056.737367	1157.874272	739.960693	878.750976	935.214353
-2.7	-236.311273	-395.918130	-421.543291	-261.152266	-323.388234	-335.879295
+2.7	601.661158	917.567427	998.998155	652.334475	779.081245	822.023811
-2.75	-260.673441	-436.734736	-465.001686	-288.075381	-356.727476	-370.506285
+2.75	502.349024	730.555209	791.968304	537.180507	642.478574	669.143272
-2.8	-285.035610	-477.551342	-508.460081	-314.998495	-390.066718	-405.133274
+2.8	383.045713	511.873910	542.739418	390.570230	467.814258	478.706364
-2.85	-309.397778	-518.367948	-551.918476	-341.921610	-423.405959	-439.760263
+2.85	251.066489	305.869406	307.821207	259.857842	293.820570	310.536359
-2.9	-333.759947	-559.184554	-595.376871	-368.844724	-456.745201	-474.387253
+2.9	131.588794	170.341413	158.091558	148.521487	172.937594	172.962908
-2.95	-358.122115	-600.001161	-638.835266	-395.767839	-490.084443	-509.014242
+2.95	80.397792	134.697769	143.406648	88.848189	110.021922	114.271621
-3	-506.775175	-940.695288	-1018.975684	-607.437556	-743.328708	-784.395492
+3	104.760224	175.514385	186.862254	115.771288	143.361183	148.898623
(Span 3) -4	-506.775175	-940.695288	-1018.975684	-607.437556	-743.328708	-784.395492
+4	104.760224	175.514385	186.862254	115.771288	143.361183	148.898623
-3.05	-481.436416	-893.660525	-968.026900	-577.065678	-706.162272	-745.175717
+3.05	99.522212	166.738665	177.519141	109.982723	136.193124	141.453692
-3.1	-456.097657	-846.625761	-917.078116	-546.693800	-668.995837	-705.955943
+3.1	110.910202	157.962946	168.176028	124.236667	135.008923	135.016148
-3.15	-430.758898	-799.590997	-866.129332	-516.321922	-631.829401	-666.736168
+3.15	205.086775	245.090372	238.765182	215.011970	237.589167	250.004625
-3.2	-405.420140	-752.556233	-815.180548	-485.950044	-594.662966	-627.516394
+3.2	320.674392	425.529889	429.314638	321.836129	387.659078	388.984034
-3.25	-380.081381	-705.521469	-764.231764	-455.578165	-557.496530	-588.296619
+3.25	421.868448	593.141888	626.344384	442.192107	531.674164	542.851736
-3.3	-354.742622	-658.486706	-713.282980	-425.206287	-520.330095	-549.076845
+3.3	512.131267	734.284053	788.643640	542.040339	649.975631	675.616305
-3.35	-329.403864	-611.451942	-662.334196	-394.834409	-483.163659	-509.857070
+3.35	585.207022	854.426378	924.833785	614.623719	734.960178	773.871538
-3.4	-304.065105	-564.417178	-611.385412	-364.462531	-445.997224	-470.637296
+3.4	649.219258	948.324782	1021.624787	672.144831	795.277209	839.694605
-3.45	-278.726346	-517.382414	-560.436628	-334.090653	-408.830788	-431.417521
+3.45	690.191895	1022.750188	1081.653093	699.753788	828.626074	874.889593
-3.5	-253.387587	-470.347651	-509.487844	-303.718775	-371.664353	-392.197747
+3.5	714.796660	1058.028324	1141.085022	700.485121	840.319442	882.099458
-3.55	-228.048829	-423.312887	-458.539060	-273.346897	-334.497917	-352.977972
+3.55	721.945313	1083.264718	1151.287811	732.659717	864.390206	918.207946
-3.6	-202.710070	-376.278123	-407.590276	-242.975019	-297.331482	-313.758198

+3.6	**728.532687**	**1075.457542**	**1157.785603**	**750.663809**	**889.248520**	**934.691435**
-3.65	**-177.371311**	**-329.243359**	**-356.641492**	**-212.603141**	**-260.165046**	**-274.538423**
+3.65	**709.282450**	**1039.440123**	**1131.529238**	**740.371949**	**882.237114**	**930.037432**
-3.7	**-152.032552**	**-282.208596**	**-305.692708**	**-182.231262**	**-222.998611**	**-235.318649**
+3.7	**673.679353**	**987.422090**	**1060.357155**	**709.816918**	**855.146960**	**892.782539**
-3.75	**-126.693794**	**-235.173832**	**-254.743923**	**-151.859384**	**-185.832175**	**-196.098874**
+3.75	**622.992591**	**905.228485**	**969.260635**	**655.434830**	**795.924915**	**815.647459**
-3.8	**-101.355035**	**-188.139068**	**-203.795139**	**-121.487506**	**-148.665740**	**-156.879100**
+3.8	**552.138277**	**809.532959**	**834.351200**	**573.407075**	**703.393914**	**716.007987**
-3.85	**-76.016276**	**-141.104304**	**-152.846355**	**-91.115628**	**-111.499304**	**-117.659325**
+3.85	**452.212086**	**664.687233**	**674.360320**	**469.001591**	**573.513849**	**584.103085**
-3.9	**-50.677517**	**-94.069541**	**-101.897571**	**-60.743750**	**-74.332869**	**-78.439551**
+3.9	**329.850194**	**484.163330**	**486.512893**	**347.534892**	**423.565578**	**431.920014**
-3.95	**-25.338759**	**-47.034777**	**-50.948787**	**-30.371872**	**-37.166433**	**-39.219776**
+3.95	**177.670777**	**267.067787**	**269.391346**	**190.115441**	**231.520725**	**236.922752**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.21799978	-20.659377	-23.018822	-14.17337237	-15.21938842	-14.33881991	-17.3106076	-16.35326334	-17.29135363	-7.344121483
End Shear	130.2023231	148.470144	162.450917	114.4160003	121.539428	113.5664899	134.1249504	114.6250505	120.9872883	59.22343355
-0.05	-18.21799978	-20.762414	-26.635253	-14.17337237	-15.21938842	-14.33881991	-17.3106076	-16.35326334	-17.29135363	-7.344121483
+0.05	121.1946107	137.047061	149.961194	106.3205757	112.8341638	105.3783492	124.2291006	104.778687	110.5709042	54.97852424
-0.1	-18.21799978	-21.174429	-31.698662	-14.17337237	-15.21938842	-14.33881991	-17.3106076	-16.35326334	-17.29135363	-7.344121483
+0.1	110.9866711	124.878211	136.060608	97.67251655	103.5410813	96.6279246	113.6673359	94.27265397	99.45840557	50.37071141
-0.15	-18.21799978	-24.541042	-35.666456	-14.17337237	-15.21938842	-14.33881991	-17.3106076	-16.35326334	-17.29135363	-7.751044213
+0.15	103.4147141	115.996499	125.919819	91.24582901	96.63952363	90.13210612	105.8363601	86.56439996	91.30643742	46.95335692
-0.2	-18.21799978	-33.568524	-41.167504	-20.15032165	-20.15032165	-18.94503873	-20.15546455	-16.35326334	-17.29135363	-10.81861162
+0.2	93.4634364	104.504573	112.810035	82.78352779	87.5580383	81.58824413	95.54933623	76.55104593	80.71842637	42.46310715
-0.25	-25.84020384	-40.490230	-48.963625	-26.11925914	-26.45138611	-24.33421728	-26.14937559	-19.62197058	-20.68887782	-13.09565643
+0.25	86.13075346	96.164026	103.307224	76.53549606	80.85754163	75.28729228	87.97283342	69.26376223	73.01431211	39.15522218
-0.3	-36.06829278	-49.891696	-59.529633	-34.69388342	-35.70012397	-32.64505988	-36.06107414	-25.81715739	-27.28110159	-16.15266224
+0.3	76.56086469	85.436553	91.106353	68.3638491	72.10061892	67.05650574	78.08965683	59.88032365	63.09609787	34.83932358
-0.35	-43.66036243	-57.051863	-67.559730	-41.04716875	-42.55735063	-39.12037027	-43.94040214	-30.40545684	-32.16395028	-19.58202746
+0.35	69.56099694	77.700336	82.327894	62.37313845	65.6859002	61.03030243	70.86445441	53.3931196	56.24064554	31.68350203
-0.4	-53.77095546	-66.713530	-78.373101	-49.38717001	-51.56496791	-47.63005738	-54.307978	-36.42585105	-38.57150287	-24.09230431
+0.4	60.49722248	67.818238	71.148140	54.59702875	57.3664909	53.21910702	61.51423448	44.57737575	46.92743936	27.59875211
-0.45	-61.96851406	-74.024363	-87.420209	-55.5251525	-58.19899221	-53.90025498	-61.95695564	-40.85459873	-43.2855744	-27.41821249
+0.45	54.11792492	60.744577	63.175945	48.94231275	51.32227515	47.54754133	55.01473895	38.88565985	40.93227352	24.63759173
-0.5	-72.8864344	-83.825850	-99.520505	-63.52563409	-66.85252309	-62.0831855	-71.95282406	-49.59934358	-52.20983534	-31.76214306
+0.5	45.67005357	51.782188	53.123564	41.8887174	43.7903247	40.48455963	46.31355949	31.58730795	33.24979784	20.84078653
-0.55	-80.8983494	-91.194580	-108.596407	-69.36964294	-73.17862337	-68.06837172	-79.27460439	-56.76520935	-59.75285195	-34.94199259
+0.55	39.60510816	45.424353	46.035101	36.64052169	38.19240753	35.23899918	40.07080621	27.08898419	28.6779535	18.11688289
-0.6	-91.30875818	-101.008915	-120.657496	-76.92570697	-81.36510077	-75.81804041	-88.76966892	-66.41220464	-69.9240003	-39.06278262
+0.6	31.91255297	37.646238	37.273008	29.95838977	31.07402204	28.57423503	32.15848765	22.21974942	23.50652302	14.66481753
-0.65	-98.88741249	-108.337824	-129.644734	-82.39706905	-87.29855178	-81.43833262	-95.66742504	-74.184577	-78.15870574	-42.05397612
+0.65	26.46099639	32.044236	31.490636	25.20211624	26.01453016	23.66835882	26.38251076	18.75048605	19.82275157	12.22076451
-0.7	-108.650005	-118.031419	-141.420678	-89.40383316	-94.90502595	-88.64821906	-104.5325699	-84.2956507	-88.87280849	-45.89482663
+0.7	19.64882441	25.105882	24.381243	19.04943914	19.48078417	17.73698474	19.35294549	14.38821747	15.1919252	9.264548402
-0.75	-115.6901682	-125.217859	-149.930368	-94.42388025	-100.361108	-93.82373206	-110.9094709	-91.66536779	-96.68329374	-48.65477121
+0.75	14.98320678	20.310084	19.512797	14.87472665	15.05640638	13.71348718	14.80964065	11.32763372	11.9438781	7.627285061
-0.8	-124.6646027	-134.650526	-160.820934	-100.7764373	-107.2746018	-100.3873211	-119.0155867	-101.1709227	-106.7590864	-52.158894
+0.8	9.442439246	14.319794	13.908788	10.17314986	10.17314986	9.270770828	9.790308526	7.722552815	8.129002963	5.580372031
-0.85	-131.0610432	-141.586880	-168.638241	-105.2664982	-112.1685922	-105.0381678	-124.7747998	-108.0350418	-114.0363532	-54.64499231
+0.85	7.040933551	10.379546	11.405227	7.117625494	7.117625494	6.210024888	6.42978001	5.474226029	5.762343189	4.153921656
-0.9	-139.1070123	-150.611843	-178.580066	-110.8599665	-118.2761559	-110.848944	-131.9927766	-116.7978393	-123.3285244	-57.75558922
+0.9	4.098719818	5.707233	8.447130	3.52980775	3.52980775	3.036914104	3.65977329	3.259130738	3.443404792	2.406727151
-0.95	-144.7544755	-157.185548	-185.665581	-114.7413664	-122.5233278	-114.8952437	-137.0374772	-123.0534216	-129.9635787	-59.92524482
+0.95	3.796867591	4.181211	6.514602	3.006919363	3.224634882	3.036914104	3.65977329	3.259130738	3.443404792	1.529169087
-1	-151.7316578	-165.649425	-194.603143	-119.4708475	-127.7119941	-119.8466878	-143.2382007	-130.9362217	-138.3268155	-62.58552133
+1	3.80E+00	4.119229	4.570579	3.01E+00	3.22E+00	3.04E+00	3.66E+00	3.26E+00	3.44E+00	1.53E+00
(Span 2) -2	-1.35E+01	-14.687627	-16.296972	-1.07E+01	-1.15E+01	-1.08E+01	-1.30E+01	-1.16E+01	-1.23E+01	-5.45E+00
+2	1.41E+02	169.359972	200.452108	119.6899688	128.0403184	120.2186929	143.8888398	134.1452217	141.7658252	62.82006769
-2.05	-1.35E+01	-14.776541	-18.560580	-1.07E+01	-1.15E+01	-1.08E+01	-1.30E+01	-1.16E+01	-1.23E+01	-5.45E+00
+2.05	1.34E+02	160.272580	183.987394	114.868537	122.7537003	115.1755008	137.5806055	126.4115668	133.5651236	60.12430527
-2.1	-13.53820699	-15.044635	-21.338663	-10.72154759	-11.49783916	-10.82849776	-13.04938034	-11.62083862	-12.27789084	-5.45244387
+2.1	127.324743	150.792500	173.504911	109.4788679	116.8674704	109.574478	130.6222322	118.2014717	124.8629758	57.14035855
-2.15	-13.53820699	-16.040871	-24.614725	-10.72154759	-11.49783916	-10.82849776	-13.04938034	-11.62083862	-12.27789084	-5.45244387
+2.15	119.6236026	141.011496	163.352328	103.5929871	110.4591946	103.4887755	123.1023864	109.609144	115.7591309	53.90722644
-2.2	-13.80532974	-21.926102	-30.292940	-13.77572718	-13.96655335	-12.66709994	-13.56829482	-11.62083862	-12.27789084	-7.051457778
+2.2	111.95598	131.018407	152.685301	97.28290736	103.6064249	96.99151573	115.1097026	100.7288327	106.353382	50.46390329

-2.25	-20.28534181	-28.498428	-37.005009	-19.47829473	-20.0149941	-18.28725996	-20.16916317	-14.51715279	-15.33745004	-9.529023381
+2.25	103.9067321	120.899195	141.549594	90.62065071	96.38672356	90.15582118	106.7328136	91.65476446	96.74549862	46.84938836
-2.3	-27.34047789	-35.707209	-44.468961	-25.63288489	-26.56256411	-24.41226019	-27.42008347	-19.00493541	-20.10277535	-12.68412813
+2.3	95.5617156	110.736862	129.988308	83.67823264	88.87764641	83.05483969	98.06038319	82.17925797	86.71745251	43.10266696
-2.35	-35.32234283	-43.498857	-53.035904	-32.16748162	-33.53170773	-30.94235103	-35.18804162	-23.76201926	-25.15595664	-16.06230876
+2.35	87.00681061	100.611545	118.162675	76.52767121	81.15675013	75.76168396	89.18103304	72.79425774	76.78494354	39.26273496
-2.4	-43.94942646	-51.816899	-62.419783	-39.01006888	-40.84486952	-37.80437648	-43.38436303	-29.90852897	-31.48266207	-19.62456527
+2.4	78.32787856	90.600433	106.493474	69.2409855	73.30159459	68.34951031	80.18343812	63.71223866	67.17786911	35.36859731
-2.45	-52.98456397	-60.601948	-72.431757	-46.08862554	-48.42448804	-44.92521771	-51.92041988	-37.16687664	-39.12302805	-23.33191869
+2.45	69.61080587	80.777807	95.095750	61.48140426	64.95012759	60.47728309	70.65574147	54.81861952	57.77329682	31.45923491
-2.5	-63.38501463	-70.834924	-84.191658	-54.14285339	-57.06447057	-53.0518726	-61.69557543	-46.209365	-48.67283296	-27.57392658
+2.5	59.98485423	69.790049	82.859972	53.32948207	56.19123273	52.23009833	60.70558627	45.27242893	47.68266397	27.1450727
-2.55	-72.96523224	-80.779427	-95.253513	-61.48306578	-64.9519146	-60.47894095	-70.65774516	-54.82037545	-57.77515328	-31.45952086
+2.55	51.46922358	60.600342	72.329411	46.08700359	48.42274985	44.92360872	51.91848818	37.16536763	39.12143961	23.33164077
-2.6	-82.65376003	-90.602041	-106.676401	-69.24263159	-73.30336744	-68.31233836	-80.14662044	-63.7140432	-67.17977766	-35.36888277
+2.6	42.97092441	51.815339	62.343367	39.00849397	40.84318472	37.80281902	43.38249957	29.90710641	31.48116464	19.6243054
-2.65	-92.35426763	-100.613120	-118.368976	-76.5292951	-81.15850218	-75.76333703	-89.18304217	-72.79612087	-76.78691469	-39.26302716
+2.65	35.01297158	43.497348	52.984226	32.16597043	33.53009438	30.94083692	35.1862364	23.76104394	25.15492045	16.06204462
-2.7	-101.9704419	-110.738387	-130.215481	-83.67981562	-88.87935684	-83.05644513	-98.0623407	-82.11403666	-86.64880923	-43.10294501
+2.7	27.45813225	35.705744	44.442071	25.63145039	26.56103598	24.41084058	27.4183987	19.004008	20.10179037	12.68388444
-2.75	-111.9233022	-120.900647	-141.794377	-90.62218124	-96.38838068	-90.15739956	-106.7347441	-91.65662786	-96.74747128	-46.84965443
+2.75	20.39229287	28.497053	36.996874	19.4769537	20.0135694	18.28593862	20.16760318	14.51627685	15.33652011	9.528803208
-2.8	-121.0636342	-131.019782	-152.943787	-97.28436832	-103.6080096	-96.99301691	-115.1115453	-100.7306666	-106.3553241	-50.46416985
+2.8	13.90132267	21.924825	30.253400	13.77449823	13.96525228	12.66604773	13.56713623	11.62084416	12.27788746	7.064576757
-2.85	-129.8252161	-141.012785	-163.619869	-103.5943608	-110.4606881	-103.4901928	-123.1041333	-109.6109027	-115.7609939	-53.90747322
+2.85	13.63404789	16.039713	24.601419	10.72154742	11.49784248	10.82849973	13.04937628	11.62084416	12.27788746	5.452444529
-2.9	-138.1116789	-150.793679	-173.776157	-109.4801402	-116.8688575	-109.575795	-130.623863	-118.2031632	-124.8647684	-57.140583
+2.9	13.63404789	15.044632	21.329306	10.72154742	11.49784248	10.82849973	13.04937628	11.62084416	12.27788746	5.452444529
-2.95	-145.8267392	-160.273631	-183.987393	-114.8696885	-122.7549602	-115.1766928	-137.582091	-126.4131845	-133.5668386	-60.12451497
+2.95	13.63404789	14.776538	18.552390	10.72154742	11.49784248	10.82849973	13.04937628	11.62084416	12.27788746	5.452444529
-3	-153.6116363	-170.342248	-202.275548	-120.1884858	-128.5884455	-120.7424918	-144.5470979	-134.972513	-142.6433173	-63.10029558
+3	13.63404789	14.687624	16.297156	10.72154742	11.49784248	10.82849973	13.04937628	11.62084416	12.27788746	5.452444529
(Span 3) -4	-3.82374687	-4.119228	-4.570631	-3.006919317	-3.224635816	-3.036914657	-3.659772153	-3.259132291	-3.443403844	-1.529169272
+4	139.6786688	164.610776	193.225690	118.9073909	127.0928869	119.2553181	142.4957053	129.9790582	137.3111632	62.26786273
-3.05	-3.82374687	-4.165435	-6.205122	-3.006919317	-3.224635816	-3.036914657	-3.659772153	-3.259132291	-3.443403844	-1.529169272
+3.05	135.0075065	158.262047	186.514542	115.3597187	123.2007839	115.541156	137.8444625	124.0662543	131.0379907	60.27237797
-3.1	-4.449653244	-6.255626	-8.770196	-3.956672578	-3.956672578	-3.168138895	-3.659772153	-3.259132291	-3.443403844	-2.603578443
+3.1	128.2023691	149.497922	177.061657	110.1849965	117.5384035	110.1465995	131.1188167	115.7262108	122.192028	57.37982068
-3.15	-6.656593709	-9.760137	-11.007574	-6.647976582	-6.647976582	-5.72445281	-5.897150841	-5.116292384	-5.38557093	-3.913195655
+3.15	122.6854628	142.728412	169.603732	105.9893401	112.9571342	105.7879501	125.7046495	109.1534151	115.2221612	55.04660443
-3.2	-9.80210613	-15.013665	-14.336996	-10.68805727	-10.68805727	-9.805036754	-10.37739989	-8.113763264	-8.540803436	-5.813723361
+3.2	114.7463733	133.480736	159.183098	100.0031166	106.4323802	99.58736262	118.0263582	100.0019798	105.5199052	51.73212803
-3.25	-14.11547258	-19.546763	-18.706608	-14.20607914	-14.34857154	-13.13754377	-14.17438823	-10.78655553	-11.3701795	-7.348237629
+3.25	108.9178706	126.405487	151.019288	95.23815146	101.2466717	94.66411492	111.9461002	92.87212845	97.96233549	49.10377251
-3.3	-20.43356661	-25.940973	-25.177849	-19.77185026	-20.24719192	-18.45258482	-20.1956565	-14.91725536	-15.75345361	-9.538235338
+3.3	100.7610802	116.824336	139.682400	88.54526762	93.97244898	87.76396291	103.4442139	83.04657428	87.54913414	45.42416832
-3.35	-25.53752448	-31.145050	-30.493902	-24.4333909	-25.19745233	-22.88814719	-25.42886234	-18.18934886	-19.22699057	-11.82640127
+3.35	94.37664916	109.553436	130.853307	83.28966351	88.26702249	82.35600373	96.79469796	75.46260486	79.51285413	42.5432663
-3.4	-32.79729645	-38.614146	-38.179639	-30.77458541	-31.94290064963	-29.38736514	-33.1225216353324	-22.81465446	-24.1382829053346	-15.08481802
+3.4	85.54098804	99.782272	118.886294	75.99506946	80.35635462	74.86285696	87.59839199	65.10018538	68.53403465	38.55533331
-3.45	-38.99111873	-44.397530	-44.770681	-35.78672602	-37.28227473	-34.38647118	-39.05740962	-26.46696473	-28.01726465	-17.67413051
+3.45	78.69417493	92.420880	109.852940	70.32749475	74.21593047	69.05007012	80.47644741	57.94623634	60.99603825	35.46448114
-3.5	-47.73135298	-52.874324	-54.191752	-42.78377521	-44.74557855	-41.38001084	-47.38042844	-32.47533615	-34.18456436	-21.30568121
+3.5	69.30436539	82.596605	97.772538	62.53605507	65.7817482	61.07038465	70.71475909	48.39242166	50.93939122	31.22501071
-3.55	-54.60992211	-59.596488	-61.708153	-48.01769395	-50.3344561	-46.85216557	-53.90697989	-37.94969969	-39.9470523	-24.15355975

+3.55	62.08871751	75.244887	88.713066	56.53518379	59.2910519317805	54.9326602856774	63.21722206	41.58334167	44.06131156	27.96678832
-3.6	-64.17576187	-69.027659	-72.304816	-55.5567542	-58.39280806	-54.18243669	-62.66637747	-45.64272031	-48.04496875	-28.10144995
+3.6	52.26949072	65.497785	77.016351	48.351763	50.44628631	46.57301263	53.01933523	35.67876484	37.77632991	23.53257686
-3.65	-71.62091448	-76.439621	-80.665119	-61.38934869	-64.63291797	-60.04136423	-69.67968848	-52.29048641	-55.07555478	-31.16527115
+3.65	44.77859249	58.250976	68.750029	42.09626384	43.69003797	40.19023727	45.24303786	31.16310575	32.97027894	20.14961477
-3.7	-81.87204362	-86.754144	-92.335138	-69.37638456	-73.1852552	-68.07570775	-79.31257542	-61.03319586	-64.3145448	-35.37270626
+3.7	34.65463744	48.704724	58.067132	33.62581502	34.54771564	31.5570777	34.73798325	25.04580015	26.4602685	15.71878399
-3.75	-89.77854358	-94.800159	-101.460509	-75.50562594	-79.75349357	-74.24931795	-86.72559132	-68.07146243	-71.75393382	-38.60988609
+3.75	26.98199585	41.653110	50.160144	27.19435847	27.61063743	25.29092269	27.21364629	20.39905472	21.51572278	13.47252557
-3.8	-100.5746393	-105.920405	-114.095705	-83.83577635	-88.68688906	-82.65001073	-96.82689946	-77.78710722	-82.02530991	-43.02006953
+3.8	18.31208781	32.424790	40.467627	19.31591675	19.31591675	18.04136031	19.15057955	16.35326543	17.29135817	10.43668302
-3.85	-108.8372047	-114.539778	-123.902751	-90.18299666	-95.49853667	-89.05841838	-104.5427895	-85.2977976	-89.96703303	-46.38801405
+3.85	18.31208781	25.653703	36.275516	14.3004997	15.2193923	14.33882248	17.31061609	16.35326543	17.29135817	8.135841078
-3.9	-120.0379938	-126.381520	-137.389010	-98.75130382	-104.6999589	-97.7188815	-114.9833326	-95.57471623	-100.8355266	-50.94415191
+3.9	18.31208781	21.105794	31.004910	14.17337312	15.2193923	14.33882248	17.31061609	16.35326543	17.29135817	7.34412247
-3.95	-128.5514244	-135.508603	-147.789912	-105.2378303	-111.6702914	-104.2821977	-122.905262	-103.4548958	-109.1705942	-54.40026392
+3.95	18.31208781	20.796768	27.224532	14.17337312	15.2193923	14.33882248	17.31061609	16.35326543	17.29135817	7.34412247
-5	-140.0165003	-147.981014	-162.007134	-113.9394326	-121.0268125	-113.0959832	-133.5560125	-114.1558406	-120.4908841	-59.04556111
+5	18.31208781	20.659385	23.018822	14.17337312	15.2193923	14.33882248	17.31061609	16.35326543	17.29135817	7.34412247

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.70337784	-14.07004842	-14.04707893	-12.41622826	-8.628452566	-11.68877519	-13.28318548	-14.8342302	-16.40879755
End Shear	84.64541823	100.7300943	93.5986121	79.56533521	68.66773694	92.45033336	103.0889459	109.7327803	115.9748241
-0.05	-10.70337784	-14.07004842	-14.04707893	-13.43113859	-8.628452566	-11.68877519	-13.28318548	-14.8342302	-16.40879755
+0.05	78.47232954	92.22466639	84.8605695	72.18406575	63.70201471	85.75857396	95.45721466	101.2499011	106.6169144
-0.1	-10.70337784	-14.07004842	-14.04707893	-15.95249869	-8.628452566	-11.68877519	-13.28318548	-14.8342302	-16.40879755
+0.1	71.87764487	83.14112132	75.55962428	64.14729687	58.40679194	78.60915301	87.29937834	92.18756264	96.62673163
-0.15	-10.70337784	-14.07004842	-14.04707893	-18.09658873	-8.628452566	-11.68877519	-13.28318548	-14.8342302	-16.40879755
+0.15	66.98606065	76.47066043	68.78762429	58.3253602	54.47641157	73.30313388	81.25332455	85.48705082	89.25819861
-0.2	-14.18635749	-14.18899704	-14.04707893	-20.83392445	-10.35498818	-15.31650614	-15.85038115	-15.83811319	-16.40879755
+0.2	60.55766058	67.79727551	60.06377261	50.86190112	49.30753084	66.32599491	73.31456238	76.71073733	79.63176363
-0.25	-17.68714387	-17.69032305	-14.07315915	-22.8059406	-14.31331081	-19.50423178	-20.84745931	-20.8354243	-20.82375428
+0.25	55.82105875	61.47875198	54.04752125	45.70103295	45.49611315	61.18186932	67.47034129	70.26681324	72.58295653
-0.3	-23.2794743	-22.30395997	-18.26418495	-25.44373473	-19.5995019	-26.22764939	-27.44721324	-27.43552384	-27.42419492
+0.3	49.63964441	53.33371195	46.62630653	39.35460404	40.51811696	54.46415928	59.85071992	61.88870833	63.44537574
-0.35	-28.18499935	-25.71293727	-22.59533317	-27.68460445	-23.52084451	-31.52673452	-33.12725	-33.08012857	-33.06643289
+0.35	45.11853282	47.695936	41.28460678	34.8613014	36.87406825	49.54728519	54.28338001	55.78551669	56.81012714
-0.4	-34.63661978	-31.16285486	-28.29943261	-33.0812295	-28.67466244	-38.49231607	-41.15937741	-41.04531238	-41.03207409
+0.4	39.26479757	40.01389142	34.49008012	29.22829434	32.15151273	43.17615305	47.08297791	48.15823111	48.54636715
-0.45	-39.39411033	-36.43245716	-32.51174906	-37.3008529	-32.47252628	-43.62603865	-47.0876053	-47.15989219	-47.14490296
+0.45	35.19362653	34.89739149	29.76300047	25.30522386	28.72324622	38.55189417	42.08109695	42.47151808	42.46835354
-0.5	-45.60800518	-44.72709955	-38.02186941	-42.662116	-37.42943064	-50.32755015	-54.83787119	-55.96802044	-56.18963832
+0.5	29.7402096	28.54217995	24.43255524	20.85533868	24.45488671	32.79545986	35.38975494	35.27537759	35.27262261
-0.55	-50.15694187	-50.84178504	-43.25172258	-47.34995849	-41.0553948	-55.23053889	-60.51717514	-62.43977283	-63.50495867
+0.55	25.8250856	24.0436498	21.06901835	18.05270303	21.28564255	28.52216402	30.59300422	30.50892206	30.50614324
-0.6	-56.05241378	-59.07495036	-51.3009512	-54.49991434	-45.75083219	-61.58083954	-67.88551043	-70.86026987	-73.04864304
+0.6	20.8592955	18.96798651	16.81634602	14.64341216	17.26012787	23.09551489	24.37417201	24.45615409	24.46936719
-0.65	-60.33227783	-65.72646631	-57.53722295	-60.10460761	-49.15649187	-66.18773582	-73.24084067	-76.99923066	-80.02650155
+0.65	17.19802306	15.99840434	13.81358091	12.32105471	14.40261935	19.09708503	20.04987521	20.02888143	20.02611008
-0.7	-65.8286338	-74.37099894	-65.65706531	-67.25096886	-53.52591605	-72.09967264	-80.12716835	-84.9199031	-89.05767896
+0.7	12.81149965	12.57589639	10.07747286	9.280169183	10.71813945	14.2802319	14.97942694	14.97698367	15.09253209
-0.75	-69.77889629	-80.66516526	-71.58095944	-72.36573859	-56.66286381	-76.34511595	-85.08347227	-90.64193107	-95.6042397
+0.75	10.1666925	10.15959457	8.078567207	7.733270429	8.227693187	11.03082649	11.72835834	11.72596593	11.83447269
-0.8	-74.79544593	-88.77411602	-80.00073039	-79.40912544	-60.64172105	-81.73154029	-91.38773785	-97.95061031	-103.997801
+0.8	7.160497584	7.153522607	5.687422451	5.873945929	5.374174572	7.542455701	7.715111056	7.712819485	7.710600661
-0.85	-78.35558882	-94.62228045	-86.74399595	-84.94398003	-63.46154055	-85.55016833	-95.86996329	-103.1715681	-110.0192351
+0.85	5.014510599	5.070862006	4.030834631	4.69735277	4.00914882	5.135680326	5.139859588	5.13794018	5.136079469
-0.9	-82.81162785	-102.0774627	-95.42529614	-91.99199249	-66.98529106	-90.32393099	-101.4920901	-109.7560618	-117.6500704
+0.9	2.488203732	2.801603534	2.6452806	3.270855323	2.298551574	2.471464711	2.795231066	3.116146648	3.43378666
-0.95	-85.92113064	-107.390977	-101.6809047	-97.0259284	-69.43956854	-93.65038684	-105.4251855	-114.391811	-123.0525524
+0.95	2.251496525	2.801603534	2.6452806	2.588330242	1.821760272	2.471464711	2.795231066	3.116146648	3.43378666
-1	-89.73597252	-114.0742028	-109.6473979	-103.3966308	-72.44366194	-97.72433588	-110.2651045	-120.1399343	-129.795546
+1	2.25E+00	2.80E+00	2.65E+00	2.31E+00	1.82E+00	2.47E+00	2.80E+00	3.12E+00	3.43E+00
(Span 2) -2	-8.03E+00	-9.99E+00	-9.43E+00	-8.23E+00	-6.50E+00	-8.81E+00	-9.97E+00	-1.11E+01	-1.22E+01
+2	9.01E+01	116.7014262	114.8951363	104.7463675	72.67901338	98.06155466	110.8558273	121.1669138	131.3903703
-2.05	-8.03E+00	-9.99E+00	-9.43E+00	-8.56E+00	-6.50E+00	-8.81E+00	-9.97E+00	-1.11E+01	-1.22E+01
+2.05	86.25354616	110.1378837	107.3381301	98.38670353	69.62307536	93.91567633	105.9447757	115.3509965	124.6009064
-2.1	-8.027992937	-9.989468217	-9.432079338	-9.330967924	-6.495714475	-8.812317043	-9.966746614	-11.11101105	-12.24359654
+2.1	81.96951471	103.1489577	99.45373472	91.66887988	66.23030072	89.3168897	100.5364266	109.0208139	117.2858236
-2.15	-8.027992937	-9.989468217	-9.432079338	-11.67414669	-6.495714475	-8.812317043	-9.966746614	-11.11101105	-12.24359654
+2.15	77.32876276	95.81577832	91.33071201	84.97922372	62.54500603	84.3250464	94.69949111	102.25339	109.5310061
-2.2	-9.297082625	-9.989468217	-9.432079338	-14.12594408	-7.638202037	-10.18125828	-10.85035427	-11.11101105	-12.24359654
+2.2	72.38669316	88.2195098	83.05772471	78.17441755	58.61151791	78.9999734	88.50267209	95.12575094	101.4223436
-2.25	-13.25157303	-12.59269715	-10.52274282	-16.42712033	-11.0416414	-14.74129024	-15.34410532	-15.33624719	-15.33062645

+2.25	67.19871113	80.44129867	74.32228026	71.20256673	54.47414881	73.40149839	82.01467877	87.71492021	93.04575661
-2.3	-17.79463669	-16.2573653	-14.40063459	-18.60279874	-14.73608702	-19.72271461	-20.89226338	-20.8523863	-20.84646485
+2.3	61.82021755	72.28262578	65.95812638	64.01348988	50.1772173	67.58946929	75.30421089	80.09791901	84.48711402
-2.35	-22.65506085	-21.16961598	-18.57411476	-21.34296306	-18.67720954	-25.03907581	-26.84776355	-26.770936	-26.76481828
+2.35	56.30662025	64.22601223	57.77684623	56.87751257	45.76503837	61.62370606	68.43997896	72.35178732	75.75843775
-2.4	-27.77744239	-27.09919359	-23.12145098	-25.14068379	-22.82069775	-30.63051905	-33.14189195	-33.20620225	-33.19917567
+2.4	50.67913913	56.39486217	49.80539133	49.9456882	41.28193301	55.56406325	61.26458571	64.3294034	66.8288153
-2.45	-33.10637764	-33.4094756	-28.72104219	-30.25086578	-27.12223491	-36.43721972	-39.70594087	-40.39242832	-40.63886932
+2.45	44.78409541	48.71087376	42.71552293	43.40239206	36.52181772	49.13208546	54.13908296	56.35078443	58.10500983
-2.5	-39.20228596	-41.25669878	-35.91048264	-36.8628849	-32.03318068	-43.06880234	-47.23233576	-48.68905132	-49.69064172
+2.5	38.58524639	40.44443554	35.17103138	36.18182822	31.5364917	42.39800026	46.46971633	47.84584868	48.76776567
-2.55	-44.78533274	-48.71239236	-42.71686532	-43.4032614	-36.52283547	-49.13343956	-54.14059235	-56.35243856	-58.10681688
+2.55	33.10518129	33.40816578	28.71981968	30.25012293	27.12123992	36.43590718	39.7044776	40.39084615	40.63720443
-2.6	-50.61305179	-56.39641973	-49.80692272	-49.94662865	-41.28295198	-55.53241248	-61.2015807	-64.30096598	-66.80122423
+2.6	27.77629617	27.09795464	23.12043804	25.1401738	22.81974249	30.62924947	33.14049206	33.20469924	33.1976846
-2.65	-56.30784105	-64.22761724	-57.77841248	-56.87841298	-45.76603723	-61.62505751	-68.44150869	-72.35345517	-75.731075
+2.65	22.65395806	21.16845373	18.5732895	21.34257503	18.67628858	25.03784266	26.84642056	26.76962228	26.76353561
-2.7	-61.82142289	-72.22208544	-65.95972408	-64.01445842	-50.17820298	-67.59078283	-75.30570157	-80.09959244	-84.48894518
+2.7	17.79360567	16.25645234	14.39984768	18.62757271	14.73522357	19.7215595	20.89101174	20.85116154	20.84526925
-2.75	-67.19987199	-80.44289756	-74.27692782	-71.20347229	-54.47511225	-73.40279048	-82.01613952	-87.71654531	-93.0475449
+2.75	13.25061086	12.59201635	10.52202491	16.42682677	11.04083874	14.74021623	15.3429317	15.33510691	15.32950413
-2.8	-72.38781564	-88.22108047	-83.03546752	-78.17527912	-58.61243352	-79.00120328	-88.5040677	-95.12733726	-101.424084
+2.8	9.296391211	9.989465024	9.432076586	14.1256202	7.637465787	10.18043305	10.84942363	11.11101093	12.24359288
-2.85	-77.32981738	-95.81728105	-91.33230487	-84.90333684	-62.54587736	-84.32620836	-94.70082566	-102.2548955	-109.5326707
+2.85	8.027994956	9.989465024	9.432076586	11.67378045	6.495715623	8.812321794	9.966747556	11.11101093	12.24359288
-2.9	-81.97050516	-103.1503998	-99.45528754	-91.66972793	-66.23109987	-89.31797046	-100.5376652	-109.0222447	-117.2874301
+2.9	8.027994956	9.989465024	9.432076586	9.330672381	6.495715623	8.812321794	9.966747556	11.11101093	12.24359288
-2.95	-86.25444528	-110.1392589	-107.3396308	-98.38749565	-69.62380808	-93.91665536	-105.945921	-115.3523143	-124.6024114
+2.95	8.027994956	9.989465024	9.432076586	8.556970659	6.495715623	8.812321794	9.966747556	11.11101093	12.24359288
-3	-90.52861892	-117.4021957	-115.7121714	-105.4296661	-72.9964886	-98.49251944	-111.3688187	-121.7792214	-132.1099258
+3	8.027994956	9.989465024	9.432076586	8.232620645	6.495715623	8.812321794	9.966747556	11.11101093	12.24359288
(Span 3) -4	-2.251497091	-2.80E+00	-2.65E+00	-2.31E+00	-1.821760594	-2.471466043	-2.79523133	-3.116146615	-3.433785633
+4	89.27968462	113.2635392	108.6745214	102.6209682	72.08480637	97.23753388	109.6851835	119.4481957	128.9811084
-3.05	-2.251497091	-2.80E+00	-2.65E+00	-2.53E+00	-1.821760594	-2.471466043	-2.79523133	-3.116146615	-3.433785633
+3.05	86.41811505	108.2505126	102.6990181	97.84277305	69.83138467	94.18159865	106.0547112	115.136511	123.9231994
-3.1	-2.788771543	-2.805049816	-2.645279829	-3.441089239	-2.497944252	-2.692918061	-2.79523133	-3.116146615	-3.433785633
+3.1	82.2725107	101.1664557	94.35887817	91.13091478	66.5593224	89.7467415	100.8110685	108.9560862	116.7205151
-3.15	-4.683803915	-4.739302418	-3.767093153	-4.511141262	-3.791108794	-4.753531169	-4.757617768	-4.755707601	-4.753843741
+3.15	78.93004536	95.57446689	87.84727527	85.84476275	63.91617241	86.16595576	96.59396981	104.0171355	110.9967406
-3.2	-7.522965193	-7.515907024	-5.975658378	-6.097846005	-5.610978748	-7.962245201	-8.196836138	-8.194522449	-8.192267707
+3.2	74.1835828	87.77753552	78.85693886	78.4650042	60.15673811	81.0748954	90.6181707	97.05642591	102.9687926
-3.25	-9.777918147	-9.770758017	-7.769247575	-7.492502088	-7.829669684	-10.57888822	-11.20719971	-11.2048099	-11.2970777
+3.25	70.4207643	81.69523099	72.55152376	73.19679833	57.17224832	77.03462266	85.88945765	91.57434644	96.67301837
-3.3	-13.34162037	-12.99221061	-10.52786271	-9.629048951	-11.14995613	-14.86190365	-15.54156495	-15.53910661	-15.65576616
+3.3	65.15415241	73.30364083	64.65359238	66.37705407	52.98998442	71.37446706	79.28156714	83.94555918	87.94491614
-3.35	-16.63193665	-15.5593863	-13.33030535	-11.94706307	-13.94148567	-18.4687443	-19.35960283	-19.34252387	-19.33972691
+3.35	61.03148571	66.81966802	58.56318672	61.01723931	49.71259542	66.94006958	74.11631348	78.00449081	81.17091109
-3.4	-21.46454182	-19.5468042463451	-17.33364477	-15.04323344	-17.7511878	-23.7574017189216	-25.11376617	-25.19130882	-25.2044870798829
+3.4	55.32542369	57.95161873	50.24875614	53.54422191	45.17203754	60.79801292	66.97640268	69.81981085	71.86776353
-3.45	-25.18929516	-23.31870474	-20.52350241	-17.61234656	-20.7706521	-27.82782473	-29.81466806	-29.73540125	-29.73257824
+3.45	50.90342669	51.8490257	44.11747115	48.12239398	41.65014558	56.03484998	61.44965751	63.50388997	64.70942559
-3.5	-30.40905773	-29.3162153	-25.00786371	-21.33882617	-24.99597933	-33.5251103	-36.2098292	-36.10170416	-36.09845383
+3.5	44.83860738	43.69668721	37.33923915	42.00756125	36.81587264	49.49799227	53.87779532	54.87550111	54.95634422
-3.55	-34.49951643	-34.08316094	-29.06673267	-24.72466917	-28.30298651	-37.98503028	-41.22884336	-41.54525802	-41.54204286
+3.55	40.17780556	37.4752421005229	33.2063155121585	37.9866490636681	33.0978706572016	44.4714284953509	48.064613057635	48.2688691047044	48.25399251

-3.6	-39.98627864	-40.93222041	-35.31930395	-29.91414272	-32.73387442	-43.96174371	-47.96988317	-48.88520153	-49.59397865
+3.6	33.83492483	30.35636423	27.59029149	32.36032859	28.03441552	37.62696907	40.16086868	40.05520624	40.04194505
-3.65	-44.3769725	-46.7370686	-40.41574882	-34.13928087	-36.27612342	-48.74052753	-53.37068563	-54.78654341	-55.72586112
+3.65	28.99581394	26.27517654	23.31188969	28.12579198	24.16875274	32.40236615	34.13630194	34.08085119	34.06724165
-3.7	-50.40468744	-54.33502541	-47.53744052	-40.13099511	-41.13450297	-55.29587394	-60.7932691	-62.92354654	-64.57219798
+3.7	22.45559047	21.73018654	17.53742387	25.06756592	18.94066313	25.33740032	26.62534441	26.61363738	26.60228207
-3.75	-55.04113062	-60.44439615	-53.10389168	-44.89118571	-44.86830369	-60.33458249	-66.50847041	-69.20767411	-71.42601292
+3.75	18.26632148	18.26969281	14.5340934	23.12811633	14.97571036	20.24751395	21.67515453	21.66318614	21.65159811
-3.8	-61.35616435	-68.86846081	-61.13579074	-51.77630882	-49.94985403	-67.19294549	-74.30021569	-77.79896216	-80.82370774
+3.8	13.59894381	14.07005163	14.04707945	20.49839057	9.989679901	14.61416376	15.01284951	15.00057076	16.40880445
-3.85	-66.17783791	-75.37407947	-67.67931401	-57.37434837	-53.82681414	-72.42621818	-80.25476379	-84.38173467	-88.04415109
+3.85	10.70337995	14.07005163	14.04707945	18.44561987	8.628453985	11.68878003	13.28318669	14.83423037	16.40880445
-3.9	-72.69949588	-84.26737655	-76.70794933	-65.13642121	-59.06695035	-79.50039676	-88.3156033	-93.31508884	-97.86816719
+3.9	10.70337995	14.07005163	14.04707945	15.58644566	8.628453985	11.68878003	13.28318669	14.83423037	16.40880445
-3.95	-77.64587576	-91.08059786	-83.68427182	-71.16444179	-63.03867738	-84.86287009	-94.43444502	-100.1123668	-105.3614077
+3.95	10.70337995	14.07005163	14.04707945	13.65690132	8.628453985	11.68878003	13.28318669	14.83423037	16.40880445
-5	-84.29346194	-100.3249329	-93.22537173	-79.45193451	-68.37286908	-92.06577043	-102.6643091	-109.2756719	-115.4865605
+5	10.70337995	14.07005163	14.04707945	12.41622856	8.628453985	11.68878003	13.28318669	14.83423037	16.40880445

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-25.91601915	-28.17413366	-16.6559	-20.3207	-21.5323
End Shear	165.4180956	169.3203059	115.6839	140.438	144.9106
-0.05	-25.91601915	-28.17413366	-16.6559	-20.3207	-21.5323
+0.05	149.6700539	152.682774	105.4825	128.1282	131.7903
-0.1	-25.91601915	-28.17413366	-16.6559	-20.3207	-21.5323
+0.1	132.9260829	134.6088563	94.60939	114.9995	117.8084
-0.15	-25.91601915	-28.17413366	-16.6559	-20.3207	-21.5323
+0.15	120.7380088	121.5070541	86.65035	105.3833	107.5919
-0.2	-25.91601915	-28.17413366	-16.6559	-20.3207	-21.5323
+0.2	105.0411655	105.6664904	76.33722	92.91418	94.37911
-0.25	-25.91601915	-28.17413366	-21.087	-23.45	-23.4508
+0.25	93.72532925	94.7846921	68.8524	83.8577	84.80996
-0.3	-30.29946724	-29.42255345	-27.5844	-30.5451	-31.3328
+0.3	80.27455333	81.54526809	59.24397	72.22177	72.92718
-0.35	-36.13495723	-36.66533047	-32.3953	-35.7975	-37.4931
+0.35	70.53437377	72.50480785	52.62329	64.19653	64.39161
-0.4	-45.44710013	-47.38608946	-38.7058	-42.6858	-45.5878
+0.4	58.41203501	60.94599315	44.12079	53.61496	53.68892
-0.45	-53.85830096	-56.22056071	-43.3467	-48.4368	-51.5515
+0.45	50.46496144	52.6799728	38.21107	46.46041	46.08468
-0.5	-65.27672173	-68.76961345	-49.3909	-58.6153	-59.3333
+0.5	40.97514711	42.24262897	32.80604	37.44197	38.72055
-0.55	-74.55341052	-79.21183405	-54.844	-67.7767	-66.5327
+0.55	34.60176566	35.44400807	28.77949	31.86896	33.71598
-0.6	-87.99418905	-92.87367979	-64.8316	-79.7682	-79.75
+0.6	26.87629859	27.27687605	23.6456	25.87842	27.35525
-0.65	-99.63251829	-102.8924835	-72.4413	-88.9	-89.6426
+0.65	22.00773959	22.10134301	19.98551	21.86569	22.83682
-0.7	-114.8150029	-116.1327702	-83.1799	-101.78	-102.806
+0.7	16.59178192	15.78661664	15.38005	16.81394	17.17498
-0.75	-126.2494528	-127.2497898	-91.0236	-111.183	-113.119
+0.75	13.056166	11.88342862	12.14615	13.26455	13.20615
-0.8	-142.6405177	-144.0020763	-101.164	-123.333	-126.477
+0.8	8.685213546	7.851390373	8.198087	8.874005	8.872263
-0.85	-154.8604729	-157.6859471	-108.504	-132.123	-136.167
+0.85	5.679910999	5.335182491	5.811052	6.141142	5.851417
-0.9	-170.6045487	-175.6421475	-117.901	-143.369	-148.601
+0.9	4.975203928	5.335182491	3.252514	4.006327	4.191659
-0.95	-181.9593343	-188.64583	-124.63	-151.416	-157.527
+0.95	4.975203928	5.335182491	3.252514	4.006327	4.191659
-1	-196.4340384	-205.2984039	-133.139	-161.583	-168.847
+1	4.98E+00	5.34E+00	3.25E+00	4.01E+00	4.19E+00
(Span 2) -2	-1.77E+01	-1.90E+01	-1.16E+01	-1.43E+01	-1.49E+01
+2	205.5835975	217.1336078	137.243	166.2806	174.8115
-2.05	-1.77E+01	-1.90E+01	-1.16E+01	-1.43E+01	-1.49E+01
+2.05	191.7856295	201.4626245	128.9866	156.376	163.8781
-2.1	-17.73971317	-19.02326141	-11.5972	-14.2851	-14.9459
+2.1	177.4138973	185.2748626	120.2706	145.9067	152.3911
-2.15	-17.73971317	-19.02326141	-11.5972	-14.2851	-14.9459
+2.15	162.6274655	168.7478502	111.1945	134.9919	140.4799
-2.2	-17.73971317	-19.02326141	-11.5972	-14.2851	-14.9459
+2.2	147.5854488	152.058924	101.8576	123.7509	128.2736
-2.25	-17.73971317	-19.02326141	-15.4948	-17.0254	-17.502

+2.25	**132.0510812**	**135.3855735**	**92.35939**	**112.303**	**115.7474**
-2.3	**-23.02174418**	**-23.4419919**	**-20.2304**	**-22.2298**	**-23.3516**
+2.3	**116.5384486**	**118.9053053**	**82.27091**	**100.2979**	**102.805**
-2.35	**-30.50417143**	**-31.48212525**	**-25.2448**	**-28.1069**	**-29.5842**
+2.35	**101.700909**	**102.1921539**	**72.75079**	**88.62811**	**90.49812**
-2.4	**-38.93296099**	**-40.79622806**	**-30.5328**	**-35.7849**	**-36.1303**
+2.4	**87.25284473**	**88.3816231**	**63.37565**	**77.28735**	**78.42022**
-2.45	**-48.79921255**	**-51.28318527**	**-36.5914**	**-44.7795**	**-44.443**
+2.45	**73.83393581**	**75.14064777**	**54.24227**	**66.22342**	**66.70064**
-2.5	**-61.46088689**	**-63.59687623**	**-45.4518**	**-55.5577**	**-55.7613**
+2.5	**60.12014414**	**62.33836156**	**44.49856**	**54.4**	**54.59636**
-2.55	**-73.83644588**	**-75.14100671**	**-54.2441**	**-66.2256**	**-66.7029**
+2.55	**48.79719285**	**51.28288774**	**36.58986**	**44.77766**	**44.44107**
-2.6	**-87.25566367**	**-87.6253293**	**-63.3775**	**-77.2896**	**-78.4226**
+2.6	**38.93124313**	**40.79592318**	**30.60182**	**35.78315**	**36.12897**
-2.65	**-101.7037979**	**-102.7959418**	**-72.7527**	**-88.6304**	**-90.5005**
+2.65	**30.50256348**	**31.48185215**	**25.24384**	**28.1055**	**29.58294**
-2.7	**-116.541392**	**-118.9057564**	**-82.2703**	**-100.238**	**-102.808**
+2.7	**23.02045189**	**23.66670016**	**20.22941**	**22.22871**	**23.35039**
-2.75	**-131.9928486**	**-135.3860877**	**-92.3613**	**-112.305**	**-115.688**
+2.75	**17.7397152**	**19.02326195**	**15.49385**	**17.02442**	**17.50086**
-2.8	**-147.5884198**	**-152.0594371**	**-101.86**	**-123.753**	**-128.276**
+2.8	**17.7397152**	**19.02326195**	**11.59725**	**14.28507**	**14.94588**
-2.85	**-162.6304061**	**-168.7483109**	**-111.196**	**-134.994**	**-140.482**
+2.85	**17.7397152**	**19.02326195**	**11.59725**	**14.28507**	**14.94588**
-2.9	**-177.4167727**	**-185.2753697**	**-120.272**	**-145.909**	**-152.393**
+2.9	**17.7397152**	**19.02326195**	**11.59725**	**14.28507**	**14.94588**
-2.95	**-191.7884106**	**-201.463068**	**-128.988**	**-156.378**	**-163.88**
+2.95	**17.7397152**	**19.02326195**	**11.59725**	**14.28507**	**14.94588**
-3	**-207.0769941**	**-218.8357056**	**-138.129**	**-167.343**	**-175.989**
+3	**17.7397152**	**19.02326195**	**11.59725**	**14.28507**	**14.94588**
(Span 3) -4	**-4.975204499**	**-5.335182643**	**-3.25251**	**-4.00633**	**-4.19166**
+4	**194.6653477**	**203.2616062**	**132.1043**	**160.3468**	**167.4674**
-3.05	**-4.975204499**	**-5.335182643**	**-3.25251**	**-4.00633**	**-4.19166**
+3.05	**183.8081505**	**190.7710025**	**125.7217**	**152.7203**	**158.9764**
-3.1	**-4.975204499**	**-5.335182643**	**-3.25251**	**-4.00633**	**-4.19166**
+3.1	**168.6696704**	**173.4342934**	**116.7505**	**141.9919**	**147.076**
-3.15	**-5.203575326**	**-5.335182643**	**-5.43103**	**-5.73655**	**-5.37243**
+3.15	***156.8604622***	***159.9659859***	***109.702***	***133.557***	***137.7501***
-3.2	***-9.210228922***	***-8.57875139***	***-8.61343***	***-9.40156***	***-9.3998***
+3.2	***140.5684136***	***141.8871075***	***99.91525***	***121.8376***	***124.8308***
-3.25	***-12.4888992***	***-11.62073907***	***-11.6273***	***-12.6949***	***-12.6931***
+3.25	***127.9810148***	***130.1459566***	***92.30943***	***112.7245***	***114.8112***
-3.3	***-17.20260941***	***-16.49914988***	***-15.9388***	***-17.427***	***-17.8603***
+3.3	***112.9367653***	***114.501101***	***81.85192***	***100.1878***	***101.061***
-3.35	***-21.22450766***	***-21.01660601***	***-19.3933***	***-21.2163***	***-22.1072***
+3.35	***101.5489232***	***104.5408681***	***73.79733***	***90.52681***	***91.27036***
-3.4	***-27.7153637***	***-28.20693182***	***-24.273***	***-26.5661***	***-28.1313***
+3.4	***86.27900559***	***91.18352622***	***63.59348***	***78.28205***	***78.08125***
-3.45	***-33.57287442***	***-34.3460409***	***-28.1238***	***-30.9883***	***-32.9023***
+3.45	***76.23972177***	***80.93634904***	***56.10215***	***69.2877***	***67.99423***
-3.5	***-42.06999187***	***-43.50944273***	***-33.4922***	***-38.5372***	***-39.5746***
+3.5	***63.85908498***	***67.01443687***	***48.64373***	***57.07345***	***58.37047***
-3.55	***-49.17821453***	***-51.33826068***	***-37.5028***	***-45.3018***	***-44.7938***
+3.55	***55.2945819***	***57.76801389***	***44.11023***	***49.63226***	***52.53356***
-3.6	***-59.78889361***	***-62.35857103***	***-45.1309***	***-54.8404***	***-54.9948***
+3.6	***44.28919464***	***46.05399312***	***37.92287***	***41.83126***	***44.58255***

-3.65	***-68.96716959***	***-71.02848517***	***-51.4121***	***-62.7561***	***-63.0227***
+3.65	***37.30457836***	***38.0127935***	***33.18956***	***36.66456***	***38.51106***
-3.7	***-81.9254323***	***-83.08138979***	***-60.4225***	***-73.6497***	***-74.431***
+3.7	***29.4158647***	***28.28551123***	***26.77555***	***29.66193***	***30.29796***
-3.75	***-91.91566485***	***-93.00610599***	***-67.6296***	***-82.3775***	***-83.2484***
+3.75	***25.91602107***	***28.17477191***	***21.90214***	***24.34021***	***24.39844***
-3.8	***-106.9698399***	***-107.5139007***	***-77.6086***	***-94.4519***	***-96.0063***
+3.8	***25.91602107***	***28.17477191***	***16.65586***	***20.32069***	***21.53234***
-3.85	***-118.7436268***	***-119.3647226***	***-85.3441***	***-103.805***	***-105.917***
+3.85	***25.91602107***	***28.17477191***	***16.65586***	***20.32069***	***21.53234***
-3.9	***-134.9931027***	***-136.8322533***	***-95.9554***	***-116.625***	***-119.538***
+3.9	***25.91602107***	***28.17477191***	***16.65586***	***20.32069***	***21.53234***
-3.95	***-147.5522247***	***-150.3888506***	***-104.111***	***-126.473***	***-130.025***
+3.95	***25.91602107***	***28.17477191***	***16.65586***	***20.32069***	***21.53234***
-5	***-164.7330399***	***-169.0045565***	***-115.21***	***-139.866***	***-144.321***
+5	***25.91602107***	***28.17477191***	***16.65586***	***20.32069***	***21.53234***

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.11E-13	*-1.14E-13*	*-2.16E-13*	-9.40E-14	-1.01E-13	-8.35E-14	-1.20E-13	-7.42E-14	-7.84E-14	-8.19E-14
End Shear	2.15E-13	*2.23E-13*	*3.12E-13*	1.81E-13	1.93E-13	1.70E-13	1.85E-13	1.36E-13	1.45E-13	8.34E-14
-0.05	-63.76299923	*-72.30781916*	*-80.56587634*	-49.6068033	-53.2678595	-50.1858697	-60.5871266	-57.2364217	-60.5197377	-25.70442519
+0.05	424.1811376	*486.0361576*	*529.8316165*	372.216094	395.1560883	369.0890093	435.4663582	366.7254043	386.9981646	192.4248349
-0.1	-127.5259985	*-144.6156383*	*-161.1317527*	-99.2136066	-106.535719	-100.371739	-121.174253	-114.472843	-121.039475	-51.40885038
+0.1	787.4084431	*909.1909738*	*984.5453349*	692.8677639	734.7874036	685.9024773	807.5377131	670.3437041	707.2617328	356.6064306
-0.15	-191.2889977	*-216.9234575*	*-241.697629*	-148.82041	-159.803578	-150.557609	-181.76138	-171.709265	-181.559213	-77.11327557
+0.15	1089.138048	*1269.428999*	*1365.349759*	961.1896938	1018.235415	949.8436069	1115.897113	912.1487378	962.1422211	493.0102476
-0.2	-255.0519969	*-289.2312766*	*-322.2635054*	-198.427213	-213.071438	-200.743479	-242.348506	-228.945687	-242.078951	-102.8177008
+0.2	1332.646639	*1567.506115*	*1673.842384*	1178.201536	1246.651279	1162.030308	1362.011512	1097.093135	1157.071103	602.2757921
-0.25	-318.8149962	*-361.5390958*	*-402.8293817*	-248.034016	-266.339297	-250.929349	-302.935633	-286.182108	-302.598688	-128.522126
+0.25	1558.091533	*1804.476136*	*1912.009404*	1345.244337	1421.532258	1323.906604	1569.708652	1263.571598	1334.589493	685.2163881
-0.3	-382.5779954	*-433.8469149*	*-483.395258*	-297.64082	-319.607157	-301.115218	-363.52276	-343.41853	-363.118426	-154.2265511
+0.3	1721.981657	*1981.691229*	*2082.226164*	1463.980236	1544.721413	1455.580696	1727.263562	1372.565949	1451.168875	743.5143922
-0.35	-446.3409946	*-506.1547341*	*-563.9611344*	-347.247623	-372.875016	-351.301088	-424.109886	-400.654952	-423.638164	-179.9309763
+0.35	1824.210605	*2100.801669*	*2216.811345*	1540.222726	1635.30809	1545.183843	1827.928449	1446.522524	1528.257107	777.5995372
-0.4	-510.1039938	*-578.4625533*	*-644.5270107*	-396.854426	-426.142876	-401.486958	-484.697013	-457.891373	-484.157902	-205.6354015
+0.4	1867.831006	*2163.755798*	*2288.237323*	1589.526617	1684.236162	1589.91052	1873.562238	1473.382073	1557.755973	788.7687952
-0.45	-573.8669931	*-650.7703724*	*-725.0928871*	-446.46123	-479.410735	-451.672827	-545.284139	-515.127795	-544.677639	-231.3398267
+0.45	1856.325197	*2172.800049*	*2297.677687*	1595.309762	1686.824288	1591.067271	1867.269724	1451.165756	1535.067767	778.5218085
-0.5	-637.6299923	*-723.0781916*	*-805.6587634*	-496.068033	-532.678595	-501.858697	-605.871266	-572.364217	-605.197377	-257.0442519
+0.5	1793.605523	*2143.581352*	*2284.968909*	1568.069653	1659.848685	1564.82621	1839.109444	1417.595906	1499.484878	768.4170039
-0.55	-701.3929915	*-795.3860107*	*-886.2246397*	-545.674836	-585.946454	-552.044567	-666.458393	-629.600638	-665.717115	-282.7486771
+0.55	1713.809418	*2067.027858*	*2227.013538*	1504.016701	1594.448068	1505.276509	1773.469418	1392.98362	1472.640677	751.1188514
-0.6	-765.1559908	*-867.6938299*	*-966.7905161*	-595.28164	-639.214314	-602.230436	-727.045519	-686.83706	-726.236852	-308.4531023
+0.6	1628.617741	*1942.535659*	*2110.580779*	1403.828719	1489.611802	1408.219955	1662.190177	1316.312989	1390.81086	712.3004354
-0.65	-828.91899	*-940.0016491*	*-1047.356392*	-644.888443	-692.482173	-652.416306	-787.632646	-744.073482	-786.75659	-334.1575275
+0.65	1492.310783	*1773.303581*	*1939.600643*	1278.902334	1349.054351	1277.126217	1508.669915	1191.505835	1258.160939	653.6263411
-0.7	-892.6819892	*-1012.309468*	*-1127.922269*	-694.495246	-745.750032	-702.602176	-848.219772	-801.309904	-847.276328	-359.8619527
+0.7	1309.253924	*1562.829815*	*1723.185112*	1125.435408	1183.368176	1115.791762	1317.184975	1036.083206	1094.988116	576.9356515
-0.75	-956.4449885	*-1084.617287*	*-1208.488145*	-744.102049	-799.017892	-752.788046	-908.806899	-858.546325	-907.796065	-385.5663779
+0.75	1084.241615	*1314.910033*	*1467.02947*	943.9103949	989.5625894	928.3387179	1092.619903	840.0818306	887.1631691	484.2411416
-0.8	-1020.207988	*-1156.925107*	*-1289.054021*	-793.708853	-852.285751	-802.973915	-969.394025	-915.782747	-968.315803	-411.270803
+0.8	822.4980055	*1033.638072*	*1165.273096*	738.5313525	769.3726852	719.2155047	840.2548101	605.9368927	639.1285856	377.7293752
-0.85	-1083.970987	*-1244.151862*	*-1448.655913*	-843.315656	-905.553611	-853.159785	-1029.98115	-973.019169	-1028.83554	-436.9752282
+0.85	533.8601119	*738.324774*	*840.3740401*	513.8235628	527.6187973	493.1967235	565.7651993	384.1409075	405.8039221	259.7609937
-0.9	-1147.733986	*-1379.375665*	*-1794.188878*	-892.922459	-958.82147	-903.345655	-1090.56828	-1030.25559	-1089.35528	-462.6796534
+0.9	280.3280126	*466.7382761*	*573.9387556*	291.5139996	291.5139996	271.868543	290.4195204	221.5388217	233.1987597	166.2111715
-0.95	-1211.496985	*-1555.303069*	*-2246.192836*	-942.529263	-1012.08933	-953.531524	-1151.15541	-1087.49201	-1149.87502	-488.3840786
+0.95	252.4916948	*282.4123794*	*437.1467*	199.9601377	214.4382197	201.9547879	243.3749238	216.7321941	228.9864187	101.6897443
-1	-1275.259992	*-1765.430975*	*-2771.473096*	-992.136098	-1065.35716	-1003.7174	-1211.74255	-1144.72844	-1210.39476	-514.0885045
+1	265.7807327	*288.3460242*	*319.9405315*	210.4843541	225.7244351	212.5839859	256.1841336	228.1391421	241.0383277	107.0418359
(Span 2) -2	-1275.259992	*-1765.430975*	*-2771.473096*	-992.136098	-1065.35716	-1003.7174	-1211.74255	-1144.72844	-1210.39476	-514.0885045
+2	265.7807327	*288.3460242*	*319.9405315*	210.4843541	225.7244351	212.5839859	256.1841336	228.1391421	241.0383277	107.0418359
-2.05	-911.0011928	*-1281.207067*	*-2107.548284*	-716.39343	-768.263992	-723.539772	-871.934517	-776.48272	-820.385107	-364.3219934
+2.05	204.1818909	*233.083878*	*402.1188937*	161.7013126	173.4092669	163.3143211	196.809453	175.2643264	185.1739244	95.42291568
-2.1	-848.9662749	*-1056.853681*	*-1550.326509*	-667.610389	-715.948809	-674.270098	-812.559855	-723.607879	-764.520719	-339.5133708
+2.1	327.3746148	*518.9575331*	*512.2824333*	348.6649903	348.6649903	340.6852493	367.5797829	265.4130713	279.3821803	193.6725298
-2.15	-786.931357	*-890.2050129*	*-1129.037798*	-618.827348	-663.633626	-625.000424	-753.185193	-670.733038	-708.656331	-314.7047482
+2.15	648.0978155	*832.6115237*	*794.6242374*	620.1283597	643.4174642	610.0402782	702.3334024	462.2855316	488.604155	307.4207712
-2.2	-724.8964392	*-782.9656803*	*-878.4655855*	-570.044307	-611.318442	-575.73075	-693.81053	-617.858197	-652.791943	-289.8961256
+2.2	984.44755	*1165.343049*	*1122.291801*	880.663688	921.9937108	873.0302851	1020.135781	745.070805	787.163821	444.547532

-2.25	-662.8615213	-728.0336024	-843.1516483	-521.261267	-559.003259	-526.461077	-634.435868	-564.983356	-596.927556	-265.087503
+2.25	1285.098249	1501.655745	1488.5093	1111.004062	1171.371089	1108.263182	1302.910228	1016.897692	1075.0716	564.3853551
-2.3	-600.8266034	-681.5599353	-843.1498141	-472.478226	-506.688076	-477.191403	-575.061206	-512.108515	-541.063168	-240.2788804
+2.3	1538.178013	1791.313944	1803.251335	1305.491137	1384.188451	1308.568009	1542.73161	1239.654656	1309.558443	663.8286661
-2.35	-538.7916855	-635.0862681	-843.148126	-423.695185	-454.372892	-427.921729	-515.686544	-459.233674	-485.19878	-215.4702578
+2.35	1737.870026	2020.688577	2056.734154	1465.234751	1554.495938	1468.43805	1732.822441	1414.915025	1495.465626	740.481333
-2.4	-476.7567676	-588.612601	-843.1465155	-374.912144	-402.057709	-378.652055	-456.311882	-406.358834	-429.334392	-190.6616352
+2.4	1878.926224	2185.826225	2235.748489	1581.65937	1677.755504	1583.697256	1868.035874	1532.665879	1620.595985	794.7990079
-2.45	-414.7218497	-542.1389338	-843.1449487	-326.129104	-349.742526	-329.382382	-396.93722	-353.483993	-373.470004	-165.8530126
+2.45	1957.422431	2283.989551	2337.561944	1651.705487	1750.840672	1651.484203	1945.262431	1590.933782	1682.819062	822.1909028
-2.5	-352.6869318	-495.6653482	-843.1432407	-277.346061	-297.427343	-280.112708	-337.562672	-300.609152	-317.605705	-141.04439
+2.5	1972.086393	2314.392443	2361.028215	1673.309964	1771.722407	1669.973653	1962.711467	1589.291639	1681.642759	823.9779534
-2.55	-411.806527	-542.1390274	-843.1415327	-326.129103	-349.742415	-329.382327	-396.937352	-353.483831	-373.470109	-165.8529797
+2.55	1919.681338	2283.990767	2337.562072	1651.715688	1750.854726	1651.469357	1945.258626	1590.916953	1682.800966	822.1873555
-2.6	-473.4053688	-588.6127066	-843.1398247	-374.912144	-402.057583	-378.651992	-456.312033	-406.358647	-429.334512	-190.6615994
+2.6	1828.573606	2185.830559	2235.748456	1581.66628	1677.765999	1583.71362	1868.062469	1532.675039	1620.605226	794.7961905
-2.65	-535.0042106	-635.0863858	-843.1381167	-423.695186	-454.372751	-427.921656	-515.686713	-459.233462	-485.198915	-215.470219
+2.65	1706.778239	2020.696184	2056.734428	1465.238997	1554.503526	1468.451541	1732.845419	1414.920697	1495.471193	741.9230899
-2.7	-596.6030524	-681.560065	-843.1364087	-472.478227	-506.687919	-477.191321	-575.061394	-512.108278	-541.063319	-240.2788386
+2.7	1523.047784	1791.325424	1803.251239	1305.492954	1384.193341	1308.578949	1542.751331	1239.657223	1309.560742	664.5145351
-2.75	-658.2018941	-728.0337442	-843.1347007	-521.261269	-559.003087	-526.460986	-634.436074	-564.983094	-596.927722	-265.0874582
+2.75	1280.894302	1501.671967	1488.509235	1111.024542	1171.374547	1108.272682	1302.909403	1016.909868	1075.083984	564.3856232
-2.8	-719.8007359	-782.9658271	-878.4461734	-570.04431	-611.318256	-575.730651	-693.810755	-617.85791	-652.792125	-289.8960778
+2.8	985.3658966	1165.365075	1120.982402	880.6595585	921.9965692	873.0391062	1020.138137	745.0846023	787.1779238	444.5490134
-2.85	-781.3995777	-890.2051468	-1129.027876	-618.827352	-663.633424	-625.000316	-753.185436	-670.732725	-708.656529	-314.7046974
+2.85	648.9401475	832.6402171	794.177709	620.1246208	643.4214452	610.0393124	702.3402549	462.2819591	488.6006136	307.4236584
-2.9	-842.9984195	-1056.853815	-1550.307388	-667.610393	-715.948592	-674.26998	-812.560116	-723.607541	-764.520932	-339.513317
+2.9	327.3745841	518.9465669	512.0024602	348.6563679	348.6563679	340.6952699	367.5838566	265.4331183	279.4032824	193.9213435
-2.95	-904.5972613	-1281.207218	-2107.556232	-716.393435	-768.26376	-723.539645	-871.934797	-776.482357	-820.385335	-364.3219366
+2.95	205.6273292	233.0838464	402.0050968	161.7013041	173.4093072	163.3143562	196.8094009	175.2644166	185.1738755	94.85944883
-3	-1281.846175	-1765.43154	-2771.473096	-992.13615	-1065.35743	-1003.71758	-1211.74314	-1144.72859	-1210.39508	-514.0885736
+3	267.6622752	288.3459722	319.9441562	210.4843508	225.7245004	212.5840246	256.184054	228.1392508	241.0382613	107.0418489
(Span 3) -4	-1.28E+03	-1765.43154	-2771.473096	-9.92E+02	-1.07E+03	-1.00E+03	-1.21E+03	-1.14E+03	-1.21E+03	-5.14E+02
+4	2.68E+02	288.3459722	319.9441562	2.10E+02	2.26E+02	2.13E+02	2.56E+02	2.28E+02	2.41E+02	1.07E+02
-3.05	-1217.753867	-1555.303622	-2246.212455	-942.529344	-1012.08956	-953.531697	-1151.15599	-1087.49216	-1149.87533	-488.384145
+3.05	254.2791612	282.4123301	436.7149472	199.9601332	214.4382751	201.9548233	243.3748514	216.7322878	228.9863479	101.6897564
-3.1	-1153.66156	-1379.37619	-1794.199796	-892.922539	-958.821689	-903.345818	-1090.56883	-1030.25573	-1089.35558	-462.6797163
+3.1	280.3281444	466.7538277	573.8931253	291.4783348	291.4783348	271.8548236	290.4118612	221.5472434	233.2076246	164.4922869
-3.15	-1089.569253	-1244.152358	-1448.67309	-843.315733	-905.553816	-853.159939	-1029.98168	-973.019304	-1028.83582	-436.9752877
+3.15	535.7865221	738.3423614	839.1159994	513.8317453	527.6250948	493.1904647	565.7521217	384.1472953	405.8104678	259.7542386
-3.2	-1025.476945	-1156.92557	-1289.054047	-793.708927	-852.285942	-802.974061	-969.394519	-915.782874	-968.316069	-411.270859
+3.2	800.843888	1033.656611	1162.853946	738.54003	769.3793551	719.2100441	840.2423785	605.947409	639.1400889	377.7228123
-3.25	-961.3846381	-1084.617722	-1208.48817	-744.102121	-799.018069	-752.788182	-908.807363	-858.546445	-907.796315	-385.5664304
+3.25	1067.572626	1314.928636	1464.537031	943.9184292	989.5684389	928.3331269	1092.607011	840.090139	887.1723612	484.234306
-3.3	-897.2923308	-1012.309875	-1127.922294	-694.495315	-745.750196	-702.602303	-848.220207	-801.310016	-847.276561	-359.8620018
+3.3	1303.976158	1562.847415	1720.774296	1125.441887	1183.372195	1115.785013	1317.170319	1036.088474	1094.994117	576.9284059
-3.35	-833.2000235	-940.0020275	-1047.356418	-644.888509	-692.482323	-652.416424	-787.63305	-744.073587	-786.756808	-334.1575731
+3.35	1503.680212	1773.319145	1937.135632	1278.906288	1349.051761	1277.117343	1508.652471	1191.50362	1258.159031	653.6186935
-3.4	-769.1077162	-867.6941801	-966.7905413	-595.281703	-639.21445	-602.230546	-727.045894	-686.837158	-726.237054	-308.4531445
+3.4	1661.466186	1942.548154	2108.194728	1403.826263	1489.60602	1408.208	1662.168748	1316.306296	1390.804241	712.2918852
-3.45	-705.0154088	-795.3863328	-886.224665	-545.674897	-585.946577	-552.044667	-666.458738	-629.600729	-665.717301	-282.7487158
+3.45	1772.542736	2067.03696	2224.873723	1504.010624	1594.43828	1505.260889	1773.481567	1392.971752	1472.628602	751.1098514
-3.5	-640.9231015	-723.0784854	-805.6587886	-496.068091	-532.678704	-501.858788	-605.871581	-572.3643	-605.197547	-257.0442872
+3.5	1832.550097	2143.586085	2283.259155	1568.059354	1659.834271	1564.805884	1839.115957	1417.57813	1499.466575	768.4069214
-3.55	-576.8307942	-650.770638	-725.0929123	-446.461285	-479.410831	-451.67291	-545.284425	-515.127871	-544.677793	-231.3398585
+3.55	1837.55711	2172.798144	2296.003993	1595.322546	1686.792591	1591.051253	1867.265885	1451.149201	1535.049916	778.5173422
-3.6	-512.7384869	-578.4627907	-644.5270359	-396.854479	-426.142958	-401.487031	-484.697269	-457.891442	-484.15804	-205.6354299

+3.6	**1804.273993**	***2163.7489***	***2286.015708***	**1589.534007**	**1684.247497**	**1589.889347**	**1873.552299**	**1473.393338**	**1557.767357**	**788.763472**
-3.65	**-448.6461796**	***-506.1549433***	***-563.9611596***	**-347.247673**	**-372.875085**	**-351.301152**	**-424.110112**	**-400.655013**	**-423.638286**	**-179.9310012**
+3.65	**1791.828572**	***2100.788948***	***2214.077037***	**1540.224346**	**1635.313308**	**1545.195469**	**1827.911588**	**1446.528033**	**1528.262376**	**777.5934605**
-3.7	**-384.5538722**	***-433.8470959***	***-483.3952833***	**-297.640868**	**-319.607212**	**-301.115274**	**-363.522956**	**-343.418584**	**-363.118533**	**-154.2265726**
+3.7	**1724.168235**	***1981.672269***	***2079.842355***	**1463.974601**	**1544.718857**	**1455.586018**	**1727.239285**	**1372.563689**	**1451.165912**	**743.5070976**
-3.75	**-320.4615649**	***-361.5392486***	***-402.8294069***	**-248.034062**	**-266.339339**	**-250.929395**	**-302.9358**	**-286.182155**	**-302.598779**	**-128.522144**
+3.75	**1597.814547**	***1804.450721***	***1908.88462***	**1345.232196**	**1421.522763**	**1323.904626**	**1569.714962**	**1263.562652**	**1334.579437**	**685.2226014**
-3.8	**-256.3692576**	***-289.2314012***	***-322.2635306***	**-198.427256**	**-213.071466**	**-200.743516**	**-242.348643**	**-228.945726**	**-242.079025**	**-102.8177153**
+3.8	**1409.719715**	***1567.473925***	***1670.052846***	**1178.182614**	**1246.634558**	**1162.021637**	**1362.008961**	**1097.077073**	**1157.0535**	**602.2810098**
-3.85	**-192.2769503**	***-216.9235538***	***-241.6976542***	**-148.82045**	**-159.803593**	**-150.557638**	**-181.761487**	**-171.709297**	**-181.559272**	**-77.11328667**
+3.85	**1157.378619**	***1269.389737***	***1361.608354***	**961.1638664**	**1018.211268**	**949.8277641**	**1115.885888**	**912.1399066**	**962.1330453**	**493.0142447**
-3.9	**-128.184643**	***-144.6157064***	***-161.1317779***	**-99.2136438**	**-106.53572**	**-100.371759**	**-121.174331**	**-114.472868**	**-121.039518**	**-51.40885802**
+3.9	**840.2657282**	***909.143991***	***981.8424788***	**692.8341349**	**734.7549237**	**685.8787806**	**807.5171825**	**670.3269632**	**707.244195**	**356.6090316**
-3.95	**-64.09233566**	***-72.30785907***	***-80.56590156***	**-49.6068379**	**-53.2678466**	**-50.1858803**	**-60.5871744**	**-57.2364393**	**-60.5197646**	**-25.70442938**
+3.95	**454.9237588**	***485.9818451***	***528.3780863***	**372.1746405**	**395.115194**	**369.0578661**	**435.4368092**	**366.7339238**	**387.0071762**	**192.4261758**
-5	**-4.58E-13**	***-3.53E-13***	***-4.67E-13***	**-2.43E-13**	**-2.44E-13**	**-2.07E-13**	**-2.49E-13**	**-2.29E-13**	**-2.41E-13**	**-1.80E-13**
+5	**2.80E-13**	***2.58E-13***	***4.15E-13***	**2.14E-13**	**2.30E-13**	**2.03E-13**	**2.37E-13**	**1.94E-13**	**2.05E-13**	**9.75E-14**

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-8.20E-14	-6.60E-14	-7.25E-14	-7.37E-14	-6.86E-14	-6.17E-14	-6.64E-14	-6.44E-14	-6.60E-14
End Shear	1.21E-13	1.21E-13	9.69E-14	8.47E-14	1.09E-13	1.35E-13	1.37E-13	1.37E-13	1.37E-13
-0.05	-37.46182246	-49.24516947	-49.16477626	-43.45679891	-30.19958398	-40.91071315	-46.4911492	-51.9198057	-57.4307914
+0.05	274.6531534	322.7863324	297.0119932	254.0733526	222.9570515	300.3169006	334.2492624	355.4890602	374.3768393
-0.1	-74.92364491	-98.49033894	-98.32955253	-86.91359782	-60.39916797	-81.82142631	-92.9822983	-103.839611	-114.861583
+0.1	510.0005769	590.8160836	538.0864408	461.7352206	413.9562389	557.9670068	619.8771074	658.0102022	696.3063797
-0.15	-112.3854674	-147.7355084	-147.4943288	-130.3703967	-90.59875195	-122.7321395	-139.473448	-155.759417	-172.292374
+0.15	705.6159919	805.5220988	725.0750287	625.4728797	573.3109132	772.4329013	856.3223984	932.8043633	983.3009652
-0.2	-149.8472898	-196.9806779	-196.6591051	-173.8271956	-120.7983359	-163.6428526	-185.964597	-207.679223	-229.723166
+0.2	862.3200782	968.2186669	874.3669638	757.7556315	701.3587274	944.6442874	1044.750252	1155.070433	1225.380937
-0.25	-187.3091123	-246.2258473	-245.8238813	-217.2839945	-150.9979199	-204.5535658	-232.455746	-259.599029	-287.153957
+0.25	981.2519306	1093.268664	984.2314112	857.110812	798.9801334	1075.79769	1192.23114	1324.6562	1425.561457
-0.3	-224.7709347	-295.4710168	-294.9886576	-260.7407934	-181.1975039	-245.4642789	-278.946895	-311.518834	-344.584748
+0.3	1063.797655	1182.016237	1050.340835	919.8146373	867.2532765	1177.446998	1311.705189	1443.446233	1569.716241
-0.35	-262.2327572	-344.7161863	-344.1534338	-304.1975924	-211.3970879	-286.3749921	-325.438044	-363.43864	-402.01554
+0.35	1123.681618	1224.732166	1088.540206	957.5831168	907.4539333	1249.63209	1387.492767	1527.308354	1658.9822
-0.4	-299.6945796	-393.9613558	-393.3182101	-347.6543913	-241.5966719	-327.2857052	-371.929193	-415.358446	-459.446331
+0.4	1154.005052	1225.50921	1119.368937	986.7301213	921.0556396	1284.797648	1421.47031	1573.166973	1701.051077
-0.45	-337.1564021	-443.2065252	-442.4829864	-391.1111902	-271.7962558	-368.1964184	-418.420343	-467.278251	-516.877123
+0.45	1151.869862	1202.56699	1132.733194	999.1694996	909.7295335	1284.895615	1415.547541	1574.382047	1711.375348
-0.5	-374.6182246	-492.4516947	-491.6477626	-434.5679891	-301.9958398	-409.1071315	-464.911492	-519.198057	-574.307914
+0.5	1134.149827	1174.155892	1101.382933	973.960795	899.3970103	1264.232906	1393.115577	1547.237274	1678.612357
-0.55	-412.080047	-541.6968642	-540.8125389	-478.024788	-332.1954238	-450.0178447	-511.402641	-571.117863	-631.738706
+0.55	1093.125386	1158.074332	1058.984562	937.5295838	874.8430837	1216.790029	1346.011611	1487.863408	1605.827288
-0.6	-449.5418695	-590.9420336	-589.9773152	-521.4815869	-362.3950078	-490.9285578	-557.89379	-623.037668	-689.169497
+0.6	1023.349893	1108.252066	989.5032169	877.0990446	825.9791608	1138.538173	1262.65578	1388.98188	1506.859832
-0.65	-487.0036919	-640.1872031	-639.1420914	-564.9383858	-392.5945918	-531.839271	-604.384939	-674.957474	-746.600288
+0.65	927.4067644	1021.835613	903.9059806	800.8098675	754.7796095	1032.301144	1146.192301	1254.225952	1366.10996
-0.7	-524.4655144	-689.4323726	-688.3068677	-608.3951847	-422.7941758	-572.7499842	-650.876088	-726.87728	-804.03108
+0.7	814.241562	893.9055023	792.5167571	701.787866	663.4253903	901.1700657	1000.072619	1097.136557	1187.666821
-0.75	-561.9273368	-738.677542	-737.4716439	-651.8519836	-452.9937597	-613.6606973	-697.367238	-778.797086	-861.461871
+0.75	679.3602953	728.2016635	649.2385619	575.3325278	554.0389236	748.5025575	828.053934	908.9556866	976.1629011
-0.8	-599.3891593	-787.9227115	-786.6364202	-695.3087825	-483.1933437	-654.5714105	-743.858387	-830.716891	-918.892663
+0.8	524.8215611	533.7328841	467.0264625	416.0790118	429.1642091	577.9231689	634.2001877	694.0460626	736.6139985
-0.85	-636.8509817	-837.167881	-835.8011965	-763.8854736	-513.3929277	-695.4821236	-790.349536	-882.636697	-976.323454
+0.85	353.9987929	333.1409775	283.1947062	308.4164573	291.7857419	393.323334	422.8815412	457.1390582	474.4186073
-0.9	-674.3128042	-886.4130504	-884.9659727	-925.0576934	-543.5925117	-736.3928368	-836.840685	-934.556503	-1033.75425
+0.9	205.2764872	205.2149085	166.6526778	231.42806	157.5244369	219.9968496	223.6693148	237.5851927	237.7955791
-0.95	-711.7746267	-935.6582199	-934.130749	-1154.824463	-573.7920957	-777.3035499	-883.331834	-986.476308	-1091.18504
+0.95	149.7245189	186.306635	175.9111599	174.67458	121.1470581	164.3524033	185.8828659	207.2237521	228.3468129
-1	-749.2364396	-984.9033791	-983.2955252	-1419.042763	-603.9916899	-818.2142608	-929.822982	-1038.39611	-1148.61581
+1	157.604752	196.1122456	185.1696406	161.6220178	127.5232207	173.0025281	195.6661797	218.1302605	240.3650649
(Span 2) -2	-749.2364396	-984.9033791	-983.2955252	-1419.042763	-603.9916899	-818.2142608	-929.822982	-1038.39611	-1148.61581
+2	157.604752	196.1122456	185.1696406	161.6220178	127.5232207	173.0025281	195.6661797	218.1302605	240.3650649
-2.05	-536.4153569	-667.4770714	-630.2334352	-1072.394912	-434.0313823	-588.8225948	-665.959135	-742.416632	-818.093604
+2.05	121.0773841	150.6601652	142.2536796	162.5450913	97.9677198	132.9064856	150.3174826	167.5751602	184.6567007
-2.1	-499.8879799	-622.0250055	-587.3174868	-768.743696	-404.4758762	-548.7265306	-620.610434	-691.861532	-762.385257
+2.1	245.4762496	245.8563187	195.7760759	240.1243108	185.8859234	272.1542214	285.5257938	301.5377094	306.184229
-2.15	-463.3606028	-576.5729396	-544.4015383	-547.6558891	-374.9203701	-508.6304665	-575.261732	-641.306432	-706.676909
+2.15	428.5077841	397.7165593	348.7280611	340.156386	352.6422847	487.9300734	525.1984669	563.2090169	598.8349538
-2.2	-426.8332258	-531.1208738	-501.4855898	-441.9769025	-345.3648641	-468.5344023	-529.913031	-590.751332	-650.968562
+2.2	627.0280456	645.01499	564.7250048	496.1324379	511.9457483	702.9948934	770.7720282	838.534706	904.2231055

-2.25	**-390.3058487**	**-485.6688079**	**-458.5696413**	**-403.8662222**	**-315.809358**	**-428.4383381**	**-484.56433**	**-540.196233**	**-595.260214**
+2.25	**802.536714**	**877.361503**	**791.0821935**	**686.6774975**	**651.6063242**	**894.8858236**	**989.2851339**	**1081.919001**	**1174.08996**
-2.3	**-353.7784717**	**-440.2167421**	**-415.6536929**	**-371.6782956**	**-286.2538519**	**-388.342274**	**-439.215628**	**-489.641133**	**-539.551866**
+2.3	**951.8377006**	**1064.101204**	**966.5067332**	**845.3720983**	**767.9674044**	**1058.056001**	**1173.679261**	**1289.971149**	**1401.000147**
-2.35	**-317.2510946**	**-394.7646762**	**-372.7377444**	**-339.490369**	**-256.6983458**	**-348.2462098**	**-393.866927**	**-439.086033**	**-483.843519**
+2.35	**1070.288195**	**1201.648885**	**1108.000296**	**972.2737952**	**858.3037459**	**1188.047662**	**1319.146211**	**1455.70783**	**1579.081491**
-2.4	**-280.7237176**	**-349.3126104**	**-329.8217959**	**-307.3024424**	**-227.1428397**	**-308.1501456**	**-348.518225**	**-388.530933**	**-428.135171**
+2.4	**1154.867711**	**1288.010704**	**1208.347436**	**1062.305111**	**921.4641555**	**1281.491831**	**1422.128272**	**1574.796238**	**1705.69109**
-2.45	**-244.1963405**	**-303.8605445**	**-286.9058475**	**-275.1145158**	**-197.5873336**	**-268.0540815**	**-303.169524**	**-337.975834**	**-372.426824**
+2.45	**1203.518895**	**1327.649359**	**1276.85707**	**1122.649858**	**955.3021597**	**1336.094515**	**1480.189573**	**1644.291339**	**1787.874387**
-2.5	**-207.6689635**	**-258.4085582**	**-243.9899693**	**-242.9266344**	**-168.0318276**	**-227.9580173**	**-257.820823**	**-287.420734**	**-316.718578**
+2.5	**1215.021631**	**1323.310432**	**1292.039211**	**1137.071627**	**959.1183725**	**1350.40016**	**1492.229193**	**1662.408775**	**1813.425027**
-2.55	**-244.1962946**	**-303.8606386**	**-286.9059303**	**-275.1145682**	**-197.5872888**	**-268.0539399**	**-303.169488**	**-337.975842**	**-372.426942**
+2.55	**1203.49835**	**1327.63824**	**1276.846606**	**1122.643812**	**955.2970928**	**1336.07982**	**1480.180841**	**1644.275625**	**1787.879962**
-2.6	**-280.7236624**	**-349.312719**	**-329.8218913**	**-307.302502**	**-227.1427897**	**-308.1499824**	**-348.518185**	**-388.530943**	**-428.135306**
+2.6	**1154.874686**	**1288.001421**	**1208.357708**	**1062.298782**	**921.4954029**	**1281.503772**	**1422.145079**	**1574.805215**	**1705.693115**
-2.65	**-317.2510303**	**-394.7647994**	**-372.7378523**	**-339.4904358**	**-256.6982905**	**-348.246025**	**-393.866882**	**-439.086043**	**-483.84367**
+2.65	**1070.292935**	**1201.639608**	**1108.007239**	**972.2698728**	**858.3033235**	**1188.057261**	**1319.160564**	**1455.714005**	**1579.085797**
-2.7	**-353.7783981**	**-440.2168798**	**-415.6538132**	**-371.6783696**	**-286.2537914**	**-388.3420675**	**-439.21558**	**-489.641143**	**-539.552035**
+2.7	**951.8406094**	**1064.11013**	**966.505338**	**845.2925407**	**767.969542**	**1058.063496**	**1173.691023**	**1289.97481**	**1401.004835**
-2.75	**-390.305766**	**-485.6689602**	**-458.5697742**	**-403.8663034**	**-315.8092923**	**-428.4381101**	**-484.564277**	**-540.196244**	**-595.260399**
+2.75	**802.538535**	**877.368058**	**791.0803159**	**686.6764313**	**651.6115826**	**894.8921379**	**989.2955441**	**1081.921262**	**1174.095696**
-2.8	**-426.8331339**	**-531.1210406**	**-501.4857352**	**-441.9769923**	**-345.3647931**	**-468.5341526**	**-529.912974**	**-590.751344**	**-650.968763**
+2.8	**627.0262046**	**645.0194465**	**564.7313172**	**496.1309136**	**511.9547604**	**703.0006289**	**770.7815242**	**838.5443954**	**904.2312845**
-2.85	**-463.3605017**	**-576.573121**	**-544.4016962**	**-547.655809**	**-374.920294**	**-508.6301952**	**-575.261671**	**-641.306444**	**-706.677127**
+2.85	**428.5096747**	**397.7308451**	**348.7307566**	**340.1536018**	**352.6555382**	**487.9366828**	**525.1995129**	**563.2116097**	**598.8464714**
-2.9	**-499.8878696**	**-622.0252013**	**-587.3176572**	**-768.7439616**	**-404.4757948**	**-548.7262377**	**-620.610368**	**-691.861544**	**-762.385492**
+2.9	**245.4702257**	**245.8748885**	**195.7903496**	**240.1207494**	**185.8960531**	**272.166568**	**285.527648**	**301.5477529**	**306.1977926**
-2.95	**-536.4152375**	**-667.4772817**	**-630.2336182**	**-1072.394784**	**-434.0312957**	**-588.8222802**	**-665.959065**	**-742.416645**	**-818.093856**
+2.95	**121.07743**	**150.6601141**	**142.2536372**	**162.5424516**	**97.96772722**	**132.9065602**	**150.3174898**	**167.5751638**	**184.6566522**
-3	**-749.2365871**	**-984.9036036**	**-983.2955612**	**-1419.042635**	**-603.9917892**	**-818.2145996**	**-929.823067**	**-1038.39612**	**-1148.6163**
+3	**157.6047916**	**196.1121829**	**185.1695866**	**161.6219866**	**127.5232432**	**173.0026214**	**195.6661982**	**218.1302582**	**240.364993**
(Span 3) -4	**-7.49E+02**	**-9.85E+02**	**-9.83E+02**	**-1.42E+03**	**-6.04E+02**	**-8.18E+02**	**-9.30E+02**	**-1.04E+03**	**-1.15E+03**
+4	**1.58E+02**	**1.96E+02**	**1.85E+02**	**1.62E+02**	**1.28E+02**	**1.73E+02**	**1.96E+02**	**2.18E+02**	**2.40E+02**
-3.05	**-711.7747572**	**-935.6584229**	**-934.1307831**	**-1154.824667**	**-573.7922003**	**-777.3038695**	**-883.331914**	**-986.476311**	**-1091.18548**
+3.05	**149.7245517**	**186.3065737**	**175.9111072**	**174.6679896**	**121.1470811**	**164.3524902**	**185.8828885**	**207.2237451**	**228.3467433**
-3.1	**-674.3129274**	**-886.4132422**	**-884.966005**	**-925.0579521**	**-543.5926113**	**-736.3931394**	**-836.840761**	**-934.556505**	**-1033.75467**
+3.1	**205.2519484**	**205.2227096**	**166.6526278**	**231.4158746**	**157.507428**	**220.0133972**	**223.6645264**	**237.5935299**	**237.8037298**
-3.15	***-636.8510976***	***-837.1680615***	***-835.801227***	***-763.8854676***	***-513.3930224***	***-695.4824093***	***-790.349607***	***-882.636698***	***-976.323849***
+3.15	**354.0040366**	**333.1497931**	**283.1975939**	**308.4059337**	**291.8051829**	**393.3197707**	**422.8749096**	**457.1462248**	**474.4328634**
-3.2	**-599.3892678**	**-787.9228808**	**-786.6364489**	**-695.3087993**	**-483.1934334**	**-654.5716792**	**-743.858454**	**-830.716892**	**-918.893034**
+3.2	**524.8268996**	**533.7360967**	**467.0228291**	**416.0768926**	**429.1833903**	**577.9201971**	**634.193957**	**694.0533157**	**736.628535**
-3.25	**-561.9274379**	**-738.6777001**	**-737.4716709**	**-651.8519994**	**-452.9938445**	**-613.6609491**	**-697.3673**	**-778.797086**	**-861.462218**
+3.25	**679.3649597**	**728.1987033**	**649.2316058**	**575.3284938**	**554.0149069**	**748.4994301**	**828.0473566**	**908.9620918**	**976.176908**
-3.3	**-524.4656081**	***-689.4325194***	**-688.3068928**	***-608.3951994***	**-422.7942555**	**-572.750219**	**-650.876147**	**-726.87728**	**-804.031403**
+3.3	**814.2447382**	**893.8996516**	**792.5088336**	**701.7832146**	**663.4001984**	**901.1659782**	**1000.064677**	**1097.141169**	**1187.679086**
-3.35	**-487.0037783**	**-640.1873387**	**-639.1421147**	**-564.9383995**	**-392.5946666**	**-531.8394889**	**-604.384993**	**-674.957473**	**-746.600587**
+3.35	**927.4052291**	**1021.826037**	**903.894552**	**800.8031511**	**754.7599241**	**1032.295269**	**1146.182223**	**1254.224278**	**1366.119585**
-3.4	**-449.5419485**	**-590.942158**	**-589.9773367**	**-521.4815995**	**-362.3950776**	**-490.9287588**	**-557.89384**	**-623.037667**	**-689.169772**
+3.4	**1023.345994**	**1108.237962**	**989.4936214**	**877.1049173**	**825.9928495**	**1138.529758**	**1262.64246**	**1388.977032**	**1506.865559**
-3.45	**-412.0801186**	**-541.6969773**	**-540.8125586**	**-478.0247996**	**-332.1954887**	**-450.0180287**	**-511.402687**	**-571.117861**	**-631.738956**
+3.45	**1093.118645**	**1158.062604**	**1058.972057**	**937.5377491**	**874.8542628**	**1216.778572**	**1345.994757**	**1487.854748**	**1605.825813**
-3.5	**-374.6182888**	**-492.4517966**	**-491.6477805**	**-434.5679996**	**-301.9958997**	**-409.1072987**	**-464.911533**	**-519.198054**	**-574.30814**
+3.5	**1134.139505**	**1174.16499**	**1101.374038**	**973.9710074**	**899.4051374**	**1264.217599**	**1393.094238**	**1547.223955**	**1678.606179**
-3.55	**-337.156459**	**-443.2066159**	**-442.4830025**	**-391.1111997**	**-271.7963108**	**-368.1965686**	**-418.42038**	**-467.278248**	**-516.877325**
+3.55	**1151.881507**	***1202.5564534 5811***	***1132.719966***	**999.1772672**	**909.7226449**	***1284.879866***	**1415.538662**	**1574.36584**	**1711.383273**

-3.6	**-299.6946291**	**-393.9614352**	**-393.3182244**	**-347.6543997**	**-241.5967218**	**-327.2858385**	**-371.929226**	**-415.358442**	**-459.446509**
+3.6	**1154.012903**	**1225.497023**	**1119.377462**	**986.7350872**	**921.045887**	**1284.777711**	**1421.456741**	**1573.176984**	**1701.053165**
-3.65	**-262.2327993**	**-344.7162545**	**-344.1534464**	**-304.1975998**	**-211.3971329**	**-286.3751084**	**-325.438073**	**-363.438635**	**-402.015694**
+3.65	**1123.685251**	**1224.71572**	**1088.546862**	**957.586966**	**907.4407865**	**1249.640257**	**1387.474106**	**1527.312487**	**1658.976401**
-3.7	**-224.7709695**	**-295.4710738**	**-294.9886683**	**-260.7407998**	**-181.1975439**	**-245.4643783**	**-278.946919**	**-311.518829**	**-344.584878**
+3.7	**1063.795904**	**1182.025185**	***1050.352022***	**919.8211583**	**867.2363948**	**1177.450037**	**1311.712965**	**1443.443056**	**1569.703848**
-3.75	**-187.3091397**	**-246.2258931**	**-245.8238902**	**-217.2839999**	**-150.997955**	**-204.5536482**	**-232.455766**	**-259.599023**	**-287.154062**
+3.75	**981.2454963**	**1093.272066**	**984.2408012**	**857.1164406**	**798.9593595**	**1075.79476**	**1192.232992**	**1324.646669**	**1425.542029**
-3.8	**-149.8473098**	**-196.9807124**	**-196.6591122**	**-173.8271999**	**-120.798366**	**-163.6429181**	**-185.964613**	**-207.679217**	**-229.723247**
+3.8	**862.3087604**	**968.2152763**	**874.3707591**	**757.7579336**	**701.3341311**	**944.635916**	**1044.745323**	**1155.054022**	**1225.384861**
-3.85	**-112.38548**	**-147.7355317**	**-147.4943341**	**-130.3704**	**-90.59877709**	**-122.732188**	**-139.473459**	**-155.75941**	**-172.292431**
+3.85	**705.5994294**	**805.5124425**	**725.0719503**	**625.4711041**	**573.2817715**	**772.4186963**	**856.3109544**	**932.7995045**	**983.2965255**
-3.9	**-74.92365018**	**-98.49035105**	**-98.32955604**	**-86.91360001**	**-60.39918814**	**-81.82145794**	**-92.9823057**	**-103.839604**	**-114.861616**
+3.9	**509.9784176**	**590.7995544**	**538.0769189**	**461.7432318**	**413.9223291**	**557.9463616**	**619.8586821**	**658.0106713**	**696.3084433**
-3.95	**-37.46182035**	**-49.24517035**	**-49.16477798**	**-43.45680006**	**-30.19959919**	**-40.91072785**	**-46.4911523**	**-51.9197977**	**-57.4308**
+3.95	**274.6588797**	**322.7936883**	**297.0191728**	**254.0774732**	**222.961834**	**300.2901746**	**334.2241817**	**355.4818595**	**374.3705932**
-5	**-1.72E-13**	**-2.02E-13**	**-2.40E-13**	**-2.20E-13**	**-1.91E-13**	**-1.72E-13**	**-1.94E-13**	**-2.05E-13**	**-2.21E-13**
+5	**1.63E-13**	**1.63E-13**	**1.54E-13**	**1.55E-13**	**1.30E-13**	**1.63E-13**	**1.67E-13**	**1.81E-13**	**1.86E-13**

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.10E-13	-1.18E-13	-9.45E-14	-9.12E-14	-9.89E-14
End Shear	1.82E-13	1.71E-13	1.68E-13	1.71E-13	1.70E-13
-0.05	-90.70606702	-98.60946782	-58.2954926	-71.1223922	-75.3631557
+0.05	524.189768	534.3897089	369.1885945	448.4485807	461.2660557
-0.1	-181.412134	-197.2189356	-116.590985	-142.244784	-150.726311
+0.1	948.580172	959.5452817	672.7901101	818.8543112	839.4038127
-0.15	-272.118201	-295.8284035	-174.886478	-213.367177	-226.089467
+0.15	1308.179442	1334.84941	912.8771275	1111.436776	1140.250575
-0.2	-362.8242681	-394.4378713	-233.18197	-284.489569	-301.452623
+0.2	1590.452983	1650.640395	1115.480632	1364.522156	1396.610752
-0.25	-453.5303351	-493.0473391	-291.477463	-355.611961	-376.815778
+0.25	1784.386857	1925.721809	1277.335685	1547.85347	1596.571529
-0.3	-544.2364021	-591.6568069	-349.772956	-426.734353	-452.178934
+0.3	1953.885722	2105.006468	1380.436122	1662.061874	1744.465372
-0.35	-634.9424691	-690.2662748	-408.068448	-497.856746	-527.54209
+0.35	2057.157439	2245.616775	1444.966135	1722.460775	1820.410377
-0.4	-725.6485361	-788.8757426	-466.363941	-568.979138	-602.905245
+0.4	2133.103643	2293.421095	1464.282737	1736.933856	1834.363593
-0.45	-816.3546031	-887.4852104	-524.659434	-640.10153	-678.268401
+0.45	2148.076686	2295.76341	1433.466663	1692.364153	1805.644687
-0.5	-907.0606702	-986.0946782	-582.954926	-711.223922	-753.631557
+0.5	2100.017299	2267.827067	1383.019948	1639.425996	1747.961103
-0.55	-997.7667372	-1084.704146	-641.250419	-782.346314	-828.994712
+0.55	2027.720156	2150.361989	1375.566527	1627.336189	1725.205278
-0.6	-1088.472804	-1183.313614	-699.545911	-853.468707	-904.357868
+0.6	1874.507658	2030.045985	1311.952331	1555.394119	1645.893128
-0.65	-1179.178871	-1281.923082	-757.841404	-924.591099	-979.721024
+0.65	1690.031031	1835.876416	1196.119235	1431.496354	1512.357491
-0.7	-1269.884938	-1380.53255	-816.136897	-995.713491	-1055.08418
+0.7	1448.61974	1560.232681	1049.913837	1259.283492	1314.956897
-0.75	-1360.591005	-1479.142017	-874.432389	-1066.83588	-1130.44734
+0.75	1163.244052	1241.856736	857.0137251	1030.037665	1058.449953
-0.8	-1451.297072	-1577.751485	-932.727882	-1137.95828	-1205.81049
+0.8	828.991425	846.8638817	621.9895061	748.7827042	752.9916976
-0.85	-1542.003139	-1676.360953	-991.023374	-1209.08067	-1281.17365
+0.85	477.8302905	474.6318829	409.6632	452.7964134	479.6581575
-0.9	-1632.709206	-1774.970421	-1049.31887	-1280.20306	-1356.5368
+0.9	313.4378475	336.1164969	235.1967686	260.462716	264.074509
-0.95	-1723.415273	-1873.579889	-1107.61436	-1351.32545	-1431.89996
+0.95	330.8510612	354.7896356	216.2921991	266.420761	278.7453151
-1	-1814.121361	-1972.189327	-1165.90986	-1422.44783	-1507.26311
+1	348.2642766	373.4627684	227.6759973	280.4429042	293.4161173
(Span 2) -2	-1814.121361	-1972.189327	-1165.90986	-1422.44783	-1507.26311
+2	348.2642766	373.4627684	227.6759973	280.4429042	293.4161173
-2.05	-1185.334039	-1271.098216	-774.906097	-954.501163	-998.65542
+2.05	267.5485817	286.9069289	174.908523	215.4458732	225.4123417
-2.1	-1104.618335	-1184.542374	-722.138618	-889.504099	-930.651658
+2.1	325.5050951	302.283946	281.8624347	329.6626347	329.677497
-2.15	-1023.902631	-1097.986532	-669.371138	-824.507034	-862.647896
+2.15	595.4457838	607.6036483	492.7439363	556.4168828	592.6235407
-2.2	-943.186927	-1011.43069	-616.603659	-759.50997	-794.644134
+2.2	998.695398	1074.687049	757.5856274	905.2569291	932.1255323

-2.25	**-862.4712228**	**-924.8748482**	**-563.836179**	**-694.512906**	**-726.640372**
+2.25	**1432.20393**	**1551.127765**	**1035.009615**	**1237.767462**	**1295.720063**
-2.3	**-781.7555186**	**-838.3190063**	**-511.0687**	**-629.515841**	**-658.63661**
+2.3	**1790.848045**	**1955.122596**	**1256.760719**	**1501.961287**	**1588.508011**
-2.35	**-701.0398145**	**-751.7631644**	**-458.30122**	**-564.518777**	**-590.632848**
+2.35	**2058.004983**	**2260.535542**	**1429.451723**	**1694.504731**	**1805.058088**
-2.4	**-620.3241103**	**-665.2073225**	**-405.533741**	**-499.521713**	**-522.629086**
+2.4	**2273.598534**	**2461.378312**	**1543.98061**	**1828.240183**	**1942.394425**
-2.45	**-539.6084062**	**-578.6514806**	**-352.766261**	**-434.524648**	**-454.625324**
+2.45	**2394.309566**	**2581.842356**	**1596.414097**	**1886.918683**	**2011.976747**
-2.5	**-458.892702**	**-492.0956388**	**-299.998782**	**-369.527584**	**-386.621639**
+2.5	**2418.551097**	**2635.532034**	**1587.215592**	**1871.334549**	**2007.149033**
-2.55	**-539.6083673**	**-578.6514651**	**-352.76622**	**-434.524437**	**-454.625415**
+2.55	**2394.326828**	**2580.890617**	**1596.394934**	**1886.902677**	**2011.954909**
-2.6	**-620.3240622**	**-665.2073045**	**-405.533694**	**-499.521468**	**-522.62919**
+2.6	**2273.610381**	**2461.377519**	**1543.988704**	**1828.222808**	**1942.390926**
-2.65	**-701.0397571**	**-751.7631439**	**-458.301169**	**-564.518499**	**-590.632966**
+2.65	**2058.012268**	**2260.534459**	**1429.456234**	**1694.486195**	**1805.05821**
-2.7	**-781.755452**	**-838.3189833**	**-511.068643**	**-629.51553**	**-658.636741**
+2.7	**1790.847938**	**1955.174816**	**1256.771611**	**1501.96686**	**1588.524792**
-2.75	**-862.4711469**	**-924.8748228**	**-563.836117**	**-694.512561**	**-726.640517**
+2.75	**1432.217257**	**1551.127338**	**1035.020932**	**1237.772565**	**1295.733257**
-2.8	**-943.1868418**	**-1011.430662**	**-616.603592**	**-759.509592**	**-794.644293**
+2.8	**998.6897899**	**1074.685733**	**757.5983954**	**905.2623821**	**932.1245154**
-2.85	**-1023.902537**	**-1097.986502**	**-669.371066**	**-824.506623**	**-862.648068**
+2.85	**595.4333047**	**607.6016535**	**492.7401269**	**556.4236864**	**592.6252724**
-2.9	**-1104.618232**	**-1184.542341**	**-722.13854**	**-889.503654**	**-930.651844**
+2.9	**325.5083206**	**302.2842485**	**281.8837197**	**329.6659318**	**329.6807674**
-2.95	**-1185.333927**	**-1271.09818**	**-774.906015**	**-954.500685**	**-998.65562**
+2.95	**267.5486354**	**286.9069382**	**174.9085333**	**215.445995**	**225.4122963**
-3	**-1814.121495**	**-1972.23403**	**-1165.91035**	**-1422.44798**	**-1507.26345**
+3	**348.2643166**	**373.462779**	**227.6760195**	**280.443048**	**293.4160587**
(Span 3) -4	**-1.81E+03**	**-1.97E+03**	**-1.17E+03**	**-1.42E+03**	**-1.51E+03**
+4	**3.48E+02**	**3.73E+02**	**2.28E+02**	**2.80E+02**	**2.93E+02**
-3.05	**-1723.415421**	**-1873.622328**	**-1107.61483**	**-1351.32558**	**-1431.90028**
+3.05	**330.8511008**	**354.7896398**	**216.2922185**	**266.4208955**	**278.7452555**
-3.1	**-1632.709348**	**-1775.010626**	**-1049.31931**	**-1280.20318**	**-1356.53711**
+3.1	**313.4378851**	**336.1165005**	**235.2056348**	**260.4565838**	**264.0744524**
-3.15	***-1542.003274***	***-1676.398925***	***-991.023797***	***-1209.08078***	***-1281.17393***
+3.15	**477.8181315**	**474.629861**	**409.6700452**	**452.792074**	**479.6507484**
-3.2	**-1451.2972**	**-1577.787223**	**-932.72828**	**-1137.95838**	**-1205.81076**
+3.2	**828.9739482**	**846.8664448**	**622.0017286**	**748.7710913**	**752.979572**
-3.25	**-1360.591127**	**-1479.175521**	**-874.432763**	**-1066.83598**	**-1130.44759**
+3.25	**1163.220595**	**1241.858411**	**857.0235908**	**1030.022457**	**1058.441817**
-3.3	**-1269.885053**	**-1380.56382**	**-816.137246**	**-995.713581**	**-1055.08442**
+3.3	**1448.607438**	**1560.233424**	**1049.920058**	**1259.294125**	**1314.944266**
-3.35	**-1179.178979**	**-1281.952118**	**-757.841728**	**-924.591182**	**-979.721242**
+3.35	**1690.042092**	**1835.874498**	**1196.117519**	**1431.50116**	**1512.369579**
-3.4	**-1088.472905**	**-1183.340416**	**-699.546211**	**-853.468782**	**-904.358069**
+3.4	**1875.083583**	**2030.04255**	**1311.945638**	**1555.388944**	**1645.898402**
-3.45	**-997.7668317**	**-1084.728714**	**-641.250694**	**-782.346383**	**-828.994896**
+3.45	**2027.735035**	**2150.360934**	**1375.554199**	**1627.323839**	**1725.199746**
-3.5	**-907.0607579**	**-986.1170128**	**-582.955177**	**-711.223984**	**-753.631723**
+3.5	**2100.02383**	**2267.824761**	**1383.001332**	**1639.413169**	**1747.947703**
-3.55	**-816.3546842**	**-887.5053111**	**-524.65966**	**-640.101584**	**-678.26855**
+3.55	**2148.065346**	**2296.871528**	**1433.482018**	**1692.349897**	**1805.654196**
-3.6	**-725.6486105**	**-788.8936094**	**-466.364143**	**-568.979185**	**-602.905377**

+3.6	**2133.083436**	**2293.41954**	**1464.293388**	**1736.944549**	**1834.366629**
-3.65	**-634.9425367**	**-690.2819078**	**-408.068626**	**-497.856786**	**-527.542204**
+3.65	**2057.151357**	**2245.633305**	**1444.971106**	**1722.464737**	**1820.403317**
-3.7	**-544.236463**	**-591.6702061**	**-349.773108**	**-426.734386**	**-452.179031**
+3.7	**1953.870064**	**2105.007109**	**1380.433109**	**1662.056502**	**1744.450433**
-3.75	**-453.5303893**	**-493.0585044**	**-291.477591**	**-355.611987**	**-376.815858**
+3.75	**1784.388636**	**1925.72014**	**1277.326142**	**1547.840037**	**1596.578495**
-3.8	**-362.8243156**	**-394.4468027**	**-233.182074**	**-284.489587**	**-301.452685**
+3.8	**1590.472529**	**1650.636883**	**1115.463837**	**1364.531182**	**1396.622321**
-3.85	**-272.1182418**	**-295.835101**	**-174.886557**	**-213.367188**	**-226.089512**
+3.85	**1308.187667**	**1334.847023**	**912.8672025**	**1111.435785**	**1140.252317**
-3.9	**-181.4121681**	**-197.2233994**	**-116.59104**	**-142.244789**	**-150.726339**
+3.9	**948.5752594**	**959.7138796**	**672.7720837**	**818.8436973**	**839.3946045**
-3.95	**-90.70609436**	**-98.61169768**	**-58.2955227**	**-71.1223893**	**-75.3631662**
+3.95	**524.1722107**	**534.3917794**	**369.1972394**	**448.4590145**	**461.2772194**
-5	**-3.79E-13**	**-4.47E-13**	**-2.94E-13**	**-2.98E-13**	**-2.89E-13**
+5	**2.90E-13**	**2.71E-13**	**2.03E-13**	**2.36E-13**	**2.34E-13**

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	**-7.867698433**	**-5.550105182**	**-7.295850879**	**-7.283940333**	**-6.760145018**	**-4.474178152**	**-6.061070877**	**-6.887832759**	**-7.692107961**	**-8.508580527**
End Shear	**60.36680317**	**43.89184248**	**52.23235379**	**48.53441125**	**42.86037818**	**35.606812**	**47.93898541**	**53.45550734**	**56.90058613**	**60.13732126**
-0.05	**-7.867698433**	**-5.550105182**	**-7.295850879**	**-7.283940333**	**-7.290979606**	**-4.474178152**	**-6.061070877**	**-6.887832759**	**-7.692107961**	**-8.508580527**
+0.05	**55.80783278**	**40.69086313**	**47.82196857**	**44.00340653**	**38.86379261**	**33.0318977**	**44.46905572**	**49.49816679**	**52.50189322**	**55.28489209**
-0.1	**-7.867698433**	**-5.550105182**	**-7.295850879**	**-7.283940333**	**-8.616655169**	**-4.474178152**	**-6.061070877**	**-6.887832759**	**-7.692107961**	**-8.508580527**
+0.1	**50.9316505**	**37.27127035**	**43.11180779**	**39.18051557**	**34.51618376**	**30.28612494**	**40.76181126**	**45.26802092**	**47.80272888**	**50.10460546**
-0.15	**-7.867698433**	**-5.550105182**	**-7.295850879**	**-7.283940333**	**-9.751238787**	**-4.474178152**	**-6.061070877**	**-6.887832759**	**-7.692107961**	**-8.508580527**
+0.15	**47.32258188**	**34.7347994**	**39.65292219**	**35.66897811**	**31.37120984**	**28.24807445**	**38.01044017**	**42.13291395**	**44.32826073**	**46.28374312**
-0.2	**-7.867698433**	**-7.356161519**	**-7.357530223**	**-7.283940333**	**-11.21309845**	**-5.369452**	**-7.942186229**	**-8.219020562**	**-8.212659159**	**-8.508580527**
+0.2	**42.59036818**	**31.40143147**	**35.15544491**	**31.14533192**	**27.34507634**	**25.5678148**	**34.39253042**	**38.01636628**	**39.77741111**	**41.29207344**
-0.25	**-11.10212839**	**-9.17145132**	**-9.173099843**	**-7.297463912**	**-12.27646517**	**-7.421991606**	**-10.11367995**	**-10.81019409**	**-10.80395349**	**-10.79790214**
+0.25	**39.20269957**	**28.94532473**	**31.8790521**	**28.02567863**	**24.56090128**	**23.59145095**	**31.72510724**	**34.98591718**	**36.43599339**	**37.63700105**
-0.3	**-15.49658122**	**-12.07128561**	**-11.56544463**	**-9.470668886**	**-13.71046599**	**-10.1630811**	**-13.60002561**	**-14.23241547**	**-14.22635408**	**-14.22047961**
+0.3	**34.66923421**	**25.74002822**	**27.65554159**	**24.17749885**	**21.1377473**	**21.01017213**	**28.24172117**	**31.03485606**	**32.09162994**	**32.89882071**
-0.35	**-18.7584801**	**-14.61498541**	**-13.33312796**	**-11.71653263**	**-14.93081715**	**-12.19644517**	**-16.34780115**	**-17.17772881**	**-17.15329457**	**-17.14619284**
+0.35	**31.36228826**	**23.3956613**	**24.73214208**	**21.40762602**	**18.71730387**	**19.12059541**	**25.69213648**	**28.1479803**	**28.92689483**	**29.458194**
-0.4	**-23.10245132**	**-17.96039397**	**-16.15911582**	**-14.67432336**	**-17.81840531**	**-14.86889419**	**-19.95971795**	**-21.34268987**	**-21.28354284**	**-21.27667829**
+0.4	**27.09306235**	**20.36027875**	**20.74871217**	**17.88440763**	**15.68711546**	**16.67177222**	**22.38846412**	**24.41430019**	**24.97185953**	**25.17312271**
-0.45	**-26.62449584**	**-20.42733229**	**-18.8916034**	**-16.85856835**	**-20.0817331**	**-16.83822986**	**-22.62174677**	**-24.41669966**	**-24.45418314**	**-24.44641066**
+0.45	**24.00695978**	**18.24922299**	**18.09561394**	**15.43323851**	**13.57927712**	**14.89408671**	**19.99061144**	**21.82063622**	**22.0230843**	**22.02144337**
-0.5	**-31.31533164**	**-23.64947118**	**-23.19268839**	**-19.71577361**	**-22.97299393**	**-19.40857176**	**-26.09673329**	**-28.4355049**	**-29.02152992**	**-29.13644714**
+0.5	**20.06240629**	**15.42142058**	**14.80019702**	**12.66920158**	**11.18459121**	**12.68078129**	**17.0056831**	**18.35092297**	**18.291614**	**18.29018543**
-0.55	**-34.75761521**	**-26.00826646**	**-26.36338348**	**-22.42764977**	**-25.49515432**	**-21.28877096**	**-28.63911791**	**-31.38043824**	**-32.37737767**	**-32.92971671**
+0.55	**17.2424731**	**13.3912811**	**12.46753944**	**10.92508081**	**9.67378393**	**11.03740863**	**14.789818**	**15.86362676**	**15.82002699**	**15.81858607**
-0.6	**-39.23040094**	**-29.06529104**	**-30.63259028**	**-26.60147845**	**-29.3346163**	**-23.72353238**	**-31.93198835**	**-35.20119805**	**-36.74372303**	**-37.87847708**
+0.6	**13.72005293**	**10.8163316**	**9.835616547**	**8.719909785**	**7.839381902**	**8.950027417**	**11.97589572**	**12.63892767**	**12.68143847**	**12.68828996**
-0.65	**-42.48653598**	**-31.28456201**	**-34.08165222**	**-29.83522061**	**-32.34714754**	**-25.4894954**	**-34.32083786**	**-37.9781388**	**-39.92700578**	**-41.49675994**
+0.65	**11.37722458**	**8.917823728**	**8.295776166**	**7.1628628**	**6.592566131**	**7.468301454**	**9.902559001**	**10.39661665**	**10.38573058**	**10.38429354**
-0.7	**-46.68099033**	**-34.13462992**	**-38.56416849**	**-34.04566518**	**-36.2038369**	**-27.75520666**	**-37.38640012**	**-41.54895948**	**-44.03417325**	**-46.17976612**
+0.7	**8.449570898**	**6.643245864**	**6.521076689**	**5.225549834**	**4.968287487**	**5.557759633**	**7.404838942**	**7.767397944**	**7.766131021**	**7.826047232**
-0.75	**-49.70576506**	**-36.18299004**	**-41.82793117**	**-37.11742776**	**-38.97595992**	**-29.38183242**	**-39.58782263**	**-44.11899003**	**-47.0012606**	**-49.57440482**
+0.75	**6.437468004**	**5.271813588**	**5.268133043**	**4.18904185**	**4.137211913**	**4.266369296**	**5.719899657**	**6.081596236**	**6.08035568**	**6.136620529**
-0.8	**-53.56159084**	**-38.78426027**	**-46.03272804**	**-41.48339663**	**-42.79644686**	**-31.44501999**	**-42.38088685**	**-47.38798955**	**-50.7910865**	**-53.92678297**
+0.8	**4.056901932**	**3.712988117**	**3.709371329**	**2.949143091**	**3.142810944**	**2.786712249**	**3.911047809**	**4.000576125**	**3.999387858**	**3.998237315**
-0.85	**-56.30979299**	**-40.63032866**	**-49.06522191**	**-44.9800342**	**-45.79850247**	**-32.90720278**	**-44.36098954**	**-49.71219253**	**-53.49835009**	**-57.04912374**
+0.85	**3.025105715**	**2.600212911**	**2.629433241**	**2.090139814**	**2.515855527**	**2.078894903**	**2.663043985**	**2.665211091**	**2.664215805**	**2.663250956**
-0.9	**-59.76670775**	**-42.94095299**	**-52.93101514**	**-49.48161583**	**-49.63639163**	**-34.73440034**	**-46.83636556**	**-52.62747739**	**-56.91265843**	**-61.00599966**
+0.9	**1.760996699**	**1.290227499**	**1.452737119**	**1.371677781**	**1.760895368**	**1.191885701**	**1.281547685**	**1.449432754**	**1.615839589**	**1.780547918**
-0.95	**-62.19311514**	**-44.55334749**	**-55.68627275**	**-52.72538487**	**-52.38905252**	**-36.0070358**	**-48.56125841**	**-54.66693569**	**-59.31646928**	**-63.80739039**
+0.95	**1.642844748**	**1.167485883**	**1.452737119**	**1.371677781**	**1.400483412**	**0.944651424**	**1.281547685**	**1.449432754**	**1.615839589**	**1.780547918**
-1	**-65.19083041**	**-46.53148692**	**-59.15177745**	**-56.85631212**	**-55.88825202**	**-37.56477155**	**-50.67375467**	**-57.17661627**	**-62.29708806**	**-67.30388696**
+1	**1.64E+00**	**1.167485883**	**1.452737119**	**1.371677781**	**1.25E+00**	**0.944651424**	**1.281547685**	**1.449432754**	**1.615839589**	**1.780547918**
(Span 2) -2	**-5.857768519**	**-4.162817183**	**-5.179916109**	**-4.890888949**	**-4.46713927**	**-3.368272997**	**-4.569518819**	**-5.168134101**	**-5.761478376**	**-6.348766678**
+2	**65.67797137**	**46.73344675**	**60.51409188**	**59.57746242**	**56.75864582**	**37.68681015**	**50.84861533**	**57.48292835**	**62.82961568**	**68.13086351**
-2.05	**-5.857768519**	**-4.162817183**	**-5.179916109**	**-4.890888949**	**-4.639312094**	**-3.368272997**	**-4.569518819**	**-5.168134101**	**-5.761478376**	**-6.348766678**
+2.05	**62.64876689**	**44.72571748**	**57.11064748**	**55.65886964**	**53.24155138**	**36.10219101**	**48.69882102**	**54.93636284**	**59.81384315**	**64.61027036**
-2.1	**-5.857768519**	**-4.162817183**	**-5.179916109**	**-4.890888949**	**-5.052490966**	**-3.368272997**	**-4.569518819**	**-5.168134101**	**-5.761478376**	**-6.348766678**
+2.1	**59.33207341**	**42.50428557**	**53.4866257**	**51.57051321**	**49.54667661**	**34.34290937**	**46.31417667**	**52.13192977**	**56.53140467**	**60.81712398**
-2.15	**-5.857768519**	**-4.162817183**	**-5.179916109**	**-4.890888949**	**-6.288439337**	**-3.368272997**	**-4.569518819**	**-5.168134101**	**-5.761478376**	**-6.348766678**
+2.15	**55.7693844**	**40.09788061**	**49.68409558**	**47.3584195**	**45.87545105**	**32.43194505**	**43.7257176**	**49.10525855**	**53.02224009**	**56.79595858**
-2.2	**-5.931398383**	**-4.820888061**	**-5.179916109**	**-4.890888949**	**-7.590729137**	**-3.960695897**	**-5.279366492**	**-5.626318005**	**-5.761478376**	**-6.348766678**
+2.2	**52.0021968**	**37.53523109**	**45.74514379**	**43.0685635**	**42.15453443**	**30.39228308**	**40.96446637**	**45.89197412**	**49.32629035**	**52.59131117**
-2.25	**-8.715506685**	**-6.871440514**	**-6.529788517**	**-5.456439108**	**-8.825780958**	**-5.725507594**	**-7.643915085**	**-7.956497445**	**-7.952422709**	**-7.94950814**

+2.25	48.07199702	34.8450667	41.7118479	38.53890602	38.35786363	28.24690112	38.06144588	42.52770483	45.48349505	48.24773482
-2.3	-11.74671445	-9.227190402	-8.430057196	-7.467272281	-10.00733929	-7.641217019	-10.22697154	-10.8334267	-10.81274892	-10.80967843
+2.3	44.0202862	32.05611488	37.48126823	34.2017767	34.46013482	26.01878004	35.04768955	39.04807409	41.53379259	43.80975578
-2.35	-15.17608714	-11.74750368	-10.97724448	-9.631379185	-11.49377478	-9.684837717	-12.98370537	-13.92157819	-13.88174021	-13.87856794
+2.35	39.88854702	29.19710669	33.30361018	29.95947432	30.60211003	23.73089882	31.95421626	35.4887109	37.5171311	39.28360785
-2.4	-18.88267517	-14.40365174	-14.05195415	-11.98934456	-13.54122202	-11.83339266	-15.88307962	-17.18532121	-17.21866853	-17.21502498
+2.4	35.7182793	26.27904544	29.24286345	25.82597424	26.86257511	21.40623957	28.81206287	31.76799881	33.3572224	34.65326176
-2.45	-22.76458173	-17.1669057	-17.32407342	-14.89294384	-16.28218867	-14.06390195	-18.89407297	-20.58902819	-20.94499783	-21.07278679
+2.45	31.42542007	23.22224289	25.25842559	22.14961002	23.33746547	18.93794023	25.47683975	28.07315684	29.22000748	30.12963953
-2.5	-27.23308899	-20.32786412	-21.39315467	-18.62093992	-19.82748007	-16.61041259	-22.33279873	-24.49174786	-25.24710984	-25.76647224
+2.5	26.85379309	20.00790583	20.97196554	18.23750655	19.46192048	16.35286062	21.98496254	24.09630092	24.80987746	25.2879262
-2.55	-31.34918678	-23.22288449	-25.25921305	-22.1503061	-23.33791625	-18.93846796	-25.4775419	-28.07393951	-29.22086521	-30.13057655
+2.55	22.83464703	17.16628534	17.32339423	14.89230992	16.28180348	14.06338601	18.89339237	20.58826943	20.94417742	21.07192348
-2.6	-35.51181956	-26.24477666	-29.2436711	-25.82676833	-26.86306277	-21.40676795	-28.79565075	-31.73532834	-33.34247652	-34.63895475
+2.6	18.94884204	14.40305739	14.05131172	11.98881931	13.54095758	11.83289732	15.88242129	17.18459531	17.21788916	17.2142518
-2.65	-39.67959941	-29.19773972	-33.30444244	-29.96028648	-30.60257693	-23.73141676	-31.95491704	-35.48950412	-37.51799594	-39.26941924
+2.65	15.2378582	11.74693184	10.97664181	9.630951258	11.49357357	9.684360167	12.98306594	13.92088181	13.881059	13.87790283
-2.7	-43.81114582	-32.0567399	-37.44987578	-34.20260517	-34.46063704	-26.01929115	-35.04837067	-39.04884707	-41.53466032	-43.8107053
+2.7	11.80519745	9.226655778	8.429583788	7.466864235	10.02018553	7.640769285	10.22637257	10.83277767	10.81211384	10.80905846
-2.75	-48.0873479	-34.84566865	-41.71267698	-38.51538907	-38.35833319	-28.2474007	-38.06211588	-42.52846229	-45.48433773	-48.24866212
+2.75	8.768580299	6.870941591	6.529435495	5.456066843	8.825628737	5.725091389	7.643358172	7.955888878	7.951831427	7.948926173
-2.8	-52.01445077	-37.53581314	-45.74595824	-43.05702231	-42.15498118	-30.39275786	-40.96510411	-45.8926978	-49.32711292	-52.59221364
+2.8	5.978852596	4.820529536	5.179914454	4.890887522	7.590561189	3.960314123	5.278938578	5.625835431	5.761478316	6.348764779
-2.85	-55.77882541	-40.09842747	-49.6848748	-47.35924546	-45.83610083	-32.43239687	-43.72632012	-49.10595056	-53.02302073	-56.79682175
+2.85	5.8578079	4.162818229	5.179914454	4.890887522	6.288249428	3.368273593	4.569521283	5.168134589	5.761478316	6.348764779
-2.9	-59.33906719	-42.50479915	-53.48737348	-51.5713184	-49.54711635	-34.34332376	-46.31473708	-52.13257205	-56.53214657	-60.81795702
+2.9	5.8578079	4.162818229	5.179914454	4.890887522	5.052337715	3.368273593	4.569521283	5.168134589	5.761478316	6.348764779
-2.95	-62.65380847	-44.72618371	-57.11136057	-55.65964782	-53.24196212	-36.10257095	-48.69932868	-54.93695671	-59.81452649	-64.61105078
+2.95	5.8578079	4.162818229	5.179914454	4.890887522	4.639265701	3.368273593	4.569521283	5.168134589	5.761478316	6.348764779
-3	-65.99855481	-46.94250397	-60.8774673	-60.00112594	-57.13777395	-37.85143303	-51.07208682	-57.74893371	-63.14712025	-68.50398018
+3	5.8578079	4.162818229	5.179914454	4.890887522	4.467138447	3.368273593	4.569521283	5.168134589	5.761478316	6.348764779
(Span 3) -4	-1.64E+00	-1.167486176	-1.452736654	-1.371677381	-1.25E+00	-0.944651591	-1.281548376	-1.449432891	-1.615839572	-1.780547386
+4	64.80982986	46.29488443	58.7314178	56.35183895	55.46122968	37.3786914	50.42132947	56.87590539	61.93839547	66.88157031
-3.05	-1.64E+00	-1.167486176	-1.452736654	-1.371677381	-1.37E+00	-0.944651591	-1.281548376	-1.449432891	-1.615839572	-1.780547386
+3.05	62.55970283	44.81105266	56.13197437	53.25331506	52.83673037	36.21020724	48.83671177	54.99336852	59.70262433	64.25885372
-3.1	-1.911773682	-1.446083248	-1.454524146	-1.371677381	-1.850650419	-1.295278326	-1.396379601	-1.449432891	-1.615839572	-1.780547386
+3.1	59.32288886	42.66140042	52.45862367	48.92863789	49.16656067	34.51351952	46.53707104	52.274342	56.49784093	60.52399018
-3.15	-2.859975815	-2.42872902	-2.457507088	-1.953379908	-2.41695224	-1.965832924	-2.464885231	-2.467004287	-2.466013794	-2.465047312
+3.15	56.72855391	40.92820605	49.5589665	45.55212615	46.28805873	33.14294654	44.68029855	50.08761722	53.93680864	57.5559972
-3.2	-4.235298877	-3.900941246	-3.897281319	-3.098604292	-3.262195718	-2.909504147	-4.128724501	-4.250368752	-4.249169017	-4.247999848
+3.2	53.06294549	38.46698616	45.51596345	40.89029757	42.28535649	31.19353804	42.0403917	46.98893995	50.32741816	53.39320332
-3.25	-6.064649874	-5.070219418	-5.06650662	-4.028647952	-4.008071037	-4.059979095	-5.485552615	-5.811355828	-5.810116617	-5.857960956
+3.25	50.16962117	36.51582281	42.36205911	37.62070198	39.42741436	29.6459675	39.94535787	44.53692385	47.48475314	50.12860688
-3.3	-8.77919081	-6.918133456	-6.736951313	-5.459093962	-5.154563635	-5.781672872	-7.706457688	-8.058887713	-8.057612969	-8.118105344
+3.3	46.13550197	33.78488588	38.01070305	33.52532662	35.7312359	27.4773059	37.01035367	41.11048335	43.52893916	45.60275662
-3.35	-10.97208356	-8.62428657	-8.06812875	-6.912266193	-6.392131519	-7.229186245	-9.576740625	-10.03868438	-10.0298283	-10.02837797
+3.35	42.98840348	31.64712767	34.64851855	30.36722153	32.8386877	25.77785606	34.7109513	38.43210447	40.4482711	42.09017946
-3.4	-14.09121222	-11.13017465	-10.13575538	-8.988148703	-8.054404178	-9.204660512	-12.31910901	-13.02243514	-13.06264393	-13.06947736
+3.4	38.64606416	28.68831926	30.05010046	26.05587562	28.82194154	23.42340552	31.52606322	34.72979138	36.20420578	37.2661465
-3.45	-16.75236036	-13.06159977	-12.09162807	-10.64221022	-9.43649616	-10.77036666	-14.42977689	-15.46003011	-15.41892727	-15.41746344
+3.45	35.29042469	26.395347	26.88567576	22.87657306	25.91155696	21.59717168	29.05618355	31.86396552	32.92916255	33.55427824
-3.5	-20.50756304	-15.76824357	-15.20156355	-12.96752072	-11.44553838	-12.96135822	-17.38403438	-18.77616241	-18.7200955	-18.71841007
+3.5	30.70013264	23.2505094	22.65838072	19.36180407	22.61901125	19.09041879	25.66657623	27.93766934	28.45501743	28.49693763
-3.55	-23.46290961	-17.88930072	-17.67340469	-15.07219739	-13.26665928	-14.6761662	-19.69667113	-21.37871058	-21.54278352	-21.54111634
+3.55	27.18115169	20.83370784	19.43232673	17.21872726	20.45057798	17.16249451	23.0601133	24.92331504	25.02922951	25.02151543
-3.6	-27.57283002	-20.7343939	-21.22490039	-18.31439147	-16.05570843	-16.97374873	-22.79582251	-24.87419402	-25.34882112	-25.7163488
+3.6	22.56959915	17.5446849	15.74092001	14.30660694	17.43273368	14.53690201	19.51100289	20.82492542	20.77013546	20.76325904

-3.65	**-30.77160665**	**-23.0111343**	**-24.23493316**	**-20.95709039**	**-18.32854371**	**-18.81053846**	**-25.27380219**	**-27.67471384**	**-28.40888951**	**-28.89596117**
+3.65	**19.26636809**	**15.03542336**	**13.62467023**	**12.08809421**	**15.17003628**	**12.53241003**	**16.80184919**	**17.7009603**	**17.672207**	**17.66514993**
-3.7	**-35.17595859**	**-26.13673188**	**-28.17476039**	**-24.6499562**	**-21.55614079**	**-21.32979153**	**-28.6729966**	**-31.52360337**	**-32.62823258**	**-33.48312055**
+3.7	**14.91704685**	**11.64407077**	**11.26792146**	**9.09381585**	**13.50640167**	**9.821448342**	**13.13839789**	**13.80624548**	**13.80017495**	**13.79428679**
-3.75	**-38.57295106**	**-28.54090258**	**-31.34269959**	**-27.53637111**	**-24.12369432**	**-23.26590806**	**-31.28575706**	**-34.48715085**	**-35.88678979**	**-37.03708214**
+3.75	**11.62072138**	**9.471776757**	**9.473524919**	**7.536475707**	**12.45106685**	**7.76547076**	**10.49909979**	**11.23938529**	**11.23317923**	**11.2271704**
-3.8	**-43.21144544**	**-31.81548579**	**-35.7108949**	**-31.70121376**	**-27.83798748**	**-25.90088361**	**-34.842077**	**-38.52746471**	**-40.34169674**	**-41.91014143**
+3.8	**7.867706898**	**7.051565365**	**7.295852542**	**7.2839406**	**11.0330557**	**5.180025876**	**7.577995207**	**7.784728811**	**7.778361816**	**8.508584109**
-3.85	**-46.76141986**	**-34.31570543**	**-39.08430359**	**-35.09427742**	**-30.85781654**	**-27.91123367**	**-37.5557263**	**-41.61512252**	**-43.75511261**	**-45.65421369**
+3.85	**7.867706898**	**5.550106275**	**7.295852542**	**7.2839406**	**9.93677884**	**4.474178888**	**6.061073386**	**6.88783339**	**7.692108048**	**8.508584109**
-3.9	**-51.57378897**	**-37.6974311**	**-43.69581361**	**-39.77596543**	**-35.05085269**	**-30.62844198**	**-41.22395476**	**-45.79497189**	**-48.38739375**	**-50.74833663**
+3.9	**7.867706898**	**5.550106275**	**7.295852542**	**7.2839406**	**8.423801476**	**4.474178888**	**6.061073386**	**6.88783339**	**7.692108048**	**8.508584109**
-3.95	**-55.23154648**	**-40.26231567**	**-47.22872588**	**-43.39345181**	**-38.31178887**	**-32.68793227**	**-44.00459948**	**-48.96782215**	**-51.91203881**	**-54.63386448**
+3.95	**7.867706898**	**5.550106275**	**7.295852542**	**7.2839406**	**7.409567881**	**4.474178888**	**6.061073386**	**6.88783339**	**7.692108048**	**8.508584109**
-5	**-60.15746521**	**-43.70933987**	**-52.02226233**	**-48.34087204**	**-42.80157565**	**-35.45391189**	**-47.73957502**	**-53.23531716**	**-56.66355813**	**-59.88413819**
+5	**7.867706898**	**5.550106275**	**7.295852542**	**7.2839406**	**6.760145172**	**4.474178888**	**6.061073386**	**6.88783339**	**7.692108048**	**8.508584109**

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**							
-0	-7.867698433	-7.349428245	-7.891827025	-7.435219038	-8.976203058	-8.479783945	-8.966219148	-3.808204036
End Shear	60.36680317	59.32901233	63.02277833	58.88850915	69.54884648	59.43741274	62.73647308	30.70958442
-0.05	-7.867698433	-7.349428245	-7.891827025	-7.435219038	-8.976203058	-8.479783945	-8.966219148	-3.808204036
+0.05	55.80783278	55.13122932	58.50877044	54.64264929	64.41747503	54.33170182	57.33518495	28.50843881
-0.1	-7.867698433	-7.349428245	-7.891827025	-7.435219038	-8.976203058	-8.479783945	-8.966219148	-3.808204036
+0.1	50.9316505	50.64688439	53.68995658	50.10522406	58.94080159	48.88392739	51.57293522	26.11911403
-0.15	-7.867698433	-7.349428245	-7.891827025	-7.435219038	-8.976203058	-8.479783945	-8.966219148	-4.019208822
+0.15	47.32258188	47.31440446	50.11123859	46.73689713	54.88014526	44.8869069	47.34583221	24.34708681
-0.2	-7.867698433	-10.44870192	-10.44870192	-9.823717259	-10.45136871	-8.479783945	-8.966219148	-5.60985824
+0.2	42.59036818	42.92638205	45.40214586	42.30658238	49.5459353	39.6946051	41.85554906	22.01872292
-0.25	-11.10212839	-13.54382118	-13.71604154	-12.61820963	-13.55943769	-10.17473196	-10.72796361	-6.790591872
+0.25	39.20269957	39.6865419	41.92768557	39.03930116	45.61723278	35.9158736	37.86067519	20.30345977
-0.3	-15.49658122	-17.99008733	-18.51186102	-16.92769504	-18.6990273	-13.38717002	-14.14628032	-8.375764706
+0.3	34.66923421	35.44923469	37.38689081	34.77132784	40.49243289	31.05020671	32.71770696	18.06550354
-0.35	-18.7584801	-21.28450545	-22.06759172	-20.28538775	-22.7847561	-15.76637638	-16.67822156	-10.15401994
+0.35	31.36228826	32.34282523	34.06061716	31.6465141	36.74589288	27.68634669	29.16289631	16.42909102
-0.4	-23.10245132	-25.60911072	-26.73838108	-24.69798153	-28.16073528	-18.88817788	-20.0007793	-12.49276863
+0.4	27.09306235	28.31061901	29.7466896	27.59611461	31.89745112	23.11505094	24.33364758	14.31099409
-0.45	-26.62449584	-28.79188618	-30.17837294	-27.94931552	-32.12701874	-21.18465063	-22.44520321	-14.21737749
+0.45	24.00695978	25.37843544	26.61253573	24.65519384	28.5272175	20.16368154	21.22492794	12.77552073
-0.5	-31.31533164	-32.94043769	-34.66555514	-32.19247369	-37.31025359	-25.71913071	-27.07276917	-16.46986936
+0.5	20.06240629	21.72088017	22.70693529	20.99277139	24.01532771	16.37921076	17.24127448	10.80673401
-0.55	-34.75761521	-35.97077674	-37.94587678	-35.29601852	-41.1068729	-29.43490244	-30.98410783	-18.1187413
+0.55	17.2424731	18.99949271	19.80420406	18.27275042	20.77822464	14.04666019	14.87060073	9.394287213
-0.6	-39.23040094	-39.88888098	-42.19087414	-39.31451408	-46.03042205	-34.43723342	-36.25823194	-20.25552638
+0.6	13.72005293	15.53455523	16.11305265	14.81681878	16.67538898	11.52177829	12.18901894	7.604261102
-0.65	-42.48653598	-42.72598862	-45.26759232	-42.22884761	-49.6071688	-38.46750168	-40.52823735	-21.80657305
+0.65	11.37722458	13.06824798	13.48951525	12.27293691	13.68032707	9.722834352	10.27884447	6.336927409
-0.7	-46.68099033	-46.35926013	-49.21183612	-45.96744571	-54.20408084	-43.71047483	-46.0839038	-23.79819892
+0.7	8.449570898	9.877852807	10.10152148	9.197295689	10.0352323	7.460833535	7.87758631	4.804017839
-0.75	-49.70576506	-48.96234392	-52.04102051	-48.65114444	-57.51074456	-47.53195115	-50.13393505	-25.22933431
+0.75	6.437468004	7.713106894	7.807314688	7.110960426	7.679357353	5.873805402	6.193351359	3.955035033
-0.8	-53.56159084	-52.2563844	-55.62592781	-52.05461298	-61.71407139	-52.46093995	-55.35861365	-27.04635416
+0.8	4.056901932	5.27516197	5.27516197	4.807244401	5.076644296	4.004434957	4.215194692	2.89363341
-0.85	-56.30979299	-54.58465037	-58.16364645	-54.46625242	-64.70044066	-56.02024466	-59.13215101	-28.33548992
+0.85	3.025105715	3.690757321	3.690757321	3.220132169	3.33408349	2.838592704	2.98799232	2.153965079
-0.9	-59.76670775	-57.48507467	-61.33064866	-57.47935909	-68.44323393	-60.56408573	-63.95049232	-29.94845176
+0.9	1.760996699	1.830338475	1.830338475	1.574754526	1.897730511	1.689982234	1.785535282	1.247978818
-0.95	-62.19311514	-59.49772694	-63.5329675	-59.57751812	-71.05910145	-63.8078411	-67.39101826	-31.07350003
+0.95	1.642844748	1.559201122	1.672094831	1.574754526	1.897730511	1.689982234	1.785535282	0.792931857
-1	-65.19083041	-61.95014131	-66.2234867	-62.1450287	-74.27441053	-67.89537032	-71.72767203	-32.45295376
+1	1.64E+00	1.559201122	1.672094831	1.574754526	1.897730511	1.689982234	1.785535282	0.792931857
(Span 2) -2	-5.857768519	-5.559526879	-5.962063343	-5.614984577	-6.766595975	-6.025843205	-6.366549565	-2.827297832
+2	65.67797137	62.06376398	66.39373522	62.33792736	74.61179142	69.5593579	73.5109283	32.5745749
-2.05	-5.857768519	-5.559526879	-5.962063343	-5.614984577	-6.766595975	-6.025843205	-6.366549565	-2.827297832
+2.05	62.64876689	59.56366967	63.65242434	59.72284202	71.34073401	65.54916609	69.25855517	31.17672039
-2.1	-5.857768519	-5.559526879	-5.962063343	-5.614984577	-6.766595975	-6.025843205	-6.366549565	-2.827297832
+2.1	59.33207341	56.76892292	60.60019206	56.81850037	67.73255496	61.29192205	64.74616322	29.62943145
-2.15	-5.857768519	-5.559526879	-5.962063343	-5.614984577	-6.766595975	-6.025843205	-6.366549565	-2.827297832
+2.15	55.7693844	53.71687172	57.2772593	53.66283407	63.83323121	56.83647602	60.02547624	27.95293048
-2.2	-5.931398383	-7.143234215	-7.242184783	-6.568369169	-7.035672711	-6.025843205	-6.366549565	-3.656446865
+2.2	52.0021968	50.44485733	53.72383972	50.29375977	59.68872314	52.2316996	55.14824062	26.16743754
-2.25	-8.715506685	-10.10023061	-10.37852948	-9.482634152	-10.45847196	-7.527691363	-7.953046429	-4.941158092

+2.25	48.07199702	46.99022593	49.98015222	46.74919428	55.34499019	47.52645292	50.16619063	24.29317519
-2.3	-11.74671445	-13.29161778	-13.77369153	-12.65867783	-14.21834767	-9.854775947	-10.42404737	-6.577198926
+2.3	44.0202862	43.39032027	46.08641245	43.06706751	50.84800787	42.61304536	44.96627042	22.35035881
-2.35	-15.17608714	-16.68005269	-17.3874554	-16.04477627	-18.246327	-12.32150337	-13.04431249	-8.328913019
+2.35	39.88854702	39.68248442	42.08283647	39.28529114	46.24372986	37.7465687	39.81588983	20.35920921
-2.4	-18.88267517	-20.22819232	-21.17960566	-19.60299532	-22.49642885	-15.50870053	-16.32494792	-10.1760774
+2.4	35.7182793	35.904063	38.009642	35.44179949	41.57813748	33.0371992	34.83425932	18.33995194
-2.45	-22.76458173	-23.89869097	-25.10992379	-23.29542012	-26.92269633	-19.27242761	-20.2867659	-12.09848
+2.45	31.42542007	31.88042741	33.67909131	31.3597527	36.63766734	28.42552218	29.95763382	16.31280006
-2.5	-27.23308899	-28.07511195	-29.59008067	-27.50939725	-31.99148324	-23.96129894	-25.2387	-14.29812112
+2.5	26.85379309	27.65334823	29.13727391	27.08327629	31.47813651	23.47546224	24.72526003	14.0757442
-2.55	-31.34918678	-31.88128897	-33.68001794	-31.36061237	-36.63870633	-28.42643269	-29.95859646	-16.31294833
+2.55	22.83464703	23.89784993	25.10902248	23.2945858	26.92169468	19.27164513	20.28594224	12.09833589
-2.6	-35.51181956	-35.90491656	-38.01056129	-35.42252443	-41.55904612	-33.03813492	-34.83524898	-18.34009996
+2.6	18.94884204	20.22737567	21.17873203	19.60218772	22.49546257	15.50796288	16.32417145	10.17594265
-2.65	-39.67959941	-39.68332647	-42.08374497	-39.28614832	-46.24477167	-37.74753481	-39.81691195	-20.35936072
+2.65	15.2378582	16.67926908	17.38661881	16.04399114	18.24539093	12.32099764	13.04377519	8.328776056
-2.7	-43.81114582	-43.3911411	-46.08729937	-43.06789999	-50.84902292	-42.57922565	-44.93067629	-22.35050299
+2.7	11.80519745	13.29087394	13.77289914	12.6579417	14.21747405	9.854295046	10.42353662	6.577072563
-2.75	-48.0873479	-46.99101957	-49.9810115	-46.75001274	-55.34599123	-47.52741917	-50.16721352	-24.29331316
+2.75	8.768580299	10.09953524	10.37779072	9.481948987	10.45766304	7.527237153	7.952564226	4.941043924
-2.8	-52.01445077	-50.44561489	-53.72466145	-50.2945382	-59.68967864	-52.23265056	-55.14924768	-26.16757576
+2.8	5.978852596	7.142596956	7.241510128	6.567823558	7.035071936	6.025846077	6.366547812	3.66324955
-2.85	-55.77882541	-53.71758404	-57.27803375	-53.66356897	-63.83413706	-56.83738796	-60.02644228	-27.95305845
+2.85	5.8578079	5.559526794	5.962065068	5.6149856	6.766593872	6.025846077	6.366547812	2.827298174
-2.9	-59.33906719	-56.76958266	-60.60091133	-56.8191833	-67.73340057	-61.29279919	-64.74709275	-29.62954784
+2.9	5.8578079	5.559526794	5.962065068	5.6149856	6.766593872	6.025846077	6.366547812	2.827298174
-2.95	-62.65380847	-59.56426681	-63.65307763	-59.72346008	-71.34150426	-65.55000492	-69.25944442	-31.17682912
+2.95	5.8578079	5.559526794	5.962065068	5.6149856	6.766593872	6.025846077	6.366547812	2.827298174
-3	-65.99855481	-62.32226382	-66.67795981	-62.60953684	-74.95312312	-69.98833966	-73.96594103	-32.71988363
+3	5.8578079	5.559526794	5.962065068	5.6149856	6.766593872	6.025846077	6.366547812	2.827298174
(Span 3) -4	-1.64E+00	-1.559201098	-1.672095315	-1.574754813	-1.897729921	-1.689983039	-1.785534791	-0.792931953
+4	64.80982986	61.65796779	65.90245627	61.83838117	73.88939867	67.39904496	71.20101798	32.28823579
-3.05	-1.64E+00	-1.559201098	-1.672095315	-1.574754813	-1.897729921	-1.689983039	-1.785534791	-0.792931953
+3.05	62.55970283	59.81836595	63.88425402	59.91244804	71.47755381	64.3330331	67.94814138	31.25350167
-3.1	-1.911773682	-2.051683992	-2.051683992	-1.642799531	-1.897729921	-1.689983039	-1.785534791	-1.350053639
+3.1	59.32288886	57.13507725	60.9480962	57.11516695	67.99005275	60.00840593	63.36117603	29.7536016
-3.15	-2.859975815	-3.447226644	-3.447226644	-2.968344729	-3.057895173	-2.652990606	-2.79262169	-2.029139567
+3.15	56.72855391	54.95947115	58.57253525	54.85504282	65.18260282	56.6001634	59.74703719	28.54374095
-3.2	-4.235298877	-5.542160885	-5.542160885	-5.084281439	-5.381073318	-4.207292333	-4.428728772	-3.014634878
+3.2	53.06294549	51.85538844	55.18920416	51.63980432	61.20111913	51.85479894	54.71605144	26.82505991
-3.25	-6.064649874	-7.366387939	-7.440275622	-6.812312042	-7.349955009	-5.593235951	-5.895866995	-3.810338413
+3.25	50.16962117	49.38457426	52.50021866	49.08691466	58.04827598	48.15770208	50.79716645	25.46215842
-3.3	-8.77919081	-10.25245023	-10.49893281	-9.568361326	-10.47220975	-7.735159639	-8.168759973	-4.945934839
+3.3	46.13550197	45.91406151	48.72825978	45.50892554	53.63972718	43.06278158	45.39752872	23.55414484
-3.35	-10.97208356	-12.6696349	-13.06582957	-11.86836774	-13.18582439	-9.43186355	-9.969919922	-6.132435192
+3.35	42.98840348	43.18883252	45.76978091	42.7046947	50.19170234	39.13020734	41.23041438	22.06028846
-3.4	-14.09121222	-15.95778347	-16.56359899	-15.23845742	-17.17527697	-11.83025899	-12.51661027	-7.822047197
+3.4	38.64606416	39.40631033	41.6678012	38.81921543	45.42307078	33.75690194	35.53748232	19.99239477
-3.45	-16.75236036	-18.55676745	-19.33226587	-17.83068249	-20.25274028	-13.72411964	-14.52800863	-9.164703399
+3.45	35.29042469	36.46745904	38.48375964	35.80506618	41.73007385	30.04730948	31.62874683	18.38967132
-3.5	-20.50756304	-22.18500141	-23.20227044	-21.45709662	-24.56853951	-16.83968688	-17.72598619	-11.04779944
+3.5	30.70013264	32.42730364	34.11031797	31.66729824	36.6682702	25.09329617	26.41399596	16.19134598
-3.55	-23.46290961	-24.89898571	-26.10031429	-24.29461528	-27.95280264	-19.67835089	-20.71405357	-12.52453189
+3.55	27.18115169	29.31562551	30.7446471	28.48465662	32.78051442	21.56253133	22.8474522	14.50183475
-3.6	-27.57283002	-28.80827285	-30.27887377	-28.09563738	-32.49488072	-23.66747229	-24.91312872	-14.57166189
+3.6	22.56959915	25.07221312	26.15830247	24.14986395	27.4925254	18.5007855	19.58845212	12.20252884

-3.65	**-30.77160665**	**-31.83269312**	**-33.51460616**	**-31.13371233**	**-36.13154705**	**-27.11458979**	**-28.5587528**	**-16.16036876**
+3.65	**19.26636809**	**21.82850083**	**22.65493283**	**20.84015415**	**23.46022186**	**16.15924592**	**17.09633339**	**10.44833537**
-3.7	**-35.17595859**	**-35.97427252**	**-37.94931564**	**-35.29982253**	**-41.12656231**	**-31.64801445**	**-33.34951766**	**-18.34208258**
+3.7	**14.91704685**	**17.43625357**	**17.91429382**	**16.36353523**	**18.01295476**	**12.98719219**	**13.72064739**	**8.150782467**
-3.75	**-38.57295106**	**-39.15251539**	**-41.35519501**	**-38.50107231**	**-44.9704907**	**-35.29762117**	**-37.2071215**	**-20.02068244**
+3.75	**11.62072138**	**14.10130074**	**14.31715708**	**13.11429748**	**14.1113022**	**10.5776794**	**11.15671391**	**6.986012741**
-3.8	**-43.21144544**	**-43.47201263**	**-45.98749757**	**-42.85714842**	**-50.20840003**	**-40.3355495**	**-42.53321748**	**-22.30752893**
+3.8	**7.867706898**	**10.0160315**	**10.0160315**	**9.355125907**	**9.930297928**	**8.479785031**	**8.966221505**	**5.411813857**
-3.85	**-46.76141986**	**-46.76328579**	**-49.51959381**	**-46.18014954**	**-54.20938007**	**-44.2301258**	**-46.65130051**	**-24.05393521**
+3.85	**7.867706898**	**7.41534856**	**7.891829039**	**7.435220368**	**8.976207461**	**8.479785031**	**8.966221505**	**4.218740513**
-3.9	**-51.57378897**	**-51.20627629**	**-54.29087837**	**-50.67092637**	**-59.62319555**	**-49.55909579**	**-52.2870244**	**-26.41646456**
+3.9	**7.867706898**	**7.349428634**	**7.891829039**	**7.435220368**	**8.976207461**	**8.479785031**	**8.966221505**	**3.808204547**
-3.95	**-55.23154648**	**-54.56978498**	**-57.90525872**	**-54.0742534**	**-63.73101477**	**-53.64526619**	**-56.60907139**	**-28.20858902**
+3.95	**7.867706898**	**7.349428634**	**7.891829039**	**7.435220368**	**8.976207461**	**8.479785031**	**8.966221505**	**3.808204547**
-5	**-60.15746521**	**-59.08189399**	**-62.75696786**	**-58.64453369**	**-69.25383068**	**-59.19410974**	**-62.47906877**	**-30.61735085**
+5	**7.867706898**	**7.349428634**	**7.891829039**	**7.435220368**	**8.976207461**	**8.479785031**	**8.966221505**	**3.808204547**

3-Span: Shear (Max and Min) Raw Data Results - 70' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.867698433	-14.98902206	-16.2950455	-9.63323021	-11.75285338	-12.45363227
End Shear	60.36680317	95.67269846	97.92961589	66.90799892	81.22496915	83.81180406
-0.05	-7.867698433	-14.98902206	-16.2950455	-9.63323021	-11.75285338	-12.45363227
+0.05	55.80783278	86.56451929	88.30698322	61.00778228	74.10535912	76.22342489
-0.1	-7.867698433	-14.98902206	-16.2950455	-9.63323021	-11.75285338	-12.45363227
+0.1	50.9316505	76.88032556	77.85358955	54.71913872	66.51216871	68.13675109
-0.15	-7.867698433	-14.98902206	-16.2950455	-9.63323021	-11.75285338	-12.45363227
+0.15	47.32258188	69.83112132	70.27591332	50.11587638	60.95044452	62.22784431
-0.2	-7.867698433	-14.98902206	-16.2950455	-9.63323021	-11.75285338	-12.45363227
+0.2	42.59036818	60.75255378	61.1142223	44.15107944	53.73868028	54.5859524
-0.25	-11.10212839	-14.98902206	-16.2950455	-12.19606629	-13.56275159	-13.56320752
+0.25	39.20269957	54.2078249	54.82052753	39.82209293	48.50069413	49.05144949
-0.3	-15.49658122	-17.52427255	-17.0170928	-15.95397709	-17.66635156	-18.12194311
+0.3	34.66923421	46.42831309	47.16325512	34.26487403	41.77083342	42.17881803
-0.35	-18.7584801	-20.89933906	-21.2060905	-18.73640962	-20.70414194	-21.6848448
+0.35	31.36228826	40.79489518	41.93453317	30.43567858	37.12928114	37.24211114
-0.4	-23.10245132	-26.28519383	-27.40664515	-22.38626301	-24.68816542	-26.36656153
+0.4	27.09306235	33.78371024	35.24927308	25.51809569	31.00922851	31.05200494
-0.45	-26.62449584	-31.14997163	-32.51622944	-25.07038991	-28.01434279	-29.81576255
+0.45	24.00695978	29.18736925	30.46846316	22.10009858	26.87126244	26.65395037
-0.5	-31.31533164	-37.75403223	-39.77421252	-28.56614082	-33.90129919	-34.31656868
+0.5	20.06240629	23.69875484	24.43182705	18.97399758	21.65527742	22.39476823
-0.55	-34.75761521	-43.11938145	-45.8136692	-31.72005408	-39.19994539	-38.48047316
+0.55	17.2424731	20.01258858	20.49971548	16.64516744	18.43201995	19.50027927
-0.6	-39.23040094	-50.89311108	-53.71525725	-37.49656995	-46.13543612	-46.12494318
+0.6	13.72005293	15.54441792	15.77609951	13.6758794	14.96727782	15.82142815
-0.65	-42.48653598	-57.62435991	-59.50982271	-41.89782782	-51.41700343	-51.84651035
+0.65	11.37722458	12.72859433	12.78273164	11.55899929	12.64643966	13.20811136
-0.7	-46.68099033	-66.40543837	-67.1675941	-48.10865839	-58.86648189	-59.45953409
+0.7	8.449570898	9.59617231	9.130489671	8.895343068	9.724659533	9.93347472
-0.75	-49.70576506	-73.01876968	-73.59733358	-52.64521872	-64.30501941	-65.42448352
+0.75	6.437468004	7.551281666	6.873006722	7.024957186	7.671802379	7.638026835
-0.8	-53.56159084	-82.49885347	-83.28633677	-58.50996279	-71.33200375	-73.15045492
+0.8	4.056901932	5.023258268	4.541000794	4.74151946	5.132449208	5.131442016
-0.85	-56.30979299	-89.56649676	-91.20066347	-62.75556985	-76.41600445	-78.75501647
+0.85	3.025105715	3.285084441	3.085704159	3.360932508	3.551846014	3.384278176
-0.9	-59.76670775	-98.67238215	-101.5859731	-68.19049995	-82.92002192	-85.94601864
+0.9	1.760996699	2.877503718	3.085704159	1.881153425	2.317135473	2.424325549
-0.95	-62.19311514	-105.2396381	-109.1069	-72.08234023	-87.57411022	-91.10852698
+0.95	1.642844748	2.877503718	3.085704159	1.881153425	2.317135473	2.424325549
-1	-65.19083041	-113.6113582	-118.7382324	-77.00372391	-93.45468173	-97.65571423
+1	1.64E+00	2.877503718	3.085704159	1.881153425	2.317135473	2.424325549
(Span 2) -2	-5.857768519	-10.26010015	-11.00246467	-6.707488202	-8.262036877	-8.64423641
+2	65.67797137	118.9031796	125.5833475	79.37710913	96.17156938	101.1055671
-2.05	-5.857768519	-10.26010015	-11.00246467	-6.707488202	-8.262036877	-8.64423641
+2.05	62.64876689	110.9228626	116.5197365	74.6018447	90.4430391	94.78201042
-2.1	-5.857768519	-10.26010015	-11.00246467	-6.707488202	-8.262036877	-8.64423641
+2.1	59.33207341	102.6106983	107.1572369	69.56079818	84.38789274	88.13831268
-2.15	-5.857768519	-10.26010015	-11.00246467	-6.707488202	-8.262036877	-8.64423641
+2.15	55.7693844	94.05868452	97.59852526	64.31145426	78.07510881	81.24922915
-2.2	-5.931398383	-10.26010015	-11.00246467	-6.707488202	-8.262036877	-8.64423641
+2.2	52.0021968	85.35884837	87.94616772	58.91129242	71.5736645	74.18946767
-2.25	-8.715506685	-10.26010015	-11.00246467	-8.96169215	-9.846978642	-10.12261044

+2.25	48.07199702	76.37425173	78.30281869	53.4178094	64.95255592	66.94470467
-2.3	-11.74671445	-13.31506315	-13.5581214	-11.70062356	-12.85701302	-13.50583425
+2.3	44.0202862	67.40222593	68.77114246	47.58294242	58.00916805	59.45925383
-2.35	-15.17608714	-17.64266711	-18.20828528	-14.60083718	-16.25616044	-17.11059923
+2.35	39.88854702	58.82065297	59.10477383	42.07680069	51.25974999	52.34130914
-2.4	-18.88267517	-22.51761769	-23.5952736	-17.65925347	-20.69687353	-20.89665207
+2.4	35.7182793	50.4643405	51.11719092	36.65451006	44.70060793	45.35582224
-2.45	-22.76458173	-28.22395173	-29.66060455	-21.16331597	-25.89907695	-25.70447022
+2.45	31.42542007	42.70325958	43.45902126	31.37204524	38.30157578	38.57758057
-2.5	-27.23308899	-35.54707165	-36.78246167	-26.28790699	-32.13287178	-32.25061418
+2.5	26.85379309	34.77162761	36.0545758	25.73658639	31.46327102	31.57684031
-2.55	-31.34918678	-42.70471132	-43.45922887	-31.37308498	-38.30283655	-38.57890104
+2.55	22.83464703	28.22278361	29.66043247	21.1624405	25.89801074	25.70333714
-2.6	-35.51181956	-50.46597089	-50.67977403	-36.65557559	-44.70189747	-45.35720325
+2.6	18.94884204	22.51662414	23.59509727	17.69914528	20.69586544	20.89587827
-2.65	-39.67959941	-58.8223238	-59.45398599	-42.07789717	-51.26107617	-52.342701
+2.65	15.2378582	17.64173712	18.20812733	14.60025283	16.25535051	17.10985775
-2.7	-43.81114582	-67.40392829	-68.77140334	-47.58257016	-57.97449366	-59.46068821
+2.7	11.80519745	13.31431572	13.68808569	11.70006253	12.85639737	13.50513923
-2.75	-48.0873479	-76.34057179	-78.3031161	-53.41891712	-64.95389187	-66.91013299
+2.75	8.768580299	10.26010133	11.00246498	8.961161865	9.846395881	10.12195754
-2.8	-52.01445077	-85.3605667	-87.94646448	-58.91238539	-71.57498134	-74.19089526
+2.8	5.978852596	10.26010133	11.00246498	6.707488856	8.262041114	8.644234682
-2.85	-55.77882541	-94.06038526	-97.59879173	-64.31252459	-78.07639687	-81.25063089
+2.85	5.8578079	10.26010133	11.00246498	6.707488856	8.262041114	8.644234682
-2.9	-59.33906719	-102.6123613	-107.1575302	-69.56182455	-84.38912605	-88.13967363
+2.9	5.8578079	10.26010133	11.00246498	6.707488856	8.262041114	8.644234682
-2.95	-62.65380847	-110.9244712	-116.5199931	-74.60283234	-90.44422532	-94.78330404
+2.95	5.8578079	10.26010133	11.00246498	6.707488856	8.262041114	8.644234682
-3	-65.99855481	-119.7669139	-126.5677881	-79.88970124	-96.78600612	-101.7863898
+3	5.8578079	10.26010133	11.00246498	6.707488856	8.262041114	8.644234682
(Span 3) -4	-1.64E+00	-2.877504048	-3.085704247	-1.881153609	-2.317136661	-2.424325064
+4	64.80982986	112.5884024	117.5602118	76.40502123	92.73960515	96.85794599
-3.05	-1.64E+00	-2.877504048	-3.085704247	-1.881153609	-2.317136661	-2.424325064
+3.05	62.55970283	106.3089361	110.3360338	72.7135525	88.32865858	91.94700424
-3.1	-1.911773682	-2.877504048	-3.085704247	-1.881153609	-2.317136661	-2.424325064
+3.1	59.32288886	97.5533085	100.3090188	67.52486353	82.12372477	85.06421616
-3.15	-2.859975815	-3.009586655	-3.085704247	-3.141141271	-3.317842433	-3.107245581
+3.15	56.72855391	90.72322859	92.51936719	63.44824191	77.24520242	79.67041562
-3.2	-4.235298877	-5.326910886	-4.961683858	-4.981740508	-5.43756889	-5.43655372
+3.2	53.06294549	81.30041271	82.06310438	57.78788437	70.46707505	72.198249
-3.25	-6.064649874	-7.223192136	-6.721075231	-6.724886051	-7.342346483	-7.341308049
+3.25	50.16962117	74.02025148	75.2723867	53.3889101	65.19633668	66.40323785
-3.3	-8.77919081	-9.949455992	-9.542596808	-9.218502338	-10.07924044	-10.32983357
+3.3	46.13550197	65.31912392	66.22388723	47.34061461	57.94549518	58.45055288
-3.35	-10.97208356	-12.27559726	-12.15535339	-11.21648473	-12.27083624	-12.78611785
+3.35	42.98840348	58.7327491	60.46319727	42.68208747	52.35790022	52.78794469
-3.4	-14.09121222	-16.02970717	-16.31401494	-14.03875386	-15.36503054	-16.27024309
+3.4	38.64606416	49.90110213	52.73772482	36.78049536	45.27591206	45.15977514
-3.45	-16.75236036	-19.41750979	-19.86468531	-16.26595455	-17.92264767	-19.02967899
+3.45	35.29042469	44.0946916	46.81107521	32.44774428	40.07385579	39.32575752
-3.5	-20.50756304	-24.3319791	-25.16451286	-19.3708216	-22.28871135	-22.88869936
+3.5	30.70013264	36.93411508	38.7590728	28.13402493	33.00951183	33.7596706
-3.55	-23.46290961	-28.44315473	-29.69245846	-21.69044413	-26.20116782	-25.90732501
+3.55	27.18115169	31.98067201	33.41122839	25.51198834	28.7057626	30.38378022
-3.6	-27.57283002	-34.58004257	-36.06626433	-26.10230746	-31.71798561	-31.80726243
+3.6	22.56959915	25.61549719	26.63620192	21.93341153	24.19390488	25.78516632

-3.65	**-30.77160665**	**-39.88847287**	**-41.0806739**	**-29.73518146**	**-36.29619961**	**-36.45035565**
+3.65	**19.26636809**	**21.57581166**	**21.98542134**	**19.195814**	**21.20564671**	**22.2736028**
-3.7	**-35.17595859**	**-47.3831303**	**-48.05170028**	**-34.94652117**	**-42.5966985**	**-43.04858242**
+3.7	**14.91704685**	**17.01322423**	**16.35946283**	**15.48614876**	**17.15554153**	**17.52339888**
-3.75	**-38.57295106**	**-53.16117111**	**-53.79184846**	**-39.11486195**	**-47.64460552**	**-48.1482815**
+3.75	**11.62072138**	**14.98902317**	**16.29541464**	**12.66751607**	**14.07762206**	**14.1113022**
-3.8	**-43.21144544**	**-61.86803926**	**-62.18270715**	**-44.88639194**	**-54.62804345**	**-55.52704301**
+3.8	**7.867706898**	**14.98902317**	**16.29541464**	**9.633234265**	**11.75285456**	**12.45363513**
-3.85	**-46.76141986**	**-68.67763264**	**-69.03685519**	**-49.36038179**	**-60.03733657**	**-61.25900223**
+3.85	**7.867706898**	**14.98902317**	**16.29541464**	**9.633234265**	**11.75285456**	**12.45363513**
-3.9	**-51.57378897**	**-78.07582575**	**-79.13953343**	**-55.49763111**	**-67.45244782**	**-69.13695422**
+3.9	**7.867706898**	**14.98902317**	**16.29541464**	**9.633234265**	**11.75285456**	**12.45363513**
-3.95	**-55.23154648**	**-85.33963253**	**-86.98024907**	**-60.21449369**	**-73.14779522**	**-75.20248471**
+3.95	**7.867706898**	**14.98902317**	**16.29541464**	**9.633234265**	**11.75285456**	**12.45363513**
-5	**-60.15746521**	**-95.27648347**	**-97.74699627**	**-66.6336825**	**-80.89404401**	**-83.47073352**
+5	**7.867706898**	**14.98902317**	**16.29541464**	**9.633234265**	**11.75285456**	**12.45363513**

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-27.536945	-19.425368	-25.535478	-25.493791	-23.660508	-15.659624	-21.213748	-24.107415	-26.922378	-29.780032
+0.05	195.327415	142.418021	167.376890	154.011923	137.008876	115.611642	155.725642	173.320852	184.334488	194.128514
-0.1	-55.073889	-38.850736	-51.070956	-50.987582	-47.321015	-31.319247	-42.427496	-48.214829	-53.844756	-59.560064
+0.1	360.856226	264.454538	306.360427	279.018118	249.343751	214.651926	289.326942	321.429664	341.203112	361.061125
-0.15	-82.610834	-58.276104	-76.606434	-76.481373	-70.981523	-46.978871	-63.641244	-72.322244	-80.767134	-89.340096
+0.15	497.793267	365.888510	417.693595	375.978755	338.294373	297.283336	400.535598	444.035467	483.694251	509.878644
-0.2	-110.147778	-77.701473	-102.141912	-101.975165	-94.642030	-62.638494	-84.854992	-96.429659	-107.689511	-119.120127
+0.2	606.142982	447.145490	502.057903	453.392255	410.326544	363.680958	489.833698	541.742417	598.947593	635.406242
-0.25	-137.684723	-97.126841	-127.677390	-127.468956	-118.302538	-78.298118	-106.068740	-120.537073	-134.611889	-148.900159
+0.25	686.846981	508.816142	566.901044	510.361115	464.676632	414.301340	557.841685	618.216821	686.884210	739.207393
-0.3	-165.221667	-116.552209	-153.212868	-152.962747	-141.963045	-93.957741	-127.282488	-144.644488	-161.534267	-178.680191
+0.3	741.031585	551.619215	612.920009	544.641346	499.413715	449.703540	610.550686	680.168623	748.481324	813.957086
-0.35	-192.758612	-135.977577	-178.748347	-178.456538	-165.623553	-109.617365	-148.496236	-168.751903	-188.456645	-208.460223
+0.35	783.763955	582.671308	635.069830	564.449161	520.612986	470.549097	647.981379	719.467341	791.966997	860.244853
-0.4	-220.295556	-155.402945	-204.283825	-203.950329	-189.284061	-125.276988	-169.709985	-192.859317	-215.379023	-238.240255
+0.4	802.505266	598.395153	635.472756	580.435020	536.733802	477.602095	666.216048	737.085979	815.746421	882.059153
-0.45	-247.832501	-174.828313	-229.819303	-229.444120	-212.944568	-140.936612	-190.923733	-216.966732	-242.301401	-268.020287
+0.45	797.561846	597.287976	623.576349	587.364892	543.583189	471.729081	666.266847	734.014800	816.376483	887.412677
-0.5	-275.369445	-194.253681	-255.354781	-254.937912	-236.605076	-156.596235	-212.137481	-241.074147	-269.223779	-297.800318
+0.5	787.131266	588.099470	608.844123	571.108599	530.302729	466.371278	655.552453	722.382980	802.300894	870.423830
-0.55	-302.906390	-213.679050	-280.890259	-280.431703	-260.265583	-172.255859	-233.351229	-265.181561	-296.146156	-327.580350
+0.55	761.270202	566.826750	600.505228	549.123444	510.595083	453.639141	630.951532	697.957797	771.513305	832.682026
-0.6	-330.443334	-233.104418	-306.425737	-305.925494	-283.926091	-187.915482	-254.564977	-289.288976	-323.068534	-357.360382
+0.6	713.479086	530.645524	574.670504	513.094746	477.834984	428.301354	590.374993	654.734654	720.239502	781.363667
-0.65	-357.980279	-252.529786	-331.961215	-331.419285	-307.586598	-203.575106	-275.778725	-313.396391	-349.990912	-387.140414
+0.65	645.696336	480.895392	529.860313	468.709350	436.243689	391.381701	535.287085	594.343947	650.363470	708.379549
-0.7	-385.517223	-271.955154	-357.496693	-356.913076	-331.247106	-219.234729	-296.992473	-337.503805	-376.913290	-416.920446
+0.7	562.515112	422.214966	463.523724	410.949835	382.256672	344.011092	467.290674	518.575379	568.906693	615.850050
-0.75	-413.054168	-291.380522	-383.032171	-382.406867	-354.907613	-234.894353	-318.206221	-361.611220	-403.835668	-446.700478
+0.75	465.839577	352.273941	377.600033	336.654686	313.436540	287.290082	388.126812	429.377202	471.327813	506.177289
-0.8	-440.591112	-310.805890	-408.567649	-407.900659	-378.568121	-250.553977	-339.419969	-385.718635	-430.758046	-476.480510
+0.8	353.382602	272.139778	276.760635	242.170839	227.001421	222.537832	299.674964	328.856722	359.889065	381.962146
-0.85	-468.128057	-330.231258	-434.103127	-433.394450	-415.915257	-266.213600	-360.633717	-409.826049	-457.680424	-506.260541
+0.85	229.703624	183.561728	172.746164	146.847138	167.371284	151.301914	203.952986	219.280032	237.043847	246.003945
-0.9	-495.665001	-349.656626	-459.638605	-458.888241	-503.403281	-281.873224	-381.847465	-433.933464	-484.602802	-536.040573
+0.9	120.441681	106.443602	106.411672	86.415700	125.165573	81.682363	114.076666	115.980977	123.196885	123.305978
-0.95	-523.201946	-369.081995	-485.174083	-484.382032	-628.263631	-297.532847	-403.061213	-458.040879	-511.525179	-565.820605
+0.95	109.249176	77.637811	96.607018	91.216572	94.647999	62.819320	85.222921	96.387278	107.453333	118.406437
-1	-550.738902	-388.507358	-510.709556	-509.875823	-772.503726	-313.192476	-424.274960	-482.148293	-538.447553	-595.600629
+1	114.999130	81.724009	101.691597	96.017444	87.698432	66.125601	89.708337	101.460295	113.108769	124.638354
(Span 2) -2	-550.738902	-388.507358	-510.709556	-509.875823	-772.503726	-313.192476	-424.274960	-482.148293	-538.447553	-595.600629
+2	114.999130	81.724009	101.691597	96.017444	87.698432	66.125601	89.708337	101.460295	113.108769	124.638354
-2.05	-391.407602	-278.151598	-346.112041	-326.799811	-582.605154	-225.061645	-305.326728	-345.324934	-384.971030	-424.212395
+2.05	88.346283	62.783191	78.122979	73.763899	87.787688	50.799958	68.917026	77.945285	86.894042	95.751465
-2.1	-364.754576	-259.210775	-322.543430	-304.546273	-417.269192	-209.736000	-284.535406	-321.809922	-358.756304	-395.325516
+2.1	140.655044	127.288696	127.485776	101.517281	128.866062	96.388864	141.122230	148.055895	156.358677	158.768073
-2.15	-338.101550	-240.269952	-298.974820	-282.292734	-297.302206	-194.410355	-263.744084	-298.294909	-332.541577	-366.438636
+2.15	278.647471	222.197451	206.231039	180.828655	183.116605	182.858328	253.010150	272.335217	292.045122	310.518514
-2.2	-311.448524	-221.329129	-275.406209	-260.039196	-239.811308	-179.084710	-242.952762	-274.779897	-306.326851	-337.551756
+2.2	423.086039	325.137695	334.464605	292.831218	267.981253	265.463183	364.529372	399.674373	434.811878	468.873791

-2.25	-284.795498	-202.388306	-251.837598	-237.785658	-219.674715	-163.759066	-222.161441	-251.264884	-280.112125	-308.664876
+2.25	552.136734	416.145561	454.945037	410.205960	372.061606	337.882460	464.032058	512.981661	561.015816	608.809935
-2.3	-258.142472	-183.447483	-228.268987	-215.532120	-202.984060	-148.433421	-201.370119	-227.749872	-253.897398	-279.777997
+2.3	660.871327	493.563755	551.776616	501.170201	458.973845	398.220070	548.641950	608.596972	668.898703	726.471427
-2.35	-231.489446	-164.506660	-204.700377	-193.278581	-186.293406	-133.107776	-180.578797	-204.234860	-227.682672	-250.891117
+2.35	746.668110	554.984804	623.100278	574.539951	528.373046	445.062871	616.047530	684.027073	754.839424	818.813322
-2.4	-204.836420	-145.565837	-181.131766	-171.025043	-169.602752	-117.782131	-159.787475	-180.719847	-201.467946	-222.004237
+2.4	807.272277	598.842474	667.882139	626.573729	577.626345	477.813926	664.501857	737.427157	816.591256	884.465175
-2.45	-178.183394	-126.625015	-157.563155	-148.771505	-152.912098	-102.456486	-138.996153	-157.204835	-175.253219	-193.117357
+2.45	840.997822	624.069948	688.436276	662.098559	610.458820	495.360207	692.815408	767.534132	852.627088	927.080315
-2.5	-151.530368	-107.684192	-133.994586	-126.518003	-136.221467	-87.130841	-118.204831	-133.689822	-149.038493	-164.230530
+2.5	847.393792	630.034551	686.186379	669.971071	618.451281	497.339058	700.233425	773.777129	862.021662	940.329285
-2.55	-178.182184	-126.624991	-157.563204	-148.771548	-152.912125	-102.456463	-138.996080	-157.204816	-175.253224	-193.117419
+2.55	841.238157	624.059295	688.430511	662.093132	610.455685	495.357580	692.807788	767.529604	852.618940	927.083206
-2.6	-204.835031	-145.565809	-181.131822	-171.025093	-169.602783	-117.782105	-159.787390	-180.719827	-201.467951	-222.004307
+2.6	807.585697	598.846091	667.877325	626.579055	577.623064	477.830129	664.508049	737.435872	816.595912	884.466225
-2.65	-231.487878	-164.506627	-204.700440	-193.278637	-186.293441	-133.107747	-180.578701	-204.234837	-227.682677	-250.891195
+2.65	746.874415	554.987262	623.095467	574.543551	528.371013	445.062652	616.052507	684.034516	754.842626	818.815554
-2.7	-258.140724	-183.447445	-228.269059	-215.532182	-202.984099	-148.433389	-201.370012	-227.749847	-253.897404	-279.778084
+2.7	660.863293	493.565263	551.781244	501.169478	458.932592	398.221178	548.645837	608.603071	668.900602	726.473858
-2.75	-284.793571	-202.388263	-251.837677	-237.785727	-219.674757	-163.759032	-222.161322	-251.264857	-280.112130	-308.664972
+2.75	552.195923	416.146505	454.948436	410.204986	372.061055	337.885187	464.035332	512.987059	561.016988	608.812910
-2.8	-311.446418	-221.329082	-275.406295	-260.039272	-239.811355	-179.084674	-242.952633	-274.779867	-306.326857	-337.551861
+2.8	423.358065	325.136741	334.466915	292.834492	267.980464	265.467856	364.532346	399.679297	434.816902	468.878032
-2.85	-338.099265	-240.269900	-298.974914	-282.292816	-297.302163	-194.410316	-263.743944	-298.294877	-332.541584	-366.438749
+2.85	278.814242	222.198431	206.238447	180.830053	183.115161	182.865200	253.013577	272.335760	292.046466	310.524486
-2.9	-364.752111	-259.210718	-322.543532	-304.546361	-417.269328	-209.735958	-284.535254	-321.809887	-358.756310	-395.325637
+2.9	140.655031	127.285572	127.495405	101.524682	128.864215	96.394116	141.128633	148.056857	156.363885	158.775106
-2.95	-391.404958	-278.151536	-346.112150	-326.799906	-582.605086	-225.061600	-305.326565	-345.324898	-384.971037	-424.212526
+2.95	88.346865	62.783215	78.122953	73.763877	87.786319	50.799962	68.917065	77.945289	86.894044	95.751440
-3	-550.739495	-388.507434	-510.709673	-509.875842	-772.503659	-313.192527	-424.275136	-482.148337	-538.447559	-595.600880
+3	114.999903	81.724030	101.691565	96.017416	87.698416	66.125612	89.708385	101.460305	113.108768	124.638316
(Span 3) -4	-550.739495	-388.507434	-510.709673	-509.875842	-772.503659	-313.192527	-424.275136	-482.148337	-538.447559	-595.600880
+4	114.999903	81.724030	101.691565	96.017416	87.698416	66.125612	89.708385	101.460305	113.108768	124.638316
-3.05	-523.202521	-369.082062	-485.174189	-484.382050	-628.263737	-297.532901	-403.061379	-458.040920	-511.525181	-565.820835
+3.05	109.249908	77.637828	96.606987	91.216545	94.644582	62.819332	85.222966	96.387290	107.453329	118.406400
-3.1	-495.665547	-349.656690	-459.638705	-458.888258	-503.403416	-281.873275	-381.847622	-433.933503	-484.602803	-536.040791
+3.1	120.441738	106.430878	106.415717	86.415674	125.159255	81.673543	114.085246	115.978494	123.201208	123.310205
-3.15	-468.128573	-330.231318	-434.103221	-433.394466	-415.915254	-266.213649	-360.633865	-409.826086	-457.680424	-506.260746
+3.15	230.198291	183.564447	172.750735	146.848636	167.365827	151.311995	203.951139	219.276593	237.047563	246.011337
-3.2	-440.591598	-310.805946	-408.567737	-407.900674	-378.568130	-250.554023	-339.420108	-385.718669	-430.758046	-476.480702
+3.2	353.750314	272.142546	276.762301	242.168955	227.000322	222.547778	299.673423	328.853491	359.892826	381.969684
-3.25	-413.054624	-291.380575	-383.032253	-382.406881	-354.907622	-234.894397	-318.206352	-361.611252	-403.835668	-446.700658
+3.25	466.183162	352.276360	377.598498	336.651079	313.434448	287.277629	388.125191	429.373791	471.331134	506.184552
-3.3	-385.517650	-271.955203	-357.496769	-356.913089	-331.247113	-219.234771	-296.992595	-337.503836	-376.913290	-416.920613
+3.3	562.819381	422.216613	463.520690	410.945727	382.254260	343.998029	467.288555	518.571261	568.909085	615.856410
-3.35	-357.980676	-252.529831	-331.961285	-331.419297	-307.586605	-203.575145	-275.778838	-313.396419	-349.990912	-387.140569
+3.35	646.049500	480.894596	529.855347	468.703423	436.240206	391.371493	535.284039	594.338721	650.362602	708.384540
-3.4	-330.443702	-233.104459	-306.425801	-305.925505	-283.926097	-187.915519	-254.565081	-289.289002	-323.068534	-357.360525
+3.4	713.841541	530.643502	574.663190	513.089770	477.838029	428.308452	590.370629	654.727747	720.236988	781.366637
-3.45	-302.906728	-213.679087	-280.890318	-280.431713	-260.265589	-172.255892	-233.351324	-265.181585	-296.146155	-327.580480
+3.45	761.565085	566.823254	600.499146	549.116960	510.599317	453.644938	630.945591	697.949057	771.508814	832.681262
-3.5	-275.369754	-194.253715	-255.354834	-254.937921	-236.605081	-156.596266	-212.137567	-241.074168	-269.223777	-297.800436
+3.5	787.346981	588.094117	608.848841	571.103987	530.308025	466.375493	655.544516	722.371915	802.293987	870.420627
-3.55	-247.832779	-174.828343	-229.819350	-229.444129	-212.944573	-140.936640	-190.923811	-216.966751	-242.301399	-268.020391
+3.55	797.372411	597.294014	623.570886	587.358032	543.587216	471.725509	666.258681	734.010196	816.368079	887.416786
-3.6	-220.295805	-155.402971	-204.283866	-203.950337	-189.284065	-125.277014	-169.710054	-192.859334	-215.379021	-238.240347

+3.6	802.233428	598.399224	635.466437	580.439441	536.736377	477.597038	666.205710	737.078943	815.751612	882.060236
-3.65	-192.758831	-135.977599	-178.748382	-178.456545	-165.623557	-109.617388	-148.496297	-168.751917	-188.456643	-208.460303
+3.65	783.399573	582.673192	635.061302	564.452612	520.614982	470.542280	647.985614	719.457664	791.969140	860.241847
-3.7	-165.221857	-116.552227	-153.212898	-152.962753	-141.963049	-93.957762	-127.282540	-144.644501	-161.534265	-178.680258
+3.7	740.781196	551.618306	612.924649	544.647147	499.417096	449.694786	610.552262	680.172655	748.479676	813.950660
-3.75	-137.684883	-97.126855	-127.677414	-127.468960	-118.302541	-78.298136	-106.068783	-120.537084	-134.611886	-148.900214
+3.75	686.493898	508.812806	566.902808	510.365985	464.679550	414.290568	557.840166	618.217781	686.879268	739.197318
-3.8	-110.147909	-77.701483	-102.141930	-101.975168	-94.642032	-62.638510	-84.855026	-96.429667	-107.689508	-119.120169
+3.8	605.679792	447.139622	502.056145	453.394223	410.327737	363.668204	489.829358	541.739862	598.939083	635.408277
-3.85	-82.610935	-58.276111	-76.606446	-76.481376	-70.981524	-46.978884	-63.641269	-72.322250	-80.767130	-89.340125
+3.85	497.262565	365.879922	417.688588	375.977159	338.293452	297.268225	400.528232	444.029533	483.691732	509.876342
-3.9	-55.073960	-38.850739	-51.070962	-50.987584	-47.321016	-31.319258	-42.427513	-48.214833	-53.844752	-59.560081
+3.9	361.016425	264.443048	306.351856	279.013181	249.347906	214.634342	289.316236	321.420110	341.203356	361.062195
-3.95	-27.536986	-19.425367	-25.535479	-25.493792	-23.660508	-15.659631	-21.213756	-24.107416	-26.922374	-29.780036
+3.95	195.455965	142.420990	167.380704	154.015646	137.011013	115.614122	155.711784	173.307846	184.330754	194.125275
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-27.536945	-25.722999	-27.621395	-26.023267	-31.416711	-29.679244	-31.381767	-13.328714
+0.05	195.327415	193.008086	204.903339	191.386575	225.805734	190.160956	200.673147	99.779536
-0.1	-55.073889	-51.445998	-55.242789	-52.046533	-62.833421	-59.358488	-62.763534	-26.657428
+0.1	360.856226	359.278073	381.014988	355.666309	418.738767	347.598498	366.741889	184.913887
-0.15	-82.610834	-77.168997	-82.864184	-78.069800	-94.250132	-89.037731	-94.145301	-39.986142
+0.15	497.793267	498.413116	527.993474	492.529742	578.634749	472.983530	498.907037	255.644412
-0.2	-110.147778	-102.891995	-110.485578	-104.093067	-125.666843	-118.716975	-125.527068	-53.314857
+0.2	606.142982	610.941942	646.435717	602.556551	706.254349	568.884177	599.985016	312.302718
-0.25	-137.684723	-128.614994	-138.106973	-130.116333	-157.083554	-148.396219	-156.908835	-66.643571
+0.25	686.846981	697.559936	737.118101	686.495517	813.953151	655.209540	692.034998	355.310546
-0.3	-165.221667	-154.337993	-165.728368	-156.139600	-188.500264	-178.075463	-188.290602	-79.972285
+0.3	741.031585	759.128979	800.996325	754.773501	895.651316	711.727223	752.485805	385.540260
-0.35	-192.758612	-180.060992	-193.349762	-182.162866	-219.916975	-207.754707	-219.672369	-93.300999
+0.35	783.763955	798.663586	847.968934	801.236112	947.849857	750.076497	792.458961	403.214694
-0.4	-220.295556	-205.783991	-220.971157	-208.186133	-251.333686	-237.433950	-251.054136	-106.629713
+0.4	802.505266	824.229514	873.339985	824.428582	971.512698	764.004186	807.755236	409.006376
-0.45	-247.832501	-231.506990	-248.592551	-234.209400	-282.750396	-267.113194	-282.435903	-119.958427
+0.45	797.561846	827.228293	874.682026	825.028401	968.249792	752.484187	795.990545	403.692926
-0.5	-275.369445	-257.229989	-276.213946	-260.232666	-314.167107	-296.792438	-313.817670	-133.287141
+0.5	787.131266	813.103268	860.694159	811.421421	953.647625	735.076954	777.539475	398.453204
-0.55	-302.906390	-282.952987	-303.835340	-286.255933	-345.583818	-326.471682	-345.199437	-146.615855
+0.55	761.270202	779.889396	826.781472	780.542654	919.610795	722.314555	763.619744	389.483459
-0.6	-330.443334	-308.675986	-331.456735	-312.279200	-377.000528	-356.150926	-376.581204	-159.944570
+0.6	713.479086	727.938148	772.419913	730.215170	861.908311	682.557941	721.187897	369.354646
-0.65	-357.980279	-334.398985	-359.078130	-338.302466	-408.417239	-385.830169	-407.962971	-173.273284
+0.65	645.696336	663.159105	699.535572	662.238121	782.302263	617.840723	652.403909	338.929915
-0.7	-385.517223	-360.121984	-386.699524	-364.325733	-439.833950	-415.509413	-439.344738	-186.601998
+0.7	562.515112	583.580714	613.621040	578.580120	683.010099	537.248227	567.792645	299.162899
-0.75	-413.054168	-385.844983	-414.320919	-390.349000	-471.250661	-445.188657	-470.726505	-199.930712
+0.75	465.839577	489.453147	513.125533	481.378646	566.564637	435.614120	460.027570	251.097299
-0.8	-440.591112	-411.567982	-441.942313	-416.372266	-502.667371	-474.867901	-502.108272	-213.259426
+0.8	353.382602	382.956366	398.948761	372.940371	435.703817	314.201137	331.412282	195.866930
-0.85	-468.128057	-437.290981	-469.563708	-442.395533	-534.084082	-504.547145	-533.490039	-226.588140
+0.85	229.703624	266.436901	273.590250	255.741106	293.370599	199.191552	210.424642	134.695874
-0.9	-495.665001	-463.013979	-497.185103	-468.418799	-565.500793	-534.226389	-564.871806	-239.916854
+0.9	120.441681	151.161006	151.161006	140.974095	150.593477	114.876236	120.922354	86.186763
-0.95	-523.201946	-488.736978	-524.806497	-494.442066	-596.917503	-563.905632	-596.253573	-253.245568
+0.95	109.249176	103.686875	111.194306	104.721176	126.199079	112.383819	118.738096	52.729969
-1	-550.738902	-514.459994	-552.427878	-520.465333	-628.334223	-593.584881	-627.635346	-266.574283
+1	114.999130	109.144078	117.046635	110.232816	132.841137	118.298751	124.987466	55.505230
(Span 2) -2	-550.738902	-514.459994	-552.427878	-520.465333	-628.334223	-593.584881	-627.635346	-266.574283
+2	114.999130	109.144078	117.046635	110.232816	132.841137	118.298751	124.987466	55.505230
-2.05	-391.407602	-371.477018	-398.373862	-375.182666	-452.130939	-402.635582	-425.400626	-188.914697
+2.05	88.346283	83.848231	89.919247	84.684636	102.053126	90.881165	96.019665	49.480381
-2.1	-364.754576	-346.181171	-371.246466	-349.634482	-421.342937	-375.217982	-396.432833	-176.050490
+2.1	140.655044	180.795950	180.795950	176.658154	190.603984	137.626690	144.870200	100.426513
-2.15	-338.101550	-320.885324	-344.119070	-324.086297	-390.554935	-347.800383	-367.465041	-163.186284
+2.15	278.647471	321.559948	333.636227	316.328897	364.186364	239.712487	253.359686	159.409267
-2.2	-311.448524	-295.589478	-316.991673	-298.538113	-359.766933	-320.382783	-338.497248	-150.322077
+2.2	423.086039	456.657344	478.088520	452.699137	528.978886	386.347319	408.174136	230.514665

-2.25	-284.795498	-270.293631	-289.864277	-272.989928	-328.978931	-292.965183	-309.529456	-137.457870
+2.25	552.136734	576.097517	607.400098	574.676267	675.608104	527.299814	557.465180	292.655097
-2.3	-258.142472	-244.997784	-262.736881	-247.441744	-298.190929	-265.547584	-280.561663	-124.593664
+2.3	660.871327	676.946402	717.753929	678.541877	799.964537	642.807703	679.055454	344.220205
-2.35	-231.489446	-219.701937	-235.609485	-221.893559	-267.402927	-238.129984	-251.593871	-111.729457
+2.35	746.668110	759.779492	806.064785	761.440524	898.533804	733.686816	775.455341	383.967505
-2.4	-204.836420	-194.406090	-208.482089	-196.345375	-236.614925	-210.712385	-222.626078	-98.865250
+2.4	807.272277	820.150049	869.979520	821.206770	968.647070	794.745076	840.340153	412.133268
-2.45	-178.183394	-169.110243	-181.354693	-170.797190	-205.826922	-183.294785	-193.658286	-86.001044
+2.45	840.997822	856.471603	907.876936	856.356859	1008.691953	824.959182	872.605166	426.336999
-2.5	-151.530368	-143.814395	-154.227297	-145.249006	-175.038979	-155.877185	-164.690539	-73.136837
+2.5	847.393792	867.674340	918.704904	865.944336	1017.739936	824.107669	871.995208	427.263652
-2.55	-178.182184	-169.110242	-181.354636	-170.797162	-205.826991	-183.294701	-193.658340	-86.001027
+2.55	841.238157	856.476893	907.884224	856.349161	1008.689980	824.950456	872.595782	426.335160
-2.6	-204.835031	-194.406090	-208.482024	-196.345342	-236.615003	-210.712288	-222.626141	-98.865232
+2.6	807.585697	820.153632	869.984962	821.215255	968.660860	794.749826	840.344945	412.131807
-2.65	-231.487878	-219.701937	-235.609412	-221.893522	-267.403014	-238.129874	-251.593941	-111.729437
+2.65	746.874415	759.781694	806.068720	761.447519	898.545719	733.689758	775.458228	384.715110
-2.7	-258.140724	-244.997784	-262.736800	-247.441701	-298.191026	-265.547461	-280.561742	-124.593642
+2.7	660.863293	676.947345	717.756464	678.547549	799.974763	642.809035	679.056646	344.575854
-2.75	-284.793571	-270.293632	-289.864188	-272.989881	-328.979038	-292.965047	-309.529542	-137.457847
+2.75	552.195923	576.108137	607.401891	574.681194	675.607676	527.306128	557.471602	292.655236
-2.8	-311.446418	-295.589479	-316.991577	-298.538061	-359.767050	-320.382634	-338.497343	-150.322052
+2.8	423.358065	456.655203	478.090002	452.703711	528.980107	386.354474	408.181449	230.515433
-2.85	-338.099265	-320.885326	-344.118965	-324.086241	-390.555061	-347.800221	-367.465143	-163.186257
+2.85	278.814242	321.558009	333.638292	316.328396	364.189917	239.710635	253.357850	159.410764
-2.9	-364.752111	-346.181174	-371.246353	-349.634421	-421.343073	-375.217807	-396.432944	-176.050463
+2.9	140.655031	180.791479	180.791479	176.663350	190.606096	137.637085	144.881142	100.555532
-2.95	-391.404958	-371.477021	-398.373741	-375.182601	-452.131085	-402.635394	-425.400744	-188.914668
+2.95	88.346865	83.848226	89.919267	84.684654	102.053099	90.881212	96.019640	49.188203
-3	-550.739495	-514.460021	-552.428019	-520.465427	-628.334532	-593.584958	-627.635511	-266.574319
+3	114.999903	109.144076	117.046669	110.232836	132.841096	118.298808	124.987431	55.505237
(Span 3) -4	-550.739495	-514.460021	-552.428019	-520.465427	-628.334532	-593.584958	-627.635511	-266.574319
+4	114.999903	109.144076	117.046669	110.232836	132.841096	118.298808	124.987431	55.505237
-3.05	-523.202521	-488.737021	-524.806617	-494.442155	-596.917806	-563.905710	-596.253736	-253.245603
+3.05	109.249908	103.686872	111.194335	104.721194	126.199041	112.383867	118.738060	52.729975
-3.1	-495.665547	-463.014021	-497.185216	-468.418884	-565.501079	-534.226462	-564.871961	-239.916887
+3.1	120.441738	151.142512	151.142512	140.966981	150.589505	114.880603	120.926951	85.295456
-3.15	-468.128573	-437.291020	-469.563814	-442.395613	-534.084353	-504.547215	-533.490185	-226.588171
+3.15	230.198291	266.441144	273.593516	255.737861	293.363817	199.194864	210.428036	134.692372
-3.2	-440.591598	-411.568020	-441.942412	-416.372341	-502.667627	-474.867967	-502.108410	-213.259455
+3.2	353.750314	382.960866	398.952219	372.937539	435.697370	314.206590	331.418247	195.863527
-3.25	-413.054624	-385.845020	-414.321011	-390.349070	-471.250901	-445.188719	-470.726635	-199.930739
+3.25	466.183162	489.457314	513.128566	481.375746	566.557952	435.618428	460.032337	251.093755
-3.3	-385.517650	-360.122020	-386.699609	-364.325799	-439.834175	-415.509472	-439.344859	-186.602023
+3.3	562.819381	583.584074	613.623124	578.576621	683.002499	537.250959	567.795757	299.159142
-3.35	-357.980676	-334.399019	-359.078208	-338.302528	-408.417449	-385.830224	-407.963084	-173.273307
+3.35	646.049500	663.161155	699.534229	662.233520	782.293218	617.839575	652.402920	338.925949
-3.4	-330.443702	-308.676019	-331.456806	-312.279256	-377.000723	-356.150977	-376.581309	-159.944591
+3.4	713.841541	727.936875	772.416915	730.208971	861.897199	682.554470	721.184465	369.350213
-3.45	-302.906728	-282.953019	-303.835404	-286.255985	-345.583997	-326.471729	-345.199534	-146.615875
+3.45	761.565085	779.886246	826.776396	780.534555	919.617094	722.308401	763.613483	389.478793
-3.5	-275.369754	-257.230019	-276.214003	-260.232714	-314.167271	-296.792481	-313.817758	-133.287160
+3.5	787.346981	813.097928	860.686684	811.410881	953.651002	735.067737	777.529984	398.447976
-3.55	-247.832779	-231.507019	-248.592601	-234.209442	-282.750544	-267.113234	-282.435983	-119.958444
+3.55	797.372411	827.234922	874.665590	825.020095	968.247801	752.475603	795.981289	403.690610
-3.6	-220.295805	-205.784018	-220.971199	-208.186171	-251.333818	-237.433986	-251.054208	-106.629728

+3.6	**802.233428**	**824.233346**	**873.345863**	**824.417603**	**971.507544**	**764.010027**	**807.761139**	**409.003615**
-3.65	**-192.758831**	**-180.061018**	**-193.349798**	**-182.162900**	**-219.917092**	**-207.754739**	**-219.672433**	**-93.301012**
+3.65	**783.399573**	**798.664426**	**847.971640**	**801.242141**	**947.841114**	**750.079353**	**792.461694**	**403.211543**
-3.7	**-165.221857**	**-154.338018**	**-165.728396**	**-156.139629**	**-188.500366**	**-178.075491**	**-188.290657**	**-79.972296**
+3.7	**740.781196**	**759.126057**	**800.995000**	**754.776260**	**895.638727**	**711.726051**	**752.484268**	**385.536478**
-3.75	**-137.684883**	**-128.615018**	**-138.106994**	**-130.116357**	**-157.083640**	**-148.396243**	**-156.908882**	**-66.643580**
+3.75	**686.493898**	**697.553640**	**737.113177**	**686.494491**	**813.956423**	**655.204901**	**692.029783**	**355.313768**
-3.8	**-110.147909**	**-102.892017**	**-110.485593**	**-104.093086**	**-125.666914**	**-118.716996**	**-125.527107**	**-53.314864**
+3.8	**605.679792**	**610.932130**	**646.427046**	**602.552055**	**706.253026**	**568.875848**	**599.975888**	**312.305424**
-3.85	**-82.610935**	**-77.169017**	**-82.864191**	**-78.069815**	**-94.250188**	**-89.037748**	**-94.145332**	**-39.986148**
+3.85	**497.262565**	**498.399723**	**527.980953**	**492.521527**	**578.628928**	**472.978951**	**498.902279**	**255.646484**
-3.9	**-55.073960**	**-51.446017**	**-55.242790**	**-52.046543**	**-62.833462**	**-59.358501**	**-62.763556**	**-26.657432**
+3.9	**361.016425**	**359.260635**	**380.998146**	**355.654022**	**418.728122**	**347.589818**	**366.732795**	**184.915235**
-3.95	**-27.536986**	**-25.723017**	**-27.621388**	**-26.023272**	**-31.416736**	**-29.679253**	**-31.381781**	**-13.328716**
+3.95	**195.455965**	**192.986591**	**204.882133**	**191.370426**	**225.790412**	**190.165374**	**200.677820**	**99.780231**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 70' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-27.536945	-52.461577	-57.032659	-33.716306	-41.134987	-43.587713
+0.05	195.327415	303.175112	309.074441	213.527238	259.368757	266.781987
-0.1	-55.073889	-104.923154	-114.065318	-67.432611	-82.269974	-87.175426
+0.1	360.856226	548.629365	554.971244	389.120943	473.599949	485.485143
-0.15	-82.610834	-157.384732	-171.097978	-101.148917	-123.404960	-130.763139
+0.15	497.793267	756.610435	772.035518	527.979831	642.820576	659.485584
-0.2	-110.147778	-209.846309	-228.130637	-134.865223	-164.539947	-174.350852
+0.2	606.142982	919.868700	954.679233	645.159417	789.197314	807.756363
-0.25	-137.684723	-262.307886	-285.163296	-168.581529	-205.674934	-217.938565
+0.25	686.846981	1032.034041	1113.777796	738.771362	895.230463	923.407478
-0.3	-165.221667	-314.769463	-342.195955	-202.297834	-246.809921	-261.526278
+0.3	741.031585	1130.066930	1217.470485	798.401459	961.285063	1008.944692
-0.35	-192.758612	-367.231041	-399.228615	-236.014140	-287.944908	-305.113991
+0.35	783.763955	1189.796090	1298.795127	835.723617	996.217915	1052.868928
-0.4	-220.295556	-419.692618	-456.261274	-269.730446	-329.079895	-348.701704
+0.4	802.505266	1233.721020	1326.443664	846.895741	1004.588696	1060.939036
-0.45	-247.832501	-472.154195	-513.293933	-303.446752	-370.214881	-392.289416
+0.45	797.561846	1242.380964	1327.798386	829.072680	978.810962	1044.328911
-0.5	-275.369445	-524.615772	-570.326592	-337.163057	-411.349868	-435.877129
+0.5	787.131266	1214.584904	1311.640872	799.895863	948.193173	1010.966514
-0.55	-302.906390	-577.077349	-627.359252	-370.879363	-452.484855	-479.464842
+0.55	761.270202	1172.770478	1243.702712	795.585036	941.200804	997.805251
-0.6	-330.443334	-629.538927	-684.391911	-404.595669	-493.619842	-523.052555
+0.6	713.479086	1084.157118	1174.115665	758.792557	899.591740	951.933562
-0.65	-357.980279	-682.000504	-741.424570	-438.311975	-534.754829	-566.640268
+0.65	645.696336	977.461557	1061.814006	691.798285	827.933114	874.700689
-0.7	-385.517223	-734.462081	-798.457229	-472.028280	-575.889816	-610.227981
+0.7	562.515112	837.836750	902.390215	607.237615	728.330533	760.530305
-0.75	-413.054168	-786.923658	-855.489889	-505.744586	-617.024802	-653.815694
+0.75	465.839577	672.784298	718.251438	495.670171	595.741854	612.174640
-0.8	-440.591112	-839.385236	-912.522548	-539.460892	-658.159789	-697.403407
+0.8	353.382602	479.462941	489.799816	359.739448	433.072703	435.507055
-0.85	-468.128057	-891.846813	-969.555207	-573.177197	-699.294776	-740.991120
+0.85	229.703624	276.362227	274.512367	236.936495	261.883409	277.419409
-0.9	-495.665001	-944.308390	-1026.587866	-606.893503	-740.429763	-784.578833
+0.9	120.441681	181.282734	194.399362	136.030520	150.643560	152.732510
-0.95	-523.201946	-996.769967	-1083.620526	-640.609809	-781.564750	-828.166546
+0.95	109.249176	191.353997	205.199327	125.096703	154.089509	161.217649
-1	-550.738902	-1049.231556	-1140.653168	-674.326118	-822.699731	-871.754255
+1	114.999130	201.425261	215.999288	131.680739	162.199482	169.702786
(Span 2) -2	-550.738902	-1049.231556	-1140.653168	-674.326118	-822.699731	-871.754255
+2	114.999130	201.425261	215.999288	131.680739	162.199482	169.702786
-2.05	-391.407602	-685.560462	-735.163803	-448.181664	-552.053883	-577.591336
+2.05	88.346283	154.741806	165.938073	101.161667	124.607214	130.371511
-2.1	-364.754576	-638.877001	-685.102588	-417.662590	-514.461596	-538.260068
+2.1	140.655044	188.262056	174.831663	163.020494	190.666648	190.675244
-2.15	-338.101550	-592.193540	-635.041372	-387.143515	-476.869309	-498.928801
+2.15	278.647471	344.387382	351.419114	284.987817	321.814276	342.755084
-2.2	-311.448524	-545.510079	-584.980156	-356.624441	-439.277021	-459.597533
+2.2	423.086039	577.614458	621.565673	438.164041	523.572544	539.112511

-2.25	-284.795498	-498.826618	-534.918941	-326.105367	-401.684734	-420.266265
+2.25	552.136734	828.342354	897.124213	598.617476	715.886329	749.404317
-2.3	-258.142472	-452.143157	-484.857725	-295.586292	-364.092447	-380.934997
+2.3	660.871327	1035.770992	1130.782300	726.871440	868.687847	918.743789
-2.35	-231.489446	-405.459696	-434.796509	-265.067218	-326.500160	-341.603729
+2.35	746.668110	1190.286283	1307.423679	826.750563	980.049006	1043.989640
-2.4	-204.836420	-358.776235	-384.735294	-234.548144	-288.907873	-302.272462
+2.4	807.272277	1314.978909	1423.584911	892.990521	1057.397445	1123.420720
-2.45	-178.183394	-312.092774	-334.674078	-204.029070	-251.315586	-262.941194
+2.45	840.997822	1384.794428	1493.257580	923.316424	1091.335271	1163.664978
-2.5	-151.530368	-265.409313	-284.612862	-173.509995	-213.723299	-223.609970
+2.5	847.393792	1398.814978	1524.310025	917.996294	1082.321890	1160.872778
-2.55	-178.182184	-312.092751	-334.674069	-204.029046	-251.315464	-262.941246
+2.55	841.238157	1384.804412	1492.707124	923.305341	1091.326013	1163.652347
-2.6	-204.835031	-358.776207	-384.735283	-234.548117	-288.907732	-302.272522
+2.6	807.585697	1314.985761	1423.584453	892.995202	1057.387396	1123.418696
-2.65	-231.487878	-405.459663	-434.796497	-265.067188	-326.499999	-341.603797
+2.65	746.874415	1190.290496	1307.423053	826.753172	980.038285	1043.989711
-2.7	-258.140724	-452.143119	-484.857712	-295.586260	-364.092267	-380.935073
+2.7	660.863293	1035.770930	1130.812502	726.877739	868.691070	918.753494
-2.75	-284.793571	-498.826574	-534.918926	-326.105331	-401.684535	-420.266349
+2.75	552.195923	828.350062	897.123966	598.624021	715.889280	749.411947
-2.8	-311.446418	-545.510030	-584.980140	-356.624402	-439.276803	-459.597624
+2.8	423.358065	577.611215	621.564912	438.171426	523.575698	539.111923
-2.85	-338.099265	-592.193486	-635.041354	-387.143474	-476.869070	-498.928900
+2.85	278.814242	344.380165	351.417960	284.985614	321.818211	342.756086
-2.9	-364.752111	-638.876941	-685.102569	-417.662545	-514.461338	-538.260176
+2.9	140.655031	188.263922	174.831838	163.032805	190.668555	190.677136
-2.95	-391.404958	-685.560397	-735.163783	-448.181616	-552.053606	-577.591451
+2.95	88.346865	154.741837	165.938079	101.161673	124.607285	130.371484
-3	-550.739495	-1049.231634	-1140.679022	-674.326402	-822.699813	-871.754455
+3	114.999903	201.425284	215.999294	131.680752	162.199565	169.702752
(Span 3) -4	-550.739495	-1049.231634	-1140.679022	-674.326402	-822.699813	-871.754455
+4	114.999903	201.425284	215.999294	131.680752	162.199565	169.702752
-3.05	-523.202521	-996.770053	-1083.645071	-640.610082	-781.564822	-828.166732
+3.05	109.249908	191.354020	205.199329	125.096714	154.089587	161.217615
-3.1	-495.665547	-944.308472	-1026.611120	-606.893762	-740.429831	-784.579009
+3.1	120.441738	181.282756	194.399364	136.035648	150.640014	152.732477
-3.15	-468.128573	-891.846891	-969.577169	-573.177442	-699.294841	-740.991286
+3.15	230.198291	276.355195	274.511198	236.940454	261.880899	277.415123
-3.2	-440.591598	-839.385310	-912.543217	-539.461122	-658.159850	-697.403563
+3.2	353.750314	479.452833	489.801298	359.746517	433.065987	435.500042
-3.25	-413.054624	-786.923728	-855.509266	-505.744802	-617.024859	-653.815840
+3.25	466.183162	672.770732	718.252407	495.675877	595.733058	612.169935
-3.3	-385.517650	-734.462147	-798.475315	-472.028482	-575.889868	-610.228117
+3.3	562.819381	837.829635	902.390644	607.241214	728.336683	760.523000
-3.35	-357.980676	-682.000566	-741.441364	-438.312162	-534.754877	-566.640395
+3.35	646.049500	977.467954	1061.812897	691.797293	827.935894	874.707680
-3.4	-330.443702	-629.538985	-684.407412	-404.595842	-493.619886	-523.052672
+3.4	713.841541	1084.490216	1174.113678	758.788686	899.588747	951.936612
-3.45	-302.906728	-577.077404	-627.373461	-370.879522	-452.484895	-479.464949
+3.45	761.565085	1172.779083	1243.702102	795.577906	941.193661	997.802051
-3.5	-275.369754	-524.615823	-570.339510	-337.163202	-411.349904	-435.877226
+3.5	787.346981	1214.588681	1311.639538	799.885096	948.185754	1010.958764
-3.55	-247.832779	-472.154242	-513.305559	-303.446883	-370.214913	-392.289503
+3.55	797.372411	1242.374405	1328.439287	829.081560	978.802717	1044.334411
-3.6	-220.295805	-419.692661	-456.271608	-269.730563	-329.079922	-348.701780

+3.6	**802.233428**	**1233.709333**	**1326.442765**	**846.901902**	**1004.594881**	**1060.940792**
-3.65	**-192.758831**	**-367.231080**	**-399.237656**	**-236.014243**	**-287.944931**	**-305.114057**
+3.65	**783.399573**	**1189.792572**	**1298.804688**	**835.726493**	**996.220207**	**1052.864845**
-3.7	**-165.221857**	**-314.769499**	**-342.203705**	**-202.297923**	**-246.809940**	**-261.526334**
+3.7	**740.781196**	**1130.057874**	**1217.470856**	**798.399716**	**961.281956**	**1008.936051**
-3.75	**-137.684883**	**-262.307917**	**-285.169754**	**-168.581603**	**-205.674949**	**-217.938611**
+3.75	**686.493898**	**1032.035070**	**1113.776830**	**738.765843**	**895.222694**	**923.411507**
-3.8	**-110.147909**	**-209.846336**	**-228.135803**	**-134.865283**	**-164.539958**	**-174.350888**
+3.8	**605.679792**	**919.880005**	**954.677202**	**645.149703**	**789.202534**	**807.763055**
-3.85	**-82.610935**	**-157.384755**	**-171.101851**	**-101.148963**	**-123.404967**	**-130.763165**
+3.85	**497.262565**	**756.615192**	**772.034137**	**527.974090**	**642.820003**	**659.486592**
-3.9	**-55.073960**	**-104.923174**	**-114.067900**	**-67.432643**	**-82.269976**	**-87.175442**
+3.9	**361.016425**	**548.626524**	**555.068756**	**389.110517**	**473.593810**	**485.479818**
-3.95	**-27.536986**	**-52.461593**	**-57.033949**	**-33.716323**	**-41.134985**	**-43.587719**
+3.95	**195.455965**	**303.164957**	**309.075639**	**213.532238**	**259.374792**	**266.788444**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 80’ Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-18.4951268	-21.722894	-25.366949	-14.24953576	-15.31156973	-14.42780377	-17.43499606	-16.94594212	-17.92429567	-7.451672423
End Shear	132.4943604	154.097216	170.111571	115.7579958	123.1896697	115.2463793	136.5912216	120.374298	127.1149938	60.23541645
-0.05	-18.4951268	-21.843317	-27.893717	-14.24953576	-15.31156973	-14.42780377	-17.43499606	-16.94594212	-17.92429567	-7.451672423
+0.05	123.4480689	142.175725	157.077906	107.689288	114.5105426	107.0787151	126.7141512	110.3979886	116.5589105	55.9871558
-0.1	-18.4951268	-22.307579	-32.937145	-14.24953576	-15.31156973	-14.42780377	-17.43499606	-16.94594212	-17.92429567	-7.451672423
+0.1	113.3500986	129.609768	142.808687	99.14538028	105.3257032	98.42814293	116.2646018	99.85099429	105.400417	51.42242034
-0.15	-18.4951268	-26.409299	-37.059554	-14.24953576	-15.31156973	-14.42780377	-17.43499606	-16.94594212	-17.92429567	-7.810676627
+0.15	105.5777024	120.116785	132.021968	92.55874559	98.24891233	91.76541142	108.2246506	91.80741875	96.89156087	47.90943623
-0.2	-20.42974139	-35.437720	-44.659725	-21.0329432	-21.17681453	-19.78427041	-21.19977919	-16.94594212	-17.92429567	-10.83272287
+0.2	95.72122341	108.294955	118.584369	84.19226313	89.2650122	83.31032939	98.03286778	81.70583227	86.2070906	43.45520668
-0.25	-28.32693528	-42.640417	-52.746424	-27.66220785	-28.32347174	-25.80702081	-28.18699555	-20.6518677	-21.80779892	-13.15836549
+0.25	88.1840067	99.414025	108.489332	77.78345817	82.38740394	76.84009123	90.24242617	74.06078883	78.12208793	40.04972801
-0.3	-38.39523145	-52.104543	-63.336259	-36.10103948	-37.42595446	-34.3988524	-38.63029819	-26.74845796	-28.2951335	-17.2324047
+0.3	78.69079527	88.419998	95.997000	69.69681773	73.71473826	68.68450034	80.43447298	64.53859509	68.05350734	35.76143629
-0.35	-46.13714961	-59.602611	-71.698973	-42.57976097	-44.41816096	-41.00125063	-46.66382175	-31.42720312	-33.27419116	-20.7341765
+0.35	71.48348127	80.213339	86.679461	63.54550539	67.12210341	62.4876478	72.99159293	57.39629445	60.50269891	32.50657534
-0.4	-57.07406689	-69.388631	-83.608876	-50.77382851	-53.26691758	-49.35992919	-56.84532274	-37.35139617	-39.56961804	-25.1704724
+0.4	62.65684228	70.123436	75.239423	55.84113912	58.87098328	54.73555741	63.69353928	48.58749772	51.19189483	28.43965264
-0.45	-65.56381887	-77.090677	-93.045710	-57.02234072	-60.01888035	-55.74053658	-64.62619524	-44.87852808	-47.24055587	-28.55927901
+0.45	55.86411419	62.647547	66.780049	50.0269782	52.6491079	48.89298347	56.69627258	42.20508415	44.44751686	25.37852231
-0.5	-76.26635031	-87.077408	-105.234051	-64.86922092	-68.50360879	-63.76205385	-74.41982512	-54.41259619	-57.27641705	-32.8226209
+0.5	47.4496585	53.530719	56.492692	42.80730297	44.9298287	41.64839416	48.03418084	34.44196177	36.2546966	21.58839464
-0.55	-84.3994516	-94.886326	-114.728152	-70.80786551	-74.92954163	-69.83997871	-81.84999383	-62.34147601	-65.66047509	-36.05535312
+0.55	41.17598391	46.836367	48.966992	37.59887916	39.36620974	36.43011262	41.80608124	28.96269724	30.48704972	18.76410691
-0.6	-94.5749118	-104.945234	-126.912239	-78.20513303	-82.9399376	-77.42032468	-91.12967945	-72.69620607	-76.63016738	-40.09031313
+0.6	33.48991027	38.754210	39.926093	30.95630192	32.27813234	29.78661798	33.89307272	22.88223398	24.22560558	15.30620427
-0.65	-102.2447878	-112.758190	-136.341241	-83.75425145	-88.95405399	-83.11467752	-98.11109673	-80.5657786	-84.96815318	-43.12386063
+0.65	27.83022373	33.052042	33.404421	26.04701673	27.04596539	24.88653957	28.07034085	19.3060947	20.42726213	12.76186919
-0.7	-111.7561992	-122.753380	-148.360457	-90.59948693	-96.37981988	-90.14986337	-106.7507915	-90.41223092	-95.40208406	-46.87500883
+0.7	20.99460708	26.048569	26.156180	19.93349018	20.53967917	18.79898758	20.85665108	14.9643169	15.81668703	9.691622256
-0.75	-118.8563068	-130.461811	-157.596837	-95.67941498	-101.8963278	-95.37975099	-113.1854055	-97.83437846	-103.2682041	-49.66625775
+0.75	16.04385393	21.038154	21.005541	15.60875724	15.94482367	14.5046008	15.78452891	11.80038628	12.45771269	7.627727025
-0.8	-127.5666534	-140.250026	-169.205747	-101.8701962	-108.6271628	-101.7657657	-121.059035	-107.0385476	-113.0244853	-53.0781658
+0.8	10.18075601	15.033849	15.025803	10.47647739	10.48287366	9.786388889	10.41979888	7.926106002	8.345838676	5.612728447
-0.85	-133.9904503	-147.739643	-177.849290	-106.4012744	-113.5602754	-106.4502913	-126.8487887	-113.9090297	-120.3083674	-55.58400503
+0.85	7.036447584	10.931475	11.740419	7.349204326	7.349204326	6.622532627	6.939968247	5.645023476	5.942129975	4.156316864
-0.9	-141.7627422	-157.170269	-188.435245	-111.8351781	-119.4858773	-112.0831314	-133.8302883	-122.3369434	-129.2451461	-58.60124034
+0.9	4.140095706	6.249300	8.785048	3.78917068	3.78917068	3.089968754	3.729170929	3.471893201	3.670329544	2.435726633
-0.95	-147.4036704	-164.321068	-196.247407	-115.7377482	-123.7498085	-116.1414186	-138.8771503	-128.5515498	-135.8364498	-60.77856077
+0.95	3.91438799	4.411431	6.792530	3.055687901	3.280243615	3.089968754	3.729170929	3.471893201	3.670329544	1.575578546
-1	-154.1009218	-173.236123	-205.733159	-120.3123532	-128.7598778	-120.9170802	-144.8404546	-136.0691787	-143.8118127	-63.34569803
+1	3.91E+00	4.341754	4.842348	3.06E+00	3.28E+00	3.09E+00	3.73E+00	3.47E+00	3.67E+00	1.58E+00
(Span 2) -2	-1.39E+01	-15.404298	-17.180375	-1.08E+01	-1.16E+01	-1.10E+01	-1.32E+01	-1.23E+01	-1.30E+01	-5.59E+00
+2	1.42E+02	177.590508	223.827550	120.4930739	129.0328766	121.2267188	145.3844721	138.6366269	146.5622099	63.53294602
-2.05	-1.39E+01	-15.499330	-19.386883	-1.08E+01	-1.16E+01	-1.10E+01	-1.32E+01	-1.23E+01	-1.30E+01	-5.59E+00
+2.05	1.36E+02	168.108003	205.825476	115.8871908	123.989915	116.4205128	139.3868743	131.2765819	138.7570989	60.95820775
-2.1	-13.88802631	-15.787138	-22.100748	-10.84140721	-11.638118	-10.96303364	-13.2308865	-12.31807967	-13.02212035	-5.590063196
+2.1	129.1499529	158.272556	187.782586	110.7329381	118.3665831	111.0733187	132.755008	123.4195664	130.4282761	58.10278206
-2.15	-13.88802631	-17.196230	-26.256854	-10.84140721	-11.638118	-10.96303364	-13.2308865	-12.31807967	-13.02212035	-5.590063196
+2.15	121.1975988	147.150349	172.750250	104.5087463	111.5955091	104.6466243	124.8244169	114.3059603	120.7708611	54.68028219
-2.2	-14.78226119	-23.045836	-32.219136	-14.39206354	-14.71847238	-13.40091087	-14.62231696	-12.31807967	-13.02212035	-7.029139926
+2.2	113.8068579	136.855248	161.335012	98.41794916	104.9849721	98.38170456	117.125252	105.6865658	111.6400471	51.35177931

-2.25	-21.21071654	-29.573840	-38.966452	-20.00687767	-20.68863686	-18.98361407	-21.22505165	-14.85543195	-15.70885041	-9.859031138
+2.25	106.0382071	126.469024	149.406018	91.98357227	98.01460716	91.78374937	109.0438819	96.8381059	102.2691855	47.85341238
-2.3	-29.21134503	-37.485280	-47.536296	-26.66506546	-27.78653835	-25.63220695	-29.12815982	-19.70375604	-20.85861805	-13.30672401
+2.3	97.15017297	115.032390	136.136904	84.58776445	90.01651109	84.22140003	99.80996639	86.94339331	91.79321499	43.85169592
-2.35	-37.30315247	-45.290324	-56.329114	-33.08436703	-34.6444547	-32.06508566	-36.80650682	-25.41377654	-26.75134372	-16.65427835
+2.35	88.84419842	104.706397	124.166731	77.64689871	82.5220774	77.14241673	91.19062763	77.44320453	81.73775632	40.11299169
-2.4	-46.72250335	-54.487775	-66.785981	-40.46724286	-42.54630828	-39.48617757	-45.69558287	-33.04073076	-34.78150658	-20.52717498
+2.4	79.55605784	93.514717	111.211234	69.85418838	74.12006738	69.21361421	81.56213336	67.5434394	71.26233038	35.93360537
-2.45	-55.66089548	-63.347210	-76.926479	-47.39969994	-49.97823475	-46.47341719	-54.09097829	-40.92058588	-43.10846912	-24.18245801
+2.45	71.05995368	83.567112	99.719566	62.33980242	66.02974469	61.58609536	72.32390853	58.68579286	61.89233382	32.11223499
-2.5	-65.79717442	-73.570663	-88.685350	-55.18681449	-58.33894096	-54.34161245	-63.57160329	-50.05423877	-52.7642194	-28.30712427
+2.5	61.75365159	72.621264	87.496263	54.47283301	57.571843	53.61939386	62.70026448	49.20523829	51.86653487	27.92861584
-2.55	-75.19249888	-83.568358	-99.839366	-62.34109701	-66.03113755	-61.58738492	-72.32546817	-58.68721351	-61.89383644	-32.11246457
+2.55	53.41464837	63.345964	76.851303	47.39843252	49.97687491	46.47217172	54.08948002	40.91926103	43.10706885	24.18221877
-2.6	-84.66841882	-93.515953	-111.351387	-69.85547719	-74.12145573	-69.21490059	-81.56369265	-67.54488974	-71.26386483	-35.93384759
+2.6	45.08234657	54.486546	66.731778	40.46601011	42.54498769	39.48496786	45.69413129	33.03949334	34.78019923	20.52695487
-2.65	-95.07962705	-104.707601	-124.327720	-77.64816435	-82.52344337	-77.14366254	-91.19214318	-77.44466705	-81.73930412	-40.11322941
+2.65	36.45920593	45.289133	56.296862	33.08318124	34.64318668	32.06392602	36.80512019	25.41269891	26.75020938	16.65406487
-2.7	-104.4805538	-115.033563	-136.314835	-84.58900378	-90.01785024	-84.22262284	-99.81145725	-86.9146963	-91.76301654	-43.85191997
+2.7	28.99957917	37.484137	47.522385	26.66393632	27.78533312	25.63110599	29.12684815	19.70301799	20.85783395	13.30651447
-2.75	-114.0535321	-125.429560	-148.390678	-91.32497677	-97.30181302	-91.10940362	-108.2193012	-95.94545535	-101.3239728	-47.49583537
+2.75	21.98283789	30.261205	39.644789	20.59145698	21.31110082	19.56625399	21.91607208	15.28150737	16.16133763	10.16091485
-2.8	-123.7874256	-136.856309	-161.539588	-98.41907575	-104.9861934	-98.38283219	-117.126635	-105.687987	-111.6415524	-51.35199684
+2.8	14.86992019	23.044833	32.199277	14.39109383	14.717443	13.39998151	14.62122107	12.31807815	13.02212064	7.041286295
-2.85	-132.2370734	-147.151345	-172.962118	-104.509806	-111.5966605	-104.6476878	-124.825726	-114.3073379	-120.7723206	-54.68048197
+2.85	13.95151372	17.195328	26.241424	10.84141126	11.63811736	10.96303231	13.23088917	12.31807815	13.02212064	5.590063423
-2.9	-140.9835239	-158.273457	-187.782590	-110.7339081	-118.36764	-111.0743128	-132.7562374	-123.4208758	-130.4296639	-58.10296683
+2.9	13.95151372	15.787140	22.094276	10.84141126	11.63811736	10.96303231	13.23088917	12.31807815	13.02212064	5.590063423
-2.95	-148.340687	-168.108807	-205.825477	-115.8880686	-123.9908744	-116.4214174	-139.3879993	-131.2778209	-138.7584126	-60.95837947
+2.95	13.95151372	15.499331	19.381848	10.84141126	11.63811736	10.96303231	13.23088917	12.31807815	13.02212064	5.590063423
-3	-155.6711112	-178.516572	-225.618937	-120.9217299	-129.50336	-121.6757946	-145.947209	-139.3431119	-147.3116043	-63.77375096
+3	13.95151372	15.404299	17.180400	10.84141126	11.63811736	10.96303231	13.23088917	12.31807815	13.02212064	5.590063423
(Span 3) -4	-3.932282141	-4.341755	-4.842355	-3.055689041	-3.280243435	-3.08996838	-3.729171681	-3.47189277	-3.670329628	-1.57557861
+4	141.117532	172.261702	204.469893	119.8286769	128.2294185	120.4110149	144.207026	135.2599745	142.9532137	63.0736733
-3.05	-3.932282141	-4.395663	-6.517886	-3.055689041	-3.280243435	-3.08996838	-3.729171681	-3.47189277	-3.670329628	-1.57557861
+3.05	136.4230844	165.327018	197.084538	116.2701637	124.3321743	116.6961089	139.5682933	129.41231	136.7494977	61.07676955
-3.1	-4.44720716	-6.737209	-9.082871	-4.165861263	-4.165861263	-3.334892442	-3.729171681	-3.47189277	-3.670329628	-2.607474481
+3.1	129.8103931	156.133873	187.034994	111.2530193	118.8504584	111.4787622	133.0800197	121.4227043	128.2756025	58.2776335
-3.15	-6.700174847	-10.379097	-11.375896	-6.935163823	-6.935163823	-6.191732152	-6.466518625	-5.329569657	-5.610073323	-3.944968137
+3.15	124.2384007	148.798227	178.799514	107.0261551	114.2411247	107.0971901	127.6493919	114.8670663	121.3241459	55.93065543
-3.2	-10.77507389	-15.653490	-15.615483	-11.00738449	-11.06507756	-10.25918755	-10.94018746	-8.328164344	-8.77247863	-5.816231308
+3.2	116.8713768	139.169447	167.687762	101.2009345	107.8990388	101.0746794	120.2059711	106.0342039	111.9598057	52.70913558
-3.25	-15.3307772	-20.355100	-20.253626	-15.01426978	-15.31379925	-13.91518361	-15.08965461	-11.36504652	-11.99560096	-7.382812738
+3.25	110.9987306	131.555711	158.655698	96.38541816	102.6634458	96.10729452	114.0814515	98.87481063	104.3709571	50.05519486
-3.3	-21.68838464	-26.796910	-26.857041	-20.57419708	-21.22099422	-19.43609115	-21.61041535	-15.43262903	-16.31393317	-10.02131664
+3.3	102.9421934	121.645560	146.788223	89.8545225	95.57126802	89.38362173	105.8089466	89.33265583	94.25801635	46.46672135
-3.35	-26.99960565	-32.244316	-32.479155	-25.36628633	-26.32095249	-24.15721265	-27.21427191	-18.80990969	-19.9003003	-12.40952231
+3.35	96.48634993	113.870879	137.446747	84.52999481	89.79518262	83.91133233	99.08860592	81.67372689	86.14212592	43.54892683
-3.4	-34.7781722	-39.623895	-40.778430	-31.67776629	-33.047532435383	-30.50744968	-34.7506781058012	-23.40746566	-24.7835259535728	-15.68053909
+3.4	87.85881028	103.826334	125.336558	77.39586478	82.06323366	76.59050231	90.11308325	71.55634203	75.42253311	39.64892925
-3.45	-41.25870556	-45.910294	-47.790879	-36.84469721	-38.56100095	-35.67509726	-40.90583008	-28.20468371	-29.68914075	-18.370252
+3.45	80.91675471	96.002133	115.870428	71.64198774	75.83244553	70.69422905	82.89500833	63.50206211	66.88991407	36.51039509
-3.5	-50.03664656	-54.517085	-57.439695	-43.59582474	-45.77252512	-42.43898324	-48.97862032	-35.24890227	-37.10410765	-22.00120818
+3.5	71.72500736	85.962731	103.680683	64.00707665	67.57105968	62.88024646	73.34253271	53.36054036	56.16898985	32.3543052
-3.55	-57.18515405	-61.608224	-65.419844	-49.2115762	-51.77689292	-48.07413874	-55.71638076	-41.17566885	-43.36027764	-24.94931485

+3.55	64.39147614	78.194707	94.214169	57.90348546	60.9713295207729	56.6408285680376	65.72470902	45.94467909	48.3628201	29.03814243
-3.6	-66.7534282	-71.219797	-76.267190	-56.68644107	-59.77592594	-55.5855341	-64.71228049	-49.5458566	-52.20476242	-28.88477986
+3.6	54.75731781	68.292702	82.101296	49.870182	52.29077207	48.43769214	55.72134182	36.69028109	38.87557244	24.68138394
-3.65	-74.46333363	-79.067820	-85.142756	-62.67919395	-66.1939686	-61.61540451	-71.94466696	-56.39774593	-59.44713757	-32.04817165
+3.65	47.12702562	60.680828	72.770510	43.49656417	45.40791766	41.93604778	47.80185276	32.08927964	33.97879626	21.2307195
-3.7	-84.68494526	-89.618903	-97.092410	-70.5875283	-74.66968047	-69.58229059	-81.51348568	-65.58009525	-69.1546756	-36.23271677
+3.7	37.1721714	51.041035	62.038237	35.16729591	36.41849459	33.44779422	37.47369772	26.07412228	27.57754662	16.72872586
-3.75	-92.84976228	-98.170128	-106.786036	-76.87759417	-81.41557987	-75.92595688	-89.14241585	-72.98683319	-76.98641585	-39.56828111
+3.75	29.33986345	43.679560	53.816733	28.60331264	29.3383047	26.76478484	29.35055662	21.33200459	22.53149601	13.48827041
-3.8	-103.5877174	-109.588083	-119.735155	-85.11697633	-90.2576711	-84.24432746	-99.15808559	-82.81553247	-87.38073947	-43.94647565
+3.8	19.18608156	34.419522	43.440831	20.08052883	20.15034629	18.9934225	20.32036724	16.94594362	17.92429893	10.49833924
-3.85	-112.1008617	-118.783203	-130.164244	-91.62466456	-97.24560658	-90.82095381	-107.0855763	-90.67290222	-95.69149762	-47.41110137
+3.85	18.55778296	27.396939	37.604304	14.74751178	15.31157432	14.42780734	17.43499652	16.94594362	17.92429893	8.14771129
-3.9	-123.2181303	-130.988035	-144.003361	-100.0927008	-106.3438064	-99.38680523	-117.4220314	-101.013984	-106.6307589	-51.92751709
+3.9	18.55778296	22.238831	32.321326	14.24953797	15.31157432	14.42780734	17.43499652	16.94594362	17.92429893	7.451672582
-3.95	-131.9730499	-140.761943	-155.080194	-106.7383772	-113.4880179	-106.1154713	-125.5499976	-109.2177637	-115.3101823	-55.47810734
+3.95	18.55778296	21.877722	28.414526	14.24953797	15.31157432	14.42780734	17.43499652	16.94594362	17.92429893	7.451672582
-5	-143.3327538	-153.666296	-169.693217	-115.3326175	-122.7319957	-114.8247712	-136.0811385	-119.9372318	-126.6525029	-60.07728448
+5	18.55778296	21.722894	25.366949	14.24953797	15.31157432	14.42780734	17.43499652	16.94594362	17.92429893	7.451672582

3-Span: Shear (Max and Min) Raw Data Results - 80' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.80660738	-14.5785666	-14.87416409	-13.44957035	-8.697545316	-11.77103701	-13.40871247	-14.9875366	-16.6096496
End Shear	86.08065757	105.4413407	100.294521	85.91388376	69.70604926	93.88033833	105.0954409	112.6811416	120.0164714
-0.05	-10.80660738	-14.5785666	-14.87416409	-13.86407641	-8.697545316	-11.77103701	-13.40871247	-14.9875366	-16.6096496
+0.05	79.91623965	96.82969443	91.31342392	78.18568307	64.75330391	87.20360957	97.46978597	104.1898269	110.6270435
-0.1	-10.80660738	-14.5785666	-14.87416409	-16.13093373	-8.697545316	-11.77103701	-13.40871247	-14.9875366	-16.6096496
+0.1	73.38950617	87.71851444	81.83726356	69.88784327	59.51667246	80.13369153	89.39259472	95.20125198	100.6945919
-0.15	-10.80660738	-14.5785666	-14.87416409	-18.93711532	-8.697545316	-11.77103701	-13.40871247	-14.9875366	-16.6096496
+0.15	68.3660315	80.7648301	74.65484065	63.63674011	55.48380911	74.68953823	83.18017546	88.30187141	93.08652181
-0.2	-14.50374954	-14.5785666	-14.87416409	-22.34912264	-11.40048047	-15.89654913	-16.83827823	-16.82876323	-16.81950691
+0.2	61.9957697	72.02516184	65.6947366	55.88443703	50.3666355	67.78236492	75.30801425	79.57769237	83.48717487
-0.25	-18.28223585	-18.08061871	-14.87416409	-24.86083158	-15.48451068	-20.69286744	-21.94042009	-21.9310966	-21.92202847
+0.25	57.12463514	65.40530175	58.96274377	50.09349186	46.4511955	62.49788294	69.2930642	72.92653883	76.1856835
-0.3	-24.79062585	-22.62056399	-19.87277776	-27.92168589	-20.68853358	-27.72346044	-29.12919999	-29.08900548	-29.078119
+0.3	50.98964032	57.15252995	50.6448571	42.97847424	41.51650486	55.83854613	61.72364117	64.57628574	67.04157884
-0.35	-29.79525936	-26.74409414	-24.2923765	-30.37726286	-24.68790623	-33.12722095	-35.35357971	-35.26192611	-35.25130031
+0.35	46.33213527	50.95623775	44.77350873	37.94424764	37.7675049	50.77991963	55.98214505	58.25856143	60.14167393
-0.4	-36.1354004	-33.99127128	-29.89817667	-35.05547815	-29.75156898	-39.96985078	-43.24483658	-43.50426857	-43.49237202
+0.4	40.51119595	43.305764	37.8055841	31.99412091	33.07832855	44.45351828	48.81317053	50.39177088	51.57497778
-0.45	-40.9785253	-40.42657234	-34.34371668	-38.92721664	-33.61725623	-45.19432205	-49.27753658	-50.33992898	-50.62315667
+0.45	36.12860007	37.75164522	32.64318082	27.61594667	29.54479519	39.68693258	43.42113682	44.49267583	45.3957647
-0.5	-47.07162343	-48.57060351	-41.67506792	-45.16274198	-38.47752885	-51.76389117	-56.87349849	-58.96616672	-60.34765106
+0.5	30.70051506	30.8500023	26.36427681	22.34767577	25.16415734	33.7785579	36.75031501	37.41552076	37.51668675
-0.55	-51.69196803	-55.36025471	-48.25793657	-51.38821295	-42.16051768	-56.74289002	-62.63852118	-65.5286903	-67.76236504
+0.55	26.79552946	26.08443386	22.22710947	18.83682327	22.00943988	29.52434838	31.95719867	32.01166373	32.00920307
-0.6	-57.45923304	-64.23207185	-56.56352079	-59.0896378	-46.75437088	-62.95429899	-69.84147757	-73.74897905	-77.0724973
+0.6	21.83106788	20.32267258	17.81622901	15.12927537	17.99404621	24.1105329	25.87211791	25.80014819	25.79800445
-0.65	-61.79551031	-70.96913513	-62.88046723	-64.99075508	-50.20563179	-67.62164287	-75.26284273	-79.95316077	-84.11743217
+0.65	18.16040414	16.53064292	14.68103696	12.56797906	15.03320869	20.11939916	21.24362678	21.2003803	21.31068067
-0.7	-67.15814923	-79.39117275	-71.47027597	-73.01778275	-54.47004132	-73.38981041	-81.97508647	-87.65796591	-92.89104039
+0.7	13.64271774	12.82259775	10.90778323	9.511545198	11.35603131	15.16395108	15.86224036	15.85104195	15.84895214
-0.75	-71.14907643	-85.73354164	-78.67958153	-79.51998412	-57.64055982	-77.67931354	-86.97678331	-93.41862639	-99.47118547
+0.75	10.45254266	10.34428968	8.226079111	7.327112653	8.763021753	11.67059385	12.28460928	12.28277937	12.38124705
-0.8	-76.02829793	-93.59039729	-87.67848481	-87.49784151	-61.51249614	-82.91913955	-93.10060949	-100.4984136	-107.5861333
+0.8	7.374350835	7.368866049	5.859301529	5.439372118	5.686171376	7.906714064	8.276383048	8.274621909	8.272906094
-0.85	-79.61259181	-99.44830289	-94.44396126	-93.402364	-64.35324391	-86.76461405	-97.60664997	-105.7303453	-113.606471
+0.85	5.176743394	5.229074378	4.157252517	4.228721191	4.007145557	5.42281958	5.426118108	5.424642861	5.423214365
-0.9	-83.92959942	-106.6246025	-102.8091738	-100.6026927	-67.7696803	-91.39100457	-103.0443531	-112.0755848	-120.9406072
+0.9	2.670113872	2.984511939	2.929073883	2.85168149	2.325704272	2.578484128	2.857698026	3.189939056	3.525279038
-0.95	-87.04598131	-111.9083011	-109.0327256	-105.8950531	-70.23164256	-94.72627884	-106.9787381	-116.6936052	-126.3061384
+0.95	2.302494481	2.984511939	2.929073883	2.589853404	1.858426373	2.517867954	2.857698026	3.189939056	3.525279038
-1	-90.72198784	-118.2886223	-116.6380853	-112.2983389	-73.12955123	-98.65413989	-111.6326078	-122.1947465	-132.7373035
+1	2.30E+00	2.98E+00	2.93E+00	2.57E+00	1.86E+00	2.52E+00	2.86E+00	3.19E+00	3.53E+00
(Span 2) -2	-8.17E+00	-1.06E+01	-1.04E+01	-9.12E+00	-6.59E+00	-8.93E+00	-1.01E+01	-1.13E+01	-1.25E+01
+2	9.10E+01	120.3877787	120.7268431	112.1681847	73.32536418	98.93429244	112.1218603	123.0462973	134.0538728
-2.05	-8.17E+00	-1.06E+01	-1.04E+01	-9.15E+00	-6.59E+00	-8.93E+00	-1.01E+01	-1.13E+01	-1.25E+01
+2.05	87.35327595	114.1367136	113.4679367	106.0616617	70.41169426	94.98374917	107.4504041	117.5342522	127.632054
-2.1	-8.169119841	-10.58887881	-10.39218759	-9.22377154	-6.593591061	-8.93325261	-10.13895024	-11.31772277	-12.50748964
+2.1	83.26208194	107.4452202	105.8412232	99.72998972	67.17117244	90.59346742	102.2928062	111.5129133	120.681788
-2.15	-8.169119841	-10.58887881	-10.39218759	-11.1071992	-6.593591061	-8.93325261	-10.13895024	-11.31772277	-12.50748964
+2.15	78.35903313	99.66468123	97.12409145	92.31470773	63.27759765	85.32176347	96.13316965	104.3855224	112.5201905
-2.2	-9.668664582	-10.58887881	-10.39218759	-13.40931916	-8.093249907	-10.78652694	-11.31908455	-11.31772277	-12.50748964
+2.2	73.5907406	92.29050324	88.98976351	85.19297645	59.48299784	80.18667998	90.15980069	97.52462351	104.7166686
-2.25	-13.81158275	-12.65557719	-11.11814893	-16.314904	-11.46196624	-15.32718999	-16.15692376	-16.13267244	-16.12822908

+2.25	68.57878203	84.70661113	80.67635204	77.73562156	55.48757235	74.78200083	83.89566431	90.37343777	96.62893272
-2.3	-18.76335849	-17.43470534	-15.36875203	-19.73045687	-15.47633344	-20.74057962	-22.21995502	-22.15816643	-22.15349024
+2.3	62.84486828	76.21095189	71.21512103	69.33475986	50.90914531	68.59097211	76.74447687	82.25616613	87.49821776
-2.35	-23.56852847	-23.01944203	-19.62577568	-22.61560765	-19.36236136	-25.98290575	-28.12017419	-28.18324415	-28.17784487
+2.35	57.48665509	68.03982323	62.99223007	61.83482661	46.62428462	62.79878915	70.07483911	74.72534437	79.07014051
-2.4	-29.12552025	-29.64982048	-25.59546675	-26.45957841	-23.84716505	-32.03501133	-34.9599886	-35.66288357	-36.00007784
+2.4	51.49509565	59.51037071	54.11265197	53.40438286	41.82609125	56.31460638	62.54440615	66.21589347	69.50752554
-2.45	-34.36882766	-36.49106918	-31.81456608	-32.16321297	-28.07121937	-37.73696982	-41.42742747	-42.7796424	-43.75891481
+2.45	45.74086544	51.86565962	46.27912794	45.81898888	37.2112862	50.08005482	55.49385072	58.38454452	60.91686429
-2.5	-40.28450803	-44.40321123	-39.04150193	-39.0324938	-32.82926329	-44.16155872	-48.7383163	-50.86982326	-52.63119985
+2.5	39.74104724	43.66846522	38.36905461	38.40508122	32.392456	43.57169404	48.06610334	50.12409491	51.81125448
-2.55	-45.74183808	-51.86688682	-46.28032707	-45.81980329	-37.21206683	-50.08110865	-55.49503445	-58.3858406	-60.91826965
+2.55	34.36787591	36.48992018	31.81357828	32.16251338	28.07045276	37.73595325	41.42628195	42.77839033	43.75757061
-2.6	-51.49606833	-59.51162145	-54.11387075	-53.40524321	-41.82688403	-56.31565799	-62.48954122	-66.1908312	-69.48305342
+2.6	29.12459734	29.64874486	25.59452741	26.45904655	23.84642729	32.03402447	34.9588902	35.66167818	35.99880213
-2.65	-57.48761386	-68.04108213	-62.99347736	-61.83567445	-46.62506484	-62.79980828	-70.07601075	-74.72666493	-79.07156439
+2.65	23.56765411	23.01850354	19.6250028	22.6153082	19.36164271	25.9819603	28.11912683	28.18211343	28.17672424
-2.7	-62.84580981	-76.18426936	-71.21641015	-69.3355578	-50.90991115	-68.59197284	-76.74562974	-82.25747167	-87.49965589
+2.7	18.76253109	17.43382905	15.36812627	19.7301294	15.47566287	20.73968297	22.21896522	22.15718295	22.15252416
-2.75	-68.06705911	-83.94081145	-79.76457231	-76.97322417	-55.07927287	-74.22978767	-83.25680232	-89.64631961	-95.80896104
+2.75	14.24482456	12.98728622	11.48910475	16.63625853	11.81365711	15.80135827	16.68659485	16.65917343	16.65472596
-2.8	-73.59160414	-92.29172049	-88.99104471	-85.19374083	-59.48369275	-80.1876038	-90.16087303	-97.52582841	-104.7180092
+2.8	9.667957549	10.58887884	10.39218535	13.40899559	8.092674133	10.78577136	11.31836154	11.31772074	12.50749314
-2.85	-78.35985073	-99.66585879	-97.1253478	-92.3154195	-63.27825305	-85.32263525	-96.13417713	-104.3866727	-112.52149
+2.85	8.169119683	10.58887884	10.39218535	11.10693554	6.593590358	8.933253771	10.13894897	11.31772074	12.50749314
-2.9	-83.26284234	-107.4463369	-105.8424396	-99.73064196	-67.17177641	-90.59428329	-102.2937385	-111.5139947	-120.6830099
+2.9	8.169119683	10.58887884	10.39218535	9.223770168	6.593590358	8.933253771	10.13894897	11.31772074	12.50749314
-2.95	-87.35397016	-114.1377675	-113.4691007	-106.0622553	-70.41224745	-94.98449224	-107.4512573	-117.5352538	-127.6331942
+2.95	8.169119683	10.58887884	10.39218535	9.149248322	6.593590358	8.933253771	10.13894897	11.31772074	12.50749314
-3	-91.38885603	-120.9867639	-121.4304508	-112.7874978	-73.59767145	-99.30369943	-112.5606002	-123.5676575	-134.6649931
+3	8.169119683	10.58887884	10.39218535	9.124641792	6.593590358	8.933253771	10.13894897	11.31772074	12.50749314
(Span 3) -4	-2.302494437	-2.98E+00	-2.93E+00	-2.57E+00	-1.858426175	-2.517868282	-2.857697667	-3.189938484	-3.525280025
+4	90.33190363	117.6025166	115.8148874	111.6086548	72.82241266	98.23772675	111.1379708	121.6076905	132.0485808
-3.05	-2.302494437	-2.98E+00	-2.93E+00	-2.59E+00	-1.858426175	-2.517868282	-2.857697667	-3.189938484	-3.525280025
+3.05	87.47240881	112.6395099	109.8990165	106.6281698	70.56817958	95.18231266	107.5178382	117.3285015	127.0460017
-3.1	-2.935338167	-2.984511948	-2.92907325	-2.996790311	-2.50024035	-2.834658575	-2.857697667	-3.189938484	-3.525280025
+3.1	83.46597331	105.8467008	101.8978823	99.823734	67.40307668	90.89447228	102.4597629	111.3915344	120.1479754
-3.15	-4.885212597	-4.936864524	-3.924806648	-4.067948358	-3.816278723	-5.084361122	-5.087605063	-5.086137077	-5.084710153
+3.15	*80.10792918*	*100.2646217*	*95.39106254*	*94.22335267*	*64.74554959*	*87.29578074*	*98.22997328*	*106.4558418*	*114.443096*
-3.2	*-7.693325901*	*-7.687776876*	*-6.112961648*	*-5.630277186*	*-6.013805884*	*-8.277659473*	*-8.704426417*	*-8.70264604*	*-8.700918028*
+3.2	*75.49989666*	*92.73355691*	*86.6931714*	*86.63187011*	*61.09344078*	*82.35196828*	*92.43692796*	*99.7295429*	*106.7032105*
-3.25	*-10.01526198*	*-10.00226555*	*-7.95399317*	*-7.10497803*	*-8.407214047*	*-11.19130613*	*-11.82231655*	*-11.8204757*	*-11.91801274*
+3.25	*71.7045853*	*86.62215588*	*79.69348544*	*80.42673034*	*58.08164163*	*78.27615211*	*87.67351201*	*94.22256206*	*100.3910389*
-3.3	*-14.11656506*	*-13.18841343*	*-11.31274242*	*-9.837986405*	*-11.74080426*	*-15.6824001*	*-16.440351*	*-16.42577601*	*-16.42366678*
+3.3	*66.57374784*	*78.46820247*	*70.42497889*	*72.06676338*	*54.0055407*	*72.76146009*	*81.24320444*	*86.81648765*	*91.93142516*
-3.35	*-17.54384608*	*-16.04486244*	*-14.24780948*	*-12.21541887*	*-14.62316048*	*-19.5237143*	*-20.62632957*	*-20.58682674*	*-20.58469795*
+3.35	*62.40245142*	*71.9172307*	*63.77025253*	*65.84855829*	*50.68848919*	*68.27471653*	*76.0221156*	*80.82336661*	*85.1069372*
-3.4	*-22.36931016*	*-20.94269155418 69*	*-18.27845968*	*-15.50831289*	*-18.4296814*	*-24.6978032662602*	*-26.53131044*	*-26.45516787*	*-26.453008887386*
+3.4	*56.82759991*	63.25583968	*55.64897469*	*58.24991073*	*46.25144958*	62.27423944	*69.0522543*	*72.84707893*	76.04974588
-3.45	*-26.23091898*	-25.42453685	*-21.66283412*	*-18.3604932*	*-21.55305648*	-28.90894549	*-31.26461075*	*-31.26072202*	-31.25823232
+3.45	*52.34160163*	56.35501894	*49.18863083*	*52.25984652*	*42.67817025*	57.44277678	*63.44953245*	*66.45303484*	68.80800923
-3.5	*-31.29251337*	-31.55122251	*-27.04213123*	*-22.91664019*	*-25.6421772*	-34.42320894	*-37.47738333*	*-38.20803147*	-38.37226699
+3.5	*46.40153122*	47.6723385	*40.72546863*	*44.25568342*	*37.94319261*	51.04161013	*56.03780018*	*58.01604349*	59.27539153
-3.55	*-35.51471042*	-36.84920045	*-31.92622863*	*-27.03185519*	*-29.04962316*	*-39.01900036*	*-42.66623156*	*-43.66811301*	-44.50099438
+3.55	*41.66211416*	*41.33768349818 9*	*35.126632544 6711*	*39.46764494509 34*	*34.162704363 8941*	*45.9315691446346*	*50.1294177262479*	*51.306271733067*	51.71138343

-3.6	-41.14911779	-44.13859905	-38.56311917	-32.63847231	-33.59243627	-45.14707056	-49.59841496	-51.25215303	-52.51043192
+3.6	35.43561232	33.06423849	29.27921258	34.48947664	29.19284335	39.21480221	42.3735692	42.51807989	42.50620241
-3.65	-45.67685919	-50.08948587	-43.98308308	-37.26665689	-37.23985424	-50.06798721	-55.17470749	-57.37126121	-59.17396149
+3.65	30.50405909	27.45705185	24.9188242	30.82903484	25.25416918	33.89238878	36.23549386	36.13652385	36.12597339
-3.7	-51.66471266	-58.05562188	-51.55062949	-43.75075598	-42.05970198	-56.57153025	-62.55615692	-65.49354675	-68.04468786
+3.7	24.06992105	22.11891009	19.23686625	27.59013745	20.11244093	26.94514262	28.2332142	28.20043106	28.18951644
-3.75	-56.43671383	-64.47494923	-58.02065145	-49.28504656	-45.89806947	-61.75136547	-68.44392594	-71.98864243	-75.15732755
+3.75	19.00751444	18.58762626	14.87416866	25.20965435	16.06458437	21.4765164	22.66467767	22.65540745	22.64635901
-3.8	-62.69922028	-72.98564346	-66.67548365	-56.73009427	-50.93189151	-68.54528512	-76.1769565	-80.5396121	-84.5443665
+3.8	13.98964616	14.57856905	14.87416866	21.9799857	10.81403277	15.28189504	16.10518258	16.09564388	16.60965049
-3.85	-67.6541996	-79.78366204	-73.64501936	-62.76007773	-54.91218633	-73.91790052	-82.30015452	-87.3255596	-92.01104879
+3.85	10.80661062	14.57856905	14.87416866	19.326397	8.697547542	11.77103672	13.40871545	14.98753924	16.60965049
-3.9	-74.1125675	-88.72354527	-82.87894226	-70.79676795	-60.09699019	-80.91710296	-90.28705903	-96.1956471	-101.7922468
+3.9	10.80661062	14.57856905	14.87416866	15.71812103	8.697547542	11.77103672	13.40871545	14.98753924	16.60965049
-3.95	-79.18924163	-95.81050163	-90.24985077	-77.25103535	-64.1701729	-86.41629124	-96.56971742	-103.1871927	-109.5180279
+3.95	10.80661062	14.57856905	14.87416866	14.04471524	8.697547542	11.77103672	13.40871545	14.98753924	16.60965049
-5	-85.76470102	-105.0641793	-99.93678692	-85.78666541	-69.44291433	-93.53565902	-104.7128445	-112.2669225	-119.5712354
+5	10.80661062	14.57856905	14.87416866	13.44957084	8.697547542	11.77103672	13.40871545	14.98753924	16.60965049

3-Span: Shear (Max and Min) Raw Data Results - 80' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-27.26817626	-29.80117801	-17.4048	-21.146	-22.5363
End Shear	177.8508771	184.4548194	122.254	148.1625	154.0153
-0.05	-27.26817626	-29.80117801	-17.4048	-21.146	-22.5363
+0.05	161.6861781	167.2448576	111.8731	135.6534	140.6304
-0.1	-27.26817626	-29.80117801	-17.4048	-21.146	-22.5363
+0.1	144.6460668	148.7159125	100.9083	122.4339	126.4949
-0.15	-27.26817626	-29.80117801	-17.4048	-21.146	-22.5363
+0.15	131.73373	134.7210271	92.56194	112.3661	115.7506
-0.2	-27.26817626	-29.80117801	-17.4048	-21.146	-22.5363
+0.2	115.629536	117.3288011	82.10136	99.74102	102.3056
-0.25	-27.26817626	-29.80117801	-22.106	-24.4972	-24.8002
+0.25	103.5330896	104.3161065	74.20209	90.20146	92.16985
-0.3	-31.77270898	-32.22345243	-28.4994	-31.4763	-32.9731
+0.3	88.59098774	89.08774975	64.38704	78.3404	79.59925
-0.35	-38.98513504	-40.51057391	-33.4048	-36.8302	-39.2529
+0.35	77.51425371	78.43205109	57.04483	69.46105	70.21496
-0.4	-50.0121308	-52.24514008	-39.605	-44.8378	-47.2023
+0.4	64.90190779	66.18485136	48.26026	58.82863	59.03081
-0.45	-58.86657407	-62.19413386	-44.3299	-53.1385	-53.2698
+0.45	55.58343231	57.46459849	41.54487	50.46271	50.89545
-0.5	-71.88707533	-76.05652019	-53.0239	-65.322	-64.6686
+0.5	44.81846432	46.80254115	33.90401	41.20346	40.96443
-0.55	-83.12343502	-86.65194679	-60.7858	-74.638	-75.1023
+0.55	37.4156003	38.96968787	29.25685	34.41138	34.83648
-0.6	-98.59404735	-99.98978116	-71.6069	-87.6201	-88.4938
+0.6	29.28067857	30.02872112	24.30812	26.92519	28.50011
-0.65	-110.3794684	-111.3753457	-79.9602	-97.6375	-99.199
+0.65	23.47602099	23.93441659	20.5386	22.48388	23.82507
-0.7	-127.240309	-128.3282735	-90.431	-110.189	-112.942
+0.7	17.35713883	17.15524499	15.95929	17.46597	18.16564
-0.75	-140.2674167	-142.8722405	-98.3392	-119.664	-123.339
+0.75	13.61175775	12.85280206	12.61993	13.80498	14.05558
-0.8	-156.5373191	-161.3105596	-108.167	-131.433	-136.282
+0.8	9.255082977	8.404491127	8.527377	9.431006	9.429616
-0.85	-168.7767963	-175.226257	-115.52	-140.233	-145.984
+0.85	6.142214277	5.892738859	5.992586	6.337428	6.302496
-0.9	-183.9209738	-192.5054831	-124.563	-151.05	-157.942
+0.9	5.442542379	5.892738859	3.515084	4.29888	4.542002
-0.95	-195.1969478	-205.4215879	-131.251	-159.044	-166.807
+0.95	5.442542379	5.892738859	3.515084	4.29888	4.542002
-1	-208.9891872	-221.289523	-139.369	-168.74	-177.597
+1	5.44E+00	5.89E+00	3.52E+00	4.30E+00	4.54E+00
(Span 2) -2	-1.93E+01	-2.09E+01	-1.25E+01	-1.53E+01	-1.61E+01
+2	216.1594771	230.4781657	142.622	172.4717	182.3109
-2.05	-1.93E+01	-2.09E+01	-1.25E+01	-1.53E+01	-1.61E+01
+2.05	202.9461774	215.4180013	134.7408	163.0302	171.8713
-2.1	-19.30983093	-20.90710256	-12.4713	-15.2522	-16.1148
+2.1	189.0842446	199.7363019	126.3708	152.9913	160.8326
-2.15	-19.30983093	-20.90710256	-12.4713	-15.2522	-16.1148
+2.15	173.2610127	181.9627354	116.7082	141.389	148.1396
-2.2	-19.30983093	-20.90710256	-12.4713	-15.2522	-16.1148
+2.2	158.5117726	165.505298	107.6086	130.4516	136.2285
-2.25	-19.30983093	-20.90710256	-15.825	-17.3848	-18.1659

+2.25	**143.5661306**	**148.9305916**	**98.303**	**119.256**	**124.0858**
-2.3	**-25.14937843**	**-25.94442998**	**-20.9359**	**-23.1935**	**-24.5104**
+2.3	**126.5011907**	**130.7571247**	**87.77964**	**106.6326**	**110.2439**
-2.35	**-33.06276356**	**-34.65741036**	**-25.852**	**-30.3803**	**-30.6457**
+2.35	**111.4514875**	**114.465611**	**78.0251**	**94.82317**	**97.74986**
-2.4	**-43.42379256**	**-45.60621374**	**-32.5589**	**-39.8142**	**-39.647**
+2.4	**95.39976902**	**96.99813766**	**67.73831**	**82.40864**	**84.4548**
-2.45	**-54.56927709**	**-56.18530949**	**-40.3259**	**-49.244**	**-49.4388**
+2.45	**81.24690897**	**81.86584658**	**58.57392**	**71.33587**	**72.64987**
-2.5	**-67.7070423**	**-68.37270924**	**-49.6835**	**-60.5809**	**-61.2373**
+2.5	**66.48194852**	**67.572065**	**48.81135**	**59.52509**	**60.12014**
-2.55	**-81.24916004**	**-81.70753162**	**-58.5754**	**-71.3376**	**-72.6517**
+2.55	**54.56742842**	**56.1850703**	**40.32457**	**49.24245**	**49.43723**
-2.6	**-95.40205441**	**-96.99853171**	**-67.7398**	**-82.4104**	**-84.4567**
+2.6	**43.42221804**	**45.605987**	**32.55776**	**39.81282**	**39.64551**
-2.65	**-111.4538291**	**-114.4659645**	**-78.0266**	**-94.825**	**-97.7518**
+2.65	**33.06144334**	**34.65717067**	**25.85118**	**30.37898**	**30.64472**
-2.7	**-126.4476846**	**-130.7574905**	**-87.7194**	**-106.58**	**-110.191**
+2.7	**25.1481618**	**25.94422435**	**20.93517**	**23.19243**	**24.50942**
-2.75	**-141.9864603**	**-147.2733289**	**-97.3661**	**-118.128**	**-122.865**
+2.75	**19.3095764**	**20.90710243**	**16.27439**	**17.87809**	**18.72217**
-2.8	**-158.5141352**	**-165.5056685**	**-107.61**	**-130.453**	**-136.23**
+2.8	**19.3095764**	**20.90710243**	**12.47132**	**15.25218**	**16.11477**
-2.85	**-173.2633295**	**-181.9631008**	**-116.71**	**-141.391**	**-148.141**
+2.85	**19.3095764**	**20.90710243**	**12.47132**	**15.25218**	**16.11477**
-2.9	**-189.086489**	**-199.7367058**	**-126.372**	**-152.993**	**-160.834**
+2.9	**19.3095764**	**20.90710243**	**12.47132**	**15.25218**	**16.11477**
-2.95	**-202.9483343**	**-215.4183901**	**-134.742**	**-163.032**	**-171.873**
+2.95	**19.3095764**	**20.90710243**	**12.47132**	**15.25218**	**16.11477**
-3	**-217.4415715**	**-231.9440861**	**-143.381**	**-173.38**	**-183.319**
+3	**19.3095764**	**20.90710243**	**12.47132**	**15.25218**	**16.11477**
(Span 3) -4	**-5.442470649**	**-5.892738823**	**-3.51508**	**-4.29888**	**-4.542**
+4	**207.4954772**	**219.5692281**	**138.4937**	**167.6948**	**176.4316**
-3.05	**-5.442470649**	**-5.892738823**	**-3.51508**	**-4.29888**	**-4.542**
+3.05	**196.7671479**	**207.2264321**	**132.1794**	**160.1531**	**168.0386**
-3.1	**-5.442470649**	**-5.892738823**	**-3.51508**	**-4.29888**	**-4.542**
+3.1	**182.2705197**	**190.6213315**	**123.5811**	**149.8755**	**156.6416**
-3.15	**-5.718713802**	**-5.892738823**	**-5.65767**	**-5.9808**	**-5.8769**
+3.15	***170.4907237***	***177.1808687***	***116.5467***	***141.4615***	***147.34***
-3.2	***-9.720609679***	***-9.049655036***	***-8.95229***	***-9.89851***	***-9.89712***
+3.2	***154.7552921***	***159.2906474***	***107.0934***	***130.1472***	***134.8665***
-3.25	***-13.10952788***	***-12.26309095***	***-12.1603***	***-13.3009***	***-13.3951***
+3.25	***142.0999382***	***144.9486047***	***99.44895***	***120.9929***	***124.7992***
-3.3	***-18.01362912***	***-17.87377715***	***-16.4534***	***-18.0075***	***-18.775***
+3.3	***125.3518239***	***126.4036284***	***89.28194***	***108.8116***	***111.4331***
-3.35	***-22.77327998***	***-23.15239551***	***-20.0154***	***-21.9107***	***-23.1773***
+3.35	***112.0408086***	***114.0116759***	***81.13741***	***99.04887***	***100.7429***
-3.4	***-30.15741809***	***-30.96127264***	***-24.8616***	***-27.6753***	***-29.1876***
+3.4	***96.88910995***	***98.52478376***	***70.39802***	***86.17008***	***87.04397***
-3.45	***-36.48522313***	***-37.88553909***	***-28.8236***	***-33.4733***	***-34.1163***
+3.45	***84.85557977***	***88.15017909***	***61.88241***	***75.95383***	***76.57768***
-3.5	***-45.93052198***	***-47.95544892***	***-34.7303***	***-42.2053***	***-42.0323***
+3.5	***70.38738092***	***74.52845294***	***51.90337***	***63.97684***	***63.16362***
-3.55	***-54.29130848***	***-56.24889451***	***-40.6738***	***-49.4077***	***-49.766***
+3.55	***60.11961331***	***63.7458154***	***44.99604***	***54.50017***	***54.12604***
-3.6	***-66.27130055***	***-67.45974067***	***-49.2424***	***-60.0179***	***-60.2249***
+3.6	***48.73606254***	***50.87603977***	***38.92163***	***43.77337***	***46.32547***

-3.65	***-76.08180228***	***-76.9440007***	***-56.0198***	***-68.2209***	***-68.9063***
+3.65	***40.00757606***	***41.68774331***	***34.09893***	***37.58766***	***40.14217***
-3.7	***-90.21793728***	***-90.64314153***	***-65.4591***	***-79.6365***	***-80.9709***
+3.7	***30.73498725***	***31.03352278***	***27.79237***	***30.70458***	***32.06865***
-3.75	***-101.8405687***	***-102.4968494***	***-73.0937***	***-88.8625***	***-90.7489***
+3.75	***27.26817467***	***29.80117892***	***22.81937***	***25.27598***	***25.71153***
-3.8	***-117.3921023***	***-119.2261375***	***-83.2492***	***-101.127***	***-103.78***
+3.8	***27.26817467***	***29.80117892***	***17.40479***	***21.14605***	***22.53634***
-3.85	***-129.9185677***	***-132.7544901***	***-91.3859***	***-110.947***	***-114.238***
+3.85	***27.26817467***	***29.80117892***	***17.40479***	***21.14605***	***22.53634***
-3.9	***-146.5190835***	***-150.746588***	***-102.116***	***-123.891***	***-128.051***
+3.9	***27.26817467***	***29.80117892***	***17.40479***	***21.14605***	***22.53634***
-3.95	***-159.7734617***	***-165.1589911***	***-110.645***	***-134.173***	***-139.046***
+3.95	***27.26817467***	***29.80117892***	***17.40479***	***21.14605***	***22.53634***
-5	***-177.1968529***	***-184.1617594***	***-121.809***	***-147.626***	***-153.458***
+5	***27.26817467***	***29.80117892***	***17.40479***	***21.14605***	***22.53634***

3-Span: Moment (Max and Min) Raw Data Results - 80' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.24E-13	*-2.86E-13*	*-2.89E-13*	-2.24E-13	-2.24E-13	-2.16E-13	-2.31E-13	-1.98E-13	-2.08E-13	-1.52E-13
End Shear	4.11E-13	*3.81E-13*	*4.05E-13*	3.30E-13	3.44E-13	2.77E-13	3.01E-13	2.76E-13	2.92E-13	1.63E-13
-0.05	-73.98050719	*-86.89157584*	*-101.4677979*	-56.998143	-61.2462789	-57.7112151	-69.7399842	-67.7837685	-71.6971827	-29.80668969
+0.05	493.8775727	*576.9761577*	*634.9341044*	431.0274277	458.4560684	428.7464878	507.6911278	441.5919543	466.2356421	223.9486232
-0.1	-147.9610144	*-173.7831517*	*-202.9355957*	-113.996286	-122.492558	-115.42243	-139.479968	-135.567537	-143.394365	-59.61337939
+0.1	917.5534879	*1079.608505*	*1181.504851*	802.5326708	852.8234598	797.1398691	942.2134843	809.8149768	854.8633526	415.4176099
-0.15	-221.9415216	*-260.6747275*	*-304.4033936*	-170.994429	-183.738837	-173.133645	-209.219953	-203.351305	-215.091548	-89.42006908
+0.15	1270.425362	*1507.995071*	*1641.010078*	1113.999949	1182.698673	1104.822827	1303.505145	1105.347339	1166.584806	574.9132347
-0.2	-295.9220288	*-347.5663034*	*-405.8711914*	-227.992572	-244.985116	-230.84486	-278.959937	-271.135074	-286.788731	-119.2267588
+0.2	1581.417373	*1863.004606*	*2015.188058*	1366.569104	1449.361846	1353.034509	1593.179077	1337.78228	1411.962306	703.138727
-0.25	-369.902536	*-434.4578792*	*-507.3389893*	-284.990715	-306.231395	-288.556075	-348.699921	-338.918842	-358.485913	-149.0334485
+0.25	1846.964665	*2145.843823*	*2306.217726*	1561.744108	1654.485258	1543.383805	1836.150915	1538.830068	1626.095961	801.0711354
-0.3	-443.8830432	*-521.349455*	*-608.8067871*	-341.988858	-367.477674	-346.26729	-418.439905	-406.702611	-430.183096	-178.8401382
+0.3	2038.51657	*2358.057359*	*2517.255669*	1701.393029	1800.133297	1696.9181	2019.604119	1672.628078	1768.9517	870.3895254
-0.35	-517.8635504	*-608.2410309*	*-710.274585*	-398.987001	-428.723952	-403.978506	-488.17989	-474.486379	-501.880279	-208.6468279
+0.35	2159.028615	*2501.527916*	*2682.423076*	1792.23013	1906.527169	1800.825909	2137.429365	1766.226156	1866.819213	911.6661126
-0.4	-591.8440575	*-695.1326067*	*-811.7423828*	-455.985144	-489.970231	-461.689721	-557.919874	-542.270148	-573.577462	-238.4535175
+0.4	2211.943907	*2578.476516*	*2770.578274*	1848.935716	1963.386853	1853.067364	2192.001654	1800.288968	1903.951991	926.3837155
-0.45	-665.8245647	*-782.0241825*	*-913.2101807*	-512.983287	-551.21651	-519.400936	-627.659858	-610.053916	-645.274644	-268.2602072
+0.45	2201.192115	*2591.461606*	*2785.276582*	1855.792802	1967.234238	1855.244009	2186.83895	1777.216399	1880.360349	916.221537
-0.5	-739.8050719	*-868.9157584*	*-1014.677979*	-569.98143	-612.462789	-577.112151	-697.399842	-677.837685	-716.971827	-298.0668969
+0.5	2131.189877	*2556.420174*	*2768.095589*	1824.096955	1935.348568	1824.530572	2153.447929	1745.122562	1846.246302	905.1400377
-0.55	-813.7855791	*-955.8073342*	*-1116.145776*	-626.979573	-673.709068	-634.823366	-767.139827	-745.621453	-788.66901	-327.8735866
+0.55	2038.207986	*2464.767357*	*2693.915745*	1749.66977	1858.714383	1754.362279	2074.815017	1704.534664	1802.487858	881.7927409
-0.6	-887.7660863	*-1042.69891*	*-1217.613574*	-683.977716	-734.955347	-692.534581	-836.879811	-813.405222	-860.366192	-357.6802763
+0.6	1929.528792	*2316.30035*	*2551.316806*	1634.048229	1737.190723	1641.54216	1944.213151	1604.9927	1696.442752	834.1457219
-0.65	-961.7465935	*-1129.590486*	*-1319.081372*	-740.975859	-796.201626	-750.245796	-906.619795	-881.18899	-932.063375	-387.486966
+0.65	1764.862038	*2114.692097*	*2344.844908*	1487.903106	1575.041243	1490.057918	1765.810339	1451.0905	1532.987919	764.1404234
-0.7	-1035.727101	*-1216.482062*	*-1420.54917*	-797.974002	-857.447905	-807.957011	-976.359779	-948.972759	-1003.76056	-417.2936557
+0.7	1547.963034	*1863.953692*	*2081.279643*	1310.219707	1381.534436	1304.267613	1544.504048	1257.99675	1330.024918	673.9159243
-0.75	-1109.707608	*-1303.373638*	*-1522.016968*	-854.972146	-918.694184	-865.668226	-1046.09976	-1016.75653	-1075.45774	-447.1003454
+0.75	1284.42836	*1568.434639*	*1772.31746*	1101.066447	1157.834196	1088.899005	1285.913925	1021.824429	1079.683676	565.8080522
-0.8	-1183.688115	*-1390.265213*	*-1623.484766*	-911.970289	-979.940463	-923.379441	-1115.83975	-1084.5403	-1147.15492	-476.9070351
+0.8	980.3415067	*1232.821763*	*1410.537933*	865.2876163	904.7563733	849.0494126	996.1075412	743.5645387	784.9578803	442.3496984
-0.85	-1257.668622	*-1497.456388*	*-1745.562048*	-968.968432	-1041.18674	-981.090656	-1185.57973	-1152.32406	-1218.85211	-506.7137248
+0.85	642.2726584	*882.4395972*	*1020.133641*	608.091917	627.8577203	590.1859371	681.6006727	452.8705346	478.779459	306.2706488
-0.9	-1331.649129	*-1666.919615*	*-2161.731279*	-1025.96657	-1102.43302	-1038.80187	-1255.31972	-1220.10783	-1290.54929	-536.5204145
+0.9	320.1989133	*564.6240973*	*680.7451269*	341.178617	341.178617	326.5068581	351.0544618	259.5625789	273.2237672	189.9460547
-0.95	-1405.629637	*-1889.309474*	*-2702.117153*	-1082.96472	-1163.6793	-1096.51309	-1325.0597	-1287.8916	-1362.24647	-566.3271042
+0.95	297.4934873	*341.0245956*	*521.4125621*	232.2322805	249.2985147	234.8376253	283.4169906	263.8638833	278.9450454	119.7439695
-1	-1479.610081	*-2156.313913*	*-3333.911741*	-1139.96287	-1224.92559	-1154.22428	-1394.7997	-1355.67534	-1433.94362	-596.1337798
+1	313.1510406	*347.3403444*	*387.3878342*	244.4550323	262.419493	247.1975012	298.3336701	277.7514558	293.6263643	126.0462843
(Span 2) -2	-1479.610081	*-2156.313913*	*-3333.911741*	-1139.96287	-1224.92559	-1154.22428	-1394.7997	-1355.67534	-1433.94362	-596.1337798
+2	313.1510406	*347.3403444*	*387.3878342*	244.4550323	262.419493	247.1975012	298.3336701	277.7514558	293.6263643	126.0462843
-2.05	-1063.826966	*-1566.910492*	*-2533.551341*	-826.676304	-887.426509	-835.95011	-1008.8781	-939.274703	-992.959176	-426.25198
+2.05	240.9333038	*291.8104531*	*473.3930286*	188.0797148	201.9012794	190.1897262	229.5330603	213.6974415	225.9113385	106.3921591
-2.1	-991.279095	*-1281.042619*	*-1865.820651*	-770.300965	-826.908298	-778.942342	-940.077481	-875.220697	-925.244149	-397.1836502
+2.1	389.9345421	*621.6766665*	*620.8269479*	417.4719564	427.3390882	406.1231069	448.2500809	312.5095889	329.9915206	222.8735952
-2.15	-918.7312237	*-1070.429223*	*-1361.403371*	-713.925627	-766.390088	-721.934574	-871.276857	-811.16669	-857.529122	-368.1153204
+2.15	790.6748944	*989.637795*	*979.2761111*	733.9959421	766.8372487	727.4342885	842.7449959	547.5377274	578.2638906	365.1602505
-2.2	-846.1833524	*-937.1821106*	*-1058.483937*	-657.550288	-705.871878	-664.926806	-802.476233	-747.112684	-789.814094	-339.0469906
+2.2	1178.60558	*1382.831365*	*1367.6055*	1031.659422	1086.34345	1028.342661	1205.778144	914.2922748	966.405343	521.1431726

-2.25	-773.635481	-871.9292046	-1011.984657	-601.17495	-645.353668	-607.919038	-733.67561	-683.058677	-722.099067	-309.9786608
+2.25	1534.01385	1788.620604	1831.473705	1296.862016	1372.759602	1299.487877	1534.580577	1234.263086	1305.321388	664.1785934
-2.3	-701.0876097	-818.5433905	-1011.984486	-544.799611	-584.835457	-550.91127	-664.874986	-619.004671	-654.38404	-280.910331
+2.3	1821.754694	2135.672951	2222.250141	1520.857146	1615.338281	1525.643738	1807.130682	1500.859631	1586.182348	777.6499612
-2.35	-628.5397384	-765.1575765	-1011.984328	-488.424272	-524.317247	-493.903502	-596.074362	-554.950665	-586.669012	-251.8420012
+2.35	2053.423392	2410.400933	2510.713372	1704.488473	1811.865832	1711.213172	2026.399022	1709.014639	1806.848963	867.9081155
-2.4	-555.991867	-711.7717624	-1011.984175	-432.048934	-463.799037	-436.895734	-527.273739	-490.896658	-518.953985	-222.7736714
+2.4	2218.456701	2611.164683	2707.211844	1835.810148	1950.784638	1842.865918	2183.387683	1848.347071	1954.779307	930.5023707
-2.45	-483.4439957	-658.3859484	-1011.984036	-375.673595	-403.280826	-379.887966	-458.473115	-426.842652	-451.238958	-193.7053416
+2.45	2306.03082	2728.554221	2826.402286	1916.932162	2035.621427	1918.826578	2271.347161	1919.541151	2030.856276	961.2408611
-2.5	-410.8961244	-605.0001343	-1011.983902	-319.298257	-342.762643	-322.880248	-389.672491	-362.788687	-383.52393	-164.6370118
+2.5	2327.839085	2765.191465	2859.830106	1943.625717	2062.451102	1943.879556	2293.796012	1924.205334	2036.285451	966.1998275
-2.55	-481.2440644	-658.3859089	-1011.983748	-375.67346	-403.280857	-379.888023	-458.473038	-426.842702	-451.238919	-193.7053304
+2.55	2269.018652	2728.571468	2826.402157	1916.941086	2035.633816	1918.833731	2271.353977	1919.53577	2030.850261	961.2416881
-2.6	-553.4618013	-711.7717147	-1011.983594	-432.048778	-463.79907	-436.895798	-527.273648	-490.896716	-518.953945	-222.7736591
+2.6	2164.274805	2611.200865	2707.211745	1835.816275	1950.785524	1842.873716	2183.404647	1848.350247	1954.782285	930.5081643
-2.65	-625.6795381	-765.1575204	-1011.98344	-488.424095	-524.317284	-493.903573	-596.074258	-554.95073	-586.668971	-251.8419877
+2.65	2015.672074	2410.402451	2510.135397	1704.492048	1811.872417	1711.225001	2026.419347	1709.020334	1806.854583	867.9049753
-2.7	-697.8972749	-818.5433262	-1011.983286	-544.799413	-584.835498	-550.911348	-664.874867	-619.004744	-654.383997	-280.9103163
+2.7	1802.123215	2135.694202	2222.250124	1520.858773	1615.34269	1525.653495	1807.135519	1500.862696	1586.185196	777.6519318
-2.75	-770.1150117	-871.9291319	-1011.983132	-601.17473	-645.353711	-607.919122	-733.675477	-683.058759	-722.099023	-309.9786449
+2.75	1522.865179	1788.66188	1830.600108	1296.859406	1372.763207	1299.496776	1534.597011	1234.260773	1305.318554	664.1858809
-2.8	-842.3327485	-937.1820363	-1058.484066	-657.550048	-705.871925	-664.926897	-802.476087	-747.112773	-789.814048	-339.0469735
+2.8	1174.090944	1382.840231	1367.558109	1031.656587	1086.346658	1028.351098	1205.793828	914.3001861	966.4132742	522.0877229
-2.85	-914.5504854	-1070.429145	-1361.404844	-713.925365	-766.390138	-721.934672	-871.276697	-811.166787	-857.529074	-368.1153022
+2.85	783.3399193	989.6690018	979.0973115	733.9934101	766.841145	727.4370729	842.7549248	547.5531562	578.2797633	365.1644977
-2.9	-986.7682222	-1281.042538	-1865.840701	-770.300683	-826.908352	-778.942447	-940.077307	-875.220802	-925.2441	-397.1836308
+2.9	389.5772398	621.6780204	620.6493276	417.4759424	427.3455913	406.1344151	448.2686634	312.5112372	329.9934958	221.7806193
-2.95	-1058.985959	-1566.910405	-2533.561046	-826.676	-887.426566	-835.950222	-1008.87792	-939.274816	-992.959126	-426.2519594
+2.95	242.0347176	291.8051293	473.3292311	188.0797901	201.9012766	190.1897136	229.5331221	213.6974115	225.9113156	106.7041619
-3	-1484.622579	-2156.313937	-3333.941472	-1139.96305	-1224.92595	-1154.22456	-1394.79973	-1355.67546	-1433.94388	-596.1337925
+3	314.5825705	347.3403803	387.3883775	244.4551235	262.4194786	247.1974712	298.3337303	277.7514214	293.626371	126.0462895
(Span 3) -4	-1.48E+03	-2156.313937	-3333.941472	-1.14E+03	-1.22E+03	-1.15E+03	-1.39E+03	-1.36E+03	-1.43E+03	-5.96E+02
+4	3.15E+02	347.3403803	387.3883775	2.44E+02	2.62E+02	2.47E+02	2.98E+02	2.78E+02	2.94E+02	1.26E+02
-3.05	-1410.391448	-1889.309513	-2702.144997	-1082.96489	-1163.67966	-1096.51334	-1325.05975	-1287.89168	-1362.24668	-566.3271022
+3.05	298.8534419	341.0246303	521.2016769	232.2323673	249.2985049	234.8375977	283.4170436	263.8638503	278.9450525	119.743975
-3.1	-1336.160316	-1666.919654	-2161.756923	-1025.96674	-1102.43336	-1038.80211	-1255.31976	-1220.10791	-1290.54949	-536.5204119
+3.1	320.1990665	564.6373261	680.1211499	341.1891266	341.1891266	326.4946813	351.0476205	259.5698144	273.2313836	188.2514526
-3.15	-1261.929184	-1497.456422	-1745.587115	-968.96859	-1041.18706	-981.090877	-1185.57978	-1152.32413	-1218.85229	-506.7137215
+3.15	642.6327271	882.4547814	1017.929715	608.0983682	627.8622984	590.1800945	681.5885648	452.8757358	478.7847564	306.264289
-3.2	-1187.698052	-1390.265239	-1623.484831	-911.970438	-979.940764	-923.379647	-1115.83979	-1084.54036	-1147.1551	-476.9070312
+3.2	963.5899375	1232.837795	1408.13384	865.2945157	904.7613237	849.0443798	996.0961209	743.5725759	784.9667415	442.3431866
-3.25	-1113.46692	-1303.373662	-1522.017033	-854.972286	-918.694466	-865.668418	-1046.0998	-1016.75658	-1075.4579	-447.1003409
+3.25	1272.671136	1568.450804	1769.846661	1101.072963	1157.838616	1088.893894	1285.902168	1021.830784	1079.690781	565.8014451
-3.3	-1039.235788	-1216.482085	-1420.549235	-797.974134	-857.448169	-807.957188	-976.359818	-948.97281	-1003.76071	-417.2936505
+3.3	1545.690225	1863.968866	2078.897648	1310.225003	1381.537425	1304.261546	1544.490902	1258.000659	1330.029461	673.9090826
-3.35	-965.0046565	-1129.590508	-1319.081437	-740.975983	-796.201872	-750.245959	-906.619832	-881.189036	-932.06351	-387.4869602
+3.35	1778.536517	2114.705414	2342.112278	1487.906047	1575.038831	1490.049897	1765.794592	1451.088139	1532.985831	764.1330503
-3.4	-890.7735246	-1042.698931	-1217.613639	-683.977831	-734.955574	-692.53473	-836.879846	-813.405261	-860.366315	-357.6802699
+3.4	1964.049377	2316.31125	2548.705443	1634.04592	1737.185421	1641.531364	1944.193828	1604.986429	1696.43655	834.1376711
-3.45	-816.5423928	-955.8073537	-1116.145841	-626.979679	-673.709277	-634.8235	-767.13986	-745.621487	-788.669119	-327.8735796
+3.45	2096.696769	2464.775159	2691.598267	1749.66442	1858.705718	1754.348561	2074.825344	1704.524014	1802.477034	881.7840076
-3.5	-742.3112609	-868.9157767	-1014.678044	-569.981527	-612.46298	-577.112271	-697.399874	-677.837712	-716.971923	-298.0668892
+3.5	2171.433814	2556.424319	2766.259813	1824.08773	1935.335652	1824.512942	2153.453502	1745.106582	1846.229855	905.130526
-3.55	-668.0801291	-782.0241996	-913.2102458	-512.983375	-551.216683	-519.401042	-627.659887	-610.053938	-645.274727	-268.2601989
+3.55	2183.703701	2591.460107	2783.783689	1855.804187	1967.20655	1855.23032	2186.835983	1777.202569	1880.345403	916.2174068
-3.6	-593.8489972	-695.1326226	-811.7424479	-455.985223	-489.970385	-461.689812	-557.919901	-542.270163	-573.577532	-238.4535086

+3.6	2144.273675	2578.470598	2768.568932	1848.942549	1963.397233	1853.049129	2191.993379	1800.300158	1903.963341	926.3788198
-3.65	-519.6178653	-608.2410455	-710.2746501	-398.987071	-428.724088	-403.978583	-488.179915	-474.486389	-501.880336	-208.6468183
+3.65	2123.287488	2501.517092	2679.937237	1792.231688	1906.531965	1800.80244	2137.41491	1766.231905	1866.824789	911.6602909
-3.7	-445.3867335	-521.3494685	-608.8068522	-341.98892	-367.477791	-346.267354	-418.439929	-406.702614	-430.18314	-178.8401279
+3.7	2038.036857	2358.040701	2514.64438	1701.388105	1800.131165	1696.922909	2019.582701	1672.626732	1768.94976	870.3828261
-3.75	-371.1556016	-434.4578914	-507.3390544	-284.990768	-306.231493	-288.556124	-348.699943	-338.91884	-358.485944	-149.0334376
+3.75	1884.657291	2145.821432	2303.475301	1561.733487	1654.477033	1543.382125	1836.156533	1538.822634	1626.087558	801.063539
-3.8	-296.9244698	-347.5663144	-405.8712565	-227.992616	-244.985196	-230.844895	-278.959957	-271.135065	-286.788749	-119.2267473
+3.8	1659.770846	1862.976188	2011.860513	1366.552485	1449.347202	1353.027	1593.176894	1337.768221	1411.946877	703.143676
-3.85	-222.6933379	-260.6747373	-304.4034587	-170.994464	-183.738899	-173.133665	-209.219971	-203.351291	-215.091553	-89.42005694
+3.85	1360.485489	1507.960677	1637.202394	1113.97682	1182.677064	1104.809095	1303.495549	1105.339758	1166.576942	574.9169179
-3.9	-148.4622061	-173.7831602	-202.9356608	-113.996312	-122.492601	-115.422436	-139.479985	-135.567516	-143.394357	-59.61336662
+3.9	985.7451519	1079.566734	1178.552245	802.5031663	852.794942	797.1195695	942.1960186	809.8003332	854.8480167	415.4200675
-3.95	-74.23107421	-86.89158319	-101.4678629	-56.9981603	-61.2463042	-57.7112068	-69.7399987	-67.783742	-71.6971616	-29.80667629
+3.95	532.9206269	576.9281667	633.3576461	430.9911383	458.4202934	428.7198944	507.6659888	441.5994723	466.2435956	223.949942
-5	-2.47E-13	-1.92E-13	-3.99E-13	-1.83E-13	-2.00E-13	-1.06E-13	-1.31E-13	-1.59E-13	-1.67E-13	-9.84E-14
+5	3.46E-13	3.10E-13	3.96E-13	2.16E-13	2.16E-13	2.03E-13	2.24E-13	2.33E-13	2.45E-13	1.50E-13

3-Span: Moment (Max and Min) Raw Data Results - 80’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	-1.58E-13	-1.80E-13	-1.28E-13	-1.10E-13	-1.34E-13	-1.73E-13	-1.74E-13	-1.85E-13	-1.82E-13
End Shear	2.12E-13	2.37E-13	1.77E-13	1.51E-13	1.89E-13	2.41E-13	2.05E-13	2.02E-13	2.03E-13
-0.05	-43.2264295	-58.31426639	-59.49665635	-53.7982814	-34.79018126	-47.08414804	-53.6348499	-59.9501464	-66.4385984
+0.05	319.7479166	387.3187777	365.2536957	314.648009	259.0132156	349.1183255	390.1983685	417.9742141	443.8429547
-0.1	-86.452859	-116.6285328	-118.9933127	-107.5965628	-69.58036253	-94.16829608	-107.2697	-119.900293	-132.877197
+0.1	594.1662682	711.0776101	664.5644731	574.2631997	481.4135937	648.9502537	724.1454352	774.8617136	826.2657218
-0.15	-129.6792885	-174.9427992	-178.489969	-161.3948442	-104.3705438	-141.2524441	-160.90455	-179.850439	-199.315795
+0.15	822.8229004	972.1463123	899.1494241	780.9695433	667.2679964	899.1793225	1001.51524	1095.760902	1164.368068
-0.2	-172.905718	-233.2570656	-237.9866254	-215.1931256	-139.1607251	-188.3365922	-214.539399	-239.800586	-265.754394
+0.2	1006.701248	1172.272712	1090.427538	950.9661928	817.1327721	1100.834312	1223.585945	1355.804117	1449.223912
-0.25	-216.1321475	-291.5713319	-297.4832817	-268.991407	-173.9509063	-235.4207402	-268.174249	-299.750732	-332.192992
+0.25	1147.064871	1329.225464	1229.381259	1077.103345	931.9883705	1255.246512	1398.382412	1555.185892	1682.853216
-0.3	-259.358577	-349.8855983	-356.9799381	-322.7896884	-208.7410876	-282.5048882	-321.809099	-359.700878	-398.631591
+0.3	1245.457407	1439.049303	1312.210238	1155.680982	1013.039097	1374.791715	1537.678466	1696.010113	1851.611759
-0.35	-302.5850065	-408.1998647	-416.4765944	-376.5879698	-243.5312689	-329.5890363	-375.443949	-419.651025	-465.070189
+0.35	1316.713145	1495.201826	1380.928322	1219.955901	1061.71334	1458.577401	1626.79872	1795.602896	1957.122733
-0.4	-345.811436	-466.5141311	-475.9732508	-430.3862512	-278.3214501	-376.6731843	-429.078799	-479.601171	-531.508787
+0.4	1352.523814	1505.995822	1424.883071	1260.713381	1079.66388	1499.927449	1667.55208	1849.071194	2008.733688
-0.45	-389.0378655	-524.8283975	-535.4699071	-484.1845326	-313.1116314	-423.7573323	-482.713649	-539.551318	-597.947386
+0.45	1350.984232	1482.324315	1436.669247	1272.325036	1068.767332	1500.815606	1662.337431	1851.273334	2019.908498
-0.5	-432.264295	-583.1426639	-594.9665635	-537.982814	-347.9018126	-470.8414804	-536.348499	-599.501464	-664.385984
+0.5	1330.322301	1455.678048	1400.310731	1243.774047	1056.053568	1476.552775	1636.298425	1819.857594	1982.105635
-0.55	-475.4907245	-641.4569303	-654.4632198	-591.7810954	-382.6919939	-517.9256284	-589.983349	-659.45161	-730.824583
+0.55	1281.086475	1425.713766	1346.750879	1196.858897	1024.851256	1420.375385	1578.973694	1749.055523	1896.498049
-0.6	-518.717154	-699.7711967	-713.9598762	-645.5793768	-417.4821752	-565.0097765	-643.618198	-719.401757	-797.263181
+0.6	1199.183198	1355.409446	1254.561019	1116.941696	966.1998294	1329.174523	1480.537194	1633.300602	1778.007396
-0.65	-561.9435835	-758.085463	-773.4565325	-699.3776582	-452.2723564	-612.0939245	-697.253048	-779.351903	-863.701779
+0.65	1087.588971	1243.134014	1133.954001	1010.761049	882.3533766	1206.197937	1344.620978	1476.771922	1612.665556
-0.7	-605.170013	-816.3997294	-832.9531889	-753.1759396	-487.0625377	-659.1780725	-750.887898	-839.30205	-930.140378
+0.7	954.0547648	1084.517823	986.6186866	880.2408348	775.7937861	1054.996422	1175.204558	1291.696368	1404.801995
-0.75	-648.3964425	-874.7139958	-892.4498452	-806.974221	-521.852719	-706.2622206	-804.522748	-899.252196	-996.578976
+0.75	797.4859623	883.9790169	805.1547278	719.2390219	649.2135802	879.4231729	976.6151329	1073.401388	1159.761804
-0.8	-691.622872	-933.0282622	-951.9465016	-860.7725024	-556.6429002	-753.3463686	-858.157598	-959.202342	-1063.01757
+0.8	619.0965758	646.3461562	577.0636596	518.6859198	505.5490979	683.6338216	753.5271974	825.3720177	883.3245872
-0.85	-734.8493015	-991.3425286	-1011.443158	-943.8170145	-591.4330815	-800.4305166	-911.792448	-1019.15249	-1129.45617
+0.85	422.7866389	394.1362561	341.4498274	317.3994851	347.9475617	472.0865216	510.9624279	553.0713899	581.703837
-0.9	-778.075731	-1049.656795	-1070.939814	-1148.029033	-626.2232628	-847.5146647	-965.427298	-1079.10264	-1195.89477
+0.9	240.2307412	240.4369152	210.8933195	229.4833827	180.2146917	262.5051143	273.4695266	293.5907678	293.7631103
-0.95	-821.3021605	-1107.971061	-1130.436471	-1437.976372	-661.013444	-894.5988127	-1019.06215	-1139.05278	-1262.33337
+0.95	174.9895806	226.8229074	222.6096151	198.3192106	141.2404044	191.3579645	217.18505	242.4353683	267.9212069
-1	-864.5285798	-1166.285359	-1189.933134	-1797.598752	-695.8036182	-941.682957	-1072.697	-1199.00291	-1328.77197
+1	184.1995614	238.7609556	234.325914	205.7449723	148.6741099	201.4294381	228.615842	255.1951266	282.0223216
(Span 2) -2	-864.5285798	-1166.285359	-1189.933134	-1797.598752	-695.8036182	-941.682957	-1072.697	-1199.00291	-1328.77197
+2	184.1995614	238.7609556	234.325914	205.7449723	148.6741099	201.4294381	228.615842	255.1951266	282.0223216
-2.05	-622.9094608	-807.4202853	-792.4220737	-1345.124432	-502.7726446	-681.1759966	-773.112337	-862.995711	-953.71793
+2.05	141.7201382	183.6987858	180.2865386	176.7104384	114.3874363	154.9765245	175.8933008	196.3429682	216.9833754
-2.1	-580.4300385	-752.3581154	-738.3827098	-956.7242861	-468.4859747	-634.723077	-720.389802	-804.143563	-888.678965
+2.1	287.304399	287.322336	228.5593661	271.8367844	220.0618292	322.2109145	346.2930353	369.2660842	381.4866713
-2.15	-537.9506161	-697.2959454	-684.343346	-685.1789045	-434.1993048	-588.2701574	-667.667268	-745.291415	-823.640001
+2.15	514.4583816	482.9487171	422.6475524	407.8507343	421.2897262	582.9125153	632.7099499	682.5177804	729.5456979
-2.2	-495.4711938	-642.2337755	-630.3039822	-554.1722394	-399.912635	-541.8172378	-614.944733	-686.439268	-758.601037
+2.2	741.7763917	789.8739785	699.7003612	617.0581036	602.1983368	829.4332664	914.2579612	997.4689171	1079.373896

-2.25	-452.9917714	-587.1716055	-576.2646184	-510.5690491	-365.6259651	-495.3643182	-562.222198	-627.58712	-693.562072
+2.25	944.5174592	1064.682857	976.0033167	853.4654319	767.2667763	1050.551361	1167.082683	1279.060197	1392.708167
-2.3	-410.5123491	-532.1094355	-522.2252546	-470.0385881	-331.3392952	-448.9113986	-509.499664	-568.734972	-628.523108
+2.3	1115.413957	1282.85607	1191.458431	1058.310081	899.8147731	1235.417505	1375.604251	1517.260941	1653.544688
-2.35	-368.0329267	-477.0472656	-468.1858908	-429.5081271	-297.0526254	-402.458479	-456.777129	-509.882824	-563.484144
+2.35	1252.65888	1450.064132	1372.245353	1217.317511	1004.479488	1386.257119	1545.420297	1709.067451	1859.247739
-2.4	-325.5535044	-421.9850956	-414.146527	-388.977666	-262.7659555	-356.0055594	-404.054594	-451.030676	-498.445179
+2.4	1348.47581	1555.756686	1499.423529	1328.566936	1079.265764	1492.80578	1664.529751	1845.119043	2007.249488
-2.45	-283.074082	-366.9229257	-360.1071632	-348.447205	-228.4792857	-309.5526398	-351.33206	-392.178529	-433.406215
+2.45	1405.657384	1609.189748	1579.622599	1401.410652	1116.60737	1554.71315	1729.885197	1925.200939	2101.861794
-2.5	-240.5946704	-311.8607557	-306.0678408	-307.916744	-194.1926158	-263.0997202	-298.609571	-333.326457	-368.367251
+2.5	1421.314619	1610.455819	1601.059037	1426.468472	1123.594251	1574.177282	1747.737213	1949.022842	2132.539827
-2.55	-283.0740935	-366.9229121	-360.1072162	-348.4472285	-228.4792988	-309.5526112	-351.332112	-392.178616	-433.406086
+2.55	1405.64808	1609.187533	1579.620315	1401.407742	1116.599594	1554.717451	1729.875022	1925.203653	2101.866808
-2.6	-325.5535167	-421.9850819	-414.1465917	-388.9776966	-262.7659723	-356.0055248	-404.054653	-451.030774	-498.445032
+2.6	1348.476275	1555.744185	1499.428302	1328.569824	1079.285962	1492.810698	1664.539411	1845.121698	2007.251329
-2.65	-368.0329399	-477.0472517	-468.1859672	-429.5081647	-297.0526459	-402.4584383	-456.777194	-509.882932	-563.483978
+2.65	1252.663307	1450.053856	1372.252441	1217.314279	1004.505702	1386.265539	1545.432946	1709.072826	1859.249358
-2.7	-410.5123631	-532.1094215	-522.2253427	-470.0386329	-331.3393194	-448.9113519	-509.499736	-568.735091	-628.522924
+2.7	1115.416782	1282.86506	1191.462978	1058.309479	899.824653	1235.424248	1375.603972	1517.264279	1653.555007
-2.75	-452.9917862	-587.1715913	-576.2647182	-510.569101	-365.6259929	-495.3642655	-562.222277	-627.587249	-693.56187
+2.75	944.51955	1064.690122	976.0134812	853.4590047	767.2907874	1050.557407	1167.092338	1279.062663	1392.727441
-2.8	-495.4712094	-642.2337611	-630.3040937	-554.1723001	-399.9126664	-541.817179	-614.944818	-686.439408	-758.600817
+2.8	741.777998	789.8794413	699.7083399	617.0554444	602.1991194	829.4389121	914.2669946	997.4708985	1079.376338
-2.85	-537.9506326	-697.2959309	-684.3434691	-685.1787754	-434.1993399	-588.2700926	-667.667359	-745.291566	-823.639763
+2.85	514.4603417	482.9525959	422.6503641	407.849763	421.3056267	582.9132779	632.7142326	682.5203753	729.5595518
-2.9	-580.4300557	-752.3581007	-738.3828446	-956.7247576	-468.4860134	-634.7230062	-720.389901	-804.143724	-888.678709
+2.9	287.3051579	287.3230382	228.5599071	271.8363128	220.0562737	322.2046868	346.3000746	369.2803084	381.4830129
-2.95	-622.9094789	-807.4202705	-792.4222201	-1345.124404	-502.772687	-681.1759197	-773.112442	-862.995883	-953.717655
+2.95	141.7201415	183.6987739	180.2864749	176.7075099	114.387413	154.9765563	175.8932866	196.3429497	216.9834285
-3	-864.5288389	-1166.285556	-1189.9335	-1797.599117	-695.8037963	-941.682934	-1072.69724	-1199.00312	-1328.77204
+3	184.1995578	238.7609563	234.3258634	205.7449415	148.674094	201.4294643	228.6158133	255.1950808	282.0224005
(Span 3) -4	-8.65E+02	-1.17E+03	-1.19E+03	-1.80E+03	-6.96E+02	-9.42E+02	-1.07E+03	-1.20E+03	-1.33E+03
+4	1.84E+02	2.39E+02	2.34E+02	2.06E+02	1.49E+02	2.01E+02	2.29E+02	2.55E+02	2.82E+02
-3.05	-821.3023965	-1107.97128	-1130.436825	-1437.976282	-661.0136061	-894.5987871	-1019.06238	-1139.05296	-1262.33344
+3.05	174.98958	226.8229086	222.6095704	198.3191839	141.2403893	191.3579911	217.1850227	242.4353268	267.9212804
-3.1	-778.075954	-1049.657003	-1070.940151	-1148.029373	-626.2234159	-847.5146402	-965.427518	-1079.10281	-1195.89483
+3.1	240.2380765	240.4436175	210.8932774	229.471502	180.1996345	262.5192449	273.4651553	293.5974782	293.7697002
-3.15	*-734.8495116*	*-991.3427271*	*-1011.443476*	*-943.8170955*	*-591.4332258*	*-800.4304933*	*-911.792656*	*-1019.15265*	*-1129.45623*
+3.15	422.790579	394.1412806	341.451637	317.3889196	347.9637268	472.0830502	510.9560151	553.076787	581.7157303
-3.2	-691.6230691	-933.0284509	-951.9468013	-860.7725286	-556.6430356	-753.3463464	-858.157794	-959.202491	-1063.01763
+3.2	619.1005802	646.3441694	577.059129	518.6831819	505.5656455	683.6309879	753.5212724	825.3775884	883.3370595
-3.25	-648.3966266	-874.7141747	-892.4501267	-806.9742452	-521.8528454	-706.2621996	-804.522932	-899.252334	-996.579028
+3.25	797.489496	883.9753451	805.1476497	719.2345983	649.2297356	879.4202507	976.6089589	1073.406336	1159.773899
-3.3	-605.1701842	*-816.3998985*	-832.953452	*-753.1759619*	-487.0626553	-659.1780527	-750.88807	-839.302177	-930.140426
+3.3	954.0570832	1084.511829	986.6083463	880.2470492	775.8057345	1054.992696	1175.197228	1291.699775	1404.812399
-3.35	-561.9437417	-758.0856223	-773.4567774	-699.3776785	-452.2724651	-612.0939058	-697.253209	-779.35202	-863.701824
+3.35	1087.587435	1243.12488	1133.949134	1010.758086	882.3670759	1206.192602	1344.611708	1476.770166	1612.673602
-3.4	-518.7172993	-699.7713461	-713.9601027	-645.5793951	-417.4822749	-565.0097589	-643.618347	-719.401863	-797.263222
+3.4	1199.17956	1355.396353	1254.552562	1116.947242	966.2115515	1329.166886	1480.525238	1633.296163	1778.012289
-3.45	-475.4908568	-641.4570699	-654.463428	-591.7811118	-382.6920848	-517.925612	-589.983485	-659.451706	-730.82462
+3.45	1281.080361	1425.703222	1346.740337	1196.852318	1024.86088	1420.365313	1578.958732	1749.047746	1896.496861
-3.5	-432.2644143	-583.1427937	-594.9667534	-537.9828284	-347.9018946	-470.8414651	-536.348623	-599.501549	-664.386018
+3.5	1330.313055	1455.686187	1400.302607	1243.779532	1056.060638	1476.53948	1636.279759	1819.845854	1982.100097
-3.55	-389.0379719	-524.8285174	-535.4700787	-484.1845451	-313.1117044	-423.7573183	-482.713761	-539.551392	-597.947416
+3.55	1350.994879	*1482.31586199747*	*1436.658625*	1272.332912	1068.761592	*1500.802132*	1662.329888	1851.259121	2019.915742

-3.6	**-345.8115294**	**-466.5142412**	**-475.9734041**	**-430.3862617**	**-278.3215143**	**-376.6731714**	**-429.078899**	**-479.601236**	**-531.508814**
+3.6	**1352.531196**	**1505.983571**	**1424.89152**	**1260.718546**	**1079.655643**	**1499.910266**	**1667.540621**	**1849.080396**	**2008.735867**
-3.65	**-302.585087**	**-408.199965**	**-416.4767294**	**-376.5879783**	**-243.5313241**	**-329.5890245**	**-375.444038**	**-419.651079**	**-465.070212**
+3.65	**1316.71657**	**1495.187839**	**1380.931071**	**1219.960144**	**1061.702138**	**1458.584772**	**1626.782437**	**1795.606818**	**1957.118099**
-3.7	**-259.3586445**	**-349.8856888**	**-356.9800547**	**-322.789695**	**-208.7411339**	**-282.5048776**	**-321.809176**	**-359.700922**	**-398.63161**
+3.7	**1245.456045**	**1439.058081**	***1312.203768***	**1155.677034**	**1013.024545**	**1374.794499**	**1537.685548**	**1696.007605**	**1851.600955**
-3.75	**-216.132202**	**-291.5714126**	**-297.4833801**	**-268.9914116**	**-173.9509438**	**-235.4207307**	**-268.174314**	**-299.750765**	**-332.193008**
+3.75	**1147.059298**	**1329.229121**	**1229.370126**	**1077.109175**	**931.970259**	**1255.243999**	**1398.384097**	**1555.177597**	**1682.835891**
-3.8	**-172.9057596**	**-233.2571364**	**-237.9867054**	**-215.1931283**	**-139.1607536**	**-188.3365838**	**-214.539452**	**-239.800608**	**-265.754407**
+3.8	**1006.691297**	**1172.270287**	**1090.431813**	**950.9688283**	**817.1111696**	**1100.827065**	**1223.581715**	**1355.789746**	**1449.227482**
-3.85	**-129.6793171**	**-174.9428602**	**-178.4900308**	**-161.3948449**	**-104.3705634**	**-141.252437**	**-160.90459**	**-179.850451**	**-199.315805**
+3.85	**822.8080617**	**972.1379229**	**899.1475173**	**780.9684136**	**667.2425336**	**899.1669901**	**1001.505194**	**1095.740322**	**1164.364308**
-3.9	**-86.45287465**	**-116.6285839**	**-118.9933561**	**-107.5965615**	**-69.58037327**	**-94.16829008**	**-107.269729**	**-119.900294**	**-132.877203**
+3.9	**594.1462477**	**711.0631311**	**664.5563873**	**574.2583686**	**481.3842312**	**648.9325525**	**724.1295065**	**774.8622847**	**826.2677647**
-3.95	**-43.22643219**	**-58.31430774**	**-59.49668145**	**-53.79827818**	**-34.7901831**	**-47.0841432**	**-53.6348668**	**-59.9501367**	**-66.4386007**
+3.95	**319.7228166**	**387.3252692**	**365.2603371**	**314.6521264**	**259.0173843**	**349.0954998**	**390.1760285**	**417.9679851**	**443.8374942**
-5	**-9.56E-14**	**-1.40E-13**	**-9.85E-14**	**-1.04E-13**	**-1.31E-13**	**-8.99E-14**	**-1.18E-13**	**-1.03E-13**	**-1.01E-13**
+5	**1.60E-13**	**2.07E-13**	**1.31E-13**	**1.58E-13**	**1.38E-13**	**1.68E-13**	**1.86E-13**	**1.96E-13**	**1.94E-13**

3-Span: Moment (Max and Min) Raw Data Results - 80' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.47E-13	-2.86E-13	-2.39E-13	-2.79E-13	-2.75E-13
End Shear	2.29E-13	2.71E-13	2.46E-13	2.79E-13	2.42E-13
-0.05	-109.072705	-119.204712	-69.619142	-84.5841759	-90.1453414
+0.05	647.5300286	668.9794304	447.4923742	542.8973427	562.8280491
-0.1	-218.1454101	-238.409424	-139.238284	-169.168352	-180.290683
+0.1	1176.355264	1212.175923	818.4736145	994.0239687	1027.521292
-0.15	-327.2181151	-357.6141361	-208.857426	-253.752528	-270.436024
+0.15	1627.849134	1684.159019	1114.301121	1354.060567	1403.800096
-0.2	-436.2908202	-476.8188481	-278.476568	-338.336703	-360.581366
+0.2	1980.515805	2091.151873	1366.534645	1665.035103	1719.210482
-0.25	-545.3635252	-596.0235601	-348.09571	-422.920879	-450.726707
+0.25	2236.730132	2427.367364	1563.846257	1891.327659	1970.587788
-0.3	-654.4362303	-715.2282721	-417.714852	-507.505055	-540.872049
+0.3	2454.685717	2662.269843	1691.98212	2035.493621	2152.087367
-0.35	-763.5089353	-834.4329842	-487.333994	-592.089231	-631.01739
+0.35	2582.296951	2830.867355	1777.163136	2120.780649	2248.055899
-0.4	-872.5816404	-953.6376962	-556.953136	-676.673407	-721.162731
+0.4	2686.014792	2888.897101	1802.947154	2142.992206	2277.614365
-0.45	-981.6543454	-1072.842408	-626.572278	-761.257583	-811.308073
+0.45	2698.388462	2911.088321	1770.121223	2095.998161	2245.94042
-0.5	-1090.72705	-1192.04712	-696.19142	-845.841759	-901.453414
+0.5	2645.604222	2865.311235	1727.572779	2044.918015	2195.171214
-0.55	-1199.799755	-1311.251832	-765.810562	-930.425934	-991.598756
+0.55	2545.281479	2715.792879	1702.552543	2020.497043	2149.731674
-0.6	-1308.872461	-1430.456544	-835.429704	-1015.01011	-1081.7441
+0.6	2352.612251	2561.989924	1613.990569	1918.715347	2036.90558
-0.65	-1417.945166	-1549.661256	-905.048845	-1099.59429	-1171.88944
+0.65	2117.403134	2310.28043	1466.538908	1753.488612	1861.541062
-0.7	-1527.017871	-1668.865968	-974.667987	-1184.17846	-1262.03478
+0.7	1814.246513	1962.663026	1279.547649	1535.089075	1614.290626
-0.75	-1636.090576	-1788.07068	-1044.28713	-1268.76264	-1352.18012
+0.75	1442.895732	1562.335906	1042.99969	1252.928118	1301.430124
-0.8	-1745.163281	-1907.275392	-1113.90627	-1353.34681	-1442.32546
+0.8	1027.060478	1079.598149	760.0478372	914.0191855	930.2569105
-0.85	-1854.235986	-2026.480104	-1183.52541	-1437.93099	-1532.4708
+0.85	591.1525889	599.552356	482.2852765	544.7888392	572.5508874
-0.9	-1963.308691	-2145.684816	-1253.14456	-1522.51517	-1622.61615
+0.9	391.8630513	424.2771979	275.6088279	314.8167375	327.0241625
-0.95	-2072.381396	-2264.889528	-1322.7637	-1607.09934	-1712.76149
+0.95	413.6332208	447.8481533	267.14638	326.7148701	345.1921715
-1	-2181.454069	-2384.094211	-1392.38284	-1691.68351	-1802.90681
+1	435.4033926	471.4191095	281.2067067	343.9103944	363.3601837
(Span 2) -2	-2181.454069	-2384.094211	-1392.38284	-1691.68351	-1802.90681
+2	435.4033926	471.4191095	281.2067067	343.9103944	363.3601837
-2.05	-1472.388535	-1594.202643	-950.959274	-1163.00514	-1228.77899
+2.05	334.9922718	362.7021762	216.3558532	264.5990501	279.5633998
-2.1	-1371.978738	-1485.48571	-886.108436	-1083.6938	-1144.98218
+2.1	391.1808692	362.2053916	335.825178	395.5385465	398.3100662
-2.15	-1271.568941	-1376.768777	-821.257598	-1004.38246	-1061.18538
+2.15	737.1297716	783.0406509	580.2487054	673.2443336	704.8082685
-2.2	-1171.159143	-1268.051845	-756.406759	-925.071114	-977.388575
+2.2	1261.325192	1363.087676	927.7926877	1109.072973	1156.924691

-2.25	**-1070.749346**	**-1159.334912**	**-691.555921**	**-845.759771**	**-893.591771**
+2.25	**1789.411902**	**1946.755771**	**1257.099626**	**1505.463288**	**1589.313931**
-2.3	**-970.3395488**	**-1050.61798**	**-626.705083**	**-766.448428**	**-809.794968**
+2.3	**2214.887596**	**2424.801692**	**1523.813546**	**1819.644404**	**1935.540448**
-2.35	**-869.9297515**	**-941.901047**	**-561.854245**	**-687.137086**	**-725.998164**
+2.35	**2546.238891**	**2792.119798**	**1733.499189**	**2059.821402**	**2195.659068**
-2.4	**-769.5199542**	**-833.1841143**	**-497.003406**	**-607.825743**	**-642.20136**
+2.4	**2801.824031**	**3036.561173**	**1870.476431**	**2221.142238**	**2365.546582**
-2.45	**-669.1101569**	**-724.4671817**	**-432.152568**	**-528.5144**	**-558.404556**
+2.45	**2945.422127**	**3191.87205**	**1936.802278**	**2296.299527**	**2458.099994**
-2.5	**-568.7078155**	**-615.7502491**	**-367.301828**	**-449.203057**	**-474.607753**
+2.5	**2978.615524**	**3255.48086**	**1933.4284**	**2287.084389**	**2459.582628**
-2.55	**-669.1189363**	**-724.4671567**	**-432.152682**	**-528.514394**	**-558.404438**
+2.55	**2945.422224**	**3191.87099**	**1936.795627**	**2296.29468**	**2458.089949**
-2.6	**-769.5300571**	**-833.18409**	**-497.003535**	**-607.825738**	**-642.201222**
+2.6	**2801.829802**	**3036.559724**	**1870.478583**	**2221.122959**	**2365.566056**
-2.65	**-869.9411779**	**-941.9010233**	**-561.854389**	**-687.137082**	**-725.998006**
+2.65	**2546.245585**	**2792.118358**	**1733.504183**	**2059.824653**	**2195.679412**
-2.7	**-970.3522988**	**-1050.617957**	**-626.705242**	**-766.448427**	**-809.79479**
+2.7	**2214.894761**	**2424.80161**	**1523.815595**	**1819.656732**	**1935.546554**
-2.75	**-1070.76342**	**-1159.33489**	**-691.556096**	**-845.759771**	**-893.591574**
+2.75	**1789.426031**	**1944.54841**	**1257.126971**	**1505.483416**	**1589.327613**
-2.8	**-1171.17454**	**-1268.051823**	**-756.406949**	**-925.071115**	**-977.388357**
+2.8	**1261.336765**	**1363.087311**	**927.7993018**	**1109.074385**	**1156.935664**
-2.85	**-1271.585661**	**-1376.768757**	**-821.257802**	**-1004.38246**	**-1061.18514**
+2.85	**737.119844**	**783.0391416**	**580.2457616**	**673.2505206**	**704.8128342**
-2.9	**-1371.996782**	**-1485.48569**	**-886.108656**	**-1083.6938**	**-1144.98193**
+2.9	**391.1673185**	**362.6297245**	**335.8268584**	**395.546663**	**398.3216086**
-2.95	**-1472.407903**	**-1594.202623**	**-950.959509**	**-1163.00515**	**-1228.77871**
+2.95	**334.987816**	**362.7021446**	**216.3558141**	**264.5990282**	**279.5634809**
-3	**-2181.453942**	**-2384.094285**	**-1392.38281**	**-1691.68373**	**-1802.90728**
+3	**435.3976572**	**471.4191066**	**281.2066406**	**343.9103877**	**363.36027**
(Span 3) -4	**-2.18E+03**	**-2.38E+03**	**-1.39E+03**	**-1.69E+03**	**-1.80E+03**
+4	**4.35E+02**	**4.71E+02**	**2.81E+02**	**3.44E+02**	**3.63E+02**
-3.05	**-2072.381243**	**-2264.889569**	**-1322.76366**	**-1607.09955**	**-1712.76191**
+3.05	**413.6277746**	**447.8481513**	**267.1463081**	**326.7148686**	**345.1922567**
-3.1	**-1963.308545**	**-2145.684853**	**-1253.14452**	**-1522.51536**	**-1622.61655**
+3.1	**391.8578921**	**424.2771961**	**275.5304687**	**314.8111859**	**327.0242434**
-3.15	***-1854.235846***	***-2026.480138***	***-1183.52538***	***-1437.93117***	***-1532.47118***
+3.15	**591.1399185**	**599.5504913**	**482.2908815**	**544.7812725**	**572.5440697**
-3.2	**-1745.163147**	**-1907.275422**	**-1113.90624**	**-1353.34698**	**-1442.32582**
+3.2	**1027.04217**	**1079.600065**	**760.057537**	**914.0067353**	**930.2508811**
-3.25	**-1636.090449**	**-1788.070706**	**-1044.2871**	**-1268.7628**	**-1352.18045**
+3.25	**1442.872464**	**1562.337216**	**1043.007279**	**1252.91286**	**1301.421699**
-3.3	**-1527.01775**	**-1668.865991**	**-974.667963**	**-1184.17861**	**-1262.03509**
+3.3	**1814.234471**	**1964.128502**	**1279.552411**	**1535.09742**	**1614.27876**
-3.35	**-1417.945051**	**-1549.661275**	**-905.048823**	**-1099.59442**	**-1171.88972**
+3.35	**2117.412355**	**2310.278777**	**1466.537009**	**1753.491997**	**1861.551161**
-3.4	**-1308.872352**	**-1430.456559**	**-835.429683**	**-1015.01024**	**-1081.74436**
+3.4	**2352.896731**	**2561.98712**	**1613.984477**	**1918.710361**	**2036.909878**
-3.45	**-1199.799654**	**-1311.251844**	**-765.810541**	**-930.426051**	**-991.598992**
+3.45	**2545.295543**	**2717.703488**	**1702.541566**	**2020.486227**	**2149.726859**
-3.5	**-1090.726955**	**-1192.047128**	**-696.191402**	**-845.841864**	**-901.453628**
+3.5	**2645.610845**	**2865.309418**	**1727.555985**	**2044.900333**	**2195.159414**
-3.55	**-981.6542564**	**-1072.842412**	**-626.572262**	**-761.257677**	**-811.308263**
+3.55	**2698.380005**	**2911.748451**	**1770.105555**	**2095.987443**	**2245.950811**
-3.6	**-872.5815577**	**-953.6376964**	**-556.953122**	**-676.673491**	**-721.162898**

+3.6	**2685.997919**	**2888.896182**	**1802.958097**	**2143.003403**	**2277.618592**
-3.65	**-763.508859**	**-834.4329807**	**-487.333981**	**-592.089304**	**-631.017533**
+3.65	**2582.293603**	**2830.865063**	**1777.168657**	**2120.785504**	**2248.05127**
-3.7	**-654.4361603**	**-715.228265**	**-417.714841**	**-507.505117**	**-540.872168**
+3.7	**2454.673203**	**2662.270903**	**1691.980466**	**2035.489933**	**2152.075245**
-3.75	**-545.3634616**	**-596.0235493**	**-348.095701**	**-422.92093**	**-450.726803**
+3.75	**2236.733434**	**2427.36623**	**1563.838413**	**1891.31687**	**1970.594967**
-3.8	**-436.290763**	**-476.8188336**	**-278.476561**	**-338.336743**	**-360.581438**
+3.8	**1980.534988**	**2091.149035**	**1366.520486**	**1665.043966**	**1719.194484**
-3.85	**-327.2180643**	**-357.6141179**	**-208.857422**	**-253.752557**	**-270.436073**
+3.85	**1627.857478**	**1684.157131**	**1114.292788**	**1354.060831**	**1403.802302**
-3.9	**-218.1453656**	**-238.4094022**	**-139.23828**	**-169.16837**	**-180.290708**
+3.9	**1176.351692**	**1212.176117**	**818.4581764**	**994.0150934**	**1027.513757**
-3.95	**-109.0726669**	**-119.2046865**	**-69.6191397**	**-84.5841832**	**-90.1453429**
+3.95	**647.5150801**	**668.9814494**	**447.5003378**	**542.8793004**	**562.8105835**
-5	**-1.67E-13**	**-1.68E-13**	**-1.54E-13**	**-1.60E-13**	**-1.47E-13**
+5	**2.35E-13**	**2.68E-13**	**2.46E-13**	**2.59E-13**	**2.54E-13**

3-Span: Shear (Max and Min) Raw Data Results - 80' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-7.973203277	-5.603633589	-7.559536737	-7.712815186	-7.342356335	-4.510005349	-6.103726736	-6.952923239	-7.771603111	-8.612729896
End Shear	61.77594185	44.63606822	54.67531277	52.00649261	46.37934739	36.14521611	48.68049693	54.4959507	58.42942268	62.2330679
-0.05	-7.973203277	-5.603633589	-7.559536737	-7.712815186	-7.56262895	-4.510005349	-6.103726736	-6.952923239	-7.771603111	-8.612729896
+0.05	57.21284373	41.43958499	50.20984933	47.34945498	42.17882315	33.57703081	45.2183612	50.54176094	54.02635565	57.36429531
-0.1	-7.973203277	-5.603633589	-7.559536737	-7.712815186	-8.758650161	-4.510005349	-6.103726736	-6.952923239	-7.771603111	-8.612729896
+0.1	52.37727648	38.05522747	45.4853588	42.43570835	37.67334208	30.86163986	41.55234199	46.35343257	49.36544049	52.21394444
-0.15	-7.973203277	-5.603633589	-7.559536737	-7.712815186	-10.24039037	-4.510005349	-6.103726736	-6.952923239	-7.771603111	-8.612729896
+0.15	48.66233546	35.45036634	41.87961115	38.71135113	34.28485426	28.77044808	38.72934313	43.13205883	45.78785139	48.26887312
-0.2	-8.777547322	-7.52074127	-7.559536737	-7.712815186	-12.05746082	-5.911579193	-8.242960402	-8.731282463	-8.726348577	-8.721548824
+0.2	44.04595849	32.14714529	37.34776346	34.06519917	30.08950034	26.11700052	35.14771321	39.05004628	41.26403545	43.29124961
-0.25	-12.17054147	-9.480028959	-9.375482869	-7.712815186	-13.40753378	-8.029302919	-10.73003238	-11.37693549	-11.37210091	-11.36739874
+0.25	40.45428472	29.62127827	33.91511628	30.57440694	26.96064972	24.08669718	32.40750995	35.93106777	37.81516144	39.5051509
-0.3	-16.49634004	-12.85487469	-11.72961576	-10.30478494	-15.06925926	-10.72778511	-14.37566007	-15.10458905	-15.08374668	-15.07810163
+0.3	35.94020724	26.44005202	29.63574278	26.26126891	23.12249347	21.52787392	28.9543926	32.00603638	33.48524021	34.76358768
-0.35	-19.82262067	-15.44996596	-13.8678217	-12.59651361	-16.41073428	-12.8016107	-17.17771374	-18.33216474	-18.2846389	-18.27912902
+0.35	32.52097481	24.02495995	26.42273153	23.21675329	20.40653858	19.58387602	26.33130393	29.02885406	30.20926183	31.18572669
-0.4	-24.52161843	-18.73756826	-17.62575643	-15.50333247	-18.93703283	-15.42731085	-20.72587543	-22.42407912	-22.55860439	-22.55243558
+0.4	28.2581019	21.00658333	22.45567229	19.60362152	17.19833257	17.15236119	23.05082618	25.31147033	26.13003416	26.74357158
-0.45	-28.16920252	-21.24891123	-20.9627028	-17.80851267	-21.03257665	-17.43181552	-23.43496088	-25.55226165	-26.10315218	-26.25001642
+0.45	25.05719161	18.73404204	19.57565218	16.92672068	14.84230122	15.32009084	20.57917168	22.51549744	23.07113084	23.53941649
-0.5	-32.76749745	-24.40841246	-25.18569018	-21.61009485	-24.39115269	-19.95205022	-26.84153029	-29.49105444	-30.57618186	-31.29253361
+0.5	21.10450828	15.91937519	15.99688997	13.67087208	12.01241667	13.04856487	17.51545652	19.05642469	19.40135896	19.45381735
-0.55	-36.26184816	-26.80423543	-28.70638046	-25.02356058	-27.72590462	-21.86181886	-29.42332902	-32.48043618	-33.9790979	-35.13734252
+0.55	18.16779927	13.89449285	13.52576296	11.52559475	10.12483338	11.41272485	15.3094884	16.57101305	16.59925524	16.59797929
-0.6	-40.63368928	-29.7947799	-33.30675232	-29.33031931	-31.86787535	-24.24390505	-32.64417889	-36.21544079	-38.24162772	-39.9649973
+0.6	14.58429338	11.32023224	10.53807238	9.238386835	8.127513074	9.330591761	12.50222084	13.41566913	13.37835011	13.3772385
-0.65	-43.92901732	-32.04330324	-36.80017378	-32.60589434	-35.05186642	-26.03351402	-35.06437276	-39.02662314	-41.45872998	-43.61806179
+0.65	11.96395058	9.416854623	8.571761951	7.612671484	6.749739248	7.79528581	10.43266744	11.01562187	10.99319694	11.05039184
-0.7	-48.01555282	-34.82403383	-41.16731799	-37.06003421	-39.38413588	-28.24477123	-38.05538523	-42.50717473	-45.4539621	-48.16750863
+0.7	9.026433821	7.074263801	6.64900065	5.656097083	5.111507519	5.888530626	7.863080674	8.225170006	8.219363208	8.218279562
-0.75	-51.06608243	-36.89348013	-44.45607552	-40.7983311	-42.89570656	-29.88880468	-40.27965441	-45.10074323	-48.44108187	-51.57956208
+0.75	6.898851901	5.420037679	5.363904425	4.265532337	3.945046619	4.543957352	6.051643171	6.37003333	6.369084452	6.420143663
-0.8	-54.808444	-39.42354054	-48.53015156	-45.46460193	-47.22180553	-31.89654972	-42.99670186	-48.27617811	-52.11221864	-55.78746863
+0.8	4.379103028	3.823879095	3.821035027	3.038268877	2.932152618	2.948494362	4.099929512	4.291616826	4.290703609	4.289813894
-0.85	-57.56839971	-41.28213213	-51.5676966	-48.97275668	-50.43756446	-33.3695846	-44.99072546	-50.61273008	-54.82517257	-58.90924086
+0.85	3.023178339	2.684336735	2.711472325	2.155692257	2.284741509	2.077856135	2.811936521	2.813646932	2.812881961	2.812141231
-0.9	-60.90773028	-43.52066343	-55.28887867	-53.31043496	-54.37735027	-35.14113575	-47.38968347	-53.43238427	-58.11541861	-62.71226717
+0.9	1.778773665	1.384554769	1.547582027	1.518835303	1.553529961	1.205965399	1.33704129	1.481824229	1.654103737	1.827990167
-0.95	-63.33132993	-45.136625	-58.0286757	-56.53758134	-57.28774615	-36.41775606	-49.119149	-55.4725113	-60.51003641	-65.49449751
+0.95	1.689486668	1.193930247	1.547582027	1.518835303	1.410185371	0.963664181	1.305609517	1.481824229	1.654103737	1.827990167
-1	-66.20877414	-47.04277306	-61.33711295	-60.48124726	-60.82831251	-37.92043102	-51.15589312	-57.88571835	-63.3625857	-68.82929917
+1	1.69E+00	1.193930247	1.547582027	1.518835303	1.40E+00	0.963664181	1.305609517	1.481824229	1.654103737	1.827990167
(Span 2) -2	-5.994202754	-4.235996806	-5.490733112	-5.388741298	-4.959113062	-3.419025699	-4.632228473	-5.257428179	-5.868666199	-6.485605207
+2	66.61200483	47.20937068	62.42560473	62.60142238	60.95912168	38.02196743	51.30116279	58.13941422	63.80414691	69.51199004
-2.05	-5.994202754	-4.235996806	-5.490733112	-5.388741298	-4.976083083	-3.419025699	-4.632228473	-5.257428179	-5.868666199	-6.485605207
+2.05	63.73242588	45.29596886	59.18419165	58.83740561	57.54874945	36.51111966	49.25265708	55.71708795	60.94594357	66.18203474
-2.1	-5.994202754	-4.235996806	-5.490733112	-5.388741298	-5.027477463	-3.419025699	-4.632228473	-5.257428179	-5.868666199	-6.485605207
+2.1	60.56995762	43.17453043	55.7143999	54.88266692	54.03017034	34.83078685	46.97613037	53.04267887	57.82365221	62.57805965
-2.15	-5.994202754	-4.235996806	-5.490733112	-5.388741298	-6.029382892	-3.419025699	-4.632228473	-5.257428179	-5.868666199	-6.485605207
+2.15	56.80992182	40.63211467	51.67989693	50.36250529	49.9374117	32.81182144	44.24255301	49.84867495	54.12783114	58.34596346
-2.2	-6.351132628	-5.013567323	-5.490733112	-5.388741298	-7.257437951	-4.196655384	-5.593221124	-5.869372337	-5.868666199	-6.485605207
+2.2	53.17723656	38.15957511	47.85610746	46.1445494	46.03072409	30.84417829	41.5798185	46.75125781	50.57019627	54.29954296
-2.25	-9.113089814	-7.161826679	-6.562394186	-5.765179638	-8.810132487	-5.943461883	-7.947726205	-8.377974466	-8.36539924	-8.363095196

+2.25	49.37960533	35.56068552	43.92357331	41.83373194	41.96172314	28.77239945	38.77728848	43.50306679	46.86203669	50.10574681
-2.3	-12.55052418	-9.729509196	-9.040552417	-7.969277694	-10.64630365	-8.025062712	-10.75477294	-11.5218849	-11.48984518	-11.4874204
+2.3	45.05710377	32.58743494	39.51825351	36.92772675	37.39770525	26.39831232	35.56700654	39.79490633	42.65292514	45.37112666
-2.35	-16.02713318	-12.2211711	-11.93644907	-10.17670504	-12.21531829	-10.04011478	-13.4731168	-14.58137111	-14.61407527	-14.61127554
+2.35	41.03692762	29.80899927	35.28121505	32.66384759	33.33354175	24.17645041	32.56354117	36.33644756	38.74790996	41.00085067
-2.4	-20.0741153	-15.10268097	-15.37455042	-13.27221506	-14.30457641	-12.36565468	-16.61136185	-18.12807291	-18.49255046	-18.66739841
+2.4	36.56191121	26.70214967	30.85837216	28.05945137	28.78512059	21.68840614	29.2012478	32.43163399	34.33543867	36.04227407
-2.45	-23.91445563	-17.82153366	-18.92199595	-16.49705267	-17.36411325	-14.55598619	-19.56804242	-21.48168394	-22.18285839	-22.69064808
+2.45	32.40929191	23.71836424	26.89430107	23.99747365	24.70567452	19.29545564	25.96839762	28.77565503	30.27458881	31.58769214
-2.5	-28.26946269	-20.88903709	-23.02474007	-20.24449154	-21.054703	-17.02321145	-22.89943413	-25.27265558	-26.37792235	-27.29126256
+2.5	27.93609716	20.60723217	22.64374655	19.89580223	20.71695989	16.7967104	22.59356704	24.92408781	25.99123407	26.86608995
-2.55	-32.30612197	-23.71886859	-26.89493743	-23.99809545	-24.70609683	-19.29586043	-25.96894407	-28.77626884	-30.27526088	-31.58842087
+2.55	23.97840909	17.82104014	18.92140015	16.49654046	17.36375048	14.55558867	19.56751529	21.48108994	22.18220914	22.68995106
-2.6	-36.37740873	-26.70265405	-30.85902072	-28.06008335	-28.78556672	-21.68881723	-29.2017931	-32.40318445	-34.32244294	-36.02958435
+2.6	20.1345664	15.1022024	15.37399267	13.27172798	14.30430061	12.36527212	16.61085013	18.12750335	18.49192543	18.66673691
-2.65	-40.85053794	-29.80949643	-35.28186784	-32.66449436	-33.33398141	-24.17685498	-32.56406963	-36.33705509	-38.74859473	-41.001589
+2.65	16.08323665	12.22071771	11.93596243	10.17630428	12.215163	10.03974214	13.47262655	14.58082801	14.61348894	14.61069444
-2.7	-44.8896042	-32.58792316	-39.50441761	-36.9283952	-37.39811903	-26.39870944	-35.56752545	-39.79550414	-42.65360211	-45.37187238
+2.7	12.60230996	9.729080161	9.040098027	7.96895321	10.64613383	8.024714998	10.754308	11.52137165	11.48933521	11.48691945
-2.75	-49.00259164	-35.29533788	-43.52647729	-41.36093975	-41.54685809	-28.56068077	-38.49094512	-43.17179275	-46.4849985	-49.68056056
+2.75	9.450695875	7.386478903	6.734397833	5.957534225	8.982045697	6.125826865	8.193600347	8.652628909	8.638409868	8.636103687
-2.8	-53.18471561	-38.16002289	-47.85673865	-46.14521375	-46.03112047	-30.84453863	-41.58029754	-46.75181386	-50.57082106	-54.30023811
+2.8	6.393935616	5.0132007	5.490733129	5.388740134	7.257270171	4.196356823	5.592829329	5.868997427	5.868665147	6.485607022
-2.85	-56.81506911	-40.63253862	-51.68050754	-50.36315676	-49.9377808	-32.81216129	-44.24300506	-49.84919737	-54.12842761	-58.34663727
+2.85	5.994205679	4.235996724	5.490733129	5.388740134	6.029246172	3.419025335	4.632229075	5.257427518	5.868665147	6.485607022
-2.9	-60.57294258	-43.17492473	-55.71497896	-54.8832977	-54.03050857	-34.83110003	-46.97655343	-53.04316233	-57.82421297	-62.57869324
+2.9	5.994205679	4.235996724	5.490733129	5.388740134	5.02747675	3.419025335	4.632229075	5.257427518	5.868665147	6.485607022
-2.95	-63.73391492	-45.29632884	-59.18473814	-58.83800919	-57.54905724	-36.51140651	-49.25304238	-55.71753036	-60.94646297	-66.18262596
+2.95	5.994205679	4.235996724	5.490733129	5.388740134	4.976082374	3.419025335	4.632229075	5.257427518	5.868665147	6.485607022
-3	-66.88339902	-47.38856937	-62.73620114	-62.96626955	-61.30507091	-38.16316902	-51.49271425	-58.36691741	-64.07449183	-69.82887895
+3	5.994205679	4.235996724	5.490733129	5.388740134	4.959112353	3.419025335	4.632229075	5.257427518	5.868665147	6.485607022
(Span 3) -4	-1.69E+00	-1.193930224	-1.547582031	-1.518834975	-1.40E+00	-0.963664078	-1.305609687	-1.481824043	-1.65410344	-1.827990679
+4	65.9199643	46.84049968	60.98134123	60.05438808	60.44587322	37.76116809	50.9399672	57.62923041	63.05817502	68.47217048
-3.05	-1.69E+00	-1.193930224	-1.547582031	-1.518834975	-1.41E+00	-0.963664078	-1.305609687	-1.481824043	-1.65410344	-1.827990679
+3.05	63.68283522	45.35774375	58.40783507	56.98678584	57.69200822	36.5922632	49.35561974	55.75205509	60.83925409	65.87814452
-3.1	-1.910722733	-1.522083571	-1.547582031	-1.518834975	-1.630255886	-1.29646894	-1.469877405	-1.481824043	-1.65410344	-1.827990679
+3.1	60.5295047	43.2802558	54.88550727	52.83789594	53.95010031	34.95103795	47.13221275	53.12925223	57.76071268	62.30125767
-3.15	-2.878700256	-2.533167019	-2.559950492	-2.035160305	-2.199030629	-1.978884482	-2.636433042	-2.638115148	-2.637353942	-2.636614028
+3.15	57.93089222	41.53898324	51.99098869	49.46386442	50.885746	33.5730099	45.26615543	50.93594674	55.20136988	59.34306251
-3.2	-4.629462465	-3.9892797	-3.986402321	-3.169801217	-3.03442593	-3.118385214	-4.2922787	-4.51357346	-4.512650267	-4.511754228
+3.2	54.38133938	39.14954455	48.08584751	44.95367975	46.7512365	31.67925371	42.70260217	47.9320342	51.71353016	55.32963985
-3.25	-6.586800086	-5.193291147	-5.186552008	-4.124445512	-3.825571228	-4.359457634	-5.803114404	-6.130317113	-6.129362562	-6.179939197
+3.25	51.46940259	37.18153244	44.91685553	41.32407853	43.38641052	30.11752224	40.58913773	45.46202334	48.85795285	52.05654079
-3.3	-9.318317781	-7.31997151	-6.838689879	-5.866083703	-5.286144276	-6.088049912	-8.131916049	-8.524942184	-8.517384498	-8.516290785
+3.3	47.54644784	34.52099966	40.68872308	36.51800824	38.87154911	28.00391014	37.72956188	42.12766629	45.01762388	47.66991193
-3.35	-11.60026021	-9.097146009	-8.319866445	-7.388026693	-6.56042275	-7.582660349	-10.12378237	-10.69552998	-10.67504628	-10.67394242
+3.35	44.36697607	32.35802511	37.2917971	33.06728158	35.51498104	26.2838938	35.40301609	39.42033477	41.90996454	44.13115748
-3.4	-14.94228666	-11.59933117	-10.8595756	-9.478070872	-8.331752164	-9.556485041	-12.80674268	-13.75748532	-13.71800252	-13.71688301
+3.4	40.12947711	29.46725429	32.80053911	28.85609266	31.415327	23.98312138	32.29154236	35.80619876	37.77395848	39.43466211
-3.45	-17.72661893	-13.60172102	-13.18358146	-11.23299669	-9.868898809	-11.17607284	-14.99037879	-16.21188009	-16.20986363	-16.20857263
+3.45	36.7282664	27.14109496	29.22220323	25.50616066	28.19375209	22.13024125	29.78624671	32.90097612	34.45840541	35.67954848
-3.5	-21.49802215	-16.22634865	-16.3604991	-14.02236517	-12.31767925	-13.29643619	-17.84973241	-19.43343704	-19.81230566	-19.89746798
+3.5	32.23508474	24.06094437	24.71990588	21.1176918	23.90622965	19.67497672	26.46700033	29.05771334	30.08350713	30.73652659
-3.55	-24.56934653	-18.4157171	-19.10770052	-16.55495392	-14.51638029	-15.06332547	-20.23282362	-22.12405059	-22.64356391	-23.07544432
+3.55	28.65789859	21.60337784	21.4351483	18.21448408	21.32605102	17.71465095	23.81725131	25.99399415	26.60423735	26.81430305
-3.6	-28.68031287	-21.33736987	-22.88752867	-19.99643203	-17.5453992	-17.41894543	-23.4104592	-25.71864919	-26.57617476	-27.22863984
+3.6	23.96787321	18.37470175	17.14505496	15.18237624	18.63167379	15.13759054	20.33435427	21.97229411	22.04722836	22.04106944

-3.65	**-31.99283937**	**-23.68517459**	**-25.97328798**	**-22.80688778**	**-20.04082569**	**-19.31026924**	**-25.96214011**	**-28.61016722**	**-29.74916319**	**-30.68393129**
+3.65	**20.2693352**	**15.81750536**	**14.23751716**	**12.92135038**	**16.65545061**	**13.0952394**	**17.57448213**	**18.7894705**	**18.73815082**	**18.73268001**
-3.7	**-36.38450924**	**-26.7901025**	**-30.10403001**	**-26.73094607**	**-23.53874747**	**-21.80954212**	**-29.33447251**	**-32.43772721**	**-33.96087464**	**-35.28373755**
+3.7	**15.99257601**	**12.48116207**	**11.46948929**	**9.975040836**	**14.88832365**	**10.42905934**	**13.97207292**	**14.63998662**	**14.62298733**	**14.61732769**
-3.75	**-39.89248648**	**-29.26456512**	**-33.4326934**	**-30.08589652**	**-26.52417793**	**-23.79988046**	**-32.02041248**	**-35.49075755**	**-37.32882677**	**-38.97190954**
+3.75	**12.62764616**	**9.856113267**	**9.63838541**	**7.71281756**	**13.59596117**	**8.330093008**	**11.13638393**	**11.75249037**	**11.74768341**	**11.74299145**
-3.8	**-44.50600105**	**-32.51191096**	**-37.84580942**	**-34.57375351**	**-30.54675433**	**-26.41010708**	**-35.54331611**	**-39.50062562**	**-41.76282712**	**-43.83944335**
+3.8	**8.265284206**	**7.254159275**	**7.559538011**	**7.71281756**	**11.85998618**	**5.607483936**	**7.924239068**	**8.351144715**	**8.34619854**	**8.612730353**
-3.85	**-48.16363552**	**-35.08125465**	**-41.3708385**	**-38.1877207**	**-33.81002022**	**-28.4740401**	**-38.32921987**	**-42.67573478**	**-45.28159689**	**-47.71119979**
+3.85	**7.973268728**	**5.603635268**	**7.559538011**	**7.71281756**	**10.44680811**	**4.510006503**	**6.103726586**	**6.952924788**	**7.771604482**	**8.612730353**
-3.9	**-52.94012041**	**-38.43016204**	**-46.0065052**	**-42.97585806**	**-38.16641979**	**-31.16255649**	**-41.95857037**	**-46.81724606**	**-49.88107187**	**-52.78311992**
+3.9	**7.973268728**	**5.603635268**	**7.559538011**	**7.71281756**	**8.541545149**	**4.510006503**	**6.103726586**	**6.952924788**	**7.771604482**	**8.612730353**
-3.95	**-56.7016326**	**-41.06260909**	**-49.68135942**	**-46.79795217**	**-41.67088538**	**-33.27465538**	**-44.81010694**	**-50.07504144**	**-53.506452**	**-56.78922888**
+3.95	**7.973268728**	**5.603635268**	**7.559538011**	**7.71281756**	**7.657821375**	**4.510006503**	**6.103726586**	**6.952924788**	**7.771604482**	**8.612730353**
-5	**-61.58227877**	**-44.47223283**	**-54.47974039**	**-51.820994**	**-46.31337988**	**-36.00877072**	**-48.50176771**	**-54.29756003**	**-58.21463442**	**-62.00219623**
+5	**7.973268728**	**5.603635268**	**7.559538011**	**7.71281756**	**7.342356589**	**4.510006503**	**6.103726586**	**6.952924788**	**7.771604482**	**8.612730353**

3-Span: Shear (Max and Min) Raw Data Results - 80' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-7.973203277	-7.388921835	-7.939626513	-7.481360523	-9.040703167	-8.787110252	-9.294423476	-3.863973256
End Shear	61.77594185	60.02488762	63.87849092	59.75959516	70.82770109	62.41861448	65.91391951	31.23433573
-0.05	-7.973203277	-7.388921835	-7.939626513	-7.481360523	-9.040703167	-8.787110252	-9.294423476	-3.863973256
+0.05	57.21284373	55.84095827	59.3780361	55.52435316	65.7060675	57.24552169	60.44019213	29.03145232
-0.1	-7.973203277	-7.388921835	-7.939626513	-7.481360523	-9.040703167	-8.787110252	-9.294423476	-3.863973256
+0.1	52.37727648	51.4106198	54.61535037	51.03870517	60.28758198	51.77650728	54.65409232	26.66446478
-0.15	-7.973203277	-7.388921835	-7.939626513	-7.481360523	-9.040703167	-8.787110252	-9.294423476	-4.050130478
+0.15	48.66233546	47.99520124	50.94576735	47.58382754	56.11856396	47.60560993	50.24192941	24.84285
-0.2	-8.777547322	-10.90637449	-10.9809772	-10.25889054	-10.99288524	-8.787110252	-9.294423476	-5.61717546
+0.2	44.04595849	43.65686447	46.28727622	43.19954855	50.8337401	42.36755627	44.70162852	22.53316395
-0.25	-12.17054147	-14.34389829	-14.68678856	-13.38191382	-14.61602051	-10.70877247	-11.30816641	-6.823108887
+0.25	40.45428472	40.33365733	42.7209769	39.84448599	46.79410224	38.40331285	40.50924964	20.76729479
-0.3	-16.49634004	-18.71975083	-19.40676923	-17.83710262	-20.03126689	-13.8700845	-14.67209411	-8.935651907
+0.3	35.94020724	36.14042921	38.22387257	35.61550446	41.70830852	33.46569619	35.28831078	18.54365376
-0.35	-19.82262067	-22.07921233	-23.03249207	-21.26069517	-24.19695191	-16.29619036	-17.25392334	-10.75145268
+0.35	32.52097481	32.95074171	34.80534271	32.40220265	37.84889444	29.76214387	31.37293176	16.85588558
-0.4	-24.52161843	-26.32814545	-27.62090618	-25.59498532	-29.47644425	-19.36810794	-20.51833966	-13.05183946
+0.4	28.2581019	28.95573716	30.52682566	28.38245134	33.02750287	25.19445047	26.54492861	14.74703274
-0.45	-28.16920252	-29.56823475	-31.12205359	-28.90357095	-33.51112017	-23.27120979	-24.4960103	-14.80906353
+0.45	25.05719161	25.9408754	27.30054856	25.35285635	29.39915612	21.88492826	23.04771421	13.15972119
-0.5	-32.76749745	-33.63713815	-35.52170536	-33.06303026	-38.58948671	-28.21498377	-29.69998291	-17.01976712
+0.5	21.10450828	22.19720144	23.2978111	21.5962635	24.90753479	17.85945645	18.79942784	11.19439701
-0.55	-36.26184816	-36.7165494	-38.85379395	-36.21466358	-42.44230948	-32.32640706	-34.04743328	-18.69606073
+0.55	18.16779927	19.49643721	20.41286479	18.89038767	21.6780302	15.0182511	15.80868536	9.729897285
-0.6	-40.63368928	-40.55231166	-43.00748644	-40.14535892	-47.25417653	-37.69572521	-39.73563255	-20.78833971
+0.6	14.58429338	16.05201033	16.73742927	15.44548508	17.57483678	11.86530152	12.56189037	7.93684432
-0.65	-43.92901732	-43.42973889	-46.12603266	-43.09809568	-50.87430476	-41.77639544	-44.05919273	-22.36134852
+0.65	11.96395058	13.50636076	14.02435333	12.90460958	14.55553064	10.0109384	10.59230601	6.617510599
-0.7	-48.01555282	-46.97925171	-49.97657241	-46.74610494	-55.3543124	-46.88215241	-49.4695795	-24.30646037
+0.7	9.026433821	10.33626662	10.65059848	9.747984224	10.81496038	7.759562822	8.201548888	5.025471743
-0.75	-51.06608243	-49.61338604	-52.83708986	-49.45799896	-58.6909025	-50.7308159	-53.54845947	-25.75382824
+0.75	6.898851901	8.09372945	8.267992571	7.521182682	8.184873689	6.11894544	6.459793978	3.955264208
-0.8	-54.808444	-52.82353967	-56.32728173	-52.7693885	-62.77367641	-55.5035248	-58.60745933	-27.52303127
+0.8	4.379103028	5.432448736	5.435765443	5.074611817	5.40305879	4.109984963	4.327632189	2.910411432
-0.85	-57.56839971	-55.17307464	-58.88528668	-55.19849173	-65.77588213	-59.06612896	-62.38442695	-28.82240344
+0.85	3.023178339	3.810839682	3.810839682	3.434032993	3.598635337	2.927157623	3.081218551	2.155207085
-0.9	-60.90773028	-57.99075869	-61.95793485	-58.11933182	-69.39605303	-63.43632015	-67.01848387	-30.38695377
+0.9	1.778773665	1.964827939	1.964827939	1.602265364	1.933715804	1.800307597	1.903204327	1.263016144
-0.95	-63.33132993	-60.0143885	-64.16894399	-60.22370681	-72.01304136	-66.65882799	-70.43632349	-31.51597655
+0.95	1.689486668	1.584489448	1.700930057	1.602265364	1.933715804	1.800307597	1.903204327	0.816996912
-1	-66.20877414	-62.38649373	-66.76685393	-62.70006752	-75.10523961	-70.55700219	-74.57184996	-32.84713406
+1	1.69E+00	1.584489448	1.700930057	1.602265364	1.933715804	1.800307597	1.903204327	0.816996912
(Span 2) -2	-5.994202754	-5.621678617	-6.034803216	-5.684746506	-6.860713769	-6.387388994	-6.752460641	-2.898658644
+2	66.61200483	62.48020427	66.90841409	62.86062682	75.38733324	71.88832093	75.9980347	32.94422921
-2.05	-5.994202754	-5.621678617	-6.034803216	-5.684746506	-6.860713769	-6.387388994	-6.752460641	-2.898658644
+2.05	63.73242588	60.0918801	64.2934483	60.36842768	72.2773525	68.07185994	71.95079021	31.60913028
-2.1	-5.994202754	-5.621678617	-6.034803216	-5.684746506	-6.860713769	-6.387388994	-6.752460641	-2.898658644
+2.1	60.56995762	57.41920564	61.37753857	57.59570585	68.83847965	63.99770102	67.63198139	30.12848434
-2.15	-5.994202754	-5.621678617	-6.034803216	-5.684746506	-6.860713769	-6.387388994	-6.752460641	-2.898658644
+2.15	56.80992182	54.19172741	57.86648126	54.26322236	64.72616902	59.27195243	62.62424739	28.35378905
-2.2	-6.351132628	-7.462827866	-7.632083163	-6.948877819	-7.582222948	-6.387388994	-6.752460641	-3.644874216
+2.2	53.17723656	51.03341932	54.43866846	51.01462513	60.73386156	54.80247124	57.88957588	26.62783475
-2.25	-9.113089814	-10.3743208	-10.72783866	-9.843720024	-11.00598997	-7.703101865	-8.145631532	-5.112279563

+2.25	49.37960533	47.69695217	50.82427128	47.59333647	56.54336628	50.21421099	53.03043064	24.81379952
-2.3	-12.55052418	-13.82684235	-14.40836834	-13.29126624	-15.10404969	-10.2171408	-10.81598032	-6.900038377
+2.3	45.05710377	43.86194682	46.67695675	43.67197305	51.75523277	45.08342925	47.59824474	22.73875858
-2.35	-16.02713318	-17.15549237	-17.96445668	-16.62695652	-19.08556226	-13.17800183	-13.87158088	-8.635871584
+2.35	41.03692762	40.2628461	42.79081016	40.00125316	47.28578047	40.15722299	42.3841101	20.8000994
-2.4	-20.0741153	-20.98379199	-22.06186584	-20.47507263	-23.69488352	-17.13286531	-18.03552325	-10.64411459
+2.4	36.56191121	36.22203183	38.43405101	35.88986996	42.29304297	35.02382131	36.95220658	18.63292993
-2.45	-23.91445563	-24.57853251	-25.91560008	-24.09821996	-28.04821275	-21.21886745	-22.35336744	-12.53951673
+2.45	32.40929191	32.32553924	34.2389135	31.9347137	37.50267489	30.43079744	32.09350989	16.65140523
-2.5	-28.26946269	-28.61644516	-30.25094164	-28.17817602	-32.96427446	-25.95501103	-27.36023822	-14.67831178
+2.5	27.93609716	28.24621883	29.85317242	27.80367843	32.51245242	25.51477225	26.89475492	14.48204088
-2.55	-32.30612197	-32.32621053	-34.23963575	-31.93538238	-37.50348362	-30.4315341	-32.09428905	-16.65152428
+2.55	23.97840909	24.5778753	25.91489495	24.09757413	28.04743584	21.21818047	22.35264135	12.53939267
-2.6	-36.37740873	-36.22270012	-38.43477093	-35.89053699	-42.29385151	-35.02457337	-36.95300224	-18.63305553
+2.6	20.1345664	20.98315277	22.06118107	20.47444535	23.69413082	17.13222367	18.03484534	10.64400045
-2.65	-40.85053794	-40.26350239	-42.79151847	-40.00189916	-47.28656634	-40.15798136	-42.38491269	-20.80022267
+2.65	16.08323665	17.15487749	17.96379916	16.62635521	19.08484324	13.17744305	13.87099268	8.635760885
-2.7	-44.8896042	-43.86258946	-46.67765115	-43.67260712	-51.75600584	-45.06854877	-47.58258571	-22.73887476
+2.7	12.60230996	13.82625684	14.40774339	13.29069536	15.10336953	10.21675809	10.81557374	6.899929722
-2.75	-49.00259164	-47.35544556	-50.45466063	-47.24366276	-56.11579012	-49.75133801	-52.54030218	-24.62838235
+2.75	9.450695875	10.67744723	11.05060971	10.1458408	11.36431012	7.924038043	8.380263228	5.268817659
-2.8	-53.18471561	-51.0340035	-54.43930172	-51.01520985	-60.73457868	-54.80320819	-57.89035645	-26.62794755
+2.8	6.393935616	7.462325032	7.631549393	6.948395909	7.581654691	6.387388201	6.752460794	3.651172567
-2.85	-56.81506911	-54.19227692	-57.86707829	-54.26377381	-64.72684782	-59.27266678	-62.62500421	-28.35389265
+2.85	5.994205679	5.621680715	6.034802886	5.684745817	6.860715153	6.387388201	6.752460794	2.898658762
-2.9	-60.57294258	-57.41970866	-61.37808659	-57.59622131	-68.83911713	-63.99837998	-67.63270101	-30.12858015
+2.9	5.994205679	5.621680715	6.034802886	5.684745817	6.860715153	6.387388201	6.752460794	2.898658762
-2.95	-63.73391492	-60.09233529	-64.29394577	-60.36889676	-72.27793583	-68.07250244	-71.95147142	-31.60921933
+2.95	5.994205679	5.621680715	6.034802886	5.684745817	6.860715153	6.387388201	6.752460794	2.898658762
-3	-66.88339902	-62.70247856	-67.15237752	-63.09348955	-75.67913353	-72.25466004	-76.38662396	-33.06909565
+3	5.994205679	5.621680715	6.034802886	5.684745817	6.860715153	6.387388201	6.752460794	2.898658762
(Span 3) -4	-1.69E+00	-1.584490039	-1.700929964	-1.60226517	-1.933716194	-1.800307374	-1.90320437	-0.816996946
+4	65.9199643	62.13568936	66.49179075	62.43765355	74.77678302	70.13739926	74.12663399	32.70607898
-3.05	-1.69E+00	-1.584490039	-1.700929964	-1.60226517	-1.933716194	-1.800307374	-1.90320437	-0.816996946
+3.05	63.68283522	60.29046601	64.47092264	60.51133465	72.37142508	67.10516465	70.90977326	31.67060905
-3.1	-1.910722733	-2.160156216	-2.160156216	-1.729267535	-1.933716194	-1.800307374	-1.90320437	-1.352073882
+3.1	60.5295047	57.68888738	61.62844617	57.80594358	69.00701048	62.96225267	66.51573894	30.21915141
-3.15	-2.878700256	-3.596144062	-3.596144062	-3.210646695	-3.353133847	-2.763582918	-2.90903465	-2.045614797
+3.15	57.93089222	55.49709884	59.23833276	55.53393317	66.19102508	59.56290706	62.91114641	29.00215475
-3.2	-4.629462465	-5.707744096	-5.73766013	-5.319775757	-5.672899901	-4.318467381	-4.548861099	-3.015935343
+3.2	54.38133938	52.47650221	55.94972196	52.41103418	62.33133063	54.98273472	58.05538278	27.33167518
-3.25	-6.586800086	-7.785465272	-7.940782603	-7.215547632	-7.824555151	-5.893205352	-6.220171614	-3.828266911
+3.25	51.46940259	49.97947532	53.23486949	49.83525772	59.15553617	51.27031923	54.1202785	25.9555068
-3.3	-9.318317781	-10.66849732	-11.00388604	-10.07834646	-11.20581558	-8.002400326	-8.459389768	-5.196430717
+3.3	47.54644784	46.59295955	49.55730776	46.34877974	54.86593028	46.322352	48.87633723	24.09474791
-3.35	-11.60026021	-13.15337637	-13.64840679	-12.52642606	-14.11162661	-9.753647754	-10.31905642	-6.434805449
+3.35	44.36697607	43.83199109	46.56218959	43.51119125	51.38118015	42.35090842	44.66794188	22.58176138
-3.4	-14.94228666	-16.42611682	-17.13639224	-15.81926351	-18.01953752	-12.13765396	-12.85119313	-8.130951046
+3.4	40.12947711	40.13267554	42.55288237	39.71506472	46.72703305	37.10466271	39.10942863	20.55946552
-3.45	-17.72661893	-19.10536542	-19.99533366	-18.49888372	-21.21121601	-14.62519249	-15.39493946	-9.525668654
+3.45	36.7282664	37.14907324	39.32198368	36.6576246	42.98418892	32.92821473	34.68494378	18.93201716
-3.5	-21.49802215	-22.60607972	-23.73478098	-22.00621376	-25.39726229	-18.27788554	-19.23987952	-11.40845641
+3.5	32.23508474	33.19008382	35.03814347	32.60577986	38.03086995	27.66945313	29.12574014	16.77692777
-3.55	-24.56934653	-25.5180587	-26.84827219	-24.92825447	-28.89104525	-21.35113759	-22.48393967	-12.93716093
+3.55	28.65789859	30.02514154	31.61593442	29.37040631	34.080741	23.82404931	25.07794664	15.05737227
-3.6	-28.68031287	-29.39405811	-30.99607256	-28.82319632	-33.55575862	-25.69139569	-27.07013867	-14.977848
+3.6	23.96787321	25.85957065	27.11473792	25.11677062	28.89361775	19.02529483	20.15845084	12.79822864

-3.65	**-31.99283937**	**-32.50152655**	**-34.3240698**	**-31.9499116**	**-37.30602383**	**-29.24435879**	**-30.82558339**	**-16.61818597**
+3.65	**20.2693352**	**22.55460937**	**23.54571826**	**21.74542276**	**24.78706391**	**16.63950202**	**17.61928767**	**11.00892896**
-3.7	**-36.38450924**	**-36.60229624**	**-38.71904613**	**-36.08104257**	**-42.26781731**	**-34.00575331**	**-35.85930806**	**-18.78803047**
+3.7	**15.99257601**	**18.23556957**	**18.88436328**	**17.34394308**	**19.43152591**	**13.52041601**	**14.29999825**	**8.674475425**
-3.75	**-39.89248648**	**-39.86393268**	**-42.21704945**	**-39.37047285**	**-46.22370539**	**-37.84642633**	**-39.92036082**	**-20.51764641**
+3.75	**12.62764616**	**14.83189663**	**15.21301773**	**13.8785506**	**15.21937082**	**11.0614491**	**11.68343065**	**6.994177032**
-3.8	**-44.50600105**	**-44.13636315**	**-46.80200731**	**-43.68386179**	**-51.41720798**	**-42.94297769**	**-45.31020973**	**-22.78790545**
+3.8	**8.265284206**	**10.41251171**	**10.4487147**	**9.848806067**	**10.53687697**	**8.787111027**	**9.294425164**	**5.443784932**
-3.85	**-48.16363552**	**-47.51084499**	**-50.42551547**	**-47.09409064**	**-55.52791099**	**-47.01732031**	**-49.61965135**	**-24.58444458**
+3.85	**7.973268728**	**7.647141187**	**7.939628895**	**7.481362375**	**9.040703409**	**8.787111027**	**9.294425164**	**4.224895665**
-3.9	**-52.94012041**	**-51.90184122**	**-55.14327532**	**-51.53580774**	**-60.88775286**	**-52.37956133**	**-55.29207099**	**-26.9263765**
+3.9	**7.973268728**	**7.388922979**	**7.939628895**	**7.481362375**	**9.040703409**	**8.787111027**	**9.294425164**	**3.863973338**
-3.95	**-56.7016326**	**-55.34787513**	**-58.84781848**	**-55.02487494**	**-65.10240996**	**-56.63353055**	**-59.79267945**	**-28.76749149**
+3.95	**7.973268728**	**7.388922979**	**7.939628895**	**7.481362375**	**9.040703409**	**8.787111027**	**9.294425164**	**3.863973338**
-5	**-61.58227877**	**-59.80431293**	**-63.64116969**	**-59.54097547**	**-70.56320378**	**-62.19197915**	**-65.67410054**	**-31.15233834**
+5	**7.973268728**	**7.388922979**	**7.939628895**	**7.481362375**	**9.040703409**	**8.787111027**	**9.294425164**	**3.863973338**

3-Span: Shear (Max and Min) Raw Data Results - 80' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-7.973203277	-15.77106782	-17.2360775	-10.06638837	-12.23021629	-13.03431773
End Shear	61.77594185	102.8634338	106.6829493	70.70790917	85.69259667	89.0776661
-0.05	-7.973203277	-15.77106782	-17.2360775	-10.06638837	-12.23021629	-13.03431773
+0.05	57.21284373	93.51427304	96.72924094	64.70392919	78.45773526	81.33628777
-0.1	-7.973203277	-15.77106782	-17.2360775	-10.06638837	-12.23021629	-13.03431773
+0.1	52.37727648	83.65880095	86.01267349	58.36225066	70.8119949	73.16074056
-0.15	-7.973203277	-15.77106782	-17.2360775	-10.06638837	-12.23021629	-13.03431773
+0.15	48.66233546	76.19070562	77.91846567	53.5349589	64.9890704	66.9465474
-0.2	-8.777547322	-15.77106782	-17.2360775	-10.06638837	-12.23021629	-13.03431773
+0.2	44.04595849	66.87653906	67.85934127	47.48488327	57.68711255	59.17041161
-0.25	-12.17054147	-15.77106782	-17.2360775	-12.78541473	-14.16842966	-14.34368153
+0.25	40.45428472	59.88032944	60.33320213	42.91618962	52.16972852	53.30818498
-0.3	-16.49634004	-18.3763499	-18.63704594	-16.48319319	-18.20493922	-19.07063477
+0.3	35.94020724	51.23828094	51.52559268	37.23946963	45.30965762	46.03773954
-0.35	-19.82262067	-22.54779354	-23.4300601	-19.320325	-21.30144002	-22.70267879
+0.35	32.52097481	44.83184136	45.36266691	32.99295967	40.1741184	40.61015509
-0.4	-24.52161843	-28.92546605	-30.21696939	-22.90631884	-25.93278987	-27.30037156
+0.4	28.2581019	37.53725147	38.27926626	27.91223706	34.02465687	34.14158933
-0.45	-28.16920252	-34.04660155	-35.97115897	-25.63902109	-30.73366809	-30.80962065
+0.45	25.05719161	32.14773413	33.23574233	24.02826511	29.18606641	29.43635325
-0.5	-32.76749745	-41.57725583	-43.98873348	-30.66738396	-37.78023008	-37.40229012
+0.5	21.10450828	25.92161037	27.0691389	19.60902605	23.83080115	23.69255672
-0.55	-36.26184816	-48.07601794	-50.11679976	-35.15664785	-43.16830628	-43.43686685
+0.55	18.16779927	21.64002331	22.53885938	16.92125519	19.90247268	20.14834071
-0.6	-40.63368928	-57.02374052	-57.83098968	-41.41519644	-50.67672795	-51.18206501
+0.6	14.58429338	16.93503676	17.36768139	14.05906591	15.5726954	16.48358169
-0.65	-43.92901732	-63.84006267	-64.41604725	-46.24651757	-56.47049601	-57.37363249
+0.65	11.96395058	13.57780277	13.84292457	11.87888888	13.00397731	13.77967966
-0.7	-48.01555282	-73.5918502	-74.22109513	-52.30249919	-63.72969599	-65.32241562
+0.7	9.026433821	10.03883102	9.922061879	9.230357154	10.10177635	10.50644375
-0.75	-51.06608243	-81.12632547	-82.63287479	-56.87635038	-69.20972431	-71.33545248
+0.75	6.898851901	7.872618711	7.433662266	7.298977333	7.984372945	8.129313013
-0.8	-54.808444	-90.5363326	-93.29702693	-62.56041652	-76.01648466	-78.8210918
+0.8	4.379103028	5.352853081	4.860897124	4.931970639	5.454601652	5.453797316
-0.85	-57.56839971	-97.61526681	-101.3454349	-66.81321804	-81.1064768	-84.43257731
+0.85	3.023178339	3.552466326	3.408177478	3.465926007	3.665372049	3.645168245
-0.9	-60.90773028	-106.3741896	-111.3392037	-72.04362452	-87.36270464	-91.34877701
+0.9	1.778773665	3.14779779	3.408177478	2.033015585	2.486338849	2.626953301
-0.95	-63.33132993	-112.8958634	-118.8094782	-75.91178976	-91.98635683	-96.47604826
+0.95	1.689486668	3.14779779	3.408177478	2.033015585	2.486338849	2.626953301
-1	-66.20877414	-120.8728671	-127.987	-80.60678972	-97.59395613	-102.7165411
+1	1.69E+00	3.14779779	3.408177478	2.033015585	2.486338849	2.626953301
(Span 2) -2	-5.994202754	-11.16820759	-12.09201999	-7.2130237	-8.821389015	-9.320281156
+2	66.61200483	125.0199405	133.3014261	82.48815602	99.75230729	105.4429772
-2.05	-5.994202754	-11.16820759	-12.09201999	-7.2130237	-8.821389015	-9.320281156
+2.05	63.73242588	117.3777775	124.5910939	77.92988558	94.29163781	99.40503243
-2.1	-5.994202754	-11.16820759	-12.09201999	-7.2130237	-8.821389015	-9.320281156
+2.1	60.56995762	109.3604653	115.5212851	73.08895174	88.48543447	93.02060597
-2.15	-5.994202754	-11.16820759	-12.09201999	-7.2130237	-8.821389015	-9.320281156
+2.15	56.80992182	100.2087986	105.2416052	67.50038105	81.77503791	85.67933074
-2.2	-6.351132628	-11.16820759	-12.09201999	-7.2130237	-8.821389015	-9.320281156
+2.2	53.17723656	91.67829531	95.72313359	62.23748893	75.44917587	78.79035755
-2.25	-9.113089814	-11.16820759	-12.09201999	-9.152692658	-10.05481243	-10.50660733

+2.25	49.37960533	83.03419931	86.13683727	56.85540865	68.97395069	71.76740616
-2.3	-12.55052418	-14.54562084	-15.00545401	-12.1086916	-13.41438938	-14.1760405
+2.3	45.05710377	73.1643671	75.62586736	50.76902396	61.67297867	63.7616524
-2.35	-16.02713318	-19.12247748	-20.04477175	-14.95198243	-17.57102307	-17.72453572
+2.35	41.03692762	64.46008529	66.20336089	45.12730064	54.84278469	56.53548659
-2.4	-20.0741153	-25.11497546	-26.37722021	-18.83107992	-23.02732386	-22.93060792
+2.4	36.56191121	55.17626895	56.10071583	39.17773882	47.66260024	48.84604013
-2.45	-23.91445563	-31.56117819	-32.49584123	-23.32324104	-28.48122609	-28.59387923
+2.45	32.40929191	46.99069344	47.34866777	33.87733702	41.25845395	42.01843237
-2.5	-28.26946269	-39.15965431	-39.54465543	-28.73537083	-35.03810126	-35.41776487
+2.5	27.93609716	38.45109804	39.08158762	28.23097262	34.42746668	34.77162255
-2.55	-32.30612197	-46.9919954	-47.25710331	-33.87818532	-41.25947918	-42.01950228
+2.55	23.97840909	31.56010898	32.49570289	23.32248068	28.48030402	28.59296106
-2.6	-36.37740873	-55.17759075	-56.10094373	-39.17859213	-47.6636304	-48.84714063
+2.6	20.1345664	25.1140648	26.37708907	18.83040195	23.02649939	22.92973679
-2.65	-40.85053794	-64.4614396	-66.20356538	-45.12816488	-54.84382718	-56.53660608
+2.65	16.08323665	19.12171391	20.04463312	14.95151996	17.57025827	17.72395731
-2.7	-44.8896042	-73.13342083	-75.62607894	-50.73418755	-61.64228798	-63.73104382
+2.7	12.60230996	14.54491718	15.00533508	12.10825059	13.41377982	14.1754909
-2.75	-49.00259164	-82.12056696	-85.1783279	-56.31353753	-68.32168724	-71.06149781
+2.75	9.450695875	11.16806038	12.09201991	9.41260127	10.34013065	10.82832321
-2.8	-53.18471561	-91.67966177	-95.72334788	-62.23835391	-75.45021644	-78.79146662
+2.8	6.393935616	11.16806038	12.09201991	7.213022003	8.821388844	9.320283371
-2.85	-56.81506911	-100.2101385	-105.2418166	-67.50122281	-81.77604963	-85.68041384
+2.85	5.994205679	11.16806038	12.09201991	7.213022003	8.821388844	9.320283371
-2.9	-60.57294258	-109.3617634	-115.5215187	-73.08974184	-88.48638229	-93.02164579
+2.9	5.994205679	11.16806038	12.09201991	7.213022003	8.821388844	9.320283371
-2.95	-63.73391492	-117.379025	-124.5913187	-77.93063625	-94.29253763	-99.40602377
+2.95	5.994205679	11.16806038	12.09201991	7.213022003	8.821388844	9.320283371
-3	-66.88339902	-125.7614641	-134.149269	-82.9271103	-100.2777767	-106.026005
+3	5.994205679	11.16806038	12.09201991	7.213022003	8.821388844	9.320283371
(Span 3) -4	-1.69E+00	-3.147756304	-3.408177457	-2.033015107	-2.4863388	-2.626953925
+4	65.9199643	120.0089515	126.9920348	80.10048756	96.98950195	102.0425406
-3.05	-1.69E+00	-3.147756304	-3.408177457	-2.033015107	-2.4863388	-2.626953925
+3.05	63.68283522	113.8040185	119.8533442	76.44843852	92.62757708	97.18834318
-3.1	-1.910722733	-3.147756304	-3.408177457	-2.033015107	-2.4863388	-2.626953925
+3.1	60.5295047	105.4196181	110.2494688	71.47545553	86.68332729	90.596635
-3.15	-2.878700256	-3.307526779	-3.408177457	-3.272218313	-3.459109989	-3.399017068
+3.15	57.93089222	98.60654927	102.4759218	67.40698495	81.81692019	85.21687331
-3.2	-4.629462465	-5.622099294	-5.234039928	-5.177727096	-5.724993587	-5.724184781
+3.2	54.38133938	89.50566344	92.12877234	61.93947723	75.27309982	78.00260595
-3.25	-6.586800086	-7.582144525	-7.092591644	-7.033117204	-7.692825011	-7.747315681
+3.25	51.46940259	82.18619908	83.83377946	57.51818947	69.97853496	72.17998918
-3.3	-9.318317781	-10.41852465	-10.33763861	-9.51611846	-10.41498086	-10.85890633
+3.3	47.54644784	72.49960898	73.10794011	51.63790625	62.933243	64.44944329
-3.35	-11.60026021	-13.17135916	-13.39062782	-11.576296	-12.67247991	-13.40502691
+3.35	44.36697607	64.80093037	65.94081893	46.92736247	57.28679494	58.26658101
-3.4	-14.94228666	-17.44211572	-17.90704028	-14.37917993	-16.00653597	-16.88121513
+3.4	40.12947711	56.03765757	56.9836806	40.71603156	49.83810561	50.34353346
-3.45	-17.72661893	-21.101922	-21.91182134	-16.67066883	-19.35993706	-19.73183621
+3.45	36.7282664	49.07783677	50.98333088	35.79086968	43.92933943	44.29015848
-3.5	-21.49802215	-26.56479004	-27.73594501	-20.08694469	-24.4102493	-24.31018023
+3.5	32.23508474	40.70987908	43.10494676	30.01930174	37.00222264	36.53187878
-3.55	-24.56934653	-31.40040977	-32.53261684	-23.52446771	-28.57585992	-28.78308545
+3.55	28.65789859	34.7713206	36.86860347	26.02431239	31.5212084	31.30482342
-3.6	-28.68031287	-38.32926579	-39.01662271	-28.48027457	-34.71248886	-34.83221078
+3.6	23.96787321	28.18742773	29.42512422	22.51106567	25.31715885	26.79321772

-3.65	**-31.99283937**	**-44.00335586**	**-44.5020247**	**-32.400109**	**-39.45686073**	**-39.85326594**
+3.65	**20.2693352**	**23.13914174**	**24.11089839**	**19.72176567**	**21.73953617**	**23.21698642**
-3.7	**-36.38450924**	**-52.17925811**	**-52.42518307**	**-37.85953933**	**-46.05925461**	**-46.8310868**
+3.7	**15.99257601**	**17.77616382**	**17.94882752**	**16.0742452**	**17.75857532**	**18.54751327**
-3.75	**-39.89248648**	**-58.90142781**	**-59.28100023**	**-42.27512879**	**-51.39530079**	**-52.48634367**
+3.75	**12.62764616**	**15.7710669**	**17.23607804**	**13.19801641**	**14.61884563**	**14.87074988**
-3.8	**-44.50600105**	**-67.89595274**	**-68.95670183**	**-48.14878218**	**-58.4886216**	**-60.02297879**
+3.8	**8.265284206**	**15.7710669**	**17.23607804**	**10.06638813**	**12.23021787**	**13.03432113**
-3.85	**-48.16363552**	**-75.14087203**	**-76.78108161**	**-52.85475395**	**-64.16835045**	**-66.07156294**
+3.85	**7.973268728**	**15.7710669**	**17.23607804**	**10.06638813**	**12.23021787**	**13.03432113**
-3.9	**-52.94012041**	**-84.74209573**	**-87.18715324**	**-59.06086146**	**-71.65447454**	**-74.06073269**
+3.9	**7.973268728**	**15.7710669**	**17.23607804**	**10.06638813**	**12.23021787**	**13.03432113**
-3.95	**-56.7016326**	**-92.40801717**	**-95.52284043**	**-63.99363305**	**-77.60158656**	**-80.41993049**
+3.95	**7.973268728**	**15.7710669**	**17.23607804**	**10.06638813**	**12.23021787**	**13.03432113**
-5	**-61.58227877**	**-102.4851665**	**-106.5134525**	**-70.45051071**	**-85.38249386**	**-88.75538386**
+5	**7.973268728**	**15.7710669**	**17.23607804**	**10.06638813**	**12.23021787**	**13.03432113**

3-Span: Moment (Max and Min) Raw Data Results - 80' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-31.892813	-22.414534	-30.238147	-30.851261	-29.369425	-18.040021	-24.414907	-27.811693	-31.086412	-34.450920
+0.05	228.851375	165.801357	200.839397	189.397820	170.029276	134.308123	181.031022	202.332574	216.735397	230.149315
-0.1	-63.785626	-44.829069	-60.476294	-61.702521	-58.738851	-36.080043	-48.829814	-55.623386	-62.172825	-68.901839
+0.1	423.567319	308.097624	368.720565	344.601749	310.727976	249.631109	336.505187	375.496726	401.795029	428.449946
-0.15	-95.678439	-67.243603	-90.714441	-92.553782	-88.108276	-54.120064	-73.244721	-83.435079	-93.259237	-103.352759
+0.15	585.041625	426.664714	504.094536	466.242896	423.197457	346.003628	466.258399	519.323433	568.193364	603.768768
-0.2	-127.571252	-89.658137	-120.952588	-123.405043	-117.477701	-72.160086	-97.659628	-111.246772	-124.345650	-137.803678
+0.2	714.615768	522.012574	607.867624	565.427813	515.837592	423.714168	570.824118	634.475471	703.035580	751.477268
-0.25	-159.464066	-112.072672	-151.190735	-154.256304	-146.847127	-90.200107	-122.074535	-139.058465	-155.432062	-172.254598
+0.25	810.044552	594.796407	689.253546	637.480560	584.940938	483.271128	650.892669	725.114033	806.422552	872.622876
-0.3	-191.356879	-134.487206	-181.428882	-185.107564	-176.216552	-108.240128	-146.489442	-166.870158	-186.518475	-206.705518
+0.3	875.850078	645.816649	746.201350	680.430509	628.588896	525.298987	712.881366	797.344291	879.445223	960.130546
-0.35	-223.249692	-156.901740	-211.667029	-215.958825	-205.585977	-126.280150	-170.904349	-194.681851	-217.604887	-241.156437
+0.35	927.617020	682.765437	775.318551	716.063429	664.026371	550.538418	756.327405	843.556505	931.087838	1014.841967
-0.4	-255.142505	-179.316275	-241.905176	-246.810086	-234.955403	-144.320171	-195.319256	-222.493544	-248.691300	-275.607357
+0.4	950.351840	701.334620	780.915645	738.855624	686.475181	559.846450	777.768965	864.688659	958.813168	1041.604194
-0.45	-287.035318	-201.730809	-272.143323	-277.661347	-264.324828	-162.360193	-219.734162	-250.305237	-279.777712	-310.058276
+0.45	945.732380	700.536289	768.641076	744.967201	693.016796	554.196180	778.229508	861.984667	959.955060	1047.398755
-0.5	-318.928131	-224.145344	-302.381469	-308.512607	-293.694253	-180.400214	-244.149069	-278.116930	-310.864124	-344.509196
+0.5	932.756177	689.822297	754.823981	726.113939	677.938581	547.603613	765.648315	848.482461	943.664814	1027.796544
-0.55	-350.820944	-246.559878	-332.619616	-339.363868	-323.063679	-198.440235	-268.563976	-305.928623	-341.950537	-378.960115
+0.55	900.575883	664.291664	739.286371	698.341135	652.543871	531.424037	736.518219	818.757425	906.951269	983.405781
-0.6	-382.713757	-268.974412	-362.857763	-370.215129	-352.433104	-216.480257	-292.978883	-333.740315	-373.036949	-413.411035
+0.6	843.525307	621.821726	702.830929	650.537215	609.242366	501.011060	689.227131	767.714386	846.927976	921.963907
-0.65	-414.606570	-291.388947	-393.095910	-401.066390	-381.802529	-234.520278	-317.393790	-361.552008	-404.123362	-447.861955
+0.65	763.817620	563.955909	644.611882	587.997926	551.528290	457.533511	625.459132	697.236701	765.761951	836.227926
-0.7	-446.499384	-313.803481	-423.334057	-431.917650	-411.171955	-252.560300	-341.808697	-389.363701	-435.209774	-482.312874
+0.7	665.075417	494.713386	562.363403	511.599008	480.399245	402.278344	547.055443	609.387896	669.793294	728.442829
-0.75	-478.392197	-336.218015	-453.572204	-462.768911	-440.541380	-270.600321	-366.223604	-417.175394	-466.296187	-516.763794
+0.75	551.848919	413.526556	458.376467	417.503100	392.670356	336.641732	456.014090	506.411788	556.599112	601.380246
-0.8	-510.285010	-358.632550	-483.810351	-493.620172	-469.910805	-288.640342	-390.638511	-444.987087	-497.382599	-551.214713
+0.8	421.199358	321.024929	335.154865	299.229276	283.638646	262.146278	354.489926	390.732278	427.986527	458.037121
-0.85	-542.177823	-381.047084	-514.048498	-524.471433	-515.344923	-306.680364	-415.053418	-472.798780	-528.469012	-585.665633
+0.85	275.949585	219.230821	204.374517	177.054616	174.332109	180.423937	244.794670	264.953294	286.788379	301.635383
-0.9	-574.070636	-403.461618	-544.286645	-555.322693	-626.368063	-324.720385	-439.468325	-500.610473	-559.555424	-620.116553
+0.9	137.572036	124.568702	124.675611	109.356142	125.777482	93.448116	136.118804	141.804266	152.237888	152.327254
-0.95	-605.963449	-425.876153	-574.524792	-586.173954	-784.193233	-342.760407	-463.883232	-528.422166	-590.641836	-654.567472
+0.95	128.400987	90.738699	117.616234	115.431483	108.201917	73.238478	99.226323	112.618641	125.711884	138.927253
-1	-637.856238	-448.290682	-604.762955	-617.025218	-980.124286	-360.800424	-488.298137	-556.233862	-621.728238	-689.018391
+1	135.158933	95.514421	123.806562	121.506826	111.819450	77.093134	104.448762	118.545938	132.328300	146.239213
(Span 2) -2	-637.856238	-448.290682	-604.762955	-617.025218	-980.124286	-360.800424	-488.298137	-556.233862	-621.728238	-689.018391
+2	135.158933	95.514421	123.806562	121.506826	111.819450	77.093134	104.448762	118.545938	132.328300	146.239213
-2.05	-457.068514	-323.002054	-418.677877	-410.900738	-732.237793	-260.706583	-353.215451	-400.887911	-447.495832	-494.538724
+2.05	103.989079	73.487238	95.254750	93.485371	96.248399	59.314201	80.361174	91.207312	101.811236	112.514066
-2.1	-425.898644	-300.974871	-390.126064	-382.879290	-520.537037	-242.927651	-329.127859	-373.549288	-416.978773	-460.813568
+2.1	167.580915	148.978169	148.987470	118.516653	146.680460	114.110360	167.078514	179.566002	191.478395	197.815230
-2.15	-394.728775	-278.947688	-361.574252	-354.857841	-372.764199	-225.148719	-305.040268	-346.210665	-386.461714	-427.088411
+2.15	339.709944	266.766078	250.427128	219.158700	220.306270	218.454616	302.262129	328.083977	353.911216	378.296965
-2.2	-363.558905	-256.920505	-333.022440	-326.836392	-301.293871	-207.369787	-280.952677	-318.872042	-355.944655	-393.363255
+2.2	506.382634	384.639042	409.579455	362.821033	333.971181	312.262555	430.092438	474.077242	517.225262	559.696083

-2.25	-332.389036	-234.893322	-304.470628	-298.814943	-278.158174	-189.590856	-256.865086	-291.533419	-325.427596	-359.638098
+2.25	659.082213	489.767933	552.078225	506.094538	463.413080	397.856768	544.750511	605.176398	663.240963	722.171722
-2.3	-301.219166	-212.866139	-275.918815	-270.793495	-257.141601	-171.811924	-232.777495	-264.194796	-294.910538	-325.912942
+2.3	782.708784	578.384214	665.209266	617.816142	575.669526	466.587904	640.610581	713.302697	786.757035	857.425298
-2.35	-270.049297	-190.838956	-247.367003	-242.772046	-236.125028	-154.032992	-208.689904	-236.856173	-264.393479	-292.187785
+2.35	882.244207	649.550884	751.912954	711.560982	662.817793	520.860507	718.826611	801.358723	886.215945	964.090090
-2.4	-238.879427	-168.811773	-218.815191	-214.750597	-215.108455	-136.254060	-184.602312	-209.517550	-233.876420	-258.462629
+2.4	953.150033	699.235577	806.718530	777.507664	723.859403	559.640012	774.076111	863.121468	956.763828	1040.834580
-2.45	-207.709558	-146.784590	-190.263379	-186.729149	-194.091882	-118.475129	-160.514721	-182.178926	-203.359361	-224.737472
+2.45	990.775863	728.886380	834.425589	819.093906	763.643874	579.003044	806.177418	897.010732	998.289313	1089.894630
-2.5	-176.539688	-124.757413	-161.711566	-158.707721	-173.075318	-100.696197	-136.427130	-154.840327	-172.842342	-191.012316
+2.5	1000.240409	737.005247	835.082094	830.209508	777.309705	582.626005	816.270304	906.267676	1010.641868	1105.802348
-2.55	-207.709464	-146.784596	-190.263372	-186.729176	-194.091895	-118.475136	-160.514706	-182.178954	-203.359407	-224.737405
+2.55	990.848621	728.881555	834.424440	819.092723	763.642365	578.999012	806.179648	897.005456	998.290720	1089.897230
-2.6	-238.879319	-168.811779	-218.815184	-214.750631	-215.108471	-136.254069	-184.602294	-209.517580	-233.876471	-258.462552
+2.6	953.438965	699.235818	806.712048	777.510139	723.860901	559.650486	774.078661	863.126477	956.765205	1040.835535
-2.65	-270.049173	-190.838963	-247.366996	-242.772086	-236.125048	-154.033003	-208.689882	-236.856207	-264.393535	-292.187699
+2.65	882.408649	649.553179	751.907626	711.564657	662.816117	520.874100	718.830977	801.365282	886.218733	964.090930
-2.7	-301.219027	-212.866146	-275.918808	-270.793540	-257.141625	-171.811936	-232.777471	-264.194833	-294.910599	-325.912846
+2.7	782.878883	578.385679	665.213928	617.818500	575.669213	466.593027	640.614077	713.302552	786.758765	857.430649
-2.75	-332.388882	-234.893330	-304.470620	-298.814995	-278.158201	-189.590870	-256.865059	-291.533460	-325.427664	-359.637993
+2.75	659.061648	489.769017	552.081992	506.099809	463.409747	397.869218	544.753647	605.181404	663.242242	722.181717
-2.8	-363.558736	-256.920513	-333.022433	-326.836450	-301.293903	-207.369804	-280.952647	-318.872086	-355.944728	-393.363141
+2.8	506.350911	384.639875	409.582287	362.825170	333.969802	312.262961	430.095365	474.081926	517.226289	559.697349
-2.85	-394.728590	-278.947696	-361.574245	-354.857905	-372.764133	-225.148737	-305.040235	-346.210713	-386.461792	-427.088288
+2.85	339.771048	266.767094	250.429140	219.160158	220.305766	218.462861	302.262524	328.086198	353.912562	378.304149
-2.9	-425.898445	-300.974880	-390.126057	-382.879359	-520.537282	-242.927671	-329.127823	-373.549339	-416.978856	-460.813435
+2.9	167.450595	148.978563	148.987834	118.516934	146.680215	114.107479	167.075285	179.569652	191.485771	197.813333
-2.95	-457.068299	-323.002063	-418.677869	-410.900814	-732.237779	-260.706605	-353.215411	-400.887966	-447.495920	-494.538582
+2.95	103.989138	73.487240	95.254744	93.485338	96.246881	59.314189	80.361191	91.207304	101.811226	112.514093
-3	-637.861473	-448.290816	-604.763057	-617.025408	-980.124476	-360.800517	-488.298125	-556.233986	-621.728348	-689.018428
+3	135.158999	95.514419	123.806563	121.506800	111.819434	77.093126	104.448776	118.545923	132.328276	146.239254
(Span 3) -4	-637.861473	-448.290816	-604.763057	-617.025408	-980.124476	-360.800517	-488.298125	-556.233986	-621.728348	-689.018428
+4	135.158999	95.514419	123.806563	121.506800	111.819434	77.093126	104.448776	118.545923	132.328276	146.239254
-3.05	-605.968399	-425.876275	-574.524905	-586.174138	-784.193187	-342.760491	-463.883219	-528.422286	-590.641930	-654.567506
+3.05	128.401049	90.738698	117.616235	115.431460	108.201903	73.238470	99.226337	112.618627	125.711863	138.927291
-3.1	-574.075324	-403.461734	-544.286753	-555.322868	-626.368240	-324.720465	-439.468312	-500.610587	-559.555512	-620.116585
+3.1	137.572102	124.572505	124.679086	109.356120	125.771321	93.440308	136.126132	141.801999	152.241368	152.330672
-3.15	-542.182249	-381.047193	-514.048601	-524.471598	-515.344965	-306.680439	-415.053406	-472.798888	-528.469094	-585.665663
+3.15	276.261335	219.232864	204.377122	177.055555	174.326631	180.432319	244.792870	264.949969	286.791178	301.641551
-3.2	-510.289174	-358.632652	-483.810449	-493.620327	-469.910819	-288.640413	-390.638500	-444.987189	-497.382676	-551.214742
+3.2	421.507524	321.027006	335.153834	299.226927	283.637226	262.154859	354.488456	390.729205	427.989416	458.043588
-3.25	-478.396099	-336.218111	-453.572297	-462.769057	-440.541393	-270.600387	-366.223593	-417.175490	-466.296258	-516.763821
+3.25	552.138687	413.528388	458.374563	417.499429	392.668062	336.650109	456.012575	506.408586	556.601678	601.386517
-3.3	-446.503024	-313.803570	-423.334145	-431.917787	-411.171966	-252.560361	-341.808687	-389.363791	-435.209840	-482.312899
+3.3	665.332700	494.714588	562.360295	511.593646	480.402467	402.284540	547.053511	609.384095	669.795061	728.448223
-3.35	-414.609949	-291.389029	-393.095993	-401.066517	-381.802540	-234.520335	-317.393781	-361.552092	-404.123423	-447.861978
+3.35	764.140287	563.955113	644.607145	587.995403	551.526754	457.540615	625.456366	697.231894	765.761040	836.232099
-3.4	-382.716874	-268.974488	-362.857841	-370.215246	-352.433114	-216.480308	-292.978874	-333.740392	-373.037005	-413.411056
+3.4	843.845060	621.819839	702.824140	650.532830	609.245242	501.017138	689.223171	767.708187	846.925674	921.966445
-3.45	-350.823799	-246.559946	-332.619689	-339.363976	-323.063687	-198.440282	-268.563968	-305.928693	-341.950587	-378.960135
+3.45	900.836421	664.288494	739.280903	698.335669	652.540459	531.429028	736.512996	818.749667	906.947237	983.405165
-3.5	-318.930724	-224.145405	-302.381537	-308.512706	-293.694261	-180.400256	-244.149062	-278.116994	-310.864169	-344.509213
+3.5	932.946859	689.817503	754.828202	726.109726	677.941425	547.607279	765.641421	848.472781	943.658727	1027.793672
-3.55	-287.037649	-201.730864	-272.143385	-277.661436	-264.324835	-162.360230	-219.734155	-250.305295	-279.777751	-310.058292
+3.55	945.570328	700.541809	768.636693	744.961693	693.020881	554.193203	778.222521	861.980756	959.947690	1047.402511
-3.6	-255.144575	-179.316323	-241.905233	-246.810165	-234.955408	-144.320204	-195.319249	-222.493596	-248.691333	-275.607371

+3.6	950.115154	701.338448	780.909293	738.860005	686.477859	559.842179	777.760055	864.682718	958.817939	1041.605324
-3.65	-223.251500	-156.901782	-211.667081	-215.958895	-205.585982	-126.280178	-170.904342	-194.681897	-217.604915	-241.156449
+3.65	927.296553	682.767213	775.311299	716.064854	664.028571	550.532610	756.331228	843.548062	931.089872	1014.839564
-3.7	-191.358425	-134.487241	-181.428929	-185.107625	-176.216555	-108.240152	-146.489436	-166.870197	-186.518497	-206.705528
+3.7	875.633451	645.815942	746.205901	680.427155	628.586849	525.291441	712.882810	797.347963	879.443923	960.124944
-3.75	-159.465350	-112.072700	-151.190777	-154.256355	-146.847129	-90.200126	-122.074530	-139.058498	-155.432079	-172.254606
+3.75	809.734604	594.793517	689.255443	637.474787	584.943961	483.261737	650.891366	725.114906	806.418251	872.613892
-3.8	-127.572275	-89.658159	-120.952625	-123.405084	-117.477703	-72.160100	-97.659623	-111.246799	-124.345661	-137.803685
+3.8	713.113145	522.007413	607.866366	565.430030	515.838959	423.702966	570.820360	634.473277	703.028129	751.479119
-3.85	-95.679200	-67.243618	-90.714472	-92.553814	-88.108276	-54.120074	-73.244717	-83.435100	-93.259243	-103.352764
+3.85	584.526526	426.657019	504.090186	466.241907	423.196871	345.990424	466.252004	519.318223	568.182692	603.766818
-3.9	-63.786125	-44.829077	-60.476320	-61.702544	-58.738850	-36.080048	-48.829811	-55.623401	-62.172825	-68.901842
+3.9	423.521010	308.087243	368.713057	344.597556	310.725471	249.615883	336.496009	375.488466	401.795325	428.451006
-3.95	-31.893050	-22.414536	-30.238168	-30.851274	-29.369424	-18.040022	-24.414904	-27.811702	-31.086407	-34.450921
+3.95	228.966972	165.788342	200.842763	189.401264	170.031412	134.310285	181.019186	202.320990	216.732168	230.146484
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 80’ Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-31.892813	-29.555687	-31.758506	-29.925442	-36.162813	-35.148441	-37.177694	-15.455893
+0.05	228.851375	223.503981	237.726766	222.321228	263.257002	228.982087	241.760769	116.125809
-0.1	-63.785626	-59.111375	-63.517012	-59.850884	-72.325625	-70.296882	-74.355388	-30.911786
+0.1	423.567319	416.143464	442.221135	413.347093	488.573235	419.919615	443.278897	215.409702
-0.15	-95.678439	-88.667062	-95.275518	-89.776326	-108.488438	-105.445323	-111.533082	-46.367679
+0.15	585.041625	577.650998	613.273878	572.892314	675.916590	573.164293	604.918230	298.114200
-0.2	-127.571252	-118.222749	-127.034024	-119.701768	-144.651251	-140.593764	-148.710776	-61.823572
+0.2	714.615768	708.617632	751.548792	701.599435	826.123452	693.690578	732.155720	364.603955
-0.25	-159.464066	-147.778437	-158.792530	-149.627210	-180.814063	-175.742205	-185.888470	-77.279465
+0.25	810.044552	809.823234	857.913020	800.302725	952.113516	797.941441	843.192098	415.385603
-0.3	-191.356879	-177.334124	-190.551036	-179.552653	-216.976876	-210.890646	-223.066163	-92.735358
+0.3	875.850078	882.236468	933.437022	879.916049	1047.240922	867.320756	917.268188	451.329803
-0.35	-223.249692	-206.889811	-222.309542	-209.478095	-253.139689	-246.039087	-260.243857	-108.191251
+0.35	927.617020	929.338932	988.606258	933.796168	1108.337757	915.854890	968.016185	472.733271
-0.4	-255.142505	-236.445499	-254.068048	-239.403537	-289.302501	-281.187528	-297.421551	-123.647144
+0.4	950.351840	958.742917	1018.090149	960.885333	1136.635548	933.517744	987.270931	480.364903
-0.45	-287.035318	-266.001186	-285.826554	-269.328979	-325.465314	-316.335969	-334.599245	-139.103037
+0.45	945.732380	962.298575	1020.085163	962.014005	1133.958491	921.553746	975.037775	475.095430
-0.5	-318.928131	-295.556873	-317.585061	-299.254421	-361.628127	-351.484410	-371.776939	-154.558930
+0.5	932.756177	945.863083	1003.551241	946.087930	1116.643987	904.911881	957.348355	469.349255
-0.55	-350.820944	-325.112561	-349.343567	-329.179863	-397.790939	-386.632851	-408.954633	-170.014823
+0.55	900.575883	907.269780	963.813525	909.703022	1075.869856	883.865525	934.657951	457.242801
-0.6	-382.713757	-354.668248	-381.102073	-359.105305	-433.953752	-421.781292	-446.132327	-185.470716
+0.6	843.525307	847.315649	900.798923	851.201535	1008.147862	832.249261	879.669563	432.536024
-0.65	-414.606570	-384.223935	-412.860579	-389.030747	-470.116565	-456.929733	-483.310021	-200.926609
+0.65	763.817620	771.533889	816.718301	772.651241	915.639274	752.445165	794.912066	396.235636
-0.7	-446.499384	-413.779623	-444.619085	-418.956189	-506.279377	-492.078174	-520.487715	-216.382502
+0.7	665.075417	679.398344	716.377722	676.311959	800.883613	652.318771	689.668094	349.450829
-0.75	-478.392197	-443.335310	-476.377591	-448.881631	-542.442190	-527.226615	-557.665409	-231.838395
+0.75	551.848919	570.944489	600.380708	564.635212	666.794879	529.854513	559.856716	293.392819
-0.8	-510.285010	-472.890997	-508.136097	-478.807073	-578.605003	-562.375056	-594.843102	-247.294288
+0.8	421.199358	448.684271	469.150310	440.264150	516.519337	385.566263	407.030272	229.375006
-0.85	-542.177823	-502.446685	-539.894603	-508.732516	-614.767815	-597.523497	-632.020796	-262.750181
+0.85	275.949585	315.318598	325.567913	306.033672	353.435661	234.830456	248.265211	158.812885
-0.9	-574.070636	-532.002372	-571.653109	-538.657958	-650.930628	-632.671938	-669.198490	-278.206074
+0.9	137.572036	176.913983	176.913983	169.306123	182.034981	134.592989	141.676830	98.494195
-0.95	-605.963449	-561.558059	-603.411615	-568.583400	-687.093441	-667.820379	-706.376184	-293.661967
+0.95	128.400987	120.421198	129.270684	121.772168	146.962401	136.823377	144.643529	62.091765
-1	-637.856238	-591.113751	-635.170125	-598.508830	-723.256260	-702.968803	-743.553860	-309.117853
+1	135.158933	126.759156	136.074407	128.181230	154.697262	144.024608	152.256347	65.359753
(Span 2) -2	-637.856238	-591.113751	-635.170125	-598.508830	-723.256260	-702.968803	-743.553860	-309.117853
+2	135.158933	126.759156	136.074407	128.181230	154.697262	144.024608	152.256347	65.359753
-2.05	-457.068514	-428.662849	-460.164122	-433.471667	-523.141356	-487.049366	-514.886791	-221.027731
+2.05	103.989079	97.526427	104.693430	98.620548	119.021551	110.810185	117.143551	55.168348
-2.1	-425.898644	-399.430109	-428.783147	-403.910989	-487.465637	-453.834948	-479.773995	-205.954706
+2.1	167.580915	216.474958	221.591438	210.590151	232.434577	162.048011	171.113052	115.568367
-2.15	-394.728775	-370.197369	-397.402172	-374.350311	-451.789918	-420.620529	-444.661199	-190.881680
+2.15	339.709944	380.604585	397.634041	377.202120	436.995072	283.918967	299.851641	189.349365
-2.2	-363.558905	-340.964630	-366.021197	-344.789633	-416.114199	-387.406110	-409.548403	-175.808655
+2.2	506.382634	534.954328	563.310060	533.234462	625.241454	474.095035	501.117627	270.232394

-2.25	-332.389036	-311.731890	-334.640222	-315.228954	-380.438481	-354.191692	-374.435606	-160.735629
+2.25	659.082213	672.471877	711.827639	673.833486	795.737919	640.011971	676.858381	344.401656
-2.3	-301.219166	-282.499150	-303.259247	-285.668276	-344.762762	-320.977273	-339.322810	-145.662604
+2.3	782.708784	788.621802	837.613835	791.103831	937.065430	778.252337	822.495384	403.240841
-2.35	-270.049297	-253.266410	-271.878272	-256.107598	-309.087043	-287.762854	-304.210014	-130.589578
+2.35	882.244207	883.841573	939.520784	887.328583	1050.764336	886.188561	936.919348	450.043099
-2.4	-238.879427	-224.033671	-240.497297	-226.546920	-273.411324	-254.548436	-269.097218	-115.516552
+2.4	953.150033	951.936815	1011.555425	955.595498	1132.168879	958.437683	1013.626812	482.500581
-2.45	-207.709558	-194.800931	-209.116322	-196.986241	-237.735605	-221.334017	-233.984422	-100.443527
+2.45	990.775863	994.001640	1055.546501	994.983966	1177.779186	995.354499	1053.075590	498.439648
-2.5	-176.539688	-165.568191	-177.735361	-167.425589	-202.059887	-188.119620	-198.871626	-85.370501
+2.5	1000.240409	1007.843255	1069.458700	1007.974880	1189.419762	997.773054	1055.890822	501.011059
-2.55	-207.709464	-194.800861	-209.116337	-196.986271	-237.735565	-221.334043	-233.984402	-100.443521
+2.55	990.848621	994.006267	1055.552925	994.987675	1177.782721	995.351709	1053.072471	498.440077
-2.6	-238.879319	-224.033590	-240.497314	-226.546952	-273.411277	-254.548466	-269.097197	-115.516546
+2.6	953.438965	951.939992	1011.555885	955.599542	1132.177675	958.439329	1013.628356	482.503585
-2.65	-270.049173	-253.266319	-271.878291	-256.107634	-309.086989	-287.762888	-304.209993	-130.589571
+2.65	882.408649	883.843427	939.524198	887.334716	1050.774875	886.191514	936.922262	450.041470
-2.7	-301.219027	-282.499047	-303.259268	-285.668316	-344.762700	-320.977311	-339.322788	-145.662596
+2.7	782.878883	788.622646	837.616121	791.108890	937.067938	778.253926	822.496861	403.241862
-2.75	-332.388882	-311.731776	-334.640244	-315.228998	-380.438412	-354.191734	-374.435583	-160.735621
+2.75	659.061648	672.470524	711.829509	673.838100	795.746441	640.010772	676.856911	344.405435
-2.8	-363.558736	-340.964505	-366.021221	-344.789680	-416.114123	-387.406157	-409.548379	-175.808646
+2.8	506.350911	534.952858	563.311723	533.238837	625.249587	474.099137	501.121739	270.722179
-2.85	-394.728590	-370.197234	-397.402198	-374.350362	-451.789835	-420.620579	-444.661174	-190.881671
+2.85	339.771048	380.603272	397.636062	377.203564	437.000220	283.926967	299.859872	189.351567
-2.9	-425.898445	-399.429963	-428.783174	-403.911043	-487.465547	-453.835002	-479.773969	-205.954696
+2.9	167.450595	216.477025	221.594810	210.596015	232.444212	162.048866	171.114076	115.001617
-2.95	-457.068299	-428.662691	-460.164151	-433.471725	-523.141258	-487.049425	-514.886765	-221.027721
+2.95	103.989138	97.526466	104.693428	98.620541	119.021583	110.810169	117.143539	55.330133
-3	-637.861473	-591.113843	-635.170315	-598.508978	-723.256279	-702.968865	-743.553995	-309.117860
+3	135.158999	126.759203	136.074399	128.181214	154.697293	144.024590	152.256350	65.359756
(Span 3) -4	-637.861473	-591.113843	-635.170315	-598.508978	-723.256279	-702.968865	-743.553995	-309.117860
+4	135.158999	126.759203	136.074399	128.181214	154.697293	144.024590	152.256350	65.359756
-3.05	-605.968399	-561.558151	-603.411800	-568.583529	-687.093466	-667.820421	-706.376295	-293.661966
+3.05	128.401049	120.421243	129.270679	121.772153	146.962429	136.823360	144.643533	62.091768
-3.1	-574.075324	-532.002459	-571.653284	-538.658079	-650.930652	-632.671977	-669.198594	-278.206073
+3.1	137.572102	176.919433	176.919433	169.299809	182.031434	134.596741	141.680780	97.615480
-3.15	-542.182249	-502.446767	-539.894768	-508.732630	-614.767838	-597.523533	-632.020893	-262.750180
+3.15	276.261335	315.321944	325.570287	306.030643	353.429383	234.833153	248.267958	158.809587
-3.2	-510.289174	-472.891075	-508.136253	-478.807180	-578.605025	-562.375089	-594.843193	-247.294286
+3.2	421.507524	448.687848	469.152877	440.261540	516.513415	385.570431	407.034867	229.371629
-3.25	-478.396099	-443.335383	-476.377737	-448.881731	-542.442211	-527.226645	-557.665492	-231.838393
+3.25	552.138687	570.947868	600.383000	564.632561	666.788783	529.857808	559.860400	293.389393
-3.3	-446.503024	-413.779691	-444.619222	-418.956281	-506.279397	-492.078201	-520.487792	-216.382500
+3.3	665.332700	679.401091	716.379272	676.308813	800.876797	652.320798	689.670449	349.447282
-3.35	-414.609949	-384.223999	-412.860706	-389.030832	-470.116584	-456.929757	-483.310091	-200.926606
+3.35	764.140287	771.535415	816.717050	772.647082	915.631108	752.443940	794.910983	396.231812
-3.4	-382.716874	-354.668307	-381.102191	-359.105382	-433.953770	-421.781312	-446.132390	-185.470713
+3.4	843.845060	847.314451	900.796174	851.195937	1008.137842	832.246010	879.666347	432.531849
-3.45	-350.823799	-325.112615	-349.343675	-329.179933	-397.790956	-386.632868	-408.954690	-170.014820
+3.45	900.836421	907.267006	963.809032	909.695909	1075.875211	883.860002	934.652338	457.238272
-3.5	-318.930724	-295.556924	-317.585159	-299.254483	-361.628143	-351.484424	-371.776989	-154.558926
+3.5	932.946859	945.858299	1003.544543	946.078788	1116.646877	904.903595	957.339826	469.344323
-3.55	-287.037649	-266.001232	-285.826644	-269.329034	-325.465329	-316.335980	-334.599288	-139.103033
+3.55	945.570328	962.304479	1020.070806	962.006907	1133.956952	921.546575	975.030025	475.093288
-3.6	-255.144575	-236.445540	-254.068128	-239.403584	-289.302516	-281.187536	-297.421588	-123.647140

+3.6	**950.115154**	**958.746460**	**1018.095532**	**960.875877**	**1136.631257**	**933.523546**	**987.276817**	**480.362364**
-3.65	**-223.251500**	**-206.889848**	**-222.309613**	**-209.478135**	**-253.139702**	**-246.039092**	**-260.243887**	**-108.191246**
+3.65	**927.296553**	**929.339740**	**988.608745**	**933.783998**	**1108.330262**	**915.857871**	**968.019076**	**472.730252**
-3.7	**-191.358425**	**-177.334156**	**-190.551097**	**-179.552685**	**-216.976888**	**-210.890648**	**-223.066186**	**-92.735353**
+3.7	**875.633451**	**882.233915**	**933.435916**	**879.918542**	**1047.229816**	**867.320058**	**917.267182**	**451.326329**
-3.75	**-159.465350**	**-147.778464**	**-158.792581**	**-149.627236**	**-180.814075**	**-175.742204**	**-185.888486**	**-77.279459**
+3.75	**809.734604**	**809.817727**	**857.908754**	**800.301854**	**952.116429**	**797.937586**	**843.187741**	**415.381664**
-3.8	**-127.572275**	**-118.222772**	**-127.034066**	**-119.701786**	**-144.651261**	**-140.593760**	**-148.710785**	**-61.823566**
+3.8	**713.113145**	**708.609015**	**751.541199**	**701.595541**	**826.122320**	**693.683288**	**732.147719**	**364.606521**
-3.85	**-95.679200**	**-88.667080**	**-95.275550**	**-89.776337**	**-108.488447**	**-105.445315**	**-111.533084**	**-46.367673**
+3.85	**584.526526**	**577.639004**	**613.262672**	**572.885193**	**675.911615**	**573.160362**	**604.914152**	**298.116110**
-3.9	**-63.786125**	**-59.111388**	**-63.517035**	**-59.850887**	**-72.325634**	**-70.296871**	**-74.355384**	**-30.911779**
+3.9	**423.521010**	**416.128165**	**442.206348**	**413.336567**	**488.564179**	**419.912021**	**443.270945**	**215.410976**
-3.95	**-31.893050**	**-29.555696**	**-31.758519**	**-29.925438**	**-36.162820**	**-35.148427**	**-37.177683**	**-15.455886**
+3.95	**228.966972**	**223.485164**	**237.708215**	**222.307438**	**263.243966**	**228.985985**	**241.764893**	**116.126493**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 80' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-31.892813	-63.084271	-68.944310	-40.265553	-48.920865	-52.137271
+0.05	228.851375	374.511295	386.916964	258.815717	313.994993	325.522296
-0.1	-63.785626	-126.168543	-137.888620	-80.531107	-97.841730	-104.274542
+0.1	423.567319	680.367417	701.084975	473.379765	574.912648	594.286462
-0.15	-95.678439	-189.252814	-206.832930	-120.796660	-146.762595	-156.411813
+0.15	585.041625	941.497475	974.065367	644.477225	783.146655	811.914457
-0.2	-127.571252	-252.337085	-275.777240	-161.062214	-195.683461	-208.549084
+0.2	714.615768	1145.468944	1209.457416	790.361275	963.004686	994.338046
-0.25	-159.464066	-315.421356	-344.721550	-201.327767	-244.604326	-260.686355
+0.25	810.044552	1293.655368	1403.914033	904.480195	1093.885286	1139.726887
-0.3	-191.356879	-378.505628	-413.665860	-241.593321	-293.525191	-312.823626
+0.3	875.850078	1419.714122	1539.774345	978.590006	1177.266409	1244.700617
-0.35	-223.249692	-441.589899	-482.610170	-281.858874	-342.446056	-364.960896
+0.35	927.617020	1493.520504	1637.285919	1027.856065	1226.593782	1300.205841
-0.4	-255.142505	-504.674170	-551.554480	-322.124428	-391.366921	-417.098167
+0.4	950.351840	1553.507688	1670.848526	1042.768741	1239.440258	1317.301542
-0.45	-287.035318	-567.758442	-620.498790	-362.389981	-440.287786	-469.235438
+0.45	945.732380	1560.664235	1683.683239	1023.783241	1212.260359	1298.982313
-0.5	-318.928131	-630.842713	-689.443100	-402.655535	-489.208652	-521.372709
+0.5	932.756177	1530.135467	1657.207192	999.174539	1182.717186	1269.618978
-0.55	-350.820944	-693.926984	-758.387410	-442.921088	-538.129517	-573.509980
+0.55	900.575883	1472.111902	1570.730410	984.703611	1168.592853	1243.338157
-0.6	-382.713757	-757.011255	-827.331720	-483.186642	-587.050382	-625.647251
+0.6	843.525307	1360.677994	1481.775549	933.482110	1109.725475	1178.083042
-0.65	-414.606570	-820.095527	-896.276030	-523.452195	-635.971247	-677.784522
+0.65	763.817620	1224.640332	1336.194581	848.200641	1014.163454	1076.657642
-0.7	-446.499384	-883.179798	-965.220340	-563.717749	-684.892112	-729.921793
+0.7	665.075417	1049.303941	1135.143450	740.050694	887.847933	933.655654
-0.75	-478.392197	-946.264069	-1034.164650	-603.983302	-733.812977	-782.059064
+0.75	551.848919	834.526161	903.606655	603.238687	724.654782	752.706838
-0.8	-510.285010	-1009.348340	-1103.108960	-644.248856	-782.733843	-834.196335
+0.8	421.199358	594.019941	624.406101	439.588107	528.640362	538.031759
-0.85	-542.177823	-1072.432612	-1172.053270	-684.514409	-831.654708	-886.333606
+0.85	275.949585	341.904331	346.762496	278.938853	315.088976	331.145684
-0.9	-574.070636	-1135.516883	-1240.997580	-724.779963	-880.575573	-938.470877
+0.9	137.572036	226.641441	245.388778	159.403602	182.080241	189.140638
-0.95	-605.963449	-1198.601154	-1309.941890	-765.045516	-929.496438	-990.608148
+0.95	128.400987	239.232632	259.021488	154.509184	188.961753	199.648451
-1	-637.856238	-1261.685407	-1378.886184	-805.311071	-978.417301	-1042.745406
+1	135.158933	251.823825	272.654199	162.641242	198.907111	210.156266
(Span 2) -2	-637.856238	-1261.685407	-1378.886184	-805.311071	-978.417301	-1042.745406
+2	135.158933	251.823825	272.654199	162.641242	198.907111	210.156266
-2.05	-457.068514	-851.583884	-922.037387	-550.005364	-672.646121	-710.687673
+2.05	103.989079	193.749145	209.775695	125.133518	153.035888	161.690804
-2.1	-425.898644	-793.509970	-859.158884	-512.497649	-626.774899	-662.222199
+2.1	167.580915	226.246888	209.488370	194.230872	228.767233	230.370194
-2.15	-394.728775	-735.436056	-796.280380	-474.989935	-580.903677	-613.756726
+2.15	339.709944	426.333008	452.886438	335.597863	389.383652	407.639253
-2.2	-363.558905	-677.362142	-733.401877	-437.482221	-535.032455	-565.291252
+2.2	506.382634	729.511390	788.367655	536.606528	641.453425	669.129376

-2.25	-332.389036	-619.288228	-670.523373	-399.974506	-489.161233	-516.825779
+2.25	659.082213	1034.940371	1125.943187	727.067453	870.713296	919.209908
-2.3	-301.219166	-561.214314	-607.644870	-362.466792	-443.290011	-468.360305
+2.3	782.708784	1281.022323	1402.430129	881.326516	1052.425913	1119.456592
-2.35	-270.049297	-503.140400	-544.766366	-324.959077	-397.418789	-419.894832
+2.35	882.244207	1472.665640	1614.875534	1002.602192	1191.336843	1269.901139
-2.4	-238.879427	-445.066486	-481.887863	-287.451363	-351.547567	-371.429358
+2.4	953.150033	1620.488161	1756.252847	1081.825582	1284.639814	1368.158810
-2.45	-207.709558	-386.992572	-419.009359	-249.943648	-305.676345	-322.963885
+2.45	990.775863	1703.540848	1846.079844	1120.186396	1328.108460	1421.688834
-2.5	-176.539688	-328.922970	-356.130855	-212.435991	-259.805123	-274.498411
+2.5	1000.240409	1722.738880	1882.869208	1118.235049	1322.778709	1422.546344
-2.55	-207.709464	-386.997650	-419.009345	-249.943714	-305.676341	-322.963816
+2.55	990.848621	1703.540905	1846.079231	1120.182549	1328.105657	1421.683024
-2.6	-238.879319	-445.072329	-481.887848	-287.451437	-351.547564	-371.429278
+2.6	953.438965	1620.491499	1756.252009	1081.826826	1284.628663	1368.170073
-2.65	-270.049173	-503.147009	-544.766352	-324.959161	-397.418787	-419.894740
+2.65	882.408649	1472.669511	1614.874701	1002.605080	1191.338724	1269.912905
-2.7	-301.219027	-561.221688	-607.644856	-362.466884	-443.290010	-468.360202
+2.7	782.878883	1281.026467	1402.430081	881.327701	1052.433043	1119.460124
-2.75	-332.388882	-619.296368	-670.523360	-399.974607	-489.161232	-516.825664
+2.75	659.061648	1034.948543	1124.666518	727.083268	870.724937	919.217821
-2.8	-363.558736	-677.371047	-733.401864	-437.482330	-535.032455	-565.291126
+2.8	506.350911	729.518083	788.367444	536.610354	641.454242	669.135722
-2.85	-394.728590	-735.445727	-796.280368	-474.990053	-580.903678	-613.756588
+2.85	339.771048	426.327267	452.885565	335.596161	389.387230	407.641894
-2.9	-425.898445	-793.520406	-859.158872	-512.497777	-626.774901	-662.222050
+2.9	167.450595	226.239051	209.733791	194.231844	228.771928	230.376870
-2.95	-457.068299	-851.595085	-922.037376	-550.005500	-672.646124	-710.687512
+2.95	103.989138	193.746568	209.775676	125.133496	153.035875	161.690851
-3	-637.861473	-1261.685334	-1378.886226	-805.311050	-978.417427	-1042.745678
+3	135.158999	251.820507	272.654197	162.641203	198.907107	210.156316
(Span 3) -4	-637.861473	-1261.685334	-1378.886226	-805.311050	-978.417427	-1042.745678
+4	135.158999	251.820507	272.654197	162.641203	198.907107	210.156316
-3.05	-605.968399	-1198.601066	-1309.941914	-765.045497	-929.496556	-990.608393
+3.05	128.401049	239.229482	259.021487	154.509143	188.961752	199.648500
-3.1	-574.075324	-1135.516799	-1240.997602	-724.779945	-880.575684	-938.471109
+3.1	137.572102	226.638457	245.388777	159.358281	182.077031	189.140684
-3.15	-542.182249	-1072.432531	-1172.053290	-684.514392	-831.654813	-886.333824
+3.15	276.261335	341.897003	346.761418	278.942095	315.084599	331.141741
-3.2	-510.289174	-1009.348263	-1103.108977	-644.248840	-782.733941	-834.196540
+3.2	421.507524	594.009352	624.407209	439.593717	528.633161	538.028271
-3.25	-478.396099	-946.263996	-1034.164665	-603.983287	-733.813070	-782.059255
+3.25	552.138687	834.512703	903.607413	603.243076	724.645957	752.701966
-3.3	-446.503024	-883.179728	-965.220353	-563.717735	-684.892198	-729.921971
+3.3	665.332700	1049.296976	1135.991036	740.053448	887.852759	933.648791
-3.35	-414.609949	-820.095460	-896.276041	-523.452182	-635.971327	-677.784686
+3.35	764.140287	1224.645665	1336.193624	848.199542	1014.165412	1076.663482
-3.4	-382.716874	-757.011193	-827.331729	-483.186630	-587.050456	-625.647402
+3.4	843.845060	1360.842528	1481.773927	933.478587	1109.722592	1178.085528
-3.45	-350.823799	-693.926925	-758.387417	-442.921076	-538.129584	-573.510117
+3.45	900.836421	1472.120037	1571.835447	984.697262	1168.586597	1243.335373
-3.5	-318.930724	-630.842658	-689.443105	-402.655525	-489.208713	-521.372833
+3.5	932.946859	1530.139297	1657.206141	999.164826	1182.706960	1269.612154
-3.55	-287.037649	-567.758390	-620.498792	-362.389972	-440.287841	-469.235548
+3.55	945.570328	1560.659344	1684.065038	1023.774179	1212.254160	1298.988323
-3.6	-255.144575	-504.674122	-551.554480	-322.124420	-391.366970	-417.098264

+3.6	**950.115154**	**1553.497929**	**1670.847994**	**1042.775071**	**1239.446734**	**1317.303986**
-3.65	**-223.251500**	**-441.589855**	**-482.610168**	**-281.858867**	**-342.446098**	**-364.960979**
+3.65	**927.296553**	**1493.518568**	**1637.284594**	**1027.859258**	**1226.596590**	**1300.203163**
-3.7	**-191.358425**	**-378.505587**	**-413.665856**	**-241.593315**	**-293.525227**	**-312.823694**
+3.7	**875.633451**	**1419.706884**	**1539.774958**	**978.589049**	**1177.264276**	**1244.693606**
-3.75	**-159.465350**	**-315.421320**	**-344.721544**	**-201.327762**	**-244.604355**	**-260.686410**
+3.75	**809.734604**	**1293.657278**	**1403.913378**	**904.475658**	**1093.879046**	**1139.731039**
-3.8	**-127.572275**	**-252.337052**	**-275.777232**	**-161.062210**	**-195.683484**	**-208.549125**
+3.8	**713.113145**	**1145.480039**	**1209.455775**	**790.353086**	**963.009813**	**994.328794**
-3.85	**-95.679200**	**-189.252784**	**-206.832920**	**-120.796658**	**-146.762612**	**-156.411841**
+3.85	**584.526526**	**941.502301**	**974.064275**	**644.472405**	**783.146808**	**811.915733**
-3.9	**-63.786125**	**-126.168517**	**-137.888607**	**-80.531105**	**-97.841741**	**-104.274556**
+3.9	**423.521010**	**680.365351**	**701.085088**	**473.370837**	**574.907515**	**594.282104**
-3.95	**-31.893050**	**-63.084249**	**-68.944295**	**-40.265552**	**-48.920869**	**-52.137272**
+3.95	**228.966972**	**374.502649**	**386.918132**	**258.820323**	**313.984558**	**325.512194**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-18.684257**	***-22.780344***	***-28.815800***	**-14.30203061**	**-15.37508514**	**-14.48924465**	**-17.52136121**	**-17.35931285**	**-18.3659454**	**-7.526757031**
End Shear	**134.290044**	***159.614451***	***182.413897***	**116.808267**	**124.4813992**	**116.5619198**	**138.5232486**	**124.9578477**	**132.0014932**	**61.03153518**
-0.05	**-18.684257**	***-22.918137***	***-29.065862***	**-14.30203061**	**-15.37508514**	**-14.48924465**	**-17.52136121**	**-17.35931285**	**-18.3659454**	**-7.526757031**
+0.05	**125.2162317**	***147.186165***	***164.700192***	**108.7634862**	**115.8261767**	**108.4138427**	**128.6656646**	**114.898655**	**121.3562078**	**56.7829567**
-0.1	**-18.684257**	***-23.434556***	***-34.103404***	**-14.30203061**	**-15.37508514**	**-14.48924465**	**-17.52136121**	**-17.35931285**	**-18.3659454**	**-7.526757031**
+0.1	**115.2075085**	***134.199504***	***148.899675***	**100.3028128**	**106.728203**	**99.84359938**	**118.3072745**	**104.3393263**	**110.1828723**	**52.25427249**
-0.15	**-18.684257**	***-28.127305***	***-38.363086***	**-14.44163852**	**-15.37508514**	**-14.48924465**	**-17.52136121**	**-17.35931285**	**-18.3659454**	**-7.856174707**
+0.15	**107.2800019**	***124.125927***	***137.517652***	**93.59215422**	**99.51560147**	**93.0515347**	**110.1055606**	**96.04206888**	**101.4040883**	**48.66768958**
-0.2	**-22.2350792**	***-37.181996***	***-47.623797***	**-22.12499759**	**-22.51665237**	**-20.47529138**	**-22.05474876**	**-17.35931285**	**-18.3659454**	**-10.84254362**
+0.2	**97.50095899**	***111.950551***	***123.743493***	**85.30225614**	**90.61015142**	**84.66808735**	**99.9917531**	**85.89235569**	**90.66657127**	**44.2440283**
-0.25	**-30.26047651**	***-44.636883***	***-55.964095***	**-28.86061217**	**-29.77818831**	**-27.27798482**	**-30.31577825**	**-21.45034958**	**-22.67540861**	**-13.57286769**
+0.25	**89.80502856**	***102.559025***	***113.108048***	**78.76845619**	**83.59490247**	**78.06631488**	**92.0352279**	**77.97541906**	**82.29216613**	**40.76323298**
-0.3	**-40.20007387**	***-54.190795***	***-66.606000***	**-37.19143147**	**-38.76389213**	**-35.75930956**	**-40.62453572**	**-27.46874998**	**-29.07951338**	**-18.07246637**
+0.3	**80.37525915**	***91.275394***	***100.321165***	**70.74993407**	**74.99031524**	**69.97181375**	**82.2898219**	**68.36692516**	**72.1298127**	**36.49901295**
-0.35	**-48.80709185**	***-62.000136***	***-75.955545***	**-43.76575542**	**-45.85861942**	**-42.45801936**	**-48.7741398**	**-32.21659598**	**-34.13203546**	**-21.62849712**
+0.35	**73.18056571**	***82.627041***	***90.517371***	**64.47347079**	**68.25908748**	**63.64205556**	**74.67754191**	**60.9355979**	**64.2712685**	**33.16753922**
-0.4	**-59.74305456**	***-71.938852***	***-88.079419***	**-51.84466178**	**-54.58164424**	**-50.69698102**	**-58.80728648**	**-41.1186622**	**-43.28280231**	**-26.00486266**
+0.4	**64.20842829**	***72.307492***	***78.820440***	**56.82691988**	**60.06369658**	**55.93864882**	**65.42435366**	**51.99991417**	**54.82341019**	**29.11717828**
-0.45	**-68.34313549**	***-80.007857***	***-97.870559***	**-58.17721703**	**-61.42289528**	**-57.16093902**	**-66.68687475**	**-48.75084404**	**-51.31667794**	**-29.44053512**
+0.45	**57.25349801**	***64.456932***	***69.927516***	**50.88827307**	**53.70316045**	**49.96262525**	**58.25537343**	**45.15947532**	**47.59219884**	**25.9785629**
-0.5	**-78.87251064**	***-90.208829***	***-110.185261***	**-65.90361887**	**-69.77491173**	**-65.05538295**	**-76.32058844**	**-59.06838927**	**-62.23182871**	**-33.63924397**
+0.5	**48.86938297**	***55.165670***	***59.415911***	**43.7142881**	**46.02529867**	**42.75245894**	**49.61821598**	**37.02819843**	**38.9981733**	**22.19648813**
-0.55	**-87.09350873**	***-98.436216***	***-120.067751***	**-71.91392299**	**-76.2760121**	**-71.20286981**	**-83.83110586**	**-67.37464084**	**-71.03058725**	**-36.91102787**
+0.55	**42.43281513**	***48.161014***	***51.507227***	**38.19393823**	**40.12212564**	**37.21189403**	**42.99159554**	**31.09735969**	**32.73406283**	**19.2942639**
-0.6	**-97.08174323**	***-108.768776***	***-132.418085***	**-79.18722201**	**-84.14868339**	**-78.65065313**	**-92.94157636**	**-77.53738413**	**-81.79707283**	**-40.87766179**
+0.6	**34.75658086**	***39.954121***	***42.268999***	**31.75353531**	**33.24140998**	**30.75771839**	**35.28580684**	**24.35136705**	**25.63301794**	**15.83489353**
-0.65	**-104.8160301**	***-117.046752***	***-142.264841***	**-84.7948085**	**-90.22297761**	**-84.39994868**	**-99.98396849**	**-85.46619468**	**-90.19787423**	**-43.94201444**
+0.65	**28.93425925**	***33.836981***	***35.412067***	**26.72444208**	**27.87407627**	**25.72653808**	**29.29095136**	**19.75070076**	**20.91114788**	**13.21260563**
-0.7	**-114.1285968**	***-127.372093***	***-154.488313***	**-91.51439752**	**-97.50795757**	**-91.29891749**	**-108.447373**	**-95.09134386**	**-100.3972504**	**-47.62215181**
+0.7	**22.08575525**	***26.901117***	***27.672047***	**20.72917813**	**21.48718083**	**19.6564842**	**22.07542488**	**15.42646347**	**16.31809678**	**10.13035769**
-0.75	**-121.2685223**	***-135.586363***	***-164.166407***	**-96.63877888**	**-103.0687665**	**-96.56830325**	**-114.9225873**	**-102.5374339**	**-108.2886223**	**-50.43554127**
+0.75	**16.97355713**	***21.698935***	***22.279436***	**16.20212744**	**16.66471568**	**15.23198353**	**16.83067153**	**12.18152015**	**12.8721717**	**7.831534137**
-0.8	**-129.7708904**	***-145.757559***	***-176.093202***	**-102.7040716**	**-109.6577316**	**-102.816312**	**-122.615113**	**-111.493379**	**-117.7815373**	**-53.77476333**
+0.8	**11.07264216**	***15.665454***	***16.190627***	**11.04942669**	**11.1894569**	**10.19591437**	**10.92030818**	**8.322629193**	**8.775334059**	**5.638204014**
-0.85	**-136.2088269**	***-153.787336***	***-185.463646***	**-107.2647835**	**-114.6184012**	**-107.5240639**	**-128.4240897**	**-118.3514713**	**-125.0520097**	**-56.29364627**
+0.85	**7.033337817**	***11.422174***	***12.046378***	**7.532174517**	**7.532174517**	**6.950948282**	**7.346611592**	**5.779515893**	**6.08370094**	**4.158374586**
-0.9	**-143.7664441**	***-163.649328***	***-196.737150***	**-112.5751786**	**-120.4030114**	**-113.0189606**	**-135.221916**	**-126.5066187**	**-133.6991291**	**-59.23753483**
+0.9	**4.172473857**	***6.723572***	***9.084385***	**3.994354161**	**3.994354161**	**3.26230033**	**3.777392198**	**3.621615219**	**3.8300685**	**2.458386515**
-0.95	**-149.3947797**	***-171.367310***	***-205.297644***	**-116.491727**	**-124.6768561**	**-117.0833721**	**-140.2656173**	**-132.6714332**	**-140.2372289**	**-61.41838102**
+0.95	**3.995721146**	***4.631270***	***7.040186***	**3.089642763**	**3.318990507**	**3.126984938**	**3.777392198**	**3.621615219**	**3.8300685**	**1.60814723**
-1	**-155.8731064**	***-180.756911***	***-222.375351***	**-120.9466353**	**-129.5487846**	**-121.7230079**	**-146.0449273**	**-139.8941858**	**-147.8992147**	**-63.91250591**
+1	**4.00E+00**	***4.553895***	***5.083652***	**3.09E+00**	**3.32E+00**	**3.13E+00**	**3.78E+00**	**3.62E+00**	**3.83E+00**	**1.61E+00**
(Span 2) -2	**-1.41E+01**	***-16.102115***	***-17.975282***	**-1.09E+01**	**-1.17E+01**	**-1.11E+01**	**-1.34E+01**	**-1.28E+01**	**-1.35E+01**	**-5.69E+00**
+2	**1.45E+02**	***185.752200***	***244.928774***	**121.1009991**	**129.7832709**	**121.9890714**	**146.5138014**	**142.0291299**	**150.1855478**	**64.06836353**
-2.05	**-1.41E+01**	***-16.203424***	***-20.138431***	**-1.09E+01**	**-1.17E+01**	**-1.11E+01**	**-1.34E+01**	**-1.28E+01**	**-1.35E+01**	**-5.69E+00**
+2.05	**1.38E+02**	***175.838409***	***226.234394***	**116.6621936**	**124.9293363**	**117.3667807**	**140.7577027**	**134.9803512**	**142.71038**	**61.58921917**
-2.1	**-14.1284676**	***-16.550629***	***-23.074376***	**-10.92466574**	**-11.73561647**	**-11.05670412**	**-13.35647845**	**-12.80566683**	**-13.54273667**	**-5.68624696**
+2.1	**129.9015831**	***164.662490***	***205.663827***	**111.2144041**	**118.9919592**	**111.7248388**	**133.7725086**	**126.7121074**	**133.9453572**	**58.57271731**
-2.15	**-14.1284676**	***-18.270157***	***-27.880719***	**-10.92466574**	**-11.73561647**	**-11.05670412**	**-13.35647845**	**-12.80566683**	**-13.54273667**	**-5.68624696**
+2.15	**122.4032485**	***153.216955***	***185.480267***	**105.2126918**	**112.4683329**	**105.5364294**	**126.146618**	**117.9418901**	**124.6513499**	**55.27279281**
-2.2	**-15.58104954**	***-24.107247***	***-33.898803***	**-14.890273**	**-15.32811702**	**-14.01914156**	**-15.51984964**	**-12.80566683**	**-13.54273667**	**-7.27298186**
+2.2	**115.2296795**	***142.578792***	***168.400195***	**99.29291236**	**106.0469954**	**99.45312115**	**118.6775735**	**109.5510035**	**115.7618557**	**52.03587254**

-2.25	-22.64628256	-31.245938	-41.425873	-20.95625786	-21.79028441	-20.06936438	-22.70262592	-15.50820734	-16.41204577	-10.41341714
+2.25	106.9798383	130.908485	155.033640	92.4533363	98.64076251	92.44460556	110.0991833	100.1114681	105.7639827	48.31380036
-2.3	-30.86020947	-39.139289	-50.299383	-27.48596887	-28.76213186	-26.60646359	-30.4972436	-20.87310551	-21.97169001	-13.81914313
+2.3	98.38018114	119.265027	141.677995	85.29339557	90.89980469	85.12679051	101.1675725	90.47549427	95.56063281	44.43465186
-2.35	-38.91070558	-46.990518	-59.201454	-33.8105153	-35.52707848	-32.95708376	-38.09563963	-27.36244305	-28.80257163	-17.1371127
+2.35	90.27134396	108.695143	129.541643	78.51708446	83.58354042	78.21654678	92.75416705	81.26198364	85.80869599	40.77777489
-2.4	-48.16174826	-56.171607	-69.672790	-41.00519542	-43.23475495	-40.20010793	-46.78749267	-35.451953	-37.34798768	-20.93022185
+2.4	81.26788862	97.359998	116.520037	70.96693529	75.44206619	70.53318832	83.42104142	71.43650544	75.4079115	36.71863828
-2.45	-57.79767662	-65.933551	-80.852240	-48.43001967	-51.20056187	-47.69283624	-55.80370498	-44.12637449	-46.51843686	-24.86226845
+2.45	72.19288372	86.311485	103.828683	63.06072238	66.94813404	62.45419345	73.63060692	61.83284869	65.24622562	32.62878442
-2.5	-67.71141955	-76.208308	-92.648666	-56.00494602	-59.33829991	-55.35399327	-65.04576144	-53.21978706	-56.13504054	-28.88993548
+2.5	63.14173193	75.333245	91.569476	55.36892868	58.65462364	54.71009788	64.26814123	52.44741894	55.31812047	28.5515236
-2.55	-76.95160212	-86.312467	-103.922946	-63.01209754	-66.87527745	-62.45522196	-73.6318516	-61.83401266	-65.24745703	-32.62897297
+2.55	54.94729481	65.932580	80.795266	48.4290439	51.19951413	47.69183184	55.80249489	44.1252654	46.51726414	24.8620858
-2.6	-87.09847081	-97.360967	-116.632938	-70.96794416	-75.44315355	-70.53421375	-83.42228563	-71.43768822	-75.40916316	-36.718827
+2.6	46.03716558	56.170656	69.634927	41.00422585	43.2337154	40.19911247	46.78629648	35.45090251	37.34687732	20.93004302
-2.65	-97.2107908	-108.696093	-129.671872	-78.51807673	-83.58461071	-78.21755885	-92.75539769	-81.20950079	-85.75345787	-40.77795119
+2.65	37.61025408	46.989596	59.181751	33.80958107	35.52607823	32.95614605	38.09451637	27.36152987	28.80161039	17.136943
-2.7	-106.7704564	-119.265950	-141.822423	-85.29436535	-90.90085213	-85.12777987	-101.1687779	-90.47670732	-95.5619171	-44.43483013
+2.7	30.2342239	39.138404	50.294975	27.4850871	28.76118938	26.60557116	30.49617761	20.87226494	21.9708052	13.81898921
-2.75	-116.5049615	-130.909357	-155.191187	-92.4542675	-98.64176992	-92.44555894	-110.1003484	-100.1126626	-105.7652476	-48.31397165
+2.75	22.65687383	31.245101	41.316596	20.95543156	21.78940311	20.06852268	22.70162435	15.50764675	16.41145027	10.41326784
-2.8	-125.8880802	-142.579612	-168.567779	-99.29379391	-106.0479505	-99.45402727	-118.6786846	-109.5521658	-115.7630869	-52.03603497
+2.8	15.66190938	24.106469	33.891357	14.88950575	15.32730072	14.01836984	15.51893546	12.80566636	13.54273761	7.272845852
-2.85	-134.0891218	-153.217735	-185.480265	-105.213521	-112.4692329	-105.5372915	-126.147678	-117.9429892	-124.6525144	-55.27294758
+2.85	14.17290943	18.269442	27.870857	10.92466656	11.73561918	11.05670615	13.35647807	12.80566636	13.54273761	5.686246877
-2.9	-142.4994192	-164.663198	-205.663830	-111.2151664	-118.9927887	-111.7256193	-133.7734726	-126.7131525	-133.9464649	-58.57285974
+2.9	14.17290943	16.550628	23.069930	10.92466656	11.73561918	11.05670615	13.35647807	12.80566636	13.54273761	5.686246877
-2.95	-150.2459444	-175.839038	-226.234395	-116.6628775	-124.9300825	-117.3674909	-140.7585841	-134.9813298	-142.7114176	-61.58934524
+2.95	14.17290943	16.203423	20.135836	10.92466656	11.73561918	11.05670615	13.35647807	12.80566636	13.54273761	5.686246877
-3	-157.2216225	-186.635158	-246.614723	-121.4765776	-130.194878	-122.3815782	-147.0044327	-142.6427632	-150.8364524	-64.27908448
+3	14.17290943	16.102114	17.975477	10.92466656	11.73561918	11.05670615	13.35647807	12.80566636	13.54273761	5.686246877
(Span 3) -4	-4.008289789	-4.553895	-5.083707	-3.089642993	-3.318991273	-3.126985513	-3.777392089	-3.621615086	-3.830068766	-1.608147206
+4	142.5576547	179.831581	220.475681	120.5232955	129.0852192	121.2811814	145.4933496	139.1960631	147.1585345	63.67499105
-3.05	-4.008289789	-4.615506	-6.793137	-3.089642993	-3.318991273	-3.126985513	-3.777392089	-3.621615086	-3.830068766	-1.608147206
+3.05	137.4747314	172.319202	206.127572	116.9589402	125.1872153	117.5690323	140.8693688	133.4173102	141.0283629	61.67947562
-3.1	-4.445511327	-7.163637	-9.346113	-4.331373193	-4.331373193	-3.61268913	-3.777392089	-3.621615086	-3.830068766	-2.610705177
+3.1	131.0114942	162.672415	195.421905	112.0636322	119.8453169	112.4889124	134.5652221	125.7118206	132.8562979	58.9536585
-3.15	-6.734424462	-10.922668	-11.710190	-7.161974052	-7.161974052	-6.563968882	-6.92072023	-5.497548557	-5.786893218	-3.969991625
+3.15	125.3997044	154.782160	186.400940	107.8148889	115.2171692	108.0925627	129.1264385	119.1871377	125.9380041	56.59833579
-3.2	-11.60767165	-16.226707	-16.718788	-11.54468092	-11.71520002	-10.61985667	-11.38748615	-8.684319977	-9.159269671	-5.818622987
+3.2	118.3859046	144.745615	174.692807	102.1144125	109.0167783	102.2082831	121.8657168	110.6150874	116.8505122	53.44996383
-3.25	-16.32378513	-21.078888	-21.577380	-15.66726779	-16.0958668	-14.69999334	-16.20104955	-11.79051787	-12.45700227	-7.555241881
+3.25	112.4806996	136.608035	165.153194	97.26174379	103.7451388	97.20943322	115.7111599	103.4497747	109.255591	50.77837462
-3.3	-22.70662962	-27.581504	-28.300608	-21.30628681	-22.10189267	-20.23021192	-22.7564991	-15.8464061	-16.76409919	-10.42852778
+3.3	104.7083643	126.340823	153.061894	90.85667939	96.79457263	90.62312719	107.6176607	94.14273882	99.39198694	47.26188749
-3.35	-28.51068852	-33.101730	-34.488744	-26.11380486	-27.22274896	-25.11625656	-28.56459177	-19.30611036	-20.43887463	-12.89453974
+3.35	98.20092404	118.079962	143.288717	85.48059602	90.96614531	85.10353447	100.8464319	86.44207399	91.23190856	44.31757716
-3.4	-36.41122484	-40.747997	-43.037664	-32.39977911	- 33.9314941293 251	-31.40480489	- 36.057645690 99	-25.00525631	-26.3213224359733	-16.17216794
+3.4	89.63509774	107.733113	130.990968	78.47154381	83.37374256	77.91733101	92.04394762	76.53165239	80.73153337	40.48736274
-3.45	-43.1048196	-47.313731	-50.410101	-37.51952025	-39.40126341	-36.53551057	-42.18332412	-30.40256158	-32.0026964	-18.93987663
+3.45	82.62258979	99.466515	121.119522	72.65248325	77.07515233	71.95867238	84.7550488	68.40091465	72.11776999	37.31385745
-3.5	-51.90343474	-56.069367	-60.271583	-44.4195581	-46.77979988	-43.46081296	-50.46611158	-37.82048786	-39.83545677	-22.56740612
+3.5	73.58689547	89.182874	108.780643	65.1400347	68.94924222	64.27478416	75.36747432	58.01870333	61.11996063	33.22438164
-3.55	-59.26170132	-63.502617	-68.661361	-50.15915104	-52.92252632	-49.22935852	-57.37633939	-44.32607279	-46.71127387	-25.59327709

+3.55	***66.16527223***	***81.021582***	***98.940334***	***58.95849692***	***62.2671812955998***	***57.9588021282716***	**67.65998708**	***49.81080524***	***52.43242657***	***29.86520027***
-3.6	***-68.82382526***	***-73.315590***	***-79.751746***	***-57.58204779***	**-60.87275366**	***-56.69896912***	**-66.33705786**	***-52.87608243***	***-55.74971757***	***-29.51630942***
+3.6	***56.67786049***	***70.935869***	***86.718549***	***51.04325225***	**53.71610235**	***49.87928802***	**57.81102906**	***40.1564458***	***42.26994295***	***25.57086335***
-3.65	***-76.73913366***	***-81.571493***	***-89.088982***	***-63.69966218***	**-67.42946947**	***-62.86207703***	**-73.74007421**	***-60.02513313***	***-63.30853777***	***-32.75679338***
+3.65	***48.94274492***	***62.984418***	***77.032944***	***44.5797131***	**46.73723723**	***43.28774998***	**49.78406571**	***32.80439568***	***34.75758058***	***22.06954993***
-3.7	***-86.93025673***	***-92.381612***	***-101.317296***	***-71.54484141***	**-75.84307419**	***-70.77384546***	**-83.25490543**	***-69.31376931***	***-73.13116449***	***-36.92088401***
+3.7	***39.12325755***	***53.223258***	***65.434908***	***36.36226745***	**37.86932307**	***34.91480474***	***39.59759745***	***26.86988487***	***28.44224361***	***17.62476885***
-3.75	***-95.29495373***	***-101.408804***	***-111.526375***	***-77.96002548***	**-82.72713917**	***-77.24986858***	***-91.05174291***	***-77.00105795***	***-81.26156998***	***-40.33248146***
+3.75	***31.17032164***	***45.579687***	***56.934558***	***29.6972054***	**30.68032274**	***28.12933199***	***31.35009273***	***22.05490967***	***23.31868872***	***14.02489759***
-3.8	***-105.9805313***	***-113.147888***	***-124.794326***	***-86.126819***	**-91.49570996**	***-85.50164767***	***-100.9968723***	***-86.89669585***	***-91.72901232***	***-44.68321794***
+3.8	***21.13835215***	***36.261609***	***46.527348***	***21.27815545***	**21.60390807**	***19.77237954***	***21.27313985***	***17.35931292***	***18.36594674***	***10.54522261***
-3.85	***-114.6869791***	***-122.888500***	***-135.793571***	***-92.7591431***	**-98.62050716**	***-92.20876765***	***-109.0883584***	***-95.01700541***	***-100.3195968***	***-48.22236774***
+3.85	***18.72813848***	***29.017450***	***38.909417***	***15.0938706***	**15.3750848**	***14.48924837***	***17.52136307***	***17.35931292***	***18.36594674***	***8.155981379***
-3.9	***-125.732477***	***-135.480107***	***-149.995556***	***-101.1470033***	**-107.6357615**	***-100.6984077***	***-119.3399676***	***-105.3879852***	***-111.2924503***	***-52.70533848***
+3.9	***18.72813848***	***23.365736***	***33.547921***	***14.30203324***	**15.3750848**	***14.48924837***	***17.52136307***	***17.35931292***	***18.36594674***	***7.526757301***
-3.95	***-134.6729753***	***-145.869768***	***-162.776390***	***-107.9159422***	**-114.914572**	***-107.555008***	***-127.6271731***	***-113.8359757***	***-120.2316773***	***-56.32847644***
+3.95	***18.72813848***	***22.952583***	***29.532718***	***14.30203324***	**15.3750848**	***14.48924837***	***17.52136307***	***17.35931292***	***18.36594674***	***7.526757301***
-5	***-145.9439195***	***-159.229368***	***-182.413897***	***-116.4242715***	**-124.0681741**	***-116.1803067***	***-138.061381***	***-124.5507586***	***-131.5706655***	***-60.88925584***
+5	***18.72813848***	***22.780345***	***28.815800***	***14.30203324***	**15.3750848**	***14.48924837***	***17.52136307***	***17.35931292***	***18.36594674***	***7.526757301***

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.87817977	-14.93486544	-15.46393232	-14.75137694	-8.744964607	-11.82849202	-13.49563929	-15.09374488	-16.74966614
End Shear	87.20668467	109.1987332	105.7474692	92.35038363	70.51895034	95.00065895	106.6700246	114.9977807	123.1981641
-0.05	-10.87817977	-14.93486544	-15.46393232	-14.78705555	-8.744964607	-11.82849202	-13.49563929	-15.09374488	-16.74966614
+0.05	81.05241255	100.5196556	96.60530955	83.49268729	65.57852482	88.33877305	99.05360355	106.5060931	113.7929096
-0.1	-10.87817977	-14.93486544	-15.46393232	-14.97164023	-8.744964607	-11.82849202	-13.49563929	-15.09374488	-16.74966614
+0.1	74.58129185	91.40313015	87.02524334	74.81512661	60.38928717	81.33307447	91.04278409	97.58029157	103.9135333
-0.15	-10.87817977	-14.93486544	-15.46393232	-17.79875954	-8.744964607	-11.82849202	-13.49563929	-15.09374488	-16.74966614
+0.15	69.45590152	84.23505178	79.53637748	68.21250311	56.27710183	75.78196281	84.7018381	90.52761393	96.1214917
-0.2	-14.74915634	-14.93486544	-15.46393232	-21.94798817	-12.24440709	-16.37735038	-17.60569329	-17.59809917	-17.59069149
+0.2	63.13360395	75.46074879	70.4263874	60.23546691	51.20192645	68.9315401	76.88516815	81.84961014	86.55185411
-0.25	-19.53733109	-18.3823913	-15.46393232	-25.07810179	-16.39490618	-21.94341611	-22.83271911	-22.83271911	-22.83271911
+0.25	58.15822453	68.61177058	63.36311838	54.09208341	47.20574726	63.53807611	70.73792288	75.03821278	79.05558476
-0.3	-25.96451058	-23.24436763	-21.1237496	-28.76794572	-21.53292385	-28.88418277	-30.76454974	-30.69028763	-30.6815884
+0.3	52.06214033	60.29302407	54.84708148	46.73367157	42.30653431	56.92650673	63.21136425	66.71559158	69.91565552
-0.35	-31.04376379	-28.73045868	-25.60938401	-31.55164698	-25.59133391	-34.36712342	-37.08063059	-37.08712943	-37.07734025
+0.35	47.29868331	53.85381809	48.30853901	41.12044039	38.47588804	51.75755397	57.3345997	60.23153205	62.81114751
-0.4	-37.29465226	-37.00056698	-31.43589324	-36.31486135	-30.58328916	-41.11203559	-44.85881362	-45.87897998	-46.21822941
+0.4	41.50619012	46.10395097	40.59375439	34.52364067	33.81454333	45.46841349	50.19411842	52.37187402	54.22089667
-0.45	-42.20191612	-43.52589477	-37.34102146	-40.7445201	-34.50008497	-46.40486045	-50.96933318	-52.79897471	-54.00139755
+0.45	37.01656545	40.16518119	35.17778642	29.88477987	30.19895411	40.59083442	44.66459557	46.30121488	47.60411097
-0.5	-48.19912546	-52.37251415	-45.80965784	-47.46968342	-39.28407051	-52.87033713	-58.44258317	-61.27921412	-63.5577871
+0.5	31.60505466	33.0975214	28.7480705	24.42047705	25.83738141	34.70769686	38.00615347	39.0120965	39.68350672
-0.55	-52.8724943	-59.49613405	-52.46945111	-54.21186582	-43.00973179	-57.90618565	-64.27078219	-67.90689022	-71.04173885
+0.55	27.45117066	27.80502889	23.89679431	20.35500064	22.48637245	30.18835618	32.90064847	33.6109591	33.83424737
-0.6	-58.53864114	-68.20587434	-60.74677628	-62.54124694	-47.5238425	-64.00865561	-71.34314318	-75.96794507	-80.16413487
+0.6	22.61819276	21.94152311	18.68684218	15.94576043	18.58358257	24.92571822	26.96760245	26.98976058	26.98781593
-0.65	-62.9162009	-74.99602768	-68.2279103	-69.44797969	-51.00884287	-68.72066487	-76.81224284	-82.21724217	-87.2529108
+0.65	18.85598517	17.5507988	15.39308887	13.11372985	15.54195535	20.82507366	22.29134648	22.29250449	22.29081383
-0.7	-68.17389103	-83.23227562	-77.53763473	-78.3324836	-55.19117559	-74.37654747	-83.38774591	-89.75153615	-95.82134351
+0.7	14.32441365	13.04018467	11.59527033	9.915523264	11.95930552	15.88014919	16.80902818	16.78091967	16.7792477
-0.75	-72.19373845	-89.59829834	-84.78017601	-85.2860295	-58.38598743	-78.69785771	-88.4209753	-95.53638758	-102.4189552
+0.75	11.02774035	10.48961961	8.77031921	7.568587128	9.199985265	12.27786019	12.78188092	12.777985	12.81709205
-0.8	-76.96559083	-97.2477147	-93.5446781	-93.5533798	-62.17464179	-83.82357926	-94.40366098	-102.4363279	-110.3134568
+0.8	7.542730139	7.538301283	5.994501452	5.320011479	6.109158457	8.195671231	8.725966931	8.724567781	8.723203609
-0.85	-80.56580989	-103.0989446	-100.3014853	-99.82394139	-65.02974814	-87.68732497	-98.92424015	-107.6706736	-116.3239407
+0.85	5.304985485	5.353656827	4.256762189	3.96807403	4.00573978	5.651124889	5.783595685	5.782257651	5.780946484
-0.9	-84.77444201	-110.0482038	-108.3968878	-107.2278918	-68.36281313	-92.19930672	-104.2181411	-113.8286996	-123.4245405
+0.9	2.814069476	3.113730641	3.132756659	2.844890377	2.347112729	2.754828995	2.901397708	3.241591121	3.589300661
-0.95	-87.89312464	-115.293976	-114.5688768	-112.799646	-70.82868328	-95.53863706	-108.1493165	-118.4264743	-128.751916
+0.95	2.338169984	3.113730641	3.132756659	2.794299347	1.883927496	2.550182139	2.901397708	3.241591121	3.589300661
-1	-91.46113884	-121.42975	-121.8713013	-119.319365	-73.64425525	-99.35330266	-112.65847	-123.7349901	-134.9386459
+1	2.34E+00	3.11E+00	3.13E+00	2.77E+00	1.88E+00	2.55E+00	2.90E+00	3.24E+00	3.59E+00
(Span 2) -2	-8.27E+00	-1.10E+01	-1.11E+01	-9.81E+00	-6.66E+00	-9.02E+00	-1.03E+01	-1.15E+01	-1.27E+01
+2	9.17E+01	123.1733669	125.1956984	122.8524428	73.81245442	99.5936444	113.0769941	124.4638618	136.0615041
-2.05	-8.27E+00	-1.10E+01	-1.11E+01	-9.84E+00	-6.66E+00	-9.02E+00	-1.03E+01	-1.15E+01	-1.27E+01
+2.05	88.18734795	117.1824217	118.2090727	113.2233359	71.00950409	95.79494916	108.5927364	119.1901864	129.9302601
-2.1	-8.267533879	-11.00983794	-11.07711237	-9.925654274	-6.661378178	-9.017187576	-10.25905018	-11.46194012	-12.69140583
+2.1	83.87122688	110.136463	110.1393892	105.7510514	67.58941101	91.16325978	103.159063	112.8642991	122.6411346
-2.15	-8.267533879	-11.00983794	-11.07711237	-10.08848623	-6.661378178	-9.017187576	-10.25905018	-11.46194012	-12.69140583
+2.15	79.14984287	102.6456447	101.6982196	98.05259894	63.83914792	86.08737756	97.23433053	106.0239787	114.8182361
-2.2	-10.15739299	-11.00983794	-11.07711237	-12.58278133	-8.465198065	-11.30303741	-11.79188029	-11.78424839	-12.69140583
+2.2	74.51851316	95.46529608	93.71833713	90.55430982	60.15344861	81.10110197	91.43721208	99.37489924	107.2599321
-2.25	-14.66308824	-13.44162495	-11.94828204	-15.69689882	-12.11902923	-16.22879275	-17.30310049	-17.26176194	-17.25815439

+2.25	69.19256786	87.37398096	84.84072216	81.92300016	55.90809597	75.35981395	84.78481698	91.78794008	98.68091807
-2.3	-19.54636824	-18.94056663	-16.15748586	-18.91615088	-16.06892515	-21.55581788	-23.29404779	-23.26865058	-23.26444072
+2.3	63.64103627	79.10092578	75.59167648	73.39452234	51.4763088	69.36837891	77.86417357	83.93629747	89.84670071
-2.35	-24.3018115	-24.58419839	-21.12341286	-22.43958655	-19.90766147	-26.7346242	-29.14193988	-29.65105921	-29.85154912
+2.35	58.40658375	71.15916476	67.30375058	65.35270139	47.29212089	63.7133182	71.34986425	76.57962338	81.60599416
-2.4	-29.73661921	-31.61020987	-27.55902189	-26.70868722	-24.28727299	-32.6448149	-35.83885169	-37.00403367	-37.85523888
+2.4	52.59486229	62.71795515	58.46371444	56.51742775	42.6407086	57.4283927	64.12859552	68.4002891	72.39650101
-2.45	-35.36936186	-39.12905674	-34.42527154	-33.16497516	-28.81922128	-38.76222535	-42.79267341	-44.68107992	-46.2602652
+2.45	46.4930871	54.4355387	49.83148767	48.28199583	37.77567753	50.82292928	56.55927956	59.98771695	63.14197623
-2.5	-41.13842392	-46.99615706	-42.18639633	-40.92201113	-33.45421668	-45.02035787	-49.92704705	-52.59656071	-54.97110958
+2.5	40.65318641	46.32848259	41.50572553	40.25506222	33.06461998	44.49426487	49.3265295	51.92889064	54.23471289
-2.55	-46.4938637	-54.43654328	-49.83250434	-48.28266376	-37.75142734	-50.82377012	-56.56024172	-59.9887496	-63.14312019
+2.55	35.36860585	39.1280963	34.424428	33.16442031	28.8186137	38.76140518	42.79175733	44.6800858	46.25917488
-2.6	-52.59563585	-62.71897443	-58.46476145	-56.51813439	-42.64132907	-57.42923109	-64.12955668	-68.37778457	-72.37411407
+2.6	29.73588509	31.6092983	27.55822461	26.70833498	24.28668195	32.64400229	35.83794738	37.00307617	37.85419393
-2.65	-58.40734936	-71.11047056	-67.30481805	-65.35342956	-47.29273473	-63.71414609	-71.3507979	-76.5806559	-81.6071466
+2.65	24.30109503	24.5834053	21.12267248	22.43926638	19.90709412	26.73385937	29.14107348	29.65013018	29.85056091
-2.7	-63.6418009	-79.10196827	-75.55402754	-73.39523815	-51.47690785	-69.36918878	-77.86510736	-83.93733313	-89.84783957
+2.7	19.54570089	18.93983449	16.15696447	18.91585052	16.06839189	21.55509051	23.29322771	23.26779223	23.26358238
-2.75	-69.19329126	-87.37500577	-84.84179326	-81.923727	-55.90867211	-75.36059454	-84.7857202	-91.78892869	-98.68203263
+2.75	14.6624602	13.44106579	11.94779384	15.69663746	12.11853031	16.22810704	17.30234649	17.26103455	17.25741972
-2.8	-74.51920183	-95.46629159	-93.71939191	-90.5549654	-60.15399726	-81.10184454	-91.43805765	-99.37584748	-107.261007
+2.8	10.15682015	11.0098386	11.07711357	12.58250218	8.464737477	11.30240944	11.79118662	11.78358531	12.69140673
-2.85	-79.15049996	-102.6465845	-101.6992499	-98.0532217	-63.83967144	-86.08808417	-97.235146	-106.024881	-114.8192647
+2.85	8.267532476	11.0098386	11.07711357	10.08848695	6.661379576	9.017186848	10.25905231	11.46194206	12.69140673
-2.9	-83.87183454	-110.1373548	-110.1403802	-105.7516009	-67.58988451	-91.16390028	-103.1598188	-112.8651413	-122.6421006
+2.9	8.267532476	11.0098386	11.07711357	9.925654987	6.661379576	9.017186848	10.25905231	11.46194206	12.69140673
-2.95	-88.18789306	-117.1832548	-118.2100162	-113.2241919	-71.00993111	-95.7955326	-108.5934169	-119.1909577	-129.9311616
+2.95	8.267532476	11.0098386	11.07711357	9.835753589	6.661379576	9.017186848	10.25905231	11.46194206	12.69140673
-3	-92.03709646	-123.6940695	-125.8095078	-123.7247809	-74.05052373	-99.91643966	-113.4595801	-124.9166958	-136.5909343
+3	8.267532476	11.0098386	11.07711357	9.809521909	6.661379576	9.017186848	10.25905231	11.46194206	12.69140673
(Span 3) -4	-2.338169587	-3.11E+00	-3.13E+00	-2.77E+00	-1.883927891	-2.550181933	-2.901398309	-3.24159167	-3.589300915
+4	91.12091196	120.8372484	121.1616488	118.6892449	73.37609525	98.98988407	112.2278729	123.2261377	134.3436284
-3.05	-2.338169587	-3.11E+00	-3.13E+00	-2.79E+00	-1.883927891	-2.550181933	-2.901398309	-3.24159167	-3.589300915
+3.05	88.26617125	115.9281543	115.3191863	113.4733521	71.12336941	95.93779153	108.6201288	118.978867	129.3937218
-3.1	-3.051369497	-3.113730827	-3.132756999	-2.85354525	-2.502317758	-3.030167455	-3.032525453	-3.24159167	-3.589300915
+3.1	84.36811889	109.3713932	107.6047358	106.508717	68.04126793	91.76395132	103.706536	113.2320634	122.7349942
-3.15	-5.044333085	-5.092466032	-4.048986744	-3.807927795	-3.836010888	-5.347485174	-5.433259034	-5.431909038	-5.430601562
+3.15	81.00088053	103.8114986	101.1278977	100.5854147	65.37454924	88.1540123	99.47101391	108.3052013	117.0539981
-3.2	-7.82752711	-7.823050834	-6.221000756	-5.497776865	-6.405692078	-8.527919013	-9.110924068	-9.109499851	-9.108134486
+3.2	76.50091771	96.49794686	92.68241986	92.74723776	61.80592298	83.32466626	93.82066435	101.76269	109.5413934
-3.25	-10.63179416	-10.18433831	-8.431615085	-7.289057851	-8.878609714	-11.84487249	-12.31328696	-12.31183451	-12.40111585
+3.25	72.68310424	90.37793397	85.670311	86.13323906	58.77474195	79.2237269	89.03410486	96.24229732	103.225283
-3.3	-14.75233027	-13.45262063	-11.96253249	-10.22258646	-12.3066638	-16.34740078	-17.33227488	-17.30092543	-17.29925602
+3.3	67.65861495	82.4209011	76.61762812	77.44132074	54.78147481	73.82243806	82.742962	89.01166193	94.97877554
-3.35	-18.39997914	-17.02237994	-15.00106432	-12.7813068	-15.17304652	-20.32778204	-21.65786625	-21.67440812	-21.73574504
+3.35	63.45213394	75.83143236	69.16940518	70.32535428	51.43535059	69.2973904	77.48217344	82.98382533	88.12355425
-3.4	-23.1024269	-22.5103791627246	-19.17335832	-16.35609545	-18.97483097	-25.4532386558387	-27.56166126	-27.63441507	-27.6324673955895
+3.4	57.98052585	67.34424915	59.9399942	61.74785198	47.07937117	63.40771932	70.64620266	75.17261962	79.2631099
-3.45	-26.94437504	-27.20161447	-23.31043758	-19.86214411	-22.07733163	-29.63674077	-32.27811738	-32.93181118	-33.10011779
+3.45	53.44730592	60.37598855	53.29264666	55.03893725	43.46783027	58.52538985	64.98793642	68.72337987	71.96467125
-3.5	-32.13642714	-33.78661515	-29.37410106	-24.95018723	-26.26583822	-35.28558645	-38.65960331	-39.72629468	-40.45830048
+3.5	47.60591044	51.4719822	44.96832543	46.65888331	38.81100258	52.23096478	57.70310004	60.4392556	62.61025789
-3.55	-36.4659413	-39.44122761	-34.51830829	-29.32190981	-29.75535177	-39.99243415	-43.98674028	-45.55803941	-46.79526815
+3.55	42.80784502	44.4317846303955	38.1929998898888	41.284402213732	34.9835650453466	47.0582342649787	51.7241282165065	53.6546253511136	54.96468729

-3.6	***-42.07766492***	**-46.86422498**	***-41.28782671***	**-35.12019219**	**-34.2745783**	***-46.08906581***	**-50.89823996**	***-53.14591217***	**-55.06573487**
+3.6	***36.67408533***	**36.17758415**	***30.72885395***	**35.74714097**	**30.0878524**	***40.44255792***	**44.08639229**	***45.00511419***	**45.2362766**
-3.65	***-46.71195944***	**-53.06455151**	***-47.51059602***	**-40.43730676**	**-38.00390467**	***-51.12069125***	**-56.61100213**	***-59.43408307***	**-61.93841094**
+3.65	***31.67308315***	**29.56109706**	***26.16552447***	**31.88923627**	**26.09404516**	***35.0463266***	**37.86343799**	***37.97120344***	**37.96146211**
-3.7	***-52.66596385***	**-61.11310789**	***-55.68324766***	**-47.45352162**	**-42.7919323**	***-57.58153109***	**-63.95655082**	***-67.53869755***	**-70.8185836**
+3.7	***25.32434454***	***22.60104105***	***20.55879584***	**28.40933485**	**21.02129012**	***28.19301297***	***29.96876406***	***29.90113695***	**29.89240841**
-3.75	***-57.54313024***	***-67.76852926***	***-62.49658957***	**-53.34057843**	**-46.71155014**	***-62.87113226***	***-69.97821339***	***-74.19723105***	**-78.13099323**
+3.75	***20.18231516***	***18.83302652***	***16.02246397***	**25.45761354**	**16.9106365**	***22.64006182***	***23.57869354***	***23.56347838***	**23.55452574**
-3.8	***-63.76199344***	***-76.32929237***	***-71.32512099***	**-61.01940427**	**-51.70651748**	***-69.61260527***	***-77.66184845***	***-82.7110073***	**-87.50079302**
+3.8	***14.29213903***	***14.93486641***	***15.46393252***	**21.54469475**	**11.72280703**	***15.83102841***	***16.95400703***	***16.9464438***	**16.939**
-3.85	***-68.82015935***	***-83.34919829***	***-78.613617***	**-67.40140267**	**-55.76690072**	***-75.09324001***	***-83.91554736***	***-89.65384074***	**-95.15695963**
+3.85	***10.8781798***	***14.93486641***	***15.46393252***	**18.22546935**	**8.744966946**	***11.82849286***	***13.49564282***	***15.09374838***	**16.74966868**
-3.9	***-75.22653064***	***-92.30878556***	***-87.9741516***	**-75.6542889**	**-60.90684343**	***-82.03176913***	***-91.84130439***	***-98.46920172***	**-104.8965338**
+3.9	***10.8781798***	***14.93486641***	***15.46393252***	**14.90294983**	**8.744966946**	***11.82849286***	***13.49564282***	***15.09374838***	**16.74966868**
-3.95	***-80.4037091***	***-99.60245946***	***-95.63870131***	**-82.56968739**	**-65.05846865**	***-87.63666004***	***-98.25031474***	***-105.610216***	**-112.8004844**
+3.95	***10.8781798***	***14.93486641***	***15.46393252***	**14.79597267**	**8.744966946**	***11.82849286***	***13.49564282***	***15.09374838***	**16.74966868**
-5	***-86.92024131***	***-108.8475931***	***-105.4074218***	**-92.19183761**	**-70.28151158**	***-94.68862539***	***-106.3222292***	***-114.6196378***	**-122.789744**
+5	***10.8781798***	***14.93486641***	***15.46393252***	***14.75137527***	**8.744966946**	***11.82849286***	***13.49564282***	***15.09374838***	***16.74966868***

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-28.22303919	-30.9533423	-17.9316	-21.7254	-23.2412
End Shear	187.9248188	196.8068229	127.5226	154.3491	161.3366
-0.05	-28.22303919	-30.9533423	-17.9316	-21.7254	-23.2412
+0.05	171.4843416	179.2075954	117.0253	141.7112	147.7786
-0.1	-28.22303919	-30.9533423	-17.9316	-21.7254	-23.2412
+0.1	154.2697051	160.4002842	106.0148	128.4497	133.5602
-0.15	-28.22303919	-30.9533423	-17.9316	-21.7254	-23.2412
+0.15	140.8158091	145.7411183	97.37677	118.0413	122.4192
-0.2	-28.22303919	-30.9533423	-17.9316	-21.7254	-23.2412
+0.2	124.4532857	127.9647397	86.82831	105.325	108.8321
-0.25	-28.22303919	-30.9533423	-22.8954	-25.309	-26.1769
+0.25	111.7699247	114.2293873	78.6155	95.41945	98.26844
-0.3	-33.87881086	-35.08719932	-29.2066	-32.1969	-34.2435
+0.3	96.48165137	97.73152995	68.66793	83.41496	85.49316
-0.35	-42.39867511	-44.19942076	-34.1844	-38.1701	-40.6141
+0.35	84.74652316	85.11802885	60.99136	74.14545	75.65114
-0.4	-53.77630203	-56.98123997	-40.2978	-48.7758	-48.4486
+0.4	70.75457736	71.40246912	51.78349	63.01932	63.86814
-0.45	-64.37365058	-68.05967336	-47.5294	-58.5233	-57.9428
+0.45	60.65504434	61.39158264	44.75419	54.51912	54.953
-0.5	-79.20781005	-81.69065004	-57.7477	-70.7859	-71.3609
+0.5	49.03373538	50.57823903	36.55225	44.43794	44.84453
-0.55	-91.5922107	-92.38900844	-66.5441	-81.3384	-82.1359
+0.55	40.57671679	42.37940323	30.65777	37.25573	37.0891
-0.6	-107.6843338	-108.4490586	-77.3225	-94.2639	-96.2427
+0.6	31.50145076	32.73981916	24.83512	28.87803	29.41407
-0.65	-121.4427642	-123.0436703	-85.7448	-104.36	-107.28
+0.65	25.31506081	25.98927022	20.97986	23.24568	24.61637
-0.7	-138.2388385	-141.9785265	-95.9863	-116.632	-120.719
+0.7	18.51817726	18.74390038	16.42234	17.98147	18.96195
-0.75	-151.3113735	-156.7538842	-103.923	-126.139	-131.151
+0.75	14.05321368	13.81059615	13.00029	14.23281	14.73132
-0.8	-167.1390235	-174.6932959	-113.489	-137.59	-143.742
+0.8	9.709078088	8.844269694	8.927816	9.873182	9.872052
-0.85	-179.3479459	-188.5732945	-120.83	-146.374	-153.423
+0.85	6.511546166	6.290410086	6.135523	6.662468	6.661373
-0.9	-193.9850118	-205.2696471	-129.581	-156.839	-164.986
+0.9	5.774808072	6.290410086	3.701042	4.505948	4.789785
-0.95	-205.1526418	-218.0561907	-136.215	-164.767	-173.772
+0.95	5.774808072	6.290410086	3.701042	4.505948	4.789785
-1	-218.37705	-233.2619649	-144.013	-174.078	-184.126
+1	5.77E+00	6.29E+00	3.70E+00	4.51E+00	4.79E+00
(Span 2) -2	-2.04E+01	-2.22E+01	-1.31E+01	-1.59E+01	-1.69E+01
+2	224.2361496	240.7134725	146.6966	177.1632	188.0062
-2.05	-2.04E+01	-2.22E+01	-1.31E+01	-1.59E+01	-1.69E+01
+2.05	211.5456924	226.2238555	139.1364	168.1139	177.9932
-2.1	-20.41914003	-22.24225684	-13.0865	-15.9326	-16.9362
+2.1	196.9089889	209.632023	130.3129	157.54	166.3563
-2.15	-20.41914003	-22.24225684	-13.0865	-15.9326	-16.9362
+2.15	181.6171556	192.4126304	120.9957	146.3628	154.1143
-2.2	-20.41914003	-22.24225684	-13.0865	-15.9326	-16.9362
+2.2	167.1751329	176.245276	112.1157	135.7001	142.4836
-2.25	-20.41914003	-22.24225684	-16.4906	-18.1088	-19.198

+2.25	**151.1218025**	**158.3740381**	**102.1614**	**123.737**	**129.4833**
-2.3	**-27.22971132**	**-28.38555087**	**-21.4939**	**-24.8827**	**-25.4323**
+2.3	**134.6578712**	**140.4500441**	**92.03563**	**111.5572**	**116.222**
-2.35	**-35.90119015**	**-37.71976956**	**-26.9419**	**-32.9462**	**-32.7016**
+2.35	**119.4439616**	**124.1417628**	**82.27333**	**99.88578**	**103.6184**
-2.4	**-47.27100429**	**-48.63419242**	**-34.9463**	**-42.6564**	**-42.8328**
+2.4	**103.4904147**	**106.6676415**	**72.13227**	**87.5844**	**90.48378**
-2.45	**-59.79741188**	**-60.20211611**	**-43.847**	**-53.4313**	**-54.0646**
+2.45	**87.92051232**	**89.71557175**	**62.14676**	**75.54011**	**77.58806**
-2.5	**-74.13788554**	**-74.80346012**	**-53.2256**	**-64.7684**	**-66.101**
+2.5	**72.91106393**	**73.29672158**	**52.4273**	**63.80402**	**65.07489**
-2.55	**-87.92234612**	**-89.71587773**	**-62.148**	**-75.5416**	**-77.5896**
+2.55	**59.79574886**	**60.75785522**	**43.8459**	**53.42992**	**54.06319**
-2.6	**-103.4923459**	**-106.6679174**	**-72.1335**	**-87.5859**	**-90.4853**
+2.6	**47.26952861**	**48.63400875**	**34.94523**	**42.65516**	**42.83161**
-2.65	**-119.4459273**	**-124.1420932**	**-82.2746**	**-99.8366**	**-103.62**
+2.65	**35.89997221**	**37.719578**	**26.94103**	**32.9451**	**32.70045**
-2.7	**-134.6092004**	**-140.4503812**	**-92.0369**	**-111.559**	**-116.174**
+2.7	**27.22869569**	**28.38537332**	**21.49323**	**24.88164**	**25.43154**
-2.75	**-151.1237759**	**-158.3743314**	**-102.163**	**-123.738**	**-129.485**
+2.75	**20.41914275**	**22.24149325**	**16.49003**	**18.10819**	**19.19727**
-2.8	**-167.1770388**	**-176.2456074**	**-112.117**	**-135.702**	**-142.485**
+2.8	**20.41914275**	**22.24149325**	**13.08651**	**15.93258**	**16.9362**
-2.85	**-181.6190196**	**-192.4129555**	**-120.997**	**-146.364**	**-154.116**
+2.85	**20.41914275**	**22.24149325**	**13.08651**	**15.93258**	**16.9362**
-2.9	**-196.9107816**	**-209.6322978**	**-130.314**	**-157.541**	**-166.358**
+2.9	**20.41914275**	**22.24149325**	**13.08651**	**15.93258**	**16.9362**
-2.95	**-211.5474291**	**-226.2241586**	**-139.137**	**-168.115**	**-177.995**
+2.95	**20.41914275**	**22.24149325**	**13.08651**	**15.93258**	**16.9362**
-3	**-225.352077**	**-241.9913796**	**-147.357**	**-177.953**	**-188.883**
+3	**20.41914275**	**22.24149325**	**13.08651**	**15.93258**	**16.9362**
(Span 3) -4	**-5.774808839**	**-6.290194052**	**-3.70104**	**-4.50595**	**-4.78978**
+4	**217.0912712**	**231.7819074**	**143.2575**	**173.1771**	**183.1224**
-3.05	**-5.774808839**	**-6.290194052**	**-3.70104**	**-4.50595**	**-4.78978**
+3.05	**206.510806**	**219.6163777**	**137.0189**	**165.7273**	**174.838**
-3.1	**-5.774808839**	**-6.290194052**	**-3.70104**	**-4.50595**	**-4.78978**
+3.1	**192.5521726**	**203.6342776**	**128.7272**	**155.8182**	**163.8565**
-3.15	**-6.130490829**	**-6.290194052**	**-5.83615**	**-6.26707**	**-6.27862**
+3.15	***180.8415746***	***190.2762703***	***121.7258***	***147.4456***	***154.6051***
-3.2	***-10.12708853***	***-9.423712313***	***-9.30969***	***-10.2928***	***-10.2917***
+3.2	***165.5813454***	***172.9274666***	***112.5501***	***136.4665***	***142.5051***
-3.25	***-13.60274095***	***-13.27525854***	***-12.5878***	***-13.7809***	***-14.2097***
+3.25	***152.918419***	***158.5749301***	***104.897***	***127.3045***	***132.431***
-3.3	***-19.11398621***	***-19.40541697***	***-16.8651***	***-18.4663***	***-19.5103***
+3.3	***136.5787093***	***140.1068936***	***94.97605***	***115.4219***	***119.3929***
-3.35	***-24.56938772***	***-25.19436323***	***-20.5114***	***-22.6078***	***-24.0342***
+3.35	***123.1409437***	***124.958105***	***86.78232***	***105.6036***	***108.6405***
-3.4	***-32.30181989***	***-33.67222413***	***-25.2066***	***-29.6887***	***-30.031***
+3.4	***105.9438688***	***107.2371111***	***76.25503***	***92.98408***	***94.84479***
-3.45	***-39.61777572***	***-41.38452023***	***-29.9442***	***-36.3915***	***-36.075***
+3.45	***93.12396736***	***94.43230834***	***67.63177***	***82.64303***	***83.55865***
-3.5	***-50.16363701***	***-51.63225682***	***-37.3118***	***-45.419***	***-45.8311***
+3.5	***77.64432249***	***80.33946032***	***56.63684***	***69.45304***	***70.02762***
-3.55	***-59.46150622***	***-60.28357153***	***-43.8991***	***-53.4846***	***-53.9398***
+3.55	***65.71936436***	***69.43405025***	***48.5358***	***59.73123***	***59.29258***
-3.6	***-72.12017771***	***-72.70819744***	***-52.6851***	***-64.1091***	***-65.0207***
+3.6	***52.64462376***	***55.58682669***	***39.69164***	***47.54758***	***47.67124***

-3.65	***-83.31466705***	***-83.58042805***	***-60.052***	***-73.0108***	***-74.4478***
+3.65	***43.541975***	***45.42803526***	***34.80059***	***39.12531***	***41.40321***
-3.7	***-97.98256902***	***-99.34615095***	***-69.6471***	***-84.5969***	***-86.7496***
+3.7	***32.95703754***	***34.03047397***	***28.57867***	***31.51161***	***33.44049***
-3.75	***-110.214125***	***-112.5453462***	***-77.6057***	***-94.2012***	***-96.9705***
+3.75	***28.22303958***	***30.95310857***	***23.52942***	***26.00106***	***26.98686***
-3.8	***-126.0673863***	***-129.7134908***	***-87.8711***	***-106.582***	***-110.174***
+3.8	***28.22303958***	***30.95310857***	***17.93157***	***21.72543***	***23.24122***
-3.85	***-139.1583102***	***-143.9355012***	***-96.3105***	***-116.756***	***-121.045***
+3.85	***28.22303958***	***30.95310857***	***17.93157***	***21.72543***	***23.24122***
-3.9	***-155.9747328***	***-162.258251***	***-107.107***	***-129.766***	***-134.97***
+3.9	***28.22303958***	***30.95310857***	***17.93157***	***21.72543***	***23.24122***
-3.95	***-169.7473322***	***-177.3050148***	***-115.916***	***-140.376***	***-146.346***
+3.95	***28.22303958***	***30.95310857***	***17.93157***	***21.72543***	***23.24122***
-5	***-187.3047886***	***-196.5350302***	***-127.106***	***-153.847***	***-160.812***
+5	***28.22303958***	***30.95310857***	***17.93157***	***21.72543***	***23.24122***

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.65E-13	*-1.27E-13*	*-2.88E-13*	-1.30E-13	-1.45E-13	-1.37E-13	-1.75E-13	-1.26E-13	-1.33E-13	-9.94E-14
End Shear	3.20E-13	*2.42E-13*	*3.30E-13*	2.23E-13	2.40E-13	2.10E-13	2.58E-13	1.89E-13	2.00E-13	1.20E-13
-0.05	-84.0791565	*-102.5115461*	*-129.6711007*	-64.3591377	-69.1878831	-65.2016009	-78.8461255	-78.1169078	-82.6467543	-33.87040664
+0.05	563.7206178	*672.7615057*	*749.6647997*	489.8445073	521.7710919	488.4254588	579.9638339	517.0439476	546.1029352	255.5233051
-0.1	-168.158313	*-205.0230922*	*-259.3422014*	-128.718275	-138.375766	-130.403202	-157.692251	-156.233816	-165.293509	-67.74081328
+0.1	1047.817387	*1259.176179*	*1386.911272*	912.2576936	970.9406188	908.4684705	1077.039921	950.4936041	1003.764869	474.3458485
-0.15	-252.2374695	*-307.5346383*	*-389.0133021*	-193.077413	-207.563649	-195.604803	-236.538376	-234.350723	-247.940263	-101.6112199
+0.15	1451.939411	*1759.460044*	*1928.637796*	1266.935101	1347.321888	1259.97576	1491.385821	1300.563069	1373.19775	657.0138093
-0.2	-336.316626	*-410.0461844*	*-518.6844028*	-257.436551	-276.751533	-260.806404	-315.384502	-312.467631	-330.587017	-135.4816266
+0.2	1833.241884	*2174.592809*	*2371.551843*	1555.134973	1652.322232	1544.306284	1824.759103	1580.248759	1668.723209	804.2938324
-0.25	-420.3957825	*-512.5577305*	*-648.3555036*	-321.795689	-345.939416	-326.008005	-394.230627	-390.584539	-413.233771	-169.3520332
+0.25	2136.320867	*2505.932088*	*2718.024261*	1778.522751	1887.787555	1763.232574	2102.934207	1816.53521	1920.177527	917.3302187
-0.3	-504.474939	*-615.0692765*	*-778.0266043*	-386.154826	-415.127299	-391.209606	-473.076753	-468.701447	-495.880526	-203.2224398
+0.3	2355.716675	*2755.21407*	*2973.281999*	1939.171754	2056.002928	1938.556176	2312.357481	1975.890436	2090.103949	997.7583057
-0.35	-588.5540955	*-717.5808226*	*-907.697705*	-450.513964	-484.315182	-456.411207	-551.922878	-546.818355	-578.52728	-237.0928465
+0.35	2494.715916	*2924.55253*	*3168.537567*	2044.533591	2178.105598	2056.879152	2447.457437	2088.794915	2208.399589	1046.357524
-0.4	-672.633252	*-820.0923687*	*-1037.368806*	-514.873102	-553.503065	-521.612808	-630.769004	-624.935263	-661.174034	-270.9632531
+0.4	2557.151445	*3016.440042*	*3274.423096*	2108.708153	2242.978071	2116.655302	2511.089902	2131.043586	2254.070727	1064.766949
-0.45	-756.7124085	*-922.6039148*	*-1167.039906*	-579.23224	-622.690948	-586.814408	-709.615129	-703.05217	-743.820789	-304.8336598
+0.45	2547.400234	*3033.747036*	*3294.896565*	2116.707715	2248.135396	2119.937685	2507.185247	2107.454835	2230.068573	1054.846159
-0.5	-840.791565	*-1025.115461*	*-1296.711007*	-643.591377	-691.878831	-652.016009	-788.461255	-781.169078	-826.467543	-338.7040664
+0.5	2470.384272	*2992.720331*	*3272.855182*	2080.495135	2211.291338	2084.654111	2468.380788	2074.115391	2194.572498	1042.235129
-0.55	-924.8707215	*-1127.627007*	*-1426.382108*	-707.950515	-761.066714	-717.21761	-867.30738	-859.285986	-909.114297	-372.5744731
+0.55	2361.299348	*2885.230901*	*3181.985108*	1995.756776	2123.505524	2003.949953	2376.882897	2018.136872	2134.519348	1012.96814
-0.6	-1008.949878	*-1230.138553*	*-1556.053209*	-772.309653	-830.254598	-782.419211	-946.153505	-937.402894	-991.761051	-406.4448797
+0.6	2232.247388	*2711.487796*	*3012.269317*	1864.765803	1985.378779	1875.45188	2227.107133	1896.375988	2004.949818	956.6345907
-0.65	-1093.029034	*-1332.650099*	*-1685.724309*	-836.668791	-899.442481	-847.620812	-1024.99963	-1015.5198	-1074.40781	-440.3152863
+0.65	2039.661229	*2475.637522*	*2768.86916*	1697.711565	1801.724294	1703.665672	2023.966608	1714.096791	1811.450417	875.4521304
-0.7	-1177.108191	*-1435.161645*	*-1815.39541*	-901.027928	-968.630364	-912.822413	-1103.84576	-1093.63671	-1157.05456	-474.185693
+0.7	1789.393882	*2182.205399*	*2457.439638*	1495.931813	1580.868755	1493.511509	1772.990415	1484.314737	1569.71831	771.8594877
-0.75	-1261.187347	*-1537.673191*	*-1945.066511*	-965.387066	-1037.81825	-978.024014	-1182.69188	-1171.75362	-1239.70131	-508.0560996
+0.75	1487.843277	*1836.094468*	*2092.542412*	1259.274155	1327.438557	1250.323098	1480.533275	1208.986035	1277.931544	648.5154226
-0.8	-1345.266504	*-1640.184737*	*-2074.737611*	-1029.7462	-1107.00613	-1043.22562	-1261.53801	-1249.87053	-1322.34807	-541.9265063
+0.8	1141.951525	*1442.586003*	*1667.999241*	993.2243599	1041.644694	979.847596	1153.451022	887.7060916	937.6701648	508.299328
-0.85	-1429.34566	*-1769.106152*	*-2228.177593*	-1094.10534	-1176.19401	-1108.42722	-1340.38413	-1327.98743	-1404.99482	-575.7969129
+0.85	759.2060514	*1033.748913*	*1213.464756*	703.6753716	729.7811018	688.2459629	799.1012291	527.5375283	556.4250503	354.3104181
-0.9	-1513.424817	*-1976.468907*	*-2546.505989*	-1158.46448	-1245.3819	-1173.62882	-1419.23026	-1406.10434	-1487.64158	-609.6673195
+0.9	384.7588512	*667.6524784*	*816.6565183*	396.9274906	399.7156226	382.0929333	425.3429091	301.0051297	317.0148274	213.6928834
-0.95	-1597.503973	*-2250.624935*	*-3179.507059*	-1222.82362	-1314.56978	-1238.83042	-1498.07638	-1484.22125	-1570.28833	-643.5377262
+0.95	341.634158	*403.3424531*	*608.5678421*	264.1644562	283.7736884	267.3572122	322.9670329	309.6481012	327.4708567	137.4965881
-1	-1681.583092	*-2581.158485*	*-3920.50183*	-1287.18279	-1383.75766	-1304.03199	-1576.92248	-1562.33814	-1652.93507	-677.4081512
+1	359.6149071	*409.8505653*	*457.5286959*	278.0678541	298.7091487	281.4286408	339.9652981	325.9453671	344.7061717	144.7332511
(Span 2) -2	-1681.583092	*-2581.158485*	*-3920.50183*	-1287.18279	-1383.75766	-1304.03199	-1576.92248	-1562.33814	-1652.93507	-677.4081512
+2	359.6149071	*409.8505653*	*457.5286959*	278.0678541	298.7091487	281.4286408	339.9652981	325.9453671	344.7061717	144.7332511
-2.05	-1214.572783	*-1877.045139*	*-2978.623554*	-936.208818	-1005.70489	-947.524187	-1144.60729	-1097.40446	-1160.5691	-487.2930828
+2.05	276.9633717	*355.5639438*	*554.715593*	214.1585596	230.0557924	216.7469217	261.8298992	251.0322162	265.4811622	122.0177693
-2.1	-1131.661263	*-1522.39577*	*-2194.308507*	-872.299519	-937.051521	-882.842456	-1066.47189	-1022.49131	-1081.34408	-454.0285385
+2.1	475.2417642	*730.5038259*	*752.448085*	493.1019855	507.6594887	480.9451912	540.2392927	367.7423777	388.6253028	248.5489505
-2.15	-1048.749743	*-1262.911187*	*-1602.848018*	-808.390219	-868.398149	-818.160725	-988.336497	-947.578161	-1002.11907	-420.7639943
+2.15	939.8708933	*1153.454536*	*1175.252644*	848.9261943	891.6352659	845.9755171	984.5524067	668.2915199	706.1557099	424.2809129
-2.2	-965.8382225	*-1101.140318*	*-1245.92262*	-744.48092	-799.744777	-753.478994	-910.2011	-872.665013	-922.89405	-387.4994501
+2.2	1380.340527	*1610.907371*	*1629.780021*	1184.000964	1251.638583	1184.609266	1394.703237	1090.592897	1153.119312	602.1554728

-2.25	-882.9267023	-1025.129524	-1188.062765	-680.57162	-731.091404	-688.797263	-832.065703	-797.751865	-843.669035	-354.2349058
+2.25	1771.308345	2086.257334	2201.577711	1482.309592	1572.924771	1486.42548	1759.371544	1458.931641	1541.561352	758.6980021
-2.3	-800.0151821	-964.859357	-1188.061613	-616.662321	-662.438032	-624.115532	-753.930306	-722.838716	-764.44402	-320.9703616
+2.3	2107.985292	2499.089895	2684.84963	1736.80098	1847.199324	1745.67757	2073.322694	1766.787822	1867.814183	892.4474398
-2.35	-717.1036619	-904.5891896	-1188.060359	-552.753022	-593.78466	-559.433801	-675.79491	-647.925568	-685.219005	-287.7058174
+2.35	2371.172439	2823.535272	3024.305613	1944.317623	2069.957604	1954.714777	2321.092284	2007.806684	2123.199697	994.9512031
-2.4	-634.1921417	-844.3190221	-1188.059077	-488.843722	-525.131288	-494.75207	-597.659513	-573.01242	-605.99399	-254.4412731
+2.4	2553.392789	3058.472528	3258.856519	2093.989668	2228.460589	2101.912	2496.20938	2170.004413	2295.506638	1064.459856
-2.45	-551.2806216	-784.0488547	-1188.057661	-424.934423	-456.477915	-430.070339	-519.524116	-498.099272	-526.768975	-221.1767289
+2.45	2661.457143	3199.29476	3368.533465	2182.685004	2321.04945	2191.028588	2600.238008	2255.028864	2385.941515	1103.980459
-2.5	-468.3691014	-723.7787133	-1188.055972	-361.025124	-387.824543	-365.388608	-441.38872	-423.186124	-447.54396	-187.9121847
+2.5	2685.54883	3242.65947	3405.412701	2214.476767	2353.839904	2218.454209	2625.893509	2263.906022	2395.990561	1109.582632
-2.55	-549.551983	-784.0488879	-1188.054644	-424.934386	-456.477771	-430.070269	-519.52409	-498.099293	-526.768933	-221.1767408
+2.55	2620.65021	3199.324623	3368.533693	2182.693085	2321.049462	2191.035401	2600.253768	2255.032973	2385.945507	1103.984942
-2.6	-632.2035185	-844.3190624	-1188.053315	-488.843681	-525.131128	-494.751988	-597.659489	-573.012444	-605.993942	-254.4412855
+2.6	2498.089817	3058.485638	3258.856486	2093.995352	2228.469174	2101.925399	2496.212889	2170.013221	2295.515568	1064.460144
-2.65	-714.8550539	-904.589237	-1188.051987	-552.752976	-593.784484	-559.433708	-675.794888	-647.925595	-685.218952	-287.7058302
+2.65	2329.880897	2823.53214	3023.575645	1944.321199	2069.963945	1954.725886	2321.111269	2007.812669	2123.205647	994.957982
-2.7	-797.5065894	-964.8594115	-1188.050659	-616.66227	-662.43784	-624.115427	-753.930287	-722.838746	-764.443961	-320.9703749
+2.7	2083.847737	2499.118295	2684.849609	1736.802388	1847.203213	1745.680791	2073.333329	1766.79103	1867.817196	892.4516607
-2.75	-880.1581249	-1025.129586	-1188.049331	-680.571565	-731.091197	-688.797146	-832.065686	-797.751897	-843.668971	-354.2349196
+2.75	1758.702967	2086.270457	2201.577926	1482.307943	1572.927823	1486.433436	1759.371859	1458.933404	1541.56285	758.6984397
-2.8	-962.8096603	-1101.140362	-1245.908954	-744.480859	-799.744553	-753.478865	-910.201085	-872.665048	-922.89398	-387.4994644
+2.8	1368.253473	1610.905883	1629.649842	1184.006328	1251.641391	1184.616961	1394.717662	1090.596038	1153.122256	602.1522047
-2.85	-1045.461196	-1262.911202	-1602.842745	-808.390154	-868.39791	-818.160584	-988.336484	-947.578199	-1002.11899	-420.7640091
+2.85	926.8513687	1153.444404	1175.140146	848.9243015	891.635503	845.9812129	984.5648076	668.2889883	706.1527036	424.2856795
-2.9	-1128.112731	-1522.395777	-2194.291527	-872.299449	-937.051266	-882.842303	-1066.47188	-1022.49135	-1081.344	-454.0285538
+2.9	476.0737203	730.4958606	752.2186691	493.1055167	507.6653468	480.9439938	540.245	367.7438334	388.6270634	248.6999202
-2.95	-1210.764267	-1877.045164	-2978.613099	-936.208743	-1005.70462	-947.524022	-1144.60728	-1097.4045	-1160.56901	-487.2930985
+2.95	277.8345803	355.5595355	554.5050507	214.1585706	230.0558066	216.7469706	261.8298506	251.0322099	265.481175	121.0776175
-3	-1685.532509	-2581.158569	-3920.506804	-1287.18303	-1383.75763	-1304.03233	-1576.92265	-1562.33814	-1652.93519	-677.4081755
+3	360.7460861	409.8505343	457.5336407	278.0678749	298.7092176	281.4286925	339.9652883	325.9453552	344.7061957	144.733249
(Span 3) -4	-1.69E+03	-2581.158569	-3920.506804	-1.29E+03	-1.38E+03	-1.30E+03	-1.58E+03	-1.56E+03	-1.65E+03	-6.77E+02
+4	3.61E+02	409.8505343	457.5336407	2.78E+02	2.99E+02	2.81E+02	3.40E+02	3.26E+02	3.45E+02	1.45E+02
-3.05	-1601.255886	-2250.625061	-3179.509723	-1222.82388	-1314.56975	-1238.83071	-1498.07652	-1484.22124	-1570.28843	-643.5377677
+3.05	342.7087821	403.3424211	608.5575569	264.1644814	283.7737569	267.3572577	322.9670239	309.6480873	327.4708863	137.4965866
-3.1	-1516.979262	-1976.469026	-2546.506315	-1158.46473	-1245.38187	-1173.62909	-1419.23038	-1406.10433	-1487.64167	-609.6673598
+3.1	385.9283613	667.6641124	815.3156285	396.9314572	399.7131084	382.0857526	425.3296536	301.0087122	317.0184257	212.0182911
-3.15	-1432.702639	-1769.106263	-2228.177647	-1094.10558	-1176.19398	-1108.42747	-1340.38425	-1327.98742	-1404.99491	-575.796952
+3.15	752.2892135	1033.762032	1211.304377	703.6804065	729.7843572	688.2402591	799.089493	527.5442304	556.4324608	354.3047807
-3.2	-1348.426016	-1640.184835	-2074.737656	-1029.74643	-1107.0061	-1043.22585	-1261.53811	-1249.87051	-1322.34815	-541.9265441
+3.2	1129.105738	1442.599647	1665.638513	993.2299081	1041.648427	979.8427006	1153.440089	887.7122575	937.6770304	508.2935773
-3.25	-1264.149393	-1537.673284	-1945.066555	-965.387279	-1037.81822	-978.024237	-1182.69198	-1171.7536	-1239.70139	-508.0561363
+3.25	1479.371662	1836.108306	2090.116344	1259.279391	1327.441857	1250.318177	1480.522129	1208.990992	1277.93715	648.5095909
-3.3	-1179.87277	-1435.161734	-1815.395454	-901.028129	-968.630339	-912.822619	-1103.84585	-1093.6367	-1157.05463	-474.1857284
+3.3	1790.881351	2182.21867	2454.536943	1495.936003	1580.870808	1493.505812	1772.978091	1484.317602	1569.721727	771.8536876
-3.35	-1095.596147	-1332.650184	-1685.724354	-836.66898	-899.442458	-847.621002	-1024.99971	-1015.51979	-1074.40787	-440.3153205
+3.35	2056.272513	2475.649239	2765.956834	1697.71388	1801.721818	1703.658221	2023.952075	1714.094209	1811.448082	875.4460459
-3.4	-1011.319523	-1230.138634	-1556.053253	-772.30983	-830.254576	-782.419384	-946.153579	-937.40288	-991.761106	-406.4449127
+3.4	2268.385489	2711.497073	3009.507328	1864.763751	1985.374023	1875.442156	2227.089689	1896.370063	2004.943953	956.6278118
-3.45	-927.0429003	-1127.627083	-1426.382152	-707.950681	-761.066694	-717.217766	-867.307446	-859.285972	-909.114345	-372.5745048
+3.45	2422.305758	2885.237592	3179.550535	1995.752051	2123.497877	2003.937266	2376.892206	2018.126712	2134.509023	1012.960772
-3.5	-842.7662771	-1025.115533	-1296.711052	-643.591531	-691.878813	-652.016149	-788.461312	-781.169064	-826.467585	-338.704097
+3.5	2511.494138	2992.723789	3270.937924	2080.486945	2211.279839	2084.637663	2468.385773	2074.100742	2194.557426	1042.226931
-3.55	-758.489654	-922.6039827	-1167.039951	-579.232381	-622.690931	-586.814531	-709.615178	-703.052156	-743.820825	-304.8336891
+3.55	2530.768356	3033.745736	3293.534429	2116.71793	2248.110684	2119.925266	2507.182712	2107.443167	2230.055943	1054.842542
-3.6	-674.2130308	-820.0924324	-1037.36885	-514.873232	-553.503049	-521.612913	-630.769044	-624.935248	-661.174064	-270.9632813

+3.6	**2486.462238**	***3016.434909***	***3272.568263***	**2108.714103**	**2242.987154**	**2116.639139**	**2511.082648**	**2131.027321**	**2254.053211**	**1064.763163**
-3.65	**-589.9364077**	***-717.5808821***	***-907.6977495***	**-450.514082**	**-484.315168**	**-456.411296**	**-551.92291**	**-546.818339**	**-578.527304**	**-237.0928734**
+3.65	**2456.521904**	***2924.54275***	***3166.232582***	**2044.535057**	**2178.109989**	**2056.858088**	**2447.444455**	**2088.800594**	**2208.405137**	**1046.352786**
-3.7	**-505.6597845**	***-615.0693318***	***-778.0266488***	**-386.154933**	**-415.127286**	**-391.209678**	**-473.076777**	**-468.701431**	**-495.880544**	**-203.2224656**
+3.7	**2353.304057**	***2755.199319***	***2970.596077***	**1939.167691**	**2056.00133**	**1938.560432**	**2312.338166**	**1975.889866**	**2090.102872**	**997.7525592**
-3.75	**-421.3831614**	***-512.5577815***	***-648.3555481***	**-321.795783**	**-345.939405**	**-326.00806**	**-394.230643**	**-390.584523**	**-413.233783**	**-169.3520577**
+3.75	**2172.555248**	***2505.912349***	***2715.557945***	**1778.513541**	**1887.78046**	**1763.231365**	**2102.93934**	**1816.528912**	**1920.170367**	**917.3235797**
-3.8	**-337.1065382**	***-410.0462313***	***-518.6844473***	**-257.436634**	**-276.751523**	**-260.806443**	**-315.384509**	**-312.467615**	**-330.587023**	**-135.4816498**
+3.8	**1910.568711**	***2174.567633***	***2368.559579***	**1555.120631**	**1652.309598**	**1544.299577**	**1824.757436**	**1580.236644**	**1668.709893**	**804.2979475**
-3.85	**-252.829915**	***-307.534681***	***-389.0133466***	**-193.077484**	**-207.563641**	**-195.604825**	**-236.538375**	**-234.350707**	**-247.940263**	**-101.611242**
+3.85	**1564.179533**	***1759.430158***	***1925.227303***	**1266.914796**	**1347.302932**	**1259.963466**	**1491.377246**	**1300.556458**	**1373.190898**	**657.0170602**
-3.9	**-168.5532919**	***-205.0231307***	***-259.3422459***	**-128.718334**	**-138.37576**	**-130.403207**	**-157.692241**	**-156.233799**	**-165.293502**	**-67.74083413**
+3.9	**1131.591984**	***1259.140096***	***1383.774056***	**912.2316787**	**970.9155126**	**908.4497817**	**1077.023752**	**950.4802031**	**1003.750839**	**474.3480356**
-3.95	**-84.27666872**	***-102.5115804***	***-129.6711452***	**-64.3591848**	**-69.1878852**	**-65.2015895**	**-78.8461074**	**-78.1168907**	**-82.6467419**	**-33.87042628**
+3.95	**611.0812347**	***672.7196182***	***749.6647555***	**489.8120674**	**521.7391494**	**488.4005738**	**579.9402694**	**517.0508629**	**546.1102521**	**255.5243435**
-5	**-3.46E-13**	***-2.42E-13***	***-4.05E-13***	**-2.41E-13**	**-2.73E-13**	**-2.27E-13**	**-2.97E-13**	**-1.75E-13**	**-1.86E-13**	**-1.82E-13**
+5	**3.79E-13**	***3.51E-13***	***6.01E-13***	**2.34E-13**	**2.36E-13**	**2.68E-13**	**3.37E-13**	**2.04E-13**	**2.15E-13**	**1.55E-13**

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.03E-13	-1.07E-13	-1.42E-13	-1.09E-13	-1.37E-13	-1.13E-13	-1.12E-13	-1.10E-13	-1.13E-13
End Shear	1.61E-13	1.61E-13	1.69E-13	1.38E-13	1.37E-13	1.71E-13	1.96E-13	1.94E-13	2.03E-13
-0.05	-48.95180897	-67.20689446	-69.58769543	-66.38119625	-39.35234073	-53.22821408	-60.7303768	-67.921852	-75.3734976
+0.05	364.9403105	452.3384501	434.723893	378.1665392	295.1033617	397.9402939	446.1949179	480.5712535	513.4947777
-0.1	-97.90361794	-134.4137889	-139.1753909	-132.7623925	-78.70468146	-106.4564282	-121.460754	-135.843704	-150.746995
+0.1	678.4314756	832.3382688	793.6107594	691.11557	548.9170386	740.0163505	828.5624745	891.8807088	956.5065522
-0.15	-146.8554269	-201.6206834	-208.7630863	-199.1435888	-118.0570222	-159.6846422	-182.19113	-203.765556	-226.120493
+0.15	940.2167783	1140.442508	1077.402786	942.9398542	761.3233468	1026.082646	1146.977181	1258.968226	1345.88374
-0.2	-195.8072359	-268.8275778	-278.3507817	-265.524785	-157.4093629	-212.9128563	-242.921507	-271.687408	-301.493991
+0.2	1151.370229	1378.769885	1311.157834	1151.802077	933.0656824	1257.265893	1402.829065	1556.927457	1673.490261
-0.25	-244.7590448	-336.0344723	-347.9384771	-331.9059813	-196.7617036	-266.1410704	-303.651884	-339.60926	-376.867488
+0.25	1313.278998	1567.594679	1481.122943	1306.589136	1065.223427	1435.031188	1604.88699	1786.261603	1940.691995
-0.3	-293.7108538	-403.2413668	-417.5261726	-398.2871775	-236.1140444	-319.3692845	-364.382261	-407.531112	-452.240986
+0.3	1427.644006	1699.219842	1585.174264	1405.861575	1159.126923	1572.410013	1764.119085	1949.293027	2134.238736
-0.35	-342.6626628	-470.4482612	-487.113868	-464.6683738	-275.4663851	-372.5974985	-425.112638	-475.452964	-527.614484
+0.35	1510.173637	1769.488385	1678.599917	1491.734596	1216.356707	1667.869898	1866.656187	2064.49626	2256.197408
-0.4	-391.6144717	-537.6551557	-556.7015634	-531.04957	-314.8187258	-425.8257126	-485.843014	-543.374816	-602.987981
+0.4	1551.571998	1790.232618	1734.146826	1543.464165	1238.744702	1715.453302	1914.316607	2125.718023	2317.220078
-0.45	-440.5662807	-604.8620501	-626.2892589	-597.4307663	-354.1710666	-479.0539267	-546.573391	-611.296668	-678.361479
+0.45	1550.832217	1765.943342	1745.11988	1555.065117	1228.373135	1717.212276	1909.950121	2129.020102	2329.427552
-0.5	-489.5180897	-672.0689446	-695.8769543	-663.8119625	-393.5234073	-532.2821408	-607.303768	-679.21852	-753.734976
+0.5	1526.906692	1738.556708	1706.443883	1524.411302	1213.096157	1689.244546	1879.993667	2093.063075	2286.381711
-0.55	-538.4698986	-739.2758391	-765.4646497	-730.1931588	-432.875748	-585.5103548	-668.034145	-747.140372	-829.108474
+0.55	1469.558055	1695.220252	1637.676935	1464.548113	1175.342929	1624.410481	1812.578501	2010.972717	2188.126368
-0.6	-587.4217076	-806.4827335	-835.0523451	-796.574355	-472.2280888	-638.7385689	-728.764522	-815.062224	-904.481972
+0.6	1375.632222	1604.66093	1522.88056	1364.751528	1107.008291	1520.341979	1699.200627	1878.49387	2050.343753
-0.65	-636.3735166	-873.689628	-904.6400406	-862.9555513	-511.5804295	-691.966783	-789.494898	-882.984076	-979.855469
+0.65	1248.498411	1467.2889	1374.006373	1233.296145	1010.661075	1380.710767	1543.979172	1700.351173	1860.654141
-0.7	-685.3253256	-940.8965224	-974.227736	-929.3367475	-550.9327702	-745.1949971	-850.225275	-950.905928	-1055.22897
+0.7	1095.007038	1278.826281	1188.207693	1068.663376	889.1214057	1209.527569	1351.422829	1487.790276	1623.631071
-0.75	-734.2771345	-1008.103417	-1043.815431	-995.7179438	-590.2851109	-798.4232111	-910.955652	-1018.82778	-1130.60246
+0.75	916.9400194	1044.367796	966.6596382	870.9298601	745.4598897	1011.141514	1126.428319	1239.63743	1345.332251
-0.8	-783.2289435	-1075.310311	-1113.403127	-1062.09914	-629.6374517	-851.6514252	-971.686029	-1086.74963	-1205.97596
+0.8	714.9001622	769.4676298	694.5444003	629.5451413	582.99774	790.2399783	874.2812569	958.7592732	1032.301261
-0.85	-832.1807525	-1142.517206	-1182.990822	-1135.318606	-668.9897924	-904.8796393	-1032.41641	-1154.67148	-1281.34946
+0.85	493.3141972	466.6094747	403.2014657	374.6886727	405.3070775	551.8488857	600.6557202	651.351201	691.5675718
-0.9	-881.1325614	-1209.7241	-1252.578518	-1341.589294	-708.3421331	-958.1078534	-1093.14678	-1222.59334	-1356.72296
+0.9	276.1239076	276.3064121	253.7532894	240.6826172	216.2105901	305.2245775	323.6967191	350.473023	357.3175932
-0.95	-930.0843704	-1276.930995	-1322.166213	-1702.15643	-747.6944739	-1011.336067	-1153.87716	-1290.51519	-1432.09646
+0.95	199.9135336	266.2239698	267.8506943	240.8206044	161.0758009	218.0405729	248.069504	277.1560409	306.8852065
-1	-979.0361889	-1344.137904	-1391.7539	-2145.516391	-787.0468062	-1064.564307	-1214.60752	-1358.43704	-1507.46996
+1	210.4352956	280.2357574	281.9481026	249.6838345	169.5534776	229.5163897	261.1257849	291.7431983	323.0370663
(Span 2) -2	-979.0361889	-1344.137904	-1391.7539	-2145.516391	-787.0468062	-1064.564307	-1214.60752	-1358.43704	-1507.46996
+2	210.4352956	280.2357574	281.9481026	249.6838345	169.5534776	229.5163897	261.1257849	291.7431983	323.0370663
-2.05	-708.5009703	-943.5078047	-949.273048	-1585.463235	-570.8588171	-772.7439302	-879.167817	-982.251608	-1087.61277
+2.05	162.0702224	215.8282054	217.1469953	197.2433163	130.5844153	176.7658424	201.1103413	224.6908485	248.7923422
-2.1	-660.1359054	-879.1002489	-884.4719336	-1111.77446	-531.8897466	-719.9933872	-819.152361	-915.199247	-1013.36805
+2.1	330.4424194	330.731951	263.204867	289.545322	264.836635	380.9582176	404.5641326	437.9427995	458.9982638
-2.15	-611.7708404	-814.6926931	-819.6708192	-796.4229749	-492.9206761	-667.2428441	-759.136905	-848.146885	-939.123316
+2.15	601.606765	584.7110191	504.273476	473.6851662	490.964241	679.5974021	741.6140939	803.9499674	862.5674502
-2.2	-563.4057754	-750.2851373	-754.8697048	-669.4798727	-453.9516056	-614.4923011	-699.121449	-781.094524	-864.878587
+2.2	858.2342271	941.0298341	845.8597024	748.0020841	695.4984301	956.7584665	1059.195744	1159.19009	1257.513015

-2.25	-515.0407104	-685.8775815	-690.0685904	-616.8031929	-414.982535	-561.741758	-639.105993	-714.042163	-790.633857
+2.25	1086.228655	1252.972421	1164.191824	1038.424844	877.5372841	1203.517123	1340.442048	1476.014306	1609.61622
-2.3	-466.6756454	-621.4700257	-625.267476	-568.2022113	-376.0134645	-508.991215	-579.090537	-646.989802	-716.389128
+2.3	1279.80426	1509.447661	1432.037125	1293.940597	1032.362281	1414.46285	1581.54114	1745.723181	1907.728112
-2.35	-418.3105804	-557.0624699	-560.4663617	-519.6012297	-337.044394	-456.2406719	-519.075081	-579.937441	-642.144399
+2.35	1435.854863	1703.447597	1643.398024	1496.319769	1151.765797	1585.137683	1772.782948	1963.59243	2141.31165
-2.4	-369.9455154	-492.6549142	-495.6652473	-471.000248	-298.0753235	-403.4901288	-459.059625	-512.88508	-567.899669
+2.4	1545.787829	1827.064481	1796.15431	1631.051254	1233.839595	1705.026788	1905.497133	2118.039544	2311.340704
-2.45	-321.5804505	-428.2473584	-430.8641329	-422.3992664	-259.106253	-350.7395858	-399.044169	-445.832719	-493.65494
+2.45	1608.485933	1898.038447	1891.333553	1713.682504	1281.048921	1776.501556	1984.90302	2208.898614	2417.169793
-2.5	-273.2154363	-363.8398026	-366.0630185	-373.7982848	-220.1371825	-297.9890835	-339.028713	-378.780358	-419.410211
+2.5	1628.38088	1902.003845	1915.948283	1743.453315	1288.810818	1798.573729	2004.268381	2236.740748	2452.993442
-2.55	-321.5805095	-428.247314	-430.8640783	-422.3992304	-259.1062081	-350.7396308	-399.044094	-445.832649	-493.654899
+2.55	1608.489887	1898.043696	1891.323263	1713.674867	1281.042267	1776.50576	1984.894297	2208.901386	2417.174474
-2.6	-369.9455827	-492.6548659	-495.6651856	-471.0002079	-298.0752705	-403.4901781	-459.059538	-512.884998	-567.899623
+2.6	1545.79379	1827.073155	1796.163141	1631.049521	1233.844664	1705.036648	1905.51146	2118.047248	2311.342578
-2.65	-418.3106559	-557.0624179	-560.466293	-519.6011854	-337.0443328	-456.2407254	-519.074982	-579.937348	-642.144347
+2.65	1435.859225	1703.459349	1643.405324	1496.314719	1151.789636	1585.145674	1772.795063	1963.597683	2141.311182
-2.7	-466.6757291	-621.4699698	-625.2674003	-568.2021629	-376.0133951	-508.9912728	-579.090425	-646.989698	-716.389071
+2.7	1279.806855	1509.45217	1432.038985	1293.935514	1032.378023	1414.464173	1581.546359	1745.726401	1907.742797
-2.75	-515.0408023	-685.8775217	-690.0685077	-616.8031403	-414.9824575	-561.7418201	-639.105869	-714.042048	-790.633795
+2.75	1086.230521	1252.9798	1164.192862	1038.42317	877.5422304	1203.52251	1340.451038	1476.016445	1609.622036
-2.8	-563.4058755	-750.2850737	-754.8696151	-669.4798093	-453.9515198	-614.4923674	-699.121312	-781.094397	-864.87852
+2.8	858.235796	941.0358264	845.8683461	747.9980986	695.5194535	956.7636227	1059.204334	1159.191979	1257.510744
-2.85	-611.7709487	-814.6926256	-819.6707224	-796.4232174	-492.9205822	-667.2429147	-759.136756	-848.146747	-939.123244
+2.85	601.6065236	584.7133278	504.2769848	473.6762362	490.982228	679.6008096	741.6208368	803.9504413	862.5828713
-2.9	-660.1360219	-879.1001776	-884.4718298	-1111.774444	-531.8896445	-719.993462	-819.152199	-915.199097	-1013.36797
+2.9	330.4538702	330.7426252	263.2130051	289.5425601	264.8454936	380.9556425	404.570535	437.9458284	459.0047891
-2.95	-708.5010951	-943.5077295	-949.2729371	-1585.46349	-570.8587068	-772.7440094	-879.167643	-982.251446	-1087.61269
+2.95	162.0701994	215.8281995	217.147011	197.2433196	130.5844522	176.7658448	201.1103911	224.6908918	248.7923538
-3	-979.0361915	-1344.137992	-1391.753918	-2145.516632	-787.0470167	-1064.564383	-1214.60784	-1358.43736	-1507.47019
+3	210.4352599	280.2357741	281.9481332	249.6838526	169.5535132	229.5163712	261.125839	291.7432477	323.0370892
(Span 3) -4	-9.79E+02	-1.34E+03	-1.39E+03	-2.15E+03	-7.87E+02	-1.06E+03	-1.21E+03	-1.36E+03	-1.51E+03
+4	2.10E+02	2.80E+02	2.82E+02	2.50E+02	1.70E+02	2.30E+02	2.61E+02	2.92E+02	3.23E+02
-3.05	-930.0843824	-1276.931093	-1322.166222	-1702.156499	-747.6946654	-1011.336165	-1153.87745	-1290.51549	-1432.09668
+3.05	199.9134968	266.2239854	267.8507267	240.8206245	161.0758377	218.0405525	248.0695466	277.1560852	306.8852351
-3.1	-881.1325733	-1209.724194	-1252.578526	-1341.589278	-708.3423142	-958.1079475	-1093.14706	-1222.59362	-1356.72317
+3.1	276.1304524	276.312593	253.7533202	240.6826357	216.2238985	305.2375268	323.6926655	350.478781	357.3289637
-3.15	*-832.1807642*	*-1142.517295*	*-1182.990829*	*-1135.318497*	*-668.9899629*	*-904.8797297*	*-1032.41666*	*-1154.67175*	*-1281.34966*
+3.15	493.3170825	466.6078384	403.1987779	374.6870333	405.3211969	551.8454235	600.6493104	651.3552307	691.5777961
-3.2	-783.2289551	-1075.310396	-1113.403133	-1062.099036	-629.6376117	-851.6515118	-971.68627	-1086.74989	-1205.97615
+3.2	714.9032043	769.4646981	694.5389736	629.5418369	583.0119578	790.2371272	874.2753981	958.7635668	1032.311858
-3.25	-734.277146	-1008.103497	-1043.815437	-995.7178472	-590.2852604	-798.4232939	-910.955877	-1018.82802	-1130.60264
+3.25	916.9427017	1044.363611	966.6522728	870.9252336	745.4739012	1011.138609	1126.422271	1239.641202	1345.342595
-3.3	-685.3253369	*-940.8965985*	-974.2277402	*-929.3366585*	-550.9329092	-745.1950761	-850.225484	-950.90615	-1055.22913
+3.3	1095.008738	1278.820227	1188.197348	1068.668518	889.1346424	1209.524026	1351.415903	1487.792857	1623.640181
-3.35	-636.3735278	-873.6896997	-904.6400439	-862.9554698	-511.5805579	-691.9668582	-789.495092	-882.984282	-979.855624
+3.35	1248.496792	1467.279951	1374.00154	1233.293279	1010.672954	1380.705754	1543.970371	1700.349453	1860.661104
-3.4	-587.4217187	-806.4828008	-835.0523475	-796.5742811	-472.2282067	-638.7386403	-728.764699	-815.062414	-904.482115
+3.4	1375.628831	1604.648859	1522.872604	1364.756562	1107.018623	1520.335094	1699.189699	1878.489826	2050.347755
-3.45	-538.4699096	-739.275902	-765.4646512	-730.1930923	-432.8758554	-585.5104225	-668.034306	-747.140547	-829.108606
+3.45	1469.552462	1695.210196	1637.667473	1464.542531	1175.351551	1624.401168	1812.564608	2010.965606	2188.125238
-3.5	-489.5181005	-672.0690031	-695.8769548	-663.8119036	-393.5235041	-532.2822046	-607.303913	-679.218679	-753.735097
+3.5	1526.898236	1738.563966	1706.43053	1524.416354	1213.102188	1689.232149	1879.976086	2093.052531	2286.376817
-3.55	-440.5662914	-604.8621043	-626.2892585	-597.4307149	-354.1711529	-479.0539867	-546.573521	-611.296811	-678.361588
+3.55	1550.814755	*1765.9364379 9567*	*1745.110472*	1555.059548	1228.368132	*1717.200044*	1909.943425	2129.007749	2329.434373

-3.6	**-391.6144823**	**-537.6552054**	**-556.7015622**	**-531.0495262**	**-314.8188016**	**-425.8257689**	**-485.843128**	**-543.374944**	**-602.988079**
+3.6	**1551.578694**	**1790.221887**	**1734.155041**	**1543.469052**	**1238.737394**	**1715.43808**	**1914.306086**	**2125.726175**	**2317.222158**
-3.65	**-342.6626732**	**-470.4483066**	**-487.1138658**	**-464.6683374**	**-275.4664504**	**-372.597551**	**-425.112735**	**-475.453076**	**-527.61457**
+3.65	**1510.17677**	**1769.476242**	**1678.59058**	**1491.738962**	**1216.346869**	**1667.876551**	**1866.641568**	**2064.499844**	**2256.193269**
-3.7	**-293.7108641**	**-403.2414078**	**-417.5261695**	**-398.2871487**	**-236.1140991**	**-319.3693331**	**-364.382343**	**-407.531208**	**-452.241061**
+3.7	**1427.642949**	**1699.228078**	*1585.169268*	**1405.858544**	**1159.113985**	**1572.412462**	**1764.125542**	**1949.290892**	**2134.228959**
-3.75	**-244.759055**	**-336.0345089**	**-347.9384732**	**-331.90596**	**-196.7617479**	**-266.1411153**	**-303.65195**	**-339.60934**	**-376.867552**
+3.75	**1313.274163**	**1567.598369**	**1481.113255**	**1306.594773**	**1065.207432**	**1435.029181**	**1604.888597**	**1786.254553**	**1940.676594**
-3.8	**-195.8072459**	**-268.8276101**	**-278.3507768**	**-265.5247713**	**-157.4093966**	**-212.9128974**	**-242.921557**	**-271.687473**	**-301.494043**
+3.8	**1151.361467**	**1378.768114**	**1311.16229**	**1151.804745**	**933.0468543**	**1257.259391**	**1402.825429**	**1556.914771**	**1673.493809**
-3.85	**-146.8554368**	**-201.6207112**	**-208.7630805**	**-199.1435825**	**-118.0570454**	**-159.6846795**	**-182.191165**	**-203.765605**	**-226.120533**
+3.85	**940.2034931**	**1140.435144**	**1077.40137**	**942.9389988**	**761.3006807**	**1026.071583**	**1146.968354**	**1258.949884**	**1345.880463**
-3.9	**-97.90362774**	**-134.4138124**	**-139.1753841**	**-132.7623938**	**-78.70469411**	**-106.4564617**	**-121.460772**	**-135.843737**	**-150.747024**
+3.9	**678.413751**	**832.3249684**	**793.6036368**	**691.1113588**	**548.8904138**	**740.0000752**	**828.5478035**	**891.8811952**	**956.5083849**
-3.95	**-48.95181864**	**-67.20691353**	**-69.5876878**	**-66.38120509**	**-39.35234285**	**-53.22824381**	**-60.7303791**	**-67.9218695**	**-75.3735153**
+3.95	**364.917522**	**452.3444102**	**434.7299949**	**378.1703775**	**295.1070664**	**397.918942**	**446.1744299**	**480.5657052**	**513.4899303**
-5	**-1.52E-13**	**-1.45E-13**	**-1.51E-13**	**-1.54E-13**	**-1.82E-13**	**-1.91E-13**	**-1.78E-13**	**-1.77E-13**	**-1.77E-13**
+5	**2.03E-13**	**1.85E-13**	**2.25E-13**	**2.61E-13**	**2.04E-13**	**2.09E-13**	**1.87E-13**	**1.85E-13**	**2.05E-13**

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.94E-13	-2.40E-13	-1.32E-13	-1.60E-13	-1.12E-13
End Shear	2.87E-13	2.79E-13	1.89E-13	2.23E-13	2.33E-13
-0.05	-127.0036763	-139.2900404	-80.6920496	-97.7644083	-104.585487
+0.05	772.8090741	806.4341792	526.6137826	638.2610062	665.6132036
-0.1	-254.0073527	-278.5800807	-161.384099	-195.528817	-209.170974
+0.1	1408.413333	1469.998171	965.8536331	1171.119137	1218.21054
-0.15	-381.011029	-417.8701211	-242.076149	-293.293225	-313.75646
+0.15	1952.768182	2041.001307	1318.536561	1601.678749	1670.501317
-0.2	-508.0147054	-557.1601614	-322.768198	-391.057633	-418.341947
+0.2	2378.342083	2538.012223	1620.263718	1968.966372	2046.630849
-0.25	-635.0183817	-696.4502018	-403.460248	-488.822041	-522.927434
+0.25	2696.610881	2937.609741	1854.007389	2239.286096	2348.890621
-0.3	-762.0220581	-835.7402421	-484.152297	-586.58645	-627.512921
+0.3	2962.382356	3226.882034	2008.271141	2414.743315	2565.140903
-0.35	-889.0257344	-975.0302825	-564.844347	-684.350858	-732.098408
+0.35	3116.149804	3425.228097	2113.737896	2524.463959	2682.549399
-0.4	-1016.029411	-1114.320323	-645.536397	-782.115266	-836.683894
+0.4	3244.316158	3495.611274	2147.005571	2555.873415	2727.035576
-0.45	-1143.033087	-1253.610363	-726.228446	-879.879675	-941.269381
+0.45	3255.409098	3532.411688	2113.119805	2507.369962	2693.871732
-0.5	-1270.036763	-1392.900404	-806.920496	-977.644083	-1045.85487
+0.5	3195.605407	3470.307269	2073.441813	2460.439176	2644.49943
-0.55	-1397.04044	-1532.190444	-887.612545	-1075.40849	-1150.44035
+0.55	3066.634817	3293.876275	2031.599306	2415.899031	2577.329884
-0.6	-1524.044116	-1671.480484	-968.304595	-1173.1729	-1255.02584
+0.6	2837.675996	3099.63313	1918.930382	2285.2597	2431.618512
-0.65	-1651.047792	-1810.770525	-1048.99664	-1270.93731	-1359.61133
+0.65	2551.444629	2792.319757	1740.795015	2079.802444	2215.775433
-0.7	-1778.051469	-1950.060565	-1129.68869	-1368.70172	-1464.19682
+0.7	2188.457046	2378.455926	1514.094322	1816.658624	1920.164373
-0.75	-1905.055145	-2089.350605	-1210.38074	-1466.46612	-1568.7823
+0.75	1738.437842	1894.619265	1235.215517	1483.441482	1552.59515
-0.8	-2032.058822	-2228.640646	-1291.07279	-1564.23053	-1673.36779
+0.8	1239.22353	1327.181036	905.7652688	1088.384992	1121.325758
-0.85	-2159.062498	-2367.930686	-1371.76484	-1661.99494	-1777.95328
+0.85	709.4790293	737.3840522	555.6809279	651.7923795	666.3267561
-0.9	-2286.066174	-2507.220726	-1452.45689	-1759.75935	-1882.53876
+0.9	467.7594538	509.523217	323.4739549	369.4602185	387.9726129
-0.95	-2413.069851	-2646.510767	-1533.14894	-1857.52376	-1987.12425
+0.95	493.7460902	537.8300624	316.439099	385.2585275	409.5266469
-1	-2540.073536	-2785.800841	-1613.84101	-1955.28818	-2091.70971
+1	519.7327221	566.1369058	333.093784	405.5352912	431.0806752
(Span 2) -2	-2540.073536	-2785.800841	-1613.84101	-1955.28818	-2091.70971
+2	519.7327221	566.1369058	333.093784	405.5352912	431.0806752
-2.05	-1749.854921	-1906.024495	-1121.47201	-1365.37079	-1451.37758
+2.05	400.2807529	436.0197033	256.5376867	312.3297132	332.0039114
-2.1	-1630.402936	-1775.91176	-1044.91592	-1272.16521	-1352.30083
+2.1	454.2213507	427.8678847	394.1233655	458.5046862	470.9418562
-2.15	-1510.950951	-1645.799024	-968.359826	-1178.95962	-1253.22408
+2.15	885.6101908	963.9137745	673.5174499	812.3101072	827.0457928
-2.2	-1391.498966	-1515.686289	-891.803731	-1085.75403	-1154.14733
+2.2	1548.553756	1680.190213	1106.758151	1324.009406	1392.961943

-2.25	**-1272.046981**	**-1385.573553**	**-815.247637**	**-992.548449**	**-1055.07058**
+2.25	**2152.19531**	**2351.578526**	**1485.301315**	**1778.132399**	**1885.471173**
-2.3	**-1152.594996**	**-1255.460818**	**-738.691543**	**-899.342864**	**-955.993833**
+2.3	**2650.14979**	**2908.860472**	**1799.236422**	**2145.393008**	**2291.429699**
-2.35	**-1033.143011**	**-1125.348082**	**-662.135448**	**-806.137278**	**-856.917084**
+2.35	**3044.220424**	**3336.239139**	**2043.646778**	**2432.29686**	**2595.426353**
-2.4	**-913.6910257**	**-995.235347**	**-585.579354**	**-712.931692**	**-757.840336**
+2.4	**3338.193904**	**3621.877973**	**2205.232501**	**2623.030911**	**2800.501446**
-2.45	**-794.2390406**	**-865.1226115**	**-509.02326**	**-619.726107**	**-658.763587**
+2.45	**3508.119269**	**3813.210461**	**2285.052375**	**2715.192052**	**2911.47786**
-2.5	**-674.7870556**	**-735.0351196**	**-432.467189**	**-526.520521**	**-559.686962**
+2.5	**3547.892676**	**3886.11817**	**2286.239519**	**2710.683189**	**2920.07593**
-2.55	**-794.238939**	**-865.1523221**	**-509.023286**	**-619.726067**	**-658.763726**
+2.55	**3508.127344**	**3812.829557**	**2285.036134**	**2715.17908**	**2911.477206**
-2.6	**-913.6909082**	**-995.2695246**	**-585.579384**	**-712.931645**	**-757.84049**
+2.6	**3338.189781**	**3622.577647**	**2205.240972**	**2623.024196**	**2800.503929**
-2.65	**-1033.142877**	**-1125.386727**	**-662.135481**	**-806.137223**	**-856.917253**
+2.65	**3044.226843**	**3336.23791**	**2043.652192**	**2432.301221**	**2595.446238**
-2.7	**-1152.594847**	**-1255.50393**	**-738.691578**	**-899.342801**	**-955.994017**
+2.7	**2650.162745**	**2907.044309**	**1799.238805**	**2145.41081**	**2291.44127**
-2.75	**-1272.046816**	**-1385.621132**	**-815.247676**	**-992.548379**	**-1055.07078**
+2.75	**2152.197673**	**2351.5778**	**1485.313239**	**1778.140002**	**1885.472855**
-2.8	**-1391.498785**	**-1515.738335**	**-891.803773**	**-1085.75396**	**-1154.14754**
+2.8	**1548.566048**	**1678.206079**	**1106.760451**	**1324.007502**	**1392.973521**
-2.85	**-1510.950754**	**-1645.855537**	**-968.35987**	**-1178.95954**	**-1253.22431**
+2.85	**885.6054395**	**963.9124707**	**673.5349016**	**812.323303**	**827.0516568**
-2.9	**-1630.402723**	**-1775.97274**	**-1044.91597**	**-1272.16511**	**-1352.30107**
+2.9	**454.7025431**	**428.2100585**	**394.1247763**	**458.5120984**	**470.9429675**
-2.95	**-1749.854693**	**-1906.089942**	**-1121.47206**	**-1365.37069**	**-1451.37784**
+2.95	**400.28081**	**436.0047434**	**256.5376837**	**312.3297491**	**332.003898**
-3	**-2540.073571**	**-2785.779812**	**-1613.84145**	**-1955.2883**	**-2091.7101**
+3	**519.7327912**	**566.1174653**	**333.0937711**	**405.5353241**	**431.080609**
(Span 3) -4	**-2.54E+03**	**-2.79E+03**	**-1.61E+03**	**-1.96E+03**	**-2.09E+03**
+4	**5.20E+02**	**5.66E+02**	**3.33E+02**	**4.06E+02**	**4.31E+02**
-3.05	**-2413.069893**	**-2646.490824**	**-1533.14938**	**-1857.52389**	**-1987.12459**
+3.05	**493.7461514**	**537.8115921**	**316.4390823**	**385.2585579**	**409.5265783**
-3.1	**-2286.066215**	**-2507.201835**	**-1452.4573**	**-1759.75948**	**-1882.53908**
+3.1	**467.7595116**	**509.5057188**	**323.4778428**	**369.4552097**	**387.9725476**
-3.15	***-2159.062537***	***-2367.912847***	***-1371.76523***	***-1661.99506***	***-1777.95358***
+3.15	**709.4662611**	**737.3820622**	**555.6856269**	**651.7815731**	**666.3202342**
-3.2	**-2032.058859**	**-2228.623858**	**-1291.07316**	**-1564.23065**	**-1673.36807**
+3.2	**1239.204125**	**1327.182471**	**905.7728346**	**1088.372043**	**1121.318852**
-3.25	**-1905.05518**	**-2089.33487**	**-1210.38109**	**-1466.46623**	**-1568.78257**
+3.25	**1738.429615**	**1894.620155**	**1235.221603**	**1483.451099**	**1552.58641**
-3.3	**-1778.051502**	**-1950.045881**	**-1129.68902**	**-1368.70182**	**-1464.19706**
+3.3	**2188.445536**	**2380.129031**	**1514.097815**	**1816.665207**	**1920.152577**
-3.35	**-1651.047824**	**-1810.756893**	**-1048.99695**	**-1270.9374**	**-1359.61156**
+3.35	**2551.452295**	**2792.318135**	**1740.79281**	**2079.804691**	**2215.783725**
-3.4	**-1524.044146**	**-1671.467904**	**-968.304876**	**-1173.17299**	**-1255.02605**
+3.4	**2837.777994**	**3099.630371**	**1918.924315**	**2285.254711**	**2431.621792**
-3.45	**-1397.040468**	**-1532.178915**	**-887.612805**	**-1075.40857**	**-1150.44054**
+3.45	**3068.530377**	**3293.876838**	**2031.589071**	**2415.888438**	**2577.325387**
-3.5	**-1270.03679**	**-1392.889927**	**-806.920734**	**-977.64416**	**-1045.85504**
+3.5	**3195.61145**	**3470.305701**	**2073.426824**	**2460.422536**	**2644.488592**
-3.55	**-1143.033112**	**-1253.600938**	**-726.228663**	**-879.879746**	**-941.269532**
+3.55	**3255.402321**	**3532.763613**	**2113.106916**	**2507.361215**	**2693.857724**
-3.6	**-1016.029434**	**-1114.31195**	**-645.536591**	**-782.115331**	**-836.684026**

+3.6	**3244.301659**	**3495.610427**	**2147.01652**	**2555.859781**	**2727.040462**
-3.65	**-889.0257556**	**-975.0229613**	**-564.84452**	**-684.350917**	**-732.09852**
+3.65	**3116.147245**	**3425.225883**	**2113.743518**	**2524.46933**	**2682.546157**
-3.7	**-762.0220775**	**-835.7339727**	**-484.152449**	**-586.586503**	**-627.513014**
+3.7	**2962.371463**	**3226.881851**	**2008.270441**	**2414.740908**	**2565.13086**
-3.75	**-635.0183994**	**-696.4449842**	**-403.460378**	**-488.822088**	**-522.927508**
+3.75	**2696.614434**	**2937.60786**	**1854.000815**	**2239.276914**	**2348.897779**
-3.8	**-508.0147213**	**-557.1559957**	**-322.768306**	**-391.057674**	**-418.342002**
+3.8	**2378.335039**	**2538.009084**	**1620.251196**	**1968.966251**	**2046.617305**
-3.85	**-381.0110432**	**-417.8670071**	**-242.076235**	**-293.293259**	**-313.756496**
+3.85	**1952.776797**	**2041.00018**	**1318.529064**	**1601.679367**	**1670.503685**
-3.9	**-254.0073651**	**-278.5780186**	**-161.384164**	**-195.528845**	**-209.170991**
+3.9	**1408.410421**	**1469.998277**	**965.8394205**	**1171.110996**	**1218.203678**
-3.95	**-127.003687**	**-139.28903**	**-80.6920925**	**-97.7644306**	**-104.585485**
+3.95	**772.794882**	**806.4357188**	**526.6209853**	**638.2449854**	**665.59822**
-5	**-2.35E-13**	**-3.21E-13**	**-1.84E-13**	**-2.13E-13**	**-2.22E-13**
+5	**3.70E-13**	**3.78E-13**	**2.48E-13**	**3.08E-13**	**3.09E-13**

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.046454478	-5.640746575	-7.744291126	-8.018632262	-8.063735289	-4.53459404	-6.133519324	-6.997998076	-7.826676113	-8.685333754
End Shear	62.88380098	45.21995575	56.62366256	54.83405197	49.94394157	36.56673598	49.26142544	55.31243175	59.63068742	63.88289556
-0.05	-8.046454478	-5.640746575	-7.744291126	-8.018632262	-8.088341225	-4.53459404	-6.133519324	-6.997998076	-7.826676113	-8.685333754
+0.05	58.32077898	42.0287335	52.12323338	50.09349731	45.13368883	34.00493898	45.80698629	51.3630301	55.22742705	59.00591629
-0.1	-8.046454478	-5.640746575	-7.744291126	-8.018632262	-8.206936433	-4.53459404	-6.133519324	-6.997998076	-7.826676113	-8.685333754
+0.1	53.5197389	38.6732133	47.39597104	45.12587158	40.40880706	31.3141235	42.17426729	47.20911802	50.59906226	53.883087
-0.15	-8.046454478	-5.640746575	-7.744291126	-8.018632262	-9.703368139	-4.53459404	-6.133519324	-6.997998076	-7.826676113	-8.685333754
+0.15	49.72326677	36.01550506	43.679052	41.24261213	36.81706515	29.18180027	39.29580649	43.92109831	46.94198285	49.8426195
-0.2	-9.553202666	-7.647993956	-7.744291126	-8.018632262	-11.9080762	-6.349186979	-8.492273986	-9.129216122	-9.125278284	-9.12143712
+0.2	45.1258516	32.73715528	39.1292449	36.51873861	32.48572714	26.55013039	35.74360389	39.86786007	42.44211052	44.88040141
-0.25	-13.00127884	-10.13084319	-9.531963338	-8.018632262	-13.58566672	-8.501377329	-11.37848904	-11.83962619	-11.83962619	-11.83962619
+0.25	41.44984582	30.15723336	35.57779133	32.85616716	29.15616333	24.47796073	32.94688935	36.68028151	38.91014404	40.99330296
-0.3	-17.27178254	-13.46357821	-12.05308148	-10.95346103	-15.58188979	-11.16563332	-14.97753838	-15.95257959	-15.91407188	-15.90956101
+0.3	36.95401993	26.99618373	31.26420745	28.44028078	25.1753287	21.93753399	29.51854121	32.77747693	34.59455099	36.25390486
-0.35	-20.96974945	-16.09736261	-14.89782664	-13.27943169	-17.10329552	-13.27007203	-17.82064994	-19.22770577	-19.23107567	-19.22599961
+0.35	33.44785804	24.52615157	27.92523624	25.04979985	22.14411195	19.9511994	26.83824422	29.73015282	31.23232152	32.56994945
-0.4	-25.66833708	-19.33868408	-19.18618977	-16.30069652	-19.6848927	-15.85858914	-21.31814135	-23.2609871	-23.78998184	-23.96589547
+0.4	29.1932962	21.52252534	23.90663779	21.049393	18.58699298	17.53411632	23.57708763	26.0275439	27.15679234	28.11558033
-0.45	-29.36332352	-21.88328552	-22.56981839	-19.36272827	-22.08234271	-17.88959553	-24.0626707	-26.429522	-27.37826016	-28.00176176
+0.45	25.90330916	19.19448559	20.82716162	18.24100929	16.08357727	15.65929692	21.04787888	23.16027772	24.00892657	24.68452733
-0.5	-33.88722262	-24.99306479	-27.15712427	-23.75403569	-25.7087831	-20.3702725	-27.41526426	-30.30468404	-31.7755842	-32.95711024
+0.5	21.94792484	16.3884131	17.1623134	14.90695904	13.14119933	13.39765694	17.99725012	19.7076243	20.22924371	20.57739524
-0.55	-37.4193378	-27.41638283	-30.85098991	-27.20738974	-29.32673913	-22.30216842	-30.02654169	-33.32682509	-35.21228427	-36.83782155
+0.55	18.92045265	14.23446754	14.41795638	12.39138932	10.95648031	11.66003238	15.65380149	17.06022736	17.42855022	17.54433361
-0.6	-41.71073823	-30.35449372	-35.36731882	-31.49949509	-33.8108731	-24.64290511	-33.19090257	-36.99411106	-39.3922453	-41.56812801
+0.6	15.32216692	11.72838619	11.37750745	9.689832604	8.587038272	9.636288605	12.92492518	13.98371918	13.99520901	13.99420064
-0.65	-45.0337401	-32.62442359	-38.88826947	-35.3787453	-37.53406387	-26.45000927	-35.63425713	-39.83004555	-42.6327416	-45.24392574
+0.65	12.60353679	9.777539629	9.100751259	7.981897264	7.061816634	8.059090145	10.79858629	11.55890406	11.55950453	11.55862786
-0.7	-49.03484288	-35.35073427	-43.15907473	-40.20618861	-42.32988341	-28.61870656	-38.56704562	-43.23969194	-46.53955725	-49.68698134
+0.7	9.494205136	7.427748848	6.761827672	6.012585082	5.344174672	6.201351059	8.234456413	8.71611521	8.701539887	8.700672906
-0.75	-52.10248004	-37.43517679	-46.46009766	-43.96171948	-46.09550356	-30.27533702	-40.80780799	-45.84961125	-49.53922094	-53.10809187
+0.75	7.297363537	5.718299375	5.439263477	4.547741359	4.088647794	4.770539417	6.366533671	6.627887437	6.625867252	6.646145737
-0.8	-55.75548462	-39.90956227	-50.42660861	-48.50644444	-50.59276632	-32.23989722	-43.46568798	-48.95185947	-53.11710028	-57.20168876
+0.8	4.761521804	3.911190116	3.908893587	3.108375137	2.884885944	3.167829119	4.249764704	4.524743029	4.524017517	4.523310142
-0.85	-58.5215153	-41.77641166	-53.46069203	-52.01010385	-54.02034602	-33.72037757	-45.46918588	-51.2959503	-55.83130597	-60.31835142
+0.85	3.021842241	2.750835097	2.776073024	2.207291775	2.161416105	2.077127187	2.930321436	2.999012541	2.99831872	2.99763883
-0.9	-61.76861187	-43.95874618	-57.06414509	-56.20787546	-58.08863106	-35.4486975	-47.80881862	-54.04103762	-59.02447476	-64.00028025
+0.9	1.792684793	1.45920118	1.614586798	1.624452507	1.559940152	1.217066491	1.428482756	1.504484163	1.680887281	1.861187794
-0.95	-64.18680117	-45.57590077	-59.78427586	-59.40828455	-61.16763501	-36.72734419	-49.54038738	-56.07950036	-61.40859438	-66.76272545
+0.95	1.722149688	1.212429341	1.614586798	1.624452507	1.525049786	0.976887475	1.322365641	1.504484163	1.680887281	1.861187794
-1	-66.97018535	-47.42605073	-62.96590615	-63.19486717	-64.79304733	-38.18732447	-51.51843539	-58.4176666	-64.16126008	-69.97077827
+1	1.72E+00	1.212429341	1.614586798	1.624452507	1.51E+00	0.976887475	1.322365641	1.504484163	1.680887281	1.861187794
(Span 2) -2	-6.089348033	-4.287028198	-5.709016302	-5.743900632	-5.343567329	-3.454175876	-4.675751919	-5.319704529	-5.94344834	-6.580972689
+2	67.31499133	47.5681504	63.87003728	64.91869245	66.85118809	38.27454209	51.64306166	58.63468714	64.53920756	70.5530226
-2.05	-6.089348033	-4.287028198	-5.709016302	-5.743900632	-5.361658144	-3.454175876	-4.675751919	-5.319704529	-5.94344834	-6.580972689
+2.05	64.55321343	45.72846666	60.76350619	61.29586346	61.58968932	36.8211066	49.67329487	56.30943034	61.80460793	67.37374129
-2.1	-6.089348033	-4.287028198	-5.709016302	-5.743900632	-5.423659105	-3.454175876	-4.675751919	-5.319704529	-5.94344834	-6.580972689
+2.1	61.22365726	43.49039507	57.10991081	57.11142813	57.43266725	35.04765933	47.27158921	53.49186572	58.52439671	63.59405474
-2.15	-6.089348033	-4.287028198	-5.709016302	-5.743900632	-5.535957005	-3.454175876	-4.675751919	-5.319704529	-5.94344834	-6.580972689
+2.15	57.60843419	41.04217935	53.22563894	52.73436327	53.17084826	33.10300644	44.63955279	50.41966841	54.97743254	59.53758676
-2.2	-6.694328482	-5.266991439	-5.709016302	-5.743900632	-6.867041218	-4.389524535	-5.861051288	-6.114534763	-6.110577333	-6.580972689
+2.2	54.08291691	38.64066018	49.50235731	48.5964932	49.04746826	31.19183231	42.0539808	47.4136438	51.52963404	55.61832105
-2.25	-9.729874355	-7.603364396	-6.969989603	-6.19563497	-8.53734342	-6.284173827	-8.415241249	-8.97231034	-8.950874743	-8.949004091

+2.25	50.04905203	35.87895663	45.30670519	43.99311494	44.32957904	28.99045682	39.07690638	43.96412599	47.59550951	51.16977862
-2.3	-13.25895144	-10.13552929	-9.821398303	-8.378265938	-10.27817194	-8.332343869	-11.17750473	-12.07884251	-12.0656731	-12.06349013
+2.3	45.86399528	33.00027807	41.01681399	39.19713585	39.68102208	26.69240798	35.97012129	40.37551132	43.52413662	46.58890366
-2.35	-16.71781121	-12.60140601	-12.74783427	-10.95328642	-12.18555266	-10.32287346	-13.86291118	-15.11119517	-15.37519274	-15.47915433
+2.35	41.93425158	30.28601698	36.89871131	34.89953361	35.31844863	24.52274871	33.03775899	36.99759619	39.70942359	42.31578645
-2.4	-20.69248046	-15.41955883	-16.39108627	-14.29039248	-14.50362719	-12.59386725	-16.92756801	-18.58379657	-19.18798738	-19.62936939
+2.4	37.58827982	27.27242016	32.5216257	30.3156414	30.54366637	22.11081597	29.77878802	33.25309594	35.4681302	37.54031683
-2.45	-24.83251412	-18.34034838	-20.28989201	-17.85080194	-17.97375546	-14.9438534	-20.09967609	-22.18961546	-23.16882547	-23.98769261
+2.45	33.20226604	24.10841955	28.22688032	25.83950618	26.0978393	19.58811384	26.35360606	29.32812007	31.10589419	32.74149662
-2.5	-29.09190958	-21.33182469	-24.3692803	-21.87523792	-22.13656399	-17.34727336	-23.34475389	-25.88905733	-27.27330086	-28.50459402
+2.5	28.79503589	21.08021074	24.0230659	21.52228443	21.77831981	17.14525278	23.07195482	25.57766632	26.92708874	28.12274456
-2.55	-33.06191283	-24.10882224	-28.22740123	-25.84003336	-26.09818564	-19.57553919	-26.35404206	-29.32861899	-31.10642966	-32.7420898
+2.55	24.89132965	18.33995636	20.28939398	17.85036453	17.97346775	14.94353835	20.09925081	22.18914044	23.16830998	23.98712724
-2.6	-37.42146974	-27.27282129	-32.52215423	-30.31618431	-30.54403278	-22.11113771	-29.77922276	-33.25359434	-35.45646076	-37.52870836
+2.6	20.74783057	15.41917817	16.39061359	14.28997906	14.50344455	12.59356077	16.92714664	18.58332766	19.18749088	19.62882755
-2.65	-41.76618294	-30.28641398	-36.87346153	-34.90008714	-35.31882621	-24.52306701	-33.03818827	-36.99808032	-39.70995898	-42.31638403
+2.65	16.76924511	12.6010345	12.74742302	10.95290251	12.18538665	10.32257927	13.86251458	15.11074591	15.37471101	15.4786419
-2.7	-45.87345067	-33.00067456	-41.01735456	-39.17761345	-39.68139326	-26.69271861	-35.97054124	-40.37599552	-43.52467365	-46.5894942
+2.7	13.30646274	10.13518325	9.821018663	8.377995576	10.2780162	8.332067351	11.17712756	12.07841727	12.06522802	12.06304505
-2.75	-50.05583736	-35.87933174	-45.30723659	-43.99367035	-44.32995593	-28.99075557	-39.07731114	-43.96459435	-47.59602214	-51.17035656
+2.75	9.772838272	7.603038734	6.969699658	6.195381821	8.537207901	6.283915118	8.414885682	8.971919362	8.950497564	8.948623138
-2.8	-54.0872525	-38.64101728	-49.50287352	-48.59704014	-49.0478082	-31.19211681	-42.05436585	-47.41408227	-51.53012573	-55.61887842
+2.8	6.733367812	5.266694399	5.709016643	5.743901255	6.866896478	4.389285702	5.860725662	6.114175068	6.110233503	6.580973156
-2.85	-57.61079345	-41.04252007	-53.22612626	-52.73489755	-53.17117117	-33.1032779	-44.63991919	-50.42009127	-54.97790043	-59.53812016
+2.85	6.089327361	4.28702747	5.709016643	5.743901255	5.535957382	3.454176601	4.675751541	5.319705631	5.943449346	6.580973156
-2.9	-61.22424025	-43.49071016	-57.11037325	-57.11194203	-57.43295219	-35.04790485	-47.27192133	-53.49225762	-58.52483343	-63.59455566
+2.9	6.089327361	4.28702747	5.709016643	5.743901255	5.423659475	3.454176601	4.675751541	5.319705631	5.943449346	6.580973156
-2.95	-64.5525003	-45.72874932	-60.76393818	-61.29635271	-61.59013317	-36.82132803	-49.67359741	-56.30978321	-61.80500789	-67.37420876
+2.95	6.089327361	4.28702747	5.709016643	5.743901255	5.361658511	3.454176601	4.675751541	5.319705631	5.943449346	6.580973156
-3	-67.54956927	-47.72470649	-64.14004121	-65.23697578	-67.32834035	-38.39799001	-51.81044317	-58.8330724	-64.77401907	-70.82755214
+3	6.089327361	4.28702747	5.709016643	5.743901255	5.343567697	3.454176601	4.675751541	5.319705631	5.943449346	6.580973156
(Span 3) -4	-1.72E+00	-1.212429135	-1.614586895	-1.624452683	-1.51E+00	-0.97688768	-1.322365535	-1.504484475	-1.680887566	-1.861187926
+4	66.72106067	47.24963026	62.65867173	62.82688557	64.44149424	38.0482734	51.32998915	58.19438575	63.89740091	69.66223924
-3.05	-1.72E+00	-1.212429135	-1.614586895	-1.624452683	-1.52E+00	-0.97688768	-1.322365535	-1.504484475	-1.680887566	-1.861187926
+3.05	64.49521857	45.76933951	60.11312123	59.79734835	61.54109067	36.88015007	49.74736403	56.32363433	61.69503087	67.09552598
-3.1	-1.909994125	-1.582250193	-1.614586895	-1.624452683	-1.565908995	-1.297546154	-1.571256134	-1.572478845	-1.680887566	-1.861187926
+3.1	61.47361995	43.74805232	56.71319326	55.79711477	57.69238071	35.28196418	47.58307043	53.77575109	58.71509639	63.64272449
-3.15	-2.893415451	-2.615676995	-2.640635744	-2.099552369	-2.076031177	-1.989116354	-2.772872789	-2.817349771	-2.816649748	-2.815971772
+3.15	58.87605138	42.0020122	53.83017817	52.43862987	54.4376676	33.89916995	45.71118087	51.57947312	56.16033251	60.69691372
-3.2	-4.987184381	-4.058868089	-4.056546971	-3.225823571	-2.980344244	-3.321592988	-4.422047712	-4.724357826	-4.723619316	-4.722911323
+3.2	55.38243735	39.66861173	50.0378257	48.05933101	50.15321946	32.04870261	43.20698276	48.64955372	52.76779364	56.80134475
-3.25	-7.013441517	-5.512986344	-5.280963602	-4.372110493	-3.939413328	-4.60389407	-6.142013215	-6.38490379	-6.384150641	-6.430446385
+3.25	52.45902092	37.68893142	46.86436815	44.42328805	46.55533771	30.47692089	41.08049101	46.16754206	49.90526177	53.52620324
-3.3	-9.7558022	-7.649639754	-6.975691276	-6.203024364	-5.508760338	-6.381469434	-8.476743987	-8.987438363	-8.97118249	-8.970316836
+3.3	48.62379596	35.08354418	42.73834643	39.72913048	41.84833163	28.40626125	38.27971899	42.90534716	46.15590456	49.25007806
-3.35	-12.24949023	-9.541083297	-8.826746146	-7.778617745	-6.882945532	-7.867797002	-10.54072183	-11.23042067	-11.23899825	-11.27080375
+3.35	45.42202198	32.90232509	39.32145832	35.86694591	38.00733051	26.67116961	35.93331107	40.17742984	43.03024389	45.69538722
-3.4	-15.64392045	-11.97947985	-11.67248077	-9.942109577	-8.807502138	-9.839165655	-13.19846443	-14.29176109	-14.32948668	-14.32847674
+3.4	41.26775039	30.06508989	34.92053365	31.08114815	33.38234552	24.41242996	32.87929443	36.63272111	38.97983906	41.10091257
-3.45	-18.5197936	-13.9716749	-14.10506324	-12.08734124	-10.6919809	-11.44792929	-15.3677681	-16.73742151	-17.0763864	-17.16365973
+3.45	37.83386408	27.71444434	31.30722766	27.63424769	29.77148418	22.53970976	30.34762243	33.69869661	35.63566496	37.31639681
-3.5	-22.30007937	-16.66394977	-17.51963451	-15.2315795	-13.42610185	-13.61982796	-18.29690768	-20.04646269	-20.59958241	-20.97915503
+3.5	33.4183788	24.68546043	26.69016448	23.3177731	25.27376844	20.12496893	27.08372558	29.92123414	31.34003402	32.4657806
-3.55	-25.46152581	-18.90896619	-20.45176438	-17.899045	-15.78014344	-15.42927237	-20.73758577	-22.80878417	-23.62356205	-24.26511182
+3.55	29.79859376	22.19748251	23.03955646	19.80451122	22.37553951	18.14029818	24.40146967	26.8209117	27.82194729	28.50126383
-3.6	-29.56984973	-21.81885658	-24.30086854	-21.40929567	-18.90926766	-17.77266181	-23.89891927	-26.39265748	-27.55816032	-28.55366081
+3.6	25.1796742	19.01689672	18.75944213	15.93406998	19.37863644	15.60168649	20.97099192	22.8604575	23.33684947	23.45671589

-3.65	**-32.97062671**	**-24.22191312**	**-27.51597174**	**-24.63603631**	**-21.77553092**	**-19.70645822**	**-26.50800687**	**-29.35494017**	**-30.81881414**	**-32.11740262**
+3.65	**21.42026213**	**16.42368844**	**15.32854398**	**13.5678115**	**17.28880985**	**13.53074678**	**18.17284242**	**19.63362094**	**19.6895014**	**19.68445015**
-3.7	**-37.34919731**	**-27.30928901**	**-31.68945185**	**-28.87386448**	**-25.56438894**	**-22.18923116**	**-29.85819606**	**-33.16388427**	**-35.02136248**	**-36.72210713**
+3.7	**16.82657245**	**13.13162797**	**11.71949238**	**10.66051119**	**15.38691532**	**10.90033193**	**14.61914077**	**15.5399347**	**15.50486749**	**15.50034141**
-3.75	**-40.94305208**	**-29.83828376**	**-35.1405389**	**-32.40683929**	**-28.74922293**	**-24.22170087**	**-32.6010538**	**-36.28634347**	**-38.47406329**	**-40.51386737**
+3.75	**13.40979385**	**10.46529176**	**9.765634702**	**8.308251996**	**13.79001318**	**8.768802953**	**11.73972612**	**12.22644207**	**12.21855244**	**12.21391016**
-3.8	**-45.53406287**	**-33.06299893**	**-39.57961751**	**-36.98476588**	**-32.91097194**	**-26.81177987**	**-36.09676187**	**-40.27059811**	**-42.88877744**	**-45.37246203**
+3.8	**9.09975029**	**7.411013241**	**7.744291631**	**8.018632367**	**11.69288501**	**6.07871767**	**8.208985433**	**8.791292209**	**8.787370392**	**8.783510499**
-3.85	**-49.27474934**	**-35.68584877**	**-43.21970355**	**-40.76412601**	**-36.37623178**	**-28.91724175**	**-38.93867774**	**-43.5133769**	**-46.48889849**	**-49.34247323**
+3.85	**8.046461216**	**5.64074659**	**7.744291631**	**8.018632367**	**9.929198109**	**4.534595253**	**6.133519761**	**6.997999908**	**7.826677926**	**8.68533507**
-3.9	**-54.02039827**	**-39.00779395**	**-47.86558754**	**-45.61791631**	**-40.86570712**	**-31.58249595**	**-42.53656683**	**-47.62318091**	**-51.05999571**	**-54.39280984**
+3.9	**8.046461216**	**5.64074659**	**7.744291631**	**8.018632367**	**8.168268602**	**4.534595253**	**6.133519761**	**6.997999908**	**7.826677926**	**8.68533507**
-3.95	**-57.86164351**	**-41.69235629**	**-51.6476326**	**-49.59227447**	**-44.6317927**	**-33.73527024**	**-45.4429142**	**-50.94649455**	**-54.76288097**	**-58.49130643**
+3.95	**8.046461216**	**5.64074659**	**7.744291631**	**8.018632367**	**8.09449125**	**4.534595253**	**6.133519761**	**6.997999908**	**7.826677926**	**8.68533507**
-5	**-62.70415448**	**-45.07142406**	**-56.44158313**	**-54.65772453**	**-49.86172948**	**-36.44361503**	**-49.09962426**	**-55.13208672**	**-59.43460606**	**-63.67111433**
+5	**8.046461216**	**5.64074659**	**7.744291631**	**8.018632367**	**8.063734421**	**4.534595253**	**6.133519761**	**6.997999908**	**7.826677926**	**8.68533507**

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**							
-0	-8.046454478	-7.416142394	-7.972561649	-7.51321994	-9.085486757	-9.001458569	-9.523435518	-3.902907457
End Shear	62.88380098	60.56949288	64.5483014	60.44175255	71.82953	64.79535788	68.44775379	31.64715332
-0.05	-8.046454478	-7.416142394	-7.972561649	-7.51321994	-9.085486757	-9.001458569	-9.523435518	-3.902907457
+0.05	58.32077898	56.39797056	60.06024199	56.2166672	66.71800082	59.57928702	62.92777175	29.44410511
-0.1	-8.046454478	-7.416142394	-7.972561649	-7.51321994	-9.085486757	-9.001458569	-9.523435518	-3.902907457
+0.1	53.5197389	52.01079221	55.34259945	51.77267274	61.3467848	54.10387673	57.13397581	27.09581151
-0.15	-8.046454478	-7.488534361	-7.972561649	-7.51321994	-9.085486757	-9.001458569	-9.523435518	-4.073722949
+0.15	49.72326677	48.5310626	51.60259345	48.25073098	57.09388674	49.80143577	52.58184512	25.23603297
-0.2	-9.553202666	-11.47264588	-11.67573366	-10.61721098	-11.43621922	-9.001458569	-9.523435518	-5.622267889
+0.2	45.1258516	44.23243772	46.98478165	43.90359728	51.84949603	44.53842659	47.01403747	22.94219772
-0.25	-13.00127884	-14.96531614	-15.44111398	-14.14466415	-15.71987464	-11.12281544	-11.75805476	-7.038043916
+0.25	41.44984582	40.84441596	43.34711043	40.48032921	47.72373757	40.4331963	42.6715925	21.13727404
-0.3	-17.27178254	-19.28516021	-20.10054038	-18.54255098	-21.06535428	-14.24358308	-15.07882467	-9.371255574
+0.3	36.95401993	36.68650976	38.88530736	36.28302502	42.67037692	35.45082974	37.40202888	18.92611509
-0.35	-20.96974945	-22.69419519	-23.77942412	-22.01608471	-25.29123142	-16.70552034	-17.69874797	-11.21519166
+0.35	33.44785804	33.43192678	35.39491184	33.00080661	38.72312259	31.59740622	33.32707726	17.19862029
-0.4	-25.66833708	-26.8834129	-28.30264156	-26.28829713	-30.49379646	-21.32157749	-22.44376578	-13.48450229
+0.4	29.1932962	29.46690167	31.1452925	29.00629962	33.92499542	26.96391712	28.42800632	15.09835534
-0.45	-29.36332352	-30.16708168	-31.8500883	-29.6401032	-34.57966023	-25.27915169	-26.60963336	-15.26602807
+0.45	25.90330916	26.38748927	27.84711457	25.90750596	30.20760873	23.41689153	24.67835045	13.47086487
-0.5	-33.88722262	-34.17351251	-36.18092389	-33.73367018	-39.5751042	-30.62918811	-32.2695508	-17.44321699
+0.5	21.94792484	22.66750744	23.8658536	22.16876274	25.72891676	19.20051772	20.22202401	11.50971643
-0.55	-37.4193378	-37.29008192	-39.55198968	-36.92137403	-43.4695908	-34.93629289	-36.83203902	-19.13976037
+0.55	18.92045265	19.80499779	20.8048357	19.29577082	22.29276409	16.1251541	16.97384643	10.00480368
-0.6	-41.71073823	-41.06156184	-43.63426673	-40.78333063	-48.19371344	-40.20605866	-42.41486795	-21.19660969
+0.6	15.32216692	16.46540591	17.23692506	15.94903728	18.29702195	12.62710244	13.29168677	8.210989644
-0.65	-45.0337401	-43.96930697	-46.78401743	-43.76455726	-51.84545942	-44.31744603	-46.77100038	-22.78559214
+0.65	12.60353679	13.85763136	14.45376006	13.3401805	15.18846324	10.24148341	10.84321902	6.851234447
-0.7	-49.03484288	-47.45366737	-50.56155435	-47.34193284	-56.23405393	-49.30844898	-52.05976169	-24.69388219
+0.7	9.494205136	10.74886084	11.14191383	10.19262857	11.44694057	7.999203253	8.461548759	5.252972617
-0.75	-52.10248004	-50.11085242	-53.44504353	-50.07430814	-59.59169683	-53.16952756	-56.15173569	-26.15273076
+0.75	7.297363537	8.401414278	8.641283734	7.898358063	8.7273381	6.316577731	6.674706613	4.060945884
-0.8	-55.75548462	-53.25593549	-56.86167051	-53.31413639	-63.58056158	-57.81352292	-61.07417023	-27.88424337
+0.8	4.761521804	5.729544564	5.80215551	5.286966225	5.662591745	4.315597196	4.550341747	2.923621475
-0.85	-58.5215153	-55.62083667	-59.43396486	-55.75528331	-66.59273512	-61.36970254	-64.84418445	-29.19037919
+0.85	3.021842241	3.905716628	3.905716628	3.604328899	3.809495251	2.996897015	3.154628436	2.156274092
-0.9	-61.76861187	-58.37447684	-62.43350347	-58.60459458	-70.11766452	-65.59845406	-69.32804204	-30.71689647
+0.9	1.792684793	2.071223314	2.071223314	1.691625787	1.958720352	1.877944111	1.986035001	1.274766147
-0.95	-64.18680117	-60.40535493	-64.64965313	-60.71214522	-72.73301392	-68.79514294	-72.71829343	-31.84774748
+0.95	1.722149688	1.602096325	1.721021782	1.621459652	1.958720352	1.877944111	1.986035001	0.833885004
-1	-66.97018535	-62.71539296	-67.17593186	-63.11797141	-75.72980416	-72.54041265	-76.69132211	-33.14104532
+1	1.72E+00	1.602096325	1.721021782	1.621459652	1.958720352	1.877944111	1.986035001	0.833885004
(Span 2) -2	-6.089348033	-5.664851306	-6.085359852	-5.733318185	-6.925837932	-6.640221326	-7.022419843	-2.948533555
+2	67.31499133	62.7954364	67.29752184	63.25593538	75.97293304	73.6474617	77.87687206	33.22186338
-2.05	-6.089348033	-5.664851306	-6.085359852	-5.733318185	-6.925837932	-6.640221326	-7.022419843	-2.948533555
+2.05	64.55321343	60.49374828	64.78057365	60.85910329	72.98817874	69.99240404	74.00071556	31.93633351
-2.1	-6.089348033	-5.664851306	-6.085359852	-5.733318185	-6.925837932	-6.640221326	-7.022419843	-2.948533555
+2.1	61.22365726	57.66886395	61.70181964	57.9335436	69.36609209	65.70500775	69.4557206	30.3721635
-2.15	-6.089348033	-5.664851306	-6.085359852	-5.733318185	-6.925837932	-6.640221326	-7.022419843	-2.948533555
+2.15	57.60843419	54.55674972	58.31907331	54.72461987	65.41178016	61.15731923	64.63642722	28.66102816
-2.2	-6.694328482	-7.721168265	-7.948206909	-7.269453753	-8.047627501	-6.640221326	-7.022419843	-3.771315458
+2.2	54.08291691	51.48712075	54.98936757	51.57019505	61.53879882	56.80632796	60.02688913	26.98256289
-2.25	-9.729874355	-10.86661024	-11.29908447	-10.40672252	-11.77216797	-8.041590533	-8.510264853	-5.399749617

+2.25	50.04905203	47.94054255	51.14895645	47.93601533	57.0905799	51.91157279	54.84261481	25.05252806
-2.3	-13.25895144	-14.25251173	-14.91425038	-13.79645506	-15.81397127	-10.82349262	-11.39315012	-7.165747019
+2.3	45.86399528	44.22784318	47.1349778	44.14145217	52.45920276	46.91495684	49.55179301	23.04104323
-2.35	-16.71781121	-17.53202764	-18.4221304	-17.08949119	-19.75402625	-14.18845893	-14.93521993	-8.886239408
+2.35	41.93425158	40.71407024	43.34121878	40.55823012	48.09653464	42.13740401	44.49504588	21.14481456
-2.4	-20.69248046	-21.26274069	-22.41885141	-20.84527246	-24.26107994	-18.38317501	-19.36634051	-10.85310959
+2.4	37.58827982	36.79903308	39.11955727	36.57411891	43.25695692	37.04252292	39.10184677	19.03999911
-2.45	-24.83251412	-25.11279216	-26.5494228	-24.73053473	-28.93632615	-22.88118978	-24.12156435	-12.89202409
+2.45	33.20226604	32.69936343	34.71513302	32.3848553	38.1802473	32.06266461	33.83262931	16.9192556
-2.5	-29.09190958	-29.04067722	-30.76914696	-28.70313366	-33.72868107	-27.59646723	-29.10813614	-14.98052138
+2.5	28.79503589	28.71087824	30.41463502	28.36924962	33.32545565	27.19596522	28.68453226	14.80504205
-2.55	-33.06191283	-32.67414962	-34.67735413	-32.38538862	-38.18089271	-32.06326817	-33.83326784	-16.91935337
+2.55	24.89132965	25.11228618	26.54887951	24.73001392	28.93569867	22.88061467	24.12095626	12.89192937
-2.6	-37.42146974	-36.79955622	-39.1201211	-36.57465063	-43.25760209	-37.04313623	-39.1024958	-19.04009697
+2.6	20.74783057	21.26223793	22.41831237	20.84475627	24.26045967	18.38263029	19.36576475	10.85301686
-2.65	-41.76618294	-40.71458477	-43.34177377	-40.55875491	-48.09717277	-42.11018968	-44.46640284	-21.14490598
+2.65	16.76924511	17.53154321	18.42161173	17.08900495	19.7534438	14.18798541	14.93472149	8.886151415
-2.7	-45.87345067	-44.22834605	-47.13552094	-44.14196519	-52.45982779	-46.91558585	-49.55245896	-23.04113566
+2.7	13.30646274	14.2520545	14.91376167	13.7959923	15.81341852	10.82305675	11.39269131	7.165667209
-2.75	-50.05583736	-47.94102541	-51.14947883	-47.93650969	-57.09118405	-51.91219216	-54.84327073	-25.05261688
+2.75	9.772838272	10.86618178	11.29862749	10.40628607	11.77164861	8.041299844	8.509956067	5.399672204
-2.8	-54.0872525	-51.48757786	-54.98986287	-51.5706649	-61.53937494	-56.80693068	-60.02752758	-26.98264712
+2.8	6.733367812	7.720770416	7.947783625	7.269053586	8.047153466	6.640221082	7.022420332	3.771244932
-2.85	-57.61079345	-54.55717965	-58.31954	-54.72506688	-65.41232978	-61.15788913	-64.63703106	-28.66110842
+2.85	6.089327361	5.664851728	6.085361255	5.733319239	6.925837733	6.640221082	7.022420332	2.948533512
-2.9	-61.22424025	-57.66925921	-61.70224978	-57.9339483	-69.36659196	-65.70554967	-69.45629499	-30.37223735
+2.9	6.089327361	5.664851728	6.085361255	5.733319239	6.925837733	6.640221082	7.022420332	2.948533512
-2.95	-64.5525003	-60.49410292	-64.78096061	-60.85947157	-72.98863576	-69.9929115	-74.00125362	-31.93639888
+2.95	6.089327361	5.664851728	6.085361255	5.733319239	6.925837733	6.640221082	7.022420332	2.948533512
-3	-67.54956927	-62.99018801	-67.51095565	-63.45946498	-76.22734388	-73.9656537	-78.21439065	-33.33113014
+3	6.089327361	5.664851728	6.085361255	5.733319239	6.925837733	6.640221082	7.022420332	2.948533512
(Span 3) -4	-1.72E+00	-1.602096445	-1.721022179	-1.62145995	-1.958720295	-1.877944042	-1.986035139	-0.833884991
+4	66.72106067	62.49587527	66.93555571	62.88886774	75.4437903	72.1784097	76.30725151	33.01788491
-3.05	-1.72E+00	-1.602096445	-1.721022179	-1.62145995	-1.958720295	-1.877944042	-1.986035139	-0.833884991
+3.05	64.49521857	60.64762259	64.91429367	60.96397837	73.04608182	69.18190835	73.12852625	31.98313488
-3.1	-1.909994125	-2.245980396	-2.245980396	-1.873315598	-1.958720295	-1.877944042	-1.986035139	-1.35374912
+3.1	61.47361995	58.10922075	62.14431783	58.32974457	69.77714394	65.18632129	68.89100226	30.56969588
-3.15	-2.893415451	-3.713753722	-3.713753722	-3.403665482	-3.588654514	-2.850686314	-3.000722436	-2.05859042
+3.15	58.87605138	55.90608704	59.74444865	56.05007138	66.95692947	61.80302705	65.30360599	29.3483722
-3.2	-4.987184381	-5.986352565	-6.074773152	-5.506796305	-5.904841147	-4.503147512	-4.749426845	-3.017175518
+3.2	55.38243735	52.95017499	56.52931205	52.99885047	63.19197136	57.3580956	60.59139862	27.71582257
-3.25	-7.013441517	-8.124069378	-8.346314128	-7.622501085	-8.400855353	-6.113828297	-6.459425602	-3.917677926
+3.25	52.45902092	50.43388322	53.79576813	50.40675822	60.00060147	53.6426107	56.65314547	26.33050279
-3.3	-9.7558022	-11.04811346	-11.46066511	-10.49012804	-11.80010324	-8.216959345	-8.692817831	-5.407585055
+3.3	48.62379596	47.1126157	50.19163735	46.99151008	55.80381678	48.81656148	51.53849465	24.50707155
-3.35	-12.24949023	-13.54099293	-14.11602228	-13.0237265	-14.81181839	-10.01094652	-10.59832753	-6.686305285
+3.35	45.42202198	44.32491367	47.16937791	44.12939304	52.29267925	44.82347627	47.30718619	22.98033558
-3.4	-15.64392045	-16.80050771	-17.59475972	-16.28457604	-18.69724952	-12.96616869	-13.64859862	-8.385879148
+3.4	41.26775039	40.69045569	43.23243068	40.40307545	47.72825907	39.68454881	41.86234554	20.99422491
-3.45	-18.5197936	-19.45528662	-20.43104143	-18.94504048	-21.87364486	-15.76487508	-16.59460534	-9.821040512
+3.45	37.83386408	37.67305328	39.96637404	37.31328617	43.94869007	35.46845458	37.39578428	19.3486427
-3.5	-22.30007937	-23.03321654	-24.25709094	-22.53607102	-26.16858262	-19.61134968	-20.65618707	-11.7020514
+3.5	33.4183788	33.77756531	35.75278311	33.32890026	39.08087857	30.08488635	31.69300525	17.22809522
-3.55	-25.46152581	-26.009412	-27.44232633	-25.5272795	-29.75179642	-22.98474088	-24.22155762	-13.27107964
+3.55	29.79859376	30.57220478	32.28788245	30.05382532	35.08425568	25.82878156	27.18819112	15.48623296
-3.6	-29.56984973	-29.85846398	-31.56481912	-29.40055438	-34.39826697	-27.41824341	-28.90833164	-15.30531989
+3.6	25.1796742	26.46785183	27.85382543	25.86429247	29.97719941	20.82263199	21.91855999	13.25945727

-3.65	**-32.97062671**	**-33.03067782**	**-34.96472361**	**-32.59635833**	**-38.23701022**	**-31.12529589**	**-32.82786506**	**-16.98563307**
+3.65	**21.42026213**	**23.11626295**	**24.2350206**	**22.44633134**	**25.8149161**	**17.01031666**	**18.02311671**	**11.44389418**
-3.7	**-37.34919731**	**-37.0986992**	**-39.32749504**	**-36.69890872**	**-43.17080914**	**-35.94180415**	**-37.92126756**	**-19.14487115**
+3.7	**16.82657245**	**18.85520739**	**19.63667258**	**18.10464337**	**20.53284804**	**13.93304893**	**14.74837626**	**9.13910752**
-3.75	**-40.94305208**	**-40.42521415**	**-42.89714243**	**-40.056971**	**-47.2137635**	**-39.92795331**	**-42.13718952**	**-20.91391312**
+3.75	**13.40979385**	**15.39912129**	**15.90890471**	**14.58611977**	**16.25620572**	**11.43630265**	**12.09161977**	**7.272438472**
-3.8	**-45.53406287**	**-44.66000467**	**-47.44397716**	**-44.33582975**	**-52.37068823**	**-45.05921486**	**-47.56495324**	**-23.16993411**
+3.8	**9.09975029**	**11.03352629**	**11.20244131**	**10.25272468**	**11.03092551**	**9.001458603**	**9.523436215**	**5.46809573**
-3.85	**-49.27474934**	**-48.09911491**	**-51.13845329**	**-47.81372447**	**-56.56642906**	**-49.26990169**	**-52.01949535**	**-25.00511679**
+3.85	**8.046461216**	**7.826741299**	**7.972561474**	**7.513221867**	**9.085487721**	**9.001458603**	**9.523436215**	**4.229184018**
-3.9	**-54.02039827**	**-52.44853684**	**-55.81320275**	**-52.21592309**	**-61.88227515**	**-54.64764596**	**-57.70933381**	**-27.32970624**
+3.9	**8.046461216**	**7.416143759**	**7.972561474**	**7.513221867**	**9.085487721**	**9.001458603**	**9.523436215**	**3.902907597**
-3.95	**-57.86164351**	**-55.95848702**	**-59.5875406**	**-55.77132902**	**-66.17950381**	**-59.0282477**	**-62.34466023**	**-29.20843995**
+3.95	**8.046461216**	**7.416143759**	**7.972561474**	**7.513221867**	**9.085487721**	**9.001458603**	**9.523436215**	**3.902907597**
-5	**-62.70415448**	**-60.37037671**	**-64.33402855**	**-60.24387177**	**-71.5900342**	**-64.58426686**	**-68.22435337**	**-31.57337612**
+5	**8.046461216**	**7.416143759**	**7.972561474**	**7.513221867**	**9.085487721**	**9.001458603**	**9.523436215**	**3.902907597**

3-Span: Shear (Max and Min) Raw Data Results - 90' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.046454478	-16.32333094	-17.90245362	-10.37106222	-12.56531178	-13.44200074
End Shear	62.88380098	108.6898894	113.8269652	73.75513092	89.27076268	93.31211209
-0.05	-8.046454478	-16.32333094	-17.90245362	-10.37106222	-12.56531178	-13.44200074
+0.05	58.32077898	99.18122708	103.6481176	67.683797	81.96137397	85.4705775
-0.1	-8.046454478	-16.32333094	-17.90245362	-10.37106222	-12.56531178	-13.44200074
+0.1	53.5197389	89.22481496	92.7705519	61.31564938	74.29133252	77.24705599
-0.15	-8.046454478	-16.32333094	-17.90245362	-10.37106222	-12.56531178	-13.44200074
+0.15	49.72326677	81.44349861	84.29214475	56.31970364	68.27144147	70.80348407
-0.2	-9.553202666	-16.32333094	-17.90245362	-10.37106222	-12.56531178	-13.44200074
+0.2	45.1258516	71.97992235	74.01083844	50.21880203	60.9167346	62.94511563
-0.25	-13.00127884	-16.32333094	-17.90245362	-13.24197461	-14.63796862	-15.13992547
+0.25	41.44984582	64.6442595	66.06673646	45.46876909	55.18765161	56.83542025
-0.3	-17.27178254	-19.59445394	-20.29334836	-16.89218974	-18.62166363	-19.80539946
+0.3	36.95401993	55.80199617	56.52488719	39.71540143	48.24462506	49.44659115
-0.35	-20.96974945	-24.5220793	-25.56357476	-19.77118831	-22.07642927	-23.48991731
+0.35	33.44785804	49.01476181	49.22962918	35.27551356	42.88342797	43.75427139
-0.4	-25.66833708	-31.102546	-32.95618274	-23.30702231	-28.21043757	-28.02117727
+0.4	29.1932962	40.92225411	41.29697462	29.94996348	36.44842308	36.9393502
-0.45	-29.36332352	-37.23172388	-39.36360518	-27.48954282	-33.84804673	-33.51232863
+0.45	25.90330916	35.08099731	35.50698822	25.88443579	31.53216918	31.78311156
-0.5	-33.88722262	-45.81134184	-47.24733953	-33.39945886	-40.94035274	-41.27291578
+0.5	21.94792484	28.35959247	29.2528855	21.14068823	25.70152669	25.93668558
-0.55	-37.4193378	-52.97409526	-53.43493837	-38.48702759	-47.04361567	-47.50484033
+0.55	18.92045265	23.46831509	24.51093304	17.73150213	21.54756183	21.45118805
-0.6	-41.71073823	-62.28128042	-62.72357354	-44.72092982	-54.51934467	-55.6638108
+0.6	15.32216692	18.21946256	18.93569645	14.36386383	16.70215453	17.01218904
-0.65	-45.0337401	-70.23873002	-71.16464445	-49.59215197	-60.35870463	-62.04741341
+0.65	12.60353679	14.64144639	15.03138821	12.13409865	13.44458216	14.23734335
-0.7	-49.03484288	-79.95305871	-82.11597834	-55.5154724	-67.45637534	-69.82038279
+0.7	9.494205136	10.71033965	10.84089091	9.498173659	10.39992342	10.96700505
-0.75	-52.10248004	-87.51380767	-90.66158718	-60.10611218	-72.95474778	-75.85342767
+0.75	7.297363537	8.127943137	7.987620676	7.51896443	8.231817908	8.520138145
-0.8	-55.75548462	-96.66802976	-101.0371867	-65.63857301	-79.57802705	-83.13602194
+0.8	4.761521804	5.615429779	5.115251413	5.163571815	5.710342234	5.709689073
-0.85	-58.5215153	-103.729292	-109.0649476	-69.88440362	-84.65834036	-88.73502721
+0.85	3.021842241	3.766076441	3.638178188	3.548596584	3.853365209	3.85273172
-0.9	-61.76861187	-112.1949172	-118.7216004	-74.94571545	-90.71088061	-95.42286078
+0.9	1.792684793	3.339969966	3.638178188	2.140568013	2.606100457	2.770263357
-0.95	-64.18680117	-118.6539282	-126.1169408	-78.78252055	-95.29607544	-100.504316
+0.95	1.722149688	3.339969966	3.638178188	2.140568013	2.606100457	2.770263357
-1	-66.97018535	-126.3025159	-134.9114892	-83.2923993	-100.6815355	-106.4930344
+1	1.72E+00	3.339969966	3.638178188	2.140568013	2.606100457	2.770263357
(Span 2) -2	-6.089348033	-11.80979759	-12.86423184	-7.56883306	-9.214908873	-9.795372429
+2	67.31499133	129.6912375	139.2212102	84.84476061	102.4657092	108.7369481
-2.05	-6.089348033	-11.80979759	-12.86423184	-7.56883306	-9.214908873	-9.795372429
+2.05	64.55321343	122.3514704	130.8408649	80.47216164	97.23184415	102.9457718
-2.1	-6.089348033	-11.80979759	-12.86423184	-7.56883306	-9.214908873	-9.795372429
+2.1	61.22365726	113.8860549	121.2446634	75.36891517	91.116273	96.21535347
-2.15	-6.089348033	-11.80979759	-12.86423184	-7.56883306	-9.214908873	-9.795372429
+2.15	57.60843419	105.0417326	111.2855005	69.98016056	84.65169189	89.13494737
-2.2	-6.694328482	-11.80979759	-12.86423184	-7.56883306	-9.214908873	-9.795372429
+2.2	54.08291691	96.68891432	101.9348039	64.84426444	78.4847591	82.40809996
-2.25	-9.729874355	-11.80979759	-12.86423184	-9.537663149	-10.47359165	-11.10352253

+2.25	50.04905203	87.40416569	91.59863392	59.08695941	71.5656506	74.88914458
-2.3	-13.25895144	-15.74882089	-16.41732265	-12.43138382	-14.39137468	-14.70924706
+2.3	45.86399528	77.88193822	81.23195149	53.23055786	64.52122723	67.21921133
-2.35	-16.71781121	-20.76413543	-21.81594538	-15.5823875	-19.05506637	-18.91359831
+2.35	41.93425158	69.08268456	71.79974715	47.58434478	57.77083907	59.92965996
-2.4	-20.69248046	-27.34008345	-28.12850921	-20.21184695	-24.67116034	-24.7731866
+2.4	37.58827982	59.85564759	61.6932571	41.71906602	50.6561042	52.33301571
-2.45	-24.83251412	-34.58496928	-34.81903765	-25.35975335	-30.90299073	-31.26926517
+2.45	33.20226604	50.85049874	51.88870547	35.94375657	43.69005726	44.8745272
-2.5	-29.09190958	-42.87905468	-43.26400238	-30.78401773	-37.46005054	-38.23076391
+2.5	28.79503589	42.16949909	42.39255152	30.32232673	36.90226464	37.63729726
-2.55	-33.06191283	-50.85155935	-51.88888243	-35.9444553	-43.69089999	-44.875409
+2.55	24.89132965	34.58400744	35.14045993	25.35910657	30.90220823	31.26847119
-2.6	-37.42146974	-59.85676454	-61.69341667	-41.71977896	-50.65696402	-52.33391838
+2.6	20.74783057	27.33922996	28.12840298	20.21123806	24.67042291	24.77247653
-2.65	-41.76618294	-69.08382148	-71.79993824	-47.58506566	-57.74240928	-59.93057581
+2.65	16.76924511	20.76343101	21.81583458	15.58185679	19.05442183	18.91292521
-2.7	-45.87345067	-77.85378854	-81.23214645	-53.23127905	-64.52209471	-67.19144219
+2.7	13.30646274	15.74823348	16.41721996	12.43102022	14.39077155	14.7088117
-2.75	-50.05583736	-87.40530706	-91.59880356	-59.08767142	-71.56650718	-74.89005441
+2.75	9.772838272	11.80979916	12.86379019	9.537321382	10.47321343	11.10310688
-2.8	-54.0872525	-96.69001668	-101.9349956	-64.84496004	-78.48559482	-82.40899111
+2.8	6.733367812	11.80979916	12.86379019	7.568832766	9.21490962	9.795370925
-2.85	-57.61079345	-105.0428107	-111.2856886	-69.98083466	-84.65250141	-89.13581244
+2.85	6.089327361	11.80979916	12.86379019	7.568832766	9.21490962	9.795370925
-2.9	-61.22424025	-113.8870917	-121.2448223	-75.36955752	-91.1170434	-96.21616502
+2.9	6.089327361	11.80979916	12.86379019	7.568832766	9.21490962	9.795370925
-2.95	-64.5525003	-122.3524749	-130.8410402	-80.4727665	-97.23256831	-102.9465537
+2.95	6.089327361	11.80979916	12.86379019	7.568832766	9.21490962	9.795370925
-3	-67.54956927	-130.3366553	-139.9603121	-85.22656762	-102.9224041	-109.2438778
+3	6.089327361	11.80979916	12.86379019	7.568832766	9.21490962	9.795370925
(Span 3) -4	-1.72E+00	-3.33997041	-3.63805324	-2.14056793	-2.606100668	-2.770262932
+4	66.72106067	125.5588613	134.0554699	82.85570705	100.1602827	105.9123036
-3.05	-1.72E+00	-3.33997041	-3.63805324	-2.14056793	-2.606100668	-2.770262932
+3.05	64.49521857	119.4394483	127.0193046	79.24746577	95.85150773	101.1208981
-3.1	-1.909994125	-3.33997041	-3.63805324	-2.14056793	-2.606100668	-2.770262932
+3.1	61.47361995	111.3662074	117.7757534	74.45180481	90.12042866	94.76952544
-3.15	-2.893415451	-3.545685846	-3.63805324	-3.375445445	-3.624677899	-3.631357783
+3.15	58.87605138	104.5931605	110.049896	70.40240671	85.27797803	89.41880722
-3.2	-4.987184381	-5.85719406	-5.450383061	-5.384434132	-5.953040611	-5.952373951
+3.2	55.38243735	95.76711709	100.0158858	65.09546207	78.92799793	82.4205039
-3.25	-7.013441517	-7.867403671	-7.677997999	-7.28039277	-7.970418786	-8.21845971
+3.25	52.45902092	88.44327298	91.71482365	60.66914789	73.62895909	76.59398995
-3.3	-9.7558022	-11.05493708	-11.2234916	-9.754232151	-10.68035143	-11.28413827
+3.3	48.62379596	78.99289144	81.03348385	54.93120431	66.75642049	69.0531332
-3.35	-12.24949023	-14.21017219	-14.57163865	-11.86314968	-13.07563527	-13.90065153
+3.35	45.42202198	71.22090442	72.27189415	50.19220207	61.07786844	62.83432358
-3.4	-15.64392045	-18.68237125	-19.47497058	-14.57869413	-17.17104349	-17.36897702
+3.4	41.26775039	61.27464939	62.02262062	44.1035438	53.77911161	54.85528769
-3.45	-18.5197936	-22.9136933	-23.93552356	-17.31879214	-21.04772142	-20.86468928
+3.45	37.83386408	53.86001583	54.61671968	39.11611881	47.79816476	48.32773357
-3.5	-22.30007937	-29.01309254	-29.86249671	-21.58000012	-26.26893068	-26.50728534
+3.5	33.4183788	44.90706911	46.46585328	32.75698999	40.1694833	40.50180478
-3.55	-25.46152581	-34.39069186	-34.86614895	-25.38985867	-30.93384775	-31.19711349
+3.55	29.79859376	38.01004301	40.15850217	28.07160172	34.54669175	34.29299133
-3.6	-29.56984973	-41.71207502	-42.0521674	-30.47141885	-37.07874406	-37.6059514
+3.6	25.1796742	30.44801837	32.14969734	22.95641258	27.50004501	27.57156935

-3.65	**-32.97062671**	**-48.18662062**	**-48.34032854**	**-34.73220594**	**-42.22716499**	**-43.05828997**
+3.65	**21.42026213**	**25.18332851**	**26.2741673**	**20.12758229**	**22.62886403**	**23.94633466**
-3.7	**-37.34919731**	**-56.6700804**	**-57.45873392**	**-40.28171811**	**-48.92824368**	**-50.17329008**
+3.7	**16.82657245**	**19.06132882**	**19.68217118**	**16.52901841**	**18.22533885**	**19.3409409**
-3.75	**-40.94305208**	**-63.74443323**	**-65.09273926**	**-44.88475649**	**-54.48307738**	**-56.08474584**
+3.75	**13.40979385**	**16.32333116**	**17.90231843**	**13.60868512**	**15.03820601**	**15.60836394**
-3.8	**-45.53406287**	**-72.91346807**	**-75.02226189**	**-50.82193633**	**-61.6439976**	**-63.72145978**
+3.8	**9.09975029**	**16.32333116**	**17.90231843**	**10.371065**	**12.56531256**	**13.4420032**
-3.85	**-49.27474934**	**-80.48485265**	**-83.24783181**	**-55.7029979**	**-67.52817077**	**-70.00853379**
+3.85	**8.046461216**	**16.32333116**	**17.90231843**	**10.371065**	**12.56531256**	**13.4420032**
-3.9	**-54.02039827**	**-90.21095012**	**-93.84514228**	**-61.9475636**	**-75.05259394**	**-78.06253935**
+3.9	**8.046461216**	**16.32333116**	**17.90231843**	**10.371065**	**12.56531256**	**13.4420032**
-3.95	**-57.86164351**	**-98.17659466**	**-102.547724**	**-67.04238102**	**-81.18898625**	**-84.64178228**
+3.95	**8.046461216**	**16.32333116**	**17.90231843**	**10.371065**	**12.56531256**	**13.4420032**
-5	**-62.70415448**	**-108.3312832**	**-113.6697687**	**-73.51408576**	**-88.98061639**	**-93.00874964**
+5	**8.046461216**	**16.32333116**	**17.90231843**	**10.371065**	**12.56531256**	**13.4420032**

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-36.209045	-25.383360	-34.849310	-36.083845	-36.286809	-20.405673	-27.600837	-31.490991	-35.220043	-39.084002
+0.05	262.443505	189.235318	234.554550	225.420738	204.790873	153.022225	206.347054	231.368897	249.194324	266.266413
-0.1	-72.418090	-50.766719	-69.698620	-72.167690	-72.573618	-40.811346	-55.201674	-62.981983	-70.440085	-78.168004
+0.1	486.395592	351.792313	431.598791	411.517117	374.759121	284.634192	383.726394	429.640899	462.473792	495.984730
-0.15	-108.627135	-76.150079	-104.547930	-108.251536	-108.860426	-61.217020	-82.802511	-94.472974	-105.660128	-117.252006
+0.15	672.506938	487.537868	591.362462	558.673988	512.026994	394.774875	532.062559	594.750936	652.822518	697.891491
-0.2	-144.836181	-101.533438	-139.397240	-144.335381	-145.147235	-81.622693	-110.403348	-125.963965	-140.880170	-156.336008
+0.2	821.234875	597.028898	714.944198	679.884799	626.012531	483.829755	651.939794	727.419790	807.325619	867.767831
-0.25	-181.045226	-126.916798	-174.246550	-180.419226	-181.434044	-102.028366	-138.004185	-157.454957	-176.100213	-195.420009
+0.25	933.705126	680.984702	812.856977	768.018119	710.953168	552.358531	744.117806	832.194447	926.244026	1006.322009
-0.3	-217.254271	-152.300158	-209.095860	-216.503071	-217.720853	-122.434039	-165.605022	-188.945948	-211.320255	-234.504011
+0.3	1012.123169	740.287273	881.109589	821.972654	766.102493	601.051036	815.353909	914.762294	1010.781969	1106.683296
-0.35	-253.463316	-177.683517	-243.945170	-252.586916	-254.007662	-142.839712	-193.205859	-220.436939	-246.540298	-273.588013
+0.35	1071.843573	783.082000	917.546479	870.417380	813.298827	630.726838	864.853460	967.931650	1070.519191	1169.923468
-0.4	-289.672361	-203.066877	-278.794481	-288.670761	-290.294470	-163.245385	-220.806696	-251.927931	-281.760340	-312.672015
+0.4	1098.668720	804.548612	928.303146	899.220548	841.785606	642.335858	889.527250	992.645376	1102.264985	1201.566024
-0.45	-325.881406	-228.450236	-313.643791	-324.754607	-326.581279	-183.651059	-248.407533	-283.418922	-316.980383	-351.756017
+0.45	1094.479155	804.165008	915.708241	904.910490	848.459296	636.957809	890.439345	990.381188	1103.977237	1207.896060
-0.5	-362.090451	-253.833596	-348.493101	-360.838452	-362.868088	-204.056732	-276.008370	-314.909913	-352.200425	-390.840019
+0.5	1078.881628	791.758720	901.507238	884.855527	832.217408	629.036120	875.937022	974.847637	1085.332162	1185.575168
-0.55	-398.299497	-279.216955	-383.342411	-396.922297	-399.154897	-224.462405	-303.609207	-346.400905	-387.420468	-429.924021
+0.55	1040.499632	762.021288	879.035651	849.197270	799.824471	609.459647	842.318113	939.890330	1042.765215	1134.626066
-0.6	-434.508542	-304.600315	-418.191721	-433.006142	-435.441706	-244.868078	-331.210044	-377.891896	-422.640510	-469.008023
+0.6	974.315927	713.317201	832.077226	789.671019	745.719674	574.025559	788.354669	881.099625	974.069935	1063.180582
-0.65	-470.717587	-329.983675	-453.041031	-469.089987	-471.728514	-265.273751	-358.810880	-409.382887	-457.860553	-508.092025
+0.65	882.819385	647.393524	760.844646	712.474137	674.193709	524.065893	715.950618	800.611445	881.696227	964.819363
-0.7	-506.926632	-355.367034	-487.890341	-505.173833	-508.015323	-285.679425	-386.411717	-440.873879	-493.080595	-547.176026
+0.7	768.805105	567.802457	663.119669	616.130512	584.459130	461.042990	627.185672	700.763717	771.475383	841.913960
-0.75	-543.135677	-380.750394	-522.739651	-541.257678	-544.302132	-306.085098	-414.012554	-472.364870	-528.300638	-586.260028
+0.75	639.245232	475.467990	541.544099	501.249488	476.555679	386.549074	524.315019	584.095576	642.798771	697.605523
-0.8	-579.344722	-406.133753	-557.588961	-577.341523	-580.588941	-326.490771	-441.613391	-503.855861	-563.520680	-625.344030
+0.8	490.634382	370.702703	398.997993	360.147472	345.012544	302.306321	409.769239	453.347813	497.152851	535.287146
-0.85	-615.553768	-431.517113	-592.438271	-613.425368	-621.591798	-346.896444	-469.214228	-535.346853	-598.740723	-664.428032
+0.85	326.189496	255.802021	241.954615	209.075170	206.649060	210.167009	286.154465	311.462650	337.750169	358.603874
-0.9	-651.762813	-456.900473	-627.287581	-649.509213	-735.062249	-367.302117	-496.815065	-566.837844	-633.960765	-703.512034
+0.9	165.540487	143.180663	143.275298	131.580653	133.421702	112.113347	158.270458	167.848960	181.733484	185.282651
-0.95	-687.971858	-482.283832	-662.136891	-685.593058	-931.500651	-387.707790	-524.415902	-598.328835	-669.180808	-742.596036
+0.95	147.243798	103.662709	138.047171	138.890689	131.707626	83.523879	113.062262	128.633396	143.715863	159.131556
-1	-724.180921	-507.667197	-696.986209	-721.676899	-1173.368185	-408.113459	-552.016753	-629.819820	-704.400851	-781.680041
+1	154.993474	109.118639	145.312812	146.200727	136.010958	87.919874	119.012906	135.403570	151.279854	167.506905
(Span 2) -2	-724.180921	-507.667197	-696.986209	-721.676899	-1173.368185	-408.113459	-552.016753	-629.819820	-704.400851	-781.680041
+2	154.993474	109.118639	145.312812	146.200727	136.010958	87.919874	119.012906	135.403570	151.279854	167.506905
-2.05	-521.835782	-367.384480	-489.244389	-492.233885	-866.170322	-296.011832	-400.696879	-455.881679	-509.334513	-563.968253
+2.05	119.370788	84.039524	111.915066	112.598909	108.161559	67.712945	91.659758	104.283299	116.510681	129.008215
-2.1	-486.213217	-342.305370	-455.846642	-458.632063	-607.501705	-275.804898	-373.343732	-424.761401	-474.565334	-525.469560
+2.1	204.368761	171.346860	171.496993	136.481653	157.415532	137.327786	197.541207	209.781764	227.089862	238.007915
-2.15	-450.590652	-317.226259	-422.448895	-425.030241	-435.153431	-255.597965	-345.990585	-393.641123	-439.796155	-486.970867
+2.15	403.811340	311.955802	303.194721	261.484820	256.810232	254.583480	352.396890	384.554884	416.878386	447.273762
-2.2	-414.968087	-292.147148	-389.051147	-391.428418	-364.831432	-235.391032	-318.637439	-362.520845	-405.026977	-448.472174
+2.2	593.057154	445.026822	487.959468	438.610165	405.594943	360.642173	496.115357	549.232950	601.083790	652.067936

-2.25	-379.345522	-267.068038	-355.653400	-357.826596	-336.819164	-215.184099	-291.284292	-331.400567	-370.257798	-409.973481
+2.25	761.034735	563.250534	649.713467	603.677378	564.832545	455.036186	624.069029	695.069768	765.369098	834.646731
-2.3	-343.722957	-241.988927	-322.255652	-324.224774	-311.617721	-194.977166	-263.931146	-300.280289	-335.488619	-371.474788
+2.3	905.686484	663.626788	782.705554	742.565271	704.969828	535.318787	733.452346	820.088742	905.223324	989.228992
-2.35	-308.100392	-216.909816	-288.857905	-290.622951	-286.416279	-174.770233	-236.577999	-269.160011	-300.719441	-332.976095
+2.35	1018.763669	744.544912	883.301839	852.163870	815.855405	597.234015	821.953686	919.254834	1018.196749	1110.350868
-2.4	-272.477827	-191.830705	-255.460158	-257.021129	-261.214837	-154.563300	-209.224853	-238.039733	-265.950262	-294.477402
+2.4	1097.053830	801.549302	947.401857	931.373767	889.963482	639.792375	884.120709	988.072146	1098.283404	1198.517347
-2.45	-236.855262	-166.751595	-222.062410	-223.419307	-236.013394	-134.356367	-181.871706	-206.919455	-231.181083	-255.978709
+2.45	1143.483198	834.060634	984.204536	980.727795	935.358477	664.272191	921.183073	1029.247094	1145.397259	1253.393722
-2.5	-201.233386	-141.672510	-188.664663	-189.817484	-210.811952	-114.149433	-154.518581	-175.799177	-196.411905	-217.480016
+2.5	1153.926283	844.376915	986.260744	993.491461	951.646198	668.297028	932.628327	1039.288764	1159.834456	1271.969635
-2.55	-236.856072	-166.751625	-222.062387	-223.419278	-236.013376	-134.356343	-181.871730	-206.919416	-231.181047	-255.978688
+2.55	1143.720859	834.062685	984.207257	980.722459	935.354518	664.268741	921.185253	1029.242570	1145.398696	1253.396149
-2.6	-272.478758	-191.830740	-255.460133	-257.021097	-261.214816	-154.563272	-209.224878	-238.039688	-265.950220	-294.477378
+2.6	1097.131465	801.552393	947.406355	931.378346	889.962584	639.795003	884.125822	988.079575	1098.287398	1198.518319
-2.65	-308.101444	-216.909855	-288.857878	-290.622916	-286.416256	-174.770201	-236.578027	-269.159959	-300.719392	-332.976068
+2.65	1018.893177	744.547174	883.307933	852.167656	815.852789	597.246376	821.957829	919.261116	1018.199473	1110.350626
-2.7	-343.724130	-241.988970	-322.255623	-324.224734	-311.617696	-194.977130	-263.931176	-300.280231	-335.488565	-371.474758
+2.7	905.865953	663.628133	782.707892	742.566235	704.967194	535.326950	733.453033	820.091449	905.224994	989.236607
-2.75	-379.346816	-267.068085	-355.653369	-357.826553	-336.819136	-215.184059	-291.284325	-331.400502	-370.257738	-409.973448
+2.75	761.096707	563.251502	649.717293	603.677916	564.831679	455.038751	624.071823	695.074430	765.370207	834.649747
-2.8	-414.969502	-292.147200	-389.051114	-391.428372	-364.831398	-235.390988	-318.637473	-362.520774	-405.026911	-448.472139
+2.8	592.917633	445.027636	487.962575	438.614647	405.592878	360.653074	496.118031	549.237404	601.084770	652.066758
-2.85	-450.592188	-317.226315	-422.448860	-425.030191	-435.153554	-255.597917	-345.990622	-393.641045	-439.796083	-486.970829
+2.85	403.710770	311.955677	303.195918	261.486640	256.805601	254.592807	352.398657	384.558380	416.878632	447.281759
-2.9	-486.214874	-342.305430	-455.846605	-458.632009	-607.501694	-275.804845	-373.343771	-424.761317	-474.565256	-525.469519
+2.9	204.542952	171.352798	171.502528	136.485872	157.414100	137.332379	197.539872	209.785084	227.091433	238.011298
-2.95	-521.837560	-367.384545	-489.244350	-492.233828	-866.170451	-296.011774	-400.696920	-455.881588	-509.334429	-563.968209
+2.95	119.370389	84.039512	111.915063	112.598917	108.161560	67.712965	91.659759	104.283324	116.510704	129.008221
-3	-724.181529	-507.667198	-696.986254	-721.676909	-1173.368310	-408.113568	-552.016792	-629.819985	-704.401014	-781.680160
+3	154.992948	109.118621	145.312820	146.200743	136.010968	87.919893	119.012897	135.403598	151.279880	167.506917
(Span 3) -4	-724.181529	-507.667198	-696.986254	-721.676909	-1173.368310	-408.113568	-552.016792	-629.819985	-704.401014	-781.680160
+4	154.992948	109.118621	145.312820	146.200743	136.010968	87.919893	119.012897	135.403598	151.279880	167.506917
-3.05	-687.972454	-482.283838	-662.136942	-685.593063	-931.500687	-387.707890	-524.415953	-598.328985	-669.180964	-742.596152
+3.05	147.243301	103.662690	138.047179	138.890706	131.707636	83.523898	113.062252	128.633418	143.715885	159.131571
-3.1	-651.763378	-456.900479	-627.287630	-649.509217	-735.062241	-367.302211	-496.815114	-566.837986	-633.960913	-703.512144
+3.1	165.812400	143.184056	143.278503	131.580669	133.421711	112.120248	158.277172	167.846858	181.736469	185.288547
-3.15	-615.554303	-431.517119	-592.438317	-613.425372	-621.591742	-346.896533	-469.214275	-535.346986	-598.740862	-664.428136
+3.15	326.543134	255.803517	241.953766	209.073776	206.648209	210.174331	286.152670	311.459326	337.752259	358.609176
-3.2	-579.345227	-406.133759	-557.589005	-577.341526	-580.588887	-326.490854	-441.613436	-503.855986	-563.520812	-625.344128
+3.2	490.897821	370.704280	398.996473	360.144658	345.010830	302.313693	409.767761	453.344775	497.155077	535.292641
-3.25	-543.136152	-380.750400	-522.739693	-541.257680	-544.302082	-306.085175	-414.012597	-472.364987	-528.300761	-586.260120
+3.25	639.494059	475.469381	541.541929	501.245669	476.553279	386.556340	524.313512	584.092440	642.800727	697.610887
-3.3	-506.927076	-355.367040	-487.890380	-505.173835	-508.015277	-285.679497	-386.411758	-440.873987	-493.080710	-547.176113
+3.3	769.444190	567.803338	663.116529	616.125148	584.461796	461.049853	627.183835	700.760126	771.476721	841.918683
-3.35	-470.718001	-329.983680	-453.041068	-469.089989	-471.728472	-265.273818	-358.810919	-409.382988	-457.860660	-508.092105
+3.35	883.468319	647.392684	760.840005	712.471631	674.192223	524.072053	715.948018	800.606881	881.695335	964.822973
-3.4	-434.508925	-304.600321	-418.191756	-433.006143	-435.441667	-244.868139	-331.210081	-377.891988	-422.640609	-469.008097
+3.4	974.601714	713.315443	832.070967	789.666893	745.722284	574.030917	788.351099	881.093958	974.067838	1063.182658
-3.45	-398.299850	-279.216961	-383.342443	-396.922298	-399.154862	-224.462461	-303.609242	-346.400988	-387.420558	-429.924089
+3.45	1040.732871	762.018389	879.030436	849.192364	799.821576	609.464118	842.313284	939.883126	1042.761527	1134.625480
-3.5	-362.090774	-253.833602	-348.493131	-360.838452	-362.868057	-204.056782	-276.008403	-314.909989	-352.200508	-390.840081
+3.5	1079.052261	791.754335	901.511001	884.848602	832.220028	629.039247	875.930593	974.838520	1085.326695	1185.572630
-3.55	-325.881699	-228.450242	-313.643819	-324.754606	-326.581253	-183.651103	-248.407564	-283.418989	-316.980457	-351.756074
+3.55	1094.337485	804.155953	915.704661	904.905612	848.456408	636.955215	890.433002	990.377716	1103.970831	1207.899597
-3.6	-289.672623	-203.066882	-278.794506	-288.670761	-290.294448	-163.245425	-220.806725	-251.927990	-281.760406	-312.672066

+3.6	**1098.458646**	**804.552084**	**928.297582**	**899.224807**	**841.788140**	**642.332068**	**889.519357**	**992.639920**	**1102.269212**	**1201.567103**
-3.65	**-253.463548**	**-177.683523**	**-243.945194**	**-252.586915**	**-254.007643**	**-142.839746**	**-193.205886**	**-220.436990**	**-246.540356**	**-273.588058**
+3.65	**1071.557171**	**783.083624**	**917.540183**	**870.412538**	**813.301091**	**630.721736**	**864.856910**	**967.924069**	**1070.521050**	**1169.921322**
-3.7	**-217.254472**	**-152.300163**	**-209.095882**	**-216.503069**	**-217.720838**	**-122.434067**	**-165.605047**	**-188.945990**	**-211.320305**	**-234.504050**
+3.7	**1011.753056**	**740.286725**	**881.113859**	**821.970064**	**766.100921**	**601.044327**	**815.355179**	**914.765643**	**1010.780862**	**1106.678226**
-3.75	**-181.045397**	**-126.916803**	**-174.246569**	**-180.419224**	**-181.434033**	**-102.028389**	**-138.004208**	**-157.454991**	**-176.100254**	**-195.420042**
+3.75	**933.428678**	**680.982195**	**812.858890**	**768.013096**	**710.956090**	**552.350237**	**744.116765**	**832.195280**	**926.240370**	**1006.314023**
-3.8	**-144.836321**	**-101.533444**	**-139.397257**	**-144.335378**	**-145.147228**	**-81.622710**	**-110.403369**	**-125.963991**	**-140.880204**	**-156.336035**
+3.8	**820.867330**	**597.024354**	**714.943279**	**679.887109**	**626.013914**	**483.819992**	**651.936423**	**727.417905**	**807.319041**	**867.769670**
-3.85	**-108.627246**	**-76.150084**	**-104.547945**	**-108.251533**	**-108.860423**	**-61.217032**	**-82.802530**	**-94.472992**	**-105.660153**	**-117.252027**
+3.85	**672.042764**	**487.530979**	**591.358643**	**558.673254**	**512.026550**	**394.763122**	**532.056823**	**594.746359**	**652.813007**	**697.889792**
-3.9	**-72.418171**	**-50.766724**	**-69.698632**	**-72.167687**	**-72.573618**	**-40.811353**	**-55.201691**	**-62.981992**	**-70.440102**	**-78.168019**
+3.9	**486.183452**	**351.783122**	**431.591894**	**411.513423**	**374.756937**	**284.620386**	**383.717954**	**429.633292**	**462.474045**	**495.985681**
-3.95	**-36.209095**	**-25.383365**	**-34.849320**	**-36.083841**	**-36.286813**	**-20.405674**	**-27.600852**	**-31.490993**	**-35.220052**	**-39.084011**
+3.95	**262.548329**	**189.223501**	**234.557641**	**225.423902**	**204.792863**	**153.024146**	**206.335982**	**231.358273**	**249.191447**	**266.263900**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-36.209045	-33.372641	-35.876527	-33.809490	-40.884690	-40.506564	-42.855460	-17.563084
+0.05	262.443505	254.002856	270.557994	253.267026	300.733126	268.106792	283.174973	132.498473
-0.1	-72.418090	-66.745282	-71.753055	-67.618979	-81.769381	-81.013127	-85.710920	-35.126167
+0.1	486.395592	473.040028	503.469338	471.075173	558.485829	492.866790	520.489950	245.966217
-0.15	-108.627135	-100.117922	-107.629582	-101.428469	-122.654071	-121.519691	-128.566379	-52.689251
+0.15	672.506938	656.953643	698.637225	653.344962	773.339809	674.391013	712.054835	340.686445
-0.2	-144.836181	-133.490563	-143.506110	-135.237959	-163.538762	-162.026254	-171.421839	-70.252334
+0.2	821.234875	806.396149	856.791409	800.781065	946.206432	819.418594	865.295934	417.056693
-0.25	-181.045226	-166.863204	-179.382637	-169.047449	-204.423452	-202.532818	-214.277299	-87.815418
+0.25	933.705126	922.231139	978.889061	914.302605	1090.450717	941.942033	995.684484	475.670323
-0.3	-217.254271	-200.235845	-215.259165	-202.856938	-245.308142	-243.039381	-257.132759	-105.378501
+0.3	1012.123169	1005.533707	1066.115078	1005.214507	1199.044584	1024.573729	1083.797744	517.375321
-0.35	-253.463316	-233.608485	-251.135692	-236.666428	-286.192833	-283.545945	-299.988219	-122.941585
+0.35	1071.843573	1060.167794	1129.429919	1066.569433	1269.099008	1083.118961	1145.138496	542.575849
-0.4	-289.672361	-266.981126	-287.012219	-270.475918	-327.077523	-324.052508	-342.843679	-140.504668
+0.4	1098.668720	1093.444726	1163.068743	1097.565622	1302.094842	1105.026490	1168.820704	552.121830
-0.45	-325.881406	-300.353767	-322.888747	-304.285408	-367.962214	-364.559072	-385.699138	-158.067752
+0.45	1094.479155	1097.592800	1165.743011	1099.267662	1300.070131	1092.794833	1156.374682	546.977526
-0.5	-362.090451	-333.726408	-358.765274	-338.094897	-408.846904	-405.065636	-428.554598	-175.630836
+0.5	1078.881628	1078.815211	1146.637977	1080.971797	1279.948555	1075.507073	1137.968627	540.438231
-0.55	-398.299497	-367.099049	-394.641802	-371.904387	-449.731594	-445.572199	-471.410058	-193.193919
+0.55	1040.499632	1034.875175	1101.117720	1039.123647	1232.503447	1046.480100	1106.828804	525.262193
-0.6	-434.508542	-400.471689	-430.518329	-405.713877	-490.616285	-486.078763	-514.265518	-210.757003
+0.6	974.315927	966.951415	1029.493792	972.492549	1154.839063	983.342488	1039.642115	496.051123
-0.65	-470.717587	-433.844330	-466.394856	-439.523366	-531.500975	-526.585326	-557.120978	-228.320086
+0.65	882.819385	880.327490	934.262014	883.414919	1049.503037	888.823848	939.305375	453.954955
-0.7	-506.926632	-467.216971	-502.271384	-473.332856	-572.385666	-567.091890	-599.976438	-245.883170
+0.7	768.805105	775.697077	819.740085	774.442058	919.362414	769.673185	813.958159	400.238262
-0.75	-543.135677	-500.589612	-538.147911	-507.142346	-613.270356	-607.598453	-642.831897	-263.446253
+0.75	639.245232	652.981154	688.326968	648.339693	767.712354	626.904866	662.655714	336.279711
-0.8	-579.344722	-533.962252	-574.024439	-540.951836	-654.155047	-648.105017	-685.687357	-281.009337
+0.8	490.634382	515.024299	540.132069	508.087942	598.107867	460.309096	486.217353	263.572376
-0.85	-615.553768	-567.334893	-609.900966	-574.761325	-695.039737	-688.611581	-728.542817	-298.572420
+0.85	326.189496	364.882225	378.419031	356.881495	414.364132	273.548109	288.527379	183.723318
-0.9	-651.762813	-600.707534	-645.777494	-608.570815	-735.924427	-729.118144	-771.398277	-316.135504
+0.9	165.540487	205.821877	207.267629	198.129600	220.556344	156.082515	164.384147	110.807821
-0.95	-687.971858	-634.080175	-681.654021	-642.380305	-776.809118	-769.624708	-814.253737	-333.698588
+0.95	147.243798	136.979236	147.147362	138.634800	167.470590	160.564222	169.805993	71.297168
-1	-724.180921	-667.452834	-717.530547	-676.189780	-817.693795	-810.131262	-857.109187	-351.261681
+1	154.993474	144.188672	154.891962	145.931367	176.284832	169.014969	178.743154	75.049651
(Span 2) -2	-724.180921	-667.452834	-717.530547	-676.189780	-817.693795	-810.131262	-857.109187	-351.261681
+2	154.993474	144.188672	154.891962	145.931367	176.284832	169.014969	178.743154	75.049651
-2.05	-521.835782	-485.459589	-521.495926	-491.327035	-593.522059	-569.045609	-601.798857	-252.679846
+2.05	119.370788	111.049292	119.292607	112.391455	135.768680	130.169674	137.661997	63.270816
-2.1	-486.213217	-452.320207	-485.896563	-457.787118	-553.005908	-530.200316	-560.717698	-235.430925
+2.1	204.368761	255.691981	263.240596	249.388225	280.134453	190.688295	201.516880	128.882007
-2.15	-450.590652	-419.180824	-450.297199	-424.247200	-512.489757	-491.355023	-519.636539	-218.182004
+2.15	403.811340	440.200256	462.346521	438.670219	510.527564	346.534363	366.168374	220.005659
-2.2	-414.968087	-386.041441	-414.697836	-390.707283	-471.973606	-452.509729	-478.555380	-200.933083
+2.2	593.057154	613.949165	649.021822	614.264592	723.206242	565.513558	597.935863	312.240328

-2.25	-379.345522	-352.902059	-379.098473	-357.167365	-431.457456	-413.664436	-437.474221	-183.684162
+2.25	761.034735	768.633442	815.620830	770.767685	912.300515	756.511092	799.357714	393.413535
-2.3	-343.722957	-319.762676	-343.499109	-323.627447	-390.941305	-374.819143	-396.393062	-166.435241
+2.3	905.686484	900.596827	957.842533	905.199673	1075.096030	916.146136	968.532114	462.767664
-2.35	-308.100392	-286.623294	-307.899746	-290.087530	-350.425154	-335.973849	-355.311903	-149.186320
+2.35	1018.763669	1008.202034	1073.351104	1013.593351	1203.573909	1041.123508	1100.959138	515.919732
-2.4	-272.477827	-253.483911	-272.300383	-256.547612	-309.909003	-297.128556	-314.230744	-131.937399
+2.4	1097.053830	1085.812636	1155.540881	1089.920664	1294.378730	1125.229148	1190.306787	551.962591
-2.45	-236.855262	-220.344528	-236.701019	-223.007695	-269.392853	-258.283263	-273.149585	-114.688478
+2.45	1143.483198	1131.804513	1203.551698	1136.130976	1348.321497	1169.317534	1237.200682	572.455514
-2.5	-201.233386	-187.205146	-201.101656	-189.467777	-228.876702	-219.437969	-232.068426	-97.439556
+2.5	1153.926283	1148.289742	1220.554785	1150.352196	1361.624843	1173.920675	1242.411491	575.360452
-2.55	-236.856072	-220.344509	-236.700944	-223.007658	-269.392839	-258.283274	-273.149563	-114.688484
+2.55	1143.720859	1131.808704	1203.551704	1136.134509	1348.329670	1169.319665	1237.202752	572.457839
-2.6	-272.478758	-253.483890	-272.300300	-256.547570	-309.908991	-297.128568	-314.230719	-131.937405
+2.6	1097.131465	1085.815583	1155.545333	1089.927611	1294.380549	1125.233716	1190.311417	551.962740
-2.65	-308.101444	-286.623270	-307.899655	-290.087481	-350.425143	-335.973863	-355.311875	-149.186326
+2.65	1018.893177	1008.203888	1073.354392	1013.599111	1203.583754	1041.126611	1100.962223	515.923247
-2.7	-343.724130	-319.762650	-343.499010	-323.627393	-390.941295	-374.819158	-396.393032	-166.435248
+2.7	905.865953	900.597557	957.844549	905.201344	1075.101545	916.147799	968.533677	462.769853
-2.75	-379.346816	-352.902030	-379.098365	-357.167304	-431.457447	-413.664453	-437.474188	-183.684169
+2.75	761.096707	768.632586	815.622413	770.771810	912.300679	756.512006	799.358491	393.413762
-2.8	-414.969502	-386.041410	-414.697720	-390.707215	-471.973599	-452.509747	-478.555344	-200.933090
+2.8	592.917633	613.951946	649.023278	614.268582	723.213721	565.515187	597.937390	312.238634
-2.85	-450.592188	-419.180790	-450.297075	-424.247127	-512.489751	-491.355042	-519.636500	-218.182011
+2.85	403.710770	440.199275	462.346644	438.673172	510.533994	346.533051	366.166815	220.008130
-2.9	-486.214874	-452.320170	-485.896430	-457.787038	-553.005902	-530.200337	-560.717656	-235.430933
+2.9	204.542952	255.693812	263.243633	249.387604	280.137412	190.689050	201.517793	128.960290
-2.95	-521.837560	-485.459551	-521.495785	-491.326950	-593.522054	-569.045632	-601.798812	-252.679854
+2.95	119.370389	111.049298	119.292614	112.391481	135.768655	130.169671	137.662004	62.783312
-3	-724.181529	-667.452957	-717.530531	-676.189953	-817.693881	-810.131265	-857.109250	-351.261693
+3	154.992948	144.188683	154.891998	145.931394	176.284827	169.014962	178.743166	75.049649
(Span 3) -4	-724.181529	-667.452957	-717.530531	-676.189953	-817.693881	-810.131265	-857.109250	-351.261693
+4	154.992948	144.188683	154.891998	145.931394	176.284827	169.014962	178.743166	75.049649
-3.05	-687.972454	-634.080310	-681.654004	-642.380455	-776.809186	-769.624702	-814.253787	-333.698609
+3.05	147.243301	136.979249	147.147398	138.634824	167.470585	160.564214	169.806008	71.297167
-3.1	-651.763378	-600.707663	-645.777478	-608.570957	-735.924492	-729.118138	-771.398324	-316.135525
+3.1	165.812400	205.823934	207.266325	198.125876	220.549470	156.084372	164.386013	109.939482
-3.15	-615.554303	-567.335016	-609.900951	-574.761458	-695.039797	-688.611574	-728.542861	-298.572441
+3.15	326.543134	364.884836	378.420719	356.878537	414.358047	273.551584	288.531222	183.720394
-3.2	-579.345227	-533.962369	-574.024424	-540.951960	-654.155102	-648.105010	-685.687398	-281.009357
+3.2	490.897821	515.027176	540.134004	508.085403	598.102198	460.312293	486.220913	263.569394
-3.25	-543.136152	-500.589722	-538.147898	-507.142461	-613.270408	-607.598447	-642.831935	-263.446272
+3.25	639.494059	652.983869	688.328679	648.337142	767.706575	626.907437	662.658621	336.276687
-3.3	-506.927076	-467.217075	-502.271371	-473.332963	-572.385713	-567.091883	-599.976472	-245.883188
+3.3	769.444190	775.699250	819.741150	774.439104	919.356023	769.674670	813.959931	400.235254
-3.35	-470.718001	-433.844428	-466.394844	-439.523465	-531.501018	-526.585319	-557.121009	-228.320104
+3.35	883.468319	880.328691	934.260730	883.411056	1049.495502	888.822509	939.304165	453.951800
-3.4	-434.508925	-400.471781	-430.518318	-405.713966	-490.616323	-486.078756	-514.265546	-210.757020
+3.4	974.601714	966.950351	1029.491326	972.487506	1154.830017	983.339416	1039.639074	496.047608
-3.45	-398.299850	-367.099134	-394.641791	-371.904468	-449.731629	-445.572192	-471.410083	-193.193936
+3.45	1040.732871	1034.872725	1101.113755	1039.117068	1232.508274	1046.474831	1106.823450	525.258373
-3.5	-362.090774	-333.726487	-358.765265	-338.094969	-408.846934	-405.065628	-428.554620	-175.630851
+3.5	1079.052261	1078.810965	1146.632014	1080.963269	1279.951140	1075.499477	1137.960812	540.433980
-3.55	-325.881699	-300.353841	-322.888738	-304.285471	-367.962239	-364.559064	-385.699157	-158.067767
+3.55	1094.337485	1097.598097	1165.730197	1099.261222	1300.068816	1092.788783	1156.368132	546.975651
-3.6	-289.672623	-266.981194	-287.012211	-270.475973	-327.077544	-324.052501	-342.843694	-140.504683

+3.6	**1098.458646**	**1093.447811**	**1163.073453**	**1097.557241**	**1302.091080**	**1105.018056**	**1168.811621**	**552.119867**
-3.65	**-253.463548**	**-233.608547**	**-251.135685**	**-236.666474**	**-286.192850**	**-283.545937**	**-299.988231**	**-122.941599**
+3.65	**1071.557171**	**1060.168554**	**1129.432196**	**1066.558511**	**1269.092276**	**1083.121905**	**1145.141373**	**542.573392**
-3.7	**-217.254472**	**-200.235900**	**-215.259158**	**-202.856976**	**-245.308155**	**-243.039373**	**-257.132768**	**-105.378515**
+3.7	**1011.753056**	**1005.531600**	**1066.114249**	**1005.216713**	**1199.034569**	**1024.573433**	**1083.797186**	**517.372341**
-3.75	**-181.045397**	**-166.863253**	**-179.382631**	**-169.047477**	**-204.423460**	**-202.532810**	**-214.277305**	**-87.815430**
+3.75	**933.428678**	**922.226363**	**978.885382**	**914.301978**	**1090.453378**	**941.938767**	**995.680771**	**475.666881**
-3.8	**-144.836321**	**-133.490606**	**-143.506105**	**-135.237979**	**-163.538765**	**-162.026246**	**-171.421842**	**-70.252346**
+3.8	**820.867330**	**806.388712**	**856.784858**	**800.777587**	**946.205567**	**819.412312**	**865.289029**	**417.058827**
-3.85	**-108.627246**	**-100.117959**	**-107.629578**	**-101.428481**	**-122.654071**	**-121.519682**	**-128.566379**	**-52.689262**
+3.85	**672.042764**	**656.943114**	**698.627395**	**653.338587**	**773.335362**	**674.387585**	**712.051282**	**340.688131**
-3.9	**-72.418171**	**-66.745312**	**-71.753051**	**-67.618982**	**-81.769376**	**-81.013118**	**-85.710916**	**-35.126178**
+3.9	**486.183452**	**473.026538**	**503.456320**	**471.065482**	**558.477445**	**492.859841**	**520.482675**	**245.967351**
-3.95	**-36.209095**	**-33.372665**	**-35.876529**	**-33.809484**	**-40.884681**	**-40.506555**	**-42.855453**	**-17.563094**
+3.95	**262.548329**	**253.986034**	**270.541431**	**253.254122**	**300.720907**	**268.110377**	**283.178767**	**132.499011**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 90' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-36.209045	-73.454989	-80.561041	-46.669780	-56.543903	-60.489003
+0.05	262.443505	446.968811	466.416529	304.577087	369.150380	384.970043
-0.1	-72.418090	-146.909978	-161.122083	-93.339560	-113.087806	-120.978007
+0.1	486.395592	814.582610	850.201371	558.619799	677.339003	704.575211
-0.15	-108.627135	-220.364968	-241.683124	-140.009340	-169.631709	-181.467010
+0.15	672.506938	1129.420580	1180.451884	762.600671	926.361336	966.166175
-0.2	-144.836181	-293.819957	-322.244165	-186.679120	-226.175612	-241.956013
+0.2	821.234875	1375.559331	1467.907590	937.110306	1138.789110	1183.707836
-0.25	-181.045226	-367.274946	-402.805206	-233.348900	-282.719515	-302.445017
+0.25	933.705126	1559.636137	1699.022406	1072.300399	1295.133659	1358.525518
-0.3	-217.254271	-440.729935	-483.366248	-280.018680	-339.263418	-362.934020
+0.3	1012.123169	1713.350119	1866.328533	1161.521771	1396.612675	1483.597977
-0.35	-253.463316	-514.184924	-563.927289	-326.688460	-395.807321	-423.423023
+0.35	1071.843573	1802.284444	1981.045747	1222.520472	1460.071694	1551.503412
-0.4	-289.672361	-587.639914	-644.488330	-373.358240	-452.351224	-483.912027
+0.4	1098.668720	1876.411890	2021.753195	1241.761464	1478.237950	1577.232837
-0.45	-325.881406	-661.094903	-725.049371	-420.028020	-508.895127	-544.401030
+0.45	1094.479155	1882.827703	2043.037414	1222.162987	1450.185056	1558.051898
-0.5	-362.090451	-734.549892	-805.610413	-466.697800	-565.439030	-604.890034
+0.5	1078.881628	1848.239102	2007.118143	1199.214467	1423.041744	1529.496489
-0.55	-398.299497	-808.004881	-886.171454	-513.367580	-621.982933	-665.379037
+0.55	1040.499632	1773.646511	1905.075925	1175.014058	1397.281105	1490.647706
-0.6	-434.508542	-881.459871	-966.732495	-560.037360	-678.526836	-725.868040
+0.6	974.315927	1641.223827	1792.731712	1109.849845	1321.723366	1406.372766
-0.65	-470.717587	-954.914860	-1047.293536	-606.707140	-735.070739	-786.357044
+0.65	882.819385	1475.676477	1614.991184	1006.821871	1202.893258	1281.535820
-0.7	-506.926632	-1028.369849	-1127.854578	-653.376920	-791.614642	-846.846047
+0.7	768.805105	1265.735712	1375.625174	875.705218	1050.699031	1110.563547
-0.75	-543.135677	-1101.824838	-1208.415619	-700.046700	-848.158545	-907.335050
+0.75	639.245232	1005.458555	1095.789048	714.410363	857.976566	897.972903
-0.8	-579.344722	-1175.279827	-1288.976660	-746.716480	-904.702448	-967.824054
+0.8	490.634382	716.728473	767.600368	523.866552	629.488139	648.540057
-0.85	-615.553768	-1248.734817	-1369.537702	-793.386260	-961.246351	-1028.313057
+0.85	326.189496	410.340676	426.480076	321.388622	376.976506	385.382739
-0.9	-651.762813	-1322.189806	-1450.098743	-840.056040	-1017.790254	-1088.802060
+0.9	165.540487	270.537567	294.692433	187.087308	213.684337	224.391332
-0.95	-687.971858	-1395.644795	-1530.659784	-886.725820	-1074.334157	-1149.291064
+0.95	147.243798	285.567432	311.064235	183.018565	222.821589	236.857517
-1	-724.180921	-1469.099789	-1611.220845	-933.395612	-1130.878069	-1209.780055
+1	154.993474	300.597294	327.436036	192.651119	234.549041	249.323699
(Span 2) -2	-724.180921	-1469.099789	-1611.220845	-933.395612	-1130.878069	-1209.780055
+2	154.993474	300.597294	327.436036	192.651119	234.549041	249.323699
-2.05	-521.835782	-1012.061840	-1102.385480	-648.624647	-789.688139	-839.431796
+2.05	119.370788	231.509979	252.180280	148.373445	180.641824	192.020770
-2.1	-486.213217	-942.974515	-1027.132308	-604.346975	-735.780917	-782.128876
+2.1	204.368761	262.707548	247.465520	227.948737	265.184897	272.378170
-2.15	-450.590652	-873.887190	-951.879135	-560.069303	-681.873696	-724.825956
+2.15	403.811340	512.209480	557.497845	389.541614	469.814984	478.337648
-2.2	-414.968087	-804.799865	-876.625962	-515.791632	-627.966475	-667.523036
+2.2	593.057154	895.635487	971.769933	640.114605	765.765995	805.646005

-2.25	-379.345522	-735.712540	-801.372790	-471.513960	-574.059253	-610.220116
+2.25	761.034735	1244.763048	1360.080119	859.052236	1028.416656	1090.498076
-2.3	-343.722957	-666.625214	-726.119617	-427.236288	-520.152032	-552.917197
+2.3	905.686484	1532.764482	1682.394721	1040.622569	1240.828808	1325.291902
-2.35	-308.100392	-597.537889	-650.866444	-382.958617	-466.244811	-495.614277
+2.35	1018.763669	1760.682721	1929.577293	1181.981942	1406.765101	1501.114143
-2.4	-272.477827	-528.450564	-575.613272	-338.680945	-412.337590	-438.311357
+2.4	1097.053830	1930.707868	2094.781939	1275.438115	1517.079764	1619.723219
-2.45	-236.855262	-459.363239	-500.360099	-294.403273	-358.430368	-381.008437
+2.45	1143.483198	2028.987431	2205.442719	1321.603456	1570.382910	1683.908537
-2.5	-201.233386	-390.275914	-425.121527	-250.125615	-304.523147	-323.705588
+2.5	1153.926283	2051.991137	2247.610277	1322.290063	1567.775124	1688.881394
-2.55	-236.856072	-459.363180	-500.377283	-294.403289	-358.430345	-381.008517
+2.55	1143.720859	2028.992102	2205.222416	1321.594063	1570.375408	1683.908158
-2.6	-272.478758	-528.450496	-575.633039	-338.680962	-412.337562	-438.311446
+2.6	1097.131465	1930.705484	2095.186609	1275.443014	1517.075880	1619.724655
-2.65	-308.101444	-597.537812	-650.888795	-382.958636	-466.244779	-495.614374
+2.65	1018.893177	1760.686433	1929.576582	1181.985074	1406.767623	1501.125644
-2.7	-343.724130	-666.625128	-726.144552	-427.236309	-520.151996	-552.917303
+2.7	905.865953	1532.771975	1681.344308	1040.623947	1240.839104	1325.298594
-2.75	-379.346816	-735.712444	-801.400308	-471.513982	-574.059213	-610.220232
+2.75	761.096707	1244.764415	1360.079699	859.059132	1028.421054	1090.499048
-2.8	-414.969502	-804.799760	-876.656064	-515.791656	-627.966430	-667.523161
+2.8	592.917633	895.642596	970.622371	640.115935	765.764894	805.652701
-2.85	-450.592188	-873.887076	-951.911820	-560.069329	-681.873647	-724.826089
+2.85	403.710770	512.206732	557.497091	389.551707	469.822616	478.341039
-2.9	-486.214874	-942.974392	-1027.167577	-604.347003	-735.780864	-782.129018
+2.9	204.542952	262.985855	247.663423	227.949553	265.189184	272.378813
-2.95	-521.837560	-1012.061708	-1102.423333	-648.624676	-789.688081	-839.431947
+2.95	119.370389	231.510012	252.171627	148.373443	180.641844	192.020762
-3	-724.181529	-1469.099810	-1611.208683	-933.395863	-1130.878140	-1209.780276
+3	154.992948	300.597334	327.424792	192.651111	234.549060	249.323661
(Span 3) -4	-724.181529	-1469.099810	-1611.208683	-933.395863	-1130.878140	-1209.780276
+4	154.992948	300.597334	327.424792	192.651111	234.549060	249.323661
-3.05	-687.972454	-1395.644819	-1530.648250	-886.726070	-1074.334233	-1149.291261
+3.05	147.243301	285.567468	311.053552	183.018555	222.821607	236.857477
-3.1	-651.763378	-1322.189829	-1450.087817	-840.056278	-1017.790327	-1088.802247
+3.1	165.812400	270.537601	294.682313	187.089556	213.681440	224.391294
-3.15	-615.554303	-1248.734839	-1369.527384	-793.386485	-961.246420	-1028.313232
+3.15	326.543134	410.333292	426.478925	321.391340	376.970256	385.378967
-3.2	-579.345227	-1175.279849	-1288.966951	-746.716693	-904.702514	-967.824218
+3.2	490.897821	716.717250	767.601198	523.870928	629.480649	648.536063
-3.25	-543.136152	-1101.824859	-1208.406518	-700.046900	-848.158607	-907.335204
+3.25	639.494059	1005.453797	1095.789563	714.413882	857.982128	897.967849
-3.3	-506.927076	-1028.369868	-1127.846085	-653.377108	-791.614701	-846.846189
+3.3	769.444190	1265.729055	1376.592846	875.707239	1050.702838	1110.556725
-3.35	-470.718001	-954.914878	-1047.285652	-606.707315	-735.070794	-786.357175
+3.35	883.468319	1475.680911	1614.990246	1006.820596	1202.894558	1281.540616
-3.4	-434.508925	-881.459888	-966.725219	-560.037523	-678.526888	-725.868160
+3.4	974.601714	1641.282819	1792.730116	1109.846336	1321.720480	1406.374663
-3.45	-398.299850	-808.004898	-886.164786	-513.367730	-621.982981	-665.379146
+3.45	1040.732871	1774.742844	1905.076251	1175.008138	1397.274978	1490.645105
-3.5	-362.090774	-734.549907	-805.604353	-466.697938	-565.439075	-604.890132
+3.5	1079.052261	1848.242597	2007.117236	1199.205798	1423.032120	1529.490221
-3.55	-325.881699	-661.094917	-725.043920	-420.028145	-508.895168	-544.401117
+3.55	1094.337485	1882.823783	2043.240956	1222.155533	1450.179997	1558.043796
-3.6	-289.672623	-587.639927	-644.483487	-373.358352	-452.351262	-483.912103

+3.6	**1098.458646**	**1876.403505**	**2021.752705**	**1241.767796**	**1478.230064**	**1577.235663**
-3.65	**-253.463548**	**-514.184937**	**-563.923055**	**-326.688560**	**-395.807355**	**-423.423088**
+3.65	**1071.557171**	**1802.282964**	**1981.044467**	**1222.523723**	**1460.074800**	**1551.501537**
-3.7	**-217.254472**	**-440.729947**	**-483.362622**	**-280.018767**	**-339.263449**	**-362.934074**
+3.7	**1011.753056**	**1713.343819**	**1866.328428**	**1161.521366**	**1396.611283**	**1483.592169**
-3.75	**-181.045397**	**-367.274956**	**-402.802189**	**-233.348975**	**-282.719542**	**-302.445060**
+3.75	**933.428678**	**1559.638192**	**1699.021318**	**1072.296596**	**1295.128348**	**1358.529658**
-3.8	**-144.836321**	**-293.819966**	**-322.241756**	**-186.679182**	**-226.175636**	**-241.956045**
+3.8	**820.867330**	**1375.555257**	**1467.905774**	**937.103063**	**1138.789041**	**1183.700003**
-3.85	**-108.627246**	**-220.364976**	**-241.681323**	**-140.009390**	**-169.631729**	**-181.467031**
+3.85	**672.042764**	**1129.425562**	**1180.451232**	**762.596335**	**926.361693**	**966.167545**
-3.9	**-72.418171**	**-146.909986**	**-161.120890**	**-93.339597**	**-113.087822**	**-120.978017**
+3.9	**486.183452**	**814.580926**	**850.201432**	**558.611579**	**677.334295**	**704.571242**
-3.95	**-36.209095**	**-73.454995**	**-80.560457**	**-46.669805**	**-56.543916**	**-60.489002**
+3.95	**262.548329**	**446.960603**	**466.417420**	**304.581252**	**369.141114**	**384.961377**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.81947535	*-23.833788*	*-32.032788*	-14.33972529	-15.42117886	-14.53367573	-17.58327493	-17.65900666	-18.68551503	-7.581061312
End Shear	135.7342688	*165.054267*	*197.816214*	117.6522597	125.5195562	117.6195465	140.0768821	128.6880665	135.978927	61.67363155
-0.05	-18.81947535	*-23.988940*	*-32.172425*	-14.33972529	-15.42117886	-14.53367573	-17.58327493	-17.65900666	-18.68551503	-7.581061312
+0.05	126.6400651	*152.112942*	*178.505901*	109.6286586	116.8857727	109.4895135	130.2380494	118.5740921	125.2746045	57.42624397
-0.1	-18.81947535	*-24.557454*	*-35.223942*	-14.33972529	-15.42117886	-14.53367573	-17.58327493	-17.65900666	-18.68551503	-7.581061312
+0.1	116.7050905	*138.688796*	*158.382651*	101.2359914	107.8589926	100.9852361	119.9550524	108.0167872	114.1021421	52.92797542
-0.15	-18.81947535	*-29.740316*	*-40.021516*	-14.78263614	-15.42117886	-14.53367573	-17.58327493	-17.65900666	-18.68551503	-7.89199879
+0.15	108.6540916	*128.056106*	*142.839172*	94.42641606	100.53812	94.09008312	111.6245174	99.52135808	105.1125419	49.28306712
-0.2	-23.67973275	*-38.839394*	*-50.220710*	-22.99809722	-23.58826604	-21.51648561	-23.59346536	-17.65900666	-18.68551503	-10.84966389
+0.2	98.93930583	*115.510450*	*128.460633*	86.19908759	91.69703856	85.76557749	101.575543	89.34559623	94.34593654	44.88541762
-0.25	-31.80544254	*-46.526473*	*-58.789590*	-29.81750662	-30.94010742	-28.4533485	-32.01753265	-22.08700108	-23.36723899	-14.28903646
+0.25	91.11670551	*105.629243*	*117.320796*	79.56537687	84.57181094	79.05871977	93.48643134	81.21542539	85.74461066	41.34478439
-0.3	-42.08895287	*-56.189366*	*-69.917355*	-38.06053673	-39.83064673	-36.8444816	-42.21591081	-28.04199302	-29.70382008	-18.74358595
+0.3	81.90573062	*94.039747*	*104.235284*	71.60258171	76.02325331	71.01470897	83.79356804	71.55096478	75.52125346	37.1014024
-0.35	-51.06194512	*-64.291488*	*-79.785057*	-44.71011175	-47.00584119	-43.61864822	-50.45595676	-34.56896747	-36.38838681	-22.34172798
+0.35	74.39994941	*84.969933*	*93.982038*	65.22589302	69.181071	64.57855611	76.04577039	63.89222372	67.42061878	33.70893484
-0.4	-61.8686135	*-74.402813*	*-92.019067*	-52.69596911	-55.62706698	-51.76056119	-60.36836693	-44.12681781	-46.44928191	-26.6687681
+0.4	65.46919196	*74.405378*	*82.028561*	57.62684082	61.03187804	56.91576576	66.83110943	54.86882792	57.87790642	29.67346774
-0.45	-70.55303106	*-82.821928*	*-102.141228*	-59.09454175	-62.53820384	-58.28960275	-68.32447959	-52.57140556	-55.3813189	-30.14063746
+0.45	58.384365	*66.199580*	*72.739535*	51.58832668	54.56013579	50.83272951	59.52451913	47.78767434	50.39036523	26.4730584
-0.5	-80.94066137	*-93.257394*	*-114.610779*	-66.72402535	-70.783284	-66.08156712	-77.82882684	-63.0007897	-66.4281663	-34.28652494
+0.5	50.02718223	*56.719832*	*62.008970*	44.45220833	46.9171287	43.65189648	50.910166	39.53510034	41.66568745	22.69915621
-0.55	-89.22796971	*-101.888162*	*-124.862311*	-72.79043778	-77.34296219	-72.28308347	-85.40112587	-71.37162932	-75.29542161	-37.58823127
+0.55	43.4599828	*49.423389*	*53.755263*	38.83303836	40.90324028	38.00439023	44.14467776	33.13770171	34.90365237	19.73469231
-0.6	-99.06391001	*-112.514578*	*-137.410514*	-79.96434474	-85.10506275	-79.62436558	-94.37530887	-81.37078163	-85.88859973	-41.49931839
+0.6	35.79452804	*41.079413*	*44.330476*	32.25904832	33.87324375	31.40623496	36.25271823	26.06224183	27.43393876	16.275997
-0.65	-106.8455606	*-121.244394*	*-147.659799*	-85.61744142	-91.2258838	-85.41594047	-101.4638961	-89.33653788	-94.32847353	-44.58696465
+0.65	29.84162421	*34.730398*	*37.176608*	27.27897521	28.55260849	26.41543132	30.29374544	20.69053538	21.77951093	13.59138436
-0.7	-115.9971444	*-131.919663*	*-160.121783*	-92.23657747	-98.39818059	-92.20581601	-109.7858248	-98.77569748	-104.3305885	-48.20960872
+0.7	22.98605782	*27.564263*	*29.132463*	21.35739803	22.23275642	20.36192373	23.08309567	15.80490648	16.72882374	10.50154429
-0.75	-123.1646061	*-140.628613*	*-170.230646*	-97.39519124	-103.9927339	-97.50503527	-116.2908042	-106.2301871	-112.2306515	-51.03930698
+0.75	17.74412721	*22.311747*	*23.390894*	16.69073298	17.25849977	15.83271854	17.69715866	12.49475276	13.21291135	8.140661655
-0.8	-131.4991902	*-151.201744*	*-182.433512*	-103.3603617	-110.4684016	-103.6427883	-123.8383988	-114.9795967	-121.5043133	-54.31985139
+0.8	11.81660379	*16.238306*	*17.202774*	11.53858789	11.77500424	10.70209537	11.61626064	8.649529736	9.129596424	5.658785966
-0.85	-137.9439081	*-159.762661*	*-192.257209*	-107.9433304	-115.4492818	-108.3672298	-129.6598648	-121.8166618	-128.7521629	-56.84770762
+0.85	7.382314236	*11.869168*	*12.691977*	7.68036843	7.68036843	7.218455465	7.678108002	5.888158605	6.19806169	4.160146785
-0.9	-145.3288261	*-170.073755*	*-206.601495*	-113.1553367	-121.1214913	-113.7521222	-136.3110184	-129.7465732	-137.1599911	-59.73251408
+0.9	4.198508725	*7.149306*	*9.358288*	4.160679524	4.160679524	3.534174949	3.812307625	3.730616921	3.946328227	2.476582531
-0.95	-150.9422836	*-178.352165*	*-223.359065*	-117.0814925	-125.4012866	-117.8193892	-141.3490962	-135.8600463	-143.6432147	-61.91463583
+0.95	4.054298033	*4.844559*	*7.268310*	3.114156656	3.346978623	3.15371488	3.812307625	3.730616921	3.946328227	1.631839513
-1	-157.2448662	*-188.232423*	*-243.868313*	-121.4411427	-130.1632159	-122.3506873	-146.9817074	-142.8406767	-151.0477921	-64.35005159
+1	4.05E+00	*4.759483*	*5.457731*	3.11E+00	3.35E+00	3.15E+00	3.81E+00	3.73E+00	3.95E+00	1.63E+00
(Span 2) -2	-1.43E+01	*-16.788236*	*-19.251182*	-1.10E+01	-1.18E+01	-1.11E+01	-1.34E+01	-1.32E+01	-1.39E+01	-5.76E+00
+2	1.48E+02	*193.866361*	*263.721029*	121.5763295	130.3693528	122.5845928	147.3947412	144.6673068	153.0034256	64.48377726
-2.05	-1.43E+01	*-16.895933*	*-20.842992*	-1.10E+01	-1.18E+01	-1.11E+01	-1.34E+01	-1.32E+01	-1.39E+01	-5.76E+00
+2.05	1.41E+02	*183.496229*	*244.545327*	117.2707249	125.6662058	118.1090707	141.8315982	137.8793671	145.8049467	62.08188636
-2.1	-14.30082084	*-17.302704*	*-23.967747*	-10.98463789	-11.80587633	-11.12417258	-13.44724223	-13.15909275	-13.91997629	-5.756025769
+2.1	131.7763418	*171.038275*	*221.877384*	111.5942317	119.4851255	112.2389895	134.5749998	129.3104801	136.721201	58.9413074
-2.15	-14.30082084	*-18.831244*	*-28.860451*	-10.98463789	-11.80587633	-11.12417258	-13.44724223	-13.15909275	-13.91997629	-5.756025769
+2.15	123.9196371	*160.146894*	*202.834245*	106.2353915	113.6639508	106.7192488	127.78036	121.4961864	128.4399658	55.9954329
-2.2	-16.75177081	*-25.645498*	*-35.941541*	-15.74106493	-16.30059526	-14.96974055	-16.78644207	-13.15909275	-13.91997629	-7.757201843
+2.2	115.7555133	*147.303485*	*180.896788*	99.48984824	106.3505156	99.79313014	119.2836425	111.9388272	118.3142356	52.30658256

-2.25	-23.47720113	-32.222831	-43.161973	-21.2548809	-22.18288755	-20.48210663	-23.34903883	-15.69328722	-16.61678764	-10.62947492
+2.25	108.3583663	136.264811	162.469236	93.35158937	99.70619272	93.50721976	111.5945354	103.4563589	109.3294928	48.96479962
-2.3	-32.22892458	-40.705946	-52.755678	-28.15348522	-29.55667842	-27.40096176	-31.61659066	-22.47347363	-23.65628804	-14.2456619
+2.3	99.36006564	123.453621	146.813115	85.85645535	91.60443642	85.8494112	102.2508471	93.32841917	98.60425178	44.90044261
-2.35	-40.23598559	-48.626670	-61.765828	-34.39914347	-36.24333456	-33.68175322	-39.14483381	-29.33820243	-30.90127631	-17.53648262
+2.35	91.41098259	112.609671	134.477657	79.21259975	84.43185053	79.07539192	94.00431569	84.46213487	89.21754394	41.31084196
-2.4	-50.05791843	-58.565936	-73.111877	-41.9918665	-44.38356766	-41.33489634	-48.34235811	-38.1511274	-40.21784338	-21.55460025
+2.4	81.95901597	100.211079	120.345581	71.28733395	75.88580524	71.01029648	84.20687218	73.88913793	78.02540045	37.04374351
-2.45	-58.79923023	-67.631776	-83.480262	-48.69556035	-51.57971841	-48.10604032	-56.49919082	-46.13669869	-48.66248392	-25.11589142
+2.45	73.78415294	89.871926	108.543564	64.30723679	68.37537491	63.77781438	75.4915339	65.14935861	68.77622987	33.35440684
-2.5	-69.26413266	-78.777259	-96.234554	-56.66291684	-60.14233325	-56.16908864	-66.23349588	-55.8496502	-58.93665354	-29.36317307
+2.5	64.25902273	77.961675	95.242481	56.08960799	59.52584538	55.58834621	65.53164812	55.14315326	58.18923981	29.05732901
-2.55	-78.37348576	-89.025162	-107.651827	-63.59531838	-67.61955005	-63.15257492	-74.68193638	-64.4275651	-68.01245282	-33.04684832
+2.55	56.18452467	68.407619	84.324585	49.25957358	52.18552351	48.67627991	57.18689071	46.81664804	49.38162494	25.41633757
-2.6	-89.05416791	-101.086451	-121.436698	-71.85862222	-76.50149763	-71.59113818	-84.91175234	-74.62264608	-78.80174569	-37.35053204
+2.6	46.81086685	57.831672	72.246861	41.43963025	43.79112732	40.77765984	47.67185803	37.50153259	39.53101036	21.26204757
-2.65	-98.16538144	-111.714749	-133.564780	-78.6525794	-83.82761913	-78.50496081	-93.31063332	-83.62995917	-88.33716405	-41.00850947
+2.65	39.17030994	49.311633	62.535024	34.93073779	36.81287629	34.21697279	39.78723725	29.94648233	31.54420153	17.81748625
-2.7	-109.0040643	-124.364849	-147.969038	-86.40269004	-92.19450185	-86.4069203	-102.9303006	-94.05871132	-99.37752959	-45.19582892
+2.7	30.65087683	40.071567	51.749168	27.64518792	29.01291106	26.89046583	31.0056013	21.94795127	23.1031066	13.97874693
-2.75	-117.7404059	-135.346885	-160.954373	-92.82794553	-99.13978591	-92.97162306	-110.940229	-102.7409316	-108.571789	-48.6800243
+2.75	23.76612442	32.799785	43.555671	21.73127085	22.69162855	20.95916699	23.91809836	16.03979936	16.98494212	10.87869846
-2.8	-127.554579	-148.224012	-182.450554	-99.9881762	-106.8903434	-100.3041014	-119.9095427	-112.6357769	-119.0525411	-52.57821611
+2.8	16.31871713	25.126902	35.342112	15.29956885	15.83012186	14.52917107	16.26306862	13.15909235	13.91997692	7.528273874
-2.85	-135.5533534	-159.233743	-201.256391	-105.7709102	-113.1599072	-106.2416245	-127.1934755	-120.8289151	-127.7329202	-55.74054719
+2.85	14.333177	19.285681	29.324645	10.98463696	11.80587669	11.12417235	13.44724459	13.15909235	13.91997692	5.75602604
-2.9	-144.2934221	-171.938894	-223.502253	-112.0218048	-119.9501097	-112.6802221	-135.119224	-129.9442036	-137.3928924	-59.1768468
+2.9	14.333177	17.262676	23.718992	10.98463696	11.80587669	11.12417235	13.44724459	13.15909235	13.91997692	5.75602604
-2.95	-151.188445	-182.618332	-242.934237	-116.8881982	-125.249071	-117.7125548	-141.3401792	-137.2900583	-145.1801192	-61.86922911
+2.95	14.333177	16.914451	21.042360	10.98463696	11.80587669	11.12417235	13.44724459	13.15909235	13.91997692	5.75602604
-3	-158.4271972	-194.715228	-265.303129	-121.9103	-130.7348881	-122.9328861	-147.8291676	-145.2079104	-153.5768508	-64.67087194
+3	14.333177	16.788237	19.251182	10.98463696	11.80587669	11.12417235	13.44724459	13.15909235	13.91997692	5.75602604
(Span 3) -4	-4.063471018	-4.759483	-5.457731	-3.114156393	-3.346978727	-3.153714805	-3.812308296	-3.730616805	-3.946328406	-1.63183959
+4	145.5651843	187.345810	242.027580	121.0649375	129.7518058	121.958901	146.4936911	142.2285259	150.3983773	64.13946156
-3.05	-4.063471018	-4.828799	-7.054571	-3.114156393	-3.346978727	-3.153714805	-3.812308296	-3.730616805	-3.946328406	-1.63183959
+3.05	139.5790817	179.261303	225.246297	117.4975609	125.8552621	118.2510696	141.8846996	136.5165956	144.3395515	62.1466584
-3.1	-4.444286065	-7.550626	-9.592505	-4.465581974	-4.465581974	-3.852533569	-3.971936149	-3.730616805	-3.946328406	-2.613417624
+3.1	131.9405594	169.143912	204.777433	112.6992768	120.6247792	113.2803351	135.7274984	129.0450375	136.4161036	59.47983227
-3.15	-6.88900055	-11.412421	-12.182802	-7.345618328	-7.345618328	-6.86726413	-7.291182083	-5.633246075	-5.929732711	-3.990210107
+3.15	126.3984809	160.706937	193.148602	108.4345328	115.983477	108.8741194	130.2851681	122.5564353	129.5364496	57.11934718
-3.2	-12.30253336	-16.752451	-17.682299	-11.9890348	-12.25401227	-11.15002668	-12.14627381	-8.978107045	-9.478473043	-5.82082374
+3.2	119.5746923	150.244226	181.142680	102.8334748	109.89611	103.1001505	123.1704665	114.2005395	120.6785145	54.02995067
-3.25	-17.14769398	-21.742480	-22.733316	-16.20479727	-16.74090892	-15.34819095	-17.12201765	-12.13997551	-12.83612133	-7.888180628
+3.25	113.6459865	141.592909	171.159811	97.95249667	104.5974232	98.07799928	116.9947351	107.0414387	113.0904511	51.34567753
-3.3	-23.73925708	-28.189246	-29.743882	-21.88015618	-22.79034293	-20.88351155	-23.70378508	-16.18545492	-17.13306677	-10.77347734
+3.3	106.0078943	130.949234	158.809814	91.64791628	97.76005851	91.6015444	109.0446526	97.93087745	103.4353287	47.88738842
-3.35	-29.83312176	-34.052603	-36.310076	-26.72546721	-27.96154509	-25.86119853	-29.63263184	-20.1295707	-21.18902179	-13.30171695
+3.35	99.46128242	122.214368	148.618383	86.23188018	91.8914077	86.04580009	102.2353279	90.20743901	95.25126172	44.92322449
-3.4	-37.76787794	-41.812405	-45.033309	-32.84345936	-34.4979123442305	-31.99234979	-36.9531611186348	-26.66605282	-28.0695292870164	-16.58270862
+3.4	91.12703539	111.545170	136.100568	79.32290242	84.41079488	78.96758343	93.57195442	80.47201274	84.93638786	41.14963872
-3.45	-44.63203121	-48.639436	-52.727519	-38.22255432	-40.25013279	-37.39122952	-43.41069152	-32.44852762	-34.17527727	-19.41273758
+3.45	83.97215019	102.850311	125.841507	73.45296826	78.05958323	72.96069367	86.22897402	72.29046102	76.26879001	37.94947161
-3.5	-53.4419189	-57.557151	-62.793261	-45.09003191	-47.60001402	-44.29336904	-51.67917617	-40.26710548	-42.43949464	-23.03575825
+3.5	75.06230155	92.302132	113.324127	66.03886519	70.04263125	65.38148228	76.97445185	62.05992993	65.43155787	33.91426172
-3.55	-60.9678224	-65.313513	-71.554806	-50.92904942	-53.85378832	-50.1689437	-58.72770599	-47.01971001	-49.5783953	-26.12368429

+3.55	67.57242455	83.763541	103.131819	59.79619724	63.2962661928667	59.0058633620044	69.19771395	53.52632196	56.39272482	30.52198573
-3.6	-70.52023343	-75.342622	-82.884867	-58.30908832	-61.76330011	-57.60338867	-67.65752694	-55.67398011	-58.72933362	-30.03506925
+3.6	58.20407418	73.474027	90.775116	51.97608709	54.84971723	51.02630342	59.47403753	43.26245795	45.53942942	26.27882404
-3.65	-78.59929656	-83.986577	-92.646429	-64.52686214	-68.43121793	-63.87332102	-75.19725282	-63.05719923	-66.53747424	-33.33699808
+3.65	50.38724668	65.200677	80.777390	45.44184493	47.79560119	44.36436692	51.3634347	35.44197815	37.30734542	22.73833244
-3.7	-88.7615232	-95.071662	-105.154574	-72.32018612	-76.79344805	-71.73934772	-84.66632047	-72.41740259	-76.43774164	-37.48314147
+3.7	40.67836105	55.298566	68.733584	37.31500837	39.02637341	36.085272	41.29280354	27.5035313	29.13083419	18.3408155
-3.75	-97.2852543	-104.554227	-115.842313	-78.83555626	-83.78810614	-78.32114083	-92.59724595	-80.32517107	-84.80281764	-40.95518227
+3.75	32.63111294	47.392151	59.679857	30.57035579	31.75191375	29.21943219	32.94823185	22.63100465	23.94608165	14.69600125
-3.8	-107.9246375	-116.630969	-129.434292	-86.94305323	-92.4963179	-86.51802069	-102.4834654	-90.26155205	-95.31502581	-45.28239239
+3.8	22.69956306	37.997284	49.222651	22.23590219	22.7667399	20.74143908	22.6526291	17.65900927	18.68551874	10.58200633
-3.85	-116.7845004	-126.895876	-141.152371	-93.67481298	-99.7302635	-93.32935098	-110.7058043	-98.5875964	-104.1245124	-48.88067515
+3.85	18.85165472	30.552209	40.841344	15.36997641	15.42117944	14.61495279	17.58327733	17.65900927	18.68551874	8.161961431
-3.9	-127.7683817	-139.891052	-160.149102	-101.9972429	-108.677583	-101.7563578	-120.8870825	-108.9703906	-115.1112637	-53.33532836
+3.9	18.85165472	24.488582	34.717448	14.33972797	15.42117944	14.53367596	17.58327733	17.65900927	18.68551874	7.581126319
-3.95	-136.8558367	-150.874749	-176.617006	-108.8643206	-116.0635077	-108.7147674	-129.3008868	-117.608659	-124.2528708	-57.0159119
+3.95	18.85165472	24.023416	32.203452	14.33972797	15.42117944	14.53367596	17.58327733	17.65900927	18.68551874	7.581126319
-5	-148.0515577	-164.706234	-197.816214	-117.3024849	-125.1431061	-117.2711255	-139.6550723	-128.30811	-135.5767762	-61.54438681
+5	18.85165472	23.833789	32.032788	14.33972797	15.42117944	14.53367596	17.58327733	17.65900927	18.68551874	7.581126319

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.93020501	-15.19352335	-15.8973079	-16.20131429	-8.779142948	-11.86981802	-13.55866684	-15.1705762	-16.8505158
End Shear	88.11313219	112.2573478	110.2473167	99.57373893	71.17238307	95.90160572	107.9377571	116.8645839	125.765407
-0.05	-10.93020501	-15.19352335	-15.8973079	-16.24148774	-8.779142948	-11.86981802	-13.55866684	-15.1705762	-16.8505158
+0.05	81.96916032	103.53395	100.9939427	89.91853038	66.24324701	89.25363365	100.3316412	108.3765973	116.3530981
-0.1	-10.93020501	-15.19352335	-15.8973079	-16.38869215	-8.779142948	-11.86981802	-13.55866684	-15.1705762	-16.8505158
+0.1	75.54426348	94.42298388	91.35032346	79.87165316	61.09307395	82.30082714	92.3761996	99.50437275	106.5212252
-0.15	-10.93020501	-15.19352335	-15.8973079	-16.58911684	-8.779142948	-11.86981802	-13.55866684	-15.1705762	-16.8505158
+0.15	70.3378297	87.08733725	83.62478502	72.2954312	56.91772259	76.66451121	85.93307107	92.330063	98.58364778
-0.2	-15.28592127	-15.19352335	-15.8973079	-20.27275344	-12.91956721	-17.26668789	-18.21865063	-18.21244994	-18.20639241
+0.2	64.05560906	78.29560461	74.41530186	64.03217564	51.87725264	69.86095799	78.16308699	83.6924986	89.04310256
-0.25	-20.54126475	-18.62260769	-16.51173038	-24.01229261	-17.12217955	-22.94290982	-24.16734917	-24.13058905	-24.12327176
+0.25	58.99713025	71.26686613	67.09493331	57.59174219	47.81663352	64.38047522	71.91040093	76.75357754	81.39226959
-0.3	-26.90160463	-24.46899305	-22.12309636	-28.34128614	-22.20618411	-29.81020743	-32.07056962	-31.96887563	-31.96176325
+0.3	52.93389567	62.90611178	58.44174148	50.0352265	42.94691084	57.80858535	64.42048687	68.45674265	72.26133817
-0.35	-32.03900531	-31.22528045	-26.65982007	-31.6779881	-26.31078394	-35.35508714	-38.4578686	-39.08681855	-39.0883712
+0.35	48.08580563	56.27571387	51.62647867	44.12739872	39.05096201	52.55136185	58.43566551	61.84000256	64.99403254
-0.4	-38.21703652	-39.40329959	-33.80087596	-36.44496095	-31.24447104	-42.02064501	-46.1435788	-47.77079486	-48.83664148
+0.4	42.31786457	48.45768721	43.65169682	37.2644036	34.41303029	46.29354719	51.32045651	53.98999003	56.39101761
-0.45	-43.17404994	-46.64874702	-40.74554595	-41.42515481	-35.20111354	-47.36674171	-52.31419457	-54.75490047	-56.68975475
+0.45	37.74259726	42.31705027	37.4414737	31.95832137	30.73169971	41.32701059	45.68091654	47.78222185	49.60403689
-0.5	-49.0934632	-55.60044761	-49.10419117	-49.42069353	-39.92344807	-53.74814519	-59.68776187	-63.11577676	-66.10742377
+0.5	32.34626662	35.15349496	30.79508662	26.26283108	26.38660269	35.46569222	39.03503858	40.48510351	41.64721575
-0.55	-53.80766461	-62.78098147	-55.9390982	-56.18601551	-43.68218832	-58.82803986	-65.5642778	-69.79213573	-73.6416498
+0.55	28.10626139	29.59404794	25.73335982	21.95923479	22.96983901	30.8572717	33.8182167	34.77309981	35.43734243
-0.6	-59.39214375	-71.35283426	-65.52702451	-65.78849639	-48.1321227	-64.84287125	-72.53108305	-77.72384288	-82.61041906
+0.6	23.1578447	23.32514033	19.92475533	17.09104757	18.97861784	25.47485712	27.73629585	28.28109612	28.38702488
-0.65	-63.80109509	-78.17687614	-73.19970129	-73.39299879	-51.64301851	-69.58913271	-78.03607861	-84.00565902	-89.72897692
+0.65	19.41940199	18.76526191	15.98565601	13.72255414	15.96027877	21.40511063	23.14702267	23.0626101	23.10481437
-0.7	-68.9743334	-86.25713393	-82.33567625	-82.3116213	-55.75950455	-75.15498045	-84.50148807	-91.40211711	-98.13054643
+0.7	14.89133506	13.67196451	12.17079215	10.47767752	12.37838929	16.470886	17.5962693	17.5536568	17.55229578
-0.75	-73.01559491	-92.63324152	-89.58861151	-89.66901198	-58.97260843	-79.50017892	-89.557545	-97.20259769	-104.7366369
+0.75	11.50915158	10.60696113	9.262762147	8.040788981	9.562257714	12.78098589	13.45712415	13.4404963	13.43916309
-0.8	-77.70129233	-100.1101605	-98.1504881	-98.22371507	-62.69460512	-84.53463951	-95.42693267	-103.9577229	-112.4527289
+0.8	7.685488653	7.675097978	6.103630126	5.400287513	6.461923749	8.603614442	9.093766118	9.092637254	9.09152429
-0.85	-81.31243269	-105.9469129	-104.8837413	-104.8458186	-65.55997293	-88.41133867	-99.95661604	-109.1900901	-118.4495709
+0.85	5.408897839	5.454294287	4.337120005	3.927669856	4.13852083	5.836912996	6.084646042	6.083556187	6.08248588
-0.9	-85.43426475	-112.7087569	-112.7493778	-112.4730471	-68.82644258	-92.8319899	-105.1353543	-115.197794	-125.3618684
+0.9	2.930804035	3.208013218	3.282859463	3.031908609	2.364424475	2.94716667	2.949101658	3.279031685	3.635759589
-0.95	-88.55285506	-117.9147251	-118.8630123	-118.3274369	-71.29412947	-96.17277427	-109.0612509	-119.7752467	-130.6526842
+0.95	2.364069833	3.208013218	3.282859463	2.975004005	1.902322043	2.573608338	2.933073637	3.279031685	3.635759589
-1	-92.03451922	-123.8497284	-125.9102561	-125.0048542	-74.04401862	-99.89719741	-113.454713	-124.9294613	-136.6429038
+1	2.36E+00	3.21E+00	3.28E+00	2.95E+00	1.90E+00	2.57E+00	2.93E+00	3.28E+00	3.64E+00
(Span 2) -2	-8.34E+00	-1.13E+01	-1.16E+01	-1.04E+01	-6.71E+00	-9.08E+00	-1.03E+01	-1.16E+01	-1.28E+01
+2	9.23E+01	125.3402018	128.7012951	134.4220842	74.19184804	100.1082066	113.8212077	125.5678635	137.6235075
-2.05	-8.34E+00	-1.13E+01	-1.16E+01	-1.04E+01	-6.71E+00	-9.08E+00	-1.03E+01	-1.16E+01	-1.28E+01
+2.05	88.84018148	119.5671227	121.9559299	123.2465117	71.47742094	96.43083825	109.487076	120.485845	131.7271774
-2.1	-8.338838858	-11.31570074	-11.57970718	-10.54931034	-6.710105092	-9.077949174	-10.34589971	-11.56620537	-12.82450018
+2.1	84.35071785	112.2608513	113.5678541	111.2574137	67.91841585	91.6125557	103.8417705	113.9299614	124.1857962
-2.15	-8.338838858	-11.31570074	-11.57970718	-10.71054356	-6.710105092	-9.077949174	-10.34589971	-11.56620537	-12.82450018
+2.15	80.13962222	105.5840633	106.0157741	103.2301373	64.57273877	87.08542906	98.56188738	107.844625	117.2336135
-2.2	-10.89542801	-11.31570074	-11.57970718	-11.32458624	-9.039395126	-12.08953101	-12.77188942	-12.7509074	-12.82450018
+2.2	74.86618909	97.40339969	96.88322826	94.07495409	60.37556673	81.40848515	91.96559839	100.2890276	108.6508885
-2.25	-15.01109337	-14.11174052	-12.33257183	-14.33238907	-12.37037652	-16.58062021	-17.81519304	-17.76198592	-17.75900317

+2.25	70.08843902	90.13135848	88.86162676	85.96699256	56.5671271	76.25909486	86.00117447	93.49321366	100.9693875
-2.3	-20.19025425	-20.23355744	-17.24353863	-18.23058623	-16.55302141	-22.22198626	-24.17779665	-24.50224087	-24.56032322
+2.3	64.27678298	81.43618129	79.2897971	76.40797085	51.9283725	69.98886513	78.75862398	85.27949572	91.72626958
-2.35	-24.90183546	-26.19736639	-22.77918025	-21.45504699	-20.35124952	-27.34638937	-29.97820052	-30.85710082	-31.46537003
+2.35	59.14301764	73.80896225	70.88491777	67.94119197	47.82569347	64.4447152	72.37086486	78.06600448	83.64199234
-2.4	-30.65336342	-33.84152895	-29.75488971	-27.44994638	-24.98072766	-33.59390596	-37.07172456	-38.67015974	-40.00305468
+2.4	53.03888905	64.71206705	61.44821402	58.61438995	42.94194361	57.84662026	64.78679333	69.52497681	74.02339422
-2.45	-35.75022375	-40.75546449	-36.51956353	-34.16269151	-29.07770518	-39.12410909	-43.36802857	-45.63781015	-47.65447506
+2.45	47.53957563	57.17837967	53.50633067	50.79150363	38.68244594	51.92406445	57.96390334	61.92720269	65.6201036
-2.5	-41.82837277	-49.15156594	-45.14404022	-42.41423422	-33.95743088	-45.71237213	-50.88773479	-53.99501753	-56.87245088
+2.5	41.39027813	48.54130542	44.5128079	41.81706123	33.60592575	45.23775089	50.34538932	53.39105052	56.20487715
-2.55	-47.0998694	-56.55577674	-52.85389739	-50.13911909	-38.20703804	-51.42091192	-57.41873533	-61.28265855	-64.94370945
+2.55	36.17977917	41.34368312	37.11935705	34.74371301	29.42276992	39.58994686	43.89909994	46.22680251	48.30272453
-2.6	-53.47823008	-65.34393354	-62.11819167	-59.26519309	-43.29364352	-58.32171409	-65.33222747	-70.13726516	-74.70558694
+2.6	30.2342409	33.27861616	29.24019271	26.92433866	24.64360877	33.13890111	36.55439958	38.09900517	39.3773296
-2.65	-58.71100165	-73.08657331	-70.2078672	-67.26155458	-47.48024921	-63.97794738	-71.83369331	-77.46061359	-82.9648703
+2.65	25.30371297	26.72551574	23.26013501	21.75377445	20.67496111	27.78319168	30.4734238	31.40117184	32.05830135
-2.7	-64.69959752	-82.06359103	-79.97110707	-77.10506001	-52.2660621	-70.44525268	-79.28509558	-85.87523815	-92.39528744
+2.7	19.80768087	19.77687076	16.85286178	17.95689359	16.24435105	21.80560778	23.70730674	23.98833224	24.00369587
-2.75	-69.68166492	-89.51757138	-88.18837568	-85.29887484	-56.24266058	-75.82044491	-85.49381328	-92.91648924	-100.3189909
+2.75	15.36776355	14.52876747	12.64029709	14.61567838	12.65871174	16.96945459	18.25284723	18.19678757	18.19378684
-2.8	-75.25489719	-98.0004405	-97.54565432	-94.74963719	-60.68517386	-81.82718048	-92.45129116	-100.8438057	-109.2794789
+2.8	10.56698577	11.31570121	11.57970931	11.09062323	8.773238209	11.73074912	12.37003518	12.35155617	12.82449951
-2.85	-79.77561975	-105.0133978	-105.3746063	-102.5972729	-64.28326467	-86.69382802	-98.10605722	-107.3209372	-116.6371159
+2.85	8.338839621	11.31570121	11.57970931	10.72716878	6.710105246	9.077950428	10.34590005	11.56620552	12.82449951
-2.9	-84.68774195	-112.8017879	-114.1840503	-112.0875377	-68.18589134	-91.97457608	-104.2648895	-114.4193434	-124.7467164
+2.9	8.338839621	11.31570121	11.57970931	10.53894738	6.710105246	9.077950428	10.34590005	11.56620552	12.82449951
-2.95	-88.53647859	-119.0652476	-121.3748686	-122.3543302	-71.23697988	-96.10521567	-109.1044999	-120.0395588	-131.2117514
+2.95	8.338839621	11.31570121	11.57970931	10.44878185	6.710105246	9.077950428	10.34590005	11.56620552	12.82449951
-3	-92.54174309	-125.7992905	-129.243164	-135.3376873	-74.40313463	-100.3945698	-114.1599482	-125.9674178	-138.0895051
+3	8.338839621	11.31570121	11.57970931	10.41610151	6.710105246	9.077950428	10.34590005	11.56620552	12.82449951
(Span 3) -4	-2.36407005	-3.21E+00	-3.28E+00	-2.95E+00	-1.902322086	-2.573608694	-2.933073733	-3.279031728	-3.635759398
+4	91.73310661	123.3297396	125.2890103	124.4192415	73.80621898	99.57504842	113.0738589	124.4810604	136.1200946
-3.05	-2.36407005	-3.21E+00	-3.28E+00	-2.97E+00	-1.902322086	-2.573608694	-2.933073733	-3.279031728	-3.635759398
+3.05	88.88417841	118.473392	119.5225952	118.9557555	71.55607408	96.52746112	109.4788424	120.2635456	131.218569
-3.1	-3.1454829	-3.208013353	-3.282860067	-3.040561344	-2.504161639	-3.197041857	-3.198990297	-3.279031728	-3.635759398
+3.1	85.07284674	112.1109417	112.0508296	111.8004338	68.54022437	92.44458272	104.6808543	114.6692852	124.7524347
-3.15	-5.173220219	-5.218164785	-4.14928623	-3.773051135	-3.893050473	-5.561627841	-5.765851765	-5.764757911	-5.763702778
+3.15	81.700126	106.5780989	105.6148762	105.559883	65.86742983	88.8273639	100.4433424	109.7534624	119.0964907
-3.2	-8.018930597	-7.932287278	-6.308200345	-5.572880976	-6.732546593	-8.968196318	-9.443402429	-9.442258742	-9.441136433
+3.2	77.28679599	99.44473493	97.38580708	97.46621541	62.36553203	84.08946104	94.90739519	103.3587582	111.7674288
-3.25	-11.14768029	-10.33129503	-8.952419741	-7.782657564	-9.269425661	-12.38635807	-13.01515459	-13.00124021	-12.99990426
+3.25	73.45274093	93.32683069	90.38016378	90.46679547	59.32003135	79.97006786	90.10481445	97.8314224	105.4538089
-3.3	-15.28119778	-14.04983519	-12.50644222	-10.7609611	-12.69426717	-16.89592932	-18.07377188	-18.02807883	-18.02674454
+3.3	68.5137154	85.53422465	81.51593374	81.51740844	55.39312815	74.65957176	83.92553761	90.74235706	97.38016109
-3.35	-19.0045267	-18.27658824	-15.62793889	-13.41598246	-15.62512916	-20.95325185	-22.63804517	-22.56272413	-22.5613707
+3.35	64.28078707	78.92268246	74.04063057	74.22018626	52.02487088	70.10537599	78.63530743	84.69029737	90.50569451
-3.4	-23.5971457	-23.8493879011842	-20.43554072	-17.51959951	-19.33313086	-25.9528928975954	-28.27591808	-28.86984836	-29.0238039166978
+3.4	58.8923468	70.58261508	64.66338518	64.92587582	47.73400257	64.30469644	71.90732902	77.01295027	81.80571506
-3.45	-27.64615612	-28.99476971	-25.18844498	-21.49783026	-22.59889912	-30.35700494	-33.25238557	-34.15446047	-34.7659297
+3.45	54.32295447	63.56891248	56.81825487	57.03389971	44.09290481	59.38315508	66.20687164	70.5229592	74.46718497
-3.5	-32.82808829	-35.78924851	-31.37461684	-26.75754801	-26.77472176	-35.98921779	-39.62812862	-41.13541806	-42.35532292
+3.5	48.56143184	54.79313013	48.3499514	48.69921656	39.49914282	53.17473833	59.02481647	62.36340514	65.2591684
-3.55	-37.24357343	-41.65076808	-36.77075513	-31.38713879	-30.33002235	-40.78512636	-45.0660491	-47.10620848	-48.86590053
+3.55	43.7180118	47.4686014720735	41.5107103061703	42.124122864146	35.6351742544348	47.9532828867971	52.9915557991177	55.5222779600013	57.55336511

-3.6	-42.83525867	-49.15558298	-44.36057472	-37.87203931	-34.82919552	-46.85502954	-51.95842643	-54.69305132	-57.16063381
+3.6	37.65971994	38.66397218	33.02319815	35.877224	30.79954002	41.41947592	45.45009547	46.9865963	47.955605
-3.65	-47.55478087	-55.55252909	-50.88582307	-43.48750611	-38.62408412	-51.97536804	-57.7803007	-61.11620352	-64.19991631
+3.65	32.60470645	31.97250426	27.15971738	32.03742315	26.76264645	35.96553391	39.16141125	39.88112405	39.97931444
-3.7	-53.47991001	-63.65593473	-59.21512687	-50.70785758	-43.38556496	-58.40055068	-65.09472672	-69.20289324	-73.08169944
+3.7	26.32595259	23.89015384	21.61510216	27.95897997	21.74615177	29.18882028	31.35513058	31.25934772	31.25219407
-3.75	-58.44100236	-70.49696706	-66.29549223	-56.89077757	-47.37009529	-63.77782151	-71.22317201	-75.99161801	-80.5529015
+3.75	21.12178124	19.02816476	17.02373257	24.41721737	17.58630599	23.56982189	24.88853014	24.84585154	24.83858475
-3.8	-64.62330016	-79.08722083	-75.24213855	-64.76209764	-52.33284003	-70.47586994	-78.86498141	-84.47207457	-89.90343668
+3.8	14.69887637	15.19352631	15.89730817	19.89652602	12.45002445	16.63254085	17.63224322	17.62604648	17.61995719
-3.85	-69.76355844	-86.28081861	-82.77758516	-71.48696338	-56.45706879	-76.04271696	-85.22257506	-91.53957938	-97.70977325
+3.85	10.93020579	15.19352631	15.89730817	16.6158114	8.779143199	11.86981932	13.55866725	15.17057642	16.85051896
-3.9	-76.12668446	-95.24617079	-92.21943185	-80.7680891	-61.56003326	-82.93121855	-93.09714208	-100.3077246	-107.4108202
+3.9	10.93020579	15.19352631	15.89730817	16.37085864	8.779143199	11.86981932	13.55866725	15.17057642	16.85051896
-3.95	-81.38367346	-102.7010049	-100.1101259	-88.9886792	-65.774044	-88.62017676	-99.60646034	-107.5672171	-115.4554486
+3.95	10.93020579	15.19352631	15.89730817	16.2504138	8.779143199	11.86981932	13.55866725	15.17057642	16.85051896
-5	-87.85131678	-111.9297121	-109.9250301	-99.40646029	-70.95615614	-95.61667873	-107.6191552	-116.5169714	-125.3886588
+5	10.93020579	15.19352631	15.89730817	16.20131407	8.779143199	11.86981932	13.55866725	15.17057642	16.85051896

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-28.91931461	-31.79570535	-18.3149	-22.1465	-23.7534
End Shear	196.2109811	207.0141287	131.8271	159.3994	167.329
-0.05	-28.91931461	-31.79570535	-18.3149	-22.1465	-23.7534
+0.05	179.580344	189.1382781	121.2512	146.6749	153.653
-0.1	-28.91931461	-31.79570535	-18.3149	-22.1465	-23.7534
+0.1	162.2598534	170.1538746	110.2195	133.3972	139.3904
-0.15	-28.91931461	-31.79570535	-18.3149	-22.1465	-23.7534
+0.15	148.3872031	154.9833942	101.3547	122.7235	127.9414
-0.2	-28.91931461	-31.79570535	-18.3558	-22.1465	-23.7534
+0.2	131.8533435	136.9474363	90.75218	109.9525	114.2638
-0.25	-28.91931461	-31.79570535	-23.5244	-25.9566	-27.2756
+0.25	118.7138924	122.6527892	82.29444	99.76056	103.3664
-0.3	-36.21962223	-37.67859597	-29.7691	-32.7707	-35.2557
+0.3	103.1856682	105.8093365	72.25785	87.66045	90.4517
-0.35	-45.53494772	-47.69434356	-34.804	-40.7718	-41.6974
+0.35	90.95860772	92.59018955	64.31915	78.08466	80.25127
-0.4	-58.24655784	-61.54979131	-43.0359	-52.9713	-52.4492
+0.4	76.65503161	77.18323292	54.98539	66.81972	68.27751
-0.45	-70.32485744	-72.73214181	-51.3368	-62.9329	-63.4494
+0.45	65.51954859	65.92158967	47.67773	57.99446	58.9197
-0.5	-85.84618491	-86.33691163	-62.3736	-76.1736	-77.1046
+0.5	53.1199382	53.73627491	39.18367	47.72893	48.06478
-0.55	-99.36011354	-100.0338169	-71.2435	-86.8113	-88.6994
+0.55	43.96486485	45.24679336	32.6852	39.78854	40.15947
-0.6	-116.6317781	-118.7932902	-81.8532	-99.5312	-102.584
+0.6	33.9193242	35.45829868	25.54233	31.15957	30.82842
-0.65	-130.4580852	-134.3463568	-90.3176	-109.676	-113.674
+0.65	26.96963214	27.96340494	21.33978	24.63614	25.26345
-0.7	-146.9275024	-152.9144964	-100.363	-121.71	-126.852
+0.7	19.67389461	20.1218481	16.80059	18.39916	19.61494
-0.75	-160.0078399	-167.6973793	-108.31	-131.227	-137.292
+0.75	14.77113375	14.96057726	13.31195	14.5798	15.28724
-0.8	-175.4560041	-185.2021373	-117.655	-142.413	-149.587
+0.8	10.07908571	9.439127097	9.256798	10.23253	10.27566
-0.85	-187.6111754	-199.0151523	-124.973	-151.167	-159.23
+0.85	6.813166711	6.582372233	6.271988	6.954405	6.95349
-0.9	-201.8190771	-215.2124929	-133.48	-161.34	-170.463
+0.9	6.018329412	6.582372233	3.836963	4.657215	4.970813
-0.95	-212.869892	-227.8559726	-140.056	-169.198	-179.165
+0.95	6.018329412	6.582372233	3.836963	4.657215	4.970813
-1	-225.6185193	-242.5018455	-147.588	-178.192	-189.158
+1	6.02E+00	6.58E+00	3.84E+00	4.66E+00	4.97E+00
(Span 2) -2	-2.12E+01	-2.32E+01	-1.35E+01	-1.64E+01	-1.75E+01
+2	230.5586028	248.746043	149.8699	180.8186	192.449
-2.05	-2.12E+01	-2.32E+01	-1.35E+01	-1.64E+01	-1.75E+01
+2.05	218.3258885	234.7682024	142.5833	172.1014	182.802
-2.1	-21.22859483	-23.2181563	-13.5342	-16.4275	-17.5337
+2.1	203.134816	217.530636	133.4302	161.1384	170.733
-2.15	-21.22859483	-23.2181563	-13.5342	-16.4275	-17.5337
+2.15	189.4729567	202.122422	125.1176	151.1725	159.81
-2.2	-21.22859483	-23.2181563	-13.5342	-16.4275	-17.5337
+2.2	172.9672313	183.6089933	114.9879	139.0173	146.5388
-2.25	-21.22859483	-23.2181563	-16.6665	-18.6559	-19.5865

+2.25	**158.4807978**	**167.4439599**	**106.0271**	**128.256**	**134.8309**
-2.3	**-29.36928183**	**-30.886802**	**-22.0584**	**-26.9863**	**-26.6367**
+2.3	**141.3435676**	**148.4405682**	**95.36151**	**115.4374**	**120.9305**
-2.35	**-38.93908066**	**-40.2959926**	**-28.8537**	**-35.228**	**-35.3795**
+2.35	**126.0957527**	**132.1924199**	**85.89651**	**104.1264**	**108.5406**
-2.4	**-51.5972431**	**-52.01405826**	**-37.8999**	**-46.1749**	**-46.6934**
+2.4	**109.0376508**	**113.4849618**	**74.98718**	**90.92056**	**94.47701**
-2.45	**-64.14646327**	**-64.64340664**	**-46.1373**	**-56.1296**	**-57.2574**
+2.45	**94.7290817**	**97.82724288**	**65.86937**	**79.93561**	**82.68159**
-2.5	**-79.67010089**	**-81.43341804**	**-56.1988**	**-68.2746**	**-70.2025**
+2.5	**78.53361392**	**80.20161678**	**55.46551**	**67.38995**	**69.25776**
-2.55	**-93.55393579**	**-96.54330128**	**-65.1176**	**-79.0295**	**-81.7103**
+2.55	**65.2257512**	**65.48434166**	**46.84022**	**56.97857**	**58.16046**
-2.6	**-110.2450297**	**-114.8080874**	**-75.7536**	**-91.8436**	**-95.4697**
+2.6	**50.66127764**	**51.47035461**	**37.23136**	**45.36654**	**45.83762**
-2.65	**-124.8272664**	**-130.8452084**	**-85.024**	**-103.109**	**-107.451**
+2.65	**39.80979604**	**41.10799557**	**29.4764**	**35.98209**	**36.13687**
-2.7	**-142.5702741**	**-149.7988727**	**-96.1294**	**-116.361**	**-121.93**
+2.7	**28.64234095**	**30.13234844**	**21.55706**	**26.33195**	**25.93879**
-2.75	**-157.2654538**	**-166.0896914**	**-105.273**	**-127.349**	**-133.846**
+2.75	**21.22859502**	**23.21815643**	**17.03142**	**19.15785**	**20.04142**
-2.8	**-174.1639821**	**-184.9463344**	**-115.725**	**-139.902**	**-147.504**
+2.8	**21.22859502**	**23.21815643**	**13.53421**	**16.42751**	**17.53366**
-2.85	**-188.3136562**	**-200.8171351**	**-124.409**	**-150.323**	**-158.88**
+2.85	**21.22859502**	**23.21815643**	**13.53421**	**16.42751**	**17.53366**
-2.9	**-204.2501502**	**-218.7908598**	**-134.106**	**-161.948**	**-171.622**
+2.9	**21.22859502**	**23.21815643**	**13.53421**	**16.42751**	**17.53366**
-2.95	**-217.272949**	**-233.5680973**	**-141.952**	**-171.346**	**-181.968**
+2.95	**21.22859502**	**23.21815643**	**13.53421**	**16.42751**	**17.53366**
-3	**-231.5421055**	**-249.873004**	**-150.452**	**-181.514**	**-193.221**
+3	**21.22859502**	**23.21815643**	**13.53421**	**16.42751**	**17.53366**
(Span 3) -4	**-6.018329465**	**-6.582372267**	**-3.83696**	**-4.65722**	**-4.97081**
+4	**224.4940855**	**241.2085791**	**146.9265**	**177.4024**	**188.2789**
-3.05	**-6.018329465**	**-6.582372267**	**-3.83696**	**-4.65722**	**-4.97081**
+3.05	**214.062526**	**229.2247531**	**140.763**	**170.0427**	**180.1021**
-3.1	**-6.018329465**	**-6.582372267**	**-3.83696**	**-4.65722**	**-4.97081**
+3.1	**200.5568448**	**213.7726383**	**132.7261**	**160.4388**	**169.467**
-3.15	**-6.466918069**	**-6.582372267**	**-5.98033**	**-6.57299**	**-6.60585**
+3.15	***188.9313387***	***200.5194451***	***125.7652***	***152.1156***	***160.2758***
-3.2	***-10.45830772***	***-9.888473239***	***-9.60342***	***-10.6131***	***-10.7031***
+3.2	***174.0759093***	***183.6378046***	***116.8221***	***141.416***	***148.4898***
-3.25	***-14.26772114***	***-14.24557622***	***-12.9379***	***-14.1702***	***-14.8241***
+3.25	***161.4356578***	***169.3149203***	***109.1758***	***132.2636***	***138.4299***
-3.3	***-20.31304291***	***-20.80131753***	***-17.2015***	***-18.838***	***-20.1131***
+3.3	***145.4494011***	***151.2479769***	***99.46342***	***120.6327***	***125.6711***
-3.35	***-26.28283095***	***-27.16066405***	***-20.9157***	***-23.9388***	***-24.735***
+3.35	***131.9736747***	***136.0550534***	***91.24369***	***110.7853***	***114.8881***
-3.4	***-34.753174***	***-36.32039288***	***-26.164***	***-31.9113***	***-31.6317***
+3.4	***115.0756798***	***117.0467617***	***80.8989***	***98.38732***	***101.3344***
-3.45	***-42.98068282***	***-44.32978772***	***-32.0246***	***-38.9342***	***-39.3006***
+3.45	***100.9435837***	***101.6642413***	***72.21771***	***87.97946***	***89.97367***
-3.5	***-54.16952882***	***-54.70559715***	***-39.936***	***-48.6385***	***-49.0251***
+3.5	***84.44479462***	***85.59959283***	***61.37737***	***74.97862***	***75.80296***
-3.55	***-64.31712786***	***-64.77259197***	***-46.8862***	***-57.0382***	***-57.907***
+3.55	***71.74480325***	***73.96452791***	***52.34673***	***64.14468***	***64.66146***
-3.6	***-77.9263744***	***-78.54833587***	***-55.8173***	***-67.824***	***-69.3437***
+3.6	***57.01767085***	***60.29784509***	***42.11636***	***51.86759***	***51.21757***

-3.65	*-89.63007439*	*-91.15484383*	*-63.4545*	*-77.0414*	*-79.1411*
+3.65	*46.56269564*	*48.96101652*	*35.358*	*41.88564*	*42.40659*
-3.7	*-104.5734497*	*-107.3105569*	*-73.1568*	*-88.7445*	*-91.6076*
+3.7	*35.17783186*	*36.56251533*	*29.20448*	*32.15467*	*34.53378*
-3.75	*-117.2792072*	*-121.0924024*	*-81.3691*	*-98.6452*	*-102.175*
+3.75	*28.91931396*	*31.79553964*	*24.09494*	*26.57915*	*28.0043*
-3.8	*-133.3376257*	*-138.56261*	*-91.7058*	*-111.101*	*-115.493*
+3.8	*28.91931396*	*31.79553964*	*18.31487*	*22.14645*	*23.75345*
-3.85	*-146.8661683*	*-153.3202172*	*-100.381*	*-121.551*	*-126.685*
+3.85	*28.91931396*	*31.79553964*	*18.31487*	*22.14645*	*23.75345*
-3.9	*-163.8207952*	*-171.8608888*	*-111.215*	*-134.596*	*-140.677*
+3.9	*28.91931396*	*31.79553964*	*18.31487*	*22.14645*	*23.75345*
-3.95	*-177.9928398*	*-187.3943887*	*-120.242*	*-145.46*	*-152.347*
+3.95	*28.91931396*	*31.79553964*	*18.31487*	*22.14645*	*23.75345*
-5	*-195.6245789*	*-206.7614804*	*-131.437*	*-158.93*	*-166.836*
+5	*28.91931396*	*31.79553964*	*18.31487*	*22.14645*	*23.75345*

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.31E-13	*-2.38E-13*	*-3.91E-13*	-2.09E-13	-2.27E-13	-1.82E-13	-2.08E-13	-1.71E-13	-1.81E-13	-1.44E-13
End Shear	3.17E-13	*2.41E-13*	*4.34E-13*	1.81E-13	1.95E-13	1.65E-13	1.99E-13	1.85E-13	1.96E-13	1.27E-13
-0.05	-94.09737677	*-119.168939*	*-160.1639399*	-71.6986264	-77.1058943	-72.6683786	-87.9163747	-88.2950333	-93.4275752	-37.90530656
+0.05	633.5809161	*773.3919262*	*903.1713156*	548.6639963	585.0946828	548.117007	652.2665676	593.0238007	626.548198	287.1312199
-0.1	-188.1947535	*-238.337878*	*-320.3278798*	-143.397253	-154.211789	-145.336757	-175.832749	-176.590067	-186.85515	-75.81061312
+0.1	1178.159615	*1447.887965*	*1643.477966*	1022.022469	1089.11158	1019.857193	1211.966126	1091.946181	1153.499523	533.3514049
-0.15	-282.2921303	*-357.506817*	*-480.4918196*	-215.095879	-231.317683	-218.005136	-263.749124	-264.8851	-280.282725	-113.7159197
+0.15	1648.199756	*2023.811185*	*2245.650957*	1419.954749	1512.053246	1415.245626	1679.449928	1497.084047	1581.214775	739.2460069
-0.2	-376.3895071	*-476.675756*	*-640.6557595*	-286.794506	-308.423577	-290.673515	-351.665499	-353.180133	-373.710301	-151.6212262
+0.2	2085.293619	*2502.250666*	*2751.012039*	1743.836319	1855.453047	1735.759957	2056.618914	1823.883862	1926.713627	905.6443484
-0.25	-470.4868839	*-595.844695*	*-800.8196994*	-358.493132	-385.529471	-363.341893	-439.581873	-441.475167	-467.137876	-189.5265328
+0.25	2426.015952	*2884.713965*	*3147.139417*	1995.493316	2121.329719	1983.335462	2369.953848	2095.85728	2215.961122	1033.841318
-0.3	-564.5842606	*-715.013634*	*-960.9836393*	-430.191759	-462.635366	-436.010272	-527.498248	-529.7702	-560.565451	-227.4318394
+0.3	2675.464375	*3173.127354*	*3448.190929*	2177.203044	2312.187824	2180.403671	2605.396916	2282.70797	2413.491231	1125.459459
-0.35	-658.6816374	*-834.182573*	*-1121.147579*	-501.890385	-539.74126	-508.67865	-615.414623	-618.065233	-653.993026	-265.3371459
+0.35	2831.011188	*3369.835257*	*3674.972593*	2297.045207	2449.936085	2313.174974	2757.851508	2413.291286	2552.011268	1181.47016
-0.4	-752.7790142	*-953.351512*	*-1281.311519*	-573.589011	-616.847154	-581.347029	-703.330997	-706.360266	-747.420601	-303.2424525
+0.4	2903.123653	*3477.601173*	*3799.536172*	2368.73548	2522.877771	2380.543408	2830.628664	2464.16035	2606.811451	1203.669386
-0.45	-846.876391	*-1072.520451*	*-1441.475459*	-645.287638	-693.953049	-654.015408	-791.247372	-794.6553	-840.848176	-341.1477591
+0.45	2894.543999	*3499.606768*	*3826.241837*	2377.925172	2529.38044	2384.991105	2828.070914	2440.518149	2582.75625	1190.910372
-0.5	-940.9737677	*-1191.68939*	*-1601.639399*	-716.986264	-771.058943	-726.683786	-879.163747	-882.950333	-934.275752	-379.0530656
+0.5	2810.699713	*3452.421513*	*3799.051779*	2337.163779	2487.557638	2345.086713	2783.753525	2404.338239	2544.208136	1179.633617
-0.55	-1035.071145	*-1310.858329*	*-1761.803339*	-788.684891	-848.164837	-799.352165	-967.080121	-971.245366	-1027.70333	-416.9583722
+0.55	2686.851359	*3328.352479*	*3690.959231*	2242.158302	2388.67736	2253.904628	2679.479871	2333.387725	2468.303509	1144.539206
-0.6	-1129.168521	*-1430.027268*	*-1921.967279*	-860.383517	-925.270731	-872.020544	-1054.9965	-1059.5404	-1121.1309	-454.8636787
+0.6	2536.359098	*3128.027543*	*3493.102422*	2095.842561	2234.006184	2109.788235	2510.634723	2189.871732	2315.700588	1079.619614
-0.65	-1223.265898	*-1549.196207*	*-2082.131218*	-932.082144	-1002.37663	-944.688922	-1142.91287	-1147.83543	-1214.55848	-492.7689853
+0.65	2316.163969	*2856.066735*	*3211.2579*	1908.105058	2028.906544	1917.761582	2282.857215	1979.724183	2092.695101	987.3687842
-0.7	-1317.363275	*-1668.365146*	*-2242.295158*	-1003.78077	-1079.48252	-1017.3573	-1230.82925	-1236.13047	-1307.98605	-530.6742919
+0.7	2032.862027	*2517.509358*	*2851.748196*	1682.311793	1781.045304	1683.307201	2002.316002	1714.087729	1813.062581	870.5249849
-0.75	-1411.460652	*-1787.534085*	*-2402.459098*	-1075.4794	-1156.58841	-1090.02568	-1318.74562	-1324.4255	-1401.41363	-568.5795984
+0.75	1693.651565	*2117.812562*	*2427.065291*	1418.235711	1497.999695	1412.364969	1676.100996	1400.323229	1480.590712	732.0695165
-0.8	-1505.558028	*-1906.703024*	*-2562.623038*	-1147.17802	-1233.69431	-1162.69406	-1406.66199	-1412.72053	-1494.8412	-606.484905
+0.8	1306.334266	*1662.853292*	*1936.880155*	1122.004417	1179.60929	1111.333105	1311.857773	1036.79861	1095.61203	575.2280264
-0.85	-1599.655405	*-2059.114864*	*-2752.705588*	-1218.87665	-1310.8002	-1235.36244	-1494.57837	-1501.01557	-1588.26878	-644.3902116
+0.85	879.3138628	*1192.168411*	*1415.503477*	800.1959072	832.9060641	787.0670619	917.7860536	631.4746533	666.5683545	403.4699143
-0.9	-1693.752782	*-2308.034458*	*-3029.645115*	-1290.57528	-1387.9061	-1308.03082	-1582.49474	-1589.3106	-1681.69635	-682.2955181
+0.9	456.1267467	*775.7361001*	*959.3595662*	459.8388065	468.6735813	446.8807346	502.6840994	346.9145548	365.7528836	237.4482058
-0.95	-1787.850159	*-2639.235551*	*-3679.212529*	-1362.2739	-1465.01199	-1380.69919	-1670.41112	-1677.60563	-1775.12393	-720.2008247
+0.95	385.1583131	*469.3994729*	*698.7392059*	295.8448823	317.9629692	299.6029136	362.1692244	354.4086075	374.9011815	155.0247537
-1	-1881.947575	*-3039.986323*	*-4535.090112*	-1433.97252	-1542.1179	-1453.36758	-1758.32747	-1765.90065	-1868.55149	-758.1061361
+1	405.4298048	*475.9483053*	*545.7730661*	311.4156628	334.6978609	315.3714886	381.2307695	373.0616875	394.6328158	163.183951
(Span 2) -2	-1881.947575	*-3039.986323*	*-4535.090112*	-1433.97252	-1542.1179	-1453.36758	-1758.32747	-1765.90065	-1868.55149	-758.1061361
+2	405.4298048	*475.9483053*	*545.7730661*	311.4156628	334.6978609	315.3714886	381.2307695	373.0616875	394.6328158	163.183951
-2.05	-1363.800234	*-2211.726566*	*-3443.599855*	-1045.18703	-1123.3279	-1058.46384	-1279.50388	-1252.08623	-1324.48433	-547.685243
+2.05	312.4744693	*425.5726192*	*641.1724906*	240.0155165	257.9596647	243.0643668	293.823695	287.5275846	304.1529699	138.4659045
-2.1	-1270.634583	*-1781.034514*	*-2536.471658*	-973.786886	-1046.5897	-986.156719	-1192.09679	-1166.55213	-1234.00448	-510.2710737
+2.1	566.0130511	*845.1418802*	*892.0853355*	571.8125257	592.722666	562.187359	635.4430806	424.5110082	449.0506697	280.7158325
-2.15	-1177.468933	*-1467.745274*	*-1853.88424*	-902.386745	-969.851501	-913.849597	-1104.6897	-1081.01803	-1143.52463	-472.8569045
+2.15	1091.257464	*1323.77914*	*1378.634257*	965.9486321	1018.888554	965.1593556	1127.351678	799.932453	843.9173991	484.4041033
-2.2	-1084.303282	*-1274.922423*	*-1460.754497*	-830.986605	-893.113303	-841.542452	-1017.28261	-995.483929	-1053.04478	-435.4427352
+2.2	1584.972524	*1851.523731*	*1902.686389*	1337.84368	1417.604044	1341.555082	1584.700731	1273.709173	1346.003857	684.1234077

-2.25	-991.137632	-1187.711073	-1371.704766	-759.586465	-816.375104	-769.235332	-929.875516	-909.949829	-962.564925	-398.0285659
+2.25	2024.198805	2402.683335	2614.804043	1669.555261	1775.781934	1679.140307	1993.022451	1690.536623	1786.670831	860.2594101
-2.3	-897.9719815	-1120.574283	-1371.702373	-688.186325	-739.636906	-696.928211	-842.468427	-824.415729	-872.085075	-360.6143967
+2.3	2396.112923	2881.518653	3199.000824	1954.359908	2082.412195	1967.638831	2340.222302	2038.944098	2155.780311	1007.948828
-2.35	-804.806331	-1053.437492	-1371.699971	-616.786184	-662.898707	-624.62111	-755.061337	-738.881628	-781.605225	-323.2002274
+2.35	2690.475663	3260.313048	3639.242743	2184.553535	2328.559841	2198.731261	2616.577604	2309.982326	2443.13151	1123.370602
-2.4	-711.6406805	-986.3007018	-1371.697776	-545.386044	-586.160509	-552.313988	-667.654247	-653.347528	-691.125375	-285.7860582
+2.4	2899.633329	3533.215859	3946.039554	2352.624499	2507.368405	2366.057993	2814.741175	2497.225396	2641.878588	1203.746968
-2.45	-618.47503	-919.1639113	-1371.69581	-473.985904	-509.42231	-480.006866	-580.247157	-567.813428	-600.645525	-248.3718889
+2.45	3018.514618	3696.164715	4088.757047	2453.973122	2614.055836	2465.215462	2929.737054	2596.768212	2747.844776	1247.342369
-2.5	-525.3093795	-852.0271209	-1371.694557	-402.585764	-432.684112	-407.69973	-492.840067	-482.279328	-510.165675	-210.9577196
+2.5	3044.634204	3746.736635	4062.371901	2485.70413	2645.692847	2493.498745	2958.703442	2606.973647	2759.256316	1253.697697
-2.55	-617.0788856	-919.1638346	-1371.692489	-473.985946	-509.422297	-480.006851	-580.24705	-567.813444	-600.645489	-248.3718915
+2.55	2978.089865	3696.204169	4088.757184	2453.980358	2614.065869	2465.229951	2929.759732	2596.779385	2747.856234	1247.34951
-2.6	-710.0342211	-986.3006192	-1371.69042	-545.386092	-586.160493	-552.313973	-667.654124	-653.347547	-691.125335	-285.786059
+2.6	2837.869804	3533.253332	3946.039569	2352.629677	2507.376268	2366.070208	2814.761084	2497.233955	2641.887276	1203.753778
-2.65	-802.9895565	-1053.437404	-1371.688352	-616.786239	-662.898689	-624.621094	-755.061199	-738.88165	-781.605181	-323.2002265
+2.65	2646.996668	3260.348221	3639.242857	2184.556957	2328.565784	2198.741392	2616.59486	2309.988234	2443.1374	1123.376988
-2.7	-895.944892	-1120.574188	-1371.686283	-688.186385	-739.636885	-696.928216	-842.468273	-824.415753	-872.085027	-360.614394
+2.7	2367.409275	2881.552964	3198.395591	1954.361476	2082.416114	1967.647128	2340.237344	2038.947699	2155.783769	1007.954815
-2.75	-988.9002275	-1187.710973	-1371.684215	-759.586531	-816.375081	-769.235338	-929.875347	-909.949856	-962.564872	-398.0285615
+2.75	2005.460926	2402.716937	2614.474954	1669.553906	1775.785024	1679.14809	1993.036847	1690.53897	1786.672973	860.265138
-2.8	-1081.855563	-1274.922318	-1460.754488	-830.986677	-893.113277	-841.54246	-1017.28242	-995.483959	-1053.04472	-435.442729
+2.8	1570.253936	1851.556708	1902.67446	1337.842129	1417.606938	1341.562645	1584.714632	1273.710987	1346.002379	684.1290962
-2.85	-1174.810898	-1467.745173	-1853.859278	-902.386824	-969.851473	-913.849581	-1104.6895	-1081.01806	-1143.52456	-472.8568965
+2.85	1073.198167	1323.770326	1378.198352	965.9502927	1018.892367	965.1675695	1127.366178	799.9342304	843.918974	484.4097468
-2.9	-1267.766234	-1781.034416	-2536.454825	-973.78697	-1046.58967	-986.156703	-1192.09657	-1166.55216	-1234.00441	-510.271064
+2.9	565.6160761	845.1345675	892.0489621	571.8160004	592.7283491	562.1972741	635.4595125	424.5125222	449.0524858	280.06753
-2.95	-1360.721569	-2211.726454	-3443.587995	-1045.18712	-1123.32787	-1058.46383	-1279.50365	-1252.08627	-1324.48426	-547.6852314
+2.95	313.1814749	425.568521	640.8608564	240.0154985	257.9596749	243.0643523	293.8237414	287.5275745	304.1529747	137.4220934
-3	-1885.165474	-3039.986443	-4535.110624	-1433.97279	-1542.11796	-1453.3676	-1758.32771	-1765.90092	-1868.55186	-758.1126239
+3	406.3471099	475.9483309	545.7730661	311.4156365	334.6978712	315.3714886	381.2308366	373.061676	394.6328338	163.1839587
(Span 3) -4	-1.89E+03	-3039.986443	-4535.110624	-1.43E+03	-1.54E+03	-1.45E+03	-1.76E+03	-1.77E+03	-1.87E+03	-7.58E+02
+4	4.06E+02	475.9483309	545.7730661	3.11E+02	3.35E+02	3.15E+02	3.81E+02	3.73E+02	3.95E+02	1.63E+02
-3.05	-1790.9072	-2639.235709	-3679.23091	-1362.27415	-1465.01206	-1380.69922	-1670.41132	-1677.60587	-1775.12427	-720.2069923
+3.05	386.0297548	469.3994944	698.5786936	295.8448545	317.9629776	299.6029091	362.1692951	354.4085919	374.9011917	155.0247607
-3.1	-1696.648926	-2308.034607	-3029.645111	-1290.57551	-1387.90616	-1308.03084	-1582.49493	-1589.31082	-1681.69668	-682.3013607
+3.1	457.1479287	775.7460634	957.9295797	459.8417472	468.6711058	446.8738718	502.6986198	346.917439	365.7557517	235.7900493
-3.15	-1602.390653	-2059.115007	-2752.705583	-1218.87687	-1310.80027	-1235.36246	-1494.57855	-1501.01578	-1588.26908	-644.3957291
+3.15	872.0058649	1192.179831	1413.395696	800.200028	832.9085362	787.061694	917.7750575	631.4797571	666.5740588	403.4649021
-3.2	-1508.132379	-1906.703154	-2562.623027	-1147.17823	-1233.69437	-1162.69408	-1406.66216	-1412.72073	-1494.84149	-606.4900975
+3.2	1296.851934	1662.865477	1934.569898	1122.009082	1179.612283	1111.328471	1311.847521	1036.803441	1095.617469	575.2231538
-3.25	-1413.874106	-1787.534209	-2402.459087	-1075.47959	-1156.58847	-1090.0257	-1318.74577	-1324.42568	-1401.41389	-568.5844659
+3.25	1688.035718	2117.825218	2424.689599	1418.240179	1498.002295	1412.360401	1676.090717	1400.32714	1480.595197	732.0640282
-3.3	-1319.615832	-1668.365264	-2242.295147	-1003.78095	-1079.48257	-1017.35732	-1230.82939	-1236.13064	-1307.9863	-530.6788343
+3.3	2036.73232	2517.520874	2848.698933	1682.315097	1781.046627	1683.301667	2002.304242	1714.089638	1813.064966	870.5197974
-3.35	-1225.357559	-1549.196319	-2082.131207	-932.082306	-1002.37668	-944.688945	-1142.913	-1147.83559	-1214.55871	-492.7732027
+3.35	2334.722879	2856.076806	3208.217006	1908.106806	2028.904277	1917.754726	2282.843769	1979.721691	2092.692819	987.3636325
-3.4	-1131.099285	-1430.027374	-1921.967267	-860.383667	-925.27078	-872.020565	-1054.99661	-1059.54054	-1121.13111	-454.8675711
+3.4	2574.390859	3128.03594	3490.232251	2095.840643	2234.001781	2109.77938	2510.61879	2189.866243	2315.695149	1079.613362
-3.45	-1036.841011	-1310.858429	-1761.803327	-788.685027	-848.164883	-799.352185	-967.080228	-971.245499	-1027.70352	-416.9619395
+3.45	2748.968484	3328.358462	3688.440917	2242.153907	2388.67028	2253.893235	2679.488138	2333.37848	2468.294113	1144.532709
-3.5	-942.5827378	-1191.689484	-1601.639387	-716.986387	-771.058985	-726.683805	-879.163842	-882.950452	-934.275925	-379.0563079
+3.5	2852.415187	3452.424514	3797.077852	2337.156565	2487.547498	2345.071747	2783.757756	2404.324769	2544.194281	1179.62686
-3.55	-848.3244642	-1072.520539	-1441.475447	-645.287747	-693.953088	-654.015426	-791.247455	-794.655406	-840.848332	-341.1506763
+3.55	2878.513863	3499.605442	3824.977642	2377.934408	2529.3586	2384.980062	2828.068671	2440.507887	2582.745125	1194.093049
-3.6	-754.0661906	-953.351594	-1281.311508	-573.589107	-616.847191	-581.347046	-703.331068	-706.36036	-747.420738	-303.2450447

+3.6	**2830.130599**	***3477.596512***	***3797.797103***	**2368.740961**	**2522.886125**	**2380.528303**	**2830.621958**	**2464.145961**	**2606.795944**	**1203.665789**
-3.65	**-659.8079171**	***-834.182649***	***-1121.147568***	**-501.890467**	**-539.741294**	**-508.678666**	**-615.414682**	**-618.065313**	**-653.993144**	**-265.3394131**
+3.65	**2790.954432**	***3369.82647***	***3672.80483***	**2297.046512**	**2449.939962**	**2313.155829**	**2757.839798**	**2413.296924**	**2552.016801**	**1181.46559**
-3.7	**-565.5496435**	***-715.013704***	***-960.9836278***	**-430.191827**	**-462.635397**	**-436.010286**	**-527.498295**	**-529.770267**	**-560.56555**	**-227.4337815**
+3.7	**2669.510612**	***3173.114488***	***3445.66562***	**2177.199524**	**2312.186534**	**2180.407746**	**2605.380027**	**2282.708514**	**2413.490794**	**1125.454167**
-3.75	**-471.2913699**	***-595.8447591***	***-800.8196879***	**-358.493188**	**-385.529499**	**-363.341906**	**-439.581908**	**-441.475221**	**-467.137957**	**-189.5281499**
+3.75	**2461.15957**	***2884.695935***	***3144.880172***	**1995.484845**	**2121.323241**	**1983.334305**	**2369.958572**	**2095.851923**	**2215.955017**	**1033.835623**
-3.8	**-377.0330963**	***-476.6758141***	***-640.655748***	**-286.794548**	**-308.423602**	**-290.673527**	**-351.665522**	**-353.180174**	**-373.710363**	**-151.6225183**
+3.8	**2161.862488**	***2502.228349***	***2751.012216***	**1743.822999**	**1855.441307**	**1735.754117**	**2056.617515**	**1823.872929**	**1926.701607**	**905.6478229**
-3.85	**-282.7748227**	***-357.5068691***	***-480.4918082***	**-215.095908**	**-231.317705**	**-218.005147**	**-263.749135**	**-264.885128**	**-280.282769**	**-113.7168867**
+3.85	**1768.1863**	***2023.784397***	***2245.650744***	**1419.936518**	**1512.036218**	**1415.234301**	**1679.442065**	**1497.078384**	**1581.208917**	**739.2489574**
-3.9	**-188.5165491**	***-238.3379241***	***-320.3278683***	**-143.397268**	**-154.211808**	**-145.336767**	**-175.832748**	**-176.590082**	**-186.855176**	**-75.81125515**
+3.9	**1277.683668**	***1447.855295***	***1643.478***	**1021.99907**	**1089.088996**	**1019.840617**	**1211.951915**	**1091.934559**	**1153.48736**	**533.3531632**
-3.95	**-94.25827554**	***-119.1689791***	***-160.1639284***	**-71.6986281**	**-77.1059105**	**-72.6683871**	**-87.9163618**	**-88.2950352**	**-93.4275819**	**-37.90562356**
+3.95	**689.3505119**	***773.3549879***	***903.1715648***	**548.6357635**	**585.0668644**	**548.0952207**	**652.2459098**	**593.0057098**	**626.5291927**	**287.1321474**
-5	**-8.30E-13**	***-6.06E-13***	***-8.94E-13***	**-4.35E-13**	**-4.97E-13**	**-5.39E-13**	**-6.74E-13**	**-4.10E-13**	**-4.33E-13**	**-3.34E-13**
+5	**2.80E-13**	***2.23E-13***	***3.72E-13***	**1.54E-13**	**1.63E-13**	**1.47E-13**	**1.71E-13**	**2.05E-13**	**2.17E-13**	**9.38E-14**

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-1.55E-13	-1.43E-13	-2.04E-13	-1.63E-13	-1.27E-13	-1.44E-13	-1.54E-13	-1.58E-13	-1.60E-13
End Shear	1.49E-13	1.53E-13	1.65E-13	1.48E-13	1.29E-13	1.37E-13	1.24E-13	1.15E-13	1.39E-13
-0.05	-54.65102504	-75.96761676	-79.48653951	-81.00657145	-43.89571474	-59.3490901	-67.7933342	-75.852881	-84.252579
+0.05	410.1484982	517.6697501	505.1158301	452.6542847	331.2230813	446.7743992	502.220626	543.2404377	583.2661419
-0.1	-109.3020501	-151.9352335	-158.973079	-162.0131429	-87.79142948	-118.6981802	-135.586668	-151.705762	-168.505158
+0.1	762.7617725	954.2387443	924.2853056	820.4103485	616.4506616	831.1369558	933.0770009	1009.011035	1086.933078
-0.15	-163.9530751	-227.9028503	-238.4596185	-243.0197143	-131.6871442	-178.0472703	-203.380003	-227.558643	-252.757737
+0.15	1057.735379	1309.819891	1258.325114	1116.585186	855.4449802	1153.091321	1292.61836	1422.342468	1527.697265
-0.2	-218.6041001	-303.870467	-317.9461581	-324.0262858	-175.582859	-237.3963604	-271.173337	-303.411524	-337.010316
+0.2	1296.232856	1586.857388	1534.897853	1359.029033	1049.106734	1413.861251	1582.345859	1758.312779	1898.043828
-0.25	-273.2551252	-379.8380838	-397.4326976	-405.0328572	-219.4785737	-296.7454505	-338.966671	-379.264405	-421.262895
+0.25	1479.7647	1807.55208	1736.8258	1544.011692	1198.613859	1615.044927	1811.633475	2017.706553	2198.902578
-0.3	-327.9061502	-455.8057005	-476.9192371	-486.0394287	-263.3742884	-356.0945406	-406.760005	-455.117286	-505.515474
+0.3	1610.188337	1961.463581	1869.929325	1684.772019	1305.422092	1770.218339	1990.880376	2203.063993	2417.364352
-0.35	-382.5571753	-531.7733173	-556.4057766	-567.0460001	-307.2700032	-415.4436307	-474.553339	-530.970167	-589.768053
+0.35	1703.930071	2046.302603	1979.473685	1771.718666	1371.264333	1877.403778	2106.892077	2333.803353	2555.909924
-0.4	-437.2082003	-607.740934	-635.8923161	-648.0525716	-351.1657179	-474.7927208	-542.346674	-606.823048	-674.020632
+0.4	1750.985319	2076.609598	2046.072055	1834.101176	1398.151175	1931.254218	2161.54993	2402.950375	2626.267101
-0.45	-491.8592253	-683.7085508	-715.3788556	-729.059143	-395.0614326	-534.1418109	-610.140008	-682.675929	-758.273211
+0.45	1751.118736	2052.166304	2056.65514	1847.84028	1388.370481	1933.939866	2158.127945	2407.357105	2639.632896
-0.5	-546.5102504	-759.6761676	-794.8653951	-810.0657145	-438.9571474	-593.490901	-677.933342	-758.52881	-842.52579
+0.5	1723.801242	2022.568046	2014.443356	1812.498846	1370.428463	1902.211838	2124.078647	2366.708607	2591.234637
-0.55	-601.1612754	-835.6437843	-874.3519346	-891.0722859	-482.8528621	-652.8399911	-745.726676	-834.381691	-926.778369
+0.55	1658.409116	1966.230727	1931.01054	1739.874977	1326.192734	1828.77567	2046.664913	2273.428425	2480.454014
-0.6	-655.8123004	-911.6114011	-953.8384742	-972.0788574	-526.7485769	-712.1890812	-813.52001	-910.234572	-1011.03095
+0.6	1552.534268	1855.730131	1793.912527	1620.102491	1248.247359	1711.896262	1918.443134	2124.330216	2323.568741
-0.65	-710.4633255	-987.5790178	-1033.325014	-1053.085429	-570.6442916	-771.5381713	-881.313345	-986.087453	-1095.28353
+0.65	1409.93882	1693.809941	1617.536524	1463.441059	1139.476019	1555.669425	1744.020213	1924.684652	2109.703132
-0.7	-765.1143505	-1063.546635	-1112.811553	-1134.092	-614.5400063	-830.8872614	-949.106679	-1061.94033	-1179.53611
+0.7	1236.797893	1476.101846	1393.668649	1267.47189	1003.040298	1364.566106	1528.433027	1685.015461	1843.702935
-0.75	-819.7653756	-1139.514251	-1192.298093	-1215.098572	-658.4357211	-890.2363515	-1016.90001	-1137.79321	-1263.78868
+0.75	1037.365172	1208.376676	1133.268586	1030.040507	842.378929	1143.431438	1277.148713	1407.183803	1532.33893
-0.8	-874.4164006	-1215.481868	-1271.784632	-1296.105143	-702.3314358	-949.5854416	-1084.69335	-1213.6461	-1348.04126
+0.8	811.8147544	896.913324	818.4754821	747.9114141	661.2081681	897.4855004	996.0645674	1093.646539	1182.919869
-0.85	-929.0674256	-1291.449485	-1351.271172	-1385.719252	-746.2271505	-1008.934532	-1152.48668	-1289.49898	-1432.29384
+0.85	565.1008551	551.1369782	475.9378313	446.335961	463.5216621	632.3225211	691.5076208	751.3316696	803.2916488
-0.9	-983.7184507	-1367.417102	-1430.757711	-1523.569771	-790.1228653	-1068.283622	-1220.28002	-1365.35186	-1516.54642
+0.9	312.1238104	312.2875196	295.4573516	285.4584832	253.5909718	353.9118467	374.2226414	407.9719636	422.3790992
-0.95	-1038.369476	-1443.384718	-1510.244251	-1944.603638	-834.01858	-1127.632712	-1288.07335	-1441.20474	-1600.799
+0.95	224.5866342	304.7612557	311.871649	284.9988228	180.7205941	244.4927921	278.6419955	311.50801	345.397161
-1	-1093.020482	-1519.352325	-1589.730762	-2466.110264	-877.9142882	-1186.981806	-1355.86671	-1517.05763	-1685.05162
+1	236.4069837	320.8013273	328.2859414	295.2975486	190.2322058	257.360835	293.3073685	327.903166	363.5759641
(Span 2) -2	-1093.020482	-1519.352325	-1589.730762	-2466.110264	-877.9142882	-1186.981806	-1355.86671	-1517.05763	-1685.05162
+2	236.4069837	320.8013273	328.2859414	295.2975486	190.2322058	257.360835	293.3073685	327.903166	363.5759641
-2.05	-793.4397048	-1076.687746	-1101.80809	-1797.36018	-638.4657879	-863.7660172	-984.411283	-1100.52322	-1220.24975
+2.05	182.2045311	247.2492725	253.0178447	233.7091558	146.6165227	198.3541654	226.0590204	252.7228311	280.2167129
-2.1	-739.2372473	-1003.135689	-1026.539979	-1238.130916	-594.8501039	-804.7593394	-917.162933	-1025.34288	-1136.8905
+2.1	385.6452634	374.4182449	306.0771921	303.9615626	311.7968059	447.0420519	470.6512437	509.406782	538.2958565
-2.15	-685.0347897	-929.5836307	-951.2718687	-905.1479131	-551.2344198	-745.7526617	-849.914583	-950.162546	-1053.53125
+2.15	691.0123637	690.1489751	598.4636393	549.2713266	561.3719455	776.887519	851.5154211	927.5890733	997.2502695
-2.2	-630.8323322	-856.0315728	-876.0037582	-789.2441639	-507.6187357	-686.7459839	-782.666232	-874.98221	-970.172007
+2.2	975.4765794	1096.892923	999.9321291	885.1902336	791.2009458	1084.715798	1205.176274	1322.012438	1438.810633

-2.25	-576.6298746	-782.4795149	-800.7356477	-727.2131972	-464.0030516	-627.7393061	-715.417882	-799.801874	-886.81276
+2.25	1229.914864	1450.354933	1365.035619	1250.397633	994.433971	1360.565655	1520.512592	1675.540195	1831.198057
-2.3	-522.4274171	-708.927457	-725.4675371	-670.3801075	-420.3873675	-568.7326283	-648.169532	-724.621538	-803.453513
+2.3	1446.687687	1740.393104	1678.889338	1567.027364	1165.407779	1596.077898	1788.242168	1977.416532	2163.083294
-2.35	-468.2249596	-635.3753991	-650.1994266	-613.5470177	-376.7716834	-509.7259505	-580.921181	-649.441202	-720.094266
+2.35	1619.638242	1960.469271	1919.576453	1805.796309	1299.644237	1784.494384	2000.922338	2218.946793	2425.436108
-2.4	-414.022502	-561.8233412	-574.9313161	-556.713928	-333.1559993	-450.7192727	-513.672831	-574.260866	-636.73502
+2.4	1744.093912	2108.367025	2100.133122	1979.469141	1393.85417	1920.66041	2152.949907	2393.499576	2616.459433
-2.45	-359.8200445	-488.2712833	-499.6632055	-499.8808383	-289.5403152	-391.712595	-446.424481	-499.080531	-553.375773
+2.45	1816.86432	2190.941614	2208.368289	2065.025012	1445.916702	2001.021656	2240.548949	2496.503707	2736.529686
-2.5	-305.6175869	-414.7192255	-424.395095	-443.0477485	-245.9246311	-332.7059172	-379.17613	-423.900183	-470.016526
+2.5	1835.990536	2196.648556	2234.964988	2087.65645	1454.5484	2023.405276	2261.519082	2525.235317	2774.389246
-2.55	-359.8199947	-488.2712754	-499.6631222	-499.8807789	-289.5403083	-391.7125309	-446.424461	-499.080518	-553.375799
+2.55	1816.871605	2190.952273	2208.359006	2065.02075	1445.910656	2001.032507	2240.541136	2496.512984	2736.534036
-2.6	-414.0224472	-561.8233301	-574.9312189	-556.7138586	-333.1559914	-450.7192006	-513.672809	-574.260853	-636.73505
+2.6	1744.099543	2108.375438	2100.141145	1979.462955	1393.877101	1920.669398	2152.962822	2393.506583	2616.461267
-2.65	-468.2248998	-635.3753849	-650.1993156	-613.5469383	-376.7716745	-509.7258702	-580.921157	-649.441188	-720.094301
+2.65	1619.642371	1960.48039	1919.583518	1805.789298	1299.66583	1784.501707	2000.933234	2218.951789	2425.455643
-2.7	-522.4273524	-708.9274397	-725.4674123	-670.380018	-420.3873576	-568.7325399	-648.169505	-724.621523	-803.453553
+2.7	1446.690355	1740.402013	1678.894329	1567.02085	1165.428101	1596.08368	1788.251413	1977.419714	2163.101004
-2.75	-576.629805	-782.4794945	-800.735509	-727.2130977	-464.0030407	-627.7392095	-715.417853	-799.801857	-886.812804
+2.75	1229.916787	1450.362454	1365.039005	1250.39195	994.4541836	1360.570996	1520.521034	1675.54256	1831.214663
-2.8	-630.8322575	-856.0315493	-876.0036057	-789.244055	-507.6187238	-686.7458791	-782.666201	-874.982192	-970.172055
+2.8	975.4783885	1096.899629	999.9412244	885.1850085	791.2205426	1084.720957	1205.184751	1322.014758	1438.827022
-2.85	-685.0347101	-929.5836041	-951.2717024	-905.1481536	-551.2344069	-745.7525488	-849.91455	-950.162527	-1053.53131
+2.85	691.0147262	690.154015	598.4710196	549.2645715	561.3915061	776.8931624	851.5241364	927.5920277	997.2671507
-2.9	-739.2371627	-1003.135659	-1026.539799	-1238.130954	-594.8500899	-804.7592184	-917.162898	-1025.34286	-1136.89056
+2.9	385.6488741	374.4143498	306.080935	303.9582055	311.816948	447.0490971	470.6612548	509.4184677	538.3106734
-2.95	-793.4396153	-1076.687714	-1101.807896	-1797.360184	-638.465773	-863.765888	-984.411246	-1100.5232	-1220.24981
+2.95	182.2045309	247.2492955	253.0178998	233.709196	146.6165258	198.3541829	226.0590226	252.7228283	280.2166952
-3	-1093.02056	-1519.352621	-1589.730789	-2466.110377	-877.9143133	-1186.981936	-1355.86675	-1517.05766	-1685.05193
+3	236.4070053	320.8013408	328.2860017	295.2975923	190.2322101	257.3608706	293.3073781	327.9031703	363.5759449
(Span 3) -4	-1.09E+03	-1.52E+03	-1.59E+03	-2.47E+03	-8.78E+02	-1.19E+03	-1.36E+03	-1.52E+03	-1.69E+03
+4	2.36E+02	3.21E+02	3.28E+02	2.95E+02	1.90E+02	2.57E+02	2.93E+02	3.28E+02	3.64E+02
-3.05	-1038.369531	-1443.384989	-1510.244248	-1944.6038	-834.0185973	-1127.63284	-1288.07341	-1441.20477	-1600.79934
+3.05	224.5866551	304.7612741	311.8717014	284.998863	180.7205997	244.4928271	278.6420094	311.5080116	345.3971479
-3.1	-983.718502	-1367.417358	-1430.757707	-1523.569782	-790.1228813	-1068.283743	-1220.28008	-1365.35189	-1516.54674
+3.1	312.1295626	312.2928513	295.4574011	285.4585215	253.6027668	353.9073321	374.2189632	407.976756	422.3891609
-3.15	*-929.067473*	*-1291.449726*	*-1351.271166*	*-1385.719249*	*-746.2271653*	*-1008.934646*	*-1152.48674*	*-1289.49901*	*-1432.29415*
+3.15	565.1029428	551.1348526	475.9331796	446.3330327	463.5340688	632.3191962	691.5015474	751.3348358	803.3004301
-3.2	-874.416444	-1215.482095	-1271.784625	-1296.10514	-702.3314493	-949.5855498	-1084.6934	-1213.64613	-1348.04155
+3.2	811.8171298	896.9098222	818.4695721	747.9077583	661.2208673	897.4827205	996.0590114	1093.649999	1182.929243
-3.25	-819.7654151	-1139.514463	-1192.298084	-1215.09857	-658.4357333	-890.2364532	-1016.90007	-1137.79325	-1263.78896
+3.25	1037.367273	1208.372405	1133.261099	1030.035898	842.3910992	1143.428682	1277.143022	1407.186924	1532.348056
-3.3	-765.1143861	*-1063.546831*	-1112.811544	*-1134.091999*	-614.5400173	-830.8873565	-949.106731	-1061.94036	-1179.53636
+3.3	1236.799025	1476.095802	1393.658772	1267.469115	1003.052149	1364.562603	1528.426464	1685.017322	1843.710869
-3.35	-710.4633572	-987.5791999	-1033.325003	-1053.085429	-570.6443013	-771.5382599	-881.313394	-986.087482	-1095.28377
+3.35	1409.937294	1693.801494	1617.531948	1463.438221	1139.486595	1555.664814	1744.012137	1924.683067	2109.709218
-3.4	-655.8123282	-911.6115683	-953.8384619	-972.0788586	-526.7485853	-712.1891633	-813.520058	-910.2346	-1011.03117
+3.4	1552.531088	1855.718622	1793.905235	1620.107211	1248.256602	1711.889969	1918.433054	2124.326627	2323.572349
-3.45	-601.1612993	-835.6439367	-874.351921	-891.0722882	-482.8528693	-652.8400667	-745.726722	-834.381718	-926.778579
+3.45	1658.403759	1966.221587	1931.001978	1739.869523	1326.20011	1828.767273	2046.652616	2273.421976	2480.452966
-3.5	-546.5102703	-759.6763052	-794.8653801	-810.0657179	-438.9571533	-593.4909701	-677.933386	-758.528835	-842.525984
+3.5	1723.79379	2022.574733	2014.431612	1812.503766	1370.433867	1902.200549	2124.063462	2366.699235	2591.230115
-3.55	-491.8592414	-683.7086736	-715.3788392	-729.0591476	-395.0614373	-534.1418734	-610.140049	-682.675953	-758.273389
+3.55	1751.103412	*2052.1603898 4491*	*2056.647224*	1847.845046	1388.365967	*1933.929023*	2158.122077	2407.345828	2639.639014

-3.6	**-437.2082124**	**-607.7410421**	**-635.8922984**	**-648.0525773**	**-351.1657214**	**-474.7927768**	**-542.346713**	**-606.823071**	**-674.020794**
+3.6	**1750.991479**	**2076.600213**	**2046.060316**	**1834.106192**	**1398.144766**	**1931.240007**	**2161.540717**	**2402.935685**	**2626.268988**
-3.65	**-382.5571835**	**-531.7734105**	**-556.4057575**	**-567.0460069**	**-307.2700054**	**-415.4436802**	**-474.553377**	**-530.970189**	**-589.7682**
+3.65	**1703.93303**	**2046.292147**	**1979.46594**	**1771.713754**	**1371.25524**	**1877.40996**	**2106.879129**	**2333.806581**	**2555.906268**
-3.7	**-327.9061545**	**-455.8057789**	**-476.9192166**	**-486.0394366**	**-263.3742894**	**-356.0945836**	**-406.760041**	**-455.117307**	**-505.515605**
+3.7	**1610.187551**	**1961.471744**	***1869.931983***	**1684.775192**	**1305.410551**	**1770.220743**	**1990.886377**	**2203.06231**	**2417.355688**
-3.75	**-273.2551256**	**-379.8381474**	**-397.4326758**	**-405.0328663**	**-219.4785734**	**-296.745487**	**-338.966704**	**-379.264425**	**-421.26301**
+3.75	**1479.760319**	**1807.555803**	**1736.817502**	**1544.006408**	**1198.599321**	**1615.043054**	**1811.634976**	**2017.699947**	**2198.888495**
-3.8	**-218.6040966**	**-303.8705158**	**-317.9461349**	**-324.026296**	**-175.5828574**	**-237.3963903**	**-271.173368**	**-303.411543**	**-337.010415**
+3.8	**1296.224883**	**1586.855859**	**1534.902368**	**1359.031791**	**1049.089615**	**1413.85556**	**1582.342686**	**1758.301537**	**1898.047011**
-3.85	**-163.9530677**	**-227.9028843**	**-238.459594**	**-243.0197256**	**-131.6871414**	**-178.0472937**	**-203.380032**	**-227.558661**	**-252.75782**
+3.85	**1057.723561**	**1309.813495**	**1258.324171**	**1116.586589**	**855.4241609**	**1153.081177**	**1292.610527**	**1422.325649**	**1527.694201**
-3.9	**-109.3020387**	**-151.9352527**	**-158.9730532**	**-162.0131553**	**-87.79142539**	**-118.6981971**	**-135.586696**	**-151.705779**	**-168.505225**
+3.9	**762.7456638**	**954.2271699**	**924.2789967**	**820.4076253**	**616.4270837**	**831.122526**	**933.0641441**	**1009.011487**	**1086.934804**
-3.95	**-54.65100974**	**-75.96762114**	**-79.4865123**	**-81.00658498**	**-43.8957094**	**-59.34910047**	**-67.7933595**	**-75.8528967**	**-84.2526306**
+3.95	**410.1284124**	**517.6753172**	**505.1041895**	**452.6586427**	**331.2196633**	**446.7556889**	**502.2029812**	**543.2355772**	**583.2617267**
-5	**-3.60E-13**	**-3.53E-13**	**-4.46E-13**	**-3.74E-13**	**-3.75E-13**	**-4.52E-13**	**-4.19E-13**	**-4.62E-13**	**-4.60E-13**
+5	**1.16E-13**	**1.77E-13**	**1.53E-13**	**1.73E-13**	**1.06E-13**	**1.21E-13**	**1.26E-13**	**1.34E-13**	**1.48E-13**

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.46E-13	-2.64E-13	-1.86E-13	-1.91E-13	-2.18E-13
End Shear	2.56E-13	2.73E-13	1.85E-13	1.91E-13	1.91E-13
-0.05	-144.596573	-158.9785268	-91.5743601	-110.732267	-118.767223
+0.05	899.3079162	945.6913904	606.2558132	734.1589302	769.1192838
-0.1	-289.1931461	-317.9570535	-183.14872	-221.464534	-237.534446
+0.1	1643.194712	1730.82243	1114.316729	1349.44563	1410.540954
-0.15	-433.7897191	-476.9355803	-274.72308	-332.196801	-356.301669
+0.15	2281.061764	2402.662602	1524.582912	1850.809996	1939.239097
-0.2	-578.3862922	-635.914107	-366.29744	-442.929068	-475.068892
+0.2	2781.319185	2988.99103	1875.737107	2275.410418	2376.935526
-0.25	-722.9828652	-794.8926338	-457.8718	-553.661335	-593.836115
+0.25	3161.409678	3453.454486	2146.561243	2590.180119	2730.014572
-0.3	-867.5794383	-953.8711606	-549.44616	-664.393602	-712.603338
+0.3	3474.638101	3796.360968	2329.004205	2797.817042	2981.781078
-0.35	-1012.176011	-1112.849687	-641.02052	-775.125869	-831.370561
+0.35	3664.064929	4025.64089	2453.226701	2931.709693	3121.578454
-0.4	-1156.772584	-1271.828214	-732.59488	-885.858136	-950.137784
+0.4	3806.332604	4109.806522	2494.924621	2973.318647	3180.59564
-0.45	-1301.369157	-1430.806741	-824.169241	-996.590403	-1068.90501
+0.45	3817.047971	4158.00282	2460.356818	2923.901279	3147.079154
-0.5	-1445.96573	-1589.785268	-915.743601	-1107.32267	-1187.67223
+0.5	3748.939518	4080.618483	2420.574827	2877.347784	3095.682359
-0.55	-1590.562303	-1748.763794	-1007.31796	-1218.05494	-1306.43945
+0.55	3594.219785	3878.930892	2362.449377	2813.31978	3007.468715
-0.6	-1735.158877	-1907.742321	-1098.89232	-1328.7872	-1425.20668
+0.6	3327.871926	3642.086868	2226.278086	2654.531049	2829.539225
-0.65	-1879.75545	-2066.720848	-1190.46668	-1439.51947	-1543.9739
+0.65	2990.969609	3280.557323	2018.127709	2409.855901	2574.188921
-0.7	-2024.352023	-2225.699375	-1282.04104	-1550.25174	-1662.74112
+0.7	2569.542845	2801.960164	1752.680783	2103.005987	2231.30047
-0.75	-2168.948596	-2384.677901	-1373.6154	-1660.984	-1781.50835
+0.75	2053.318843	2236.702316	1432.413927	1720.105176	1810.195844
-0.8	-2313.545169	-2543.656428	-1465.18976	-1771.71627	-1900.27557
+0.8	1463.210307	1586.747966	1057.48529	1270.154777	1320.097479
-0.85	-2458.141742	-2702.634955	-1556.76412	-1882.44854	-2019.04279
+0.85	842.0800188	881.8494744	636.1001106	771.1700169	771.8280828
-0.9	-2602.738315	-2861.613482	-1648.33848	-1993.18081	-2137.81001
+0.9	541.6496471	592.413501	372.0211301	424.3056147	447.373127
-0.95	-2747.334888	-3020.592008	-1739.91284	-2103.91307	-2256.57724
+0.95	571.7412942	625.3253621	364.5114389	442.4354362	472.2271896
-1	-2891.931428	-3179.570499	-1831.4872	-2214.64533	-2375.34443
+1	601.8329506	658.2372195	383.6962611	465.7215108	497.0812544
(Span 2) -2	-2891.931428	-3179.570499	-1831.4872	-2214.64533	-2375.34443
+2	601.8329506	658.2372195	383.6962611	465.7215108	497.0812544
-2.05	-2019.898521	-2209.205063	-1287.77847	-1563.07541	-1668.32613
+2.05	463.8470842	507.3192035	295.7239097	358.9427335	383.1124372
-2.1	-1881.912653	-2058.287046	-1199.80611	-1456.29662	-1554.35732
+2.1	521.9927014	519.6247374	453.8982102	526.9069362	547.9671491
-2.15	-1743.926786	-1907.369029	-1111.83376	-1349.51784	-1440.38851
+2.15	1061.830358	1155.282658	798.0026431	961.5282493	993.586518
-2.2	-1605.940918	-1756.451013	-1023.86141	-1242.73905	-1326.4197
+2.2	1846.544997	2010.897246	1293.182719	1548.294252	1637.331575

-2.25	**-1467.955051**	**-1605.532996**	**-935.889058**	**-1135.96027**	**-1212.45089**
+2.25	**2530.501107**	**2769.810103**	**1722.086794**	**2060.579137**	**2195.30904**
-2.3	**-1329.969183**	**-1454.614979**	**-847.916706**	**-1029.18148**	**-1098.48208**
+2.3	**3093.623288**	**3401.986486**	**2081.504396**	**2480.475875**	**2653.593606**
-2.35	**-1191.983315**	**-1303.696962**	**-759.944354**	**-922.402695**	**-984.513275**
+2.35	**3549.145441**	**3889.490416**	**2358.231609**	**2810.000098**	**3001.717938**
-2.4	**-1053.997448**	**-1152.778946**	**-671.972002**	**-815.62391**	**-870.544466**
+2.4	**3884.597706**	**4221.250428**	**2546.120659**	**3031.839014**	**3242.564973**
-2.45	**-916.01158**	**-1001.860929**	**-583.99965**	**-708.845125**	**-756.575657**
+2.45	**4077.08301**	**4443.185529**	**2641.617589**	**3141.907738**	**3375.018424**
-2.5	**-778.0257124**	**-850.9429403**	**-496.027298**	**-602.06634**	**-642.606918**
+2.5	**4123.648848**	**4524.272261**	**2643.691175**	**3139.803767**	**3386.238573**
-2.55	**-916.0115801**	**-1001.860956**	**-583.999604**	**-708.84504**	**-756.575735**
+2.55	**4077.097262**	**4444.715499**	**2641.603149**	**3141.896708**	**3375.024701**
-2.6	**-1053.997446**	**-1152.778972**	**-671.971956**	**-815.623818**	**-870.544552**
+2.6	**3884.607452**	**4221.249468**	**2546.12891**	**3031.824787**	**3242.567955**
-2.65	**-1191.983313**	**-1303.696988**	**-759.944307**	**-922.402595**	**-984.513369**
+2.65	**3549.151402**	**3889.488875**	**2358.237124**	**2810.0048**	**3001.736873**
-2.7	**-1329.969179**	**-1454.615004**	**-847.916659**	**-1029.18137**	**-1098.48219**
+2.7	**3093.640434**	**3402.593542**	**2081.50732**	**2480.477697**	**2653.609258**
-2.75	**-1467.955046**	**-1605.53302**	**-935.88901**	**-1135.96015**	**-1212.451**
+2.75	**2530.515369**	**2771.445123**	**1722.088369**	**2060.598608**	**2195.322536**
-2.8	**-1605.940912**	**-1756.451036**	**-1023.86136**	**-1242.73893**	**-1326.41982**
+2.8	**1846.557775**	**2008.441671**	**1293.180726**	**1548.312344**	**1637.344095**
-2.85	**-1743.926779**	**-1907.369052**	**-1111.83371**	**-1349.5177**	**-1440.38864**
+2.85	**1061.818008**	**1155.281863**	**797.9998522**	**961.5437822**	**993.5981586**
-2.9	**-1881.912645**	**-2058.287068**	**-1199.80606**	**-1456.29648**	**-1554.35746**
+2.9	**522.2390147**	**519.6229333**	**453.8995891**	**526.9137794**	**547.9771741**
-2.95	**-2019.898511**	**-2209.205084**	**-1287.77842**	**-1563.07526**	**-1668.32627**
+2.95	**463.8470963**	**507.3192388**	**295.7238705**	**358.9427274**	**383.1124371**
-3	**-2891.931363**	**-3179.553925**	**-1831.48748**	**-2214.6453**	**-2375.34466**
+3	**601.8329559**	**658.2372229**	**383.6962639**	**465.7215451**	**497.0812202**
(Span 3) -4	**-2.89E+03**	**-3.18E+03**	**-1.83E+03**	**-2.21E+03**	**-2.38E+03**
+4	**6.02E+02**	**6.58E+02**	**3.84E+02**	**4.66E+02**	**4.97E+02**
-3.05	**-2747.334793**	**-3020.576226**	**-1739.91311**	**-2103.91304**	**-2256.57742**
+3.05	**571.7413085**	**625.3253616**	**364.5114512**	**442.4354678**	**472.2271593**
-3.1	**-2602.738223**	**-2861.598528**	**-1648.33873**	**-1993.18077**	**-2137.81019**
+3.1	**541.6496612**	**592.4135002**	**372.0242079**	**424.3009171**	**447.3730984**
-3.15	***-2458.141653***	***-2702.62083***	***-1556.76436***	***-1882.44851***	***-2019.04295***
+3.15	**842.0648522**	**881.8473192**	**636.1065778**	**771.1589895**	**771.8213501**
-3.2	**-2313.545084**	**-2543.643132**	**-1465.18998**	**-1771.71624**	**-1900.27572**
+3.2	**1463.190584**	**1586.749062**	**1057.491333**	**1270.16429**	**1320.090148**
-3.25	**-2168.948514**	**-2384.665433**	**-1373.61561**	**-1660.98397**	**-1781.50849**
+3.25	**2053.310097**	**2236.702983**	**1432.418642**	**1720.112884**	**1810.186977**
-3.3	**-2024.351944**	**-2225.687735**	**-1282.04124**	**-1550.25171**	**-1662.74125**
+3.3	**2569.531272**	**2803.851394**	**1752.683194**	**2103.010942**	**2231.28875**
-3.35	**-1879.755374**	**-2066.710037**	**-1190.46686**	**-1439.51944**	**-1543.97402**
+3.35	**2990.975766**	**3280.555865**	**2018.125556**	**2409.85735**	**2574.196019**
-3.4	**-1735.158804**	**-1907.732339**	**-1098.89249**	**-1328.78718**	**-1425.20678**
+3.4	**3327.86632**	**3642.084933**	**2226.272441**	**2654.526127**	**2829.541972**
-3.45	**-1590.562234**	**-1748.754641**	**-1007.31812**	**-1218.05491**	**-1306.43955**
+3.45	**3595.983302**	**3878.931325**	**2362.440091**	**2813.310074**	**3007.464485**
-3.5	**-1445.965665**	**-1589.776942**	**-915.743742**	**-1107.32264**	**-1187.67231**
+3.5	**3748.945043**	**4080.710593**	**2420.56085**	**2877.33255**	**3095.672614**
-3.55	**-1301.369095**	**-1430.799244**	**-824.169368**	**-996.590379**	**-1068.90508**
+3.55	**3817.042278**	**4158.134222**	**2460.345624**	**2923.894143**	**3147.06685**
-3.6	**-1156.772525**	**-1271.821546**	**-732.594994**	**-885.858113**	**-950.137845**

+3.6	**3806.319938**	**4109.805647**	**2494.909468**	**2973.307001**	**3180.600604**
-3.65	**-1012.175955**	**-1112.843848**	**-641.02062**	**-775.125847**	**-831.370611**
+3.65	**3664.059268**	**4025.638811**	**2453.232196**	**2931.715085**	**3121.576331**
-3.7	**-867.5793854**	**-953.8661494**	**-549.446246**	**-664.393581**	**-712.603376**
+3.7	**3474.628838**	**3796.361296**	**2329.0048**	**2797.815703**	**2981.772812**
-3.75	**-722.9828156**	**-794.8884512**	**-457.871872**	**-553.661315**	**-593.836142**
+3.75	**3161.413749**	**3453.453203**	**2146.555677**	**2590.17212**	**2730.021563**
-3.8	**-578.3862458**	**-635.910753**	**-366.297498**	**-442.929049**	**-475.068908**
+3.8	**2781.313438**	**2988.987868**	**1875.725869**	**2275.395871**	**2376.923392**
-3.85	**-433.789676**	**-476.9330548**	**-274.723125**	**-332.196784**	**-356.301673**
+3.85	**2281.070139**	**2402.661763**	**1524.576611**	**1850.810828**	**1939.241586**
-3.9	**-289.1931062**	**-317.9553566**	**-183.148751**	**-221.464518**	**-237.534439**
+3.9	**1643.192705**	**1730.822747**	**1114.304202**	**1349.438621**	**1410.535029**
-3.95	**-144.5965364**	**-158.9776583**	**-91.5743769**	**-110.732252**	**-118.767205**
+3.95	**899.2958112**	**945.693477**	**606.2623332**	**734.1444964**	**769.1056951**
-5	**-6.65E-13**	**-7.70E-13**	**-5.03E-13**	**-5.62E-13**	**-5.70E-13**
+5	**2.42E-13**	**2.67E-13**	**2.20E-13**	**2.46E-13**	**2.57E-13**

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.099504356	-5.667723623	-7.878415012	-8.243353851	-8.861896552	-4.552316799	-6.154948416	-7.030680238	-7.866516046	-8.737628103
End Shear	63.77691603	45.68998299	58.2096696	57.16739261	53.91656327	36.9055655	49.72860032	55.96979886	60.59869531	65.21410787
-0.05	-8.099504356	-5.667723623	-7.878415012	-8.243353851	-8.889602377	-4.552316799	-6.154948416	-7.030680238	-7.866516046	-8.737628103
+0.05	59.21608056	42.5041018	53.68625876	52.36916913	48.66872748	34.34962251	46.28137602	52.02574082	56.19735407	60.3334706
-0.1	-8.099504356	-5.667723623	-7.878415012	-8.243353851	-8.99112266	-4.552316799	-6.154948416	-7.030680238	-7.866516046	-8.737628103
+0.1	54.44447978	39.17255042	48.96187912	47.36858878	43.21129954	31.6790635	42.67608356	47.90054426	51.59677093	55.23527363
-0.15	-8.099504356	-5.667723623	-7.878415012	-8.243353851	-9.129346585	-4.552316799	-6.154948416	-7.030680238	-7.866516046	-8.737628103
+0.15	50.58336438	36.4728181	45.15806961	43.36260566	39.09373054	29.51398631	39.75344113	44.55953906	47.87662069	51.11934031
-0.2	-10.17389162	-7.926326817	-7.878415012	-8.243353851	-11.09798298	-6.69928297	-8.953429034	-9.447057624	-9.443842332	-9.440701276
+0.2	46.00269285	33.21524971	40.59922458	38.58714123	34.59452033	26.90031249	36.22554213	40.5305092	43.39771771	46.1722077
-0.25	-13.66506661	-10.65142066	-9.6565246	-8.561955086	-13.09843214	-8.878496009	-11.89676423	-12.53168222	-12.51262071	-12.50882643
+0.25	42.25966233	30.59223762	36.95455853	34.79125399	31.09296139	24.7947283	33.38370507	37.2882556	39.79962538	42.20496219
-0.3	-18.08333099	-13.94949683	-12.68809596	-11.47166003	-15.43441473	-11.51474416	-15.4577171	-16.62980017	-16.57706799	-16.57337996
+0.3	37.78038025	27.44822176	32.619192	30.30424759	26.99292676	22.26959339	29.97593226	33.40445262	35.4974035	37.4702298
-0.35	-21.93853711	-16.61343288	-16.19148584	-13.82412241	-17.25235486	-13.64313401	-18.33294641	-19.94185564	-20.26798992	-20.26879502
+0.35	34.2049699	24.93430419	29.18108057	26.77027673	23.7939212	20.24939695	27.24986354	30.30109697	32.06637416	33.70185768
-0.4	-26.58157401	-19.81697512	-20.43209727	-17.52702928	-19.84711782	-16.20143689	-21.78928961	-23.92718631	-24.77095922	-25.3236409
+0.4	29.95910652	21.94340917	25.12713882	22.6350515	20.08517471	17.84445439	24.00495058	26.61159269	27.99584653	29.2408699
-0.45	-30.3127953	-22.38737357	-24.18913509	-21.12810264	-22.54264144	-18.25310528	-24.56144242	-27.12688336	-28.39248145	-29.39577638
+0.45	26.59803361	19.57096047	21.94298692	19.41481654	17.22356787	15.93554561	21.42961399	23.68727848	24.77688455	25.72156437
-0.5	-34.77579436	-25.45681265	-28.83092954	-25.46237551	-26.84178202	-20.70181388	-27.87044085	-30.95035617	-32.72791121	-34.27919303
+0.5	22.64268712	16.77275946	18.22841325	15.96841412	14.1504611	13.68244889	18.39029931	20.24114005	20.99305341	21.59565245
-0.55	-38.33639944	-27.90130392	-32.55430722	-29.00653264	-30.48700386	-22.65086249	-30.50455788	-33.99755136	-36.18985519	-38.18597345
+0.55	19.5426644	14.5741568	15.34563025	13.34371782	11.83272298	11.91072803	16.00065942	17.5360211	18.03116402	18.37559887
-0.6	-42.56236735	-30.79706702	-36.99913625	-33.97823413	-35.64782744	-24.95832134	-33.62347485	-37.6101027	-40.30274456	-42.83661865
+0.6	15.93493064	12.00821608	12.09496517	10.33173727	9.21702693	9.841129294	13.20967442	14.38231571	14.6648152	14.71974326
-0.65	-45.90571886	-33.08327461	-40.53765939	-37.95680648	-39.75058622	-26.77885326	-36.08459046	-40.46465056	-43.5601032	-46.52785944
+0.65	13.14268105	10.0696925	9.730496195	8.289165679	7.406565149	8.276006621	11.09935734	12.00260444	11.95883334	11.98071785
-0.7	-49.83765601	-35.76579383	-44.72757788	-42.69415414	-44.58301036	-28.91340656	-38.97069248	-43.81720927	-47.39544574	-50.88439016
+0.7	9.939659721	7.721718982	7.089429353	6.311014855	5.658823809	6.418661804	8.540775731	9.124329425	9.102233239	9.101527496
-0.75	-52.917124	-37.86134037	-48.03383019	-46.45507468	-48.57804821	-30.57952213	-41.22384181	-46.43896552	-50.40321373	-54.30989726
+0.75	7.627704333	5.967929259	5.500109478	4.803091598	4.35185014	4.958391348	6.627423329	6.978026523	6.969404357	6.968713039
-0.8	-56.49804089	-40.29105125	-51.91089476	-50.89473067	-53.24536296	-32.50951782	-43.83439954	-49.48246444	-53.90600096	-58.31098208
+0.8	5.080539736	3.985215791	3.979827834	3.164962472	2.94109667	3.350751231	4.461298648	4.715460782	4.714875423	4.71429831
-0.85	-59.26698523	-42.16356375	-54.93747103	-54.38617644	-56.87724543	-33.99531912	-45.8446143	-51.83127614	-56.61918078	-61.42057087
+0.85	3.174995273	2.804717573	2.828257344	2.248960334	2.15225256	2.14597917	3.026659578	3.155118508	3.154553377	3.153998382
-0.9	-62.43988232	-44.30088916	-58.44374223	-58.46480573	-61.08422139	-35.68910686	-48.13688872	-54.51664729	-59.73440184	-65.00485787
+0.9	1.803870559	1.519732453	1.663475871	1.702286473	1.666804496	1.226043285	1.528217096	1.529220461	1.700301625	1.885278501
-0.95	-64.85167931	-45.91799588	-61.14323315	-61.6349558	-64.33351428	-36.9686956	-49.86921145	-56.55237278	-62.10798376	-67.74834546
+0.95	1.745844267	1.22585939	1.663475871	1.702286473	1.627559942	0.986425742	1.334513009	1.520909327	1.700301625	1.885278501
-1	-67.55955583	-47.72337009	-64.22075623	-65.28921759	-68.06516989	-38.39461686	-51.80046534	-58.8305486	-64.78063848	-70.85450031
+1	1.75E+00	1.22585939	1.663475871	1.702286473	1.61E+00	0.986425742	1.334513009	1.520909327	1.700301625	1.885278501
(Span 2) -2	-6.158157583	-4.324002519	-5.867617701	-6.004515003	-5.687343124	-3.479442619	-4.7072591	-5.364739285	-5.997513802	-6.649987131
+2	67.86143036	47.84754134	64.99362294	66.73647659	73.20228182	38.47127199	51.90988159	59.02058992	65.1116741	71.36298028
-2.05	-6.158157583	-4.324002519	-5.867617701	-6.004515003	-5.706574718	-3.479442619	-4.7072591	-5.364739285	-5.997513802	-6.649987131
+2.05	65.19463122	46.06698547	62.00006362	63.23875029	67.11435331	37.06373914	50.00302735	56.77317913	62.47645577	68.30551072
-2.1	-6.158157583	-4.324002519	-5.867617701	-6.004515003	-5.779212349	-3.479442619	-4.7072591	-5.364739285	-5.997513802	-6.649987131
+2.1	61.7379444	43.73902922	58.21148631	58.88921656	60.56820815	35.21826075	47.50456609	53.84587531	59.07698284	64.39502006
-2.15	-6.158157583	-4.324002519	-5.867617701	-6.004515003	-5.89040767	-3.479442619	-4.7072591	-5.364739285	-5.997513802	-6.649987131
+2.15	58.517384	41.55541728	54.74931984	54.97317815	56.13560796	33.48340097	45.15708015	51.10805672	55.92150634	60.79005109
-2.2	-7.197323655	-5.649690436	-5.867617701	-6.004515003	-6.256753032	-4.687267372	-6.268877889	-6.622706466	-6.6118265	-6.649987131
+2.2	54.50657588	38.82094327	50.50733715	50.23760864	51.08887275	31.30700894	42.21337057	47.68763204	52.00364407	56.33958439
-2.25	-10.08687481	-7.783818186	-7.317469807	-6.394903721	-7.872127583	-6.414506884	-8.597677059	-9.237849644	-9.210259748	-9.208713077

+2.25	50.88986585	36.34349962	46.73650945	46.07810566	46.64255979	29.33218932	39.54321745	44.59485324	48.47975819	52.35643636
-2.3	-13.84701378	-10.46940848	-10.49186281	-8.941425268	-9.976715523	-8.583366043	-11.52293817	-12.53709964	-12.70533621	-12.7354541
+2.3	46.50881894	33.32993673	42.22773207	41.11475089	41.42170367	26.92682007	36.2918668	40.8393176	44.22063558	47.56353102
-2.35	-17.28721186	-12.91254107	-13.58432273	-11.81186428	-11.73645301	-10.5528906	-14.18013449	-15.54482786	-16.00057082	-16.31598135
+2.35	42.65356603	30.66788573	38.27273127	36.7565039	36.821348	24.79942622	33.41701592	37.52702352	40.48016825	43.37152831
-2.4	-21.50716152	-15.89492529	-17.54810939	-15.42903278	-14.96725995	-12.95344965	-17.41970753	-19.22308766	-20.0519366	-20.74309291
+2.4	38.08615981	27.50266479	33.55564794	31.86321702	31.75990634	22.26701769	29.99565479	33.59439633	36.05132321	38.38392233
-2.45	-25.26282717	-18.53783964	-21.13324578	-18.93677134	-18.57029889	-15.07788705	-20.28732647	-22.48795881	-23.66492619	-24.71064302
+2.45	34.14997629	24.65106333	29.64914684	27.7450509	27.52792768	20.05830746	26.92458618	30.05647049	32.11159071	34.02649914
-2.5	-29.75902585	-21.6895892	-25.48694111	-23.40888785	-23.01232433	-17.60820891	-23.70358939	-26.38721016	-27.99845348	-29.49051121
+2.5	29.49171876	21.4624206	25.17049801	23.08157008	22.69026158	17.42594024	23.45748037	26.10598357	27.6852738	29.14434905
-2.55	-33.6728188	-24.42305906	-29.32630373	-27.40673963	-27.17575182	-19.81179053	-26.66368261	-29.77378031	-31.77737026	-33.67576326
+2.55	25.6348761	18.76058033	21.43825933	19.24778691	18.88250261	15.25681614	20.52888092	22.76333935	23.97034094	25.04678482
-2.6	-38.26172628	-27.73047969	-33.88329455	-32.21062571	-32.11273133	-22.44938736	-30.24200886	-33.87722451	-36.36881782	-38.737665
+2.6	21.25047536	15.67759445	17.25621787	15.16214297	14.68525947	12.7786408	17.18377034	18.95483515	19.75577141	20.41863085
-2.65	-42.17631856	-30.44386915	-37.89814535	-36.40542764	-36.45213177	-24.62030034	-33.1749792	-37.24847981	-40.16625024	-43.02041499
+2.65	17.62960594	13.12092972	13.85818809	12.06125746	11.89936787	10.72074727	14.40663297	15.80161981	16.28269217	16.62343861
-2.7	-46.83311035	-33.54918202	-42.55306768	-41.46803581	-41.80136473	-27.10192486	-36.52852097	-41.11231298	-44.52955051	-47.91044202
+2.7	13.61244668	10.27102975	10.25505354	8.738844586	9.828177553	8.423308817	11.30703022	12.29313287	12.43885519	12.44682181
-2.75	-50.58664055	-36.13257191	-46.41823769	-45.72899958	-46.27658512	-29.16394119	-39.31576091	-44.33176732	-48.18070482	-52.01918118
+2.75	10.38515953	7.968765127	7.533714012	6.554470879	8.024305349	6.56401957	8.799302355	9.464789851	9.435720803	9.434164811
-2.8	-54.80325627	-39.02250308	-50.81692533	-50.58110154	-51.45951458	-31.46755191	-42.4304799	-47.93948206	-52.29131746	-56.66553225
+2.8	7.014901079	5.479380746	5.867617949	6.004516107	6.131415517	4.54925497	6.082835947	6.414329883	6.404747818	6.649986781
-2.85	-58.23989405	-41.36666827	-54.45340825	-54.64070849	-55.78547649	-33.33329773	-44.95402023	-50.87169158	-55.6499545	-60.48074459
+2.85	6.158185606	4.324002915	5.867617949	6.004516107	5.901873075	3.479442699	4.70725975	5.364739461	5.997513881	6.649986781
-2.9	-61.99502561	-43.91378893	-58.49198229	-59.20873752	-61.02169725	-35.35695688	-47.69228731	-54.06527847	-59.33074587	-64.68587833
+2.9	6.158185606	4.324002915	5.867617949	6.004516107	5.772065214	3.479442699	4.70725975	5.364739461	5.997513881	6.649986781
-2.95	-64.95744148	-45.90950407	-61.73982244	-62.93744808	-66.62773193	-36.93906138	-49.83417976	-56.57479901	-62.24503958	-68.03824291
+2.95	6.158185606	4.324002915	5.867617949	6.004516107	5.709882091	3.479442699	4.70725975	5.364739461	5.997513881	6.649986781
-3	-68.06753908	-47.9863848	-65.23167773	-67.01745607	-73.70186861	-38.58083206	-52.0583717	-59.19623964	-65.31885809	-71.60461761
+3	6.158185606	4.324002915	5.867617949	6.004516107	5.687343924	3.479442699	4.70725975	5.364739461	5.997513881	6.649986781
(Span 3) -4	-1.75E+00	-1.225859502	-1.663475941	-1.702286786	-1.61E+00	-0.986425764	-1.334513194	-1.520909377	-1.700301648	-1.885278402
+4	67.34092997	47.56707628	63.95112242	64.9670782	67.73669563	38.27130878	51.63341894	58.63306138	64.54812568	70.583404
-3.05	-1.75E+00	-1.225859502	-1.663475941	-1.702286786	-1.62E+00	-0.986425764	-1.334513194	-1.520909377	-1.700301648	-1.885278402
+3.05	65.12623993	46.08979954	61.43292299	61.97697441	64.68343489	37.10452377	50.05312996	56.76890973	62.36118515	68.04177805
-3.1	-1.909467697	-1.631051543	-1.663475941	-1.702286786	-1.672771825	-1.298502276	-1.657786807	-1.658797147	-1.700301648	-1.885278402
+3.1	62.17954996	44.11348029	58.1337525	58.10258212	60.71211459	35.54069192	47.93600348	54.28097188	59.46035011	64.68884351
-3.15	-2.959828378	-2.682509836	-2.705815289	-2.151561436	-2.069734605	-2.01869353	-2.88391384	-2.989811649	-2.989244445	-2.988697318
+3.15	59.58368861	42.36459735	55.26476479	54.7652975	57.26998447	34.15474713	46.06033907	52.08366215	56.91131054	61.7560232
-3.2	-5.285728618	-4.158118018	-4.113190188	-3.271039847	-3.033871984	-3.491079385	-4.650348104	-4.896760399	-4.896167354	-4.895585394
+3.2	56.19967517	40.07611926	51.56584647	50.49821472	52.83103789	32.33888101	43.60355771	49.21306465	53.59541522	57.95562809
-3.25	-7.367430283	-5.78049276	-5.357166209	-4.642167353	-4.213712867	-4.806546882	-6.422793917	-6.748848632	-6.741633505	-6.740940762
+3.25	53.26935872	38.08801707	48.39348234	46.86552439	49.01225469	30.75967402	41.46749695	46.72274537	50.72928307	54.68177802
-3.3	-10.19946599	-7.923877513	-7.285369556	-6.485062077	-5.811076782	-6.582456401	-8.761176726	-9.371932526	-9.348238957	-9.347547081
+3.3	49.4721705	35.52694602	44.35272214	42.26908672	44.15172876	28.72342657	38.71380439	43.51855723	47.05333526	50.49528706
-3.35	-12.81766778	-9.854564015	-9.477100462	-8.103675855	-7.241101494	-8.102218906	-10.86505151	-11.73868041	-11.69962361	-11.6989218
+3.35	46.25433981	33.332013	40.9243881	38.39286003	40.19783148	26.97685812	36.35228208	40.77537331	43.91511401	46.9306168
-3.4	-16.22680041	-12.23601021	-12.36680731	-10.59659877	-9.44693396	-10.02495766	-13.457554	-14.66213019	-14.97010545	-15.04993721
+3.4	42.16762964	30.53790345	36.59974855	33.53040455	35.18340079	24.75188103	33.34441091	37.2866627	39.93411992	42.41934927
-3.45	-19.17595326	-14.33557486	-15.03488188	-13.06115892	-11.58453602	-11.7183817	-15.74125224	-17.24261632	-17.71037618	-18.02744605
+3.45	38.70933199	28.16850115	32.96287917	29.46240854	30.94254454	22.86383449	30.79240606	34.33076051	36.56881472	38.61404458
-3.5	-22.96108223	-17.02260218	-18.55807545	-16.26892239	-14.41721452	-13.88370327	-18.66176707	-20.5486796	-21.33026604	-21.96283273
+3.5	34.35721881	25.18093432	28.41230497	25.07127373	26.453081	20.48179561	27.57310777	30.60659397	32.33777814	33.83934063
-3.55	-26.19455313	-19.31219778	-21.59749446	-19.06702366	-16.91582776	-15.72726074	-21.14862658	-23.36844651	-24.42634611	-25.33881282
+3.55	30.705088	22.66943832	24.61426055	21.52486923	22.91833438	18.47818214	24.86558615	27.47812072	28.79039562	29.84359093
-3.6	-30.29870395	-22.21169752	-25.4890241	-23.00263143	-20.41319268	-18.06025176	-24.29610036	-26.94240416	-28.36041033	-29.63994494
+3.6	26.14456869	19.52798545	20.04872812	17.123774	19.5408487	15.97072337	21.47756076	23.56758904	24.36432268	24.86679025

-3.65	-33.7698374	-24.65894782	-28.80608198	-26.38621886	-23.44776661	-20.02804465	-26.95118903	-29.96126559	-31.69105705	-33.29007846
+3.65	22.34523904	16.90677026	16.57894958	14.08333802	17.44920139	13.87744177	18.64948608	20.30666904	20.67986728	20.7307827
-3.7	-38.13599278	-27.7313508	-33.00800349	-30.70527709	-27.35749789	-22.49705209	-30.28288861	-33.75407141	-35.88431073	-37.89561806
+3.7	17.63328046	13.65099953	12.38794599	11.20824587	15.22714908	11.27620003	15.13550442	16.25881803	16.20915101	16.20544157
-3.75	-41.79817585	-30.30386433	-36.55533682	-34.37671363	-30.71223214	-24.56318138	-33.07120638	-36.93190148	-39.40452061	-41.76971817
+3.75	14.03425647	10.95244036	9.866821241	8.827447535	13.31596028	9.119163074	12.22184179	12.90564176	12.8835113	12.87974319
-3.8	-46.3693394	-33.50961896	-41.00970746	-39.01588724	-34.99175242	-27.13655174	-36.54439717	-40.89446794	-43.80195726	-46.6183234
+3.8	9.767316532	7.621921895	7.878416548	8.243353992	10.89682283	6.455807339	8.624599869	9.142983261	9.139770016	9.136612493
-3.85	-50.17594	-36.17503679	-44.73985927	-42.92330058	-38.65426539	-29.27511993	-39.43101735	-44.19112007	-47.46672511	-50.66620339
+3.85	8.099529417	5.667724029	7.878416548	8.243353992	9.147756666	4.55231693	6.154949092	7.030680451	7.866516161	8.737629746
-3.9	-54.89511565	-39.47455767	-49.38873258	-47.81925427	-43.69789583	-31.92119951	-43.00296528	-48.27438013	-52.01333918	-55.69656219
+3.9	8.099529417	5.667724029	7.878416548	8.243353992	8.978823728	4.55231693	6.154949092	7.030680451	7.866516161	8.737629746
-3.95	-58.79950019	-42.20050478	-53.25434531	-51.9108768	-48.16327997	-34.10632305	-45.95290473	-51.6497072	-55.77765987	-59.86800551
+3.95	8.099529417	5.667724029	7.878416548	8.243353992	8.895758321	4.55231693	6.154949092	7.030680451	7.866516161	8.737629746
-5	-63.60969182	-45.55422182	-58.03977812	-57.00027486	-53.82982298	-36.79344368	-49.58085493	-55.80459178	-60.41844513	-65.0187497
+5	8.099529417	5.667724029	7.878416548	8.243353992	8.861896436	4.55231693	6.154949092	7.030680451	7.866516161	8.737629746

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.099504356	-7.435688508	-7.99646298	-7.536259128	-9.117591358	-9.156861115	-9.689144429	-3.931066276
End Shear	63.77691603	61.00713491	65.08662492	60.99017191	72.63514757	66.72961706	70.51020324	31.98010451
-0.05	-8.099504356	-7.435688508	-7.99646298	-7.536259128	-9.117591358	-9.156861115	-9.689144429	-3.931066276
+0.05	59.21608056	56.84659508	60.60968248	56.7744431	67.53334168	61.4851398	64.95960824	29.77767383
-0.1	-8.099504356	-7.435688508	-7.99646298	-7.536259128	-9.117591358	-9.156861115	-9.689144429	-3.931066276
+0.1	54.44447978	52.49468053	55.9289565	52.36465444	62.2012198	56.01077895	59.16626502	27.44515189
-0.15	-8.099504356	-7.665354493	-7.99646298	-7.536259128	-9.117591358	-9.156861115	-9.689144429	-4.092299088
+0.15	50.58336438	48.96365883	52.13280786	48.78925752	57.88152317	51.60557847	54.50481819	25.55512944
-0.2	-10.17389162	-11.92538098	-12.23140578	-11.15710947	-12.23410182	-9.156861115	-9.689144429	-5.625960017
+0.2	46.00269285	44.69747866	47.54837364	44.47268732	52.67075082	46.32906208	48.92192716	23.27478227
-0.25	-13.66506661	-15.46150201	-16.04361287	-14.75413456	-16.6022985	-11.45294326	-12.11679491	-7.409404439
+0.25	42.25966233	41.2576494	43.85367433	40.99492858	48.4762413	42.1132618	44.46181522	21.43883038
-0.3	-18.08333099	-19.73582408	-20.65369289	-19.10525361	-21.89054229	-14.54083123	-15.40255125	-9.719256391
+0.3	37.78038025	37.12863972	39.42092472	36.82380553	43.45012603	37.1018744	39.16061886	19.23847675
-0.35	-21.93853711	-23.18387957	-24.37430189	-22.61791456	-26.16331696	-17.9253137	-18.86875126	-11.58502877
+0.35	34.2049699	33.82208609	35.87299507	33.48641748	39.43260067	33.13052824	34.96013419	17.47935434
-0.4	-26.58157401	-27.32484786	-28.84473268	-26.83980357	-31.30327557	-22.88141966	-24.0857049	-13.8287623
+0.4	29.95910652	29.88169086	31.64733111	29.51297162	34.65445135	28.45155713	30.01187784	15.38681242
-0.45	-30.3127953	-30.64274916	-32.42841786	-30.22535792	-35.42882011	-27.26025697	-28.71730303	-15.62905754
+0.45	26.59803361	26.75049348	28.29148861	26.35868784	30.86570865	24.77971187	26.12930528	13.72727944
-0.5	-34.77579436	-34.59892422	-36.70380295	-34.26578539	-40.3571827	-32.66828608	-34.44551014	-17.77885659
+0.5	22.64268712	23.05014692	24.32830111	22.63515503	26.39884159	20.50044093	21.60523073	11.77036879
-0.55	-38.33639944	-37.74458791	-40.10524355	-37.48150556	-44.2837054	-37.0088822	-39.04351652	-19.49091588
+0.55	19.5426644	20.13639531	21.20987311	19.70671	22.89068072	17.18314841	18.09886044	10.23318243
-0.6	-42.56236735	-41.46452929	-44.13018551	-41.28823727	-48.93715783	-42.19381987	-44.53647899	-21.51896209
+0.6	15.93493064	16.72753348	17.56455471	16.28531759	18.79840199	13.51425555	14.22553216	8.439718434
-0.65	-45.90571886	-44.39587317	-47.30406212	-44.29138733	-52.61285769	-46.32436499	-48.91287194	-23.12002315
+0.65	13.14268105	14.14517771	14.80560461	13.69739763	15.7084498	10.72882312	11.29349802	7.047645505
-0.7	-49.83765601	-47.82814492	-51.02316857	-47.81219394	-56.92809166	-51.21892532	-54.09934588	-24.99850076
+0.7	9.939659721	11.07461656	11.5285229	10.55842558	11.96945588	8.195440228	8.674526184	5.445446869
-0.75	-52.917124	-50.50308076	-53.92415552	-50.56003903	-60.3011689	-55.08435942	-58.19582656	-26.46580605
+0.75	7.627704333	8.654774686	8.949183186	8.209861829	9.176644366	6.479000652	6.851392976	4.221240163
-0.8	-56.49804089	-53.59624666	-57.28203351	-53.74269549	-64.21488142	-59.62125834	-63.00457002	-28.16689209
+0.8	5.080539736	5.983193099	6.105783893	5.54944017	6.023469347	4.485107459	4.734040147	2.934293993
-0.85	-59.26698523	-55.97268883	-59.86480778	-56.19249663	-67.23353111	-63.16653453	-66.76285346	-29.4776809
+0.85	3.174995273	3.982560762	3.982560762	3.743041465	3.981388645	3.05323236	3.213928799	2.157193044
-0.9	-62.43988232	-58.67531069	-62.80606237	-58.98476648	-70.68240517	-67.27849273	-71.12262954	-30.97356188
+0.9	1.803870559	2.157469289	2.157469289	1.832603033	1.976825318	1.934465606	2.046320055	1.284201468
-0.95	-64.85167931	-60.7111706	-65.02529771	-61.09379787	-73.29483857	-70.44855914	-74.48442555	-32.10507432
+0.95	1.745844267	1.614807703	1.735534676	1.635320135	1.976825318	1.934465606	2.046320055	0.846170346
-1	-67.55955583	-62.97181368	-67.49453768	-63.44344685	-76.21555995	-74.06827934	-78.32397828	-33.36792926
+1	1.75E+00	1.614807703	1.735534676	1.635320135	1.976825318	1.934465606	2.046320055	0.846170346
(Span 2) -2	-6.158157583	-5.695949125	-6.121792236	-5.768303127	-6.972902372	-6.823486001	-7.218032818	-2.984716499
+2	67.86143036	63.04191316	67.60142745	63.56473572	76.42973357	75.01545597	79.33804802	33.43727107
-2.05	-6.158157583	-5.695949125	-6.121792236	-5.768303127	-6.972902372	-6.823486001	-7.218032818	-2.984716499
+2.05	65.19463122	60.80929474	65.16266828	61.24400865	73.54503409	71.49565313	75.60536518	32.19180003
-2.1	-6.158157583	-5.695949125	-6.121792236	-5.768303127	-6.972902372	-6.823486001	-7.218032818	-2.984716499
+2.1	61.7379444	57.86581888	61.95754499	58.20015014	69.78221405	67.05236201	70.89510035	30.56329137
-2.15	-6.158157583	-5.695949125	-6.121792236	-5.768303127	-6.972902372	-6.823486001	-7.218032818	-2.984716499
+2.15	58.517384	55.08705809	58.9390463	55.33795634	66.25893701	63.00035592	66.60096749	29.03574431
-2.2	-7.197323655	-8.162335975	-8.45247356	-7.762375189	-8.704403457	-6.823486001	-7.218032818	-4.022401785
+2.2	54.50657588	51.58923943	55.14675427	51.74650253	61.85306844	58.04450462	61.35039438	27.12293625
-2.25	-10.08687481	-11.02145756	-11.50266401	-10.62074495	-12.10735744	-8.137561431	-8.616431235	-5.511783727

+2.25	50.88986585	48.40632065	51.7014222	48.48702087	57.86597638	53.64602483	56.69146632	25.39009573
-2.3	-13.84701378	-14.59864414	-15.32625275	-14.20843234	-16.39439495	-11.65334386	-12.26667775	-7.386913092
+2.3	46.50881894	44.51981092	47.50035594	44.51615826	53.02092148	48.39430602	51.13002426	23.2825733
-2.35	-17.28721186	-17.83725355	-18.7935362	-17.46525964	-20.29807302	-15.2129647	-16.02347747	-9.093327779
+2.35	42.65356603	41.07472116	43.78109958	41.00357372	48.74478387	43.79680315	46.26266214	21.42122995
-2.4	-21.50716152	-21.77436686	-23.01455414	-21.43370306	-25.06733633	-19.78279875	-20.85446895	-11.17687334
+2.4	38.08615981	36.96517187	39.3496527	36.82151749	43.66443982	38.31430538	40.45911353	19.20857843
-2.45	-25.26282717	-25.25048501	-26.74602977	-24.94479664	-29.2969618	-23.92361871	-25.23333364	-13.02353716
+2.45	34.14997629	33.34572818	35.45521126	33.07120269	39.14520814	33.78240011	35.66306968	17.2955182
-2.5	-29.75902585	-29.38185991	-31.18606857	-29.12579136	-34.34456618	-28.96015048	-30.56087816	-15.22591292
+2.5	29.49171876	29.08457765	30.86639636	28.8246545	33.98063164	28.59380517	30.17331595	15.06732124
-2.55	-33.6728188	-32.97657162	-35.06328755	-32.74699244	-38.72540128	-33.40812295	-35.26702246	-17.1360375
+2.55	25.6348761	25.54294715	27.06016257	25.24048738	29.65356013	24.2761981	25.60623539	13.17932983
-2.6	-38.26172628	-37.26140639	-39.66891243	-37.12270582	-44.02994677	-38.69465703	-40.86167783	-19.36765986
+2.6	21.25047536	21.48801154	22.70735147	21.14475491	24.71965674	19.44595934	20.49832012	11.02517375
-2.65	-42.17631856	-40.78432948	-43.4677828	-40.70778367	-48.38508339	-43.36528866	-45.80615196	-21.26445915
+2.65	17.62960594	18.11290526	19.08886507	17.74279118	20.63118343	15.52838078	16.35685845	9.239038761
-2.7	-46.83311035	-44.80305421	-47.80632712	-44.80524776	-53.37324376	-48.77299005	-51.53099797	-23.43574224
+2.7	13.61244668	14.33507281	15.04428886	13.94372094	16.07757392	11.38084069	11.9798323	7.248507611
-2.75	-50.58664055	-48.13479156	-51.40771891	-48.20929378	-57.52669379	-53.2750488	-56.29856834	-25.24242899
+2.75	10.38515953	11.26848372	11.76646541	10.86811874	12.40243628	8.317241047	8.807333222	5.641015537
-2.8	-54.80325627	-51.84764128	-55.42667533	-52.01146041	-62.17762131	-58.40589935	-61.73323363	-27.26378849
+2.8	7.014901079	7.933403602	8.208515354	7.533923292	8.433014579	6.82348579	7.218033146	3.903693997
-2.85	-58.23989405	-54.84620699	-58.67768066	-55.0902901	-65.95461524	-62.65435057	-66.23433767	-28.90357645
+2.85	6.158185606	5.695948644	6.121792426	5.768303008	6.972903599	6.82348579	7.218033146	2.98471664
-2.9	-61.99502561	-58.08753167	-62.19865682	-58.42894587	-70.06441481	-67.38097152	-71.24339768	-30.68542743
+2.9	6.158185606	5.695948644	6.121792426	5.768303008	6.972903599	6.82348579	7.218033146	2.98471664
-2.95	-64.95744148	-60.6109402	-64.94636814	-61.0384002	-73.29021477	-71.19007428	-75.28136854	-32.08152923
+2.95	6.158185606	5.695948644	6.121792426	5.768303008	6.972903599	6.82348579	7.218033146	2.98471664
-3	-68.06753908	-63.21508943	-67.79097129	-63.74533893	-76.65500007	-75.29577929	-79.63539063	-33.53428672
+3	6.158185606	5.695948644	6.121792426	5.768303008	6.972903599	6.82348579	7.218033146	2.98471664
(Span 3) -4	-1.75E+00	-1.614807567	-1.73553473	-1.635320096	-1.976825665	-1.934465546	-2.046320148	-0.846170386
+4	67.34092997	62.77673712	67.281206	63.24029089	75.96250511	73.75085607	77.98723218	33.25873039
-3.05	-1.75E+00	-1.614807567	-1.73553473	-1.635320096	-1.976825665	-1.934465546	-2.046320148	-0.846170386
+3.05	65.12623993	60.92691777	65.2607011	61.31764045	73.57256914	70.78900471	74.84550245	32.22538678
-3.1	-1.909467697	-2.315572711	-2.315572711	-1.997683987	-2.059598729	-1.934465546	-2.046320148	-1.355155626
+3.1	62.17954996	58.43882645	62.54849844	58.74012707	70.37982803	66.91472001	70.73689581	30.84253683
-3.15	-2.959828378	-3.808980206	-3.808980206	-3.560935509	-3.78075296	-2.921050596	-3.074790101	-2.069074465
+3.15	59.58368861	56.22739579	60.14180812	56.45533805	67.55777448	63.55013499	67.16953572	29.61853626
-3.2	-5.285728618	-6.216766813	-6.354167629	-5.781709455	-6.298301172	-4.655487189	-4.914945835	-3.018316692
+3.2	56.19967517	53.32303591	56.9852787	53.46131735	63.86853332	59.2172878	62.5763622	28.01656763
-3.25	-7.367430283	-8.402798691	-8.680792804	-7.958615999	-8.878412057	-6.295035268	-6.656013135	-4.090319226
+3.25	53.26935872	50.79206465	54.23770971	50.85714248	60.66618361	55.50502394	58.64166509	26.62467075
-3.3	-10.19946599	-11.34568638	-11.81765254	-10.82888854	-12.29130676	-8.39276895	-8.884141441	-5.586454414
+3.3	49.4721705	47.52290188	50.6922782	47.49885631	56.54376591	50.78085427	53.63511991	24.83141738
-3.35	-12.81766778	-13.85816293	-14.49911594	-13.41000701	-15.36563746	-10.43794177	-10.98730713	-6.897442029
+3.35	46.25433981	44.71448285	47.64916137	44.61799331	53.01287419	46.77596008	49.39137242	23.29438656
-3.4	-16.22680041	-17.03057265	-17.88846894	-16.58924023	-19.16160805	-13.82735433	-14.55510982	-8.598759978
+3.4	42.16762964	41.13191725	43.77018142	40.94767095	48.52058824	41.7277743	44.04272121	21.33763999
-3.45	-19.17595326	-19.81983631	-20.87121223	-19.38876304	-22.51008116	-16.82578565	-17.72117048	-10.06623675
+3.45	38.70933199	38.08813495	40.47683859	37.83287201	44.7129759	37.4853311	39.54824476	19.67823262
-3.5	-22.96108223	-23.3808825	-24.68240292	-22.96778275	-26.79760237	-20.88001321	-22.00647894	-11.94490964
+3.5	34.35721881	34.24364282	36.31974657	33.90276499	39.91415704	32.1804148	33.92873107	17.58582407
-3.55	-26.19455313	-26.40863335	-27.9252208	-26.01448986	-30.45253098	-24.38149339	-25.70826824	-13.54611579
+3.55	30.705088	31.006584	32.82150179	30.59676607	35.88162507	27.75541714	29.24175516	15.826801
-3.6	-30.29870395	-30.23546192	-32.02660104	-29.86953004	-35.08298	-28.86905891	-30.45337496	-15.57431644
+3.6	26.14456869	26.95156188	28.44164751	26.45906322	30.83953203	22.43321646	23.61391206	13.6265616

-3.65	**-33.7698374**	**-33.45961221**	**-35.48416797**	**-33.12072648**	**-38.9926123**	**-32.69753655**	**-34.50219043**	**-17.2864911**
+3.65	**22.34523904**	**23.56331083**	**24.78382224**	**23.00459783**	**26.63387851**	**18.37800267**	**19.34526597**	**11.79068314**
-3.7	**-38.13599278**	**-37.50074468**	**-39.82029974**	**-37.19955806**	**-43.90268108**	**-37.55115509**	**-39.63585255**	**-19.43642285**
+3.7	**17.63328046**	**19.3492395**	**20.23664683**	**18.7115748**	**21.41187635**	**14.26161851**	**15.10543645**	**9.510404718**
-3.75	**-41.79817585**	**-40.87920989**	**-43.44729383**	**-40.61246608**	**-48.01516513**	**-41.65163136**	**-43.97346002**	**-21.23680698**
+3.75	**14.03425647**	**15.8518827**	**16.46456507**	**15.15137785**	**17.08490114**	**11.73502964**	**12.41694667**	**7.620431033**
-3.8	**-46.3693394**	**-45.08325291**	**-47.96283012**	**-44.8628575**	**-53.14154285**	**-46.80401973**	**-49.42443651**	**-23.48062867**
+3.8	**9.767316532**	**11.5301541**	**11.80541348**	**10.75521861**	**11.74624273**	**9.156862468**	**9.689146354**	**5.487169476**
-3.85	**-50.17594**	**-48.57392428**	**-51.71390381**	**-48.39478921**	**-57.40513576**	**-51.12138781**	**-53.99248766**	**-25.34647402**
+3.85	**8.099529417**	**7.96991258**	**7.996463283**	**7.578404352**	**9.117592599**	**9.156862468**	**9.689146354**	**4.232284901**
-3.9	**-54.89511565**	**-52.88941815**	**-56.35342652**	**-52.76451013**	**-62.68451259**	**-56.50525827**	**-59.68953265**	**-27.65637975**
+3.9	**8.099529417**	**7.435689899**	**7.996463283**	**7.536259249**	**9.117592599**	**9.156862468**	**9.689146354**	**3.931099984**
-3.95	**-58.79950019**	**-56.45025698**	**-60.18330709**	**-56.37270802**	**-67.04738749**	**-60.98452633**	**-64.42980079**	**-29.56490117**
+3.95	**8.099529417**	**7.435689899**	**7.996463283**	**7.536259249**	**9.117592599**	**9.156862468**	**9.689146354**	**3.931099984**
-5	**-63.60969182**	**-60.82576351**	**-64.89142138**	**-60.80950247**	**-72.41642326**	**-66.5325953**	**-70.30167289**	**-31.91308624**
+5	**8.099529417**	**7.435689899**	**7.996463283**	**7.536259249**	**9.117592599**	**9.156862468**	**9.689146354**	**3.931099984**

3-Span: Shear (Max and Min) Raw Data Results - 100' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.099504356	-16.72603505	-18.38965029	-10.5927542	-12.80882209	-13.73825599
End Shear	63.77691603	113.4823488	119.7305545	76.24469742	92.19164526	96.77788138
-0.05	-8.099504356	-16.72603505	-18.38965029	-10.5927542	-12.80882209	-13.73825599
+0.05	59.21608056	103.8637039	109.3917166	70.12791361	84.83219867	88.86813329
-0.1	-8.099504356	-16.72603505	-18.38965029	-10.5927542	-12.80882209	-13.73825599
+0.1	54.44447978	93.84606903	98.41172619	63.74756331	77.1527848	80.61906104
-0.15	-8.099504356	-16.72603505	-18.38965029	-10.5927542	-12.80882209	-13.73825599
+0.15	50.58336438	85.82255818	89.63759065	58.62043267	70.97946932	73.9973673
-0.2	-10.17389162	-16.72603505	-18.38965029	-10.61640828	-12.80882209	-13.73825599
+0.2	46.00269285	76.25988636	79.20615169	52.48824853	63.59309928	66.08664913
-0.25	-13.66506661	-16.72603505	-18.38965029	-13.60580007	-15.01246805	-15.77537782
+0.25	42.25966233	68.66043516	70.93857099	47.59655544	57.69841752	59.78390183
-0.3	-18.08333099	-20.94830667	-21.79213185	-17.21750551	-18.95355321	-20.39078109
+0.3	37.78038025	59.67939169	61.19684007	41.79170194	50.70008801	52.31446094
-0.35	-21.93853711	-26.33600215	-27.58492976	-20.1295775	-23.58114196	-24.11647
+0.35	34.2049699	52.60763894	53.55129529	37.20020296	45.16174761	46.41484676
-0.4	-26.58157401	-33.68800338	-35.59849121	-24.89062296	-30.63694146	-30.33501612
+0.4	29.95910652	44.33489393	44.6403892	31.80184439	38.64645563	39.48959472
-0.45	-30.3127953	-40.67371743	-42.06601609	-29.69162147	-36.39844655	-36.69713843
+0.45	26.59803361	37.89447576	38.12700386	27.57532161	33.54219591	34.07732597
-0.5	-34.77579436	-49.65077207	-49.93459319	-36.07497006	-44.05646277	-44.59489866
+0.5	22.64268712	30.72292551	31.07939555	22.66261834	27.60493398	27.79917619
-0.55	-38.33639944	-57.46680945	-57.85645858	-41.20502024	-50.20893894	-51.30098196
+0.55	19.5426644	25.42791489	26.1693426	18.90410733	23.01246036	23.22699306
-0.6	-42.56236735	-67.45620482	-68.70635642	-47.34133109	-57.56575315	-59.3313118
+0.6	15.93493064	19.6178856	20.50798073	14.77289267	18.02172793	17.83020228
-0.65	-45.90571886	-75.45291221	-77.70176798	-52.23687722	-63.43293294	-65.74543735
+0.65	13.14268105	15.59839916	16.17316654	12.34226629	14.24877696	14.611598
-0.7	-49.83765601	-84.97831257	-88.44100428	-58.04698453	-70.39354739	-73.36745732
+0.7	9.939659721	11.37877074	11.63785315	9.716939428	10.64150276	11.34467426
-0.75	-52.917124	-92.54357425	-96.99096546	-62.64325541	-75.89770586	-79.40540712
+0.75	7.627704333	8.54316585	8.652734103	7.699217051	8.43250347	8.841665306
-0.8	-56.49804089	-101.4783136	-107.1151749	-68.04801172	-82.36714272	-86.51622041
+0.8	5.080539736	5.829430719	5.459298494	5.35384488	5.918178702	5.943124086
-0.85	-59.26698523	-108.5084878	-115.1041945	-72.28023188	-87.43054907	-92.09379833
+0.85	3.174995273	3.940524414	3.807040042	3.627523249	4.022212154	4.021683057
-0.9	-62.43988232	-116.7258977	-124.4722342	-77.20046715	-93.31380456	-98.59047837
+0.9	1.803870559	3.48081516	3.807040042	2.21918017	2.693588848	2.874963865
-0.95	-64.85167931	-123.1173464	-131.7848309	-81.00388376	-97.85875522	-103.6234834
+0.95	1.745844267	3.48081516	3.807040042	2.21918017	2.693588848	2.874963865
-1	-67.55955583	-130.4907573	-140.2555497	-85.36042905	-103.0608275	-109.4031161
+1	1.75E+00	3.48081516	3.807040042	2.21918017	2.693588848	2.874963865
(Span 2) -2	-6.158157583	-12.27796115	-13.42866183	-7.827766286	-9.501159174	-10.14092781
+2	67.86143036	133.3479484	143.867	86.68010074	104.5798894	111.3065584
-2.05	-6.158157583	-12.27796115	-13.42866183	-7.827766286	-9.501159174	-10.14092781
+2.05	65.19463122	126.2729257	135.7826503	82.46578005	99.53809127	105.7270278
-2.1	-6.158157583	-12.27796115	-13.42866183	-7.827766286	-9.501159174	-10.14092781
+2.1	61.7379444	117.4868803	125.8129763	77.17187555	93.197466	98.74668956
-2.15	-6.158157583	-12.27796115	-13.42866183	-7.827766286	-9.501159174	-10.14092781
+2.15	58.517384	109.5852844	116.901343	72.36415031	87.43348351	92.42913896
-2.2	-7.197323655	-12.27796115	-13.42866183	-7.827766286	-9.501159174	-10.14092781
+2.2	54.50657588	100.0388845	106.1937497	66.50540998	80.40327341	84.75349165
-2.25	-10.08687481	-12.27796115	-13.42866183	-9.639362003	-10.79001348	-11.32821009

+2.25	**50.88986585**	**91.66038046**	**96.84439556**	**61.3227913**	**74.17932053**	**77.98199943**
-2.3	**-13.84701378**	**-16.98628215**	**-17.86396877**	**-12.75788297**	**-15.60806696**	**-15.40584519**
+2.3	**46.50881894**	**81.74873778**	**85.85342291**	**55.1541434**	**66.76543893**	**69.94246531**
-2.35	**-17.28721186**	**-22.52115712**	**-23.30595292**	**-16.68810292**	**-20.37477944**	**-20.46237893**
+2.35	**42.65356603**	**72.92987435**	**76.45599763**	**49.67987835**	**60.22349557**	**62.77650457**
-2.4	**-21.50716152**	**-29.84224587**	**-30.08331883**	**-21.92010399**	**-26.70614726**	**-27.00599502**
+2.4	**38.08615981**	**63.06399699**	**65.63618381**	**43.37026297**	**52.58563389**	**54.64257297**
-2.45	**-25.26282717**	**-37.10032578**	**-37.38774242**	**-26.68437063**	**-32.46361704**	**-33.11593085**
+2.45	**34.14997629**	**54.7883642**	**56.58024458**	**38.09680138**	**46.23227776**	**47.82046616**
-2.5	**-29.75902585**	**-46.07871654**	**-47.09856451**	**-32.50361713**	**-39.48789716**	**-40.60294424**
+2.5	**29.49171876**	**45.42140771**	**46.38612885**	**32.0795301**	**38.97625826**	**40.05653875**
-2.55	**-33.6728188**	**-54.10869624**	**-55.83765256**	**-37.66198904**	**-45.70819556**	**-47.25867815**
+2.55	**25.6348761**	**37.72455246**	**37.87411316**	**27.09092999**	**32.95463678**	**33.6382059**
-2.6	**-38.26172628**	**-63.76230751**	**-66.40143861**	**-43.81355951**	**-53.11948261**	**-55.21674312**
+2.6	**21.25047536**	**29.30091246**	**29.7688575**	**21.53346327**	**26.23860071**	**26.51105828**
-2.65	**-42.17631856**	**-72.19622119**	**-75.67681227**	**-49.17524169**	**-59.63506547**	**-62.14627666**
+2.65	**17.62960594**	**23.0247519**	**23.77559027**	**17.04823614**	**20.81092768**	**20.9004436**
-2.7	**-46.83311035**	**-82.45822679**	**-86.63902414**	**-55.5982488**	**-67.29939883**	**-70.52054704**
+2.7	**13.61244668**	**16.56584208**	**17.42761622**	**12.46793782**	**15.22958524**	**15.00219149**
-2.75	**-50.58664055**	**-90.95746317**	**-96.06112864**	**-60.8863619**	**-73.65499447**	**-77.41248939**
+2.75	**10.38515953**	**12.27796126**	**13.4286619**	**9.850443887**	**11.08030793**	**11.59133763**
-2.8	**-54.80325627**	**-100.7310481**	**-106.9672263**	**-66.93190695**	**-80.91526056**	**-85.31147238**
+2.8	**7.014901079**	**12.27796126**	**13.4286619**	**7.827766344**	**9.501159872**	**10.14092711**
-2.85	**-58.23989405**	**-108.9147809**	**-116.1464055**	**-71.95437387**	**-86.94198183**	**-91.89149724**
+2.85	**6.158185606**	**12.27796126**	**13.4286619**	**7.827766344**	**9.501159872**	**10.14092711**
-2.9	**-61.99502561**	**-118.131955**	**-126.5418507**	**-77.56253353**	**-93.66560368**	**-99.26086759**
+2.9	**6.158185606**	**12.27796126**	**13.4286619**	**7.827766344**	**9.501159872**	**10.14092711**
-2.95	**-64.95744148**	**-125.6639381**	**-135.0885468**	**-82.10084248**	**-99.10123666**	**-105.244897**
+2.95	**6.158185606**	**12.27796126**	**13.4286619**	**7.827766344**	**9.501159872**	**10.14092711**
-3	**-68.06753908**	**-133.9167759**	**-144.5187993**	**-87.01668446**	**-104.9822954**	**-111.7532286**
+3	**6.158185606**	**12.27796126**	**13.4286619**	**7.827766344**	**9.501159872**	**10.14092711**
(Span 3) -4	**-1.75E+00**	**-3.480815191**	**-3.807040062**	**-2.219180187**	**-2.693589046**	**-2.874963667**
+4	**67.34092997**	**129.8404196**	**139.5075645**	**84.97771752**	**102.6040285**	**108.8946618**
-3.05	**-1.75E+00**	**-3.480815191**	**-3.807040062**	**-2.219180187**	**-2.693589046**	**-2.874963667**
+3.05	**65.12623993**	**123.807129**	**132.5764911**	**81.41297378**	**98.34743021**	**104.165494**
-3.1	**-1.909467697**	**-3.480815191**	**-3.807040062**	**-2.219180187**	**-2.693589046**	**-2.874963667**
+3.1	**62.17954996**	**115.9958617**	**123.6394669**	**76.76464371**	**92.79283873**	**98.01443886**
-3.15	**-2.959828378**	**-3.740264933**	**-3.807040062**	**-3.458835038**	**-3.801614225**	**-3.820619528**
+3.15	**59.58368861**	**109.2720293**	**115.9742308**	**72.73870988**	**87.97892089**	**92.69856676**
-3.2	**-5.285728618**	**-6.048760971**	**-5.719186373**	**-5.554321159**	**-6.138266956**	**-6.190352189**
+3.2	**56.19967517**	**100.6801095**	**106.2104133**	**67.56628003**	**81.79065398**	**85.88192583**
-3.25	**-7.367430283**	**-8.252007602**	**-8.239199662**	**-7.482888038**	**-8.195622008**	**-8.573786619**
+3.25	**53.26935872**	**93.36937987**	**97.92650103**	**63.14392548**	**76.49714108**	**80.06358656**
-3.3	**-10.19946599**	**-11.7484343**	**-12.03083721**	**-9.948834653**	**-10.89533815**	**-11.6328121**
+3.3	**49.4721705**	**84.1234246**	**87.47714104**	**57.52656125**	**69.77019571**	**72.68427738**
-3.35	**-12.81766778**	**-15.20117464**	**-15.70888609**	**-12.09699128**	**-13.84544994**	**-14.30595138**
+3.35	**46.25433981**	**76.32948218**	**78.69002507**	**52.77252101**	**64.07476809**	**66.44771416**
-3.4	**-16.22680041**	**-20.10015847**	**-21.00658929**	**-15.13247143**	**-18.45650029**	**-18.2948233**
+3.4	**42.16762964**	**66.55620577**	**67.69621847**	**46.78941408**	**56.90417638**	**58.60865222**
-3.45	**-19.17595326**	**-24.85869452**	**-25.63897497**	**-18.52202179**	**-22.5183371**	**-22.73025856**
+3.45	**38.70933199**	**58.38263951**	**58.79944552**	**41.76848731**	**50.88459376**	**52.03798343**
-3.5	**-22.96108223**	**-31.32997619**	**-31.64002149**	**-23.09771634**	**-28.13098445**	**-28.3545984**
+3.5	**34.35721881**	**48.84025137**	**49.50815086**	**35.49876807**	**43.36531098**	**43.84207972**
-3.55	**-26.19455313**	**-37.19903288**	**-37.46245921**	**-27.11751468**	**-32.98912104**	**-33.49163907**
+3.55	**30.705088**	**41.49497007**	**42.77879**	**30.27572335**	**37.09929562**	**37.39818519**
-3.6	**-30.29870395**	**-45.07019919**	**-45.42992243**	**-32.28298047**	**-39.227319**	**-40.1062363**
+3.6	**26.14456869**	**32.97725324**	**34.87440433**	**24.3587962**	**29.99860676**	**29.62265226**

-3.65	**-33.7698374**	**-51.83925644**	**-52.72113582**	**-36.70010065**	**-44.55834979**	**-45.77275361**
+3.65	**22.34523904**	**26.93041969**	**28.31753413**	**20.44997255**	**24.22535545**	**24.52665424**
-3.7	**-38.13599278**	**-60.48204147**	**-62.06509941**	**-42.31163641**	**-51.32707644**	**-52.9829901**
+3.7	**17.63328046**	**20.34576741**	**21.14662541**	**16.89096509**	**18.59726233**	**19.97326923**
-3.75	**-41.79817585**	**-67.83065772**	**-70.0360916**	**-47.06133624**	**-57.05331108**	**-59.09474745**
+3.75	**14.03425647**	**16.72603468**	**18.38955445**	**13.9357663**	**15.37255648**	**16.19681889**
-3.8	**-46.3693394**	**-77.11834914**	**-80.14031809**	**-53.0397806**	**-64.25757155**	**-66.79770769**
+3.8	**9.767316532**	**16.72603468**	**18.38955445**	**10.5927558**	**12.80882196**	**13.73825729**
-3.85	**-50.17594**	**-84.9428388**	**-88.67566063**	**-58.05729311**	**-70.30129075**	**-73.27046099**
+3.85	**8.099529417**	**16.72603468**	**18.38955445**	**10.5927558**	**12.80882196**	**13.73825729**
-3.9	**-54.89511565**	**-94.74886938**	**-99.39901027**	**-64.32348368**	**-77.84609054**	**-81.36322872**
+3.9	**8.099529417**	**16.72603468**	**18.38955445**	**10.5927558**	**12.80882196**	**13.73825729**
-3.95	**-58.79950019**	**-102.9455407**	**-108.3831051**	**-69.54403956**	**-84.12957053**	**-88.11285998**
+3.95	**8.099529417**	**16.72603468**	**18.38955445**	**10.5927558**	**12.80882196**	**13.73825729**
-5	**-63.60969182**	**-113.1431919**	**-119.5844306**	**-76.01881467**	**-91.91991607**	**-96.4925233**
+5	**8.099529417**	**16.72603468**	**18.38955445**	**10.5927558**	**12.80882196**	**13.73825729**

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-40.497522	-28.338618	-39.392075	-41.216769	-44.309483	-22.761584	-30.774742	-35.153401	-39.332580	-43.688141
+0.05	296.080403	212.677469	268.431294	261.921613	245.455108	171.751663	231.669380	260.420340	281.690660	302.445497
-0.1	-80.995044	-56.677236	-78.784150	-82.433539	-88.618966	-45.523168	-61.549484	-70.306802	-78.665160	-87.376281
+0.1	549.299102	395.520753	494.808786	479.276798	445.646685	319.652923	430.975865	483.835624	523.210285	563.615804
-0.15	-121.492565	-85.015854	-118.176225	-123.650308	-132.928448	-68.284752	-92.324226	-105.460204	-117.997741	-131.064422
+0.15	760.114870	548.475696	679.191025	652.489040	607.480094	443.580493	597.921349	670.271382	737.538226	792.168662
-0.2	-161.990087	-113.354472	-157.568300	-164.867077	-177.237931	-91.046336	-123.098968	-140.613605	-157.330321	-174.752562
+0.2	929.167938	672.145634	822.845418	795.902439	740.211356	544.001418	733.140394	820.506020	911.751506	984.207326
-0.25	-202.487609	-141.693091	-196.960375	-206.083846	-221.547414	-113.807920	-153.873710	-175.767006	-196.662901	-218.440703
+0.25	1057.675587	767.313819	937.283941	900.609697	841.906223	621.526502	837.461720	939.400298	1046.256963	1140.213937
-0.3	-242.985131	-170.031709	-236.352450	-247.300616	-265.856897	-136.569504	-184.648452	-210.920407	-235.995481	-262.128843
+0.3	1149.501343	834.943395	1017.092860	969.628896	919.429540	676.910600	917.924988	1032.346578	1142.371788	1253.494608
-0.35	-283.482652	-198.370327	-275.744525	-288.517385	-310.166379	-159.331088	-215.423195	-246.073808	-275.328062	-305.816984
+0.35	1216.331337	883.552020	1061.085094	1026.431778	967.807833	711.052286	973.504681	1092.503022	1210.165078	1325.335714
-0.4	-323.980174	-226.708945	-315.136600	-329.734154	-354.475862	-182.092672	-246.197937	-281.227210	-314.660642	-349.505124
+0.4	1247.314137	907.951941	1076.800414	1060.965546	1002.208093	724.994127	1001.428166	1120.845180	1246.020417	1361.818564
-0.45	-364.477696	-255.047563	-354.528676	-370.950923	-398.785345	-204.854256	-276.972679	-316.380611	-353.993222	-393.193265
+0.45	1243.627926	908.021123	1064.125644	1066.453275	1010.144311	719.922469	1002.820776	1119.070752	1248.305473	1368.749233
-0.5	-404.975218	-283.386181	-393.920751	-412.167693	-443.094828	-227.615840	-307.747421	-351.534012	-393.325802	-436.881405
+0.5	1225.373349	893.855972	1048.777830	1044.564872	991.389816	710.618856	986.368596	1101.414907	1227.227694	1343.652910
-0.55	-445.472740	-311.724799	-433.312826	-453.384462	-487.404310	-250.377424	-338.522163	-386.687413	-432.658383	-480.569546
+0.55	1180.871653	859.947688	1019.564805	1001.301810	952.062371	687.680961	948.289173	1061.272965	1178.858400	1286.208978
-0.6	-485.970261	-340.063417	-472.704901	-494.601231	-531.713793	-273.139008	-369.296905	-421.840814	-471.990963	-524.257686
+0.6	1105.642428	805.047585	962.266078	930.211318	887.045988	647.263344	887.682791	994.785136	1101.545355	1204.858046
-0.65	-526.467783	-368.402036	-512.096976	-535.818000	-576.023276	-295.900592	-400.071647	-456.994215	-511.323543	-567.945827
+0.65	1002.452003	731.106466	878.304351	838.753707	801.660693	590.861301	806.673282	904.340271	998.021598	1093.960660
-0.7	-566.965305	-396.740654	-551.489051	-577.034770	-620.332759	-318.662176	-430.846389	-492.147617	-550.656123	-611.633967
+0.7	874.396560	641.326364	765.414491	722.669769	694.652253	520.114233	707.579002	792.550183	873.744081	956.029523
-0.75	-607.462827	-425.079272	-590.881126	-618.251539	-664.642241	-341.423760	-461.621131	-527.301018	-589.988703	-655.322108
+0.75	727.669845	537.912975	626.588891	587.642513	564.903489	436.805252	592.912335	662.249786	729.677886	794.575541
-0.8	-647.960348	-453.417890	-630.273201	-659.468308	-708.951724	-364.185344	-492.395873	-562.454419	-629.321284	-699.010248
+0.8	561.260695	420.956575	465.083393	424.410413	410.736674	342.861378	465.380088	516.497053	567.096987	613.388576
-0.85	-688.457870	-481.756508	-669.665276	-700.685077	-759.197439	-386.946928	-523.170615	-597.607820	-668.653864	-742.698389
+0.85	377.793282	293.026111	285.785314	246.791720	246.718486	240.353468	327.883081	358.572788	389.593814	416.537023
-0.9	-728.955392	-510.095126	-709.057351	-741.901847	-838.731541	-409.708512	-553.945357	-632.761221	-707.986444	-786.386529
+0.9	196.174162	161.847970	161.932860	153.205783	158.692893	131.496485	183.516643	194.048557	211.548853	219.019497
-0.95	-769.452914	-538.433744	-748.449426	-783.118616	-1068.752555	-432.470096	-584.720100	-667.914623	-747.319024	-830.074670
+0.95	165.855205	116.456642	158.030208	161.717215	156.255051	93.710445	126.778736	144.486386	161.528654	179.101458
-1	-809.950436	-566.772352	-787.841496	-824.335370	-1353.954033	-455.231677	-615.494844	-703.068036	-786.651612	-873.762829
+1	174.584430	122.585939	166.347590	170.228645	161.236786	98.642575	133.451302	152.090935	170.030161	188.527853
(Span 2) -2	-809.950436	-566.772352	-787.841496	-824.335370	-1353.954033	-455.231677	-615.494844	-703.068036	-786.651612	-873.762829
+2	174.584430	122.585939	166.347590	170.228645	161.236786	98.642575	133.451302	152.090935	170.030161	188.527853
-2.05	-585.950691	-411.428418	-558.303213	-571.329059	-986.450313	-331.068596	-447.895264	-510.454386	-570.662804	-632.745526
+2.05	134.556406	94.479923	128.208075	131.199297	128.487164	76.026198	102.854117	117.220130	131.046322	145.302936
-2.1	-545.922485	-383.322399	-520.163696	-532.299704	-680.360728	-308.452219	-417.298076	-475.583579	-531.678964	-589.520612
+2.1	243.359699	199.971617	194.149984	158.712570	166.628813	161.678406	231.808168	244.050425	264.146633	279.126708
-2.15	-505.894278	-355.216380	-482.024180	-493.270349	-496.790155	-285.835841	-386.700888	-440.712773	-492.695124	-546.295698
+2.15	468.853905	358.315978	357.868279	310.325973	298.649479	291.092531	402.845486	441.542868	480.989927	517.111885
-2.2	-465.866072	-327.110362	-443.884663	-454.240995	-431.120891	-263.219464	-356.103699	-405.841966	-453.711283	-503.070784
+2.2	680.976380	505.821405	568.780359	518.502530	480.895315	410.267537	562.466061	624.929362	685.513320	746.077590

-2.25	**-425.837866**	**-299.004343**	**-405.745146**	**-415.211640**	**-398.066047**	**-240.603086**	**-325.506511**	**-370.971160**	**-414.727443**	**-459.845870**
+2.25	**869.687993**	**637.757254**	**752.063745**	**707.822463**	**680.911072**	**515.651528**	**705.504618**	**788.443138**	**868.830799**	**949.545272**
-2.3	**-385.809659**	**-270.898324**	**-367.605630**	**-376.182285**	**-368.595946**	**-217.986709**	**-294.909322**	**-336.100353**	**-375.743603**	**-416.620956**
+2.3	**1029.479236**	**750.162140**	**902.459478**	**870.567456**	**854.530307**	**604.307897**	**827.626600**	**927.271023**	**1025.365067**	**1121.640287**
-2.35	**-345.781453**	**-242.792305**	**-329.466113**	**-337.152931**	**-339.125845**	**-195.370331**	**-264.312134**	**-301.229547**	**-336.759763**	**-373.396042**
+2.35	**1155.950875**	**839.843527**	**1016.577273**	**995.372804**	**985.679170**	**673.914564**	**925.327656**	**1037.553714**	**1150.607619**	**1257.680118**
-2.4	**-305.753246**	**-214.686286**	**-291.326596**	**-298.123576**	**-309.655744**	**-172.753953**	**-233.714946**	**-266.358740**	**-297.775922**	**-330.171128**
+2.4	**1245.814535**	**904.378487**	**1093.267838**	**1088.998248**	**1080.976626**	**722.765968**	**995.934877**	**1116.385744**	**1241.119822**	**1356.732918**
-2.45	**-265.725040**	**-186.580267**	**-253.187080**	**-259.094221**	**-280.185643**	**-150.137576**	**-203.117757**	**-231.487934**	**-258.792082**	**-286.946213**
+2.45	**1296.891350**	**942.112689**	**1136.085877**	**1145.122265**	**1128.485498**	**749.762355**	**1037.605214**	**1161.809152**	**1294.531349**	**1418.993874**
-2.5	**-225.696833**	**-158.474248**	**-215.047563**	**-220.064866**	**-250.715542**	**-127.521198**	**-172.520569**	**-196.617127**	**-219.808236**	**-243.721299**
+2.5	**1308.202365**	**952.030353**	**1139.045142**	**1158.913657**	**1141.269060**	**754.238216**	**1049.211966**	**1172.682957**	**1309.429773**	**1438.625484**
-2.55	**-265.723837**	**-186.580241**	**-253.187076**	**-259.094178**	**-280.185613**	**-150.137572**	**-203.117724**	**-231.487924**	**-258.792076**	**-286.946227**
+2.55	**1297.126255**	**942.116466**	**1136.091404**	**1145.117452**	**1128.483287**	**749.759220**	**1037.610841**	**1161.805100**	**1294.536160**	**1418.996130**
-2.6	**-305.751861**	**-214.686257**	**-291.326591**	**-298.123525**	**-309.655708**	**-172.753949**	**-233.714908**	**-266.358729**	**-297.775915**	**-330.171143**
+2.6	**1246.011182**	**904.381407**	**1093.272200**	**1089.002408**	**1080.973418**	**722.777859**	**995.939537**	**1116.392441**	**1241.123455**	**1356.733869**
-2.65	**-345.779885**	**-242.792274**	**-329.466106**	**-337.152873**	**-339.125804**	**-195.370326**	**-264.312092**	**-301.229534**	**-336.759755**	**-373.396060**
+2.65	**1156.049701**	**839.845668**	**1016.583038**	**995.376468**	**985.675534**	**673.925761**	**925.331453**	**1037.559365**	**1150.610210**	**1257.690248**
-2.7	**-385.807910**	**-270.898290**	**-367.605621**	**-376.182221**	**-368.595900**	**-217.986703**	**-294.909277**	**-336.100340**	**-375.743595**	**-416.620976**
+2.7	**1029.490297**	**750.163524**	**902.464098**	**870.570044**	**854.526928**	**604.318435**	**827.629598**	**927.275817**	**1025.366717**	**1121.649470**
-2.75	**-425.835934**	**-299.004306**	**-405.745136**	**-415.211568**	**-398.065996**	**-240.603080**	**-325.506461**	**-370.971145**	**-414.727434**	**-459.845893**
+2.75	**869.614711**	**637.758251**	**752.067645**	**707.824218**	**680.908124**	**515.662009**	**705.507387**	**788.447516**	**868.832025**	**949.553883**
-2.8	**-465.863958**	**-327.110323**	**-443.884651**	**-454.240916**	**-431.120835**	**-263.219457**	**-356.103645**	**-405.841950**	**-453.711274**	**-503.070809**
+2.8	**680.812208**	**505.822343**	**568.783837**	**518.507246**	**480.892605**	**410.277699**	**562.468736**	**624.933757**	**685.514523**	**746.086089**
-2.85	**-505.891983**	**-355.216339**	**-482.024166**	**-493.270263**	**-496.790280**	**-285.835835**	**-386.700829**	**-440.712756**	**-492.695114**	**-546.295725**
+2.85	**468.580011**	**358.317203**	**357.870892**	**310.329800**	**298.645976**	**291.102674**	**402.848412**	**441.547387**	**480.991459**	**517.120638**
-2.9	**-545.920007**	**-383.322356**	**-520.163681**	**-532.299611**	**-680.360749**	**-308.452212**	**-417.298013**	**-475.583561**	**-531.678954**	**-589.520642**
+2.9	**243.014426**	**199.973489**	**194.147965**	**158.714511**	**166.627073**	**161.688850**	**231.811821**	**244.055616**	**264.152693**	**279.134391**
-2.95	**-585.948031**	**-411.428372**	**-558.303196**	**-571.328958**	**-986.450315**	**-331.068589**	**-447.895197**	**-510.454367**	**-570.662793**	**-632.745558**
+2.95	**134.557025**	**94.479923**	**128.208087**	**131.199326**	**128.487185**	**76.026200**	**102.854126**	**117.220131**	**131.046320**	**145.302927**
-3	**-809.952942**	**-566.772393**	**-787.841649**	**-824.335384**	**-1353.954092**	**-455.231690**	**-615.494911**	**-703.068057**	**-786.651624**	**-873.762993**
+3	**174.585224**	**122.585950**	**166.347597**	**170.228676**	**161.236809**	**98.642577**	**133.451320**	**152.090940**	**170.030163**	**188.527843**
(Span 3) -4	**-809.952942**	**-566.772393**	**-787.841649**	**-824.335384**	**-1353.954092**	**-455.231690**	**-615.494911**	**-703.068057**	**-786.651624**	**-873.762993**
+4	**174.585224**	**122.585950**	**166.347597**	**170.228676**	**161.236809**	**98.642577**	**133.451320**	**152.090940**	**170.030163**	**188.527843**
-3.05	**-769.455295**	**-538.433773**	**-748.449567**	**-783.118614**	**-1068.752639**	**-432.470105**	**-584.720166**	**-667.914655**	**-747.319043**	**-830.074844**
+3.05	**165.855963**	**116.456653**	**158.030217**	**161.717242**	**156.255072**	**93.710448**	**126.778754**	**144.486393**	**161.528655**	**179.101451**
-3.1	**-728.957648**	**-510.095153**	**-709.057484**	**-741.901844**	**-838.731547**	**-409.708520**	**-553.945420**	**-632.761253**	**-707.986462**	**-786.386696**
+3.1	**196.411570**	**161.850953**	**161.935624**	**153.205808**	**158.692913**	**131.502601**	**183.514302**	**194.046649**	**211.551338**	**219.024714**
-3.15	**-688.460001**	**-481.756533**	**-669.665401**	**-700.685075**	**-759.197438**	**-386.946936**	**-523.170675**	**-597.607850**	**-668.653881**	**-742.698547**
+3.15	**378.021288**	**293.027194**	**285.784212**	**246.789308**	**246.716968**	**240.359901**	**327.881357**	**358.569638**	**389.595455**	**416.541576**
-3.2	**-647.962354**	**-453.417912**	**-630.273318**	**-659.468305**	**-708.951722**	**-364.185351**	**-492.395929**	**-562.454448**	**-629.321300**	**-699.010398**
+3.2	**561.533279**	**420.957806**	**465.081577**	**424.407349**	**410.734778**	**342.867963**	**465.378647**	**516.494172**	**567.098781**	**613.393437**
-3.25	**-607.464707**	**-425.079292**	**-590.881236**	**-618.251535**	**-664.642240**	**-341.423766**	**-461.621184**	**-527.301046**	**-589.988720**	**-655.322249**
+3.25	**727.918807**	**537.914064**	**626.586676**	**587.638630**	**564.901098**	**436.811563**	**592.910906**	**662.246835**	**729.679504**	**794.580273**
-3.3	**-566.967060**	**-396.740672**	**-551.489153**	**-577.034765**	**-620.332758**	**-318.662182**	**-430.846438**	**-492.147644**	**-550.656139**	**-611.634101**
+3.3	**875.072962**	**641.326951**	**765.411357**	**722.664647**	**694.650814**	**520.120378**	**707.577186**	**792.546779**	**873.745046**	**956.033637**
-3.35	**-526.469413**	**-368.402052**	**-512.097070**	**-535.817995**	**-576.023276**	**-295.900597**	**-400.071693**	**-456.994241**	**-511.323558**	**-567.945952**
+3.35	**1003.103278**	**731.105675**	**878.299971**	**838.751334**	**801.659221**	**590.866785**	**806.670891**	**904.336083**	**998.020776**	**1093.963816**
-3.4	**-485.971766**	**-340.063432**	**-472.704987**	**-494.601225**	**-531.713794**	**-273.139012**	**-369.296948**	**-421.840839**	**-471.990977**	**-524.257803**
+3.4	**1106.075557**	**805.045936**	**962.260110**	**930.207537**	**887.048436**	**647.268137**	**887.679527**	**994.779909**	**1101.543494**	**1204.859917**
-3.45	**-445.474119**	**-311.724812**	**-433.312905**	**-453.384455**	**-487.404311**	**-250.377428**	**-338.522202**	**-386.687437**	**-432.658396**	**-480.569655**
+3.45	**1181.082056**	**859.944910**	**1019.560066**	**1001.297370**	**952.059543**	**687.684786**	**948.284819**	**1061.266589**	**1178.855056**	**1286.208435**
-3.5	**-404.976472**	**-283.386192**	**-393.920822**	**-412.167685**	**-443.094829**	**-227.615843**	**-307.747457**	**-351.534035**	**-393.325816**	**-436.881506**
+3.5	**1225.527470**	**893.852108**	**1048.781298**	**1044.558783**	**991.392367**	**710.621658**	**986.362743**	**1101.407032**	**1227.222834**	**1343.650565**
-3.55	**-364.478825**	**-255.047571**	**-354.528739**	**-370.950915**	**-398.785347**	**-204.854258**	**-276.972711**	**-316.380632**	**-353.993235**	**-393.193357**
+3.55	**1243.502099**	**908.013177**	**1064.122577**	**1066.449170**	**1010.146782**	**719.920128**	**1002.815153**	**1119.067709**	**1248.299626**	**1368.752406**
-3.6	**-323.981178**	**-226.708951**	**-315.136657**	**-329.734145**	**-354.475865**	**-182.092674**	**-246.197966**	**-281.227230**	**-314.660654**	**-349.505208**

+3.6	1247.125462	907.955136	1076.795547	1060.959459	1002.210694	724.990804	1001.420797	1120.840403	1246.012800	1361.819543
-3.65	-283.483530	-198.370331	-275.744574	-288.517375	-310.166383	-159.331089	-215.423220	-246.073828	-275.328073	-305.817060
+3.65	1216.072295	883.553554	1061.079672	1026.427762	967.805286	711.047571	973.507887	1092.496308	1210.166752	1325.333818
-3.7	-242.985883	-170.031711	-236.352491	-247.300605	-265.856901	-136.569504	-184.648475	-210.920426	-235.995492	-262.128911
+3.7	1148.271520	834.942987	1017.097093	969.630274	919.431185	676.904616	917.926234	1032.349690	1142.370915	1253.490116
-3.75	-202.488236	-141.693091	-196.960408	-206.083835	-221.547418	-113.807920	-153.873729	-175.767023	-196.662912	-218.440762
+3.75	1057.426238	767.311547	937.285871	900.605394	841.903482	621.518963	837.460749	939.401077	1046.253537	1140.206635
-3.8	-161.990589	-113.354471	-157.568326	-164.867065	-177.237936	-91.046335	-123.098984	-140.613621	-157.330331	-174.752613
+3.8	928.834581	672.141500	822.844625	795.904780	740.212786	543.992541	733.137443	820.504374	911.745676	984.208977
-3.85	-121.492942	-85.015850	-118.176243	-123.650295	-132.928454	-68.284751	-92.324238	-105.460219	-117.997750	-131.064465
+3.85	759.693362	548.469568	679.187708	652.488551	607.480821	443.569697	597.916088	670.267320	737.529504	792.167073
-3.9	-80.995295	-56.677230	-78.784160	-82.433525	-88.618972	-45.523166	-61.549493	-70.306817	-78.665169	-87.376316
+3.9	548.951093	395.512400	494.802784	479.273527	445.645273	319.640697	430.968383	483.828957	523.210519	563.616699
-3.95	-40.497648	-28.338610	-39.392077	-41.216755	-44.309490	-22.761581	-30.774747	-35.153414	-39.332588	-43.688167
+3.95	296.176375	212.667053	268.434181	261.915577	245.457368	171.749890	231.659678	260.411191	281.688140	302.443208
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-40.497522	-37.178443	-39.982315	-37.681296	-45.587957	-45.784306	-48.445722	-19.655331
+0.05	296.080403	284.502980	303.393665	284.219345	338.224821	307.505212	324.888876	148.888369
-0.1	-80.995044	-74.356885	-79.964630	-75.362591	-91.175914	-91.568611	-96.891444	-39.310663
+0.1	549.299102	529.957205	564.745439	528.834427	628.450156	566.215287	598.133017	276.562823
-0.15	-121.492565	-111.535328	-119.946945	-113.043887	-136.763870	-137.352917	-145.337166	-58.965994
+0.15	760.114870	736.300103	784.056648	733.858245	870.858143	776.294554	819.919510	383.326942
-0.2	-161.990087	-148.713770	-159.929260	-150.725183	-182.351827	-183.137222	-193.782889	-78.621326
+0.2	929.167938	904.244915	962.122399	900.057017	1066.434490	945.752586	999.073698	469.610759
-0.25	-202.487609	-185.892213	-199.911574	-188.406478	-227.939784	-228.921528	-242.228611	-98.276657
+0.25	1057.675587	1034.738561	1099.989483	1028.434256	1228.910473	1086.781063	1149.059436	536.085724
-0.3	-242.985131	-223.070655	-239.893889	-226.087774	-273.527741	-274.705833	-290.674333	-117.931988
+0.3	1149.501343	1128.961910	1198.956611	1130.621556	1350.996586	1183.670194	1251.486249	583.593186
-0.35	-283.482652	-260.249098	-279.876204	-263.769069	-319.115698	-320.490139	-339.120055	-137.587320
+0.35	1216.331337	1191.104593	1270.384280	1199.468485	1430.050043	1251.382570	1323.314114	612.636847
-0.4	-323.980174	-297.427540	-319.858519	-301.450365	-364.703654	-366.274445	-387.565777	-157.242651
+0.4	1247.314137	1228.278704	1308.207296	1234.401560	1467.787744	1277.760099	1351.730076	624.147983
-0.45	-364.477696	-334.605983	-359.840834	-339.131661	-410.291611	-412.058750	-436.011499	-176.897982
+0.45	1243.627926	1233.043906	1311.579175	1236.707859	1466.461454	1265.500725	1339.256547	617.531953
-0.5	-404.975218	-371.784425	-399.823149	-376.812956	-455.879568	-457.843056	-484.457221	-196.553314
+0.5	1225.373349	1211.907586	1289.892475	1216.015926	1443.481216	1246.740077	1319.267895	611.684530
-0.55	-445.472740	-408.962868	-439.805464	-414.494252	-501.467525	-503.627361	-532.902944	-216.208645
+0.55	1180.871653	1162.643662	1238.619321	1168.734575	1389.411393	1209.949559	1279.908483	593.486755
-0.6	-485.970261	-446.141310	-479.787779	-452.175548	-547.055481	-549.411667	-581.348666	-235.863977
+0.6	1105.642428	1086.773431	1158.416481	1094.004789	1301.858814	1135.531103	1200.778111	559.823497
-0.65	-526.467783	-483.319753	-519.770094	-489.856843	-592.643438	-595.195973	-629.794388	-255.519308
+0.65	1002.452003	989.424453	1052.064581	994.431725	1183.747583	1026.561671	1085.141354	511.987962
-0.7	-566.965305	-520.498196	-559.752409	-527.538139	-638.231395	-640.980278	-678.240110	-275.174639
+0.7	874.396560	872.342127	923.539178	872.858284	1038.276381	888.819149	940.141343	451.400044
-0.75	-607.462827	-557.676638	-599.734723	-565.219435	-683.819352	-686.764584	-726.685832	-294.829971
+0.75	727.669845	735.408717	776.769352	732.364516	869.121595	726.120420	767.742138	379.605661
-0.8	-647.960348	-594.855081	-639.717038	-602.900730	-729.407309	-732.548889	-775.131554	-314.485302
+0.8	561.260695	581.801616	611.671916	576.268138	680.247743	537.619191	568.116168	298.277431
-0.85	-688.457870	-632.033523	-679.699353	-640.582026	-774.995265	-778.333195	-823.577276	-334.140633
+0.85	377.793282	414.931764	431.893214	408.123963	475.906691	327.443429	345.640837	209.214371
-0.9	-728.955392	-669.211966	-719.681668	-678.263321	-820.583222	-824.117500	-872.022999	-353.795965
+0.9	196.174162	238.443768	243.024932	231.724519	260.660669	179.888284	189.656668	123.125852
-0.95	-769.452914	-706.390408	-759.663983	-715.944617	-866.171179	-869.901806	-920.468721	-373.451296
+0.95	165.855205	153.406732	164.875794	155.355413	187.798405	183.774233	194.400405	80.386183
-1	-809.950436	-743.568845	-799.646305	-753.625917	-911.759123	-915.686106	-968.914437	-393.106630
+1	174.584430	161.480769	173.553467	163.532014	197.682535	193.446558	204.632002	84.617034
(Span 2) -2	-809.950436	-743.568845	-799.646305	-753.625917	-911.759123	-915.686106	-968.914437	-393.106630
+2	174.584430	161.480769	173.553467	163.532014	197.682535	193.446558	204.632002	84.617034
-2.05	-585.950691	-541.968901	-582.487891	-548.853430	-663.471027	-649.253943	-686.795087	-283.995459
+2.05	134.556406	124.457100	133.761817	126.038043	152.358670	149.093899	157.714789	71.799795
-2.1	-545.922485	-504.945235	-542.696240	-511.359460	-618.147154	-604.901286	-639.877872	-264.594801
+2.1	243.359699	296.506365	307.349062	291.515353	329.501209	220.124972	232.849712	145.561749
-2.15	-505.894278	-467.921569	-502.904590	-473.865490	-572.823280	-560.548628	-592.960656	-245.194143
+2.15	468.853905	500.880805	528.332152	500.471535	584.574373	414.795153	437.603007	251.181801
-2.2	-465.866072	-430.897903	-463.112939	-436.371507	-527.499407	-516.195971	-546.043441	-225.793485
+2.2	680.976380	693.722416	735.081174	695.646918	821.727110	660.466255	697.953776	354.743794

-2.25	-425.837866	-393.874236	-423.321288	-398.877538	-482.175534	-471.843313	-499.126225	-206.392827
+2.25	869.687993	865.727384	920.809922	870.697592	1033.457325	876.607012	926.456226	446.076956
-2.3	-385.809659	-356.850570	-383.529637	-361.383568	-436.851660	-427.490655	-452.209010	-186.992168
+2.3	1029.479236	1013.409338	1079.809279	1020.294960	1213.493545	1057.269431	1117.853415	522.659491
-2.35	-345.781453	-319.826904	-343.737987	-323.889609	-391.527787	-383.137998	-405.291794	-167.591510
+2.35	1155.950875	1132.773417	1207.446119	1140.125103	1356.794195	1197.812977	1266.855852	582.510035
-2.4	-305.753246	-282.803238	-303.946336	-286.395638	-346.203913	-338.785340	-358.374579	-148.190852
+2.4	1245.814535	1219.924552	1300.165105	1226.890325	1459.549482	1294.905572	1369.913709	624.188213
-2.45	-265.725040	-245.779572	-264.154685	-248.901668	-300.880040	-294.432682	-311.457363	-128.790194
+2.45	1296.891350	1272.477636	1355.486563	1278.307214	1519.179183	1346.522278	1424.861175	646.794073
-2.5	-225.696833	-208.755905	-224.363034	-211.407690	-255.556167	-250.080025	-264.540148	-109.389536
+2.5	1308.202365	1288.931361	1371.891546	1292.973163	1534.199348	1351.814180	1430.778489	650.089550
-2.55	-265.723837	-245.779594	-264.154678	-248.901660	-300.879984	-294.432691	-311.457345	-128.790195
+2.55	1297.126255	1272.481389	1355.491765	1278.314727	1519.190942	1346.528071	1424.867116	646.797776
-2.6	-305.751861	-282.803263	-303.946328	-286.395630	-346.203850	-338.785350	-358.374558	-148.190852
+2.6	1246.011182	1219.927237	1300.169182	1226.896660	1459.559805	1294.910010	1369.918214	624.191744
-2.65	-345.779885	-319.826932	-343.737977	-323.889600	-391.527715	-383.138009	-405.291771	-167.591510
+2.65	1156.049701	1132.775192	1207.449201	1140.130356	1356.803142	1197.816040	1266.858906	582.513346
-2.7	-385.807910	-356.850601	-383.529627	-361.383571	-436.851581	-427.490668	-452.208984	-186.992167
+2.7	1029.490297	1013.410151	1079.811311	1020.299262	1213.501345	1057.271299	1117.855208	522.662595
-2.75	-425.835934	-393.874271	-423.321276	-398.877541	-482.175446	-471.843327	-499.126198	-206.392824
+2.75	869.614711	865.726682	920.811524	870.701628	1033.464790	876.608229	926.457336	446.079926
-2.8	-465.863958	-430.897940	-463.112926	-436.371511	-527.499311	-516.195986	-546.043411	-225.793481
+2.8	680.812208	693.721612	735.082675	695.650840	821.734318	660.467196	697.953009	354.746744
-2.85	-505.891983	-467.921609	-502.904575	-473.865482	-572.823177	-560.548645	-592.960624	-245.194139
+2.85	468.580011	500.881666	528.334129	500.475794	584.581892	414.796075	437.603824	251.184727
-2.9	-545.920007	-504.945279	-542.696225	-511.359452	-618.147042	-604.901304	-639.877838	-264.594796
+2.9	243.014426	296.508167	307.352009	291.520495	329.509729	220.125757	232.850654	145.225579
-2.95	-585.948031	-541.968948	-582.487874	-548.853422	-663.470908	-649.253963	-686.795051	-283.995453
+2.95	134.557025	124.457090	133.761823	126.038036	152.358694	149.093894	157.714791	71.258539
-3	-809.952942	-743.568984	-799.646335	-753.625929	-911.759247	-915.686241	-968.914629	-393.109994
+3	174.585224	161.480755	173.553472	163.532014	197.682570	193.446552	204.632011	84.617038
(Span 3) -4	-809.952942	-743.568984	-799.646335	-753.625929	-911.759247	-915.686241	-968.914629	-393.109994
+4	174.585224	161.480755	173.553472	163.532014	197.682570	193.446552	204.632011	84.617038
-3.05	-769.455295	-706.390534	-759.664019	-715.944632	-866.171284	-869.901929	-920.468898	-373.454494
+3.05	165.855963	153.406717	164.875799	155.355410	187.798442	183.774224	194.400411	80.386187
-3.1	-728.957648	-669.212085	-719.681702	-678.263336	-820.583321	-824.117616	-872.023166	-353.798994
+3.1	196.411570	238.445293	243.023648	231.720960	260.668198	179.889779	189.658155	122.266035
-3.15	-688.460001	-632.033635	-679.699386	-640.582040	-774.995358	-778.333304	-823.577434	-334.143494
+3.15	378.021288	414.933901	431.894496	408.121179	475.900989	327.446076	345.643795	209.211772
-3.2	-647.962354	-594.855186	-639.717070	-602.900744	-729.407395	-732.548992	-775.131702	-314.487995
+3.2	561.533279	581.804035	611.673468	576.265736	680.242427	537.621696	568.118988	298.274905
-3.25	-607.464707	-557.676736	-599.734753	-565.219447	-683.819432	-686.764679	-726.685970	-294.832495
+3.25	727.918807	735.411034	776.770700	732.362147	869.116265	726.122448	767.744463	379.602815
-3.3	-566.967060	-520.498287	-559.752437	-527.538151	-638.231469	-640.980367	-678.240239	-275.176995
+3.3	875.072962	872.343841	923.539863	872.855415	1038.270284	888.820139	940.142580	451.397354
-3.35	-526.469413	-483.319837	-519.770120	-489.856855	-592.643506	-595.196055	-629.794507	-255.521495
+3.35	1003.103278	989.425360	1052.063405	994.428170	1183.740611	1026.560379	1085.140171	511.985290
-3.4	-485.971766	-446.141388	-479.787804	-452.175559	-547.055543	-549.411742	-581.348775	-235.865995
+3.4	1106.075557	1086.772436	1158.414198	1094.000197	1301.850552	1135.528257	1200.775291	559.820255
-3.45	-445.474119	-408.962938	-439.805487	-414.494262	-501.467580	-503.627430	-532.903043	-216.210495
+3.45	1181.082056	1162.641383	1238.615650	1168.728667	1389.415680	1209.944765	1279.903611	593.483385
-3.5	-404.976472	-371.784489	-399.823171	-376.812966	-455.879617	-457.843118	-484.457312	-196.554995
+3.5	1225.527470	1211.903845	1289.887217	1216.008166	1443.483410	1246.733092	1319.260711	611.681027
-3.55	-364.478825	-334.606039	-359.840855	-339.131670	-410.291654	-412.058805	-436.011580	-176.899495
+3.55	1243.502099	1233.048695	1311.567851	1236.702132	1466.460291	1265.495404	1339.250778	619.182291
-3.6	-323.981178	-297.427590	-319.858538	-301.450374	-364.703691	-366.274493	-387.565848	-157.243995

+3.6	**1247.125462**	**1228.281546**	**1308.211628**	**1234.393727**	**1467.784266**	**1277.752637**	**1351.722035**	**624.146118**
-3.65	**-283.483530**	**-260.249140**	**-279.876222**	**-263.769077**	**-319.115728**	**-320.490181**	**-339.120116**	**-137.588495**
+3.65	**1216.072295**	**1191.105269**	**1270.386291**	**1199.458558**	**1430.043971**	**1251.385494**	**1323.316983**	**612.634478**
-3.7	**-242.985883**	**-223.070691**	**-239.893905**	**-226.087781**	**-273.527765**	**-274.705868**	**-290.674384**	**-117.932995**
+3.7	**1148.271520**	**1128.960085**	**1198.955942**	**1130.623669**	**1350.987828**	**1183.670476**	**1251.486022**	**583.590442**
-3.75	**-202.488236**	**-185.892241**	**-199.911589**	**-188.406485**	**-227.939802**	**-228.921556**	**-242.228653**	**-98.277495**
+3.75	**1057.426238**	**1034.734169**	**1099.986124**	**1028.433656**	**1228.912923**	**1086.778285**	**1149.056270**	**536.082771**
-3.8	**-161.990589**	**-148.713792**	**-159.929273**	**-150.725189**	**-182.351839**	**-183.137244**	**-193.782921**	**-78.621996**
+3.8	**928.834581**	**904.238008**	**962.116312**	**900.053989**	**1066.433765**	**945.746917**	**999.067465**	**469.612560**
-3.85	**-121.492942**	**-111.535342**	**-119.946956**	**-113.043893**	**-136.763876**	**-137.352931**	**-145.337189**	**-58.966496**
+3.85	**759.693362**	**736.290650**	**784.047819**	**733.852373**	**870.854065**	**776.291617**	**819.916472**	**383.328472**
-3.9	**-80.995295**	**-74.356893**	**-79.964640**	**-75.362596**	**-91.175913**	**-91.568619**	**-96.891457**	**-39.310996**
+3.9	**548.951093**	**529.945071**	**564.733729**	**528.825832**	**628.442787**	**566.209261**	**598.126710**	**276.563735**
-3.95	**-40.497648**	**-37.178443**	**-39.982323**	**-37.681300**	**-45.587950**	**-45.784307**	**-48.445726**	**-19.655496**
+3.95	**296.176375**	**284.488340**	**303.379240**	**284.208048**	**338.214109**	**307.495831**	**324.879021**	**148.888850**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 100' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-40.497522**	**-83.630175**	**-91.948251**	**-52.963771**	**-64.044110**	**-68.691280**
+0.05	**296.080403**	**520.131820**	**546.958583**	**350.639568**	**424.614766**	**444.834751**
-0.1	**-80.995044**	**-167.260351**	**-183.896503**	**-105.927542**	**-128.088221**	**-137.382560**
+0.1	**549.299102**	**950.372881**	**1001.054037**	**644.486252**	**780.477519**	**815.813160**
-0.15	**-121.492565**	**-250.890526**	**-275.844754**	**-158.891313**	**-192.132331**	**-206.073840**
+0.15	**760.114870**	**1319.295410**	**1389.625565**	**881.771493**	**1070.451125**	**1121.595776**
-0.2	**-161.990087**	**-334.520701**	**-367.793006**	**-211.855084**	**-256.176442**	**-274.765120**
+0.2	**929.167938**	**1608.628794**	**1728.739751**	**1084.868194**	**1316.026847**	**1374.745822**
-0.25	**-202.487609**	**-418.150876**	**-459.741257**	**-264.818855**	**-320.220552**	**-343.456400**
+0.25	**1057.675587**	**1828.461352**	**1997.371016**	**1241.504478**	**1498.079884**	**1578.955797**
-0.3	**-242.985131**	**-501.781052**	**-551.689509**	**-317.782626**	**-384.264663**	**-412.147680**
+0.3	**1149.501343**	**2009.622962**	**2195.697495**	**1347.023832**	**1618.170643**	**1724.569739**
-0.35	**-283.482652**	**-585.411227**	**-643.637760**	**-370.746397**	**-448.308773**	**-480.838960**
+0.35	**1216.331337**	**2119.181567**	**2328.305894**	**1418.870272**	**1695.610002**	**1805.424207**
-0.4	**-323.980174**	**-669.041402**	**-735.586012**	**-423.710168**	**-512.352884**	**-549.530240**
+0.4	**1247.314137**	**2201.464780**	**2376.984686**	**1442.987057**	**1719.675331**	**1839.557918**
-0.45	**-364.477696**	**-752.671577**	**-827.534263**	**-476.673939**	**-576.396994**	**-618.221520**
+0.45	**1243.627926**	**2207.662216**	**2404.859931**	**1422.994111**	**1691.093857**	**1820.173022**
-0.5	**-404.975218**	**-836.301753**	**-919.482515**	**-529.637710**	**-640.441104**	**-686.912799**
+0.5	**1225.373349**	**2168.270398**	**2360.103229**	**1399.985441**	**1664.168759**	**1790.446709**
-0.55	**-445.472740**	**-919.931928**	**-1011.430766**	**-582.601481**	**-704.485215**	**-755.604079**
+0.55	**1180.871653**	**2078.785301**	**2243.453379**	**1366.367482**	**1627.136946**	**1739.426672**
-0.6	**-485.970261**	**-1003.562103**	**-1103.379017**	**-635.565252**	**-768.529325**	**-824.295359**
+0.6	**1105.642428**	**1924.737956**	**2106.470137**	**1287.610229**	**1535.298467**	**1636.517771**
-0.65	**-526.467783**	**-1087.192279**	**-1195.327269**	**-688.529023**	**-832.573436**	**-892.986639**
+0.65	**1002.452003**	**1729.884100**	**1897.372657**	**1167.222504**	**1393.785946**	**1488.831070**
-0.7	**-566.965305**	**-1170.822454**	**-1287.275520**	**-741.492794**	**-896.617546**	**-961.677919**
+0.7	**874.396560**	**1486.143924**	**1620.566897**	**1013.696231**	**1216.313469**	**1290.515020**
-0.75	**-607.462827**	**-1254.452629**	**-1379.223772**	**-794.456565**	**-960.661657**	**-1030.369199**
+0.75	**727.669845**	**1187.575965**	**1293.639281**	**828.463810**	**994.855509**	**1046.961159**
-0.8	**-647.960348**	**-1338.082804**	**-1471.172023**	**-847.420336**	**-1024.705767**	**-1099.060479**
+0.8	**561.260695**	**846.275481**	**917.725834**	**611.616709**	**734.618147**	**763.503458**
-0.85	**-688.457870**	**-1421.712980**	**-1563.120275**	**-900.384107**	**-1088.749878**	**-1167.751759**
+0.85	**377.793282**	**487.032978**	**510.034398**	**367.900585**	**446.020831**	**446.401436**
-0.9	**-728.955392**	**-1505.343155**	**-1655.068526**	**-953.347878**	**-1152.793988**	**-1236.443039**
+0.9	**196.174162**	**313.273364**	**342.633604**	**215.165489**	**245.405214**	**258.746748**
-0.95	**-769.452914**	**-1588.973330**	**-1747.016778**	**-1006.311649**	**-1216.838098**	**-1305.134319**
+0.95	**165.855205**	**330.677440**	**361.668804**	**210.822116**	**255.890941**	**273.121567**
-1	**-809.950436**	**-1672.603486**	**-1838.965008**	**-1059.275422**	**-1280.882201**	**-1373.825582**
+1	**174.584430**	**348.081521**	**380.704002**	**221.918023**	**269.358884**	**287.496388**
(Span 2) -2	**-809.950436**	**-1672.603486**	**-1838.965008**	**-1059.275422**	**-1280.882201**	**-1373.825582**
+2	**174.584430**	**348.081521**	**380.704002**	**221.918023**	**269.358884**	**287.496388**
-2.05	**-585.950691**	**-1168.246687**	**-1277.735722**	**-744.811143**	**-904.034359**	**-964.908115**
+2.05	**134.556406**	**268.274774**	**293.417700**	**171.037542**	**207.601350**	**221.580357**
-2.1	**-545.922485**	**-1088.439938**	**-1190.449419**	**-693.930662**	**-842.276820**	**-898.992089**
+2.1	**243.359699**	**301.904396**	**300.534839**	**262.520654**	**304.746637**	**316.927212**
-2.15	**-505.894278**	**-1008.633190**	**-1103.163117**	**-643.050181**	**-780.519281**	**-833.076063**
+2.15	**468.853905**	**614.129762**	**668.179675**	**461.539990**	**556.118131**	**574.659640**
-2.2	**-465.866072**	**-928.826442**	**-1015.876815**	**-592.169700**	**-718.761741**	**-767.160037**
+2.2	**680.976380**	**1067.984382**	**1163.040628**	**747.936795**	**895.485397**	**946.981825**

-2.25	-425.837866	-849.019694	-928.590512	-541.289218	-657.004202	-701.244010
+2.25	869.687993	1463.563393	1601.972298	996.001616	1191.775094	1269.698693
-2.3	-385.809659	-769.212946	-841.304210	-490.408737	-595.246663	-635.327984
+2.3	1029.479236	1789.255806	1967.603520	1203.877615	1434.630350	1534.756279
-2.35	-345.781453	-689.406197	-754.017908	-439.528256	-533.489124	-569.411958
+2.35	1155.950875	2052.715697	2249.560680	1363.928056	1625.216945	1736.100600
-2.4	-305.753246	-609.599449	-666.731605	-388.647775	-471.731585	-503.495932
+2.4	1245.814535	2246.730888	2441.440386	1472.597258	1753.521697	1875.399059
-2.45	-265.725040	-529.792701	-579.445303	-337.767293	-409.974046	-437.579905
+2.45	1296.891350	2358.058421	2569.800769	1527.829722	1817.182035	1952.006029
-2.5	-225.696833	-449.985953	-492.159017	-286.886812	-348.216506	-371.663920
+2.5	1308.202365	2384.990658	2616.698821	1529.029020	1815.965163	1958.495415
-2.55	-265.723837	-529.792701	-579.445319	-337.767267	-409.973997	-437.579951
+2.55	1297.126255	2358.066664	2570.685656	1527.821370	1817.175655	1952.009659
-2.6	-305.751861	-609.599449	-666.731621	-388.647748	-471.731531	-503.495982
+2.6	1246.011182	2246.736525	2441.439831	1472.602030	1753.513468	1875.400784
-2.65	-345.779885	-689.406196	-754.017923	-439.528229	-533.489066	-569.412012
+2.65	1156.049701	2052.719145	2249.559789	1363.931246	1625.219664	1736.111552
-2.7	-385.807910	-769.212944	-841.304225	-490.408709	-595.246601	-635.328043
+2.7	1029.490297	1789.265723	1967.954622	1203.879306	1434.631404	1534.765332
-2.75	-425.835934	-849.019691	-928.590526	-541.289190	-657.004135	-701.244074
+2.75	869.614711	1463.571642	1602.917943	996.002527	1191.786355	1269.706499
-2.8	-465.863958	-928.826439	-1015.876828	-592.169671	-718.761670	-767.160105
+2.8	680.812208	1067.991772	1161.620400	747.935642	895.495861	946.989066
-2.85	-505.891983	-1008.633186	-1103.163130	-643.050152	-780.519205	-833.076136
+2.85	468.580011	614.122619	668.179215	461.538376	556.127115	574.666373
-2.9	-545.920007	-1088.439934	-1190.449432	-693.930633	-842.276739	-898.992166
+2.9	243.014426	302.046856	300.533796	262.521451	304.750595	316.933010
-2.95	-585.948031	-1168.246681	-1277.735734	-744.811114	-904.034274	-964.908197
+2.95	134.557025	268.274781	293.417721	171.037519	207.601346	221.580357
-3	-809.952942	-1672.603449	-1838.955422	-1059.275581	-1280.882188	-1373.825712
+3	174.585224	348.081525	380.704004	221.918024	269.358904	287.496368
(Span 3) -4	-809.952942	-1672.603449	-1838.955422	-1059.275581	-1280.882188	-1373.825712
+4	174.585224	348.081525	380.704004	221.918024	269.358904	287.496368
-3.05	-769.455295	-1588.973275	-1747.007650	-1006.311802	-1216.838078	-1305.134426
+3.05	165.855963	330.677449	361.668804	210.822123	255.890959	273.121550
-3.1	-728.957648	-1505.343102	-1655.059877	-953.348023	-1152.793968	-1236.443139
+3.1	196.411570	313.273373	342.633603	215.167269	245.402497	258.746731
-3.15	-688.460001	-1421.712928	-1563.112105	-900.384244	-1088.749858	-1167.751853
+3.15	378.021288	487.024206	510.033152	367.904325	446.014453	446.397542
-3.2	-647.962354	-1338.082755	-1471.164333	-847.420465	-1024.705749	-1099.060566
+3.2	561.533279	846.264074	917.726467	611.620204	734.623650	763.499218
-3.25	-607.464707	-1254.452582	-1379.216561	-794.456686	-960.661639	-1030.369280
+3.25	727.918807	1187.570906	1293.639666	828.466537	994.859968	1046.956031
-3.3	-566.967060	-1170.822408	-1287.268788	-741.492908	-896.617529	-961.677993
+3.3	875.072962	1486.137231	1621.660725	1013.697625	1216.316334	1290.508242
-3.35	-526.469413	-1087.192235	-1195.321016	-688.529129	-832.573419	-892.986707
+3.35	1003.103278	1729.887661	1897.371813	1167.221258	1393.786784	1488.835176
-3.4	-485.971766	-1003.562061	-1103.373244	-635.565350	-768.529309	-824.295421
+3.4	1106.075557	1924.734714	2106.469019	1287.606964	1535.295620	1636.519359
-3.45	-445.474119	-919.931888	-1011.425472	-582.601571	-704.485200	-755.604134
+3.45	1181.082056	2079.805265	2243.453629	1366.362112	1627.131333	1739.424225
-3.5	-404.976472	-836.301715	-919.477699	-529.637792	-640.441090	-686.912848
+3.5	1225.527470	2168.273593	2360.156503	1399.977357	1664.159948	1790.441072
-3.55	-364.478825	-752.671541	-827.529927	-476.674013	-576.396980	-618.221561
+3.55	1243.502099	2207.658923	2404.935929	1422.987637	1691.089730	1820.165905
-3.6	-323.981178	-669.041368	-735.582155	-423.710234	-512.352870	-549.530275

+3.6	**1247.125462**	**2201.457454**	**2376.984180**	**1442.978293**	**1719.668595**	**1839.560789**
-3.65	**-283.483530**	**-585.411194**	**-643.634383**	**-370.746455**	**-448.308761**	**-480.838988**
+3.65	**1216.072295**	**2119.178293**	**2328.304691**	**1418.873450**	**1695.613121**	**1805.422979**
-3.7	**-242.985883**	**-501.781021**	**-551.686610**	**-317.782676**	**-384.264651**	**-412.147702**
+3.7	**1148.271520**	**2009.617604**	**2195.697684**	**1347.024176**	**1618.169869**	**1724.564958**
-3.75	**-202.488236**	**-418.150848**	**-459.738838**	**-264.818897**	**-320.220541**	**-343.456415**
+3.75	**1057.426238**	**1828.463707**	**1997.370273**	**1241.501259**	**1498.075257**	**1578.959840**
-3.8	**-161.990589**	**-334.520674**	**-367.791066**	**-211.855118**	**-256.176431**	**-274.765129**
+3.8	**928.834581**	**1608.625470**	**1728.737923**	**1084.861694**	**1316.018433**	**1374.738804**
-3.85	**-121.492942**	**-250.890501**	**-275.843294**	**-158.891339**	**-192.132321**	**-206.073842**
+3.85	**759.693362**	**1319.300254**	**1389.625080**	**881.767849**	**1070.451607**	**1121.597216**
-3.9	**-80.995295**	**-167.260327**	**-183.895521**	**-105.927560**	**-128.088212**	**-137.382556**
+3.9	**548.951093**	**950.371720**	**1001.054220**	**644.479006**	**780.473465**	**815.809734**
-3.95	**-40.497648**	**-83.630154**	**-91.947749**	**-52.963781**	**-64.044102**	**-68.691269**
+3.95	**296.176375**	**520.124819**	**546.959790**	**350.643339**	**424.606418**	**444.826891**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.9194563	*-24.884576*	*-34.818564*	-14.36785391	-15.45538233	-14.56690652	-17.6291576	-17.88239129	-18.92440161	-7.621819593
End Shear	136.9206873	*170.437498*	*212.231098*	118.3451205	126.3718923	118.4880615	141.3529471	131.7781905	139.2742332	62.20215287
-0.05	-18.9194563	*-25.057079*	*-34.973816*	-14.36785391	-15.45538233	-14.56690652	-17.6291576	-17.88239129	-18.92440161	-7.621819593
+0.05	127.8109039	*156.978374*	*191.896119*	110.3402197	117.7572078	110.3743997	131.5315972	121.6270695	128.5298133	57.95670566
-0.1	-18.9194563	*-25.677643*	*-36.313996*	-14.36785391	-15.45538233	-14.56690652	-17.6291576	-17.88239129	-18.92440161	-7.621819593
+0.1	117.9378118	*143.104360*	*170.597090*	102.0041314	108.7898003	101.9252148	121.3119071	111.0790784	117.3662731	53.48434616
-0.15	-18.9194563	*-31.277136*	*-42.317101*	-15.37822904	-15.48396571	-14.56690652	-17.6291576	-17.88239129	-18.92440161	-7.920922824
+0.15	109.7862269	*131.928177*	*153.598497*	95.11386889	101.3806449	94.94602713	112.8764433	102.4248618	108.2077861	49.79210746
-0.2	-24.86124147	*-40.433972*	*-52.552476*	-23.71170094	-24.46436844	-22.40810653	-24.90104683	-17.88239129	-18.92440161	-11.15622393
+0.2	100.1255415	*118.999963*	*134.497539*	86.93859694	92.59329298	86.67081036	102.8821108	92.2357901	97.42595929	45.41675959
-0.25	-33.06753683	*-48.338799*	*-61.332252*	-30.59882502	-31.88904527	-29.41354741	-33.40819336	-22.60622201	-23.93149867	-14.87487263
+0.25	92.19953771	*108.644310*	*121.232190*	80.22321678	85.37819599	79.87810139	94.68475394	83.93413498	88.64217366	41.82746289
-0.3	-43.84808459	*-58.124748*	*-73.074900*	-38.7691883	-40.70066108	-37.72979374	-43.51457887	-29.13301484	-30.66633141	-19.29152883
+0.3	83.0194431	*96.737066*	*107.844047*	72.30684619	76.87652955	71.87646576	85.0365216	74.23228874	78.37791367	37.60215937
-0.35	-52.90150758	*-66.506278*	*-83.212893*	-45.47951806	-47.94066826	-44.56463965	-51.82701696	-37.11623253	-39.06971845	-22.92326099
+0.35	75.40871742	*87.260549*	*97.167991*	65.84808806	69.94351898	65.35323156	77.17787411	66.3901138	70.08203737	34.15999741
-0.4	-63.69536426	*-76.804728*	*-95.576167*	-53.38868388	-56.47786322	-52.62637587	-61.63939287	-47.15351082	-49.66876716	-27.20910146
+0.4	66.51342176	*76.439780*	*84.957077*	58.288715	61.83317989	57.72477695	67.99646884	57.30379974	60.47119841	30.1377744
-0.45	-72.35077687	*-85.561765*	*-106.013285*	-59.8404785	-63.44517129	-59.2076337	-69.65652284	-55.89141635	-58.92328982	-30.70972391
+0.45	59.32224881	*67.892952*	*75.299135*	52.16833087	55.27029568	51.55402877	60.57714911	50.02803122	52.77644744	26.88694497
-0.5	-82.62048975	*-96.246418*	*-118.659279*	-67.3903539	-71.6023068	-66.91525426	-79.05415415	-66.19985871	-69.84209891	-34.8117166
+0.5	50.98881688	*58.214465*	*64.352221*	45.06403736	47.65691098	44.39835979	51.98330444	41.68555287	43.95488033	23.12083868
-0.55	-90.95937734	*-105.269670*	*-129.266717*	-73.50186454	-78.20887912	-73.15991191	-86.67535646	-74.61677807	-78.75815477	-38.13702969
+0.55	44.3145346	*50.639802*	*55.781076*	39.36376306	41.55217687	38.66310324	45.10392603	35.08310893	36.97446216	20.10553676
-0.6	-100.6691996	*-116.204548*	*-142.036516*	-80.59435785	-85.88031795	-80.41381908	-95.53751936	-84.4758864	-89.20287946	-42.00213372
+0.6	36.65977808	*42.149743*	*46.176229*	32.81264856	34.54139197	32.07981225	37.21835966	27.61277556	29.07802376	16.64858369
-0.65	-108.4868488	*-125.376682*	*-152.678213*	-86.28385656	-92.03813976	-86.23887859	-102.6621902	-92.46489842	-97.66725787	-45.10794668
+0.65	30.59973842	*35.581662*	*38.753307*	27.61422925	28.98284067	26.86304784	30.9795285	22.08340824	23.24569289	13.91300688
-0.7	-117.505591	*-136.416139*	*-165.404183*	-92.82087306	-99.1182412	-92.93946496	-110.868148	-101.7463667	-107.5020448	-48.6831305
+0.7	23.7404728	*28.316482*	*30.559881*	21.83310333	22.80703719	21.05762458	24.05171599	16.12024387	17.07114403	10.81823733
-0.75	-124.6926887	*-145.611736*	*-175.936815*	-98.00659746	-104.7392607	-98.2619208	-117.3956747	-109.2005509	-115.4015357	-51.52524419
+0.75	18.39201107	*22.781331*	*24.379299*	17.0995599	17.75595118	16.33647537	18.42530621	12.75647404	13.49768993	8.406579901
-0.8	-132.8891849	*-156.600441*	*-188.442617*	-103.8900588	-111.1224023	-104.309575	-124.8246863	-117.7760707	-124.4905289	-54.75747231
+0.8	12.44505313	*16.768938*	*18.098081*	11.94908349	12.26728302	11.19676983	12.31851424	8.923307325	9.42640059	5.727031718
-0.85	-139.3364229	*-165.686028*	*-203.185898*	-108.4902751	-116.1185986	-109.0464323	-130.6544691	-124.588505	-131.711921	-57.29169146
+0.85	7.90551598	*12.283877*	*13.436292*	7.999591041	8.06517778	7.440479083	7.953410499	6.043123014	6.368039775	4.161681679
-0.9	-146.5795015	*-176.458968*	*-224.503203*	-113.6220802	-121.6991329	-114.341558	-137.1858117	-132.3297717	-139.9192684	-60.1279318
+0.9	4.219901417	*7.539114*	*9.614850*	4.298210061	4.298210061	3.760373446	3.89777263	3.812277165	4.033408189	2.491517347
-0.95	-152.1775689	*-185.293003*	*-242.121278*	-117.5550461	-125.9824755	-118.4098069	-142.2172326	-138.3935336	-146.3493494	-62.3100605
+0.95	4.097826755	*5.053362*	*7.483384*	3.132478136	3.36783842	3.173701633	3.838341983	3.812277165	4.033408189	1.649621349
-1	-158.3360561	*-195.675496*	*-262.762357*	-121.8371041	-130.6547662	-122.8528016	-147.7301761	-145.1722407	-153.539197	-64.69727044
+1	4.10E+00	*4.960583*	*6.166457*	3.13E+00	3.37E+00	3.17E+00	3.84E+00	3.81E+00	4.03E+00	1.65E+00
(Span 2) -2	-1.44E+01	*-17.466209*	*-21.712089*	-1.10E+01	-1.19E+01	-1.12E+01	-1.35E+01	-1.34E+01	-1.42E+01	-5.81E+00
+2	1.50E+02	*201.946337*	*280.569155*	121.9576931	130.8391212	123.0619628	148.100007	146.769206	155.248568	64.81462485
-2.05	-1.44E+01	*-17.598482*	*-21.831134*	-1.10E+01	-1.19E+01	-1.12E+01	-1.35E+01	-1.34E+01	-1.42E+01	-5.81E+00
+2.05	1.43E+02	*190.255698*	*259.498058*	117.416061	125.8834626	118.3494162	142.2528832	139.6740618	147.7246043	62.28515444
-2.1	-14.42844491	*-18.006148*	*-24.578133*	-11.02945287	-11.8581566	-11.17460096	-13.51479894	-13.42302481	-14.20162701	-5.808315278
+2.1	134.5374288	*178.268620*	*238.124917*	112.2881858	120.3041182	113.0535012	135.7147869	131.9778592	139.5660987	59.45080041
-2.15	-14.42844491	*-19.838574*	*-30.212173*	-11.02945287	-11.8581566	-11.17460096	-13.51479894	-13.42302481	-14.20162701	-5.808315278
+2.15	125.9574126	*166.087579*	*217.116423*	106.6436197	114.1759906	107.2448622	128.5713486	123.7715293	130.8693315	56.34916148
-2.2	-17.29350978	*-26.597213*	*-37.310119*	-16.04622646	-16.68198506	-15.36117819	-17.36926938	-13.42302481	-14.20162701	-7.959475899
+2.2	116.7268163	*152.932555*	*194.760322*	100.10153	107.086265	100.5325634	120.3431427	114.5163395	121.0635345	52.77209829

-2.25	-24.73617335	-33.729812	-45.355836	-21.93939787	-22.97589408	-21.2634866	-24.41122534	-16.81977326	-17.70502449	-11.04367953
+2.25	108.9080036	140.656807	174.233385	93.60792421	100.0596389	93.88648827	112.2180653	105.542757	111.5582619	49.23642651
-2.3	-32.78424994	-41.617599	-54.307800	-28.24238181	-29.71879263	-27.59382913	-31.98815142	-23.46206993	-24.70264579	-14.36018714
+2.3	100.7519821	128.474463	154.218629	86.81123885	92.71427279	86.94456469	103.7505246	96.3385012	101.8106202	45.54896536
-2.35	-41.9733847	-50.856225	-64.829886	-35.37131163	-37.35645449	-34.77111708	-40.60271726	-31.66470967	-33.37340827	-18.12865341
+2.35	91.73330052	115.621759	138.138337	79.27179259	84.57565541	79.25875467	94.39542228	86.32415118	91.20717021	41.47240086
-2.4	-50.97972186	-60.161968	-75.444950	-42.30194035	-44.79113064	-41.76348597	-49.0155348	-39.85442959	-42.0333899	-21.80673939
+2.4	83.14225792	103.897359	124.876826	72.06856002	76.80832168	71.92872249	85.49088225	76.5963474	80.90916793	37.59014697
-2.45	-60.30582862	-70.072497	-86.751332	-49.42876243	-52.44474486	-48.96697632	-57.70039823	-48.46651471	-51.14245476	-25.601635
+2.45	74.46839528	92.512584	111.965479	64.74349937	68.91993116	64.34319673	76.33024636	67.2558462	71.02308621	33.67159447
-2.5	-70.54724925	-81.296218	-99.543792	-57.20332593	-60.80288909	-56.83907616	-67.21027787	-58.05907101	-61.29105747	-29.75449218
+2.5	65.17716818	80.529285	98.622277	56.68154131	60.24165886	56.31030233	66.57090295	57.40917497	60.60341404	29.47560423
-2.55	-80.23987915	-92.513253	-112.029669	-64.68237632	-68.85885986	-64.2932802	-76.28047692	-67.25663787	-71.02392404	-33.67172456
+2.55	56.59523352	70.071831	86.717023	49.42808404	52.444016	48.96630674	57.69959058	48.4657447	51.14164023	25.60150733
-2.6	-89.96661598	-103.898021	-124.954858	-72.0692264	-76.80903953	-71.92939988	-85.49170379	-76.5971684	-80.91003694	-37.59027648
+2.6	48.04156056	60.161317	75.424818	42.30127954	44.79042135	41.76281861	49.01473104	39.85369519	42.03261321	21.80661737
-2.65	-99.7480191	-115.622403	-138.229332	-79.27244576	-84.57636017	-79.25943606	-94.39625101	-86.3249492	-91.20801509	-41.4725268
+2.65	39.89239724	50.855592	64.823196	35.37068724	37.35578509	34.77048829	40.60196184	31.66403321	33.37269308	18.12853429
-2.7	-110.1572318	-128.475091	-154.218632	-86.8118923	-92.71497833	-86.94521537	-103.7513169	-96.33931524	-101.8114822	-45.54909013
+2.7	31.53919006	41.616993	54.047103	28.24177262	29.71814052	27.59323121	31.98743498	23.46142827	24.70196764	14.36007473
-2.75	-119.3965638	-140.657389	-174.233388	-93.60853381	-100.0602982	-93.88711037	-112.2188247	-105.5435524	-111.5591044	-49.23654414
+2.75	24.18352205	33.729251	45.123854	21.93882599	22.97528286	21.26291246	24.4105391	16.81922838	17.70445092	11.04357415
-2.8	-128.2880133	-152.933120	-194.760325	-100.1021102	-107.086893	-100.5331733	-120.3438895	-114.5171117	-121.0643525	-52.77221173
+2.8	17.33812025	26.596677	37.107883	16.04570792	16.6814319	15.36065948	17.36865164	13.42302417	14.20162715	7.959378222
-2.85	-137.3228615	-166.088090	-217.116428	-106.6441735	-114.1765909	-107.2454187	-128.5720317	-123.7722675	-130.8701138	-56.3492678
+2.85	14.4526324	19.838099	30.208612	11.02945373	11.85815566	11.17460252	13.51479935	13.42302417	14.20162715	5.808315692
-2.9	-145.1978224	-178.269095	-238.124922	-112.2886825	-120.304658	-113.054026	-135.7154336	-131.9785564	-139.5668378	-59.45089672
+2.9	14.4526324	18.006147	24.575917	11.02945373	11.85815566	11.17460252	13.51479935	13.42302417	14.20162715	5.808315692
-2.95	-152.4392614	-190.256119	-259.498063	-117.4165072	-125.8839488	-118.3498779	-142.2534546	-139.6747123	-147.7252939	-62.28524205
+2.95	14.4526324	17.598481	21.831134	11.02945373	11.85815566	11.17460252	13.51479935	13.42302417	14.20162715	5.808315692
-3	-159.3892483	-202.767602	-282.056298	-122.2582163	-131.1676803	-123.3747934	-148.4894656	-147.2511904	-155.7597957	-64.98271788
+3	14.4526324	17.466209	21.712089	11.02945373	11.85815566	11.17460252	13.51479935	13.42302417	14.20162715	5.808315692
(Span 3) -4	-4.104696268	-4.960583	-6.166457	-3.132478381	-3.367838151	-3.173702077	-3.838342099	-3.812276982	-4.033408228	-1.649621467
+4	147.9492992	194.820201	261.065077	121.4987013	130.285112	122.5010357	147.2928523	144.6282652	152.9621539	64.50824292
-3.05	-4.104696268	-5.037604	-7.285918	-3.132478381	-3.367838151	-3.173702077	-3.838342099	-3.812276982	-4.033408228	-1.649621467
+3.05	142.0439745	186.167488	243.863243	117.9299655	126.3911558	118.79819	142.6983092	138.9789162	146.9701627	62.51872804
-3.1	-4.443375998	-7.908413	-9.827331	-4.576560437	-4.576560437	-4.052005362	-4.218947424	-3.812276982	-4.033408228	-2.615728145
+3.1	134.4539833	175.567274	222.722655	113.2107378	121.2515017	113.9166166	136.6609997	131.7028068	139.2544944	59.9003628
-3.15	-7.448341003	-11.862460	-12.956915	-7.622968146	-7.664839367	-7.119061773	-7.598980815	-5.768279403	-6.076234546	-4.006898802
+3.15	127.7358856	166.589241	204.956079	108.9338874	116.6006842	109.5036429	131.2177668	125.2513353	132.4145979	57.53665723
-3.2	-12.88984694	-17.244114	-18.538136	-12.36204002	-12.70702259	-11.60833576	-12.80680418	-9.224258906	-9.746010502	-5.941134138
+3.2	120.5319428	155.687133	187.238899	103.4139382	110.6055833	103.8197707	124.2224617	117.0768236	123.7493611	54.49578327
-3.25	-17.8410696	-22.254533	-23.761000	-16.65446201	-17.281299	-15.89178925	-17.89624085	-12.43183791	-13.15285	-8.174265921
+3.25	114.5856964	146.529334	176.818391	98.51071	105.2859286	98.77969286	118.0311747	109.9301486	116.1747677	51.80208701
-3.3	-24.71609422	-28.896673	-31.123779	-22.31132408	-23.31764086	-21.537537	-24.62382265	-16.46811676	-17.44073436	-11.0680652
+3.3	107.057547	135.495186	164.183740	92.28819085	98.54108284	92.39310495	110.1985794	100.9855427	106.6958181	48.39174157
-3.35	-30.95121265	-34.951097	-37.937104	-27.10879205	-28.4426361	-26.35621	-30.52493135	-21.47903887	-22.6095146	-13.64721362
+3.35	100.4804759	126.295094	153.582893	86.84032768	92.64062229	86.80892592	103.3598494	93.25058485	98.49973794	45.4122476
-3.4	-38.91041745	-42.832714	-46.825821	-33.34658071	-35.1125590816278	-32.61600384	-37.8601275085767	-28.21634312	-29.7159483165754	-16.92971701
+3.4	92.25374399	115.289073	140.820775	80.01326396	85.25159688	79.81918632	94.81064681	83.6641899	88.34292807	41.6854827
-3.45	-45.91405496	-49.907894	-54.813989	-38.80618205	-40.95524563	-38.1024026	-44.43182578	-34.44204059	-36.29675813	-19.81068625
+3.45	85.14319575	106.176196	130.186067	74.10251087	78.85836316	73.77394613	87.42512738	75.4478734	79.63857489	38.46438929
-3.5	-54.72985657	-58.997367	-65.079180	-45.6461549	-48.28054361	-44.98438005	-52.68668027	-42.36456366	-44.67282625	-23.42883809
+3.5	76.25956186	95.348795	117.467906	66.76906151	70.93086806	66.28069211	78.28009121	65.34799546	68.93975826	34.47420317
-3.55	-62.39270927	-67.062961	-74.184876	-51.56673422	-54.62539162	-50.94779918	-59.84865659	-49.31704037	-52.02456791	-26.56743139

+3.55	***68.71531012***	***86.444480***	***106.938561***	***60.47716335***	***64.1328945811948***	***59.8573610255801***	**70.44835219**	***56.75723961***	***59.8403408***	***31.05570689***
-3.6	***-71.93397841***	***-77.318992***	***-85.753403***	***-58.91086876***	**-62.5005014**	***-58.35231863***	**-68.75138256**	***-58.04754844***	***-61.25783062***	***-30.46823518***
+3.6	***59.44533607***	***75.936511***	***94.427060***	***52.73534582***	**55.77248688**	***51.96019704***	**60.82821534**	***46.27218603***	***48.73537222***	***26.85515342***
-3.65	***-80.14672899***	***-86.336483***	***-95.912037***	***-65.21068508***	**-69.25948231**	***-64.70972075***	**-76.40298604**	***-65.61988193***	***-69.26729212***	***-33.82025894***
+3.65	***51.56320228***	***67.354071***	***84.135032***	***46.14404451***	**48.65780287**	***45.24173637***	**52.65081543**	***37.9092016***	***39.90442274***	***23.28344866***
-3.7	***-90.2822938***	***-97.708096***	***-108.702046***	***-72.96081549***	**-77.57868703**	***-72.5372138***	**-85.83289415**	***-75.03007056***	***-79.22189765***	***-37.95065951***
+3.7	***41.94607106***	***57.296668***	***71.984189***	***38.0920295***	**39.97020516**	***37.04030702***	***42.67635909***	***28.32972781***	***29.82076611***	***18.92556258***
-3.75	***-98.9356867***	***-107.631001***	***-119.841779***	***-79.55812171***	**-84.66376571**	***-79.20559434***	***-93.87351417***	***-83.11533855***	***-87.77586716***	***-41.47191597***
+3.75	***33.82322187***	***49.141307***	***62.222033***	***31.28306806***	**32.62684179**	***30.10975877***	***34.25395566***	***23.10065914***	***24.45759719***	***15.24484625***
-3.8	***-109.5343754***	***-120.057540***	***-136.040600***	***-87.61623788***	**-93.32151598**	***-87.35650105***	***-103.7099253***	***-93.07690147***	***-98.31596187***	***-45.77887997***
+3.8	***23.9755289***	***39.655926***	***51.634712***	***23.01886428***	**23.71760159**	***21.70362766***	***24.04586283***	***17.88239202***	***18.92440311***	***10.78268507***
-3.85	***-118.5189962***	***-130.831282***	***-151.937726***	***-94.42925049***	**-100.6446177**	***-94.25281395***	***-112.0388991***	***-101.5681833***	***-107.3012293***	***-49.42517408***
+3.85	***18.94340882***	***32.024900***	***43.072867***	***16.07398437***	**16.23358841**	***15.03855683***	***17.62916015***	***17.88239202***	***18.92440311***	***8.166447969***
-3.9	***-129.4496332***	***-144.242411***	***-172.335230***	***-102.6972191***	**-109.5352317**	***-102.6274892***	***-122.1610318***	***-111.9528131***	***-118.2909583***	***-53.85564265***
+3.9	***18.94340882***	***25.608732***	***35.847532***	***14.36785402***	**15.45538337**	***14.56690726***	***17.62916015***	***17.88239202***	***18.92440311***	***7.621819618***
-3.95	***-138.6562229***	***-155.804384***	***-190.085110***	***-109.6442794***	**-117.0084161**	***-109.6687738***	***-130.6778013***	***-120.7431869***	***-127.5943122***	***-57.58277871***
+3.95	***18.94340882***	***25.091576***	***35.004862***	***14.36785402***	**15.45538337**	***14.56690726***	***17.62916015***	***17.88239202***	***18.92440311***	***7.621819618***
-5	***-149.7876379***	***-170.120089***	***-212.231098***	***-118.0240085***	**-126.0262561**	***-118.1676131***	***-140.9649229***	***-131.4225769***	***-138.8978213***	***-62.08376191***
+5	***18.94340882***	***24.884578***	***34.818564***	***14.36785402***	**15.45538337**	***14.56690726***	***17.62916015***	***17.88239202***	***18.92440311***	***7.621819618***

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.96885506	-15.38728427	-16.22387524	-17.78198094	-8.804519647	-11.90048988	-13.60574208	-15.22813426	-16.92596083
End Shear	88.8582092	114.7915456	114.0111277	106.8390099	71.70892654	96.64161787	108.9799153	118.4001833	127.8791678
-0.05	-10.96885506	-15.38728427	-16.22387524	-17.82664694	-8.804519647	-11.90048988	-13.60574208	-15.22813426	-16.92596083
+0.05	82.72413923	106.0382964	104.6784328	96.10644933	66.78999043	90.00640852	101.3841904	109.9179212	118.4648453
-0.1	-10.96885506	-15.38728427	-16.22387524	-17.9873285	-8.804519647	-11.90048988	-13.60574208	-15.22813426	-16.92596083
+0.1	76.33819031	96.93821207	94.9953718	85.64516015	61.67253757	83.09787274	93.47556514	101.091739	108.6751562
-0.15	-10.96885506	-15.38728427	-16.22387524	-18.21014066	-8.804519647	-11.90048988	-13.60574208	-15.22813426	-16.92596083
+0.15	71.06581433	89.46823699	87.08205306	77.28519006	57.44572859	77.3921347	86.94930753	93.81864665	100.6196929
-0.2	-16.05362729	-15.38728427	-16.22387524	-19.06983282	-13.47163812	-18.0269804	-18.74970658	-18.74970658	-18.74970658
+0.2	64.81749985	80.66884871	77.80425404	67.72629023	52.43438891	70.62788491	79.2190126	85.21643659	91.10640746
-0.25	-21.36194533	-19.13156791	-17.37713688	-22.45338485	-17.71618426	-23.75955875	-25.30389323	-25.2440474	-25.2379486
+0.25	59.69125713	73.49549381	70.27897134	60.68267354	48.32115888	65.07634396	72.88035241	78.1736941	83.33002887
-0.3	-27.66645125	-26.42942546	-22.93915069	-27.07544859	-22.75524968	-30.56575958	-33.13688302	-33.45115166	-33.44434812
+0.3	53.65602625	65.10729565	61.52720171	52.95672637	43.47629027	58.53788131	65.42196156	69.90035003	74.21012298
-0.35	-32.85039687	-33.26462062	-28.28245575	-30.95843326	-26.89695346	-36.16038378	-39.58102232	-40.71851539	-41.32575419
+0.35	48.73879494	58.3226366	54.49058565	46.79565674	39.52693864	53.20844321	59.34886584	63.17537082	66.81029759
-0.4	-38.96792488	-41.87237789	-36.52310011	-36.08324843	-31.78242606	-42.76029707	-47.18985415	-49.31225362	-50.97095
+0.4	42.99211147	50.45612345	46.38561867	39.75638333	34.90891246	46.97725879	52.25594797	55.33578054	58.20074343
-0.45	-43.96462067	-49.3773414	-43.52337667	-42.78305469	-35.77098533	-48.14906397	-53.40820272	-56.34659112	-58.87799718
+0.45	38.34678139	44.15224283	39.9383376	34.20177422	31.17374141	41.93784201	46.52640535	49.01596949	51.27493914
-0.5	-49.81972227	-58.22663293	-52.0281463	-51.25786326	-40.44250362	-54.46119435	-60.69930863	-64.6082585	-68.17957822
+0.5	32.96409656	36.91790642	32.6009435	27.93068281	26.84291403	36.09543032	39.89251907	41.71503225	43.29270982
-0.55	-54.56628288	-65.44817332	-60.07234939	-58.95866713	-44.22761434	-59.57618422	-66.61389402	-71.32216305	-75.75153929
+0.55	28.65354283	31.18687956	27.3263254	23.40698416	23.372231	31.41394826	34.5844989	35.88780446	36.93842494
-0.6	-60.08349417	-73.90211176	-69.53214238	-68.4047627	-48.62481283	-65.51904304	-73.49369378	-79.14685799	-84.59253162
+0.6	23.71032675	24.69521687	21.41384269	18.38637741	19.38896639	26.04179416	28.50323396	29.23042299	29.7004925
-0.65	-64.51703831	-80.7481511	-77.22987896	-76.41184505	-52.15617328	-70.29234903	-79.02655103	-85.45292465	-91.73192509
+0.65	19.79742764	19.81609682	16.87850631	14.58186937	16.23307196	21.78615654	23.69471348	24.10566453	24.03059968
-0.7	-69.62090516	-88.69624258	-86.21350897	-85.62241934	-56.21869198	-75.78443897	-85.40147942	-92.73576497	-99.99535685
+0.7	15.38090396	14.55841773	12.65818134	10.97445823	12.72959401	17.05162852	18.25963108	18.20453895	18.21822838
-0.75	-73.67855155	-95.07470306	-93.46410979	-93.1091445	-59.4459984	-80.14814742	-90.47461279	-98.54657436	-106.6047106
+0.75	11.91677246	10.86188629	9.682027343	8.458741581	9.866931207	13.20387712	14.02858428	14.00091298	13.99980998
-0.8	-78.29360728	-102.4064515	-101.8508085	-101.9412986	-63.11347114	-85.10796834	-96.25109917	-105.1826592	-114.1736076
+0.8	8.078854312	7.787849845	6.38349804	5.717373031	6.759884593	9.01673485	9.400036323	9.399098897	9.398185757
-0.85	-81.91247991	-108.2252546	-108.5536428	-108.897035	-65.98642169	-88.99417417	-100.7865428	-110.410793	-120.1554535
+0.85	5.494801198	5.537279375	4.403364234	4.044005563	4.384474734	5.9910018	6.33591846	6.335017872	6.334130725
-0.9	-85.96327197	-114.8301669	-116.2226436	-116.7527917	-69.1984853	-93.34023819	-105.8710223	-116.2952296	-126.9128435
+0.9	3.027352492	3.278768712	3.396330594	3.253041904	2.378718191	3.107007959	3.108635138	3.307054772	3.67053235
-0.95	-89.08048394	-119.9972334	-122.2770669	-122.8851824	-71.6667773	-96.68102431	-109.7907998	-120.8532919	-132.169686
+0.95	2.383389978	3.278768712	3.396330594	3.189822784	1.916027945	2.591061678	2.956754044	3.307054772	3.67053235
-1	-92.49155442	-125.764815	-129.1075801	-129.9859763	-74.36306845	-100.3318385	-114.0896888	-125.8811847	-137.9985948
+1	2.38E+00	3.28E+00	3.40E+00	3.17E+00	1.92E+00	2.59E+00	2.96E+00	3.31E+00	3.67E+00
(Span 2) -2	-8.39E+00	-1.15E+01	-1.20E+01	-1.11E+01	-6.75E+00	-9.12E+00	-1.04E+01	-1.16E+01	-1.29E+01
+2	9.27E+01	127.0669295	131.5092265	146.1186603	74.49522847	100.5203116	114.4162753	126.450073	138.8703407
-2.05	-8.39E+00	-1.15E+01	-1.20E+01	-1.12E+01	-6.75E+00	-9.12E+00	-1.04E+01	-1.16E+01	-1.29E+01
+2.05	89.09104138	121.0283095	124.4545197	133.3527356	71.63676845	96.64908586	109.8613243	121.1252631	132.7062362
-2.1	-8.39191422	-11.54454184	-11.95847728	-11.286584	-6.746332839	-9.123126102	-10.41072871	-11.64413729	-12.92394143
+2.1	85.04201092	114.462716	116.9092038	120.9564618	68.42551716	92.30272973	104.7749775	115.2315733	125.9374594
-2.15	-8.39191422	-11.54454184	-11.95847728	-11.47326123	-6.746332839	-9.123126102	-10.41072871	-11.64413729	-12.92394143
+2.15	80.61105106	107.4484575	108.9589411	108.9969111	64.90426971	87.53904276	99.22355466	108.8433753	118.6469456
-2.2	-11.21638263	-11.54454184	-11.95847728	-11.77313363	-9.276670974	-12.41982669	-13.23023943	-13.1998854	-13.19751432
+2.2	75.50054536	99.5243376	100.0887018	97.47975524	60.83612438	82.0376091	92.83490979	101.534625	110.3509502
-2.25	-15.63168418	-15.23796733	-12.97284677	-13.30718966	-12.84482744	-17.23123535	-18.64825546	-18.68690621	-18.68410659

+2.25	70.44862493	91.8299593	91.5719948	88.60201197	56.80889033	76.59324378	86.53119391	94.35868099	102.2435325
-2.3	-20.37777002	-21.00997677	-18.17658854	-16.98718944	-16.6731357	-22.39502475	-24.48502279	-25.06434087	-25.40587097
+2.3	65.17908681	83.92757434	82.91331314	79.38358183	52.60310306	70.90899104	79.96618426	86.91667605	93.86913327
-2.35	-25.76914047	-28.13041179	-24.66707407	-22.49908497	-21.01495956	-28.25306502	-31.12800467	-32.36349214	-33.36482501
+2.35	59.35245144	75.31889543	73.26484071	69.64359184	47.94741778	64.61819171	72.71767879	78.73231765	84.69447046
-2.4	-31.03022235	-35.2262631	-31.4452551	-28.43607867	-25.24600224	-33.96300872	-37.62109627	-39.53227477	-41.22122959
+2.4	53.8023448	66.94625291	64.58744925	60.91493866	43.50794476	58.62089211	65.82247315	70.97572915	76.00162185
-2.45	-36.45775832	-42.67648947	-39.08190936	-35.48913225	-29.60574025	-39.84785878	-44.32916983	-46.96887554	-49.40600688
+2.45	48.00007697	58.89746662	56.03416495	52.14433945	39.02139363	52.41110519	58.62121207	62.95408943	67.05123559
-2.5	-42.39691457	-50.96309978	-47.69136971	-44.03318595	-34.37107822	-46.28152507	-51.67955311	-55.14933804	-58.44556367
+2.5	41.99772398	50.40204185	47.10497409	43.45770306	34.0509542	45.84929114	51.18521535	54.59819233	57.83543248
-2.55	-47.99905636	-58.89814922	-56.03490478	-52.1448463	-38.99334278	-52.3686539	-58.62186546	-62.93502833	-67.04670082
+2.55	36.45724135	42.67582379	39.08122387	35.48861379	29.60532456	39.84731176	44.32853059	46.96816561	49.40524297
-2.6	-53.80288242	-66.94695995	-64.5882032	-60.91549793	-43.50837544	-58.62144614	-65.82312587	-70.9764443	-75.98264428
+2.6	31.02971938	35.22562728	31.4446081	28.43567778	25.24559789	33.96246377	37.62049002	39.5315884	41.22051087
-2.65	-59.35297952	-75.31958182	-73.26559959	-69.6441165	-47.94783218	-64.61874926	-72.71830495	-78.73302409	-84.69526095
+2.65	25.76865627	28.12982515	24.66652448	22.49873459	21.01456948	28.25255179	31.12740736	32.36283349	33.36413875
-2.7	-65.1795932	-83.92827387	-82.91407359	-79.38417112	-52.60351592	-70.90952379	-79.96681268	-86.9173702	-93.86989271
+2.7	20.37731005	21.00941908	18.17609345	16.98686563	16.67276505	22.3945368	24.48447049	25.06373589	25.4052124
-2.75	-70.44910898	-91.83064164	-91.57274533	-88.60254677	-56.80927815	-76.5937533	-86.53179819	-94.3593679	-102.2442887
+2.75	15.63124445	15.23749325	12.97244153	13.30696739	12.8444797	17.23076715	18.6477396	18.68634461	18.6835584
-2.8	-75.50100895	-99.52499933	-100.089439	-97.48030646	-60.83649428	-82.038109	-92.83547462	-101.5352842	-110.3516796
+2.8	11.21597679	11.54454195	11.95847646	11.77313474	9.276341605	12.41940384	13.22975401	13.19941431	13.19704323
-2.85	-80.61149473	-107.4490891	-108.9596506	-108.9976096	-64.90461471	-87.53949907	-99.22409831	-108.8439839	-118.6476374
+2.85	8.391913996	11.54454195	11.95847646	11.47326235	6.746332271	9.123126127	10.41072797	11.64413637	12.92394292
-2.9	-85.04242081	-114.4633116	-116.9098819	-120.9572237	-68.42583596	-92.30316025	-104.7754672	-115.2321391	-125.938107
+2.9	8.391913996	11.54454195	11.95847646	11.2865851	6.746332271	9.123126127	10.41072797	11.64413637	12.92394292
-2.95	-89.09140261	-121.0288638	-124.4551591	-133.3330821	-71.63706304	-96.64946498	-109.8617789	-121.12578	-132.7068178
+2.95	8.391913996	11.54454195	11.95847646	11.18102872	6.746332271	9.123126127	10.41072797	11.64413637	12.92394292
-3	-92.94497177	-127.4765276	-131.9926916	-147.0306176	-74.68502095	-100.7774559	-114.7199332	-126.8071389	-139.2858304
+3	8.391913996	11.54454195	11.95847646	11.14677961	6.746332271	9.123126127	10.41072797	11.64413637	12.92394292
(Span 3) -4	-2.383389914	-3.28E+00	-3.40E+00	-3.17E+00	-1.916027784	-2.591061685	-2.956753836	-3.30705451	-3.670532775
+4	92.2211686	125.3023787	128.5566089	129.1901038	74.14956078	100.0426847	113.7484917	125.4807797	137.5330121
-3.05	-2.383389914	-3.28E+00	-3.40E+00	-3.19E+00	-1.916027784	-2.591061685	-2.956753836	-3.30705451	-3.670532775
+3.05	89.37833732	120.4956927	122.8640911	123.4770655	71.9024375	97.00005313	110.1657412	121.290494	132.6751738
-3.1	-3.223336508	-3.278768741	-3.39633036	-3.261692721	-2.505792472	-3.335692218	-3.337342324	-3.336601175	-3.670532775
+3.1	85.6379384	114.2955613	115.5991852	116.1182504	68.94068261	92.9913758	105.4623229	115.8211667	126.3673328
-3.15	-5.279732891	-5.321839319	-4.231991455	-3.901766825	-4.158366209	-5.73925513	-6.043555308	-6.042649182	-6.041760823
+3.15	*82.26201301*	*108.791109*	*109.207939*	*109.571656*	*66.26375299*	*89.36935409*	*101.2249237*	*110.9171005*	*120.7357671*
-3.2	*-8.385891397*	*-8.022341155*	*-6.646881282*	*-5.934256155*	*-7.008661726*	*-9.351921949*	*-9.720242696*	*-9.719303113*	*-9.718363531*
+3.2	*77.91960422*	*101.8088975*	*101.164946*	*101.2248195*	*62.81641153*	*84.70619928*	*95.78271166*	*104.6436815*	*113.557972*
-3.25	*-11.58442702*	*-10.539654*	*-9.395905127*	*-8.218847317*	*-9.598079013*	*-12.84150646*	*-13.62160218*	*-13.59652377*	*-13.59539167*
+3.25	*74.07346327*	*95.69875498*	*94.17561912*	*93.86456875*	*59.75996003*	*80.57271558*	*90.96863915*	*99.11324653*	*107.2501578*
-3.3	*-15.73777059*	*-14.98061893*	*-12.96705401*	*-11.23760028*	*-13.0191263*	*-17.44293728*	*-18.69854012*	*-18.64056714*	*-18.65441663*
+3.3	*69.20454901*	*88.04495952*	*85.47535777*	*84.87100471*	*55.88739649*	*75.33655973*	*84.88120722*	*92.14063346*	*99.31931075*
-3.35	*-19.41750909*	*-19.36234664*	*-16.49015319*	*-14.23318825*	*-15.9264995*	*-21.37277215*	*-23.34442427*	*-23.5573341*	*-23.59557523*
+3.35	*64.95107072*	*81.42120399*	*77.98858987*	*77.19537217*	*52.50176099*	*70.75952571*	*79.56843503*	*86.07124059*	*92.43272419*
-3.4	*-24.11272274*	*-25.2200418930714*	*-21.89120227*	*-18.78957589*	*-19.71337115*	*-26.4792730820488*	*-28.99801357*	*-29.77125104*	*-30.2874819481827*
+3.4	*59.63105864*	73.20631801	*68.75174363*	*67.58696304*	*48.2643352*	65.03183017	*72.92931934*	*78.50432671*	83.86587955
-3.45	*-28.23235453*	-30.63012152	*-26.81862228*	*-22.97364104*	*-23.03296007*	-30.95633262	*-34.06606798*	*-35.31944126*	-36.31949574
+3.45	*55.03312956*	66.16103023	*60.86818012*	*59.71802574*	*44.59980125*	60.07918833	*67.1958584*	*71.98338765*	76.49794996
-3.5	*-33.40475322*	-37.50700063	*-33.19567435*	*-28.43677193*	*-27.19757233*	-36.57384077	*-40.43536012*	*-42.31171932*	-43.94426078
+3.5	*49.33753135*	57.49554776	*51.21556567*	*50.47725502*	*40.05787913*	53.94147471	*60.09866008*	*63.92706598*	67.41203752
-3.55	*-37.8905748*	-43.53596801	*-39.31059047*	*-33.66296495*	*-30.80681923*	*-41.44281299*	*-45.96392158*	*-48.39619399*	-50.59651865
+3.55	*44.45803125*	*50.1208042326199*	*44.2171805834083*	*43.4840499104099*	*36.164751696492*	*48.6811088543014*	*54.0224556730505*	*57.0419939774841*	59.66033595

-3.6	-43.46470121	-51.10026778	-47.04692239	-40.32820822	-35.28881177	-47.48980374	-52.83903471	-55.9796004	-58.90704568
+3.6	38.46227783	41.11522047	35.81721678	35.56989764	31.37869597	42.21487165	46.56074568	48.60115978	50.1722811
-3.65	-48.25385667	-57.65604394	-53.80147651	-46.19455707	-39.13736659	-52.68274924	-58.75012731	-62.51294802	-66.08206701
+3.65	33.36405835	33.94335652	28.86555882	31.33502564	27.30727472	36.71465992	40.2197727	41.43936654	42.13423886
-3.7	-54.15428281	-65.7972715	-62.24498928	-53.58753643	-43.87637531	-59.07775768	-66.03749041	-70.58255504	-74.96146956
+3.7	27.14360746	25.74145405	22.47773347	26.67523076	22.33744904	30.00142657	32.48712317	32.7189132	32.71211382
-3.75	-59.18388843	-72.78777717	-69.53854084	-60.02611953	-47.91395722	-64.52676367	-72.25313777	-77.47736359	-82.56177964
+3.75	21.8896122	19.66187504	17.84250579	22.82483673	18.13801209	24.32931224	25.95931611	25.89410559	25.88805943
-3.8	-65.33509675	-81.39543842	-78.56846273	-68.46199752	-52.84961847	-71.18833144	-79.85922036	-85.92827682	-91.89299482
+3.8	15.51992213	15.38728547	16.22387776	18.73342514	13.0447783	17.45054377	18.21674281	18.21674281	18.21674281
-3.85	-70.5422713	-88.72859619	-86.30036643	-76.46685641	-57.02592589	-76.82545105	-86.30140797	-93.0971339	-99.82116215
+3.85	10.97918537	15.38728547	16.22387776	18.23684686	8.804520216	12.06900029	13.60574304	15.22813516	16.92596124
-3.9	-76.86886571	-97.69219565	-95.79587662	-86.49837917	-62.09787537	-83.67205038	-94.13260018	-101.8244598	-109.4872631
+3.9	10.96885616	15.38728547	16.22387776	17.96948309	8.804520216	11.90049133	13.60574304	15.22813516	16.92596124
-3.95	-82.19072767	-105.2759269	-103.8654868	-95.17993441	-66.36260539	-89.42940674	-100.7233895	-109.1799536	-117.6457137
+3.95	10.96885616	15.38728547	16.22387776	17.83557673	8.804520216	11.90049133	13.60574304	15.22813516	16.92596124
-5	-88.61718546	-114.4849699	-113.7059073	-106.653216	-71.51048088	-96.37954317	-108.6861201	-118.0787961	-127.5297769
+5	10.96885616	15.38728547	16.22387776	17.78197886	8.804520216	11.90049133	13.60574304	15.22813516	16.92596124

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-29.44170369	-32.4285647	-18.6017	-22.4622	-24.1364
End Shear	203.1263091	215.5600253	135.4026	163.5919	172.3128
-0.05	-29.44170369	-32.4285647	-18.6017	-22.4622	-24.1364
+0.05	186.3602874	197.4806798	124.7721	150.8076	158.554
-0.1	-29.44170369	-32.4285647	-18.6017	-22.4622	-24.1364
+0.1	168.9748595	178.3806325	113.7332	137.5278	144.2695
-0.15	-29.44170369	-32.4285647	-18.6017	-22.4622	-24.1364
+0.15	154.7696098	162.8056348	104.6873	126.6421	132.5751
-0.2	-29.44170369	-32.4285647	-18.8174	-22.4622	-24.1364
+0.2	138.1181944	144.5878327	94.05091	113.838	118.8383
-0.25	-29.44170369	-32.4285647	-24.0372	-26.4849	-28.1723
+0.25	124.6148581	129.8485659	85.39684	103.4163	107.6736
-0.3	-38.69696106	-40.42569812	-30.2269	-34.6141	-36.0806
+0.3	108.9140134	112.7542591	75.29832	91.25024	94.66052
-0.35	-48.65979721	-51.56337103	-35.9292	-44.3144	-43.4796
+0.35	96.29304278	99.05175252	67.14886	81.42793	84.17223
-0.4	-62.92817049	-65.27627518	-46.0876	-56.5056	-56.8539
+0.4	81.75931787	83.32218034	57.72353	70.0623	72.05878
-0.45	-75.91117354	-76.53696179	-55.2271	-67.4711	-68.124
+0.45	70.20117647	70.85746453	50.19148	60.97472	62.3935
-0.5	-92.38787471	-92.99464527	-66.1404	-80.5609	-82.3749
+0.5	57.05112345	57.45185687	41.57469	50.57194	51.35563
-0.55	-106.8662976	-108.7954058	-75.0618	-91.2584	-94.0359
+0.55	47.15591854	47.68179405	34.77279	42.3544	42.65997
-0.6	-123.8975577	-127.9154872	-85.525	-103.801	-107.726
+0.6	36.45958171	37.78117434	27.27993	33.13753	33.26601
-0.65	-137.7608393	-143.5098361	-94.0151	-113.975	-118.847
+0.65	28.70502879	30.03943983	21.63881	26.38387	25.99426
-0.7	-153.9456075	-161.7540438	-103.893	-125.807	-131.801
+0.7	21.00702574	21.64750031	17.11516	19.17174	20.1596
-0.75	-167.013257	-176.5179708	-111.839	-135.322	-142.235
+0.75	15.48124964	15.80245838	13.57175	14.86682	15.75208
-0.8	-182.1350162	-193.6450504	-120.996	-146.282	-154.276
+0.8	10.38635544	10.08000334	9.551018	10.53023	10.74344
-0.85	-194.2265571	-207.3775197	-128.285	-155.002	-163.876
+0.85	7.064050783	6.802431936	6.493796	7.196564	7.195795
-0.9	-208.0687325	-223.1462371	-136.586	-164.928	-174.83
+0.9	6.201548041	6.802431936	3.939085	4.770832	5.106722
-0.95	-219.003721	-235.646223	-143.106	-172.719	-183.449
+0.95	6.201548041	6.802431936	3.939085	4.770832	5.106722
-1	-231.3497565	-249.8153367	-150.416	-181.447	-193.138
+1	6.20E+00	6.80E+00	3.94E+00	4.77E+00	5.11E+00
(Span 2) -2	-2.18E+01	-2.40E+01	-1.39E+01	-1.68E+01	-1.80E+01
+2	235.6160957	255.1811188	152.3998	183.7344	195.9952
-2.05	-2.18E+01	-2.40E+01	-1.39E+01	-1.68E+01	-1.80E+01
+2.05	222.8387621	240.5817004	144.7821	174.6235	185.9159
-2.1	-21.83564552	-23.95135763	-13.8695	-16.7981	-17.9808
+2.1	209.1899633	225.0878497	136.5571	164.7755	175.0744
-2.15	-21.83564552	-23.95135763	-13.8695	-16.7981	-17.9808
+2.15	194.8231868	208.8706111	127.8207	154.3058	163.5953
-2.2	-21.83564552	-23.95135763	-13.8695	-16.7981	-17.9808
+2.2	178.807971	190.8865687	118.0018	142.5289	150.7306
-2.25	-21.9063489	-23.95135763	-17.1456	-20.0483	-20.3259

+2.25	**163.4424523**	**173.7149971**	**108.5114**	**131.1372**	**138.3278**
-2.3	**-30.869272**	**-32.32683143**	**-23.0869**	**-28.2081**	**-28.1905**
+2.3	**147.830577**	**156.3453843**	**98.8044**	**119.4774**	**125.6706**
-2.35	**-42.63006184**	**-43.23293375**	**-31.382**	**-38.2469**	**-38.5492**
+2.35	**130.6099824**	**137.7096689**	**88.2014**	**106.7546**	**111.7378**
-2.4	**-55.19262245**	**-55.48715858**	**-39.8272**	**-48.4517**	**-49.3702**
+2.4	**114.8159424**	**120.4739453**	**78.07124**	**94.54662**	**98.72673**
-2.45	**-68.9215424**	**-70.32081104**	**-48.7446**	**-59.2149**	**-60.8323**
+2.45	**99.41840854**	**103.5655329**	**68.30345**	**82.78829**	**86.07531**
-2.5	**-84.40637374**	**-87.15569744**	**-58.714**	**-71.2357**	**-73.683**
+2.5	**83.35148939**	**86.00689863**	**58.03748**	**70.42035**	**72.80986**
-2.55	**-99.41970523**	**-103.5657642**	**-68.3043**	**-82.7893**	**-86.0764**
+2.55	**68.92033956**	**70.32059914**	**48.74383**	**59.21392**	**60.83135**
-2.6	**-114.8173024**	**-120.474184**	**-78.0721**	**-94.5477**	**-98.7278**
+2.6	**55.1914903**	**55.54157105**	**39.82644**	**48.45077**	**49.36923**
-2.65	**-130.570162**	**-137.7099063**	**-88.1536**	**-106.712**	**-111.698**
+2.65	**42.62909109**	**43.24686281**	**31.38126**	**38.24604**	**38.54831**
-2.7	**-147.8319489**	**-156.3456275**	**-98.8053**	**-119.478**	**-125.672**
+2.7	**30.86835788**	**32.3266937**	**23.08624**	**28.20733**	**28.18973**
-2.75	**-163.4437716**	**-173.7152381**	**-108.512**	**-131.138**	**-138.329**
+2.75	**21.90569697**	**23.95135695**	**17.14522**	**20.04763**	**20.32542**
-2.8	**-178.8092664**	**-190.8868048**	**-118.003**	**-142.53**	**-150.732**
+2.8	**21.83564673**	**23.95135695**	**13.86952**	**16.79809**	**17.98076**
-2.85	**-194.824439**	**-208.8708432**	**-127.821**	**-154.307**	**-163.596**
+2.85	**21.83564673**	**23.95135695**	**13.86952**	**16.79809**	**17.98076**
-2.9	**-209.1911607**	**-225.0880726**	**-136.558**	**-164.776**	**-175.075**
+2.9	**21.83564673**	**23.95135695**	**13.86952**	**16.79809**	**17.98076**
-2.95	**-222.8398891**	**-240.5819108**	**-144.783**	**-174.624**	**-185.917**
+2.95	**21.83564673**	**23.95135695**	**13.86952**	**16.79809**	**17.98076**
-3	**-236.4924071**	**-256.1853666**	**-152.919**	**-184.355**	**-196.683**
+3	**21.83564673**	**23.95135695**	**13.86952**	**16.79809**	**17.98076**
(Span 3) -4	**-6.201548387**	**-6.802431744**	**-3.93909**	**-4.77083**	**-5.10672**
+4	**230.3535036**	**248.6706117**	**149.8281**	**180.7461**	**192.3585**
-3.05	**-6.201548387**	**-6.802431744**	**-3.93909**	**-4.77083**	**-5.10672**
+3.05	**220.0643907**	**236.8622064**	**143.7359**	**173.4714**	**184.2837**
-3.1	**-6.201548387**	**-6.802431744**	**-3.93909**	**-4.77083**	**-5.10672**
+3.1	**206.9431154**	**221.8631241**	**135.9133**	**164.1236**	**173.9405**
-3.15	**-6.746836568**	**-6.802431744**	**-6.2038**	**-6.82709**	**-6.87741**
+3.15	***195.4072339***	***208.7217977***	***128.9951***	***155.8514***	***164.8122***
-3.2	***-10.73331871***	***-10.49460603***	***-9.86891***	***-10.8783***	***-11.136***
+3.2	***180.8981045***	***192.2437339***	***120.2488***	***145.3879***	***153.2927***
-3.25	***-15.01682656***	***-15.27105733***	***-13.2297***	***-14.4924***	***-15.3272***
+3.25	***168.295912***	***177.9703556***	***112.6172***	***136.2536***	***143.2575***
-3.3	***-21.60005051***	***-22.27828093***	***-17.4815***	***-19.6782***	***-20.616***
+3.3	***152.6154885***	***160.2545483***	***103.0827***	***124.8367***	***130.7376***
-3.35	***-27.9831765***	***-29.29205134***	***-21.155***	***-25.733***	***-25.3184***
+3.35	***139.1274454***	***145.0503229***	***94.85054***	***114.9755***	***119.9421***
-3.4	***-37.32196892***	***-38.58151783***	***-27.8585***	***-33.8369***	***-34.02***
+3.4	***122.4923623***	***126.3380121***	***84.66298***	***102.7677***	***106.5979***
-3.45	***-46.23623291***	***-46.83253851***	***-34.1134***	***-41.5574***	***-41.9237***
+3.45	***108.2989316***	***110.4037837***	***75.94316***	***92.31511***	***95.18862***
-3.5	***-58.11683954***	***-58.46618618***	***-42.2752***	***-51.4179***	***-52.252***
+3.5	***90.92557557***	***91.68711483***	***65.23797***	***79.47868***	***81.19602***
-3.55	***-69.07596096***	***-69.64513763***	***-49.4563***	***-60.0874***	***-61.4509***
+3.55	***77.19863258***	***78.23168606***	***56.14318***	***68.57001***	***69.31975***
-3.6	***-82.94494452***	***-84.60189865***	***-58.4943***	***-70.992***	***-73.0486***
+3.6	***61.61969034***	***64.1411138***	***45.25308***	***55.5043***	***55.73594***

-3.65	***-95.05711445***	***-97.71060719***	***-66.3492***	***-80.4639***	***-83.1437***
+3.65	***49.78608182***	***52.71312516***	***36.77231***	***45.32629***	***44.50324***
-3.7	***-110.2015497***	***-114.1527108***	***-76.128***	***-92.25***	***-95.7291***
+3.7	***37.75061043***	***39.4120604***	***29.71408***	***33.82219***	***35.42502***
-3.75	***-123.286311***	***-128.3987796***	***-84.544***	***-102.389***	***-106.574***
+3.75	***29.44170512***	***32.42856511***	***24.55577***	***27.05067***	***28.83448***
-3.8	***-139.489579***	***-146.0849982***	***-94.9284***	***-114.894***	***-119.971***
+3.8	***29.44170512***	***32.42856511***	***18.60171***	***22.46217***	***24.1364***
-3.85	***-153.3664673***	***-161.2672218***	***-103.792***	***-125.565***	***-131.419***
+3.85	***29.44170512***	***32.42856511***	***18.60171***	***22.46217***	***24.1364***
-3.9	***-170.4120207***	***-179.9563123***	***-114.647***	***-138.627***	***-145.451***
+3.9	***29.44170512***	***32.42856511***	***18.60171***	***22.46217***	***24.1364***
-3.95	***-184.9005787***	***-195.8738406***	***-123.847***	***-149.694***	***-157.356***
+3.95	***29.44170512***	***32.42856511***	***18.60171***	***22.46217***	***24.1364***
-5	***-202.5717648***	***-215.3245701***	***-135.036***	***-163.151***	***-171.848***
+5	***29.44170512***	***32.42856511***	***18.60171***	***22.46217***	***24.1364***

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.95E-13	-4.25E-13	-7.07E-13	-3.40E-13	-3.55E-13	-2.73E-13	-3.00E-13	-3.47E-13	-3.65E-13	-3.04E-13
End Shear	4.30E-13	3.23E-13	5.20E-13	2.26E-13	2.37E-13	1.78E-13	1.96E-13	1.94E-13	2.04E-13	1.90E-13
-0.05	-104.0570097	-136.8651695	-191.5020995	-79.0231965	-85.0046028	-80.1179859	-96.9603668	-98.3531521	-104.084209	-41.92000776
+0.05	703.4517355	878.8673184	1068.434765	607.4840747	648.4231184	607.816334	724.5891187	669.2806367	707.2772466	318.7618811
-0.1	-208.1140193	-273.730339	-383.0041991	-158.046393	-170.009206	-160.235972	-193.920734	-196.706304	-208.168418	-83.84001552
+0.1	1308.555835	1645.740035	1946.730436	1131.814428	1207.319539	1131.287437	1346.961453	1233.920642	1303.795896	592.4103982
-0.15	-312.171029	-410.5955086	-574.5062986	-237.06959	-255.013808	-240.353958	-290.8811	-295.059456	-312.252627	-125.7600233
+0.15	1852.758546	2301.040121	2677.026766	1573.033902	1676.860749	1570.597694	1867.642863	1694.492956	1790.186788	821.569773
-0.2	-416.2280386	-547.4606781	-766.0083982	-316.092786	-340.018411	-320.471943	-387.841467	-393.412608	-416.336835	-167.680031
+0.2	2337.510059	2845.965075	3273.754933	1932.634079	2058.70501	1927.342479	2288.676647	2068.325166	2185.552341	1007.131709
-0.25	-520.2850483	-684.3258476	-957.5104977	-395.115983	-425.023014	-400.589929	-484.801834	-491.765761	-520.421044	-209.6000388
+0.25	2715.957088	3282.17146	3701.487655	2212.601088	2355.043164	2203.61929	2637.143577	2376.300224	2512.924715	1150.529308
-0.3	-624.3420579	-821.1910171	-1149.012597	-474.139179	-510.027617	-480.707915	-581.762201	-590.118913	-624.505253	-251.5200466
+0.3	2991.386853	3611.77485	3979.095013	2415.415593	2568.598649	2422.402859	2898.642692	2591.028334	2739.056874	1253.394535
-0.35	-728.3990676	-958.0561866	-1340.514697	-553.162376	-595.03222	-560.825901	-678.722568	-688.472065	-728.589462	-293.4400543
+0.35	3167.747946	3837.349656	4201.622386	2549.708475	2721.949897	2569.646268	3068.509633	2739.144836	2897.053515	1316.880228
-0.4	-832.4560772	-1094.921356	-1532.016796	-632.185572	-680.036823	-640.943887	-775.682934	-786.825217	-832.673671	-335.3600621
+0.4	3249.650828	3961.930022	4345.779436	2628.94827	2803.001653	2644.648574	3150.492612	2798.913321	2961.277728	1342.938534
-0.45	-936.5130869	-1231.786526	-1723.518896	-711.208769	-765.041425	-721.061873	-872.643301	-885.178369	-936.75788	-377.2800699
+0.45	3242.366072	3989.008228	4379.138343	2639.36259	2810.875034	2650.304614	3149.345968	2775.575424	2937.547485	1330.645678
-0.5	-1040.570097	-1368.651695	-1915.020995	-790.231965	-850.046028	-801.179859	-969.603668	-983.531521	-1040.84209	-419.2000776
+0.5	3151.826913	3935.484429	4346.562654	2594.034945	2764.066518	2605.752501	3099.458578	2735.567112	2894.91325	1317.276336
-0.55	-1144.627106	-1505.516865	-2106.523095	-869.255162	-935.050631	-881.297845	-1066.56403	-1081.88467	-1144.9263	-461.1200854
+0.55	3013.2754	3794.089625	4220.674336	2488.794204	2654.133074	2504.134465	2982.474198	2649.953779	2803.484431	1276.422196
-0.6	-1248.684116	-1642.382034	-2298.025194	-948.278358	-1020.05523	-961.41583	-1163.5244	-1180.23783	-1249.01051	-503.0400931
+0.6	2841.553582	3565.874433	3993.608099	2327.185958	2482.959754	2344.443155	2794.636018	2485.024626	2628.210068	1202.99063
-0.65	-1352.741126	-1779.247204	-2489.527294	-1027.30155	-1105.05984	-1041.53382	-1260.48477	-1278.59098	-1353.09472	-544.9601009
+0.65	2593.977121	3255.932317	3671.755217	2118.93401	2256.458337	2132.220423	2542.294166	2247.381817	2376.093407	1099.751236
-0.7	-1456.798135	-1916.112373	-2681.029394	-1106.32475	-1190.06444	-1121.6518	-1357.44514	-1376.94413	-1457.17892	-586.8801087
+0.7	2277.884224	2869.816878	3262.105845	1869.187256	1981.847509	1873.511608	2232.263552	1946.578326	2059.277588	969.7410792
-0.75	-1560.855145	-2052.977543	-2872.531493	-1185.34795	-1275.06904	-1201.76979	-1454.4055	-1475.29728	-1561.26313	-628.8001164
+0.75	1901.274654	2413.540525	2775.45796	1577.755323	1669.269732	1574.863522	1872.370134	1594.908492	1686.680356	816.2654653
-0.8	-1664.912154	-2189.842712	-3064.033593	-1264.37114	-1360.07365	-1281.88777	-1551.36587	-1573.65043	-1665.34734	-670.7201242
+0.8	1472.808082	1893.574965	2216.66542	1251.407637	1318.369824	1243.325336	1471.048767	1189.709072	1257.585727	642.8956927
-0.85	-1768.969164	-2367.505709	-3292.253736	-1343.39434	-1445.07825	-1362.00576	-1648.32624	-1672.00359	-1769.43155	-712.640132
+0.85	1001.806885	1357.648558	1625.641829	897.4072718	936.9175737	886.4483132	1037.343026	739.8392328	781.3867091	453.4714219
-0.9	-1873.026174	-2661.638554	-3625.296741	-1422.41754	-1530.08285	-1442.12375	-1745.2866	-1770.35674	-1873.51576	-754.5601397
+0.9	528.9934963	888.8226576	1107.487008	523.5126088	538.2482822	512.2856776	581.0768226	393.3038313	415.0192126	261.21
-0.95	-1977.083183	-3055.175597	-4201.768423	-1501.44073	-1615.08745	-1522.24173	-1842.24697	-1868.70989	-1977.59997	-796.4801475
+0.95	428.2228959	539.2334737	792.0551449	327.3439652	351.9391149	331.6518206	401.1067372	398.3829637	421.4911558	172.385431
-1	-2081.140176	-3532.824305	-5178.322694	-1580.46392	-1700.09213	-1602.35971	-1939.20729	-1967.06306	-2081.6842	-838.4001385
+1	450.760938	545.6641413	678.3102482	344.5725884	370.4622227	349.107169	422.2176145	419.3504853	443.6749077	181.4583477
(Span 2) -2	-2081.140176	-3532.824305	-5178.322694	-1580.46392	-1700.09213	-1602.35971	-1939.20729	-1967.06306	-2081.6842	-838.4001385
+2	450.760938	545.6641413	678.3102482	344.5725884	370.4622227	349.107169	422.2176145	419.3504853	443.6749077	181.4583477
-2.05	-1511.873559	-2570.958562	-3929.020181	-1153.77869	-1240.46824	-1168.96251	-1413.76786	-1404.16736	-1485.61612	-607.6013465
+2.05	347.5975569	496.2324106	720.2543871	265.7120004	285.676403	269.2087722	325.586802	323.3758579	342.1332746	148.9417221
-2.1	-1408.537238	-2056.961305	-2892.772575	-1074.9181	-1155.68242	-1089.0641	-1317.13704	-1308.19274	-1384.07449	-566.0718893
+2.1	649.9098323	959.7408063	1027.537269	648.4221238	674.2715892	637.6291599	726.6263552	480.3675033	508.3671613	305.9917622
-2.15	-1305.200916	-1684.943379	-2114.899607	-996.057504	-1070.89661	-1009.16569	-1220.50623	-1212.21811	-1282.53285	-524.5424321
+2.15	1240.52344	1498.600991	1585.568997	1083.050172	1144.504402	1083.11549	1269.18087	937.5632278	989.6713	543.5819223
-2.2	-1201.864594	-1458.538525	-1811.014328	-917.196909	-986.110797	-929.267284	-1123.87541	-1116.24349	-1180.99122	-483.0129749
+2.2	1783.74387	2099.094841	2179.083594	1491.140964	1581.878424	1495.531056	1772.018886	1460.81387	1543.63664	763.6469917

-2.25	-1098.528273	-1359.681767	-1679.196862	-838.336315	-901.324984	-849.368876	-1027.24459	-1020.26887	-1079.44958	-441.4835177
+2.25	2264.832416	2729.949683	3050.390363	1856.372876	1976.835382	1866.951159	2219.515473	1923.286095	2033.247056	956.4327886
-2.3	-995.191951	-1285.693434	-1569.760979	-759.475721	-816.539171	-769.470468	-930.613779	-924.294246	-977.90795	-399.9540605
+2.3	2677.906638	3279.190682	3749.655069	2171.015064	2315.175295	2186.328788	2604.024341	2311.089008	2443.993593	1121.004428
-2.35	-891.8556293	-1211.7051	-1563.152934	-680.615127	-731.753358	-689.57206	-833.982964	-828.319623	-876.366316	-358.4246033
+2.35	3007.19451	3716.999723	4315.294437	2422.843771	2585.241953	2441.282508	2910.801741	2612.916114	2763.875366	1250.538473
-2.4	-788.5193077	-1137.716767	-1563.152449	-601.754533	-646.967545	-609.673652	-737.352148	-732.345	-774.824682	-316.8951461
+2.4	3236.660033	4029.92588	4680.460264	2607.894473	2781.098631	2623.121458	3128.876485	2820.433677	2984.2776	1339.021237
-2.45	-685.182986	-1063.728434	-1563.152012	-522.893939	-562.181732	-529.775244	-640.721333	-636.370378	-673.283048	-275.3656889
+2.45	3368.318373	4217.388255	4843.826246	2720.359282	2900.249052	2733.956522	3256.530275	2935.224966	3106.307879	1387.511503
-2.5	-581.8466644	-989.7401156	-1563.151783	-444.033344	-477.395974	-449.876836	-544.090518	-540.395789	-571.741424	-233.8362317
+2.5	3404.722338	4277.384525	4824.134701	2757.206665	2937.885021	2768.886391	3292.033375	2952.49813	3125.120267	1398.347243
-2.55	-684.0362545	-1063.728453	-1563.151335	-522.89388	-562.181794	-529.775196	-640.721322	-636.370416	-673.283057	-275.3656489
+2.55	3332.073712	4217.397385	4843.82604	2720.365951	2900.258385	2733.969762	3256.533646	2935.235178	3106.318342	1387.819593
-2.6	-787.1996356	-1137.71679	-1563.150886	-601.754468	-646.967614	-609.673593	-737.352135	-732.345043	-774.82469	-316.8951031
+2.6	3175.398359	4029.944245	4680.460585	2607.899358	2781.105999	2623.122428	3128.884397	2820.441578	2984.285621	1339.02366
-2.65	-890.3630167	-1211.705128	-1563.150438	-680.615056	-731.753434	-689.57199	-833.982947	-828.319671	-876.366323	-358.4245573
+2.65	2962.072587	3717.028965	4315.294129	2422.843532	2585.244053	2441.289434	2910.815359	2612.919557	2763.878694	1250.543497
-2.7	-993.5263979	-1285.693465	-1569.760899	-759.475644	-816.539253	-769.470387	-930.61376	-924.294298	-977.907956	-399.9540116
+2.7	2645.962986	3279.190825	3749.65542	2171.016707	2315.179152	2186.336421	2604.038083	2311.092682	2443.997151	1121.002163
-2.75	-1096.689779	-1359.681802	-1679.196782	-838.336232	-901.325073	-849.368783	-1027.24457	-1020.26893	-1079.44959	-441.4834658
+2.75	2246.304726	2729.960837	3050.389859	1856.372142	1976.838084	1866.957953	2219.515955	1923.288281	2033.24905	956.4333063
-2.8	-1199.85316	-1458.538556	-1811.01424	-917.19682	-986.110893	-929.26718	-1123.87538	-1116.24355	-1180.99122	-483.01292
+2.8	1767.454035	2099.117617	2178.930676	1491.139598	1581.880969	1495.53277	1772.026408	1460.81563	1543.638195	763.6503842
-2.85	-1303.016541	-1684.943414	-2114.899435	-996.057408	-1070.89671	-1009.16558	-1220.5062	-1212.21818	-1282.53286	-524.5423743
+2.85	1218.199561	1498.596785	1584.888661	1083.051537	1144.507776	1083.122901	1269.194081	937.5652964	989.6732047	543.5781536
-2.9	-1406.179922	-2056.961348	-2892.781193	-1074.918	-1155.68253	-1089.06397	-1317.13701	-1308.19281	-1384.07449	-566.0718285
+2.9	649.6902327	959.7502408	1027.47355	648.4255223	674.2770982	637.6383683	726.6270934	480.3689663	508.368908	305.3235994
-2.95	-1509.343304	-2570.958607	-3929.014369	-1153.77858	-1240.46835	-1168.96237	-1413.76782	-1404.16744	-1485.61612	-607.6012828
+2.95	348.1802304	496.2290289	720.056447	265.7120031	285.6763976	269.2088361	325.5868203	323.3758506	342.133293	149.2954879
-3	-2083.77498	-3532.824452	-5178.341354	-1580.46393	-1700.09224	-1602.35979	-1939.20757	-1967.06314	-2081.68436	-838.4001412
+3	451.5166065	545.6641228	678.3102482	344.5726154	370.4621931	349.1072179	422.2176272	419.3504653	443.674912	181.4583607
(Span 3) -4	-2.08E+03	-3532.824452	-5178.341354	-1.58E+03	-1.70E+03	-1.60E+03	-1.94E+03	-1.97E+03	-2.08E+03	-8.38E+02
+4	4.52E+02	545.6641228	678.3102482	3.45E+02	3.70E+02	3.49E+02	4.22E+02	4.19E+02	4.44E+02	1.81E+02
-3.05	-1979.586231	-3055.175772	-4201.786642	-1501.44073	-1615.08763	-1522.2418	-1842.24719	-1868.70998	-1977.60015	-796.4801333
+3.05	428.940777	539.2334501	791.7314355	327.3439843	351.9390833	331.6518564	401.1067456	398.3829419	421.4911667	172.3854426
-3.1	-1875.397483	-2661.638718	-3625.29674	-1422.41753	-1530.08302	-1442.12381	-1745.28681	-1770.35683	-1873.51593	-754.5601254
+3.1	529.8983405	888.8317512	1105.99034	523.5150066	538.2459613	512.2794175	581.0898642	393.3062603	415.0216101	259.5651457
-3.15	-1771.208734	-2367.50587	-3292.253739	-1343.39434	-1445.07842	-1362.00582	-1648.32643	-1672.00367	-1769.43171	-712.6401175
+3.15	997.8583223	1357.658935	1623.576878	897.4108389	936.9195626	886.4433164	1037.332817	739.8432679	781.3912735	453.4666012
-3.2	-1667.019986	-2189.842861	-3064.033592	-1264.37114	-1360.07381	-1281.88783	-1551.36605	-1573.65052	-1665.34749	-670.7201096
+3.2	1466.23293	1893.586123	2214.396374	1251.411537	1318.37208	1243.321079	1471.039374	1189.712924	1257.590104	642.8909402
-3.25	-1562.831237	-2052.977684	-2872.531492	-1185.34794	-1275.0692	-1201.76984	-1454.40567	-1475.29736	-1561.26328	-628.8001017
+3.25	1898.141156	2413.552121	2773.122186	1577.759219	1669.271862	1574.85929	1872.360648	1594.911678	1686.684051	816.2605308
-3.3	-1458.642489	-1916.112507	-2681.029393	-1106.32474	-1190.06459	-1121.65185	-1357.44529	-1376.9442	-1457.17906	-586.8800938
+3.3	2283.84301	2869.827641	3258.938404	1869.19011	1981.848505	1873.506791	2232.253281	1946.579554	2059.279216	969.7361407
-3.35	-1354.45374	-1779.24733	-2489.527293	-1027.30155	-1105.05998	-1041.53386	-1260.4849	-1278.59105	-1353.09484	-544.9600859
+3.35	2614.260171	3255.941707	3668.609845	2118.935441	2256.456157	2132.214299	2542.282241	2247.379292	2376.091068	1099.74564
-3.4	-1250.264992	-1642.382154	-2298.025194	-948.278351	-1020.05537	-961.415874	-1163.52452	-1180.23789	-1249.01063	-503.040078
+3.4	2880.977958	3565.882063	3990.650402	2327.184139	2482.955713	2344.434806	2794.621069	2485.019178	2628.204655	1202.985304
-3.45	-1146.076243	-1505.516977	-2106.523094	-869.255153	-935.050765	-881.297884	-1066.56414	-1081.88474	-1144.92641	-461.1200701
+3.45	3076.418976	3794.095247	4218.086996	2488.789998	2654.126318	2504.123817	2982.481303	2649.945381	2803.475895	1276.416332
-3.5	-1041.887495	-1368.6518	-1915.020995	-790.231956	-850.046157	-801.179894	-969.603762	-983.53158	-1040.84219	-419.2000622
+3.5	3193.982586	3935.487254	4344.541325	2594.02818	2764.056987	2605.739079	3099.462388	2735.55488	2894.900674	1317.269835
-3.55	-937.6987462	-1231.786623	-1723.518895	-711.208759	-765.041548	-721.061904	-872.643381	-885.178424	-936.757974	-377.2800543
+3.55	3226.775028	3989.007095	4377.943617	2639.371179	2810.854879	2650.294638	3149.34426	2775.56655	2937.537854	1333.785752
-3.6	-833.5099977	-1094.921446	-1532.016796	-632.185562	-680.03694	-640.943914	-775.683	-786.825268	-832.673757	-335.3600464

+3.6	**3174.844742**	***3961.925877***	***4344.125104***	**2628.953352**	**2803.009418**	**2644.635146**	**3150.486696**	**2798.900546**	**2961.263953**	**1342.934903**
-3.65	**-729.3212492**	***-958.0562692***	***-1340.514696***	**-553.162365**	**-595.032331**	**-560.825924**	**-678.722619**	**-688.472112**	**-728.58954**	**-293.4400385**
+3.65	**3126.231379**	***3837.341588***	***4199.556462***	**2549.709728**	**2721.953546**	**2569.62915**	**3068.499235**	**2739.149951**	**2897.058548**	**1316.875784**
-3.7	**-625.1325007**	***-821.1910924***	***-1149.012597***	**-474.139168**	**-510.027723**	**-480.707934**	**-581.762239**	**-590.118955**	**-624.505323**	**-251.5200306**
+3.7	**2986.378166**	***3611.762767***	***3976.688963***	**2415.412522**	**2568.597633**	**2422.406596**	**2898.627495**	**2591.029104**	**2739.057292**	**1253.389856**
-3.75	**-520.9437522**	***-684.3259155***	***-957.510497***	**-395.115971**	**-425.023114**	**-400.589944**	**-484.801858**	**-491.765799**	**-520.421106**	**-209.6000227**
+3.75	**2750.256283**	***3282.154971***	***3701.487954***	**2212.593402**	**2355.037308**	**2203.618239**	**2637.147926**	**2376.295473**	**2512.919286**	**1150.523883**
-3.8	**-416.7550038**	***-547.4607386***	***-766.0083974***	**-316.092774**	**-340.018505**	**-320.471954**	**-387.841477**	**-393.412643**	**-416.336889**	**-167.6800148**
+3.8	**2413.499763**	***2845.944348***	***3273.755157***	**1932.622077**	**2058.694494**	**1927.337021**	**2288.675272**	**2068.315125**	**2185.541295**	**1007.135479**
-3.85	**-312.5662553**	***-410.5955617***	***-574.5062979***	**-237.069576**	**-255.013897**	**-240.353964**	**-290.881096**	**-295.059487**	**-312.252672**	**-125.7600069**
+3.85	**1972.403171**	***2301.014896***	***2677.027***	**1573.01721**	**1676.845127**	**1570.587506**	**1867.635765**	**1694.487862**	**1790.181522**	**821.5727213**
-3.9	**-208.3775068**	***-273.7303849***	***-383.0041983***	**-158.046379**	**-170.009288**	**-160.235974**	**-193.920715**	**-196.706331**	**-208.168454**	**-83.83999905**
+3.9	**1423.945579**	***1645.710142***	***1946.730153***	**1131.79314**	**1207.298969**	**1131.272428**	**1346.94855**	**1233.909818**	**1303.784569**	**592.4119281**
-3.95	**-104.1887583**	***-136.865208***	***-191.5020988***	**-79.0231822**	**-85.0046799**	**-80.1179844**	**-96.9603346**	**-98.353175**	**-104.084237**	**-41.91999116**
+3.95	**767.6943831**	***878.8331393***	***1068.434715***	**607.4584909**	**648.3978952**	**607.7966627**	**724.5705247**	**669.2642347**	**707.2600112**	**318.7626877**
-5	**-5.38E-13**	***-4.61E-13***	***-6.79E-13***	**-3.20E-13**	**-3.38E-13**	**-3.11E-13**	**-3.63E-13**	**-2.97E-13**	**-3.14E-13**	**-2.09E-13**
+5	**5.74E-13**	***3.68E-13***	***6.39E-13***	**3.58E-13**	**4.01E-13**	**2.10E-13**	**3.03E-13**	**3.44E-13**	**3.67E-13**	**1.92E-13**

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.15E-13	-3.06E-13	-2.17E-13	-1.94E-13	-3.17E-13	-2.37E-13	-2.52E-13	-2.51E-13	-2.52E-13
End Shear	1.93E-13	1.71E-13	2.43E-13	2.04E-13	1.70E-13	1.55E-13	2.01E-13	2.00E-13	2.00E-13
-0.05	-60.32870284	-84.6300635	-89.23131382	-97.80089517	-48.42485806	-65.45269435	-74.8315814	-83.7547384	-93.0927845
+0.05	455.366482	583.3625333	576.0502172	532.3273083	367.4278034	495.6160792	558.2653683	605.9584315	653.1182019
-0.1	-120.6574057	-169.260127	-178.4626276	-195.6017903	-96.84971611	-130.9053887	-149.663163	-167.509477	-186.185569
+0.1	847.1366319	1076.570284	1056.047582	967.1522502	684.0047845	922.2951543	1037.658376	1126.218669	1217.487759
-0.15	-180.9861085	-253.8901905	-267.6939415	-293.4026855	-145.2745742	-196.358083	-224.494744	-251.264215	-279.278354
+0.15	1175.340722	1479.932342	1441.043162	1321.306911	949.612981	1280.173898	1438.384433	1585.833076	1709.717795
-0.2	-241.3148114	-338.520254	-356.9252553	-391.2035807	-193.6994322	-261.8107774	-299.326326	-335.018954	-372.371138
+0.2	1441.231549	1796.033002	1760.680086	1599.168606	1165.224293	1570.572358	1762.054776	1959.882294	2122.800711
-0.25	-301.6435142	-423.1503175	-446.1565691	-489.0044759	-242.1242903	-327.2634717	-374.157907	-418.773692	-465.463923
+0.25	1646.442189	2048.607207	1995.226715	1805.157163	1332.115034	1795.221401	2018.552534	2249.412386	2457.376808
-0.3	-361.9722171	-507.780381	-535.3878829	-586.805371	-290.5491483	-392.7161661	-448.989489	-502.528431	-558.556707
+0.3	1792.986217	2225.363673	2157.161846	1979.347439	1451.865788	1968.164021	2217.871007	2457.180865	2700.844493
-0.35	-422.3009199	-592.4104445	-624.6191968	-684.6062662	-338.9740064	-458.1688604	-523.82107	-586.283169	-651.649492
+0.35	1897.898997	2324.873673	2282.583088	2092.958042	1526.361417	2087.112017	2347.398756	2603.407715	2856.076791
-0.4	-482.6296227	-677.040508	-713.8505106	-782.4071614	-387.3988645	-523.6215548	-598.652651	-670.037907	-744.742276
+0.4	1950.660853	2364.495073	2359.910772	2149.811995	1557.791382	2147.253651	2409.11888	2680.564251	2935.720391
-0.45	-542.9583256	-761.6705715	-803.0818244	-880.2080566	-435.8237225	-589.0742491	-673.484233	-753.792646	-837.835061
+0.45	1951.702497	2340.2268	2370.390772	2175.705592	1548.649089	2150.906262	2406.710544	2686.118208	2950.334733
-0.5	-603.2870284	-846.300635	-892.3131382	-978.0089517	-484.2485806	-654.5269435	-748.315814	-837.547384	-930.927845
+0.5	1920.933161	2307.503249	2323.903871	2131.541512	1527.981795	2115.387666	2368.464408	2640.690883	2896.522776
-0.55	-663.6157313	-930.9306985	-981.544452	-1075.809847	-532.6734386	-719.9796378	-823.147396	-921.302123	-1024.02063
+0.55	1847.547918	2238.442612	2226.202406	2038.279049	1477.31323	2033.388973	2281.118727	2536.292438	2773.305753
-0.6	-723.9444341	-1015.560762	-1070.775766	-1173.610742	-581.0982967	-785.4323322	-897.978977	-1005.05686	-1117.11341
+0.6	1729.777869	2108.315012	2067.153819	1892.335307	1389.809861	1903.739951	2138.124476	2370.651265	2597.471157
-0.65	-784.2731369	-1100.190826	-1160.00708	-1271.411637	-629.5231547	-850.8850265	-972.810559	-1088.8116	-1210.2062
+0.65	1571.777167	1922.253743	1863.8415	1722.841564	1268.66994	1730.960155	1944.575132	2149.583331	2359.554173
-0.7	-844.6018398	-1184.820889	-1249.238394	-1369.212532	-677.9480128	-916.3377209	-1047.64214	-1172.56634	-1303.29898
+0.7	1379.220912	1675.745268	1602.607567	1490.953466	1117.396402	1519.98105	1706.036564	1883.094482	2064.709629
-0.75	-904.9305426	-1269.450953	-1338.469707	-1467.013428	-726.3728709	-981.7904152	-1122.47372	-1256.32108	-1396.39177
+0.75	1158.519108	1375.235481	1304.250272	1199.892332	939.7966955	1276.144408	1428.54606	1575.714799	1720.421473
-0.8	-965.2592455	-1354.081016	-1427.701021	-1564.814323	-774.7977289	-1047.24311	-1197.3053	-1340.07581	-1489.48455
+0.8	909.560224	1027.728097	947.7857667	876.4799216	739.9817117	1005.202917	1118.613264	1229.656712	1334.763764
-0.85	-1025.587948	-1438.71108	-1516.932335	-1673.178942	-823.222587	-1112.695804	-1272.13688	-1423.83055	-1582.57734
+0.85	637.8261349	640.7828421	559.1960144	527.6367641	522.3675803	713.3201697	783.2188255	852.581023	916.3993976
-0.9	-1085.916651	-1523.341143	-1606.163649	-1811.700933	-871.647445	-1178.148498	-1346.96847	-1507.58529	-1675.67012
+0.9	350.3697472	348.348813	336.2367289	337.2192187	291.6739216	407.0704458	429.8156547	465.9207445	488.0233984
-0.95	-1146.245354	-1607.971207	-1695.394963	-2165.001914	-920.0723031	-1243.601193	-1421.80005	-1591.34003	-1768.76291
+0.95	249.0642527	342.6313304	354.9165471	336.2253968	200.2249202	270.7659453	308.9807976	345.5872237	383.5706306
-1	-1206.574048	-1692.601268	-1784.626291	-2764.569435	-968.4971354	-1309.05388	-1496.63162	-1675.09476	-1861.85569
+1	262.1729024	360.6645556	373.5963635	348.2379796	210.7630711	285.0167851	325.2429413	363.7760215	403.7585602
(Span 2) -2	-1206.574048	-1692.601268	-1784.626291	-2764.569435	-968.4971354	-1309.05388	-1496.63162	-1675.09476	-1861.85569
+2	262.1729024	360.6645556	373.5963635	348.2379796	210.7630711	285.0167851	325.2429413	363.7760215	403.7585602
-2.05	-877.8686216	-1207.661474	-1250.9627	-1986.110599	-705.7261696	-954.3598921	-1089.05447	-1218.07992	-1351.95908
+2.05	202.1707157	278.1210814	288.0932509	275.9313776	162.5267913	219.7864335	250.8062311	280.5204399	311.352379
-2.1	-817.8664365	-1125.117999	-1165.459594	-1355.709974	-657.4898939	-889.1295402	-1014.61776	-1134.82434	-1259.55288
+2.1	442.66691	416.1588069	354.9341606	336.5365326	355.4221269	508.7272689	539.5981108	584.27536	614.9613044
-2.15	-757.8642515	-1042.574524	-1079.956487	-1034.511145	-609.2536181	-823.8991884	-940.181058	-1051.56877	-1167.14669
+2.15	779.5792814	802.5488064	701.6478604	631.8227878	630.4420573	873.1778469	960.6989963	1050.607277	1132.261469
-2.2	-697.8620664	-960.0310491	-994.4533803	-928.5248629	-561.0173424	-758.6688366	-865.744353	-968.313193	-1074.7405
+2.2	1091.919157	1253.181238	1157.689497	1026.950249	883.6741021	1210.189605	1348.960168	1483.951897	1618.798401

-2.25	-637.8598813	-877.4875742	-908.9502736	-855.5644284	-512.7810666	-693.4384848	-791.307648	-885.057618	-982.334308
+2.25	1372.668489	1645.187575	1575.267622	1478.032275	1106.032286	1514.349975	1695.202585	1874.015426	2050.809279
-2.3	-577.8576962	-794.9440993	-823.4471669	-789.0431399	-464.5447909	-628.208133	-716.870943	-801.802043	-889.928116
+2.3	1612.137356	1970.65085	1927.304327	1858.710273	1294.820734	1774.940916	1992.371091	2207.377543	2417.159779
-2.35	-517.8555112	-712.4006243	-737.9440602	-722.5218513	-416.3085152	-562.9777812	-642.434238	-718.546468	-797.521924
+2.35	1802.229516	2218.57455	2198.399082	2155.975261	1445.92015	1982.63411	2228.057952	2473.343691	2709.198071
-2.4	-457.8533261	-629.8571494	-652.4409536	-656.0005628	-368.0722394	-497.7474294	-567.997533	-635.290893	-705.115732
+2.4	1938.925835	2386.459018	2401.157485	2345.317109	1549.424017	2130.404085	2394.624673	2664.452153	2920.944567
-2.45	-397.851141	-547.3136745	-566.9378469	-589.4792743	-319.8359637	-432.5170776	-493.560828	-552.035318	-612.70954
+2.45	2020.59905	2481.53168	2523.665394	2464.050355	1607.030638	2220.935341	2491.726525	2779.739145	3053.432991
-2.5	-337.8489559	-464.7701996	-481.4347623	-522.9579858	-271.5997269	-367.2867311	-419.124123	-468.779795	-520.303348
+2.5	2043.996931	2493.55298	2556.993987	2493.339559	1620.666357	2248.554581	2519.295131	2814.296287	3096.472293
-2.55	-397.851151	-547.3136605	-566.9378749	-589.4792013	-319.8360067	-432.5170828	-493.560871	-552.035376	-612.709433
+2.55	2020.605635	2481.54145	2523.668739	2464.048	1607.03384	2220.945234	2491.733037	2779.747877	3053.436993
-2.6	-457.8533377	-629.8571347	-652.4409875	-656.000482	-368.0722865	-497.7474344	-567.997582	-635.290958	-705.115614
+2.6	1938.931037	2386.459886	2401.1578	2345.313289	1549.434291	2130.403817	2394.628143	2664.458617	2920.946139
-2.65	-517.8555244	-712.4006089	-737.9441	-722.5217626	-416.3085663	-562.977786	-642.434292	-718.546539	-797.521795
+2.65	1802.231092	2218.582881	2198.404653	2155.969435	1445.93765	1982.638792	2228.066024	2473.346374	2709.214751
-2.7	-577.8577111	-794.944083	-823.4472126	-789.0430433	-464.5448461	-628.2081377	-716.871002	-801.802121	-889.927977
+2.7	1612.139963	1970.659557	1927.309696	1858.707617	1294.840081	1774.94628	1992.379642	2207.380626	2417.159992
-2.75	-637.8598977	-877.4875572	-908.9503252	-855.564324	-512.7811259	-693.4384893	-791.307712	-885.057703	-982.334158
+2.75	1372.670178	1645.19468	1575.271201	1478.031349	1106.036769	1514.354655	1695.210491	1874.017618	2050.814762
-2.8	-697.8620844	-960.0310314	-994.4534378	-928.5247484	-561.0174057	-758.6688409	-865.744423	-968.313284	-1074.74034
+2.8	1091.920975	1253.183567	1157.69561	1026.94376	883.6864725	1210.189921	1348.963599	1483.953908	1618.809604
-2.85	-757.8642711	-1042.574506	-1079.95655	-1034.511022	-609.2536855	-823.8991925	-940.181133	-1051.56887	-1167.14652
+2.85	779.5814974	802.5549541	701.6556235	631.8182148	630.4601905	873.1829743	960.7072606	1050.610073	1132.258785
-2.9	-817.8664578	-1125.11798	-1165.459663	-1355.710042	-657.4899653	-889.1295442	-1014.61784	-1134.82445	-1259.5527
+2.9	442.670459	416.1638255	354.9380847	336.5324803	355.4246798	508.7338459	539.5952354	584.2797708	614.963234
-2.95	-877.8686444	-1207.661454	-1250.962776	-1986.110757	-705.7262451	-954.3598958	-1089.05455	-1218.08003	-1351.95888
+2.95	202.1707097	278.1210747	288.09322	275.9313826	162.5267937	219.7864405	250.806222	280.5204317	311.3523789
-3	-1206.574169	-1692.6014	-1784.626568	-2764.569419	-968.4971979	-1309.054039	-1496.63173	-1675.09486	-1861.85574
+3	262.1728954	360.6645588	373.5963378	348.2380139	210.7630534	285.0167859	325.2429184	363.7759927	403.7586069
(Span 3) -4	-1.21E+03	-1.69E+03	-1.78E+03	-2.76E+03	-9.68E+02	-1.31E+03	-1.50E+03	-1.68E+03	-1.86E+03
+4	2.62E+02	3.61E+02	3.74E+02	3.48E+02	2.11E+02	2.85E+02	3.25E+02	3.64E+02	4.04E+02
-3.05	-1146.24546	-1607.97133	-1695.395241	-2165.001938	-920.0723367	-1243.601337	-1421.80014	-1591.34012	-1768.76295
+3.05	249.0642509	342.6313308	354.9165208	336.2254302	200.2249005	270.7659467	308.9807723	345.5871929	383.5706766
-3.1	-1085.916751	-1523.34126	-1606.163913	-1811.700705	-871.6474755	-1178.148634	-1346.96856	-1507.58537	-1675.67016
+3.1	350.3685373	348.353588	336.2367038	337.2192502	291.6848365	407.0663022	429.808763	465.9250778	488.0323134
-3.15	*-1025.588042*	*-1438.71119*	*-1516.932585*	*-1673.178727*	*-823.2226144*	*-1112.695932*	*-1272.13697*	*-1423.83063*	*-1582.57738*
+3.15	637.8277651	640.7794446	559.1909343	527.6336104	522.378534	713.3170071	783.2130106	852.5836447	916.407167
-3.2	-965.2593332	-1354.08112	-1427.701258	-1564.814118	-774.7977532	-1047.24323	-1197.30538	-1340.07589	-1489.48459
+3.2	909.5622901	1027.724221	947.7794807	876.4757576	739.99321	1005.200326	1118.608061	1229.659582	1334.771856
-3.25	-904.9306243	-1269.45105	-1338.46993	-1467.013235	-726.372892	-981.7905274	-1122.4738	-1256.32114	-1396.3918
+3.25	1158.520854	1375.231048	1304.242492	1199.890293	939.8076167	1276.14181	1428.540633	1575.717494	1720.429384
-3.3	-844.6019154	*-1184.82098*	-1249.238602	*-1369.212351*	-677.9480308	-916.3378251	-1047.64221	-1172.5664	-1303.29901
+3.3	1379.221738	1675.73923	1602.613975	1490.950645	1117.407225	1519.97801	1706.030437	1883.09597	2064.716751
-3.35	-784.2732065	-1100.190909	-1160.007275	-1271.411467	-629.5231696	-850.8851227	-972.810622	-1088.81166	-1210.20623
+3.35	1571.775734	1922.245814	1863.837041	1722.837031	1268.679832	1730.956024	1944.567541	2149.581674	2359.559483
-3.4	-723.9444976	-1015.560839	-1070.775947	-1173.610584	-581.0983084	-785.4324204	-897.979035	-1005.05691	-1117.11344
+3.4	1729.774888	2108.304163	2067.146537	1892.33902	1389.818141	1903.734011	2138.114908	2370.647637	2597.474151
-3.45	-663.6157887	-930.9307693	-981.5446192	-1075.8097	-532.6734472	-719.9797181	-823.147448	-921.302169	-1024.02065
+3.45	1847.543087	2238.434316	2226.194744	2038.275207	1477.32001	2033.381095	2281.107127	2536.28635	2773.304795
-3.5	-603.2870798	-846.3006993	-892.3132915	-978.0088161	-484.2485861	-654.5270158	-748.315862	-837.547426	-930.927867
+3.5	1920.926011	2307.509198	2323.892577	2131.548713	1527.986643	2115.377525	2368.449686	2640.681786	2896.518731
-3.55	-542.9583709	-761.6706292	-803.0819638	-880.2079323	-435.8237249	-589.0743134	-673.484275	-753.792682	-837.835081
+3.55	1951.688294	*2340.22179936952*	*2370.383165*	2175.710732	1548.645279	*2150.89645*	2406.7053	2686.107761	2950.340457

-3.6	**-482.629662**	**-677.0405591**	**-713.8506361**	**-782.4070486**	**-387.3988637**	**-523.6216111**	**-598.652688**	**-670.037939**	**-744.742294**
+3.6	**1950.666501**	**2364.486833**	**2359.899974**	**2149.816263**	**1557.785429**	**2147.241007**	**2409.110409**	**2680.550161**	**2935.722173**
-3.65	**-422.3009531**	**-592.410489**	**-624.6193085**	**-684.6061649**	**-338.9740025**	**-458.1689088**	**-523.821101**	**-586.283196**	**-651.649507**
+3.65	**1897.90178**	**2324.864518**	**2282.576048**	**2092.964292**	**1526.353273**	**2087.117633**	**2347.387125**	**2603.410892**	**2856.073646**
-3.7	**-361.9722442**	**-507.7804189**	**-535.3879808**	**-586.8052812**	**-290.5491413**	**-392.7162065**	**-448.989515**	**-502.528452**	**-558.55672**
+3.7	**1792.985602**	**2225.350616**	***2157.164564***	**1979.350968**	**1451.855012**	**1968.166225**	**2217.876738**	**2457.179412**	**2700.836782**
-3.75	**-301.6435353**	**-423.1503488**	**-446.1566531**	**-489.0043974**	**-242.1242801**	**-327.2635042**	**-374.157928**	**-418.773709**	**-465.463933**
+3.75	**1646.438052**	**2048.610614**	**1995.219324**	**1805.159053**	**1332.102186**	**1795.219692**	**2018.55391**	**2249.406238**	**2457.364136**
-3.8	**-241.3148264**	**-338.5202788**	**-356.9253254**	**-391.2035137**	**-193.6994189**	**-261.8108018**	**-299.326341**	**-335.018966**	**-372.371146**
+3.8	**1441.224004**	**1796.031857**	**1760.684533**	**1599.173757**	**1165.208463**	**1570.567054**	**1762.051878**	**1959.871531**	**2122.803789**
-3.85	**-180.9861175**	**-253.8902087**	**-267.6939977**	**-293.40263**	**-145.2745577**	**-196.3580995**	**-224.494755**	**-251.264222**	**-279.27836**
+3.85	**1175.329908**	**1479.926548**	**1441.042642**	**1321.308724**	**949.5939716**	**1280.164778**	**1438.377106**	**1585.817071**	**1709.715126**
-3.9	**-120.6574086**	**-169.2601386**	**-178.46267**	**-195.6017463**	**-96.84969656**	**-130.9053972**	**-149.663168**	**-167.509479**	**-186.185573**
+3.9	**847.1218861**	**1076.559488**	**1056.041632**	**967.1499395**	**683.9830506**	**922.2820833**	**1037.646436**	**1126.219132**	**1217.489439**
-3.95	**-60.3286997**	**-84.63006852**	**-89.23134233**	**-97.80086256**	**-48.42483537**	**-65.45269486**	**-74.8315812**	**-83.7547353**	**-93.092786**
+3.95	**455.3476975**	**583.3469792**	**576.0393117**	**532.3318785**	**367.4026395**	**495.5992146**	**558.2485022**	**605.9535547**	**653.1141036**
-5	**-2.78E-13**	**-2.53E-13**	**-3.02E-13**	**-2.63E-13**	**-2.38E-13**	**-2.74E-13**	**-2.70E-13**	**-2.69E-13**	**-2.69E-13**
+5	**2.00E-13**	**2.92E-13**	**1.74E-13**	**2.11E-13**	**1.75E-13**	**1.75E-13**	**2.00E-13**	**1.98E-13**	**1.96E-13**

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.37E-13	-4.14E-13	-3.17E-13	-3.80E-13	-3.60E-13
End Shear	3.05E-13	3.19E-13	2.11E-13	2.11E-13	2.40E-13
-0.05	-161.9293703	-178.3571058	-102.309394	-123.541913	-132.750184
+0.05	1026.615192	1086.143739	686.4370258	830.411488	873.1037953
-0.1	-323.8587406	-356.7142117	-204.618788	-247.083827	-265.500368
+0.1	1879.79987	1993.656564	1263.507811	1528.600842	1603.973855
-0.15	-485.7881109	-535.0713175	-306.928182	-370.62574	-398.250553
+0.15	2611.638634	2767.570882	1731.856441	2100.972101	2209.360835
-0.2	-647.7174811	-713.4284233	-409.237576	-494.167654	-531.000737
+0.2	3185.68343	3442.779671	2132.405744	2583.321169	2709.209419
-0.25	-809.6468514	-891.7855292	-511.54697	-617.709567	-663.750921
+0.25	3629.582278	3973.138375	2440.762404	2943.093505	3113.332281
-0.3	-971.5762217	-1070.142635	-613.856364	-741.251481	-796.501105
+0.3	3990.056812	4367.652084	2652.498004	3183.531217	3400.907261
-0.35	-1133.505592	-1248.499741	-716.165759	-864.793394	-929.251289
+0.35	4214.169876	4630.271708	2794.749588	3341.437357	3563.760147
-0.4	-1295.434962	-1426.856847	-818.475153	-988.335308	-1062.00147
+0.4	4371.016546	4729.225538	2845.370484	3393.746064	3637.063776
-0.45	-1457.364333	-1605.213953	-920.784547	-1111.87722	-1194.75166
+0.45	4381.999943	4786.733108	2810.562304	3344.041026	3603.7388
-0.5	-1619.293703	-1783.571058	-1023.09394	-1235.41913	-1327.50184
+0.5	4304.829107	4694.824238	2768.81459	3295.499516	3548.417898
-0.55	-1781.223073	-1961.928164	-1125.40333	-1358.96105	-1460.25203
+0.55	4124.967728	4467.024639	2694.808951	3212.455278	3439.668862
-0.6	-1943.152443	-2140.28527	-1227.71273	-1482.50296	-1593.00221
+0.6	3821.942815	4188.491278	2535.584112	3026.044713	3230.132683
-0.65	-2105.081814	-2318.642376	-1330.02212	-1606.04488	-1725.75239
+0.65	3434.931419	3773.772877	2297.91353	2744.295492	2935.996242
-0.7	-2267.011184	-2496.999482	-1432.33152	-1729.58679	-1858.50258
+0.7	2956.106937	3231.572782	1994.536863	2393.238411	2546.641218
-0.75	-2428.940554	-2675.356588	-1534.64091	-1853.1287	-1991.25276
+0.75	2374.800997	2586.763418	1633.580362	1961.492643	2072.867663
-0.8	-2590.869925	-2853.713693	-1636.95031	-1976.67062	-2124.00295
+0.8	1703.532407	1855.912905	1213.926409	1457.852924	1524.874231
-0.85	-2752.799295	-3032.070799	-1739.2597	-2100.21253	-2256.75313
+0.85	984.8938214	1046.8247	744.7288353	895.5570192	914.7159224
-0.9	-2914.728665	-3210.427905	-1841.56909	-2223.75444	-2389.50332
+0.9	613.953256	673.4407617	421.0070033	479.2973245	505.5655003
-0.95	-3076.658035	-3388.785011	-1943.87849	-2347.29636	-2522.2535
+0.95	648.0617703	710.8541373	411.6343856	498.5518981	533.6524725
-1	-3238.587372	-3567.142129	-2046.18792	-2470.83828	-2655.0037
+1	682.1702843	748.2674979	433.2993531	524.7914818	561.7394513
(Span 2) -2	-3238.587372	-3567.142129	-2046.18792	-2470.83828	-2655.0037
+2	682.1702843	748.2674979	433.2993531	524.7914818	561.7394513
-2.05	-2284.20228	-2505.524297	-1450.87431	-1757.22972	-1880.94739
+2.05	526.0454189	577.0152908	334.1323201	404.6851089	433.1769815
-2.1	-2128.077406	-2334.272095	-1351.70728	-1637.12334	-1752.38493
+2.1	599.2064419	621.6491477	512.752382	590.1562001	620.128762
-2.15	-1971.952532	-2163.019893	-1252.54024	-1517.01696	-1623.82247
+2.15	1275.149573	1381.567822	933.3311525	1113.655431	1170.774929
-2.2	-1815.827657	-1991.767691	-1153.37321	-1396.91058	-1495.26
+2.2	2149.566693	2347.654496	1483.148028	1775.559902	1884.889683

-2.25	**-1659.702783**	**-1820.515488**	**-1054.20618**	**-1276.8042**	**-1366.69754**
+2.25	**2910.486391**	**3194.292732**	**1963.914302**	**2346.27756**	**2504.815006**
-2.3	**-1503.577909**	**-1649.263286**	**-955.039143**	**-1156.69783**	**-1238.13508**
+2.3	**3540.604411**	**3900.893415**	**2365.023765**	**2821.313471**	**3017.399406**
-2.35	**-1347.453035**	**-1478.011084**	**-855.872109**	**-1036.59145**	**-1109.57261**
+2.35	**4057.827225**	**4448.090929**	**2674.258818**	**3189.928166**	**3411.234375**
-2.4	**-1191.328161**	**-1306.758882**	**-756.705076**	**-916.485069**	**-981.01015**
+2.4	**4430.974536**	**4822.324303**	**2883.909414**	**3438.235048**	**3686.224829**
-2.45	**-1035.203287**	**-1135.50668**	**-657.538043**	**-796.378691**	**-852.447687**
+2.45	**4648.037257**	**5077.273029**	**2995.346314**	**3567.03153**	**3837.682435**
-2.5	**-879.0784126**	**-964.2545724**	**-558.371009**	**-676.272312**	**-723.885224**
+2.5	**4704.132947**	**5167.911986**	**3004.530007**	**3572.95504**	**3856.537928**
-2.55	**-1035.203235**	**-1135.506779**	**-657.53801**	**-796.37862**	**-852.447716**
+2.55	**4648.036364**	**5077.419868**	**2995.340137**	**3567.027893**	**3837.688532**
-2.6	**-1191.328101**	**-1306.758986**	**-756.705043**	**-916.484993**	**-981.010186**
+2.6	**4430.975702**	**4822.32375**	**2883.917292**	**3438.23869**	**3686.227679**
-2.65	**-1347.452966**	**-1478.011194**	**-855.872076**	**-1036.59137**	**-1109.57266**
+2.65	**4057.830637**	**4448.089174**	**2674.262002**	**3189.931134**	**3411.25028**
-2.7	**-1503.577832**	**-1649.263401**	**-955.039109**	**-1156.69774**	**-1238.13513**
+2.7	**3540.604526**	**3900.892458**	**2365.027024**	**2821.315717**	**3017.398414**
-2.75	**-1659.702697**	**-1820.515608**	**-1054.20614**	**-1276.80411**	**-1366.6976**
+2.75	**2910.490172**	**3194.292158**	**1963.916099**	**2346.285839**	**2504.817896**
-2.8	**-1815.827563**	**-1991.767815**	**-1153.37317**	**-1396.91048**	**-1495.26006**
+2.8	**2149.575106**	**2346.763025**	**1483.146605**	**1775.57297**	**1884.897265**
-2.85	**-1971.952428**	**-2163.020022**	**-1252.54021**	**-1517.01686**	**-1623.82253**
+2.85	**1275.161811**	**1382.663151**	**933.3325688**	**1113.653645**	**1170.786819**
-2.9	**-2128.077294**	**-2334.272229**	**-1351.70724**	**-1637.12323**	**-1752.385**
+2.9	**599.3992383**	**621.7528282**	**512.7537533**	**590.1627086**	**620.1261968**
-2.95	**-2284.202159**	**-2505.524436**	**-1450.87427**	**-1757.2296**	**-1880.94747**
+2.95	**526.0454547**	**577.0153424**	**334.1322911**	**404.6850929**	**433.1769458**
-3	**-3238.587529**	**-3567.142175**	**-2046.18805**	**-2470.83852**	**-2655.00376**
+3	**682.1703224**	**748.2674768**	**433.2993549**	**524.7915056**	**561.7394229**
(Span 3) -4	**-3.24E+03**	**-3.57E+03**	**-2.05E+03**	**-2.47E+03**	**-2.66E+03**
+4	**6.82E+02**	**7.48E+02**	**4.33E+02**	**5.25E+02**	**5.62E+02**
-3.05	**-3076.658151**	**-3388.785067**	**-1943.87865**	**-2347.29659**	**-2522.25357**
+3.05	**648.0618063**	**710.8541022**	**411.6343872**	**498.5519308**	**533.6524521**
-3.1	**-2914.728773**	**-3210.427959**	**-1841.56925**	**-2223.75467**	**-2389.50338**
+3.1	**613.9532901**	**673.4407276**	**421.0097936**	**479.293068**	**505.5654813**
-3.15	***-2752.799395***	***-3032.070851***	***-1739.25985***	***-2100.21274***	***-2256.75319***
+3.15	**984.877757**	**1046.826365**	**744.7341626**	**895.5668751**	**914.7084466**
-3.2	**-2590.870017**	**-2853.713743**	**-1636.95045**	**-1976.67082**	**-2124.00301**
+3.2	**1703.524786**	**1855.913923**	**1213.931513**	**1457.860929**	**1524.866717**
-3.25	**-2428.940638**	**-2675.356635**	**-1534.64105**	**-1853.12889**	**-1991.25282**
+3.25	**2374.792201**	**2586.764347**	**1633.584304**	**1961.499362**	**2072.859069**
-3.3	**-2267.01126**	**-2496.999527**	**-1432.33165**	**-1729.58696**	**-1858.50263**
+3.3	**2956.095187**	**3233.676945**	**1994.53856**	**2393.242251**	**2546.630188**
-3.35	**-2105.081882**	**-2318.642418**	**-1330.02224**	**-1606.04504**	**-1725.75245**
+3.35	**3434.936673**	**3773.772094**	**2297.911135**	**2744.294344**	**2936.002461**
-3.4	**-1943.152504**	**-2140.28531**	**-1227.71284**	**-1482.50311**	**-1593.00226**
+3.4	**3821.93778**	**4188.489648**	**2535.57865**	**3026.039607**	**3230.13486**
-3.45	**-1781.223126**	**-1961.928202**	**-1125.40344**	**-1358.96119**	**-1460.25207**
+3.45	**4126.639662**	**4467.025145**	**2694.799848**	**3212.445969**	**3439.664846**
-3.5	**-1619.293748**	**-1783.571094**	**-1023.09404**	**-1235.41926**	**-1327.50188**
+3.5	**4304.834537**	**4695.588075**	**2768.801573**	**3295.485576**	**3548.40884**
-3.55	**-1457.36437**	**-1605.213986**	**-920.784642**	**-1111.87734**	**-1194.7517**
+3.55	**4381.995316**	**4786.731209**	**2810.552097**	**3344.034913**	**3603.728355**
-3.6	**-1295.434991**	**-1426.856878**	**-818.475242**	**-988.335413**	**-1062.00151**

+3.6	**4371.005342**	**4729.224792**	**2845.356435**	**3393.735514**	**3637.068756**
-3.65	**-1133.505613**	**-1248.49977**	**-716.165841**	**-864.793488**	**-929.251323**
+3.65	**4214.171775**	**4630.269557**	**2794.755151**	**3341.44273**	**3563.758624**
-3.7	**-971.5762351**	**-1070.142662**	**-613.85644**	**-741.251563**	**-796.501135**
+3.7	**3990.048794**	**4369.221542**	**2652.498963**	**3183.530546**	**3400.900196**
-3.75	**-809.6468569**	**-891.7855534**	**-511.54704**	**-617.709637**	**-663.750948**
+3.75	**3629.586633**	**3973.136988**	**2440.757473**	**2943.086253**	**3113.318503**
-3.8	**-647.7174788**	**-713.4284452**	**-409.237639**	**-494.167712**	**-531.000761**
+3.8	**3187.535579**	**3442.777137**	**2132.395469**	**2583.30771**	**2709.198732**
-3.85	**-485.7881006**	**-535.0713371**	**-306.928239**	**-370.625787**	**-398.250574**
+3.85	**2611.646306**	**2767.570349**	**1731.850616**	**2100.973062**	**2209.363552**
-3.9	**-323.8587225**	**-356.714229**	**-204.618838**	**-247.083862**	**-265.500387**
+3.9	**1879.798014**	**1993.657188**	**1263.496015**	**1528.594259**	**1603.968667**
-3.95	**-161.9293443**	**-178.3571209**	**-102.309437**	**-123.541936**	**-132.750199**
+3.95	**1026.604375**	**1086.145855**	**686.4193412**	**830.3977028**	**873.0912144**
-5	**-4.39E-13**	**-5.87E-13**	**-3.19E-13**	**-3.39E-13**	**-3.42E-13**
+5	**3.79E-13**	**4.54E-13**	**2.51E-13**	**3.17E-13**	**2.58E-13**

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.138918218	-5.687765135	-7.97888736	-8.412691335	-9.727824678	-4.565475575	-6.170852933	-7.055090525	-7.896362073	-8.776749197
End Shear	64.51180601	46.07633352	59.52374674	59.11907065	57.91092953	37.18378353	50.11232454	56.51019722	61.39496154	66.31017259
-0.05	-8.138918218	-5.687765135	-7.97888736	-8.412691335	-9.758628818	-4.565475575	-6.170852933	-7.055090525	-7.896362073	-8.776749197
+0.05	59.95418522	42.89558684	54.98485682	54.27971624	52.08040278	34.6331296	46.67171819	52.57152729	56.99658867	61.42849123
-0.1	-8.138918218	-5.687765135	-7.97888736	-8.412691335	-9.869443683	-4.565475575	-6.170852933	-7.055090525	-7.896362073	-8.776749197
+0.1	55.20786794	39.58423143	50.26611982	49.25868385	46.38558075	31.97953724	43.08938177	48.47060676	52.41988021	56.35216812
-0.15	-8.138918218	-5.687765135	-7.97888736	-8.412691335	-10.02310724	-4.565475575	-6.170852933	-7.055090525	-7.896362073	-8.776749197
+0.15	51.36342604	36.85030559	46.39265595	45.15532956	41.84062764	29.78777733	40.13074135	45.086496	48.64850747	52.1751065
-0.2	-10.68152158	-8.324411352	-7.97888736	-8.412691335	-10.53277355	-6.985552563	-9.347669382	-9.72243017	-9.72243017	-9.72243017
+0.2	46.72832573	33.61031882	41.82984118	40.34444078	36.65011661	27.18920866	36.62322266	41.07804646	44.18793705	47.24210913
-0.25	-14.2073198	-11.0769745	-9.920439671	-9.010701002	-12.35547621	-9.186509858	-12.32022751	-13.1210232	-13.08999087	-13.08682842
+0.25	42.93077474	30.95216859	38.11018605	36.44229782	32.81781863	25.05634373	33.74453926	37.79121203	40.53600938	43.20976348
-0.3	-18.83913409	-14.34609865	-13.70465411	-11.89481498	-14.85175854	-11.79945537	-15.84949939	-17.18272389	-17.34568403	-17.34215614
+0.3	38.46628949	27.82267371	33.76058888	31.90417512	28.61344713	22.54409659	30.35409972	33.92375502	36.24596838	38.48074824
-0.35	-22.72889692	-17.03417001	-17.24896066	-14.66552022	-16.96274705	-13.94708502	-18.75052309	-20.52425321	-21.11408628	-21.42896251
+0.35	34.83443867	25.27290378	30.24248722	28.25542424	25.26809428	20.49620878	27.59058502	30.77462579	32.75881297	34.64365963
-0.4	-27.36642933	-20.20633906	-21.71240751	-18.93860519	-19.75427691	-16.48038686	-22.1728271	-24.46971955	-25.57026374	-26.43036039
+0.4	30.5970198	22.29303162	26.16340339	24.05269311	21.45434097	18.101588	24.35948084	27.0966803	28.69368967	30.17928101
-0.45	-31.08518877	-22.79731432	-25.60401421	-22.56851266	-23.35408241	-18.5486053	-24.96710602	-27.69416786	-29.21783309	-30.53046263
+0.45	27.17791344	19.88425273	22.89460349	20.70953466	18.45164952	16.16476091	21.74635313	24.12569632	25.41662924	26.58799022
-0.5	-35.49752513	-25.83340538	-30.19270569	-26.97855655	-27.91570083	-20.97096377	-28.24018374	-31.47488132	-33.50181929	-35.35368329
+0.5	23.22400935	17.09312759	19.14332716	16.90481903	15.06921816	13.91906354	18.71684227	20.68577603	21.63081786	22.4489032
-0.55	-39.08029101	-28.29467611	-33.93734681	-31.14977931	-32.06127031	-22.93368646	-30.89249895	-34.54181697	-36.98323207	-39.28003075
+0.55	20.06468493	14.85794287	16.17157353	14.16973057	12.62780162	12.11938346	16.28931722	17.93336733	18.60918043	19.15396678
-0.6	-43.25207287	-31.15555829	-38.3210328	-36.05503883	-37.15753808	-25.21379976	-33.97409543	-38.10925267	-41.04063157	-43.86441878
+0.6	16.45075067	12.29469886	12.80540154	11.10388524	9.924794148	10.05391049	13.50365266	14.78000205	15.157077	15.40082577
-0.65	-46.61089098	-33.45451818	-41.87096246	-40.04660563	-41.48679628	-27.04494336	-36.44923465	-40.97824787	-44.31056502	-47.56646362
+0.65	13.59825301	10.26571306	10.27539374	8.752142241	7.871245231	8.417460181	11.29694402	12.28660279	12.49969641	12.46077245
-0.7	-50.4857534	-36.10106568	-45.99234772	-44.70495669	-46.48951875	-29.15151257	-39.29709047	-44.28388873	-48.08699247	-51.85136471
+0.7	10.38073498	7.975578928	7.549088787	6.563744538	5.939545963	6.600774702	8.841912636	9.468307535	9.439740186	9.446838675
-0.75	-53.57365789	-38.2051084	-49.2998201	-48.46466673	-50.57162932	-30.82499269	-41.55983791	-46.91449976	-51.10011634	-55.27856395
+0.75	7.905484291	6.179296067	5.632297793	5.020496419	4.586892826	5.116376047	6.846708386	7.274350157	7.260001544	7.259429598
-0.8	-57.09524594	-40.59818889	-53.10160826	-52.8134864	-55.40386014	-32.72671565	-44.13169217	-49.90982586	-54.54117668	-59.20332259
+0.8	5.350048996	4.189190725	4.03829393	3.310084542	3.120071182	3.505255169	4.675517164	4.874273437	4.873787346	4.873313848
-0.85	-59.865273	-42.47471087	-56.11887717	-56.28915884	-59.23075826	-34.21644889	-46.14683649	-52.26162446	-57.25216126	-62.30513536
+0.85	3.399347977	2.849261705	2.871288242	2.283310466	2.224333152	2.273515548	3.106560436	3.285412735	3.284945746	3.284485727
-0.9	-62.97722942	-44.57519936	-59.54377333	-60.26582503	-63.57914694	-35.88202505	-48.40043463	-54.89811891	-60.3034636	-65.80909695
+0.9	1.813061833	1.56979647	1.700165264	1.761125535	1.791326759	1.233455116	1.611100834	1.611944588	1.714832653	1.903309489
-0.95	-65.38241412	-46.19159136	-62.22309227	-63.40527193	-66.99632526	-37.16192756	-50.13275826	-56.93067141	-62.66699086	-68.53496809
+0.95	1.763562976	1.235877614	1.700165264	1.761125535	1.747727366	0.993532769	1.343563224	1.533188511	1.714832653	1.903309489
-1	-68.02838072	-47.96036008	-65.21380091	-66.94715069	-70.97198838	-38.56005623	-52.02584316	-59.15980753	-65.27414297	-71.55747723
+1	1.76E+00	1.235877614	1.700165264	1.761125535	1.73E+00	0.993532769	1.343563224	1.533188511	1.714832653	1.903309489
(Span 2) -2	-6.209503878	-4.351524097	-5.986280449	-6.200921589	-6.095412219	-3.498228073	-4.730685041	-5.398355565	-6.037924442	-6.701551168
+2	68.29734152	48.07084356	65.88899637	68.19249492	79.61913887	38.62858619	52.12357354	59.32915494	65.56913299	72.00951032
-2.05	-6.209503878	-4.351524097	-5.986280449	-6.200921589	-6.119032288	-3.498228073	-4.730685041	-5.398355565	-6.037924442	-6.701551168
+2.05	65.49785313	46.19706579	62.75774411	64.53436332	72.65801756	37.14636684	50.11619697	56.96724103	62.80801823	68.81318961
-2.1	-6.209503878	-4.351524097	-5.986280449	-6.200921589	-6.191829796	-3.498228073	-4.730685041	-5.398355565	-6.037924442	-6.701551168
+2.1	62.38574195	44.09749075	59.35323619	60.62183241	65.90077606	35.48121191	47.86244736	54.32977832	59.75191772	65.30332352
-2.15	-6.209503878	-4.351524097	-5.986280449	-6.200921589	-6.320572713	-3.498228073	-4.730685041	-5.398355565	-6.037924442	-6.701551168
+2.15	59.00103605	41.79987091	55.71607854	56.49932127	59.38387318	33.65531227	45.39229596	51.45115617	56.43939608	61.52291707
-2.2	-7.430079389	-5.816117517	-5.986280449	-6.200921589	-6.527381266	-4.81030385	-6.44014866	-6.860378235	-6.844638529	-6.843409032
+2.2	55.11753871	39.14988092	51.60712346	51.89976757	53.09092634	31.54582545	42.53959507	48.1384028	52.64953334	57.22113054
-2.25	-10.62778662	-8.105617931	-7.90146089	-6.726910435	-7.388051442	-6.660527581	-8.935045551	-9.669823934	-9.689865806	-9.688414101

+2.25	51.29549335	36.53026961	47.61729806	47.48353373	48.20531738	29.45755267	39.71648627	44.86968831	48.92853564	53.01712861
-2.3	-14.08560685	-10.56664248	-10.89446553	-9.425246843	-9.379303526	-8.645649834	-11.61266515	-12.69640798	-12.99680626	-13.1739025
+2.3	47.32378959	33.7978153	43.51961335	42.99368066	43.16087855	27.27669332	36.7689868	41.46548315	45.06957534	48.67468668
-2.35	-18.03367764	-13.36227144	-14.58667969	-12.79080844	-12.34718738	-10.89704929	-14.65028002	-16.14104468	-16.78169154	-17.30092041
+2.35	42.94777999	30.77648506	39.05568858	37.99058372	37.84790394	24.86254487	33.50697003	37.70685963	40.82567677	43.91727792
-2.4	-21.90321025	-16.09034086	-18.26614628	-16.305551	-15.54832375	-13.09100453	-17.61110123	-19.50795762	-20.49897577	-21.37476256
+2.4	38.7933806	27.8985454	34.71415759	33.49102891	33.09698074	22.56051064	30.39714395	34.13143539	36.80359303	39.40970799
-2.45	-25.91013045	-18.90472301	-22.1293697	-20.26544431	-19.34813094	-15.35169315	-20.66261798	-22.98634681	-24.3551338	-25.61887834
+2.45	34.61225126	24.88985065	30.54055827	29.05582834	28.34425862	20.23406463	27.17713518	30.39730986	32.64407023	34.76859507
-2.5	-30.31031117	-21.98439957	-26.42628975	-24.72977429	-23.95373278	-17.82270066	-23.99871665	-26.79779783	-28.59701221	-30.30622954
+2.5	30.06737428	21.77740419	26.13536004	24.42570604	23.64291718	17.65670428	23.77458706	26.54146505	28.31122236	29.9898535
-2.55	-34.4747064	-24.88932142	-30.54091222	-29.05621197	-28.34452144	-20.2195192	-27.15512258	-30.39764867	-32.63418633	-34.76624362
+2.55	25.96058992	18.90445494	22.12902452	20.26508886	19.3478621	15.3514776	20.66233433	22.98601535	24.35476568	25.61848223
-2.6	-38.65375552	-27.89882417	-34.71452421	-33.49141986	-33.09727075	-22.56073396	-30.39743124	-34.13177385	-36.80396386	-39.3998674
+2.6	21.95080565	16.09008005	18.26581658	16.30521551	15.54811588	13.09079486	17.61081865	19.50764325	20.49861986	21.37438987
-2.65	-42.85629177	-30.77675889	-39.0560445	-37.99097723	-37.848176	-24.86275975	-33.50725915	-37.70718431	-40.82604308	-43.91768781
+2.65	18.07804361	13.36202036	14.5863755	12.79052345	12.3470057	10.89684702	14.65001389	16.14073495	16.78135001	17.30056456
-2.7	-47.32856361	-33.79807788	-43.51997608	-42.99407498	-43.16118412	-27.2769074	-36.76926305	-41.46580901	-45.06993528	-48.67508048
+2.7	14.12618711	10.56640397	10.89417635	9.42499012	9.379135623	8.645457636	11.61241213	12.69612159	12.99649255	13.17356101
-2.75	-51.29820143	-36.5305206	-47.61765188	-47.48392291	-48.20559469	-29.45775377	-39.71675048	-44.87000166	-48.92889183	-53.01752069
+2.75	10.66458302	8.105389912	7.901215063	6.726700302	7.38793619	6.660347266	8.934802775	9.669556442	9.689574598	9.688129841
-2.8	-55.11837305	-39.15012131	-51.60746659	-51.90014985	-53.09121217	-31.54601726	-42.53985429	-48.13869568	-52.64987513	-57.22150874
+2.8	7.462935472	5.815907071	5.986280502	6.200921161	6.527381845	4.810133059	6.439929395	6.860126528	6.84439425	6.843164752
-2.85	-59.00015533	-41.80010098	-55.71640608	-56.49968918	-59.38423538	-33.65549116	-45.39253258	-51.45143807	-56.43971163	-61.52327584
+2.85	6.209509086	4.351523981	5.986280502	6.200921161	6.320573301	3.498227779	4.730685054	5.398355184	6.037923965	6.701551943
-2.9	-62.38359718	-44.0977033	-59.35354501	-60.62218404	-65.90117113	-35.48137721	-47.8626706	-54.33003225	-59.7522111	-65.30365933
+2.9	6.209509086	4.351523981	5.986280502	6.200921161	6.191830372	3.498227779	4.730685054	5.398355184	6.037923965	6.701551943
-2.95	-65.49484916	-46.19725311	-62.75803151	-64.53469492	-72.64782648	-37.1465196	-50.11639356	-56.96747675	-62.80828621	-68.81349123
+2.95	6.209509086	4.351523981	5.986280502	6.200921161	6.119032867	3.498227779	4.730685054	5.398355184	6.037923965	6.701551943
-3	-68.48088003	-48.19547408	-66.10138844	-68.44318982	-80.11683517	-38.72700075	-52.25691257	-59.48661301	-65.75428512	-72.22495743
+3	6.209509086	4.351523981	5.986280502	6.200921161	6.095412787	3.498227779	4.730685054	5.398355184	6.037923965	6.701551943
(Span 3) -4	-1.76E+00	-1.235877581	-1.700165279	-1.761125414	-1.73E+00	-0.993532685	-1.343563228	-1.533188403	-1.714832518	-1.90330971
+4	67.83384397	47.82015484	64.9740102	66.66145131	70.53448647	38.44934445	51.87590599	58.98288393	65.06651787	71.316055
-3.05	-1.76E+00	-1.235877581	-1.700165279	-1.761125414	-1.74E+00	-0.993532685	-1.343563228	-1.533188403	-1.714832518	-1.90330971
+3.05	65.62968865	46.34603958	62.4815622	63.70966611	67.32735286	37.28412626	50.29818674	57.12509264	62.89369663	68.79708258
-3.1	-1.909076691	-1.671421575	-1.700165279	-1.761125414	-1.797292787	-1.299347925	-1.729682249	-1.730537892	-1.730153578	-1.90330971
+3.1	62.74446883	44.40650163	59.26656019	59.94253833	63.22678158	35.74834462	48.21953632	54.68619284	60.05764415	65.5262291
-3.15	-3.20014651	-2.737740674	-2.759574446	-2.194447216	-2.148235242	-2.156269748	-2.97602029	-3.133811412	-3.133341551	-3.132880904
+3.15	60.15133253	42.65595697	56.412294	56.62843612	59.60304499	34.36025563	46.34138143	52.48894153	57.5147008	62.60604982
-3.2	-5.53806528	-4.348401036	-4.159886521	-3.446658689	-3.2358115	-3.634255497	-4.849324319	-5.040312521	-5.039825312	-5.039338103
+3.2	56.82756178	40.4042542	52.79175394	52.45784082	55.01080488	32.57267904	43.92335975	49.66694926	54.26169641	58.88409229
-3.25	-7.665336027	-6.006962414	-5.465208193	-4.872131256	-4.458213389	-4.976966042	-6.65880553	-7.063314588	-7.050310486	-7.049723447
+3.25	53.89247754	38.40988503	49.62341456	48.83361116	50.98387211	30.98779364	41.77999252	47.17067107	51.39395724	55.61325266
-3.3	-10.61915971	-8.160627739	-7.768016038	-6.723906668	-6.081353268	-6.750908115	-9.044820989	-9.69589843	-9.665837253	-9.673018732
+3.3	50.18660745	35.88516931	45.65463289	44.32219744	46.08042811	28.97972335	39.06484819	44.01410797	47.77839433	51.50080931
-3.35	-13.29805055	-10.06871096	-10.04010715	-8.550766499	-7.693879741	-8.258490798	-11.08258862	-12.10496462	-12.2153664	-12.23519587
+3.35	46.92713625	33.67958036	42.21996577	40.44002586	41.91140388	27.22414363	36.69148339	41.25923517	44.63118517	47.92985439
-3.4	-16.71768741	-12.50335636	-13.07754311	-11.35141419	-10.14155223	-10.2221266	-13.73050199	-15.03656395	-15.43751674	-15.70520194
+3.4	42.89622487	30.9209534	37.9602375	35.65037264	36.71635054	25.02687851	33.72145718	37.81660324	40.70745487	43.48762227
-3.45	-19.72676905	-14.63954085	-15.88287349	-13.90646735	-12.39416812	-11.94345868	-16.05202625	-17.66454135	-18.31446267	-18.83302864
+3.45	39.41915555	28.53675373	34.30699001	31.56244756	32.47090967	23.12667941	31.15332556	34.84358745	37.32610197	39.66707283
-3.5	-23.51443891	-17.32162469	-19.44879473	-17.21320941	-15.34186569	-14.10296724	-18.96491613	-20.96725959	-21.94022262	-22.78675695
+3.5	35.11961119	25.58337119	29.81361045	26.55720283	27.4963352	20.77152146	27.97068951	31.16342239	33.14859527	34.95568448
-3.55	-26.80674942	-19.6476924	-22.57504175	-20.3840241	-18.16069922	-15.97449791	-21.48966191	-23.83402726	-25.09525227	-26.2362036
+3.55	31.4421423	23.05316632	25.98952773	22.92827616	23.73082953	18.75278802	25.24299137	28.01268119	29.57842571	30.93613479
-3.6	-30.90611317	-22.53808722	-26.49741653	-24.39560404	-21.76378651	-18.29858012	-24.62525473	-27.39903278	-29.02753456	-30.54552537
+3.6	26.93032152	19.94414199	21.31979283	18.57257805	19.47620589	16.27103758	21.89000345	24.14350307	25.20153476	26.01622043

-3.65	**-34.43468485**	**-25.021445**	**-29.89683378**	**-27.89809515**	**-24.94205851**	**-20.29420098**	**-27.31799286**	**-30.46415728**	**-32.41532176**	**-34.2660446**
+3.65	**23.09946019**	**17.30052287**	**17.60091082**	**14.96788116**	**17.16849352**	**14.15985207**	**19.03793618**	**20.85546938**	**21.48787479**	**21.84819231**
-3.7	**-38.78938509**	**-28.08103853**	**-34.11836738**	**-32.27637505**	**-28.9563293**	**-22.75155577**	**-30.63404598**	**-34.24292995**	**-36.59971742**	**-38.87034978**
+3.7	**18.43172169**	**14.07498442**	**13.34791499**	**11.65555274**	**14.63520182**	**11.58280997**	**15.55687144**	**16.8457989**	**16.96599077**	**16.96246504**
-3.75	**-42.50727678**	**-30.68907878**	**-37.74320828**	**-36.05835667**	**-32.46012098**	**-24.84519431**	**-33.45956114**	**-37.46597758**	**-40.17493575**	**-42.81139727**
+3.75	**14.58194113**	**11.35058968**	**10.19542392**	**9.252012335**	**12.55565042**	**9.405243502**	**12.61566619**	**13.46088468**	**13.42707057**	**13.42393541**
-3.8	**-47.06095612**	**-33.87871234**	**-42.20660535**	**-40.74071181**	**-37.05034585**	**-27.40452086**	**-36.91383534**	**-41.41001834**	**-44.55705306**	**-47.64998435**
+3.8	**10.31314537**	**8.04766509**	**7.97888798**	**8.412692643**	**10.35225871**	**6.764209643**	**9.048765243**	**9.446068347**	**9.446068347**	**9.446068347**
-3.85	**-50.92115843**	**-36.57882878**	**-46.00912429**	**-44.74999555**	**-41.396049**	**-29.5700938**	**-39.8368945**	**-44.75053563**	**-48.27437589**	**-51.76103819**
+3.85	**8.138951156**	**5.693121787**	**7.97888798**	**8.412692643**	**10.04152567**	**4.56547587**	**6.258231935**	**7.055091023**	**7.896362541**	**8.776749412**
-3.9	**-55.61745786**	**-39.85940664**	**-50.65708875**	**-49.67377579**	**-46.84976573**	**-32.20009094**	**-43.38711453**	**-48.81130421**	**-52.79982361**	**-56.77327618**
+3.9	**8.138951156**	**5.687765706**	**7.97888798**	**8.412692643**	**9.857136861**	**4.56547587**	**6.170853685**	**7.055091023**	**7.896362541**	**8.776749412**
-3.95	**-59.57302808**	**-42.61899283**	**-54.58953951**	**-53.85817309**	**-51.57668621**	**-34.41151433**	**-46.372521**	**-52.22887713**	**-56.61392459**	**-61.0037406**
+3.95	**8.138951156**	**5.687765706**	**7.97888798**	**8.412692643**	**9.764787644**	**4.56547587**	**6.170853685**	**7.055091023**	**7.896362541**	**8.776749412**
-5	**-64.35559094**	**-45.95135362**	**-59.36477566**	**-58.96080233**	**-57.81458839**	**-37.08088197**	**-49.97642892**	**-56.35785333**	**-61.22831014**	**-66.12900022**
+5	**8.138951156**	**5.687765706**	**7.97888798**	**8.412692643**	**9.727823599**	**4.56547587**	**6.170853685**	**7.055091023**	**7.896362541**	**8.776749412**

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.138918218	-7.450274261	-8.014198773	-7.553490548	-9.141383251	-9.272694473	-9.813016133	-3.952200982
End Shear	64.51180601	61.36640936	65.52859336	61.4405297	73.29683542	68.33196294	72.21894383	32.25416275
-0.05	-8.138918218	-7.450274261	-8.014198773	-7.553490548	-9.141383251	-9.272694473	-9.813016133	-3.952200982
+0.05	59.95418522	57.21556633	61.06155449	57.23328995	68.20409499	63.06822377	66.64755682	30.05273822
-0.1	-8.138918218	-7.450274261	-8.014198773	-7.553490548	-9.141383251	-9.272694473	-9.813016133	-3.952200982
+0.1	55.20786794	52.89299011	56.41161542	52.85206888	62.90480014	57.59869245	60.85884006	27.73365111
-0.15	-8.138918218	-7.974191878	-8.029020331	-7.553490548	-9.141383251	-9.272694473	-9.813016133	-4.10729729
+0.15	51.36342604	49.32012906	52.56968881	49.23309677	58.53069398	53.11115469	56.10981911	25.81908605
-0.2	-10.68152158	-12.29541143	-12.68569792	-11.61944855	-12.91213214	-9.272694473	-9.813016133	-5.784922963
+0.2	46.72832573	45.08094215	48.01311536	44.94208471	53.34825554	47.82773664	50.51903515	23.55030313
-0.25	-14.2073198	-15.86664507	-16.53567294	-15.25203392	-17.32340854	-11.7221789	-12.40938484	-7.713182593
+0.25	42.93077474	41.59876421	44.27181539	41.41980886	49.09761677	43.52301529	45.96431095	21.68911739
-0.3	-18.83913409	-20.10328665	-21.10482815	-19.56432136	-22.56395067	-15.1065672	-15.90164968	-10.00338544
+0.3	38.46628949	37.49382743	39.86338063	37.27065894	44.09464433	38.49224202	40.64190494	19.49813812
-0.35	-22.72889692	-23.58284576	-24.85904499	-23.1084468	-26.8742634	-19.24616673	-20.25912287	-11.88657557
+0.35	34.83443867	34.14471769	36.26835311	33.88811593	40.01963916	34.42577848	36.34018012	17.7132473
-0.4	-27.36642933	-27.68404661	-29.28590263	-27.28876114	-31.96235047	-24.45087416	-25.75512946	-14.10894553
+0.4	30.5970198	30.22489759	32.06283635	29.93247444	35.25873417	29.71418187	31.35659757	15.62757293
-0.45	-31.08518877	-31.0295455	-32.8987147	-30.7013916	-36.11953479	-28.9818078	-30.55394857	-15.92415033
+0.45	27.17791344	27.05124753	28.6597333	26.73270872	31.411537	25.94142143	27.36657892	13.94189524
-0.5	-35.49752513	-34.9444407	-37.12849718	-34.69808362	-40.99256114	-34.32712404	-36.21576298	-18.05118828
+0.5	23.22400935	23.36740335	24.71190614	23.02222442	26.95530435	21.61553169	22.79226359	11.98902705
-0.55	-39.08029101	-38.11348952	-40.55425414	-37.93617418	-44.94444203	-38.69161424	-40.83907429	-19.77548856
+0.55	20.06468493	20.41159609	21.54637121	20.04827754	23.38808713	18.19191544	19.17265344	10.42547927
-0.6	-43.25207287	-41.79121486	-44.53218457	-41.69759869	-49.53980781	-43.80393384	-46.25505806	-21.77969081
+0.6	16.45075067	17.01459609	17.91101476	16.63459282	19.29912349	14.31826578	15.07805225	8.632918689
-0.65	-46.61089098	-44.74143456	-47.72524748	-44.71811179	-53.23421842	-47.94653794	-50.64415757	-23.39017199
+0.65	13.59825301	14.31901957	15.02869622	13.92950367	16.06405419	11.45108024	12.05376867	7.214418914
-0.7	-50.4857534	-48.13112422	-51.39654716	-48.19261859	-57.48931708	-52.75932935	-55.74386557	-25.24403967
+0.7	10.38073498	11.3212877	11.82630915	10.91917271	12.47172206	8.358954559	8.852032165	5.60966416
-0.75	-53.57365789	-50.82011795	-54.31125784	-50.95251273	-60.87408593	-56.62460507	-59.84004965	-26.71778283
+0.75	7.905484291	8.866766867	9.207130507	8.471078749	9.554216339	6.614713009	6.99906141	4.359128805
-0.8	-57.09524594	-53.87091461	-57.62115754	-54.08844957	-64.72630867	-61.07133559	-64.55303548	-28.39381504
+0.8	5.350048996	6.196050552	6.361049014	5.80594754	6.387614334	4.627071467	4.887944304	2.96968199
-0.85	-59.865273	-56.25630031	-60.2118738	-56.54468878	-67.74927098	-64.60383978	-68.29759968	-29.70790327
+0.85	3.399347977	4.148089728	4.182098926	3.858169086	4.124143375	3.133587251	3.302068849	2.157988944
-0.9	-62.97722942	-58.91733483	-63.10559132	-59.29041122	-71.13601853	-68.6179786	-72.55341892	-31.17860088
+0.9	1.813061833	2.228784061	2.228784061	1.949895486	2.021142147	1.976809523	2.091474301	1.291945734
-0.95	-65.38241412	-60.95672598	-65.32666605	-61.39995173	-73.74500008	-71.7622679	-75.88765847	-32.31011693
+0.95	1.763562976	1.624308082	1.746351268	1.64568402	1.990325114	1.976809523	2.091474301	0.855390899
-1	-68.02838072	-63.17713462	-67.74942503	-63.7038121	-76.60366923	-75.27728322	-79.61586572	-33.54797534
+1	1.76E+00	1.624308082	1.746351268	1.64568402	1.990325114	1.976809523	2.091474301	0.855390899
(Span 2) -2	-6.209503878	-5.719187382	-6.148901532	-5.794452142	-7.007933078	-6.960344729	-7.364079342	-3.011830582
+2	68.29734152	63.23966454	67.84502005	63.81227008	76.79544049	76.10536999	80.50223904	33.60882803
-2.05	-6.209503878	-5.719187382	-6.148901532	-5.794452142	-7.007933078	-6.960344729	-7.364079342	-3.011830582
+2.05	65.49785313	60.88465701	65.27532414	61.36863689	73.76348625	72.42627008	76.60078001	32.2972022
-2.1	-6.209503878	-5.719187382	-6.148901532	-5.794452142	-7.007933078	-6.960344729	-7.364079342	-3.011830582
+2.1	62.38574195	58.22566026	62.38222359	58.62250514	70.37323667	68.43549867	72.37028713	30.82748271
-2.15	-6.209503878	-5.719187382	-6.148901532	-5.794452142	-7.007933078	-6.960344729	-7.364079342	-3.011830582
+2.15	59.00103605	55.29873981	59.20455823	55.61050673	66.66909444	64.18020703	67.86068525	29.21916592
-2.2	-7.430079389	-8.320573742	-8.650238559	-7.965350373	-9.006621406	-6.960344729	-7.364079342	-4.127288514
+2.2	55.11753871	51.90641948	55.52826807	52.12992655	62.40245929	59.38104202	62.77600957	27.36432372
-2.25	-10.62778662	-11.37640543	-11.91386781	-11.02591994	-12.65814122	-8.721686939	-9.180723093	-5.726564444

+2.25	51.29549335	48.53923993	51.88469738	48.6836859	58.18930012	54.72790094	57.84716719	25.53094452
-2.3	-14.08560685	-14.64474037	-15.41031508	-14.30844134	-16.58706322	-12.16596833	-12.80925372	-7.446298753
+2.3	47.32378959	45.01490218	48.07584796	45.08403665	53.79856086	49.95514711	52.79264724	23.61885681
-2.35	-18.03367764	-18.34135942	-19.37073087	-18.0301359	-21.05404058	-16.41934647	-17.30537116	-9.400390672
+2.35	42.94777999	41.10541488	43.85566783	41.09865422	48.94758739	44.76232885	47.29435842	21.50500434
-2.4	-21.90321025	-21.93515185	-23.22589092	-21.65594294	-25.41640384	-20.6660252	-21.79589831	-11.307617
+2.4	38.7933806	37.37026706	39.82801228	37.29775602	44.33024747	39.71809562	41.95445576	19.49190924
-2.45	-25.91013045	-25.63067795	-27.19457862	-25.39122443	-29.91983315	-25.13171621	-26.51929207	-13.27541353
+2.45	34.61225126	33.57194678	35.73758422	33.36437476	39.58011219	34.87469339	36.82814945	17.45999195
-2.5	-30.31031117	-29.66208241	-31.5285917	-29.47320517	-34.85106449	-30.10581852	-31.78172542	-15.42882664
+2.5	30.06737428	29.3915174	31.23757265	29.19901598	34.51952448	29.7688229	31.42515636	15.28421272
-2.55	-34.4747064	-33.54025217	-35.70591644	-33.33849116	-39.55430486	-34.8751039	-36.8285839	-17.4600594
+2.55	25.96058992	25.63032618	27.19420068	25.39087723	29.91941436	25.13131693	26.51886971	13.27534733
-2.6	-38.65375552	-37.3706126	-39.82838451	-37.29810727	-44.33067347	-39.71852134	-41.95490637	-19.4919764
+2.6	21.95080565	21.9348092	23.22552313	21.6555969	25.41598706	20.66564438	21.79549557	11.30755373
-2.65	-42.85629177	-41.10575357	-43.85603328	-41.09900755	-48.94801712	-44.76274265	-47.29479652	-21.50506964
+2.65	18.07804361	18.34103564	19.37038376	18.02980984	21.05364887	16.4189957	17.3050003	9.400328901
-2.7	-47.32856361	-45.01524101	-48.07621381	-45.08437406	-53.7989717	-49.95556922	-52.79309424	-23.61892151
+2.7	14.12618711	14.64442449	15.40997694	14.3081313	16.58669172	12.16563561	12.80890207	7.446240464
-2.75	-51.29820143	-48.53955604	-51.88503925	-48.68400849	-58.18969391	-54.72831339	-57.84760402	-25.53100552
+2.75	10.66458302	11.37610889	11.91355087	11.02562222	12.65778538	8.721404395	9.180425679	5.726509801
-2.8	-55.11837305	-51.90672034	-55.5285937	-52.13024284	-62.40284651	-59.38144244	-62.77643376	-27.36438254
+2.8	7.462935472	8.320304858	8.649951726	7.965081399	9.006301083	6.960344397	7.364079412	4.127237865
-2.85	-59.00015533	-55.29902698	-59.20486953	-55.61079529	-66.66944862	-64.18058985	-67.86109088	-29.21922105
+2.85	6.209509086	5.71918783	6.148901041	5.794452952	7.007933289	6.960344397	7.364079412	3.011830797
-2.9	-62.38359718	-58.22591784	-62.38250347	-58.62277729	-70.37357198	-68.43586022	-72.37067035	-30.82753265
+2.9	6.209509086	5.71918783	6.148901041	5.794452952	7.007933289	6.960344397	7.364079412	3.011830797
-2.95	-65.49484916	-60.88488838	-65.27557625	-61.36887628	-73.76378251	-72.42660736	-76.60113762	-32.29724763
+2.95	6.209509086	5.71918783	6.148901041	5.794452952	7.007933289	6.960344397	7.364079412	3.011830797
-3	-68.48088003	-63.39549716	-68.01539034	-63.97448452	-76.99738948	-76.35529709	-80.76732987	-33.6959906
+3	6.209509086	5.71918783	6.148901041	5.794452952	7.007933289	6.960344397	7.364079412	3.011830797
(Span 3) -4	-1.76E+00	-1.624308209	-1.746351128	-1.64568425	-1.990325174	-1.976809428	-2.091474321	-0.85539096
+4	67.83384397	63.00166001	67.55774542	63.52140817	76.37690032	74.99521141	79.31664708	33.44995744
-3.05	-1.76E+00	-1.624308209	-1.746351128	-1.64568425	-1.990325174	-1.976809428	-2.091474321	-0.85539096
+3.05	65.62968865	61.15113585	65.5385822	61.60134302	73.99445643	72.06581083	76.20957363	32.41831892
-3.1	-1.909076691	-2.373119231	-2.373119231	-2.101117637	-2.187683393	-1.976809428	-2.091474321	-1.356353718
+3.1	62.74446883	58.70403825	62.87347767	59.07006304	70.86388369	68.29287366	72.20870853	31.06059777
-3.15	-3.20014651	-3.952796549	-3.974508357	-3.691502086	-3.940358213	-2.991070471	-3.15075683	-2.077728184
+3.15	60.15133253	56.48633	60.46185334	56.78176972	68.04136211	64.94754228	68.66196415	29.83492726
-3.2	-5.53806528	-6.410184089	-6.58907057	-6.01936	-6.640811087	-4.783126215	-5.0536741	-3.080702171
+3.2	56.82756178	53.62402812	57.35316738	53.83446758	64.41403252	60.70874961	64.16871199	28.2581194
-3.25	-7.665336027	-8.635966821	-8.961005444	-8.240492222	-9.27987599	-6.44637693	-6.820248896	-4.238665243
+3.25	53.89247754	51.08151931	54.59472572	51.22099708	61.20361665	57.00292903	60.24099961	26.86133627
-3.3	-10.61915971	-11.5692632	-12.09107641	-11.16802541	-12.76838094	-8.539339778	-9.043678693	-5.739209333
+3.3	50.18660745	47.8549084	51.09726878	47.90931032	57.14212049	52.3648134	55.32580662	25.09294352
-3.35	-13.29805055	-14.05693132	-14.74857977	-13.66668914	-15.82832842	-11.13769192	-11.72388623	-7.076595085
+3.35	46.92713625	45.02998583	48.03765739	45.01370284	53.59598102	48.353946	51.07582989	23.5479635
-3.4	-16.71768741	-17.29146005	-18.20718646	-16.91262839	-19.63190433	-14.63123833	-15.4088402	-8.778696918
+3.4	42.89622487	41.48989575	44.20616898	41.38925918	49.16289697	43.38303858	45.80914082	21.61549531
-3.45	-19.72676905	-20.12246931	-21.23683984	-19.75753311	-23.0395778	-17.85949732	-18.82123834	-10.27258815
+3.45	39.41915555	38.4249473	40.89103612	38.25457409	45.33322654	39.12256852	41.29560534	19.94523686
-3.5	-23.51443891	-23.66925326	-25.03528318	-23.32609803	-27.32003125	-21.9676244	-23.16454563	-12.14873637
+3.5	35.11961119	34.62227716	36.78033086	34.36903921	40.5911803	33.88540081	35.74786532	17.87617484
-3.55	-26.80674942	-26.73929698	-28.32532622	-26.41835581	-31.03378615	-25.57274585	-26.97670102	-13.7762154
+3.55	31.4421423	31.35969062	33.25532517	31.03829973	36.53012818	29.43076983	31.0294741	16.10355556
-3.6	-30.90611317	-30.54750779	-32.40886772	-30.25787847	-35.65018541	-30.09984363	-31.76449604	-15.79892931
+3.6	26.93032152	27.34526618	28.92013839	26.94332229	31.54172431	23.99387401	25.27112897	13.92541012

-3.65	**-34.43468485**	**-33.8142002**	**-35.9136543**	**-33.55443129**	**-39.61783046**	**-34.0263842**	**-35.91770398**	**-17.53708009**
+3.65	**23.09946019**	**23.9274278**	**25.23090634**	**23.45954699**	**27.30143398**	**19.6573511**	**20.69194853**	**12.07334647**
-3.7	**-38.78938509**	**-37.83293518**	**-40.22747578**	**-37.61328172**	**-44.50759355**	**-38.90592199**	**-41.07954247**	**-19.67884859**
+3.7	**18.43172169**	**19.75215427**	**20.7260592**	**19.20679648**	**22.1293021**	**14.69003257**	**15.46319218**	**9.813618138**
-3.75	**-42.50727678**	**-41.25388733**	**-43.90135634**	**-41.07108859**	**-48.67695835**	**-43.09843845**	**-45.51509834**	**-21.5047529**
+3.75	**14.58194113**	**16.2214509**	**16.91824827**	**15.61304577**	**17.76196819**	**11.97856321**	**12.68218677**	**7.905027869**
-3.8	**-47.06095612**	**-45.43232454**	**-48.39072646**	**-45.2976412**	**-53.77750856**	**-48.26388461**	**-50.98053506**	**-23.73807621**
+3.8	**10.31314537**	**11.93614949**	**12.29847114**	**11.25414968**	**12.46868697**	**9.272694848**	**9.813016912**	**5.591228971**
-3.85	**-50.92115843**	**-48.96512859**	**-52.18803095**	**-48.87363959**	**-58.09639571**	**-52.66693456**	**-55.63973518**	**-25.62881726**
+3.85	**8.138951156**	**8.334967265**	**8.41772798**	**7.798059027**	**9.141384572**	**9.272694848**	**9.813016912**	**4.23461134**
-3.9	**-55.61745786**	**-53.25238224**	**-56.79814968**	**-53.21622464**	**-63.34510337**	**-58.05175687**	**-61.33832424**	**-27.92618234**
+3.9	**8.138951156**	**7.450274318**	**8.01419931**	**7.553490933**	**9.141384572**	**9.272694848**	**9.813016912**	**3.952200994**
-3.95	**-59.57302808**	**-56.85469502**	**-60.67327773**	**-56.86739632**	**-67.76136963**	**-62.60989729**	**-66.1624642**	**-29.85884299**
+3.95	**8.138951156**	**7.450274318**	**8.01419931**	**7.553490933**	**9.141384572**	**9.272694848**	**9.813016912**	**3.952200994**
-5	**-64.35559094**	**-61.19990069**	**-65.34936797**	**-61.27436509**	**-73.09563023**	**-68.14756387**	**-72.02376008**	**-32.19277258**
+5	**8.138951156**	**7.450274318**	**8.01419931**	**7.553490933**	**9.141384572**	**9.272694848**	**9.813016912**	**3.952200994**

3-Span: Shear (Max and Min) Raw Data Results - 110' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.138918218	-17.0281687	-18.75567652	-10.75865125	-12.99142052	-13.95974386
End Shear	64.51180601	117.4819602	124.6732362	78.31269369	94.61647654	99.66038793
-0.05	-8.138918218	-17.0281687	-18.75567652	-10.75865125	-12.99142052	-13.95974386
+0.05	59.95418522	107.785013	114.2167032	72.16432005	87.22242892	91.70274087
-0.1	-8.138918218	-17.0281687	-18.75567652	-10.75865125	-12.99142052	-13.95974386
+0.1	55.20786794	97.72982042	103.1698279	65.77975505	79.54182698	83.4410094
-0.15	-8.138918218	-17.0281687	-18.75567652	-10.75865125	-12.99142052	-13.95974386
+0.15	51.36342604	89.51394435	94.16173213	60.54788573	73.24586578	76.67731267
-0.2	-10.68152158	-17.0281687	-18.75567652	-10.8834035	-12.99142052	-13.95974386
+0.2	46.72832573	79.88328192	83.62512013	54.39613125	65.84036154	68.73237594
-0.25	-14.2073198	-17.0281687	-18.75567652	-13.90239924	-15.31805306	-16.29399115
+0.25	42.93077474	72.07337078	75.10038516	49.39088478	59.81278523	62.27508492
-0.3	-18.83913409	-22.38112265	-23.38097057	-17.48232326	-20.01973626	-20.86789375
+0.3	38.46628949	62.99248895	65.21356802	43.55021505	52.77630807	54.74870971
-0.35	-22.72889692	-28.14331823	-29.82265531	-20.78036183	-25.63005121	-25.14727235
+0.35	34.83443867	55.69291081	57.288463	38.83681929	47.09539096	48.68260874
-0.4	-27.36642933	-36.395703	-37.75377396	-26.65562421	-32.68110967	-32.88252728
+0.4	30.5970198	47.28705487	48.19096607	33.38550261	40.52186234	41.67656483
-0.45	-31.08518877	-43.90466949	-44.26660601	-31.94165756	-39.02319288	-39.40083105
+0.45	27.17791344	40.60218419	40.98176086	29.02919492	35.26588806	36.08646565
-0.5	-35.49752513	-53.43428265	-53.78521994	-38.25353172	-46.59391377	-47.64307839
+0.5	23.22400935	32.99660119	33.22837297	24.04551135	29.24924479	29.70250194
-0.55	-39.08029101	-61.80815363	-62.92388999	-43.41339367	-52.78102683	-54.38747688
+0.55	20.06468493	27.27352142	27.57767151	20.11150611	24.49647168	24.67320508
-0.6	-43.25207287	-71.65850649	-73.98235233	-49.46502088	-60.03517627	-62.30555495
+0.6	16.45075067	21.08709179	21.85146	15.7778637	19.16571942	19.24002637
-0.65	-46.61089098	-79.67659877	-83.00164034	-54.37539164	-65.91933752	-68.73741778
+0.65	13.59825301	16.60209878	17.37388076	12.51521407	15.25961291	15.03427182
-0.7	-50.4857534	-89.03736695	-93.55352448	-60.08849047	-72.76297817	-76.22958533
+0.7	10.38073498	12.14981246	12.5202431	9.898877839	11.0883385	11.65968917
-0.75	-53.57365789	-96.59529031	-102.0925222	-64.68414201	-78.26591368	-82.26410056
+0.75	7.905484291	8.953874865	9.139652044	7.849478418	8.598510281	9.110513936
-0.8	-57.09524594	-105.3412471	-111.998294	-69.98044063	-84.60511937	-89.22858427
+0.8	5.350048996	6.007146006	5.829961444	5.524012703	6.090357871	6.21367271
-0.85	-59.865273	-112.3346195	-119.9407286	-74.1961447	-89.64855575	-94.78096463
+0.85	3.399347977	4.085627983	3.934315752	3.755810426	4.162269587	4.161824556
-0.9	-62.97722942	-120.3405046	-129.0608659	-78.99736872	-95.38939717	-101.1160043
+0.9	1.813061833	3.586783135	3.934315752	2.278244667	2.759301076	2.953569824
-0.95	-65.38241412	-126.664963	-136.2904702	-82.76789601	-99.89505921	-106.1014556
+0.95	1.763562976	3.586783135	3.934315752	2.278244667	2.759301076	2.953569824
-1	-68.02838072	-133.8055272	-144.4854463	-86.99577019	-104.9436061	-111.7052817
+1	1.76E+00	3.586783135	3.934315752	2.278244667	2.759301076	2.953569824
(Span 2) -2	-6.209503878	-12.62906045	-13.85272275	-8.021697572	-9.715496885	-10.39951706
+2	68.29734152	136.2730455	147.5888483	88.14334322	106.2662602	113.3575255
-2.05	-6.209503878	-12.62906045	-13.85272275	-8.021697572	-9.715496885	-10.39951706
+2.05	65.49785313	128.8830319	139.1449973	83.7374945	100.9968033	107.527994
-2.1	-6.209503878	-12.62906045	-13.85272275	-8.021697572	-9.715496885	-10.39951706
+2.1	62.38574195	120.9889898	130.1838344	78.98038351	95.30106798	101.2575883
-2.15	-6.209503878	-12.62906045	-13.85272275	-8.021697572	-9.715496885	-10.39951706
+2.15	59.00103605	112.6796916	120.8042863	73.92751716	89.245664	94.61844632
-2.2	-7.430079389	-12.62906045	-13.85272275	-8.021697572	-9.715496885	-10.39951706
+2.2	55.11753871	103.4169873	110.4028737	68.24858785	82.43427234	87.17790398
-2.25	-10.62778662	-12.66995309	-13.85272275	-9.916504311	-11.59532904	-11.75588748

+2.25	51.29549335	94.5300476	100.4713691	62.75963681	75.84570023	80.00451842
-2.3	-14.08560685	-17.85382996	-18.69683715	-13.35272258	-16.31467552	-16.30451515
+2.3	47.32378959	85.50062291	90.42532345	57.14540221	69.10202516	72.6839994
-2.35	-18.03367764	-24.65590621	-25.00458864	-18.1503678	-22.12083323	-22.29566455
+2.35	42.94777999	75.54076482	79.64700344	51.01295514	61.74355544	64.62566145
-2.4	-21.90321025	-31.92170182	-32.09205239	-23.03482528	-28.02296643	-28.55419713
+2.4	38.7933806	66.40598172	69.67839517	45.15398395	54.68283395	57.10048059
-2.45	-25.91013045	-39.86208351	-40.67137712	-28.1923919	-34.2480679	-35.18354449
+2.45	34.61225126	57.50052547	59.89909362	39.50459979	47.88218004	49.78328982
-2.5	-30.31031117	-48.81802993	-50.40815353	-33.95835831	-41.20053676	-42.61594197
+2.5	30.06737428	48.20791752	49.7437239	33.56707849	40.72894796	42.11096432
-2.55	-34.4747064	-57.50127543	-59.8992274	-39.50510185	-47.88278421	-49.78392302
+2.55	25.96058992	39.86138783	40.67125456	28.19191902	34.24749749	35.18296493
-2.6	-38.65375552	-66.40676832	-69.67853327	-45.15449281	-54.68344606	-57.10110877
+2.6	21.95080565	31.92104702	32.12352288	23.03437549	28.022423	28.55363388
-2.65	-42.85629177	-75.51773396	-79.64714074	-50.98531244	-61.71914419	-64.60248718
+2.65	18.07804361	24.65534476	25.01264477	18.14994527	22.12032219	22.29514998
-2.7	-47.32856361	-85.50141635	-90.42546413	-57.14589773	-69.10262017	-72.68464479
+2.7	14.12618711	17.85330126	18.69675749	13.35236701	16.314245	16.30406529
-2.75	-51.29820143	-94.53081063	-100.4715085	-62.76013379	-75.84629664	-80.00513578
+2.75	10.66458302	12.66957604	13.85272235	9.916262823	11.59492657	11.75559301
-2.8	-55.11837305	-103.4177365	-110.4030103	-68.24907267	-82.43485401	-87.17850777
+2.8	7.462935472	12.62906115	13.85272235	8.021697605	9.715497326	10.39951654
-2.85	-59.00015533	-112.6804159	-120.8044206	-73.92798287	-89.24622206	-94.61904245
+2.85	6.209509086	12.62906115	13.85272235	8.021697605	9.715497326	10.39951654
-2.9	-62.38359718	-120.9896823	-130.1839633	-78.9808143	-95.3015842	-101.2581409
+2.9	6.209509086	12.62906115	13.85272235	8.021697605	9.715497326	10.39951654
-2.95	-65.49484916	-128.8836837	-139.145119	-83.73789626	-100.9972841	-107.5285109
+2.95	6.209509086	12.62906115	13.85272235	8.021697605	9.715497326	10.39951654
-3	-68.48088003	-136.7798769	-148.1696742	-88.4435162	-106.6250297	-113.7556264
+3	6.209509086	12.62906115	13.85272235	8.021697605	9.715497326	10.39951654
(Span 3) -4	-1.76E+00	-3.586783335	-3.934315642	-2.278244677	-2.759301202	-2.953569675
+4	67.83384397	133.2293254	143.8233729	86.65591785	104.5379498	111.2542139
-3.05	-1.76E+00	-3.586783335	-3.934315642	-2.278244677	-2.759301202	-2.953569675
+3.05	65.62968865	127.2784214	136.9937573	83.13239523	100.3304745	106.584003
-3.1	-1.909076691	-3.586783335	-3.934315642	-2.278244677	-2.759301202	-2.953569675
+3.1	62.74446883	119.6894826	128.3187531	78.60802698	94.92399808	100.601791
-3.15	-3.20014651	-3.902161115	-3.934315642	-3.588084276	-3.948579852	-3.977679539
+3.15	60.15133253	113.0174864	120.7182173	74.60674106	90.13964357	95.3222494
-3.2	-5.53806528	-6.207818804	-6.069754789	-5.707873939	-6.291678362	-6.440742212
+3.2	56.82756178	104.6258557	111.187816	69.54816625	84.08784361	88.65974923
-3.25	-7.665336027	-8.685266954	-8.832306147	-7.651646674	-8.38198002	-8.864805192
+3.25	53.89247754	97.33713826	102.9325365	65.1343208	78.80485591	82.85567608
-3.3	-10.61915971	-12.4927996	-12.88506705	-10.11078097	-11.38123678	-11.92363914
+3.3	50.18660745	88.26806739	92.68626273	59.61981435	72.20166314	75.61458301
-3.35	-13.29805055	-16.18460179	-16.94161442	-12.23540238	-14.88314151	-14.64334952
+3.35	46.92713625	80.4670014	83.89261013	54.85860977	66.49828338	69.37077789
-3.4	-16.71768741	-21.58586982	-22.31435387	-16.11248874	-19.57020769	-19.67609986
+3.4	42.89622487	70.84578504	73.06998968	48.9664446	59.43762509	61.6529261
-3.45	-19.72676905	-26.74160376	-27.08648844	-19.73010761	-24.03551135	-24.24734923
+3.45	39.41915555	62.63674468	63.85412592	43.92316853	53.39219596	55.05414879
-3.5	-23.51443891	-33.61297834	-33.8150296	-24.45064577	-29.73851744	-30.22094768
+3.5	35.11961119	52.58853416	53.02898486	37.73162016	45.96800299	46.96125998
-3.55	-26.80674942	-39.95139442	-40.28058857	-28.60397693	-34.75270085	-35.54126909
+3.55	31.4421423	44.64929588	45.24678199	32.47147202	39.65876618	40.09239359
-3.6	-30.90611317	-47.97278457	-48.93111547	-33.83128023	-41.0595504	-42.24901841
+3.6	26.93032152	35.63891865	37.09723181	26.17298031	32.10196537	32.23594022

-3.65	**-34.43468485**	**-54.97808817**	**-56.51278611**	**-38.37430277**	**-46.5378009**	**-48.08773541**
+3.65	**23.09946019**	**28.79472633**	**30.48763746**	**21.26796289**	**26.21532369**	**25.73929152**
-3.7	**-38.78938509**	**-63.73716001**	**-66.02238913**	**-44.03009846**	**-53.35456621**	**-55.36671637**
+3.7	**18.43172169**	**21.83378278**	**22.79471394**	**17.18570079**	**19.56170617**	**20.48873081**
-3.75	**-42.50727678**	**-71.30498032**	**-74.26187368**	**-48.89761182**	**-59.21864384**	**-61.63902995**
+3.75	**14.58194113**	**17.02816953**	**18.75567676**	**14.20229381**	**15.64527013**	**16.6769702**
-3.8	**-47.06095612**	**-80.67644822**	**-84.49103423**	**-54.9036265**	**-66.45139714**	**-69.3874086**
+3.8	**10.31314537**	**17.02816953**	**18.75567676**	**10.75865194**	**12.99142176**	**13.95974417**
-3.85	**-50.92115843**	**-88.70241022**	**-93.2719617**	**-60.03034313**	**-72.62295593**	**-76.00851634**
+3.85	**8.138951156**	**17.02816953**	**18.75567676**	**10.75865194**	**12.99142176**	**13.95974417**
-3.9	**-55.61745786**	**-98.5610299**	**-104.0811523**	**-66.3083002**	**-80.17776557**	**-84.12461078**
+3.9	**8.138951156**	**17.02816953**	**18.75567676**	**10.75865194**	**12.99142176**	**13.95974417**
-3.95	**-59.57302808**	**-106.9407627**	**-113.2873572**	**-71.62902187**	**-86.57856803**	**-91.0097147**
+3.95	**8.138951156**	**17.02816953**	**18.75567676**	**10.75865194**	**12.99142176**	**13.95974417**
-5	**-64.35559094**	**-117.1612289**	**-124.5370561**	**-78.10064721**	**-94.36150468**	**-99.39168128**
+5	**8.138951156**	**17.02816953**	**18.75567676**	**10.75865194**	**12.99142176**	**13.95974417**

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-44.764050**	**-31.282708**	**-43.883880**	**-46.269802**	**-53.503036**	**-25.110116**	**-33.939691**	**-38.802998**	**-43.429991**	**-48.272121**
+0.05	**329.748019**	**236.124699**	**302.495480**	**298.703768**	**289.022793**	**190.525177**	**256.995633**	**289.481653**	**314.212306**	**338.666426**
-0.1	**-89.528100**	**-62.565416**	**-87.767761**	**-92.539605**	**-107.006071**	**-50.220231**	**-67.879382**	**-77.605996**	**-86.859983**	**-96.544241**
+0.1	**612.253414**	**439.272301**	**558.242305**	**547.600509**	**525.985802**	**354.682284**	**478.244830**	**538.065012**	**583.986865**	**631.313331**
-0.15	**-134.292151**	**-93.848125**	**-131.651641**	**-138.809407**	**-160.509107**	**-75.330347**	**-101.819073**	**-116.408994**	**-130.289974**	**-144.816362**
+0.15	**847.821137**	**609.458503**	**767.400748**	**747.235241**	**719.617100**	**492.410153**	**663.818459**	**745.856590**	**822.314273**	**886.553173**
-0.2	**-179.056201**	**-125.130833**	**-175.535522**	**-185.079209**	**-214.012143**	**-100.440463**	**-135.758765**	**-155.211992**	**-173.719966**	**-193.088482**
+0.2	**1037.254861**	**747.332927**	**931.310865**	**912.979044**	**872.186489**	**604.212753**	**814.401015**	**913.691872**	**1016.272903**	**1100.752248**
-0.25	**-223.820251**	**-156.413541**	**-219.419402**	**-231.349012**	**-267.515179**	**-125.550578**	**-169.698456**	**-194.014989**	**-217.149957**	**-241.360603**
+0.25	**1181.863117**	**853.742385**	**1062.280117**	**1034.600319**	**985.985817**	**690.751898**	**930.890019**	**1046.695636**	**1166.405178**	**1274.242576**
-0.3	**-268.584301**	**-187.696249**	**-263.303283**	**-277.618814**	**-321.018214**	**-150.660694**	**-203.638147**	**-232.817987**	**-260.579948**	**-289.632723**
+0.3	**1285.236027**	**929.730992**	**1153.935013**	**1118.569793**	**1081.795409**	**752.847181**	**1020.567291**	**1150.049783**	**1274.140972**	**1400.489755**
-0.35	**-313.348351**	**-218.978958**	**-307.187163**	**-323.888616**	**-374.521250**	**-175.770810**	**-237.577838**	**-271.620985**	**-304.009940**	**-337.904844**
+0.35	**1361.008784**	**984.132225**	**1205.534702**	**1183.605438**	**1144.691027**	**791.475975**	**1082.246314**	**1217.214807**	**1349.965110**	**1480.983558**
-0.4	**-358.112402**	**-250.261666**	**-351.071044**	**-370.158419**	**-428.024286**	**-200.880925**	**-271.517529**	**-310.423983**	**-347.439931**	**-386.176965**
+0.4	**1396.197993**	**1011.491238**	**1226.079893**	**1223.702760**	**1176.655053**	**807.773597**	**1113.432020**	**1249.219020**	**1389.973685**	**1522.281769**
-0.45	**-402.876452**	**-281.544374**	**-394.954924**	**-416.428221**	**-481.527322**	**-225.991041**	**-305.457220**	**-349.226981**	**-390.869923**	**-434.449085**
+0.45	**1393.068130**	**1012.031370**	**1213.495878**	**1229.137035**	**1191.063840**	**803.032973**	**1115.326037**	**1247.970207**	**1392.853621**	**1529.859856**
-0.5	**-447.640502**	**-312.827082**	**-438.838805**	**-462.698023**	**-535.030357**	**-251.101157**	**-339.396911**	**-388.029979**	**-434.299914**	**-482.721206**
+0.5	**1372.139689**	**996.076309**	**1196.527482**	**1205.031823**	**1167.643949**	**792.316202**	**1096.908305**	**1228.138143**	**1369.297839**	**1501.956327**
-0.55	**-492.404552**	**-344.109791**	**-482.722685**	**-508.967826**	**-588.533393**	**-276.211272**	**-373.336602**	**-426.832977**	**-477.729905**	**-530.993326**
+0.55	**1321.577640**	**958.023292**	**1160.716937**	**1154.369928**	**1117.263567**	**766.042639**	**1054.388889**	**1182.846112**	**1315.163307**	**1438.063652**
-0.6	**-537.168602**	**-375.392499**	**-526.606566**	**-555.237628**	**-642.036429**	**-301.321388**	**-407.276294**	**-465.635975**	**-521.159897**	**-579.265447**
+0.6	**1237.366279**	**896.955079**	**1093.240867**	**1071.897236**	**1038.064827**	**720.668841**	**987.160981**	**1108.698199**	**1229.272111**	**1346.886781**
-0.65	**-581.932653**	**-406.675207**	**-570.490446**	**-601.507430**	**-695.539464**	**-326.431504**	**-441.215985**	**-504.438973**	**-564.589888**	**-627.537568**
+0.65	**1122.554521**	**815.025754**	**996.761080**	**966.472128**	**945.153395**	**657.853223**	**897.568139**	**1008.335562**	**1114.640047**	**1223.517849**
-0.7	**-626.696703**	**-437.957915**	**-614.374327**	**-647.777233**	**-749.042500**	**-351.541619**	**-475.155676**	**-543.241970**	**-608.019880**	**-675.809688**
+0.7	**980.566458**	**715.178072**	**868.937136**	**831.012480**	**818.387009**	**579.412187**	**788.167514**	**884.644316**	**976.455526**	**1070.629831**
-0.75	**-671.460753**	**-469.240624**	**-658.258207**	**-694.047035**	**-802.545536**	**-376.651735**	**-509.095367**	**-582.044968**	**-651.449871**	**-724.081809**
+0.75	**816.874180**	**600.735861**	**713.111476**	**676.302967**	**659.436043**	**487.320039**	**661.729016**	**740.755022**	**817.067565**	**892.103434**
-0.8	**-716.224803**	**-500.523332**	**-702.142088**	**-740.316838**	**-856.048572**	**-401.761851**	**-543.035058**	**-620.847966**	**-694.879862**	**-772.353929**
+0.8	**632.785427**	**471.641288**	**532.915788**	**491.462674**	**482.208592**	**383.708432**	**521.235633**	**580.043176**	**637.623392**	**692.125364**
-0.85	**-760.988853**	**-531.806040**	**-746.025968**	**-786.586640**	**-916.836934**	**-426.871966**	**-576.974749**	**-659.650964**	**-738.309854**	**-820.626050**
+0.85	**430.421862**	**330.736912**	**332.270076**	**289.964228**	**292.100849**	**270.867296**	**369.883417**	**406.128507**	**442.095423**	**475.187658**
-0.9	**-805.752904**	**-563.088748**	**-789.909849**	**-832.856442**	**-998.423484**	**-451.982082**	**-610.914440**	**-698.453962**	**-781.739845**	**-868.898170**
+0.9	**227.458001**	**181.679931**	**180.632001**	**174.351428**	**187.802087**	**151.243931**	**211.081382**	**222.875631**	**241.597482**	**253.058542**
-0.95	**-850.516954**	**-594.371457**	**-833.793729**	**-879.126245**	**-1195.785365**	**-477.092198**	**-644.854132**	**-737.256960**	**-825.169837**	**-917.170291**
+0.95	**184.292331**	**129.149211**	**177.667270**	**184.037618**	**184.629866**	**103.824174**	**140.402357**	**160.218199**	**179.200012**	**198.895842**
-1	**-895.281008**	**-625.654160**	**-877.677609**	**-925.396054**	**-1524.572487**	**-502.202300**	**-678.793819**	**-776.059955**	**-868.599824**	**-965.442411**
+1	**193.991934**	**135.946540**	**187.018178**	**193.723808**	**190.427578**	**109.288603**	**147.791955**	**168.650734**	**188.631590**	**209.364045**
(Span 2) -2	**-895.281008**	**-625.654160**	**-877.677609**	**-925.396054**	**-1524.572487**	**-502.202300**	**-678.793819**	**-776.059955**	**-868.599824**	**-965.442411**
+2	**193.991934**	**135.946540**	**187.018178**	**193.723808**	**190.427578**	**109.288603**	**147.791955**	**168.650734**	**188.631590**	**209.364045**
-2.05	**-649.569735**	**-455.207997**	**-626.218032**	**-648.671351**	**-1095.822940**	**-365.945641**	**-494.871606**	**-564.715825**	**-631.620388**	**-701.041781**
+2.05	**149.593982**	**104.833143**	**144.216272**	**149.387219**	**151.943908**	**84.276272**	**113.967557**	**130.052492**	**145.460430**	**161.447954**
-2.1	**-605.171745**	**-424.094600**	**-583.416126**	**-604.334765**	**-749.440872**	**-340.933313**	**-461.047208**	**-526.117585**	**-588.449232**	**-653.125685**
+2.1	**279.230862**	**229.539492**	**215.794040**	**184.046752**	**185.437920**	**184.299781**	**263.794280**	**279.801976**	**302.968815**	**318.880635**
-2.15	**-560.773755**	**-392.981204**	**-540.614220**	**-559.998178**	**-569.682306**	**-315.920984**	**-427.222810**	**-487.519346**	**-545.278075**	**-605.209588**
+2.15	**532.985366**	**404.241266**	**416.151831**	**363.830884**	**344.377852**	**326.907989**	**452.775653**	**498.158671**	**544.779506**	**587.120285**
-2.2	**-516.375766**	**-361.867807**	**-497.812315**	**-515.661592**	**-507.971272**	**-290.908656**	**-393.398412**	**-448.921106**	**-502.106919**	**-557.293492**
+2.2	**766.377602**	**566.201274**	**649.821747**	**600.305676**	**559.002652**	**458.218357**	**627.528963**	**699.486735**	**769.485039**	**839.408038**

-2.25	-471.977776	-330.754411	-455.010409	-471.325006	-469.036684	-265.896327	-359.574013	-410.322867	-458.935763	-509.377396
+2.25	973.075152	711.780394	853.091820	816.835687	805.756274	573.519464	785.247589	879.026490	971.747693	1063.421975
-2.3	-427.579786	-299.641014	-412.208504	-426.988419	-434.542886	-240.883998	-325.749615	-371.724627	-415.764606	-461.461299
+2.3	1150.550650	835.954035	1021.856806	999.379999	1014.568812	671.413396	920.373822	1033.119570	1144.608526	1253.388529
-2.35	-383.181796	-268.527618	-369.406598	-382.651833	-400.049089	-215.871670	-291.925217	-333.126387	-372.593450	-413.545203
+2.35	1292.027716	934.523991	1150.414597	1139.952855	1177.591528	749.764143	1028.070578	1155.332099	1282.522007	1404.821401
-2.4	-338.783806	-237.414221	-326.604692	-338.315247	-365.555291	-190.859341	-258.100819	-294.528148	-329.422294	-365.629107
+2.4	1390.616556	1005.406189	1237.469027	1245.090736	1282.113753	803.434803	1104.694884	1241.703227	1381.618954	1514.619946
-2.45	-294.385816	-206.300825	-283.802787	-293.978661	-331.061494	-165.847013	-224.276421	-255.929908	-286.251137	-317.713010
+2.45	1447.182974	1047.756832	1286.767789	1308.615709	1347.486966	833.306009	1151.638756	1292.054200	1441.399608	1583.320193
-2.5	-249.987826	-175.187429	-241.000881	-249.642086	-296.567696	-140.834704	-190.452025	-217.331669	-243.080008	-269.796914
+2.5	1462.909055	1059.889515	1293.001286	1325.897841	1363.944278	840.376643	1165.960374	1306.349562	1459.318790	1605.637694
-2.55	-294.385546	-206.300830	-283.802780	-293.978675	-331.061456	-165.847035	-224.276424	-255.929931	-286.251167	-317.712955
+2.55	1447.218661	1047.760246	1286.772855	1308.617443	1347.485745	833.307669	1151.643886	1292.057577	1441.404137	1583.322267
-2.6	-338.783498	-237.414227	-326.604685	-338.315264	-365.555249	-190.859366	-258.100822	-294.528173	-329.422327	-365.629046
+2.6	1390.816917	1005.408886	1237.469477	1245.090900	1282.111773	803.440130	1104.694745	1241.705026	1381.622306	1514.620762
-2.65	-383.181451	-268.527625	-369.406590	-382.651854	-400.049043	-215.871696	-291.925220	-333.126415	-372.593487	-413.545136
+2.65	1292.152157	934.524808	1150.418917	1139.955744	1177.588507	749.773218	1028.073006	1155.336284	1282.523399	1404.830050
-2.7	-427.579404	-299.641022	-412.208495	-426.988443	-434.542836	-240.884027	-325.749618	-371.724658	-415.764647	-461.461227
+2.7	1150.539769	835.955386	1021.861321	999.382782	1014.567435	671.423428	920.376604	1033.124004	1144.610125	1253.388640
-2.75	-471.977357	-330.754419	-455.010400	-471.325033	-469.036630	-265.896358	-359.574016	-410.322900	-458.935806	-509.377318
+2.75	973.135088	711.781269	853.095504	816.837543	805.755794	573.521788	785.250016	879.030589	971.748830	1063.424818
-2.8	-516.375309	-361.867817	-497.812306	-515.661622	-507.971212	-290.908688	-393.398414	-448.921142	-502.106966	-557.293409
+2.8	766.463628	566.202217	649.822954	600.308846	558.999287	458.224772	627.529127	699.488514	769.486081	839.413847
-2.85	-560.773262	-392.981214	-540.614211	-559.998211	-569.682242	-315.921019	-427.222812	-487.519384	-545.278126	-605.209500
+2.85	532.693456	404.242415	416.155019	363.834910	344.375480	326.917392	452.778312	498.162956	544.780955	587.118893
-2.9	-605.171215	-424.094611	-583.416116	-604.334801	-749.440907	-340.933350	-461.047210	-526.117627	-588.449286	-653.125591
+2.9	279.257382	229.541332	215.796643	184.048786	185.435818	184.301104	263.797690	279.800485	302.971102	318.881635
-2.95	-649.569167	-455.208009	-626.218021	-648.671390	-1095.823021	-365.945681	-494.871608	-564.715869	-631.620445	-701.041681
+2.95	149.594084	104.833140	144.216269	149.387202	151.943910	84.276274	113.967561	130.052487	145.460426	161.447954
-3	-895.284631	-625.654223	-877.677677	-925.396198	-1524.572478	-502.202332	-678.793901	-776.060010	-868.599875	-965.442435
+3	193.992097	135.946536	187.018179	193.723795	190.427596	109.288594	147.791955	168.650723	188.631575	209.364069
(Span 3) -4	-895.284631	-625.654223	-877.677677	-925.396198	-1524.572478	-502.202332	-678.793901	-776.060010	-868.599875	-965.442435
+4	193.992097	135.946536	187.018179	193.723795	190.427596	109.288594	147.791955	168.650723	188.631575	209.364069
-3.05	-850.520400	-594.371511	-833.793793	-879.126389	-1195.785377	-477.092215	-644.854206	-737.257009	-825.169881	-917.170313
+3.05	184.292493	129.149210	177.667270	184.037605	184.629883	103.824164	140.402358	160.218186	179.199996	198.895866
-3.1	-805.756169	-563.088800	-789.909909	-832.856579	-998.423366	-451.982098	-610.914511	-698.454008	-781.739887	-868.898191
+3.1	227.668460	181.679304	180.634477	174.351415	187.802104	151.249591	211.079234	222.872058	241.599729	253.063165
-3.15	-760.991937	-531.806089	-746.026025	-786.586770	-916.836823	-426.871980	-576.974816	-659.651008	-738.309893	-820.626070
+3.15	430.621298	330.737757	332.268315	289.961594	292.099214	270.872976	369.881777	406.125492	442.096782	475.191686
-3.2	-716.227706	-500.523377	-702.142141	-740.316960	-856.048466	-401.761863	-543.035120	-620.848007	-694.879899	-772.353948
+3.2	632.987268	471.642359	532.913778	491.459414	482.206433	383.714395	521.234289	580.040478	637.624880	692.129560
-3.25	-671.463475	-469.240666	-658.258258	-694.047151	-802.545436	-376.651746	-509.095425	-582.045007	-651.449905	-724.081826
+3.25	817.066387	600.736767	713.109177	676.298933	659.434986	487.325702	661.727669	740.752208	817.068963	892.107537
-3.3	-626.699243	-437.957955	-614.374374	-647.777341	-749.042406	-351.541629	-475.155730	-543.242006	-608.019912	-675.809704
+3.3	981.242969	715.178501	868.934006	831.015802	818.385546	579.417799	788.165937	884.641139	976.456298	1070.633524
-3.35	-581.935012	-406.675243	-570.490490	-601.507532	-695.539376	-326.431511	-441.216035	-504.439005	-564.589918	-627.537583
+3.35	1123.205229	815.025011	996.756969	966.469816	945.151045	657.858352	897.565997	1008.331626	1114.639188	1223.520603
-3.4	-537.170781	-375.392532	-526.606606	-555.237722	-642.036347	-301.321394	-407.276339	-465.636005	-521.159924	-579.265461
+3.4	1237.799337	896.953533	1093.235241	1071.893460	1038.066753	720.673135	987.157901	1108.693237	1229.270229	1346.888333
-3.45	-492.406549	-344.109820	-482.722722	-508.967912	-588.533317	-276.211277	-373.336644	-426.833004	-477.729930	-530.993339
+3.45	1321.769700	958.020786	1160.712635	1154.365955	1117.261575	766.046155	1054.384804	1182.840097	1315.160150	1438.063155
-3.5	-447.642318	-312.827109	-438.838838	-462.698103	-535.030287	-251.101159	-339.396949	-388.030003	-434.299936	-482.721217
+3.5	1372.280381	996.072601	1196.530567	1205.025967	1167.647683	792.318715	1096.903047	1228.130509	1369.293122	1501.954229
-3.55	-402.878086	-281.544398	-394.954954	-416.428293	-481.527257	-225.991042	-305.457254	-349.227003	-390.869942	-434.449095
+3.55	1392.954849	1012.024005	1213.493285	1229.133091	1191.066505	803.030998	1115.320949	1247.967488	1392.848204	1529.862824
-3.6	-358.113855	-250.261686	-351.071070	-370.158484	-428.024227	-200.880925	-271.517558	-310.424002	-347.439948	-386.176974

+3.6	1396.026377	1011.494167	1226.075620	1223.697161	1176.657267	807.770510	1113.425464	1249.214627	1389.966378	1522.282693
-3.65	-313.349624	-218.978975	-307.187186	-323.888674	-374.521198	-175.770808	-237.577863	-271.621002	-304.009954	-337.904852
+3.65	1360.772310	984.133668	1205.529955	1183.601788	1144.694268	791.471752	1082.249226	1217.208776	1349.966758	1480.981927
-3.7	-268.585392	-187.696264	-263.303303	-277.618865	-321.018168	-150.660690	-203.638168	-232.818001	-260.579960	-289.632730
+3.7	1284.928936	929.730673	1153.928243	1118.571202	1081.797238	752.841593	1020.568434	1150.052755	1274.140219	1400.485757
-3.75	-223.821161	-156.413552	-219.419419	-231.349055	-267.515138	-125.550573	-169.698472	-194.015000	-217.149966	-241.360608
+3.75	1181.635352	853.740240	1062.281884	1034.596486	985.986797	690.745235	930.889133	1046.696349	1166.401990	1274.236005
-3.8	-179.056930	-125.130841	-175.535535	-185.079246	-214.012108	-100.440456	-135.758777	-155.212000	-173.719972	-193.088487
+3.8	1036.949415	747.329014	931.310271	912.981350	872.189160	604.204544	814.398265	913.690370	1016.267322	1100.753845
-3.85	-134.292698	-93.848129	-131.651651	-138.809436	-160.509078	-75.330338	-101.819082	-116.408999	-130.289978	-144.816365
+3.85	847.434230	609.452895	767.397743	747.234971	719.618040	492.400296	663.813730	745.852790	822.305974	886.551790
-3.9	-89.528467	-62.565418	-87.767767	-92.539627	-107.006049	-50.220221	-67.879387	-77.605998	-86.859984	-96.544243
+3.9	611.791871	439.264654	558.236706	547.597424	525.984604	354.671014	478.238052	538.058821	583.987105	631.314202
-3.95	-44.764236	-31.282707	-43.883883	-46.269817	-53.503019	-25.110104	-33.939691	-38.802998	-43.429990	-48.272121
+3.95	329.836470	236.114959	302.487415	298.698113	289.025162	190.512128	256.986889	289.472908	314.209777	338.664301
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-44.764050	-40.976508	-44.078093	-41.544198	-50.277608	-50.999820	-53.971589	-21.737105
+0.05	329.748019	315.003409	336.231848	315.175698	375.726792	347.047258	366.749933	165.290060
-0.1	-89.528100	-81.953017	-88.156186	-83.088396	-100.555216	-101.999639	-107.943177	-43.474211
+0.1	612.253414	586.888477	626.040725	586.615212	698.450325	639.834401	676.067356	307.187139
-0.15	-134.292151	-122.929525	-132.234280	-124.632594	-150.832824	-152.999459	-161.914766	-65.211316
+0.15	847.821137	815.677419	869.515555	814.414153	968.443279	878.658520	928.279382	426.014920
-0.2	-179.056201	-163.906034	-176.312373	-166.176792	-201.110432	-203.999278	-215.886355	-86.948422
+0.2	1037.254861	1002.143676	1067.516209	999.399782	1186.765179	1072.504623	1133.291336	522.235784
-0.25	-223.820251	-204.882542	-220.390466	-207.720990	-251.388039	-254.999098	-269.857944	-108.685527
+0.25	1181.863117	1147.317132	1221.178721	1142.659731	1367.458427	1232.201309	1303.046261	596.592848
-0.3	-268.584301	-245.859051	-264.468559	-249.265188	-301.665647	-305.998918	-323.829532	-130.422632
+0.3	1285.236027	1252.484103	1331.915297	1256.107264	1503.055583	1343.545934	1420.304316	649.932349
-0.35	-313.348351	-286.835559	-308.546653	-290.809386	-351.943255	-356.998737	-377.801121	-152.159738
+0.35	1361.008784	1322.120029	1411.433703	1332.458527	1591.138000	1420.349928	1502.231535	682.852076
-0.4	-358.112402	-327.812067	-352.624746	-332.353584	-402.220863	-407.998557	-431.772710	-173.896843
+0.4	1396.197993	1363.208852	1453.462096	1371.350051	1633.649267	1451.342142	1535.534212	696.364290
-0.45	-402.876452	-368.788576	-396.702839	-373.897782	-452.498471	-458.998376	-485.744299	-195.633949
+0.45	1393.068130	1368.609069	1457.544742	1374.282921	1633.054689	1439.240562	1523.229186	689.989981
-0.5	-447.640502	-409.765084	-440.780932	-415.441980	-502.776079	-509.998196	-539.715887	-217.371054
+0.5	1372.139689	1345.104975	1433.272760	1351.180970	1607.186195	1418.494743	1501.121727	683.057473
-0.55	-492.404552	-450.741593	-484.859026	-456.986178	-553.053687	-560.998016	-593.687476	-239.108159
+0.55	1321.577640	1290.533681	1376.268122	1298.488185	1546.525381	1374.101000	1453.712435	661.873060
-0.6	-537.168602	-491.718101	-528.937119	-498.530376	-603.331295	-611.997835	-647.659065	-260.845265
+0.6	1237.366279	1206.733709	1287.508299	1215.682217	1449.124199	1288.579012	1362.826066	623.796023
-0.65	-581.932653	-532.694610	-573.015212	-540.074574	-653.608902	-662.997655	-701.630654	-282.582370
+0.65	1122.554521	1098.747218	1170.058770	1105.636724	1318.275429	1165.352251	1232.094067	570.262503
-0.7	-626.696703	-573.671118	-617.093305	-581.618772	-703.886510	-713.997474	-755.602242	-304.319476
+0.7	980.566458	969.244105	1027.662696	971.486444	1157.512861	1009.374294	1067.813113	502.847332
-0.75	-671.460753	-614.647627	-661.171399	-623.162970	-754.164118	-764.997294	-809.573831	-326.056581
+0.75	816.874180	818.125653	865.579327	816.626146	970.894547	827.020219	874.607392	423.264436
-0.8	-716.224803	-655.624135	-705.249492	-664.707168	-804.441726	-815.997114	-863.545420	-347.793686
+0.8	632.785427	648.902067	683.624487	644.711090	762.794279	616.909034	652.105640	333.365669
-0.85	-760.988853	-696.600643	-749.327585	-706.251366	-854.719334	-866.996933	-917.517008	-369.530792
+0.85	430.421862	465.339524	485.827106	459.656890	537.901491	383.634552	405.178485	235.142039
-0.9	-805.752904	-737.577152	-793.405678	-747.795564	-904.996942	-917.996753	-971.488597	-391.267897
+0.9	227.458001	271.461036	279.102039	265.639449	301.310253	203.942873	215.203118	135.447239
-0.95	-850.516954	-778.553660	-837.483772	-789.339762	-955.274550	-968.996572	-1025.460186	-413.005003
+0.95	184.292331	169.740195	182.493707	171.973980	207.988974	206.576595	218.559064	89.388349
-1	-895.281008	-819.530161	-881.561902	-830.883957	-1005.552134	-1019.996402	-1079.431785	-434.742099
+1	193.991934	178.673886	192.098638	181.025237	218.935761	217.449046	230.062177	94.092999
(Span 2) -2	-895.281008	-819.530161	-881.561902	-830.883957	-1005.552134	-1019.996402	-1079.431785	-434.742099
+2	193.991934	178.673886	192.098638	181.025237	218.935761	217.449046	230.062177	94.092999
-2.05	-649.569735	-598.277776	-643.229575	-606.151158	-733.091966	-728.113746	-770.348001	-315.064219
+2.05	149.593982	137.781696	148.133992	139.594904	168.829039	167.682581	177.409009	77.231902
-2.1	-605.171745	-557.385584	-599.264933	-564.720819	-682.985243	-678.347284	-717.694834	-293.529629
+2.1	279.230862	336.231332	349.635255	330.634773	376.783176	249.088672	263.607551	158.668272
-2.15	-560.773755	-516.493391	-555.300290	-523.290481	-632.878520	-628.580822	-665.041666	-271.995039
+2.15	532.985366	561.602371	593.468707	561.636240	658.118159	486.161902	513.181903	281.867733
-2.2	-516.375766	-475.601198	-511.335648	-481.860142	-582.771797	-578.814359	-612.388498	-250.460449
+2.2	766.377602	773.212841	820.263637	775.489269	918.858639	757.487099	800.433829	395.979773

-2.25	-471.977776	-434.709005	-467.371005	-440.429803	-532.665074	-529.047897	-559.735330	-228.925858
+2.25	973.075152	962.599365	1025.063719	968.084604	1150.902501	997.296393	1054.315300	495.946481
-2.3	-427.579786	-393.816812	-423.406363	-398.999465	-482.558351	-479.281434	-507.082162	-207.391268
+2.3	1150.550650	1125.753209	1200.505727	1133.693953	1350.284854	1198.386834	1267.302874	581.283084
-2.35	-383.181796	-352.924619	-379.441720	-357.569126	-432.451628	-429.514972	-454.428995	-185.856678
+2.35	1292.027716	1256.335894	1340.545477	1265.897075	1509.360509	1354.895574	1433.173640	648.451373
-2.4	-338.783806	-312.032426	-335.477078	-316.138788	-382.344905	-379.748509	-401.775827	-164.322088
+2.4	1390.616556	1352.291663	1442.104553	1360.187430	1622.440490	1462.501259	1547.460513	694.333024
-2.45	-294.385816	-271.140233	-291.512436	-274.708449	-332.238182	-329.982047	-349.122659	-142.787498
+2.45	1447.182974	1410.608909	1503.888541	1417.659592	1688.633796	1522.024872	1610.737816	719.477056
-2.5	-249.987826	-230.248040	-247.547822	-233.278110	-282.131458	-280.215602	-296.469496	-121.252907
+2.5	1462.909055	1429.715667	1523.404211	1435.772046	1707.043492	1530.981659	1620.492749	725.095796
-2.55	-294.385546	-271.140202	-291.512468	-274.708424	-332.238176	-329.982067	-349.122664	-142.787477
+2.55	1447.218661	1410.612368	1503.893381	1417.666457	1688.635544	1522.030167	1610.743242	719.636813
-2.6	-338.783498	-312.032392	-335.477114	-316.138757	-382.344897	-379.748532	-401.775831	-164.322065
+2.6	1390.816917	1352.294196	1442.108374	1360.187933	1622.444593	1462.505355	1547.464673	694.334280
-2.65	-383.181451	-352.924582	-379.441760	-357.569090	-432.451619	-429.514997	-454.428998	-185.856654
+2.65	1292.152157	1256.335770	1340.546566	1265.900666	1509.367570	1354.897359	1433.175366	648.453978
-2.7	-427.579404	-393.816771	-423.406406	-398.999423	-482.558340	-479.281461	-507.082165	-207.391243
+2.7	1150.539769	1125.754061	1200.507727	1133.697911	1350.291980	1198.388738	1267.304719	581.281910
-2.75	-471.977357	-434.708961	-467.371052	-440.429755	-532.665062	-529.047926	-559.735333	-228.925831
+2.75	973.135088	962.598985	1025.065120	968.088127	1150.902751	997.297527	1054.316334	495.946749
-2.8	-516.375309	-475.601151	-511.335698	-481.860088	-582.771783	-578.814391	-612.388500	-250.460420
+2.8	766.463628	773.212133	820.264957	775.490158	918.862540	757.488012	800.434636	395.981532
-2.85	-560.773262	-516.493341	-555.300344	-523.290421	-632.878505	-628.580856	-665.041667	-271.995009
+2.85	532.693456	561.603079	593.470457	561.640084	658.125009	486.162975	513.182891	281.865778
-2.9	-605.171215	-557.385530	-599.264989	-564.720754	-682.985226	-678.347321	-717.694835	-293.529597
+2.9	279.257382	336.233094	349.638112	330.639548	376.783559	249.089430	263.608456	158.321804
-2.95	-649.569167	-598.277720	-643.229635	-606.151087	-733.091948	-728.113785	-770.348002	-315.064186
+2.95	149.594084	137.781697	148.133989	139.594937	168.829049	167.682577	177.409019	77.415342
-3	-895.284631	-819.530167	-881.561961	-830.884000	-1005.552279	-1019.996443	-1079.431871	-434.742101
+3	193.992097	178.673900	192.098622	181.025262	218.935767	217.449036	230.062179	94.093005
(Span 3) -4	-895.284631	-819.530167	-881.561961	-830.884000	-1005.552279	-1019.996443	-1079.431871	-434.742101
+4	193.992097	178.673900	192.098622	181.025262	218.935767	217.449036	230.062179	94.093005
-3.05	-850.520400	-778.553658	-837.483865	-789.339800	-955.274664	-968.996621	-1025.460278	-413.004995
+3.05	184.292493	169.740204	182.493691	171.973999	207.988979	206.576584	218.559070	89.388355
-3.1	-805.756169	-737.577150	-793.405769	-747.795599	-904.997049	-917.996800	-971.488685	-391.267890
+3.1	227.668460	271.462280	279.100836	265.636203	301.317015	203.944133	215.204361	134.594320
-3.15	-760.991937	-696.600641	-749.327673	-706.251399	-854.719433	-866.996978	-917.517092	-369.530784
+3.15	430.621298	465.341374	485.828137	459.654299	537.896197	383.636644	405.180852	235.139539
-3.2	-716.227706	-655.624132	-705.249576	-664.707199	-804.441818	-815.997156	-863.545499	-347.793679
+3.2	632.987268	648.904089	683.625657	644.708882	762.789408	616.911031	652.107910	333.363205
-3.25	-671.463475	-614.647624	-661.171480	-623.162999	-754.164203	-764.997335	-809.573906	-326.056573
+3.25	817.066387	818.127674	865.580432	816.623951	970.889628	827.021871	874.609308	423.261878
-3.3	-626.699243	-573.671115	-617.093384	-581.618799	-703.886588	-713.997513	-755.602313	-304.319468
+3.3	981.242969	969.245584	1027.663212	971.483946	1157.507535	1009.374931	1067.813957	502.844771
-3.35	-581.935012	-532.694606	-573.015288	-540.074599	-653.608973	-662.997691	-701.630720	-282.582362
+3.35	1123.205229	1098.747960	1170.057639	1105.633549	1318.269246	1165.350942	1232.092854	570.259601
-3.4	-537.170781	-491.718097	-528.937191	-498.530399	-603.331358	-611.997870	-647.659127	-260.845257
+3.4	1237.799337	1206.732766	1287.506203	1215.677887	1449.116447	1288.576188	1362.823259	623.793261
-3.45	-492.406549	-450.741589	-484.859095	-456.986199	-553.053743	-560.998048	-593.687534	-239.108151
+3.45	1321.769700	1290.531500	1376.264619	1298.482664	1546.529066	1374.096646	1453.708009	661.870019
-3.5	-447.642318	-409.765080	-440.780999	-415.441998	-502.776127	-509.998226	-539.715941	-217.371046
+3.5	1372.280381	1345.101468	1433.267818	1351.174010	1607.188171	1418.488401	1501.115206	683.054102
-3.55	-402.878086	-368.788571	-396.702903	-373.897798	-452.498512	-458.998405	-485.744348	-195.633941
+3.55	1392.954849	1368.613523	1457.534290	1374.277749	1633.053804	1439.235960	1523.224192	691.618228
-3.6	-358.113855	-327.812062	-352.624807	-332.353598	-402.220897	-407.998583	-431.772755	-173.896835

+3.6	**1396.026377**	**1363.211487**	**1453.466123**	**1371.343088**	**1633.646199**	**1451.335518**	**1535.527069**	**696.362408**
-3.65	**-313.349624**	**-286.835554**	**-308.546710**	**-290.809398**	**-351.943282**	**-356.998761**	**-377.801162**	**-152.159730**
+3.65	**1360.772310**	**1322.120678**	**1411.435595**	**1332.449650**	**1591.132608**	**1420.352580**	**1502.234145**	**682.849771**
-3.7	**-268.585392**	**-245.859045**	**-264.468614**	**-249.265198**	**-301.665667**	**-305.998940**	**-323.829569**	**-130.422624**
+3.7	**1284.928936**	**1252.482511**	**1331.914769**	**1256.109202**	**1503.047703**	**1343.546334**	**1420.304533**	**649.929923**
-3.75	**-223.821161**	**-204.882536**	**-220.390518**	**-207.720998**	**-251.388052**	**-254.999118**	**-269.857976**	**-108.685519**
+3.75	**1181.635352**	**1147.313146**	**1221.175685**	**1142.659186**	**1367.460682**	**1232.198845**	**1303.043446**	**596.590035**
-3.8	**-179.056930**	**-163.906027**	**-176.312422**	**-166.176798**	**-201.110437**	**-203.999296**	**-215.886382**	**-86.948413**
+3.8	**1036.949415**	**1002.137453**	**1067.510756**	**999.396952**	**1186.764466**	**1072.499417**	**1133.285608**	**522.237739**
-3.85	**-134.292698**	**-122.929519**	**-132.234326**	**-124.632598**	**-150.832821**	**-152.999475**	**-161.914789**	**-65.211308**
+3.85	**847.434230**	**815.668763**	**869.507455**	**814.408870**	**968.439598**	**878.655879**	**928.276651**	**426.016449**
-3.9	**-89.528467**	**-81.953010**	**-88.156229**	**-83.088397**	**-100.555206**	**-101.999653**	**-107.943196**	**-43.474202**
+3.9	**611.791871**	**586.877438**	**626.030059**	**586.607430**	**698.443635**	**639.828788**	**676.061482**	**307.187933**
-3.95	**-44.764236**	**-40.976501**	**-44.078133**	**-41.544197**	**-50.277591**	**-50.999831**	**-53.971603**	**-21.737097**
+3.95	**329.836470**	**314.990143**	**336.218769**	**315.165498**	**375.717150**	**347.038753**	**366.740996**	**165.290478**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 110' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-44.764050	-93.654928	-103.156221	-59.172582	-71.452813	-76.778591
+0.05	329.748019	593.762402	628.191868	397.013896	480.284261	504.976168
-0.1	-89.528100	-187.309856	-206.312442	-118.345164	-142.905626	-153.557182
+0.1	612.253414	1087.217970	1153.069152	730.773748	884.095339	927.688754
-0.15	-134.292151	-280.964784	-309.468663	-177.517746	-214.358439	-230.335774
+0.15	847.821137	1510.490824	1600.677202	1001.652077	1215.137132	1277.825816
-0.2	-179.056201	-374.619711	-412.624883	-236.690328	-285.811252	-307.114365
+0.2	1037.254861	1842.500538	1991.197034	1233.317377	1494.112880	1566.922741
-0.25	-223.820251	-468.274639	-515.781104	-295.862909	-357.264064	-383.892956
+0.25	1181.863117	2099.237870	2297.940066	1411.661309	1702.194045	1800.654876
-0.3	-268.584301	-561.929567	-618.937325	-355.035491	-428.716877	-460.671547
+0.3	1285.236027	2307.725166	2526.114566	1534.122616	1841.255765	1966.979330
-0.35	-313.348351	-655.584495	-722.093546	-414.208073	-500.169690	-537.450138
+0.35	1361.008784	2437.345215	2678.005615	1616.396523	1932.583781	2061.168391
-0.4	-358.112402	-749.239423	-825.249767	-473.380655	-571.622503	-614.228730
+0.4	1396.197993	2528.060466	2735.237443	1645.674080	1962.837515	2103.564937
-0.45	-402.876452	-842.894351	-928.405988	-532.553237	-643.075316	-691.007321
+0.45	1393.068130	2534.412922	2768.498038	1625.542108	1934.089662	2084.290804
-0.5	-447.640502	-936.549279	-1031.562208	-591.725819	-714.528129	-767.785912
+0.5	1372.139689	2489.779703	2715.340797	1601.396524	1906.014758	2052.294909
-0.55	-492.404552	-1030.204207	-1134.718429	-650.898401	-785.980942	-844.564503
+0.55	1321.577640	2385.753458	2583.588571	1558.593957	1857.984545	1989.397838
-0.6	-537.168602	-1123.859134	-1237.874650	-710.070983	-857.433755	-921.343095
+0.6	1237.366279	2210.493242	2422.493510	1466.503246	1750.170453	1868.208608
-0.65	-581.932653	-1217.514062	-1341.030871	-769.243564	-928.886567	-998.121686
+0.65	1122.554521	1986.657848	2182.633243	1329.041949	1587.215438	1698.089209
-0.7	-626.696703	-1311.168990	-1444.187092	-828.416146	-1000.339380	-1074.900277
+0.7	980.566458	1709.720611	1869.041516	1153.578290	1384.174905	1472.898333
-0.75	-671.460753	-1404.823918	-1547.343313	-887.588728	-1071.792193	-1151.678868
+0.75	816.874180	1373.511276	1496.103770	944.812240	1134.466537	1198.882396
-0.8	-716.224803	-1498.478846	-1650.499533	-946.761310	-1143.245006	-1228.457459
+0.8	632.785427	985.270334	1073.402490	702.097402	843.176937	881.939983
-0.85	-760.988853	-1592.133774	-1753.655754	-1005.933892	-1214.697819	-1305.236051
+0.85	430.421862	569.632054	605.450954	430.728071	517.962417	529.043333
-0.9	-805.752904	-1685.788702	-1856.811975	-1065.106474	-1286.150632	-1382.014642
+0.9	227.458001	355.091530	389.497259	243.497399	277.210714	292.403413
-0.95	-850.516954	-1779.443630	-1959.968196	-1124.279056	-1357.603445	-1458.793233
+0.95	184.292331	374.818838	411.135996	238.076568	288.346962	308.648047
-1	-895.281008	-1873.098538	-2063.124424	-1183.451659	-1429.056264	-1535.571831
+1	193.991934	394.546145	432.774724	250.606913	303.523124	324.892684
(Span 2) -2	-895.281008	-1873.098538	-2063.124424	-1183.451659	-1429.056264	-1535.571831
+2	193.991934	394.546145	432.774724	250.606913	303.523124	324.892684
-2.05	-649.569735	-1321.111787	-1449.117581	-839.140723	-1016.327194	-1087.881662
+2.05	149.593982	304.248363	333.727756	193.251776	234.057321	250.536137
-2.1	-605.171745	-1230.814000	-1350.070616	-781.785585	-946.861388	-1013.525118
+2.1	279.230862	346.562430	359.542596	296.560082	341.328051	358.663252
-2.15	-560.773755	-1140.516213	-1251.023651	-724.430447	-877.395582	-939.168575
+2.15	532.985366	737.506983	799.055999	539.809805	644.103778	677.139924
-2.2	-516.375766	-1050.218425	-1151.976686	-667.075309	-807.929776	-864.812032
+2.2	766.377602	1243.242737	1357.810582	857.806841	1026.928804	1090.161760

-2.25	-471.977776	-959.920638	-1052.929721	-609.720171	-738.463970	-790.455489
+2.25	973.075152	1683.335102	1847.479891	1135.867150	1357.014205	1448.707349
-2.3	-427.579786	-869.622851	-953.882757	-552.365033	-668.998164	-716.098946
+2.3	1150.550650	2047.775831	2256.155821	1367.856429	1631.760249	1745.170275
-2.35	-383.181796	-779.325064	-854.835792	-495.009896	-599.532358	-641.742402
+2.35	1292.027716	2346.921472	2572.637900	1546.708397	1844.955562	1972.952212
-2.4	-338.783806	-689.027276	-755.788827	-437.654758	-530.066552	-567.385859
+2.4	1390.616556	2562.738309	2789.082882	1667.963802	1988.568564	2131.998166
-2.45	-294.385816	-598.729489	-656.741862	-380.299620	-460.600747	-493.029316
+2.45	1447.182974	2688.280658	2936.537322	1732.415451	2063.060457	2219.596550
-2.5	-249.987826	-508.431702	-557.694952	-322.944482	-391.134941	-418.672773
+2.5	1462.909055	2720.724666	2988.960084	1737.727014	2066.486431	2230.501983
-2.55	-294.385546	-598.729459	-656.741920	-380.299601	-460.600706	-493.029333
+2.55	1447.218661	2688.280141	2936.622249	1732.411878	2063.058354	2219.600076
-2.6	-338.783498	-689.027242	-755.788887	-437.654738	-530.066509	-567.385880
+2.6	1390.816917	2562.738983	2789.082562	1667.968358	1988.570671	2131.999815
-2.65	-383.181451	-779.325024	-854.835855	-495.009876	-599.532311	-641.742427
+2.65	1292.152157	2346.923445	2572.636885	1546.710239	1844.957278	1972.961411
-2.7	-427.579404	-869.622806	-953.882823	-552.365014	-668.998114	-716.098974
+2.7	1150.539769	2047.775897	2256.155268	1367.858313	1631.761548	1745.169702
-2.75	-471.977357	-959.920588	-1052.929790	-609.720151	-738.463917	-790.455521
+2.75	973.135088	1683.337288	1847.479560	1135.868189	1357.018993	1448.709020
-2.8	-516.375309	-1050.218371	-1151.976758	-667.075289	-807.929719	-864.812068
+2.8	766.463628	1243.247603	1357.294983	857.806018	1026.936362	1090.166145
-2.85	-560.773262	-1140.516153	-1251.023726	-724.430427	-877.395522	-939.168615
+2.85	532.693456	737.514061	799.689503	539.810624	644.102744	677.146801
-2.9	-605.171215	-1230.813935	-1350.070693	-781.785564	-946.861325	-1013.525162
+2.9	279.257382	346.673938	359.602561	296.560875	341.331815	358.661768
-2.95	-649.569167	-1321.111717	-1449.117661	-839.140702	-1016.327128	-1087.881709
+2.95	149.594084	304.248383	333.727786	193.251759	234.057312	250.536117
-3	-895.284631	-1873.098629	-2063.124451	-1183.451734	-1429.056400	-1535.571866
+3	193.992097	394.546167	432.774712	250.606914	303.523138	324.892668
(Span 3) -4	-895.284631	-1873.098629	-2063.124451	-1183.451734	-1429.056400	-1535.571866
+4	193.992097	394.546167	432.774712	250.606914	303.523138	324.892668
-3.05	-850.520400	-1779.443696	-1959.968229	-1124.279149	-1357.603581	-1458.793273
+3.05	184.292493	374.818858	411.135976	238.076569	288.346981	308.648035
-3.1	-805.756169	-1685.788764	-1856.812006	-1065.106563	-1286.150761	-1382.014680
+3.1	227.668460	355.091550	389.497240	243.499013	277.208252	292.403402
-3.15	-760.991937	-1592.133832	-1753.655784	-1005.933977	-1214.697941	-1305.236087
+3.15	430.621298	569.622763	605.451917	430.731152	517.968117	529.039009
-3.2	-716.227706	-1498.478899	-1650.499562	-946.761392	-1143.245122	-1228.457494
+3.2	632.987268	985.265926	1073.403078	702.100354	843.181567	881.935637
-3.25	-671.463475	-1404.823967	-1547.343340	-887.588806	-1071.792302	-1151.678901
+3.25	817.066387	1373.506189	1496.104307	944.814520	1134.470423	1198.877426
-3.3	-626.699243	-1311.169034	-1444.187118	-828.416220	-1000.339482	-1074.900308
+3.3	981.242969	1709.713815	1870.258499	1153.579272	1384.177126	1472.891954
-3.35	-581.935012	-1217.514102	-1341.030896	-769.243635	-928.886663	-998.121715
+3.35	1123.205229	1986.660887	2182.632790	1329.040564	1587.214774	1698.092806
-3.4	-537.170781	-1123.859169	-1237.874673	-710.071049	-857.433843	-921.343122
+3.4	1237.799337	2210.490330	2422.492567	1466.500087	1750.167500	1868.209867
-3.45	-492.406549	-1030.204237	-1134.718451	-650.898464	-785.981023	-844.564529
+3.45	1321.769700	2386.720452	2583.588864	1558.588692	1857.979161	1989.395516
-3.5	-447.642318	-936.549305	-1031.562229	-591.725878	-714.528203	-767.785937
+3.5	1372.280381	2489.782844	2715.782577	1601.388995	1906.006695	2052.289670
-3.55	-402.878086	-842.894372	-928.406007	-532.553292	-643.075384	-691.007344
+3.55	1392.954849	2534.410247	2768.496940	1625.536204	1934.086127	2084.284763
-3.6	-358.113855	-749.239440	-825.249785	-473.380707	-571.622564	-614.228751

+3.6	1396.026377	2528.053986	2735.237011	1645.665954	1962.831414	2103.567817
-3.65	-313.349624	-655.584507	-722.093563	-414.208121	-500.169744	-537.450158
+3.65	1360.772310	2437.346313	2678.004371	1616.399740	1932.586889	2061.167510
-3.7	-268.585392	-561.929575	-618.937340	-355.035535	-428.716925	-460.671565
+3.7	1284.928936	2307.720529	2527.022292	1534.123171	1841.255376	1966.975243
-3.75	-223.821161	-468.274643	-515.781118	-295.862950	-357.264105	-383.892972
+3.75	1181.635352	2099.240389	2297.939264	1411.658458	1702.189851	1800.646907
-3.8	-179.056930	-374.619710	-412.624896	-236.690364	-285.811285	-307.114379
+3.8	1036.949415	1843.571763	1991.195568	1233.311434	1494.105095	1566.916560
-3.85	-134.292698	-280.964778	-309.468674	-177.517778	-214.358466	-230.335786
+3.85	847.434230	1510.495261	1600.676894	1001.648708	1215.137688	1277.827387
-3.9	-89.528467	-187.309845	-206.312452	-118.345193	-142.905646	-153.557193
+3.9	611.791871	1087.216897	1153.069513	730.766926	884.091532	927.685753
-3.95	-44.764236	-93.654913	-103.156230	-59.172607	-71.452826	-76.778600
+3.95	329.836470	593.756145	628.193092	397.003668	480.276288	504.968892
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-18.99516549	-25.933531	-37.247233	-14.38948747	-15.48140117	-14.59221266	-17.66431757	-18.05332019	-19.10676037	-7.652964025
End Shear	137.9124731	175.778127	225.522327	118.9239889	127.0840505	119.2138604	142.4194765	134.377369	142.0462349	62.64460988
-0.05	-18.99516549	-26.123378	-37.418095	-14.38948747	-15.48140117	-14.59221266	-17.66431757	-18.05332019	-19.10676037	-7.652964025
+0.05	128.7904967	161.797497	204.290170	110.9356342	118.4863754	111.114969	132.6141953	124.2006053	131.2740801	58.40145064
-0.1	-18.99516549	-26.795957	-38.023417	-14.38948747	-15.48140117	-14.59221266	-17.66431757	-18.05332019	-19.10676037	-7.652964025
+0.1	118.9700435	147.464231	182.162867	102.6473477	109.569226	102.7124698	122.4483813	113.6655426	120.1235124	53.9513767
-0.15	-18.99516549	-32.756935	-44.404716	-16.02922635	-16.27478785	-14.86131877	-17.66431757	-18.05332019	-19.10676037	-7.944755739
+0.15	110.7349751	135.756260	164.195496	95.69003322	102.0867324	95.66347852	113.9258206	104.8814095	110.8268692	50.21998599
-0.2	-25.84509292	-41.981676	-54.687108	-24.3056472	-25.19372409	-23.15057381	-25.99020009	-18.05332019	-19.10676037	-11.61283333
+0.2	101.1204092	122.436209	143.908634	87.55872947	93.34487966	87.43008286	103.9781372	94.68662999	100.0381281	45.86390563
-0.25	-34.39808069	-50.093472	-63.923092	-31.24861699	-32.6783727	-30.21241492	-34.56546006	-23.03761875	-24.40034028	-15.36265596
+0.25	93.39748555	111.617547	127.730835	80.77536724	86.05499742	80.56593504	95.6907628	86.24421266	91.10459348	42.2342776
-0.3	-45.31128401	-60.013094	-75.947126	-39.35788003	-41.42353064	-38.46555318	-44.5941039	-31.19246327	-32.83417186	-19.74706258
+0.3	83.95498417	99.383598	111.219561	72.89824225	77.59311378	72.60033786	86.08084056	76.51684254	80.81228316	38.02473029
-0.35	-54.42998115	-68.664066	-86.341830	-46.11828385	-48.71684841	-45.35024639	-52.9657716	-39.31609551	-41.39008364	-23.40619735
+0.35	76.25689269	89.511488	100.140606	66.3710755	70.58441296	66.00454629	78.12987876	68.52371454	72.35575852	34.5413168
-0.4	-65.03667431	-79.160538	-98.849298	-53.96318693	-57.1835494	-53.34468477	-62.69399742	-49.85689532	-52.55334049	-27.65715557
+0.4	67.39223692	78.426067	87.670920	58.84532094	62.50716622	58.40543843	68.9773432	59.39090059	62.69450497	30.53084351
-0.45	-73.84102496	-88.246396	-109.589858	-60.45878442	-64.19696909	-59.96872596	-70.7608557	-58.64700352	-61.863199	-31.18114834
+0.45	60.11240999	69.548915	77.664388	52.65659714	55.86822079	52.16151134	61.46401669	51.95463494	54.8288911	27.23810674
-0.5	-84.01123213	-99.191229	-122.428960	-67.94213874	-72.28054817	-67.60576514	-80.06902746	-68.85015718	-72.67047487	-35.24612012
+0.5	51.79993382	59.663984	66.502377	45.57941771	48.28029313	45.02758895	52.88849898	43.5434855	45.93327965	23.47924541
-0.55	-92.39125975	-108.598823	-133.382943	-74.09068328	-78.92549717	-73.88564321	-87.72985147	-77.30078188	-81.62217217	-38.59050579
+0.55	45.0362904	51.821333	57.634469	39.81136226	42.09965364	39.21903639	45.91403229	36.77165366	38.7724758	20.42164127
-0.6	-101.9950125	-119.853084	-146.392456	-81.11528499	-86.52127279	-81.06659927	-96.49835173	-87.03915708	-91.93885638	-42.41695117
+0.6	37.39171619	43.178405	47.853659	33.27994969	35.10571295	32.64899523	38.03516415	29.20931877	30.77713589	16.96693197
-0.65	-109.8407544	-129.460425	-157.419471	-86.8345346	-92.70918252	-86.91879731	-103.6519088	-95.04271841	-100.4184843	-45.53727918
+0.65	31.24218309	36.400951	40.182607	28.01482629	29.47197103	27.35932681	31.70078075	23.25096964	24.47470488	14.18891396
-0.7	-118.7480803	-140.874703	-170.428761	-93.30319086	-99.71248606	-93.54497003	-111.7611014	-104.1891973	-110.1099816	-49.0726583
+0.7	24.38123819	29.031074	31.847110	22.12637635	23.29364001	21.56156938	24.76921595	17.02358293	17.91956098	11.0908967
-0.75	-125.9495434	-150.550947	-181.380441	-98.5109037	-105.3547883	-98.88598289	-118.3061731	-111.6381297	-118.003647	-51.92447019
+0.75	18.94374212	23.340667	25.423183	17.44642158	18.1784079	16.7645882	19.04511716	12.978264	13.73906796	8.636923919
-0.8	-134.0304859	-161.965379	-200.889291	-104.326417	-111.6609452	-104.8586778	-125.6364285	-120.0655598	-126.9353253	-55.11624252
+0.8	12.98214928	17.301937	18.902341	12.29813186	12.68646047	11.61839807	12.91844312	9.155736839	9.678452062	5.948138636
-0.85	-140.4777059	-171.570832	-219.136176	-108.9403502	-116.669071	-109.6049934	-131.4717876	-126.8522925	-134.1291301	-57.65508308
+0.85	8.354606119	12.674068	14.104994	8.285586814	8.412205863	7.627662796	8.185625067	6.231964233	6.57325067	4.163019444
-0.9	-147.6022746	-182.815097	-240.540522	-114.0055244	-122.1734086	-114.8255103	-137.9034691	-134.4335557	-142.1663935	-60.45070925
+0.9	4.237793678	7.901610	9.859145	4.413818895	4.413818895	3.951448695	4.131175665	3.874944224	4.100267214	2.503995876
-0.95	-153.185284	-192.201215	-258.573228	-117.9434395	-126.4587933	-118.8936242	-142.9278985	-140.4505227	-148.5464442	-62.6321249
+0.95	4.131026954	5.259106	7.689374	3.146460844	3.383831215	3.189005656	3.858246422	3.874944224	4.100267214	1.663258387
-1	-159.2235178	-203.094526	-279.367240	-122.1610774	-131.0566376	-123.2632757	-148.3413852	-147.0584889	-155.5546846	-64.97906434
+1	4.13E+00	5.158623	6.818092	3.15E+00	3.38E+00	3.19E+00	3.86E+00	3.87E+00	4.10E+00	1.66E+00
(Span 2) -2	-1.45E+01	-18.138754	-23.973780	-1.11E+01	-1.19E+01	-1.12E+01	-1.36E+01	-1.36E+01	-1.44E+01	-5.85E+00
+2	1.52E+02	210.000934	295.838400	122.2701566	131.2236907	123.4527673	148.6767257	148.4782125	157.0740595	65.08384826
-2.05	-1.45E+01	-18.277216	-24.098395	-1.11E+01	-1.19E+01	-1.12E+01	-1.36E+01	-1.36E+01	-1.44E+01	-5.85E+00
+2.05	1.45E+02	197.849063	274.524199	117.8503085	126.4048747	118.872787	143.0020367	141.6226832	149.8044333	62.62536132
-2.1	-14.52552072	-18.744452	-25.789566	-11.06358857	-11.89823047	-11.21318452	-13.5663694	-13.62508228	-14.41736318	-5.848350596
+2.1	136.2608407	184.597105	251.501720	112.5082334	120.5964141	113.3618387	136.206412	133.650724	141.3538073	59.67549516
-2.15	-14.52552072	-20.808401	-31.459979	-11.06358857	-11.89823047	-11.21318452	-13.5663694	-13.62508228	-14.41736318	-5.848350596
+2.15	127.9172204	172.007461	230.148206	106.9812435	114.5992693	107.6794265	129.2249225	125.6498138	132.8748458	56.64059173
-2.2	-17.91757146	-27.532544	-38.716084	-16.30491185	-17.00560956	-15.69362746	-17.86508896	-13.62508228	-14.41736318	-8.135358844
+2.2	118.5547921	158.511684	207.464478	100.6082316	107.6954787	101.1448892	121.2200303	116.6523247	123.3420136	53.15698491

-2.25	-25.30032322	-34.662555	-46.791476	-22.11522346	-23.21611307	-21.52079986	-24.82851823	-17.60978416	-18.53661491	-11.1866842
+2.25	109.8857221	145.892988	186.473198	94.25541046	100.8229547	94.64568087	113.2779658	107.8739661	114.0432923	49.69772291
-2.3	-33.80819826	-43.107951	-56.393858	-28.74438311	-30.31279125	-28.18621362	-32.81706665	-24.9713403	-26.30787362	-14.68513119
+2.3	101.3649293	132.568502	164.574784	87.15153821	93.14699311	87.39224344	104.4331252	98.24346189	103.8438579	45.84256258
-2.35	-42.86480206	-52.372509	-66.944432	-35.74071692	-37.81258242	-35.23643462	-41.28827808	-33.15390398	-34.95942215	-18.39284595
+2.35	92.5586144	119.481131	143.385252	79.78786013	85.19893608	79.88695592	95.29924246	88.43976912	93.46293062	41.8590972
-2.4	-51.75865219	-61.753439	-77.626612	-42.56215576	-45.13318426	-42.12332651	-49.58091252	-41.31961053	-43.59560384	-22.02045312
+2.4	84.12803172	107.510535	129.134671	72.71951508	77.57704002	72.6942187	86.56123357	78.87599954	83.33785372	38.0465056
-2.45	-61.57419543	-72.444415	-89.785057	-50.04238389	-53.16900236	-49.68813664	-58.70731465	-50.45804553	-53.26290036	-26.01064807
+2.45	75.03938478	95.144264	115.200778	65.07989772	69.34672713	64.81546095	77.03082395	69.03697621	72.92322555	33.93741057
-2.5	-71.62448436	-83.777629	-102.645094	-57.65497833	-61.35506399	-57.39934235	-68.02739719	-59.93624341	-63.29182925	-30.08317036
+2.5	65.94478233	83.051255	101.781938	57.17626082	60.84005458	56.91406999	67.44039097	59.33519472	62.6557956	29.82693318
-2.55	-81.16473972	-95.144819	-115.254956	-65.05105438	-69.31792848	-64.77013392	-76.98561968	-69.03768637	-72.92397717	-33.93751856
+2.55	57.49783769	72.443859	89.757260	50.04181821	53.16839441	49.68757997	58.70664304	50.45736691	53.26218239	26.01053204
-2.6	-91.36565659	-107.511085	-129.201950	-72.72008134	-77.57765034	-72.69479366	-86.56193127	-78.87671435	-83.33861039	-38.046615
+2.6	48.53039739	61.752895	77.612187	42.56159126	45.1325783	42.12277053	49.58024262	41.31897896	43.59493578	22.02034767
-2.65	-101.1733613	-119.481685	-143.385257	-79.78841892	-85.19953897	-79.88752378	-95.2999326	-88.44048332	-93.46368681	-41.85921342
+2.65	40.49995287	52.371981	66.941874	35.74018409	37.81201085	35.23591159	41.28764902	33.15330589	34.95878968	18.39274443
-2.7	-111.1163724	-132.569021	-164.574786	-87.15209091	-93.14759008	-87.39277947	-104.4337783	-98.24414941	-103.844586	-45.84266811
+2.7	32.28901852	43.107445	56.155556	28.74387516	30.31224679	28.1857029	32.81645352	24.97076899	26.30726966	14.68503633
-2.75	-120.1768496	-145.055613	-185.087628	-93.82106553	-100.3533731	-94.20177885	-112.7361321	-107.2797939	-113.413962	-49.46145318
+2.75	25.00680044	35.164956	47.149394	22.51679445	23.64570109	21.92410216	25.31122967	18.02785935	18.97669405	11.39829935
-2.8	-129.4615156	-158.512154	-207.464478	-100.6087352	-107.6960237	-101.1453794	-121.2206296	-116.6529942	-123.3427229	-53.15708129
+2.8	17.77259977	27.532095	38.531057	16.30445634	17.00512301	15.69318264	17.86455817	13.62508135	14.41736284	8.135268418
-2.85	-138.2493846	-172.007903	-230.148204	-106.981699	-114.5997632	-107.6798951	-129.2254977	-125.6504303	-132.8754991	-56.64068735
+2.85	14.54408631	20.807990	31.458155	11.06358832	11.89823102	11.21318484	13.56636868	13.62508135	14.41736284	5.848350811
-2.9	-145.9417967	-184.597503	-251.501721	-112.5086462	-120.5968625	-113.362263	-136.206934	-133.651312	-141.3544305	-59.67557903
+2.9	14.54408631	18.744452	25.787350	11.06358832	11.89823102	11.21318484	13.56636868	13.62508135	14.41736284	5.848350811
-2.95	-153.4630035	-197.849413	-274.524203	-117.8506855	-126.4052852	-118.8731668	-143.0025061	-141.6232404	-149.8050241	-62.62544122
+2.95	14.54408631	18.277217	24.098395	11.06358832	11.89823102	11.21318484	13.56636868	13.62508135	14.41736284	5.848350811
-3	-160.1734511	-210.799378	-297.241156	-122.5432254	-131.5219425	-123.7365658	-149.0294546	-148.9123031	-157.5344666	-65.23634606
+3	14.54408631	18.138755	23.973780	11.06358832	11.89823102	11.21318484	13.56636868	13.62508135	14.41736284	5.848350811
(Span 3) -4	-4.136307121	-5.158623	-6.818092	-3.146460773	-3.383831371	-3.189005748	-3.858246218	-3.874943959	-4.100267119	-1.663258448
+4	149.881942	202.265074	277.789432	121.8536439	130.72114	122.9442322	147.9454066	146.5697403	155.0362657	64.80766501
-3.05	-4.136307121	-5.243350	-7.505954	-3.146460773	-3.383831371	-3.189005748	-3.858246218	-3.874943959	-4.100267119	-1.663258448
+3.05	144.0490522	193.047060	260.193620	118.2845543	126.8303129	119.2465033	143.3643631	140.9779757	149.1057835	62.82163338
-3.1	-4.442679019	-8.244011	-10.054103	-4.669879004	-4.669879004	-4.220469714	-4.42769556	-3.874943959	-4.100267119	-2.617720088
+3.1	136.6462138	181.954967	238.883261	113.630945	121.7660802	114.4390461	137.4267822	133.8674141	141.5661467	60.24377514
-3.15	-7.92878285	-12.282277	-13.652392	-7.937492877	-8.041718307	-7.331384625	-7.858685806	-5.978160759	-6.303731988	-4.020908346
+3.15	129.9780486	172.440031	220.784247	109.3447153	117.108227	110.0213573	131.9841926	127.452095	134.7649575	57.87808464
-3.2	-13.39201227	-17.746245	-19.309811	-12.67930493	-13.09280145	-11.9989721	-13.37093302	-9.433313248	-9.973286595	-6.146596455
+3.2	121.6531715	161.088715	199.220780	103.8921992	111.1898714	104.412362	125.0882067	119.4318067	126.2636073	54.87781145
-3.25	-18.54871991	-22.848771	-24.795453	-17.03586351	-17.74017201	-16.35377085	-18.55544269	-12.67907865	-13.42121709	-8.421882775
+3.25	115.3592488	151.429804	182.222371	98.971046	105.8535325	99.35822284	118.8852949	112.300508	118.7056139	52.1769226
-3.3	-25.55435352	-29.573769	-32.371653	-22.56643277	-23.76449847	-22.0032568	-25.29680701	-17.4771502	-18.39700021	-11.32185779
+3.3	107.9227506	139.994790	169.283382	92.81679284	99.1856987	93.04643251	111.1505942	103.4976218	109.3771574	48.80677169
-3.35	-31.90732519	-35.809927	-39.411058	-27.54927767	-28.97403505	-26.89191019	-31.14148977	-22.76310894	-23.9611673	-13.94341791
+3.35	101.3214022	130.336072	158.279143	87.34298357	93.25947016	87.4393562	104.2885883	95.7579141	101.1762581	45.81514222
-3.4	-39.88433406	-43.819572	-48.459458	-33.77137462	-35.6317479443889	-33.14301743	-38.6271937234255	-29.77394953	-31.3740391685449	-17.22635282
+3.4	93.18446626	118.982430	145.254211	80.5841914	85.94683215	80.5234433	95.83477483	86.29956123	91.15530478	42.12765736
-3.45	-47.00425891	-51.132923	-56.720647	-39.29828709	-41.55005613	-38.70259836	-45.29431104	-36.1732513	-38.13975356	-20.14972712
+3.45	86.03939319	109.459145	134.252197	74.64000115	79.5193184	74.44693818	88.41489745	78.05896779	82.42534769	38.8897389
-3.5	-55.822725	-60.401430	-67.182356	-46.11474627	-48.85408933	-45.56696243	-53.53651285	-44.17592992	-46.60210323	-23.76308473
+3.5	77.31771929	98.341538	121.316150	67.37383736	71.66651779	67.0255996	79.36160331	68.07233127	71.84656197	34.93745856
-3.55	-63.59958448	-68.765735	-76.611578	-52.10342737	-55.27496518	-51.60367227	-60.793101	-51.29344771	-54.12957347	-26.94381786

+3.55	69.66178255	89.080103	110.460394	61.04147515	64.8262510607356	60.5631745505662	71.48507719	59.43846633	62.70149161	31.49770973
-3.6	-73.12949654	-79.256760	-88.418283	-59.4170807	-63.12067619	-58.98253015	-69.67208916	-60.08136066	-63.42487443	-30.83505742
+3.6	60.47435886	78.342732	97.778653	53.36516238	56.53799004	52.7350617	61.95188061	49.0505762	51.69937583	27.33317308
-3.65	-81.45335317	-88.636925	-98.953674	-65.78531691	-69.95558225	-65.41285404	-77.41691803	-67.80956351	-71.60024422	-34.22869069
+3.65	52.53879099	69.460690	87.205104	46.72687967	49.37354864	45.97023367	53.71993773	40.13106882	42.25315238	23.73605354
-3.7	-91.56474027	-100.303764	-112.027648	-73.49893972	-78.23826767	-73.20754696	-86.81310588	-77.2555369	-81.59384179	-38.34527297
+3.7	42.99898872	59.237239	74.933624	38.73765246	40.75454102	37.83411496	43.82655799	30.45650684	32.05948089	19.41180003
-3.75	-100.3256742	-110.655754	-126.321714	-80.16448915	-85.39863574	-79.94797617	-94.9449528	-85.48681161	-90.30316775	-41.90735188
+3.75	34.8140893	50.843369	64.770302	31.87564758	33.35444648	30.85038962	35.34041813	23.49069798	24.88242897	15.70176355
-3.8	-110.8885133	-123.441243	-145.431455	-88.18088424	-94.0136219	-88.05980701	-104.7387068	-95.46380384	-100.8605473	-46.19673516
+3.8	25.03748651	41.257060	53.836090	23.67066847	24.50932878	22.50492431	25.20644162	18.05332194	19.10676035	11.27033497
-3.85	-119.9765017	-134.712265	-162.597867	-95.0615008	-101.4108789	-95.02682973	-113.1563457	-104.0905303	-109.9898787	-49.88280287
+3.85	19.01356688	33.451198	45.106694	16.66726323	16.96223538	15.3911113	17.66431774	18.05332194	19.10676035	8.169880797
-3.9	-130.860874	-148.548714	-183.831300	-103.2834326	-110.2534506	-103.357146	-123.2280878	-114.4713636	-120.9763814	-54.29244871
+3.9	19.01356688	26.727017	37.961369	14.38948797	15.48140246	14.59221367	17.66431774	18.05332194	19.10676035	7.652964155
-3.95	-140.1659414	-160.677100	-202.555031	-110.2969156	-117.799073	-110.467213	-131.8302461	-123.3860182	-130.4118698	-58.0580484
+3.95	19.01356688	26.157891	37.449156	14.38948797	15.48140246	14.59221367	17.66431774	18.05332194	19.10676035	7.652964155
-5	-151.2418747	-175.486356	-225.522327	-118.6272257	-126.764598	-118.9172801	-142.0602978	-134.0435628	-141.6928876	-62.53541677
+5	19.01356688	25.933532	37.247233	14.38948797	15.48140246	14.59221367	17.66431774	18.05332194	19.10676035	7.652964155

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-10.99834653	-15.53548763	-16.47591687	-19.42218041	-8.823793163	-11.92389701	-13.64166115	-15.27206316	-16.98375667
End Shear	89.48130524	116.923386	117.199193	114.0392506	72.1572765	97.2601324	109.8515219	119.6850796	129.6490807
-0.05	-10.99834653	-15.53548763	-16.47591687	-19.47133719	-8.823793163	-11.92389701	-13.64166115	-15.27206316	-16.98375667
+0.05	83.3565098	108.1496995	107.8084673	102.7645502	67.24751394	90.63652459	102.2658312	111.2094769	120.2357158
-0.1	-10.99834653	-15.53548763	-16.47591687	-19.64548732	-8.823793163	-11.92389701	-13.64166115	-15.27206316	-16.98375667
+0.1	77.00380041	99.06295672	98.10097538	91.28404051	62.1578506	83.76556852	94.39725204	102.4231736	110.483422
-0.15	-10.99834653	-15.53548763	-16.47591687	-19.8906797	-8.833759322	-11.92389701	-13.64166115	-15.27206316	-16.98375667
+0.15	71.67674921	91.48303069	90.03534535	82.16847638	57.88833093	78.00218949	87.80207679	95.06831775	102.3306085
-0.2	-16.69326669	-15.53548763	-16.47591687	-20.29526948	-13.93127476	-18.66017554	-19.60460398	-19.57970667	-19.57443783
+0.2	65.45744667	82.68170586	80.70937105	72.22348206	52.90176592	71.27136021	80.10589007	86.49712075	92.8423971
-0.25	-22.04501089	-20.01097366	-18.09770651	-21.48169637	-18.2102849	-24.43906048	-26.25006909	-26.17090125	-26.16574477
+0.25	60.27490662	75.38960468	73.01721022	64.17491021	48.74478621	65.660714	73.69580879	79.36825499	84.96206712
-0.3	-28.30224114	-28.07462112	-23.84601784	-25.69398692	-23.21142134	-31.19371245	-34.02351844	-34.75675948	-34.98545364
+0.3	54.26378088	66.98317579	64.19243005	55.5645796	43.92112768	59.15076184	66.26472901	71.11610004	75.85383648
-0.35	-33.52427191	-35.032886	-30.34569114	-30.01633497	-27.38357458	-36.82915564	-40.5140501	-42.07453623	-43.18573924
+0.35	49.28902221	60.07153931	56.97497256	49.1805084	39.92729957	53.76117706	60.1181987	64.30115835	68.34406256
-0.4	-39.59081543	-44.09152953	-38.7873157	-37.23754205	-32.22851905	-43.37391331	-48.05803072	-50.59180086	-52.74301114
+0.4	43.56083732	52.16950228	48.77105906	41.98817562	35.32636627	47.55284917	53.04493291	56.47198131	59.73170353
-0.45	-44.61986789	-51.64219161	-45.8299921	-44.04618172	-36.24320667	-48.79759256	-54.31517708	-57.66647762	-60.69272334
+0.45	38.85713053	45.73096976	42.12956979	36.21704356	31.54630248	42.45265066	47.24040556	50.05891574	52.69055871
-0.5	-50.42096101	-60.40243621	-55.41895337	-53.37423038	-40.87214792	-55.05170231	-61.53697658	-65.84446329	-69.89589976
+0.5	33.48666211	38.44278717	34.66617742	29.78869027	27.22790157	36.62669859	40.61767801	42.75664923	44.68999367
-0.55	-55.1937652	-67.6542904	-63.49909396	-61.38903766	-44.67875239	-60.19529088	-67.48228083	-72.58808982	-77.49695364
+0.55	29.11726178	32.56999663	28.71371786	24.7014359	23.71220823	31.88421267	35.23360024	36.83340508	38.2155486
-0.6	-60.65463813	-76.00665273	-72.84492078	-70.66779293	-49.03187392	-66.07801109	-74.28918608	-80.32287474	-86.23014005
+0.6	24.17927637	26.00516721	22.72039288	19.57239365	19.73615908	26.52138741	29.15412735	30.16198496	30.94267046
-0.65	-65.10793304	-82.86705368	-80.55616841	-78.79527449	-52.57979057	-70.87317681	-79.84419681	-86.64750652	-93.38447294
+0.65	20.20746122	20.79075676	17.97136757	15.58144427	16.53544917	22.20494022	24.26895175	24.81650734	25.21143985
-0.7	-70.15381532	-90.70206287	-89.40621259	-88.27966548	-56.59728607	-76.30375267	-86.14348963	-93.83514948	-101.5317511
+0.7	15.85894648	15.41474523	13.1168346	11.45441732	13.0279187	17.47546567	18.82544906	18.87986912	18.87879511
-0.75	-74.22432684	-97.07837752	-96.64733459	-95.94714727	-59.83590304	-80.68217323	-91.22975716	-99.65284302	-108.1412886
+0.75	12.26575296	11.26422025	10.04248402	8.833077974	10.12644069	13.56391058	14.51762239	14.48034012	14.47940499
-0.8	-78.78044952	-104.286533	-104.8819215	-104.9934511	-63.45795174	-85.57985471	-96.92872103	-106.1894075	-115.5867653
+0.8	8.417039349	7.882380564	6.726664357	6.057101015	7.014519411	9.369593078	9.80281287	9.795894068	9.794986351
-0.85	-82.40492196	-110.086124	-111.551654	-112.2646221	-66.33666249	-89.47320189	-101.4677925	-111.4122171	-121.5534359
+0.85	5.567000047	5.606872958	4.458908832	4.152757526	4.59560973	6.1208379	6.548710875	6.547949911	6.547201354
-0.9	-86.39651657	-116.5579544	-119.0511304	-120.3475666	-69.50345614	-93.75723447	-106.4737116	-117.1937682	-128.1812155
+0.9	3.108533242	3.333176792	3.483982814	3.512640022	2.390721051	3.24190886	3.243298089	3.32856984	3.697192843
-0.95	-89.51167343	-121.6881886	-125.0482194	-128.220907	-71.97164128	-97.09718659	-110.3871343	-121.7337421	-133.4069386
+0.95	2.398221818	3.333176792	3.483982814	3.443105632	1.926523479	2.604449441	2.97493395	3.32856984	3.697192843
-1	-92.86396996	-127.3142123	-131.6929213	-139.3627702	-74.62337065	-100.6868259	-114.6072926	-126.6563449	-139.1011103
+1	2.40E+00	3.33E+00	3.48E+00	3.42E+00	1.93E+00	2.60E+00	2.97E+00	3.33E+00	3.70E+00
(Span 2) -2	-8.43E+00	-1.17E+01	-1.23E+01	-1.20E+01	-6.77E+00	-9.16E+00	-1.05E+01	-1.17E+01	-1.30E+01
+2	9.31E+01	128.4711076	133.7996968	157.2791395	74.74307273	100.8574101	114.9022726	127.1700986	139.8867816
-2.05	-8.43E+00	-1.17E+01	-1.23E+01	-1.21E+01	-6.77E+00	-9.16E+00	-1.05E+01	-1.17E+01	-1.30E+01
+2.05	89.54586886	122.6331942	126.9811222	144.2012302	71.96484079	97.09576509	110.4820346	122.0148502	133.9295156
-2.1	-8.432629574	-11.72011929	-12.25038349	-12.17199945	-6.774043551	-9.157767445	-10.46046537	-11.70392009	-13.00007289
+2.1	85.33387798	115.8291178	119.1605408	130.0079485	68.62295035	92.57357411	105.1955502	115.9013495	126.9187046
-2.15	-8.432629574	-11.72011929	-12.25038349	-12.37368849	-6.774043551	-9.157767445	-10.46046537	-11.70392009	-13.00007289
+2.15	81.00024883	108.9877417	111.4011929	117.3433629	65.17795014	87.91390423	99.77001556	109.6681714	119.8136508
-2.2	-11.4913344	-11.72011929	-12.25038349	-12.69327687	-9.478646099	-12.70093521	-13.62265493	-13.58411827	-13.58210153
+2.2	76.02547166	101.2822766	102.7618318	104.284358	61.21716286	82.55846011	93.55432065	102.5652926	111.7574473
-2.25	-15.85667412	-15.85972065	-13.50814972	-13.24120215	-13.00252297	-17.45301967	-18.98491084	-19.23033301	-19.26400921

+2.25	**71.08492697**	**93.75429262**	**94.40804112**	**92.88904876**	**57.27850197**	**77.2344667**	**87.39182315**	**95.55498994**	**103.8400812**
-2.3	**-20.86011255**	**-22.25295591**	**-19.40666402**	**-18.22274958**	**-17.03463134**	**-22.89201222**	**-25.14337892**	**-25.97812088**	**-26.60209149**
+2.3	**65.57819134**	**85.48546302**	**85.31932263**	**81.4840695**	**52.88346254**	**71.295061**	**80.53316533**	**87.78362759**	**95.09630287**
-2.35	**-26.16161358**	**-29.34864168**	**-25.91909062**	**-23.79593378**	**-21.30068365**	**-28.64802983**	**-31.68004526**	**-33.17686683**	**-34.4729391**
+2.35	**59.88720816**	**77.05808011**	**75.91910537**	**71.76763887**	**48.33655087**	**65.15177819**	**73.45462622**	**79.79277804**	**86.13764517**
-2.4	**-31.34778263**	**-36.4182008**	**-33.14019885**	**-30.0602723**	**-25.46883815**	**-34.2731683**	**-38.08385177**	**-40.25924503**	**-42.25096522**
+2.4	**54.4392633**	**68.82785887**	**67.26348146**	**62.76683866**	**43.97962838**	**59.26636293**	**66.68663297**	**72.17802404**	**77.6285007**
-2.45	**-37.0517942**	**-44.31883369**	**-41.31912326**	**-37.20259975**	**-30.04818917**	**-40.45444215**	**-45.13632907**	**-48.08850273**	**-50.88280284**
+2.45	**48.42333931**	**60.35152924**	**58.20298995**	**53.66954957**	**39.27843235**	**52.81803534**	**59.17102463**	**63.81352718**	**68.26298099**
-2.5	**-42.87323807**	**-52.50265498**	**-49.89350109**	**-45.32143865**	**-34.7169943**	**-46.75767714**	**-52.34301948**	**-56.11761747**	**-59.76741012**
+2.5	**42.50668155**	**51.98398154**	**49.34727547**	**44.76766453**	**34.42314607**	**46.36094333**	**51.88899693**	**55.61096066**	**59.20584472**
-2.55	**-48.38337979**	**-60.35214116**	**-58.20360605**	**-53.66997301**	**-39.27879111**	**-52.77948873**	**-59.17155252**	**-63.79577336**	**-68.2452954**
+2.55	**37.05136318**	**44.31824728**	**41.31852849**	**37.20223691**	**30.04783363**	**40.45398736**	**45.13579545**	**48.08790976**	**50.88214854**
-2.6	**-54.43969915**	**-68.82847433**	**-67.26410799**	**-62.76729368**	**-43.97998608**	**-59.26683351**	**-66.68715978**	**-72.1786309**	**-77.62917737**
+2.6	**31.34736417**	**36.41765433**	**33.13963718**	**30.07846731**	**25.46849249**	**34.272714**	**38.08334729**	**40.25867251**	**42.25033495**
-2.65	**-59.88763782**	**-77.05869464**	**-75.88926908**	**-71.76809543**	**-48.33690423**	**-65.15224295**	**-73.45516056**	**-79.79337844**	**-86.1383162**
+2.65	**26.16119903**	**29.34812348**	**25.91859358**	**23.79561432**	**21.3003416**	**28.64760259**	**31.67955985**	**33.17631676**	**34.4723365**
-2.7	**-65.57860926**	**-85.48605365**	**-85.31996814**	**-81.48461466**	**-52.88381363**	**-71.29549948**	**-80.53367189**	**-87.78421605**	**-95.09696381**
+2.7	**20.85972967**	**22.25246013**	**19.40622446**	**18.22248254**	**17.03430722**	**22.89159535**	**25.14290633**	**25.97760056**	**26.60152441**
-2.75	**-70.74771643**	**-93.24442493**	**-93.84505076**	**-92.16789397**	**-57.00952301**	**-76.87091213**	**-86.97152879**	**-95.0779011**	**-103.3023302**
+2.75	**16.15912621**	**16.22281011**	**13.81890867**	**13.50530642**	**13.24644503**	**17.78202347**	**19.35684794**	**19.63675154**	**19.70470558**
-2.8	**-76.02585468**	**-101.2828503**	**-102.7624346**	**-104.2849851**	**-61.2174761**	**-82.55886157**	**-93.55479844**	**-102.5658375**	**-111.7580647**
+2.8	**11.49099282**	**11.72011902**	**12.25038297**	**12.69327783**	**9.478376024**	**12.70057262**	**13.62224716**	**13.58371318**	**13.58169645**
-2.85	**-81.00060469**	**-108.9882693**	**-111.4017741**	**-117.3439985**	**-65.17824183**	**-87.91428805**	**-99.77045**	**-109.6686834**	**-119.8142333**
+2.85	**8.432630384**	**11.72011902**	**12.25038297**	**12.37368944**	**6.774043886**	**9.157768453**	**10.460466**	**11.70392073**	**13.00007319**
-2.9	**-85.33421071**	**-115.8296202**	**-119.1611135**	**-129.9900839**	**-68.62322784**	**-92.57392217**	**-105.1959555**	**-115.9018286**	**-126.9192365**
+2.9	**8.432630384**	**11.72011902**	**12.25038297**	**12.17200043**	**6.774043886**	**9.157768453**	**10.460466**	**11.70392073**	**13.00007319**
-2.95	**-89.54616619**	**-122.6336693**	**-126.9816416**	**-144.2018998**	**-71.96508893**	**-97.0960769**	**-110.4823907**	**-122.0152854**	**-133.9300034**
+2.95	**8.432630384**	**11.72011902**	**12.25038297**	**12.05101976**	**6.774043886**	**9.157768453**	**10.460466**	**11.70392073**	**13.00007319**
-3	**-93.27410792**	**-128.8402431**	**-134.2350262**	**-158.1487187**	**-74.91526913**	**-101.0906377**	**-115.1772556**	**-127.4925539**	**-140.2612314**
+3	**8.432630384**	**11.72011902**	**12.25038297**	**12.01516807**	**6.774043886**	**9.157768453**	**10.460466**	**11.70392073**	**13.00007319**
(Span 3) -4	**-2.398222048**	**-3.33E+00**	**-3.48E+00**	**-3.42E+00**	**-1.926523574**	**-2.604449728**	**-2.974934129**	**-3.328570023**	**-3.697192927**
+4	**92.61893119**	**126.8984355**	**131.1990185**	**138.4413006**	**74.42971526**	**100.4246419**	**114.2984416**	**126.294923**	**138.681823**
-3.05	**-2.398222048**	**-3.33E+00**	**-3.48E+00**	**-3.44E+00**	**-1.926523574**	**-2.604449728**	**-2.974934129**	**-3.328570023**	**-3.697192927**
+3.05	**89.782131**	**122.1376015**	**125.5761632**	**129.0778899**	**72.18574429**	**97.38698363**	**110.7272287**	**122.1293**	**133.8632976**
-3.1	**-3.288807195**	**-3.333176715**	**-3.483982667**	**-3.521289456**	**-2.507239966**	**-3.452702457**	**-3.454094381**	**-3.453475748**	**-3.697192927**
+3.1	**86.10080708**	**116.0749411**	**118.4891018**	**119.7451434**	**69.26899112**	**93.44002455**	**106.1025565**	**116.764194**	**127.687809**
-3.15	**-5.369230203**	**-5.40878297**	**-4.301340579**	**-4.020885425**	**-4.386102066**	**-5.888931164**	**-6.278739448**	**-6.277984447**	**-6.277245859**
+3.15	***82.72304783***	***110.5984286***	***112.1429768***	***112.905635***	***66.58919477***	***89.81480514***	***101.8664726***	***111.871774***	***122.0793146***
-3.2	***-8.701419301***	***-8.09785822***	***-6.971253395***	***-6.259846221***	***-7.244634583***	***-9.67968986***	***-10.15085502***	***-10.1417527***	***-10.14084355***
+3.2	***78.43981552***	***103.744707***	***104.2609444***	***104.3124695***	***63.18726968***	***85.21381147***	***96.50240162***	***105.6996939***	***115.0281431***
-3.25	***-11.95826243***	***-10.96496934***	***-9.777171733***	***-8.608839541***	***-9.877996875***	***-13.2289981***	***-14.14061581***	***-14.10581756***	***-14.1048827***
+3.25	***74.58440273***	***97.64515695***	***97.29284272***	***96.62718183***	***60.12225947***	***81.06935741***	***91.67992599***	***100.168421***	***108.7277495***
-3.3	***-16.1900334***	***-15.80918296***	***-13.45441619***	***-11.73907302***	***-13.29512789***	***-17.83570199***	***-19.23139954***	***-19.32178795***	***-19.32070755***
+3.3	***69.77402745***	***90.10985426***	***88.73553472***	***87.56568722***	***56.29498591***	***75.89511867***	***85.66917167***	***93.29326877***	***100.9168671***
-3.35	***-19.85668021***	***-20.33344242***	***-17.55542973***	***-15.23104223***	***-16.2526517***	***-21.82358337***	***-23.83774058***	***-24.34543599***	***-24.66359221***
+3.35	***65.50418329***	***83.479904***	***81.2466757***	***79.54032703***	***52.89539353***	***71.29975879***	***80.33870375***	***87.21108648***	***94.02264537***
-3.4	***-24.55041***	***-26.4955902531296***	***-23.16760569***	***-19.95289823***	***-20.03512033***	***-26.9245778709396***	***-29.6108483***	***-30.66248737***	***-31.4874993269042***
+3.4	***60.24143705***	**75.37250289**	***72.13375952***	***69.93108052***	***48.70258917***	**65.63300721**	***73.77398321***	***79.73686303***	**85.56788356**
-3.45	***-28.72895889***	**-32.0507926**	***-28.23920006***	***-24.29304105***	***-23.39967012***	**-31.46261116**	***-34.75531364***	***-36.30786983***	**-37.64185169**
+3.45	***55.62047381***	**68.30474897**	***64.22539598***	***62.10733943***	***45.01898365***	**60.65506636**	***68.01399883***	***73.19171768***	**78.17790308**
-3.5	***-33.89255515***	**-38.99102261**	***-35.22534672***	***-30.26800216***	***-27.55439154***	**-37.06713099**	***-41.11800068***	***-43.30772865***	**-45.29307865**
+3.5	***49.9801301***	**59.73477632**	***54.67653619***	***52.63545649***	***40.52045791***	**54.57655422**	***60.9880303***	***65.22232825***	**69.19519917**
-3.55	***-38.43702436***	**-45.15828295**	***-41.54090586***	***-35.70763535***	***-31.20861696***	**-41.99703977**	***-46.72213801***	***-49.48690064***	**-52.06316019**
+3.55	***45.07128954***	***52.3218933707172***	***46.4642884856108***	***44.6594426291974***	***36.6034695445122***	***49.2843577813339***	***54.8769818344373***	***58.3021649826995***	**61.40757944**

-3.6	-43.99571393	-52.76711203	-49.38956079	-42.52781677	-35.67577744	-48.02427832	-53.58174595	-57.06563275	-60.38415581
+3.6	39.12811105	43.3987446	38.14146293	36.61304328	31.85903645	42.87479983	47.48247735	49.94153979	52.01283472
-3.65	-48.84288706	-59.4538274	-56.33170776	-48.61386984	-39.56904523	-53.27773224	-59.56710395	-63.69064782	-67.67189743
+3.65	33.9946358	35.73342038	30.99825095	30.4872154	27.75930099	37.33667999	41.09882093	42.73430747	43.9255603
-3.7	-54.7219009	-67.62173655	-64.86104656	-56.15842084	-44.2888308	-59.64696892	-66.83088909	-71.74435679	-76.54672183
+3.7	27.82339318	27.44431032	23.30457307	25.37540821	22.82877195	30.67688664	33.42853439	34.08634256	34.23467902
-3.75	-59.80845896	-74.73523283	-72.32852951	-63.46121802	-48.37057544	-65.15564231	-73.11901651	-78.72727198	-84.25400821
+3.75	22.52860101	20.4970921	18.52419121	21.81121062	18.59685369	24.9611661	26.85071885	26.76662014	26.76144525
-3.8	-65.93302955	-83.352817	-81.41888793	-72.97279657	-53.28317299	-71.78612478	-80.69426129	-87.15194607	-93.56675851
+3.8	16.20406492	15.5354876	16.4759183	20.25975489	13.54004289	18.13185863	18.9972949	18.97731079	18.9720503
-3.85	-71.19573048	-90.80041409	-89.31045301	-81.38813084	-57.50276179	-77.48169009	-87.20670481	-94.40481418	-101.5956034
+3.85	11.1108987	15.5354876	16.4759183	19.91739649	9.226575018	12.31216284	13.64166231	15.2720644	16.98375764
-3.9	-77.49108793	-99.75815075	-98.84216612	-92.15054884	-62.5483602	-84.29270286	-95.00065653	-103.0965559	-111.2303751
+3.9	10.99834774	15.5354876	16.4759183	19.62763457	8.82379389	11.92389695	13.64166231	15.2720644	16.98375764
-3.95	-82.86669821	-107.447252	-107.0565582	-101.8652687	-66.85515819	-90.10680151	-101.6589653	-110.5314324	-119.4826644
+3.95	10.99834774	15.5354876	16.4759183	19.48027154	8.82379389	11.92389695	13.64166231	15.2720644	16.98375764
-5	-89.2580736	-116.6356599	-116.9099633	-113.8403553	-71.97394344	-97.01756175	-109.5789798	-119.3863057	-129.3235081
+5	10.99834774	15.5354876	16.4759183	19.42217865	8.82379389	11.92389695	13.64166231	15.2720644	16.98375764

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-29.84282816	-32.91524596	-18.8215	-22.704	-24.4302
End Shear	208.9743734	222.8036539	138.4161	167.1238	176.517
-0.05	-29.84282816	-32.91524596	-18.8215	-22.704	-24.4302
+0.05	192.1094608	204.5703755	127.7468	154.2973	162.6987
-0.1	-29.84282816	-32.91524596	-18.8215	-22.704	-24.4302
+0.1	174.6844934	185.3935354	116.7085	141.0233	148.4055
-0.15	-29.84282816	-32.91524596	-18.8215	-22.704	-24.4302
+0.15	160.2092225	169.4913024	107.5149	129.9645	136.5111
-0.2	-29.84282816	-32.91524596	-19.201	-22.704	-24.4302
+0.2	143.4750465	151.1424069	96.85733	117.1407	122.735
-0.25	-29.84282816	-32.91524596	-24.4632	-26.9242	-28.9177
+0.25	129.6750533	136.0418566	88.04258	106.5308	111.3519
-0.3	-40.75944618	-43.13921323	-30.6068	-37.0021	-36.7656
+0.3	113.8462379	118.7599115	77.89975	94.31794	98.26725
-0.35	-51.98594406	-54.781719	-38.474	-47.2641	-47.1496
+0.35	100.9031122	104.6632447	69.57732	84.29313	87.54294
-0.4	-67.49084354	-68.37124349	-49.1602	-60.0865	-60.6275
+0.4	86.19421973	88.68717648	60.08336	72.85224	75.32404
-0.45	-81.06259545	-81.52271132	-58.4583	-71.2405	-72.6382
+0.45	74.28948421	75.79660134	52.36669	63.54866	65.40604
-0.5	-98.54895436	-100.2907273	-69.2626	-84.1978	-86.7457
+0.5	60.91508113	61.36541702	43.65569	53.04062	54.22722
-0.55	-113.0859148	-116.5812764	-78.221	-94.9385	-98.4535
+0.55	50.23032347	50.63296993	36.65826	44.59445	45.26305
-0.6	-129.9045039	-135.4616819	-88.5568	-107.327	-111.974
+0.6	39.06929319	39.78275541	28.86433	35.18016	35.50436
-0.65	-143.7856448	-151.0734006	-97.0621	-117.518	-123.112
+0.65	30.47884602	31.83619632	22.85627	27.91556	27.86777
-0.7	-159.7218963	-169.0320427	-106.795	-129.177	-135.871
+0.7	22.16191738	23.08319112	17.29701	20.27521	20.62056
-0.75	-172.7656677	-183.7627395	-114.734	-138.682	-146.291
+0.75	16.32226821	16.7450423	13.79154	15.10816	16.14624
-0.8	-187.6050375	-200.5606731	-123.731	-149.45	-158.116
+0.8	10.70909572	10.63969422	9.803852	10.78085	11.14115
-0.85	-199.6298857	-214.2081027	-130.989	-158.134	-167.67
+0.85	7.275928609	6.972026294	6.682258	7.400628	7.399963
-0.9	-213.1577698	-229.6063524	-139.115	-167.851	-178.385
+0.9	6.342633992	6.972026294	4.017643	4.858204	5.211205
-0.95	-223.9821378	-241.9683526	-145.58	-175.577	-186.926
+0.95	6.342633992	6.972026294	4.017643	4.858204	5.211205
-1	-235.9840024	-255.7279401	-152.701	-184.081	-196.357
+1	6.34E+00	6.97E+00	4.02E+00	4.86E+00	5.21E+00
(Span 2) -2	-2.23E+01	-2.45E+01	-1.41E+01	-1.71E+01	-1.83E+01
+2	239.738026	260.4303996	154.4573	186.1068	198.8813
-2.05	-2.23E+01	-2.45E+01	-1.41E+01	-1.71E+01	-1.83E+01
+2.05	227.4004546	246.334937	147.0961	177.3044	189.1462
-2.1	-22.3019752	-24.51504516	-14.1268	-17.0824	-18.3236
+2.1	213.2667555	230.2897939	138.5747	167.1038	177.9184
-2.15	-22.3019752	-24.51504516	-14.1268	-17.0824	-18.3236
+2.15	199.2572167	214.4717307	130.0541	156.8952	166.726
-2.2	-22.3019752	-24.51504516	-14.1268	-17.0824	-18.3236
+2.2	183.6713018	196.9580096	120.5029	145.443	154.2126
-2.25	-22.98131698	-24.51504516	-17.2535	-21.1161	-20.7936

+2.25	168.6108146	180.1089734	111.2111	134.2938	142.0673
-2.3	-33.3076202	-34.2204342	-24.6206	-30.0368	-30.1748
+2.3	152.2350981	161.8644241	101.0443	122.0866	128.8067
-2.35	-45.40575306	-45.54477979	-33.0496	-40.2235	-40.8505
+2.35	135.4987998	143.5313561	90.72158	109.6842	115.3129
-2.4	-58.37486987	-59.33905689	-41.4978	-50.4212	-51.6973
+2.4	119.7281028	126.4384158	80.67703	97.60814	102.3233
-2.45	-73.07082423	-75.28953901	-50.9871	-61.8641	-63.9151
+2.45	103.4273307	108.4929976	70.36997	85.20816	88.96181
-2.5	-88.48404706	-92.10950563	-60.8615	-73.761	-76.6611
+2.5	87.50195531	91.03635665	60.23448	73.00579	75.85079
-2.55	-103.4284686	-108.4931767	-70.3707	-85.209	-88.9628
+2.55	73.06978655	75.28939971	50.98637	61.86324	63.91422
-2.6	-119.7292591	-126.4385675	-80.6778	-97.609	-102.324
+2.6	58.37388673	59.33892262	41.49718	50.42038	51.69651
-2.65	-135.4619459	-143.5315089	-90.7223	-109.685	-115.275
+2.65	45.40480535	45.91097809	33.04902	40.22273	40.84968
-2.7	-152.2362312	-161.8646115	-101.045	-122.088	-128.808
+2.7	33.30682377	34.22034465	24.62007	30.03612	30.17412
-2.75	-167.5961525	-178.9751522	-110.583	-133.54	-141.247
+2.75	23.56046367	24.51504462	17.68389	21.63779	21.35218
-2.8	-183.6723934	-196.9581914	-120.504	-145.444	-154.214
+2.8	22.3019761	24.51504462	14.12684	17.08242	18.32364
-2.85	-199.2582645	-214.4718703	-130.055	-156.896	-166.727
+2.85	22.3019761	24.51504462	14.12684	17.08242	18.32364
-2.9	-213.2677314	-230.2899312	-138.575	-167.105	-177.919
+2.9	22.3019761	24.51504462	14.12684	17.08242	18.32364
-2.95	-227.401372	-246.3350644	-147.097	-177.305	-189.147
+2.95	22.3019761	24.51504462	14.12684	17.08242	18.32364
-3	-240.5263456	-261.3335738	-154.925	-186.665	-199.501
+3	22.3019761	24.51504462	14.12684	17.08242	18.32364
(Span 3) -4	-6.342634247	-6.972026141	-4.01764	-4.8582	-5.2112
+4	235.0914994	254.7035383	152.1737	183.4508	195.6572
-3.05	-6.342634247	-6.972026141	-4.01764	-4.8582	-5.2112
+3.05	224.9354053	243.0600858	146.1478	176.2547	187.677
-3.1	-6.342634247	-6.972026141	-4.01764	-4.8582	-5.2112
+3.1	212.1436322	228.4512651	138.5076	167.1245	177.5827
-3.15	-6.983281762	-6.972026141	-6.41461	-7.05789	-7.10632
+3.15	*200.6962884*	*215.4212561*	*131.6314*	*158.9024*	*168.5161*
-3.2	*-11.10602498*	*-11.07009794*	*-10.0969*	*-11.1016*	*-11.5041*
+3.2	*186.4857724*	*199.2932676*	*123.0535*	*148.6402*	*157.2249*
-3.25	*-15.81349436*	*-16.2030108*	*-13.4764*	*-14.7634*	*-15.754*
+3.25	*173.9287387*	*185.0789882*	*115.4405*	*139.5283*	*147.2192*
-3.3	*-22.71448119*	*-23.73102032*	*-17.6338*	*-20.8409*	*-21.0415*
+3.3	*158.5140491*	*167.6708046*	*106.0588*	*128.2948*	*134.9054*
-3.35	*-29.79363189*	*-31.1379084*	*-22.3528*	*-27.3063*	*-27.2131*
+3.35	*145.0288803*	*152.4743078*	*97.82264*	*118.4293*	*124.1083*
-3.4	*-39.87929273*	*-40.52873292*	*-29.4454*	*-35.8823*	*-36.0493*
+3.4	*128.6245803*	*134.0248928*	*87.77132*	*106.3856*	*110.9462*
-3.45	*-49.29016171*	*-49.73717334*	*-36.0407*	*-43.8488*	*-44.4727*
+3.45	*114.3928277*	*118.0484567*	*79.02527*	*95.90261*	*99.5051*
-3.5	*-61.91694561*	*-62.44329215*	*-44.31*	*-53.8301*	*-55.0661*
+3.5	*97.21349068*	*98.79687944*	*68.43846*	*83.20958*	*85.66915*
-3.55	*-73.23441799*	*-74.6550217*	*-51.6812*	*-62.722*	*-64.5257*
+3.55	*82.41663187*	*83.21561635*	*59.29598*	*72.24519*	*73.73154*
-3.6	*-87.30296335*	*-89.88853617*	*-60.8005*	*-73.7167*	*-76.2464*
+3.6	*66.29378346*	*67.333269*	*48.3078*	*59.06382*	*59.60482*

-3.65	***-99.74967957***	***-103.4074615***	***-68.8343***	***-83.3979***	***-86.5861***
+3.65	***53.05955033***	***55.83394881***	***39.24618***	***48.19078***	***48.18281***
-3.7	***-115.045355***	***-120.0662795***	***-78.6695***	***-95.2449***	***-99.2596***
+3.7	***39.8927375***	***42.0752491***	***30.13701***	***36.06345***	***36.16525***
-3.75	***-128.4396968***	***-134.6901911***	***-87.2523***	***-105.579***	***-110.332***
+3.75	***30.32257112***	***32.91524612***	***24.93835***	***27.44261***	***29.52447***
-3.8	***-144.7480731***	***-152.5354987***	***-97.6693***	***-118.118***	***-123.784***
+3.8	***29.84282797***	***32.91524612***	***18.82149***	***22.70396***	***24.43022***
-3.85	***-158.9083994***	***-168.0621936***	***-106.688***	***-128.969***	***-135.441***
+3.85	***29.84282797***	***32.91524612***	***18.82149***	***22.70396***	***24.43022***
-3.9	***-176.0148477***	***-186.854939***	***-117.552***	***-142.038***	***-149.498***
+3.9	***29.84282797***	***32.91524612***	***18.82149***	***22.70396***	***24.43022***
-3.95	***-190.7596816***	***-203.0822132***	***-126.893***	***-153.27***	***-161.592***
+3.95	***29.84282797***	***32.91524612***	***18.82149***	***22.70396***	***24.43022***
-5	***-208.4496181***	***-222.5833373***	***-138.071***	***-166.709***	***-176.079***
+5	***29.84282797***	***32.91524612***	***18.82149***	***22.70396***	***24.43022***

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.26E-13	-4.16E-13	-6.10E-13	-3.61E-13	-3.84E-13	-3.13E-13	-3.66E-13	-3.63E-13	-3.83E-13	-2.22E-13
End Shear	7.74E-13	4.21E-13	6.71E-13	3.96E-13	4.26E-13	2.52E-13	3.17E-13	2.69E-13	2.86E-13	3.46E-13
-0.05	-113.9709929	-155.6011841	-223.4833969	-86.3369248	-92.888407	-87.553276	-105.985905	-108.319921	-114.640562	-45.91778415
+0.05	773.3289789	989.1876794	1241.347849	666.3040189	711.7544638	667.5205697	796.9251575	745.6856737	788.1661776	350.4087038
-0.1	-227.9419859	-311.2023683	-446.9667937	-172.67385	-185.776814	-175.106552	-211.971811	-216.639842	-229.281124	-91.8355683
+0.1	1438.99011	1852.729752	2266.957962	1241.625781	1325.553991	1242.747248	1482.00628	1376.26115	1454.486219	651.5077284
-0.15	-341.9129788	-466.8035524	-670.4501906	-259.010775	-278.665221	-262.659828	-317.957716	-324.959763	-343.921687	-137.7533524
+0.15	2057.38813	2591.141362	3139.60357	1726.156381	1841.723711	1726.009529	2055.929441	1892.53038	1999.834673	903.9597479
-0.2	-455.8839717	-622.4047366	-893.9335875	-345.347699	-371.553628	-350.213104	-423.943622	-433.279685	-458.562249	-183.6711366
+0.2	2589.849565	3205.727489	3831.037341	2121.502855	2262.046085	2119.019592	2520.879347	2313.344471	2444.999289	1108.718429
-0.25	-569.8549647	-778.0059207	-1117.416984	-431.684624	-464.442035	-437.76638	-529.929527	-541.599606	-573.202811	-229.5889207
+0.25	3008.274383	3698.292679	4326.905026	2429.810306	2588.883091	2424.036503	2904.459628	2657.550305	2810.738097	1267.345635
-0.3	-683.8259576	-933.6071048	-1340.900381	-518.021549	-557.330442	-525.319656	-635.915433	-649.919527	-687.843373	-275.5067049
+0.3	3309.64436	4071.141637	4651.299557	2653.762693	2825.176934	2664.515243	3192.042234	2900.120173	3066.344751	1381.500339
-0.35	-797.7969505	-1089.208289	-1564.383778	-604.358474	-650.218849	-612.872932	-741.901338	-758.239448	-802.483936	-321.424489
+0.35	3504.815073	4327.07791	4918.238655	2802.485613	2994.101137	2826.248595	3379.364541	3065.989102	3243.140281	1452.507611
-0.4	-911.7679435	-1244.809473	-1787.867175	-690.695399	-743.107256	-700.426208	-847.887243	-866.559369	-917.124498	-367.3422732
+0.4	3596.592671	4469.406066	5021.250101	2889.300194	3083.293519	2908.915873	3470.598942	3134.862701	3317.006023	1482.476357
-0.45	-1025.738936	-1400.410657	-2011.350572	-777.032324	-835.995663	-787.979484	-953.873149	-974.87929	-1031.76506	-413.2600573
+0.45	3590.695129	4501.929	4955.757997	2900.964865	3092.55681	2915.812268	3470.911292	3112.092038	3293.878569	1470.697319
-0.5	-1139.709929	-1556.011841	-2234.833969	-863.369248	-928.88407	-875.53276	-1059.85905	-1083.19921	-1146.40562	-459.1778415
+0.5	3493.560525	4441.882821	4915.295794	2851.061088	3040.761154	2866.597979	3415.420222	3067.615663	3246.488955	1455.115672
-0.55	-1253.680922	-1711.613026	-2458.317366	-949.706173	-1021.77248	-963.086035	-1165.84496	-1191.51913	-1261.04618	-505.0956256
+0.55	3340.393093	4282.413882	4771.011306	2735.609347	2919.805896	2754.575701	3285.773614	2967.574756	3139.784932	1408.55351
-0.6	-1367.651915	-1867.21421	-2681.800762	-1036.0431	-1114.66088	-1050.63931	-1271.83087	-1299.83905	-1375.68675	-551.0134098
+0.6	3147.601023	4024.99799	4513.637347	2558.732528	2732.161909	2579.341599	3078.999758	2781.490618	2942.112373	1326.665804
-0.65	-1481.622908	-2022.815394	-2905.284159	-1122.38002	-1207.54929	-1138.19259	-1377.81677	-1408.15897	-1490.32731	-596.9311939
+0.65	2872.815266	3675.202685	4150.181002	2330.095586	2484.291088	2346.956229	2802.148329	2516.635322	2661.183809	1212.497619
-0.7	-1595.593901	-2178.416578	-3128.767556	-1208.71695	-1300.4377	-1225.74586	-1483.80268	-1516.4789	-1604.96787	-642.8489781
+0.7	2524.115157	3239.09617	3688.298047	2056.440231	2183.235491	2064.027193	2462.684831	2181.22791	2307.772722	1069.385942
-0.75	-1709.564894	-2334.017762	-3352.250953	-1295.05387	-1393.32611	-1313.29914	-1589.78858	-1624.79882	-1719.60843	-688.7667622
+0.75	2110.302178	2723.245789	3137.406956	1737.699033	1841.078972	1737.708729	2069.1718	1792.055049	1895.474612	900.9584163
-0.8	-1823.535887	-2489.618946	-3575.73435	-1381.3908	-1486.21451	-1400.85242	-1695.77449	-1733.11874	-1834.249	-734.6845464
+0.8	1640.895216	2134.718884	2506.983702	1381.283373	1457.734294	1375.701744	1630.834482	1345.611863	1422.718847	711.1333025
-0.85	-1937.50688	-2694.294257	-3843.38446	-1467.72772	-1579.10292	-1488.40569	-1801.76039	-1841.43866	-1948.88956	-780.6023305
+0.85	1126.133653	1530.156746	1843.446151	995.142499	1041.601718	986.2533083	1157.559918	851.6570395	899.8508401	504.1200384
-0.9	-2051.477873	-3037.30982	-4235.540794	-1554.06465	-1671.99133	-1575.95897	-1907.7463	-1949.75858	-2063.53012	-826.5201147
+0.9	602.9972656	1006.891886	1260.796023	587.7639844	608.2880236	578.1574484	660.1794606	440.0560068	464.6851144	284.976527
-0.95	-2165.448866	-3498.479742	-4747.670214	-1640.40157	-1764.87973	-1663.51224	-2013.7322	-2058.0785	-2178.17068	-872.4378988
+0.95	470.9370727	612.8968111	888.6115517	358.6965362	385.7567586	363.5466448	439.8400921	441.7436415	467.4304624	189.6114562
-1	-2279.419852	-4059.690455	-5850.759671	-1726.73853	-1857.76817	-1751.06554	-2119.71812	-2166.3984	-2292.81123	-918.3556739
+1	495.7232389	619.0347483	818.1709876	377.5753083	406.0597526	382.6806708	462.9895724	464.9932968	492.0320551	199.5910029
(Span 2) -2	-2279.419852	-4059.690455	-5850.759671	-1726.73853	-1857.76817	-1751.06554	-2119.71812	-2166.3984	-2292.81123	-918.3556739
+2	495.7232389	619.0347483	818.1709876	377.5753083	406.0597526	382.6806708	462.9895724	464.9932968	492.0320551	199.5910029
-2.05	-1659.076756	-2954.806234	-4435.381692	-1262.04849	-1357.25808	-1279.11329	-1547.5463	-1554.24376	-1644.62109	-667.1345588
+2.05	382.4241773	570.4363423	806.3534285	291.2793175	313.2535549	295.2178316	357.1718911	358.717655	379.5766223	163.0947399
-2.1	-1545.632882	-2350.230754	-3263.634774	-1175.7525	-1264.45187	-1191.65044	-1441.72863	-1447.96812	-1532.16566	-621.5174224
+2.1	752.9526318	1082.150542	1186.621975	725.3726056	756.6239591	717.3597876	823.1519441	536.4530958	567.9311337	343.8575908
-2.15	-1432.189009	-1914.559729	-2476.308241	-1089.45651	-1171.64567	-1104.1876	-1335.91095	-1341.69249	-1419.71023	-575.9002861
+2.15	1390.998194	1679.764005	1799.119177	1200.443387	1270.484316	1201.434317	1411.568074	1077.911542	1138.305658	604.0058462
-2.2	-1318.745136	-1652.037919	-2180.377191	-1003.16052	-1078.83947	-1016.72476	-1230.09328	-1235.41685	-1307.2548	-530.2831498
+2.2	1984.281107	2356.69485	2495.067616	1644.929938	1748.593065	1651.418874	1959.949932	1651.71599	1745.727086	843.7745584

-2.25	-1205.301263	-1541.085738	-2020.858806	-916.864531	-986.033269	-929.261919	-1124.2756	-1129.14122	-1194.79937	-484.6660135
+2.25	2519.792195	3075.728497	3523.840013	2044.835076	2180.49213	2060.484245	2454.075851	2160.30715	2284.084611	1058.94394
-2.3	-1091.85739	-1460.255488	-1888.450158	-830.568542	-893.227067	-841.799078	-1018.45793	-1022.86558	-1082.34394	-439.0488771
+2.3	2962.465929	3699.535806	4359.345698	2387.895471	2548.211574	2405.2886	2868.705412	2585.144515	2734.232264	1234.964003
-2.35	-978.4135164	-1379.425237	-1762.623182	-744.272553	-800.420865	-754.336236	-912.64025	-916.589949	-969.888512	-393.4317408
+2.35	3324.773613	4195.994422	5027.225366	2663.501993	2842.648342	2684.125029	3205.471629	2917.776351	3086.657502	1378.14772
-2.4	-864.9696432	-1298.594987	-1762.62216	-657.976564	-707.614663	-666.873394	-806.822574	-810.314314	-857.433082	-347.8146045
+2.4	3577.476858	4551.417043	5464.094643	2867.032545	3060.64306	2886.857134	3444.387251	3152.012937	3335.257914	1474.800429
-2.45	-751.52577	-1217.764736	-1762.621044	-571.680575	-614.808461	-579.410552	-701.004899	-704.03868	-744.977652	-302.1974681
+2.45	3726.624956	4766.351371	5655.618939	2986.950872	3186.684598	3005.514535	3586.866042	3277.038505	3468.082067	1531.754293
-2.5	-638.0818968	-1136.934486	-1762.619406	-485.3846	-522.002259	-491.947711	-595.187223	-597.763121	-632.522273	-256.5803318
+2.5	3765.564783	4834.577585	5627.660541	3028.915417	3230.33166	3044.532343	3625.754489	3299.870413	3492.938325	1543.398544
-2.55	-750.5664391	-1217.764725	-1762.618287	-571.680591	-614.808422	-579.410561	-701.004922	-704.038763	-744.977705	-302.1974783
+2.55	3686.956418	4766.370585	5655.619002	2986.957111	3186.69334	3005.517461	3586.875692	3277.040568	3468.08397	1531.756934
-2.6	-863.8655008	-1298.59497	-1762.617175	-657.976582	-707.61462	-666.8734	-806.822603	-810.314405	-857.433138	-347.8146129
+2.6	3514.328963	4551.420191	5464.094462	2867.036816	3060.649588	2886.867001	3444.403404	3152.020988	3335.266106	1476.601999
-2.65	-977.1645624	-1379.425216	-1762.616064	-744.272573	-800.420817	-754.336239	-912.640284	-916.590047	-969.888571	-393.4317476
+2.65	3278.308596	4196.017386	5027.225148	2663.504794	2842.653342	2684.128919	3205.481581	2917.777894	3086.658844	1378.151824
-2.7	-1090.463624	-1460.255461	-1888.450169	-830.568564	-893.227015	-841.799078	-1018.45797	-1022.86569	-1082.344	-439.0488822
+2.7	2932.501734	3699.543086	4359.345794	2387.896966	2548.215086	2405.295542	2868.70463	2585.148075	2734.235722	1235.270623
-2.75	-1203.762686	-1541.085707	-2020.858818	-916.864554	-986.033213	-929.261918	-1124.27565	-1129.14133	-1194.79944	-484.6660169
+2.75	2495.596334	3075.756817	3523.830439	2044.835922	2180.494915	2060.490664	2454.087757	2160.309512	2284.086802	1058.949249
-2.8	-1317.061747	-1652.037882	-2180.377203	-1003.16055	-1078.83941	-1016.72476	-1230.09333	-1235.41697	-1307.25487	-530.2831515
+2.8	1966.475052	2356.708627	2495.067274	1644.928978	1748.59562	1651.424949	1959.952464	1651.717736	1745.728636	843.7760458
-2.85	-1430.360809	-1914.559671	-2476.308236	-1089.45654	-1171.64561	-1104.1876	-1335.91101	-1341.69261	-1419.7103	-575.9002862
+2.85	1366.636105	1679.763921	1798.237202	1200.444831	1270.487671	1201.441032	1411.580025	1077.913812	1138.307782	604.0035979
-2.9	-1543.659871	-2350.230688	-3263.61964	-1175.75253	-1264.45181	-1191.65044	-1441.72869	-1447.96826	-1532.16573	-621.5174208
+2.9	741.2484983	1082.144822	1185.626434	725.3754326	756.6233823	717.3638856	823.1617837	536.4543483	567.9326489	343.8614799
-2.95	-1656.958932	-2954.806157	-4435.383221	-1262.04852	-1357.258	-1279.11327	-1547.54637	-1554.2439	-1644.62117	-667.1345555
+2.95	382.912962	570.4334117	806.3300301	291.2793142	313.2535589	295.217865	357.1718582	358.7176653	379.5766499	162.5846283
-3	-2281.628077	-4059.690615	-5850.761141	-1726.73859	-1857.76832	-1751.06566	-2119.71814	-2166.39861	-2292.81123	-918.3556896
+3	496.3568561	619.0347698	818.1709876	377.5752999	406.0597713	382.6806817	462.9895479	464.9932649	492.0320437	199.5910102
(Span 3) -4	-2.28E+03	-4059.690615	-5850.761141	-1.73E+03	-1.86E+03	-1.75E+03	-2.12E+03	-2.17E+03	-2.29E+03	-9.18E+02
+4	4.96E+02	619.0347698	818.1709876	3.78E+02	4.06E+02	3.83E+02	4.63E+02	4.65E+02	4.92E+02	2.00E+02
-3.05	-2167.546675	-3498.479894	-4747.668329	-1640.40166	-1764.87991	-1663.51237	-2013.73224	-2058.07868	-2178.17067	-872.4379047
+3.05	471.5390134	612.8968317	888.143836	358.6965352	385.756783	363.5466473	439.8400706	441.7436012	467.430441	189.6114596
-3.1	-2053.465274	-3037.30996	-4235.540809	-1554.06473	-1671.9915	-1575.95909	-1907.74633	-1949.75874	-2063.5301	-826.5201197
+3.1	603.8067197	1006.900071	1259.258847	587.7659039	608.2857362	578.1515946	660.1907761	440.0581653	464.6872297	283.3431625
-3.15	-1939.383873	-2694.294387	-3843.384472	-1467.72781	-1579.10308	-1488.40581	-1801.76042	-1841.43881	-1948.88954	-780.6023348
+3.15	1125.09692	1530.166175	1841.430593	995.1453983	1041.603043	986.2486985	1157.550529	851.6600406	899.854298	504.1153816
-3.2	-1825.302472	-2489.619074	-3575.734368	-1381.39088	-1486.21467	-1400.85253	-1695.77452	-1733.11888	-1834.24898	-734.6845499
+3.2	1636.847515	2134.729118	2504.761428	1381.286697	1457.736069	1375.697774	1630.825769	1345.615075	1422.722548	711.129021
-3.25	-1711.22107	-2334.017882	-3352.250971	-1295.05395	-1393.32625	-1313.29925	-1589.78861	-1624.79895	-1719.60842	-688.7667649
+3.25	2109.336966	2723.256126	3135.116595	1737.702408	1841.080686	1737.704747	2069.162826	1792.057257	1895.47725	900.9538136
-3.3	-1597.139669	-2178.41669	-3128.767574	-1208.71702	-1300.43784	-1225.74596	-1483.8027	-1516.47902	-1604.96786	-642.84898
+3.3	2531.907776	3239.105961	3685.043965	2056.442731	2183.234822	2064.022635	2462.674995	2181.228798	2307.773982	1069.381717
-3.35	-1483.058268	-2022.815498	-2905.284177	-1122.3801	-1207.54942	-1138.19268	-1377.8168	-1408.15909	-1490.32729	-596.9311951
+3.35	2894.623501	3675.211468	4146.958041	2330.096849	2484.289015	2346.950337	2802.136848	2516.632598	2661.181256	1212.492631
-3.4	-1368.976866	-1867.214306	-2681.800781	-1036.04317	-1114.66101	-1050.6394	-1271.83089	-1299.83915	-1375.68673	-551.0134101
+3.4	3188.269233	4025.005168	4510.615653	2558.730843	2732.158099	2579.334098	3078.986294	2781.485641	2942.107437	1326.660685
-3.45	-1254.895465	-1711.613113	-2458.317384	-949.70624	-1021.77259	-963.086118	-1165.84498	-1191.51922	-1261.04617	-505.0956252
+3.45	3404.469345	4282.41886	4768.375167	2735.605567	2919.799842	2754.566144	3285.780278	2967.56641	3139.776442	1408.547656
-3.5	-1140.814064	-1556.011921	-2234.833987	-863.369312	-928.884177	-875.532836	-1059.85908	-1083.19929	-1146.40561	-459.1778403
+3.5	3536.044968	4441.885267	4913.241772	2851.054828	3040.752329	2866.585931	3415.423699	3067.604325	3246.477294	1455.109766
-3.55	-1026.732663	-1400.410729	-2011.35059	-777.032384	-835.995763	-787.979554	-953.873171	-974.879358	-1031.76505	-413.2600553
+3.55	3575.433525	4501.927897	4955.757753	2900.972584	3092.538168	2915.80324	3470.909625	3112.084098	3293.869939	1473.80304
-3.6	-912.6512612	-1244.809537	-1787.867193	-690.695456	-743.107348	-700.426272	-847.887265	-866.559427	-917.124484	-367.3422704

+3.6	**3520.325146**	***4469.402229***	***5021.250273***	**2889.304886**	**3083.300683**	**2908.903773**	**3470.593625**	**3134.850714**	**3316.993094**	**1482.473006**
-3.65	**-798.56986**	***-1089.208345***	***-1564.383796***	**-604.358529**	**-650.218933**	**-612.87299**	**-741.901358**	**-758.239495**	**-802.483921**	**-321.4244855**
+3.65	**3462.126868**	***4327.070729***	***4918.238753***	**2802.486864**	**2994.104586**	**2826.233376**	**3379.355461**	**3065.994458**	**3243.145578**	**1452.50388**
-3.7	**-684.4884587**	***-933.6071526***	***-1340.900399***	**-518.021601**	**-557.330518**	**-525.319708**	**-635.915452**	**-649.919564**	**-687.843359**	**-275.5067005**
+3.7	**3303.726961**	***4071.130484***	***4651.299372***	**2653.759685**	**2825.175868**	**2664.518521**	**3192.028418**	**2900.120642**	**3066.34488**	**1381.495388**
-3.75	**-570.4070574**	***-778.0059604***	***-1117.417002***	**-431.684673**	**-464.442104**	**-437.766426**	**-529.929545**	**-541.599632**	**-573.202797**	**-229.5889156**
+3.75	**3039.712358**	***3698.277376***	***4326.904978***	**2429.803393**	**2588.877817**	**2424.035694**	**2904.463398**	**2657.546121**	**2810.733291**	**1267.340616**
-3.8	**-456.3256561**	***-622.4047682***	***-893.9336055***	**-345.347745**	**-371.553689**	**-350.213144**	**-423.943639**	**-433.2797**	**-458.562235**	**-183.6711307**
+3.8	**2665.386306**	***3205.708006***	***3831.037684***	**2121.491542**	**2262.036154**	**2119.014527**	**2520.878106**	**2313.33507**	**2444.98895**	**1108.721726**
-3.85	**-342.2442548**	***-466.803576***	***-670.4502087***	**-259.010817**	**-278.665274**	**-262.659862**	**-317.957733**	**-324.959769**	**-343.921673**	**-137.7533458**
+3.85	**2176.772222**	***2591.118517***	***3139.603542***	**1726.141102**	**1841.709483**	**1726.000109**	**2055.922914**	**1892.525693**	**1999.829832**	**903.9624281**
-3.9	**-228.1628535**	***-311.2023839***	***-446.9668118***	**-172.67389**	**-185.776859**	**-175.10658**	**-211.971826**	**-216.639837**	**-229.281111**	**-91.83556082**
+3.9	**1570.614599**	***1852.70246***	***2266.958118***	**1241.606305**	**1325.53517**	**1242.733305**	**1481.994216**	**1376.251366**	**1454.475985**	**651.5093334**
-3.95	**-114.0814522**	***-155.6011917***	***-223.4834149***	**-86.3369619**	**-92.8884448**	**-87.5532981**	**-105.98592**	**-108.319905**	**-114.640549**	**-45.91777589**
+3.95	**846.0914308**	***989.1559481***	***1241.34762***	**666.2794783**	**711.7302578**	**667.5023439**	**796.9079172**	**745.6702652**	**788.1499916**	**350.4095222**
-5	**-5.28E-13**	***-4.00E-13***	***-7.45E-13***	**-2.89E-13**	**-3.06E-13**	**-2.83E-13**	**-3.30E-13**	**-2.78E-13**	**-2.95E-13**	**-1.86E-13**
+5	**9.47E-13**	***7.68E-13***	***1.15E-12***	**5.72E-13**	**6.09E-13**	**5.70E-13**	**7.13E-13**	**6.47E-13**	**6.85E-13**	**3.94E-13**

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.44E-13	-3.20E-13	-2.77E-13	-2.29E-13	-2.41E-13	-2.74E-13	-2.61E-13	-2.83E-13	-2.67E-13
End Shear	2.17E-13	2.18E-13	2.07E-13	1.86E-13	2.71E-13	2.14E-13	2.06E-13	2.06E-13	2.06E-13
-0.05	-65.99007918	-93.21292578	-98.8555012	-116.5330824	-52.94275898	-71.54338207	-81.8499669	-91.6323789	-101.90254
+0.05	500.5908094	649.1880505	647.3148281	621.0773608	403.6316332	544.4626024	614.3228	668.7106196	723.0268609
-0.1	-131.9801584	-186.4258516	-197.7110024	-233.0661649	-105.885518	-143.0867641	-163.699934	-183.264758	-203.80508
+0.1	931.5430667	1199.203909	1188.567074	1124.946918	751.5735252	1013.480084	1142.28737	1243.481953	1348.134217
-0.15	-197.9702375	-279.6387773	-296.5665036	-349.5992473	-158.8282769	-214.6301462	-245.549901	-274.897137	-305.70762
+0.15	1293.008842	1650.564839	1625.020097	1537.594556	1043.814718	1407.310128	1584.240594	1749.407497	1891.887509
-0.2	-263.9603167	-372.8517031	-395.4220048	-466.1323298	-211.7710359	-286.1735283	-327.399868	-366.529516	-407.61016
+0.2	1586.329374	2005.983164	1987.905467	1858.544787	1281.398182	1727.368299	1941.903506	2161.585684	2347.706484
-0.25	-329.9503959	-466.0646289	-494.277506	-582.6654122	-264.7137949	-357.7169103	-409.249834	-458.161895	-509.5127
+0.25	1813.259975	2290.450537	2255.540814	2116.218304	1465.697758	1975.517622	2225.598839	2481.308948	2716.044343
-0.3	-395.9404751	-559.2775547	-593.1330072	-699.1984946	-317.6565539	-429.2602924	-491.099801	-549.794274	-611.41524
+0.3	1975.970342	2490.268846	2445.693537	2309.984738	1598.419209	2166.212022	2445.069415	2711.551716	2984.585682
-0.35	-461.9305543	-652.4904805	-691.9885084	-815.7315771	-370.5993129	-500.8036745	-572.949768	-641.426653	-713.31778
+0.35	2092.025708	2604.713353	2587.312461	2446.527473	1681.598854	2296.950288	2588.105497	2873.233006	3156.578661
-0.4	-527.9206335	-745.7034062	-790.8440096	-932.2646595	-423.5420718	-572.3470565	-654.799735	-733.059032	-815.22032
+0.4	2150.531084	2653.483263	2675.060044	2520.905703	1717.604976	2363.401151	2656.936288	2958.437555	3245.477304
-0.45	-593.9107126	-838.916332	-889.6995108	-1048.797742	-476.4848308	-643.8904386	-736.649702	-824.69141	-917.12286
+0.45	2152.507132	2629.631832	2685.749617	2518.454327	1709.136415	2368.050643	2655.592822	2965.194279	3261.407292
-0.5	-659.9007918	-932.1292578	-988.555012	-1165.330824	-529.4275898	-715.4338207	-818.499669	-916.323789	-1019.0254
+0.5	2118.249888	2593.189656	2634.520488	2470.337312	1685.706942	2328.724546	2613.085123	2914.934996	3202.146208
-0.55	-725.890871	-1025.342184	-1087.410513	-1281.863907	-582.3703488	-786.9772027	-900.349636	-1007.95617	-1120.92794
+0.55	2036.909879	2511.618975	2522.850831	2361.80242	1628.64278	2238.193225	2515.858372	2799.472645	3066.55992
-0.6	-791.8809502	-1118.555109	-1186.266014	-1398.396989	-635.3131078	-858.5205848	-982.199603	-1099.58855	-1222.83048
+0.6	1907.28447	2362.149971	2342.190646	2223.278636	1531.620781	2095.80526	2358.144908	2617.345507	2871.89922
-0.65	-857.8710294	-1211.768035	-1285.121516	-1514.930072	-688.2558667	-930.0639669	-1064.04957	-1191.22093	-1324.73302
+0.65	1733.921003	2152.25866	2112.372287	2014.21587	1398.154082	1906.504668	2145.525328	2374.915526	2610.024794
-0.7	-923.8611086	-1304.980961	-1383.977017	-1631.463154	-741.1986257	-1001.607349	-1145.89954	-1282.85331	-1426.63556
+0.7	1522.131429	1877.287997	1814.704643	1734.542916	1232.086469	1675.682904	1884.094892	2081.832367	2286.43563
-0.75	-989.8511877	-1398.193887	-1482.832518	-1747.996237	-794.1413847	-1073.150731	-1227.7495	-1374.48568	-1528.5381
+0.75	1280.23309	1544.360058	1478.901916	1406.095672	1037.594138	1409.178857	1580.461227	1745.002822	1909.329042
-0.8	-1055.841267	-1491.406812	-1581.688019	-1864.529319	-847.0841437	-1144.694113	-1309.59947	-1466.11806	-1630.44064
+0.8	1007.942418	1161.202182	1081.538582	1012.975749	819.1832405	1113.278431	1241.746098	1366.527548	1487.544687
-0.85	-1121.831346	-1584.619738	-1680.54352	-1993.769095	-900.0269026	-1216.237495	-1391.44944	-1557.75044	-1732.34318
+0.85	711.2691064	736.148699	645.6442346	613.121921	581.6920354	794.71459	875.5845927	954.8012738	1030.563535
-0.9	-1187.821425	-1677.832664	-1779.399022	-2158.829117	-952.9696616	-1287.780877	-1473.2994	-1649.38282	-1834.24572
+0.9	399.1899783	384.4698949	376.2701439	397.3589062	330.2897408	460.6677231	490.1252845	524.207841	554.1046879
-0.95	-1253.811504	-1771.04559	-1878.254523	-2367.973673	-1005.912421	-1359.324259	-1555.14937	-1741.0152	-1936.14826
+0.95	273.3972872	379.9821542	397.1740407	395.9730122	219.6236766	296.9072363	339.1424703	379.4569618	421.4799841
-1	-1319.801612	-1864.258527	-1977.110028	-3045.872311	-1058.855198	-1430.867657	-1636.99934	-1832.64759	-2038.05077
+1	287.7866159	399.9812186	418.0779389	410.0505355	231.1828146	312.5339258	356.9920681	399.4283735	443.6631475
(Span 2) -2	-1319.801612	-1864.258527	-1977.110028	-3045.872311	-1058.855198	-1430.867657	-1636.99934	-1832.64759	-2038.05077
+2	287.7866159	399.9812186	418.0779389	410.0505355	231.1828146	312.5339258	356.9920681	399.4283735	443.6631475
-2.05	-961.9291582	-1336.940419	-1397.428836	-2156.470335	-772.7304571	-1044.647303	-1193.24895	-1335.09264	-1482.94766
+2.05	222.0121052	308.5642882	322.5249477	325.1289867	178.3452749	241.1033397	275.4004382	308.1377968	342.2625789
-2.1	-896.1546412	-1245.523491	-1301.875849	-1471.3086	-719.8929148	-973.2167092	-1111.65732	-1243.80206	-1381.54709
+2.1	500.3051375	459.7248775	405.2191771	380.0941786	403.3529537	573.1394783	613.6381119	665.0484851	697.8082459
-2.15	-830.3801242	-1154.106562	-1206.322861	-1216.406007	-667.0553725	-901.7861152	-1030.06568	-1152.51147	-1280.14652
+2.15	868.5844565	919.2450649	807.8172027	723.8409794	700.4895017	969.8098284	1070.450456	1174.258745	1268.422768
-2.2	-764.6056072	-1062.689634	-1110.769874	-1091.347104	-614.2178302	-830.3555213	-948.474048	-1061.22089	-1178.74595
+2.2	1210.070414	1412.747838	1323.666858	1191.3302	976.6251173	1338.189051	1493.545392	1648.075533	1799.76913

-2.25	-698.8310902	-971.2727058	-1015.216887	-1005.533911	-561.3802879	-758.9249273	-866.882413	-969.930311	-1077.34538
+2.25	1517.296134	1848.454304	1791.980967	1737.153391	1223.560736	1672.158875	1876.537683	2074.85219	2273.961124
-2.3	-633.0565732	-879.8557774	-919.6638998	-927.5201463	-508.5427456	-687.4943334	-785.290778	-878.639729	-975.944809
+2.3	1777.902997	2202.942678	2178.619729	2189.883546	1427.160824	1954.055016	2196.90564	2437.797453	2674.176862
-2.35	-567.2820562	-788.4388491	-824.1109127	-849.5063816	-455.7052032	-616.0637395	-703.699144	-787.349147	-874.544238
+2.35	1985.47725	2478.814179	2480.113451	2528.004742	1592.53364	2181.043085	2455.634113	2728.208265	2993.676823
-2.4	-501.5075393	-697.0219208	-728.5579255	-771.492617	-402.8676609	-544.6331455	-622.107509	-696.058566	-773.143667
+2.4	2137.97458	2670.892119	2710.085061	2774.371843	1705.768038	2346.584792	2640.209856	2940.953195	3227.298291
-2.45	-435.7330223	-605.6049925	-633.0049383	-693.4788523	-350.0301186	-473.2025516	-540.515874	-604.767984	-671.743096
+2.45	2224.60764	2776.451166	2843.326954	2899.483598	1772.485151	2442.264938	2747.598325	3063.776872	3370.851318
-2.5	-369.9585053	-514.1880641	-537.4519731	-615.4650876	-297.1925824	-401.7719577	-458.924239	-513.477402	-570.342538
+2.5	2252.301566	2792.156853	2881.287833	2928.777508	1787.070378	2473.943096	2777.466166	3103.78326	3419.072327
-2.55	-435.7330016	-605.6050162	-633.0049643	-693.4788056	-350.0301221	-473.202521	-540.515861	-604.76797	-671.743107
+2.55	2224.6137	2776.45451	2843.329461	2899.480195	1772.495755	2442.266271	2747.603411	3063.777363	3370.854973
-2.6	-501.5075123	-697.0219466	-728.5579555	-771.4925627	-402.8676618	-544.633107	-622.10749	-696.058547	-773.143675
+2.6	2137.979325	2670.900012	2710.092277	2774.369679	1705.783462	2346.59209	2640.220711	2940.959372	3227.299902
-2.65	-567.282023	-788.438877	-824.1109467	-849.5063198	-455.7052015	-616.0636931	-703.69912	-787.349124	-874.544244
+2.65	1985.480649	2478.820617	2480.117642	2528.00121	1592.547382	2181.045317	2455.639646	2728.208687	2993.690351
-2.7	-633.0565336	-879.8558075	-919.6639379	-927.520077	-508.5427412	-687.4942792	-785.29075	-878.6397	-975.944813
+2.7	1777.905464	2202.951211	2178.624737	2189.882583	1427.162923	1954.059892	2196.913561	2437.800382	2674.18104
-2.75	-698.8310443	-971.2727379	-1015.216929	-1005.533834	-561.3802809	-758.9248653	-866.88238	-969.930277	-1077.34538
+2.75	1517.298005	1848.461398	1791.984887	1737.147878	1223.577765	1672.163292	1876.545041	2074.854353	2273.975887
-2.8	-764.605555	-1062.689668	-1110.76992	-1091.34702	-614.2178206	-830.3554513	-948.47401	-1061.22085	-1178.74595
+2.8	1210.072017	1412.750179	1323.66982	1191.329889	976.6316274	1338.193198	1493.544886	1648.077508	1799.77587
-2.85	-830.3800657	-1154.106599	-1206.322911	-1216.40591	-667.0553603	-901.7860374	-1030.06564	-1152.51143	-1280.14652
+2.85	868.5865468	919.2515503	807.8249751	723.8381276	700.4860883	969.8144853	1070.457888	1174.261486	1268.422421
-2.9	-896.1545764	-1245.523529	-1301.875903	-1471.308735	-719.8929	-973.2166235	-1111.65727	-1243.80201	-1381.54709
+2.9	500.3044463	459.7217845	405.2199554	380.0873775	403.3659542	573.1417829	613.6431648	665.0490348	697.8057271
-2.95	-961.9290871	-1336.94046	-1397.428894	-2156.470638	-772.7304397	-1044.64721	-1193.2489	-1335.09258	-1482.94766
+2.95	222.0121477	308.5642908	322.5249333	325.1290157	178.3453045	241.1033878	275.4004737	308.137833	342.2626124
-3	-1319.801758	-1864.258524	-1977.110199	-3045.872587	-1058.855285	-1430.867649	-1636.99948	-1832.64774	-2038.05089
+3	287.7866435	399.9812094	418.0779213	410.0505685	231.1828261	312.5339602	356.9920895	399.4283953	443.6631575
(Span 3) -4	-1.32E+03	-1.86E+03	-1.98E+03	-3.05E+03	-1.06E+03	-1.43E+03	-1.64E+03	-1.83E+03	-2.04E+03
+4	2.88E+02	4.00E+02	4.18E+02	4.10E+02	2.31E+02	3.13E+02	3.57E+02	3.99E+02	4.44E+02
-3.05	-1253.811671	-1771.045598	-1878.254689	-2367.973762	-1005.912522	-1359.324268	-1555.14951	-1741.01535	-1936.14834
+3.05	273.3973112	379.9821491	397.1740253	395.9730421	219.6236846	296.9072618	339.1424847	379.4569752	421.48
-3.1	-1187.821585	-1677.832673	-1779.39918	-2158.828956	-952.9697583	-1287.780886	-1473.29954	-1649.38297	-1834.24579
+3.1	399.1887909	384.4742622	376.2701293	397.3589345	330.2990767	460.6637992	490.1187891	524.2115795	554.1134164
-3.15	*-1121.831498*	*-1584.619747*	*-1680.54367*	*-1993.768944*	*-900.0269949*	*-1216.237504*	*-1391.44956*	*-1557.75058*	*-1732.34325*
+3.15	711.2703965	736.1446852	645.6392731	613.118942	581.7020815	794.7116398	875.5792573	954.8031935	1030.570503
-3.2	-1055.841412	-1491.406822	-1581.68816	-1864.52918	-847.0842316	-1144.694123	-1309.59959	-1466.11819	-1630.4407
+3.2	1007.943946	1161.198266	1081.531956	1012.97146	819.1936277	1113.27598	1241.741081	1366.529846	1487.552397
-3.25	-989.8513255	-1398.193896	-1482.83265	-1747.996108	-794.1414683	-1073.150741	-1227.74961	-1374.48581	-1528.53816
+3.25	1280.2345	1544.355354	1478.894048	1406.092885	1037.604446	1409.176408	1580.456175	1745.005044	1909.336416
-3.3	-923.8612391	*-1304.98097*	-1383.977141	*-1631.463036*	-741.1987049	-1001.607359	-1145.89964	-1282.85342	-1426.63561
+3.3	1522.131957	1877.282072	1814.709999	1734.539383	1232.096544	1675.680023	1884.08934	2081.833587	2286.442089
-3.35	-857.8711526	-1211.768045	-1285.121631	-1514.929964	-688.2559416	-930.0639777	-1064.04967	-1191.22103	-1324.73306
+3.35	1733.919672	2152.250815	2112.368107	2014.210573	1398.162671	1906.50064	2145.518374	2374.913939	2610.029763
-3.4	-791.8810661	-1118.555119	-1186.266121	-1398.396892	-635.3131782	-858.520596	-982.199692	-1099.58865	-1222.83052
+3.4	1907.281709	2362.139691	2342.183965	2223.273045	1531.628399	2095.799916	2358.136327	2617.342115	2871.902137
-3.45	-725.8909797	-1025.342193	-1087.410611	-1281.86382	-582.3704149	-786.9772143	-900.349718	-1007.95626	-1120.92797
+3.45	2036.9053	2511.610744	2522.84379	2361.796895	1628.649006	2238.186167	2515.847954	2799.466846	3066.558962
-3.5	-659.9008932	-932.1292678	-988.5551015	-1165.330748	-529.4276516	-715.4338326	-818.499744	-916.323875	-1019.02543
+3.5	2118.243617	2593.19529	2634.510735	2470.341159	1685.711567	2328.715461	2613.072045	2914.926812	3202.142467
-3.55	-593.9108067	-838.9163422	-889.6995917	-1048.797677	-476.4848882	-643.890451	-736.64977	-824.691489	-917.122881
+3.55	2152.49452	*2629.6274968 8507*	*2685.743379*	2518.457761	1709.132809	*2368.041782*	2655.588051	2965.184894	3261.412876

-3.6	**-527.9207203**	**-745.7034166**	**-790.8440819**	**-932.2646047**	**-423.5421249**	**-572.3470693**	**-654.799797**	**-733.059102**	**-815.220335**
+3.6	**2150.536349**	**2653.475539**	**2675.050215**	**2520.901242**	**1717.599415**	**2363.389751**	**2656.928767**	**2958.424598**	**3245.479063**
-3.65	**-461.9306338**	**-652.490491**	**-691.9885722**	**-815.7315328**	**-370.5993616**	**-500.8036876**	**-572.949823**	**-641.426716**	**-713.317789**
+3.65	**2092.028204**	**2604.70492**	**2587.306415**	**2446.52326**	**1681.591703**	**2296.955413**	**2588.09512**	**2873.23604**	**3156.575886**
-3.7	**-395.9405474**	**-559.2775653**	**-593.1330624**	**-699.1984609**	**-317.6565982**	**-429.2603059**	**-491.099849**	**-549.79433**	**-611.415244**
+3.7	**1975.969897**	**2490.256913**	***2445.696307***	**2309.988231**	**1598.409309**	**2166.213932**	**2445.055057**	**2711.55034**	**2984.578376**
-3.75	**-329.9504609**	**-466.0646397**	**-494.2775526**	**-582.6653891**	**-264.7138349**	**-357.7169242**	**-409.249875**	**-458.161943**	**-509.512698**
+3.75	**1813.256397**	**2290.453892**	**2255.534487**	**2116.221468**	**1465.685569**	**1975.516227**	**2225.600204**	**2481.303371**	**2716.0323**
-3.8	**-263.9603744**	**-372.8517141**	**-395.4220428**	**-466.1323172**	**-211.7710715**	**-286.1735426**	**-327.399901**	**-366.529557**	**-407.610152**
+3.8	**1586.322669**	**2005.982089**	**1987.910013**	**1858.54984**	**1281.383357**	**1727.363373**	**1941.900806**	**2161.575976**	**2347.709232**
-3.85	**-197.970288**	**-279.6387885**	**-296.5665331**	**-349.5992453**	**-158.8283082**	**-214.6301609**	**-245.549927**	**-274.89717**	**-305.707606**
+3.85	**1292.998789**	**1650.559441**	**1625.019661**	**1537.597272**	**1043.797058**	**1407.301633**	**1584.234152**	**1749.393063**	**1891.885074**
-3.9	**-131.9802015**	**-186.4258628**	**-197.7110233**	**-233.0661735**	**-105.8855449**	**-143.0867792**	**-163.699953**	**-183.264784**	**-203.80506**
+3.9	**931.5294122**	**1199.194151**	**1188.562027**	**1124.94584**	**751.5528125**	**1013.467954**	**1142.276346**	**1243.482314**	**1348.135705**
-3.95	**-65.99011503**	**-93.2129372**	**-98.8555135**	**-116.5331016**	**-52.94278153**	**-71.54339752**	**-81.8499796**	**-91.6323977**	**-101.902514**
+3.95	**500.5744151**	**649.1734205**	**647.3051058**	**621.0818696**	**403.6087937**	**544.4469706**	**614.3079547**	**668.7063799**	**723.0230783**
-5	**-2.23E-13**	**-2.40E-13**	**-2.41E-13**	**-2.70E-13**	**-2.11E-13**	**-2.33E-13**	**-2.19E-13**	**-2.25E-13**	**-2.45E-13**
+5	**4.80E-13**	**5.53E-13**	**4.91E-13**	**4.55E-13**	**4.65E-13**	**4.81E-13**	**4.97E-13**	**5.25E-13**	**5.55E-13**

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.20E-13	-4.27E-13	-3.43E-13	-4.01E-13	-3.63E-13
End Shear	3.29E-13	3.29E-13	2.81E-13	2.87E-13	2.81E-13
-0.05	-179.056969	-197.4914757	-112.928946	-136.223735	-146.581323
+0.05	1154.480949	1227.422253	766.8417929	926.9090483	977.4188753
-0.1	-358.1139379	-394.9829515	-225.857892	-272.44747	-293.162645
+0.1	2117.677726	2257.892883	1413.208045	1708.336592	1798.177977
-0.15	-537.1709069	-592.4744272	-338.786838	-408.671204	-439.743968
+0.15	2943.824289	3134.758504	1939.995665	2351.864877	2480.461361
-0.2	-716.2278759	-789.9659029	-451.715783	-544.894939	-586.325291
+0.2	3594.349758	3898.56354	2389.926111	2892.275967	3042.882274
-0.25	-895.2848448	-987.4573787	-564.644729	-681.118674	-732.906613
+0.25	4100.362498	4495.559449	2736.142922	3297.450999	3498.00567
-0.3	-1074.341814	-1184.948854	-677.573675	-817.342409	-879.487936
+0.3	4507.755405	4943.144324	2977.147465	3571.141096	3821.824203
-0.35	-1253.398783	-1382.44033	-790.502621	-953.566143	-1026.06926
+0.35	4765.8348	5237.955128	3137.746571	3752.961124	4008.218492
-0.4	-1432.455752	-1579.931806	-903.431567	-1089.78988	-1172.65058
+0.4	4937.679031	5354.909366	3197.593235	3816.335561	4095.65152
-0.45	-1611.512721	-1777.423282	-1016.36051	-1226.01361	-1319.2319
+0.45	4949.408638	5417.837598	3162.926334	3766.800818	4062.918431
-0.5	-1790.56969	-1974.914757	-1129.28946	-1362.23735	-1465.81323
+0.5	4862.712488	5311.966882	3117.99421	3714.720614	4002.436861
-0.55	-1969.626659	-2172.406233	-1242.2184	-1498.46108	-1612.39455
+0.55	4658.169974	5057.644472	3028.416767	3613.022278	3873.540581
-0.6	-2148.683628	-2369.897709	-1355.14735	-1634.68482	-1758.97587
+0.6	4319.003665	4738.220496	2846.48077	3399.391591	3632.930197
-0.65	-2327.740597	-2567.389185	-1468.0763	-1770.90855	-1905.55719
+0.65	3882.485308	4270.999036	2579.666063	3082.704808	3300.557708
-0.7	-2506.797565	-2764.88066	-1581.00524	-1907.13229	-2052.13852
+0.7	3347.249692	3666.062768	2239.040782	2686.626727	2865.456035
-0.75	-2685.854534	-2962.372136	-1693.93419	-2043.35602	-2198.71984
+0.75	2701.526522	2944.964274	1837.926254	2206.675432	2339.574143
-0.8	-2864.911503	-3159.863612	-1806.86313	-2179.57976	-2345.30116
+0.8	1959.641016	2132.798616	1374.119553	1650.034497	1734.393807
-0.85	-3043.968472	-3357.355087	-1919.79208	-2315.80349	-2491.88248
+0.85	1141.736571	1228.731961	857.7228716	1028.727033	1063.104855
-0.9	-3223.025441	-3554.846563	-2032.72103	-2452.02723	-2638.46381
+0.9	685.0044712	752.9788397	470.3243113	534.3984305	562.8100914
-0.95	-3402.08241	-3752.338039	-2145.64997	-2588.25096	-2785.04513
+0.95	723.0602751	794.8109975	458.0112761	553.8352935	594.0773187
-1	-3581.139401	-3949.829568	-2258.57889	-2724.47476	-2931.62643
+1	761.1160788	836.6431593	482.1171315	582.9845179	625.3445481
(Span 2) -2	-3581.139401	-3949.829568	-2258.57889	-2724.47476	-2931.62643
+2	761.1160788	836.6431593	482.1171315	582.9845179	625.3445481
-2.05	-2544.036702	-2796.486445	-1611.48039	-1948.63042	-2090.21909
+2.05	587.1606722	645.425807	371.927785	449.7416255	482.4201397
-2.1	-2370.081288	-2605.269097	-1501.29104	-1815.38752	-1947.29469
+2.1	684.3992192	731.8027942	571.8211224	655.7172989	696.7112176
-2.15	-2196.125875	-2414.051749	-1391.1017	-1682.14463	-1804.37029
+2.15	1497.980383	1631.089285	1077.131942	1281.27475	1353.124111
-2.2	-2022.170461	-2222.834401	-1280.91235	-1548.90173	-1661.44589
+2.2	2459.007075	2692.104768	1679.662668	2007.710849	2137.429642

-2.25	**-1848.215048**	**-2031.617053**	**-1170.72301**	**-1415.65884**	**-1518.52149**
+2.25	**3300.455042**	**3626.900734**	**2210.235596**	**2637.437544**	**2823.532109**
-2.3	**-1674.259634**	**-1840.399705**	**-1060.53366**	**-1282.41595**	**-1375.59709**
+2.3	**3995.611206**	**4405.066509**	**2651.060458**	**3165.08595**	**3388.052328**
-2.35	**-1500.304221**	**-1649.182357**	**-950.344319**	**-1149.17305**	**-1232.67268**
+2.35	**4570.390848**	**5011.943601**	**2992.8423**	**3572.878974**	**3824.532322**
-2.4	**-1326.348807**	**-1457.965009**	**-840.154974**	**-1015.93016**	**-1089.74828**
+2.4	**4984.231828**	**5429.632243**	**3230.632493**	**3853.942544**	**4135.493968**
-2.45	**-1152.393393**	**-1266.74766**	**-729.965628**	**-882.687265**	**-946.823884**
+2.45	**5224.699489**	**5715.596106**	**3352.674216**	**3997.430333**	**4303.159539**
-2.5	**-978.4379798**	**-1075.530363**	**-619.776334**	**-749.444371**	**-803.899536**
+2.5	**5288.172213**	**5815.675642**	**3367.915352**	**4009.137025**	**4329.948177**
-2.55	**-1152.393394**	**-1266.747715**	**-729.96568**	**-882.687299**	**-946.823944**
+2.55	**5224.704556**	**5715.596082**	**3352.669443**	**3997.42212**	**4303.165897**
-2.6	**-1326.3488**	**-1457.965068**	**-840.155027**	**-1015.93019**	**-1089.74835**
+2.6	**4984.240603**	**5429.47864**	**3230.640377**	**3853.950493**	**4135.497504**
-2.65	**-1500.304207**	**-1649.18242**	**-950.344373**	**-1149.17308**	**-1232.67276**
+2.65	**4570.392702**	**5011.942396**	**2992.843564**	**3572.880149**	**3824.545875**
-2.7	**-1674.259614**	**-1840.399772**	**-1060.53372**	**-1282.41598**	**-1375.59717**
+2.7	**3995.615937**	**4405.06664**	**2651.063579**	**3165.088321**	**3388.055541**
-2.75	**-1848.21502**	**-2031.617124**	**-1170.72307**	**-1415.65887**	**-1518.52158**
+2.75	**3300.468823**	**3627.91157**	**2210.237524**	**2637.436031**	**2823.544833**
-2.8	**-2022.170427**	**-2222.834477**	**-1280.91241**	**-1548.90176**	**-1661.44599**
+2.8	**2459.012243**	**2692.10425**	**1679.663752**	**2007.719559**	**2137.433519**
-2.85	**-2196.125833**	**-2414.051829**	**-1391.10176**	**-1682.14465**	**-1804.37039**
+2.85	**1497.978016**	**1631.388506**	**1077.133508**	**1281.275644**	**1353.135729**
-2.9	**-2370.08124**	**-2605.269181**	**-1501.29111**	**-1815.38755**	**-1947.2948**
+2.9	**684.3911963**	**731.0361376**	**571.8222538**	**655.7194062**	**696.7163518**
-2.95	**-2544.036646**	**-2796.486533**	**-1611.48045**	**-1948.63044**	**-2090.21921**
+2.95	**587.1607422**	**645.4258201**	**371.9278222**	**449.7416757**	**482.4201223**
-3	**-3581.139378**	**-3949.829588**	**-2258.57888**	**-2724.47481**	**-2931.6267**
+3	**761.1161093**	**836.643141**	**482.1171251**	**582.9845249**	**625.344514**
(Span 3) -4	**-3.58E+03**	**-3.95E+03**	**-2.26E+03**	**-2.72E+03**	**-2.93E+03**
+4	**7.61E+02**	**8.37E+02**	**4.82E+02**	**5.83E+02**	**6.25E+02**
-3.05	**-3402.08241**	**-3752.338111**	**-2145.64994**	**-2588.25107**	**-2785.04537**
+3.05	**723.0603038**	**794.8109841**	**458.0112688**	**553.8352985**	**594.0772884**
-3.1	**-3223.025442**	**-3554.846635**	**-2032.72099**	**-2452.02733**	**-2638.46403**
+3.1	**685.0044983**	**752.9788273**	**470.3265394**	**534.3946013**	**562.8100628**
-3.15	***-3043.968474***	***-3357.355158***	***-1919.79205***	***-2315.80359***	***-2491.88269***
+3.15	**1141.738844**	**1228.732963**	**857.726936**	**1028.733715**	**1063.097304**
-3.2	**-2864.911507**	**-3159.863681**	**-1806.8631**	**-2179.57986**	**-2345.30136**
+3.2	**1959.633305**	**2132.799591**	**1374.123465**	**1650.040931**	**1734.386258**
-3.25	**-2685.854539**	**-2962.372204**	**-1693.93416**	**-2043.35612**	**-2198.72002**
+3.25	**2701.517582**	**2946.206071**	**1837.929204**	**2206.680594**	**2339.565476**
-3.3	**-2506.797571**	**-2764.880728**	**-1581.00521**	**-1907.13238**	**-2052.13869**
+3.3	**3347.257338**	**3668.367175**	**2239.042158**	**2686.62981**	**2865.464412**
-3.35	**-2327.740603**	**-2567.389251**	**-1468.07627**	**-1770.90865**	**-1905.55735**
+3.35	**3882.489574**	**4270.998336**	**2579.66359**	**3082.703441**	**3300.56297**
-3.4	**-2148.683635**	**-2369.897774**	**-1355.14732**	**-1634.68491**	**-1758.97601**
+3.4	**4318.998914**	**4738.221318**	**2846.475898**	**3399.386891**	**3632.932176**
-3.45	**-1969.626668**	**-2172.406298**	**-1242.21838**	**-1498.46117**	**-1612.39468**
+3.45	**4659.776196**	**5057.644825**	**3028.408088**	**3613.013314**	**3873.536517**
-3.5	**-1790.5697**	**-1974.914821**	**-1129.28943**	**-1362.23744**	**-1465.81334**
+3.5	**4862.71745**	**5313.238272**	**3117.981993**	**3714.707284**	**4002.428415**
-3.55	**-1611.512732**	**-1777.423344**	**-1016.36048**	**-1226.0137**	**-1319.23201**
+3.55	**4949.404545**	**5417.83605**	**3162.91775**	**3766.796012**	**4062.909204**
-3.6	**-1432.455764**	**-1579.931867**	**-903.431539**	**-1089.78996**	**-1172.65067**

+3.6	**4937.668862**	**5354.909389**	**3197.581191**	**3816.326318**	**4095.656453**
-3.65	**-1253.398796**	**-1382.440391**	**-790.502593**	**-953.566224**	**-1026.06933**
+3.65	**4765.836748**	**5237.953782**	**3137.752212**	**3752.966647**	**4008.21771**
-3.7	**-1074.341828**	**-1184.948914**	**-677.573648**	**-817.342487**	**-879.487998**
+3.7	**4507.747975**	**4944.522206**	**2977.148157**	**3571.140434**	**3821.817171**
-3.75	**-895.2848605**	**-987.4574373**	**-564.644703**	**-681.11875**	**-732.906662**
+3.75	**4100.366853**	**4495.558036**	**2736.138633**	**3297.444915**	**3497.992711**
-3.8	**-716.2278927**	**-789.9659606**	**-451.715757**	**-544.895012**	**-586.325326**
+3.8	**3596.054278**	**3898.560925**	**2389.916859**	**2892.263763**	**3042.871932**
-3.85	**-537.1709249**	**-592.4744839**	**-338.786812**	**-408.671275**	**-439.74399**
+3.85	**2943.831489**	**3134.757605**	**1939.990608**	**2351.865918**	**2480.463859**
-3.9	**-358.113957**	**-394.9830072**	**-225.857866**	**-272.447538**	**-293.162654**
+3.9	**2117.676279**	**2257.892911**	**1413.197477**	**1708.33068**	**1798.173123**
-3.95	**-179.0569892**	**-197.4915305**	**-112.928921**	**-136.223801**	**-146.581318**
+3.95	**1154.470266**	**1227.423393**	**766.8257619**	**926.8965606**	**977.4073863**
-5	**-4.06E-13**	**-3.95E-13**	**-3.45E-13**	**-3.84E-13**	**-3.71E-13**
+5	**8.31E-13**	**9.70E-13**	**5.68E-13**	**7.18E-13**	**7.02E-13**

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.169092349	-5.703057573	-8.055736391	-8.543384427	-10.62460686	-4.575469621	-6.182990413	-7.073715918	-7.919140864	-8.806718524
End Shear	65.12686348	46.39943233	60.62918643	60.77220273	61.87158239	37.4162699	50.43304765	56.96215808	62.06122872	67.22793919
-0.05	-8.169092349	-5.703057573	-8.055736391	-8.543384427	-10.6585081	-4.575469621	-6.182990413	-7.073715918	-7.919140864	-8.806718524
+0.05	60.57292949	43.22349484	56.07969898	55.90275724	55.73589215	34.8703728	46.99845714	53.02869131	57.66630898	62.34675439
-0.1	-8.169092349	-5.703057573	-8.055736391	-8.543384427	-10.77861163	-4.575469621	-6.182990413	-7.073715918	-7.919140864	-8.806718524
+0.1	55.84849316	39.92937538	51.36788007	50.86905646	49.49005851	32.23119036	43.43560722	48.94853619	53.11027928	57.28982215
-0.15	-8.169092349	-5.703057573	-8.055736391	-8.543384427	-10.94770983	-4.58063745	-6.182990413	-7.073715918	-7.919140864	-8.806718524
+0.15	51.9556716	37.16709837	47.43740249	46.68672302	44.532319	30.01728334	40.44707777	45.52868903	49.29650907	53.0622808
-0.2	-11.10422897	-8.656088511	-8.055736391	-8.543384427	-11.22673726	-7.223891501	-9.676004946	-10.16572672	-10.15281653	-10.15008444
+0.2	47.33848298	33.94215539	42.87358354	41.85085354	39.12214026	27.43156127	36.95688888	41.53792589	44.8520201	48.14228525
-0.25	-14.77898204	-11.43116976	-10.37644473	-9.384343539	-11.91699213	-9.442719677	-12.67257479	-13.61165107	-13.57059956	-13.56792573
+0.25	43.49573515	31.25481287	39.092354	37.86217797	34.75076757	25.27601048	34.04755717	38.21405693	41.15543427	44.05603688
-0.3	-19.4677912	-14.6757797	-14.55775013	-12.36505981	-14.20912	-12.03599758	-16.17511664	-17.6424778	-18.02269094	-18.14127749
+0.3	39.04443322	28.13781741	34.7333035	33.28619655	30.07132626	22.77476156	30.6719014	34.36076174	36.87638063	39.3330757
-0.35	-23.38559878	-17.38359964	-18.16587296	-15.7353856	-16.5577132	-14.19941642	-19.09730653	-21.00806331	-21.81723424	-22.39343492
+0.35	35.36571612	25.55821738	31.14935925	29.54367257	26.59530486	20.70381103	27.87719837	31.1735539	33.34257628	35.43897462
-0.4	-27.94271721	-20.52933131	-22.86312135	-20.11268639	-20.44751004	-16.7117029	-22.49101027	-24.91990185	-26.23375725	-27.34924093
+0.4	31.13623128	22.58793742	27.05185495	25.28963395	22.68858114	18.31805355	24.65794616	27.50579876	29.28285264	30.97314158
-0.45	-31.72546722	-23.13708472	-26.77842448	-23.76457978	-24.11634587	-18.79346988	-25.30339256	-28.16446828	-29.90224403	-31.4714666
+0.45	27.66886029	20.14888801	23.71323296	21.84577121	19.56139844	16.35794788	22.01330084	24.49593236	25.95743621	27.32204237
-0.5	-36.0950514	-26.14517034	-31.32094177	-28.73681793	-29.13435662	-21.19375054	-28.5463844	-31.90924376	-34.14283811	-36.24366075
+0.5	23.71711597	17.36409754	19.93403535	17.97572073	16.086564	14.1186941	18.99232491	21.0617983	22.17093556	23.17344758
-0.55	-39.69549291	-28.62004937	-35.08130174	-32.92667564	-33.45801207	-23.16761856	-31.21352911	-34.99210829	-37.63966286	-40.18509393
+0.55	20.50841752	15.09839864	16.88877191	14.8891459	13.34337389	12.29567448	16.53316706	18.26995086	19.09951003	19.81620358
-0.6	-43.82170246	-31.45171798	-39.41231669	-37.7728394	-38.48404087	-25.42487629	-34.26394145	-38.52174544	-41.65044062	-44.71358053
+0.6	16.89033912	12.53786693	13.48466021	11.7813808	10.57585976	10.233943	13.75233986	15.11751483	15.64012702	16.0449419
-0.65	-47.19259051	-33.76091939	-42.96969338	-41.77141219	-42.89347586	-27.26460491	-36.75041577	-41.40222806	-44.93000079	-48.42337202
+0.65	13.98763685	10.47833094	10.78079168	9.318832032	8.41343892	8.574254172	11.51409915	12.58436699	12.86829523	13.07308263
-0.7	-51.01958339	-36.3773997	-47.03244121	-46.36049395	-48.05709109	-29.34782788	-39.56637421	-44.66864902	-48.65706481	-52.64804308
+0.7	10.75915044	8.223462004	7.993126901	6.801573553	6.21152399	6.755467304	9.061688188	9.761705503	9.789924354	9.789367441
-0.75	-54.1136599	-38.48811348	-50.33880089	-50.11528887	-52.25293787	-31.02717296	-41.83675044	-47.30607061	-51.67375837	-56.07533763
+0.75	8.209762616	6.360255617	5.840923128	5.207406801	4.799296545	5.250941501	7.033399317	7.527934864	7.508602604	7.508117704
-0.8	-57.5856008	-40.85063496	-54.07650143	-54.38523282	-57.21725954	-32.90534184	-44.37638305	-50.26119836	-55.06321364	-59.93609817
+0.8	5.580403291	4.364552424	4.087311674	3.488029223	3.310763245	3.637292927	4.858487466	5.083128271	5.079540611	5.079069925
-0.85	-60.35562014	-42.73006065	-57.08380816	-57.84374074	-61.22973646	-34.39806196	-46.39523043	-52.61487813	-57.77143742	-63.03004195
+0.85	3.591937712	2.886699532	2.90737514	2.312112436	2.292457434	2.382997008	3.173885351	3.39575363	3.395359041	3.394970886
-0.9	-63.41665931	-44.79985303	-60.43969635	-61.73250218	-65.7188423	-36.04016393	-48.61666293	-55.21063602	-60.76938978	-66.46679572
+0.9	1.820749164	1.611891751	1.728377906	1.806576517	1.935770165	1.239679051	1.68105204	1.681772408	1.725989028	1.91713396
-0.95	-65.81537444	-46.41517938	-63.09991629	-64.84221904	-70.06250009	-37.32001104	-50.34855411	-57.23989334	-63.12353751	-69.17653025
+0.95	1.777148569	1.243568482	1.728377906	1.806576517	1.887815413	0.998975099	1.350505284	1.542615479	1.725989028	1.91713396
-1	-68.40967468	-48.15347159	-66.01722184	-68.28774761	-76.15808077	-38.69503275	-52.2099175	-59.42820462	-65.67609276	-72.12917308
+1	1.78E+00	1.243568482	1.728377906	1.806576517	1.87E+00	0.998975099	1.350505284	1.542615479	1.725989028	1.91713396
(Span 2) -2	-6.248811171	-4.372636544	-6.077323975	-6.352285967	-6.574845848	-3.512597123	-4.748647884	-5.4241459	-6.06892408	-6.741028206
+2	68.65258021	48.25314597	66.6171157	69.38019018	85.75796618	38.75710279	52.29837185	59.58116285	65.94249343	72.53657329
-2.05	-6.248811171	-4.372636544	-6.077323975	-6.352285967	-6.599571148	-3.512597123	-4.748647884	-5.4241459	-6.06892408	-6.741028206
+2.05	65.93830888	46.432911	63.58993734	65.84450205	78.61053124	37.31648472	50.347817	57.2891027	63.26930265	69.44750613
-2.1	-6.248811171	-4.372636544	-6.077323975	-6.352285967	-6.683006089	-3.512597123	-4.748647884	-5.4241459	-6.06892408	-6.741028206
+2.1	62.70609656	44.24883484	60.06176706	61.78923557	70.87448867	35.58358846	48.00289038	54.54786112	60.09922193	65.81213614
-2.15	-6.248811171	-4.372636544	-6.077323975	-6.352285967	-6.822101976	-3.512597123	-4.748647884	-5.4241459	-6.06892408	-6.741028206
+2.15	59.39999552	42.00168464	56.5142555	57.76572096	63.96975531	33.79722589	45.58667578	51.73451676	56.86708397	62.12789776
-2.2	-7.69820471	-5.958690382	-6.077323975	-6.352285967	-7.042507754	-4.915035571	-6.585914032	-7.063860475	-7.043877764	-7.042832009
+2.2	55.6228171	39.42207501	52.51868116	53.28588631	56.85586331	31.74340828	42.80967597	48.51144446	53.18397335	57.95045231
-2.25	-10.87017109	-8.222283703	-8.223863445	-7.004485207	-7.396056419	-6.742298662	-9.050049088	-9.844392448	-9.971653103	-9.989115483

+2.25	51.88674976	36.86021621	48.61513747	48.95413073	50.64421389	29.70106402	40.04898455	45.31595704	49.54886697	53.84499935
-2.3	-14.52554168	-10.81675527	-11.5389971	-10.06308738	-10.07389958	-8.833098957	-11.87037191	-13.03779047	-13.47063566	-13.79418797
+2.3	47.73726398	34.00476606	44.3274374	44.24128734	44.42803231	27.42207028	36.96917864	41.75948423	45.51912242	49.31102042
-2.35	-18.41667113	-13.56578355	-15.21837785	-13.44002625	-13.08095324	-11.04520801	-14.85508417	-16.42729855	-17.203457	-17.87551937
+2.35	43.46316988	31.05377659	39.95752145	39.36692008	39.10985141	25.06432506	33.78365475	38.08899467	41.37556549	44.66561844
-2.4	-22.2378742	-16.25500784	-18.88421094	-17.18444327	-16.46021395	-13.20655336	-17.77193067	-19.7479138	-20.87593727	-21.90871933
+2.4	39.38394593	28.22881167	35.68984126	34.87865256	34.20138139	22.80509639	30.73184492	34.57953486	37.42702828	40.25330604
-2.45	-26.4550786	-19.21275302	-22.98098714	-21.42552412	-20.32661194	-15.58111961	-20.97715434	-23.40488933	-24.93570274	-26.38465276
+2.45	34.99931058	25.10932814	31.29454459	30.18044592	29.24993309	20.3673489	27.38814381	30.68240841	33.08972112	35.39693077
-2.5	-30.77314043	-22.23139127	-27.2246072	-25.87166248	-24.72361169	-18.00207119	-24.24561946	-27.14183017	-29.09910162	-30.99165679
+2.5	30.55060104	22.04131789	26.95565545	25.58842389	24.4240529	17.8496998	24.03989802	26.90640235	28.83638095	30.70046394
-2.55	-34.87206862	-25.08860762	-31.29486189	-30.18076539	-29.25015265	-20.36753493	-27.36815594	-30.68268215	-33.08051509	-35.38776012
+2.55	26.50227353	19.21252952	22.98068306	21.42521571	20.32642379	15.58093525	20.97691852	23.40461263	24.93539526	26.38431347
-2.6	-39.25484709	-28.22903767	-35.6901604	-34.87897744	-34.20161732	-22.80528187	-30.73208893	-34.57980802	-37.42734296	-40.25365692
+2.6	22.28226094	16.25479086	18.88392757	17.18415202	16.46964875	13.20637412	17.7716951	19.74765221	20.8756404	21.90839251
-2.65	-43.46868369	-31.05399939	-39.9578401	-39.35144884	-39.11008815	-25.06450829	-33.78389575	-38.08927175	-41.37587682	-44.6659664
+2.65	18.45808554	13.56556859	15.21810914	13.43976851	13.08078759	11.04503065	14.85486264	16.42704685	17.20317177	17.8752069
-2.7	-47.74065408	-34.00498276	-44.32774366	-44.24162206	-44.42831498	-27.42225234	-36.969406	-41.7597469	-45.51942756	-49.31136314
+2.7	14.5634898	10.81655674	11.53874002	10.06285946	10.07376111	8.832930887	11.87015574	13.03754541	13.47036586	13.79389391
-2.75	-51.63344772	-36.68535983	-48.35075185	-48.66219899	-50.25073899	-29.56158828	-39.86046779	-45.09801856	-49.3014784	-53.56615515
+2.75	11.12533161	8.379116521	8.412139026	7.165625445	7.538287558	6.86878145	9.220649972	10.03725587	10.18239644	10.21763317
-2.8	-55.6225631	-39.42227362	-52.51897866	-53.2861989	-56.85618847	-31.7435707	-42.80988414	-48.51169222	-53.18425589	-57.95077247
+2.8	7.728809866	5.958513257	6.077323835	6.352285699	7.042508254	4.914895527	6.585726017	7.063649035	7.04366771	7.042621961
-2.85	-59.39823185	-42.00186917	-56.51452908	-57.76602232	-63.97008488	-33.79737715	-45.5868748	-51.73474203	-56.86734945	-62.1281998
+2.85	6.248801851	4.372636964	6.077323835	6.352285699	6.822102468	3.512597296	4.748648407	5.424146226	6.068924412	6.741028359
-2.9	-62.70324239	-44.24900737	-60.06202759	-61.78953251	-70.86522518	-35.58373235	-48.00307087	-54.5480713	-60.09947039	-65.81241198
+2.9	6.248801851	4.372636964	6.077323835	6.352285699	6.683006595	3.512597296	4.748648407	5.424146226	6.068924412	6.741028359
-2.95	-65.93469538	-46.43306518	-63.59018369	-65.84477139	-78.61087845	-37.31661339	-50.34797869	-57.28928738	-63.26952835	-69.4477591
+2.95	6.248801851	4.372636964	6.077323835	6.352285699	6.599571652	3.512597296	4.748648407	5.424146226	6.068924412	6.741028359
-3	-68.81780928	-48.36614359	-66.80852634	-69.60592492	-86.23368779	-38.84639312	-52.41930915	-59.72375192	-66.10969866	-72.73073967
+3	6.248801851	4.372636964	6.077323835	6.352285699	6.574846348	3.512597296	4.748648407	5.424146226	6.068924412	6.741028359
(Span 3) -4	-1.78E+00	-1.243568601	-1.728377866	-1.806576441	-1.87E+00	-0.998975149	-1.350505433	-1.542615571	-1.725989122	-1.917134004
+4	68.234608	48.02640974	65.80162586	68.03164039	75.65545197	38.59461512	52.07396518	59.26805373	65.48868189	71.9117568
-3.05	-1.78E+00	-1.243568601	-1.728377866	-1.806576441	-1.89E+00	-0.998975149	-1.350505433	-1.542615571	-1.725989122	-1.917134004
+3.05	66.04022626	46.55542183	63.33295386	65.11597781	70.53099198	37.43103152	50.4988248	57.41624513	63.3286492	69.41316959
-3.1	-1.908777237	-1.705370596	-1.728377866	-1.806576441	-1.941735245	-1.300098504	-1.790356472	-1.791078237	-1.790757453	-1.917134004
+3.1	63.20632419	44.6465165	60.18923572	61.44106911	65.38313111	35.91858497	48.45217762	55.01817811	60.54663935	66.2109458
-3.15	-3.406566208	-2.784148407	-2.804658009	-2.230407353	-2.221735441	-2.274359381	-3.05363296	-3.255763261	-3.255371764	-3.254988778
+3.15	60.61639389	42.89502092	57.3494574	58.15036389	61.58459649	34.52900947	46.5723646	52.8216088	58.00973504	63.3027299
-3.2	-5.753818377	-4.512014156	-4.199044968	-3.614857866	-3.419171872	-3.756616325	-5.019284345	-5.263601257	-5.258881358	-5.258409928
+3.2	57.34298867	40.67400338	53.79554421	54.06323275	56.84261042	32.76498298	44.18657582	50.04013566	54.80927866	59.64643148
-3.25	-7.969374826	-6.200810177	-5.685750242	-5.069832374	-4.678736155	-5.122114014	-6.859734561	-7.332442734	-7.314398528	-7.313913765
+3.25	54.40482366	38.67482641	50.63269741	50.45000919	52.62608916	31.17565957	42.03752005	47.53950012	51.94110502	56.37943971
-3.3	-10.97931408	-8.395143064	-8.197657746	-6.976622341	-6.36448576	-6.894025353	-9.248484308	-9.97220614	-10.01907594	-10.01851571
+3.3	50.74785015	36.18046536	46.7253587	46.01272218	47.66741144	29.19107384	39.35448207	44.42269726	48.37607922	52.32920253
-3.35	-13.70884004	-10.29643776	-10.54365694	-9.103152572	-8.225345274	-8.427613017	-11.31635124	-12.36076773	-12.62402696	-12.78900296
+3.35	47.5087821	33.96639009	43.28747939	42.12946627	43.29813438	27.42825695	36.97161462	41.65864856	45.22223826	48.7542885
-3.4	-17.13612634	-12.73031371	-13.73896306	-12.01327752	-10.78084851	-10.38896569	-13.96140932	-15.35434187	-15.8996564	-16.32745622
+3.4	43.4978902	31.23745763	39.08348607	37.40407546	38.08489842	25.25412972	34.03319015	38.25459332	41.34657145	44.37017556
-3.45	-20.19517032	-14.89704895	-16.61954503	-14.64309052	-13.12267893	-12.13361168	-16.31455077	-18.02194122	-18.82700017	-19.51872009
+3.45	40.00595517	28.84131388	35.41858904	33.30329063	33.84636383	23.3440413	31.45194004	35.26782413	37.95266667	40.5381919
-3.5	-23.98398496	-17.57456839	-20.21831611	-18.2656711	-16.34532438	-14.28799147	-19.22070572	-21.32123447	-22.45669103	-23.4861699
+3.5	35.75070984	25.91658289	30.97473494	28.35184661	28.73668152	21.011386	28.30000219	31.6245944	33.82023762	35.88032107
-3.55	-27.32527797	-19.93104711	-23.41627324	-21.54052676	-19.285696	-16.1828452	-21.7770494	-24.22719109	-25.66082481	-26.99671257
+3.55	32.05291534	23.37116388	27.13087548	24.09348638	24.44760173	18.98027977	25.55579869	28.45578524	30.23187191	31.84214645
-3.6	-31.41976221	-22.81343735	-27.36173816	-25.61035042	-22.98133579	-18.49923642	-24.90239996	-27.78415657	-29.5906833	-31.31146269
+3.6	27.58228361	20.28940163	22.50388623	19.77778736	20.11180218	16.52011224	22.23220111	24.62145571	25.89657236	26.97061691

-3.65	-34.9960701	-25.32687947	-30.82905232	-29.21011551	-26.28714094	-20.51804264	-27.62651399	-30.88779049	-33.02600353	-35.09043165
+3.65	23.72590254	17.62750106	18.52912646	16.07376248	16.81235405	14.39424474	19.36047705	21.31128905	22.15935052	22.77706005
-3.7	-39.3403825	-28.37536992	-35.06442134	-33.63289944	-30.39503627	-22.9654295	-30.92920349	-34.6543371	-37.20215545	-39.69236289
+3.7	19.09574451	14.42747896	14.2309102	12.08430027	14.03489382	11.83757944	15.90712297	17.33395613	17.67505448	17.75197253
-3.75	-43.1044787	-31.01294216	-38.7530375	-37.50507105	-34.36344393	-25.08196808	-33.78565844	-37.91496838	-40.8230604	-43.68888162
+3.75	15.1280061	11.68192948	10.62851548	9.605491943	12.09542241	9.64317018	12.94330625	13.92311063	13.87950227	13.8768189
-3.8	-47.64275544	-34.18876305	-43.22157999	-42.21876481	-39.52942327	-27.62933523	-37.22381373	-41.84301856	-45.19157172	-48.51789396
+3.8	10.76756159	8.402418936	8.055736378	8.543385168	11.20224474	7.021023018	9.4020527	9.850814052	9.840451539	9.837723777
-3.85	-51.54736915	-36.91767201	-47.08344002	-46.310839	-44.10744039	-29.8173512	-40.1771792	-45.2199662	-48.95245744	-52.68115293
+3.85	8.169094256	5.761420118	8.055736378	8.543385168	10.9661355	4.784327207	6.384320892	7.073716521	7.919141507	8.806719026
-3.9	-56.22379118	-40.18205234	-51.7283644	-51.25339182	-49.96113319	-32.43368431	-43.70894626	-49.26142418	-53.45945339	-57.67714548
+3.9	8.169094256	5.703058203	8.055736378	8.543385168	10.76629969	4.575469997	6.182990379	7.073716521	7.919141507	8.806719026
-3.95	-60.22167191	-42.96950905	-55.71545348	-55.512864	-55.24629785	-34.66692154	-46.72377574	-52.71400843	-57.31471735	-61.95626881
+3.95	8.169094256	5.703058203	8.055736378	8.543385168	10.66467002	4.575469997	6.182990379	7.073716521	7.919141507	8.806719026
-5	-64.98039728	-46.2836783	-60.47998959	-60.62222624	-61.76844769	-37.32120479	-50.30726562	-56.82083477	-61.90630318	-67.05911749
+5	8.169094256	5.703058203	8.055736378	8.543385168	10.62460595	4.575469997	6.182990379	7.073716521	7.919141507	8.806719026

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.169092349	-7.461492079	-8.027690521	-7.566612735	-9.159615022	-9.361327556	-9.907576029	-3.968350544
End Shear	65.12686348	61.66657448	65.89787424	61.8168838	73.84987116	69.679735	73.6563313	32.4835934
-0.05	-8.169092349	-7.461492079	-8.027690521	-7.566612735	-9.159615022	-9.361327556	-9.907576029	-3.968350544
+0.05	60.57292949	57.52431125	61.43965539	57.61730308	68.76546297	64.40269913	68.07056265	30.28335527
-0.1	-8.169092349	-7.461492079	-8.027690521	-7.566612735	-9.159615022	-9.361327556	-9.907576029	-3.968350544
+0.1	55.84849316	53.22652199	56.81577702	53.26029028	63.49410492	58.93987174	62.2885727	27.97582406
-0.15	-8.169092349	-8.311758541	-8.439091443	-7.706154403	-9.159615022	-9.361327556	-9.907576029	-4.119655556
+0.15	51.9556716	49.618892	52.93582184	49.60512238	59.07483567	54.38496734	57.46791249	26.04095722
-0.2	-11.10422897	-12.60339497	-13.06389634	-12.00444584	-13.47689919	-9.361327556	-9.907576029	-6.021692162
+0.2	47.33848298	45.40250426	48.40284141	45.33579614	53.91658659	49.09858957	51.87354323	23.78216522
-0.25	-14.77898204	-16.20358672	-16.94496899	-15.66627686	-17.92349498	-11.94587439	-12.6524969	-7.966116652
+0.25	43.49573515	41.88507505	44.62276247	41.77647655	49.61927031	44.72087771	47.24116852	21.90006617
-0.3	-19.4677912	-20.40854552	-21.47966328	-19.94584038	-23.12372512	-16.1744689	-17.02575673	-10.23959688
+0.3	39.04443322	37.80048859	40.23495659	37.64601393	44.63616311	39.67686935	41.90421735	19.71725709
-0.35	-23.38559878	-23.91406993	-25.26152367	-23.51581353	-27.46475064	-20.38687867	-21.46231975	-12.13699629
+0.35	35.36571612	34.4159064	36.60068082	34.22584718	40.51328948	35.53213095	37.51919031	17.91097579
-0.4	-27.94271721	-27.98194811	-29.65182753	-27.66123141	-32.50920271	-25.85268101	-27.25088955	-14.34127849
+0.4	31.13623128	30.51351876	32.41232368	30.28542309	35.76735453	30.7964224	32.50946589	15.83139409
-0.45	-31.72546722	-31.35016044	-33.28855022	-31.09604665	-36.69217304	-30.4106837	-32.07840239	-16.16860168
+0.45	27.66886029	27.30443201	28.96978003	27.04771135	31.8714113	26.94043813	28.43084838	14.12398587
-0.5	-36.0950514	-35.23056196	-37.48019091	-35.05613956	-41.51881123	-35.70140377	-37.68238261	-18.27644289
+0.5	23.71711597	23.6346475	25.0351533	23.34850347	27.42468187	22.57893985	23.81813827	12.17487447
-0.55	-39.69549291	-38.41881425	-40.92584764	-38.31249324	-45.49123748	-40.08337147	-42.32417536	-20.01063303
+0.55	20.50841752	20.64369316	21.83025856	20.33654985	23.80815779	19.06748958	20.10499134	10.58939138
-0.6	-43.82170246	-42.06133523	-44.86454384	-42.03608985	-50.03803564	-45.13308638	-47.6737653	-21.99478931
+0.6	16.89033912	17.25690935	18.20363648	16.92973567	19.72266744	15.14613367	15.95910598	8.797994278
-0.65	-47.19259051	-45.0269819	-48.07320846	-45.0706753	-53.74742484	-49.28323485	-52.07077226	-23.61279709
+0.65	13.98763685	14.52674425	15.28232877	14.18684305	16.43805069	12.05650487	12.69105775	7.357487146
-0.7	-51.01958339	-48.3812242	-51.70468554	-48.50659581	-57.95234713	-54.0260292	-57.09617918	-25.44602453
+0.7	10.75915044	11.47336082	12.07863106	11.18048711	12.84377286	8.827369938	9.291968356	5.751048325
-0.75	-54.1136599	-51.08161976	-54.6304321	-51.27611247	-61.34621371	-57.88858162	-61.18934252	-26.92479657
+0.75	8.209762616	9.046627732	9.42619025	8.693071402	9.875611696	6.729719471	7.124225023	4.478570868
-0.8	-57.5856008	-54.09718278	-57.90041236	-54.37318007	-65.14722763	-62.25852209	-65.82075464	-28.57985093
+0.8	5.580403291	6.377045302	6.578408335	6.024577685	6.69870009	4.747594939	5.0186425	3.084334268
-0.85	-60.35562014	-56.4896812	-60.49731449	-56.83432377	-68.17308147	-65.77769898	-69.55101377	-29.89633554
+0.85	3.591937712	4.296389325	4.362046079	3.955230903	4.244555389	3.231508547	3.408478439	2.158682626
-0.9	-63.41665931	-59.1161651	-63.35152116	-59.54135872	-71.50815092	-69.70886995	-73.71863808	-31.34597317
+0.9	1.820749164	2.288731602	2.288731602	2.048975211	2.142170425	2.009304757	2.126143227	1.298416321
-0.95	-65.81537444	-61.15812265	-65.57365482	-61.65082926	-74.11350714	-72.82889432	-77.026935	-32.47711947
+0.95	1.777148569	1.631558643	1.754644136	1.653619734	2.000646317	2.009304757	2.126143227	0.862462218
-1	-68.40967468	-63.34512697	-67.95781052	-63.91665839	-76.92060418	-76.25537408	-80.66097205	-33.6940961
+1	1.78E+00	1.631558643	1.754644136	1.653619734	2.000646317	2.009304757	2.126143227	0.862462218
(Span 2) -2	-6.248811171	-5.736888032	-6.169681345	-5.814459174	-7.034674305	-7.065119151	-7.475946682	-3.032590405
+2	68.65258021	63.40168867	68.04443385	64.01491695	77.09449091	76.99155432	81.44882526	33.74843052
-2.05	-6.248811171	-5.736888032	-6.169681345	-5.814459174	-7.034674305	-7.065119151	-7.475946682	-3.032590405
+2.05	65.93830888	61.1098307	65.54569599	61.64002437	74.15195057	73.43670375	77.67924983	32.4736123
-2.1	-6.248811171	-5.736888032	-6.169681345	-5.814459174	-7.034674305	-7.065119151	-7.475946682	-3.032590405
+2.1	62.70609656	58.33976325	62.53379006	58.7823898	70.62816283	69.30294216	73.29728146	30.94399542
-2.15	-6.248811171	-5.736888032	-6.169681345	-5.814459174	-7.034674305	-7.065119151	-7.475946682	-3.032590405
+2.15	59.39999552	55.47381049	59.42404422	55.83584472	67.00799717	65.15416843	68.90062007	29.3702835
-2.2	-7.69820471	-8.454711875	-8.818050068	-8.137737859	-9.263722559	-7.065119151	-7.475946682	-4.218490456
+2.2	55.6228171	52.16916339	55.84416837	52.44744062	62.85715857	60.48863092	63.95748698	27.56390195
-2.25	-10.87017109	-11.46757763	-12.03843042	-11.15934657	-12.87452332	-9.131337393	-9.611934097	-5.80071776

+2.25	51.88674976	48.87498598	52.28050541	49.07735591	58.73889852	55.93672081	59.13574921	25.77014411
-2.3	-14.52554168	-14.90504699	-15.71832577	-14.61561505	-17.01688704	-12.94858195	-13.6416249	-7.614794499
+2.3	47.73726398	45.19136024	48.30022977	45.31617498	54.15251503	50.94294109	53.84695767	23.77109805
-2.35	-18.41667113	-18.53290999	-19.60725041	-18.2714206	-21.40952973	-17.1915499	-18.12777918	-9.537384468
+2.35	43.46316988	41.37301536	44.17886237	41.42440027	49.41625225	45.85935656	48.46405529	21.70552097
-2.4	-22.2378742	-22.07008336	-23.40325863	-21.84253384	-25.70957351	-21.42577679	-22.60596518	-11.41843564
+2.4	39.38394593	37.70781181	40.22662174	37.69469468	44.88526501	40.90018125	43.21382096	19.7285484
-2.45	-26.4550786	-25.94886383	-27.57013345	-25.76517327	-30.4419573	-26.16440007	-27.61882311	-13.48750224
+2.45	34.99931058	33.74638201	35.95889403	33.60926158	39.9433881	35.79827649	37.81344338	17.59782762
-2.5	-30.77314043	-29.89628122	-31.81491521	-29.76372432	-35.27477168	-31.07920322	-32.81920106	-15.59925868
+2.5	30.55060104	29.64804813	31.54786341	29.51209229	34.97038681	30.7675368	32.48939362	15.46639003
-2.55	-34.87206862	-33.73142565	-35.94396084	-33.5857578	-39.91994798	-35.79864473	-37.81383312	-17.59788362
+2.55	26.50227353	25.9485705	27.5698182	25.76488461	30.44160905	26.16404818	27.61845081	13.48744207
-2.6	-39.25484709	-37.70810544	-40.22693821	-37.69499282	-44.88562679	-40.90055191	-43.21421332	-19.72860513
+2.6	22.28226094	22.06979065	23.40294441	21.84224554	25.70922615	21.42544929	22.60561876	11.41838095
-2.65	-43.46868369	-41.37330512	-44.17917499	-41.42469473	-49.41661011	-45.8597269	-48.4644474	-21.70558124
+2.65	18.45808554	18.5326337	19.60695403	18.27114939	21.40920354	17.19123976	18.12745122	9.537331828
-2.7	-47.74065408	-45.19164683	-48.30053932	-45.31645293	-54.15285367	-50.94329759	-53.84733521	-23.77115277
+2.7	14.5634898	14.90478359	15.71804345	14.61535022	17.01656911	12.94828571	13.64131172	7.61474531
-2.75	-51.63344772	-48.64976175	-52.03700965	-48.84717596	-58.45793732	-55.62862014	-58.80941771	-25.64762934
+2.75	11.12533161	11.67580734	12.26118802	11.36847403	13.12482742	9.348125147	9.840131734	5.9104482
-2.8	-55.6225631	-52.16942454	-55.84445095	-52.44769477	-62.85746934	-60.48897809	-63.95785476	-27.56395193
+2.8	7.728809866	8.454475675	8.817797778	8.137507201	9.263447328	7.065118667	7.475946509	4.218443566
-2.85	-59.39823185	-55.47404666	-59.42430032	-55.8360877	-67.0082954	-65.15448812	-68.90095882	-29.37033308
+2.85	6.248801851	5.736887904	6.169681629	5.81445934	7.034673932	7.065118667	7.475946509	3.032590517
-2.9	-62.70324239	-58.33997728	-62.53402254	-58.78260982	-70.6284335	-69.30324706	-73.29760461	-30.94403891
+2.9	6.248801851	5.736887904	6.169681629	5.81445934	7.034673932	7.065118667	7.475946509	3.032590517
-2.95	-65.93469538	-61.11002619	-65.54590883	-61.64022129	-74.15219397	-73.43699271	-77.67955616	-32.47365373
+2.95	6.248801851	5.736887904	6.169681629	5.81445934	7.034673932	7.065118667	7.475946509	3.032590517
-3	-68.81780928	-63.54328516	-68.19908865	-64.16207715	-77.27739413	-77.21664667	-81.68756372	-33.82750638
+3	6.248801851	5.736887904	6.169681629	5.81445934	7.034673932	7.065118667	7.475946509	3.032590517
(Span 3) -4	-1.78E+00	-1.631558607	-1.754644216	-1.653619781	-2.000646211	-2.009304619	-2.126143178	-0.86246225
+4	68.234608	63.18571112	67.78384237	63.75122228	76.71527438	76.00193949	80.39215227	33.60521909
-3.05	-1.78E+00	-1.631558607	-1.754644216	-1.653619781	-2.000646211	-2.009304619	-2.126143178	-0.86246225
+3.05	66.04022626	61.33500351	65.76630172	61.83381037	74.33983048	73.10239862	77.31697358	32.57538677
-3.1	-1.908777237	-2.421508429	-2.421508429	-2.188472758	-2.295927177	-2.009304619	-2.126143178	-1.357386615
+3.1	63.20632419	58.92193154	63.14030604	59.34096247	71.26097079	69.41530418	73.40738743	31.23867002
-3.15	-3.406566208	-4.115889488	-4.169934305	-3.801599494	-4.075025048	-3.099901871	-3.268722835	-2.08499266
+3.15	60.61639389	56.69935975	60.72503346	57.05022417	68.4387828	66.08871923	69.88071427	30.01197026
-3.2	-5.753818377	-6.574697915	-6.789111462	-6.221919677	-6.933333171	-4.891528778	-5.171525328	-3.187242134
+3.2	57.34298867	53.87202447	57.65614281	54.14174849	64.86295396	61.92989718	65.47244349	28.45621543
-3.25	-7.969374826	-8.833737885	-9.19894841	-8.480047107	-9.621697015	-6.574580581	-6.959407358	-4.367063923
+3.25	54.40482366	51.3202209	54.8890498	51.52098669	61.64651021	58.23204977	61.5533388	27.05570267
-3.3	-10.97931408	-11.70154668	-12.32278894	-11.40951869	-13.11734872	-9.062561678	-9.539538608	-5.870810368
+3.3	50.74785015	48.12900847	51.43152642	48.2480853	57.63577607	53.66742119	56.7161822	25.30815229
-3.35	-13.70884004	-14.28533973	-15.02413018	-13.94446989	-16.14803722	-11.80353069	-12.42476915	-7.230188181
+3.35	47.5087821	45.29063187	48.35855336	45.34060472	54.07756716	49.6540908	52.46370655	23.75687956
-3.4	-17.13612634	-17.51173172	-18.47640547	-17.18590481	-20.0296571	-15.43891601	-16.26862285	-8.932513775
+3.4	43.4978902	41.78594317	44.5666747	41.75444298	49.69394599	44.74957803	47.26746424	21.84477955
-3.45	-20.19517032	-20.37764433	-21.54527152	-20.06875725	-23.48680894	-18.75719538	-19.77690099	-10.44839363
+3.45	40.00595517	38.70365629	41.23376635	38.60354585	45.84645966	40.47651947	42.74065216	20.16579668
-3.5	-23.98398496	-23.91223556	-25.33268827	-23.62818897	-27.7607015	-22.90688614	-24.16494852	-12.32205586
+3.5	35.75070984	34.93587626	37.16179299	34.75530184	41.15198512	35.2980717	37.25515269	18.11639023
-3.55	-27.32527797	-27.01759262	-28.66215462	-26.75845075	-31.5235162	-26.59758761	-28.06822581	-13.97138598
+3.55	32.05291534	31.65230757	33.61485666	31.40429067	37.0677092	30.82108703	32.51308873	16.3327507
-3.6	-31.41976221	-30.80999777	-32.73045174	-30.58466692	-36.12760651	-31.15445199	-32.88819001	-15.98914048
+3.6	27.58228361	27.67184982	29.31708065	27.34511885	32.12438715	25.43457412	26.80807666	14.17328135

-3.65	**-34.9960701**	**-34.11216848**	**-36.27460838**	**-33.91903243**	**-40.14359245**	**-35.1618167**	**-37.12742765**	**-17.74886735**
+3.65	**23.72590254**	**24.22964982**	**25.60204752**	**23.83730032**	**27.85581423**	**20.80947307**	**21.90985345**	**12.30803917**
-3.7	**-39.3403825**	**-38.11197289**	**-40.56949322**	**-37.96087475**	**-45.0158703**	**-40.05991024**	**-42.30948499**	**-19.88347056**
+3.7	**19.09574451**	**20.08693412**	**21.13276693**	**19.61841585**	**22.72572361**	**15.79284773**	**16.62405024**	**10.0657506**
-3.75	**-43.1044787**	**-41.56831172**	**-44.28241418**	**-41.45604157**	**-49.23253969**	**-44.32813669**	**-46.82559904**	**-21.73054285**
+3.75	**15.1280061**	**16.52872573**	**17.29553875**	**15.9970908**	**18.32533997**	**12.18081306**	**12.90247808**	**8.141956728**
-3.8	**-47.64275544**	**-45.72511498**	**-48.74960949**	**-45.66233187**	**-54.31097061**	**-49.50158353**	**-52.29999859**	**-23.95474989**
+3.8	**10.76756159**	**12.27413454**	**12.70901155**	**11.66965222**	**13.07049086**	**9.361328464**	**9.907576017**	**5.844093842**
-3.85	**-51.54736915**	**-49.29297423**	**-52.58536632**	**-49.27499597**	**-58.67583392**	**-53.97486664**	**-57.03390135**	**-25.86611505**
+3.85	**8.169094256**	**8.642604734**	**8.795558924**	**7.980871817**	**9.159615109**	**9.361328464**	**9.907576017**	**4.236391391**
-3.9	**-56.22379118**	**-53.55635602**	**-57.17057327**	**-53.5945792**	**-63.89841211**	**-59.35772028**	**-62.73081742**	**-28.15268277**
+3.9	**8.169094256**	**7.461492334**	**8.027691189**	**7.566613257**	**9.159615109**	**9.361328464**	**9.907576017**	**3.968350612**
-3.95	**-60.22167191**	**-57.19311155**	**-61.08326316**	**-57.28141714**	**-68.35895573**	**-63.98030501**	**-67.62347412**	**-30.10528826**
+3.95	**8.169094256**	**7.461492334**	**8.027691189**	**7.566613257**	**9.159615109**	**9.361328464**	**9.907576017**	**3.968350612**
-5	**-64.98039728**	**-61.51269158**	**-65.73222607**	**-61.66309572**	**-73.66362342**	**-69.50664392**	**-73.47310741**	**-32.42697266**
+5	**8.169094256**	**7.461492334**	**8.027691189**	**7.566613257**	**9.159615109**	**9.361328464**	**9.907576017**	**3.968350612**

3-Span: Shear (Max and Min) Raw Data Results - 120' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.169092349	-17.26016666	-19.03715787	-10.88576691	-13.1312642	-14.12968215
End Shear	65.12686348	120.8642993	128.8627264	80.05560845	96.6592381	102.0919853
-0.05	-8.169092349	-17.26016666	-19.03715787	-10.88576691	-13.1312642	-14.12968215
+0.05	60.57292949	111.1101566	118.3171634	73.88478176	89.24075705	94.09989156
-0.1	-8.169092349	-17.26016666	-19.03715787	-10.88576691	-13.1312642	-14.12968215
+0.1	55.84849316	101.0320957	107.2258736	67.50058971	81.56353196	85.83315964
-0.15	-8.169092349	-17.26016666	-19.03715787	-10.88576691	-13.1312642	-14.12968215
+0.15	51.9556716	92.6600477	98.02851498	62.18330114	75.1674398	78.95380197
-0.2	-11.10422897	-17.26016666	-19.03715787	-11.10528445	-13.1312642	-14.12968215
+0.2	47.33848298	82.98151906	87.41608263	56.01927921	67.75053645	70.98613628
-0.25	-14.77898204	-17.26016666	-19.03715787	-14.14874495	-15.57209543	-16.72512178
+0.25	43.49573515	75.00003082	78.68239246	50.92109694	61.61408726	64.40249504
-0.3	-19.4677912	-23.5740001	-24.95038359	-17.70200995	-21.40084479	-21.26409644
+0.3	39.04443322	65.84513468	68.6870512	45.05480267	54.55057509	56.8347287
-0.35	-23.38559878	-30.06705845	-31.684048	-22.25215126	-27.33608223	-27.26986217
+0.35	35.36571612	58.35923206	60.53397612	40.24136299	48.75253141	50.63212032
-0.4	-27.94271721	-39.03461165	-39.54380769	-28.43275719	-34.75218545	-35.06508827
+0.4	31.13623128	49.85206462	51.29391352	34.75035317	42.13547859	43.56508813
-0.45	-31.72546722	-46.88409222	-47.15020897	-33.81048323	-41.203286	-42.01167824
+0.45	27.66886029	42.96673465	43.83840448	30.28726771	36.7545751	37.82882813
-0.5	-36.0950514	-56.99766013	-58.0050476	-40.05932073	-48.69738445	-50.1710115
+0.5	23.71711597	35.23139452	35.49185484	25.24909977	30.67704963	31.36334009
-0.55	-39.69549291	-65.40538742	-67.42699618	-45.24059881	-54.9094623	-56.94245279
+0.55	20.50841752	29.05166192	29.28454016	21.20200044	25.79204497	26.17874435
-0.6	-43.82170246	-75.13273796	-78.3468374	-51.2184949	-62.0745484	-64.76242062
+0.6	16.89033912	22.59646801	23.00911244	16.69423103	20.34711547	20.53462173
-0.65	-47.19259051	-83.16115954	-87.37617155	-56.13770361	-67.96885827	-71.20404647
+0.65	13.98763685	17.62801967	18.41306901	13.21935598	16.14549495	16.11785386
-0.7	-51.01958339	-92.37819333	-97.76289341	-61.76709943	-74.711862	-78.58383465
+0.7	10.75915044	12.81776598	13.35060215	10.0040521	11.72655233	11.92629102
-0.75	-54.1136599	-99.92230637	-106.2826718	-66.35860515	-80.20964332	-84.61033549
+0.75	8.209762616	9.44029393	9.684813361	7.976601425	8.738091204	9.338484054
-0.8	-57.5856008	-108.5049378	-115.9980758	-71.56194922	-86.43750289	-91.44910584
+0.8	5.580403291	6.193808976	6.153669303	5.670243826	6.23531119	6.443698433
-0.85	-60.35562014	-115.4597373	-123.8913261	-75.7601336	-91.46001345	-96.9751673
+0.85	3.591937712	4.20817155	4.032403871	3.864810711	4.280293623	4.279909229
-0.9	-63.41665931	-123.2838461	-132.7971963	-80.45985676	-97.07964565	-103.1720852
+0.9	1.820749164	3.668382876	4.032403871	2.323680031	2.809834777	3.013999161
-0.95	-65.81537444	-129.544325	-139.946994	-84.19909892	-101.5481405	-108.11239
+0.95	1.777148569	3.668382876	4.032403871	2.323680031	2.809834777	3.013999161
-1	-68.40967468	-136.4858313	-147.9051129	-88.31765148	-106.4664858	-113.5666449
+1	1.78E+00	3.668382876	4.032403871	2.323680031	2.809834777	3.013999161
(Span 2) -2	-6.248811171	-12.89877108	-14.17874214	-8.170525911	-9.879943383	-10.59782655
+2	68.65258021	138.6570422	150.6248696	89.33332553	107.6383782	115.0267533
-2.05	-6.248811171	-12.89877108	-14.17874214	-8.170525911	-9.879943383	-10.59782655
+2.05	65.93830888	131.5213734	142.472491	85.07583815	102.5473863	109.3963254
-2.1	-6.248811171	-12.89877108	-14.17874214	-8.170525911	-9.879943383	-10.59782655
+2.1	62.70609656	123.34688	133.1924777	80.14728351	96.64767436	102.9024993
-2.15	-6.248811171	-12.89877108	-14.17874214	-8.170525911	-9.879943383	-10.59782655
+2.15	59.39999552	115.244197	124.0438003	75.21925963	90.74333911	96.42914478
-2.2	-7.69820471	-12.89877108	-14.17874214	-8.170525911	-9.879943383	-10.59782655
+2.2	55.6228171	106.229787	113.914407	69.69516578	84.11970199	89.19181406
-2.25	-10.87017109	-13.29168131	-14.17874214	-9.978886482	-12.21288528	-12.0263539

+2.25	51.88674976	97.51926814	104.1694468	64.3210478	77.67135573	82.16734419
-2.3	-14.52554168	-19.26409497	-19.79203829	-14.23980636	-17.37234681	-17.45215376
+2.3	47.73726398	88.04806136	93.61736501	58.44086363	70.61112978	74.49779574
-2.35	-18.41667113	-26.26127996	-26.34168871	-19.11487781	-23.26400091	-23.62663668
+2.35	43.46316988	78.36830529	83.01408684	52.47055092	63.43796211	66.69338503
-2.4	-22.2378742	-33.76221508	-34.31987096	-24.00105809	-29.16203877	-29.90013314
+2.4	39.38394593	69.24702303	73.12806003	46.66109102	56.45352233	59.18064679
-2.45	-26.4550786	-42.26189949	-43.54513535	-29.48933111	-35.78025625	-36.96649988
+2.45	34.99931058	59.81916178	62.74898647	40.69980784	49.28175982	51.45275576
-2.5	-30.77314043	-51.17642977	-53.27328261	-35.20042906	-42.66107479	-44.33839571
+2.5	30.55060104	50.60841834	52.65260651	34.83775432	42.22428457	43.86974406
-2.55	-34.87206862	-59.8198199	-62.74909007	-40.70021387	-49.28224878	-51.45329685
+2.55	26.50227353	42.26129934	43.54505478	29.4889338	35.77977742	36.96600157
-2.6	-39.25484709	-69.24769177	-73.12814779	-46.66151392	-56.45403039	-59.18119581
+2.6	22.28226094	33.76164646	34.3197933	24.00067999	29.16158285	29.89966055
-2.65	-43.46868369	-78.34699013	-83.0141752	-52.4709738	-63.43847034	-66.67135173
+2.65	18.45808554	26.26073184	26.55348646	19.11452981	23.26358102	23.62619131
-2.7	-47.74065408	-88.0487167	-93.61747337	-58.44128157	-70.61163267	-74.49834119
+2.7	14.5634898	19.26363434	19.79198649	14.2394854	17.37195854	17.45177509
-2.75	-51.63344772	-96.93241904	-103.5136797	-63.95779248	-77.23533974	-81.69307347
+2.75	11.12533161	13.6266418	14.17874183	10.22781161	12.51462939	12.34943659
-2.8	-55.6225631	-106.2304184	-113.9145121	-69.69556606	-84.12018198	-89.19232321
+2.8	7.728809866	12.8987716	14.17874183	8.170525802	9.879943501	10.59782597
-2.85	-59.39823185	-115.2448031	-124.043881	-75.21962937	-90.74378323	-96.42963157
+2.85	6.248801851	12.8987716	14.17874183	8.170525802	9.879943501	10.59782597
-2.9	-62.70324239	-123.3474444	-133.1925571	-80.14764575	-96.64810819	-102.9029628
+2.9	6.248801851	12.8987716	14.17874183	8.170525802	9.879943501	10.59782597
-2.95	-65.93469538	-131.521904	-142.4725647	-85.07617456	-102.5477887	-109.3967576
+2.95	6.248801851	12.8987716	14.17874183	8.170525802	9.879943501	10.59782597
-3	-68.81780928	-139.1129818	-151.1472376	-89.60364279	-107.9614077	-115.3850434
+3	6.248801851	12.8987716	14.17874183	8.170525802	9.879943501	10.59782597
(Span 3) -4	-1.78E+00	-3.668383023	-4.032403783	-2.32368	-2.80983481	-3.013998997
+4	68.234608	135.9696353	147.3126306	88.01253196	106.102259	113.1620352
-3.05	-1.78E+00	-3.668383023	-4.032403783	-2.32368	-2.80983481	-3.013998997
+3.05	66.04022626	130.0956653	140.5784186	84.52734391	101.9402715	108.5465582
-3.1	-1.908777237	-3.668383023	-4.032403783	-2.32368	-2.80983481	-3.013998997
+3.1	63.20632419	122.6973003	132.1291296	80.10849589	96.65962986	102.708351
-3.15	-3.406566208	-4.038913685	-4.032403783	-3.710012884	-4.082065955	-4.110074951
+3.15	60.61639389	116.0765115	124.5929764	76.13154886	91.90424706	97.4644617
-3.2	-5.753818377	-6.423380557	-6.402601471	-5.839713857	-6.420795899	-6.65360271
+3.2	57.34298867	107.8575896	115.2650478	71.17031243	85.9688571	90.93400368
-3.25	-7.969374826	-9.146034913	-9.371319147	-7.794336184	-8.53868825	-9.111605774
+3.25	54.40482366	100.5949906	107.0439492	66.76723442	80.69883123	85.14702002
-3.3	-10.97931408	-13.13735176	-13.72528648	-10.19885355	-12.05371476	-12.16974456
+3.3	50.74785015	91.67961196	96.97559549	61.34113927	74.20172973	78.02510268
-3.35	-13.70884004	-17.23171307	-18.00920093	-12.92816434	-15.79310513	-15.73921842
+3.35	47.5087821	83.88020836	88.18641282	56.57758043	68.49584148	71.78037262
-3.4	-17.13612634	-23.06494664	-23.44056271	-17.03029341	-20.7532077	-20.84981589
+3.4	43.4978902	74.39246979	77.51584312	50.76420981	61.53012754	64.16785805
-3.45	-20.19517032	-28.50790151	-28.76643918	-20.84481701	-25.36076416	-25.7216028
+3.45	40.00595517	66.16126529	68.27556779	45.70576922	55.46709646	57.55066349
-3.5	-23.98398496	-35.81084188	-36.1152644	-25.62751734	-31.13366912	-31.84854462
+3.5	35.75070984	56.22526933	57.14105231	39.58268279	48.12584064	49.54838003
-3.55	-27.32527797	-42.35651706	-43.1781502	-29.89081578	-36.2764699	-37.31964801
+3.55	32.05291534	47.66722491	48.12933277	34.29495576	41.7843811	42.64403683
-3.6	-31.41976221	-50.49332756	-51.98874272	-35.16513294	-42.63543313	-44.09855091
+3.6	27.58228361	38.34226921	38.94347542	27.93973657	34.16068369	34.47358161

-3.65	**-34.9960701**	**-57.69212236**	**-59.80767006**	**-39.81159935**	**-48.23475026**	**-50.0786883**
+3.65	**23.72590254**	**30.68799903**	**32.29262511**	**22.6987718**	**27.87205354**	**27.86744348**
-3.7	**-39.3403825**	**-66.53866684**	**-69.44261394**	**-45.49997678**	**-55.08670362**	**-57.40869319**
+3.7	**19.09574451**	**23.07272267**	**24.33501972**	**17.43031074**	**20.85798**	**20.91686118**
-3.75	**-43.1044787**	**-74.28553895**	**-77.90063108**	**-50.46401531**	**-61.06382296**	**-63.81251871**
+3.75	**15.1280061**	**17.53763512**	**19.03715796**	**14.42356978**	**15.87195362**	**17.07603895**
-3.8	**-47.64275544**	**-83.71779819**	**-88.22180373**	**-56.48886805**	**-68.31566403**	**-71.5928296**
+3.8	**10.76756159**	**17.26016655**	**19.03715796**	**10.88576686**	**13.13126442**	**14.12968343**
-3.85	**-51.54736915**	**-91.90769198**	**-97.20196273**	**-61.70482615**	**-74.59180202**	**-78.33502602**
+3.85	**8.169094256**	**17.26016655**	**19.03715796**	**10.88576686**	**13.13126442**	**14.12968343**
-3.9	**-56.22379118**	**-101.8015313**	**-108.0711041**	**-67.98862223**	**-82.15049296**	**-86.46485276**
+3.9	**8.169094256**	**17.26016655**	**19.03715796**	**10.88576686**	**13.13126442**	**14.12968343**
-3.95	**-60.22167191**	**-110.3294862**	**-117.4564565**	**-73.39087582**	**-88.64690027**	**-93.46006786**
+3.95	**8.169094256**	**17.26016655**	**19.03715796**	**10.88576686**	**13.13126442**	**14.12968343**
-5	**-64.98039728**	**-120.560797**	**-128.7353021**	**-79.85605952**	**-96.41937385**	**-101.8385472**
+5	**8.169094256**	**17.26016655**	**19.03715796**	**10.88576686**	**13.13126442**	**14.12968343**

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-49.014554	-34.218345	-48.334418	-51.260307	-63.747641	-27.452818	-37.097942	-42.442296	-47.514845	-52.840311
+0.05	363.437577	259.575219	336.628494	335.657157	337.511946	209.298228	282.324398	318.549546	346.751682	374.916703
-0.1	-98.029108	-68.436691	-96.668837	-102.520613	-127.495282	-54.905635	-74.195885	-84.884591	-95.029690	-105.680622
+0.1	675.243243	483.040221	621.832465	616.316865	612.460757	389.719225	525.527656	592.319093	644.792301	699.058448
-0.15	-147.043662	-102.655036	-145.003255	-153.780920	-191.242924	-82.358453	-111.293827	-127.326887	-142.544536	-158.520933
+0.15	935.597642	670.473861	855.880134	842.634222	838.321097	541.257308	729.743390	821.488511	907.133781	981.015042
-0.2	-196.058216	-136.873382	-193.337673	-205.041226	-254.990565	-109.811271	-148.391770	-169.769182	-190.059381	-211.361245
+0.2	1145.452768	822.571623	1040.177944	1030.803975	1014.846405	664.453296	895.705626	1006.950223	1120.863720	1217.374376
-0.25	-245.072770	-171.091727	-241.672092	-256.301533	-318.738206	-137.264089	-185.489712	-212.211478	-237.574226	-264.201556
+0.25	1306.208157	940.243700	1187.685007	1169.582999	1156.773884	760.019579	1024.380411	1154.056956	1286.652294	1408.371451
-0.3	-294.087325	-205.310073	-290.006510	-307.561839	-382.485847	-164.716906	-222.587655	-254.653773	-285.089071	-317.041867
+0.3	1421.973946	1024.615163	1291.298338	1268.184359	1263.776664	828.840658	1123.262651	1267.860729	1406.041854	1547.620266
-0.35	-343.101879	-239.528418	-338.340928	-358.822146	-446.233488	-192.169724	-259.685597	-297.096069	-332.603916	-369.882178
+0.35	1505.828173	1084.794248	1350.642133	1341.619114	1339.320330	871.972442	1191.055373	1342.030333	1489.879702	1636.805113
-0.4	-392.116433	-273.746764	-386.675347	-410.082452	-509.981129	-219.622542	-296.783540	-339.538364	-380.118761	-422.722489
+0.4	1545.260009	1115.131493	1375.931171	1387.119546	1380.842889	890.642974	1225.512653	1377.721695	1534.061475	1682.902413
-0.45	-441.130987	-307.965109	-435.009765	-461.342759	-573.728771	-247.075360	-333.881482	-381.980660	-427.633607	-475.562800
+0.45	1542.726156	1116.156148	1363.563304	1392.662492	1380.739934	886.251706	1227.923590	1377.025057	1537.565091	1691.162713
-0.5	-490.145541	-342.183454	-483.344183	-512.603066	-637.476412	-274.528177	-370.979425	-424.422955	-475.148452	-528.403111
+0.5	1519.116977	1098.392475	1344.666661	1366.098257	1355.171155	874.102641	1207.531525	1354.983212	1511.503757	1660.433605
-0.55	-539.160095	-376.401800	-531.678602	-563.863372	-701.224053	-301.980995	-408.077367	-466.865251	-522.663297	-581.243423
+0.55	1462.538872	1056.214612	1302.369186	1308.193327	1296.486962	844.512720	1160.587620	1304.567473	1451.632173	1590.127001
-0.6	-588.174649	-410.620145	-580.013020	-615.123679	-764.971694	-329.433813	-445.175310	-509.307546	-570.178142	-634.083734
+0.6	1369.392762	988.998947	1224.863869	1214.514206	1220.465931	794.203153	1086.754089	1222.787093	1357.192381	1489.188084
-0.65	-637.189203	-444.838491	-628.347438	-666.383985	-828.719335	-356.886630	-482.273252	-551.749842	-617.692987	-686.924045
+0.65	1243.020905	899.103450	1116.027306	1095.344717	1106.081311	724.995635	988.594591	1112.535819	1231.483291	1353.396315
-0.7	-686.203757	-479.056836	-676.681857	-717.644292	-892.466977	-384.339448	-519.371195	-594.192137	-665.207833	-739.764356
+0.7	1087.145373	789.282566	973.444645	940.992814	953.296178	638.883313	868.904798	976.974276	1079.508617	1185.603127
-0.75	-735.218311	-513.275182	-725.016275	-768.904598	-956.214618	-411.792266	-556.469137	-636.634433	-712.722678	-792.604667
+0.75	906.681924	663.849152	800.808949	766.866433	773.433270	538.031702	730.712396	819.528767	904.849791	990.059135
-0.8	-784.232866	-547.493527	-773.350694	-820.164905	-1019.962259	-439.245084	-593.567080	-679.076728	-760.237523	-845.444978
+0.8	705.003315	522.656167	602.127136	560.818554	558.248672	424.777413	577.276863	643.892195	708.596084	771.348036
-0.85	-833.247420	-581.711872	-821.685112	-871.425212	-1092.473137	-466.697901	-630.665022	-721.519024	-807.752368	-898.285289
+0.85	483.838304	368.819863	381.720871	334.790892	339.960161	301.629264	412.089494	454.023642	495.100479	534.386070
-0.9	-882.261974	-615.930218	-870.019530	-922.685518	-1189.687633	-494.150719	-667.762965	-763.961319	-855.267213	-951.125601
+0.9	259.234673	206.995063	199.362144	195.110264	221.472684	171.267690	238.873592	254.148449	271.821541	287.324183
-0.95	-931.276528	-650.148563	-918.353949	-973.945825	-1314.996712	-521.603537	-704.860907	-806.403615	-902.782059	-1003.965912
+0.95	202.594937	141.766807	197.035081	205.949723	217.596454	113.883161	153.957602	175.858165	196.762749	218.553271
-1	-980.291104	-684.366924	-966.688373	-1025.206133	-1687.804992	-549.056364	-741.958858	-848.845913	-950.296910	-1056.806207
+1	213.257829	149.228217	207.405351	216.789183	224.384650	119.877010	162.060630	185.113854	207.118680	230.056079
(Span 2) -2	-980.291104	-684.366924	-966.688373	-1025.206133	-1687.804992	-549.056364	-741.958858	-848.845913	-950.296910	-1056.806207
+2	213.257829	149.228217	207.405351	216.789183	224.384650	119.877010	162.060630	185.113854	207.118680	230.056079
-2.05	-712.814933	-498.796556	-693.254042	-724.619567	-1196.754246	-400.689892	-541.689035	-618.744595	-692.295897	-768.964306
+2.05	164.517102	115.121652	160.002224	167.241352	179.167579	92.478753	125.021177	142.805516	159.781072	177.476059
-2.1	-664.074278	-464.689988	-645.850916	-675.071739	-818.266356	-373.291633	-504.649577	-576.436255	-644.958287	-716.384285
+2.1	323.502742	259.427087	238.384691	210.121430	210.126504	209.153722	297.194440	318.194510	344.852728	361.839899
-2.15	-615.333624	-430.583419	-598.447790	-625.523910	-670.367745	-345.893374	-467.610119	-534.127914	-597.620676	-663.804263
+2.15	597.636173	450.393807	476.663243	418.883693	395.293647	363.230232	502.882981	555.068942	608.897457	657.725054
-2.2	-566.592969	-396.476851	-551.044664	-575.976082	-597.469743	-318.495115	-430.570662	-491.819574	-550.283066	-611.224242
+2.2	852.537532	627.467158	732.563048	686.371199	649.278034	506.416965	693.901505	774.459628	854.589335	933.248188

-2.25	-517.852315	-362.370283	-503.641538	-526.428254	-551.637746	-291.096857	-393.531204	-449.511233	-502.945455	-558.644221
+2.25	1082.617484	786.775284	958.493287	929.209731	947.580022	634.462399	867.077457	973.055578	1075.889132	1179.134625
-2.3	-469.111660	-328.263714	-456.238412	-476.880425	-511.184666	-263.698598	-356.491747	-407.202893	-455.607845	-506.064200
+2.3	1272.810281	921.909773	1142.308882	1129.696515	1195.922273	740.036725	1013.251240	1139.178450	1264.089942	1386.661582
-2.35	-420.371006	-294.157146	-408.835286	-427.332597	-470.731586	-236.300339	-319.452289	-364.894552	-408.270235	-453.484179
+2.35	1428.474163	1029.544853	1285.358662	1286.032383	1381.818312	825.788769	1130.953117	1273.338923	1414.678903	1552.334365
-2.4	-371.630352	-260.050578	-361.432160	-377.784768	-430.278507	-208.902080	-282.412831	-322.586211	-360.932624	-400.904157
+2.4	1537.046985	1108.620472	1384.958320	1405.281338	1517.116768	884.505076	1216.792736	1369.048409	1524.995175	1673.475909
-2.45	-322.889697	-225.944009	-314.029034	-328.236940	-389.825427	-181.503821	-245.373374	-280.277871	-313.595014	-348.324136
+2.45	1601.127801	1153.542981	1439.694667	1474.372286	1586.520128	919.100415	1266.406501	1424.733381	1588.683885	1747.913569
-2.5	-274.149442	-191.837441	-266.625908	-278.689123	-349.372347	-154.105565	-208.333916	-237.969530	-266.257403	-295.744122
+2.5	1617.939760	1167.903327	1447.838659	1494.056434	1603.221178	926.663406	1282.832821	1440.220983	1609.428706	1772.917981
-2.55	-322.890170	-225.943999	-314.029046	-328.236953	-389.825402	-181.503823	-245.373358	-280.277864	-313.595007	-348.324142
+2.55	1601.344224	1153.546124	1439.696401	1474.373586	1586.518364	919.105914	1266.407193	1424.736018	1588.684139	1747.915464
-2.6	-371.630897	-260.050564	-361.432173	-377.784784	-430.278478	-208.902080	-282.412812	-322.586202	-360.932614	-400.904162
+2.6	1537.192232	1108.622932	1384.962412	1405.285080	1517.115646	884.513073	1216.796521	1369.054038	1524.998378	1673.476745
-2.65	-420.371624	-294.157129	-408.835301	-427.332614	-470.731554	-236.300338	-319.452265	-364.894540	-408.270222	-453.484182
+2.65	1428.634033	1029.546616	1285.362000	1286.034557	1381.816481	825.795894	1130.954274	1273.341792	1414.679122	1552.341380
-2.7	-469.112351	-328.263694	-456.238428	-476.880445	-511.184630	-263.698595	-356.491719	-407.202878	-455.607830	-506.064202
+2.7	1272.824397	921.911052	1142.313306	1129.699112	1195.921775	740.037813	1013.253768	1139.182557	1264.091461	1386.663749
-2.75	-517.853078	-362.370259	-503.641555	-526.428275	-551.637706	-291.096853	-393.531172	-449.511216	-502.945438	-558.644222
+2.75	1082.503331	786.776254	958.496965	929.211764	947.577164	634.471229	867.079747	973.059394	1075.890253	1179.142280
-2.8	-566.593805	-396.476824	-551.044682	-575.976106	-597.469699	-318.495110	-430.570626	-491.819554	-550.283046	-611.224242
+2.8	852.650703	627.467989	732.564262	686.372735	649.277873	506.420341	693.903655	774.459365	854.590359	933.251682
-2.85	-615.334532	-430.583389	-598.447809	-625.523936	-670.367694	-345.893368	-467.610079	-534.127892	-597.620653	-663.804262
+2.85	597.328143	450.394891	476.666606	418.887724	395.292168	363.228462	502.885396	555.072796	608.898878	657.724875
-2.9	-664.075259	-464.689954	-645.850936	-675.071767	-818.266425	-373.291626	-504.649533	-576.436230	-644.958261	-716.384282
+2.9	323.439656	259.426729	238.383088	210.121833	210.122978	209.160464	297.195635	318.197130	344.853013	361.838593
-2.95	-712.815987	-498.796519	-693.254063	-724.619598	-1196.754402	-400.689883	-541.688986	-618.744568	-692.295869	-768.964302
+2.95	164.516847	115.121674	160.002225	167.241345	179.167594	92.478768	125.021202	142.805535	159.781090	177.476076
-3	-980.291333	-684.366999	-966.688371	-1025.206222	-1687.805135	-549.056409	-741.958854	-848.845985	-950.296987	-1056.806267
+3	213.257511	149.228231	207.405346	216.789174	224.384667	119.877016	162.060648	185.113865	207.118691	230.056084
(Span 3) -4	-980.291333	-684.366999	-966.688371	-1025.206222	-1687.805135	-549.056409	-741.958854	-848.845985	-950.296987	-1056.806267
+4	213.257511	149.228231	207.405346	216.789174	224.384667	119.877016	162.060648	185.113865	207.118691	230.056084
-3.05	-931.276767	-650.148650	-918.353953	-973.945911	-1314.996758	-521.603589	-704.860911	-806.403686	-902.782138	-1003.965953
+3.05	202.594635	141.766819	197.035079	205.949715	217.596469	113.883165	153.957616	175.858172	196.762756	218.553280
-3.1	-882.262202	-615.930301	-870.019535	-922.685600	-1189.687549	-494.150769	-667.762969	-763.961387	-855.267289	-951.125638
+3.1	259.422866	206.994447	199.364409	195.110256	221.472699	171.272531	238.871558	254.145081	271.823479	287.328710
-3.15	-833.247636	-581.711952	-821.685117	-871.425289	-1092.473059	-466.697949	-630.665027	-721.519088	-807.752440	-898.285324
+3.15	484.015149	368.820532	381.718789	334.788319	339.958616	301.634473	412.087965	454.020875	495.101474	534.389682
-3.2	-784.233070	-547.493602	-773.350698	-820.164978	-1019.962187	-439.245129	-593.567085	-679.076789	-760.237591	-845.445010
+3.2	705.182959	522.656959	602.125105	560.815118	558.246448	424.782799	577.275593	643.889594	708.597276	771.352034
-3.25	-735.218505	-513.275253	-725.016280	-768.904667	-956.214551	-411.792309	-556.469142	-636.634490	-712.722741	-792.604696
+3.25	906.853719	663.849883	800.806510	766.862353	773.431825	538.037048	730.711127	819.526148	904.850943	990.062959
-3.3	-686.203939	-479.056904	-676.681862	-717.644356	-892.466915	-384.339489	-519.371200	-594.192191	-665.207892	-739.764382
+3.3	1087.822890	789.282840	973.441572	940.995592	953.294346	638.888537	868.903305	976.971397	1079.509249	1185.606476
-3.35	-637.189374	-444.838555	-628.347443	-666.384045	-828.719280	-356.886669	-482.273258	-551.749892	-617.693043	-686.924068
+3.35	1243.662084	899.102760	1116.023238	1095.342550	1106.078564	725.000089	988.592502	1112.532213	1231.482468	1353.398892
-3.4	-588.174808	-410.620205	-580.013025	-615.123734	-764.971644	-329.433849	-445.175316	-509.307592	-570.178194	-634.083754
+3.4	1369.825664	988.997516	1224.858538	1214.510741	1220.463032	794.207103	1086.751318	1222.782643	1357.190622	1489.189597
-3.45	-539.160243	-376.401856	-531.678607	-563.863423	-701.224008	-301.981029	-408.077373	-466.865293	-522.663345	-581.243439
+3.45	1462.715078	1056.212237	1302.364918	1308.189676	1296.484097	844.515948	1160.583960	1304.562071	1451.629166	1590.126504
-3.5	-490.145677	-342.183507	-483.344189	-512.603112	-637.476373	-274.528209	-370.979431	-424.422994	-475.148496	-528.403125
+3.5	1519.245959	1098.389223	1344.669582	1366.093199	1355.173149	874.105039	1207.526814	1354.976430	1511.499514	1660.431666
-3.55	-441.131112	-307.965158	-435.009770	-461.342801	-573.728737	-247.075389	-333.881489	-381.980695	-427.633647	-475.562811
+3.55	1542.623174	1116.149608	1363.561056	1392.659258	1380.741714	886.249836	1227.918995	1377.022583	1537.560225	1691.165609
-3.6	-392.116546	-273.746809	-386.675352	-410.082490	-509.981101	-219.622569	-296.783546	-339.538396	-380.118798	-422.722497

+3.6	**1545.102927**	**1115.134223**	**1375.927166**	**1387.114449**	**1380.840575**	**890.640091**	**1225.506742**	**1377.717795**	**1534.054756**	**1682.903325**
-3.65	**-343.101981**	**-239.528459**	**-338.340934**	**-358.822179**	**-446.233465**	**-192.169749**	**-259.685604**	**-297.096097**	**-332.603949**	**-369.882183**
+3.65	**1505.611061**	**1084.795543**	**1350.637760**	**1341.615979**	**1339.318145**	**871.968734**	**1191.058031**	**1342.024952**	**1489.881276**	**1636.803675**
-3.7	**-294.087415**	**-205.310110**	**-290.006516**	**-307.561868**	**-382.485830**	**-164.716929**	**-222.587662**	**-254.653798**	**-285.089100**	**-317.041869**
+3.7	**1421.690997**	**1024.614932**	**1291.292151**	**1268.185795**	**1263.778474**	**828.835525**	**1123.263641**	**1267.853284**	**1406.041141**	**1547.616477**
-3.75	**-245.072850**	**-171.091761**	**-241.672097**	**-256.301557**	**-318.738194**	**-137.264109**	**-185.489720**	**-212.211499**	**-237.574251**	**-264.201554**
+3.75	**1305.998865**	**940.241845**	**1187.686747**	**1169.579718**	**1156.775524**	**760.013259**	**1024.379687**	**1154.057663**	**1286.649401**	**1408.365206**
-3.8	**-196.058284**	**-136.873412**	**-193.337679**	**-205.041246**	**-254.990558**	**-109.811289**	**-148.391777**	**-169.769199**	**-190.059402**	**-211.361240**
+3.8	**1145.171345**	**822.568146**	**1040.177386**	**1030.806333**	**1014.849024**	**664.445609**	**895.703071**	**1006.948824**	**1120.858686**	**1217.375801**
-3.85	**-147.043719**	**-102.655062**	**-145.003261**	**-153.780935**	**-191.242923**	**-82.358469**	**-111.293835**	**-127.326900**	**-142.544553**	**-158.520926**
+3.85	**935.240482**	**670.468649**	**855.877335**	**842.633996**	**838.322504**	**541.248151**	**729.738985**	**821.485171**	**907.126297**	**981.013779**
-3.9	**-98.029153**	**-68.436713**	**-96.668843**	**-102.520624**	**-127.495287**	**-54.905649**	**-74.195893**	**-84.884601**	**-95.029704**	**-105.680612**
+3.9	**674.807562**	**483.033141**	**621.827405**	**616.314248**	**612.460197**	**389.708485**	**525.521366**	**592.313376**	**644.792488**	**699.059220**
-3.95	**-49.014587**	**-34.218364**	**-48.334424**	**-51.260313**	**-63.747651**	**-27.452829**	**-37.097950**	**-42.442302**	**-47.514855**	**-52.840298**
+3.95	**363.519412**	**259.566718**	**336.620908**	**335.652116**	**337.514282**	**209.286385**	**282.316293**	**318.541848**	**346.749484**	**374.914741**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-49.014554	-44.768952	-48.166143	-45.399676	-54.957690	-56.167965	-59.445456	-23.810103
+0.05	363.437577	345.503769	369.071539	346.134597	413.235757	386.666152	408.693896	181.700132
-0.1	-98.029108	-89.537905	-96.332286	-90.799353	-109.915380	-112.335931	-118.890912	-47.620207
+0.1	675.243243	643.829806	687.349749	644.411329	768.476163	713.643324	754.205973	337.831334
-0.15	-147.043662	-134.306857	-144.498429	-136.199029	-164.873070	-168.503896	-178.336369	-71.430310
+0.15	935.597642	895.077201	955.003221	895.001052	1066.076972	981.348395	1036.989719	468.737230
-0.2	-196.058216	-179.075810	-192.664572	-181.598706	-219.830761	-224.671861	-237.781825	-95.240413
+0.2	1145.452768	1100.079261	1172.956228	1098.791596	1307.171038	1199.556376	1267.824366	574.912330
-0.25	-245.072770	-223.844762	-240.830716	-226.998382	-274.788451	-280.839827	-297.227281	-119.050516
+0.25	1306.208157	1259.948305	1342.433545	1256.954370	1506.071884	1378.040086	1457.473734	657.166521
-0.3	-294.087325	-268.613715	-288.996859	-272.398058	-329.746141	-337.007792	-356.672737	-142.860620
+0.3	1421.973946	1376.076066	1464.960816	1381.651669	1655.194314	1503.821713	1590.015427	716.360041
-0.35	-343.101879	-313.382667	-337.163002	-317.797735	-384.703831	-393.175757	-416.118193	-166.670723
+0.35	1505.828173	1453.194510	1552.554388	1465.516513	1752.327996	1589.831010	1681.690578	753.179990
-0.4	-392.116433	-358.151620	-385.329145	-363.197411	-439.661521	-449.343723	-475.563649	-190.480826
+0.4	1545.260009	1498.211146	1598.804002	1508.382615	1799.636475	1625.544569	1719.992752	768.719916
-0.45	-441.130987	-402.920572	-433.495288	-408.597088	-494.619211	-505.511688	-535.009106	-214.290929
+0.45	1542.726156	1504.259717	1603.607368	1511.958656	1799.798440	1613.737121	1708.000295	762.612040
-0.5	-490.145541	-447.689525	-481.661431	-453.996764	-549.576901	-561.679653	-594.454562	-238.101033
+0.5	1519.116977	1478.382727	1576.749367	1486.439191	1771.024227	1590.674443	1683.426993	754.532368
-0.55	-539.160095	-492.458477	-529.827574	-499.396440	-604.534591	-617.847619	-653.900018	-261.911136
+0.55	1462.538872	1418.516643	1514.029503	1428.351414	1703.797570	1538.799459	1628.096932	730.388131
-0.6	-588.174649	-537.227430	-577.993717	-544.796117	-659.492282	-674.015584	-713.345474	-285.721239
+0.6	1369.392762	1326.799340	1416.729017	1337.485921	1596.577526	1442.307813	1525.596252	687.926266
-0.65	-637.189203	-581.996382	-626.159861	-590.195793	-714.449972	-730.183549	-772.790930	-309.531342
+0.65	1243.020905	1208.242461	1288.198645	1216.985340	1453.019616	1304.970351	1379.924194	628.725756
-0.7	-686.203757	-626.765335	-674.326004	-635.595470	-769.407662	-786.351515	-832.236386	-333.341446
+0.7	1087.145373	1066.341836	1132.089962	1070.275962	1276.994986	1131.048955	1196.667214	554.516952
-0.75	-735.218311	-671.534287	-722.492147	-680.995146	-824.365352	-842.519480	-891.681843	-357.151549
+0.75	906.681924	901.062501	954.668899	901.067528	1072.943635	929.248146	982.875090	467.180926
-0.8	-784.232866	-716.303240	-770.658290	-726.394823	-879.323042	-898.687445	-951.127299	-380.961652
+0.8	705.003315	716.247536	755.890222	713.353251	845.649200	697.750512	737.733392	368.749444
-0.85	-833.247420	-761.072192	-818.824433	-771.794499	-934.280732	-954.855411	-1010.572755	-404.771756
+0.85	483.838304	516.018926	540.109784	511.409545	600.238485	441.616303	466.606606	261.405257
-0.9	-882.261974	-805.841145	-866.990576	-817.194175	-989.238422	-1011.023376	-1070.018211	-428.581859
+0.9	259.234673	304.777798	315.420287	299.796447	342.327955	228.185640	240.956761	147.771080
-0.95	-931.276528	-850.610097	-915.156719	-862.593852	-1044.196112	-1067.191341	-1129.463667	-452.391962
+0.95	202.594937	185.997685	200.029431	188.512650	228.073680	229.060742	242.380328	98.320693
-1	-980.291104	-895.379067	-963.322878	-907.993537	-1099.153809	-1123.359293	-1188.909117	-476.202061
+1	213.257829	195.787041	210.557300	198.434364	240.077559	241.116566	255.137182	103.495464
(Span 2) -2	-980.291104	-895.379067	-963.322878	-907.993537	-1099.153809	-1123.359293	-1188.909117	-476.202061
+2	213.257829	195.787041	210.557300	198.434364	240.077559	241.116566	255.137182	103.495464
-2.05	-712.814933	-654.419749	-703.789513	-663.268492	-802.461138	-805.934019	-852.798078	-345.934435
+2.05	164.517102	151.039314	162.433785	153.081582	185.207099	186.008636	196.824798	84.570775
-2.1	-664.074278	-609.672024	-655.665997	-617.915709	-747.590681	-750.826094	-794.485695	-322.280229
+2.1	323.502742	376.133060	392.338065	371.978111	426.835335	278.171167	294.493717	178.303132
-2.15	-615.333624	-564.924298	-607.542480	-572.562926	-692.720224	-695.718168	-736.173312	-298.626023
+2.15	597.636173	622.475181	658.794045	622.989016	731.951296	558.937797	590.254425	313.199817
-2.2	-566.592969	-520.176572	-559.418963	-527.210143	-637.849768	-640.610242	-677.860930	-274.971817
+2.2	852.537532	852.958226	906.711467	856.322984	1016.307976	856.477049	905.225349	437.528939

-2.25	-517.852315	-475.428847	-511.295447	-481.857360	-582.979311	-585.502317	-619.548547	-251.317611
+2.25	1082.617484	1060.324125	1130.667425	1068.438810	1272.530905	1120.200752	1184.384035	549.102380
-2.3	-469.111660	-430.681121	-463.171930	-436.504577	-528.108854	-530.394391	-561.236164	-227.663405
+2.3	1272.810281	1238.213882	1321.343829	1247.232875	1487.531974	1340.494952	1417.802574	640.375423
-2.35	-420.371006	-385.933395	-415.048413	-391.151795	-473.238398	-475.286466	-502.923781	-204.009199
+2.35	1428.474163	1381.126260	1474.020400	1391.820083	1662.157961	1512.977107	1600.548355	714.621582
-2.4	-371.630352	-341.185670	-366.924896	-345.799012	-418.367941	-420.178540	-444.611398	-180.354993
+2.4	1537.046985	1486.664529	1587.058885	1496.944327	1786.044724	1634.437613	1729.457046	764.739657
-2.45	-322.889697	-296.437944	-318.801380	-300.446229	-363.497484	-365.070614	-386.299016	-156.700787
+2.45	1601.127801	1548.846706	1652.416177	1558.472665	1859.925353	1699.268086	1798.331380	794.272384
-2.5	-274.149442	-251.690226	-270.677863	-255.093446	-308.627028	-309.962728	-327.986659	-133.046581
+2.5	1617.939760	1570.606906	1675.048825	1578.704871	1880.090479	1711.107292	1811.220288	800.310368
-2.55	-322.890170	-296.437952	-318.801360	-300.446233	-363.497496	-365.070658	-386.299043	-156.700792
+2.55	1601.344224	1548.849941	1652.420710	1558.474183	1859.930356	1699.269156	1798.332367	794.273754
-2.6	-371.630897	-341.185679	-366.924874	-345.799015	-418.367956	-420.178587	-444.611428	-180.354998
+2.6	1537.192232	1486.666744	1587.062270	1496.949443	1786.053100	1634.441788	1729.461294	765.673839
-2.65	-420.371624	-385.933406	-415.048389	-391.151796	-473.238416	-475.286516	-502.923812	-204.009203
+2.65	1428.634033	1381.127713	1474.022993	1391.822100	1662.163122	1512.977907	1600.549051	714.623710
-2.7	-469.112351	-430.681132	-463.171903	-436.504578	-528.108875	-530.394446	-561.236196	-227.663408
+2.7	1272.824397	1238.214657	1321.345650	1247.236475	1487.531569	1340.496798	1417.804367	640.534417
-2.75	-517.853078	-475.428859	-511.295418	-481.857359	-582.979335	-585.502375	-619.548580	-251.317613
+2.75	1082.503331	1060.324564	1130.668869	1068.442139	1272.537079	1120.201977	1184.385171	549.105133
-2.8	-566.593805	-520.176586	-559.418932	-527.210141	-637.849794	-640.610304	-677.860964	-274.971818
+2.8	852.650703	852.957728	906.712792	856.326134	1016.309289	856.477955	905.226153	437.529710
-2.85	-615.334532	-564.924312	-607.542447	-572.562923	-692.720254	-695.718234	-736.173348	-298.626023
+2.85	597.328143	622.475930	658.795785	622.992498	731.957493	558.938974	590.255526	313.198651
-2.9	-664.075259	-609.672039	-655.665961	-617.915704	-747.590713	-750.826163	-794.485732	-322.280229
+2.9	323.439656	376.134526	392.337766	371.980236	426.840438	278.171817	294.494503	178.305149
-2.95	-712.815987	-654.419765	-703.789476	-663.268486	-802.461173	-805.934093	-852.798116	-345.934434
+2.95	164.516847	151.039313	162.433787	153.081600	185.207082	186.008642	196.824812	84.306263
-3	-980.291333	-895.379098	-963.322958	-907.993599	-1099.153820	-1123.359402	-1188.909115	-476.202069
+3	213.257511	195.787036	210.557309	198.434370	240.077546	241.116549	255.137176	103.495468
(Span 3) -4	-980.291333	-895.379098	-963.322958	-907.993599	-1099.153820	-1123.359402	-1188.909115	-476.202069
+4	213.257511	195.787036	210.557309	198.434370	240.077546	241.116549	255.137176	103.495468
-3.05	-931.276767	-850.610144	-915.156811	-862.593920	-1044.196129	-1067.191431	-1129.463659	-452.391965
+3.05	202.594635	185.997685	200.029444	188.512651	228.073669	229.060721	242.380317	98.320695
-3.1	-882.262202	-805.841190	-866.990664	-817.194240	-989.238439	-1011.023460	-1070.018203	-428.581861
+3.1	259.422866	304.778794	315.419101	299.793412	342.333822	228.186759	240.957858	146.924118
-3.15	-833.247636	-761.072236	-818.824517	-771.794561	-934.280748	-954.855490	-1010.572747	-404.771758
+3.15	484.015149	516.020429	540.110471	511.407155	600.233616	441.617859	466.608399	261.402842
-3.2	-784.233070	-716.303282	-770.658370	-726.394881	-879.323057	-898.687519	-951.127291	-380.961654
+3.2	705.182959	716.249259	755.891143	713.351192	845.644682	697.752178	737.735311	368.747224
-3.25	-735.218505	-671.534328	-722.492223	-680.995201	-824.365367	-842.519548	-891.681835	-357.151550
+3.25	906.853719	901.064251	954.669788	901.065464	1072.938982	929.249290	982.876459	467.178540
-3.3	-686.203939	-626.765374	-674.326075	-635.595522	-769.407676	-786.351577	-832.236379	-333.341447
+3.3	1087.822890	1066.343132	1132.089615	1070.273599	1276.989886	1131.049416	1196.667867	554.514761
-3.35	-637.189374	-581.996420	-626.159928	-590.195842	-714.449985	-730.183607	-772.790922	-309.531343
+3.35	1243.662084	1208.243116	1288.197571	1216.982285	1453.013662	1304.968939	1379.922871	628.723169
-3.4	-588.174808	-537.227466	-577.993781	-544.796163	-659.492295	-674.015636	-713.345466	-285.721239
+3.4	1369.825664	1326.798467	1416.727041	1337.482032	1596.570544	1442.305233	1525.593693	687.923612
-3.45	-539.160243	-492.458512	-529.827634	-499.396483	-604.534604	-617.847665	-653.900010	-261.911136
+3.45	1462.715078	1418.514683	1514.026364	1428.346458	1703.801026	1538.795131	1628.092529	730.385095
-3.5	-490.145677	-447.689558	-481.661487	-453.996804	-549.576913	-561.679694	-594.454554	-238.101032
+3.5	1519.245959	1478.379480	1576.744791	1486.432943	1771.026030	1590.668564	1683.420946	754.529306
-3.55	-441.131112	-402.920604	-433.495340	-408.597124	-494.619223	-505.511723	-535.009098	-214.290928
+3.55	1542.623174	1504.263720	1603.597702	1511.953975	1799.797576	1613.733004	1707.995820	764.222473
-3.6	-392.116546	-358.151650	-385.329193	-363.197445	-439.661532	-449.343753	-475.563642	-190.480825

+3.6	**1545.102927**	**1498.213578**	**1598.807717**	**1508.376340**	**1799.633718**	**1625.538353**	**1719.986048**	**768.718178**
-3.65	**-343.101981**	**-313.382696**	**-337.163045**	**-317.797765**	**-384.703841**	**-393.175782**	**-416.118186**	**-166.670721**
+3.65	**1505.611061**	**1453.195159**	**1552.556176**	**1465.508621**	**1752.323288**	**1589.833787**	**1681.693326**	**753.178056**
-3.7	**-294.087415**	**-268.613742**	**-288.996898**	**-272.398086**	**-329.746151**	**-337.007811**	**-356.672730**	**-142.860617**
+3.7	**1421.690997**	**1376.074506**	**1464.960263**	**1381.653368**	**1655.187149**	**1503.821956**	**1590.015494**	**716.357474**
-3.75	**-245.072850**	**-223.844788**	**-240.830751**	**-226.998406**	**-274.788460**	**-280.839840**	**-297.227274**	**-119.050514**
+3.75	**1305.998865**	**1259.944720**	**1342.430810**	**1256.953951**	**1506.073839**	**1378.037916**	**1457.471243**	**657.163918**
-3.8	**-196.058284**	**-179.075834**	**-192.664604**	**-181.598727**	**-219.830769**	**-224.671869**	**-237.781818**	**-95.240410**
+3.8	**1145.171345**	**1100.073395**	**1172.951078**	**1098.788969**	**1307.170395**	**1199.551501**	**1267.819005**	**574.914040**
-3.85	**-147.043719**	**-134.306880**	**-144.498457**	**-136.199047**	**-164.873079**	**-168.503899**	**-178.336361**	**-71.430306**
+3.85	**935.240482**	**895.069277**	**954.995843**	**894.996168**	**1066.073588**	**981.345965**	**1036.987209**	**468.738620**
-3.9	**-98.029153**	**-89.537926**	**-96.332310**	**-90.799367**	**-109.915388**	**-112.335928**	**-118.890905**	**-47.620203**
+3.9	**674.807562**	**643.819707**	**687.339990**	**644.404099**	**768.469907**	**713.638251**	**754.200666**	**337.832167**
-3.95	**-49.014587**	**-44.768972**	**-48.166163**	**-45.399688**	**-54.957698**	**-56.167957**	**-59.445449**	**-23.810099**
+3.95	**363.519412**	**345.491044**	**369.058988**	**346.125146**	**413.226817**	**386.658162**	**408.685503**	**181.700556**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 120' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-49.014554	-103.561000	-114.222947	-65.314601	-78.787585	-84.778093
+0.05	363.437577	667.715991	709.902981	443.517520	536.095459	565.308777
-0.1	-98.029108	-207.122000	-228.445894	-130.629203	-157.575170	-169.556186
+0.1	675.243243	1224.799147	1305.895248	817.355723	988.048926	1040.010397
-0.15	-147.043662	-310.683000	-342.668842	-195.943804	-236.362756	-254.334279
+0.15	935.597642	1702.616708	1813.047140	1122.033351	1360.245736	1434.621956
-0.2	-196.058216	-414.244000	-456.891789	-261.258406	-315.150341	-339.112372
+0.2	1145.452768	2078.860473	2254.808294	1382.259173	1672.802757	1759.908776
-0.25	-245.072770	-517.805000	-571.114736	-326.573007	-393.937926	-423.890465
+0.25	1306.208157	2371.522555	2600.092220	1582.500244	1907.143435	2023.138039
-0.3	-294.087325	-621.366000	-685.337683	-391.887609	-472.725511	-508.668557
+0.3	1421.973946	2607.145983	2858.961437	1721.889800	2065.437302	2210.424640
-0.35	-343.101879	-724.927000	-799.560630	-457.202210	-551.513096	-593.446650
+0.35	1505.828173	2756.411104	3029.470866	1814.775345	2170.596370	2318.229319
-0.4	-392.116433	-828.488000	-913.783578	-522.516811	-630.300681	-678.224743
+0.4	1545.260009	2855.800481	3097.113572	1849.388800	2207.250180	2368.797872
-0.45	-441.130987	-932.049000	-1028.006525	-587.831413	-709.088267	-763.002836
+0.45	1542.726156	2862.584522	3133.509311	1829.338539	2178.600820	2349.866068
-0.5	-490.145541	-1035.610000	-1142.229472	-653.146014	-787.875852	-847.780929
+0.5	1519.116977	2812.442156	3072.276970	1803.351192	2148.479245	2314.885402
-0.55	-539.160095	-1139.171000	-1256.452419	-718.460616	-866.663437	-932.559022
+0.55	1462.538872	2694.141107	2925.184773	1751.542375	2089.660080	2240.335790
-0.6	-588.174649	-1242.732000	-1370.675367	-783.775217	-945.451022	-1017.337115
+0.6	1369.392762	2497.977828	2740.439847	1646.316235	1966.102713	2101.174203
-0.65	-637.189203	-1346.293000	-1484.898314	-849.089819	-1024.238607	-1102.115208
+0.65	1243.020905	2245.509143	2470.213439	1491.998880	1782.940895	1908.940259
-0.7	-686.203757	-1449.854000	-1599.121261	-914.404420	-1103.026193	-1186.893301
+0.7	1087.145373	1935.945455	2120.337055	1294.991777	1553.861612	1657.290940
-0.75	-735.218311	-1553.415000	-1713.344208	-979.719021	-1181.813778	-1271.671394
+0.75	906.681924	1562.479192	1703.276041	1062.999568	1276.272662	1353.137156
-0.8	-784.232866	-1656.976000	-1827.567155	-1045.033623	-1260.601363	-1356.449486
+0.8	705.003315	1133.395614	1233.544601	794.748151	954.328801	1003.119611
-0.85	-833.247420	-1760.537000	-1941.790103	-1110.348224	-1339.388948	-1441.227579
+0.85	483.838304	660.345038	710.660475	496.080319	594.983825	614.866891
-0.9	-882.261974	-1864.098000	-2056.013050	-1175.662826	-1418.176533	-1526.005672
+0.9	259.234673	396.185351	435.499618	272.021001	309.079486	325.511909
-0.95	-931.276528	-1967.659000	-2170.235997	-1240.977427	-1496.964118	-1610.783765
+0.95	202.594937	418.195648	459.694041	264.899524	320.321165	343.595904
-1	-980.291104	-2071.220012	-2284.458975	-1306.292014	-1575.751741	-1695.561848
+1	213.257829	440.205945	483.888467	278.841603	337.180172	361.679901
(Span 2) -2	-980.291104	-2071.220012	-2284.458975	-1306.292014	-1575.751741	-1695.561848
+2	213.257829	440.205945	483.888467	278.841603	337.180172	361.679901
-2.05	-712.814933	-1471.391962	-1617.401067	-932.030300	-1127.027425	-1208.917923
+2.05	164.517102	339.595530	373.294278	215.111501	260.116614	279.016853
-2.1	-664.074278	-1370.781543	-1506.806881	-868.300199	-1049.963865	-1126.254880
+2.1	323.502742	395.835292	423.252050	330.723610	379.246558	402.956170
-2.15	-615.333624	-1270.171125	-1396.212695	-804.570098	-972.900306	-1043.591838
+2.15	597.636173	866.385415	943.371478	622.979723	741.049595	782.605038
-2.2	-566.592969	-1169.560706	-1285.618508	-740.839996	-895.836747	-960.928795
+2.2	852.537532	1422.213462	1557.029941	971.464816	1161.197715	1236.223043

-2.25	-517.852315	-1068.950288	-1175.024322	-677.109895	-818.773187	-878.265753
+2.25	1082.617484	1908.880880	2097.686949	1278.331750	1525.412114	1633.043441
-2.3	-469.111660	-968.339869	-1064.430136	-613.379794	-741.709628	-795.602710
+2.3	1272.810281	2310.937655	2547.753909	1533.291184	1830.587594	1959.544435
-2.35	-420.371006	-867.729451	-953.835949	-549.649693	-664.646069	-712.939667
+2.35	1428.474163	2643.372382	2898.752806	1730.967207	2066.442437	2211.990932
-2.4	-371.630352	-767.119032	-843.241763	-485.919591	-587.582509	-630.276625
+2.4	1537.046985	2882.725176	3140.330968	1868.497682	2229.000893	2391.841508
-2.45	-322.889697	-666.508614	-732.647577	-422.189490	-510.518950	-547.613582
+2.45	1601.127801	3021.804215	3305.723601	1939.082832	2311.989782	2488.814077
-2.5	-274.149442	-565.898195	-622.053420	-358.459418	-433.455391	-464.950570
+2.5	1617.939760	3058.514871	3363.606502	1947.897832	2318.760570	2504.307794
-2.55	-322.890170	-666.508614	-732.647609	-422.189520	-510.518970	-547.613617
+2.55	1601.344224	3021.807146	3305.723587	1939.080071	2311.985032	2488.817754
-2.6	-371.630897	-767.119029	-843.241797	-485.919622	-587.582528	-630.276664
+2.6	1537.192232	2882.730250	3140.242129	1868.502243	2229.005490	2391.843554
-2.65	-420.371624	-867.729443	-953.835986	-549.649724	-664.646087	-712.939711
+2.65	1428.634033	2643.373454	2898.752109	1730.967937	2066.443117	2211.998771
-2.7	-469.112351	-968.339857	-1064.430175	-613.379826	-741.709645	-795.602759
+2.7	1272.824397	2310.940392	2547.753985	1533.292990	1830.588965	1959.546293
-2.75	-517.853078	-1068.950272	-1175.024363	-677.109929	-818.773204	-878.265806
+2.75	1082.503331	1908.888851	2098.271584	1278.332865	1525.411238	1633.050800
-2.8	-566.593805	-1169.560686	-1285.618552	-740.840031	-895.836762	-960.928853
+2.8	852.650703	1422.216451	1557.029641	971.465444	1161.202752	1236.225286
-2.85	-615.334532	-1270.171101	-1396.212741	-804.570133	-972.900320	-1043.591900
+2.85	597.328143	866.384046	943.544538	622.980629	741.050112	782.611758
-2.9	-664.075259	-1370.781515	-1506.806930	-868.300235	-1049.963879	-1126.254947
+2.9	323.439656	395.830651	422.808639	330.724265	379.247777	402.959139
-2.95	-712.815987	-1471.391930	-1617.401118	-932.030337	-1127.027437	-1208.917994
+2.95	164.516847	339.595571	373.294286	215.111522	260.116643	279.016843
-3	-980.291333	-2071.219999	-2284.458987	-1306.292009	-1575.751768	-1695.562002
+3	213.257511	440.205963	483.888456	278.841599	337.180176	361.679881
(Span 3) -4	-980.291333	-2071.219999	-2284.458987	-1306.292009	-1575.751768	-1695.562002
+4	213.257511	440.205963	483.888456	278.841599	337.180176	361.679881
-3.05	-931.276767	-1967.659000	-2170.236039	-1240.977408	-1496.964181	-1610.783901
+3.05	202.594635	418.195664	459.694034	264.899519	320.321167	343.595887
-3.1	-882.262202	-1864.098000	-2056.013091	-1175.662807	-1418.176595	-1526.005801
+3.1	259.422866	396.185366	435.499611	272.022290	309.077271	325.511893
-3.15	-833.247636	-1760.537001	-1941.790143	-1110.348206	-1339.389008	-1441.227700
+3.15	484.015149	660.346353	710.661055	496.082670	594.987690	614.862524
-3.2	-784.233070	-1656.976002	-1827.567196	-1045.033604	-1260.601421	-1356.449599
+3.2	705.182959	1133.391154	1233.545165	794.750414	954.332522	1003.115245
-3.25	-735.218505	-1553.415002	-1713.344248	-979.719003	-1181.813835	-1271.671499
+3.25	906.853719	1562.474021	1703.994257	1063.001275	1276.275647	1353.132144
-3.3	-686.203939	-1449.854003	-1599.121300	-914.404402	-1103.026248	-1186.893398
+3.3	1087.822890	1935.949877	2121.669853	1294.992572	1553.863395	1657.295785
-3.35	-637.189374	-1346.293004	-1484.898352	-849.089801	-1024.238662	-1102.115298
+3.35	1243.662084	2245.511610	2470.213034	1491.997450	1782.940104	1908.943302
-3.4	-588.174808	-1242.732004	-1370.675404	-783.775200	-945.451075	-1017.337197
+3.4	1369.825664	2497.975081	2740.440323	1646.313417	1966.099995	2101.175348
-3.45	-539.160243	-1139.171005	-1256.452457	-718.460599	-866.663489	-932.559096
+3.45	1462.715078	2695.070096	2925.184977	1751.537356	2089.654895	2240.333440
-3.5	-490.145677	-1035.610006	-1142.229509	-653.145997	-787.875902	-847.780996
+3.5	1519.245959	2812.445026	3073.012303	1803.344126	2148.471535	2314.880518
-3.55	-441.131112	-932.049006	-1028.006561	-587.831396	-709.088316	-763.002895
+3.55	1542.623174	2862.582154	3133.508415	1829.333574	2178.598041	2349.860731
-3.6	-392.116546	-828.488007	-913.783613	-522.516795	-630.300729	-678.224794

+3.6	1545.102927	2855.794599	3097.113585	1849.381834	2207.244834	2368.800725
-3.65	-343.101981	-724.927008	-799.560666	-457.202194	-551.513143	-593.446694
+3.65	1505.611061	2756.412231	3029.470088	1814.778607	2170.599564	2318.228866
-3.7	-294.087415	-621.366008	-685.337718	-391.887593	-472.725556	-508.668593
+3.7	1421.690997	2607.141686	2859.758361	1721.890201	2065.436920	2210.420573
-3.75	-245.072850	-517.805009	-571.114770	-326.572992	-393.937970	-423.890493
+3.75	1305.998865	2371.525074	2600.091403	1582.497764	1907.139916	2023.130544
-3.8	-196.058284	-414.244010	-456.891822	-261.258390	-315.150383	-339.112392
+3.8	1145.171345	2079.846314	2254.806781	1382.253822	1672.795699	1759.902794
-3.85	-147.043719	-310.683010	-342.668874	-195.943789	-236.362797	-254.334291
+3.85	935.240482	1702.620873	1813.046619	1122.030427	1360.246338	1434.623400
-3.9	-98.029153	-207.122011	-228.445927	-130.629188	-157.575210	-169.556191
+3.9	674.807562	1224.798311	1305.895264	817.349611	988.045506	1040.007590
-3.95	-49.014587	-103.561012	-114.222979	-65.314587	-78.787624	-84.778090
+3.95	363.519412	667.709813	709.903639	443.508249	536.088236	565.302132
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-19.05398815	-26.981176	-39.393199	-14.40631705	-15.5016474	-14.6119223	-17.69186809	-18.18700355	-19.24975434	-7.677301369
End Shear	138.7537661	181.085889	237.809927	119.4147879	127.6878953	119.8293512	143.3240127	136.5924907	144.408798	63.02033606
-0.05	-19.05398815	-27.188361	-39.579666	-14.40631705	-15.5016474	-14.6119223	-17.69186809	-18.18700355	-19.24975434	-7.677301369
+0.05	129.622046	166.580813	215.770350	111.4411299	119.1054035	111.7437725	133.5334115	126.3978239	133.617231	58.77959251
-0.1	-19.05398815	-27.912932	-40.231780	-14.40631705	-15.5016474	-14.6119223	-17.69186809	-18.18700355	-19.24975434	-7.677301369
+0.1	119.8468914	151.781011	192.906322	103.1937562	110.2313367	103.3813326	123.4139859	115.8773251	122.481524	54.34886962
-0.15	-19.05398815	-34.192963	-46.333127	-16.57995795	-16.94391218	-15.41485123	-17.69186809	-18.18700355	-19.24975434	-7.964728487
+0.15	111.5414478	139.550244	174.073123	96.17985303	102.6869685	96.27346007	114.818004	106.9850293	113.0698752	50.58456315
-0.2	-26.67684608	-43.493489	-56.671184	-24.80759283	-25.81020864	-23.77825963	-26.91117713	-18.35050268	-19.42160766	-11.99914664
+0.2	101.9666431	125.831174	153.046381	88.08617492	93.98413427	88.07597365	104.9105732	96.78918828	102.279322	46.24527373
-0.25	-35.70513847	-51.804013	-66.473020	-31.79740084	-33.34508662	-30.88730173	-35.54328661	-23.40165284	-24.79598851	-15.77491921
+0.25	94.01897224	114.558309	135.876133	81.245352	86.63105802	81.15146439	96.54717957	88.22924261	93.22077207	42.58168032
-0.3	-46.54696811	-61.865500	-78.601117	-39.85459507	-42.03354557	-39.08655571	-45.50540578	-32.93357575	-34.66692184	-20.13158096
+0.3	84.75182324	101.990730	116.990173	73.40183129	78.20333752	73.21688179	86.97047185	78.48422423	82.90895881	38.38595386
-0.35	-55.71963836	-70.778276	-89.242414	-46.65697685	-49.37147716	-46.01293046	-53.92643009	-41.6755747	-43.90708259	-23.81348054
+0.35	76.97986421	91.731592	102.946463	66.81676459	71.13058901	66.55969375	78.94143417	70.36475247	74.31799169	34.86775489
-0.4	-66.24762073	-81.481156	-101.905914	-54.44727738	-57.77822671	-53.95008814	-63.58290765	-52.13792685	-54.98731731	-28.03455273
+0.4	68.1419062	80.375010	90.216562	59.31985953	63.08186126	58.98595049	69.81415907	61.1967131	64.61849581	30.86771922
-0.45	-75.09600333	-90.888865	-112.941410	-60.97954686	-64.83016577	-60.60982595	-71.69106587	-60.96894281	-64.34050427	-31.57789354
+0.45	60.787044	71.175797	79.877046	53.07322298	56.37847356	52.68003362	62.22123399	53.62587757	56.60963627	27.53960093
-0.5	-85.1811661	-102.102323	-125.986720	-68.40649121	-72.85132236	-68.18694987	-80.92319108	-71.07994289	-75.05011755	-35.61124773
+0.5	52.49311215	61.078489	68.500444	46.01938922	48.81261332	45.56507878	53.6621177	45.16097945	47.65604132	23.78739561
-0.55	-93.59471386	-111.888027	-137.280432	-74.58598503	-79.52824704	-74.49610744	-88.61673313	-79.55572947	-84.0283779	-38.97134497
+0.55	45.65377548	52.975754	59.351661	40.19387406	42.56763856	39.69437506	46.60705343	38.24690484	40.34377434	20.69403982
-0.6	-103.1080735	-123.470012	-150.543840	-81.55311604	-87.05993415	-81.61524615	-97.30577594	-89.18921528	-94.23378631	-42.76485225
+0.6	38.01869374	44.174740	49.397542	33.67956853	35.58852274	33.13615104	38.73481394	30.61130883	32.2696624	17.24178488
-0.65	-110.9762201	-133.507133	-161.951110	-87.29714087	-93.27278958	-87.48988146	-104.4829541	-97.20163455	-102.7226211	-45.89702348
+0.65	31.79330499	37.195406	41.494458	28.3578458	29.89099141	27.78462935	32.31939111	24.46213335	25.76848727	14.4278769
-0.7	-119.78881	-145.304344	-175.258790	-93.70800295	-100.211132	-94.05309365	-112.5101983	-106.2314482	-112.2902456	-49.39854598
+0.7	24.9319104	29.716476	33.021892	22.47951928	23.60249023	21.88107867	25.25274661	17.96076682	18.90607034	11.32770786
-0.75	-127.0010121	-155.456663	-192.651214	-98.93388574	-105.8708862	-99.40923529	-119.069229	-113.6723642	-120.1751579	-52.25810803
+0.75	19.41888686	23.877826	26.410801	17.74426633	18.54143942	17.13268251	19.578715	13.16854391	13.94618587	8.837929912
-0.8	-134.983837	-167.304564	-214.651653	-104.6920273	-112.1120126	-105.318578	-126.3159557	-121.9723432	-128.9714148	-55.41552321
+0.8	13.44600705	17.735528	19.634360	12.5983909	13.04744559	11.98175066	13.43638707	9.355420993	9.895043621	6.141982277
-0.85	-141.4295504	-177.426230	-233.307339	-109.3170908	-117.1296284	-110.0722843	-132.1550917	-128.7336284	-136.1379166	-57.95779107
+0.85	8.743781727	13.045213	14.713375	8.53228564	8.7119131	7.920426501	8.605499946	6.394622492	6.750054781	4.164195524
-0.9	-148.4536394	-189.149040	-254.826562	-114.326042	-122.5696485	-115.2298129	-138.5025798	-136.1776126	-144.0292245	-60.71896268
+0.9	4.252980986	8.242848	10.094422	4.512353731	4.512353731	4.114941291	4.331015253	3.924081999	4.152653528	2.514582047
-0.95	-154.0222959	-199.084568	-273.256273	-118.2676088	-126.8560886	-119.2971314	-143.5200606	-142.1511099	-150.3627966	-62.89925064
+0.95	4.156917056	5.462584	7.888862	3.157424367	3.396300642	3.200956899	3.873841452	3.924081999	4.152653528	1.673942376
-1	-159.9586735	-210.495259	-294.228903	-122.4309175	-131.3911306	-123.6049024	-148.8495911	-148.6129391	-157.2155741	-65.21205412
+1	4.16E+00	5.354396	7.388397	3.16E+00	3.40E+00	3.20E+00	3.87E+00	3.92E+00	4.15E+00	1.67E+00
(Span 2) -2	-1.46E+01	-18.807177	-25.951548	-1.11E+01	-1.19E+01	-1.12E+01	-1.36E+01	-1.38E+01	-1.46E+01	-5.88E+00
+2	1.53E+02	218.036173	309.837276	122.5306764	131.5440859	123.7783331	149.1566816	149.891914	158.5841112	65.30687549
-2.05	-1.46E+01	-18.951928	-26.081825	-1.11E+01	-1.19E+01	-1.12E+01	-1.36E+01	-1.38E+01	-1.46E+01	-5.88E+00
+2.05	1.46E+02	205.408485	288.292300	118.2133231	126.8404392	119.309917	143.6271324	143.2415489	151.5323087	62.90842138
-2.1	-14.60106163	-19.438497	-26.595015	-11.09037018	-11.92941651	-11.24327688	-13.60676575	-13.78323494	-14.58608632	-5.879678467
+2.1	138.1942495	191.734330	265.131218	113.0163576	121.1927599	113.9533834	137.0279785	135.5215869	143.3489741	60.04096377
-2.15	-14.60106163	-21.749128	-32.626514	-11.09037018	-11.92941651	-11.24327688	-13.60676575	-13.78323494	-14.58608632	-5.879678467
+2.15	129.5592206	177.911372	242.117315	107.2650318	114.9549078	108.0445975	129.7738336	127.2244928	134.5562302	56.88467767
-2.2	-18.46051239	-28.455248	-40.031380	-16.52682781	-17.28345351	-15.9792412	-18.29161791	-13.78323494	-14.58608632	-8.289222469
+2.2	120.4450026	164.052512	219.152027	101.0347552	108.2080924	101.6601115	121.9574878	118.4488833	125.2584944	53.48031603

-2.25	-26.26620163	-36.070355	-48.679364	-22.6379619	-23.82020117	-22.115379	-25.63449273	-18.74843273	-19.73819181	-11.50788426
+2.25	110.9525551	150.264892	196.440714	94.40090285	101.0334872	94.87646019	113.6717108	109.2933777	115.5601873	49.86860714
-2.3	-34.6893858	-44.555898	-58.334134	-29.17257878	-30.81983764	-28.69215443	-33.52588045	-26.29913063	-27.72062423	-14.96498576
+2.3	101.8818597	136.649945	174.183577	87.43886455	93.51228097	87.77021985	105.009323	99.85654491	105.5656759	46.09030361
-2.35	-43.62929671	-53.867564	-68.927811	-36.0552746	-38.20115827	-35.63303314	-41.87300959	-34.45303086	-36.34341301	-18.61978254
+2.35	93.2557	123.303328	152.575646	80.22403037	85.72566274	80.41792714	96.06309403	90.23700631	95.37938292	42.1861497
-2.4	-52.98509794	-63.955315	-80.387317	-43.21066817	-45.88298338	-42.86144035	-50.58306413	-43.11155396	-45.50217998	-22.43154091
+2.4	84.43948676	110.314955	132.341731	72.83178403	77.7548159	72.89612986	86.92581163	80.24771418	84.80330651	38.19688606
-2.45	-62.65599143	-74.763359	-92.634405	-50.5633727	-53.78412767	-50.30083813	-59.56327054	-52.17608335	-55.09250752	-26.35951178
+2.45	75.52296814	97.768992	118.292740	65.33751473	69.68092835	65.21662545	77.62550712	70.56053312	74.54878444	34.16325801
-2.5	-72.54120169	-86.230164	-105.585675	-58.0379994	-61.82340254	-57.87467835	-68.72084307	-61.5480026	-65.00997825	-30.36295054
+2.5	66.59589957	85.538126	104.771675	57.59579407	61.3476001	57.42632138	68.17832601	60.9893592	64.41876503	30.12600814
-2.55	-81.95039659	-97.769469	-118.339103	-65.33800217	-69.68145349	-65.17474585	-77.58373268	-70.56115743	-74.54944527	-34.16334435
+2.55	58.22618221	74.762897	92.611650	50.56287804	53.78359566	50.30035242	59.56268397	52.17550283	55.09189324	26.35942597
-2.6	-91.9638061	-110.315412	-132.399811	-72.83227941	-77.75535014	-72.89660642	-86.92639061	-80.24832533	-84.80395348	-38.19697217
+2.6	49.45044079	63.954861	80.376495	43.21018508	45.88246446	42.86096553	50.58249157	43.11097948	45.50157223	22.43145774
-2.65	-102.1849299	-123.303775	-152.575645	-80.2245166	-85.72618759	-80.41840894	-96.06368031	-90.23763149	-95.38004488	-42.1862348
+2.65	41.01799522	53.867124	68.883300	36.05480668	38.20065607	35.63257377	41.87245658	34.45250059	36.34285219	18.61970195
-2.7	-111.9263016	-136.650380	-174.183582	-87.43933852	-93.51279263	-87.77068928	-105.0098941	-99.85714508	-105.5663115	-46.09038754
+2.7	32.93002242	44.555465	58.114828	29.17213324	30.81935995	28.69172899	33.52536894	26.2986375	27.7201028	14.96490288
-2.75	-121.380901	-150.265307	-196.440718	-94.40135552	-101.0339763	-94.87691165	-113.6722619	-109.2939628	-115.5608071	-49.8686809
+2.75	25.27627684	36.069953	48.484027	22.63755162	23.81976208	22.11497892	25.63401367	18.74796533	19.73769778	11.50780968
-2.8	-130.4479106	-164.052891	-219.152027	-101.0351825	-108.2085547	-101.660526	-121.9579947	-118.4494475	-125.2590922	-53.4803847
+2.8	18.14649503	28.454875	39.861006	16.52644905	17.28304871	15.97887226	18.29117723	13.78323578	14.58608559	8.289155699
-2.85	-139.0265409	-177.911723	-242.117314	-107.2654311	-114.9553405	-108.0449847	-129.7743083	-127.2250464	-134.5568168	-56.88474798
+2.85	14.61573873	21.748787	32.626427	11.09037092	11.92941618	11.24327643	13.60676631	13.78323578	14.58608559	5.879651801
-2.9	-147.01599	-191.734666	-265.131214	-113.016713	-121.1931459	-113.9537382	-137.028415	-135.5220924	-143.3495099	-60.04102585
+2.9	14.61573873	19.438496	26.594269	11.09037092	11.92941618	11.24327643	13.60676631	13.78323578	14.58608559	5.879651801
-2.95	-154.3154518	-205.408783	-288.292301	-118.2136401	-126.8407841	-119.3102544	-143.627549	-143.2420163	-151.5328042	-62.90847801
+2.95	14.61573873	18.951928	26.081825	11.09037092	11.92941618	11.24327643	13.60676631	13.78323578	14.58608559	5.879651801
-3	-160.8241439	-218.815450	-311.165850	-122.7808261	-131.8170695	-124.0379466	-149.4788772	-150.2862399	-159.0023227	-65.44635947
+3	14.61573873	18.807176	25.951548	11.09037092	11.92941618	11.24327643	13.60676631	13.78323578	14.58608559	5.879651801
(Span 3) -4	-4.161095614	-5.354396	-7.388397	-3.157424579	-3.396300548	-3.200956772	-3.873841612	-3.924082238	-4.15265332	-1.673934806
+4	151.4779708	209.687519	292.751480	122.1493234	131.0840924	123.3130682	148.4879152	148.1697441	156.7455087	65.05533731
-3.05	-4.161095614	-5.446830	-7.717470	-3.157424579	-3.396300548	-3.200956772	-3.873841612	-3.924082238	-4.15265332	-1.673934806
+3.05	145.7100289	199.906341	274.774104	118.5804767	127.1965942	119.620384	143.9193717	142.6306296	150.8712719	63.07279107
-3.1	-4.442132978	-8.562321	-10.274936	-4.749415774	-4.749415774	-4.364582165	-4.606363656	-3.924082238	-4.15265332	-2.619446024
+3.1	138.4665566	188.315468	253.273734	113.9822386	122.1960238	114.875455	138.0659792	135.6619283	143.4825057	60.52928102
-3.15	-8.345453776	-12.678632	-14.284833	-8.208765799	-8.367217476	-7.597685667	-8.222165985	-6.158905974	-6.49970312	-4.032829072
+3.15	131.8441351	178.266814	234.851709	109.6885593	117.5328346	110.454432	132.6249312	129.2810005	136.7181359	58.16241674
-3.2	-13.82592167	-18.150711	-20.014507	-12.95227887	-13.4250412	-12.33561574	-13.85786026	-9.612980338	-10.16865405	-6.326859896
+3.2	123.6683869	166.458745	213.087707	104.2929301	111.6792497	104.9087195	125.8129437	121.3931953	128.3575992	55.19660174
-3.25	-19.24783181	-23.415582	-25.815125	-17.36331957	-18.13449184	-16.75098342	-19.12305721	-12.89112548	-13.65142491	-8.637817297
+3.25	116.3022152	156.302905	194.229374	99.35709617	106.329407	99.84326316	119.6010939	114.2785622	120.8175637	52.49008955
-3.3	-26.28065169	-30.227325	-33.513362	-22.8875013	-24.03874965	-22.29049992	-25.7424228	-18.38657312	-19.35428749	-11.54239686
+3.3	108.6479788	144.459048	174.176216	93.2605217	99.72667171	93.59471596	111.9492365	105.5978479	111.6188745	49.1541005
-3.35	-32.73334648	-36.637910	-40.762579	-27.9263484	-29.42919705	-27.35099154	-31.79991756	-23.96748812	-25.24557906	-14.19983908
+3.35	102.0268822	134.346665	162.772830	87.765211	93.77921319	87.96883038	105.0684087	97.85764809	103.4176729	46.15264779
-3.4	-40.72379286	-44.780434	-49.966695	-34.13476629	-36.076038672621	-33.59414912	-39.2842330733197	-31.14117854	-32.8299153087082	-17.48256853
+3.4	93.96603232	122.637200	149.470610	81.06411282	86.53116615	81.11538953	96.69539857	88.51022554	93.51445582	42.49861645
-3.45	-47.94207904	-52.324238	-58.484805	-39.71874191	-42.05844497	-39.21578796	-46.03223544	-37.68634349	-39.75097281	-20.44178729
+3.45	86.79249716	112.709329	138.107412	75.09200263	80.07512939	75.01296739	89.24728035	80.25255485	84.76654243	39.24689612
-3.5	-56.7611811	-61.777357	-69.141251	-46.51488626	-49.34393667	-46.06464659	-54.26278573	-45.7524154	-48.28158199	-24.05053719
+3.5	78.14456744	101.293120	124.940035	67.88289566	72.28570989	67.65257556	80.27183589	70.36454271	74.29233484	35.32693218
-3.55	-64.6344606	-70.432299	-78.878070	-52.5613108	-55.82926306	-52.16344854	-61.59949795	-53.00840526	-55.95647627	-27.26685711

+3.55	***70.51703392***	***91.681191***	***113.765697***	***61.51666625***	***65.4101347342827***	***61.1576340047009***	**72.35826674**	***61.69757769***	***65.11224965***	***31.86963011***
-3.6	***-74.15324143***	***-81.164602***	***-90.923181***	***-59.84874801***	**-63.64955325**	***-59.5200607***	**-70.45755879**	***-61.84065435***	***-65.29973038***	***-31.14951295***
+3.6	***61.34102087***	***80.705943***	***100.901471***	***53.89598307***	**57.18319345**	***53.38823606***	**62.89910856**	***51.39514057***	***54.20063755***	***27.73589948***
-3.65	***-82.57092669***	***-90.898975***	***-101.819736***	***-66.27494366***	**-70.54876158**	***-66.01213728***	**-78.28129719**	***-69.69937147***	***-73.61400504***	***-34.57825461***
+3.65	***53.36092833***	***71.531691***	***90.055847***	***47.21831269***	**49.97711767**	***46.58466108***	**54.62176749**	***42.42706804***	***44.70293129***	***24.11769779***
-3.7	***-92.6604003***	***-102.867783***	***-118.274762***	***-73.95725252***	**-78.8000123**	***-73.77855915***	**-87.64814826**	***-79.17167555***	***-83.63636283***	***-38.68265186***
+3.7	***43.88718393***	***61.133836***	***77.652964***	***39.28247197***	**41.41649003**	***38.50419848***	***44.79761312***	***32.25472951***	***33.95234686***	***19.8223156***
-3.75	***-101.5120246***	***-113.640185***	***-134.482040***	***-80.68054262***	**-86.02406607**	***-80.57989363***	***-95.85707496***	***-87.52490279***	***-92.47543516***	***-42.27913041***
+3.75	***35.65051715***	***52.509382***	***67.267392***	***32.37603568***	**33.96894886**	***31.4759729***	***36.25829854***	***24.07905025***	***25.34636869***	***16.08787742***
-3.8	***-112.0432198***	***-126.791670***	***-154.513361***	***-88.66119761***	**-94.60232657**	***-88.65818225***	***-105.6139979***	***-97.51114313***	***-103.0433591***	***-46.55315549***
+3.8	***25.93480872***	***42.814117***	***55.876768***	***24.22156823***	**25.1785909**	***23.18239304***	***26.18787146***	***18.18700392***	***19.2497552***	***11.68297506***
-3.85	***-121.2181372***	***-138.551057***	***-172.536839***	***-95.59890267***	**-102.0621865**	***-95.68488987***	***-114.1064337***	***-106.2507828***	***-112.2927727***	***-50.27270597***
+3.85	***19.06868149***	***34.841921***	***46.989914***	***17.16904674***	**17.57862483**	***16.01350741***	***17.69186863***	***18.18700392***	***19.2497552***	***8.172590336***
-3.9	***-132.0621214***	***-152.820053***	***-194.508238***	***-103.7814802***	**-110.8636161**	***-103.9771015***	***-124.1347087***	***-116.6247593***	***-123.2726393***	***-54.66422682***
+3.9	***19.06868149***	***27.843968***	***40.169711***	***14.40631776***	**15.50164877**	***14.61192342***	***17.69186863***	***18.18700392***	***19.2497552***	***7.677360121***
-3.95	***-141.4498253***	***-165.505810***	***-214.106560***	***-110.8509218***	**-118.4702437**	***-111.1451595***	***-132.8088083***	***-125.6426743***	***-132.8178959***	***-58.462128***
+3.95	***19.06868149***	***27.222887***	***39.610738***	***14.40631776***	**15.50164877**	***14.61192342***	***17.69186863***	***18.18700392***	***19.2497552***	***7.677360121***
-5	***-152.4775254***	***-180.815943***	***-237.809927***	***-119.1389994***	**-127.3910029**	***-119.5533494***	***-142.9897146***	***-136.2781777***	***-144.0760717***	***-62.91901463***
+5	***19.06868149***	***26.981177***	***39.393199***	***14.40631776***	**15.50164877**	***14.61192342***	***17.69186863***	***18.18700392***	***19.2497552***	***7.677360121***

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.02149059	-15.6518814	-16.67399186	-20.99218383	-8.838772176	-11.9423522	-13.669686	-15.30634539	-17.02883674
End Shear	90.00999568	118.7403944	119.9304977	121.8829693	72.53746968	97.78471167	110.5911165	120.7757618	131.1522838
-0.05	-11.02149059	-15.6518814	-16.67399186	-21.04582998	-8.838772176	-11.9423522	-13.669686	-15.30634539	-17.02883674
+0.05	83.89378947	109.952585	110.4964186	109.2533788	67.6359549	91.17161774	103.0149053	112.3071559	121.741621
-0.1	-11.02149059	-15.6518814	-16.67399186	-21.23344214	-8.838772176	-11.9423522	-13.669686	-15.30634539	-17.02883674
+0.1	77.56975802	100.8801289	100.7741193	97.0576046	62.57017973	84.33295166	95.18094089	103.5556718	112.0225713
-0.15	-11.02149059	-15.6518814	-16.67399186	-21.5010089	-9.252139404	-12.3522491	-13.669686	-15.30634539	-17.02883674
+0.15	72.1966456	93.20862802	92.58267208	87.28576058	58.26464627	78.52096875	88.52772905	96.13204465	103.7880478
-0.2	-17.23423252	-15.6518814	-16.67399186	-21.93684498	-14.3198009	-19.19553253	-20.35970177	-20.31877865	-20.31426164
+0.2	66.00243197	84.40877452	83.22205238	76.42254922	53.2994005	71.81888532	80.86112144	87.58818862	94.32269788
-0.25	-22.62221583	-21.29447634	-18.70677269	-22.41541002	-18.62762851	-25.0131404	-27.04975202	-27.16580728	-27.16075006
+0.25	60.7723925	77.01749844	75.39150868	68.02314208	49.10547622	66.15831616	74.39079122	80.38673906	86.35493036
-0.3	-28.83893572	-29.46545668	-25.06004532	-24.86974709	-23.59634644	-31.72373656	-34.77213192	-35.85953288	-36.50993243
+0.3	54.78220114	68.59889777	66.51132184	58.67769318	44.30011992	59.67295649	66.98355562	72.15366429	77.2583114
-0.35	-34.09269669	-36.97211693	-32.31906496	-30.53692632	-27.79393029	-37.39327826	-41.30122659	-43.21890545	-44.75572513
+0.35	49.75883408	61.58096007	59.14347677	51.36363174	40.26867905	54.23249357	60.77496992	65.26279287	69.6558917
-0.4	-40.11571297	-45.96405483	-40.69846424	-38.27695044	-32.60434723	-43.89105273	-48.78980874	-51.67060227	-54.23722082
+0.4	44.04686346	53.65225491	50.86246691	44.00046817	35.68256695	48.04398715	53.71911043	57.44362782	61.0430161
-0.45	-45.17164159	-53.5507015	-48.63922515	-45.95469906	-36.64080544	-49.34382609	-55.07907564	-58.77832045	-62.22141688
+0.45	39.2937664	47.10080272	44.05908892	38.03693338	31.86449516	42.89231718	47.851145	50.95174871	53.90453146
-0.5	-50.92676355	-62.23307832	-58.27696042	-55.1734056	-41.23356796	-55.54864831	-62.24186093	-66.8848455	-71.34021392
+0.5	33.93421683	39.77064125	36.49600976	31.47090597	27.55698756	37.08080366	41.23867622	43.64964664	45.89042448
-0.55	-55.72125995	-69.50782234	-66.3823759	-63.36919176	-45.05802018	-60.71597259	-68.21243513	-73.65249946	-78.96421862
+0.55	29.51499984	33.77878885	30.35889204	26.19414987	24.00315919	32.28660655	35.79019131	37.64517453	39.31446165
-0.6	-61.13427598	-77.77199003	-75.62684559	-72.78929938	-49.37376559	-66.54770016	-74.95740157	-81.31071237	-87.60527813
+0.6	24.58207035	27.15581769	23.87119854	20.64220604	20.03361401	26.93222075	29.71312289	30.96327797	32.01414184
-0.65	-65.60374487	-84.6417061	-83.34430342	-80.81770332	-52.93533656	-71.36089551	-80.53041802	-87.64989311	-94.77051827
+0.65	20.56032381	21.81669122	18.99809474	16.48822094	16.79490755	22.56419807	24.76298605	25.53460799	26.09929125
-0.7	-70.60046451	-92.3790203	-92.0767656	-90.47730728	-56.91470737	-76.73939488	-86.76556015	-94.75664747	-102.8188324
+0.7	16.12821463	16.16846086	13.76708294	12.07405821	13.22268277	17.74707476	19.31332749	19.5760605	19.62778479
-0.75	-74.68130197	-98.75058384	-99.30446356	-98.45346569	-60.16252235	-81.12975722	-91.86215057	-100.5789366	-109.4267099
+0.75	12.56754837	11.90585774	10.3552279	9.172022952	10.34997176	13.87390756	14.94040454	14.89469195	14.89389637
-0.8	-79.18751497	-105.8523966	-107.4061692	-107.5733095	-63.74615738	-85.97489322	-97.49545914	-107.0310892	-116.7672588
+0.8	8.71046116	7.962779608	7.025635522	6.364000048	7.234430051	9.674184098	10.21016787	10.19564201	10.19486895
-0.85	-82.81612222	-111.6326906	-114.0423172	-115.1428126	-66.62933331	-89.87374309	-102.0367578	-112.2480937	-122.7191782
+0.85	5.674466715	5.666077787	4.506152937	4.257099584	4.778597335	6.36455592	6.731166365	6.730513615	6.729876224
-0.9	-86.75763741	-117.9903557	-121.3945164	-126.6177255	-69.75788129	-94.1053791	-106.976221	-117.9424997	-129.2369482
+0.9	3.177734593	3.37586027	3.553006267	3.804640167	2.400941123	3.357252022	3.383917074	3.383304073	3.71807128
-0.95	-89.87041371	-123.0862382	-127.3373454	-136.9029591	-72.22553691	-97.44402826	-110.8833622	-122.4658023	-134.4343284
+0.95	2.409827274	3.37586027	3.553006267	3.728789899	1.934704227	2.614930663	2.989139721	3.345389008	3.71807128
-1	-93.17302572	-128.5911094	-133.8212961	-150.1055131	-74.83963673	-100.9820286	-115.0369739	-127.2993129	-140.0142984
+1	2.41E+00	3.38E+00	3.55E+00	3.70E+00	1.93E+00	2.61E+00	2.99E+00	3.35E+00	3.72E+00
(Span 2) -2	-8.46E+00	-1.19E+01	-1.25E+01	-1.30E+01	-6.80E+00	-9.18E+00	-1.05E+01	-1.18E+01	-1.31E+01
+2	9.33E+01	129.632789	135.6979111	167.4324903	74.94917958	101.1380273	115.3062393	127.7681968	140.7301541
-2.05	-8.46E+00	-1.19E+01	-1.25E+01	-1.30E+01	-6.80E+00	-9.18E+00	-1.05E+01	-1.18E+01	-1.31E+01
+2.05	89.92507579	123.9666999	129.0850821	154.1581838	72.23851326	97.46864266	110.9995409	122.7559654	134.9476598
-2.1	-8.464454645	-11.85762027	-12.47984103	-13.1623482	-6.795597487	-9.184874999	-10.49927437	-11.75059098	-13.05962744
+2.1	85.8322335	117.3752106	121.5085339	139.9378637	68.99008292	93.07365878	105.8661032	116.8286846	128.1584209
-2.15	-8.464454645	-11.85762027	-12.47984103	-13.38944077	-6.795597487	-9.184874999	-10.49927437	-11.75059098	-13.05962744
+2.15	81.32681762	110.2783594	113.455895	125.5340805	65.40762533	88.22876962	100.2287039	110.3604031	120.7924382
-2.2	-11.72916018	-11.85762027	-12.47984103	-13.72875176	-9.652498939	-12.94283819	-13.96191995	-13.91619155	-13.91444163
+2.2	76.46683272	102.7610723	105.0199554	111.8564844	61.5375276	82.99660898	94.15925486	103.4317569	112.9395819
-2.25	-16.33153376	-16.79263619	-14.51324911	-14.27270533	-13.36420618	-17.94861488	-19.62048842	-20.0774455	-20.34236694

+2.25	71.31025192	94.908278	96.29354829	98.79590455	57.42618173	77.43979502	87.72967798	96.12334898	104.6897767
-2.3	-21.27353682	-23.34665719	-20.49282302	-19.3504671	-17.34362246	-23.31685009	-25.70782511	-26.76338594	-27.63358346
+2.3	65.9150742	86.80486193	87.36945907	86.52126157	53.11999208	71.62098253	81.01186548	88.51579179	96.13288425
-2.35	-26.49717426	-30.41179221	-27.38240836	-25.24927342	-21.54435258	-28.9849256	-32.15204222	-33.87334229	-35.42415942
+2.35	60.33930883	78.53575457	78.242477	75.27344882	48.66533699	65.60279145	74.07774126	80.68970135	87.3588372
-2.4	-31.94444041	-37.90314727	-35.10607285	-31.95708077	-25.91999536	-34.89018914	-38.88121623	-41.32667307	-43.62416926
+2.4	54.64091982	69.93994028	69.03442538	64.72103033	44.10860975	59.44785223	66.99921319	72.72567368	78.45749322
-2.45	-37.55736181	-45.7357958	-43.27899426	-39.19044474	-30.42417111	-40.9700185	-45.82343505	-49.0427788	-52.14374758
+2.45	48.78365519	61.59563575	60.07801855	55.04079701	39.49621574	53.16375729	59.6490958	64.54380129	69.29231798
-2.5	-43.27793736	-53.82481155	-51.80839453	-46.75683817	-35.01048426	-47.16178345	-52.90678533	-56.94104721	-60.89297136
+2.5	42.9391144	53.34288417	51.29793443	46.30122676	34.73894413	46.79518752	52.48703494	56.47233103	60.37299909
-2.55	-48.74571323	-61.59617372	-60.07856007	-55.04120174	-39.49652225	-53.12814388	-59.63798664	-64.52737069	-69.27594612
+2.55	37.55699457	45.73529441	43.27849834	39.19010653	30.42386826	40.96962143	45.82298068	49.04227409	52.14318964
-2.6	-54.64129115	-69.94046625	-69.0349743	-64.72143503	-44.10892327	-59.44824221	-66.99967387	-72.72620634	-78.4580714
+2.6	31.94408197	37.90265057	35.10560062	31.97408254	25.91969907	34.88980122	38.88077368	41.32618186	43.62364239
-2.65	-60.33967254	-78.53629221	-78.21582409	-75.27393789	-48.66563625	-65.60318585	-74.07819417	-80.69021227	-87.35940918
+2.65	26.49681898	30.41133316	27.38195219	25.2489916	21.54405962	28.98455054	32.15161546	33.87285623	35.42362603
-2.7	-65.91544172	-86.80537772	-87.3700101	-86.52176268	-53.12028622	-71.62136677	-81.01230911	-88.51629255	-96.13344704
+2.7	21.2731994	23.34622955	20.49244375	19.35022473	17.34335057	23.31650292	25.70741949	26.76295158	27.63309503
-2.75	-71.31059352	-94.90878025	-96.29408972	-98.79645616	-57.42647123	-77.44016487	-87.73009344	-96.1238324	-104.6903065
+2.75	16.3312327	16.79223006	14.51291097	14.2724825	13.36394296	17.94828822	19.62009726	20.07702906	20.34191422
-2.8	-76.46715701	-102.761556	-105.0204806	-111.857045	-61.5377933	-82.99694834	-94.15965951	-103.4322309	-112.9401186
+2.8	11.72887497	11.8576197	12.47984056	13.72875193	9.652256248	12.94253733	13.96156042	13.9158441	13.91410385
-2.85	-81.32713007	-110.2788332	-113.4563864	-125.5341649	-65.40788125	-88.22908727	-100.2290831	-110.3608368	-120.7929315
+2.85	8.464454769	11.8576197	12.47984056	13.38944093	6.795597312	9.184875232	10.49927425	11.75059079	13.05962694
-2.9	-85.83251968	-117.3756426	-121.508998	-139.9211577	-68.99031546	-93.07395006	-105.8664529	-116.829087	-128.1588798
+2.9	8.464454769	11.8576197	12.47984056	13.16234834	6.795597312	9.184875232	10.49927425	11.75059079	13.05962694
-2.95	-89.92531923	-123.9670985	-129.0855305	-154.158777	-72.23871793	-97.46891962	-110.9998548	-122.7563203	-134.9480671
+2.95	8.464454769	11.8576197	12.47984056	13.03636181	6.795597312	9.184875232	10.49927425	11.75059079	13.05962694
-3	-93.54756685	-129.9683076	-136.0931196	-168.2575552	-75.10670622	-101.3513343	-115.5573783	-128.0619655	-141.0706199
+3	8.464454769	11.8576197	12.47984056	12.9988815	6.795597312	9.184875232	10.49927425	11.75059079	13.05962694
(Span 3) -4	-2.40982731	-3.38E+00	-3.55E+00	-3.70E+00	-1.934704177	-2.614930729	-2.989139685	-3.345388953	-3.718071138
+4	92.94904016	128.2138487	133.3744079	149.1735326	74.66251232	100.742264	114.7549544	126.9701329	139.6332435
-3.05	-2.40982731	-3.38E+00	-3.55E+00	-3.72E+00	-1.934704177	-2.614930729	-2.989139685	-3.345388953	-3.718071138
+3.05	90.11800494	123.49504	127.8164078	137.8412135	72.42166891	97.70943919	111.1944281	122.8268133	134.8500497
-3.1	-3.344639582	-3.375860106	-3.553006132	-3.813288307	-2.508529636	-3.552736872	-3.611159877	-3.610534759	-3.718071138
+3.1	86.48665046	117.5501694	120.8834614	125.8025664	69.54289872	93.81457452	106.6363627	117.5499119	128.786786
-3.15	-5.445479473	-5.482756416	-4.360326707	-4.134040276	-4.583471851	-6.101629026	-6.480448213	-6.479807764	-6.479167316
+3.15	83.10798747	112.1004234	114.5812195	115.9087638	66.86111377	90.18722523	102.4022698	112.6686915	123.1997624
-3.2	-8.975234343	-8.162099362	-7.253855747	-6.554426686	-7.448444213	-9.962631533	-10.53459712	-10.51797323	-10.51720483
+3.2	78.87481523	105.3570572	106.8393911	106.9234536	63.49757545	85.63879466	97.10433346	106.5824722	116.2562069
-3.25	-12.28153432	-11.56545993	-10.10799191	-8.961389517	-10.11909658	-13.56262645	-14.58937503	-14.54601932	-14.54521242
+3.25	75.01212437	99.26947429	99.89471968	99.10188524	60.42571654	81.4855712	92.27551997	101.051758	109.9639381
-3.3	-16.43542384	-16.53823919	-14.08366495	-12.34293122	-13.47041139	-18.08109321	-19.69084974	-19.98815066	-20.07452412
+3.3	70.25137541	91.83628854	91.46276754	89.79645179	56.63677238	76.3637148	86.32977497	94.25937007	102.2551167
-3.35	-20.23459731	-21.38696016	-18.60633675	-16.1562019	-16.53250115	-22.21030592	-24.36227469	-25.09577684	-25.62190145
+3.35	65.96823547	85.20399505	83.9774485	81.4925372	53.22569757	71.7533473	80.98508073	88.16757469	95.35619225
-3.4	-24.92642328	-27.6156414522366	-24.2913262	-21.0023473	-20.31082642	-27.3060997053248	-30.13715938	-31.4289364	-32.5222067754753
+3.4	60.75408856	77.18967056	74.97411886	72.12580626	49.07071906	66.13819883	74.48351089	80.77215801	86.9971225
-3.45	-29.15486998	-33.29279099	-29.86312003	-25.76983539	-23.71346125	-31.89582222	-35.34633607	-37.15657089	-38.77998767
+3.45	56.11414157	70.105756	67.04993861	64.05124147	45.37132651	61.13932713	68.70182425	74.20768761	79.59013142
-3.5	-34.31039287	-40.2829851	-37.02273845	-31.92582988	-27.85942627	-37.48881053	-41.70265046	-44.16150643	-46.45158407
+3.5	50.52077298	61.61890343	57.59397955	54.52004388	40.90963674	55.11102074	61.73643957	66.31242302	70.69583135
-3.55	-38.90450928	-46.56629291	-43.50570209	-37.554081	-31.55175611	-42.47032814	-47.37073725	-50.42074122	-53.32118179
+3.55	45.58759909	54.1765270668201	49.332725476367	46.6180773264517	36.9728235697596	49.7923860196346	55.5966305572218	59.3636521860114	62.87936364

-3.6	***-44.4495728***	**-54.20931557**	***-51.44261865***	**-44.51130601**	**-36.00598472**	***-48.48037173***	**-54.21641389**	***-57.99430654***	**-61.64904826**
+3.6	***39.68925827***	**45.3257963**	***40.10347103***	**37.6850557**	**32.26379804**	***43.43105935***	**48.25944148**	***51.07165061***	**53.56485342**
-3.65	***-49.34576177***	**-61.00569076**	***-58.54097886***	**-50.79366199**	**-39.93711707**	***-53.78504858***	**-60.26457491**	***-64.69673393***	**-69.03187265**
+3.65	***34.52646003***	**37.61812594**	***32.92084316***	**31.04961615**	**28.14040365**	***37.86129553***	**41.84040988**	***43.82702352***	**45.43754081**
-3.7	***-55.2061418***	**-69.1929285**	***-67.13644443***	**-59.32884515**	**-44.64028673**	***-60.13201176***	**-67.50763122**	***-72.73574916***	**-77.9009892**
+3.7	***28.39729475***	***28.88404315***	***24.56060174***	**24.54838341**	**23.2434222**	***31.24708207***	***34.22339307***	***35.24142691***	**35.81779746**
-3.75	***-60.34080304***	***-76.40917696***	***-74.74838367***	**-67.33956412**	**-48.75932286**	***-65.69110722***	***-73.85697206***	***-79.79299332***	**-85.69845026**
+3.75	***23.06846919***	***21.88008411***	***19.1003137***	**22.45962761**	**18.98434382**	***25.49490241***	***27.60397074***	***27.78935069***	**27.78431615**
-3.8	***-66.44227282***	***-85.03201957***	***-83.88364972***	**-77.13852162**	**-53.65205798**	***-72.29485487***	***-81.40539865***	***-88.19434961***	**-94.99379838**
+3.8	***16.78270771***	***15.65188211***	***16.6739924***	**21.90132198**	**13.95872293**	***18.707941***	***19.79920595***	***19.76283403***	**19.75831866**
-3.85	***-71.75180508***	***-92.57505007***	***-91.90738301***	**-86.48879647**	**-57.9081598**	***-78.03973551***	***-87.97701927***	***-95.51796881***	**-103.1073086**
+3.85	***11.35145753***	***15.65188211***	***16.6739924***	**21.52773484**	**9.614861749**	***12.84206508***	***13.66968729***	***15.30634676***	**17.02883797**
-3.9	***-78.02021819***	***-101.5248169***	***-101.4636994***	**-97.8888656**	**-62.93107998**	***-84.82013184***	***-95.73883804***	***-104.1785219***	**-112.7138682**
+3.9	***11.0214907***	***15.65188211***	***16.6739924***	**21.21558453**	**8.838772983**	***11.94235243***	***13.66968729***	***15.30634676***	**17.02883797**
-3.95	***-83.4410209***	***-109.3015042***	***-109.7974413***	**-108.327786**	**-67.27334797**	***-90.68205213***	***-102.4539041***	***-111.6801056***	**-121.0448379**
+3.95	***11.0214907***	***15.65188211***	***16.6739924***	**21.05476872**	**8.838772983**	***11.94235243***	***13.66968729***	***15.30634676***	**17.02883797**
-5	***-89.80214854***	***-118.4695066***	***-119.6560588***	**-121.6711143**	**-72.36713831**	***-97.55896024***	***-110.3370709***	***-120.496712***	**-130.8475893**
+5	***11.0214907***	***15.65188211***	***16.6739924***	***20.99218316***	**8.838772983**	***11.94235243***	***13.66968729***	***15.30634676***	***17.02883797***

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-30.1573782	-33.29706938	-18.994	-22.8936	-24.6603
End Shear	213.9785536	229.0126691	140.9882	170.1374	180.1079
-0.05	-30.1573782	-33.29706938	-18.994	-22.8936	-24.6603
+0.05	197.0399088	210.6602052	130.2908	157.2805	166.2459
-0.1	-30.1573782	-33.29706938	-18.994	-22.8936	-24.6603
+0.1	179.5916356	191.4320514	119.2578	144.0168	151.9521
-0.15	-30.1573782	-33.29706938	-18.994	-22.8936	-24.6603
+0.15	164.8931328	175.2601276	109.9416	132.8141	139.8919
-0.2	-30.1573782	-33.29706938	-19.5248	-22.8936	-24.6603
+0.2	148.0994948	156.8145832	99.27092	119.9791	126.0895
-0.25	-31.26627246	-33.29706938	-24.8225	-28.0691	-29.5471
+0.25	134.0533484	141.4150408	90.32234	109.2123	114.5247
-0.3	-43.30921876	-45.79062867	-32.0204	-39.4314	-38.8339
+0.3	118.1272833	123.9891857	80.14713	96.96568	101.3868
-0.35	-55.81950459	-57.49916394	-40.7805	-49.9439	-50.3403
+0.35	104.9160377	109.5652909	71.68025	86.77163	90.46554
-0.4	-71.46163381	-71.89919168	-51.8391	-63.2114	-64.2563
+0.4	90.07046145	93.39619434	62.13354	75.27306	78.16503
-0.45	-86.410437	-87.40909206	-61.1822	-74.4182	-76.4451
+0.45	77.87660554	80.15115865	54.26243	65.78864	68.03577
-0.5	-103.7397239	-106.7977238	-71.8901	-87.2588	-90.4254
+0.5	64.32443559	65.47594697	45.47731	55.19784	56.74568
-0.55	-118.3172032	-123.1329315	-80.8757	-98.0313	-102.167
+0.55	53.33047899	53.61299432	38.31601	46.55993	47.55665
-0.6	-134.9474303	-141.7990002	-91.0999	-110.285	-115.539
+0.6	41.37028825	41.85467379	30.42555	37.03657	37.44999
-0.65	-148.8344749	-157.4132426	-99.6137	-120.486	-126.684
+0.65	32.53595277	33.40278204	24.08813	29.38205	29.52768
-0.7	-164.5527156	-175.1196384	-109.221	-131.994	-139.275
+0.7	23.44155526	24.55630463	17.60803	21.53013	21.20442
-0.75	-177.5667865	-189.8096875	-117.149	-141.487	-149.676
+0.75	17.20392135	17.75209715	13.97984	15.67247	16.48453
-0.8	-192.1601111	-206.3192927	-126.007	-152.089	-161.312
+0.8	11.21418355	11.43112715	10.02146	10.99471	11.48323
-0.85	-204.118714	-219.8819443	-133.235	-160.737	-170.822
+0.85	7.45722391	7.105336957	6.844264	7.565925	7.610453
-0.9	-217.3742139	-234.9576807	-141.21	-170.273	-181.33
+0.9	6.453458513	7.105336957	4.079304	4.926799	5.293179
-0.95	-228.094841	-247.1896751	-147.624	-177.939	-189.799
+0.95	6.453458513	7.105336957	4.079304	4.926799	5.293179
-1	-239.7995584	-260.5944542	-154.583	-186.25	-199.007
+1	6.45E+00	7.11E+00	4.08E+00	4.93E+00	5.29E+00
(Span 2) -2	-2.27E+01	-2.50E+01	-1.43E+01	-1.73E+01	-1.86E+01
+2	243.1522562	264.7804467	156.1591	188.0699	201.2697
-2.05	-2.27E+01	-2.50E+01	-1.43E+01	-1.73E+01	-1.86E+01
+2.05	231.1965054	251.1255146	149.0188	179.5328	191.8317
-2.1	-22.66760305	-24.95730886	-14.3284	-17.3053	-18.5922
+2.1	217.513669	235.5922495	140.7656	169.6549	180.9608
-2.15	-22.66760305	-24.95730886	-14.3284	-17.3053	-18.5922
+2.15	202.9844375	219.1846646	131.9275	159.0678	169.3539
-2.2	-22.66760305	-24.95730886	-14.3284	-17.3053	-18.5922
+2.2	187.775232	202.088042	122.6085	147.8963	157.1461
-2.25	-24.62411365	-25.85947491	-18.4549	-22.5534	-22.5069

+2.25	172.0524422	184.4877373	112.9126	136.2651	144.4726
-2.3	-35.46421988	-35.86675503	-26.089	-31.7836	-32.0739
+2.3	155.9825344	166.5690135	102.9437	124.2992	131.4688
-2.35	-48.14702752	-48.63844273	-34.5147	-41.9564	-42.8776
+2.35	139.6780834	148.5172298	92.80605	112.1232	118.2697
-2.4	-62.01371523	-63.6600112	-43.4964	-52.7891	-54.4286
+2.4	122.9901249	130.5176338	82.3035	99.50138	104.6211
-2.45	-76.6932698	-79.649468	-52.9302	-64.157	-66.5916
+2.45	106.8843075	112.7555899	72.14281	87.28288	91.44155
-2.5	-92.01928094	-96.42143962	-62.7121	-75.9352	-79.2315
+2.5	91.10190945	95.41638052	62.12832	75.23247	78.47642
-2.55	-106.8852526	-112.7557317	-72.1435	-87.2837	-91.4424
+2.55	76.69237652	79.64933678	52.92963	64.15625	66.59085
-2.6	-122.9911142	-130.5178032	-82.3041	-99.5021	-104.622
+2.6	62.01286796	63.65986525	43.49583	52.78841	54.42783
-2.65	-139.6431968	-148.5173712	-92.8067	-112.124	-118.271
+2.65	48.14623591	48.24811369	34.51412	41.95573	42.87689
-2.7	-155.9835246	-166.569188	-102.944	-124.3	-131.47
+2.7	35.46354845	35.99078762	26.08848	31.78297	32.07326
-2.75	-172.0534447	-184.4879142	-112.913	-136.266	-144.473
+2.75	24.62356933	25.85938318	18.45448	22.55284	22.50636
-2.8	-187.7761852	-202.0882052	-122.609	-147.897	-157.147
+2.8	22.66760351	24.9573084	14.32845	17.30525	18.59215
-2.85	-202.9853519	-219.184795	-131.928	-159.069	-169.355
+2.85	22.66760351	24.9573084	14.32845	17.30525	18.59215
-2.9	-217.5145333	-235.5923762	-140.766	-169.656	-180.962
+2.9	22.66760351	24.9573084	14.32845	17.30525	18.59215
-2.95	-231.1973183	-251.1256838	-149.019	-179.533	-191.832
+2.95	22.66760351	24.9573084	14.32845	17.30525	18.59215
-3	-243.8672766	-265.5993051	-156.584	-188.577	-201.832
+3	22.66760351	24.9573084	14.32845	17.30525	18.59215
(Span 3) -4	-6.453458645	-7.105336826	-4.0793	-4.9268	-5.29318
+4	238.992555	259.6690867	154.1049	185.679	198.3735
-3.05	-6.453458645	-7.105336826	-4.0793	-4.9268	-5.29318
+3.05	228.9592979	248.1786341	148.1401	178.5551	190.4804
-3.1	-6.453458645	-7.105336826	-4.0793	-4.9268	-5.29318
+3.1	216.4525194	233.9087036	140.6568	169.6118	180.6005
-3.15	-7.185635597	-7.105336826	-6.59581	-7.25535	-7.30263
+3.15	205.0900415	220.9859962	133.821	161.4375	171.5928
-3.2	-11.58467915	-11.73109478	-10.2914	-11.292	-11.8206
+3.2	191.1389679	205.163713	125.3883	151.3486	160.499
-3.25	-16.72692698	-17.24378284	-13.6877	-15.2656	-16.1202
+3.25	178.6297749	191.0119032	117.7957	142.261	150.5248
-3.3	-24.0317575	-25.16500008	-18.0355	-22.0625	-21.776
+3.3	163.4473328	173.8743105	108.5466	131.1862	138.3901
-3.35	-31.82662334	-32.7481328	-23.5791	-28.767	-28.9108
+3.35	149.9739366	158.6966948	100.3113	121.3221	127.5978
-3.4	-42.13280365	-42.24978201	-30.9724	-37.6968	-38.1497
+3.4	133.7730516	140.4808813	90.37882	109.4212	114.5951
-3.45	-52.44245246	-52.65585657	-37.7361	-45.8602	-46.8131
+3.45	119.517958	124.4806844	81.61481	98.91727	103.133
-3.5	-65.2681108	-66.49524119	-46.0905	-55.9373	-57.5331
+3.5	102.5115591	105.4237517	71.13209	86.34996	89.43531
-3.55	-76.88487455	-79.07462962	-53.621	-65.0156	-67.2109
+3.55	87.65728105	88.80420858	61.95347	75.34321	77.45167
-3.6	-91.11040463	-94.52644989	-62.8036	-76.0803	-79.0278
+3.6	70.35902485	71.31970031	51.05357	62.26914	63.23201

-3.65	***-103.8358103***	***-108.3863074***	***-70.9869***	***-85.9366***	***-89.5716***
+3.65	***56.93388406***	***58.46887284***	***41.57445***	***50.89652***	***51.29309***
-3.7	***-119.2483562***	***-125.2134576***	***-80.8645***	***-97.8292***	***-102.313***
+3.7	***42.34598344***	***44.80940913***	***31.29887***	***38.56549***	***37.86941***
-3.75	***-132.8998911***	***-140.1505569***	***-89.5865***	***-108.327***	***-113.574***
+3.75	***32.07178807***	***33.46705686***	***25.26102***	***28.74395***	***30.10684***
-3.8	***-149.2863931***	***-158.1158645***	***-100.026***	***-120.888***	***-127.066***
+3.8	***30.15737786***	***33.29672079***	***19.08061***	***22.89358***	***24.66026***
-3.85	***-163.6815519***	***-173.9270551***	***-109.173***	***-131.889***	***-138.897***
+3.85	***30.15737786***	***33.29672079***	***18.99405***	***22.89358***	***24.66026***
-3.9	***-180.8291471***	***-192.7934929***	***-120.041***	***-144.959***	***-152.967***
+3.9	***30.15737786***	***33.29672079***	***18.99405***	***22.89358***	***24.66026***
-3.95	***-195.7854126***	***-209.2754742***	***-129.498***	***-156.328***	***-165.219***
+3.95	***30.15737786***	***33.29672079***	***18.99405***	***22.89358***	***24.66026***
-5	***-213.4811722***	***-228.8059449***	***-140.663***	***-169.746***	***-179.694***
+5	***30.15737786***	***33.29672079***	***18.99405***	***22.89358***	***24.66026***

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.95E-13	*-4.49E-13*	*-6.49E-13*	-3.24E-13	-3.24E-13	-3.32E-13	-3.81E-13	-3.51E-13	-3.73E-13	-1.97E-13
End Shear	6.06E-13	*3.50E-13*	*6.89E-13*	2.49E-13	2.37E-13	2.45E-13	2.65E-13	2.19E-13	2.34E-13	2.36E-13
-0.05	-123.850923	*-175.3776413*	*-256.0557941*	-93.6410608	-100.760708	-94.977495	-114.997143	-118.215523	-125.123403	-49.9024589
+0.05	843.210354	*1104.352882*	*1420.951241*	725.1232652	775.0873547	727.2278833	869.2705935	822.1963817	869.1691236	382.0673513
-0.1	-247.701846	*-350.7552826*	*-512.1115883*	-187.282122	-201.521416	-189.95499	-229.994285	-236.431046	-250.246806	-99.8049178
+0.1	1569.452551	*2068.855481*	*2600.412429*	1351.451391	1443.807976	1354.22891	1617.087737	1518.867066	1605.462159	710.6334412
-0.15	-371.5527689	*-526.1329238*	*-768.1673824*	-280.923182	-302.282124	-284.932485	-344.991428	-354.646569	-375.37021	-149.7073767
+0.15	2262.072071	*2894.111124*	*3621.790336*	1879.311392	2006.628272	1881.46597	2244.285966	2091.027201	2209.976502	986.3989814
-0.2	-495.4036919	*-701.5105651*	*-1024.223177*	-374.564243	-403.042833	-379.90998	-459.98857	-472.862092	-500.493613	-199.6098356
+0.2	2842.282903	*3581.531629*	*4420.891376*	2310.425167	2465.454328	2310.767938	2753.191175	2558.791169	2704.896025	1210.379336
-0.25	-619.2546059	*-876.8882064*	*-1280.278971*	-468.205304	-503.803541	-474.887475	-574.985713	-591.077615	-625.617016	-249.5122945
+0.25	3296.347725	*4133.069239*	*4994.10382*	2647.09664	2822.81905	2644.554649	3171.87216	2939.39974	3109.182554	1384.258368
-0.3	-743.1055379	*-1052.265848*	*-1536.334765*	-561.846365	-604.564249	-569.86497	-689.982855	-709.293138	-750.740419	-299.4147534
+0.3	3628.096187	*4551.216975*	*5411.339641*	2892.212198	3081.882553	2906.714315	3485.558916	3209.790817	3394.242672	1509.7342
-0.35	-866.9564608	*-1227.643489*	*-1792.390559*	-655.487426	-705.324957	-664.842465	-804.979998	-827.508662	-875.863822	-349.3172123
+0.35	3842.135553	*4839.007574*	*5717.027423*	3055.35042	3266.358085	3082.951328	3690.369952	3393.578071	3590.012338	1588.298481
-0.4	-990.8073838	*-1403.02113*	*-2048.446353*	-749.128486	-806.085665	-759.81996	-919.97714	-945.724185	-1000.98723	-399.2196712
+0.4	3943.853052	*5000.015129*	*5815.39095*	3149.759019	3363.714365	3173.307262	3790.890625	3471.712256	3673.684017	1622.216438
-0.45	-1114.658307	*-1578.398771*	*-2304.502147*	-842.769547	-906.846373	-854.797455	-1034.97428	-1063.93971	-1126.11063	-449.1221301
+0.45	3939.413002	*5038.353481*	*5744.953239*	3162.69396	3374.382266	3181.468843	3792.698809	3449.708413	3651.370283	1610.98776
-0.5	-1238.509212	*-1753.776413*	*-2560.557941*	-936.410608	-1007.60708	-949.77495	-1149.97143	-1182.15523	-1251.23403	-499.024589
+0.5	3835.75929	*4971.598062*	*5512.028038*	3108.208751	3317.601565	3127.584867	3731.583858	3400.335021	3598.776679	1593.114721
-0.55	-1362.360153	*-1929.154054*	*-2816.613736*	-1030.05167	-1108.36779	-1044.75244	-1264.96857	-1300.37075	-1376.35743	-548.9270479
+0.55	3668.068803	*4793.305324*	*5476.342701*	2982.563961	3185.647763	3005.182484	3589.312301	3286.048627	3476.99016	1540.884219
-0.6	-1486.211076	*-2104.531695*	*-3072.66953*	-1123.69273	-1209.1285	-1139.72994	-1379.96571	-1418.58628	-1501.48084	-598.8295068
+0.6	3454.32956	*4505.377424*	*5224.787351*	2790.437332	2981.557653	2814.430525	3363.647241	3079.010903	3257.132535	1450.583601
-0.65	-1610.061999	*-2279.909337*	*-3328.725324*	-1217.33379	-1309.88921	-1234.70743	-1494.96285	-1536.8018	-1626.60424	-648.7319657
+0.65	3152.46637	*4113.85625*	*4790.745812*	2541.516767	2712.34224	2561.907613	3062.327313	2787.161125	2947.622768	1325.533251
-0.7	-1733.912922	*-2455.286978*	*-3584.781118*	-1310.97485	-1410.64991	-1329.68493	-1609.96	-1655.01732	-1751.72764	-698.6344246
+0.7	2771.302153	*3625.32469*	*4168.502946*	2243.987019	2385.640415	2254.784729	2693.47455	2419.201545	2558.100922	1169.369763
-0.75	-1857.763845	*-2630.664619*	*-3840.836912*	-1404.61591	-1511.41062	-1424.66242	-1724.95714	-1773.23285	-1876.85105	-748.5368835
+0.75	2320.437475	*3046.905916*	*3513.416409*	1897.972319	2013.307541	1900.823408	2266.387604	1991.249119	2106.430649	986.0433844
-0.8	-1981.614768	*-2806.04226*	*-4096.892706*	-1498.25697	-1612.17133	-1519.63992	-1839.95428	-1891.44837	-2001.97445	-798.4393424
+0.8	1810.250703	*2386.262961*	*2807.568573*	1511.526104	1597.568128	1508.376217	1791.081722	1503.897147	1590.36719	779.8192432
-0.85	-2105.465691	*-3039.49131*	*-4405.212767*	-1591.89803	-1712.93204	-1614.61741	-1954.95142	-2009.66389	-2127.09785	-848.3418013
+0.85	1251.899767	*1709.670645*	*2070.203354*	1093.283813	1146.807514	1086.386845	1278.288647	966.2138026	1021.206319	555.2769419
-0.9	-2229.316614	*-3435.039962*	*-4859.422467*	-1685.53909	-1813.69275	-1709.59491	-2069.94857	-2127.87942	-2252.22126	-898.2442602
+0.9	677.8818266	*1129.901598*	*1419.083089*	652.4631933	678.6871177	644.3903964	739.8311748	487.0891671	514.660441	317.3106685
-0.95	-2353.167537	*-3969.133434*	*-5438.322502*	-1779.18016	-1914.45345	-1804.5724	-2184.94571	-2246.09494	-2377.34466	-948.1467191
+0.95	513.3792564	*690.3738248*	*988.4446224*	389.9419094	419.4431293	395.3181771	478.4194193	484.6241269	512.8527107	206.7318835
-1	-2477.018402	*-4620.597417*	*-6552.689727*	-1872.82122	-2015.21418	-1899.54989	-2299.94287	-2364.31044	-2502.46804	-998.0491434
+1	540.3992289	*696.0715276*	*960.4915446*	410.4651682	441.5190732	416.1243901	503.5993875	510.1306622	539.8449581	217.6125022
(Span 2) -2	-2477.018402	*-4620.597417*	*-6552.689727*	-1872.82122	-2015.21418	-1899.54989	-2299.94287	-2364.31044	-2502.46804	-998.0491434
+2	540.3992289	*696.0715276*	*960.4915446*	410.4651682	441.5190732	416.1243901	503.5993875	510.1306622	539.8449581	217.6125022
-2.05	-1805.614467	*-3363.271375*	*-4962.928543*	-1370.09383	-1473.7487	-1388.98362	-1680.96698	-1702.76776	-1801.95106	-726.3665811
+2.05	417.0202581	*648.8042136*	*901.134374*	316.7515402	340.7155037	321.1187005	388.6222169	393.6623269	416.5925287	179.5311
-2.1	-1682.111474	*-2660.851865*	*-3649.287445*	-1276.38019	-1372.94513	-1293.97793	-1565.9898	-1586.29942	-1678.69863	-676.6835234
+2.1	851.2018962	*1206.075116*	*1343.424419*	805.1763244	842.7344146	796.7942768	917.3627544	593.882582	629.0895999	383.3237913
-2.15	-1558.608482	*-2156.589928*	*-2903.357865*	-1182.66656	-1272.14156	-1198.97225	-1451.01263	-1469.83108	-1555.44621	-627.0004656
+2.15	1542.893915	*1868.702894*	*2019.060637*	1318.061824	1396.745494	1320.034036	1554.649255	1220.388195	1289.19548	663.2900572
-2.2	-1435.10549	*-1855.414214*	*-2556.037718*	-1088.95293	-1171.338	-1103.96656	-1336.03545	-1353.36273	-1432.19379	-577.3174079
+2.2	2186.201646	*2624.293024*	*2843.401555*	1799.378726	1915.613427	1809.430946	2149.050556	1844.698091	1950.016941	924.3756362

-2.25	-1311.602497	-1731.918176	-2368.629277	-995.239291	-1070.53443	-1008.96087	-1221.05828	-1236.89439	-1308.94136	-527.6343502
+2.25	2762.351656	3432.481087	4018.086022	2232.900585	2382.03674	2248.778168	2681.567323	2396.717938	2534.544193	1156.105792
-2.3	-1188.099505	-1644.25517	-2213.470562	-901.525657	-969.730863	-913.955188	-1106.0811	-1120.42605	-1185.68894	-477.9512925
+2.3	3252.626185	4138.827635	5007.9538	2604.949703	2781.45875	2624.456621	3136.658455	2860.691156	3026.051418	1351.786878
-2.35	-1064.596513	-1556.592163	-2058.311848	-807.812022	-868.927297	-818.949502	-991.103925	-1003.95771	-1062.43652	-428.2682348
+2.35	3643.016864	4697.273344	5773.159266	2904.395953	3102.06629	2927.192572	3500.486068	3224.277843	3411.340664	1506.101795
-2.4	-941.0935206	-1468.929157	-1970.206344	-714.098388	-768.12373	-723.943816	-876.12675	-887.489364	-939.184095	-378.5851771
+2.4	3923.252772	5099.956596	6277.476523	3122.657468	3335.778338	3148.171571	3763.041079	3481.633402	3684.181761	1615.11108
-2.45	-817.5905283	-1381.26615	-1970.205071	-620.384754	-667.320163	-628.938131	-761.149574	-771.021021	-815.931671	-328.9021193
+2.45	4085.814912	5341.380701	6514.920961	3256.587092	3478.261156	3280.428576	3917.451083	3624.06759	3835.585892	1676.25202
-2.5	-694.087536	-1293.603181	-1970.204499	-526.67112	-566.516597	-533.932506	-646.172399	-654.552679	-692.679336	-279.2190616
+2.5	4126.987335	5418.297814	6488.727491	3300.783814	3522.974999	3320.376629	3959.776719	3648.666423	3862.262017	1688.759853
-2.55	-816.7694496	-1381.266189	-1970.203365	-620.38474	-667.320191	-628.938195	-761.149489	-771.021026	-815.931766	-328.9036113
+2.55	4042.736067	5341.408235	6514.920672	3256.590312	3478.266652	3280.437838	3917.46681	3624.075426	3835.593887	1676.256789
-2.6	-940.1484204	-1468.929198	-1970.202106	-714.098368	-768.12376	-723.943885	-876.126659	-887.489361	-939.184195	-378.5868943
+2.6	3857.028554	5099.978892	6277.476559	3122.661508	3335.779418	3148.176766	3763.052245	3481.637204	3684.185492	1615.114638
-2.65	-1063.527391	-1556.592207	-2058.31188	-807.811996	-868.92733	-818.949575	-991.10383	-1003.9577	-1062.43662	-428.2701774
+2.65	3595.506047	4697.291417	5773.159589	2904.398703	3102.071082	2927.194419	3500.493519	3224.277631	3411.345998	1506.104389
-2.7	-1186.906362	-1644.255216	-2213.470595	-901.525624	-969.730899	-913.955264	-1106.081	-1120.42603	-1185.68905	-477.9534604
+2.7	3219.832976	4138.840698	5007.953736	2604.950909	2781.46182	2624.463189	3136.662133	2860.694885	3026.055059	1351.78825
-2.75	-1310.285333	-1731.918225	-2368.629309	-995.239252	-1070.53447	-1008.96095	-1221.05817	-1236.89437	-1308.94148	-527.6367435
+2.75	2739.463063	3432.48987	4018.086069	2232.901443	2382.039427	2248.784375	2681.567905	2396.720504	2534.546618	1156.106402
-2.8	-1433.664304	-1855.414254	-2556.037741	-1088.95288	-1171.33804	-1103.96664	-1336.03534	-1353.3627	-1432.19391	-577.3200265
+2.8	2166.92591	2624.298742	2843.401747	1799.37936	1915.615867	1809.436836	2149.049031	1844.700193	1950.01889	924.9332949
-2.85	-1557.043274	-2156.589984	-2903.357901	-1182.66651	-1272.14161	-1198.97233	-1451.01251	-1469.83104	-1555.44634	-627.0033096
+2.85	1518.160355	1868.706051	2018.011184	1318.06334	1396.74879	1320.040813	1554.64649	1220.390855	1289.198018	664.86737
-2.9	-1680.422245	-2660.85193	-3649.275747	-1276.38014	-1372.94518	-1293.97802	-1565.98968	-1586.29937	-1678.69877	-676.6865926
+2.9	828.7044897	1206.076549	1341.817749	805.1791902	842.7391651	796.8019839	917.3593961	593.8837453	629.0910068	383.3218711
-2.95	-1803.801216	-3363.271432	-4962.912482	-1370.09376	-1473.74875	-1388.98371	-1680.96685	-1702.76771	-1801.9512	-726.3698757
+2.95	417.4393946	648.8046094	901.1389096	316.7515889	340.7155035	321.1187277	388.6221789	393.6624023	416.5925611	178.2474624
-3	-2478.928671	-4620.597583	-6552.698532	-1872.82131	-2015.21436	-1899.55003	-2299.94294	-2364.31049	-2502.46815	-998.056806
+3	540.9424338	696.0715179	960.4915446	410.4651957	441.5190609	416.1243735	503.5994083	510.1306932	539.844931	217.6115175
(Span 3) -4	-2.48E+03	-4620.597583	-6552.698532	-1.87E+03	-2.02E+03	-1.90E+03	-2.30E+03	-2.36E+03	-2.50E+03	-9.98E+02
+4	5.41E+02	696.0715179	960.4915446	4.10E+02	4.42E+02	4.16E+02	5.04E+02	5.10E+02	5.40E+02	2.18E+02
-3.05	-2354.982242	-3969.133585	-5438.32241	-1779.18025	-1914.45364	-1804.57253	-2184.94579	-2246.09496	-2377.34474	-948.1539652
+3.05	513.8953123	690.3738155	987.866511	389.9419359	419.4431074	395.3181545	478.4194379	484.6241586	512.8526845	206.7309412
-3.1	-2231.035812	-3435.040094	-4859.422365	-1685.53918	-1813.69292	-1709.59503	-2069.94865	-2127.87944	-2252.22133	-898.2511244
+3.1	678.6137514	1129.909233	1417.521748	652.464825	678.684898	644.3849644	739.8415889	487.0911432	514.6623621	317.3067763
-3.15	-2107.089382	-3039.491431	-4405.212663	-1591.89812	-1712.93221	-1614.61752	-1954.9515	-2009.66391	-2127.09793	-848.3482836
+3.15	1253.405437	1709.679313	2067.603434	1093.286259	1146.808475	1086.382534	1278.279875	966.216338	1021.20928	555.2730828
-3.2	-1983.142953	-2806.042365	-4096.892595	-1498.25705	-1612.17149	-1519.64002	-1839.95436	-1891.44838	-2001.97452	-798.4454428
+3.2	1808.415821	2386.271776	2805.391753	1511.529047	1597.569549	1508.372256	1791.073107	1503.899383	1590.369846	779.8155811
-3.25	-1859.196523	-2630.664715	-3840.8368	-1404.61599	-1511.41077	-1424.66252	-1724.95721	-1773.23286	-1876.85111	-748.542602
+3.25	2321.375777	3046.915164	3510.438785	1897.975151	2013.308867	1900.819551	2266.379057	1991.250662	2106.432565	986.0392716
-3.3	-1735.250093	-2455.287065	-3584.781006	-1310.97492	-1410.65006	-1329.68502	-1609.96006	-1655.01733	-1751.7277	-698.6397612
+3.3	2780.711807	3625.333483	4168.503155	2243.989386	2385.639801	2254.780697	2693.465765	2419.200741	2558.101881	1169.365727
-3.35	-1611.303664	-2279.909416	-3328.725212	-1217.33386	-1309.88934	-1234.70752	-1494.96292	-1536.80181	-1626.60429	-648.7369204
+3.35	3175.627768	4113.864094	4790.745963	2541.517819	2712.340198	2561.902134	3062.31664	2787.158526	2947.620331	1325.529019
-3.4	-1487.357234	-2104.531766	-3072.669418	-1123.69279	-1209.12862	-1139.73001	-1379.96577	-1418.58628	-1501.48088	-598.8340797
+3.4	3496.108252	4505.383698	5224.78733	2790.435866	2981.554236	2814.423502	3363.634614	3079.005904	3257.127567	1450.579113
-3.45	-1363.410804	-1929.154117	-2816.613624	-1030.05173	-1108.36791	-1044.75251	-1264.96863	-1300.37076	-1376.35747	-548.9312389
+3.45	3732.989823	4793.309584	5476.342308	2982.560521	3185.642176	3005.173681	3589.318242	3286.041266	3476.982679	1540.879624
-3.5	-1239.464375	-1753.776467	-2560.55783	-936.41066	-1007.60719	-949.775009	-1149.97148	-1182.15523	-1251.23406	-499.0283981
+3.5	3878.496805	4971.600327	5512.027919	3108.202739	3317.593134	3127.573765	3731.586958	3400.324205	3598.765554	1593.1089
-3.55	-1115.517945	-1578.398818	-2304.502036	-842.769595	-906.846472	-854.797507	-1034.97433	-1063.93971	-1126.11065	-449.1255573
+3.55	3924.405699	5038.352937	5744.953474	3162.701075	3374.365415	3181.460856	3792.697624	3449.700935	3651.362148	1614.065179
-3.6	-991.5715154	-1403.021168	-2048.446241	-749.128529	-806.085755	-759.820004	-919.977187	-945.724181	-1000.98725	-399.2227165

+3.6	3866.383556	5000.011703	5815.391142	3149.763405	3363.721036	3173.295927	3790.885782	3471.701486	3673.672389	1622.21352
-3.65	-867.6250858	-1227.643518	-1792.390447	-655.487464	-705.325038	-664.842502	-804.980041	-827.508655	-875.863837	-349.3198757
+3.65	3798.486236	4839.000964	5717.027454	3055.351655	3266.361443	3082.936825	3690.36116	3393.583002	3590.017218	1588.295043
-3.7	-743.6786561	-1052.265869	-1536.334653	-561.846398	-604.564321	-569.865	-689.982895	-709.29313	-750.740428	-299.4170349
+3.7	3621.43799	4551.206867	5411.339402	2892.209524	3081.881651	2906.717192	3485.546144	3209.791451	3394.242998	1509.730192
-3.75	-619.7322264	-876.8882194	-1280.278859	-468.205333	-503.803604	-474.887498	-574.985749	-591.077604	-625.61702	-249.5141941
+3.75	3329.436378	4133.056351	4994.104063	2647.090397	2822.814312	2644.55413	3171.875918	2939.396114	3109.17835	1384.253875
-3.8	-495.7857968	-701.5105698	-1024.223065	-374.564268	-403.042887	-379.909995	-459.988603	-472.862079	-500.493611	-199.6113533
+3.8	2917.456683	3581.514916	4420.891778	2310.415025	2465.445441	2310.763676	2753.190389	2558.782764	2704.886757	1210.38206
-3.85	-371.8393671	-526.1329202	-768.1672707	-280.923202	-302.28217	-284.932493	-344.991457	-354.646554	-375.370202	-149.7085126
+3.85	2381.250282	2894.090183	3621.790038	1879.297815	2006.61563	1881.457815	2244.280354	2091.022995	2209.972165	986.4013509
-3.9	-247.8929374	-350.7552707	-512.1114765	-187.282137	-201.521453	-189.954991	-229.994311	-236.431028	-250.246793	-99.80567177
+3.9	1717.353024	2068.8308	2600.412081	1351.433019	1443.790256	1354.215792	1617.0764	1518.857654	1605.452315	710.6349792
-3.95	-123.9465078	-175.3776211	-256.0556824	-93.6410712	-100.760736	-94.9774887	-114.997165	-118.215503	-125.123384	-49.90283098
+3.95	924.5287729	1104.323865	1420.950981	725.1005355	775.0649752	727.2108803	869.2544708	822.1818728	869.1538812	382.0681004
-5	-5.95E-13	-4.48E-13	-8.33E-13	-3.45E-13	-3.70E-13	-3.96E-13	-4.70E-13	-4.00E-13	-4.23E-13	-2.23E-13
+5	4.91E-13	5.01E-13	8.93E-13	3.60E-13	3.90E-13	2.98E-13	3.90E-13	3.51E-13	3.71E-13	2.09E-13

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.11E-13	-3.06E-13	-2.62E-13	-2.15E-13	-2.46E-13	-2.93E-13	-2.51E-13	-2.49E-13	-2.87E-13
End Shear	2.56E-13	1.93E-13	2.11E-13	2.11E-13	2.14E-13	1.96E-13	1.95E-13	1.93E-13	1.92E-13
-0.05	-71.63968887	-101.7372291	-108.3809471	-136.4491949	-57.45201914	-77.62528932	-88.852959	-99.491245	-110.687439
+0.05	545.8193009	715.099672	718.8147641	715.4790638	439.8343953	593.3122201	670.389022	731.4875469	792.9764136
-0.1	-143.2793777	-203.4744582	-216.7618942	-272.8983898	-114.9040383	-155.2505786	-177.705918	-198.98249	-221.374878
+0.1	1015.972694	1322.056396	1321.63189	1295.095703	819.1528235	1104.68475	1246.951293	1360.786535	1478.861812
-0.15	-214.9190666	-305.2116873	-325.1428413	-409.3475847	-172.3560574	-232.875868	-266.558877	-298.473735	-332.062316
+0.15	1410.723594	1821.577278	1809.909623	1774.510707	1138.041668	1534.486338	1730.163813	1913.044112	2074.167993
-0.2	-286.5587555	-406.9489164	-433.5237884	-545.7967795	-229.8080766	-310.5011573	-355.411836	-397.96498	-442.749755
+0.2	1731.501455	2216.502481	2216.184675	2137.555283	1397.614283	1884.228012	2121.856926	2363.3895	2572.724425
-0.25	-358.1984443	-508.6861455	-541.9047355	-682.2459744	-287.2600957	-388.1264466	-444.264795	-497.456225	-553.437194
+0.25	1980.183488	2532.878116	2517.256894	2441.983488	1599.342318	2155.90431	2432.741645	2713.34921	2974.857903
-0.3	-429.8381332	-610.4233747	-650.2856826	-818.6951693	-344.7121149	-465.7517359	-533.117754	-596.94747	-664.124633
+0.3	2159.094989	2755.914455	2735.193416	2683.586197	1745.055952	2364.338261	2672.418982	2966.114193	3268.524233
-0.35	-501.4778221	-712.1606038	-758.6666296	-955.1443642	-402.164134	-543.3770253	-621.970713	-696.438715	-774.812072
+0.35	2286.272611	2885.497667	2893.252042	2833.618016	1836.943115	2506.888087	2828.964566	3143.226834	3457.334502
-0.4	-573.1175109	-813.8978329	-867.0475767	-1091.593559	-459.6161531	-621.0023146	-710.823672	-795.92996	-885.49951
+0.4	2350.549638	2943.301007	2991.203728	2915.808443	1877.550556	2579.661815	2904.942543	3236.508321	3555.466793
-0.45	-644.7571998	-915.635062	-975.4285238	-1228.042754	-517.0681723	-698.6276039	-799.676631	-895.421205	-996.186949
+0.45	2353.479958	2920.049886	3002.340594	2918.812591	1869.782958	2585.331388	2904.703298	3244.510617	3572.763916
-0.5	-716.3968887	-1017.372291	-1083.809471	-1364.491949	-574.5201914	-776.2528932	-888.52959	-994.91245	-1106.87439
+0.5	2315.713051	2879.490255	2946.063359	2865.866266	1843.56818	2542.188433	2857.893043	3189.386533	3508.033083
-0.55	-788.0365775	-1119.10952	-1192.190418	-1500.941144	-631.9722106	-853.8781826	-977.382549	-1094.4037	-1217.56183
+0.55	2226.447229	2785.575627	2820.657732	2737.512401	1780.136696	2443.147199	2750.823761	3062.901723	3360.128907
-0.6	-859.6762664	-1220.846749	-1300.571365	-1637.390339	-689.4242297	-931.5034719	-1066.23551	-1193.89494	-1328.24927
+0.6	2084.997601	2617.017506	2618.694487	2581.063335	1673.626557	2288.044068	2578.432312	2864.332794	3146.743048
-0.65	-931.3159553	-1322.583978	-1408.952312	-1773.839533	-746.8762489	-1009.128761	-1155.08847	-1293.38619	-1438.9367
+0.65	1896.304209	2383.537873	2362.705327	2329.757922	1527.864568	2082.246891	2346.786027	2600.587255	2860.983131
-0.7	-1002.955644	-1424.321208	-1517.333259	-1910.288728	-804.328268	-1086.754051	-1243.94143	-1392.87743	-1549.62414
+0.7	1665.755247	2080.369064	2032.874472	2018.575185	1347.036853	1831.608083	2062.509199	2281.0882	2508.726215
-0.75	-1074.595333	-1526.058437	-1625.714206	-2046.737923	-861.7802872	-1164.37934	-1332.79439	-1492.36868	-1660.31158
+0.75	1402.38595	1715.307309	1656.619798	1621.431491	1135.687102	1542.463368	1732.780656	1914.884737	2098.882864
-0.8	-1146.235022	-1627.795666	-1734.095153	-2183.187118	-919.2323063	-1242.004629	-1421.64734	-1591.85992	-1770.99902
+0.8	1106.822812	1296.805182	1218.963009	1157.841717	898.7173737	1221.631972	1365.334557	1504.072381	1641.058192
-0.85	-1217.874711	-1729.532895	-1842.476101	-2334.67266	-976.6843254	-1319.629919	-1510.5003	-1691.35117	-1881.68646
+0.85	785.2728666	833.969951	734.6448455	702.3140633	641.388176	876.4167791	968.4600958	1057.779996	1145.551588
-0.9	-1289.5144	-1831.270124	-1950.857048	-2528.130423	-1034.136345	-1397.255208	-1599.35326	-1790.84241	-1992.3739
+0.9	448.4430826	420.6364789	415.7017332	466.2016677	369.318228	514.604641	551.0025003	589.5833625	623.3565941
-0.95	-1361.154088	-1933.007353	-2059.237995	-2757.461399	-1091.588364	-1474.880497	-1688.20622	-1890.33366	-2103.06134
+0.95	297.6136684	416.9187434	438.796274	464.5822934	238.9359721	322.9439368	369.1587555	413.1555425	459.1818031
-1	-1432.793755	-2034.744598	-2167.618918	-3314.240324	-1149.040368	-1552.505786	-1777.05919	-1989.8249	-2213.74878
+1	313.2775356	438.8618381	461.8908124	481.1009965	251.5115447	339.9409771	388.5881594	434.9005677	483.3492692
(Span 2) -2	-1432.793755	-2034.744598	-2167.618918	-3314.240324	-1149.040368	-1552.505786	-1777.05919	-1989.8249	-2213.74878
+2	313.2775356	438.8618381	461.8908124	481.1009965	251.5115447	339.9409771	388.5881594	434.9005677	483.3492692
-2.05	-1045.690636	-1464.87905	-1541.747577	-2314.050806	-839.5216028	-1134.690711	-1297.07034	-1451.65676	-1613.37387
+2.05	241.7528938	338.6649468	356.4361557	381.5897451	194.088746	262.3287833	299.8692909	335.6080739	372.9954173
-2.1	-974.1659929	-1364.682164	-1436.292924	-1624.548594	-782.0988056	-1057.078515	-1208.35148	-1352.36426	-1503.02002
+2.1	560.8081555	502.790049	457.5219404	432.8859137	449.1823616	638.28651	686.3658561	748.2863193	787.2967331
-2.15	-902.6413501	-1264.485277	-1330.838271	-1425.289313	-724.6760083	-979.4663197	-1119.63261	-1253.07177	-1392.66618
+2.15	957.9298245	1038.210566	919.1037886	826.5011624	771.1976678	1066.706563	1180.643239	1298.401595	1406.076317
-2.2	-831.1167073	-1164.288391	-1225.383618	-1278.614859	-667.253211	-901.8541239	-1030.91374	-1153.77928	-1282.31233
+2.2	1328.581747	1576.807707	1498.750094	1370.215334	1069.948263	1467.147141	1640.794537	1812.700184	1981.507321

-2.25	-759.5920645	-1064.091504	-1119.928966	-1177.946753	-609.8304137	-824.2419282	-942.194874	-1054.48679	-1171.95848
+2.25	1660.633021	2047.145746	2007.799238	2008.858151	1335.946648	1826.397212	2051.971135	2274.182188	2495.170807
-2.3	-688.0674217	-963.894618	-1014.474313	-1086.556842	-552.4076164	-746.6297325	-853.476007	-955.194296	-1061.60463
+2.3	1943.913455	2438.21938	2432.713075	2546.669807	1561.161856	2133.363045	2402.662839	2668.572734	2931.686593
-2.35	-616.5427789	-863.6977316	-909.0196601	-995.166931	-494.9848191	-669.0175368	-764.757139	-855.901803	-951.250785
+2.35	2170.21272	2740.729556	2764.346481	2946.835098	1739.409034	2379.660252	2683.551945	2984.321428	3278.712451
-2.4	-545.0181361	-763.5008451	-803.5650074	-903.7770201	-437.5620219	-591.4053411	-676.038272	-756.609311	-840.896937
+2.4	2334.013583	2954.874978	3018.205117	3243.049225	1866.071472	2559.877294	2885.852427	3214.670446	3532.706775
-2.45	-473.4934933	-663.3039587	-698.1103546	-812.3871092	-380.1392246	-513.7931454	-587.319405	-657.316819	-730.54309
+2.45	2432.385037	3074.212123	3167.145483	3384.044519	1938.100977	2667.459708	3004.330787	3352.61337	3690.27935
-2.5	-401.9688505	-563.1070722	-592.6557019	-720.9971983	-322.7164273	-436.1809497	-498.600537	-558.02437	-620.189242
+2.5	2460.836414	3092.070189	3207.326792	3381.859986	1953.694888	2699.515279	3035.941495	3393.598507	3742.070328
-2.55	-473.4935237	-663.3039663	-698.1104116	-812.3870741	-380.1392417	-513.7931541	-587.319394	-657.316864	-730.543101
+2.55	2432.388926	3074.219907	3167.152256	3384.043067	1938.118108	2667.46646	3004.341064	3352.619348	3690.281137
-2.6	-545.0181655	-763.5008576	-803.5650684	-903.7769837	-437.5620405	-591.4053478	-676.038262	-756.609358	-840.896953
+2.6	2334.01439	2954.879458	3018.208776	3243.045896	1866.085303	2559.880663	2885.859203	3214.672588	3532.708014
-2.65	-616.5428072	-863.6977489	-909.0197251	-995.1668934	-494.9848392	-669.0175416	-764.757131	-855.901851	-951.250805
+2.65	2170.216115	2740.734345	2764.347006	2946.833141	1739.419278	2379.660804	2683.555682	2984.325555	3278.723749
-2.7	-688.067449	-963.8946403	-1014.474382	-1086.556803	-552.407638	-746.6297353	-853.475999	-955.194345	-1061.60466
+2.7	1943.915636	2438.220729	2432.713318	2546.665245	1561.168736	2133.36771	2402.663342	2668.575468	2931.694031
-2.75	-759.5920907	-1064.091532	-1119.929039	-1177.946713	-609.8304368	-824.241929	-942.194867	-1054.48684	-1171.95851
+2.75	1660.634977	2047.153016	2007.803019	2008.853292	1335.950743	1826.401531	2051.977971	2274.184413	2495.175869
-2.8	-831.1167325	-1164.288423	-1225.383695	-1278.614816	-667.2532355	-901.8541228	-1030.91374	-1153.77933	-1282.31236
+2.8	1328.583293	1576.814227	1498.753475	1370.218612	1069.949705	1467.151228	1640.801262	1812.702102	1981.510286
-2.85	-902.6413742	-1264.485314	-1330.838352	-1425.289271	-724.6760343	-979.4663165	-1119.6326	-1253.07183	-1392.66621
+2.85	957.9321657	1038.216935	919.1074111	826.5034459	771.1972171	1066.711325	1180.650645	1298.404372	1406.077941
-2.9	-974.166016	-1364.682205	-1436.293009	-1624.548553	-782.098833	-1057.07851	-1208.35147	-1352.36432	-1503.02006
+2.9	560.8112711	502.7924253	457.5255435	432.8881506	449.1800889	638.292085	686.3742796	748.2902599	787.2982342
-2.95	-1045.690658	-1464.879097	-1541.747666	-2314.051064	-839.5216318	-1134.690704	-1297.07034	-1451.65681	-1613.37392
+2.95	241.7529347	338.6649059	356.4361728	381.589722	194.0887483	262.3288117	299.8692694	335.6081023	372.9953865
-3	-1432.793768	-2034.744689	-2167.618989	-3314.240459	-1149.040473	-1552.505815	-1777.05936	-1989.82508	-2213.74894
+3	313.2775402	438.8618168	461.8907949	481.1010018	251.5115382	339.9409857	388.5881548	434.9005605	483.3492507
(Span 3) -4	-1.43E+03	-2.03E+03	-2.17E+03	-3.31E+03	-1.15E+03	-1.55E+03	-1.78E+03	-1.99E+03	-2.21E+03
+4	3.13E+02	4.39E+02	4.62E+02	4.81E+02	2.52E+02	3.40E+02	3.89E+02	4.35E+02	4.83E+02
-3.05	-1361.154078	-1933.007456	-2059.238038	-2757.461322	-1091.588449	-1474.880525	-1688.20639	-1890.33382	-2103.0615
+3.05	297.6136627	416.9187261	438.7962551	464.582294	238.9359611	322.943936	369.1587468	413.1555324	459.1817883
-3.1	-1289.514389	-1831.270222	-1950.857087	-2528.130348	-1034.136425	-1397.255234	-1599.35342	-1790.84257	-1992.37405
+3.1	448.4417887	420.6407163	415.7017152	466.2016652	369.3269595	514.6009696	550.9963499	589.5818248	623.3617913
-3.15	*-1217.874699*	*-1729.532988*	*-1842.476137*	*-2334.672589*	*-976.6844002*	*-1319.629943*	*-1510.50045*	*-1691.35131*	*-1881.6866*
+3.15	785.273743	833.966081	734.6396215	702.310784	641.3973523	876.4140345	968.4550023	1057.78149	1145.557558
-3.2	-1146.23501	-1627.795755	-1734.095186	-2183.187049	-919.2323758	-1242.004652	-1421.64749	-1591.86006	-1770.99916
+3.2	1106.823916	1296.801019	1218.956258	1157.836942	898.7271162	1221.629506	1365.329618	1504.07415	1641.064832
-3.25	-1074.59532	-1526.058521	-1625.714236	-2046.737858	-861.7803514	-1164.379362	-1332.79452	-1492.36881	-1660.31171
+3.25	1402.387004	1715.302653	1656.612133	1621.428636	1135.696552	1542.460958	1732.775889	1914.886384	2098.889188
-3.3	-1002.955631	*-1424.321287*	-1517.333285	*-1910.288668*	-804.328327	-1086.754071	-1243.94155	-1392.87755	-1549.62426
+3.3	1665.75483	2080.363293	2032.872188	2018.570322	1347.045873	1831.605504	2062.503877	2281.089229	2508.732142
-3.35	-931.3159412	-1322.584054	-1408.952334	-1773.839477	-746.8763026	-1009.12878	-1155.08858	-1293.3863	-1438.93682
+3.35	1896.302697	2383.530389	2362.701242	2329.752937	1527.872761	2082.243134	2346.779539	2600.585752	2860.987695
-3.4	-859.6762517	-1220.84682	-1300.571384	-1637.390287	-689.4242782	-931.5034892	-1066.23562	-1193.89504	-1328.24937
+3.4	2084.995164	2617.007776	2618.688437	2581.05799	1673.633539	2288.039073	2578.424308	2864.329591	3146.745414
-3.45	-788.0365622	-1119.109586	-1192.190433	-1500.941096	-631.9722538	-853.8781985	-977.382649	-1094.40379	-1217.56192
+3.45	2226.443207	2785.568347	2820.651349	2737.514124	1780.142374	2443.140715	2750.813649	3062.896637	3360.128051
-3.5	-716.3968726	-1017.372352	-1083.809483	-1364.491905	-574.5202294	-776.2529077	-888.529682	-994.912536	-1106.87447
+3.5	2315.707	2879.495139	2946.054297	2865.870256	1843.572165	2542.180027	2857.880759	3189.378697	3508.029639
-3.55	-644.7571831	-915.6351188	-975.428532	-1228.042715	-517.068205	-698.6276169	-799.676715	-895.421282	-996.187028
+3.55	2353.468349	*2920.0458594 5772*	*3002.334851*	2918.816547	1869.779749	*2585.323479*	2904.699008	3244.501724	3572.769202

-3.6	**-573.1174936**	**-813.8978851**	**-867.0475814**	**-1091.593524**	**-459.6161806**	**-621.0023261**	**-710.823747**	**-795.930028**	**-885.499581**
+3.6	**2350.554512**	**2943.294183**	**2991.194785**	**2915.80475**	**1877.545727**	**2579.651135**	**2904.935687**	**3236.496555**	**3555.468515**
-3.65	**-501.4778041**	**-712.1606514**	**-758.6666308**	**-955.1443338**	**-402.1641563**	**-543.3770353**	**-621.97078**	**-696.438774**	**-774.812134**
+3.65	**2286.275108**	**2885.490118**	**2893.246656**	**2833.613728**	**1836.93636**	**2506.892836**	**2828.954321**	**3143.22967**	**3457.331841**
-3.7	**-429.8381145**	**-610.4234177**	**-650.2856802**	**-818.6951432**	**-344.7121319**	**-465.7517446**	**-533.117813**	**-596.94752**	**-664.124688**
+3.7	**2159.094449**	**2755.903424**	*2735.195943*	**2683.591657**	**1745.047088**	**2364.339947**	**2672.405731**	**2966.112885**	**3268.517376**
-3.75	**-358.198425**	**-508.686184**	**-541.9047296**	**-682.2459527**	**-287.2601075**	**-388.1264538**	**-444.264845**	**-497.456266**	**-553.437241**
+3.75	**1980.180343**	**2532.881418**	**2517.250846**	**2441.986645**	**1599.330789**	**2155.903198**	**2432.742933**	**2713.344366**	**2974.847179**
-3.8	**-286.5587355**	**-406.9489503**	**-433.523779**	**-545.7967621**	**-229.8080831**	**-310.501163**	**-355.411878**	**-397.965012**	**-442.749794**
+3.8	**1731.495544**	**2216.501939**	**2216.188802**	**2137.553097**	**1397.600491**	**1884.223837**	**2121.854716**	**2363.38058**	**2572.727141**
-3.85	**-214.9190459**	**-305.2117166**	**-325.1428284**	**-409.3475716**	**-172.3560587**	**-232.8758722**	**-266.558911**	**-298.473759**	**-332.062347**
+3.85	**1410.714575**	**1821.572431**	**1809.909414**	**1774.513507**	**1138.0252**	**1534.478979**	**1730.157892**	**1913.031194**	**2074.166026**
-3.9	**-143.2793564**	**-203.4744829**	**-216.7618778**	**-272.898381**	**-114.9040343**	**-155.2505815**	**-177.705943**	**-198.982505**	**-221.3749**
+3.9	**1015.960147**	**1322.047012**	**1321.627118**	**1295.094831**	**819.133767**	**1104.673332**	**1246.940746**	**1360.78691**	**1478.854568**
-3.95	**-71.6396669**	**-101.7372493**	**-108.3809272**	**-136.4491904**	**-57.45200992**	**-77.62529067**	**-88.8529759**	**-99.4912507**	**-110.687453**
+3.95	**545.8034979**	**715.0858799**	**718.8054173**	**715.4749142**	**439.8130183**	**593.2976364**	**670.3749727**	**731.4834241**	**792.9729098**
-5	**-2.76E-13**	**-3.39E-13**	**-3.14E-13**	**-3.53E-13**	**-2.67E-13**	**-3.36E-13**	**-2.59E-13**	**-2.81E-13**	**-3.10E-13**
+5	**2.28E-13**	**2.97E-13**	**2.73E-13**	**3.54E-13**	**2.16E-13**	**2.40E-13**	**2.68E-13**	**2.92E-13**	**2.94E-13**

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.29E-13	-4.27E-13	-3.06E-13	-3.42E-13	-3.70E-13
End Shear	3.60E-13	3.09E-13	2.00E-13	2.87E-13	2.37E-13
-0.05	-196.0229583	-216.430951	-123.461289	-148.808259	-160.291701
+0.05	1282.745503	1369.291334	847.3971895	1023.581765	1081.970174
-0.1	-392.0459166	-432.861902	-246.922578	-297.616517	-320.583402
+0.1	2356.473842	2523.140686	1563.276608	1888.492781	1992.939933
-0.15	-588.0688748	-649.2928529	-370.383867	-446.424776	-480.875102
+0.15	3277.181447	3503.600274	2148.765918	2603.292421	2752.276884
-0.2	-784.0918331	-865.7238039	-493.845156	-595.233034	-641.166803
+0.2	4004.66654	4355.810243	2648.073089	3201.998054	3377.581416
-0.25	-980.1147914	-1082.154755	-617.306445	-744.041293	-801.458504
+0.25	4574.641419	5019.995774	3032.394762	3652.874884	3883.68272
-0.3	-1176.13775	-1298.585706	-740.767734	-892.849552	-961.750205
+0.3	5027.148655	5520.417554	3302.658178	3960.236925	4244.071157
-0.35	-1372.160708	-1515.016657	-864.229023	-1041.65781	-1122.04191
+0.35	5318.68912	5847.916509	3481.844746	4165.824872	4454.372434
-0.4	-1568.183666	-1731.447608	-987.690312	-1190.46607	-1282.33361
+0.4	5505.848784	5986.494349	3551.146067	4240.540572	4555.830473
-0.45	-1764.206625	-1947.878559	-1111.1516	-1339.27433	-1442.62531
+0.45	5518.688546	6050.779162	3516.907731	4191.522058	4523.992693
-0.5	-1960.229583	-2164.30951	-1234.61289	-1488.08259	-1602.91701
+0.5	5422.176033	5931.377157	3467.965037	4134.848797	4457.516789
-0.55	-2156.252541	-2380.740461	-1358.07418	-1636.89084	-1763.20871
+0.55	5193.311039	5650.359414	3363.056163	4014.779355	4308.77479
-0.6	-2352.275499	-2597.171412	-1481.53547	-1785.6991	-1923.50041
+0.6	4818.415048	5290.605345	3158.676264	3774.24363	4037.547174
-0.65	-2548.298458	-2813.602363	-1604.99676	-1934.50736	-2083.79211
+0.65	4332.966131	4771.482265	2863.009603	3422.963053	3667.36662
-0.7	-2744.321416	-3030.033314	-1728.45805	-2083.31562	-2244.08381
+0.7	3741.964343	4104.488692	2485.703531	2982.593349	3187.095074
-0.75	-2940.344374	-3246.464265	-1851.91933	-2232.12388	-2404.37551
+0.75	3032.467915	3312.870021	2044.844446	2454.934142	2609.527588
-0.8	-3136.367332	-3462.895216	-1975.38062	-2380.93214	-2564.66721
+0.8	2220.678266	2415.950424	1537.330559	1845.828221	1947.711294
-0.85	-3332.390291	-3679.326167	-2098.84191	-2529.7404	-2724.95891
+0.85	1324.151465	1425.159087	974.2112019	1168.43594	1215.879916
-0.9	-3528.413249	-3895.757118	-2222.3032	-2678.54866	-2885.25061
+0.9	755.0546461	831.3244239	519.8972545	589.5836471	625.9710341
-0.95	-3724.436207	-4112.188069	-2345.76449	-2827.35691	-3045.54232
+0.95	797.0021264	877.5091142	503.7940097	608.4596205	653.7075665
-1	-3920.459109	-4328.618993	-2469.22577	-2976.16518	-3205.83403
+1	838.9495956	923.6938023	530.309489	640.4838174	688.1132223
(Span 2) -2	-3920.459109	-4328.618993	-2469.22577	-2976.16518	-3205.83403
+2	838.9495956	923.6938023	530.309489	640.4838174	688.1132223
-2.05	-2800.334184	-3083.202147	-1770.1226	-2137.87408	-2296.85677
+2.05	647.4083498	712.8045424	409.2341119	494.254453	531.0095515
-2.1	-2608.792935	-2872.312891	-1649.04723	-1991.64471	-2139.75308
+2.1	771.7231186	842.6652838	632.1637407	722.2266996	771.8050088
-2.15	-2417.251685	-2661.423635	-1527.97186	-1845.41535	-1982.6494
+2.15	1727.128485	1886.44486	1223.730568	1453.465158	1540.474922
-2.2	-2225.710435	-2450.534379	-1406.89648	-1699.18599	-1825.54571
+2.2	2773.535522	3043.005405	1879.772534	2243.751658	2393.921101

-2.25	**-2034.169186**	**-2239.645123**	**-1285.82111**	**-1552.95663**	**-1668.44203**
+2.25	**3690.882787**	**4061.510922**	**2456.880846**	**2933.759657**	**3141.165888**
-2.3	**-1842.627936**	**-2028.755867**	**-1164.74574**	**-1406.72727**	**-1511.33834**
+2.3	**4457.097412**	**4914.415328**	**2939.071771**	**3511.16498**	**3761.930224**
-2.35	**-1651.086686**	**-1817.866611**	**-1043.67036**	**-1260.4979**	**-1354.23466**
+2.35	**5085.989357**	**5579.913377**	**3313.876875**	**3958.344081**	**4240.799299**
-2.4	**-1459.545436**	**-1606.977355**	**-922.594991**	**-1114.26854**	**-1197.13098**
+2.4	**5539.904077**	**6042.7267**	**3575.695933**	**4268.799125**	**4584.085826**
-2.45	**-1268.004187**	**-1396.088099**	**-801.519618**	**-968.03918**	**-1040.02729**
+2.45	**5804.443778**	**6359.431695**	**3716.438751**	**4432.666345**	**4775.226585**
-2.5	**-1076.462937**	**-1185.198843**	**-680.444245**	**-821.809818**	**-882.923606**
+2.5	**5874.950627**	**6466.617735**	**3733.263563**	**4447.655383**	**4805.755897**
-2.55	**-1268.004108**	**-1396.088056**	**-801.519658**	**-968.039192**	**-1040.02716**
+2.55	**5804.45367**	**6357.182135**	**3716.446589**	**4432.658384**	**4775.231134**
-2.6	**-1459.545354**	**-1606.977316**	**-922.595035**	**-1114.26856**	**-1197.13083**
+2.6	**5539.908927**	**6042.726378**	**3575.69976**	**4268.803201**	**4584.085559**
-2.65	**-1651.0866**	**-1817.866576**	**-1043.67041**	**-1260.49792**	**-1354.2345**
+2.65	**5085.989133**	**5579.912571**	**3313.882368**	**3958.349134**	**4240.81143**
-2.7	**-1842.627846**	**-2028.755836**	**-1164.74579**	**-1406.72728**	**-1511.33817**
+2.7	**4457.099714**	**4913.373531**	**2939.075194**	**3511.167828**	**3761.937708**
-2.75	**-2034.169091**	**-2239.645096**	**-1285.82117**	**-1552.95665**	**-1668.44184**
+2.75	**3690.887462**	**4061.510463**	**2456.883386**	**2933.760843**	**3141.169199**
-2.8	**-2225.710337**	**-2450.534355**	**-1406.89654**	**-1699.18601**	**-1825.54551**
+2.8	**2773.536455**	**3043.004531**	**1879.774315**	**2243.757396**	**2393.92227**
-2.85	**-2417.251583**	**-2661.423615**	**-1527.97192**	**-1845.41538**	**-1982.64918**
+2.85	**1727.128542**	**1886.443926**	**1223.732814**	**1453.468497**	**1540.474329**
-2.9	**-2608.792829**	**-2872.312875**	**-1649.0473**	**-1991.64474**	**-2139.75285**
+2.9	**771.7257983**	**842.6646789**	**632.1648111**	**722.2322857**	**771.8132525**
-2.95	**-2800.334074**	**-3083.202135**	**-1770.12267**	**-2137.87411**	**-2296.85652**
+2.95	**647.4083102**	**712.8044603**	**409.2341129**	**494.2544384**	**531.0095532**
-3	**-3920.459066**	**-4328.573691**	**-2469.22589**	**-2976.16537**	**-3205.83412**
+3	**838.9496127**	**923.6937853**	**530.3094716**	**640.483806**	**688.113282**
(Span 3) -4	**-3.92E+03**	**-4.33E+03**	**-2.47E+03**	**-2.98E+03**	**-3.21E+03**
+4	**8.39E+02**	**9.24E+02**	**5.30E+02**	**6.40E+02**	**6.88E+02**
-3.05	**-3724.43611**	**-4112.145005**	**-2345.76459**	**-2827.35711**	**-3045.54241**
+3.05	**797.0021315**	**877.5090959**	**503.7939983**	**608.4596161**	**653.7076176**
-3.1	**-3528.413153**	**-3895.71632**	**-2222.3033**	**-2678.54884**	**-2885.25071**
+3.1	**755.0546503**	**831.3244065**	**519.8994709**	**589.5799327**	**625.9647237**
-3.15	***-3332.390197***	***-3679.287635***	***-2098.842***	***-2529.74057***	***-2724.959***
+3.15	**1324.14329**	**1425.159931**	**974.2145509**	**1168.441758**	**1215.871923**
-3.2	**-3136.367241**	**-3462.85895**	**-1975.38071**	**-2380.9323**	**-2564.6673**
+3.2	**2220.670307**	**2415.951149**	**1537.333474**	**1845.83337**	**1947.702898**
-3.25	**-2940.344285**	**-3246.430265**	**-1851.91941**	**-2232.12403**	**-2404.37559**
+3.25	**3032.458946**	**3314.338412**	**2044.846728**	**2454.938385**	**2609.51873**
-3.3	**-2744.321329**	**-3030.00158**	**-1728.45812**	**-2083.31576**	**-2244.08389**
+3.3	**3741.970884**	**4106.978053**	**2485.704576**	**2982.595978**	**3187.102663**
-3.35	**-2548.298373**	**-2813.572895**	**-1604.99682**	**-1934.50749**	**-2083.79218**
+3.35	**4332.969815**	**4771.481513**	**2863.007092**	**3422.961585**	**3667.371542**
-3.4	**-2352.275417**	**-2597.144209**	**-1481.53553**	**-1785.69923**	**-1923.50048**
+3.4	**4818.41096**	**5290.60659**	**3158.671157**	**3774.238875**	**4037.548462**
-3.45	**-2156.252461**	**-2380.715524**	**-1358.07423**	**-1636.89096**	**-1763.20877**
+3.45	**5194.869193**	**5650.359617**	**3363.048055**	**4014.770703**	**4308.771078**
-3.5	**-1960.229504**	**-2164.286839**	**-1234.61294**	**-1488.08269**	**-1602.91707**
+3.5	**5422.180887**	**5933.042075**	**3467.953321**	**4134.83586**	**4457.508505**
-3.55	**-1764.206548**	**-1947.858154**	**-1111.15164**	**-1339.27442**	**-1442.62536**
+3.55	**5518.685349**	**6050.777739**	**3516.899405**	**4191.517714**	**4523.984023**
-3.6	**-1568.183592**	**-1731.429469**	**-987.690347**	**-1190.46615**	**-1282.33366**

+3.6	**5505.839607**	**5986.494205**	**3551.134586**	**4240.532355**	**4555.835745**
-3.65	**-1372.160636**	**-1515.000784**	**-864.229052**	**-1041.65788**	**-1122.04195**
+3.65	**5318.690841**	**5847.915079**	**3481.85014**	**4165.830077**	**4454.371692**
-3.7	**-1176.13768**	**-1298.572099**	**-740.767757**	**-892.849617**	**-961.750245**
+3.7	**5027.142495**	**5521.639676**	**3302.658931**	**3960.237008**	**4244.064667**
-3.75	**-980.1147239**	**-1082.143413**	**-617.306462**	**-744.041348**	**-801.45854**
+3.75	**4574.64577**	**5019.994549**	**3032.391046**	**3652.869372**	**3883.670698**
-3.8	**-784.0917677**	**-865.7147282**	**-493.845167**	**-595.23308**	**-641.166834**
+3.8	**4006.251745**	**4355.807494**	**2648.064474**	**3201.986786**	**3377.572187**
-3.85	**-588.0688116**	**-649.2860431**	**-370.383872**	**-446.424811**	**-480.875129**
+3.85	**3277.188471**	**3503.599728**	**2148.760929**	**2603.293597**	**2752.27955**
-3.9	**-392.0458555**	**-432.8573579**	**-246.922577**	**-297.616543**	**-320.583424**
+3.9	**2356.47235**	**2523.141259**	**1563.266267**	**1888.487016**	**1992.935289**
-3.95	**-196.0228994**	**-216.4286728**	**-123.461282**	**-148.808275**	**-160.291719**
+3.95	**1282.736341**	**1369.292534**	**847.3820417**	**1023.570028**	**1081.958542**
-5	**-5.53E-13**	**-7.05E-13**	**-4.37E-13**	**-5.22E-13**	**-4.82E-13**
+5	**4.81E-13**	**5.00E-13**	**3.48E-13**	**3.88E-13**	**3.43E-13**

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.19276505	-5.715058644	-8.116090952	-8.646093783	-11.48497746	-4.583236804	-6.192560126	-7.088247862	-7.936917493	-8.830094239
End Shear	65.64905167	46.67357826	61.57137383	62.18848729	66.16590852	37.61341441	50.70506179	57.34566581	62.62678859	68.00740671
-0.05	-8.19276505	-5.715058644	-8.116090952	-8.646093783	-11.52197481	-4.583236804	-6.192560126	-7.088247862	-7.936917493	-8.830094239
+0.05	61.09895807	43.50209462	57.01456315	57.29656136	59.30361283	35.07179409	47.27592312	53.41711449	58.23549696	63.12762302
-0.1	-8.19276505	-5.715058644	-8.116090952	-8.646093783	-11.6513625	-4.583236804	-6.192560126	-7.088247862	-7.936917493	-8.830094239
+0.1	56.39361282	40.22284574	52.31015241	52.25518244	52.66437912	32.44499856	43.72981678	49.35490842	53.69752232	58.08792913
-0.15	-8.19276505	-5.715058644	-8.116090952	-8.646093783	-11.83589131	-4.797583305	-6.405107131	-7.088247862	-7.936917493	-8.830094239
+0.15	52.45998831	37.43668426	48.33218979	48.00760803	47.34535034	30.21241704	40.71608439	45.9049671	49.8480916	53.81801803
-0.2	-11.46158801	-8.936599697	-8.116090952	-8.646093783	-12.13646791	-7.425356959	-9.953607744	-10.55727341	-10.53605323	-10.53371099
+0.2	47.85853543	34.22475083	43.76913379	43.15377359	41.43957618	27.63774981	37.2408013	41.92954184	45.41777994	48.90987705
-0.25	-15.34055359	-11.7304723	-11.04198929	-9.700167328	-12.46651277	-9.659128086	-12.97025688	-14.02631684	-14.08649587	-14.08387351
+0.25	43.97772384	31.51277807	39.93647832	39.09334129	36.86831318	25.46304185	34.30558266	38.57443154	41.68355668	44.77828901
-0.3	-19.99869736	-14.95407608	-15.27895083	-12.99457885	-13.85540127	-12.23559577	-16.44995414	-18.03066213	-18.59452055	-18.93177725
+0.3	39.53818164	28.40663787	35.57111629	34.48862942	31.7911991	22.97128334	30.94267902	34.73350045	37.41439683	40.06134893
-0.35	-23.93969425	-17.67834933	-19.17143735	-16.75865438	-16.9111168	-14.41220134	-19.38982539	-21.41624402	-22.41063285	-23.20753183
+0.35	35.81992874	25.80183255	31.93205085	30.66812381	27.81790729	20.88082917	28.12159376	31.51411455	33.84122005	36.11920752
-0.4	-28.46299494	-20.80151048	-23.83409636	-21.103689	-21.08114588	-16.90658399	-22.75916657	-25.29935636	-26.79315648	-28.12404502
+0.4	31.5977802	22.83996031	27.82071813	26.37410781	23.80899537	18.50275704	24.91261973	27.85538524	29.786688	31.65310661
-0.45	-32.26466308	-23.4232002	-27.76805885	-25.22127309	-25.21324205	-18.99963985	-25.58663525	-28.5605785	-30.47877649	-32.26415187
+0.45	28.08965325	20.37530018	24.42354302	22.84629967	20.56982713	16.52294279	22.24128451	24.8126238	26.42040379	27.95153304
-0.5	-36.59770832	-26.40744804	-32.27019877	-30.21880239	-30.18850754	-21.38116046	-28.80406964	-32.27475288	-34.68231553	-36.99259213
+0.5	24.14039905	17.59617155	20.62257778	18.92455782	17.01274419	14.2893376	19.22779552	21.38380929	22.63398841	23.79591625
-0.55	-40.2125516	-28.89357529	-36.04242797	-34.42176609	-34.62126941	-23.36428321	-31.48352222	-35.37072084	-38.19159941	-40.94592617
+0.55	20.8899602	15.30464083	17.51557628	15.74223077	14.1617403	12.44654352	16.74182346	18.55856433	19.5204431	20.38603145
-0.6	-44.29992419	-31.7004283	-40.32771067	-39.21537236	-39.73712606	-25.60216001	-34.50749295	-38.86824038	-42.1626717	-45.4266415
+0.6	17.26909048	12.7467308	14.08131589	12.37811695	11.16665504	10.3881846	13.96537244	15.4073751	16.05562768	16.60054024
-0.65	-47.68043829	-34.01801652	-43.8899176	-43.21716537	-44.11292983	-27.44896892	-37.00331631	-41.75805964	-45.44977605	-49.14208881
+0.65	14.32391021	10.66130351	11.3127774	9.851228798	8.927686168	8.708793127	11.7003879	12.84054241	13.2406575	13.53346707
-0.7	-51.46672823	-36.60900415	-47.90200689	-47.74527643	-49.38630666	-29.5124228	-39.79227113	-44.99121605	-49.13489627	-53.31544329
+0.7	11.08691609	8.3630877	8.38395689	7.138751849	6.555915623	6.856459824	9.202527748	10.01468887	10.15092585	10.17774684
-0.75	-54.56541874	-38.72507232	-51.20590295	-51.49311048	-53.76222032	-31.19653739	-42.06883963	-47.63399044	-52.15397283	-56.74187705
+0.75	8.494555948	6.516747924	6.173636373	5.369576301	4.99333114	5.366850798	7.194144446	7.747163361	7.723459658	7.723047119
-0.8	-57.99520389	-41.06171375	-54.88846075	-55.69415048	-58.78572055	-33.05478734	-44.58122542	-50.55507345	-55.49965736	-60.54822855
+0.8	5.779363618	4.516702702	4.129001611	3.643057051	3.484414075	3.75132489	5.0164294	5.294357204	5.286825001	5.286424138
-0.85	-60.76457592	-42.9432835	-57.88576128	-59.13524357	-62.97490757	-34.54982282	-46.60292616	-52.90990812	-58.20487101	-63.63452331
+0.85	3.758850017	2.942425053	2.938075078	2.336610286	2.358276485	2.477882984	3.300262339	3.490363684	3.490025209	3.489694697
-0.9	-63.78244442	-44.98710781	-61.18245047	-62.9476362	-69.24578838	-36.17209297	-48.79718906	-55.47120614	-61.15763532	-67.01423295
+0.9	1.827274323	1.647775262	1.7505109	1.842367782	2.096996361	1.244978544	1.740861821	1.754688656	1.754370792	1.927960218
-0.95	-66.17499285	-46.60119974	-63.82485779	-66.02921722	-74.86383503	-37.4516655	-50.52840459	-57.49720625	-63.50313836	-69.70927062
+0.95	1.787793011	1.249586349	1.7505109	1.842367782	2.044685831	1.003217126	1.355940193	1.549981706	1.734710401	1.927960218
-1	-68.72553105	-48.31372866	-66.67934115	-69.39139024	-82.05243227	-38.80717486	-52.36299124	-59.65101056	-66.00949595	-72.60269557
+1	1.79E+00	1.249586349	1.7505109	1.842367782	2.03E+00	1.003217126	1.355940193	1.549981706	1.734710401	1.927960218
(Span 2) -2	-6.279575863	-4.389139044	-6.148623424	-6.471268361	-7.114046569	-3.523773652	-4.762704174	-5.444269833	-6.093124698	-6.771909482
+2	68.94725223	48.40463644	67.2194913	70.3644859	91.37452575	38.86397697	52.44388244	59.79063487	66.25262992	72.97389373
-2.05	-6.279575863	-4.389139044	-6.148623424	-6.471268361	-7.139895054	-3.523773652	-4.762704174	-5.444269833	-6.093124698	-6.771909482
+2.05	66.3049534	46.6295441	64.28141038	66.93548464	84.1007181	37.45839422	50.54116809	57.55744924	63.65359885	69.97545233
-2.1	-6.279575863	-4.389139044	-6.148623424	-6.471268361	-7.226782325	-3.523773652	-4.762704174	-5.444269833	-6.093124698	-6.771909482
+2.1	63.16814277	44.50725097	60.86347454	63.00675859	76.32669967	35.77396055	48.26220315	54.89556818	60.58008019	66.45497583
-2.15	-6.279575863	-4.389139044	-6.148623424	-6.471268361	-7.383397889	-3.523773652	-4.762704174	-5.444269833	-6.093124698	-6.771909482
+2.15	59.73449292	42.17102288	57.18348943	58.83116152	68.47484971	33.91632115	45.74994536	51.97236398	57.22603222	62.63543594
-2.2	-7.931476858	-6.08201202	-6.148623424	-6.471268361	-7.617405471	-5.005184827	-6.711349851	-7.239782188	-7.216070286	-7.215162888
+2.2	56.04739013	39.65093737	53.2854925	54.45680863	61.01875767	31.90952948	43.03687269	48.82512567	53.63326776	58.56343371
-2.25	-11.28515645	-8.468516339	-8.707615346	-7.525667158	-7.978377459	-6.929845051	-9.307033904	-10.1739634	-10.41091289	-10.54828465

+2.25	52.15019576	36.9770557	49.21352243	49.93183733	53.90346135	29.77764155	40.15545503	45.49114751	49.84358257	54.28559847
-2.3	-14.90413998	-11.03113135	-12.10612247	-10.6263018	-10.712542	-8.99332251	-12.09066637	-13.33047711	-13.87782522	-14.32905546
+2.3	48.08628124	34.17945253	45.01159551	45.30436042	47.21794491	27.54471977	37.13818125	42.00770831	45.89877718	49.84852696
-2.35	-18.74513285	-13.73978442	-15.7696615	-14.1988117	-13.89582899	-11.17155954	-15.02977734	-16.67204678	-17.5646058	-18.36876299
+2.35	43.89902733	31.28820784	40.7237514	40.57167591	41.08825856	25.23481306	34.01752214	38.41210332	41.84065406	45.29885258
-2.4	-22.76481115	-16.56439741	-19.65421171	-18.2038231	-17.5228768	-13.44049539	-18.09187925	-20.16137736	-21.42943898	-22.62077742
+2.4	39.63179121	28.33337818	36.26649742	35.79695379	35.34342364	22.87197809	30.82595397	34.74161949	37.71100528	40.68316994
-2.45	-26.91986742	-19.4749089	-23.71573544	-22.44179116	-21.44733765	-15.77608043	-21.24450013	-23.7611797	-25.43053088	-27.03850017
+2.45	35.32795743	25.29616551	31.93966075	31.15271898	30.07574173	20.4802778	27.56741369	30.93030635	33.46839579	35.93068083
-2.5	-31.16700395	-22.44124312	-27.91019526	-26.86460697	-25.56975326	-18.15425681	-24.45516383	-27.43416403	-29.526081	-31.57530275
+2.5	30.96176406	22.26555064	27.66029773	26.59991414	25.32109554	18.01345301	24.26507002	27.21650762	29.28303398	31.30567751
-2.55	-35.2096226	-25.27649118	-31.93993971	-31.15299977	-30.0759516	-20.48043674	-27.54894679	-30.92454584	-33.45987591	-35.9221914
+2.55	26.96418176	19.47471847	23.71547545	22.44153401	21.44716227	15.77592339	21.24429424	23.76094409	25.43026917	27.03821086
-2.6	-39.51183936	-28.33357073	-36.26677016	-35.79723842	-35.34363349	-22.87214067	-30.82615619	-34.74185837	-37.71128148	-40.68346975
+2.6	22.80655046	16.56421155	19.65395415	18.20357823	17.53169285	13.44034175	18.0916781	20.16114788	21.42918427	22.62050422
-2.65	-43.90329965	-31.28839644	-40.72403018	-40.55785538	-41.08851217	-25.23496824	-34.01772665	-38.41233817	-41.84091899	-45.29914917
+2.65	18.78395783	13.7396002	15.76942347	14.19857515	13.89568286	11.17140763	15.02958286	16.67182549	17.56435376	18.36848641
-2.7	-48.08863658	-34.1796431	-45.01186296	-45.30464615	-47.21820476	-27.5448723	-37.13838049	-42.00793835	-45.89903684	-49.84881879
+2.7	14.93976901	11.03095639	12.10590072	10.62610514	10.71241632	8.993181526	12.09048635	13.33026678	13.87759999	14.32880219
-2.75	-52.15076307	-36.97723283	-49.21378286	-49.93211808	-53.90374738	-29.77779166	-40.15564681	-45.49136294	-49.84383324	-54.28587324
+2.75	11.31737086	8.468360229	8.707404751	7.525491819	7.978261918	6.929708562	9.306864516	10.17376057	10.41069695	10.5480499
-2.8	-56.04636329	-39.65110553	-53.28574331	-54.45708097	-61.01904836	-31.90966726	-43.03704866	-48.8253355	-53.63351354	-58.56371198
+2.8	7.960126018	6.08186413	6.148623126	6.471268116	7.617405559	5.005058983	6.711193846	7.239595758	7.215890124	7.214987735
-2.85	-59.73213359	-42.17118489	-57.18373514	-58.83141633	-68.47489347	-33.91645385	-45.75011007	-51.97256061	-57.22625711	-62.63569172
+2.85	6.279586996	4.389139108	6.148623126	6.471268116	7.383397973	3.523773561	4.762704295	5.444269769	6.093124598	6.771909223
-2.9	-63.16476475	-44.50739937	-60.86369855	-63.00699921	-76.318037	-35.77408113	-48.26235419	-54.89574948	-60.5802888	-66.45521379
+2.9	6.279586996	4.389139108	6.148623126	6.471268116	7.226782398	3.523773561	4.762704295	5.444269769	6.093124598	6.771909223
-2.95	-66.300946	-46.62967033	-64.28161707	-66.93571714	-84.10102568	-37.45850035	-50.5413117	-57.55761204	-63.65378287	-69.97566354
+2.95	6.279586996	4.389139108	6.148623126	6.471268116	7.139895136	3.523773561	4.762704295	5.444269769	6.093124598	6.771909223
-3	-69.09737653	-48.50794237	-67.39347039	-70.56941644	-91.82716503	-38.94566047	-52.55449018	-59.92085991	-66.40496006	-73.15043811
+3	6.279586996	4.389139108	6.148623126	6.471268116	7.114046643	3.523773561	4.762704295	5.444269769	6.093124598	6.771909223
(Span 3) -4	-1.79E+00	-1.249586368	-1.750510815	-1.842367712	-2.03E+00	-1.0032171	-1.355940228	-1.549981688	-1.734710372	-1.927960144
+4	68.5665035	48.1975837	66.48371723	69.15966184	81.54435318	38.71532918	52.23866422	59.50477283	65.83880369	72.40510421
-3.05	-1.79E+00	-1.249586368	-1.750510815	-1.842367712	-2.04E+00	-1.0032171	-1.355940228	-1.549981688	-1.734710372	-1.927960144
+3.05	66.38109446	46.72958514	64.0368369	66.27762912	75.37446939	37.55336734	50.66603017	57.6585056	63.69033615	69.92483778
-3.1	-1.908542633	-1.734321795	-1.750510815	-1.842367712	-2.102960589	-1.300767247	-1.84222809	-1.872522622	-1.872198475	-1.927960144
+3.1	63.59067468	44.84659085	60.95419724	62.68263488	68.79976547	36.06061639	48.64639591	55.29497677	60.95406374	66.78080685
-3.15	-3.585587014	-2.82368653	-2.843016031	-2.260993885	-2.292124588	-2.37670306	-3.163924826	-3.360356864	-3.360024768	-3.359692671
+3.15	61.00411732	43.09462664	58.12829836	59.41468473	63.3945532	34.67000973	46.76547847	53.09943985	58.42296679	63.88372433
-3.2	-5.940245614	-4.653997585	-4.232356423	-3.761397847	-3.586434549	-3.862299307	-5.166000276	-5.462586008	-5.453965896	-5.45356745
+3.2	57.7734452	40.89956714	54.63160862	55.40025468	58.42721076	32.92588823	44.40694564	50.35226003	55.26703251	60.28322888
-3.25	-8.269745138	-6.368438848	-5.997127264	-5.241375115	-4.879826157	-5.247133308	-7.032733448	-7.565141316	-7.542659747	-7.54224134
+3.25	54.83329652	38.89661621	51.47496722	51.79918054	54.11897875	31.3330135	42.2533426	47.84833807	52.39914855	57.02045014
-3.3	-11.29136485	-8.522387266	-8.575700905	-7.302911562	-6.700692559	-6.984916459	-9.375728916	-10.2104484	-10.36461014	-10.40939804
+3.3	51.21786011	36.42798829	47.62058	47.42689528	49.01380151	29.36830302	39.59746684	44.765245	48.87703919	53.02313542
-3.35	-14.0637364	-10.49240203	-11.08994563	-9.648087504	-8.749031543	-8.572725514	-11.51688147	-12.63275846	-13.013107	-13.28592245
+3.35	47.97170145	34.20701865	44.18148563	43.54547498	44.48117846	27.59953206	37.20681737	41.99381941	45.71821348	49.44578286
-3.4	-17.49679607	-12.92529079	-14.31975185	-12.59596899	-11.36108331	-10.5319297	-14.15924278	-15.62725402	-16.29708913	-16.86399107
+3.4	44.02698014	31.50328678	40.02575606	38.87690892	39.37594926	25.44501896	34.29515107	38.62251018	41.88341095	45.11128986
-3.45	-20.59810056	-15.11789991	-17.26356805	-15.48515428	-13.93279192	-12.29632422	-16.53918705	-18.32840864	-19.26708369	-20.10888653
+3.45	40.49896736	29.09729923	36.35247913	34.76792253	34.99082463	23.52674436	31.70304751	35.62448756	38.47948541	41.27048557
-3.5	-24.38718844	-17.79123301	-20.88824739	-19.19768652	-17.25885681	-14.44616348	-19.43936247	-21.62439744	-22.89940701	-24.08689866
+3.5	36.28150375	26.19692662	31.95172591	29.86465105	29.83512022	21.21318991	28.57714324	32.01267284	34.38549288	36.65845546
-3.55	-27.76990788	-20.17345568	-24.14637952	-22.55934773	-20.30789668	-16.36077579	-22.02246727	-24.56351426	-26.14505637	-27.64904423
+3.55	32.56705455	23.63888986	28.09257302	25.58087917	25.57048746	19.17180377	25.8192305	28.82895025	30.78229307	32.60532208
-3.6	-31.85960964	-23.04878029	-28.10957509	-26.67493837	-24.08681253	-18.67046135	-25.1389016	-28.11325584	-30.0722357	-31.96735715
+3.6	28.13170015	20.58037764	23.50313523	20.79516258	20.76234256	16.72999639	22.52064265	25.02434093	26.48257745	27.77539716

-3.65	**-35.47623059**	**-25.58763898**	**-31.63375201**	**-30.35570591**	**-27.50801794**	**-20.70890178**	**-27.88957666**	**-31.24945549**	**-33.54769714**	**-35.7956301**
+3.65	**24.25425792**	**17.90327199**	**19.50641739**	**17.07069907**	**17.18743932**	**14.59186085**	**19.63251**	**21.69583089**	**22.72596501**	**23.56107898**
-3.7	**-39.81112795**	**-28.6264671**	**-35.87914364**	**-34.81277907**	**-32.144625**	**-23.14767266**	**-31.18071649**	**-35.00525342**	**-37.71622979**	**-40.39460161**
+3.7	**19.65642826**	**14.72506858**	**14.97746598**	**12.73559852**	**13.67972908**	**12.05259123**	**16.20279081**	**17.74612034**	**18.27400929**	**18.57287916**
-3.75	**-43.61418886**	**-31.28898265**	**-39.62104068**	**-38.75985671**	**-36.49660671**	**-25.28354828**	**-34.0633172**	**-38.29762617**	**-41.37567712**	**-44.43787931**
+3.75	**15.66345078**	**11.9618715**	**11.34564901**	**9.904233184**	**12.49700777**	**9.844098431**	**13.22006866**	**14.31370015**	**14.40982665**	**14.40721605**
-3.8	**-48.13886993**	**-34.4528249**	**-44.09230986**	**-43.49683678**	**-41.82956842**	**-27.82061601**	**-37.48760948**	**-42.21177011**	**-45.73209728**	**-49.25786797**
+3.8	**11.15163701**	**8.702467051**	**8.116091318**	**8.646094062**	**12.1119694**	**7.23812441**	**9.700773138**	**10.26663518**	**10.24777497**	**10.24543358**
-3.85	**-52.08083229**	**-37.20601767**	**-48.00365573**	**-47.65744517**	**-46.91185574**	**-30.02756536**	**-40.4665468**	**-45.6194033**	**-49.52967011**	**-53.46502908**
+3.85	**8.192774001**	**5.886158946**	**8.116091318**	**8.646094062**	**11.8543231**	**4.985668524**	**6.659095194**	**7.088248527**	**7.936918206**	**8.830094879**
-3.9	**-56.73990178**	**-40.45642634**	**-52.64444742**	**-52.61275571**	**-53.1171757**	**-32.63213896**	**-43.98243808**	**-49.64419914**	**-54.02049362**	**-58.44639261**
+3.9	**8.192774001**	**5.715058697**	**8.116091318**	**8.646094062**	**11.63904702**	**4.583237222**	**6.192560242**	**7.088248527**	**7.936918206**	**8.830094879**
-3.95	**-60.7732869**	**-43.26731704**	**-56.67695316**	**-56.93411529**	**-58.80037567**	**-34.88376872**	**-47.02206489**	**-53.12621418**	**-57.91034775**	**-62.76631469**
+3.95	**8.192774001**	**5.715058697**	**8.116091318**	**8.646094062**	**11.52813957**	**4.583237222**	**6.192560242**	**7.088248527**	**7.936918206**	**8.830094879**
-5	**-65.51128909**	**-46.56580168**	**-61.43090825**	**-62.04618036**	**-66.05605372**	**-37.52509116**	**-50.58800116**	**-57.21393356**	**-62.48209076**	**-67.84941109**
+5	**8.192774001**	**5.715058697**	**8.116091318**	**8.646094062**	**11.48497712**	**4.583237222**	**6.192560242**	**7.088248527**	**7.936918206**	**8.830094879**

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.19276505	-7.470218848	-8.038188957	-7.576832928	-9.173901004	-9.43064742	-9.981723793	-3.980970375
End Shear	65.64905167	61.9210723	66.21099055	62.13603902	74.31890726	70.82835919	74.88140941	32.6784216
-0.05	-8.19276505	-7.470218848	-8.038188957	-7.576832928	-9.173901004	-9.43064742	-9.981723793	-3.980970375
+0.05	61.09895807	57.78642984	61.76064481	57.94336144	69.24211121	65.54203988	69.28557479	30.4794361
-0.1	-8.19276505	-7.470218848	-8.038188957	-7.576832928	-9.173901004	-9.43064742	-9.981723793	-3.980970375
+0.1	56.39361282	53.50985544	57.15910641	53.60712089	63.99480732	60.0867644	63.51129064	28.18193913
-0.15	-8.19276505	-8.597333654	-8.786057651	-7.993181866	-9.173901004	-9.43064742	-9.981723793	-4.130012179
+0.15	52.45998831	49.87288205	53.2470669	49.92142083	59.53746643	55.47577355	58.63099572	26.23000423
-0.2	-11.46158801	-12.86367271	-13.38356683	-12.32992462	-13.95446053	-9.515427886	-10.07083622	-6.222010185
+0.2	47.85853543	45.67600463	48.73431904	45.67071488	54.40008983	50.18884536	53.03568679	23.97991897
-0.25	-15.34055359	-16.48815185	-17.29068531	-16.01623113	-18.43053493	-12.13463979	-12.85765543	-8.179890699
+0.25	43.97772384	42.12877988	44.92147162	42.08009561	50.06335472	45.75019062	48.33848695	22.08020758
-0.3	-19.99869736	-20.666111	-21.79597903	-20.26785362	-23.59626953	-17.0773014	-17.97610674	-10.43898417
+0.3	39.53818164	38.06161851	40.55138062	37.96571521	45.0974705	40.69703097	42.99142277	19.90456513
-0.35	-23.93969425	-24.19340257	-25.60097338	-23.85944022	-27.9628883	-21.61035763	-22.76747866	-12.34818799
+0.35	35.81992874	34.64701301	36.88389371	34.51371208	40.93411157	36.48677857	38.53668223	18.08024625
-0.4	-28.46299494	-28.23296727	-29.96019015	-27.97515589	-32.9701362	-27.0354819	-28.51299835	-14.53697316
+0.4	31.5977802	30.75958492	32.71032474	30.58644049	36.20127512	31.7328043	33.50712772	16.00607686
-0.45	-32.26466308	-31.62019542	-33.61688658	-31.42848118	-37.1745221	-31.61469682	-33.36297862	-16.37432903
+0.45	28.08965325	27.52046823	29.23436534	27.31658471	32.26405704	27.80704048	29.35423193	14.28032197
-0.5	-36.59770832	-35.47134623	-37.77615886	-35.35750577	-41.96172729	-36.85763178	-38.91631711	-18.46577533
+0.5	24.14039905	23.86278933	25.31118139	23.62721223	27.82583236	23.41767148	24.71145518	12.33466197
-0.55	-40.2125516	-38.67564689	-41.23839618	-38.62904197	-45.95111907	-41.25264686	-43.57188379	-20.20811251
+0.55	20.8899602	20.84203996	22.0729264	20.58303088	24.16751539	19.83246297	20.91976891	10.7306403
-0.6	-44.29992419	-42.28836715	-45.14386007	-42.32058395	-50.45671555	-46.24797266	-48.86377304	-22.17518914
+0.6	17.26909048	17.4641268	18.45399157	17.18234433	20.08546224	15.8731184	16.73303728	8.94051588
-0.65	-47.68043829	-45.2668607	-48.36545998	-45.36680397	-54.17835318	-50.40271431	-53.26555409	-23.79933807
+0.65	14.32391021	14.70461281	15.49960664	14.40737845	16.7588235	12.68453894	13.36193273	7.481398445
-0.7	-51.46672823	-48.59113453	-51.96325225	-48.77007708	-58.3407821	-55.08501334	-58.22672836	-25.61500958
+0.7	11.08691609	11.65647875	12.23878155	11.34616472	13.09450174	9.313335141	9.803510675	5.873843845
-0.75	-54.56541874	-51.3009519	-54.89804833	-51.54743858	-61.74188697	-58.94340899	-62.31535284	-27.09780038
+0.75	8.494555948	9.201071468	9.614435788	8.88394219	10.15230231	6.82838678	7.231623473	4.582800058
-0.8	-57.99520389	-54.2867655	-58.1343078	-54.61165571	-65.49958811	-63.24726118	-66.87654382	-28.73503926
+0.8	5.779363618	6.53274094	6.765592734	6.212989715	6.967273566	4.851138705	5.130953395	3.184849509
-0.85	-60.76457592	-56.68503541	-60.73613088	-57.07663172	-68.52740043	-66.75324263	-70.59264539	-30.05330105
+0.85	3.758850017	4.424311973	4.517455587	4.107039928	4.462276353	3.31585299	3.500158041	2.159292467
-0.9	-63.78244442	-59.28236558	-63.55698651	-59.75100487	-71.81881245	-70.61322925	-74.68458621	-31.48507269
+0.9	1.827274323	2.339825632	2.339825632	2.13375229	2.24579479	2.034784547	2.153307507	1.303905651
-0.95	-66.17499285	-61.32621665	-65.77966741	-61.86006296	-74.42056554	-73.71071292	-77.96878227	-32.61563424
+0.95	1.787793011	1.637243644	1.761110004	1.659816904	2.008732928	2.034784547	2.153307507	0.868002269
-1	-68.72553105	-63.48504925	-68.13125776	-64.09380471	-77.18412811	-77.06141514	-81.5222059	-33.81491009
+1	1.79E+00	1.637243644	1.761110004	1.659816904	2.008732928	2.034784547	2.153307507	0.868002269
(Span 2) -2	-6.279575863	-5.750775305	-6.185852479	-5.830063197	-7.055621336	-7.147127272	-7.563435999	-3.048835088
+2	68.94725223	63.536778	68.21057087	64.18373509	77.34336612	77.72461186	82.23184404	33.86407855
-2.05	-6.279575863	-5.750775305	-6.185852479	-5.830063197	-7.055621336	-7.147127272	-7.563435999	-3.048835088
+2.05	66.3049534	61.29806745	65.77155263	61.86669279	74.47608628	74.27614668	78.57521838	32.62038962
-2.1	-6.279575863	-5.750775305	-6.185852479	-5.830063197	-7.055621336	-7.147127272	-7.563435999	-3.048835088
+2.1	63.16814277	58.60324479	62.84301785	59.089128	71.05417605	70.27305515	74.33185073	31.13350467
-2.15	-6.279575863	-5.750775305	-6.185852479	-5.830063197	-7.055621336	-7.147127272	-7.563435999	-3.048835088
+2.15	59.73449292	55.62096543	59.6084562	56.02519965	67.29262826	65.9706989	69.77248133	29.49685127
-2.2	-7.931476858	-8.569783669	-8.962122639	-8.285839356	-9.484893914	-7.147127272	-7.563435999	-4.29827455
+2.2	56.04739013	52.39033199	56.10997793	52.71460279	63.23955813	61.42021431	64.95125455	27.73156133
-2.25	-11.28515645	-11.73863723	-12.35167289	-11.46765828	-13.29245151	-9.721769628	-10.23499705	-5.967272108

+2.25	52.15019576	48.95042927	52.38967447	49.19702369	58.94307015	56.67273928	59.92231647	25.85875403
-2.3	-14.90413998	-15.12708259	-15.98124845	-14.87796444	-17.38443373	-13.63709133	-14.37418939	-7.759909652
+2.3	48.08628124	45.34034978	48.4896453	45.51217	54.45129529	51.77938548	54.73978529	23.89956112
-2.35	-18.74513285	-18.69602001	-19.80874165	-18.47707189	-21.71273507	-17.86519619	-18.84543065	-9.655059651
+2.35	43.89902733	41.59918609	44.45199002	41.69972888	49.8123381	46.79129184	49.4578081	21.87511003
-2.4	-22.76481115	-22.40636151	-23.79205775	-22.22527371	-26.22922693	-22.35496705	-23.59459683	-11.63160016
+2.4	39.63179121	37.7660275	40.31880524	37.79939324	45.07431249	41.61146704	43.97371351	19.80652635
-2.45	-26.91986742	-26.21901618	-27.88909913	-26.0828821	-30.88580272	-27.05526749	-28.56754344	-13.66840124
+2.45	35.32795743	33.87996615	36.13218997	33.8172805	40.25175376	36.58829822	38.65635698	17.71493804
-2.5	-31.16700395	-30.09489209	-32.05776642	-30.01020397	-35.63434953	-31.91496116	-33.71012613	-15.74433526
+2.5	30.96176406	29.86559195	31.81104491	29.77771396	35.35303397	31.62528348	33.40355978	15.62147168
-2.55	-35.2096226	-33.88021891	-36.13246227	-33.79556435	-40.23009214	-36.58862195	-38.65669965	-17.71498281
+2.55	26.96418176	26.21875968	27.88882326	26.08263024	30.88549856	27.05496647	28.56722491	13.66835674
-2.6	-39.51183936	-37.76628437	-40.31908226	-37.79964035	-45.07461271	-41.61178394	-43.97404899	-19.806571
+2.6	22.80655046	22.40611101	23.79178868	22.2250275	26.22893003	22.35466916	23.59428168	11.63155703
-2.65	-43.90329965	-41.59943822	-44.45226217	-41.69997871	-49.81264211	-46.79161602	-49.45815135	-21.87515416
+2.65	18.78395783	18.69577738	19.80848124	18.47683369	21.71244832	17.86492123	18.84513984	9.655017861
-2.7	-48.08863658	-45.34059555	-48.48991062	-45.51241342	-54.45159146	-51.7796967	-54.74011485	-23.89960464
+2.7	14.93976901	15.12685156	15.98100075	14.87774384	17.38416849	13.63683562	14.37391901	7.759866676
-2.75	-52.15076307	-48.950664	-52.38992807	-49.19725779	-58.94335594	-56.67304268	-59.92263784	-25.85879228
+2.75	11.31737086	11.73842449	12.35144521	11.46745083	13.2922031	9.721527266	10.23474088	5.967233434
-2.8	-56.04636329	-52.39055353	-56.11021762	-52.71481772	-63.23982095	-61.42050689	-64.95156452	-27.73159694
+2.8	7.960126018	8.569587271	8.961912738	8.28564805	9.484665401	7.147127706	7.563435619	4.298239927
-2.85	-59.73213359	-55.62117249	-59.6086806	-56.02540043	-67.29287443	-65.97098595	-69.77278549	-29.49688773
+2.85	6.279586996	5.75077569	6.185852308	5.830062965	7.055621628	7.147127706	7.563435619	3.04882126
-2.9	-63.16476475	-58.60342908	-62.84321799	-59.08931202	-71.05440238	-70.2733173	-74.33212857	-31.13353687
+2.9	6.279586996	5.75077569	6.185852308	5.830062965	7.055621628	7.147127706	7.563435619	3.04882126
-2.95	-66.300946	-61.29823186	-65.77173145	-61.86686772	-74.47630233	-74.27638905	-78.57547533	-32.62041898
+2.95	6.279586996	5.75077569	6.185852308	5.830062965	7.055621628	7.147127706	7.563435619	3.04882126
-3	-69.09737653	-63.66649006	-68.35212313	-64.31835448	-77.51043672	-77.92908474	-82.44870248	-33.93640626
+3	6.279586996	5.75077569	6.185852308	5.830062965	7.055621628	7.147127706	7.563435619	3.04882126
(Span 3) -4	-1.79E+00	-1.637243753	-1.761109955	-1.659816838	-2.008733011	-2.034784671	-2.153307399	-0.867998344
+4	68.5665035	63.33903211	67.9720469	63.94247766	76.99658556	76.83160183	81.27845926	33.73364652
-3.05	-1.79E+00	-1.637243753	-1.761109955	-1.659816838	-2.008733011	-2.034784671	-2.153307399	-0.867998344
+3.05	66.38109446	61.48845046	65.95623239	62.02768161	74.62762337	73.95936201	78.23244591	32.7056215
-3.1	-1.908542633	-2.462751244	-2.462751244	-2.263200501	-2.388573324	-2.034784671	-2.153307399	-1.358281579
+3.1	63.59067468	59.10409052	63.363248	59.56725691	71.59241859	70.34582748	74.40109187	31.38671559
-3.15	-3.585587014	-4.256554731	-4.338717903	-3.93968663	-4.263503233	-3.193625084	-3.37034126	-2.091174007
+3.15	61.00411732	56.87765586	60.94520851	57.27478972	68.77102992	67.03707572	70.89351096	30.15940717
-3.2	-5.940245614	-6.716245203	-6.961390301	-6.396482106	-7.185823313	-4.984692942	-5.272830722	-3.280715528
+3.2	57.7734452	54.07981856	57.9099039	54.39912857	65.23875742	62.94695117	66.5582573	28.62152022
-3.25	-8.269745138	-9.003536202	-9.403418116	-8.686016812	-9.916026553	-6.68453486	-7.078778797	-4.479034118
+3.25	54.83329652	51.52040247	55.13580865	51.7724984	62.01767899	59.25774551	62.64846443	27.21809155
-3.3	-11.29136485	-11.86803282	-12.46499852	-11.55846509	-13.34841732	-9.53413177	-10.03592818	-5.985168192
+3.3	51.21786011	48.35909863	51.71204133	48.53239096	58.04990225	54.75646765	57.87859707	25.48825538
-3.35	-14.0637364	-14.48086513	-15.26014885	-14.18252089	-16.48945686	-12.42804673	-13.0907851	-7.363152235
+3.35	47.97170145	45.50957273	48.62805973	45.61515705	54.48193347	50.74288208	53.62596467	23.93188892
-3.4	-17.49679607	-17.70016401	-18.70678697	-17.41983361	-20.37035679	-16.14787583	-17.02354955	-9.065371289
+3.4	44.02698014	42.03480053	44.86967392	42.06138944	50.14021186	45.89589087	48.49077305	22.03713583
-3.45	-20.59810056	-20.59566602	-21.80889031	-20.33486542	-23.86945058	-19.54179077	-20.61237895	-10.59983785
+3.45	40.49896736	38.93803611	41.52197531	38.89705335	46.27808159	41.61397711	43.95464995	20.35099617
-3.5	-24.38718844	-24.11972324	-25.5866926	-23.88625698	-28.13730139	-23.72435333	-25.03582162	-12.47111081
+3.5	36.28150375	35.19984219	37.48286746	35.08041253	41.62397505	36.4866698	38.52337819	18.318347
-3.55	-27.76990788	-27.25502245	-28.94957898	-27.04871586	-31.94166344	-27.4868578	-29.01554383	-14.13889402
+3.55	32.56705455	31.89871208	33.91762237	31.71254032	37.52049092	31.99252149	33.76315771	16.52560545
-3.6	-31.85960964	-31.03383356	-33.00469445	-30.86339679	-36.53490215	-32.06671213	-33.86037354	-16.15219754
+3.6	28.13170015	27.94710037	29.65164296	27.6838144	32.61556057	26.6503192	28.10507521	14.38211018

-3.65	**-35.47623059**	**-34.36605842**	**-36.58219423**	**-34.2297834**	**-40.59180565**	**-36.14175342**	**-38.1716386**	**-17.93012943**
+3.65	**24.25425792**	**24.48447637**	**25.91502083**	**24.15590411**	**28.32344697**	**22.00003528**	**23.18015623**	**12.50593611**
-3.7	**-39.81112795**	**-38.34962536**	**-40.860779**	**-38.25696611**	**-45.44887128**	**-41.05350041**	**-43.36860919**	**-20.05841424**
+3.7	**19.65642826**	**20.36944359**	**21.47601246**	**19.96587943**	**23.22925233**	**16.72529402**	**17.60557265**	**10.27861841**
-3.75	**-43.61418886**	**-41.83590491**	**-44.6067234**	**-41.78371461**	**-49.70550944**	**-45.38496385**	**-47.95200164**	**-21.92332404**
+3.75	**15.66345078**	**16.78819584**	**17.61418141**	**16.32147934**	**18.80129559**	**12.4858959**	**13.14304832**	**8.342171338**
-3.8	**-48.13886993**	**-45.97417558**	**-49.05487507**	**-45.97261201**	**-54.76484204**	**-50.56320618**	**-53.43186888**	**-24.13956727**
+3.8	**11.15163701**	**12.55979685**	**13.05604921**	**12.02094532**	**13.57939925**	**9.43064761**	**9.981724241**	**6.058063292**
-3.85	**-52.08083229**	**-49.57163737**	**-52.92309384**	**-49.61622498**	**-59.16849036**	**-55.09503905**	**-58.22803873**	**-26.06829451**
+3.85	**8.192774001**	**8.902798414**	**9.115180102**	**8.30360768**	**9.173901284**	**9.43064761**	**9.981724241**	**4.237796389**
-3.9	**-56.73990178**	**-53.81461249**	**-57.48696711**	**-53.91604954**	**-64.36852925**	**-60.47433721**	**-63.92151376**	**-28.34546374**
+3.9	**8.192774001**	**7.470219219**	**8.038189666**	**7.576833508**	**9.173901284**	**9.43064761**	**9.981724241**	**3.981000841**
-3.95	**-60.7732869**	**-57.48038465**	**-61.43129047**	**-57.63295799**	**-68.86637714**	**-65.1504663**	**-68.87108938**	**-30.31481877**
+3.95	**8.192774001**	**7.470219219**	**8.038189666**	**7.576833508**	**9.173901284**	**9.43064761**	**9.981724241**	**3.981000841**
-5	**-65.51128909**	**-61.77806556**	**-66.05704064**	**-61.99292165**	**-74.1455611**	**-70.66537603**	**-74.70887827**	**-32.62588262**
+5	**8.192774001**	**7.470219219**	**8.038189666**	**7.576833508**	**9.173901284**	**9.43064761**	**9.981724241**	**3.981000841**

3-Span: Shear (Max and Min) Raw Data Results - 130' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.19276505	-17.44209265	-19.2579927	-10.98556649	-13.24093595	-14.26273087
End Shear	65.64905167	123.7585619	132.4538283	81.5432319	98.40220928	104.1688347
-0.05	-8.19276505	-17.44209265	-19.2579927	-10.98556649	-13.24093595	-14.26273087
+0.05	61.09895807	113.9617749	121.8393321	75.35616216	90.96618851	96.151496
-0.1	-8.19276505	-17.44209265	-19.2579927	-10.98556649	-13.24093595	-14.26273087
+0.1	56.39361282	103.8702346	110.718364	68.97500362	83.29487786	87.88440509
-0.15	-8.19276505	-17.44209265	-19.2579927	-10.98556649	-13.24093595	-14.26273087
+0.15	52.45998831	95.36907621	101.3650246	63.58680015	76.81557795	80.90914825
-0.2	-11.46158801	-17.44209265	-19.2579927	-11.2925581	-13.24093595	-14.26273087
+0.2	47.85853543	85.65615661	90.69669356	57.41522208	69.39220767	72.92627875
-0.25	-15.34055359	-18.08344272	-19.2579927	-14.3565777	-16.23431254	-17.08910101
+0.25	43.97772384	77.53230095	81.79007566	52.23964248	63.16500823	66.23752736
-0.3	-19.99869736	-25.04870952	-26.48388009	-18.5195912	-22.80591123	-22.46030125
+0.3	39.53818164	68.32115864	71.71150128	46.35461455	56.08194262	58.63895517
-0.35	-23.93969425	-32.28427102	-33.25573392	-23.58617606	-28.88598572	-29.11527405
+0.35	35.81992874	60.68018377	63.36916766	41.45763713	50.18601876	52.32246395
-0.4	-28.46299494	-41.33119364	-41.58426355	-29.98211472	-36.55953429	-37.16387972
+0.4	31.5977802	52.09396266	54.01746347	35.9361145	43.53560266	45.20823213
-0.45	-32.26466308	-49.97711798	-50.55470912	-35.3858873	-43.04118632	-44.21347222
+0.45	28.08965325	45.04141442	46.35694543	31.38370562	38.05011259	39.34978221
-0.5	-36.59770832	-59.99984033	-61.76849266	-41.57902015	-50.4678126	-52.29923828
+0.5	24.14039905	37.20325945	37.86925793	26.30266684	31.92472169	32.81994395
-0.55	-40.2125516	-68.43100245	-71.21627039	-46.77598041	-56.69824104	-59.0900733
+0.55	20.8899602	30.84469577	31.00809388	22.16079019	26.92882164	27.50528945
-0.6	-44.29992419	-78.04941023	-82.01214585	-52.68933943	-63.78558295	-66.82391685
+0.6	17.26909048	23.92729222	24.2074458	17.59719407	21.42080607	21.65991516
-0.65	-47.68043829	-86.08124633	-91.04293962	-57.61350359	-69.68560813	-73.2702178
+0.65	14.32391021	18.81778645	19.31913362	13.93182568	16.9936681	17.07789501
-0.7	-51.46672823	-95.17218945	-101.28377	-63.17013489	-76.34132058	-80.55209448
+0.7	11.08691609	13.55786886	14.20260534	10.18393767	12.45235737	12.26397781
-0.75	-54.56541874	-102.6991247	-109.780039	-67.75553959	-81.83178648	-86.56810407
+0.75	8.494555948	9.950214775	10.26726267	8.085503982	9.064472637	9.534140431
-0.8	-57.99520389	-111.1394512	-119.3286829	-72.87846251	-87.963493	-93.29793877
+0.8	5.779363618	6.485936117	6.611409571	5.796104532	6.358999689	6.641542016
-0.85	-60.76457592	-118.0559364	-127.1729001	-77.05914473	-92.96524389	-98.7979027
+0.85	3.758850017	4.313027132	4.109506626	3.958510155	4.375896202	4.401649994
-0.9	-63.78244442	-125.7225066	-135.8922387	-81.67140143	-98.48059492	-104.8756463
+0.9	1.827274323	3.732480343	4.109506626	2.359342812	2.849507546	3.061410455
-0.95	-66.17499285	-131.922985	-142.9668451	-85.38137868	-102.9144519	-109.7737924
+0.95	1.787793011	3.732480343	4.109506626	2.359342812	2.849507546	3.061410455
-1	-68.72553105	-138.6926306	-150.7197537	-89.40600413	-107.7210898	-115.099383
+1	1.79E+00	3.732480343	4.109506626	2.359342812	2.849507546	3.061410455
(Span 2) -2	-6.279575863	-13.1102389	-14.43453375	-8.287129545	-10.00882026	-10.75312342
+2	68.94725223	140.6317271	153.140802	90.31756244	108.7738048	116.4081415
-2.05	-6.279575863	-13.1102389	-14.43453375	-8.287129545	-10.00882026	-10.75312342
+2.05	66.3049534	133.7168915	145.2432126	86.18784901	103.8361811	110.9495233
-2.1	-6.279575863	-13.1102389	-14.43453375	-8.287129545	-10.00882026	-10.75312342
+2.1	63.16814277	125.8031631	136.2592536	81.41445327	98.12314004	104.6621365
-2.15	-6.279575863	-13.1102389	-14.43453375	-8.287129545	-10.00882026	-10.75312342
+2.15	59.73449292	117.399906	126.7696151	76.30275673	91.99988697	97.94902593
-2.2	-7.931476858	-13.1102389	-14.43453375	-8.287129545	-10.00882026	-10.75312342
+2.2	56.04739013	108.6033731	116.8814586	70.91293077	85.53862704	90.88841422
-2.25	-11.28515645	-14.24182397	-14.95631863	-10.67375511	-13.04417449	-13.01730917

+2.25	52.15019576	99.50979883	106.701988	65.30511963	78.81153594	83.55849525
-2.3	-14.90413998	-20.51140536	-20.74421922	-15.08906966	-18.38265245	-18.55055918
+2.3	48.08628124	90.21546234	96.33835366	59.53946426	71.89078046	76.03745117
-2.35	-18.74513285	-27.84674813	-28.13096746	-19.96221581	-24.26627613	-24.7990803
+2.35	43.89902733	80.78547333	85.89776159	53.67614219	64.84857393	68.40351642
-2.4	-22.76481115	-35.86681043	-36.81897698	-25.15697595	-30.53158583	-31.47980114
+2.4	39.63179121	71.13367548	75.48735327	47.60179382	57.54851174	60.50961971
-2.45	-26.91986742	-44.35700971	-46.06678311	-30.61320511	-37.10640818	-38.51453297
+2.45	35.32795743	61.81857	65.2143377	41.72516654	50.48171305	52.88696058
-2.5	-31.16700395	-53.22109944	-55.76717156	-36.27076094	-43.9185722	-45.8250494
+2.5	30.96176406	52.69052021	55.18587653	35.9330922	43.51212735	45.38832915
-2.55	-35.2096226	-61.81911659	-65.2144197	-41.72554474	-50.48216775	-52.88743711
+2.55	26.96418176	44.35649307	46.06670722	30.61285506	37.10598685	38.51408154
-2.6	-39.51183936	-71.13424766	-75.48745125	-47.60216484	-57.54895789	-60.51010184
+2.6	22.80655046	35.86632039	36.81889257	25.15664056	30.53118148	31.47936935
-2.65	-43.90329965	-80.76529604	-85.89784338	-53.67651256	-64.84901901	-68.40399765
+2.65	18.78395783	27.84629029	27.90521324	19.96189886	24.26589327	24.79866151
-2.7	-48.08863658	-90.21603505	-96.3384546	-59.53984124	-71.89123299	-76.03792967
+2.7	14.93976901	20.51101703	20.81595582	15.08876702	18.38228614	18.55018191
-2.75	-52.15076307	-99.51037866	-106.7020903	-65.30548809	-78.8119782	-83.55896259
+2.75	11.31737086	14.24150916	14.95626557	10.67349634	13.04386198	13.01698265
-2.8	-56.04636329	-108.6039243	-116.881553	-70.91328661	-85.53905434	-90.88885459
+2.8	7.960126018	13.11023916	14.43453349	8.287129274	10.00882008	10.75312435
-2.85	-59.73213359	-117.4004349	-126.7696906	-76.30309748	-92.00029481	-97.94945873
+2.85	6.279586996	13.11023916	14.43453349	8.287129274	10.00882008	10.75312435
-2.9	-63.16476475	-125.803663	-136.2593269	-81.41476575	-98.1235137	-104.6625467
+2.9	6.279586996	13.11023916	14.43453349	8.287129274	10.00882008	10.75312435
-2.95	-66.300946	-133.7173617	-145.2433105	-86.18813886	-103.8365279	-110.9498938
+2.95	6.279586996	13.11023916	14.43453349	8.287129274	10.00882008	10.75312435
-3	-69.09737653	-141.0452728	-153.6144043	-90.56307946	-109.0671717	-116.733346
+3	6.279586996	13.11023916	14.43453349	8.287129274	10.00882008	10.75312435
(Span 3) -4	-1.79E+00	-3.732480419	-4.109506551	-2.359342735	-2.849507495	-3.06141072
+4	68.5665035	138.2258849	150.1845499	89.12951529	107.3910045	114.7330587
-3.05	-1.79E+00	-3.732480419	-4.109506551	-2.359342735	-2.849507495	-3.06141072
+3.05	66.38109446	132.4229601	143.5388283	85.67961283	103.2707611	110.167943
-3.1	-1.908542633	-3.732480419	-4.109506551	-2.359342735	-2.849507495	-3.06141072
+3.1	63.59067468	125.1894271	135.2855429	81.3515274	98.09819327	104.4537342
-3.15	-3.585587014	-4.15594887	-4.109506551	-3.81481264	-4.196269569	-4.22361325
+3.15	61.00411732	118.6177221	127.8114495	77.39792624	93.37046393	99.24394901
-3.2	-5.940245614	-6.700219288	-6.784901553	-5.952238414	-6.530952079	-6.836668407
+3.2	57.7734452	110.5488536	118.6603314	72.52069299	87.53536299	92.8276241
-3.25	-8.269745138	-9.67433602	-9.973269429	-7.916566248	-8.829122329	-9.323440673
+3.25	54.83329652	103.3139241	110.4753633	68.12937771	82.27932826	87.05890652
-3.3	-11.29136485	-13.89922354	-14.55465592	-10.43119664	-12.7602419	-12.59457629
+3.3	51.21786011	94.53287034	100.563511	62.7799663	75.8740571	80.04052666
-3.35	-14.0637364	-18.40753229	-18.9405048	-13.63743343	-16.6379458	-16.72108575
+3.35	47.97170145	86.74027564	91.78524857	58.01693303	70.16891324	73.79860967
-3.4	-17.49679607	-24.36830749	-24.43596415	-17.91347081	-21.80266892	-22.06462507
+3.4	44.02698014	77.370186	81.24978678	52.2723066	63.28582782	66.27822776
-3.45	-20.59810056	-30.33108875	-30.45451508	-21.82536429	-26.5241121	-27.07523875
+3.45	40.49896736	69.12548177	71.99576889	47.20347695	57.21067982	59.64893743
-3.5	-24.38718844	-37.74905194	-38.45878611	-26.65732537	-32.35238732	-33.27537799
+3.5	36.28150375	59.28950787	60.97382979	41.14059847	49.9421374	51.7266121
-3.55	-27.76990788	-44.46782797	-45.73431442	-31.01274037	-37.60300894	-38.87269428
+3.55	32.56705455	50.69825393	51.36160126	35.83196729	43.57617968	44.79564556
-3.6	-31.85960964	-52.69543356	-54.67116824	-36.32365778	-44.00247629	-45.70725754
+3.6	28.13170015	40.69347881	41.24910371	29.52780411	36.01453857	36.57143348

-3.65	**-35.47623059**	**-60.05541373**	**-62.68728014**	**-41.05659748**	**-49.70307979**	**-51.80545457**
+3.65	**24.25425792**	**32.92879356**	**33.81658348**	**24.0453708**	**29.43696998**	**29.66633213**
-3.7	**-39.81112795**	**-68.96955247**	**-72.41958221**	**-46.76950685**	**-56.58138117**	**-59.17438439**
+3.7	**19.65642826**	**24.49160407**	**25.91637312**	**18.10229849**	**22.30508229**	**21.90249152**
-3.75	**-43.61418886**	**-76.86517704**	**-81.05873738**	**-51.81405174**	**-62.65286267**	**-65.68772907**
+3.75	**15.66345078**	**18.54932797**	**19.35630819**	**14.61018875**	**16.62460764**	**17.41286569**
-3.8	**-48.13886993**	**-86.34262179**	**-91.44931436**	**-57.85198819**	**-69.91764045**	**-73.49096821**
+3.8	**11.15163701**	**17.44209246**	**19.25779109**	**11.0356315**	**13.24093681**	**14.26273125**
-3.85	**-52.08083229**	**-94.66833542**	**-100.5940168**	**-63.1421161**	**-76.28077375**	**-80.33373114**
+3.85	**8.192774001**	**17.44209246**	**19.25779109**	**10.98556703**	**13.24093681**	**14.26273125**
-3.9	**-56.73990178**	**-104.5859729**	**-111.5057796**	**-69.42814115**	**-83.83970188**	**-88.47122334**
+3.9	**8.192774001**	**17.44209246**	**19.25779109**	**10.98556703**	**13.24093681**	**14.26273125**
-3.95	**-60.7732869**	**-113.2362132**	**-121.0384466**	**-74.89790852**	**-90.41535426**	**-95.55757092**
+3.95	**8.192774001**	**17.44209246**	**19.25779109**	**10.98556703**	**13.24093681**	**14.26273125**
-5	**-65.51128909**	**-123.4708919**	**-132.3342654**	**-81.35500229**	**-98.17600932**	**-103.9292587**
+5	**8.192774001**	**17.44209246**	**19.25779109**	**10.98556703**	**13.24093681**	**14.26273125**

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)			Moment Z (kips-ft)						
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-53.252973	-37.147881	-52.754591	-56.199610	-74.652354	-29.791039	-40.251641	-46.073611	-51.589964	-57.395613
+0.05	397.143227	283.027898	370.806156	372.732571	389.146380	228.070726	307.654768	347.621997	379.303887	411.188184
-0.1	-106.505946	-74.295762	-105.509182	-112.399219	-149.304707	-59.582078	-80.503282	-92.147222	-103.179927	-114.791225
+0.1	738.258863	526.820168	685.536114	685.315992	705.746350	424.761640	572.820716	646.591285	705.619152	766.845637
-0.15	-159.758918	-111.443644	-158.263774	-168.598829	-223.957061	-89.373118	-120.754922	-138.220833	-154.769891	-172.186838
+0.15	1023.426051	731.513401	944.556535	938.506416	968.291377	590.117536	795.689053	897.155205	991.985539	1075.534349
-0.2	-213.011891	-148.591525	-211.018365	-224.798438	-298.609414	-119.164157	-161.006563	-184.294444	-206.359855	-229.582450
+0.2	1253.733295	897.848823	1149.340151	1149.175357	1168.397330	724.715729	977.043304	1100.262860	1225.506611	1334.054667
-0.25	-266.264864	-185.739406	-263.772956	-280.998048	-373.261768	-148.955196	-201.258204	-230.368056	-257.949819	-286.978063
+0.25	1430.671194	1026.799838	1313.392852	1305.292660	1336.011867	829.319325	1117.917713	1261.468315	1406.973923	1542.576045
-0.3	-319.517837	-222.887287	-316.527547	-337.197658	-447.914121	-178.746235	-241.509845	-276.441667	-309.539782	-344.373675
+0.3	1558.795354	1119.572200	1429.045608	1418.300968	1468.952398	904.877341	1225.998580	1385.750056	1538.042101	1694.853116
-0.35	-372.770810	-260.035168	-369.282138	-393.397267	-522.566475	-208.537275	-281.761486	-322.515278	-361.129746	-401.769288
+0.35	1650.756414	1185.518595	1496.239392	1500.260328	1552.313351	952.524301	1299.916042	1466.924846	1629.881687	1792.758362
-0.4	-426.023783	-297.183049	-422.036730	-449.596877	-597.218828	-238.328314	-322.013127	-368.588889	-412.719710	-459.164900
+0.4	1694.458884	1218.848659	1526.212604	1551.051972	1598.399367	973.580791	1337.651965	1506.322294	1678.251657	1843.643657
-0.45	-479.276755	-334.330931	-474.791321	-505.796486	-671.871182	-268.119353	-362.264767	-414.662500	-464.309673	-516.560513
+0.45	1692.551236	1220.368140	1514.156021	1556.826857	1601.327693	969.552999	1340.591853	1506.198236	1682.401150	1852.612868
-0.5	-532.529728	-371.478812	-527.545912	-561.996096	-746.523535	-297.910392	-402.516408	-460.736111	-515.899637	-573.956126
+0.5	1666.259597	1200.784574	1493.124322	1527.644988	1573.146971	955.959648	1318.220603	1481.925353	1653.817233	1819.047489
-0.55	-585.782701	-408.626693	-580.300503	-618.195705	-821.175889	-327.701431	-442.768049	-506.809722	-567.489601	-631.351738
+0.55	1603.699254	1154.496878	1444.426045	1462.617440	1503.767979	923.068030	1266.863987	1426.405891	1588.230087	1742.353595
-0.6	-639.035674	-445.774574	-633.055094	-674.395315	-895.828242	-357.492471	-483.019690	-552.883333	-619.079564	-688.747351
+0.6	1501.654497	1081.149910	1357.022300	1357.891878	1417.723949	867.838505	1186.437163	1337.014422	1485.264607	1631.704977
-0.65	-692.288647	-482.922455	-685.809685	-730.594925	-970.480596	-387.283510	-523.271331	-598.956944	-670.669528	-746.142963
+0.65	1363.760825	983.305268	1235.954303	1225.151842	1280.396708	792.255415	1079.723563	1216.897085	1348.502595	1483.527680
-0.7	-745.541620	-520.070337	-738.564277	-786.794534	-1045.132949	-417.074549	-563.522971	-645.030555	-722.259492	-803.538576
+0.7	1194.041682	863.756934	1078.749839	1054.122101	1109.924199	698.489424	949.757886	1069.488825	1182.830283	1300.869181
-0.75	-798.794592	-557.218218	-791.318868	-842.994144	-1119.785303	-446.865588	-603.774612	-691.104167	-773.849456	-860.934188
+0.75	996.965618	727.190018	889.451547	859.019859	892.781074	588.896604	799.825444	898.512137	992.939972	1088.349943
-0.8	-852.047565	-594.366099	-844.073459	-899.193753	-1194.437656	-476.656628	-644.026253	-737.177778	-825.439419	-918.329801
+0.8	777.766145	573.929382	672.442407	632.078304	639.086535	466.018861	633.462262	707.977473	779.918269	850.950579
-0.85	-905.300538	-631.513980	-896.828050	-955.393363	-1279.459904	-506.447667	-684.277894	-783.251389	-877.029383	-975.725413
+0.85	538.117330	407.193605	432.444880	380.941066	390.048873	332.583965	454.455162	502.183094	548.498831	594.011713
-0.9	-958.553511	-668.661861	-949.582641	-1011.592973	-1393.428511	-536.238706	-724.529535	-829.325000	-928.619347	-1033.121026
+0.9	291.393137	232.534655	218.115882	215.557030	259.871863	191.505433	266.841919	285.715582	305.721215	323.233909
-0.95	-1011.806484	-705.809743	-1002.337233	-1067.792582	-1532.137265	-566.029745	-764.781176	-875.398611	-980.209310	-1090.516638
+0.95	220.792437	154.323914	216.188096	227.532421	255.330246	123.897315	167.458614	191.422741	214.236735	238.103087
-1	-1065.059490	-742.957612	-1055.091832	-1123.992180	-1845.840494	-595.820777	-805.032816	-921.472226	-1031.799272	-1147.912254
+1	232.413093	162.446220	227.566418	239.507810	263.297648	130.418224	176.272220	201.497620	225.512350	250.634830
(Span 2) -2	-1065.059490	-742.957612	-1055.091832	-1123.992180	-1845.840494	-595.820777	-805.032816	-921.472226	-1031.799272	-1147.912254
+2	232.413093	162.446220	227.566418	239.507810	263.297648	130.418224	176.272220	201.497620	225.512350	250.634830
-2.05	-775.774207	-542.230042	-759.595048	-799.454279	-1292.154174	-435.323621	-588.379938	-672.579903	-752.738790	-836.595214
+2.05	179.350677	125.357995	175.610551	184.825593	210.307607	100.642337	136.027370	155.493539	174.025447	193.412195
-2.1	-722.711697	-505.141816	-707.639183	-744.772063	-907.383128	-405.547734	-548.135087	-626.575824	-701.251887	-779.372581
+2.1	365.715100	290.800184	260.715607	237.242386	239.785930	232.917999	330.975634	355.906589	388.014685	408.243056
-2.15	-669.649187	-468.053591	-655.683317	-690.089848	-785.601343	-375.771848	-507.890236	-580.571744	-649.764984	-722.149948
+2.15	662.897493	496.722751	538.351343	476.589986	452.006259	399.895083	553.127593	612.208058	673.270207	729.103613
-2.2	-616.586677	-430.965365	-603.727452	-635.407632	-700.084956	-345.995961	-467.645384	-534.567665	-598.278081	-664.927315
+2.2	939.291792	688.919755	817.634279	777.158462	747.513565	554.808536	760.771139	850.813864	939.953427	1027.486296

-2.25	-563.524166	-393.877140	-551.771586	-580.725416	-646.297083	-316.220075	-427.400533	-488.563585	-546.791178	-607.704682
+2.25	1186.832075	861.100867	1061.522295	1041.119647	1096.574285	692.738734	947.055853	1064.024441	1179.249255	1293.840190
-2.3	-510.461656	-356.788915	-499.815721	-526.043201	-598.907967	-286.444188	-387.155682	-442.559506	-495.304276	-550.482050
+2.3	1397.476341	1007.992458	1264.308727	1261.453500	1391.394748	809.521315	1106.229217	1245.871319	1383.755631	1520.190092
-2.35	-457.399146	-319.700689	-447.859856	-471.360985	-551.518851	-256.668301	-346.910831	-396.555426	-443.817373	-493.259417
+2.35	1565.205957	1125.337164	1421.171665	1433.417932	1611.297220	901.949201	1233.943610	1391.522917	1547.483240	1700.136091
-2.4	-404.336636	-282.612464	-395.903990	-416.678770	-504.129734	-226.892415	-306.665979	-350.551347	-392.330470	-436.036784
+2.4	1685.608065	1210.274090	1532.214145	1565.053211	1773.753935	967.628453	1327.392945	1496.423348	1666.927895	1831.841729
-2.45	-351.274126	-245.524238	-343.948125	-361.996554	-456.740618	-197.116528	-266.421128	-304.547267	-340.843567	-378.814151
+2.45	1755.452164	1261.283400	1594.094956	1642.284409	1852.180671	1004.978469	1383.178485	1557.858848	1738.456505	1913.549054
-2.5	-298.211616	-208.436013	-291.992259	-307.314339	-409.351502	-167.340642	-226.176277	-258.543188	-289.356687	-321.591518
+2.5	1773.219904	1276.036512	1603.355037	1663.119934	1852.820107	1013.064500	1399.800508	1574.250192	1759.708845	1940.404630
-2.55	-351.273483	-245.524254	-343.948129	-361.996584	-456.740600	-197.116537	-266.421133	-304.547261	-340.843590	-378.814157
+2.55	1755.682805	1261.285417	1594.098993	1642.287921	1852.179918	1004.987352	1383.181986	1557.864176	1738.459605	1913.549980
-2.6	-404.335899	-282.612479	-395.903997	-416.678801	-504.129716	-226.892424	-306.665983	-350.551341	-392.330494	-436.036792
+2.6	1685.789125	1210.274509	1532.216468	1565.055108	1773.752208	967.635625	1327.394692	1496.426862	1666.929006	1831.842372
-2.65	-457.398315	-319.700704	-447.859865	-471.361019	-551.518831	-256.668312	-346.910833	-396.555422	-443.817398	-493.259427
+2.65	1565.409909	1125.338924	1421.174148	1433.418204	1611.296206	901.954513	1233.943897	1391.524855	1547.485380	1700.141949
-2.7	-510.460731	-356.788929	-499.815733	-526.043237	-598.907947	-286.444199	-387.155683	-442.559502	-495.304301	-550.482062
+2.7	1397.602436	1007.993589	1264.309427	1261.453626	1391.392382	809.524883	1106.231636	1245.871580	1383.757049	1520.193949
-2.75	-563.523147	-393.877154	-551.771600	-580.725454	-646.297063	-316.220086	-427.400534	-488.563582	-546.791205	-607.704697
+2.75	1186.888740	861.101881	1061.526065	1041.121607	1096.571765	692.740857	947.058092	1064.027986	1179.250409	1293.842815
-2.8	-616.585563	-430.965379	-603.727468	-635.407672	-700.084932	-345.995974	-467.645384	-534.567662	-598.278109	-664.927332
+2.8	939.289307	688.920557	817.637660	777.160215	747.515264	554.809285	760.773258	850.817351	939.954421	1027.487833
-2.85	-669.647979	-468.053603	-655.683336	-690.089890	-785.601321	-375.771861	-507.890234	-580.571742	-649.765013	-722.149967
+2.85	662.848663	496.723965	538.354646	476.591865	452.007443	399.894849	553.130062	612.211898	673.271648	729.104455
-2.9	-722.710395	-505.141828	-707.639204	-744.772107	-907.383107	-405.547749	-548.135084	-626.575822	-701.251916	-779.372602
+2.9	365.634546	290.801800	260.716840	237.244254	239.787091	232.916821	330.978525	355.910957	388.016728	408.243834
-2.95	-775.772811	-542.230053	-759.595072	-799.454325	-1292.154308	-435.323636	-588.379935	-672.579902	-752.738820	-836.595238
+2.95	179.350975	125.358016	175.610529	184.825602	210.307595	100.642338	136.027385	155.493528	174.025461	193.412179
-3	-1065.060654	-742.957619	-1055.091879	-1123.992216	-1845.840564	-595.820831	-805.032831	-921.472313	-1031.799365	-1147.912338
+3	232.413505	162.446223	227.566407	239.507801	263.297651	130.418220	176.272225	201.497617	225.512347	250.634820
(Span 3) -4	-1065.060654	-742.957619	-1055.091879	-1123.992216	-1845.840564	-595.820831	-805.032831	-921.472313	-1031.799365	-1147.912338
+4	232.413505	162.446223	227.566407	239.507801	263.297651	130.418220	176.272225	201.497617	225.512347	250.634820
-3.05	-1011.807623	-705.809737	-1002.337286	-1067.792605	-1532.137227	-566.029789	-764.781190	-875.398698	-980.209397	-1090.516721
+3.05	220.792830	154.323911	216.188087	227.532411	255.330246	123.897309	167.458613	191.422736	214.236729	238.103079
-3.1	-958.554592	-668.661856	-949.582692	-1011.592993	-1393.428473	-536.238747	-724.529548	-829.325082	-928.619428	-1033.121104
+3.1	291.563373	232.533984	218.118080	215.557021	259.871861	191.509961	266.840015	285.712393	305.720417	323.236604
-3.15	-905.301561	-631.513974	-896.828099	-955.393382	-1279.459868	-506.447706	-684.277907	-783.251467	-877.029460	-975.725488
+3.15	538.520059	407.194059	432.442873	380.938357	390.047173	332.588723	454.453738	502.180452	548.499606	594.014808
-3.2	-852.048530	-594.366093	-844.073505	-899.193770	-1194.437620	-476.656664	-644.026265	-737.177851	-825.439492	-918.329871
+3.2	777.927874	573.929954	672.440249	632.074803	639.084058	466.023913	633.460983	707.974912	779.919186	850.954022
-3.25	-798.795499	-557.218211	-791.318912	-842.994159	-1119.785269	-446.865622	-603.774624	-691.104236	-773.849523	-860.934254
+3.25	997.368755	727.190565	889.449133	859.015884	892.779594	588.901505	799.824194	898.509665	992.940826	1088.353222
-3.3	-745.542468	-520.070330	-738.564318	-786.794548	-1045.132917	-417.074580	-563.522982	-645.030620	-722.259555	-803.538637
+3.3	1194.720433	863.756717	1078.746846	1054.120917	1109.921678	698.494100	949.756548	1069.486065	1182.830816	1300.872254
-3.35	-692.289437	-482.922448	-685.809724	-730.594936	-970.480566	-387.283538	-523.271340	-598.957005	-670.669587	-746.143021
+3.35	1364.394315	983.304484	1235.950422	1225.149723	1280.394123	792.259663	1079.721615	1216.893720	1348.501816	1483.530047
-3.4	-639.036406	-445.774567	-633.055131	-674.395325	-895.828215	-357.492496	-483.019699	-552.883390	-619.079618	-688.747404
+3.4	1502.087327	1081.148646	1357.017255	1357.888741	1417.721178	867.842125	1186.434573	1337.010271	1485.262946	1631.706204
-3.45	-585.783375	-408.626685	-580.300537	-618.195713	-821.175864	-327.701454	-442.768057	-506.809774	-567.489650	-631.351787
+3.45	1603.862437	1154.494792	1444.422270	1462.614130	1503.768873	923.070975	1266.860625	1426.400647	1588.227450	1742.353150
-3.5	-532.530344	-371.478804	-527.545944	-561.996102	-746.523512	-297.910412	-402.516416	-460.736159	-515.899682	-573.956171
+3.5	1666.378864	1200.781436	1493.126855	1527.640289	1573.149040	955.961714	1318.216244	1481.918983	1653.813169	1819.045703
-3.55	-479.277313	-334.330922	-474.791350	-505.796491	-671.871161	-268.119370	-362.264774	-414.662543	-464.309713	-516.560554
+3.55	1692.456740	1220.362120	1514.153933	1556.823879	1601.329744	969.551335	1340.587752	1506.196012	1682.396538	1852.615609
-3.6	-426.024282	-297.183040	-422.036757	-449.596879	-597.218810	-238.328328	-322.013133	-368.588928	-412.719745	-459.164937

+3.6	1694.313765	1218.851186	1526.209066	1551.047335	1598.397452	973.578287	1337.646427	1506.318739	1678.245556	1843.644550
-3.65	-372.771251	-260.035159	-369.282163	-393.397268	-522.566459	-208.537286	-281.761491	-322.515312	-361.129777	-401.769320
+3.65	1650.555090	1185.519890	1496.235477	1500.257535	1552.311128	952.520798	1299.918504	1466.919534	1629.883158	1792.756982
-3.7	-319.518220	-222.887277	-316.527569	-337.197656	-447.914107	-178.746244	-241.509849	-276.441697	-309.539808	-344.373704
+3.7	1558.532381	1119.571921	1429.039888	1418.302278	1468.955229	904.872745	1225.999454	1385.743185	1538.041423	1694.849560
-3.75	-266.265189	-185.739396	-263.772976	-280.998045	-373.261756	-148.955202	-201.258208	-230.368082	-257.949840	-286.978087
+3.75	1430.477499	1026.798207	1313.394565	1305.289523	1336.013504	829.313347	1117.917137	1261.468983	1406.971411	1542.570484
-3.8	-213.012158	-148.591514	-211.018382	-224.798434	-298.609405	-119.164160	-161.006566	-184.294466	-206.359872	-229.582470
+3.8	1253.472259	897.845758	1149.339870	1149.177497	1168.396197	724.708577	977.041139	1100.261714	1225.501986	1334.056075
-3.85	-159.759127	-111.443633	-158.263789	-168.598822	-223.957054	-89.373118	-120.754925	-138.220851	-154.769903	-172.186854
+3.85	1023.093569	731.508724	944.554022	938.506308	968.292830	590.108997	795.685237	897.152135	991.978841	1075.533330
-3.9	-106.506096	-74.295751	-105.509195	-112.399211	-149.304702	-59.582076	-80.503283	-92.147235	-103.179935	-114.791237
+3.9	737.853071	526.813662	685.531248	685.313517	705.745899	424.751759	572.814795	646.585816	705.619347	766.841881
-3.95	-53.253065	-37.147870	-52.754602	-56.199599	-74.652351	-29.791034	-40.251642	-46.073620	-51.589967	-57.395620
+3.95	397.219666	283.019703	370.799004	372.727725	389.144229	228.059641	307.647206	347.614712	379.301750	411.186368
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-53.252973	-48.556423	-52.248228	-49.249414	-59.630357	-61.299208	-64.881205	-25.876307
+0.05	397.143227	376.003767	401.912033	377.095091	450.749595	426.339840	450.696979	198.116335
-0.1	-106.505946	-97.112845	-104.496456	-98.498828	-119.260713	-122.598416	-129.762409	-51.752615
+0.1	738.258863	700.778528	748.668901	702.218776	838.520994	787.589871	832.492693	368.490247
-0.15	-159.758918	-145.669268	-156.744685	-147.748242	-178.891070	-183.897625	-194.643614	-77.628922
+0.15	1023.426051	974.493851	1040.512457	975.611081	1163.746936	1084.276485	1145.956184	511.485082
-0.2	-213.011891	-194.225690	-208.992913	-196.997656	-238.521426	-245.196833	-259.524819	-103.505230
+0.2	1253.733295	1198.042607	1278.431075	1198.220346	1427.633484	1326.829748	1402.590628	627.627346
-0.25	-266.264864	-242.782113	-261.241141	-246.247070	-298.151783	-306.496041	-324.406023	-129.381537
+0.25	1430.671194	1372.619466	1463.738164	1371.301348	1644.735369	1524.189650	1612.228444	717.790183
-0.3	-319.517837	-291.338535	-313.489369	-295.496484	-357.782139	-367.795249	-389.287228	-155.257845
+0.3	1558.795354	1499.721129	1598.072364	1507.241024	1807.393786	1664.397623	1760.042869	782.854135
-0.35	-372.770810	-339.894958	-365.737598	-344.745898	-417.412496	-429.094458	-454.168433	-181.134152
+0.35	1650.756414	1584.314451	1693.729886	1598.626563	1913.596034	1759.698248	1861.556825	823.592679
-0.4	-426.023783	-388.451380	-417.985826	-393.995312	-477.042852	-490.393666	-519.049637	-207.010460
+0.4	1694.458884	1633.268871	1744.212789	1645.479524	1965.719795	1800.213770	1904.943747	841.180419
-0.45	-479.276755	-437.007803	-470.234054	-443.244726	-536.673209	-551.692874	-583.930842	-232.886767
+0.45	1692.551236	1639.976127	1749.744499	1649.711612	1966.657407	1788.803948	1893.373235	835.357926
-0.5	-532.529728	-485.564225	-522.482282	-492.494140	-596.303565	-612.992082	-648.812047	-258.763074
+0.5	1666.259597	1611.723490	1720.301564	1621.770737	1934.966999	1763.201981	1866.101467	826.090081
-0.55	-585.782701	-534.120648	-574.730510	-541.743554	-655.933922	-674.291291	-713.693251	-284.639382
+0.55	1603.699254	1546.571927	1651.878539	1558.300484	1861.193830	1703.940175	1802.950562	799.006595
-0.6	-639.035674	-582.677070	-626.978739	-590.992968	-715.564278	-735.590499	-778.574456	-310.515689
+0.6	1501.654497	1446.947022	1546.050118	1459.388398	1744.177983	1596.583304	1688.946090	752.182318
-0.65	-692.288647	-631.233493	-679.226967	-640.242382	-775.194635	-796.889707	-843.455661	-336.391997
+0.65	1363.760825	1317.872319	1406.451771	1328.445742	1587.932234	1445.248185	1528.453600	687.338994
-0.7	-745.541620	-679.789915	-731.475195	-689.491796	-834.824991	-858.188915	-908.336865	-362.268304
+0.7	1194.041682	1163.591920	1237.044550	1169.190941	1396.668162	1254.447262	1326.471829	606.362335
-0.75	-798.794592	-728.346338	-783.723423	-738.741211	-894.455348	-919.488123	-973.218070	-388.144612
+0.75	996.965618	984.170246	1043.975909	985.648643	1175.207469	1032.537786	1092.263753	511.300692
-0.8	-852.047565	-776.902760	-835.971652	-787.990625	-954.085704	-980.787332	-1038.099275	-414.020919
+0.8	777.766145	783.783305	828.399340	782.149970	928.743439	779.827403	824.665382	404.365695
-0.85	-905.300538	-825.459183	-888.219880	-837.240039	-1013.716061	-1042.086540	-1102.980479	-439.897226
+0.85	538.117330	566.908899	594.662958	563.332562	662.840885	501.018306	529.534000	287.932041
-0.9	-958.553511	-874.015605	-940.468108	-886.489453	-1073.346417	-1103.385748	-1167.861684	-465.773534
+0.9	291.393137	338.326779	351.924873	334.140729	383.630373	252.574108	266.870854	164.537552
-0.95	-1011.806484	-922.572028	-992.716336	-935.738867	-1132.976774	-1164.684956	-1232.742888	-491.649841
+0.95	220.792437	202.199590	217.497085	204.987388	248.078517	251.295892	265.933477	107.198280
-1	-1065.059490	-971.128453	-1044.964574	-984.988274	-1192.607140	-1225.984153	-1297.624080	-517.526131
+1	232.413093	212.841674	228.944295	215.776194	261.135280	264.521992	279.929976	112.840292
(Span 2) -2	-1065.059490	-971.128453	-1044.964574	-984.988274	-1192.607140	-1225.984153	-1297.624080	-517.526131
+2	232.413093	212.841674	228.944295	215.776194	261.135280	264.521992	279.929976	112.840292
-2.05	-775.774207	-710.445335	-764.194294	-720.240403	-871.644790	-882.949318	-934.379599	-376.648473
+2.05	179.350677	164.247623	176.673842	166.512160	201.515280	204.128767	216.018942	93.093648
-2.1	-722.711697	-661.851280	-711.923842	-670.976371	-812.024787	-822.556089	-870.468568	-350.885934
+2.1	365.715100	417.514298	436.989585	413.167891	475.687194	307.950522	326.206689	198.767846
-2.15	-669.649187	-613.257225	-659.653390	-621.712339	-752.404784	-762.162860	-806.557537	-325.123394
+2.15	662.897493	683.464778	724.265229	684.487444	806.144286	632.817316	668.496490	343.940916
-2.2	-616.586677	-564.663171	-607.382938	-572.448307	-692.784781	-701.769631	-742.646506	-299.360855
+2.2	939.291792	933.045748	993.317826	938.258204	1114.363783	956.545549	1011.157345	479.323638

-2.25	-563.524166	-516.069116	-555.112486	-523.184275	-633.164779	-641.376402	-678.735475	-273.598315
+2.25	1186.832075	1157.843187	1235.175909	1166.076312	1390.493816	1242.788664	1314.256776	599.484466
-2.3	-510.461656	-467.475062	-502.842034	-473.920243	-573.544776	-580.983173	-614.824444	-247.835775
+2.3	1397.476341	1350.764689	1442.291289	1360.879762	1626.475735	1483.376280	1569.121814	700.952490
-2.35	-457.399146	-418.881007	-450.571582	-424.656211	-513.924773	-520.589943	-550.913414	-222.073236
+2.35	1565.205957	1506.038866	1608.538393	1517.859773	1815.134077	1671.909693	1768.908822	780.970596
-2.4	-404.336636	-370.286953	-398.301130	-375.392179	-454.304770	-460.196714	-487.002383	-196.310696
+2.4	1685.608065	1619.215695	1729.726906	1632.445720	1951.278755	1805.358259	1910.387224	837.496023
-2.45	-351.274126	-321.692898	-346.030678	-326.128146	-394.684768	-399.803485	-423.091352	-170.548156
+2.45	1755.452164	1688.663258	1803.609622	1701.025966	2031.346167	1879.215758	1988.895977	869.199907
-2.5	-298.211616	-273.098843	-293.760226	-276.864146	-335.064765	-339.410256	-359.180366	-144.785617
+2.5	1773.219904	1711.580925	1826.795436	1721.740539	2053.293606	1891.971181	2002.728555	875.685690
-2.55	-351.273483	-321.692891	-346.030693	-326.128180	-394.684723	-399.803488	-423.091400	-170.548930
+2.55	1755.682805	1688.664927	1803.612472	1701.030769	2031.354322	1879.219821	1988.900123	869.202380
-2.6	-404.335899	-370.286942	-398.301146	-375.392214	-454.304723	-460.196713	-487.002435	-196.311586
+2.6	1685.789125	1619.217790	1729.727466	1632.448414	1951.284545	1805.360230	1910.389159	837.497868
-2.65	-457.398315	-418.880993	-450.571600	-424.656248	-513.924724	-520.589939	-550.913469	-222.074243
+2.65	1565.409909	1506.040292	1608.540877	1517.860731	1815.137941	1671.909583	1768.911588	780.971941
-2.7	-510.460731	-467.475045	-502.842053	-473.920282	-573.544724	-580.983164	-614.824503	-247.836899
+2.7	1397.602436	1350.765315	1442.292881	1360.883168	1626.477642	1483.378214	1569.123702	700.953202
-2.75	-563.523147	-516.069096	-555.112507	-523.184316	-633.164724	-641.376389	-678.735537	-273.599556
+2.75	1186.888740	1157.843631	1235.177302	1166.079531	1390.494117	1242.789995	1314.258034	599.484782
-2.8	-616.585563	-564.663147	-607.382960	-572.448350	-692.784725	-701.769615	-742.646571	-299.362212
+2.8	939.289307	933.046077	993.319091	938.261258	1114.362992	956.546639	1011.158356	479.612805
-2.85	-669.647979	-613.257199	-659.653413	-621.712384	-752.404725	-762.162840	-806.557606	-325.124869
+2.85	662.848663	683.465564	724.266938	684.490958	806.142852	632.818696	668.497805	344.758813
-2.9	-722.710395	-661.851250	-711.923867	-670.976418	-812.024725	-822.556066	-870.468640	-350.887525
+2.9	365.634546	417.515784	436.992048	413.171887	475.685453	307.951125	326.207419	198.766850
-2.95	-775.772811	-710.445301	-764.194320	-720.240452	-871.644726	-882.949291	-934.379674	-376.650182
+2.95	179.350975	164.247648	176.673842	166.512174	201.515260	204.128806	216.018958	92.428033
-3	-1065.060654	-971.128501	-1044.964666	-984.988349	-1192.607177	-1225.984178	-1297.624139	-517.530104
+3	232.413505	212.841688	228.944289	215.776185	261.135291	264.522008	279.929962	112.839781
(Span 3) -4	-1065.060654	-971.128501	-1044.964666	-984.988349	-1192.607177	-1225.984178	-1297.624139	-517.530104
+4	232.413505	212.841688	228.944289	215.776185	261.135291	264.522008	279.929962	112.839781
-3.05	-1011.807623	-922.572076	-992.716433	-935.738931	-1132.976818	-1164.684968	-1232.742931	-491.653599
+3.05	220.792830	202.199604	217.497074	204.987376	248.078526	251.295908	265.933464	107.197792
-3.1	-958.554592	-874.015652	-940.468201	-886.489513	-1073.346460	-1103.385759	-1167.861724	-465.777093
+3.1	291.563373	338.327625	351.923722	334.137913	383.635773	252.575133	266.871850	164.535533
-3.15	-905.301561	-825.459227	-888.219968	-837.240096	-1013.716102	-1042.086549	-1102.980516	-439.900588
+3.15	538.520059	566.910168	594.663456	563.330326	662.836337	501.019620	529.535535	287.930040
-3.2	-852.048530	-776.902802	-835.971735	-787.990678	-954.085743	-980.787340	-1038.099308	-414.024082
+3.2	777.927874	783.784831	828.400077	782.147916	928.738972	779.828562	824.666760	404.363796
-3.25	-798.795499	-728.346377	-783.723502	-738.741260	-894.455385	-919.488130	-973.218101	-388.147577
+3.25	997.368755	984.171714	1043.976597	985.646643	1175.203037	1032.538585	1092.264747	511.298559
-3.3	-745.542468	-679.789952	-731.475269	-689.491842	-834.825027	-858.188921	-908.336893	-362.271071
+3.3	1194.720433	1163.593148	1237.044232	1169.188850	1396.663606	1254.446845	1326.472326	606.360242
-3.35	-692.289437	-631.233527	-679.227036	-640.242424	-775.194668	-796.889711	-843.455686	-336.394566
+3.35	1364.394315	1317.872864	1406.450712	1328.442901	1587.926699	1445.246837	1528.452336	687.336800
-3.4	-639.036406	-582.677102	-626.978804	-590.993007	-715.564310	-735.590502	-778.574478	-310.518060
+3.4	1502.087327	1446.946262	1546.048346	1459.384756	1744.171436	1596.580712	1688.943514	752.179991
-3.45	-585.783375	-534.120677	-574.730571	-541.743589	-655.933952	-674.291292	-713.693271	-284.641555
+3.45	1603.862437	1546.570143	1651.875642	1558.295920	1861.196911	1703.936358	1802.946683	799.004213
-3.5	-532.530344	-485.564252	-522.482338	-492.494171	-596.303593	-612.992083	-648.812063	-258.765050
+3.5	1666.378864	1611.720373	1720.297192	1621.764980	1934.968607	1763.196373	1866.095698	826.087062
-3.55	-479.277313	-437.007827	-470.234105	-443.244753	-536.673235	-551.692873	-583.930855	-232.888544
+3.55	1692.456740	1639.979816	1749.735761	1649.707470	1966.656793	1788.800070	1893.369016	836.953684
-3.6	-426.024282	-388.451402	-417.985872	-393.995335	-477.042877	-490.393664	-519.049648	-207.012039

+3.6	**1694.313765**	**1633.271146**	**1744.216249**	**1645.473646**	**1965.717284**	**1800.208186**	**1904.937718**	**841.178906**
-3.65	**-372.771251**	**-339.894977**	**-365.737639**	**-344.745918**	**-417.412518**	**-429.094454**	**-454.168440**	**-181.135533**
+3.65	**1650.555090**	**1584.315092**	**1693.731627**	**1598.619043**	**1913.591475**	**1759.700805**	**1861.559356**	**823.590896**
-3.7	**-319.518220**	**-291.338552**	**-313.489407**	**-295.496500**	**-357.782160**	**-367.795245**	**-389.287233**	**-155.259028**
+3.7	**1558.532381**	**1499.719743**	**1598.071896**	**1507.242516**	**1807.387163**	**1664.397952**	**1760.043038**	**782.852057**
-3.75	**-266.265189**	**-242.782128**	**-261.241174**	**-246.247082**	**-298.151802**	**-306.496036**	**-324.406025**	**-129.382522**
+3.75	**1430.477499**	**1372.616229**	**1463.735708**	**1371.301079**	**1644.737318**	**1524.187770**	**1612.226264**	**717.787853**
-3.8	**-213.012158**	**-194.225703**	**-208.992941**	**-196.997664**	**-238.521443**	**-245.196826**	**-259.524818**	**-103.506017**
+3.8	**1253.472259**	**1198.037348**	**1278.426467**	**1198.218136**	**1427.633077**	**1326.825390**	**1402.585822**	**627.628758**
-3.85	**-159.759127**	**-145.669278**	**-156.744708**	**-147.748246**	**-178.891085**	**-183.897617**	**-194.643610**	**-77.629511**
+3.85	**1023.093569**	**974.486811**	**1040.505901**	**975.606852**	**1163.744026**	**1084.274304**	**1145.953936**	**511.486311**
-3.9	**-106.506096**	**-97.112853**	**-104.496475**	**-98.498829**	**-119.260727**	**-122.598407**	**-129.762402**	**-51.753006**
+3.9	**737.853071**	**700.769001**	**748.659713**	**702.211974**	**838.515115**	**787.584990**	**832.487589**	**368.491044**
-3.95	**-53.253065**	**-48.556428**	**-52.248242**	**-49.249411**	**-59.630368**	**-61.299198**	**-64.881195**	**-25.876500**
+3.95	**397.219666**	**375.991981**	**401.900428**	**377.086274**	**450.741235**	**426.332317**	**450.689075**	**198.116723**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 130' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-53.252973**	**-113.373602**	**-125.176953**	**-71.406182**	**-86.066084**	**-92.707751**
+0.05	**397.143227**	**741.900233**	**791.955659**	**490.108265**	**592.007961**	**625.778007**
-0.1	**-106.505946**	**-226.747204**	**-250.353905**	**-142.812364**	**-172.132167**	**-185.415501**
+0.1	**738.258863**	**1362.911418**	**1459.306354**	**904.150728**	**1092.245680**	**1152.654675**
-0.15	**-159.758918**	**-340.120807**	**-375.530858**	**-214.218547**	**-258.198251**	**-278.123252**
+0.15	**1023.426051**	**1895.420154**	**2026.373785**	**1242.779594**	**1505.663633**	**1591.831627**
-0.2	**-213.011891**	**-453.494409**	**-500.707810**	**-285.624729**	**-344.264335**	**-370.831003**
+0.2	**1253.733295**	**2316.174980**	**2519.265612**	**1531.563383**	**1851.936411**	**1953.488384**
-0.25	**-266.264864**	**-566.868011**	**-625.884763**	**-357.030911**	**-430.330418**	**-463.538753**
+0.25	**1430.671194**	**2645.830780**	**2903.409933**	**1753.843124**	**2112.709591**	**2246.201689**
-0.3	**-319.517837**	**-680.241613**	**-751.061715**	**-428.437093**	**-516.396502**	**-556.246504**
+0.3	**1558.795354**	**2907.546938**	**3192.838377**	**1910.155106**	**2290.478268**	**2454.639189**
-0.35	**-372.770810**	**-793.615216**	**-876.238668**	**-499.843275**	**-602.462586**	**-648.954254**
+0.35	**1650.756414**	**3076.164905**	**3382.253620**	**2013.791062**	**2409.383963**	**2576.270927**
-0.4	**-426.023783**	**-906.988818**	**-1001.415620**	**-571.249457**	**-688.528669**	**-741.662005**
+0.4	**1694.458884**	**3184.412252**	**3462.402747**	**2053.872798**	**2452.597208**	**2634.951112**
-0.45	**-479.276755**	**-1020.362420**	**-1126.592573**	**-642.655640**	**-774.594753**	**-834.369756**
+0.45	**1692.551236**	**3191.838372**	**3499.583090**	**2034.070406**	**2424.246419**	**2616.537127**
-0.5	**-532.529728**	**-1133.736022**	**-1251.769526**	**-714.061822**	**-860.660836**	**-927.077506**
+0.5	**1666.259597**	**3136.018527**	**3430.524671**	**2005.763469**	**2391.468362**	**2578.089525**
-0.55	**-585.782701**	**-1247.109625**	**-1376.946478**	**-785.468004**	**-946.726920**	**-1019.785257**
+0.55	**1603.699254**	**3003.650109**	**3267.992720**	**1945.087428**	**2322.023919**	**2492.061764**
-0.6	**-639.035674**	**-1360.483227**	**-1502.123431**	**-856.874186**	**-1032.793004**	**-1112.493008**
+0.6	**1501.654497**	**2786.821890**	**3059.922120**	**1826.880430**	**2182.905512**	**2335.192119**
-0.65	**-692.288647**	**-1473.856829**	**-1627.300383**	**-928.280368**	**-1118.859087**	**-1205.200758**
+0.65	**1363.760825**	**2506.053286**	**2759.677423**	**1655.875999**	**1979.735716**	**2121.091162**
-0.7	**-745.541620**	**-1587.230431**	**-1752.477336**	**-999.686550**	**-1204.925171**	**-1297.908509**
+0.7	**1194.041682**	**2164.236173**	**2373.909018**	**1437.653864**	**1725.039531**	**1843.316989**
-0.75	**-798.794592**	**-1700.604034**	**-1877.654288**	**-1071.092733**	**-1290.991255**	**-1390.616259**
+0.75	**996.965618**	**1753.885434**	**1916.061319**	**1182.674636**	**1419.857804**	**1509.269860**
-0.8	**-852.047565**	**-1813.977636**	**-2002.831241**	**-1142.498915**	**-1377.057338**	**-1483.324010**
+0.8	**777.766145**	**1284.371467**	**1397.310829**	**889.144337**	**1067.569821**	**1126.495832**
-0.85	**-905.300538**	**-1927.351238**	**-2128.008194**	**-1213.905097**	**-1463.123422**	**-1576.031761**
+0.85	**538.117330**	**765.848158**	**824.267835**	**563.453558**	**675.787125**	**703.227250**
-0.9	**-958.553511**	**-2040.724840**	**-2253.185146**	**-1285.311279**	**-1549.189506**	**-1668.739511**
+0.9	**291.393137**	**436.700200**	**480.812275**	**300.692455**	**340.996904**	**362.042241**
-0.95	**-1011.806484**	**-2154.098443**	**-2378.362099**	**-1356.717461**	**-1635.255589**	**-1761.447262**
+0.95	**220.792437**	**460.961322**	**507.524068**	**291.378837**	**351.914182**	**378.084191**
-1	**-1065.059490**	**-2267.472012**	**-2503.539036**	**-1428.123636**	**-1721.321677**	**-1854.155020**
+1	**232.413093**	**485.222438**	**534.235860**	**306.714569**	**370.435985**	**397.983356**
(Span 2) -2	**-1065.059490**	**-2267.472012**	**-2503.539036**	**-1428.123636**	**-1721.321677**	**-1854.155020**
+2	**232.413093**	**485.222438**	**534.235860**	**306.714569**	**370.435985**	**397.983356**
-2.05	**-775.774207**	**-1619.626480**	**-1783.228541**	**-1023.784038**	**-1236.480090**	**-1328.430750**
+2.05	**179.350677**	**374.440919**	**412.264050**	**236.688324**	**285.861453**	**307.119463**
-2.1	**-722.711697**	**-1508.844959**	**-1661.256733**	**-953.757796**	**-1151.905560**	**-1237.566849**
+2.1	**365.715100**	**446.340728**	**487.371477**	**365.623910**	**417.713534**	**446.388091**
-2.15	**-669.649187**	**-1398.063438**	**-1539.284925**	**-883.731553**	**-1067.331030**	**-1146.702948**
+2.15	**662.897493**	**998.917574**	**1091.061226**	**707.767824**	**840.639189**	**890.962939**
-2.2	**-616.586677**	**-1287.281917**	**-1417.313117**	**-813.705311**	**-982.756501**	**-1055.839047**
+2.2	**939.291792**	**1604.126965**	**1759.979991**	**1087.202159**	**1297.716402**	**1384.569752**

-2.25	**-563.524166**	**-1176.500396**	**-1295.341309**	**-743.679069**	**-898.181971**	**-964.975147**
+2.25	**1186.832075**	**2134.692185**	**2349.052008**	**1420.983717**	**1696.795637**	**1816.752972**
-2.3	**-510.461656**	**-1065.718876**	**-1173.369501**	**-673.652826**	**-813.607441**	**-874.111246**
+2.3	**1397.476341**	**2577.846970**	**2842.345476**	**1699.867999**	**2030.748976**	**2175.783819**
-2.35	**-457.399146**	**-954.937355**	**-1051.397693**	**-603.626584**	**-729.032911**	**-783.247345**
+2.35	**1565.205957**	**2941.578576**	**3227.248917**	**1916.643652**	**2289.383506**	**2452.746847**
-2.4	**-404.336636**	**-844.155834**	**-929.425885**	**-533.600342**	**-644.458382**	**-692.383444**
+2.4	**1685.608065**	**3204.108778**	**3494.925795**	**2068.071679**	**2468.941079**	**2651.293132**
-2.45	**-351.274126**	**-733.374313**	**-807.454077**	**-463.574099**	**-559.883852**	**-601.519544**
+2.45	**1755.452164**	**3357.110340**	**3678.098146**	**2149.472962**	**2563.716799**	**2761.843022**
-2.5	**-298.211616**	**-622.592792**	**-685.482269**	**-393.547857**	**-475.309322**	**-510.655643**
+2.5	**1773.219904**	**3397.889316**	**3740.091229**	**2159.203912**	**2572.385994**	**2779.500230**
-2.55	**-351.273483**	**-733.374267**	**-807.454052**	**-463.574123**	**-559.883859**	**-601.519466**
+2.55	**1755.682805**	**3357.116061**	**3676.797071**	**2149.477495**	**2563.712194**	**2761.845653**
-2.6	**-404.335899**	**-844.155786**	**-929.425862**	**-533.600367**	**-644.458390**	**-692.383359**
+2.6	**1685.789125**	**3204.111583**	**3494.925609**	**2068.073892**	**2468.943436**	**2651.292978**
-2.65	**-457.398315**	**-954.937305**	**-1051.397673**	**-603.626612**	**-729.032921**	**-783.247251**
+2.65	**1565.409909**	**2941.578446**	**3227.248451**	**1916.646829**	**2289.386428**	**2452.753863**
-2.7	**-510.460731**	**-1065.718823**	**-1173.369483**	**-673.652857**	**-813.607452**	**-874.111144**
+2.7	**1397.602436**	**2577.848302**	**2841.742933**	**1699.869979**	**2030.750624**	**2175.788148**
-2.75	**-563.523147**	**-1176.500342**	**-1295.341293**	**-743.679101**	**-898.181983**	**-964.975037**
+2.75	**1186.888740**	**2134.694889**	**2349.051743**	**1420.985186**	**1696.796323**	**1816.754886**
-2.8	**-616.585563**	**-1287.281861**	**-1417.313103**	**-813.705346**	**-982.756515**	**-1055.838930**
+2.8	**939.289307**	**1604.127504**	**1759.979486**	**1087.203190**	**1297.719720**	**1384.570428**
-2.85	**-669.647979**	**-1398.063379**	**-1539.284913**	**-883.731591**	**-1067.331046**	**-1146.702823**
+2.85	**662.848663**	**998.917607**	**1091.060686**	**707.769123**	**840.641120**	**890.962596**
-2.9	**-722.710395**	**-1508.844898**	**-1661.256724**	**-953.757835**	**-1151.905577**	**-1237.566716**
+2.9	**365.634546**	**446.342278**	**487.371127**	**365.624529**	**417.716764**	**446.392859**
-2.95	**-775.772811**	**-1619.626417**	**-1783.228534**	**-1023.784080**	**-1236.480108**	**-1328.430609**
+2.95	**179.350975**	**374.440897**	**412.264003**	**236.688324**	**285.861445**	**307.119464**
-3	**-1065.060654**	**-2267.471987**	**-2503.512834**	**-1428.123707**	**-1721.321789**	**-1854.155071**
+3	**232.413505**	**485.222448**	**534.235850**	**306.714558**	**370.435978**	**397.983390**
(Span 3) -4	**-1065.060654**	**-2267.471987**	**-2503.512834**	**-1428.123707**	**-1721.321789**	**-1854.155071**
+4	**232.413505**	**485.222448**	**534.235850**	**306.714558**	**370.435978**	**397.983390**
-3.05	**-1011.807623**	**-2154.098386**	**-2378.337192**	**-1356.717521**	**-1635.255700**	**-1761.447317**
+3.05	**220.792830**	**460.961325**	**507.524058**	**291.378831**	**351.914179**	**378.084221**
-3.1	**-958.554592**	**-2040.724785**	**-2253.161550**	**-1285.311335**	**-1549.189611**	**-1668.739564**
+3.1	**291.563373**	**436.700203**	**480.812265**	**300.693737**	**340.994756**	**362.038591**
-3.15	**-905.301561**	**-1927.351184**	**-2127.985908**	**-1213.905150**	**-1463.123521**	**-1576.031811**
+3.15	**538.520059**	**765.843430**	**824.268323**	**563.455495**	**675.790491**	**703.222628**
-3.2	**-852.048530**	**-1813.977583**	**-2002.810266**	**-1142.498964**	**-1377.057432**	**-1483.324058**
+3.2	**777.927874**	**1284.366863**	**1397.311249**	**889.146023**	**1067.572799**	**1126.490976**
-3.25	**-798.795499**	**-1700.603982**	**-1877.634624**	**-1071.092778**	**-1290.991343**	**-1390.616305**
+3.25	**997.368755**	**1753.880246**	**1916.910591**	**1182.675956**	**1419.860257**	**1509.264737**
-3.3	**-745.542468**	**-1587.230381**	**-1752.458982**	**-999.686592**	**-1204.925254**	**-1297.908552**
+3.3	**1194.720433**	**2164.239956**	**2375.348787**	**1437.654468**	**1725.041051**	**1843.321378**
-3.35	**-692.289437**	**-1473.856780**	**-1627.283340**	**-928.280407**	**-1118.859164**	**-1205.200799**
+3.35	**1364.394315**	**2506.055417**	**2759.676988**	**1655.874547**	**1979.734867**	**2121.094009**
-3.4	**-639.036406**	**-1360.483179**	**-1502.107698**	**-856.874221**	**-1032.793075**	**-1112.493046**
+3.4	**1502.087327**	**2786.819526**	**3059.922840**	**1826.877476**	**2182.902762**	**2335.192864**
-3.45	**-585.783375**	**-1247.109578**	**-1376.932056**	**-785.468035**	**-946.726986**	**-1019.785292**
+3.45	**1603.862437**	**3004.551297**	**3267.992838**	**1945.082739**	**2322.018915**	**2492.059617**
-3.5	**-532.530344**	**-1133.735977**	**-1251.756414**	**-714.061849**	**-860.660896**	**-927.077539**
+3.5	**1666.378864**	**3136.021334**	**3431.487609**	**2005.756692**	**2391.460879**	**2578.084734**
-3.55	**-479.277313**	**-1020.362376**	**-1126.580772**	**-642.655664**	**-774.594807**	**-834.369786**
+3.55	**1692.456740**	**3191.836524**	**3499.582267**	**2034.065590**	**2424.243906**	**2616.532113**
-3.6	**-426.024282**	**-906.988775**	**-1001.405129**	**-571.249478**	**-688.528718**	**-741.662033**

+3.6	**1694.313765**	**3184.406945**	**3462.402664**	**2053.866157**	**2452.592455**	**2634.954161**
-3.65	**-372.771251**	**-793.615174**	**-876.229487**	**-499.843292**	**-602.462629**	**-648.954280**
+3.65	**1650.555090**	**3076.165900**	**3382.252793**	**2013.794182**	**2409.386973**	**2576.270498**
-3.7	**-319.518220**	**-680.241573**	**-751.053845**	**-428.437107**	**-516.396539**	**-556.246527**
+3.7	**1558.532381**	**2907.543375**	**3193.545215**	**1910.155541**	**2290.478316**	**2454.635435**
-3.75	**-266.265189**	**-566.867972**	**-625.878203**	**-357.030921**	**-430.330450**	**-463.538774**
+3.75	**1430.477499**	**2645.833297**	**2903.409225**	**1753.840975**	**2112.706404**	**2246.194735**
-3.8	**-213.012158**	**-453.494371**	**-500.702561**	**-285.624735**	**-344.264361**	**-370.831020**
+3.8	**1253.472259**	**2317.091813**	**2519.264022**	**1531.558400**	**1851.929894**	**1953.483046**
-3.85	**-159.759127**	**-340.120770**	**-375.526919**	**-214.218549**	**-258.198272**	**-278.123267**
+3.85	**1023.093569**	**1895.424217**	**2026.373469**	**1242.776708**	**1505.664313**	**1591.833170**
-3.9	**-106.506096**	**-226.747169**	**-250.351277**	**-142.812364**	**-172.132182**	**-185.415514**
+3.9	**737.853071**	**1362.910555**	**1459.306685**	**904.144747**	**1092.242346**	**1152.651989**
-3.95	**-53.253065**	**-113.373568**	**-125.175635**	**-71.406178**	**-86.066093**	**-92.707761**
+3.95	**397.219666**	**741.894934**	**791.956353**	**490.099504**	**592.001173**	**625.771280**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-19.10079986**	***-28.027988***	***-41.318737***	**-14.41966124**	**-15.51781419**	**-14.6275874**	**-17.71370559**	**-18.29349416**	**-19.36332368**	**-7.696839234**
End Shear	**140.1551274**	***186.367771***	***249.224281***	**119.8361512**	**128.2063346**	**120.3578433**	**144.1007616**	**138.5019116**	**146.4454159**	**63.34330402**
-0.05	**-19.10079986**	***-28.252507***	***-41.520804***	**-14.41966124**	**-15.51781419**	**-14.6275874**	**-17.71370559**	**-18.29349416**	**-19.36332368**	**-7.696839234**
+0.05	**130.3366835**	***171.335869***	***226.442365***	**111.875598**	**119.6374349**	**112.2842686**	**134.3235331**	**128.2946845**	**135.6401866**	**59.10497993**
-0.1	**-19.10079986**	***-29.029050***	***-42.219693***	**-14.41966124**	**-15.51781419**	**-14.6275874**	**-17.71370559**	**-18.29349416**	**-19.36332368**	**-7.696839234**
+0.1	**120.6009055**	***156.063759***	***202.906181***	**103.6636351**	**110.8007051**	**103.9565717**	**124.244455**	**117.7892737**	**124.5200083**	**54.69120019**
-0.15	**-19.10079986**	***-35.594672***	***-48.136909***	**-17.05184775**	**-17.5173155**	**-15.99544313**	**-17.71370559**	**-18.29349416**	**-19.36332368**	**-7.981702614**
+0.15	**112.2353512**	***143.317256***	***183.284436***	**96.60133888**	**103.2034395**	**96.79837349**	**115.5857561**	**108.8056098**	**115.0112241**	**50.89884467**
-0.2	**-27.42487255**	***-44.977213***	***-58.537594***	**-25.23729879**	**-26.33804273**	**-24.31576936**	**-27.6999796**	**-18.63289651**	**-19.72922675**	**-12.33012362**
+0.2	**102.6951706**	***129.193496***	***161.592328***	**88.54022478**	**94.53443359**	**88.63205036**	**105.7134**	**98.6115706**	**104.2220235**	**46.57429581**
-0.25	**-36.82433539**	***-53.480017***	***-68.843850***	**-32.26695715**	**-33.91560419**	**-31.46489484**	**-36.38025345**	**-24.93935989**	**-26.25195778**	**-16.12783093**
+0.25	**94.67609993**	***117.473350***	***143.656766***	**81.6501991**	**87.1272585**	**81.65588295**	**97.28497977**	**89.95207288**	**95.05759213**	**42.88171466**
-0.3	**-47.60407922**	***-63.689843***	***-81.084449***	**-40.27926711**	**-42.5551433**	**-39.61763757**	**-46.28484842**	**-34.57075097**	**-36.39883626**	**-20.46038935**
+0.3	**85.438587**	***104.566680***	***124.009021***	**73.83577452**	**78.72918985**	**73.74825172**	**87.73730798**	**80.19474386**	**84.73208061**	**38.69818349**
-0.35	**-56.82208127**	***-72.858427***	***-91.964614***	**-47.11734241**	**-49.93095335**	**-46.57935268**	**-54.74759412**	**-43.69458744**	**-46.06093425**	**-24.16149343**
+0.35	**77.60337916**	***93.927258***	***107.991098***	**67.20107554**	**71.60155063**	**67.03845295**	**79.64139452**	**71.96804803**	**76.02702813**	**35.15026133**
-0.4	**-67.28187212**	***-83.774316***	***-104.793672***	**-54.86067751**	**-58.28609843**	**-54.46719672**	**-64.34221746**	**-54.0872981**	**-57.06743191**	**-28.35669014**
+0.4	**68.78885952**	***82.294394***	***92.628136***	**59.72917939**	**63.57763006**	**59.48683303**	**70.53636955**	**62.77279247**	**66.29794327**	**31.15953194**
-0.45	**-76.16706039**	***-93.498423***	***-116.117642***	**-61.42410648**	**-65.37070348**	**-61.1571659**	**-72.48520904**	**-62.95098503**	**-66.45519552**	**-31.91630976**
+0.45	**61.36968584**	***72.779637***	***81.967867***	**53.43286461**	**56.81897294**	**53.1277349**	**62.87518291**	**55.08753539**	**58.16729696**	**27.80115059**
-0.5	**-86.178745**	***-104.987124***	***-129.379639***	**-68.80262398**	**-73.3382396**	**-68.68279287**	**-81.65189995**	**-72.9808462**	**-77.07878967**	**-35.92235776**
+0.5	**53.09223399**	***62.465263***	***70.376786***	**46.39933436**	**49.2724101**	**46.02943611**	**54.33075609**	**46.57967918**	**49.16733677**	**24.05501985**
-0.55	**-94.62005315**	***-115.146054***	***-141.007944***	**-75.00835366**	**-80.04219895**	**-75.0166785**	**-89.37291092**	**-81.47574465**	**-86.0771894**	**-39.29560849**
+0.55	**46.1879537**	***54.108686***	***60.959594***	**40.52447474**	**42.97219629**	**40.10539373**	**47.2065451**	**39.54449625**	**41.72612232**	**20.93106193**
-0.6	**-104.055504**	***-127.062310***	***-154.536535***	**-81.92621321**	**-87.51891294**	**-82.08278421**	**-97.99372331**	**-91.01739918**	**-96.18514896**	**-43.06072493**
+0.6	**38.56165439**	***45.145475***	***50.833949***	**34.02514804**	**36.00620084**	**33.55772967**	**39.34067217**	**31.84939646**	**33.58801783**	**17.48130883**
-0.65	**-111.9418618**	***-137.524950***	***-166.320321***	**-87.69118044**	**-93.75277357**	**-87.97623678**	**-105.1905114**	**-99.03487559**	**-104.6791611**	**-46.20272109**
+0.65	**32.27113473**	***37.970175***	***42.711476***	**28.65478617**	**30.25386085**	**28.1530659**	**32.85564677**	**25.57291836**	**26.95125597**	**14.63665471**
-0.7	**-120.6729221**	***-149.711445***	***-185.413891***	**-94.05255366**	**-100.6354659**	**-94.4855089**	**-113.1474928**	**-107.9629943**	**-114.1387846**	**-49.67511435**
+0.7	**25.41005854**	***30.378757***	***34.105440***	**22.78550195**	**23.97164411**	**22.25335144**	**25.78628518**	**18.81592934**	**19.8077353**	**11.53507447**
-0.75	**-127.8932879**	***-160.336258***	***-204.813921***	**-99.29369811**	**-106.3097782**	**-99.85419633**	**-119.7178373**	**-115.3944134**	**-122.0133835**	**-52.5409784**
+0.75	**19.83216824**	***24.397411***	***27.319952***	**18.00270734**	**18.88927712**	**17.45242058**	**20.04269255**	**13.78231923**	**14.50770445**	**9.01460962**
-0.8	**-135.791803**	***-172.623676***	***-227.033162***	**-105.0027422**	**-112.4952338**	**-105.7093064**	**-126.8930125**	**-123.5836323**	**-130.6919325**	**-55.66886151**
+0.8	**13.85038899**	***18.186391***	***20.308307***	**12.85930736**	**13.36141338**	**12.29796358**	**13.88779143**	**9.528763645**	**10.08309845**	**6.312985888**
-0.85	**-142.2351069**	***-183.258704***	***-246.082688***	**-109.636999**	**-117.520543**	**-110.4688906**	**-132.7346858**	**-130.3203604**	**-137.8320943**	**-58.21370615**
+0.85	**9.083992839**	***13.401250***	***15.273090***	**8.747138045**	**8.973186887**	**8.185097167**	**8.987851839**	**6.536120855**	**6.903891098**	**4.16159175**
-0.9	**-149.1729479**	***-195.465700***	***-267.745300***	**-114.5978761**	**-122.9055516**	**-115.5725319**	**-139.0101076**	**-137.6453489**	**-145.5968659**	**-60.94528842**
+0.9	**4.266034074**	***8.567220***	***10.322960***	**4.597335969**	**4.597335969**	**4.256409404**	**4.504024794**	**3.963262256**	**4.194465071**	**2.523672439**
-0.95	**-154.7281236**	***-205.948561***	***-286.563507***	**-118.5421967**	**-127.1924213**	**-119.6386737**	**-144.0208801**	**-143.578747**	**-151.887561**	**-63.12423718**
+0.95	**4.177503705**	***5.664440***	***8.083550***	**3.166130136**	**3.406257387**	**3.210503663**	**3.886229558**	**3.963262256**	**4.194465071**	**1.682494208**
-1	**-160.5771334**	***-217.881746***	***-307.740952***	**-122.6590685**	**-131.6737724**	**-123.8935322**	**-149.2785921**	**-149.9141541**	**-158.6058306**	**-65.40773166**
+1	**4.18E+00**	***5.548546***	***7.884286***	**3.17E+00**	**3.41E+00**	**3.21E+00**	**3.89E+00**	**3.96E+00**	**4.19E+00**	**1.68E+00**
(Span 2) -2	**-1.47E+01**	***-19.472735***	***-27.670065***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.36E+01**	**-1.39E+01**	**-1.47E+01**	**-5.90E+00**
+2	**1.54E+02**	***226.056311***	***323.179068***	**122.7510825**	**131.8149657**	**124.0535854**	**149.5620905**	**151.0786972**	**159.8517622**	**65.49445954**
-2.05	**-1.47E+01**	***-19.642178***	***-27.822563***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.36E+01**	**-1.39E+01**	**-1.47E+01**	**-5.90E+00**
+2.05	**1.47E+02**	***212.162435***	***299.738005***	**118.2547186**	**126.9198454**	**119.4054557**	**143.8173639**	**144.2056701**	**152.564219**	**63.00010344**
-2.1	**-14.66103545**	***-20.169677***	***-28.297313***	**-11.11159898**	**-11.95433055**	**-11.26732886**	**-13.63880267**	**-13.90915085**	**-14.72056191**	**-5.904747947**
+2.1	**139.3762956**	***198.039211***	***276.439909***	**113.1494378**	**121.3750978**	**114.1485773**	**137.3476872**	**136.6689926**	**144.5754873**	**60.18637192**
-2.15	**-14.66103545**	***-22.666873***	***-33.728315***	**-11.17521306**	**-11.95433055**	**-11.26732886**	**-13.63880267**	**-13.90915085**	**-14.72056191**	**-5.904747947**
+2.15	**130.9540342**	***183.802720***	***253.196033***	**107.5068739**	**115.2578666**	**108.3556877**	**130.2412266**	**128.5623616**	**135.9847752**	**57.09197366**
-2.2	**-18.9364787**	***-29.368017***	***-41.273810***	**-16.71921802**	**-17.52448291**	**-16.22713409**	**-18.66220705**	**-13.90915085**	**-14.72056191**	**-8.424693253**
+2.2	**122.0538093**	***169.563300***	***229.970485***	**101.3986599**	**108.6452949**	**102.0995236**	**122.5861479**	**119.9794641**	**126.8912811**	**53.75562128**

-2.25	-26.66135186	-36.981698	-49.933003	-22.74275568	-23.97112428	-22.28087308	-25.91428587	-19.5177734	-20.55842389	-11.60434412
+2.25	112.7715582	155.425473	206.960807	94.89643188	101.6145297	95.45282584	114.4706226	111.0139902	117.3942058	50.21602683
-2.3	-35.45507618	-45.970415	-60.158185	-29.54201695	-31.25757379	-29.12916425	-34.13871604	-27.47264391	-28.96958587	-15.20830273
+2.3	102.665203	140.721491	183.119475	87.6846629	93.82471624	88.09357017	105.5021409	101.2389253	107.0413096	46.30205604
-2.35	-44.29172302	-55.345945	-70.807310	-36.32629403	-38.53607185	-35.97498874	-42.37747039	-35.59373693	-37.55890259	-18.81669122
+2.35	93.8521782	127.096283	161.151862	80.597478	86.17659627	80.87253357	96.71701938	91.7812804	97.02619556	42.46624074
-2.4	-53.52291194	-65.511235	-82.323248	-43.37121926	-46.1013969	-43.09501497	-50.96151771	-44.18849323	-46.65124508	-22.57451795
+2.4	85.19122262	113.856326	139.971539	73.33516865	78.34600921	73.48322264	87.74085505	82.06408713	86.73877644	38.54545441
-2.45	-63.05283134	-76.414415	-94.632679	-50.60515818	-53.87640407	-50.41652634	-59.80271576	-53.16322014	-56.14740936	-26.44306532
+2.45	76.42604911	101.082699	122.047218	65.96935797	70.41008893	65.99836467	78.66180399	72.40626319	76.51377094	34.57840549
-2.5	-73.33046238	-88.660013	-108.399976	-58.36689265	-62.22560078	-58.28299316	-69.31663592	-62.94523489	-66.49961586	-30.6038971
+2.5	67.15508256	87.997395	107.627688	57.95603962	61.7834787	57.86634407	68.81236426	62.42372066	65.94765767	30.383559
-2.55	-83.17366661	-101.083097	-122.088160	-65.96979951	-70.41056456	-65.97878901	-78.64232024	-72.40678051	-76.51431852	-34.57848703
+2.55	58.32519604	76.414012	94.614267	50.6047264	53.87593964	50.41610119	59.80220156	53.16271138	56.14687097	26.44299424
-2.6	-93.022941	-113.856726	-139.971539	-73.335602	-78.3464767	-73.48364959	-87.7413736	-82.02772111	-86.70049967	-38.54553421
+2.6	49.77364132	65.510851	82.315562	43.37079682	46.10094291	43.09461135	50.96103025	44.18801747	46.65074171	22.57443521
-2.65	-103.0514763	-127.096690	-161.151864	-80.59789511	-86.1770463	-80.87294389	-96.71751777	-91.78181542	-97.02676203	-42.4663215
+2.65	41.46484136	55.345558	70.583634	36.32587083	38.53561758	35.97457341	42.37697004	35.5932686	37.55840718	18.81662089
-2.7	-112.6190541	-140.721870	-183.119478	-87.685077	-93.82516362	-88.0939799	-105.5026399	-101.2394343	-107.0418486	-46.30213335
+2.7	33.48410543	45.970052	59.954852	29.54162254	31.2571509	29.12877762	34.13825115	27.47221656	28.96913396	15.20824122
-2.75	-121.9027185	-154.645392	-205.692707	-94.5254658	-101.2136328	-95.07396926	-114.008511	-110.5070928	-116.8573007	-50.01427943
+2.75	25.91668027	37.430433	50.262187	23.08963741	24.34263543	22.62991282	26.33298213	19.91849591	20.98206458	11.78799443
-2.8	-131.2882316	-169.563643	-229.970480	-101.3990354	-108.6457011	-102.0999089	-122.586619	-119.9799571	-126.8918033	-53.75568834
+2.8	18.4714539	29.367696	41.115711	16.71887283	17.52411382	16.22679801	18.66180525	13.90915113	14.72056264	8.424639016
-2.85	-139.6873982	-183.803037	-253.196033	-107.5072136	-115.2582344	-108.3560369	-130.2416544	-128.5628149	-135.9852555	-57.09204297
+2.85	14.67267741	22.666578	33.588108	11.17490696	11.9543311	11.26732924	13.63880243	13.90915113	14.72056264	5.904748119
-2.9	-147.5099498	-198.039491	-276.439906	-113.1497586	-121.3754458	-114.1489072	-137.3480925	-136.669434	-144.5759551	-60.18642993
+2.9	14.67267741	20.169678	28.297313	11.11159899	11.9543311	11.26732924	13.63880243	13.90915113	14.72056264	5.904748119
-2.95	-154.6601021	-212.162683	-299.738007	-118.2549976	-126.9201489	-119.4057431	-143.8177183	-144.2060629	-152.5646354	-63.00015205
+2.95	14.67267741	19.642178	27.822563	11.11159899	11.9543311	11.26732924	13.63880243	13.90915113	14.72056264	5.904748119
-3	-161.3721816	-226.819257	-324.473394	-122.981835	-132.0665895	-124.2927444	-149.858512	-151.4395383	-160.2344415	-65.62293849
+3	14.67267741	19.472736	27.670065	11.11159899	11.9543311	11.26732924	13.63880243	13.90915113	14.72056264	5.904748119
(Span 3) -4	-4.180820933	-5.548546	-7.884286	-3.166130137	-3.406257543	-3.210503772	-3.886229491	-3.963262334	-4.194465278	-1.682494257
+4	152.816817	217.092459	306.348641	122.3993189	131.3907644	123.6246766	148.9458268	149.5090898	158.1762374	65.26341777
-3.05	-4.180820933	-5.648687	-7.974413	-3.166130137	-3.406257543	-3.210503772	-3.886229491	-3.963262334	-4.194465278	-1.682494257
+3.05	147.1072425	206.749818	287.994054	118.8310909	127.5066334	119.9368629	144.3888166	144.0180471	152.3533596	63.28424355
-3.1	-4.441697922	-8.866938	-10.491304	-4.818035439	-4.818035439	-4.489261485	-4.761004446	-3.963262334	-4.194465278	-2.620957956
+3.1	140.0010682	194.654771	266.313380	114.2802038	122.560517	115.2454085	138.6074568	137.1721552	145.0952217	60.77022843
-3.15	-8.709877737	-13.056417	-14.866033	-8.444973984	-8.650961055	-7.883221931	-8.628686502	-6.316106855	-6.670185714	-4.043100608
+3.15	133.4204491	184.074851	247.538311	109.9805077	117.8932198	110.8219874	133.1684371	130.8234729	138.365373	58.40271115
-3.2	-14.20431337	-18.577791	-20.665081	-13.18953122	-13.71402657	-12.62859005	-14.28216368	-9.768967989	-10.33830167	-6.485991813
+3.2	125.3733816	171.804196	225.558999	104.6335405	112.0950576	105.3304095	126.428348	123.0506742	130.1270944	55.46650302
-3.25	-19.8605598	-23.960689	-26.752979	-17.64741644	-18.47684682	-17.09604757	-19.61672893	-13.41309479	-14.11904715	-8.827529845
+3.25	118.0329283	161.154609	206.301546	99.68543918	106.7340462	100.2556972	120.2095191	115.9529896	122.6053025	52.75553034
-3.3	-26.91534417	-30.862261	-34.568590	-23.16576906	-24.37850183	-22.63533377	-26.24364887	-19.24998627	-20.26657349	-11.73562035
+3.3	109.2645654	148.895705	183.917778	93.6382252	100.1870439	94.06133304	112.6286866	107.3786284	113.5196008	49.44891691
-3.35	-33.45360968	-37.441536	-42.014858	-28.25274481	-29.82337278	-27.74868053	-32.37074603	-25.10641043	-26.45801339	-14.42378836
+3.35	102.6271026	138.333616	167.109517	88.12474835	94.22173504	88.41968733	105.7323011	99.6405719	105.3208861	46.43938073
-3.4	-41.45431379	-45.720682	-51.371871	-34.44905388	- 36.4604061190 404	-33.9845701	- 39.853151665 4469	-32.34815408	-34.1154487588264	-17.70594016
+3.4	94.63154064	126.261803	153.518483	81.47315326	87.02913153	81.61983161	97.42865746	90.38999859	95.5204852	42.81414
-3.45	-48.75687319	-53.488874	-60.134244	-40.08209048	-42.49791068	-39.65946859	-46.67055225	-39.01760007	-41.16885333	-20.69585438
+3.45	87.43416894	115.933962	141.798680	75.47738572	80.54900138	75.49559258	89.95694582	82.12024512	86.75991529	39.55091348
-3.5	-57.57541516	-63.131018	-70.984344	-46.86049049	-49.76708256	-46.49464742	-54.89048715	-47.13476622	-49.75449669	-24.30026859
+3.5	78.8496131	104.212553	128.389245	68.31719757	72.8139538	68.18755824	81.04844518	72.31876699	76.37749343	35.65884134
-3.55	-65.53120954	-72.070240	-81.016262	-52.95650211	-56.30774434	-52.64678872	-62.29599981	-54.50859711	-57.55483862	-27.54705947

+3.55	71.19119491	94.255282	116.902245	61.92222536	65.9084796245981	61.6650644030424	73.10363684	63.62591112	67.17005082	32.1868036
-3.6	-75.03937156	-83.048709	-93.300219	-60.22121265	-64.10590676	-59.98391366	-71.13547229	-63.37584405	-66.93597529	-31.42195876
+3.6	62.08088229	83.035588	103.845678	54.34930524	57.73422277	53.94616564	63.70823702	53.398953	56.33841084	28.07970927
-3.65	-83.53733924	-93.130654	-106.822471	-66.69710763	-71.06024214	-66.52892897	-79.02683129	-71.34538885	-75.36819122	-34.88073178
+3.65	54.06311744	73.574795	92.735287	47.63816515	50.49282843	47.10975835	55.39256258	44.39159049	46.79907924	24.44372829
-3.7	-93.60705475	-105.406774	-125.282945	-74.35226181	-79.28415355	-74.27071385	-88.36791861	-80.83740528	-85.4121385	-38.9743323
+3.7	44.64640022	62.996022	80.192180	39.74835259	41.982574	39.0772759	45.62817872	33.86445963	35.65089936	20.17338124
-3.75	-102.5361367	-116.592710	-142.311484	-81.12501161	-86.56274752	-81.12426519	-96.64289612	-89.29406437	-94.36124059	-42.6002022
+3.75	36.36589792	54.147185	69.592782	32.80410206	34.49470618	32.01132606	37.04390664	25.57387823	26.91987182	16.41835601
-3.8	-113.0392227	-130.115779	-163.005775	-89.07477085	-95.10919702	-89.17339541	-106.3676409	-99.28542553	-104.9351959	-46.8607143
+3.8	26.70293494	44.336592	57.831191	24.69323408	25.75166359	23.76260566	27.02853426	18.29349507	19.36332504	12.03654451
-3.85	-122.2883597	-142.356557	-181.806121	-96.06131538	-102.6225999	-96.25114433	-114.9240085	-108.1206095	-114.2862071	-50.60879951
+3.85	19.11245504	36.204771	48.754933	17.59893381	18.10677207	16.55142171	18.27785611	18.29349507	19.36332504	8.20735821
-3.9	-133.0966233	-157.063846	-204.445981	-104.2098411	-111.388377	-104.5103053	-124.9144541	-118.4860075	-125.2574915	-54.98443495
+3.9	19.11245504	28.960067	42.157608	14.41966205	15.51781425	14.62758735	17.71370635	18.29349507	19.36332504	7.696839217
-3.95	-142.5547555	-170.299888	-224.844552	-111.3271205	-119.0471398	-111.7279118	-133.6499818	-127.5910405	-134.8953433	-58.80983517
+3.95	19.11245504	28.287042	41.551885	14.41966205	15.51781425	14.62758735	17.71370635	18.29349507	19.36332504	7.696839217
-5	-153.5401368	-186.116614	-249.224281	-119.5785757	-127.9290354	-120.0998245	-143.7882142	-138.2051294	-146.1312375	-63.2488241
+5	19.11245504	28.027988	41.318737	14.41966205	15.51781425	14.62758735	17.71370635	18.29349507	19.36332504	7.696839217

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.03998069	-15.74444051	-16.83231914	-22.36664674	-8.85071767	-11.9570139	-13.69217477	-15.33379784	-17.06469858
End Shear	90.46415854	120.3067579	122.2944221	129.541394	72.86391086	98.23518896	111.2264805	121.7129963	132.4445502
-0.05	-11.03998069	-15.74444051	-16.83231914	-22.42478106	-8.85071767	-11.9570139	-13.69217477	-15.33379784	-17.06469858
+0.05	84.35585495	111.5091705	112.8273934	116.2856621	67.96982395	91.63161383	103.6591235	113.2513907	123.037605
-0.1	-11.03998069	-15.74444051	-16.83231914	-22.62585023	-8.85071767	-11.9570139	-13.69217477	-15.33379784	-17.06469858
+0.1	78.05680988	102.4511141	103.0966265	102.9967639	62.92479396	84.82098425	95.85536348	104.5305289	113.3481983
-0.15	-11.39348001	-15.74444051	-16.83231914	-22.91578665	-9.610695492	-12.84584944	-13.69217477	-15.33379784	-17.06469858
+0.15	72.64437524	94.70223044	94.79963353	92.23394648	58.58849626	78.967473	89.15261161	97.0482842	105.0441429
-0.2	-17.69760464	-15.9459433	-16.83231914	-23.38285951	-14.65246498	-19.65400778	-21.00659437	-20.95188588	-20.94797401
+0.2	66.47206431	85.90587615	85.41369837	80.97904094	53.64178486	72.2903717	81.51188952	88.52866319	95.59959881
-0.25	-23.11628172	-22.53051373	-19.22821794	-23.90140826	-18.9847448	-25.50447596	-27.73435635	-28.16058409	-28.15621006
+0.25	61.20141481	78.43057204	77.46668324	71.6598037	49.41625102	66.58709041	74.99005736	81.26523331	87.55728581
-0.3	-29.2979313	-30.78643239	-26.70322087	-26.06997483	-23.92545228	-32.17701571	-35.41248074	-36.80309948	-37.8145942
+0.3	55.22955658	70.0038583	68.54355562	61.98062898	44.62683436	60.12314128	67.6037879	73.04932485	78.47188205
-0.35	-34.5785129	-38.63157498	-34.00818417	-32.29065827	-28.14458562	-37.87544435	-41.97412188	-44.19734564	-46.09822599
+0.35	50.16458196	62.89568828	61.04876744	54.0717283	40.56317962	54.63909368	61.34210176	66.09352486	70.79034107
-0.4	-40.56396263	-47.56435991	-42.7289746	-39.8134238	-32.92525079	-44.33274367	-49.41485512	-52.59224781	-55.51382398
+0.4	44.46690693	54.94657507	52.70642368	45.82800112	35.99003145	48.46792165	54.30170934	58.28381586	62.1783601
-0.45	-45.64255928	-55.17988313	-51.15449331	-47.65585152	-36.98012672	-49.8101305	-55.73114675	-59.7274942	-63.52638961
+0.45	39.67149729	48.29909475	45.76611471	39.69070915	32.13937039	43.27210703	48.37938998	51.72446865	54.95663666
-0.5	-51.35808072	-63.79374669	-60.71630046	-57.0215432	-41.54177446	-55.97256578	-62.84307225	-67.77230479	-72.57207474
+0.5	34.32172549	40.93550979	38.12255385	33.00128684	27.84147478	37.47332911	41.77629945	44.42343838	46.93235717
-0.55	-56.17079715	-71.08609309	-68.83963014	-65.02524582	-45.38127864	-61.15990724	-68.83478704	-74.55973235	-80.21453108
+0.55	29.85978483	34.84227328	31.8389757	27.55922164	24.25491863	32.63476498	36.27258434	38.3493465	40.26949641
-0.6	-61.54267872	-79.27308098	-77.99378189	-74.6401026	-49.66492776	-66.9478656	-75.5264933	-82.15197942	-88.77602857
+0.6	24.93163989	28.17217117	25.01216483	21.70857078	20.29124424	27.28800162	30.1982066	31.65947389	32.94719599
-0.65	-66.02562134	-86.14869808	-85.7126775	-82.72331981	-53.23794649	-71.7761486	-81.11439179	-88.502771	-95.9493319
+0.65	20.8670549	22.72672864	19.91100393	17.33910788	17.01990609	22.87567944	25.19232405	26.15946052	26.94223849
-0.7	-70.9801267	-93.80087929	-94.34117154	-92.3468615	-57.18462778	-77.11001106	-87.29445376	-95.53996922	-103.9123613
+0.7	16.43425558	16.85806158	14.55730749	12.80238539	13.4494369	18.0605518	19.73807264	20.18322652	20.43619086
-0.75	-75.06940199	-100.166213	-101.5533795	-100.6127608	-60.44004785	-81.5102365	-92.39931323	-101.3653098	-110.5174697
+0.75	12.83092162	12.48776975	10.62888705	9.481956074	10.5984607	14.14348868	15.30925924	15.34610853	15.34533032
-0.8	-79.53281876	-107.1756272	-109.5382425	-111.8762441	-63.99077641	-86.31037063	-97.97631286	-107.7449716	-117.767751
+0.8	8.967199835	8.15448461	7.288096858	6.643762121	7.426136809	9.939612355	10.56655844	10.54529178	10.5446136
-0.85	-83.16453249	-112.9371246	-116.1415123	-122.0840575	-66.87748401	-90.21353477	-102.5189094	-112.9560455	-123.7056245
+0.85	5.889009568	5.717056401	4.633698811	4.43855382	4.938578726	6.58680687	6.889296504	6.888737558	6.888185778
-0.9	-87.06312782	-119.1958399	-123.3647708	-135.0972098	-69.97329103	-94.40032596	-107.4014223	-118.5757039	-130.1288783
+0.9	3.237429615	3.40996208	3.608277662	4.112432962	2.409751953	3.45699799	3.540763887	3.540236049	3.734745263
-0.95	-90.17338701	-124.2599438	-129.2568503	-146.7990025	-72.44017317	-97.73742395	-111.3025203	-123.0836951	-135.3004681
+0.95	2.419078309	3.40996208	3.608277662	4.030266322	1.941230004	2.623266451	3.000490298	3.358827111	3.734745263
-1	-93.43344303	-129.6600111	-135.6005001	-160.234148	-75.02207882	-101.2312517	-115.3991339	-127.8408582	-140.7824205
+1	2.42E+00	3.41E+00	3.61E+00	4.00E+00	1.94E+00	2.62E+00	3.00E+00	3.36E+00	3.73E+00
(Span 2) -2	-8.49E+00	-1.20E+01	-1.27E+01	-1.40E+01	-6.81E+00	-9.21E+00	-1.05E+01	-1.18E+01	-1.31E+01
+2	9.36E+01	130.6080929	137.2929496	176.6398666	75.12315774	101.3751156	115.6470537	128.2724645	141.440426
-2.05	-8.49E+00	-1.20E+01	-1.27E+01	-1.41E+01	-6.81E+00	-9.21E+00	-1.05E+01	-1.18E+01	-1.31E+01
+2.05	90.03565976	124.7491701	130.4655707	162.4551277	72.30343739	97.55886817	111.1735064	123.0772317	135.4572286
-2.1	-8.489805113	-11.96733222	-12.66332488	-14.21944621	-6.812787068	-9.206407669	-10.5302825	-11.78787322	-13.10716556
+2.1	86.02059712	118.3112349	123.073778	148.1336391	69.11538105	93.2462921	106.1414007	117.2773511	128.823571
-2.15	-8.489805113	-11.96733222	-12.66332488	-14.46158492	-6.812787068	-9.206407669	-10.5302825	-11.78787322	-13.10716556
+2.15	81.60466852	111.3749767	115.2057309	133.6438833	65.60306419	88.4968995	100.6190703	110.949437	121.6248718
-2.2	-11.936692	-11.96733222	-12.66332488	-14.82062387	-9.803617838	-13.15307043	-14.25785435	-14.33859721	-14.33690913
+2.2	76.84298386	104.0210766	106.9496419	119.3307745	61.81058055	83.37020311	94.67484456	104.1700634	113.946561
-2.25	-16.48151906	-17.41410951	-15.14853942	-15.30641323	-13.46623406	-18.0929472	-19.84957658	-20.46069762	-20.89845946

+2.25	71.79064322	96.33021833	98.39367414	105.5688014	57.78199691	77.92571733	88.3770564	97.01584411	105.8740359
-2.3	-21.63163517	-24.31339755	-21.47955378	-20.40522582	-17.61068617	-23.68406559	-26.19686212	-27.44497669	-28.53131231
+2.3	66.20318438	87.93569766	89.1345019	91.88567101	53.32218162	71.89976703	81.42132628	89.14213707	97.01975288
-2.35	-26.78723755	-31.34556684	-28.69032472	-26.58617827	-21.75456087	-29.27558601	-32.56004928	-34.47607071	-36.2490001
+2.35	60.72644101	79.80559216	80.23908172	79.75887575	48.9467423	65.98894063	74.61135802	81.45795008	88.40516922
-2.4	-32.15578375	-38.77815127	-36.4071422	-33.29416231	-26.06520133	-35.09319137	-39.1941507	-41.83235467	-44.3531323
+2.4	55.12741541	71.43384295	71.06576404	68.73647442	44.46990478	59.9421743	67.65662394	73.63298572	79.65740028
-2.45	-37.68217194	-46.53046516	-44.54185017	-40.59153438	-30.49854254	-41.07738687	-46.03083194	-49.43722316	-52.75827343
+2.45	49.44361342	63.12687686	62.20065104	58.52110752	39.93575165	53.81897163	60.50738426	65.62516208	70.681977
-2.5	-43.62594169	-54.9711731	-53.48438471	-49.15700415	-35.2625724	-47.50900018	-53.3916012	-57.64962915	-61.86254829
+2.5	43.3109801	54.52138752	53.00579681	48.651819	35.01022509	47.16829887	53.00136099	57.21365755	61.37850726
-2.55	-49.40872367	-63.12732262	-62.20109961	-58.52146734	-39.93602287	-53.80231844	-60.47377585	-65.61052638	-70.66647878
+2.55	37.68186052	46.53002594	44.54141403	40.59123862	30.49827825	41.07703923	46.03042339	49.43679395	52.75778365
-2.6	-55.1277391	-71.40012126	-71.06624665	-68.73691024	-44.47017171	-59.94252375	-67.6570263	-73.63341128	-79.65790706
+2.6	32.15548012	38.77774016	36.40672585	33.30303543	26.06495094	35.09286167	39.19375106	41.83194784	44.35265567
-2.65	-60.72676218	-79.80605229	-80.22638642	-79.75929382	-48.94700801	-65.98927667	-74.61175758	-81.45838519	-88.4056874
+2.65	26.78694152	31.3451615	28.68991764	26.58592994	21.7543089	29.27524654	32.55968544	34.47566849	36.24854433
-2.7	-66.20349506	-87.93613492	-89.13495277	-91.88614794	-53.32244504	-71.90010212	-81.42171284	-89.14257455	-97.02026078
+2.7	21.63135334	24.31302728	21.47920211	20.40498858	17.61044581	23.68374995	26.19651457	27.44460498	28.53086751
-2.75	-71.50284209	-95.89513566	-97.91176836	-104.8384595	-57.55238733	-77.61544622	-88.01856032	-96.60933911	-105.4162063
+2.75	16.74381747	17.76197286	15.46595721	15.33729372	13.67744118	18.3778444	20.17259093	20.81530907	21.28504415
-2.8	-76.84326728	-104.0214992	-106.9500717	-119.3313378	-61.81080637	-83.37051858	-94.67519891	-104.1704567	-113.9470186
+2.8	11.93644665	11.96733281	12.66332435	14.82062468	9.803402086	13.15279616	14.25755377	14.33827917	14.33657123
-2.85	-81.60493527	-111.3753649	-115.2061554	-133.6271474	-65.60328153	-88.49718583	-100.6194023	-110.9497944	-121.6253146
+2.85	8.48980479	11.96733281	12.66332435	14.46158571	6.812787417	9.206407382	10.53028316	11.78787386	13.1071661
-2.9	-86.02084073	-118.3116123	-123.074179	-148.1341649	-69.11557961	-93.24656254	-106.1417072	-117.2777036	-128.8239837
+2.9	8.48980479	11.96733281	12.66332435	14.21944703	6.812787417	9.206407382	10.53028316	11.78787386	13.1071661
-2.95	-90.03587948	-124.7495053	-130.4659588	-162.455645	-72.30361786	-97.55910393	-111.1737819	-123.0775409	-135.4576054
+2.95	8.48980479	11.96733281	12.66332435	14.08286225	6.812787417	9.206407382	10.53028316	11.78787386	13.1071661
-3	-93.77819498	-130.915286	-137.654254	-177.4214896	-75.26827016	-101.5715781	-115.8780711	-128.5420962	-141.7523624
+3	8.48980479	11.96733281	12.66332435	14.0389888	6.812787417	9.206407382	10.53028316	11.78787386	13.1071661
(Span 3) -4	-2.419078218	-3.41E+00	-3.61E+00	-4.00E+00	-1.941230104	-2.623266369	-3.000490485	-3.358827295	-3.734745416
+4	93.22724263	129.3150129	135.1930145	159.293496	74.85890729	101.0104144	115.1397438	127.5387834	140.43338
-3.05	-2.419078218	-3.41E+00	-3.61E+00	-4.03E+00	-1.941230104	-2.623266369	-3.000490485	-3.358827295	-3.734745416
+3.05	90.40164841	124.6346473	129.694847	147.6872337	72.62108272	97.98220984	111.5890716	123.4155969	135.6820314
-3.1	-3.392799153	-3.409962247	-3.60827751	-4.121080431	-2.509678378	-3.639239338	-3.753011688	-3.75247976	-3.751960806
+3.1	86.81308416	118.7917403	122.8965952	134.1857019	69.77484203	94.13191484	107.0880412	118.2143578	129.7151047
-3.15	-5.663275017	-5.546454523	-4.439339573	-4.278967225	-4.756022165	-6.340785679	-6.65528174	-6.654726483	-6.654185464
+3.15	83.43409046	113.3672109	116.6361133	122.8604779	67.09163871	90.50314536	102.856275	113.3436816	124.1479605
-3.2	-9.214836216	-8.395947146	-7.501929072	-6.823384149	-7.626134251	-10.20920522	-10.87031237	-10.84703124	-10.84634889
+3.2	79.24385177	106.7196297	109.0172904	111.0826766	63.76098534	85.99969934	97.61505907	107.3311996	117.2968978
-3.25	-12.56360468	-12.16696142	-10.39746117	-9.283218513	-10.32881377	-13.85277859	-14.98092351	-14.98814322	-14.98735846
+3.25	75.37535404	100.6444926	102.0967513	101.2331119	60.68351609	81.83935121	92.78141551	101.8018488	111.0130035
-3.3	-16.72109979	-17.23528574	-14.90096151	-13.09158492	-13.68059373	-18.37226286	-20.09083847	-20.56914025	-20.85566292
+3.3	70.6571615	93.30018067	93.77531113	91.69561952	56.92742843	76.76239282	86.89142847	95.08060327	103.3920301
-3.35	-20.56306162	-22.32177989	-19.54111841	-17.02357066	-16.77517269	-22.54558698	-24.81812543	-25.74884889	-26.49455527
+3.35	66.36305102	86.66798561	86.29696028	83.334747	53.50680517	72.1394857	81.53513426	88.98142448	96.49042254
-3.4	-25.2527643	-28.6046839926461	-25.45296372	-22.08420948	-20.54962626	-27.6365146336207	-30.59387528	-32.09471809	-33.4230477092181
+3.4	61.19063043	78.73489189	77.39085028	74.00810581	49.38426174	66.5686209	75.08779651	81.65386374	88.21384339
-3.45	-29.52404997	-34.38574877	-31.36986081	-27.15497905	-23.98497891	-32.27058591	-35.85860934	-37.89291403	-39.769361
+3.45	56.53480189	71.63922704	69.45694166	65.67508576	45.67159767	61.55216043	69.28808226	75.07364422	80.79356672
-3.5	-34.67223829	-41.41610228	-38.61981	-33.43409201	-28.12314276	-37.8533363	-42.20877691	-44.90117551	-47.45697059
+3.5	50.98187589	63.22526333	60.08421693	56.40210928	41.24155497	55.56700825	62.3748144	67.24227929	71.97566197
-3.55	-39.30891032	-47.79818202	-45.24455766	-39.23177871	-31.84815529	-42.87917479	-47.93172717	-51.22904061	-54.41166356
+3.55	46.02822136	55.7596478506796	51.7969994449778	48.2849662274061	37.2879803794572	50.22599870368	56.2109069944514	60.2698358377352	64.13575712

-3.6	-44.84186198	-55.46804353	-53.25226734	-46.31307877	-36.29105242	-48.87410337	-54.76489508	-58.79721705	-62.74407712
+3.6	40.16851299	46.97282674	42.07560484	39.25394418	32.60943372	43.90617982	48.92312688	52.03714473	54.89084536
-3.65	-49.78004814	-62.35755316	-60.48261546	-53.48022505	-40.2546114	-54.22268012	-60.86683136	-65.56590114	-70.20810491
+3.65	34.98092847	39.23078102	34.56637261	32.77059335	28.46604669	38.30962791	42.47425839	44.76129466	46.73035613
-3.7	-55.62403907	-70.5590076	-69.13013996	-62.60556648	-44.94326619	-60.55018941	-68.09158022	-73.59154288	-79.07110813
+3.7	28.88816164	30.17901434	26.13783547	25.59316783	23.59797205	31.73473563	34.90338558	36.22975847	37.17264045
-3.75	-60.79984384	-77.86242401	-76.86383835	-70.96091065	-49.09425827	-66.15250051	-74.49327296	-80.71226217	-86.94543121
+3.75	23.53053965	23.0742268	19.59350849	23.94563506	19.31586519	25.95167221	28.24878487	28.73931691	28.79060709
-3.8	-66.88115063	-86.48745852	-86.03312523	-81.71352057	-53.96971481	-72.73296928	-82.01818447	-89.09285787	-96.22471279
+3.8	17.2784111	15.74444166	16.83232032	23.3473298	14.31725954	19.20135303	20.48623683	20.43578192	20.43184224
-3.85	-72.23068281	-94.11126695	-94.16792114	-91.46810079	-58.25700715	-78.52001055	-88.64040476	-96.47679633	-104.4102899
+3.85	11.81464604	15.74444166	16.83232032	22.94251983	9.947565481	13.30075742	13.91358222	15.33379799	17.06469852
-3.9	-78.47558124	-103.0519693	-103.7410212	-103.8649834	-63.26026771	-85.27381782	-96.37409149	-105.109867	-113.99157
+3.9	11.03998099	15.74444166	16.83232032	22.60798874	8.850717716	11.95701429	13.69217494	15.33379799	17.06469852
-3.95	-83.93494638	-110.9025807	-112.1746639	-115.3824576	-67.63276673	-91.17658388	-103.1375769	-112.6682079	-122.3893573
+3.95	11.03998099	15.74444166	16.83232032	22.4337233	8.850717716	11.95701429	13.69217494	15.33379799	17.06469852
-5	-90.26971374	-120.0510059	-122.0336365	-129.3187236	-72.70485365	-98.02413778	-110.9885897	-121.4512725	-132.1583168
+5	11.03998099	15.74444166	16.83232032	22.36664693	8.850717716	11.95701429	13.69217494	15.33379799	17.06469852

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-30.40854998	-33.60212951	-19.1313	-23.0446	-24.8436
End Shear	218.3056293	234.3886499	143.208	172.7375	183.2085
-0.05	-30.40854998	-33.60212951	-19.1313	-23.0446	-24.8436
+0.05	201.3110761	215.9421051	132.49	159.8586	169.314
-0.1	-30.40854998	-33.60212951	-19.1313	-23.0446	-24.8436
+0.1	183.8501214	196.6797896	121.4648	146.6075	155.0245
-0.15	-30.40854998	-33.60212951	-19.1313	-23.0446	-24.8436
+0.15	168.9642238	180.2821081	112.0453	135.2834	142.8247
-0.2	-30.40854998	-33.60212951	-19.8017	-23.0446	-24.8436
+0.2	152.1272103	161.7638811	101.3669	122.4428	129.0048
-0.25	-32.82262103	-34.34460696	-25.1297	-29.4157	-30.0853
+0.25	137.8737197	146.1131501	92.30528	111.5433	117.2865
-0.3	-45.69570455	-48.06043396	-33.8163	-41.5123	-41.5062
+0.3	121.8722234	128.5745729	82.10596	99.27179	104.1082
-0.35	-59.21673745	-59.82322964	-43.1424	-52.7027	-53.1403
+0.35	108.4345022	113.8749186	73.51674	88.93428	93.02032
-0.4	-75.83809835	-76.30302855	-54.1292	-65.883	-67.4622
+0.4	93.48003726	97.55148226	63.92865	77.39061	80.65534
-0.45	-90.98067897	-93.12172003	-63.5079	-77.1317	-79.6965
+0.45	81.04143319	84.0070276	55.92647	67.75262	70.34691
-0.5	-108.1689037	-112.3519929	-74.1304	-89.8691	-93.5636
+0.5	67.34558199	69.13429559	47.08182	57.0954	58.9672
-0.55	-122.7745071	-128.7167596	-83.1361	-100.665	-105.329
+0.55	56.08943731	56.94915206	39.78125	48.29444	49.58715
-0.6	-139.2373616	-147.1909971	-93.262	-112.801	-118.57
+0.6	43.86372473	44.07526682	31.81226	38.68235	39.36461
-0.65	-153.1226429	-162.7984387	-101.78	-123.007	-129.718
+0.65	34.36655686	34.77861965	25.3279	30.85593	31.0619
-0.7	-168.6485923	-180.281107	-111.277	-134.383	-142.16
+0.7	24.72336283	25.85551254	18.53249	22.64645	22.57105
-0.75	-181.6302043	-194.9271366	-119.193	-143.861	-152.541
+0.75	17.98165121	18.68973468	14.0748	16.38126	16.77796
-0.8	-196.0076673	-211.1827202	-127.929	-154.318	-164.012
+0.8	11.65752473	11.93170011	10.20015	11.17934	11.78045
-0.85	-207.9022652	-224.663206	-135.128	-162.931	-173.478
+0.85	7.614094111	7.342769056	6.98497	7.699584	7.859496
-0.9	-220.919721	-239.4561536	-142.971	-172.311	-183.807
+0.9	6.54202586	7.211933547	4.128542	4.981588	5.358656
-0.95	-231.5439477	-251.5669607	-149.339	-179.922	-192.208
+0.95	6.54202586	7.211933547	4.128542	4.981588	5.358656
-1	-242.9898273	-264.6617557	-156.157	-188.065	-201.223
+1	6.54E+00	7.21E+00	4.13E+00	4.98E+00	5.36E+00
(Span 2) -2	-2.30E+01	-2.53E+01	-1.45E+01	-1.75E+01	-1.88E+01
+2	246.0202343	268.4352016	157.5872	189.7182	203.2749
-2.05	-2.30E+01	-2.53E+01	-1.45E+01	-1.75E+01	-1.88E+01
+2.05	233.6852219	254.3559558	150.2104	180.8985	193.5303
-2.1	-22.95937457	-25.3104299	-14.4892	-17.483	-18.8063
+2.1	220.3446851	239.2183791	142.1548	171.2577	182.9252
-2.15	-22.95937457	-25.3104299	-14.4892	-17.483	-18.8063
+2.15	206.1567292	223.1984926	133.5195	160.9146	171.5883
-2.2	-22.95937457	-25.3104299	-14.4892	-17.483	-18.8063
+2.2	191.2795325	206.4723953	124.4033	149.9878	159.6479
-2.25	-25.92078605	-26.79923409	-19.1902	-23.424	-23.5398

+2.25	**175.8711896**	**189.2161107**	**114.9048**	**138.5957**	**147.2326**
-2.3	**-37.6501078**	**-37.7718794**	**-27.3955**	**-33.3347**	**-33.8669**
+2.3	**159.2053075**	**170.6204692**	**104.5733**	**126.1972**	**133.7542**
-2.35	**-50.5866887**	**-51.58212289**	**-35.8079**	**-43.4837**	**-44.6706**
+2.35	**143.2017293**	**152.8271798**	**94.59972**	**114.2214**	**120.766**
-2.4	**-64.43720155**	**-66.63382539**	**-44.7412**	**-54.2514**	**-56.1735**
+2.4	**126.7052377**	**135.0416831**	**84.26646**	**101.8874**	**107.3325**
-2.45	**-79.04353299**	**-82.58324781**	**-54.0968**	**-65.519**	**-68.2471**
+2.45	**110.7691628**	**117.4399065**	**74.23329**	**89.74633**	**94.31116**
-2.5	**-95.10660959**	**-100.1981738**	**-64.3209**	**-77.824**	**-81.4687**
+2.5	**94.24675791**	**99.25418801**	**63.77511**	**77.16737**	**80.76228**
-2.55	**-110.7699976**	**-117.4400997**	**-74.2338**	**-89.747**	**-94.3119**
+2.55	**79.04277688**	**82.58304639**	**54.09626**	**65.51835**	**68.24647**
-2.6	**-126.7060507**	**-135.0418767**	**-84.267**	**-101.854**	**-107.333**
+2.6	**64.436451**	**66.63360774**	**44.74075**	**54.25076**	**56.17291**
-2.65	**-143.2026009**	**-152.8274038**	**-94.6003**	**-114.222**	**-120.767**
+2.65	**50.5859637**	**51.58196831**	**35.80743**	**43.48319**	**44.67**
-2.7	**-159.2061784**	**-170.6206925**	**-104.574**	**-126.198**	**-133.755**
+2.7	**37.6494786**	**38.05900684**	**27.3951**	**33.33422**	**33.86629**
-2.75	**-175.003579**	**-188.2455987**	**-114.368**	**-137.952**	**-146.532**
+2.75	**26.4962451**	**27.33035765**	**19.6026**	**23.92245**	**24.03979**
-2.8	**-191.280336**	**-206.4725795**	**-124.404**	**-149.988**	**-159.649**
+2.8	**22.95937563**	**25.31042998**	**14.4892**	**17.48298**	**18.80632**
-2.85	**-206.1575278**	**-223.1986943**	**-133.52**	**-160.915**	**-171.589**
+2.85	**22.95937563**	**25.31042998**	**14.4892**	**17.48298**	**18.80632**
-2.9	**-220.3453898**	**-239.2185725**	**-142.155**	**-171.258**	**-182.926**
+2.9	**22.95937563**	**25.31042998**	**14.4892**	**17.48298**	**18.80632**
-2.95	**-233.685899**	**-254.3561136**	**-150.211**	**-180.899**	**-193.531**
+2.95	**22.95937563**	**25.31042998**	**14.4892**	**17.48298**	**18.80632**
-3	**-246.6734876**	**-269.1829657**	**-157.976**	**-190.182**	**-203.789**
+3	**22.95937563**	**25.31042998**	**14.4892**	**17.48298**	**18.80632**
(Span 3) -4	**-6.54202616**	**-7.211933568**	**-4.12854**	**-4.98159**	**-5.35866**
+4	**242.2542845**	**263.8191484**	**155.7201**	**187.5436**	**200.6452**
-3.05	**-6.54202616**	**-7.211933568**	**-4.12854**	**-4.98159**	**-5.35866**
+3.05	**232.3339393**	**252.469747**	**149.8111**	**180.4857**	**192.832**
-3.1	**-6.54202616**	**-7.211933568**	**-4.12854**	**-4.98159**	**-5.35866**
+3.1	**220.0757982**	**238.4963951**	**142.4642**	**171.7045**	**183.1386**
-3.15	**-7.360752958**	**-7.211933568**	**-6.75314**	**-7.42614**	**-7.57165**
+3.15	***208.7934326***	***225.6752045***	***135.6665***	***163.5752***	***174.1863***
-3.2	***-12.00479174***	***-12.31013541***	***-10.4535***	***-11.4564***	***-12.0956***
+3.2	***195.0694509***	***210.1215267***	***127.3603***	***153.6372***	***163.2646***
-3.25	***-17.53295704***	***-18.16139341***	***-13.8029***	***-15.92***	***-16.4379***
+3.25	***182.6084014***	***196.0327327***	***119.7885***	***144.5741***	***153.3223***
-3.3	***-25.28851759***	***-26.42914034***	***-18.9478***	***-23.1486***	***-23.1122***
+3.3	***167.6302387***	***179.1341288***	***110.6553***	***133.6379***	***141.3442***
-3.35	***-33.69558574***	***-34.16293494***	***-24.8466***	***-30.2748***	***-30.4463***
+3.35	***154.1737964***	***163.9819235***	***102.424***	***123.7784***	***130.5608***
-3.4	***-44.65297793***	***-44.65892387***	***-32.3282***	***-39.3048***	***-40.0258***
+3.4	***138.1529453***	***145.9739869***	***92.59588***	***112.0028***	***117.6982***
-3.45	***-55.24917444***	***-56.04050975***	***-39.235***	***-47.6357***	***-48.8858***
+3.45	***123.8845733***	***129.9623517***	***83.8197***	***101.4846***	***106.2227***
-3.5	***-68.23648052***	***-70.09955871***	***-47.6584***	***-57.7903***	***-59.7085***
+3.5	***107.032521***	***111.0806869***	***73.42891***	***89.02802***	***92.64749***
-3.55	***-80.10680172***	***-82.98989445***	***-55.3241***	***-67.027***	***-69.5714***
+3.55	***92.13550839***	***94.41381762***	***64.22239***	***77.98848***	***80.62885***
-3.6	***-94.45842301***	***-98.61745381***	***-64.557***	***-78.1472***	***-81.4653***
+3.6	***74.66394428***	***75.10959104***	***53.40123***	***65.0098***	***66.5128***

-3.65	***-107.4195851***	***-112.7649816***	***-72.867***	***-88.1522***	***-92.182***
+3.65	***60.25030949***	***60.98139044***	***43.87896***	***53.58645***	***54.10004***
-3.7	***-122.9240218***	***-129.7254652***	***-82.7773***	***-100.08***	***-104.975***
+3.7	***44.76362723***	***47.15017471***	***33.14671***	***40.7088***	***40.61116***
-3.75	***-136.7925578***	***-144.9261991***	***-91.6171***	***-110.715***	***-116.397***
+3.75	***33.57036443***	***35.26269517***	***25.53679***	***30.22474***	***30.60496***
-3.8	***-153.2383265***	***-162.9840052***	***-102.072***	***-123.291***	***-129.918***
+3.8	***30.40854968***	***33.60212916***	***19.38933***	***23.04461***	***24.84358***
-3.85	***-167.8309536***	***-179.0337508***	***-111.327***	***-134.42***	***-141.895***
+3.85	***30.40854968***	***33.60212916***	***19.13133***	***23.04461***	***24.84358***
-3.9	***-185.0063668***	***-197.9534987***	***-122.196***	***-147.486***	***-155.971***
+3.9	***30.40854968***	***33.60212916***	***19.13133***	***23.04461***	***24.84358***
-3.95	***-200.139735***	***-214.6480559***	***-131.751***	***-158.971***	***-168.356***
+3.95	***30.40854968***	***33.60212916***	***19.13133***	***23.04461***	***24.84358***
-5	***-217.8333776***	***-234.19414***	***-142.9***	***-172.368***	***-182.816***
+5	***30.40854968***	***33.60212916***	***19.13133***	***23.04461***	***24.84358***

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.94E-13	*-4.64E-13*	*-8.94E-13*	-4.08E-13	-4.38E-13	-2.71E-13	-3.83E-13	-3.86E-13	-4.07E-13	-3.08E-13
End Shear	5.61E-13	*2.90E-13*	*7.59E-13*	2.49E-13	2.80E-13	2.11E-13	2.62E-13	2.70E-13	2.86E-13	2.33E-13
-0.05	-133.705599	*-196.1959163*	*-289.2311593*	-100.937629	-108.624699	-102.393112	-123.995939	-128.054459	-135.543266	-53.87787464
+0.05	913.0940482	*1224.363116*	*1606.614087*	783.9417657	838.4211897	786.9372125	941.6228085	898.7842368	950.2553285	413.7348595
-0.1	-267.411198	*-392.3918326*	*-578.4623186*	-201.875257	-217.249399	-204.786224	-247.991878	-256.108918	-271.086532	-107.7557493
+0.1	1701.4918	*2294.116192*	*2945.755545*	1461.287719	1562.0767	1465.727005	1752.196868	1661.670586	1756.650731	769.7806133
-0.15	-401.116797	*-588.5877489*	*-867.6934779*	-302.812886	-325.874098	-307.179335	-371.987817	-384.163377	-406.629797	-161.6336239
+0.15	2466.797545	*3209.946795*	*4121.465169*	2032.491437	2171.564841	2036.95669	2432.696142	2289.868971	2420.489176	1068.875738
-0.2	-534.822396	*-784.7836652*	*-1156.924637*	-403.750515	-434.498797	-409.572447	-495.983756	-512.217836	-542.173063	-215.5114986
+0.2	3094.78961	*3973.373356*	*5033.60859*	2499.388963	2668.914564	2502.571206	2985.587031	2804.562064	2965.13396	1312.097184
-0.25	-668.527995	*-980.9795815*	*-1446.155797*	-504.688143	-543.123497	-511.965559	-619.979696	-640.272296	-677.716329	-269.3893732
+0.25	3586.723522	*4586.495229*	*5693.637419*	2864.442766	3056.829397	2865.15103	3439.359718	3221.705753	3408.107785	1501.24492
-0.3	-802.233594	*-1177.175498*	*-1735.386956*	-605.625772	-651.748196	-614.358671	-743.975635	-768.326755	-813.259595	-323.2672478
+0.3	3946.699638	*5051.993305*	*6198.306992*	3130.741372	3338.687133	3148.981013	3779.167105	3519.906268	3722.609486	1638.066763
-0.35	-935.939193	*-1373.371414*	*-2024.618115*	-706.563401	-760.372896	-716.751783	-867.971574	-896.381214	-948.80286	-377.1451225
+0.35	4179.654465	*5373.129273*	*6546.133197*	3308.283772	3538.697628	3339.732328	4001.492661	3721.740374	3937.489063	1724.215727
-0.4	-1069.644792	*-1569.56733*	*-2313.849275*	-807.501029	-868.997595	-819.144895	-991.967513	-1024.43567	-1084.34613	-431.0229971
+0.4	4291.362902	*5553.74696*	*6662.695042*	3410.302025	3644.236653	3437.795911	4111.327385	3809.256083	4031.094593	1762.113115
-0.45	-1203.350391	*-1765.763247*	*-2603.080434*	-908.438658	-977.622294	-921.538006	-1115.96345	-1152.49013	-1219.88939	-484.9008718
+0.45	4288.435736	*5598.270197*	*6567.162437*	3424.522501	3656.320394	3447.241872	4114.660032	3788.173333	4009.757618	1751.462789
-0.5	-1337.05599	*-1961.959163*	*-2892.311593*	-1009.37629	-1086.24699	-1023.93112	-1239.95939	-1280.54459	-1355.43266	-538.7787464
+0.5	4178.322352	*5524.617084*	*6359.712782*	3365.452874	3594.557706	3388.684782	4047.908858	3733.606531	3951.65022	1731.244697
-0.55	-1470.761589	*-2158.155079*	*-3181.542752*	-1110.31392	-1194.87169	-1126.32423	-1363.95533	-1408.59905	-1490.97592	-592.6566211
+0.55	3996.198645	*5326.748832*	*6284.65024*	3229.629928	3451.624594	3255.921142	3893.041384	3605.220193	3814.935212	1673.377605
-0.6	-1604.467188	*-2354.350996*	*-3470.773912*	-1211.25154	-1303.49639	-1228.71734	-1487.95127	-1536.65351	-1626.51919	-646.5344957
+0.6	3761.609746	*5006.997174*	*6000.6394*	3022.26778	3231.107071	3049.670789	3648.520231	3377.387477	3573.060341	1574.698018
-0.65	-1738.172787	*-2550.546912*	*-3760.005071*	-1312.18917	-1412.12109	-1331.11045	-1611.94721	-1664.70797	-1762.06245	-700.4123703
+0.65	3432.77403	*4571.877165*	*5485.585503*	2753.143965	2940.566255	2777.030477	3322.764861	3058.716097	3235.152308	1438.802435
-0.7	-1871.878386	*-2746.742828*	*-4049.23623*	-1413.1268	-1520.74579	-1433.50357	-1735.94315	-1792.76243	-1897.60572	-754.290245
+0.7	3019.257387	*4028.48698*	*4750.763836*	2431.766979	2588.238218	2445.734358	2924.556758	2658.634577	2811.206894	1269.626133
-0.75	-2005.583985	*-2942.938745*	*-4338.46739*	-1514.06443	-1629.37049	-1535.89668	-1859.93909	-1920.81689	-2033.14899	-808.1681196
+0.75	2531.459907	*3384.504879*	*3915.41969*	2058.506806	2185.868647	2064.151213	2463.930887	2192.102302	2319.138198	1071.44288
-0.8	-2139.289584	*-3139.134661*	*-4627.698549*	-1615.00206	-1737.99519	-1638.28979	-1983.93503	-2048.87135	-2168.69225	-862.0459943
+0.8	1980.621361	*2648.190371*	*3118.402557*	1642.059216	1737.773597	1641.286318	1951.693881	1664.105861	1760.045917	848.8639336
-0.85	-2272.995183	*-3403.121795*	*-4977.941803*	-1715.93969	-1846.61989	-1740.6829	-2107.93096	-2176.9258	-2304.23552	-915.9238689
+0.85	1378.816536	*1896.175613*	*2304.65982*	1191.746377	1253.003031	1186.780057	1399.422035	1082.977384	1144.891189	606.8396986
-0.9	-2406.700782	*-3854.87792*	*-5497.177146*	-1816.87732	-1955.24459	-1843.07601	-2231.9269	-2304.98026	-2439.77878	-969.8017435
+0.9	753.4648866	*1257.860253*	*1582.250836*	717.5165559	749.3694253	710.9089672	819.9172949	534.3444472	564.8803713	350.6583021
-0.95	-2540.406381	*-4467.180562*	*-6160.90435*	-1917.81494	-2063.86929	-1945.46912	-2355.92284	-2433.03472	-2575.32205	-1023.679618
+0.95	555.6079928	*771.7033605*	*1091.611672*	421.0953081	453.0322325	426.9969872	516.8685312	527.1138801	557.8638544	223.7717296
-1	-2674.111914	*-5215.572375*	*-7284.309571*	-2018.75254	-2172.49399	-2047.8622	-2479.91878	-2561.08917	-2710.8653	-1077.557467
+1	584.8505129	*776.7963813*	*1103.800055*	443.2582145	476.8760321	449.4705071	544.0721334	554.8567242	587.2251186	235.5491817
(Span 2) -2	-2674.111914	*-5215.572375*	*-7284.309571*	-2018.75254	-2172.49399	-2047.8622	-2479.91878	-2561.08917	-2710.8653	-1077.557467
+2	584.8505129	*776.7963813*	*1103.800055*	443.2582145	476.8760321	449.4705071	544.0721334	554.8567242	587.2251186	235.5491817
-2.05	-1951.590996	*-3796.412247*	*-5511.873676*	-1477.93727	-1590.02781	-1498.6507	-1814.0768	-1850.03551	-1957.96015	-785.3817759
+2.05	451.4350903	*731.5693866*	*992.0866062*	342.1426637	368.091624	346.9378145	419.9590291	428.2834514	453.2680052	191.9937919
-2.1	-1818.069632	*-2988.861032*	*-4049.875702*	-1376.82172	-1481.2434	-1396.11801	-1689.9637	-1723.46223	-1824.00303	-731.648568
+2.1	952.5625035	*1335.972616*	*1506.406469*	882.5431221	925.2079751	874.0841071	1013.123248	650.2326443	688.9431945	423.0318148
-2.15	-1684.548267	*-2411.07362*	*-3334.652969*	-1275.70617	-1372.45899	-1293.58531	-1565.8506	-1596.88896	-1690.04591	-677.9153601
+2.15	1696.745081	*2063.98823*	*2245.772369*	1435.858056	1523.228687	1438.856182	1698.603787	1364.562528	1441.884091	725.6585837
-2.2	-1551.026903	*-2068.70264*	*-2934.203206*	-1174.59062	-1263.67457	-1191.05262	-1441.7375	-1470.31568	-1556.08879	-624.1821522
+2.2	2393.696039	*2902.103925*	*3215.156345*	1954.583356	2082.87544	1967.691069	2340.654104	2039.343562	2156.06547	1008.072711

-2.25	-1417.505538	-1932.209002	-2719.043047	-1073.47507	-1154.89016	-1088.51992	-1317.6244	-1343.74241	-1422.13167	-570.4489443
+2.25	3018.514009	3807.568417	4544.055411	2421.878182	2586.179277	2442.811202	2916.64869	2637.095204	2788.929518	1259.177772
-2.3	-1283.984174	-1837.718915	-2541.686083	-972.359515	-1046.10575	-985.987223	-1193.51129	-1217.16913	-1288.17455	-516.7157365
+2.3	3543.562476	4597.058325	5683.811334	2822.141193	3014.872358	2846.422309	3405.082359	3137.826075	3319.320309	1468.84663
-2.35	-1150.462809	-1743.228827	-2364.329119	-871.243965	-937.321335	-883.454527	-1069.39819	-1090.59586	-1154.21743	-462.9825286
+2.35	3962.050186	5220.821766	6551.150681	3145.432333	3361.664473	3170.621648	3795.773199	3533.295919	3738.605486	1634.328954
-2.4	-1016.941445	-1648.738739	-2186.972155	-770.128414	-828.536922	-780.921831	-945.28509	-964.022582	-1020.26031	-409.2493207
+2.4	4262.712131	5670.689857	7124.803709	3382.096305	3614.717686	3408.456411	4078.290443	3812.364123	4034.527618	1751.485055
-2.45	-883.4200805	-1554.248652	-2185.982804	-669.012863	-719.752509	-678.389135	-821.171988	-837.449307	-886.303188	-355.5161128
+2.45	4438.181373	5940.913102	7402.146994	3525.830133	3767.411508	3551.657677	4245.412739	3968.446253	4200.307088	1817.584132
-2.5	-749.8987161	-1459.758564	-2185.98274	-567.897312	-610.968096	-575.856439	-697.058909	-710.876032	-752.346068	-301.7829049
+2.5	4488.867732	6028.532599	7386.852966	3572.777398	3815.77279	3596.377745	4294.036416	3998.582705	4232.770417	1834.364583
-2.55	-882.719136	-1554.2486	-2185.982699	-669.012844	-719.752456	-678.389112	-821.172014	-837.449276	-886.303128	-355.5160878
+2.55	4402.367616	5940.917371	7402.147233	3525.836066	3767.419676	3551.668373	4245.413482	3968.455764	4200.316854	1818.882346
-2.6	-1016.134559	-1648.738683	-2186.972147	-770.128395	-828.536864	-780.921804	-945.285118	-964.022549	-1020.26024	-409.2492941
+2.6	4197.640837	5670.698384	7124.803592	3382.10027	3614.723805	3408.465275	4078.293091	3812.371069	4034.534675	1751.48542
-2.65	-1149.549981	-1743.228767	-2364.329112	-871.243945	-937.321272	-883.454497	-1069.39822	-1090.59582	-1154.21736	-462.9825005
+2.65	3913.514039	5220.835407	6551.151048	3145.434836	3361.668874	3170.621413	3795.778238	3533.301493	3738.611099	1634.330645
-2.7	-1282.965404	-1837.71885	-2541.686076	-972.359496	-1046.10568	-985.987189	-1193.51133	-1217.16909	-1288.17447	-516.7157068
+2.7	3507.792192	4597.076496	5683.811056	2822.142301	3014.875337	2846.424743	3405.089954	3137.826028	3319.319955	1468.850098
-2.75	-1416.380827	-1932.208934	-2719.04304	-1073.47505	-1154.89009	-1088.51988	-1317.62443	-1343.74237	-1422.13158	-570.4489131
+2.75	2990.224445	3807.593382	4544.055342	2421.878779	2586.181586	2442.816988	2916.659418	2637.0981	2788.9323	1259.182169
-2.8	-1549.796249	-2068.702549	-2934.203182	-1174.5906	-1263.6745	-1191.05257	-1441.73753	-1470.31564	-1556.0887	-624.1821194
+2.8	2368.681607	2902.103755	3215.15636	1954.584282	2082.878159	1967.696663	2340.664353	2039.345563	2156.067325	1008.070881
-2.85	-1683.211672	-2411.073515	-3334.652936	-1275.70615	-1372.4589	-1293.58527	-1565.85064	-1596.88891	-1690.04581	-677.9153257
+2.85	1671.020864	2063.994181	2245.740331	1435.859424	1523.231827	1438.862308	1698.602985	1364.565262	1441.886722	726.0803229
-2.9	-1816.627094	-2988.860932	-4049.88519	-1376.8217	-1481.24331	-1396.11796	-1689.96374	-1723.46219	-1824.00292	-731.6485321
+2.9	920.7402411	1335.967923	1505.702408	882.5460373	925.2127392	874.0840992	1013.128067	650.2338979	688.9446979	423.0330406
-2.95	-1950.042517	-3796.412127	-5511.888456	-1477.93725	-1590.02772	-1498.65065	-1814.07685	-1850.03546	-1957.96004	-785.3817384
+2.95	451.7935638	731.5668126	992.0420701	342.1426446	368.0916214	346.937826	419.9590329	428.2834454	453.2680121	191.8786861
-3	-2675.743758	-5215.572387	-7284.325384	-2018.75266	-2172.494	-2047.86219	-2479.91889	-2561.0893	-2710.86549	-1077.557465
+3	585.3149307	776.7963994	1103.800055	443.2582146	476.8760539	449.4705223	544.0721239	554.8567351	587.2251476	235.5491886
(Span 3) -4	-2.68E+03	-5215.572387	-7284.325384	-2.02E+03	-2.17E+03	-2.05E+03	-2.48E+03	-2.56E+03	-2.71E+03	-1.08E+03
+4	5.85E+02	776.7963994	1103.800055	4.43E+02	4.77E+02	4.49E+02	5.44E+02	5.55E+02	5.87E+02	2.36E+02
-3.05	-2541.956573	-4467.180567	-6160.904496	-1917.81502	-2063.8693	-1945.46908	-2355.92295	-2433.03483	-2575.32222	-1023.67959
+3.05	556.0491841	771.7033686	1090.932434	421.0953036	453.0322511	426.9969959	516.8685175	527.1138988	557.8638907	223.7717288
-3.1	-2408.169388	-3854.877923	-5497.17729	-1816.87739	-1955.2446	-1843.07597	-2231.927	-2304.98037	-2439.77894	-969.8017158
+3.1	754.1313329	1257.867547	1580.663394	717.5179889	749.3672299	710.9036804	819.9275023	534.346161	564.8820247	350.654235
-3.15	-2274.382202	-3403.121798	-4977.941949	-1715.93975	-1846.6199	-1740.68286	-2107.93106	-2176.9259	-2304.23567	-915.9238413
+3.15	1382.55758	1896.183351	2301.993605	1191.748521	1253.001989	1186.775653	1399.413137	1082.979001	1144.893155	606.8354754
-3.2	-2140.595017	-3139.134657	-4627.698689	-1615.00212	-1737.9952	-1638.28975	-1983.93511	-2048.87144	-2168.69239	-862.0459668
+3.2	1980.736088	2648.198457	3116.085244	1642.061771	1737.774668	1641.282681	1951.685928	1664.107719	1760.048154	848.8597879
-3.25	-2006.807832	-2942.93874	-4338.467529	-1514.06449	-1629.3705	-1535.89664	-1859.93917	-1920.81697	-2033.14912	-808.1680923
+3.25	2534.081904	3384.513414	3915.419971	2058.509372	2185.869712	2064.147608	2463.922817	2192.103804	2319.140058	1071.438619
-3.3	-1873.020646	-2746.742823	-4049.23637	-1413.12685	-1520.7458	-1433.50353	-1735.94322	-1792.7625	-1897.60584	-754.2902178
+3.3	3030.101195	4028.495071	4750.763849	2431.769133	2588.237667	2445.73041	2924.548272	2658.633447	2811.205983	1269.622623
-3.35	-1739.233461	-2550.546906	-3760.005211	-1312.18922	-1412.1211	-1331.11041	-1611.94728	-1664.70804	-1762.06257	-700.4123432
+3.35	3457.139988	4571.884575	5485.585561	2753.144879	2940.564252	2777.025365	3322.75486	3058.713654	3235.150009	1438.798405
-3.4	-1605.446276	-2354.350989	-3470.774051	-1211.25158	-1303.4964	-1228.7173	-1487.95133	-1536.65357	-1626.51929	-646.5344687
+3.4	3804.38307	5007.002808	6000.639377	3022.266113	3231.10344	3049.664212	3648.508476	3377.382557	3573.055437	1574.693631
-3.45	-1471.65909	-2158.155072	-3181.542892	-1110.31395	-1194.8717	-1126.32419	-1363.95539	-1408.59911	-1490.97602	-592.6565942
+3.45	4061.882073	5326.753124	6284.650103	3229.62651	3451.619046	3255.912675	3893.047217	3605.213116	3814.928021	1673.373035
-3.5	-1337.871905	-1961.959155	-2892.311733	-1009.37631	-1086.247	-1023.93108	-1239.95945	-1280.54464	-1355.43274	-538.7787197
+3.5	4221.257535	5524.619145	6359.712657	3365.447341	3594.54989	3388.67373	4047.911816	3733.596779	3951.640194	1731.239655
-3.55	-1204.08472	-1765.763239	-2603.080573	-908.438679	-977.622299	-921.537969	-1115.9635	-1152.49018	-1219.88946	-484.9008451
+3.55	4273.627819	5598.269521	6567.162552	3424.529286	3656.304181	3447.233954	4114.658817	3788.166518	4009.750195	1754.515767
-3.6	-1070.297534	-1569.567322	-2313.849414	-807.501045	-868.997599	-819.144858	-991.967556	-1024.43571	-1084.34619	-431.0229706

+3.6	4212.888436	5553.744027	6662.695163	3410.306346	3644.24325	3437.785738	4111.323115	3809.246395	4031.08413	1762.110624
-3.65	-936.5103491	-1373.371405	-2024.618255	-706.56341	-760.372899	-716.751746	-867.971612	-896.381246	-948.802914	-377.1450961
+3.65	4135.204523	5373.123019	6546.133225	3308.285029	3538.700951	3339.71864	4001.484419	3721.745338	3937.493988	1724.212595
-3.7	-802.7231637	-1177.175488	-1735.387095	-605.625776	-651.748199	-614.358635	-743.975667	-768.326781	-813.259639	-323.2672216
+3.7	3939.427439	5051.983982	6198.306688	3130.738617	3338.686052	3148.984042	3779.155231	3519.907205	3722.610151	1638.062956
-3.75	-668.9359784	-980.979571	-1446.155936	-504.688142	-543.123499	-511.965523	-619.979723	-640.272315	-677.716363	-269.3893471
+3.75	3619.36553	4586.482371	5693.637158	2864.436769	3056.824853	2865.150368	3439.363259	3221.702202	3408.103701	1501.240642
-3.8	-535.1487931	-784.7836541	-1156.924777	-403.750507	-434.4988	-409.572412	-495.983778	-512.21785	-542.173088	-215.5114725
+3.8	3169.666716	3973.357541	5033.608466	2499.37954	2668.906324	2502.567004	2985.586141	2804.554172	2965.125267	1312.099895
-3.85	-401.3616078	-588.5877372	-867.6936174	-302.812873	-325.8741	-307.1793	-371.987834	-384.163384	-406.629813	-161.633598
+3.85	2585.815167	3209.927969	4121.46527	2032.478329	2171.552644	2036.949085	2432.690996	2289.865244	2420.485336	1068.877908
-3.9	-267.5744225	-392.3918203	-578.4624581	-201.875239	-217.2494	-204.786189	-247.99189	-256.108919	-271.086538	-107.7557235
+3.9	1864.129636	2294.092342	2945.755524	1461.270445	1562.06007	1465.714738	1752.186279	1661.662115	1756.641872	769.7819813
-3.95	-133.7872372	-196.1959034	-289.2312988	-100.937604	-108.6247	-102.393077	-123.995945	-128.054453	-135.543262	-53.87784897
+3.95	1002.995793	1224.336457	1606.61428	783.9194072	838.39912	786.9208269	941.607335	898.7706647	950.2410758	413.7356768
-5	-5.95E-13	-5.41E-13	-8.77E-13	-4.21E-13	-4.53E-13	-3.11E-13	-3.98E-13	-4.26E-13	-4.52E-13	-2.37E-13
+5	5.29E-13	5.07E-13	8.23E-13	3.22E-13	3.22E-13	2.69E-13	2.74E-13	2.73E-13	2.89E-13	2.10E-13

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.72E-13	-3.23E-13	-3.69E-13	-2.99E-13	-2.81E-13	-2.36E-13	-3.15E-13	-3.12E-13	-3.12E-13
End Shear	2.12E-13	2.34E-13	2.30E-13	2.11E-13	2.63E-13	1.90E-13	1.88E-13	1.85E-13	1.85E-13
-0.05	-77.27986481	-110.2110836	-117.826234	-156.5665272	-61.95502369	-83.69909732	-95.8452234	-107.336585	-119.45289
+0.05	591.0505352	781.0739976	790.4869123	820.4393439	476.0360074	642.163902	726.4614833	794.2828622	862.9563675
-0.1	-154.5597296	-220.4221672	-235.652468	-313.1330543	-123.9100474	-167.3981946	-191.690447	-214.67317	-238.90578
+0.1	1100.419644	1445.071718	1455.100299	1483.639643	886.740002	1195.904241	1351.641413	1478.122448	1609.662235
-0.15	-231.8395944	-330.6332508	-353.4787019	-469.6995815	-185.8650711	-251.097292	-287.53567	-322.009755	-358.35867
+0.15	1528.473872	1992.874873	1995.479186	2024.846007	1232.287814	1661.693229	1876.138074	2076.728253	2256.532857
-0.2	-309.1194592	-440.8443344	-471.3049359	-626.2661086	-247.8200947	-334.7963893	-383.380893	-429.34634	-477.81156
+0.2	1876.730517	2427.451316	2445.258228	2453.07043	1513.862996	2041.136842	2301.890638	2565.270304	2797.828869
-0.25	-386.399324	-551.055418	-589.1311699	-782.8326358	-309.7751184	-418.4954866	-479.226117	-536.682925	-597.26445
+0.25	2147.188412	2775.749779	2780.028399	2812.971321	1733.034745	2336.361027	2639.959203	2945.500086	3233.784148
-0.3	-463.6791888	-661.2665016	-706.9574039	-939.3991629	-371.7301421	-502.1945839	-575.07134	-644.019509	-716.71734
+0.3	2342.328225	3022.124193	3025.433288	3071.200456	1891.757432	2562.525479	2899.859758	3220.824742	3552.615569
-0.35	-540.9590536	-771.4775852	-824.7836378	-1095.96569	-433.6851658	-585.8936812	-670.916564	-751.356094	-836.17023
+0.35	2480.613019	3167.003452	3200.118666	3260.376349	1992.370504	2716.932902	3069.941771	3413.351692	3758.287087
-0.4	-618.2389184	-881.6886688	-942.6098718	-1252.532217	-495.6401895	-669.5927786	-766.761787	-858.692679	-955.623121
+0.4	2550.683966	3233.758423	3308.119234	3340.981725	2037.599326	2796.011087	3153.095866	3514.733194	3865.638652
-0.45	-695.5187833	-991.8997524	-1060.436106	-1409.098744	-557.5952132	-753.2918759	-862.60701	-966.029264	-1075.07601
+0.45	2554.583761	3211.249517	3319.887957	3368.399533	2030.553628	2802.718659	3153.991347	3524.014108	3884.342901
-0.5	-772.7986481	-1102.110836	-1178.26234	-1565.665272	-619.5502369	-836.9909732	-958.452234	-1073.36585	-1194.5289
+0.5	2513.293777	3166.296049	3258.357856	3284.174632	2001.538549	2755.753918	3102.851631	3464.004674	3814.130537
-0.55	-850.0785129	-1212.32192	-1296.088574	-1722.231799	-681.5052606	-920.6900705	-1054.29746	-1180.70243	-1313.98179
+0.55	2416.125511	3060.17086	3119.400292	3165.375145	1931.762272	2648.220659	2985.970538	3326.530304	3653.948879
-0.6	-927.3583777	-1322.533003	-1413.914808	-1878.798326	-743.4602842	-1004.389168	-1150.14268	-1288.03902	-1433.43468
+0.6	2262.875875	2872.741664	2896.406519	2949.78979	1815.787631	2480.420932	2798.933401	3111.554215	3421.92036
-0.65	-1004.638242	-1432.744087	-1531.741042	-2035.364853	-805.4153079	-1088.088265	-1245.9879	-1395.3756	-1552.88757
+0.65	2058.877936	2615.866399	2614.512256	2687.062445	1657.755578	2258.146503	2548.294652	2826.529656	3112.332118
-0.7	-1081.918107	-1542.95517	-1649.567276	-2191.93138	-867.3703316	-1171.787362	-1341.83313	-1502.71219	-1672.34046
+0.7	1809.946365	2284.708503	2253.726815	2310.165953	1462.193852	1987.710631	2241.20768	2480.758515	2731.467751
-0.75	-1159.197972	-1653.166254	-1767.39351	-2348.497907	-929.3253553	-1255.48646	-1437.67835	-1610.04877	-1791.79335
+0.75	1524.889057	1887.738777	1837.004558	1857.430027	1234.014218	1675.945834	1885.421947	2085.240393	2288.95133
-0.8	-1236.477837	-1763.377338	-1885.219744	-2505.064434	-991.280379	-1339.185557	-1533.52357	-1717.38536	-1911.24624
+0.8	1206.099766	1434.134265	1359.438397	1315.707653	978.5150763	1330.205483	1489.284787	1642.153927	1795.154267
-0.85	-1313.757702	-1873.588421	-2003.045978	-2679.184045	-1053.235403	-1422.884654	-1629.3688	-1824.72194	-2030.69913
+0.85	859.7226279	933.7770848	825.7148119	794.8518275	701.3789192	958.3624605	1061.74021	1161.362619	1261.194695
-0.9	-1391.037567	-1983.799505	-2120.872212	-2901.922415	-1115.190426	-1506.583752	-1725.21402	-1932.05853	-2150.15202
+0.9	498.0387317	456.8390717	454.6429855	542.535901	408.6740281	568.8102421	612.3297784	658.4496517	698.9366084
-0.95	-1468.317431	-2094.010588	-2238.698446	-3166.230866	-1177.14545	-1590.282849	-1821.05924	-2039.39511	-2269.60491
+0.95	321.7374152	453.5249566	479.9009291	540.7723223	258.1835906	348.894438	399.0652096	446.7240057	496.72112
-1	-1545.597279	-2204.221629	-2356.524688	-3573.114355	-1239.100424	-1673.981908	-1916.90448	-2146.73167	-2389.05776
+1	338.6709544	477.394687	505.1588759	560.0361164	271.7722052	367.2572975	420.0686379	470.2357958	522.8643341
(Span 2) -2	-1545.597279	-2204.221629	-2356.524688	-3573.114355	-1239.100424	-1673.981908	-1916.90448	-2146.73167	-2389.05776
+2	338.6709544	477.394687	505.1588759	560.0361164	271.7722052	367.2572975	420.0686379	470.2357958	522.8643341
-2.05	-1129.216302	-1591.757131	-1684.329961	-2467.004226	-906.1586791	-1224.530562	-1400.6173	-1567.88754	-1743.36467
+2.05	261.4137278	368.4919638	389.9226195	444.261134	209.7758429	283.4789878	324.2430671	362.9661495	403.5891274
-2.1	-1051.959079	-1482.854402	-1569.093709	-1888.699113	-844.1623136	-1140.752254	-1304.79172	-1460.61789	-1624.08946
+2.1	618.950789	559.450821	507.6807417	484.9156959	496.663714	701.1581261	758.8967278	829.1205479	878.4031779
-2.15	-974.7018552	-1373.951674	-1453.857457	-1657.221276	-782.1659481	-1056.973947	-1208.96615	-1353.34824	-1504.81424
+2.15	1047.544984	1159.002223	1047.971115	945.120629	842.9781096	1163.812982	1291.186678	1422.933608	1544.407561
-2.2	-897.4446316	-1265.048945	-1338.621206	-1486.699481	-720.1695826	-973.1956401	-1113.14057	-1246.07859	-1385.53903
+2.2	1447.378936	1742.710803	1676.295527	1565.19173	1164.954348	1596.335749	1788.833622	1977.722643	2164.067375

-2.25	-820.187408	-1156.146216	-1223.384954	-1369.485214	-658.1732171	-889.4173329	-1017.31499	-1138.80893	-1266.26382
+2.25	1805.837499	2254.137092	2229.47471	2306.035091	1453.832046	1984.670999	2234.085566	2475.819094	2719.241861
-2.3	-742.9301844	-1047.243488	-1108.148703	-1263.146867	-596.1768516	-805.6390257	-921.489416	-1031.53928	-1146.98861
+2.3	2110.117746	2676.908754	2690.503857	2920.472962	1695.31997	2314.192646	2610.896395	2899.629248	3189.586404
-2.35	-665.6729608	-938.3407593	-992.9124511	-1156.808521	-534.1804861	-721.8607185	-825.663839	-924.269629	-1027.7134
+2.35	2355.157867	3003.984452	3052.606131	3390.127968	1886.491264	2579.35562	2911.740593	3241.329742	3564.189634
-2.4	-588.4157372	-829.4380308	-877.6761996	-1050.470174	-472.1841206	-638.0824114	-729.838263	-816.999977	-908.438187
+2.4	2532.778884	3238.526037	3327.177535	3728.02461	2022.505141	2773.249808	3128.762084	3489.731908	3839.79668
-2.45	-511.1585136	-720.5353022	-762.439948	-944.1318267	-410.1877551	-554.3041042	-634.012686	-709.730325	-789.162975
+2.45	2638.472304	3370.004997	3489.212792	3891.775051	2100.125577	2889.532047	3257.999259	3638.435769	4010.007131
-2.5	-433.9013109	-611.6325736	-647.2036884	-837.7934797	-348.191418	-470.525797	-538.187109	-602.460667	-669.887764
+2.5	2669.552008	3393.014006	3534.739389	3895.237973	2120.492955	2925.232683	3294.65653	3683.671834	4065.38194
-2.55	-511.1585374	-720.5352684	-762.4399448	-944.131771	-410.1877803	-554.3041101	-634.012641	-709.730313	-789.162939
+2.55	2638.477914	3370.014037	3489.220729	3891.774327	2100.125864	2889.540098	3258.010973	3638.442883	4010.010817
-2.6	-588.4157639	-829.4379917	-877.6762012	-1050.47011	-472.1841426	-638.0824199	-729.838211	-816.999959	-908.438145
+2.6	2532.783114	3238.532881	3327.183604	3728.021835	2022.509	2773.256374	3128.761614	3489.737174	3839.797902
-2.65	-665.6729905	-938.3407149	-992.9124577	-1156.80845	-534.180505	-721.8607297	-825.663782	-924.269606	-1027.71335
+2.65	2355.160996	3003.987459	3052.610748	3390.128187	1886.498898	2579.361271	2911.74235	3241.333855	3564.198536
-2.7	-742.930217	-1047.243438	-1108.148714	-1263.146789	-596.1768673	-805.6390394	-921.489353	-1031.53925	-1146.98856
+2.7	2110.119865	2676.913327	2690.506648	2920.476747	1695.330832	2314.193795	2610.900248	2899.631637	3189.596832
-2.75	-820.1874435	-1156.146161	-1223.384971	-1369.485129	-658.1732296	-889.4173492	-1017.31492	-1138.8089	-1266.26377
+2.75	1805.8391	2254.144081	2229.477977	2306.038597	1453.846832	1984.67503	2234.092286	2475.821078	2719.255198
-2.8	-897.44467	-1265.048885	-1338.621227	-1486.699383	-720.1695919	-973.195659	-1113.14049	-1246.07854	-1385.53897
+2.8	1447.380663	1742.717198	1676.299002	1565.195899	1164.951337	1596.339592	1788.840333	1977.72474	2164.06712
-2.85	-974.7018966	-1373.951608	-1453.857483	-1657.221168	-782.1659542	-1056.973969	-1208.96607	-1353.34819	-1504.81418
+2.85	1047.547044	1159.008572	1047.974377	945.1228246	842.9797725	1163.817284	1291.19351	1422.935934	1544.410822
-2.9	-1051.959123	-1482.854331	-1569.09374	-1888.699	-844.1623166	-1140.752279	-1304.79164	-1460.61784	-1624.08939
+2.9	618.9538159	559.4532475	507.6842507	484.9179635	496.670766	701.1571313	758.8982783	829.1246637	878.4015193
-2.95	-1129.21635	-1591.757054	-1684.329996	-2467.004034	-906.1586789	-1224.530588	-1400.61721	-1567.88748	-1743.36459
+2.95	261.4137223	368.4919836	389.9225677	444.2611523	209.7758999	283.4789676	324.2430816	362.9661965	403.5891397
-3	-1545.597322	-2204.221789	-2356.524853	-3573.114371	-1239.10043	-1673.981962	-1916.9045	-2146.73169	-2389.05775
+3	338.6709415	477.3947105	505.1588546	560.0361493	271.7722191	367.2572861	420.0686641	470.2358216	522.8643554
(Span 3) -4	-1.55E+03	-2.20E+03	-2.36E+03	-3.57E+03	-1.24E+03	-1.67E+03	-1.92E+03	-2.15E+03	-2.39E+03
+4	3.39E+02	4.77E+02	5.05E+02	5.60E+02	2.72E+02	3.67E+02	4.20E+02	4.70E+02	5.23E+02
-3.05	-1468.317455	-2094.010698	-2238.698611	-3166.23094	-1177.145406	-1590.282862	-1821.05928	-2039.3951	-2269.60486
+3.05	321.737394	453.5249747	479.9009121	540.77235	258.1836084	348.8944215	399.0652307	446.7240305	496.7211375
-3.1	-1391.037588	-1983.799606	-2120.872368	-2901.922487	-1115.190382	-1506.583762	-1725.21405	-1932.05851	-2150.15197
+3.1	498.0373888	456.8429361	454.6429695	542.5359282	408.682099	568.8066445	612.32366	658.4481935	698.9411745
-3.15	*-1313.757721*	*-1873.588515*	*-2003.046126*	*-2679.184116*	*-1053.235358*	*-1422.884662*	*-1629.36883*	*-1824.72193*	*-2030.69908*
+3.15	859.7232022	933.7728525	825.7097317	794.8483326	701.3871929	958.3596191	1061.735066	1161.363602	1261.200235
-3.2	-1236.477854	-1763.377423	-1885.219884	-2505.064502	-991.2803339	-1339.185562	-1533.5236	-1717.38534	-1911.24619
+3.2	1206.100622	1434.13033	1359.431622	1315.705671	978.5238479	1330.203224	1489.280022	1642.155412	1795.160337
-3.25	-1159.197987	-1653.166331	-1767.393642	-2348.497974	-929.3253099	-1255.486462	-1437.67838	-1610.04876	-1791.7933
+3.25	1524.889809	1887.734056	1837.009645	1857.426067	1234.022756	1675.943609	1885.417423	2085.241734	2288.957535
-3.3	-1081.91812	*-1542.95524*	-1649.5674	*-2191.931445*	-867.3702859	-1171.787362	-1341.83316	-1502.71217	-1672.34041
+3.3	1809.94602	2284.702794	2253.724698	2310.161447	1462.201989	1987.708065	2241.202483	2480.759276	2731.473196
-3.35	-1004.638253	-1432.744148	-1531.741157	-2035.364917	-805.4152619	-1088.088262	-1245.98793	-1395.37558	-1552.88752
+3.35	2058.876558	2615.85902	2614.508317	2687.057689	1657.763274	2258.142989	2548.288544	2826.528297	3112.336348
-3.4	-927.3583862	-1322.533057	-1413.914915	-1878.798389	-743.4602379	-1004.389162	-1150.14271	-1288.039	-1433.43463
+3.4	2262.873473	2872.732354	2896.400687	2949.786981	1815.793954	2480.416219	2798.925483	3111.551162	3421.92252
-3.45	-850.0785192	-1212.321965	-1296.088673	-1722.23186	-681.5052139	-920.6900616	-1054.29748	-1180.70241	-1313.98174
+3.45	2416.121682	3060.163856	3119.394384	3165.371156	1931.767715	2648.214424	2985.961247	3326.525669	3653.948131
-3.5	-772.7986523	-1102.110873	-1178.262431	-1565.665332	-619.5501899	-836.9909615	-958.452257	-1073.36583	-1194.52885
+3.5	2513.288401	3166.300815	3258.34917	3284.172964	2001.542253	2755.745564	3102.83984	3463.997584	3814.127214
-3.55	-695.5187854	-991.8997817	-1060.436188	-1409.098803	-557.5951659	-753.2918615	-862.607032	-966.02924	-1075.07596
+3.55	2554.573189	*3211.24594238696*	*3319.882865*	3368.395523	2030.550725	*2802.71085*	3153.987331	3524.00636	3884.347584

-3.6	**-618.2389185**	**-881.6886901**	**-942.6099462**	**-1252.532275**	**-495.6401419**	**-669.5927615**	**-766.761808**	**-858.692654**	**-955.623071**
+3.6	**2550.68849**	**3233.752334**	**3308.110819**	**3340.979998**	**2037.594714**	**2796.001478**	**3153.089329**	**3514.72257**	**3865.640419**
-3.65	**-540.9590516**	**-771.4775985**	**-824.783704**	**-1095.965746**	**-433.6851179**	**-585.8936614**	**-670.916583**	**-751.356068**	**-836.170182**
+3.65	**2480.615415**	**3166.996457**	**3200.113943**	**3260.372628**	**1992.364238**	**2716.920417**	**3069.932427**	**3413.354369**	**3758.284472**
-3.7	**-463.6791846**	**-661.2665069**	**-706.9574618**	**-939.3992177**	**-371.7300938**	**-502.1945614**	**-575.071359**	**-644.019483**	**-716.717292**
+3.7	**2342.32763**	**3022.114137**	*3025.435802*	**3071.202956**	**1891.749007**	**2562.527308**	**2899.847116**	**3220.823588**	**3552.609241**
-3.75	**-386.3993177**	**-551.0554153**	**-589.1312196**	**-782.8326892**	**-309.7750698**	**-418.4954614**	**-479.226134**	**-536.682897**	**-597.264402**
+3.75	**2147.185473**	**2775.752842**	**2780.0234**	**2812.975731**	**1733.024378**	**2336.359835**	**2639.960407**	**2945.495622**	**3233.773997**
-3.8	**-309.1194508**	**-440.8443236**	**-471.3049774**	**-626.2661607**	**-247.8200458**	**-334.7963613**	**-383.380909**	**-429.346311**	**-477.811513**
+3.8	**1876.725092**	**2427.450663**	**2445.258513**	**2453.072031**	**1513.850219**	**2041.132746**	**2301.888456**	**2565.262055**	**2797.831432**
-3.85	**-231.8395839**	**-330.633232**	**-353.4787352**	**-469.6996322**	**-185.8650218**	**-251.0972613**	**-287.535685**	**-322.009725**	**-358.358623**
+3.85	**1528.465848**	**1992.870484**	**1995.479194**	**2024.849793**	**1232.27231**	**1661.686356**	**1876.13236**	**2076.7166**	**2256.531037**
-3.9	**-154.559717**	**-220.4221404**	**-235.6524929**	**-313.1331037**	**-123.9099978**	**-167.3981612**	**-191.69046**	**-214.673139**	**-238.905733**
+3.9	**1100.407817**	**1445.063234**	**1455.095947**	**1483.639895**	**886.7224925**	**1195.893585**	**1351.631732**	**1478.122786**	**1609.655413**
-3.95	**-77.27985005**	**-110.2110488**	**-117.8262507**	**-156.5665753**	**-61.95497379**	**-83.6990612**	**-95.8452356**	**-107.336553**	**-119.452844**
+3.95	**591.0356771**	**781.0611019**	**790.4780563**	**820.4356037**	**476.0157921**	**642.1498545**	**726.4480111**	**794.2792383**	**862.9528456**
-5	**-3.16E-13**	**-3.60E-13**	**-3.51E-13**	**-3.17E-13**	**-2.64E-13**	**-2.59E-13**	**-3.41E-13**	**-3.41E-13**	**-3.41E-13**
+5	**3.09E-13**	**2.50E-13**	**2.76E-13**	**3.09E-13**	**2.45E-13**	**2.25E-13**	**2.51E-13**	**2.44E-13**	**2.44E-13**

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.52E-13	-5.05E-13	-3.99E-13	-3.87E-13	-3.58E-13
End Shear	3.18E-13	3.67E-13	2.49E-13	3.15E-13	2.28E-13
-0.05	-212.8598498	-235.2149065	-133.919317	-161.312278	-173.905043
+0.05	1411.30301	1511.594736	928.0626171	1120.382933	1186.694778
-0.1	-425.7196997	-470.4298131	-267.838634	-322.624556	-347.810085
+0.1	2595.951172	2789.13871	1713.618667	2068.961696	2188.116358
-0.15	-638.5795495	-705.6447196	-401.757951	-483.936834	-521.715128
+0.15	3611.415092	3873.676188	2358.008648	2855.121957	3024.628967
-0.2	-851.4393993	-940.8596261	-535.677267	-645.249112	-695.620171
+0.2	4416.223397	4814.159016	2906.69322	3512.299127	3713.053639
-0.25	-1064.299249	-1176.074533	-669.596584	-806.56139	-869.525213
+0.25	5050.006146	5545.95557	3329.307383	4009.106808	4270.122237
-0.3	-1277.159099	-1411.289439	-803.515901	-967.873668	-1043.43026
+0.3	5547.834351	6099.050285	3628.827133	4351.602511	4667.331721
-0.35	-1490.018949	-1646.504346	-937.435218	-1129.18595	-1217.3353
+0.35	5872.469674	6459.620608	3826.786299	4579.713543	4901.821677
-0.4	-1702.878799	-1881.719252	-1071.35453	-1290.49822	-1391.24034
+0.4	6075.148004	6619.243231	3905.718828	4665.983863	5017.233902
-0.45	-1915.738648	-2116.934159	-1205.27385	-1451.8105	-1565.14538
+0.45	6089.426084	6685.170909	3872.131531	4617.748399	4986.526402
-0.5	-2128.598498	-2352.149065	-1339.19317	-1613.12278	-1739.05043
+0.5	5982.91142	6552.574934	3818.600429	4555.760182	4913.476932
-0.55	-2341.458348	-2587.363972	-1473.11249	-1774.43506	-1912.95547
+0.55	5730.007421	6244.818567	3698.55256	4417.529613	4745.130007
-0.6	-2554.318198	-2822.578878	-1607.0318	-1935.74734	-2086.86051
+0.6	5319.707397	5845.172012	3471.940942	4150.338639	4443.673204
-0.65	-2767.178048	-3057.793785	-1740.95112	-2097.05961	-2260.76555
+0.65	4785.852866	5274.636263	3147.654368	3764.738373	4036.025926
-0.7	-2980.037898	-3293.008692	-1874.87044	-2258.37189	-2434.6706
+0.7	4139.565494	4546.126629	2735.447953	3280.683719	3510.954952
-0.75	-3192.897747	-3528.223598	-2008.78975	-2419.68417	-2608.57564
+0.75	3366.839519	3684.561443	2253.865976	2705.711496	2882.125885
-0.8	-3405.757597	-3763.438505	-2142.70907	-2580.99645	-2782.48068
+0.8	2485.710366	2706.1778	1702.997819	2044.565881	2164.108394
-0.85	-3618.617447	-3998.653411	-2276.62839	-2742.30873	-2956.38573
+0.85	1515.06238	1632.926897	1093.534707	1311.544816	1372.20198
-0.9	-3831.477297	-4233.868318	-2410.5477	-2903.621	-3130.29077
+0.9	824.2952583	908.7036269	569.6725887	644.834792	689.4772782
-0.95	-4044.337147	-4469.083224	-2544.46702	-3064.93328	-3304.19581
+0.95	870.0894394	959.1871617	549.0960751	662.5511412	712.7012691
-1	-4257.197045	-4704.298129	-2678.38634	-3226.24556	-3478.1008
+1	915.883611	1009.670706	577.9958714	697.4222547	750.2118623
(Span 2) -2	-4257.197045	-4704.298129	-2678.38634	-3226.24556	-3478.1008
+2	915.883611	1009.670706	577.9958714	697.4222547	750.2118623
-2.05	-3053.792376	-3366.502629	-1927.18749	-2325.38566	-2501.39997
+2.05	706.9533024	779.3457936	446.1441217	538.3270967	579.0744013
-2.1	-2844.862058	-3136.177717	-1795.33573	-2166.29051	-2330.26251
+2.1	874.9734653	968.6864357	691.4663148	786.9476132	846.6031902
-2.15	-2635.93174	-2905.852804	-1663.48397	-2007.19535	-2159.12504
+2.15	1961.612802	2146.479867	1372.572822	1630.036491	1731.996895
-2.2	-2427.001422	-2675.527891	-1531.63222	-1848.1002	-1987.98757
+2.2	3092.793751	3398.377543	2082.072493	2483.461415	2654.551277

-2.25	-2218.071103	-2445.202978	-1399.78046	-1689.00505	-1816.8501
+2.25	4087.993445	4503.131547	2707.622849	3234.163443	3465.319634
-2.3	-2009.140785	-2214.878065	-1267.9287	-1529.9099	-1645.71263
+2.3	4922.897373	5427.621551	3228.787539	3859.089083	4138.061361
-2.35	-1800.210467	-1984.553153	-1136.07694	-1370.81475	-1474.57516
+2.35	5604.738789	6151.168053	3637.665542	4346.891474	4660.877183
-2.4	-1591.280149	-1754.22824	-1004.22518	-1211.7196	-1303.4377
+2.4	6096.211781	6656.835846	3922.636191	4684.846978	5037.734656
-2.45	-1382.349831	-1523.903327	-872.373424	-1052.62444	-1132.30023
+2.45	6384.835844	7002.904038	4077.66722	4866.062378	5246.521526
-2.5	-1173.419475	-1293.578414	-740.521665	-893.529325	-961.162759
+2.5	6463.885259	7120.060732	4100.15594	4888.011674	5283.449938
-2.55	-1382.349784	-1523.903328	-872.373375	-1052.62448	-1132.30021
+2.55	6384.834014	7003.546966	4077.676372	4866.059394	5246.527907
-2.6	-1591.280092	-1754.22824	-1004.22513	-1211.71964	-1303.43767
+2.6	6096.209366	6656.47054	3922.643091	4684.854153	5037.737723
-2.65	-1800.210401	-1984.553152	-1136.07687	-1370.8148	-1474.57513
+2.65	5604.737319	6151.297456	3637.670912	4346.896883	4660.878349
-2.7	-2009.140709	-2214.878064	-1267.92862	-1529.90996	-1645.71259
+2.7	4922.896327	5428.177893	3228.787164	3859.091627	4138.071267
-2.75	-2218.071018	-2445.202976	-1399.78037	-1689.00511	-1816.85005
+2.75	4088.00555	4503.654542	2707.625319	3234.165222	3465.33243
-2.8	-2427.001327	-2675.527888	-1531.63212	-1848.10027	-1987.98751
+2.8	3092.792073	3398.388871	2082.073916	2483.461899	2654.549383
-2.85	-2635.931635	-2905.852801	-1663.48387	-2007.19543	-2159.12497
+2.85	1961.614549	2146.478446	1372.57504	1630.037575	1731.998299
-2.9	-2844.861944	-3136.177713	-1795.33562	-2166.29059	-2330.26244
+2.9	874.9759376	968.684939	691.4674799	786.9512424	846.6045443
-2.95	-3053.792252	-3366.502625	-1927.18737	-2325.38575	-2501.3999
+2.95	706.9533513	779.3458011	446.1441593	538.3270753	579.0744561
-3	-4257.197003	-4704.298081	-2678.38633	-3226.24558	-3478.10101
+3	915.8836531	1009.670709	577.995909	697.4222279	750.2118946
(Span 3) -4	-4.26E+03	-4.70E+03	-2.68E+03	-3.23E+03	-3.48E+03
+4	9.16E+02	1.01E+03	5.78E+02	6.97E+02	7.50E+02
-3.05	-4044.337156	-4469.083177	-2544.46702	-3064.9333	-3304.19596
+3.05	870.08947	959.1871737	549.0961137	662.5511165	712.7012999
-3.1	-3831.477308	-4233.868273	-2410.5477	-2903.62102	-3130.2909
+3.1	824.2952869	908.7036387	569.674442	644.8314804	689.4714556
-3.15	*-3618.61746*	*-3998.653369*	*-2276.62838*	*-2742.30874*	*-2956.38585*
+3.15	1515.05405	1634.393534	1093.537091	1311.54915	1372.194249
-3.2	-3405.757612	-3763.438465	-2142.70907	-2580.99646	-2782.4808
+3.2	2485.702481	2707.441007	1703.000137	2044.570256	2164.100767
-3.25	-3192.897765	-3528.223561	-2008.78975	-2419.68418	-2608.57575
+3.25	3366.831137	3686.235946	2253.867877	2705.715064	2882.117274
-3.3	-2980.037917	-3293.008656	-1874.87043	-2258.37191	-2434.67069
+3.3	4139.570971	4548.785447	2735.447163	3280.685563	3510.96141
-3.35	-2767.178069	-3057.793752	-1740.95112	-2097.05963	-2260.76564
+3.35	4785.85609	5274.634839	3147.652045	3764.736798	4036.030295
-3.4	-2554.318222	-2822.578848	-1607.0318	-1935.74735	-2086.86059
+3.4	5319.703036	5845.173815	3471.936039	4150.334043	4443.674111
-3.45	-2341.458374	-2587.363944	-1473.11248	-1774.43507	-1912.95553
+3.45	5731.529252	6244.819198	3698.54504	4417.521953	4745.126509
-3.5	-2128.598526	-2352.14904	-1339.19317	-1613.12279	-1739.05048
+3.5	5982.915876	6554.550194	3818.590091	4555.765202	4913.469103
-3.55	-1915.738678	-2116.934136	-1205.27385	-1451.81051	-1565.14543
+3.55	6089.423202	6685.168638	3872.124625	4617.744815	4986.518676
-3.6	-1702.878831	-1881.719232	-1071.35454	-1290.49823	-1391.24037

+3.6	**6075.156107**	**6619.243424**	**3905.708687**	**4665.976511**	**5017.238841**
-3.65	**-1490.018983**	**-1646.504328**	**-937.435219**	**-1129.18595**	**-1217.33532**
+3.65	**5872.471448**	**6459.619098**	**3826.791425**	**4579.718694**	**4901.821333**
-3.7	**-1277.159135**	**-1411.289423**	**-803.515903**	**-967.873675**	**-1043.43027**
+3.7	**5547.828771**	**6100.144275**	**3628.82813**	**4351.60301**	**4667.326158**
-3.75	**-1064.299287**	**-1176.074519**	**-669.596586**	**-806.561396**	**-869.525215**
+3.75	**5049.994136**	**5545.954552**	**3329.303912**	**4009.10197**	**4270.111463**
-3.8	**-851.4394397**	**-940.8596151**	**-535.67727**	**-645.249118**	**-695.620163**
+3.8	**4417.711484**	**4814.155956**	**2906.685712**	**3512.289129**	**3713.044819**
-3.85	**-638.5795919**	**-705.644711**	**-401.757954**	**-483.936839**	**-521.71511**
+3.85	**3611.421896**	**3873.675344**	**2358.004822**	**2855.122978**	**3024.631511**
-3.9	**-425.7197442**	**-470.4298068**	**-267.838637**	**-322.62456**	**-347.810057**
+3.9	**2595.950116**	**2789.139057**	**1713.609871**	**2068.956871**	**2188.112327**
-3.95	**-212.8598965**	**-235.2149027**	**-133.919321**	**-161.312281**	**-173.905004**
+3.95	**1411.293885**	**1511.596807**	**928.0485686**	**1120.371976**	**1186.683768**
-5	**-4.69E-13**	**-6.27E-13**	**-4.01E-13**	**-4.60E-13**	**-4.03E-13**
+5	**3.62E-13**	**4.33E-13**	**3.38E-13**	**3.50E-13**	**3.60E-13**

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.211568212	-5.724646454	-8.164086344	-8.72819245	-12.24394325	-4.589430993	-6.20016277	-7.099909134	-7.951152628	-8.848689957
End Shear	66.0978384	46.90907884	62.38359238	63.41427124	70.36415715	37.78268647	50.93865126	57.67512602	63.11278003	68.67749557
-0.05	-8.211568212	-5.724646454	-8.164086344	-8.72819245	-12.28403589	-4.589430993	-6.20016277	-7.099909134	-7.951152628	-8.848689957
+0.05	61.55157526	43.741693	57.82171143	58.50525973	63.1531395	35.24491778	47.51444845	53.75116595	58.72511833	63.79963964
-0.1	-8.211568212	-5.724646454	-8.164086344	-8.72819245	-12.42270429	-4.589430993	-6.20016277	-7.099909134	-7.951152628	-8.848689957
+0.1	56.86300906	40.47540051	53.1247675	53.45949002	55.92457044	32.62887942	43.98288009	49.70462198	54.20302252	58.7753167
-0.15	-8.211568212	-5.907949186	-8.164086344	-8.72819245	-12.62266044	-4.983508163	-6.661057525	-7.099909134	-7.951152628	-8.848689957
+0.15	52.89451443	37.66884897	49.10667899	49.15718617	50.07070039	30.38034548	40.94761369	46.22899228	50.32319637	54.46935073
-0.2	-11.78297424	-9.176875625	-8.268573141	-8.72819245	-12.94477965	-7.597855834	-10.19134445	-10.89271162	-10.86434321	-10.86231476
+0.2	48.30697599	34.46827291	44.54543747	44.29022472	43.94235115	27.81528901	37.48528478	42.26698964	45.90545149	49.57199834
-0.25	-15.82141155	-11.9866641	-11.6829213	-9.970556358	-13.30239948	-9.844306351	-13.22503291	-14.38131001	-14.60232517	-14.60005707
+0.25	44.39367554	31.73524232	40.66921029	40.16939758	38.87615142	25.62419031	34.52791828	38.88517364	42.13908909	45.40175567
-0.3	-20.45288044	-15.1920826	-15.96392657	-13.84662736	-14.55142902	-12.40624956	-16.68499648	-18.36270715	-19.08379543	-19.6082936
+0.3	39.96464197	28.63860855	36.29964133	35.5424193	33.60949971	23.1406971	31.17611682	35.05511429	37.87883062	40.69063109
-0.35	-24.41335393	-17.93026337	-20.03192895	-17.6345264	-17.90393272	-14.59402936	-19.63984669	-21.76516561	-22.917991	-23.90366917
+0.35	36.21260097	26.01222814	32.61378703	31.6560889	29.31272463	21.03353882	28.33243126	31.80819381	34.27198593	36.70746231
-0.4	-28.90735644	-21.03394484	-24.66391491	-22.15658522	-21.97250899	-17.07298459	-22.98819999	-25.62346649	-27.27106446	-28.78601191
+0.4	31.997196	23.0577687	28.49187196	27.33026896	24.83359921	18.66218898	25.13244576	28.15748475	30.2223572	32.2418253
-0.45	-32.72483798	-23.66738879	-28.61285099	-26.52553451	-26.20259082	-19.17559073	-25.82843168	-28.89870197	-30.97095888	-32.94082946
+0.45	28.45419492	20.5711679	25.04490265	23.73145694	21.49211262	16.66547596	22.43821988	25.08653875	26.82108823	28.49708927
-0.5	-37.02631364	-26.63110227	-33.07946419	-31.48369223	-31.26802454	-21.54097716	-29.02388684	-32.58650363	-35.14249665	-37.63135843
+0.5	24.50755488	17.79710941	21.22660606	19.76798229	17.86018362	14.43685495	19.43133477	21.66258722	23.03522861	24.33619765
-0.55	-40.65308406	-29.12667729	-36.86082089	-35.69594511	-35.61644483	-23.53190492	-31.71371907	-35.69343378	-38.66203389	-41.59426035
+0.55	21.22137033	15.48342485	18.06703307	16.50970998	14.91390968	12.57709029	16.92235675	18.80870331	19.88558284	20.881253
-0.6	-44.70698345	-31.91220053	-41.10608296	-40.44271812	-40.84981605	-25.75313858	-34.71499383	-39.16333591	-42.5989004	-46.03371976
+0.6	17.59862273	12.92799579	14.60833351	12.96975101	11.75565132	10.5217756	14.14985824	15.65890931	16.41663152	17.08436401
-0.65	-48.09532194	-34.23677539	-44.6713498	-44.44525668	-45.27178601	-27.60588358	-37.21864071	-42.06087207	-45.89202541	-49.75334815
+0.65	14.61703421	10.82035514	11.78466613	10.32460665	9.397880485	8.825463362	11.86190275	13.06317037	13.56466711	13.97056702
-0.7	-51.84658309	-36.80587332	-48.63929442	-48.91945634	-50.54536915	-29.65238672	-39.9844496	-45.26546734	-49.54107815	-53.88247929
+0.7	11.37330673	8.521781479	8.741540877	7.548513086	6.956652011	6.974040395	9.365077419	10.23493525	10.46576434	10.59693589
-0.75	-54.94878105	-38.92631682	-51.93996007	-52.65925822	-55.09153027	-31.34044483	-42.26613249	-47.91252955	-52.56173701	-57.30747715
+0.75	8.744094733	6.653316887	6.475379698	5.511478897	5.172308262	5.495701688	7.333932426	7.938428439	7.957536184	7.95713265
-0.8	-58.34234284	-41.24076679	-55.57460574	-56.7997109	-61.24763304	-33.18163153	-44.75518311	-50.80441424	-55.86983231	-61.06702153
+0.8	5.952827893	4.64983139	4.228407887	3.779153154	3.643978983	3.850732076	5.154063964	5.479159162	5.468131596	5.467779931
-0.85	-61.11067964	-43.12394737	-58.5621595	-60.2237554	-66.82689695	-34.67849832	-46.77912096	-53.15992191	-58.57197072	-64.14603295
+0.85	3.904773642	3.053673616	2.964509412	2.402747633	2.464066444	2.56083937	3.41550784	3.572360127	3.572070292	3.571784173
-0.9	-64.0914921	-45.14551611	-61.80753951	-63.96928744	-73.918324	-36.28379104	-48.95013013	-55.69168904	-61.4859756	-67.47673234
+0.9	1.832882524	1.678729383	1.768193974	1.871028085	2.266396699	1.249547292	1.792583868	1.836019646	1.835745942	1.936606307
-0.95	-66.47824859	-46.75830283	-64.43346838	-67.02455292	-80.29464119	-37.5629625	-50.68054133	-57.7145555	-63.82353909	-70.15839672
+0.95	1.796271146	1.25438336	1.768193974	1.871028085	2.20973005	1.006600987	1.360262614	1.555867409	1.741678564	1.936606307
-1	-68.99124957	-48.44876486	-67.233607	-70.31397467	-87.62831644	-38.90177797	-52.4922228	-59.83880422	-66.29030761	-73.00099587
+1	1.80E+00	1.25438336	1.768193974	1.871028085	2.19E+00	1.006600987	1.360262614	1.555867409	1.741678564	1.936606307
(Span 2) -2	-6.304050691	-4.402284217	-6.205513208	-6.566411658	-7.682462281	-3.532687098	-4.773869675	-5.460348718	-6.112456944	-6.796559794
+2	69.19539412	48.53241433	67.72522318	71.19157354	96.50053528	38.95419121	52.56682169	59.96735999	66.51411176	73.34219652
-2.05	-6.304050691	-4.402284217	-6.205513208	-6.566411658	-7.71271984	-3.532687098	-4.773869675	-5.460348718	-6.112456944	-6.796559794
+2.05	66.453263	46.68688606	64.68715066	67.65132003	88.70610402	37.49205984	50.58795342	57.64765695	63.82018755	70.23968298
-2.1	-6.304050691	-4.402284217	-6.205513208	-6.566411658	-7.806916239	-3.532687098	-4.773869675	-5.460348718	-6.112456944	-6.796559794
+2.1	63.38068706	44.60492462	61.34883845	63.81839667	80.85662739	35.83893236	48.35172004	55.03832032	60.81273067	66.79988127
-2.15	-6.304050691	-4.402284217	-6.205513208	-6.566411658	-7.973908453	-3.532687098	-4.773869675	-5.460348718	-6.112456944	-6.796559794
+2.15	60.01886507	42.31509905	57.75212687	59.73851744	72.93796002	34.01766357	45.88898081	52.17478368	57.53146851	63.06708417
-2.2	-8.135973662	-6.189625095	-6.205513208	-6.566411658	-8.221521523	-5.083545677	-6.820363202	-7.393235338	-7.435103556	-7.434228223
+2.2	56.40900771	39.84598592	53.93885228	55.45742386	65.13089445	32.05111773	43.23059534	49.09247838	54.01610756	59.08559034
-2.25	-11.45493098	-8.546289373	-9.029872703	-7.855089146	-8.556548662	-6.982750353	-9.381875655	-10.29275425	-10.60964357	-10.83663959

+2.25	52.59231584	37.22615671	49.95085213	51.0208318	57.63130275	29.96214514	40.40742408	45.82683764	50.30637496	54.89968159
-2.3	-15.23311544	-11.21681886	-12.60741382	-11.13795892	-11.31332628	-9.131805119	-12.28108146	-13.58406125	-14.23125574	-14.79456174
+2.3	48.38473841	34.32884852	45.59797649	46.21960171	50.17750582	27.64956268	37.28274152	42.22002918	46.22356084	50.30840181
-2.35	-19.02974136	-13.89019318	-16.25385887	-14.87701567	-14.65030004	-11.28056047	-15.18049573	-16.88361383	-17.87714322	-18.79647399
+2.35	44.27230906	31.48895048	41.38221009	41.60699078	43.57460521	25.38073233	34.21775506	38.68880375	42.23902001	45.8414152
-2.4	-22.99588053	-16.67398691	-20.10793429	-18.87847664	-18.28581264	-13.51579016	-18.19714357	-20.32364569	-21.69165397	-22.99877226
+2.4	40.07896491	28.5856445	37.04114231	36.85027952	37.56962759	23.05932319	31.08227861	35.08251177	38.1814808	41.30536701
-2.45	-27.09036792	-19.53962766	-24.12780149	-23.09662959	-22.25284544	-15.81464482	-21.30017468	-23.86872281	-25.63506516	-27.35715501
+2.45	35.8459034	25.63837875	32.73366702	32.253384	32.00902804	20.70819375	27.90716704	31.37536129	34.02912216	36.65127145
-2.5	-31.50610628	-22.62169649	-28.50462697	-27.7336711	-26.91613217	-18.28497402	-24.63520881	-27.68555935	-29.89350747	-32.07806497
+2.5	31.31572632	22.45837703	28.27139618	27.48550522	26.6417686	18.15412242	24.45854232	27.48320508	29.66743974	31.82707143
-2.55	-35.73519511	-25.6202871	-32.73389817	-32.2536166	-32.00921462	-20.70833439	-27.89853173	-31.35793407	-34.02153299	-36.64323504
+2.55	27.13201	19.53946618	24.12757373	23.09640344	22.25269208	15.81450778	21.29999442	23.86851096	25.6348426	27.35690104
-2.6	-39.96689195	-28.58581234	-37.02365634	-36.85052977	-37.56985358	-23.05946161	-31.08245982	-35.08272041	-38.18170147	-41.3056298
+2.6	23.03513014	16.67382946	20.10772111	18.87826075	18.29041369	13.51566033	18.19697261	20.32343845	21.69144301	22.99852511
-2.65	-44.27560744	-31.48911703	-41.38244869	-41.60040779	-43.57482199	-25.38087011	-34.21792931	-38.68901093	-42.23924562	-45.8416839
+2.65	19.06629269	13.89003968	16.25364869	14.87680458	14.65017127	11.28042982	15.1803197	16.88342517	17.87693466	18.79623766
-2.7	-48.38627457	-34.32900963	-45.59820322	-46.2198355	-50.17775312	-27.64969927	-37.28291528	-42.22022963	-46.22378768	-50.30866517
+2.7	15.26670784	11.21667272	12.60722182	11.13777657	11.31320326	9.131680483	12.28091779	13.58388103	14.23106299	14.79433109
-2.75	-52.37495961	-37.07692097	-49.72524535	-50.77094548	-57.23306493	-29.84308392	-40.2465368	-45.6409439	-50.09558678	-54.66227966
+2.75	11.67758008	8.682300995	9.210252975	8.019682246	8.57784541	7.092269213	9.529605602	10.46024938	10.79352298	11.03709834
-2.8	-56.40740347	-39.84613289	-53.93907142	-55.45764674	-65.13118654	-32.05123483	-43.23075892	-49.09266213	-54.01631147	-59.08582765
+2.8	8.16290996	6.189497875	6.205513513	6.566411381	8.221521935	5.083433801	6.820220983	7.393079479	7.434938643	7.434053012
-2.85	-60.01606795	-42.31523737	-57.75232817	-59.73873757	-72.92928182	-34.01777627	-45.88912929	-52.17495583	-57.53165382	-63.06731379
+2.85	6.304050445	4.40228405	6.205513513	6.566411381	7.973908857	3.532687279	4.773869527	5.460349059	6.112457279	6.796560072
-2.9	-63.37699238	-44.60505094	-61.34903411	-63.81860461	-80.85690006	-35.83903532	-48.35186027	-55.03847925	-60.81291345	-66.80009528
+2.9	6.304050445	4.40228405	6.205513513	6.566411381	7.806916659	3.532687279	4.773869527	5.460349059	6.112457279	6.796560072
-2.95	-66.44902344	-46.68699999	-64.68732448	-67.6515213	-88.70637225	-37.49215341	-50.58807567	-57.6477998	-63.82034788	-70.23987834
+2.95	6.304050445	4.40228405	6.205513513	6.566411381	7.712720261	3.532687279	4.773869527	5.460349059	6.112457279	6.796560072
-3	-69.33283849	-48.62753175	-67.88451439	-71.37892354	-96.9306483	-39.02943747	-52.66869489	-60.0871512	-66.65392597	-73.50394731
+3	6.304050445	4.40228405	6.205513513	6.566411381	7.682462708	3.532687279	4.773869527	5.460349059	6.112457279	6.796560072
(Span 3) -4	-1.80E+00	-1.254383312	-1.768194061	-1.871028006	-2.19E+00	-1.006601039	-1.360262572	-1.555867506	-1.74167866	-1.936606386
+4	68.84565372	48.34184217	67.05471243	70.102678	87.11574091	38.81716738	52.37771034	59.70430066	66.1336704	72.8200052
-3.05	-1.80E+00	-1.254383312	-1.768194061	-1.871028006	-2.21E+00	-1.006601039	-1.360262572	-1.555867506	-1.74167866	-1.936606386
+3.05	66.66845298	46.87666498	64.62776631	67.2516707	80.77933666	37.65677092	50.80747205	57.86314318	63.99564267	70.35625168
-3.1	-1.908355713	-1.759294349	-1.768194061	-1.871028006	-2.27236043	-1.301362913	-1.887082882	-1.946078137	-1.945802313	-1.945533215
+3.1	63.91535113	45.01585904	61.5979986	63.72652071	73.42234042	36.18088775	48.81094884	55.5291891	61.298604	67.26217509
-3.15	-3.742160145	-2.936621736	-2.876045903	-2.301965036	-2.37897403	-2.466176907	-3.287936572	-3.451014643	-3.450726722	-3.450446183
+3.15	61.33217664	43.26372334	58.78517546	60.48022466	67.25197151	34.78954561	46.92929498	53.33485872	58.77297463	64.37540082
-3.2	-6.102819922	-4.778240195	-4.353615321	-3.890033224	-3.740396452	-3.954438295	-5.293858036	-5.636667033	-5.624594887	-5.624241061
+3.2	58.13819692	41.09092651	55.33815387	56.52957759	60.81460302	33.06247619	44.59408833	50.61709052	55.65527594	60.82286635
-3.25	-8.53300099	-6.514702969	-6.309028477	-5.391475848	-5.064972301	-5.355879578	-7.183188276	-7.768173973	-7.771917665	-7.771510738
+3.25	55.19681404	39.0849645	52.18796607	52.94101703	55.43373471	31.46669229	42.43679088	48.11066399	52.78809894	57.56443014
-3.3	-11.56405764	-8.670521021	-8.937145831	-7.726710663	-7.111968286	-7.093903929	-9.526711363	-10.41785764	-10.66587516	-10.81444798
+3.3	51.61708823	36.63840368	48.3796633	48.62603636	50.188219	29.51901915	39.80419643	45.05648352	49.30287958	53.61266794
-3.35	-14.37319428	-10.66272316	-11.57468493	-10.13280706	-9.227773199	-8.698559861	-11.69073735	-12.86913426	-13.35174949	-13.73842638
+3.35	48.36528118	34.41174541	44.94061997	44.74822934	45.60715678	27.74529695	37.4070447	42.27904291	46.14022529	50.03392406
-3.4	-17.81066113	-13.09451092	-14.83260772	-13.19832187	-11.95811454	-10.65575642	-14.33057539	-15.86407844	-16.64232206	-17.33111108
+3.4	44.45494956	31.72965021	40.82701161	40.13007533	40.50497024	25.60760267	34.51834115	38.93585507	42.34060863	45.74220554
-3.45	-20.94817323	-15.30933366	-17.83030789	-16.26645622	-14.69537053	-12.43711637	-16.73351616	-18.59404166	-19.64890538	-20.62191392
+3.45	40.9404987	29.31542747	37.14764171	36.01604442	35.96929927	23.68244629	31.91711716	35.92848445	38.92851658	41.89451217
-3.5	-24.73702048	-17.97886351	-21.4758114	-20.02582836	-18.09482551	-14.58291043	-19.62838283	-21.88684309	-23.28295333	-24.6082295
+3.5	36.73405758	26.43602587	32.78468412	31.15593307	30.93222874	21.38530203	28.81358996	32.34369427	34.86765844	37.32209592
-3.55	-28.15519207	-20.38315288	-24.7851605	-23.46100994	-21.24258803	-16.51446995	-22.23446969	-24.8544087	-26.5641901	-28.21450016
+3.55	33.00574463	23.86736913	28.91348087	26.85869818	26.54207072	19.33522446	26.04407503	29.14747576	31.25218348	33.2568095
-3.6	-32.2403315	-23.25219704	-28.76227302	-27.61330948	-25.09805724	-18.81827971	-25.34306631	-28.39766403	-30.48857508	-32.53517092
+3.6	28.60091148	20.82888928	24.35718265	21.81778835	21.67051264	16.90922153	22.76701054	25.36848684	26.98322257	28.462974

-3.65	**-35.89144543**	**-25.81283284**	**-32.33474366**	**-31.36251774**	**-28.99167087**	**-20.87353456**	**-28.11650512**	**-31.56174817**	**-33.99839312**	**-36.4055509**
+3.65	**24.70580119**	**18.13893102**	**20.34263989**	**17.92396817**	**18.16327219**	**14.76071905**	**19.86498725**	**22.02450526**	**23.21041984**	**24.23145249**
-3.7	**-40.21785381**	**-28.8431626**	**-36.58750718**	**-35.84658541**	**-33.94933091**	**-23.30477894**	**-31.39755738**	**-35.308053**	**-38.15999112**	**-41.00135242**
+3.7	**20.13601912**	**14.97960158**	**15.6489574**	**13.55345371**	**14.2951521**	**12.23643871**	**16.45565757**	**18.09872211**	**18.78649649**	**19.27541636**
-3.75	**-44.05419409**	**-31.52701262**	**-40.3746041**	**-39.85679977**	**-38.49650492**	**-25.45722492**	**-34.30256702**	**-38.62757219**	**-41.8523527**	**-45.08448598**
+3.75	**16.12182737**	**12.20147247**	**11.96485704**	**10.15997329**	**13.33290068**	**10.01600476**	**13.45692103**	**14.6480606**	**14.90241997**	**14.92901586**
-3.8	**-48.56679815**	**-34.6803996**	**-44.84700986**	**-44.61142091**	**-44.34193878**	**-27.98533306**	**-37.71478832**	**-42.52952267**	**-46.19800771**	**-49.89614353**
+3.8	**11.50465035**	**8.959507959**	**8.164086938**	**8.72819306**	**12.92027637**	**7.424039172**	**9.956625893**	**10.62288661**	**10.59672384**	**10.59468097**
-3.85	**-52.54064864**	**-37.45433384**	**-48.80024213**	**-48.82961946**	**-49.65334295**	**-30.20845587**	**-40.71558753**	**-45.9633937**	**-50.02685835**	**-54.14067407**
+3.85	**8.211581115**	**6.126339663**	**8.164086938**	**8.72819306**	**12.64109708**	**5.15818796**	**6.896944474**	**7.21471725**	**7.951152702**	**8.848689926**
-3.9	**-57.1843709**	**-40.69254925**	**-53.43633358**	**-53.79363298**	**-56.39653062**	**-32.80283521**	**-44.21769138**	**-49.97360202**	**-54.50343114**	**-59.10892925**
+3.9	**8.211581115**	**5.72464661**	**8.164086938**	**8.72819306**	**12.41038598**	**4.589431017**	**6.200162972**	**7.099909225**	**7.951152702**	**8.848689926**
-3.95	**-61.24801525**	**-43.52343603**	**-57.50717173**	**-58.16679488**	**-62.66151198**	**-35.0701409**	**-47.27849825**	**-53.48072437**	**-58.42271604**	**-63.46349875**
+3.95	**8.211581115**	**5.72464661**	**8.164086938**	**8.72819306**	**12.29020292**	**4.589431017**	**6.200162972**	**7.099909225**	**7.951152702**	**8.848689926**
-5	**-65.96783536**	**-46.80825187**	**-62.25097529**	**-63.27904407**	**-70.24869417**	**-37.70020931**	**-50.82921326**	**-57.55177063**	**-62.97706637**	**-68.52907273**
+5	**8.211581115**	**5.72464661**	**8.164086938**	**8.72819306**	**12.24394335**	**4.589431017**	**6.200162972**	**7.099909225**	**7.951152702**	**8.848689926**

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.211568212	-7.477138313	-8.046572048	-7.584955875	-9.185224572	-9.485866818	-10.04061378	-3.991101496
End Shear	66.0978384	62.13956505	66.47982091	62.4100821	74.72168088	71.81846595	75.93747258	32.84589267
-0.05	-8.211568212	-7.477138313	-8.046572048	-7.584955875	-9.185224572	-9.485866818	-10.04061378	-3.991101496
+0.05	61.55157526	58.01171794	62.03652316	58.22362901	69.65181907	66.52563365	70.33455357	30.64816175
-0.1	-8.211568212	-7.477138313	-8.046572048	-7.584955875	-9.185224572	-9.485866818	-10.04061378	-3.991101496
+0.1	56.86300906	53.75350539	57.4543454	53.90540404	64.42543686	61.07818185	64.56832165	28.35945045
-0.15	-8.211568212	-8.842026318	-9.083388906	-8.294240669	-9.185224572	-9.485866818	-10.04061378	-4.138813904
+0.15	52.89451443	50.09143836	53.51487659	50.19360824	59.93557483	56.41981321	59.63765832	26.39297105
-0.2	-11.78297424	-13.08649146	-13.65726872	-12.60864369	-14.36348437	-9.661859743	-10.23034833	-6.393634233
+0.2	48.30697599	45.9114466	49.01967	45.95906163	54.81638582	51.13381934	54.04305081	24.15052933
-0.25	-15.82141155	-16.73163451	-17.58652019	-16.31573494	-18.86453381	-12.93199891	-13.61263043	-8.362888736
+0.25	44.39367554	42.33870837	45.17877029	42.34165567	50.44593195	46.6435431	49.29094744	22.23578671
-0.3	-20.45288044	-20.88631948	-22.06644713	-20.5432396	-24.00043994	-17.92623851	-18.87416969	-10.60948372
+0.3	39.96464197	38.28663444	40.82405489	38.24125057	45.49510396	41.58399993	43.93678019	20.06646797
-0.35	-24.41335393	-24.43211948	-25.89108289	-24.15315151	-28.38869283	-22.65729191	-23.884332	-12.5286458
+0.35	36.21260097	34.84629273	37.12810507	34.76196679	41.29706742	37.3181478	39.4228821	18.2267365
-0.4	-28.90735644	-28.44733083	-30.2235408	-28.2432962	-33.36386697	-28.04630443	-29.59161624	-14.70401356
+0.4	31.997196	30.97183271	32.96739956	30.84616699	36.5757685	32.55006091	34.37798458	16.15739276
-0.45	-32.72483798	-31.85071635	-33.89717577	-31.71229759	-37.58631529	-32.64246048	-34.45952581	-16.54981061
+0.45	28.45419492	27.70695598	29.46278089	27.54873471	32.60315422	28.5649652	30.16193776	14.41594534
-0.5	-37.02631364	-35.67675602	-38.02864382	-35.61461906	-42.33959033	-37.84332186	-39.96826014	-18.62709762
+0.5	24.50755488	24.05980521	25.54960337	23.86799902	28.17254659	24.15332081	25.49511889	12.47343524
-0.55	-40.65308406	-38.89466096	-41.50489964	-38.8989777	-46.34322578	-42.24824716	-44.63426985	-20.37625537
+0.55	21.22137033	21.01346888	22.28270484	20.79615957	24.47837444	20.50531307	21.63656848	10.85354521
-0.6	-44.70698345	-42.4818321	-45.38185789	-42.56302007	-50.81344221	-47.19595498	-49.87562819	-22.32861028
+0.6	17.59862273	17.64332281	18.67057342	17.40094875	20.39962259	16.51511354	17.41665431	9.064718085
-0.65	-48.09532194	-45.47118509	-48.61434979	-45.61899755	-54.54524835	-51.35331895	-54.2800939	-23.95785382
+0.65	14.61703421	14.85858759	15.68776814	14.5984267	17.03689228	13.26052287	13.97524292	7.589657614
-0.7	-51.84658309	-48.76979707	-52.18328542	-48.9943007	-58.67124335	-55.98288532	-59.18526553	-25.75842072
+0.7	11.37330673	11.81514231	12.43020177	11.5392022	13.37116162	9.756769169	10.27105797	5.981371258
-0.75	-54.94878105	-51.48752819	-55.12563036	-51.77816766	-62.07821481	-59.83635646	-63.26854212	-27.24447934
+0.75	8.744094733	9.335082886	9.794802759	9.049738438	10.39289217	7.146652439	7.522792041	4.674415152
-0.8	-58.34234284	-54.44788293	-58.33302243	-54.81426309	-65.79881385	-64.08277538	-67.76869718	-28.86640472
+0.8	5.952827893	6.668035967	6.928396878	6.37695804	7.201343755	4.941023409	5.22846692	3.273521332
-0.85	-61.11067964	-56.85091987	-60.93883485	-57.28228707	-68.8279418	-67.57602303	-71.4711404	-30.18600267
+0.85	3.904773642	4.53572105	4.652935902	4.244281652	4.660540233	3.389225229	3.579927974	2.157942313
-0.9	-64.0914921	-59.42332181	-63.73116497	-59.9287176	-72.08198474	-71.37430588	-75.49746739	-31.60243112
+0.9	1.832882524	2.383892128	2.383892128	2.207108843	2.335506764	2.055100988	2.174988369	1.308619362
-0.95	-66.47824859	-61.46860084	-65.95406861	-62.03716553	-74.6802593	-74.45099661	-78.75943011	-32.73229825
+0.95	1.796271146	1.641757914	1.766272952	1.664767261	2.015156629	2.055100988	2.174988369	0.872436716
-1	-68.99124957	-63.60335418	-68.27781822	-64.24347016	-77.40658134	-77.73614419	-82.24310635	-33.91637628
+1	1.80E+00	1.641757914	1.766272952	1.664767261	2.015156629	2.055100988	2.174988369	0.872436716
(Span 2) -2	-6.304050691	-5.761783243	-6.198771352	-5.842535057	-7.072233687	-7.21241942	-7.633166662	-3.061834559
+2	69.19539412	63.65106691	68.35103224	64.3264638	77.55358597	78.34000374	82.88916888	33.96134796
-2.05	-6.304050691	-5.761783243	-6.198771352	-5.842535057	-7.072233687	-7.21241942	-7.633166662	-3.061834559
+2.05	66.453263	61.3195326	65.81272769	61.91623321	74.57472847	74.7760799	79.11030284	32.66793023
-2.1	-6.304050691	-5.761783243	-6.198771352	-5.842535057	-7.072233687	-7.21241942	-7.633166662	-3.061834559
+2.1	63.38068706	58.6722519	62.9375669	59.19034343	71.21995707	70.86802832	74.96784405	31.20890429
-2.15	-6.304050691	-5.79476954	-6.198771352	-5.842535057	-7.072233687	-7.21241942	-7.633166662	-3.061834559
+2.15	60.01886507	55.74636965	59.76555179	56.18651163	67.53498917	66.66443432	70.51323579	29.60434206
-2.2	-8.135973662	-8.669545254	-9.087105475	-8.414381174	-9.677058359	-7.21241942	-7.633166662	-4.368521262
+2.2	56.40900771	52.57903028	56.33668391	52.94245456	63.56554209	62.21387822	65.79791603	27.87431749
-2.25	-11.45493098	-11.79297676	-12.42993222	-11.55347321	-13.43753481	-10.12070179	-10.66031832	-6.017290184

+2.25	52.59231584	49.20737977	52.69096693	49.49589103	59.35733608	57.56494175	60.87332427	26.03890424
-2.3	-15.23311544	-15.31865022	-16.20823116	-15.10457052	-17.7022121	-14.24560224	-15.02182311	-7.886078676
+2.3	48.38473841	45.46780549	48.65165478	45.67983934	54.70683999	52.49620188	55.50495702	24.00936274
-2.35	-19.02974136	-18.83655381	-19.98240697	-18.65438877	-21.97431703	-18.45669532	-19.47570785	-9.757164229
+2.35	44.27230906	41.79283277	44.68581606	41.93545946	50.15142307	47.59205621	50.31174258	22.0203478
-2.4	-22.99588053	-22.48961331	-23.9053134	-22.34639096	-26.42546939	-22.91340069	-24.19043043	-11.70573915
+2.4	40.07896491	38.02705141	40.62536127	38.10382299	45.49694325	42.55332493	44.97732768	19.98727219
-2.45	-27.09036792	-26.24068353	-27.93694792	-26.1428708	-31.0099641	-27.56713515	-29.11454984	-13.7117269
+2.45	35.8459034	34.20760071	36.51028723	34.22264178	40.78911278	37.54537889	39.67527661	17.93020767
-2.5	-31.50610628	-30.26543565	-32.26632138	-30.2219306	-35.9432906	-32.63947881	-34.48255943	-15.86927514
+2.5	31.31572632	30.05239286	32.0370644	30.00588233	35.68180672	32.36905401	34.19634829	15.75502152
-2.55	-35.73519511	-34.20782967	-36.51053387	-34.21249106	-40.77900972	-37.54564714	-39.67556055	-17.93024995
+2.55	27.13201	26.24045963	27.9367071	26.14265034	31.00969746	27.56687134	29.11427066	13.71169004
-2.6	-39.96689195	-38.02727612	-40.62560368	-38.10404438	-45.49721214	-42.53446778	-44.95747974	-19.98731356
+2.6	23.03513014	22.48939426	23.90507799	22.34618167	26.42521662	22.91315399	24.19016941	11.70569624
-2.65	-44.27560744	-41.79304906	-44.68604942	-41.93567223	-50.1516815	-47.59233364	-50.31203631	-22.02038968
+2.65	19.06629269	18.83633437	19.98217142	18.65417341	21.97405758	18.45645247	19.47545096	9.757127762
-2.7	-48.38627457	-45.46802022	-48.65188676	-45.6800518	-54.70709873	-52.49646579	-55.50523652	-24.00940283
+2.7	15.26670784	15.31844571	16.20801187	15.10437004	17.70197104	14.24538064	15.02158878	7.886046782
-2.75	-52.37495961	-49.01501986	-52.48308676	-49.2994396	-59.11771377	-57.30209637	-60.59491871	-25.9342906
+2.75	11.67758008	11.97284802	12.62257476	11.73446348	13.65464461	10.32849153	10.879992	6.112519798
-2.8	-56.40740347	-52.57922502	-56.33689454	-52.94265435	-63.56578634	-62.21413382	-65.79818681	-27.87435226
+2.8	8.16290996	8.669366261	9.08691409	8.414206904	9.676850014	7.212419562	7.633167039	4.368493138
-2.85	-60.01606795	-55.7465458	-59.76574249	-56.1866927	-67.53521099	-66.66466936	-70.51348483	-29.604378
+2.85	6.304050445	5.794610814	6.198771636	5.842535255	7.072233564	7.212419562	7.633167039	3.061834648
-2.9	-63.37699238	-58.67241825	-62.93774737	-59.19051451	-71.2201672	-70.86825722	-74.96808664	-31.20893437
+2.9	6.304050445	5.761783244	6.198771636	5.842535255	7.072233564	7.212419562	7.633167039	3.061834648
-2.95	-66.44902344	-61.31967727	-65.8128851	-61.91638222	-74.57491227	-74.77628357	-79.11051876	-32.66795543
+2.95	6.304050445	5.761783244	6.198771636	5.842535255	7.072233564	7.212419562	7.633167039	3.061834648
-3	-69.33283849	-63.77072078	-68.48150867	-64.45047675	-77.70729166	-78.52711344	-83.08760256	-34.02796914
+3	6.304050445	5.761783244	6.198771636	5.842535255	7.072233564	7.212419562	7.633167039	3.061834648
(Span 3) -4	-1.80E+00	-1.641757914	-1.766273033	-1.664767317	-2.015156594	-2.055101029	-2.174988477	-0.872436742
+4	68.84565372	63.4686642	68.13106786	64.1040584	77.23402998	77.52610311	82.02034609	33.84154409
-3.05	-1.80E+00	-1.641757914	-1.766273033	-1.664767317	-2.015156594	-2.055101029	-2.174988477	-0.872436742
+3.05	66.66845298	61.61840336	66.11699942	62.19178788	74.87104826	74.67879032	79.00096426	32.81526759
-3.1	-1.908355713	-2.498333129	-2.498333129	-2.327851431	-2.468760407	-2.055101029	-2.174988477	-1.359065572
+3.1	63.91535113	59.25859674	63.55225148	59.75909178	71.8731951	71.12893713	75.23734599	31.51165591
-3.15	-3.742160145	-4.379037586	-4.485849653	-4.087747955	-4.474299457	-3.275139671	-3.458742916	-2.096500186
+3.15	61.33217664	57.02904209	61.13208182	57.46538108	69.05285823	67.83690584	71.74766553	30.28400889
-3.2	-6.102819922	-6.839269492	-7.111240119	-6.548400335	-7.405840643	-5.065578423	-5.360799416	-3.36323143
+3.2	58.13819692	54.25643789	58.12551601	54.61779079	65.55786777	63.80641649	67.47580733	28.76147421
-3.25	-8.53300099	-9.15085115	-9.580942088	-8.864945589	-10.17201396	-6.955195641	-7.321258569	-4.577407231
+3.25	55.19681404	51.69066071	55.34562937	51.98636101	62.33317038	60.12599928	63.57547445	27.35573261
-3.3	-11.56405764	-12.01232516	-12.64117284	-11.73727444	-13.60832195	-9.98184406	-10.50898288	-6.085361861
+3.3	51.61708823	48.55495214	51.95076169	48.77434951	58.40222278	55.67986953	58.86419539	25.64112881
-3.35	-14.37319428	-14.65011398	-15.46454383	-14.38873763	-16.78545296	-13.01862091	-13.71947804	-7.47927838
+3.35	48.36528118	45.6960064	48.857524	45.84894339	54.82618673	51.66739533	54.61285252	24.08057077
-3.4	-17.81066113	-17.86313398	-18.90609599	-17.62228162	-20.66536254	-16.77373818	-17.69014714	-9.181197904
+3.4	44.45494956	42.24690343	45.12788775	42.32296169	50.52043425	46.87062411	49.53097495	22.2007467
-3.45	-20.94817323	-20.78407595	-22.03676986	-20.56493056	-24.20044192	-20.23209752	-21.34760349	-10.73158122
+3.45	40.9404987	39.13787178	41.76769582	39.14731272	46.64606991	42.58244497	44.98828897	20.50864064
-3.5	-24.73702048	-24.29893207	-25.8061097	-24.10922863	-28.46278826	-24.44115438	-25.79958345	-12.60060596
+3.5	36.73405758	35.42504411	37.75678185	35.35782123	42.02667627	37.50000881	39.60461158	18.49045442
-3.55	-28.15519207	-27.45994406	-29.19768957	-27.29934598	-32.30282593	-28.26476386	-29.844355	-14.28418951
+3.55	33.00574463	32.10900978	34.17603299	31.97566212	37.90699344	32.99243512	34.83020525	16.69007187
-3.6	-32.2403315	-31.22697052	-33.24133096	-31.10392204	-36.88642587	-32.86276591	-34.70882826	-16.29347097
+3.6	28.60091148	28.18216502	29.93737245	27.97312193	33.0351242	27.68937153	29.21359131	14.56038852

-3.65	-35.89144543	-34.58496636	-36.8474162	-34.49775938	-40.9783932	-36.99527552	-39.08125031	-18.08697525
+3.65	24.70580119	24.70218572	26.18243632	24.42818686	28.72313331	23.01871428	24.26708802	12.67499522
-3.7	-40.21785381	-38.55445258	-41.1118245	-38.51216689	-45.82209935	-41.91724412	-44.28941587	-20.20966155
+3.7	20.13601912	20.61102027	21.76954835	20.26304169	23.65993193	17.55999981	18.4863362	10.46065919
-3.75	-44.05419409	-42.06637885	-44.88605005	-42.0659918	-50.11298736	-46.30234087	-48.92986289	-22.08981188
+3.75	16.12182737	17.01016441	17.88680642	16.59908014	19.20866302	13.2610206	13.95896905	8.513536949
-3.8	-48.56679815	-46.18862891	-49.31770652	-46.23976946	-55.15563438	-51.48323855	-54.41285762	-24.29904812
+3.8	11.50465035	12.80437339	13.35320902	12.32180745	14.01531463	9.485867292	10.04061449	6.241402393
-3.85	-52.54064864	-49.81141581	-53.21368934	-49.90984928	-59.59243378	-56.06461474	-59.26170966	-26.24257169
+3.85	8.211581115	9.125711075	9.389044373	8.582536539	9.477757898	9.485867292	10.04061449	4.255824843
-3.9	-57.1843709	-54.03673379	-57.75907544	-54.19253581	-64.7728567	-61.43946462	-64.95073452	-28.51150373
+3.9	8.211581115	7.477138735	8.046572078	7.584955846	9.185224967	9.485867292	10.04061449	3.991101487
-3.95	-61.24801525	-57.72731162	-61.73043289	-57.93513706	-69.30255733	-66.16076772	-69.94832423	-30.49511806
+3.95	8.211581115	7.477138735	8.046572078	7.584955846	9.185224967	9.485867292	10.04061449	3.991101487
-5	-65.96783536	-62.00600242	-66.3360308	-62.27628961	-74.55961328	-71.66457319	-75.77455924	-32.79690127
+5	8.211581115	7.477138735	8.046572078	7.584955846	9.185224967	9.485867292	10.04061449	3.991101487

3-Span: Shear (Max and Min) Raw Data Results - 140' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.211568212	-17.58736262	-19.43443002	-11.06496876	-13.32828869	-14.36875507
End Shear	66.0978384	126.2612084	135.5631289	82.82705069	99.906003	105.9620994
-0.05	-8.211568212	-17.58736262	-19.43443002	-11.06496876	-13.32828869	-14.36875507
+0.05	61.55157526	116.4320856	124.8942192	76.62808896	92.45726115	97.92598965
-0.1	-8.211568212	-17.58736262	-19.43443002	-11.06496876	-13.32828869	-14.36875507
+0.1	56.86300906	106.3332107	113.7534931	70.25148217	84.79321581	89.66138079
-0.15	-8.211568212	-17.58736262	-19.43443002	-11.06496876	-13.32828869	-14.36875507
+0.15	52.89451443	97.72366906	104.2695825	64.80352734	78.24374737	82.60539504
-0.2	-11.78297424	-17.58736262	-19.43443002	-11.45270104	-13.32828869	-14.36875507
+0.2	48.30697599	87.98566241	93.55921403	58.62749799	70.8171141	74.61240559
-0.25	-15.82141155	-18.98358648	-19.86385596	-14.53423716	-17.01315111	-17.40042984
+0.25	44.39367554	79.74188531	84.50731641	53.38651482	64.5131687	67.83490392
-0.3	-20.45288044	-26.42897892	-27.7966651	-19.55828139	-24.00941933	-24.00590975
+0.3	39.96464197	70.48711589	74.36354706	47.48754256	57.41572366	60.21294287
-0.35	-24.41335393	-34.24912519	-34.59990147	-24.95223042	-30.48163236	-30.73467764
+0.35	36.21260097	62.71515452	65.86172274	42.51980522	51.43683066	53.80006903
-0.4	-28.90735644	-43.86240506	-44.13130627	-31.30666599	-38.10470811	-39.0180376
+0.4	31.997196	54.06595562	56.42075319	36.97435153	44.76032771	46.64854723
-0.45	-32.72483798	-52.62040426	-53.85871604	-36.73101659	-44.61055972	-46.09398663
+0.45	28.45419492	46.87185262	48.5870605	32.3461347	39.18601522	40.68647304
-0.5	-37.02631364	-62.56154061	-64.98090971	-42.8747336	-51.97749283	-54.11428571
+0.5	24.50755488	38.95059687	39.98513337	27.23066351	33.02221121	34.10480286
-0.55	-40.65308406	-71.00896884	-74.44578349	-48.08332947	-58.2215959	-60.91917961
+0.55	21.22137033	32.44039173	32.9376241	23.00823979	27.93200739	28.67967168
-0.6	-44.70698345	-80.53057353	-85.13070971	-53.93987115	-65.2406377	-68.57701628
+0.6	17.59862273	25.36941858	25.49176797	18.39922527	22.37267076	22.76726948
-0.65	-48.09532194	-88.56138976	-94.15757011	-58.86643296	-71.14345673	-75.02468573
+0.65	14.61703421	19.8765511	20.11487545	14.64887447	17.84611152	17.9652377
-0.7	-51.84658309	-97.54111761	-104.2690034	-64.35932207	-77.72283557	-82.22065181
+0.7	11.37330673	14.29922662	14.95402692	10.71862022	13.09800674	13.05439767
-0.75	-54.94878105	-105.0492795	-112.7398129	-68.93758778	-83.20485625	-88.22494687
+0.75	8.744094733	10.40002962	10.80956315	8.14042817	9.474415065	9.703852636
-0.8	-58.34234284	-113.3647584	-122.1415386	-73.99035187	-89.25280433	-94.85961534
+0.8	5.952827893	6.742350911	6.900925453	5.899451089	6.465781103	6.813447294
-0.85	-61.11067964	-120.2442251	-129.9382337	-78.15404316	-94.23449274	-100.3343806
+0.85	3.904773642	4.403755992	4.246829992	4.039890364	4.45320049	4.545688857
-0.9	-64.0914921	-127.773118	-138.494016	-82.69022404	-99.65926042	-106.308348
+0.9	1.832882524	3.783704951	4.171158789	2.387820658	2.881195794	3.099280601
-0.95	-66.47824859	-133.9178413	-145.4985313	-86.37306492	-104.0610852	-111.1674284
+0.95	1.796271146	3.783704951	4.171158789	2.387820658	2.881195794	3.099280601
-1	-68.99124957	-140.5377833	-153.0721548	-90.31618427	-108.7708987	-116.3812826
+1	1.80E+00	3.783704951	4.171158789	2.387820658	2.881195794	3.099280601
(Span 2) -2	-6.304050691	-13.2789905	-14.63876802	-8.380105995	-10.11161619	-10.87698924
+2	69.19539412	142.2904767	155.254599	91.14357808	109.7271516	117.56791
-2.05	-6.304050691	-13.2789905	-14.63876802	-8.380105995	-10.11161619	-10.87698924
+2.05	66.453263	135.156288	147.1115996	86.87701618	104.6260576	111.9319067
-2.1	-6.304050691	-13.2789905	-14.63876802	-8.380105995	-10.11161619	-10.87698924
+2.1	63.38068706	127.4405351	138.3564945	82.2179539	99.05014896	105.7982851
-2.15	-6.304050691	-13.2789905	-14.63876802	-8.380105995	-10.11161619	-10.87698924
+2.15	60.01886507	119.2346612	129.0910889	77.22356406	93.06803343	99.24135241
-2.2	-8.135973662	-13.2789905	-14.63876802	-8.380105995	-10.11161619	-10.87698924
+2.2	56.40900771	110.6301518	119.4172327	71.95099337	86.74828552	92.33540865
-2.25	-11.45493098	-14.99177909	-15.4998462	-11.09903352	-13.54773488	-13.61467693

+2.25	**52.59231584**	**101.7184439**	**109.4367326**	**66.45738931**	**80.1594845**	**85.15476484**
-2.3	**-15.23311544**	**-21.77565518**	**-21.84608409**	**-15.84472467**	**-19.27977755**	**-19.5875407**
+2.3	**48.38473841**	**92.07941438**	**98.68159007**	**60.48196735**	**72.98855895**	**77.35928235**
-2.35	**-19.02974136**	**-29.25777253**	**-29.8335008**	**-20.7101683**	**-25.14964389**	**-25.83610369**
+2.35	**44.27230906**	**82.82344087**	**88.39050305**	**54.71354528**	**66.06213692**	**69.84733853**
-2.4	**-22.99588053**	**-37.26847979**	**-38.53893892**	**-25.87694954**	**-31.37730223**	**-32.48902669**
+2.4	**40.07896491**	**73.28238154**	**78.10392311**	**48.73710933**	**58.92853309**	**62.07777235**
-2.45	**-27.09036792**	**-45.71632908**	**-47.76359041**	**-31.28789489**	**-37.89414216**	**-39.47202695**
+2.45	**35.8459034**	**64.06544987**	**67.92360119**	**42.93423141**	**51.90649518**	**54.54665382**
-2.5	**-31.50610628**	**-55.00671463**	**-57.9515175**	**-37.20119184**	**-45.01098306**	**-47.11894762**
+2.5	**31.31572632**	**54.50940307**	**57.40554541**	**36.88554685**	**44.63121508**	**46.71040086**
-2.55	**-35.73519511**	**-64.0659327**	**-67.92371295**	**-42.93454526**	**-51.90687277**	**-54.54706112**
+2.55	**27.13201**	**45.71589178**	**47.76347391**	**31.28759692**	**37.89378332**	**39.47164183**
-2.6	**-39.96689195**	**-73.28285179**	**-78.10403512**	**-48.73742533**	**-58.90938123**	**-62.07819488**
+2.6	**23.03513014**	**37.26804569**	**38.53881304**	**25.87666407**	**31.37695755**	**32.48866935**
-2.65	**-44.27560744**	**-82.82394503**	**-88.3906326**	**-54.71385252**	**-66.06250496**	**-69.84774999**
+2.65	**19.06629269**	**29.25735321**	**29.8334114**	**20.70990464**	**25.14932622**	**25.83574222**
-2.7	**-48.38627457**	**-92.07991813**	**-98.68171919**	**-60.48226875**	**-72.98892146**	**-77.35968869**
+2.7	**15.26670784**	**21.77529127**	**22.0121497**	**15.84447678**	**19.27947816**	**19.58721226**
-2.75	**-52.37495961**	**-101.2166449**	**-108.8754186**	**-66.14716802**	**-79.78730277**	**-84.74968689**
+2.75	**11.67758008**	**15.32460677**	**15.80703161**	**11.33753612**	**13.83600083**	**13.90386763**
-2.8	**-56.40740347**	**-110.6306166**	**-119.4173392**	**-71.95128624**	**-86.74863724**	**-92.33579283**
+2.8	**8.16290996**	**13.27899111**	**14.63876806**	**8.38010654**	**10.1116158**	**10.87698971**
-2.85	**-60.01606795**	**-119.2351231**	**-129.0912055**	**-77.22384316**	**-93.06836767**	**-99.24172932**
+2.85	**6.304050445**	**13.27899111**	**14.63876806**	**8.38010654**	**10.1116158**	**10.87698971**
-2.9	**-63.37699238**	**-127.4409426**	**-138.3566064**	**-82.21821795**	**-99.05046527**	**-105.7986321**
+2.9	**6.304050445**	**13.27899111**	**14.63876806**	**8.38010654**	**10.1116158**	**10.87698971**
-2.95	**-66.44902344**	**-135.1566796**	**-147.1116909**	**-86.87725246**	**-104.6263404**	**-111.9322176**
+2.95	**6.304050445**	**13.27899111**	**14.63876806**	**8.38010654**	**10.1116158**	**10.87698971**
-3	**-69.33283849**	**-142.6682982**	**-155.6870825**	**-91.36816676**	**-109.9955016**	**-117.8652279**
+3	**6.304050445**	**13.27899111**	**14.63876806**	**8.38010654**	**10.1116158**	**10.87698971**
(Span 3) -4	**-1.80E+00**	**-3.783705124**	**-4.171158802**	**-2.387820813**	**-2.881195683**	**-3.099280734**
+4	**68.84565372**	**140.1123682**	**152.5848169**	**90.0636878**	**108.469421**	**116.0469893**
-3.05	**-1.80E+00**	**-3.783705124**	**-4.171158802**	**-2.387820813**	**-2.881195683**	**-3.099280734**
+3.05	**66.66845298**	**134.374748**	**146.020675**	**86.64609885**	**104.3873198**	**111.5280476**
-3.1	**-1.908355713**	**-3.783705124**	**-4.171158802**	**-2.387820813**	**-2.881195683**	**-3.099280734**
+3.1	**63.91535113**	**127.2850192**	**137.9389214**	**82.39688091**	**99.30854794**	**105.9216719**
-3.15	**-3.742160145**	**-4.257231323**	**-4.171158802**	**-3.905806958**	**-4.295049606**	**-4.379205141**
+3.15	**61.33217664**	**120.7596487**	**130.5235422**	**78.46531234**	**94.60682861**	**100.7439455**
-3.2	**-6.102819922**	**-6.943199387**	**-7.119800702**	**-6.04595318**	**-6.626027058**	**-6.995702061**
+3.2	**58.13819692**	**112.8221232**	**121.5277772**	**73.66125602**	**88.85896949**	**94.42719003**
-3.25	**-8.53300099**	**-10.14051882**	**-10.50398693**	**-7.98319405**	**-9.207606273**	**-9.507184744**
+3.25	**55.19681404**	**105.6150384**	**113.3792555**	**69.28197963**	**83.61715693**	**88.67685793**
-3.3	**-11.56405764**	**-14.62609461**	**-15.28579545**	**-10.95884862**	**-13.38845764**	**-13.36738254**
+3.3	**51.61708823**	**96.95213343**	**103.6056269**	**63.99957047**	**77.2919955**	**81.74911324**
-3.35	**-14.37319428**	**-19.48848221**	**-19.7587825**	**-14.37048314**	**-17.50997911**	**-17.60916796**
+3.35	**48.36528118**	**89.16934434**	**94.84206101**	**59.2388577**	**71.58961659**	**75.51233118**
-3.4	**-17.81066113**	**-25.82589817**	**-25.82933711**	**-18.69760166**	**-22.73268022**	**-23.14968163**
+3.4	**44.45494956**	**79.90338076**	**84.42682874**	**53.55458917**	**64.77894213**	**68.0730064**
-3.45	**-20.94817323**	**-31.95440974**	**-32.41209355**	**-22.69229348**	**-27.55102688**	**-28.27405749**
+3.45	**40.9404987**	**71.65099671**	**75.16619531**	**48.47871417**	**58.69552562**	**61.43593154**
-3.5	**-24.73702048**	**-39.46586496**	**-40.54341163**	**-27.56411697**	**-33.42409386**	**-34.53353373**
+3.5	**36.73405758**	**61.90429209**	**64.24562575**	**42.46900793**	**51.49104503**	**53.58443861**
-3.55	**-28.15519207**	**-46.33129076**	**-47.99878221**	**-31.99773571**	**-38.76631015**	**-40.23793518**
+3.55	**33.00574463**	**53.2883218**	**54.60602523**	**37.1442421**	**45.10611711**	**46.63322758**
-3.6	**-32.2403315**	**-54.6318236**	**-57.03727808**	**-37.33775809**	**-45.19793553**	**-47.11699185**
+3.6	**28.60091148**	**43.18331075**	**43.44105902**	**30.88561417**	**37.59965051**	**38.4689433**

-3.65	**-35.89144543**	**-62.12815798**	**-65.21976956**	**-42.14402969**	**-50.9844919**	**-53.31523301**
+3.65	**24.70580119**	**34.84691121**	**35.26974577**	**25.37823269**	**30.9927402**	**31.28978737**
-3.7	**-40.21785381**	**-71.09544349**	**-75.02918754**	**-47.87582481**	**-57.882964**	**-60.71443183**
+3.7	**20.13601912**	**25.88989429**	**27.27019937**	**19.17103154**	**23.54470518**	**23.48823691**
-3.75	**-44.05419409**	**-79.11657478**	**-83.82082075**	**-52.98847782**	**-64.03433507**	**-67.3203821**
+3.75	**16.12182737**	**19.41605809**	**20.39484972**	**14.76968912**	**17.48105279**	**17.7009582**
-3.8	**-48.56679815**	**-88.62829757**	**-94.26489602**	**-59.03555663**	**-71.30786707**	**-75.14031259**
+3.8	**11.50465035**	**17.58736245**	**19.43442982**	**11.21418666**	**13.32828876**	**14.36875593**
-3.85	**-52.54064864**	**-97.0682207**	**-103.5475713**	**-64.3883188**	**-77.74452597**	**-82.0678179**
+3.85	**8.211581115**	**17.58736245**	**19.43442982**	**11.06496872**	**13.32828876**	**14.36875593**
-3.9	**-57.1843709**	**-107.0019473**	**-114.490167**	**-70.6741855**	**-85.30132315**	**-90.20906775**
+3.9	**8.211581115**	**17.58736245**	**19.43442982**	**11.06496872**	**13.32828876**	**14.36875593**
-3.95	**-61.24801525**	**-115.7546183**	**-124.1457813**	**-76.20078278**	**-91.94374117**	**-97.37200337**
+3.95	**8.211581115**	**17.58736245**	**19.43442982**	**11.06496872**	**13.32828876**	**14.36875593**
-5	**-65.96783536**	**-125.9880726**	**-135.4506304**	**-82.64902032**	**-99.69210291**	**-105.7351273**
+5	**8.211581115**	**17.58736245**	**19.43442982**	**11.06496872**	**13.32828876**	**14.36875593**

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-57.480977	-40.072525	-57.148604	-61.097347	-85.707603	-32.126017	-43.401139	-49.699364	-55.658068	-61.940830
+0.05	430.861027	306.481999	405.016333	409.897284	446.470521	246.842628	332.986208	376.697684	411.865627	447.475430
-0.1	-114.961955	-80.145050	-114.297209	-122.194694	-171.415206	-64.252034	-86.802279	-99.398728	-111.316137	-123.881659
+0.1	801.293398	570.609097	749.324199	754.524397	808.975087	459.808142	620.121463	700.877062	766.462250	834.670591
-0.15	-172.442932	-120.217576	-171.445813	-183.292041	-257.122808	-96.378051	-130.203418	-149.098092	-166.974205	-185.822489
+0.15	1111.293446	792.571362	1033.380800	1034.731235	1105.789617	638.987718	861.650624	972.848366	1076.861941	1170.097411
-0.2	-229.923910	-160.290101	-228.594418	-244.389389	-342.830411	-128.504068	-173.604558	-198.797456	-222.632274	-247.763319
+0.2	1362.076724	973.155570	1258.725079	1267.958635	1341.587169	784.995072	1058.406452	1193.617131	1330.189424	1450.779813
-0.25	-287.404887	-200.362626	-285.743022	-305.486736	-428.538014	-160.630085	-217.005697	-248.496820	-278.290342	-309.704148
+0.25	1555.224491	1113.398191	1439.330972	1441.549597	1539.524814	898.643891	1211.491328	1368.918436	1527.352910	1676.839071
-0.3	-344.885865	-240.435151	-342.891626	-366.584083	-514.245617	-192.756102	-260.406836	-298.196184	-333.948410	-371.644978
+0.3	1695.681907	1214.585546	1567.085400	1568.801290	1682.310238	980.947593	1328.766129	1503.686678	1670.119130	1842.165190
-0.35	-402.366842	-280.507676	-400.040231	-427.681430	-599.953219	-224.882119	-303.807976	-347.895548	-389.606479	-433.585808
+0.35	1795.769910	1286.291428	1642.210761	1659.382249	1786.857373	1033.119266	1408.832202	1591.880617	1769.951616	1948.813631
-0.4	-459.847820	-320.580201	-457.188835	-488.778777	-685.660822	-257.008136	-347.209115	-397.594912	-445.264547	-495.526638
+0.4	1843.764942	1322.625857	1676.825731	1715.384617	1832.675019	1056.572116	1449.837224	1634.999153	1822.521750	2004.479467
-0.45	-517.328797	-360.652727	-514.337440	-549.876124	-771.368425	-289.134153	-390.610255	-447.294275	-500.922616	-557.467467
+0.45	1842.507298	1324.648048	1665.154014	1721.487144	1848.481327	1052.918656	1453.315353	1635.463494	1827.334253	2014.178325
-0.5	-574.809775	-400.725252	-571.486044	-610.973471	-857.076028	-321.260169	-434.011394	-496.993639	-556.580684	-619.408297
+0.5	1813.533910	1303.237634	1641.843946	1689.581466	1803.965099	1037.873243	1428.962364	1608.945621	1796.217098	1977.770566
-0.55	-632.290752	-440.797777	-628.634648	-672.070819	-942.783631	-353.386186	-477.412533	-546.693003	-612.238752	-681.349127
+0.55	1745.017972	1252.852222	1586.814032	1617.526726	1739.089066	1001.691611	1373.202312	1548.338366	1724.931451	1894.710334
-0.6	-689.771730	-480.870302	-685.783253	-733.168166	-1028.491233	-385.512203	-520.813673	-596.392367	-667.896821	-743.289956
+0.6	1634.103167	1173.386505	1489.624923	1501.896043	1621.594329	941.554385	1286.191823	1451.352554	1613.458239	1774.394794
-0.65	-747.252707	-520.942827	-742.931857	-794.265513	-1114.198836	-417.638220	-564.214812	-646.091731	-723.554889	-805.230786
+0.65	1484.717795	1067.605878	1356.425408	1355.723234	1477.223114	859.608804	1170.934147	1321.386908	1465.662254	1613.861611
-0.7	-804.733685	-561.015352	-800.080462	-855.362860	-1199.906439	-449.764237	-607.615952	-695.791095	-779.212958	-867.171616
+0.7	1301.188694	938.525468	1184.707546	1168.642372	1271.219309	758.202671	1030.702946	1162.150728	1286.366873	1416.369070
-0.75	-862.214662	-601.087878	-857.229066	-916.460207	-1285.614042	-481.890254	-651.017091	-745.490459	-834.871026	-929.112445
+0.75	1088.051054	790.712501	978.863768	952.556162	1023.458318	639.882924	869.041138	977.662404	1081.275806	1186.907612
-0.8	-919.695640	-641.160403	-914.377670	-977.557554	-1371.321644	-514.016271	-694.418230	-795.189823	-890.529094	-991.053275
+0.8	850.965139	625.408227	743.652717	704.920092	727.122919	507.396980	689.761723	772.250343	851.518759	930.855207
-0.85	-977.176617	-681.232928	-971.526275	-1038.654902	-1469.134822	-546.142288	-737.819370	-844.889187	-946.187163	-1052.994105
+0.85	593.643971	445.798614	484.198644	428.164279	442.179671	363.691428	496.947089	550.552351	602.210329	653.977026
-0.9	-1034.657595	-721.305453	-1028.674879	-1099.752249	-1600.478178	-578.268305	-781.220509	-894.588551	-1001.845231	-1114.934935
+0.9	323.854337	258.251870	236.888292	235.749539	302.372431	211.912900	294.949568	317.516089	341.430983	362.424998
-0.95	-1092.138572	-761.377978	-1085.823484	-1160.849596	-1760.490556	-610.394322	-824.621648	-944.287915	-1057.503300	-1176.875764
+0.95	238.904062	166.832987	235.169799	248.846735	297.167822	133.877931	180.914928	206.930365	231.643249	257.568639
-1	-1149.619572	-801.450495	-1142.972066	-1221.946947	-2000.463201	-642.520313	-868.022768	-993.987285	-1113.161351	-1238.816570
+1	251.477960	175.613666	247.547154	261.943934	306.464850	140.924141	190.436763	217.821435	243.834999	271.124882
(Span 2) -2	-1149.619572	-801.450495	-1142.972066	-1221.946947	-2000.463201	-642.520313	-868.022768	-993.987285	-1113.161351	-1238.816570
+2	251.477960	175.613666	247.547154	261.943934	306.464850	140.924141	190.436763	217.821435	243.834999	271.124882
-2.05	-838.492372	-585.541251	-825.386119	-873.388624	-1386.250589	-469.877459	-634.965290	-726.272906	-813.008837	-904.000346
+2.05	194.111099	135.552879	191.076984	202.189588	244.816380	108.776688	146.994549	168.132262	188.211641	209.276187
-2.1	-781.125513	-545.480466	-768.915946	-813.634280	-1054.783832	-437.730004	-591.523077	-676.583730	-757.385476	-842.151649
+2.1	409.264233	320.949333	290.096355	263.251616	269.232699	257.538872	363.576939	393.516582	429.930282	455.485184
-2.15	-723.758654	-505.419681	-712.445773	-753.879936	-913.340291	-405.582550	-548.080865	-626.894553	-701.762115	-780.302953
+2.15	728.998961	543.191592	600.986374	543.412557	517.273031	437.115950	603.480934	669.529001	737.844754	800.833581
-2.2	-666.391795	-465.358896	-655.975600	-694.125593	-813.935400	-373.435096	-504.638652	-577.205377	-646.138753	-718.454256
+2.2	1028.440833	750.520579	903.661293	869.222467	854.531772	604.072775	827.760306	927.577714	1025.523797	1122.150570

-2.25	-609.024936	-425.298111	-599.505427	-634.371249	-751.294321	-341.287642	-461.196439	-527.516201	-590.515392	-656.605559
+2.25	1296.891089	936.394866	1168.855117	1156.066741	1259.428462	753.866760	1029.126782	1158.457644	1283.805597	1410.029485
-2.3	-551.658077	-385.237327	-543.035254	-574.616906	-696.153877	-309.140187	-417.754226	-477.827024	-534.892031	-594.756863
+2.3	1522.475822	1094.175652	1388.078172	1395.127745	1596.528843	879.087358	1199.996187	1353.848273	1503.567150	1653.920873
-2.35	-494.291218	-345.176542	-486.565081	-514.862562	-641.013433	-276.992733	-374.312014	-428.137848	-479.268670	-532.908166
+2.35	1702.277201	1221.238199	1557.679259	1582.891434	1854.444974	978.216886	1337.493192	1509.847339	1680.751746	1848.166779
-2.4	-436.924359	-305.115757	-430.094908	-455.108219	-585.872988	-244.845279	-330.869801	-378.448671	-423.645308	-471.059469
+2.4	1831.455266	1313.341397	1679.297919	1725.267065	2039.930551	1048.745212	1438.034642	1622.381169	1809.557639	1991.079430
-2.45	-379.557500	-265.054972	-373.624735	-395.353875	-530.732544	-212.697825	-287.427588	-328.759495	-368.021947	-409.210773
+2.45	1906.844843	1368.147423	1747.474720	1809.288458	2131.005881	1088.994336	1498.331370	1689.395519	1886.666201	2079.339970
-2.5	-322.190641	-224.994198	-317.154562	-335.599527	-475.592100	-180.550385	-243.985376	-279.070318	-312.398583	-347.362076
+2.5	1928.696782	1384.263421	1759.405759	1832.895717	2134.857213	1099.555590	1516.843496	1708.403697	1910.122808	2108.053897
-2.55	-379.557514	-265.054984	-373.624718	-395.353873	-530.732515	-212.697838	-287.427591	-328.759471	-368.021941	-409.210754
+2.55	1906.986151	1368.150331	1747.479407	1809.292574	2131.005505	1088.994485	1498.335545	1689.401594	1886.669890	2079.341881
-2.6	-436.924375	-305.115771	-430.094888	-455.108219	-585.872956	-244.845290	-330.869805	-378.448645	-423.645299	-471.059448
+2.6	1831.518250	1313.343590	1679.301468	1725.270212	2039.929112	1048.747213	1438.038047	1622.380925	1809.560370	1991.080063
-2.65	-494.291236	-345.176557	-486.565058	-514.862566	-641.013396	-276.992743	-374.312020	-428.137818	-479.268657	-532.908142
+2.65	1702.417471	1221.239822	1557.680819	1582.893828	1854.445088	978.220844	1337.496122	1509.848250	1680.753879	1848.171395
-2.7	-551.658098	-385.237344	-543.035228	-574.616912	-696.153836	-309.140196	-417.754234	-477.826991	-534.892016	-594.756836
+2.7	1522.585235	1094.176751	1388.080543	1395.129193	1596.530806	879.092990	1199.996782	1353.850271	1503.568388	1653.926281
-2.75	-609.024959	-425.298130	-599.505399	-634.371258	-751.294277	-341.287648	-461.196448	-527.516165	-590.515374	-656.605530
+2.75	1296.744953	936.395696	1168.858740	1156.068435	1259.430280	753.874427	1029.128872	1158.461128	1283.806626	1410.036400
-2.8	-666.391820	-465.358916	-655.975569	-694.125604	-813.935348	-373.435101	-504.638662	-577.205338	-646.138732	-718.454224
+2.8	1028.209678	750.521474	903.664609	869.224268	854.533934	604.071214	827.762298	927.581194	1025.524884	1122.150438
-2.85	-723.758682	-505.419703	-712.445739	-753.879950	-913.340234	-405.582553	-548.080876	-626.894511	-701.762090	-780.302919
+2.85	729.007083	543.192660	600.989667	543.414248	517.274169	437.116812	603.483165	669.532544	737.845960	800.835272
-2.9	-781.125543	-545.480489	-768.915909	-813.634296	-1054.783773	-437.730006	-591.523090	-676.583685	-757.385448	-842.151613
+2.9	409.397976	320.950903	290.097613	263.253436	269.233875	257.542528	363.576423	393.517386	429.932416	455.484324
-2.95	-838.492404	-585.541275	-825.386079	-873.388642	-1386.250489	-469.877459	-634.965304	-726.272858	-813.008806	-904.000307
+2.95	194.111091	135.552876	191.076994	202.189561	244.816389	108.776718	146.994539	168.132269	188.211665	209.276194
-3	-1149.621378	-801.450517	-1142.972149	-1221.947033	-2000.463209	-642.520316	-868.022796	-993.987297	-1113.161361	-1238.816566
+3	251.477951	175.613659	247.547166	261.943923	306.464867	140.924148	190.436757	217.821449	243.835012	271.124893
(Span 3) -4	-1149.621378	-801.450517	-1142.972149	-1221.947033	-2000.463209	-642.520316	-868.022796	-993.987297	-1113.161361	-1238.816566
+4	251.477951	175.613659	247.547166	261.943923	306.464867	140.924148	190.436757	217.821449	243.835012	271.124893
-3.05	-1092.140311	-761.377990	-1085.823541	-1160.849681	-1760.490595	-610.394299	-824.621655	-944.287933	-1057.503292	-1176.875736
+3.05	238.904053	166.832976	235.169808	248.846726	297.167836	133.877941	180.914919	206.930376	231.643262	257.568648
-3.1	-1034.659243	-721.305464	-1028.674932	-1099.752330	-1600.478216	-578.268282	-781.220514	-894.588568	-1001.845223	-1114.934907
+3.1	324.009166	258.251174	236.890296	235.749530	302.372445	211.917085	294.947703	317.512917	341.430227	362.427366
-3.15	-977.178175	-681.232938	-971.526323	-1038.654979	-1469.134860	-546.142265	-737.819374	-844.889204	-946.187154	-1052.994077
+3.15	594.009701	445.798912	484.196449	428.161645	442.177859	363.695718	496.945615	550.549684	602.210839	653.979899
-3.2	-919.697107	-641.160412	-914.377715	-977.557627	-1371.321680	-514.016248	-694.418233	-795.189839	-890.529086	-991.053248
+3.2	851.111539	625.408671	743.650677	704.916579	727.121891	507.401529	689.760552	772.247873	851.519529	930.858355
-3.25	-862.216039	-601.087885	-857.229106	-916.460276	-1285.614076	-481.890231	-651.017092	-745.490474	-834.871017	-929.112418
+3.25	1088.756994	790.712890	978.861320	952.558800	1023.456265	639.887351	869.039984	977.660059	1081.276502	1186.910830
-3.3	-804.734972	-561.015359	-800.080498	-855.362924	-1199.906473	-449.764214	-607.615951	-695.791110	-779.212948	-867.171589
+3.3	1301.869471	938.525289	1184.704586	1168.641275	1271.216973	758.206891	1030.701615	1162.148033	1286.367268	1416.371893
-3.35	-747.253904	-520.942833	-742.931889	-794.265573	-1114.198870	-417.638196	-564.214810	-646.091745	-723.554879	-805.230759
+3.35	1485.344785	1067.605164	1356.421582	1355.721191	1477.220647	859.612794	1170.932325	1321.383741	1465.661549	1613.863805
-3.4	-689.772836	-480.870307	-685.783281	-733.168221	-1028.491266	-385.512179	-520.813669	-596.392381	-667.896810	-743.289930
+3.4	1634.536228	1173.385259	1489.620095	1501.893019	1621.592872	941.557664	1286.189380	1451.348448	1613.456657	1774.395914
-3.45	-632.291768	-440.797780	-628.634672	-672.070870	-942.783663	-353.386162	-477.412529	-546.693016	-612.238741	-681.349100
+3.45	1745.169527	1252.850237	1586.810400	1617.523663	1739.086997	1001.694434	1373.199079	1548.333548	1724.929048	1894.709946
-3.5	-574.810700	-400.725254	-571.486063	-610.973519	-857.076059	-321.260145	-434.011388	-496.993651	-556.580672	-619.408271
+3.5	1813.644484	1303.234846	1641.846417	1689.576961	1803.964235	1037.875164	1428.958031	1608.939508	1796.213422	1977.768843
-3.55	-517.329633	-360.652728	-514.337455	-549.876167	-771.368456	-289.134128	-390.610247	-447.294287	-500.922603	-557.467441
+3.55	1842.420242	1324.642566	1665.152161	1721.484503	1848.479248	1052.917151	1453.311304	1635.461411	1827.330236	2014.180754
-3.6	-459.848565	-320.580201	-457.188846	-488.778816	-685.660852	-257.008111	-347.209106	-397.594922	-445.264534	-495.526612

+3.6	1843.630385	1322.628203	1676.822574	1715.380254	1832.674124	1056.569724	1449.832242	1634.995763	1822.516240	2004.480383
-3.65	-402.367497	-280.507675	-400.040238	-427.681464	-599.953249	-224.882094	-303.807965	-347.895558	-389.606465	-433.585783
+3.65	1795.582475	1286.292670	1642.207134	1659.379800	1786.855443	1033.116016	1408.825728	1591.875772	1769.953004	1948.812275
-3.7	-344.886429	-240.435149	-342.891629	-366.584113	-514.245645	-192.756077	-260.406825	-298.196193	-333.948396	-371.644953
+3.7	1695.437006	1214.585237	1567.080185	1568.802594	1682.311535	980.943224	1328.767077	1503.680122	1670.118532	1842.161908
-3.75	-287.405361	-200.362623	-285.743021	-305.486762	-428.538042	-160.630060	-217.005684	-248.496829	-278.290328	-309.704124
+3.75	1555.044266	1113.396667	1439.332560	1441.547005	1539.527101	898.638516	1211.490711	1368.919060	1527.350595	1676.833807
-3.8	-229.924293	-160.290096	-228.594412	-244.389410	-342.830438	-128.504042	-173.604543	-198.797464	-222.632259	-247.763294
+3.8	1361.833175	973.152757	1258.724741	1267.958783	1341.588000	784.988446	1058.404328	1193.616000	1330.185147	1450.781142
-3.85	-172.443226	-120.217570	-171.445803	-183.292059	-257.122835	-96.378025	-130.203402	-149.098099	-166.974190	-185.822465
+3.85	1110.983960	792.567201	1033.378524	1034.731239	1105.791581	638.979679	861.647061	972.845403	1076.855899	1170.096467
-3.9	-114.962158	-80.145044	-114.297195	-122.194707	-171.415231	-64.252008	-86.802261	-99.398735	-111.316121	-123.881635
+3.9	800.914989	570.602964	749.319800	754.522140	808.975218	459.799063	620.115937	700.872041	766.462425	834.667054
-3.95	-57.481090	-40.072518	-57.148586	-61.097356	-85.707628	-32.125991	-43.401121	-49.699370	-55.658052	-61.940806
+3.95	430.932671	306.474295	405.009646	409.892692	446.468583	246.832145	332.978924	376.690698	411.863748	447.473604
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-57.480977	-52.339968	-56.326004	-53.094691	-64.296572	-66.401068	-70.284296	-27.937710
+0.05	430.861027	406.503379	434.753015	408.056631	488.266948	466.053532	492.743235	214.537132
-0.1	-114.961955	-104.679936	-112.652009	-106.189382	-128.593144	-132.802135	-140.568593	-55.875421
+0.1	801.293398	757.732807	809.995696	760.034745	908.580175	861.638883	910.889671	399.160287
-0.15	-172.442932	-157.019905	-168.978013	-159.284073	-192.889716	-199.203203	-210.852889	-83.813131
+0.15	1111.293446	1053.923483	1126.038289	1056.238885	1261.444720	1187.383444	1255.114947	554.252392
-0.2	-229.923910	-209.359873	-225.304017	-212.378764	-257.186288	-265.604271	-281.137186	-111.750842
+0.2	1362.076724	1296.027463	1383.932882	1297.677576	1548.139503	1454.271228	1537.533814	680.371887
-0.25	-287.404887	-261.699841	-281.630022	-265.473456	-321.482860	-332.005339	-351.421482	-139.688552
+0.25	1555.224491	1485.321631	1585.081357	1485.688893	1783.437759	1670.575967	1767.232453	778.452124
-0.3	-344.885865	-314.039809	-337.956026	-318.568147	-385.779432	-398.406406	-421.705779	-167.626263
+0.3	1695.681907	1623.407504	1731.235226	1632.865446	1959.640708	1825.204183	1930.313449	849.399411
-0.35	-402.366842	-366.379777	-394.282030	-371.662838	-450.076004	-464.807474	-491.990075	-195.563973
+0.35	1795.769910	1715.469936	1834.948212	1731.777199	2074.924895	1929.862781	2041.736615	894.070898
-0.4	-459.847820	-418.719746	-450.608035	-424.757529	-514.372576	-531.208542	-562.274372	-223.501684
+0.4	1843.764942	1768.370249	1889.674178	1782.626866	2131.878343	1975.242978	2090.274614	913.722124
-0.45	-517.328797	-471.059714	-506.934039	-477.852220	-578.669148	-597.609610	-632.558668	-251.439394
+0.45	1842.507298	1775.744102	1895.940054	1787.524953	2133.606446	1964.310777	2079.210587	908.199528
-0.5	-574.809775	-523.399682	-563.260043	-530.946911	-642.965720	-664.010677	-702.842965	-279.377105
+0.5	1813.533910	1745.114272	1863.913770	1757.160893	2098.993445	1936.015831	2049.079710	897.715684
-0.55	-632.290752	-575.739650	-619.586048	-584.041602	-707.262292	-730.411745	-773.127261	-307.314815
+0.55	1745.017972	1674.684951	1789.797560	1688.317937	2018.688817	1869.442672	1978.187820	867.709414
-0.6	-689.771730	-628.079618	-675.912052	-637.136293	-771.558864	-796.812813	-843.411558	-335.252526
+0.6	1634.103167	1567.159855	1675.450905	1581.369349	1891.895375	1751.302814	1852.766576	816.540326
-0.65	-747.252707	-680.419587	-732.238056	-690.230985	-835.855436	-863.213880	-913.695854	-363.190236
+0.65	1484.717795	1427.609005	1524.794532	1439.995062	1722.978927	1586.059682	1677.548513	746.073339
-0.7	-804.733685	-732.759555	-788.564061	-743.325676	-900.152008	-929.614948	-983.980151	-391.127947
+0.7	1301.188694	1260.962914	1342.099154	1268.205526	1516.493004	1378.602322	1457.716823	658.349045
-0.75	-862.214662	-785.099523	-844.890065	-796.420367	-964.448580	-996.016016	-1054.264447	-419.065657
+0.75	1088.051054	1067.413433	1133.455353	1070.340271	1277.641113	1136.687738	1202.560642	555.583552
-0.8	-919.695640	-837.439491	-901.216069	-849.515058	-1028.745152	-1062.417084	-1124.548744	-447.003368
+0.8	850.965139	851.469648	901.101165	851.068871	1012.026902	862.901665	912.650203	440.167972
-0.85	-977.176617	-889.779459	-957.542074	-902.609749	-1093.041724	-1128.818151	-1194.833040	-474.941078
+0.85	593.643971	617.965453	649.729339	615.390229	725.653116	561.564627	593.669271	314.669276
-0.9	-1034.657595	-942.119427	-1013.868078	-955.704440	-1157.338296	-1195.219219	-1265.117337	-502.878788
+0.9	323.854337	372.059402	388.576316	368.633118	425.158048	277.077753	292.911782	181.829558
-0.95	-1092.138572	-994.459396	-1070.194082	-1008.799131	-1221.634868	-1261.620287	-1335.401633	-530.816499
+0.95	238.904062	218.353803	234.914303	221.414046	268.015832	273.328431	289.273453	116.034083
-1	-1149.619572	-1046.799348	-1126.520087	-1061.893805	-1285.931440	-1328.021348	-1405.685923	-558.754196
+1	251.477960	229.846106	247.278212	233.067414	282.121926	287.714143	304.498376	122.141136
(Span 2) -2	-1149.619572	-1046.799348	-1126.520087	-1061.893805	-1285.931440	-1328.021348	-1405.685923	-558.754196
+2	251.477960	229.846106	247.278212	233.067414	282.121926	287.714143	304.498376	122.141136
-2.05	-838.492372	-766.366227	-824.489403	-777.106924	-940.667257	-959.313201	-1015.276198	-407.250078
+2.05	194.111099	177.413878	190.869393	179.900345	217.764599	222.081126	235.036560	99.556024
-2.1	-781.125513	-713.934000	-768.080581	-723.939853	-876.309931	-893.680183	-945.814378	-379.387383
+2.1	409.264233	457.631902	479.755237	453.245583	525.342623	337.170155	357.243036	219.357954
-2.15	-723.758654	-661.501772	-711.671759	-670.772783	-811.952606	-828.047165	-876.352558	-351.524688
+2.15	728.998961	744.546568	789.851536	746.101209	880.790141	707.577147	747.671295	376.281350
-2.2	-666.391795	-609.069545	-655.262937	-617.605712	-747.595281	-762.414147	-806.890738	-323.661992
+2.2	1028.440833	1013.525204	1080.049489	1020.322047	1213.717451	1057.476568	1118.001281	522.723729

-2.25	-609.024936	-556.637317	-598.854115	-564.438641	-683.237955	-696.781129	-737.428918	-295.799297
+2.25	1296.891089	1255.835200	1341.031515	1266.689760	1512.392372	1367.433344	1446.165163	652.931176
-2.3	-551.658077	-504.205090	-542.445293	-511.271570	-618.880630	-631.148111	-667.967098	-267.936602
+2.3	1522.475822	1463.386670	1563.325050	1475.977345	1765.663655	1627.081190	1721.192797	761.652388
-2.35	-494.291218	-451.772862	-486.036471	-458.104499	-554.523304	-565.515093	-598.505278	-240.073906
+2.35	1702.277201	1631.025322	1743.149843	1644.086932	1968.251594	1832.147223	1938.607978	847.461216
-2.4	-436.924359	-399.340635	-429.627649	-404.937428	-490.165979	-499.882075	-529.043457	-212.211211
+2.4	1831.455266	1753.744519	1874.367480	1767.413228	2114.747443	1976.854614	2092.054767	908.211073
-2.45	-379.557500	-346.908407	-373.218827	-351.770358	-425.808653	-434.249057	-459.581637	-184.348516
+2.45	1906.844843	1828.275931	1953.544987	1841.668487	2201.406657	2057.789087	2178.017676	942.485938
-2.5	-322.190641	-294.476180	-316.810006	-298.603287	-361.451340	-368.616039	-390.119817	-156.485821
+2.5	1928.696782	1852.619859	1978.622136	1864.857529	2226.619868	2073.415974	2194.851136	951.187235
-2.55	-379.557514	-346.908397	-373.218800	-351.770346	-425.808667	-434.249041	-459.581607	-184.348503
+2.55	1906.986151	1828.279008	1953.549222	1841.674033	2201.407043	2057.794018	2178.022740	943.159111
-2.6	-436.924375	-399.340625	-429.627620	-404.937415	-490.165993	-499.882058	-529.043423	-212.211197
+2.6	1831.518250	1753.746575	1874.370654	1767.417825	2114.748816	1976.858216	2092.058426	908.211263
-2.65	-494.291236	-451.772852	-486.036439	-458.104484	-554.523320	-565.515075	-598.505240	-240.073892
+2.65	1702.417471	1631.026620	1743.152125	1644.086810	1968.254207	1832.150113	1938.610889	847.462092
-2.7	-551.658098	-504.205080	-542.445258	-511.271553	-618.880646	-631.148091	-667.967056	-267.936586
+2.7	1522.585235	1463.387245	1563.326594	1475.978607	1765.667594	1627.081165	1721.192613	761.654186
-2.75	-609.024959	-556.637307	-598.854077	-564.438622	-683.237973	-696.781108	-737.428873	-295.799281
+2.75	1296.744953	1255.835509	1341.032712	1266.692760	1512.397935	1367.434846	1446.166606	652.933456
-2.8	-666.391820	-609.069535	-655.262897	-617.605691	-747.595299	-762.414125	-806.890690	-323.661975
+2.8	1028.209678	1013.525684	1080.050899	1020.324948	1213.722766	1057.477606	1118.002243	522.722780
-2.85	-723.758682	-661.501762	-711.671716	-670.772760	-811.952626	-828.047142	-876.352506	-351.524670
+2.85	729.007083	744.547277	789.853164	746.104386	880.789725	707.578565	747.672658	376.500038
-2.9	-781.125543	-713.933990	-768.080535	-723.939829	-876.309952	-893.680158	-945.814323	-379.387364
+2.9	409.397976	457.633413	479.757708	453.245579	525.345122	337.170805	357.243815	219.358590
-2.95	-838.492404	-766.366217	-824.489355	-777.106898	-940.667279	-959.313175	-1015.276140	-407.250059
+2.95	194.111091	177.413868	190.869391	179.900351	217.764601	222.081123	235.036563	99.496337
-3	-1149.621378	-1046.799407	-1126.520091	-1061.893801	-1285.931496	-1328.021415	-1405.686021	-558.754195
+3	251.477951	229.846106	247.278223	233.067421	282.121921	287.714148	304.498391	122.141140
(Span 3) -4	-1149.621378	-1046.799407	-1126.520091	-1061.893801	-1285.931496	-1328.021415	-1405.686021	-558.754195
+4	251.477951	229.846106	247.278223	233.067421	282.121921	287.714148	304.498391	122.141140
-3.05	-1092.140311	-994.459436	-1070.194087	-1008.799110	-1221.634921	-1261.620343	-1335.401720	-530.816485
+3.05	238.904053	218.353800	234.914312	221.414050	268.015824	273.328441	289.273472	116.034083
-3.1	-1034.659243	-942.119465	-1013.868082	-955.704419	-1157.338346	-1195.219272	-1265.117419	-502.878774
+3.1	324.009166	372.060145	388.575178	368.630376	425.163341	277.078642	292.912639	181.827449
-3.15	-977.178175	-889.779494	-957.542078	-902.609728	-1093.041771	-1128.818201	-1194.833117	-474.941064
+3.15	594.009701	617.966565	649.728799	615.387946	725.648503	561.565466	593.670290	314.667086
-3.2	-919.697107	-837.439523	-901.216073	-849.515037	-1028.745197	-1062.417130	-1124.548816	-447.003353
+3.2	851.111539	851.470973	901.101720	851.066985	1012.022778	862.902629	912.651363	440.165822
-3.25	-862.216039	-785.099552	-844.890069	-796.420346	-964.448622	-996.016059	-1054.264514	-419.065643
+3.25	1088.756994	1067.414764	1133.455905	1070.338402	1277.636929	1136.688516	1202.561606	555.581342
-3.3	-804.734972	-732.759580	-788.564064	-743.325655	-900.152047	-929.614988	-983.980213	-391.127932
+3.3	1301.869471	1260.964031	1342.098868	1268.203479	1516.488604	1378.601736	1457.716351	658.347225
-3.35	-747.253904	-680.419609	-732.238059	-690.230964	-835.855472	-863.213917	-913.695912	-363.190222
+3.35	1485.344785	1427.609478	1524.793493	1439.992411	1722.973741	1586.058415	1677.547321	746.071250
-3.4	-689.772836	-628.079638	-675.912055	-637.136273	-771.558898	-796.812846	-843.411610	-335.252512
+3.4	1634.536228	1567.158990	1675.449023	1581.365938	1891.889280	1751.300263	1852.764033	816.538051
-3.45	-632.291768	-575.739667	-619.586050	-584.041583	-707.262323	-730.411775	-773.127309	-307.314801
+3.45	1745.169527	1674.683179	1789.794683	1688.313547	2018.691842	1869.439002	1978.184092	867.707044
-3.5	-574.810700	-523.399696	-563.260046	-530.946892	-642.965748	-664.010704	-702.843007	-279.377091
+3.5	1813.644484	1745.111403	1863.909717	1757.155162	2098.994978	1936.010775	2049.074511	897.713070
-3.55	-517.329633	-471.059725	-506.934041	-477.852201	-578.669173	-597.609633	-632.558706	-251.439380
+3.55	1842.420242	1775.747621	1895.931647	1787.520847	2133.605816	1964.307243	2079.206739	909.782612
-3.6	-459.848565	-418.719754	-450.608037	-424.757510	-514.372599	-531.208562	-562.274405	-223.501670

+3.6	**1843.630385**	**1768.372490**	**1889.677599**	**1782.621591**	**2131.876129**	**1975.237954**	**2090.269188**	**913.720832**
-3.65	**-402.367497**	**-366.379782**	**-394.282032**	**-371.662819**	**-450.076024**	**-464.807491**	**-491.990103**	**-195.563960**
+3.65	**1795.582475**	**1715.470588**	**1834.949936**	**1731.770101**	**2074.920622**	**1929.865356**	**2041.739169**	**894.069274**
-3.7	**-344.886429**	**-314.039811**	**-337.956028**	**-318.568128**	**-385.779449**	**-398.406420**	**-421.705802**	**-167.626249**
+3.7	**1695.437006**	**1623.406076**	**1731.234665**	**1632.867017**	**1959.634551**	**1825.204669**	**1930.313794**	**849.397437**
-3.75	**-287.405361**	**-261.699840**	**-281.630023**	**-265.473437**	**-321.482874**	**-332.005349**	**-351.421500**	**-139.688539**
+3.75	**1555.044266**	**1485.318522**	**1585.079001**	**1485.688550**	**1783.439595**	**1670.574126**	**1767.230335**	**778.449905**
-3.8	**-229.924293**	**-209.359869**	**-225.304019**	**-212.378746**	**-257.186299**	**-265.604278**	**-281.137199**	**-111.750828**
+3.8	**1361.833175**	**1296.022577**	**1383.928610**	**1297.675397**	**1548.139041**	**1454.267136**	**1537.529306**	**680.373293**
-3.85	**-172.443226**	**-157.019898**	**-168.978014**	**-159.284055**	**-192.889725**	**-199.203207**	**-210.852898**	**-83.813118**
+3.85	**1110.983960**	**1053.916686**	**1126.031965**	**1056.234941**	**1261.442051**	**1187.381511**	**1255.112956**	**554.253517**
-3.9	**-114.962158**	**-104.679927**	**-112.652009**	**-106.189364**	**-128.593150**	**-132.802136**	**-140.568596**	**-55.875408**
+3.9	**800.914989**	**757.723850**	**809.987073**	**760.028384**	**908.574685**	**861.634491**	**910.885078**	**399.160996**
-3.95	**-57.481090**	**-52.339956**	**-56.326005**	**-53.094673**	**-64.296575**	**-66.401065**	**-70.284295**	**-27.937697**
+3.95	**430.932671**	**406.491785**	**434.741571**	**408.048134**	**488.258924**	**466.046495**	**492.735844**	**214.537556**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 140' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-57.480977**	**-123.111538**	**-136.041010**	**-77.454781**	**-93.298021**	**-100.581286**
+0.05	**430.861027**	**816.253910**	**874.259535**	**536.762647**	**647.994756**	**686.347472**
-0.1	**-114.961955**	**-246.223077**	**-272.082020**	**-154.909563**	**-186.596042**	**-201.162571**
+0.1	**801.293398**	**1501.417682**	**1613.151365**	**991.103914**	**1196.623306**	**1265.538669**
-0.15	**-172.442932**	**-369.334615**	**-408.123030**	**-232.364344**	**-279.894062**	**-301.743857**
+0.15	**1111.293446**	**2088.730533**	**2240.414221**	**1363.799102**	**1651.314029**	**1749.351629**
-0.2	**-229.923910**	**-492.446153**	**-544.164041**	**-309.819125**	**-373.192083**	**-402.325142**
+0.2	**1362.076724**	**2554.206707**	**2784.360333**	**1681.141249**	**2031.404932**	**2147.515118**
-0.25	**-287.404887**	**-615.557692**	**-680.205051**	**-387.273906**	**-466.490104**	**-502.906428**
+0.25	**1555.224491**	**2920.767002**	**3207.608774**	**1925.568180**	**2318.743093**	**2469.706325**
-0.3	**-344.885865**	**-738.669230**	**-816.246061**	**-464.728688**	**-559.788125**	**-603.487713**
+0.3	**1695.681907**	**3208.695402**	**3527.501611**	**2098.801118**	**2516.831990**	**2699.439977**
-0.35	**-402.366842**	**-861.780769**	**-952.287071**	**-542.183469**	**-653.086146**	**-704.068999**
+0.35	**1795.769910**	**3396.454410**	**3736.044307**	**2213.294563**	**2648.764339**	**2835.061699**
-0.4	**-459.847820**	**-984.892307**	**-1088.328081**	**-619.638250**	**-746.384166**	**-804.650284**
+0.4	**1843.764942**	**3513.677273**	**3828.365085**	**2258.946691**	**2698.660418**	**2901.812552**
-0.45	**-517.328797**	**-1108.003845**	**-1224.369091**	**-697.093032**	**-839.682187**	**-905.231570**
+0.45	**1842.507298**	**3521.935271**	**3866.495609**	**2239.520839**	**2670.762521**	**2884.052286**
-0.5	**-574.809775**	**-1231.115384**	**-1360.410101**	**-774.547813**	**-932.980208**	**-1005.812855**
+0.5	**1813.533910**	**3460.330492**	**3789.806208**	**2208.560109**	**2634.910458**	**2841.802737**
-0.55	**-632.290752**	**-1354.226922**	**-1496.451112**	**-852.002594**	**-1026.278229**	**-1106.394141**
+0.55	**1745.017972**	**3314.058659**	**3611.809466**	**2139.128143**	**2554.962182**	**2744.436094**
-0.6	**-689.771730**	**-1477.338460**	**-1632.492122**	**-929.457376**	**-1119.576250**	**-1206.975426**
+0.6	**1634.103167**	**3076.753844**	**3380.666288**	**2008.063009**	**2400.427206**	**2570.082825**
-0.65	**-747.252707**	**-1600.449999**	**-1768.533132**	**-1006.912157**	**-1212.874270**	**-1307.556712**
+0.65	**1484.717795**	**2767.988933**	**3050.686098**	**1820.505707**	**2177.407966**	**2334.312277**
-0.7	**-804.733685**	**-1723.561537**	**-1904.574142**	**-1084.366938**	**-1306.172291**	**-1408.137997**
+0.7	**1301.188694**	**2394.196353**	**2629.338710**	**1582.098295**	**1897.445760**	**2030.627503**
-0.75	**-862.214662**	**-1846.673075**	**-2040.615152**	**-1161.821719**	**-1399.470312**	**-1508.719283**
+0.75	**1088.051054**	**1947.275604**	**2131.036115**	**1303.566210**	**1564.899650**	**1666.932264**
-0.8	**-919.695640**	**-1969.784614**	**-2176.656162**	**-1239.276501**	**-1492.768333**	**-1609.300568**
+0.8	**850.965139**	**1437.657817**	**1565.169347**	**984.961145**	**1182.513523**	**1251.653207**
-0.85	**-977.176617**	**-2092.896152**	**-2312.697172**	**-1316.731282**	**-1586.066354**	**-1709.881854**
+0.85	**593.643971**	**876.265113**	**944.434295**	**632.466574**	**758.556863**	**793.639086**
-0.9	**-1034.657595**	**-2216.007691**	**-2448.738183**	**-1394.186063**	**-1679.364374**	**-1810.463139**
+0.9	**323.854337**	**476.746824**	**525.566007**	**329.480965**	**372.952453**	**398.772284**
-0.95	**-1092.138572**	**-2339.119229**	**-2584.779193**	**-1471.640845**	**-1772.662395**	**-1911.044425**
+0.95	**238.904062**	**503.232758**	**554.764119**	**317.580148**	**383.199041**	**412.204320**
-1	**-1149.619572**	**-2462.230795**	**-2720.820202**	**-1549.095629**	**-1865.960417**	**-2011.625682**
+1	**251.477960**	**529.718688**	**583.962236**	**334.294894**	**403.367412**	**433.899284**
(Span 2) -2	**-1149.619572**	**-2462.230795**	**-2720.820202**	**-1549.095629**	**-1865.960417**	**-2011.625682**
+2	**251.477960**	**529.718688**	**583.962236**	**334.294894**	**403.367412**	**433.899284**
-2.05	**-838.492372**	**-1766.218841**	**-1947.080757**	**-1114.625500**	**-1344.930976**	**-1446.732200**
+2.05	**194.111099**	**408.879874**	**450.749447**	**258.035929**	**311.351704**	**334.918682**
-2.1	**-781.125513**	**-1645.380022**	**-1813.867968**	**-1038.366531**	**-1252.915272**	**-1347.751594**
+2.1	**409.264233**	**506.057528**	**560.258205**	**399.922681**	**455.146104**	**489.649040**
-2.15	**-723.758654**	**-1524.541203**	**-1680.655179**	**-962.107561**	**-1160.899569**	**-1248.770988**
+2.15	**728.998961**	**1134.536033**	**1241.457413**	**793.853570**	**942.762574**	**1001.733311**
-2.2	**-666.391795**	**-1403.702384**	**-1547.442389**	**-885.848592**	**-1068.883865**	**-1149.790381**
+2.2	**1028.440833**	**1788.776027**	**1965.516219**	**1204.206185**	**1436.357094**	**1535.310166**

-2.25	-609.024936	-1282.863565	-1414.229600	-809.589622	-976.868161	-1050.809775
+2.25	1296.891089	2364.368678	2604.471687	1566.005118	1870.539874	2004.233449
-2.3	-551.658077	-1162.024746	-1281.016810	-733.330653	-884.852457	-951.829169
+2.3	1522.475822	2847.251228	3139.168045	1867.430618	2231.977492	2393.326409
-2.35	-494.291218	-1041.185927	-1147.804021	-657.071683	-792.836754	-852.848562
+2.35	1702.277201	3241.607165	3557.644912	2103.912980	2514.107272	2695.706873
-2.4	-436.924359	-920.347107	-1014.591232	-580.812714	-700.821050	-753.867956
+2.4	1831.455266	3525.859908	3850.107487	2268.731169	2709.570259	2913.669553
-2.45	-379.557500	-799.508288	-881.378442	-504.553744	-608.805346	-654.887350
+2.45	1906.844843	3692.791119	4050.262602	2358.396310	2814.379629	3034.425406
-2.5	-322.190641	-678.669448	-748.165653	-428.294775	-516.789662	-555.906743
+2.5	1928.696782	3738.510850	4118.022401	2371.403088	2827.074421	3055.783654
-2.55	-379.557514	-799.508261	-881.378443	-504.553716	-608.805369	-654.887339
+2.55	1906.986151	3692.790060	4050.634451	2358.401603	2814.377903	3034.429096
-2.6	-436.924375	-920.347075	-1014.591232	-580.812681	-700.821076	-753.867941
+2.6	1831.518250	3525.858511	3849.896206	2268.735160	2709.574409	2913.671326
-2.65	-494.291236	-1041.185888	-1147.804021	-657.071645	-792.836784	-852.848543
+2.65	1702.417471	3241.606315	3557.719755	2103.916086	2514.110401	2695.707547
-2.7	-551.658098	-1162.024702	-1281.016810	-733.330610	-884.852491	-951.829145
+2.7	1522.585235	2847.250623	3139.489816	1867.430402	2231.978963	2393.332138
-2.75	-609.024959	-1282.863515	-1414.229599	-809.589575	-976.868198	-1050.809747
+2.75	1296.744953	2364.375679	2604.774171	1566.006547	1870.540903	2004.240850
-2.8	-666.391820	-1403.702329	-1547.442388	-885.848539	-1068.883906	-1149.790349
+2.8	1028.209678	1788.775057	1965.522771	1204.207007	1436.357374	1535.309071
-2.85	-723.758682	-1524.541142	-1680.655177	-962.107504	-1160.899613	-1248.770951
+2.85	729.007083	1134.537044	1241.456591	793.854852	942.763201	1001.734123
-2.9	-781.125543	-1645.379956	-1813.867966	-1038.366468	-1252.915320	-1347.751553
+2.9	409.397976	506.058958	560.257339	399.923354	455.148203	489.649823
-2.95	-838.492404	-1766.218769	-1947.080755	-1114.625433	-1344.931028	-1446.732155
+2.95	194.111091	408.879902	450.749451	258.035951	311.351692	334.918714
-3	-1149.621378	-2462.230771	-2720.820174	-1549.095623	-1865.960427	-2011.625801
+3	251.477951	529.718712	583.962238	334.294916	403.367396	433.899303
(Span 3) -4	-1149.621378	-2462.230771	-2720.820174	-1549.095623	-1865.960427	-2011.625801
+4	251.477951	529.718712	583.962238	334.294916	403.367396	433.899303
-3.05	-1092.140311	-2339.119234	-2584.779166	-1471.640842	-1772.662406	-1911.044510
+3.05	238.904053	503.232776	554.764126	317.580170	383.199026	412.204338
-3.1	-1034.659243	-2216.007697	-2448.738157	-1394.186061	-1679.364385	-1810.463218
+3.1	324.009166	476.746840	525.566014	329.482037	372.950538	398.768916
-3.15	-977.178175	-2092.896160	-2312.697148	-1316.731280	-1586.066363	-1709.881927
+3.15	594.009701	876.260295	945.282553	632.467953	758.559370	793.634615
-3.2	-919.697107	-1969.784623	-2176.656139	-1239.276499	-1492.768342	-1609.300635
+3.2	851.111539	1437.653257	1565.899946	984.962485	1182.516053	1251.648795
-3.25	-862.216039	-1846.673085	-2040.615130	-1161.821718	-1399.470321	-1508.719344
+3.25	1088.756994	1947.270756	2132.004596	1303.567309	1564.901714	1666.927284
-3.3	-804.734972	-1723.561548	-1904.574122	-1084.366937	-1306.172300	-1408.138052
+3.3	1301.869471	2394.199520	2630.876488	1582.097839	1897.446826	2030.631238
-3.35	-747.253904	-1600.450011	-1768.533113	-1006.912156	-1212.874278	-1307.556761
+3.35	1485.344785	2767.990798	3050.685274	1820.504364	2177.407055	2334.314803
-3.4	-689.772836	-1477.338474	-1632.492104	-929.457375	-1119.576257	-1206.975469
+3.4	1634.536228	3076.751322	3380.667331	2008.060173	2400.424548	2570.083349
-3.45	-632.291768	-1354.226937	-1496.451095	-852.002594	-1026.278236	-1106.394178
+3.45	1745.169527	3314.938839	3611.809831	2139.123794	2554.957752	2744.434071
-3.5	-574.810700	-1231.115400	-1360.410087	-774.547813	-932.980214	-1005.812886
+3.5	1813.644484	3460.333069	3790.948637	2208.554130	2634.913362	2841.798209
-3.55	-517.329633	-1108.003863	-1224.369078	-697.093032	-839.682193	-905.231595
+3.55	1842.420242	3521.933604	3866.494296	2239.516845	2670.760448	2884.047817
-3.6	-459.848565	-984.892325	-1088.328069	-619.638251	-746.384172	-804.650303

+3.6	1843.630385	3513.681959	3828.365196	2258.940825	2698.656166	2901.815408
-3.65	-402.367497	-861.780788	-952.287060	-542.183470	-653.086150	-704.069012
+3.65	1795.582475	3396.455435	3736.043434	2213.297528	2648.767318	2835.061500
-3.7	-344.886429	-738.669251	-816.246052	-464.728689	-559.788129	-603.487720
+3.7	1695.437006	3208.692175	3528.134340	2098.801695	2516.832279	2699.436760
-3.75	-287.405361	-615.557714	-680.205043	-387.273908	-466.490108	-502.906429
+3.75	1555.044266	2920.760056	3207.608185	1925.566172	2318.740295	2469.700094
-3.8	-229.924293	-492.446177	-544.164034	-309.819127	-373.192087	-402.325137
+3.8	1361.833175	2555.067371	2784.358564	1681.136907	2031.399149	2147.510017
-3.85	-172.443226	-369.334640	-408.123025	-232.364346	-279.894065	-301.743846
+3.85	1110.983960	2088.734468	2240.413733	1363.796889	1651.314620	1749.353101
-3.9	-114.962158	-246.223102	-272.082017	-154.909565	-186.596044	-201.162554
+3.9	800.914989	1501.417071	1613.151566	991.098827	1196.620515	1265.536337
-3.95	-57.481090	-123.111565	-136.041008	-77.454784	-93.298023	-100.581263
+3.95	430.932671	816.248632	874.260733	536.754522	647.988419	686.341103
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-19.13841749**	***-29.074094***	***-43.071402***	**-14.43041656**	**-15.53097241**	**-14.64039735**	**-17.73130265**	**-18.37949154**	**-19.4553883**	**-7.712625763**
End Shear	**141.9604529**	***191.628902***	***259.886501***	**120.2018051**	**128.656248**	**120.8165158**	**144.7749428**	**140.1642428**	**148.2185555**	**63.62385182**
-0.05	**-19.13841749**	***-29.315943***	***-43.289066***	**-14.43041656**	**-15.53097241**	**-14.64039735**	**-17.73130265**	**-18.37949154**	**-19.4553883**	**-7.712625763**
+0.05	**131.474474**	***176.068243***	***236.410612***	**112.2530039**	**120.0995752**	**112.7538065**	**135.0099175**	**129.9482325**	**137.4037321**	**59.38789122**
-0.1	**-19.13841749**	***-30.144443***	***-44.034715***	**-14.43041656**	**-15.53097241**	**-14.64039735**	**-17.73130265**	**-18.37949154**	**-19.4553883**	**-7.712625763**
+0.1	**121.2561504**	***160.319175***	***212.249017***	**104.0719821**	**111.2955058**	**104.4565232**	**124.9662441**	**119.4578262**	**126.2990782**	**54.98905855**
-0.15	**-19.13841749**	***-36.968982***	***-49.841549***	**-17.46064617**	**-18.01410389**	**-16.49851369**	**-18.33238192**	**-18.37949154**	**-19.4553883**	**-8.218003422**
+0.15	**112.838665**	***147.062577***	***191.898032***	**96.96784055**	**103.6525115**	**97.25481788**	**116.2533533**	**110.396003**	**116.707211**	**51.17252381**
-0.2	**-28.30792315**	***-46.438554***	***-60.586299***	**-25.60927329**	**-26.79501325**	**-24.78117906**	**-28.38306831**	**-18.87717399**	**-19.99533486**	**-12.61679194**
+0.2	**103.4537567**	***132.529558***	***169.595106***	**88.93517881**	**95.01310753**	**89.11579283**	**106.4118273**	**100.2055167**	**105.9213168**	**46.86100666**
-0.25	**-37.79326393**	***-55.128488***	***-71.072063***	**-32.67324525**	**-34.40929021**	**-31.96475091**	**-37.10464785**	**-26.27677128**	**-27.65975924**	**-16.4332758**
+0.25	**95.24798744**	***120.367674***	***150.958262***	**82.00254989**	**87.55910011**	**82.0949078**	**97.92714229**	**91.46066615**	**96.6661155**	**43.14340454**
-0.3	**-48.5185376**	***-65.491837***	***-83.432075***	**-40.646472**	**-43.00619936**	**-40.07694607**	**-46.95902246**	**-36.27940819**	**-38.22190139**	**-20.74471054**
+0.3	**86.03655865**	***107.117537***	***130.711759***	**74.2135644**	**79.1870088**	**74.21092555**	**88.40507731**	**81.69475869**	**86.33097263**	**38.97070241**
-0.35	**-57.77515868**	***-74.911468***	***-94.545096***	**-47.5152658**	**-50.41456533**	**-47.06901591**	**-55.45750736**	**-45.44113324**	**-47.9241518**	**-24.46222918**
+0.35	**78.14659364**	***96.103228***	***113.957052***	**67.53585008**	**72.01180575**	**67.45554264**	**80.25124177**	**73.3759398**	**77.52791133**	**35.39708985**
-0.4	**-68.17531032**	***-86.045645***	***-107.547484***	**-55.2177814**	**-58.72483186**	**-54.91396225**	**-64.99826283**	**-55.77174881**	**-58.86487831**	**-28.63481624**
+0.4	**69.35279476**	***84.189974***	***96.097234***	**60.08584617**	**64.00966413**	**59.92337683**	**71.16594**	**64.15926332**	**67.77550451**	**31.41469474**
-0.45	**-77.09170249**	***-96.081783***	***-119.154939***	**-61.80800446**	**-65.83747936**	**-61.62985463**	**-73.17101667**	**-64.66195085**	**-68.28068146**	**-32.20831043**
+0.45	**61.87787899**	***74.364891***	***83.959915***	**53.74644106**	**57.20307513**	**53.51816841**	**63.44558737**	**56.37556746**	**59.54009172**	**28.03013256**
-0.5	**-87.03929928**	***-107.851029***	***-132.642131***	**-69.14449986**	**-73.75846316**	**-69.11077262**	**-82.28084399**	**-74.61993775**	**-78.82805729**	**-36.19055367**
+0.5	**53.61514791**	***63.829716***	***72.154243***	**46.7307304**	**49.67352659**	**46.43459949**	**54.91435864**	**47.83277691**	**50.50240853**	**24.28954598**
-0.55	**-95.50395589**	***-118.379281***	***-144.601099***	**-75.37276096**	**-80.48558637**	**-75.465792**	**-90.02520487**	**-83.12954937**	**-87.84193005**	**-39.57496653**
+0.55	**46.6545491**	***55.224304***	***62.478611***	**40.81302517**	**43.32535688**	**40.46426196**	**47.73015128**	**40.69326008**	**42.95011533**	**21.13909213**
-0.6	**-104.8715618**	***-130.635019***	***-158.404001***	**-82.24792337**	**-87.91464252**	**-82.48590527**	**-98.58680033**	**-92.59024031**	**-97.86395458**	**-43.31536393**
+0.6	**39.03631834**	***46.095595***	***52.182643***	**34.32692034**	**36.37104544**	**33.92606932**	**39.87030331**	**32.94901231**	**34.75914535**	**17.69180297**
-0.65	**-112.7729602**	***-141.519779***	***-173.371091***	**-88.03081242**	**-94.16641529**	**-88.39537774**	**-105.8001332**	**-100.6101861**	**-106.3604052**	**-46.46563512**
+0.65	**32.6892876**	***38.729086***	***43.850902***	**28.91432416**	**30.57112023**	**28.47526997**	**33.32486828**	**26.56275682**	**28.00547068**	**14.82051686**
-0.7	**-121.4331347**	***-154.100625***	***-196.073845***	**-94.34933073**	**-101.0009011**	**-94.85790603**	**-113.6961871**	**-109.4489406**	**-115.7251062**	**-49.91269886**
+0.7	**25.82899929**	***31.022414***	***35.114037***	**23.05313357**	**24.29468594**	**22.57923102**	**26.25370753**	**19.74171778**	**20.79321316**	**11.71802719**
-0.75	**-128.6597865**	***-165.195077***	***-215.862030***	**-99.60345808**	**-106.687519**	**-100.237158**	**-120.2758578**	**-116.8701492**	**-123.5886476**	**-52.78377064**
+0.75	**20.19479025**	***24.902831***	***28.164367***	**18.2290369**	**19.1328104**	**17.73265808**	**20.44969714**	**14.43078754**	**15.19030268**	**9.170964807**
-0.8	**-136.4850919**	***-177.926836***	***-238.312708***	**-105.2700216**	**-112.8247923**	**-106.0453217**	**-127.3890613**	**-124.9622954**	**-132.1640194**	**-55.88599821**
+0.8	**14.20588017**	***18.620961***	***21.024474***	**13.0880729**	**13.63689736**	**12.57555299**	**14.28453278**	**9.680613184**	**10.24786154**	**6.464769872**
-0.85	**-142.9254717**	***-189.072955***	***-257.747781***	**-109.9119912**	**-117.8564444**	**-110.809664**	**-133.2324158**	**-131.6756926**	**-139.2791611**	**-58.43281188**
+0.85	**9.383750841**	***13.745115***	***15.792965***	**8.935872035**	**9.20288287**	**8.417896369**	**9.324601398**	**6.660299733**	**7.038921028**	**4.286995686**
-0.9	**-149.7884703**	***-201.768620***	***-279.640458***	**-114.831289**	**-123.1938624**	**-115.866685**	**-139.4454624**	**-138.8965852**	**-146.9332265**	**-61.13871146**
+0.9	**4.379653004**	***8.878003***	***10.664788***	**4.671381942**	**4.671381942**	**4.380006436**	**4.655245359**	**3.994999483**	**4.228322227**	**2.531565327**
-0.95	**-155.3310764**	***-212.797169***	***-298.784588***	**-118.7777033**	**-127.4807361**	**-119.9314358**	**-144.4498562**	**-144.7930983**	**-153.1844797**	**-63.31620702**
+0.95	**4.194135253**	***5.865020***	***8.433567***	**3.173197538**	**3.414288703**	**3.218207311**	**3.896279549**	**3.994999483**	**4.228322227**	**1.689408022**
-1	**-161.1043337**	***-225.256922***	***-320.191759***	**-122.8544249**	**-131.9156566**	**-124.1405368**	**-149.6454401**	**-151.0180879**	**-159.7852569**	**-65.57428048**
+1	**4.19E+00**	***5.741419***	***8.322326***	**3.17E+00**	**3.41E+00**	**3.22E+00**	**3.90E+00**	**3.99E+00**	**4.23E+00**	**1.69E+00**
(Span 2) -2	**-1.47E+01**	***-20.135966***	***-29.187571***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.40E+01**	**-1.48E+01**	**-5.92E+00**
+2	**1.55E+02**	***234.064448***	***336.533324***	**122.9399165**	**132.0469007**	**124.2892383**	**149.9088858**	**152.0877383**	**160.929539**	**65.65429171**
-2.05	**-1.47E+01**	***-20.311551***	***-29.345597***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.40E+01**	**-1.48E+01**	**-5.92E+00**
+2.05	**1.48E+02**	***219.690801***	***312.763777***	**118.5383317**	**127.2577073**	**119.743375**	**144.296125**	**145.4005269**	**153.8392995**	**63.21526221**
-2.1	**-14.70942429**	***-20.898720***	***-29.874049***	**-11.12885171**	**-11.97439229**	**-11.28670727**	**-13.66480188**	**-14.01102666**	**-14.82932244**	**-5.924992407**
+2.1	**140.3905907**	***204.346038***	***287.372248***	**113.26383**	**121.5318659**	**114.3164768**	**137.6226894**	**137.6525706**	**145.6268773**	**60.31085101**
-2.15	**-14.70942429**	***-23.566121***	***-34.830439***	**-11.40369198**	**-11.97439229**	**-11.28670727**	**-13.66480188**	**-14.01102666**	**-14.82932244**	**-5.924992407**
+2.15	**132.1529286**	***189.684044***	***263.531097***	**107.7153809**	**115.5189815**	**108.6238483**	**130.6439417**	**129.7122153**	**137.212568**	**57.27014626**
-2.2	**-19.74380124**	***-30.651499***	***-42.887756***	**-17.18958127**	**-18.0586761**	**-16.747709**	**-19.35048388**	**-14.01102666**	**-14.82932244**	**-8.704136685**
+2.2	**122.9688941**	***174.282662***	***238.820579***	**101.385536**	**108.6686104**	**102.1440211**	**122.7195241**	**120.8437895**	**127.8167015**	**53.81445222**

-2.25	-27.42867079	-38.324403	-51.620342	-23.15907622	-24.45093333	-22.75248256	-26.55138589	-20.58516757	-21.69328861	-11.86181942
+2.25	113.8526548	159.788961	215.545976	94.97877584	101.7427851	95.59761562	114.7299267	112.0276828	118.4779144	50.32797464
-2.3	-36.12621063	-47.358143	-61.888100	-29.86395142	-31.63921756	-29.51031403	-34.67364889	-28.51513844	-30.07935325	-15.42167202
+2.3	103.9471787	144.785094	191.464944	87.89730839	94.09496816	88.37328798	105.9283813	102.4360437	108.3192279	46.48509737
-2.35	-44.87104086	-56.810971	-72.603181	-36.56219352	-38.82767326	-36.27280298	-42.81702562	-36.60182083	-38.6332607	-18.98905883
+2.35	94.36829184	130.865893	169.173846	80.92079632	86.56695803	81.26610733	97.28308729	93.12158528	98.45556276	42.70875349
-2.4	-54.4812566	-67.630181	-84.822078	-43.88230137	-46.69050976	-43.67403948	-51.74446955	-45.59625706	-48.14934149	-22.89812352
+2.4	85.38988059	116.660596	146.521822	73.39145896	78.44881328	73.60569966	87.97825621	83.1190067	87.86522534	38.64281595
-2.45	-63.90021469	-78.682980	-97.250572	-51.02072687	-54.36440328	-50.90125576	-60.47518335	-54.50546015	-57.57694169	-26.71931394
+2.45	76.75324141	103.671683	125.951077	66.13376302	70.62938413	66.2307437	79.03241709	73.52094355	77.70359313	34.73251094
-2.5	-74.01697137	-91.071693	-111.113471	-58.65232224	-62.57468159	-58.63746593	-69.83395253	-64.16708825	-67.80239616	-30.8134871
+2.5	67.64043609	90.434568	110.377321	58.26869687	62.16181891	58.2483649	69.36292992	63.67821851	67.28495904	30.60760465
-2.55	-83.72423659	-103.672053	-125.951078	-66.13413702	-70.62978671	-66.2311245	-79.03287853	-73.52142787	-77.70410581	-34.73256863
+2.55	58.93708768	78.682623	97.235201	51.0203556	54.36400393	50.90089138	60.4747429	54.50499268	57.57644697	26.71925581
-2.6	-93.94139258	-117.358942	-147.631634	-73.77161769	-78.85855075	-73.99223833	-88.44745482	-83.61652544	-88.39196897	-38.84774251
+2.6	50.05486364	67.068537	84.184323	43.51057537	46.29106211	43.29793297	51.29046412	45.13593467	47.66227788	22.69951627
-2.65	-103.8019519	-130.866250	-169.173846	-80.92117275	-86.56736426	-81.26648972	-97.28355193	-93.12203636	-98.45604039	-42.70881486
+2.65	41.85413634	56.810631	72.395477	36.56183191	38.82728507	36.27244804	42.81659766	36.60139263	38.63280771	18.98900033
-2.7	-113.7068919	-145.527859	-192.655613	-88.2587527	-94.48515188	-88.74177151	-106.3769613	-102.922092	-108.8339734	-46.68085768
+2.7	33.56283014	46.883437	61.161247	29.51931182	31.2695402	29.16265782	34.25539483	28.10323229	29.6437008	15.23852435
-2.75	-122.8246161	-159.789290	-215.545972	-94.97910475	-101.7431407	-95.59796145	-114.7303482	-112.0281176	-118.4783749	-50.32802988
+2.75	26.09521667	38.324094	51.451660	23.1587689	24.45060387	22.75216329	26.55100248	20.58479754	21.69289736	11.86176502
-2.8	-132.0124677	-175.050426	-240.052704	-101.7130665	-109.0228718	-102.4789937	-123.1287509	-121.2984867	-128.2983985	-53.99284736
+2.8	18.75635007	30.272540	42.309563	16.8872344	17.73514494	16.4439222	18.9866707	14.0110265	14.82932263	8.544665915
-2.85	-140.2560726	-189.684331	-263.531097	-107.7156793	-115.5193047	-108.6241438	-130.6443033	-129.7126385	-137.2130164	-57.27020012
+2.85	14.71887055	23.565856	34.686791	11.40342373	11.97439222	11.2867071	13.66480244	14.0110265	14.82932263	5.924992478
-2.9	-148.32076	-205.116721	-288.647135	-113.5422544	-121.833844	-114.6025223	-137.9738765	-138.0560382	-146.0544781	-60.4636794
+2.9	14.71887055	20.858643	29.837980	11.12885233	11.97439222	11.2867071	13.66480244	14.0110265	14.82932263	5.924992478
-2.95	-155.3044224	-219.691033	-312.763777	-118.5385754	-127.2579719	-119.7436334	-144.2964431	-145.4008914	-153.8396859	-63.21530729
+2.95	14.71887055	20.311551	29.345597	11.12885233	11.97439222	11.2867071	13.66480244	14.0110265	14.82932263	5.924992478
-3	-161.8397689	-234.813329	-337.770656	-123.1540071	-132.2801965	-124.5109013	-150.1832997	-152.4201133	-161.2820122	-65.77333735
+3	14.71887055	20.135966	29.187571	11.12885233	11.97439222	11.2867071	13.66480244	14.0110265	14.82932263	5.924992478
(Span 3) -4	-4.196828704	-5.741419	-8.322326	-3.173197715	-3.414288682	-3.218207263	-3.896279709	-3.994999437	-4.228322281	-1.689408042
+4	153.9549986	224.483543	318.872262	122.6134244	131.6532508	123.8913302	149.3373516	150.6453505	159.3899737	65.44056756
-3.05	-4.196828704	-5.849268	-8.419390	-3.173197715	-3.414288682	-3.218207263	-3.896279709	-3.994999437	-4.228322281	-1.689408042
+3.05	148.2980566	213.580715	300.140223	119.0460303	127.7724121	120.2081204	144.7909174	145.1981657	153.6139561	63.46462454
-3.1	-4.656096889	-9.160508	-10.926444	-4.877810781	-4.877810781	-4.598187392	-4.896152701	-3.994999437	-4.228322281	-2.622292607
+3.1	141.3113668	200.977202	278.283725	114.5360896	122.8733944	115.5629361	139.0719076	138.4596093	146.470001	60.97619992
-3.15	-9.031142166	-13.419210	-15.405344	-8.652437208	-8.900403578	-8.134390151	-8.986801962	-6.454028844	-6.81978912	-4.138549089
+3.15	134.7689036	189.867997	259.126853	110.2314384	118.2028678	111.13778	133.6351743	132.1409791	139.772324	58.60840937
-3.2	-14.66387718	-18.991673	-21.386507	-13.39758173	-13.96760387	-12.88576408	-14.65501274	-9.905649656	-10.48697319	-6.62729944
+3.2	126.8339852	177.130087	236.916211	104.9265616	112.4526572	105.6930662	126.957356	124.4688752	131.6411043	55.69791109
-3.25	-20.40164953	-24.488318	-27.623320	-17.89617038	-18.77679181	-17.39849299	-20.04984873	-14.08146079	-14.82259031	-8.995353605
+3.25	119.5176796	165.989316	217.271125	99.96807755	107.0822842	100.6106628	120.7329882	117.3878978	124.1372839	52.98333108
-3.3	-27.47446601	-31.482136	-35.552826	-23.40919188	-24.67582864	-22.93718503	-26.68270317	-20.15287869	-21.22791446	-11.90613372
+3.3	110.7621833	153.310418	194.656889	93.96359116	100.5835406	94.46319895	113.2136714	108.9068397	115.1507217	49.70223947
-3.35	-34.08687834	-38.225509	-43.185885	-28.53797298	-30.16796667	-28.09647727	-32.87028188	-26.12161686	-27.53898822	-14.62094286
+3.35	103.1438943	142.301755	174.791266	88.43465291	94.60311268	88.80823232	106.3043159	101.1726261	106.9562872	46.68593285
-3.4	-42.09563274	-46.644369	-52.693777	-34.72356585	-36.7962033988005	-34.32571187	-40.3504761501268	-33.41987759	-35.2571379875538	-17.90226779
+3.4	95.20497856	129.862472	157.433264	81.82586894	87.45847954	82.05479619	98.06080619	92.00729967	97.24640287	43.08576806
-3.45	-49.47120085	-54.632055	-61.690285	-40.39914217	-42.88147868	-40.04688606	-47.22815298	-40.19640674	-42.42456747	-20.9187733
+3.45	87.98733982	119.138287	145.360289	75.80986959	80.95780564	75.91194279	90.56910221	83.72885133	88.47676745	39.81279026
-3.5	-58.28842405	-64.466745	-72.733310	-47.16199692	-50.13627461	-46.86988472	-55.43837953	-48.35553416	-51.05542049	-24.51916124
+3.5	79.45781198	107.106409	131.700085	68.69209984	73.26992637	68.64931536	81.71870992	74.00394766	78.17558698	35.94503662
-3.55	-66.3156469	-73.685114	-83.050387	-53.30097195	-56.72487571	-53.06823194	-62.90347762	-55.83081394	-58.96375124	-27.7923024

+3.55	71.7730141	96.807965	119.905000	62.2724392	66.3388212481025	62.1032593987885	73.74730431	65.29037453	68.94627887	32.46044871
-3.6	-75.81389565	-84.913698	-97.157550	-60.54577329	-64.5035839	-60.38821233	-71.72642552	-64.72615257	-68.37531936	-31.66022736
+3.6	62.766307	85.338468	106.648148	54.74099171	58.21033557	54.42821571	64.4073326	55.13047375	58.18571058	28.37658645
-3.65	-84.38126214	-95.337917	-112.795586	-67.06475229	-71.5057008	-66.97910659	-79.67636677	-72.79104722	-76.90899592	-35.14494913
+3.65	54.66970104	75.595714	95.278577	48.0010657	50.9386102	47.56363952	56.05887115	46.09088689	48.61225914	24.72544628
-3.7	-94.4330639	-107.925552	-131.943319	-74.69618741	-79.70567624	-74.69929051	-88.99472914	-82.29793962	-86.9692889	-39.22894516
+3.7	45.30265462	64.830769	82.588023	40.15125534	42.47216461	39.57296162	46.34663097	35.62068492	37.52433398	20.47700219
-3.75	-103.4291033	-119.519573	-149.659466	-81.51177463	-87.03149847	-81.5980235	-97.32683707	-90.8434081	-96.01285602	-42.88018699
+3.75	36.98452527	55.762549	71.781496	33.17445863	34.9496286	32.47454469	37.72375543	26.86881561	28.2829638	16.70436874
-3.8	-113.907057	-133.418713	-170.958182	-89.4345352	-95.55010141	-89.6216329	-107.0233065	-100.837199	-106.5898859	-47.12872867
+3.8	27.36770332	45.831510	59.808658	25.10159513	26.24786458	24.26504221	27.75659241	18.51026544	19.60496039	12.34280671
-3.85	-123.2202251	-146.135278	-190.473720	-96.46333272	-103.1098156	-96.74352385	-115.6349381	-109.7542079	-116.0278964	-50.90143176
+3.85	19.14779458	37.545350	50.426307	17.97129476	18.56429797	17.01746645	18.96194723	18.37949152	19.45538861	8.493738216
-3.9	-133.9968908	-161.285452	-213.731425	-104.5821077	-111.8444037	-104.9737804	-125.5922081	-120.1102445	-126.9896779	-55.26303751
+3.9	19.14779458	30.075445	43.972617	14.43041745	15.53097268	14.64039752	17.73130356	18.37949152	19.45538861	7.712625644
-3.95	-143.5156801	-175.066094	-234.873332	-111.7407505	-119.5482322	-112.2341467	-134.3807176	-129.2896414	-136.7065588	-59.11214218
+3.95	19.14779458	29.350486	43.320155	14.43041745	15.53097268	14.64039752	17.73130356	18.37949152	19.45538861	7.712625644
-5	-154.4636203	-191.394135	-259.886501	-119.9601974	-128.3961288	-120.5742704	-144.4814784	-139.8832691	-147.9211046	-63.53533367
+5	19.14779458	29.074095	43.071402	14.43041745	15.53097268	14.64039752	17.73130356	18.37949152	19.45538861	7.712625644

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.05490333	-15.81955878	-16.96110734	-23.57216999	-8.860405026	-11.96883646	-13.71037417	-15.35606096	-17.09391867
End Shear	90.85846337	121.6705031	124.3590377	137.2088372	73.14722463	98.62618572	111.7781239	122.5269202	133.5671807
-0.05	-11.05490333	-15.81955878	-16.96110734	-23.63479158	-8.860405026	-11.96883646	-13.71037417	-15.35606096	-17.09391867
+0.05	84.75742477	112.8661986	114.8666086	123.1300132	68.25984274	92.03125505	104.2189962	114.0721417	124.16452
-0.1	-11.05490333	-15.81955878	-16.96110734	-23.84931376	-8.860405026	-11.96883646	-13.71037417	-15.35606096	-17.09391867
+0.1	78.48033001	103.8222165	105.1316178	109.1556883	63.23299536	85.24519121	96.44181097	105.3784033	114.5016654
-0.15	-11.82291138	-15.81955878	-16.96110734	-24.16161599	-9.921357388	-13.27357252	-13.79873493	-15.35606096	-17.09391867
+0.15	73.03394926	96.00711626	96.7449051	97.64896858	58.87011591	79.3557886	89.69629757	97.84560995	106.1377529
-0.2	-18.09889283	-16.47069189	-16.96110734	-24.6599181	-14.94047069	-20.05100195	-21.56689223	-21.50020544	-21.49678124
+0.2	66.88090509	87.21543724	87.34024864	85.29952664	53.93965842	72.70059616	82.07839805	89.34758071	96.71212663
-0.25	-23.54389387	-23.60133109	-20.05398103	-25.21844501	-19.29375761	-25.9296927	-28.326957	-29.02187797	-29.3233602
+0.25	61.57514443	79.66807332	79.2939204	75.60494916	49.6867811	66.96035173	75.51204117	82.03061721	88.6055064
-0.3	-29.69489095	-32.18899001	-28.13405703	-27.57298965	-24.21002258	-32.56903446	-35.96637745	-37.61946874	-38.94353049
+0.3	55.6194704	71.23605111	70.33693195	65.07878727	44.91136761	60.51521855	68.1443455	73.83021257	79.53076191
-0.35	-34.99845139	-40.0671218	-35.46966589	-33.87370355	-28.44765478	-38.29225594	-42.5558487	-45.04335725	-47.25909306
+0.35	50.51848278	64.05034241	62.73363364	56.86122056	40.81981223	54.99341737	61.83669199	66.81826046	71.78087967
-0.4	-40.95114634	-48.94720878	-44.87582511	-41.97574227	-33.20241736	-44.71432753	-49.95485165	-53.38861094	-56.61688985
+0.4	44.83349273	56.0853242	54.34164002	48.00477829	36.25809359	48.83752182	54.81011877	59.01739009	63.17066061
-0.45	-46.04911922	-56.58627826	-53.3279784	-49.3471211	-37.27307322	-50.21279979	-56.29418186	-60.54712024	-64.65315633
+0.45	40.00143126	49.35521772	47.28404513	41.20330221	32.37918659	43.6034412	48.84072034	52.39962347	55.87696025
-0.5	-51.73019278	-65.13948538	-62.82126948	-58.62441606	-41.80768077	-56.33841754	-63.36185104	-68.53812686	-73.63492571
+0.5	34.66044402	41.96455343	39.57437696	34.40117508	28.08981616	37.81596714	42.24618184	45.10020801	47.84491618
-0.55	-56.55841907	-72.44556638	-70.957297	-66.7935395	-45.66004448	-61.54284439	-69.37149481	-75.34207536	-81.29245316
+0.55	30.16145724	35.78396568	33.16515032	28.80935706	24.47487088	32.93890418	36.6945904	38.96580338	41.10684311
-0.6	-61.89455505	-80.56453309	-80.03065225	-76.24446717	-49.91584498	-67.29282783	-76.01691424	-82.87691598	-89.78456024
+0.6	25.23779592	29.07500696	26.25514535	22.84827572	20.51650166	27.59903475	30.62300328	32.26976558	33.76662399
-0.65	-66.38888352	-87.44369212	-87.74789542	-84.56295104	-53.49859083	-72.13393054	-81.61730766	-89.23713102	-96.9638946
+0.65	21.13604179	23.537877	20.72623559	18.11710797	17.216846	23.14826285	25.56876314	26.70789134	27.68361834
-0.7	-71.30676397	-95.0210811	-96.28397401	-95.33636967	-57.41693133	-77.42909585	-87.74956208	-96.21388795	-104.8526797
+0.7	16.70301361	17.6179832	15.31687116	13.50443998	13.64812949	18.33517966	20.11104157	20.71713275	21.14887324
-0.75	-75.4030424	-101.3793886	-103.479762	-106.0030847	-60.67873634	-81.83759596	-92.86116127	-102.0411935	-111.4543943
+0.75	13.06264882	13.00756743	11.06990556	9.920590023	10.71507737	14.37998904	15.6337155	15.81698358	15.82037944
-0.8	-79.82934893	-108.3078354	-111.3612348	-118.1328246	-64.20096453	-86.59875975	-98.38933484	-108.3579463	-118.6262007
+0.8	9.193576772	8.41756156	7.520144511	6.900920172	7.594669484	10.17287574	10.88077572	10.85348734	10.85290144
-0.85	-83.46342422	-114.0513593	-117.9329193	-129.9874872	-67.09051131	-90.50536623	-102.9325937	-113.5631706	-124.550844
+0.85	6.07875293	5.761412252	4.829834355	4.652578162	5.079542797	6.782558138	7.059908243	7.057986435	7.057424667
-0.9	-87.32483998	-120.2235222	-125.0424565	-143.7644578	-70.15797499	-94.65334647	-107.7657669	-119.1180153	-130.8920306
+0.9	3.289446917	3.437601256	3.6532102	4.425801835	2.466090635	3.544100171	3.678200368	3.677741234	3.748227617
-0.95	-90.43256237	-125.2583316	-130.8873653	-156.0918027	-72.62394202	-97.98877419	-111.6611242	-123.6119664	-136.0401597
+0.95	2.426586798	3.437601256	3.6532102	4.337318414	1.946493611	2.630032383	3.009677107	3.369703184	3.748227617
-1	-93.6557696	-130.5668656	-137.1076305	-170.3131549	-75.1779882	-101.4443893	-115.7083913	-128.3029838	-141.4370737
+1	2.43E+00	3.44E+00	3.65E+00	4.31E+00	1.95E+00	2.63E+00	3.01E+00	3.37E+00	3.75E+00
(Span 2) -2	-8.51E+00	-1.21E+01	-1.28E+01	-1.51E+01	-6.83E+00	-9.22E+00	-1.06E+01	-1.18E+01	-1.31E+01
+2	9.38E+01	131.4373863	138.6495422	185.0024491	75.2718969	101.5779691	115.9382737	128.7030701	142.046311
-2.05	-8.51E+00	-1.21E+01	-1.28E+01	-1.51E+01	-6.83E+00	-9.22E+00	-1.06E+01	-1.18E+01	-1.31E+01
+2.05	90.32591221	125.7344321	132.0120702	170.7867013	72.51419647	97.84623694	111.5680693	123.636507	136.2193754
-2.1	-8.510382262	-12.05615275	-12.8123235	-15.29684428	-6.826627764	-9.223894786	-10.5553622	-11.81802466	-13.14556337
+2.1	86.18232604	119.1136018	124.4170505	155.618589	69.22297018	93.39470711	106.3779705	117.6630527	129.3951178
-2.15	-8.510382262	-12.05615275	-12.8123235	-15.55397938	-6.826627764	-9.223894786	-10.5553622	-11.81802466	-13.14556337
+2.15	81.84387285	112.3175414	116.7120421	141.1372054	65.77136248	88.72794453	100.9552195	111.4565542	122.3412539
-2.2	-12.34706844	-12.42200206	-12.8123235	-15.95625349	-10.11974919	-13.58501752	-14.79832202	-15.03496749	-15.10926326
+2.2	76.91280701	104.7171276	108.1802706	125.7311113	61.84317562	83.41832898	94.80205352	104.445561	114.4065833
-2.25	-16.85905737	-18.29940799	-16.01911072	-16.47393567	-13.75340511	-18.4861649	-20.35341949	-21.13007803	-21.75129046

+2.25	71.9372324	97.15296234	99.76294496	111.6175215	57.87523222	78.05625376	88.60200266	97.40767729	106.4698629
-2.3	-21.94468903	-25.172284	-22.63517211	-21.58514674	-17.84374723	-24.00452791	-26.62447305	-28.04185688	-29.31913644
+2.3	66.45232963	88.91507292	90.66832266	97.28667646	53.4969971	72.14090323	81.77548427	89.68393613	97.78696636
-2.35	-27.04039852	-32.17096345	-29.86204554	-27.8210578	-21.93772024	-29.52885615	-32.91613881	-35.00261767	-36.97072877
+2.35	61.06161169	80.90781053	81.89390117	84.52521919	49.19029162	66.32324363	75.07338436	82.12321935	89.31145281
-2.4	-32.62365311	-39.94587056	-37.98202623	-34.93548325	-26.41913754	-35.57704332	-39.81765041	-42.66321137	-45.4201805
+2.4	55.25653638	72.29583247	72.37846751	72.1550348	44.54892661	60.05450222	67.86327104	74.01153603	80.24252965
-2.45	-38.0811032	-47.63895718	-46.09507229	-42.3699766	-30.79585111	-41.4848346	-46.57063842	-50.18107059	-53.73726316
+2.45	49.67263107	64.03585503	63.60448565	61.4480965	40.08103163	54.02098554	60.85631792	66.14047589	71.41789742
-2.5	-43.92831827	-55.97377288	-54.96090681	-51.75142857	-35.48142938	-47.81049329	-53.81289297	-58.26568832	-62.70615003
+2.5	43.63409987	55.55222536	54.51074961	51.26531867	35.2457465	47.49229489	53.44831512	57.85818565	62.25349599
-2.55	-49.65634696	-64.03627224	-63.60490478	-61.44849503	-40.08126968	-54.02129671	-60.82465957	-66.12581105	-71.40419069
+2.55	38.08083748	47.63855378	46.09467366	42.36968001	30.79561705	41.48453697	46.57028693	50.18068996	53.7368551
-2.6	-55.54933138	-72.72408517	-72.84268018	-72.73262001	-44.78312148	-60.37077661	-68.22676279	-74.41995256	-80.69856379
+2.6	32.3398059	39.5481737	37.56463761	34.56714588	26.19138643	35.26964714	39.46658326	42.27297131	44.98910741
-2.65	-61.06187605	-80.90819855	-81.89432687	-84.52566395	-49.19051721	-66.32355629	-75.07374433	-82.1236131	-89.31189423
+2.65	27.04013949	32.17059313	29.86168568	27.8208149	21.9374927	29.52856613	32.91580831	35.00226162	36.97033717
-2.7	-66.73193921	-89.33271375	-91.12769837	-97.97140448	-53.72029498	-72.44257546	-82.12330949	-90.07690832	-98.2280838
+2.7	21.68289662	24.81554807	22.26926455	21.27196727	17.63329747	23.72057961	26.30142627	27.68513261	28.92778044
-2.75	-71.93748602	-97.15333553	-99.76335775	-111.6180143	-57.8754483	-78.05653666	-88.6023304	-97.40804804	-106.4702544
+2.75	16.85881757	18.29908701	16.0188362	16.47393579	13.75321147	18.48590437	20.35313221	21.12976209	21.75095627
-2.8	-77.16754887	-105.1070359	-108.6160362	-126.4822855	-62.04623418	-83.69275353	-95.11972154	-104.8068207	-114.8146833
+2.8	12.11903292	12.14611924	12.8123241	15.9327508	9.935944504	13.33713264	14.51780987	14.72801639	14.77572908
-2.85	-81.84410566	-112.3179038	-116.7124257	-141.1216421	-65.77155832	-88.72818674	-100.9555104	-111.4568859	-122.3416171
+2.85	8.510382481	12.05615293	12.8123241	15.55397948	6.82662775	9.223895076	10.5553623	11.81802474	13.14556329
-2.9	-86.40049879	-119.4586585	-124.8104939	-156.3800057	-69.39642302	-93.62927051	-106.6509702	-117.976345	-129.75205
+2.9	8.510382481	12.05615293	12.8123241	15.28646729	6.82662775	9.223895076	10.5553623	11.81802474	13.14556329
-2.95	-90.32609818	-125.7347433	-132.0123947	-170.787226	-72.51434813	-97.84644908	-111.5683025	-123.6367848	-136.2196729
+2.95	8.510382481	12.05615293	12.8123241	15.14480944	6.82662775	9.223895076	10.5553623	11.81802474	13.14556329
-3	-93.9751967	-131.7204857	-138.9819388	-185.7431381	-75.40639637	-101.7600261	-116.152095	-128.9521387	-142.3339692
+3	8.510382481	12.05615293	12.8123241	15.09934558	6.82662775	9.223895076	10.5553623	11.81802474	13.14556329
(Span 3) -4	-2.426586861	-3.44E+00	-3.65E+00	-4.31E+00	-1.946493607	-2.630032466	-3.009677135	-3.369703207	-3.748227596
+4	93.46476605	130.249237	136.7334867	169.4364494	75.02676191	101.2397326	115.4682963	128.0239426	141.1152479
-3.05	-2.426586861	-3.44E+00	-3.65E+00	-4.33E+00	-1.946493607	-2.630032466	-3.009677135	-3.369703207	-3.748227596
+3.05	90.64426658	125.603995	131.290428	156.9922314	72.79181627	98.21586804	111.9267044	123.9190377	136.3926397
-3.1	-3.434778221	-3.43895303	-3.653210372	-4.434448397	-2.6211387	-3.714781833	-3.87730918	-3.876834578	-3.876384314
+3.1	87.09276467	119.8501989	124.6108256	142.9124045	69.97371232	94.40415118	107.4750922	118.7833415	130.5093464
-3.15	-5.866519359	-5.601886266	-4.646791743	-4.590159109	-4.908065542	-6.551433727	-6.808264475	-6.807783837	-6.807303199
+3.15	83.71383279	114.4492554	118.3896845	130.8570828	67.28952521	90.77445367	103.2458108	113.9225665	124.9605045
-3.2	-9.42614567	-8.644882611	-7.7212721	-7.070986093	-7.782344948	-10.42589119	-11.16627655	-11.13707095	-11.13646439
+3.2	79.56079897	107.8855293	110.8794844	117.3176203	63.98733394	86.3099641	98.05374926	107.9740005	118.1897688
-3.25	-12.81177579	-12.7043824	-10.81025358	-9.700682306	-10.51286073	-14.1073299	-15.32535001	-15.48004118	-15.47936393
+3.25	75.68757425	101.8228373	103.9829064	106.7589724	60.90523113	82.14373297	93.21636905	102.4465766	111.9141365
-3.3	-16.97199744	-17.97502242	-15.6427253	-13.78024445	-13.86476856	-18.62734419	-20.44206697	-21.07996319	-21.54404856
+3.3	71.00630989	94.55647825	95.75943628	94.56884944	57.17760212	77.10565389	87.37477198	95.78705789	104.3696083
-3.35	-20.85110284	-23.15521276	-20.37617727	-17.81647372	-16.98754845	-22.83900346	-25.21779943	-26.32215944	-27.26225175
+3.35	66.70298071	87.92600149	88.29008605	85.14725179	53.74890443	72.47217587	82.00880469	89.68214175	97.46666306
-3.4	-25.53862014	-29.4830881318037	-26.67384841	-23.2073272	-20.75843605	-27.9253952933781	-30.99383757	-32.67832367	-34.2139705836675
+3.4	61.56678579	80.06438585	79.47067786	75.64056334	49.65447479	66.93968925	75.60858735	82.41358521	89.26199148
-3.45	-29.84701298	-35.35369573	-32.7204032	-28.42346009	-24.22215877	-32.59799008	-36.30672172	-38.53761934	-40.63696187
+3.45	56.89748337	72.95999372	71.53117917	67.37094358	45.93049859	61.90824556	69.79362658	75.82034935	81.83111237
-3.5	-34.98852877	-42.41694872	-40.04494062	-34.81392682	-28.35337209	-38.17157658	-42.65116749	-45.54810964	-48.33732811
+3.5	51.37969233	64.61050265	62.23319995	58.03501599	41.52795426	55.9605355	62.92570571	68.04467178	73.0799476
-3.55	-39.66207343	-48.88407088	-46.79121903	-40.76597019	-32.10673647	-43.23580006	-48.4216319	-51.9353506	-55.36566329
+3.55	46.40857221	57.126158173965	53.9262513996117	49.9083398788678	37.560024287403	50.6004131067302	56.7412536447926	61.0522926709052	65.22060685

-3.6	-45.18424953	-56.57535075	-54.8567131	-48.54256426	-36.53962105	-49.21739552	-55.2435678	-59.49824999	-63.70102756
+3.6	40.58252533	48.39607707	44.26699583	41.44966726	32.90800037	44.31665914	49.49654208	52.87140796	56.03659745
-3.65	-50.15879479	-63.54500211	-62.20002505	-56.29221833	-40.53127264	-54.60400801	-61.39203476	-66.32426067	-71.23526311
+3.65	35.37371691	40.6257441	35.99000613	34.32526649	28.74743767	38.69714361	43.02217546	45.56903093	47.84824054
-3.7	-55.98831263	-71.75695688	-70.88917431	-65.72002588	-45.20717748	-60.91443055	-68.6005429	-74.33765276	-80.0919415
+3.7	29.31271211	31.62245817	27.60671502	27.12466662	23.9045862	32.15653115	35.49159073	37.08485639	38.34503662
-3.75	-61.19970565	-79.13523404	-78.72685474	-74.93075138	-49.38581043	-66.55412533	-75.04751471	-81.5132576	-88.03263347
+3.75	23.93038986	24.1086551	20.48980581	25.26267836	19.60271022	26.34690562	28.80688894	29.56171943	29.92710565
-3.8	-67.26322479	-87.76051374	-87.92236652	-86.03742074	-54.24608381	-73.11419291	-82.55168288	-89.87522736	-97.29704311
+3.8	17.70774318	16.0776613	16.9611078	24.6243821	14.62768471	19.62864262	21.08134692	21.01862745	21.01518669
-3.85	-72.64733668	-95.45351968	-96.15171668	-96.8455546	-58.56037797	-78.9376857	-89.2175524	-97.31128266	-105.5447507
+3.85	12.21608471	15.81955903	16.9611078	24.18835413	10.23581612	13.69819228	14.26580248	15.35606133	17.0939189
-3.9	-78.87156162	-104.384776	-105.7362256	-109.9956661	-63.54636631	-85.66821585	-96.92646393	-105.9199162	-115.1032092
+3.9	11.05490375	15.81955903	16.9611078	23.83144829	8.860405195	11.96883698	13.71037453	15.35606133	17.0939189
-3.95	-84.3641918	-112.2985112	-114.2546161	-122.2255501	-67.94500144	-91.60622095	-103.7317383	-113.5271807	-123.5584878
+3.95	11.05490375	15.81955903	16.9611078	23.64373581	8.860405195	11.96883698	13.71037453	15.35606133	17.0939189
-5	-90.67582963	-121.4283946	-124.1107922	-136.985198	-72.99805308	-98.42803001	-111.5544778	-122.2805607	-133.2973457
+5	11.05490375	15.81955903	16.9611078	23.57217007	8.860405195	11.96883698	13.71037453	15.35606133	17.0939189

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-30.61197965	-33.84922926	-19.2428	-23.1672	-24.992
End Shear	222.0820872	239.085405	145.1422	175.0027	185.9114
-0.05	-30.61197965	-33.84922926	-19.2428	-23.1672	-24.992
+0.05	205.0445387	220.5633765	134.409	162.1078	171.9926
-0.1	-30.61197965	-33.84922926	-19.2428	-23.1672	-24.992
+0.1	187.5779956	201.2786666	123.3932	148.8703	157.7104
-0.15	-30.61197965	-33.84922926	-19.2428	-23.1672	-24.992
+0.15	172.5326907	184.6894589	113.8855	137.4427	145.3915
-0.2	-30.61197965	-33.84922926	-20.0412	-23.1672	-24.992
+0.2	155.6636891	166.1157913	103.2031	124.6001	131.5602
-0.25	-34.30319149	-36.38047035	-25.3953	-31.2768	-30.7121
+0.25	141.2332868	150.2511884	94.04465	113.5869	119.7107
-0.3	-48.57944361	-50.02487795	-35.5076	-43.4775	-43.8207
+0.3	125.1722237	132.6227762	83.82712	101.2969	106.5011
-0.35	-62.2480829	-62.61976896	-45.1863	-55.0901	-55.9963
+0.35	111.5407927	117.6877104	75.133	90.83631	95.27046
-0.4	-79.74166445	-81.09058221	-56.1086	-68.1922	-70.2337
+0.4	96.49806363	101.2387074	65.51184	79.25669	82.85363
-0.45	-94.92893651	-98.0584182	-65.5159	-79.4745	-82.5042
+0.45	83.849703	87.43811346	57.39708	69.48672	72.39139
-0.5	-111.9902373	-117.1450938	-76.0622	-92.1202	-96.2702
+0.5	70.03567297	72.40274152	48.50379	58.77529	60.93823
-0.55	-126.6152485	-133.5288859	-85.083	-102.934	-108.054
+0.55	58.55448205	59.94151004	41.08343	49.834	51.39399
-0.6	-142.9287794	-151.8310051	-95.1219	-114.966	-121.177
+0.6	46.17952412	46.55393402	33.0495	40.14853	41.07541
-0.65	-156.8074169	-167.4258274	-103.641	-125.173	-132.324
+0.65	36.04957216	36.46522852	26.43858	32.17396	32.59871
-0.7	-172.1627736	-184.7091859	-113.041	-136.432	-144.635
+0.7	26.1849417	27.00833301	19.39548	23.67222	23.79794
-0.75	-185.1109802	-199.3101245	-120.944	-145.895	-154.995
+0.75	18.78234832	19.70971118	14.22173	17.25546	17.03483
-0.8	-199.2977664	-215.3405266	-129.573	-156.225	-166.321
+0.8	12.17105709	12.49742824	10.34768	11.34031	12.04103
-0.85	-211.1314467	-228.7426891	-136.744	-164.805	-175.746
+0.85	7.751148193	7.652775403	7.10828	7.816673	8.07819
-0.9	-223.9392832	-243.2859456	-144.472	-174.048	-185.917
+0.9	6.613922656	7.298499277	4.168502	5.026045	5.411718
-0.95	-234.4743623	-255.2843952	-150.796	-181.607	-194.256
+0.95	6.613922656	7.298499277	4.168502	5.026045	5.411718
-1	-245.6928813	-268.106288	-157.491	-189.604	-203.102
+1	6.61E+00	7.30E+00	4.17E+00	5.03E+00	5.41E+00
(Span 2) -2	-2.32E+01	-2.56E+01	-1.46E+01	-1.76E+01	-1.90E+01
+2	248.4590691	271.5431523	158.801	191.1197	204.9796
-2.05	-2.32E+01	-2.56E+01	-1.46E+01	-1.76E+01	-1.90E+01
+2.05	236.4738548	257.8701284	151.6255	182.5409	195.5056
-2.1	-23.19595988	-25.59686683	-14.6195	-17.627	-18.9797
+2.1	222.7736903	242.33044	143.3456	172.632	184.6097
-2.15	-23.19595988	-25.59686683	-14.6195	-17.627	-18.9797
+2.15	208.8864572	226.6538032	134.888	162.5024	173.5096
-2.2	-23.19595988	-25.59686683	-14.6195	-17.627	-18.9797
+2.2	193.5193971	209.3782266	125.4681	151.2126	161.1744
-2.25	-27.63175657	-28.13209832	-20.3623	-24.821	-24.9571

+2.25	178.3670749	192.4069977	116.1265	140.01	148.9658
-2.3	-39.80210511	-40.17071428	-28.5622	-34.7177	-35.4711
+2.3	162.0035784	174.1418597	105.9856	127.8422	135.7361
-2.35	-52.76517349	-54.22225801	-36.9555	-44.8375	-46.2642
+2.35	146.2231124	156.5850618	96.15816	116.0442	122.9364
-2.4	-67.33630471	-70.09896887	-46.32	-56.1189	-58.335
+2.4	129.1168718	138.0766838	85.51822	103.3259	109.055
-2.45	-81.9005146	-86.03743059	-55.6206	-67.3152	-70.3482
+2.45	113.3494736	120.6433393	75.54008	91.27306	96.14636
-2.5	-97.82182108	-103.5271908	-65.7307	-79.4784	-83.4311
+2.5	97.01328676	102.6381313	65.21855	78.86244	82.76781
-2.55	-113.350229	-120.6435452	-75.5406	-91.2737	-96.147
+2.55	81.89984857	86.03726246	55.62013	67.31468	70.34761
-2.6	-129.9512546	-139.0000501	-86.0392	-103.953	-109.735
+2.6	66.58721757	69.28146046	45.84006	55.54091	57.71573
-2.65	-146.2238841	-156.5852729	-96.1586	-116.045	-122.937
+2.65	52.76457429	54.22208856	36.95504	44.83697	46.26362
-2.7	-162.8299355	-175.0621015	-106.499	-128.458	-136.405
+2.7	39.14596081	39.28376409	28.13549	34.20291	34.92314
-2.75	-178.3678231	-192.4071697	-116.127	-140.011	-148.966
+2.75	27.63129205	28.13200157	20.36197	24.82051	24.95663
-2.8	-194.3040547	-210.2580937	-125.95	-151.791	-161.805
+2.8	23.19596027	25.59686675	14.61952	17.62705	18.97966
-2.85	-208.8871479	-226.6539933	-134.888	-162.503	-173.51
+2.85	23.19596027	25.59686675	14.61952	17.62705	18.97966
-2.9	-223.4831044	-243.1325663	-143.776	-173.147	-185.175
+2.9	23.19596027	25.59686675	14.61952	17.62705	18.97966
-2.95	-236.4744616	-257.8702711	-151.626	-182.541	-195.506
+2.95	23.19596027	25.59686675	14.61952	17.62705	18.97966
-3	-249.0596772	-272.2302554	-159.159	-191.547	-205.453
+3	23.19596027	25.59686675	14.61952	17.62705	18.97966
(Span 3) -4	-6.613922767	-7.298499255	-4.1685	-5.02604	-5.41172
+4	245.0178821	267.3337819	157.0891	189.1248	202.5708
-3.05	-6.613922767	-7.298499255	-4.1685	-5.02604	-5.41172
+3.05	235.2010989	256.1140478	151.2313	182.1271	194.8305
-3.1	-6.613922767	-7.298499255	-4.1685	-5.02604	-5.41172
+3.1	223.1615534	242.4021503	144.0038	173.4879	185.3007
-3.15	-7.513763316	-7.364842265	-6.89102	-7.57534	-7.80791
+3.15	211.9541155	229.6762467	137.2418	165.4006	176.4002
-3.2	-12.55994528	-12.9111361	-10.5849	-11.5997	-12.3366
+3.2	198.4304988	214.3601041	129.0467	155.5949	165.6298
-3.25	-18.297541	-19.20952011	-13.9672	-16.8182	-16.6367
+3.25	186.0164977	200.3329488	121.4955	146.5559	155.7187
-3.3	-26.77559661	-27.55037611	-19.8194	-24.1842	-24.3113
+3.3	171.219088	183.6468227	112.4642	135.7416	143.8787
-3.35	-35.36630334	-35.47411931	-25.9825	-31.6236	-32.0144
+3.35	157.7826061	168.5232724	104.2389	125.8891	133.1065
-3.4	-46.92925884	-47.3629494	-33.5375	-40.737	-41.7016
+3.4	141.921836	150.7012878	94.503	114.2239	120.368
-3.45	-57.75785941	-59.07768341	-40.5675	-49.2122	-50.7308
+3.45	127.6470179	134.6863164	85.7186	103.696	108.8842
-3.5	-70.87870256	-73.31842619	-49.0476	-59.4304	-61.6381
+3.5	110.9332731	115.9626675	75.40951	91.33765	95.41797
-3.55	-82.96653977	-86.47494096	-56.8295	-68.8033	-71.6601
+3.55	96.00408368	99.26126972	66.18109	80.27227	83.37229
-3.6	-97.42127091	-102.2464511	-66.1032	-79.9686	-83.6164
+3.6	78.64774812	79.87007155	55.4303	67.37865	69.34925

-3.65	***-110.5841597***	***-116.6398788***	***-74.5221***	***-90.1011***	***-94.4816***
+3.65	***63.24840256***	***64.13998613***	***45.87296***	***55.91395***	***56.89118***
-3.7	***-126.1623919***	***-133.7079101***	***-84.4578***	***-102.056***	***-107.316***
+3.7	***47.60381538***	***49.17615626***	***34.8119***	***42.64276***	***42.9859***
-3.75	***-140.2163654***	***-149.1333307***	***-93.3985***	***-112.81***	***-118.875***
+3.75	***35.14277937***	***37.23692695***	***25.96977***	***32.03171***	***31.45919***
-3.8	***-156.707722***	***-167.2636244***	***-103.865***	***-125.396***	***-132.417***
+3.8	***30.61197916***	***33.84938866***	***19.65634***	***23.16721***	***24.99204***
-3.85	***-171.4685735***	***-183.5161953***	***-113.212***	***-136.634***	***-144.52***
+3.85	***30.61197916***	***33.84938866***	***19.24283***	***23.16721***	***24.99204***
-3.9	***-188.6626639***	***-202.4746239***	***-124.078***	***-149.693***	***-158.598***
+3.9	***30.61197916***	***33.84938866***	***19.24283***	***23.16721***	***24.99204***
-3.95	***-203.9464312***	***-219.3493587***	***-133.717***	***-161.276***	***-171.095***
+3.95	***30.61197916***	***33.84938866***	***19.24283***	***23.16721***	***24.99204***
-5	***-221.6328788***	***-238.9017295***	***-144.85***	***-174.652***	***-185.539***
+5	***30.61197916***	***33.84938866***	***19.24283***	***23.16721***	***24.99204***

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.95E-13	-3.46E-13	-7.27E-13	-2.74E-13	-3.08E-13	-2.27E-13	-2.66E-13	-2.52E-13	-2.65E-13	-2.09E-13
End Shear	5.95E-13	4.57E-13	7.44E-13	3.26E-13	3.26E-13	3.29E-13	3.96E-13	2.65E-13	2.81E-13	2.10E-13
-0.05	-143.5381312	-218.0557071	-323.0355144	-108.228124	-116.482293	-109.80298	-132.98477	-137.846187	-145.915412	-57.84469322
+0.05	987.9803335	1349.21846	1797.907107	842.7593624	901.7554259	846.6478693	1013.980013	975.430064	1031.404105	445.4091842
-0.1	-287.0762624	-436.1114142	-646.0710289	-216.456248	-232.964586	-219.60596	-265.96954	-275.692373	-291.830825	-115.6893864
+0.1	1847.864131	2528.510819	3316.763085	1571.132144	1680.356645	1577.237718	1887.32736	1804.624677	1908.001319	828.9444179
-0.15	-430.6143936	-654.1671213	-969.1065433	-324.684373	-349.446879	-329.40894	-398.95431	-413.53856	-437.746237	-173.5340797
+0.15	2671.556695	3538.646392	4637.173637	2185.690748	2336.526115	2192.474096	2621.148132	2488.975619	2631.286582	1151.381786
-0.2	-574.1525248	-872.2228284	-1292.142058	-432.912497	-465.929172	-439.21192	-531.93908	-551.384746	-583.661649	-231.3787729
+0.2	3349.515082	4381.249387	5667.136852	2688.385487	2872.415769	2694.417664	3218.048892	3050.584386	3225.636525	1413.859429
-0.25	-717.690656	-1090.278536	-1615.177572	-541.140621	-582.411465	-549.014901	-664.923849	-689.230933	-729.577061	-289.2234661
+0.25	3877.187281	5058.565996	6418.477197	3081.836201	3290.898599	3085.809098	3706.906912	3504.367037	3707.407136	1618.289362
-0.3	-861.2287872	-1308.334243	-1938.213087	-649.368745	-698.893758	-658.817881	-797.908619	-827.077119	-875.492474	-347.0681593
+0.3	4265.424696	5573.465066	7010.249938	3369.333824	3595.570247	3391.301662	4072.847859	3830.370948	4051.344505	1766.476892
-0.35	-1004.766918	-1526.38995	-2261.248601	-757.596869	-815.376051	-768.620861	-930.893389	-964.923306	-1021.40789	-404.9128526
+0.35	4517.332139	5929.436642	7403.142389	3561.272133	3811.103396	3596.575963	4312.708984	4050.353522	4285.441345	1860.232167
-0.4	-1148.30505	-1744.445657	-2584.284116	-865.824993	-931.858344	-878.423841	-1063.87816	-1102.76949	-1167.3233	-462.7575458
+0.4	4639.071808	6130.593679	7540.47869	3670.912185	3924.839874	3702.362179	4431.879638	4147.346649	4389.082162	1902.132878
-0.45	-1291.843181	-1962.501364	-2907.31963	-974.053118	-1048.34064	-988.226821	-1196.86293	-1240.61568	-1313.23871	-520.602239
+0.45	4637.701611	6181.670794	7438.287911	3686.430678	3938.348646	3713.107804	4436.75972	4127.307136	4368.851036	1892.083417
-0.5	-1435.381312	-2180.557071	-3230.355144	-1082.28124	-1164.82293	-1098.0298	-1329.8477	-1378.46187	-1459.15412	-578.4469322
+0.5	4521.175877	6100.929743	7229.507465	3622.775313	3871.607879	3649.876025	4364.364723	4067.337311	4305.01085	1869.48327
-0.55	-1578.919443	-2398.612778	-3553.390659	-1190.50937	-1281.30522	-1207.83278	-1462.83247	-1516.30805	-1605.06953	-636.2916254
+0.55	4324.702502	5882.734334	7139.451143	3476.785327	3717.709806	3506.766405	4196.924976	3924.967786	4153.490901	1806.00469
-0.6	-1722.457574	-2616.668485	-3876.426173	-1298.73749	-1397.78752	-1317.63576	-1595.81724	-1654.15424	-1750.98495	-694.1363187
+0.6	4069.34123	5529.846057	6798.604625	3254.199209	3480.780022	3285.033098	3933.575203	3676.467858	3889.733986	1698.973496
-0.65	-1865.995706	-2834.724192	-4199.461688	-1406.96561	-1514.26981	-1427.43874	-1728.80201	-1792.00043	-1896.90036	-751.9810119
+0.65	3713.617822	5049.254282	6202.120497	2964.93778	3168.929546	2992.291665	3583.410913	3331.113977	3523.574864	1552.262005
-0.7	-2009.533837	-3052.7799	-4522.497202	-1515.19374	-1630.7521	-1537.24172	-1861.78678	-1929.84661	-2042.81577	-809.8257051
+0.7	3267.838384	4448.571172	5366.030542	2619.735207	2790.991244	2636.838589	3155.874527	2899.059743	3065.777032	1370.104532
-0.75	-2153.071968	-3270.835607	-4845.532717	-1623.42186	-1747.2344	-1647.0447	-1994.77155	-2067.6928	-2188.73118	-867.6703983
+0.75	2743.205207	3736.031163	4399.858403	2219.251672	2358.697669	2227.651144	2661.738723	2394.317597	2533.283594	1157.097875
-0.8	-2296.610099	-3488.891314	-5168.568231	-1731.64999	-1863.71669	-1756.84768	-2127.75632	-2205.53898	-2334.6466	-925.5150915
+0.8	2151.815613	2920.489852	3440.658388	1772.825879	1878.278062	1774.386063	2112.599767	1825.889384	1931.386895	918.1999509
-0.85	-2440.14823	-3785.180201	-5562.013607	-1839.87811	-1980.19898	-1866.65066	-2260.74109	-2343.38517	-2480.56201	-983.3597848
+0.85	1506.66517	2089.659596	2545.832363	1290.467338	1359.804934	1287.38198	1520.880729	1201.542329	1270.477338	658.7313403
-0.9	-2583.686362	-4296.795666	-6149.252897	-1948.10624	-2096.68127	-1976.45364	-2393.72586	-2481.23136	-2626.47742	-1041.204478
+0.9	829.6090686	1390.734134	1758.212828	782.8549093	820.2788224	777.656913	900.3525777	581.7781712	615.2968378	384.3752474
-0.95	-2727.224493	-4992.614538	-6902.275251	-2056.33436	-2213.16357	-2086.25662	-2526.71063	-2619.07754	-2772.39283	-1099.049171
+0.95	597.6642735	856.8881272	1220.793797	452.1806491	486.5361402	458.5945419	555.2198357	569.2874263	602.5359173	240.7406431
-1	-2870.762672	-5844.609018	-8045.894897	-2164.5625	-2329.64582	-2196.05961	-2659.69537	-2756.92372	-2918.30822	-1156.893882
+1	629.1202857	861.2128275	1248.3489	475.9796367	512.1433079	482.7311005	584.4419324	599.2499174	634.248339	253.4112058
(Span 2) -2	-2870.762672	-5844.609018	-8045.894897	-2164.5625	-2329.64582	-2196.05961	-2659.69537	-2756.92372	-2918.30822	-1156.893882
+2	629.1202857	861.2128275	1248.3489	475.9796367	512.1433079	482.7311005	584.4419324	599.2499174	634.248339	253.4112058
-2.05	-2097.146462	-4254.197807	-6082.427986	-1585.64022	-1706.11283	-1608.13138	-1946.96275	-1996.29276	-2112.88372	-844.1936498
+2.05	485.7033989	816.0419313	1083.461987	367.4733325	395.3929831	372.6857047	451.2101141	462.6424075	489.6624452	204.1773609
-2.1	-1953.637474	-3334.238305	-4469.500093	-1477.13391	-1589.36251	-1498.08598	-1813.73093	-1859.68525	-1968.29783	-786.4249732
+2.1	1059.128046	1471.370129	1678.42353	962.8022256	1012.323044	957.1078364	1110.659362	728.2841142	768.6109889	465.5546505
-2.15	-1810.128486	-2677.998746	-3770.998785	-1368.6276	-1472.61218	-1388.04059	-1680.49911	-1723.07774	-1823.71193	-728.6562965
+2.15	1852.807108	2265.584617	2481.53878	1553.796882	1649.89015	1557.856777	1843.499384	1510.111825	1596.029367	788.3047441
-2.2	-1666.619498	-2291.890893	-3315.616007	-1260.12129	-1355.86186	-1277.9952	-1547.26728	-1586.47024	-1679.12603	-670.8876199
+2.2	2603.197201	3192.509935	3614.984352	2109.938045	2250.331935	2126.150787	2533.038166	2235.339403	2363.541611	1092.039603

-2.25	-1523.11051	-2141.948948	-3072.782543	-1151.61498	-1239.11153	-1167.9498	-1414.03546	-1449.86273	-1534.54014	-613.1189432
+2.25	3262.290404	4193.733468	5105.704592	2610.190607	2788.021426	2631.397385	3144.780506	2875.790478	3041.812085	1356.979651
-2.3	-1379.601523	-2040.637818	-2873.71681	-1043.10867	-1122.36121	-1057.90441	-1280.80363	-1313.25522	-1389.95424	-555.3502665
+2.3	3835.287159	5074.221239	6392.396339	3040.804539	3251.534181	3069.506291	3673.690439	3419.093452	3617.142623	1586.098547
-2.35	-1236.092535	-1939.326687	-2674.651077	-934.602355	-1005.61089	-947.859014	-1147.57181	-1176.64771	-1245.36835	-497.5815899
+2.35	4281.499489	5766.627753	7357.980571	3386.583474	3621.407909	3415.62152	4091.279479	3843.385639	4066.913714	1762.777268
-2.4	-1092.583547	-1838.015556	-2475.585344	-826.096045	-888.860562	-837.81362	-1014.33999	-1040.0402	-1100.78245	-439.8129132
+2.4	4611.827138	6268.457411	8009.464215	3641.675174	3894.823304	3673.828047	4398.112462	4147.659521	4389.434419	1892.134192
-2.45	-949.0745588	-1736.704425	-2410.056352	-717.589735	-772.110238	-727.768225	-881.108163	-903.432694	-956.196556	-382.0442366
+2.45	4797.409706	6567.950069	8319.163458	3792.792854	4054.297977	3821.909574	4576.376627	4312.261535	4564.200648	1962.489763
-2.5	-805.5655709	-1635.393295	-2410.054238	-609.083425	-655.359941	-617.722831	-747.87634	-766.825186	-811.610661	-324.2755599
+2.5	4851.112314	6665.272565	8319.401553	3844.870902	4108.693981	3872.50435	4628.486004	4349.396848	4604.22834	1980.164918
-2.55	-948.4654689	-1736.704469	-2410.052455	-717.589709	-772.110265	-727.768254	-881.108069	-903.432692	-956.196493	-382.0442299
+2.55	4758.728458	6567.962764	8319.163505	3792.798426	4054.305635	3821.910263	4576.383253	4312.261897	4564.200806	1962.491311
-2.6	-1091.882356	-1838.015601	-2475.58523	-826.096013	-888.86059	-837.81365	-1014.33989	-1040.0402	-1100.78239	-439.8129058
+2.6	4541.302732	6268.48377	8009.465204	3641.679066	3894.829154	3673.83717	4398.127332	4147.666703	4389.44173	1892.139099
-2.65	-1235.299242	-1939.326733	-2674.650963	-934.602317	-1005.61092	-947.859045	-1147.57171	-1176.64771	-1245.36828	-497.5815818
+2.65	4232.180213	5766.637849	7357.980756	3386.585637	3621.411812	3415.628495	4091.282607	3843.390732	4066.918827	1762.777912
-2.7	-1378.716129	-2040.637864	-2873.716696	-1043.10862	-1122.36124	-1057.90444	-1280.80352	-1313.25522	-1389.95417	-555.3502578
+2.7	3796.261101	5074.244733	6392.396705	3040.80566	3251.537062	3069.51213	3673.701095	3419.097156	3617.146263	1586.101879
-2.75	-1522.133016	-2141.948996	-3072.782428	-1151.61493	-1239.11156	-1167.94984	-1414.03534	-1449.86273	-1534.54007	-613.1189337
+2.75	3236.068693	4193.741897	5105.704976	2610.19156	2788.02405	2631.403213	3144.781253	2875.793508	3041.815021	1356.980075
-2.8	-1665.549903	-2291.890881	-3315.615838	-1260.12123	-1355.86189	-1277.99523	-1547.26716	-1586.47024	-1679.12596	-670.8876097
+2.8	2576.006427	3192.503616	3614.984727	2109.938772	2250.334345	2126.156393	2533.048571	2235.342175	2363.544274	1092.04331
-2.85	-1808.96679	-2677.998626	-3770.998517	-1368.62753	-1472.61221	-1388.04063	-1680.49898	-1723.07775	-1823.71186	-728.6562857
+2.85	1824.651631	2265.593505	2481.277988	1553.797844	1649.892695	1557.862411	1843.500766	1510.114284	1596.031719	788.3051074
-2.9	-1952.383676	-3334.238144	-4469.499787	-1477.13384	-1589.36254	-1498.08602	-1813.7308	-1859.68526	-1968.29775	-786.4249616
+2.9	1013.918652	1471.365177	1676.506916	962.8045562	1012.326984	957.114826	1110.671131	728.2879124	768.6147706	465.5516143
-2.95	-2095.800563	-4254.19767	-6082.4057	-1585.64014	-1706.11286	-1608.13142	-1946.96262	-1996.29277	-2112.88364	-844.1936376
+2.95	486.0153202	816.0394965	1083.354622	367.4733675	395.3930038	372.6857166	451.2100745	462.6423898	489.6624001	204.0742653
-3	-2872.16921	-5844.609053	-8045.904159	-2164.56264	-2329.64586	-2196.05964	-2659.6955	-2756.92372	-2918.30826	-1156.893864
+3	629.5243133	861.2128229	1248.3489	475.9796633	512.1433048	482.7310933	584.4419563	599.2499106	634.2483472	253.4112088
(Span 3) -4	-2.87E+03	-5844.609053	-8045.904159	-2.16E+03	-2.33E+03	-2.20E+03	-2.66E+03	-2.76E+03	-2.92E+03	-1.16E+03
+4	6.30E+02	861.2128229	1248.3489	4.76E+02	5.12E+02	4.83E+02	5.84E+02	5.99E+02	6.34E+02	2.53E+02
-3.05	-2728.560751	-4992.614556	-6902.275202	-2056.33451	-2213.16356	-2086.25666	-2526.71073	-2619.07753	-2772.39285	-1099.049171
+3.05	598.048098	856.8881241	1220.793803	452.1806804	486.5361397	458.5945388	555.2198585	569.2874148	602.5359301	240.7406485
-3.1	-2584.952291	-4296.795687	-6149.252852	-1948.10638	-2096.68127	-1976.45367	-2393.72595	-2481.23135	-2626.47744	-1041.204479
+3.1	838.2773437	1390.740497	1755.954181	782.855942	820.2768376	777.6516683	900.3619403	581.7795722	615.2981676	384.3720867
-3.15	-2441.343832	-3785.180231	-5562.013571	-1839.87824	-1980.19897	-1866.65069	-2260.74117	-2343.38516	-2480.56202	-983.3597868
+3.15	1512.385788	2089.667411	2543.120641	1290.469326	1359.804112	1287.377829	1520.872272	1201.543804	1270.479155	658.7280706
-3.2	-2297.735373	-3488.891371	-5168.568222	-1731.65011	-1863.71668	-1756.84771	-2127.7564	-2205.53897	-2334.64661	-925.5150945
+3.2	2153.659534	2920.49821	3437.58542	1772.828523	1878.279324	1774.382528	2112.592019	1825.890943	1931.388802	918.1962489
-3.25	-2154.126913	-3270.835662	-4845.532708	-1623.42198	-1747.23438	-1647.04473	-1994.77162	-2067.69279	-2188.73119	-867.6704022
+3.25	2747.321271	3736.039065	4399.858396	2219.253869	2358.698494	2227.647331	2661.730461	2394.318543	2533.284861	1157.094556
-3.3	-2010.518454	-3052.779953	-4522.497193	-1515.19385	-1630.75209	-1537.24175	-1861.78684	-1929.8466	-2042.81578	-809.8257098
+3.3	3279.958975	4448.578809	5366.030986	2619.736946	2790.99079	2636.834607	3155.86594	2899.058882	3065.776393	1370.101274
-3.35	-1866.909994	-2834.724244	-4199.461679	-1406.96572	-1514.26979	-1427.43877	-1728.80207	-1792.00042	-1896.90036	-751.9810175
+3.35	3739.05985	5049.261327	6202.120682	2964.93846	3168.927807	2992.286427	3583.400799	3331.111262	3523.572271	1552.25816
-3.4	-1723.301535	-2616.668535	-3876.426164	-1298.73759	-1397.7875	-1317.63579	-1595.81729	-1654.15423	-1750.98495	-694.1363252
+3.4	4113.007839	5529.851818	6798.604378	3254.197869	3480.776944	3285.027004	3933.564231	3676.463263	3889.729409	1698.969908
-3.45	-1579.693076	-2398.612827	-3553.39065	-1190.50946	-1281.3052	-1207.8328	-1462.83251	-1516.30804	-1605.06953	-636.2916328
+3.45	4391.082855	5882.738507	7139.451243	3476.782299	3717.704801	3506.758674	4196.93032	3924.961095	4153.4841	1806.000482
-3.5	-1436.084616	-2180.557118	-3230.355136	-1082.28133	-1164.82291	-1098.02982	-1329.84774	-1378.46186	-1459.15412	-578.4469405
+3.5	4564.269685	6100.931731	7229.507458	3622.769988	3871.600422	3649.865856	4364.367386	4067.328056	4305.001337	1869.478331
-3.55	-1292.476157	-1962.501409	-2907.319621	-974.053198	-1048.34061	-988.226841	-1196.86296	-1240.61567	-1313.2387	-520.6022482
+3.55	4623.053926	6181.66995	7438.288052	3686.43702	3938.333718	3713.100253	4436.758467	4127.301071	4368.844424	1895.116287
-3.6	-1148.867697	-1744.4457	-2584.284107	-865.825067	-931.858318	-878.42386	-1063.87818	-1102.76948	-1167.32329	-462.7575558

+3.6	4559.744725	6130.590403	7540.478998	3670.916198	3924.845946	3702.352023	4431.875242	4147.337682	4389.072471	1902.130323
-3.65	-1005.259238	-1526.389991	-2261.248592	-757.596936	-815.376023	-768.620879	-930.893407	-964.923297	-1021.40787	-404.9128635
+3.65	4472.204798	5929.430862	7403.142777	3561.273147	3811.10622	3596.563099	4312.701381	4050.358131	4285.445923	1860.229344
-3.7	-861.6507787	-1308.334282	-1938.213078	-649.368805	-698.893728	-658.817897	-797.90863	-827.077111	-875.49246	-347.0681712
+3.7	4257.634136	5573.456332	7010.250022	3369.331565	3595.569636	3391.304664	4072.836332	3830.371796	4051.345096	1766.473421
-3.75	-718.0423193	-1090.278573	-1615.177563	-541.140674	-582.411433	-549.014916	-664.923854	-689.230924	-729.577045	-289.2234789
+3.75	3909.45579	5058.554791	6418.477654	3081.831019	3290.894717	3085.808743	3706.910697	3504.364141	3707.403753	1618.285415
-3.8	-574.43386	-872.2228645	-1292.142049	-432.912543	-465.929138	-439.211935	-531.939077	-551.384738	-583.661631	-231.3787865
+3.8	3421.985546	4381.23367	5667.136816	2688.376239	2872.407627	2694.413634	3218.048016	3050.577127	3225.628526	1413.862088
-3.85	-430.8254006	-654.1671556	-969.1065344	-324.684412	-349.446842	-329.408953	-398.9543	-413.538552	-437.746216	-173.5340942
+3.85	2790.440619	3538.627393	4637.173814	2185.678519	2336.51473	2192.46659	2621.143094	2488.971808	2631.28265	1151.383701
-3.9	-287.2169412	-436.1114467	-646.07102	-216.456281	-232.964547	-219.605972	-265.969524	-275.692365	-291.830802	-115.6894019
+3.9	2010.928428	2528.48862	3316.762865	1571.11587	1680.340966	1577.226252	1887.31747	1804.616669	1907.992944	828.9453577
-3.95	-143.6084818	-218.0557378	-323.0355055	-108.228151	-116.482252	-109.80299	-132.984747	-137.846179	-145.915387	-57.84470953
+3.95	1081.485789	1349.193414	1797.907133	842.7389987	901.7353869	846.6326565	1013.965559	975.417628	1031.391043	445.4098147
-5	-9.38E-13	-7.99E-13	-1.48E-12	-5.36E-13	-6.00E-13	-5.17E-13	-6.07E-13	-5.48E-13	-5.79E-13	-3.65E-13
+5	7.17E-13	7.09E-13	1.26E-12	4.39E-13	4.72E-13	4.40E-13	5.33E-13	5.02E-13	5.32E-13	2.83E-13

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-2.05E-13	-2.17E-13	-2.37E-13	-1.96E-13	-2.38E-13	-1.87E-13	-2.11E-13	-2.11E-13	-2.11E-13
End Shear	3.27E-13	2.45E-13	3.02E-13	2.45E-13	2.74E-13	2.90E-13	2.65E-13	2.65E-13	2.66E-13
-0.05	-82.91177499	-118.6466908	-127.208305	-176.7912749	-66.45303769	-89.76627347	-102.827806	-115.170457	-128.20439
+0.05	636.2837009	847.0953643	862.2882594	931.183187	512.2365892	691.0169789	782.5383771	857.0921517	932.9593888
-0.1	-165.82355	-237.2933816	-254.41661	-353.5825499	-132.9060754	-179.5325469	-205.655613	-230.340914	-256.40878
+0.1	1184.879872	1568.211029	1588.874746	1686.425798	954.3332281	1287.135111	1456.351702	1595.482649	1740.497491
-0.15	-248.735325	-355.9400724	-381.6249151	-530.3738248	-199.3591131	-269.2988204	-308.483419	-345.511372	-384.61317
+0.15	1646.251819	2164.391354	2181.567543	2302.414963	1326.548949	1788.923994	2022.152075	2240.449218	2438.963175
-0.2	-331.6471	-474.5867633	-508.8332201	-707.1650998	-265.8121508	-359.0650939	-411.311225	-460.681829	-512.81756
+0.2	2022.004213	2638.731622	2675.056826	2791.435397	1630.137487	2198.084263	2481.987176	2767.21136	3023.001247
-0.25	-414.5588749	-593.2334541	-636.0415251	-883.9563747	-332.2651885	-448.8313674	-514.139031	-575.852286	-641.02195
+0.25	2314.257294	3018.966558	3043.612903	3215.121431	1866.764936	2516.872914	2847.235895	3177.737957	3492.799004
-0.3	-497.4706499	-711.8801449	-763.2498301	-1060.74765	-398.7182262	-538.5976408	-616.966838	-691.022743	-769.22634
+0.3	2525.647143	3288.773165	3316.251085	3508.175283	2038.510267	2760.761287	3127.372825	3475.652076	3836.827584
-0.35	-580.3824249	-830.5268357	-890.4581352	-1237.538925	-465.1712638	-628.3639143	-719.794644	-806.1932	-897.43073
+0.35	2675.02777	3449.072669	3507.710566	3724.957504	2147.863977	2927.044156	3311.012585	3683.580875	4059.395453
-0.4	-663.2941999	-949.1735265	-1017.66644	-1414.3302	-531.6243015	-718.1301878	-822.62245	-921.363658	-1025.63512
+0.4	2750.910166	3524.719447	3625.645371	3826.07476	2197.729638	3012.430996	3401.365828	3793.080784	4175.955798
-0.45	-746.2059749	-1067.820217	-1144.874745	-1591.121474	-598.0773392	-807.8964612	-925.450256	-1036.53411	-1153.83951
+0.45	2755.792024	3503.065072	3638.192662	3829.017131	2191.422952	3020.19082	3403.420389	3803.66675	4196.09917
-0.5	-829.1177499	-1186.466908	-1272.08305	-1767.912749	-664.5303769	-897.6627347	-1028.27806	-1151.70457	-1282.0439
+0.5	2710.970577	3453.521596	3571.269592	3732.386686	2159.597678	2969.401649	3347.933277	3738.758781	4120.398608
-0.55	-912.0295249	-1305.113599	-1399.291355	-1944.704024	-730.9834146	-987.4290082	-1131.10587	-1266.87503	-1410.24829
+0.55	2605.917935	3335.293519	3418.907364	3603.847239	2083.494715	2853.390829	3221.264923	3590.321015	3947.972027
-0.6	-994.9412999	-1423.76029	-1526.49966	-2121.495299	-797.4364523	-1077.195282	-1233.93368	-1382.04549	-1538.45268
+0.6	2440.887947	3129.181513	3175.122738	3383.406382	1958.074279	2672.909215	3019.607975	3358.965238	3697.36892
-0.65	-1077.853075	-1542.406981	-1653.707965	-2298.286574	-863.88949	-1166.961555	-1336.76148	-1497.21594	-1666.65707
+0.65	2221.605992	2849.06639	2867.537097	3064.038499	1787.792397	2434.173144	2750.00426	3052.691142	3363.998549
-0.7	-1160.76485	-1661.053671	-1780.91627	-2475.077849	-930.3425277	-1256.727829	-1439.58929	-1612.3864	-1794.86146
+0.7	1954.313564	2490.087884	2476.030627	2635.073842	1577.517625	2143.956032	2420.135719	2680.765166	2954.574837
-0.75	-1243.676625	-1779.700362	-1908.124575	-2651.869124	-996.7955654	-1346.494102	-1542.41709	-1727.55686	-1923.06585
+0.75	1647.675898	2061.392654	2019.655135	2118.510203	1332.530796	1809.588238	2038.323519	2255.980302	2479.436945
-0.8	-1326.5884	-1898.347053	-2035.33288	-2828.660399	-1063.248603	-1436.260376	-1645.2449	-1842.72732	-2051.27024
+0.8	1305.697737	1572.881493	1502.512594	1489.353507	1058.525002	1438.95614	1613.52728	1780.670185	1949.72174
-0.85	-1409.500175	-2016.993744	-2162.541185	-3025.70848	-1129.701641	-1526.026649	-1748.07271	-1957.89777	-2179.47463
+0.85	934.5329004	1035.21076	924.1031462	895.0017241	761.6063423	1040.503923	1155.346674	1265.433059	1377.366552
-0.9	-1492.41195	-2135.640435	-2289.74949	-3278.510767	-1196.154678	-1615.792922	-1850.90051	-2073.06823	-2307.67902
+0.9	547.9102431	494.166522	493.183377	625.4029783	448.2927166	623.2317231	674.0197775	727.7091062	775.1074179
-0.95	-1575.323725	-2254.287125	-2416.957795	-3579.00858	-1262.607716	-1705.559196	-1953.72832	-2188.23869	-2435.88341
+0.95	345.7886188	489.8581789	520.5824535	623.5371647	277.3753395	374.7796146	428.8789878	480.1827037	534.1224354
-1	-1658.235476	-2372.933802	-2544.16614	-3919.944698	-1329.060704	-1795.325472	-2056.55612	-2303.40915	-2564.08785
+1	363.9880181	515.6401904	547.9815269	645.7971807	291.9740463	394.5048562	451.4515668	505.4554778	562.234152
(Span 2) -2	-1658.235476	-2372.933802	-2544.16614	-3919.944698	-1329.060704	-1795.325472	-2056.55612	-2303.40915	-2564.08785
+2	363.9880181	515.6401904	547.9815269	645.7971807	291.9740463	394.5048562	451.4515668	505.4554778	562.234152
-2.05	-1212.560336	-1717.762109	-1825.501477	-2611.85449	-972.6587491	-1314.221673	-1503.92931	-1683.8336	-1872.98145
+2.05	281.011791	398.0927011	423.0613727	512.3289051	225.4144256	304.571882	348.5367853	390.2297374	434.0649092
-2.1	-1129.584106	-1600.214618	-1700.581317	-2175.4423	-906.0991286	-1224.288696	-1401.01452	-1568.60785	-1744.81221
+2.1	680.3206187	632.8196082	561.735917	540.9555961	545.3021667	768.9249405	835.0989443	914.2314619	970.389032
-2.15	-1046.607877	-1482.667127	-1575.661157	-1909.138829	-839.539508	-1134.355719	-1298.09974	-1453.38211	-1616.64297
+2.15	1137.377243	1281.351674	1178.937708	1066.9401	915.2247149	1261.087765	1402.331538	1547.778847	1683.18916
-2.2	-963.631648	-1365.119636	-1450.740997	-1712.780178	-772.9798874	-1044.422742	-1195.18496	-1338.15637	-1488.47372
+2.2	1566.406741	1910.116765	1855.848613	1775.172075	1262.187975	1725.709967	1937.18334	2143.065997	2348.639057

-2.25	-880.6554188	-1247.572145	-1325.820837	-1577.571631	-706.4202669	-954.4897649	-1092.27018	-1222.93063	-1360.30448
+2.25	1949.530377	2455.269672	2448.82356	2615.736463	1566.727853	2139.184604	2409.9714	2675.673536	2941.479688
-2.3	-797.6791896	-1130.024653	-1200.900677	-1454.954991	-639.8606463	-864.5567879	-989.355393	-1107.70489	-1232.13524
+2.3	2278.693926	2916.596704	2949.740384	3308.576635	1829.60462	2496.856443	2819.317645	3133.6438	3447.801147
-2.35	-714.7029604	-1012.477162	-1075.980517	-1332.338351	-573.3010258	-774.6238109	-886.440611	-992.479149	-1103.966
+2.35	2540.271792	3268.32571	3342.535843	3850.477358	2033.740186	2779.780165	3140.147161	3498.574599	3850.022822
-2.4	-631.7267312	-894.9296714	-951.0603571	-1209.721712	-506.7414052	-684.6908339	-783.525828	-877.253408	-975.796756
+2.4	2732.475715	3527.266387	3640.854091	4232.277364	2183.36448	2990.014584	3377.994218	3767.132322	4147.184894
-2.45	-548.750502	-777.3821804	-826.1401971	-1087.105072	-440.1817846	-594.7578569	-680.611046	-762.027666	-847.627514
+2.45	2843.006262	3667.010527	3811.706758	4417.770571	2266.015239	3110.084623	3513.16027	3922.825087	4328.369705
-2.5	-465.7742728	-659.8346894	-701.2200371	-964.4884323	-373.6221641	-504.8248799	-577.696264	-646.801926	-719.458276
+2.5	2878.412649	3694.783485	3863.251842	4429.406913	2287.429997	3151.066304	3553.563564	3973.952503	4388.943823
-2.55	-548.7504795	-777.3821919	-826.1401686	-1087.105063	-440.1817814	-594.7578596	-680.611029	-762.027667	-847.627519
+2.55	2843.011373	3667.012238	3811.707514	4417.770059	2266.022095	3110.092804	3513.163055	3922.832393	4328.373089
-2.6	-631.7267066	-894.9296812	-951.0603228	-1209.721702	-506.7414021	-684.6908338	-783.525811	-877.253407	-975.796762
+2.6	2732.479679	3527.273405	3640.86034	4232.283443	2183.38138	2990.021383	3378.004222	3767.137919	4147.186556
-2.65	-714.7029337	-1012.47717	-1075.980477	-1332.338341	-573.3010228	-774.623808	-886.440592	-992.479147	-1103.966
+2.65	2540.274607	3268.327234	3342.540345	3850.480963	2033.745004	2779.785239	3140.147314	3498.578154	3850.029651
-2.7	-797.6791607	-1130.02466	-1200.900631	-1454.95498	-639.8606435	-864.5567821	-989.355374	-1107.70489	-1232.13525
+2.7	2278.695832	2916.604183	2949.745139	3308.582667	1829.618875	2496.860554	2819.324428	3133.646204	3447.813861
-2.75	-880.6553878	-1247.572149	-1325.820785	-1577.571619	-706.4202642	-954.4897563	-1092.27016	-1222.93063	-1360.30449
+2.75	1949.532246	2455.276682	2448.827785	2615.740858	1566.731693	2139.188698	2409.977737	2675.675687	2941.484159
-2.8	-963.6316148	-1365.119638	-1450.740939	-1712.78015	-772.9798849	-1044.42273	-1195.18494	-1338.15637	-1488.47373
+2.8	1566.408361	1910.123253	1855.852379	1775.176574	1262.20232	1725.713855	1937.189626	2143.067964	2348.651585
-2.85	-1046.607842	-1482.667128	-1575.661093	-1909.138772	-839.5395056	-1134.355705	-1298.09972	-1453.38211	-1616.64298
+2.85	1137.378829	1281.350186	1178.940985	1066.942158	915.2285048	1261.091691	1402.330095	1547.781049	1683.194062
-2.9	-1129.584069	-1600.214617	-1700.581248	-2175.44223	-906.0991263	-1224.288679	-1401.0145	-1568.60785	-1744.81222
+2.9	680.3232645	632.8250661	561.7390044	540.9577106	545.3167019	768.9299861	835.1062253	914.2350284	970.3873211
-2.95	-1212.560296	-1717.762106	-1825.501402	-2611.8546	-972.658747	-1314.221653	-1503.92928	-1683.83359	-1872.98146
+2.95	281.0117898	398.0927299	423.061403	512.3288972	225.414421	304.571913	348.5367782	390.2297457	434.0649074
-3	-1658.235539	-2372.933841	-2544.166209	-3919.944709	-1329.060729	-1795.325549	-2056.55617	-2303.40921	-2564.08789
+3	363.9880274	515.640198	547.9815526	645.7971842	291.9740457	394.5048686	451.451571	505.4554813	562.2341489
(Span 3) -4	-1.66E+03	-2.37E+03	-2.54E+03	-3.92E+03	-1.33E+03	-1.80E+03	-2.06E+03	-2.30E+03	-2.56E+03
+4	3.64E+02	5.16E+02	5.48E+02	6.46E+02	2.92E+02	3.95E+02	4.51E+02	5.05E+02	5.62E+02
-3.05	-1575.323761	-2254.287148	-2416.957901	-3579.008563	-1262.60769	-1705.559272	-1953.72836	-2188.23875	-2435.8835
+3.05	345.788626	489.8581882	520.5824748	623.5371675	277.3753436	374.7796251	428.8789925	480.1827073	534.1224419
-3.1	-1492.411983	-2135.640455	-2289.749592	-3278.51075	-1196.154651	-1615.792995	-1850.90055	-2073.06829	-2307.6791
+3.1	547.9089196	494.1659397	493.183397	625.4029843	448.2999821	623.2281505	674.0142922	727.7076529	775.1115284
-3.15	*-1409.500205*	*-2016.993763*	*-2162.541284*	*-3025.708466*	*-1129.701612*	*-1526.026717*	*-1748.07274*	*-1957.89783*	*-2179.47471*
+3.15	934.5333923	1035.206274	924.1091005	895.0056362	761.6141074	1040.501225	1155.341751	1265.434183	1377.371706
-3.2	-1326.588427	-1898.34707	-2035.332975	-2828.660391	-1063.248573	-1436.26044	-1645.24494	-1842.72737	-2051.27032
+3.2	1305.698545	1572.877302	1502.517981	1489.351209	1058.53301	1438.953921	1613.522805	1780.671678	1949.727162
-3.25	-1243.676649	-1779.700377	-1908.124667	-2651.869116	-996.7955345	-1346.494163	-1542.41713	-1727.55691	-1923.06593
+3.25	1647.676436	2061.387958	2019.659903	2118.506102	1332.538492	1809.585812	2038.318886	2255.981288	2479.442301
-3.3	-1160.76487	*-1661.053684*	-1780.916358	*-2475.07784*	-930.3424956	-1256.727885	-1439.58932	-1612.38645	-1794.86154
+3.3	1954.313155	2490.082523	2476.028123	2635.069029	1577.524993	2143.953451	2420.130832	2680.765866	2954.579787
-3.35	-1077.853092	-1542.406992	-1653.70805	-2298.286565	-863.8894566	-1166.961608	-1336.76151	-1497.21599	-1666.65715
+3.35	2221.604595	2849.059356	2867.53327	3064.03492	1787.799567	2434.169538	2749.99839	3052.68967	3364.002009
-3.4	-994.9413142	-1423.760299	-1526.499741	-2121.495289	-797.4364176	-1077.195331	-1233.9337	-1382.04553	-1538.45275
+3.4	2440.885657	3129.17284	3175.116965	3383.409029	1958.080549	2672.904855	3019.600695	3358.962354	3697.371049
-3.45	-912.029536	-1305.113606	-1399.291433	-1944.704014	-730.9833787	-987.4290532	-1131.10589	-1266.87507	-1410.24836
+3.45	2605.914653	3335.286885	3418.901867	3603.843804	2083.499702	2853.385096	3221.256059	3590.316582	3947.971432
-3.5	-829.1177579	-1186.466913	-1272.083124	-1767.912738	-664.5303397	-897.6627758	-1028.27808	-1151.70461	-1282.04397
+3.5	2710.965284	3453.526003	3571.261364	3732.388659	2159.601214	2969.393937	3347.92213	3738.751856	4120.395632
-3.55	-746.2059797	-1067.820221	-1144.874816	-1591.121463	-598.0773008	-807.8964985	-925.450272	-1036.53415	-1153.83958
+3.55	2755.782195	*3503.0619512244*	*3638.1879*	3829.0134	2191.420398	*3020.183428*	3403.416639	3803.659232	4196.1034

-3.6	**-663.2942016**	**-949.173528**	**-1017.666507**	**-1414.330187**	**-531.6242618**	**-718.1302211**	**-822.622463**	**-921.363686**	**-1025.63519**
+3.6	**2750.914552**	**3524.71385**	**3625.637688**	**3826.071975**	**2197.725353**	**3012.421472**	**3401.359681**	**3793.070544**	**4175.957384**
-3.65	**-580.3824234**	**-830.5268352**	**-890.4581989**	**-1237.538912**	**-465.1712228**	**-628.3639438**	**-719.794654**	**-806.193226**	**-897.430795**
+3.65	**2675.030001**	**3449.066262**	**3507.706164**	**3724.954684**	**2147.857877**	**2927.032391**	**3311.003756**	**3683.583364**	**4059.39345**
-3.7	**-497.4706453**	**-711.8801425**	**-763.2498904**	**-1060.747636**	**-398.7181839**	**-538.5976664**	**-616.966845**	**-691.022766**	**-769.226403**
+3.7	**2525.646669**	**3288.763694**	***3316.253763***	**3508.171482**	**2038.502288**	**2760.763116**	**3127.360664**	**3475.651173**	**3836.822231**
-3.75	**-414.5588671**	**-593.2334497**	**-636.0415819**	**-883.9563607**	**-332.2651449**	**-448.8313891**	**-514.139036**	**-575.852306**	**-641.022011**
+3.75	**2314.254891**	**3018.96976**	**3043.608009**	**3215.116968**	**1866.755245**	**2516.872025**	**2847.237154**	**3177.734061**	**3492.789934**
-3.8	**-331.647089**	**-474.586757**	**-508.8332735**	**-707.1650852**	**-265.812106**	**-359.0651117**	**-411.311227**	**-460.681846**	**-512.817619**
+3.8	**2021.999083**	**2638.731017**	**2675.048154**	**2791.432074**	**1630.125356**	**2198.080347**	**2481.98493**	**2767.203415**	**3023.003453**
-3.85	**-248.7353108**	**-355.9400643**	**-381.624965**	**-530.3738097**	**-199.359067**	**-269.2988343**	**-308.483418**	**-345.511386**	**-384.613227**
+3.85	**1646.243901**	**2164.386947**	**2181.567163**	**2302.411536**	**1326.534554**	**1788.917244**	**2022.146292**	**2240.437199**	**2438.961408**
-3.9	**-165.8235327**	**-237.2933715**	**-254.4166565**	**-353.5825342**	**-132.906028**	**-179.532557**	**-205.655609**	**-230.340926**	**-256.408836**
+3.9	**1184.869297**	**1568.202996**	**1588.870861**	**1686.426962**	**954.3166246**	**1287.125072**	**1456.342921**	**1595.483046**	**1740.491583**
-3.95	**-82.91175453**	**-118.6466788**	**-127.208348**	**-176.7912587**	**-66.45298909**	**-89.76627962**	**-102.8278**	**-115.170466**	**-128.204444**
+3.95	**636.2700697**	**847.0835609**	**862.2799856**	**931.1796211**	**512.2179058**	**691.003939**	**782.5260811**	**857.0885596**	**932.9562891**
-5	**-3.46E-13**	**-4.73E-13**	**-4.66E-13**	**-4.71E-13**	**-4.01E-13**	**-4.29E-13**	**-4.81E-13**	**-4.78E-13**	**-5.25E-13**
+5	**3.37E-13**	**4.28E-13**	**4.57E-13**	**5.58E-13**	**2.81E-13**	**3.60E-13**	**3.93E-13**	**4.43E-13**	**4.43E-13**

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.94E-13	-5.21E-13	-3.12E-13	-3.69E-13	-3.90E-13
End Shear	5.43E-13	3.87E-13	3.14E-13	3.38E-13	3.26E-13
-0.05	-229.5898474	-253.8692194	-144.321207	-173.754071	-187.44031
+0.05	1540.080788	1654.225323	1008.810767	1217.280865	1291.549915
-0.1	-459.1796948	-507.7384389	-288.642414	-347.508142	-374.88062
+0.1	2835.945739	3055.706315	1864.169037	2249.6689	2383.608154
-0.15	-688.7695422	-761.6076583	-432.963621	-521.262213	-562.32093
+0.15	3946.319647	4244.694257	2567.613432	3107.260522	3297.392898
-0.2	-918.3593896	-1015.476878	-577.284828	-695.016284	-749.761241
+0.2	4828.734099	5273.356758	3165.678932	3823.047178	4049.12168
-0.25	-1147.949237	-1269.346097	-721.606035	-868.770355	-937.201551
+0.25	5526.201265	6073.093494	3626.732269	4365.964971	4657.15385
-0.3	-1377.539084	-1523.215317	-865.927242	-1042.52443	-1124.64186
+0.3	6069.527257	6678.744191	3955.510206	4743.593605	5091.381964
-0.35	-1607.128932	-1777.084536	-1010.24845	-1216.2785	-1312.08217
+0.35	6426.986058	7072.687363	4172.387769	4994.403738	5351.026759
-0.4	-1836.718779	-2030.953756	-1154.56966	-1390.03257	-1499.52248
+0.4	6645.379553	7252.927121	4261.091342	5092.396655	5479.599059
-0.45	-2066.308627	-2284.822975	-1298.89086	-1563.78664	-1686.96279
+0.45	6661.321457	7320.726604	4228.330496	5045.154893	5450.208204
-0.5	-2295.898474	-2538.692194	-1443.21207	-1737.54071	-1874.4031
+0.5	6544.684041	7175.206157	4169.797133	4977.354874	5370.172968
-0.55	-2525.488322	-2792.561414	-1587.53328	-1911.29478	-2061.84341
+0.55	6267.969733	6840.739303	4034.765778	4821.113452	5182.415184
-0.6	-2755.078169	-3046.430633	-1731.85448	-2085.04885	-2249.28372
+0.6	5822.525427	6401.553659	3786.093419	4527.468979	4851.060033
-0.65	-2984.668016	-3300.299853	-1876.17569	-2258.80292	-2436.72403
+0.65	5240.736394	5780.00121	3433.374434	4107.770019	4406.221685
-0.7	-3214.257864	-3554.169072	-2020.4969	-2432.55699	-2624.16434
+0.7	4539.55015	4990.413717	2987.12901	3580.538559	3836.650094
-0.75	-3443.847711	-3808.038292	-2164.81811	-2606.31107	-2811.60465
+0.75	3704.081943	4059.365229	2464.626269	2958.573398	3156.95616
-0.8	-3673.437559	-4061.907511	-2309.13931	-2780.06514	-2999.04496
+0.8	2754.021578	3004.542607	1870.688505	2245.730942	2383.036773
-0.85	-3903.027406	-4315.776731	-2453.46052	-2953.81921	-3186.48527
+0.85	1709.943408	1849.581428	1215.18569	1457.447443	1531.651834
-0.9	-4132.617253	-4569.64595	-2597.78173	-3127.57328	-3373.92558
+0.9	892.8795585	985.2974024	619.6100224	700.1388255	753.1693989
-0.95	-4362.207101	-4823.515169	-2742.10293	-3301.32735	-3561.36589
+0.95	942.4839784	1040.036147	594.0114765	716.2113833	771.169881
-1	-4591.796988	-5077.384432	-2886.42421	-3475.08141	-3748.80616
+1	992.088403	1094.774901	625.2752445	753.9067133	811.7577708
(Span 2) -2	-4591.796988	-5077.384432	-2886.42421	-3475.08141	-3748.80616
+2	992.088403	1094.774901	625.2752445	753.9067133	811.7577708
-2.05	-3304.963235	-3647.044671	-2082.99152	-2511.50406	-2704.22432
+2.05	765.9277942	845.2054493	482.7348906	582.0429954	626.706083
-2.1	-3078.802623	-3397.47522	-1940.45116	-2339.64033	-2519.17263
+2.1	982.1230535	1096.209182	752.0488506	874.423541	924.9127386
-2.15	-2852.64201	-3147.905769	-1797.9108	-2167.77661	-2334.12094
+2.15	2199.513613	2410.323852	1523.240411	1811.204862	1926.428409
-2.2	-2626.481397	-2898.336319	-1655.37044	-1995.91288	-2149.06925
+2.2	3416.842916	3757.397712	2286.157639	2728.285158	2919.223468

-2.25	**-2400.320785**	**-2648.766868**	**-1512.83008**	**-1824.04916**	**-1964.01756**
+2.25	**4485.226354**	**4944.151128**	**2957.306388**	**3534.621457**	**3788.262316**
-2.3	**-2174.160172**	**-2399.197417**	**-1370.28972**	**-1652.18543**	**-1778.96587**
+2.3	**5392.696878**	**5945.223309**	**3523.433366**	**4211.925116**	**4516.022278**
-2.35	**-1947.999559**	**-2149.627966**	**-1227.74936**	**-1480.32171**	**-1593.91418**
+2.35	**6125.413538**	**6725.084749**	**3962.774098**	**4737.00761**	**5083.5181**
-2.4	**-1721.838947**	**-1900.058515**	**-1085.209**	**-1308.45798**	**-1408.86249**
+2.4	**6657.758355**	**7278.281169**	**4274.350588**	**5106.516416**	**5493.123695**
-2.45	**-1495.678334**	**-1650.489064**	**-942.668646**	**-1136.59426**	**-1223.8108**
+2.45	**6967.340415**	**7649.020198**	**4438.212963**	**5300.953602**	**5717.452537**
-2.5	**-1269.517722**	**-1400.919613**	**-800.128287**	**-964.730534**	**-1038.75911**
+2.5	**7054.546099**	**7775.506916**	**4468.286025**	**5329.841243**	**5762.654694**
-2.55	**-1495.678294**	**-1650.489067**	**-942.668648**	**-1136.59418**	**-1223.81079**
+2.55	**6967.343458**	**7649.019251**	**4438.213057**	**5300.947812**	**5717.458748**
-2.6	**-1721.838902**	**-1900.058518**	**-1085.209**	**-1308.4579**	**-1408.86248**
+2.6	**6657.765575**	**7276.895246**	**4274.358222**	**5106.524143**	**5493.127251**
-2.65	**-1947.999511**	**-2149.62797**	**-1227.74936**	**-1480.32162**	**-1593.91417**
+2.65	**6125.410276**	**6725.53166**	**3962.779516**	**4737.012781**	**5083.519025**
-2.7	**-2174.16012**	**-2399.197421**	**-1370.28971**	**-1652.18534**	**-1778.96586**
+2.7	**5392.699155**	**5945.221564**	**3523.436899**	**4211.928098**	**4516.035367**
-2.75	**-2400.320729**	**-2648.766873**	**-1512.83006**	**-1824.04906**	**-1964.01755**
+2.75	**4485.230938**	**4944.150564**	**2957.309246**	**3534.62373**	**3788.266068**
-2.8	**-2626.481338**	**-2898.336324**	**-1655.37042**	**-1995.91277**	**-2149.06923**
+2.8	**3416.853568**	**3758.070797**	**2286.160224**	**2728.286819**	**2919.235502**
-2.85	**-2852.641946**	**-3147.905776**	**-1797.91077**	**-2167.77649**	**-2334.12092**
+2.85	**2199.516786**	**2410.323201**	**1523.242358**	**1811.205889**	**1926.432387**
-2.9	**-3078.802555**	**-3397.475228**	**-1940.45113**	**-2339.64021**	**-2519.17261**
+2.9	**982.1252224**	**1096.207596**	**752.0497834**	**874.4330379**	**924.9199668**
-2.95	**-3304.963164**	**-3647.044679**	**-2082.99148**	**-2511.50393**	**-2704.2243**
+2.95	**765.9277918**	**845.2054442**	**482.7349432**	**582.0429901**	**626.7061083**
-3	**-4591.796915**	**-5077.408352**	**-2886.42429**	**-3475.08152**	**-3748.80621**
+3	**992.0884197**	**1094.774898**	**625.2752664**	**753.9067439**	**811.7577825**
(Span 3) -4	**-4.59E+03**	**-5.08E+03**	**-2.89E+03**	**-3.48E+03**	**-3.75E+03**
+4	**9.92E+02**	**1.09E+03**	**6.25E+02**	**7.54E+02**	**8.12E+02**
-3.05	**-4362.207071**	**-4823.537937**	**-2742.10308**	**-3301.32745**	**-3561.36589**
+3.05	**942.483999**	**1040.036153**	**594.0115034**	**716.2114064**	**771.1698934**
-3.1	**-4132.617227**	**-4569.667522**	**-2597.78187**	**-3127.57337**	**-3373.92558**
+3.1	**892.8795782**	**985.2974088**	**619.6116573**	**700.1354248**	**753.1638388**
-3.15	***-3903.027383***	***-4315.797107***	***-2453.46065***	***-2953.8193***	***-3186.48527***
+3.15	**1709.950581**	**1851.306566**	**1215.187842**	**1457.451415**	**1531.659585**
-3.2	**-3673.43754**	**-4061.926692**	**-2309.13944**	**-2780.06522**	**-2999.04496**
+3.2	**2754.013725**	**3006.027547**	**1870.690569**	**2245.734615**	**2383.028868**
-3.25	**-3443.847696**	**-3808.056277**	**-2164.81823**	**-2606.31114**	**-2811.60464**
+3.25	**3704.088277**	**4061.227413**	**2464.627668**	**2958.576344**	**3156.963698**
-3.3	**-3214.257852**	**-3554.185862**	**-2020.49702**	**-2432.55707**	**-2624.16433**
+3.3	**4539.555277**	**4993.228484**	**2987.128363**	**3580.540225**	**3836.656261**
-3.35	**-2984.668009**	**-3300.315447**	**-1876.17581**	**-2258.80299**	**-2436.72402**
+3.35	**5240.738782**	**5778.471335**	**3433.371725**	**4107.767862**	**4406.225253**
-3.4	**-2755.078165**	**-3046.445033**	**-1731.8546**	**-2085.04891**	**-2249.28371**
+3.4	**5822.521539**	**6401.555119**	**3786.088459**	**4527.464197**	**4851.060796**
-3.45	**-2525.488321**	**-2792.574618**	**-1587.53339**	**-1911.29484**	**-2061.8434**
+3.45	**6269.464336**	**6840.739799**	**4034.758709**	**4821.106059**	**5182.411881**
-3.5	**-2295.898477**	**-2538.704203**	**-1443.21218**	**-1737.54076**	**-1874.40308**
+3.5	**6544.687927**	**7177.430439**	**4169.786553**	**4977.359787**	**5370.165821**
-3.55	**-2066.308634**	**-2284.833788**	**-1298.89097**	**-1563.78668**	**-1686.96277**
+3.55	**6661.318423**	**7320.724949**	**4228.323601**	**5045.151467**	**5450.200958**
-3.6	**-1836.71879**	**-2030.963373**	**-1154.56976**	**-1390.03261**	**-1499.52246**

+3.6	**6645.387101**	**7252.927112**	**4261.081614**	**5092.389795**	**5479.604116**
-3.65	**-1607.128946**	**-1777.092958**	**-1010.24855**	**-1216.27853**	**-1312.08215**
+3.65	**6426.988158**	**7072.685538**	**4172.392775**	**4994.40869**	**5351.027099**
-3.7	**-1377.539102**	**-1523.222543**	**-865.927334**	**-1042.52445**	**-1124.64183**
+3.7	**6069.522166**	**6679.729812**	**3955.511161**	**4743.59415**	**5091.376649**
-3.75	**-1147.949259**	**-1269.352128**	**-721.606124**	**-868.770376**	**-937.201522**
+3.75	**5526.190485**	**6073.091887**	**3626.729216**	**4365.960495**	**4657.143651**
-3.8	**-918.359415**	**-1015.481713**	**-577.284913**	**-695.016299**	**-749.761209**
+3.8	**4830.139693**	**5273.353583**	**3165.671337**	**3823.037657**	**4049.113616**
-3.85	**-688.7695712**	**-761.6112982**	**-432.963702**	**-521.262222**	**-562.320897**
+3.85	**3946.325907**	**4244.693516**	**2567.609258**	**3107.261408**	**3297.395387**
-3.9	**-459.1797275**	**-507.7408832**	**-288.642491**	**-347.508146**	**-374.880585**
+3.9	**2835.945104**	**3055.706478**	**1864.16006**	**2249.664223**	**2383.604236**
-3.95	**-229.5898838**	**-253.8704683**	**-144.32128**	**-173.754069**	**-187.440273**
+3.95	**1540.072597**	**1654.227072**	**1008.797686**	**1217.270746**	**1291.540086**
-5	**-7.73E-13**	**-8.53E-13**	**-5.49E-13**	**-6.40E-13**	**-7.57E-13**
+5	**7.23E-13**	**7.63E-13**	**5.41E-13**	**6.05E-13**	**6.30E-13**

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.226749565	-5.732384409	-8.203037996	-8.794973988	-12.91529972	-4.594454252	-6.206293214	-7.109346211	-7.962696894	-8.863841675
End Shear	66.48762941	47.11354077	63.09074572	64.48485231	74.56708573	37.92959535	51.14139783	57.96117389	63.53483027	69.25962183
-0.05	-8.226749565	-5.732384409	-8.203037996	-8.794973988	-12.95848702	-4.594454252	-6.206293214	-7.109346211	-7.962696894	-8.863841675
+0.05	61.94508681	43.9499221	58.52538169	59.56266972	66.9052196	35.39530347	47.7216775	54.04148105	59.15070868	64.38398757
-0.1	-8.226749565	-5.732384409	-8.203037996	-8.794973988	-13.10643335	-4.594454252	-6.206293214	-7.109346211	-7.962696894	-8.863841675
+0.1	57.271375	40.69501167	53.8357358	54.51470975	59.29872094	32.78869347	44.2028474	50.00871712	54.64267738	59.37343292
-0.15	-8.226749565	-6.130625553	-8.203037996	-8.794973988	-13.3218142	-5.144598075	-6.882848079	-7.155164599	-7.962696894	-8.863841675
+0.15	53.27273926	37.8708578	49.78331152	50.16588286	53.03812464	30.52637589	41.14896998	46.51091396	50.73663985	55.03642877
-0.2	-12.162373	-9.384958686	-8.540675079	-8.794973988	-13.66547083	-7.747197661	-10.39720091	-11.1832472	-11.14866759	-11.14689201
+0.2	48.69757196	34.68027228	45.22449429	45.28921371	46.32274883	27.96974769	37.69800164	42.56074568	46.33009111	50.14888599
-0.25	-16.23770738	-12.20839713	-12.2381805	-10.39874567	-14.0506618	-10.00454115	-13.44552383	-14.6885958	-15.04893854	-15.20526845
+0.25	44.75622631	31.92903523	41.31090139	41.11688898	41.04394996	25.76447037	34.72146836	39.15584194	42.53596952	45.94529759
-0.3	-20.84577341	-15.39792116	-16.69120561	-14.58856989	-15.40445022	-12.55381	-16.88827299	-18.64992349	-19.50711369	-20.19368965
+0.3	40.33661939	28.84079357	36.93857978	36.47235258	35.32161365	23.28823833	31.37942367	35.33541379	38.28375036	41.23970024
-0.35	-24.82283939	-18.14801731	-20.77631413	-18.39235981	-18.80822705	-14.75118215	-19.85597923	-22.06681291	-23.35667993	-24.50562254
+0.35	36.55537745	26.19573906	33.21251875	32.52975558	30.84974587	21.16661251	28.51616146	32.0646575	34.64778868	37.22109394
-0.4	-29.29121818	-21.2347142	-25.38097422	-23.2698082	-23.18838067	-17.21670592	-23.18606561	-25.90347506	-27.68400878	-29.35799318
+0.4	32.34615106	23.24785726	29.08235634	28.17819031	26.03929488	18.80118932	25.32409739	28.42111422	30.60274311	32.75637055
-0.45	-33.12210633	-23.87820545	-29.34211992	-27.65256852	-27.18679819	-19.32749454	-26.0372309	-29.19065691	-31.3959659	-33.52510051
+0.45	28.77297432	20.7422511	25.59254225	24.51856112	22.34118405	16.7898297	22.61002914	25.32575594	27.17118147	28.97431177
-0.5	-37.39604695	-26.8240564	-33.77728047	-32.57519807	-32.22034427	-21.67885962	-29.21359478	-32.85551	-35.53960428	-38.18248676
+0.5	24.82895122	17.97274774	21.76020401	20.52080734	18.63995072	14.56562933	19.60900552	21.90623896	23.3861592	24.80939392
-0.55	-41.03284893	-29.32767387	-37.56575908	-36.79403526	-36.6698016	-23.67645552	-31.91228643	-35.971737	-39.06770825	-42.15320361
+0.55	21.51181373	15.63985338	18.55533611	17.19738155	15.60647236	12.69114383	17.08006439	19.02752938	20.20523898	21.31544885
-0.6	-45.05759904	-32.09466168	-41.7757496	-41.49891224	-41.83469798	-25.88324863	-34.89386976	-39.41763767	-42.97480735	-46.55668148
+0.6	17.88781292	13.08674924	15.07648792	13.61428331	12.38266818	10.63858007	14.31114065	15.87918241	16.73309079	17.50926834
-0.65	-48.45239967	-34.42514053	-45.34285306	-45.50059394	-46.39640535	-27.7410375	-37.40416414	-42.32165292	-46.27281878	-50.27943718
+0.65	14.87468041	10.959835	12.20527716	10.74733502	9.830270487	8.92758413	12.00324752	13.25836823	13.84904918	14.35500043
-0.7	-52.17320502	-36.97524707	-49.27201509	-49.9268727	-52.28514814	-29.77284487	-40.1499071	-45.50145817	-49.89053044	-54.37006986
+0.7	11.62552615	8.661142655	9.135588904	7.942375504	7.343754458	7.077069999	9.507482322	10.42833371	10.74261486	10.96648859
-0.75	-55.27810378	-39.09932196	-52.56903741	-53.65816021	-58.09622819	-31.46421382	-42.43588072	-48.15201518	-52.91220817	-57.79330792
+0.75	8.964366764	6.773476181	6.744914403	5.740163628	5.418010566	5.55617183	7.456566782	8.106671249	8.20170266	8.203463543
-0.8	-58.64021135	-41.39452887	-56.16169842	-57.74500119	-64.72256183	-33.290622	-44.90472375	-51.01858172	-56.18768279	-61.51216008
+0.8	6.144877198	4.767216371	4.36482321	3.899478616	3.79181128	3.938122626	5.275019831	5.642092671	5.627942621	5.627638806
-0.85	-61.40729179	-43.278934	-59.13993224	-61.15266754	-71.17779235	-34.78896101	-46.93044658	-53.3744328	-58.88678796	-64.58431112
+0.85	4.033356951	3.152062707	2.987509594	2.504451312	2.586733428	2.633934559	3.517012257	3.660828749	3.659832219	3.659540922
-0.9	-64.35594857	-45.28122374	-62.34043154	-64.83923077	-78.68819887	-36.37955664	-49.08133081	-55.88061544	-61.7671845	-67.87245559
+0.9	1.883163126	1.705702316	1.78252593	1.894327301	2.43867642	1.278761024	1.837749635	1.907285646	1.907047567	1.943597416
-0.95	-66.73730459	-46.89269503	-64.95117012	-67.87003643	-85.41261957	-37.65825357	-50.81087591	-57.90050518	-64.09746765	-70.54195472
+0.95	1.803146251	1.258276795	1.78252593	1.894327301	2.377653371	1.009330366	1.363771005	1.560631116	1.747318218	1.943597416
-1	-69.21775883	-48.56404957	-67.70384524	-71.09547861	-93.17844325	-38.98262287	-52.60274269	-59.99916583	-66.52993714	-73.34045822
+1	1.80E+00	1.258276795	1.78252593	1.894327301	2.36E+00	1.009330366	1.363771005	1.560631116	1.747318218	1.943597416
(Span 2) -2	-6.323888347	-4.412954245	-6.251570002	-6.643673063	-8.261357477	-3.539864021	-4.782937405	-5.473353489	-6.128091604	-6.816470503
+2	69.40704504	48.64157295	68.15524308	71.89501799	101.188466	39.03131807	52.67200886	60.11836852	66.73739699	73.65637074
-2.05	-6.323888347	-4.412954245	-6.251570002	-6.643673063	-8.292711857	-3.539864021	-4.782937405	-5.473353489	-6.128091604	-6.816470503
+2.05	66.73023713	46.8373929	65.19804622	68.45323835	93.35341557	37.60134637	50.73696497	57.85225271	64.11019292	70.63488484
-2.1	-6.323888347	-4.412954245	-6.251570002	-6.643673063	-8.397563528	-3.539864021	-4.782937405	-5.473353489	-6.128091604	-6.816470503
+2.1	63.56310135	44.68878716	61.76489594	64.51493414	85.01795236	35.89472138	48.42867882	55.16099068	61.01273151	67.09624981
-2.15	-6.323888347	-4.412954245	-6.251570002	-6.643673063	-8.574898083	-3.539864021	-4.782937405	-5.473353489	-6.128091604	-6.816470503
+2.15	60.26349029	42.43913552	58.24088222	60.51959665	77.08138037	34.10493258	46.00878638	52.34908972	57.79442787	63.43855529
-2.2	-8.482836193	-6.402420763	-6.441276672	-6.643673063	-8.852328503	-5.247471707	-7.044344062	-7.673488216	-7.796197818	-7.834722976
+2.2	56.52812809	39.88219187	54.29978099	56.09555127	68.66533493	32.06801951	43.25555042	49.15844102	54.15896346	59.32412929
-2.25	-11.78460614	-8.742057231	-9.488933361	-8.306513206	-9.209350698	-7.13165938	-9.585773866	-10.55401581	-10.95674256	-11.27886464

+2.25	52.7716846	37.30216873	50.37747593	51.73085038	60.96406209	30.01049117	40.47511214	45.94348077	50.50955525	55.20864037
-2.3	-15.52146536	-11.37914909	-13.05277884	-11.73719062	-11.97899072	-9.252656072	-12.44725326	-13.80579365	-14.54076063	-15.20307827
+2.3	48.6428025	34.45803973	46.10581951	47.01494563	53.15602199	27.7402111	37.40777974	42.40367346	46.50450408	50.70623094
-2.35	-19.27864269	-14.02146669	-16.68185815	-15.48459712	-15.35184388	-11.37553552	-15.31182585	-17.06825969	-18.15017769	-19.17071754
+2.35	44.59550373	31.66274913	41.9537519	42.46507709	46.20659444	25.50702184	34.39110378	38.92838183	42.58398722	46.31135743
-2.4	-23.40762904	-16.91659482	-20.71344079	-19.69511342	-19.21595047	-13.69931944	-18.44803905	-20.6469538	-22.12248451	-23.552077
+2.4	40.24781035	28.65259859	37.4881164	37.53096578	39.47095519	23.100299	31.14052487	35.18966608	38.37777342	41.60877866
-2.45	-27.4544424	-19.74648857	-24.70259641	-23.90203385	-23.26492269	-15.96881053	-21.5114517	-24.14863283	-26.02077811	-27.86479811
+2.45	36.07562189	25.75713304	33.2050065	32.9813252	33.64148216	20.7835269	28.01191887	31.55629656	34.29633181	37.03287396
-2.5	-31.80106181	-22.77849016	-29.02451277	-28.49930351	-28.36321691	-18.39845962	-24.79154436	-27.90401502	-30.21295738	-32.51550429
+2.5	31.62355459	22.62592682	28.80592448	28.26588002	28.09874458	18.27624916	24.62654648	27.71496766	30.00165188	32.2807861
-2.55	-35.97174505	-25.74868912	-33.20522284	-32.98154253	-33.6416888	-20.78365034	-28.01208022	-31.53988051	-34.28872754	-37.0257665
+2.55	27.49380704	19.74635078	24.70238724	23.90182715	23.2647689	15.96868916	21.51129736	24.14845057	26.02058074	27.86458652
-2.6	-40.36150057	-28.80442384	-37.71018158	-37.77167756	-39.78581246	-23.22173787	-31.30452508	-35.37815027	-38.58955279	-41.84524957
+2.6	23.23465973	16.76940934	20.50721996	19.47868167	19.01549918	13.5812219	18.28864254	20.46491224	21.92013031	23.32854934
-2.65	-44.59804594	-31.66288621	-41.9539531	-42.46529783	-46.20682506	-25.50713882	-34.3912659	-38.92856849	-42.58419139	-46.31158632
+2.65	19.31315391	14.02133238	16.68166613	15.48441052	15.35171794	11.37541752	15.31167546	17.06808831	18.14999306	19.17051448
-2.7	-48.85365923	-34.60302785	-46.32238203	-47.25314927	-53.52927079	-27.85599947	-37.56420817	-42.58403396	-46.70827499	-50.93496697
+2.7	15.36055489	11.24339985	12.86779781	11.54745375	11.80997483	9.143529931	12.30001536	13.63828171	14.35578564	15.00014542
-2.75	-52.77104883	-37.30230025	-50.37766945	-51.73106443	-60.9643176	-30.01060322	-40.47525883	-45.94365071	-50.50974749	-55.20884337
+2.75	11.81326383	8.741932885	9.488766923	8.30637086	9.209350761	7.131558968	9.585638769	10.55386684	10.95657874	11.27869135
-2.8	-56.71856828	-40.01428513	-54.50196315	-56.32151214	-69.07563738	-32.17331303	-43.3978499	-49.32316388	-54.34629025	-59.53574452
+2.8	8.341934287	6.28417574	6.29822102	6.643673375	8.836119734	5.152162045	6.915806398	7.528032084	7.637032091	7.661772921
-2.85	-60.26039638	-42.43925624	-58.24107013	-60.51979555	-77.07331024	-34.10503413	-46.00891197	-52.34924054	-57.79459989	-63.43874364
+2.85	6.323897123	4.412954359	6.251570094	6.643673375	8.574898135	3.539864013	4.782937556	5.473353539	6.128091646	6.816470465
-2.9	-63.7253534	-44.80191796	-61.94382086	-64.71894937	-85.43581196	-35.98466322	-48.55030879	-55.30255129	-61.17518538	-67.28133265
+2.9	6.323897123	4.412954359	6.251570094	6.643673375	8.390406974	3.539864013	4.782937556	5.473353539	6.128091646	6.816470465
-2.95	-66.72585282	-46.83748934	-65.19820756	-68.45340662	-93.35368761	-37.60142501	-50.73707497	-57.85237359	-64.11033697	-70.6350391
+2.95	6.323897123	4.412954359	6.251570094	6.643673375	8.292711904	3.539864013	4.782937556	5.473353539	6.128091646	6.816470465
-3	-69.53373528	-48.72968457	-68.30204079	-72.06737814	-101.5973532	-39.10106112	-52.76641228	-60.22924295	-66.86654845	-73.80553237
+3	6.323897123	4.412954359	6.251570094	6.643673375	8.261357519	3.539864013	4.782937556	5.473353539	6.128091646	6.816470465
(Span 3) -4	-1.80E+00	-1.258276827	-1.782525956	-1.89432739	-2.36E+00	-1.009330364	-1.363771048	-1.56063113	-1.74731823	-1.943597405
+4	69.0835436	48.46500702	67.53914284	70.90147094	92.69902634	38.90420633	52.49662047	59.87466752	66.38524374	73.17357943
-3.05	-1.80E+00	-1.258276827	-1.782525956	-1.89432739	-2.37E+00	-1.009330364	-1.363771048	-1.56063113	-1.74731823	-1.943597405
+3.05	66.91385625	47.00247165	65.13040965	68.07903969	85.90363995	37.74530271	50.92863264	58.03821849	64.25669573	70.72472891
-3.1	-2.000471273	-1.78106208	-1.783226876	-1.89432739	-2.444639562	-1.359159295	-1.926254515	-2.010531076	-2.010284977	-2.010051498
+3.1	64.19311681	45.16088394	62.14684933	64.61541382	78.2230446	36.2840095	48.95211365	55.72988967	61.59364349	67.67401941
-3.15	-3.880189975	-3.042011594	-2.904789352	-2.409536813	-2.55202626	-2.545017133	-3.397165531	-3.530341963	-3.530092734	-3.529843505
+3.15	61.61323679	43.40878029	59.34625636	61.38951752	71.65118197	34.89215723	47.06997857	53.53684769	59.07314829	64.79673555
-3.2	-6.300269463	-4.887812118	-4.48269775	-4.003770858	-3.883273213	-4.035439434	-5.406217884	-5.790135626	-5.774991419	-5.774676896
+3.2	58.45110679	41.25527559	55.94271679	57.49519545	64.27831196	33.17984648	44.75497231	50.84456793	55.98859241	61.28585365
-3.25	-8.76547778	-6.643389056	-6.587701532	-5.605524284	-5.299697527	-5.451314873	-7.315182731	-7.946772108	-8.026985316	-8.026634134
+3.25	55.50900026	39.24686246	52.79898228	53.91905959	58.50871393	31.58165991	42.5946243	48.33620381	53.12241461	58.0317016
-3.3	-11.80428185	-8.800620918	-9.32072721	-8.111343168	-7.492124296	-7.18940553	-9.658980656	-10.59998287	-10.93075613	-11.1714019
+3.3	51.96030496	36.81945029	49.03110098	49.65488011	51.86770273	29.64874364	39.98219025	45.30711537	49.66920295	54.11957909
-3.35	-14.64527534	-10.8120834	-12.00685131	-10.56581658	-9.667891664	-8.808684703	-11.84288486	-13.07638031	-13.64903264	-14.13650596
+3.35	48.70394051	34.58801178	45.59294866	45.78174024	46.71771073	27.87083455	37.5795571	42.5246589	46.50357363	50.54014159
-3.4	-18.08620096	-13.24273795	-15.28809341	-13.83139663	-12.57652945	-10.76403218	-14.48037091	-16.07147398	-16.94494357	-17.74123442
+3.4	44.82350093	31.92470095	41.51640438	41.20854439	41.50441855	25.74771832	34.71075408	39.20590477	42.73455287	46.28570987
-3.45	-21.25508092	-15.47680217	-18.33222491	-16.96676339	-15.39744708	-12.56010307	-16.90328757	-18.82640483	-19.98320941	-21.07179771
+3.45	41.30084404	29.50349151	37.83250906	37.09161481	36.98509627	23.81669618	32.10176072	36.19062825	39.31571136	42.43251873
-3.5	-25.04336157	-18.14287206	-21.99478803	-20.76481235	-18.86419308	-14.70229302	-19.79340243	-22.1162393	-23.61841309	-25.06472808
+3.5	37.14349247	26.6423087	33.50298297	32.27026183	31.90012107	21.53381087	29.01764869	32.6293522	35.28372921	37.89470967
-3.55	-28.49222208	-20.56628127	-25.34823483	-24.2630122	-22.10286021	-16.64855404	-22.41939334	-25.10844278	-26.93043848	-28.70918501
+3.55	33.38434704	24.06459539	29.62206802	27.96279564	27.49107263	19.47628949	26.23822303	29.4224805	31.65791686	33.81934501
-3.6	-32.57310232	-23.4297379	-29.33645359	-28.44527514	-26.33108295	-18.94717192	-25.52107624	-28.64587389	-30.85208711	-33.03138582
+3.6	29.0061494	21.0435703	25.09519163	22.95410725	22.90370465	17.0640396	22.97985955	25.66582426	27.41581953	29.05708968

-3.65	**-36.25403314**	**-26.00922727**	**-32.95048074**	**-32.2530594**	**-30.54036097**	**-21.01699385**	**-28.31423801**	**-31.83408595**	**-34.39163115**	**-36.93817117**
+3.65	**25.09602946**	**18.34260664**	**21.06598086**	**18.66217585**	**19.0528557**	**14.90663089**	**20.06592876**	**22.30862093**	**23.62926157**	**24.81111773**
-3.7	**-40.57274496**	**-29.03205218**	**-37.20868907**	**-36.75871108**	**-35.66989637**	**-23.4416269**	**-31.58643015**	**-35.57196935**	**-38.54687724**	**-41.53069302**
+3.7	**20.55082577**	**15.19974701**	**16.39743748**	**14.31512316**	**15.16294209**	**12.39542971**	**16.67437446**	**18.40372866**	**19.22989701**	**19.883348**
-3.75	**-44.43785318**	**-31.73435605**	**-41.03460412**	**-40.82284404**	**-40.67711004**	**-25.60840572**	**-34.51082465**	**-38.91496744**	**-42.26769904**	**-45.64824136**
+3.75	**16.51853014**	**12.40880988**	**12.50124713**	**10.62473726**	**14.08116755**	**10.16474474**	**13.66186447**	**14.93745861**	**15.3288667**	**15.51833324**
-3.8	**-48.9396593**	**-34.87851947**	**-45.50713702**	**-45.59106379**	**-46.72410595**	**-28.12864082**	**-37.91246716**	**-42.80616172**	**-46.6036958**	**-50.45218725**
+3.8	**11.86107475**	**9.182132841**	**8.33687389**	**8.794974228**	**13.64096323**	**7.585006334**	**10.17819166**	**10.93147364**	**10.89895123**	**10.89716707**
-3.85	**-52.94102047**	**-37.67038459**	**-49.4962508**	**-49.85829229**	**-52.60128751**	**-30.36576509**	**-40.93216785**	**-46.26266653**	**-50.45957099**	**-54.72893478**
+3.85	**8.22676459**	**6.334500759**	**8.203038129**	**8.794974228**	**13.34025428**	**5.307656789**	**7.103029443**	**7.397356745**	**7.962697084**	**8.863841796**
-3.9	**-57.57116684**	**-40.89788002**	**-54.12744414**	**-54.82822174**	**-59.75603608**	**-32.95118813**	**-44.42220164**	**-50.26002796**	**-54.92347223**	**-59.68535608**
+3.9	**8.22676459**	**5.732384627**	**8.203038129**	**8.794974228**	**13.09411233**	**4.59445434**	**6.206293482**	**7.109346401**	**7.962697084**	**8.863841796**
-3.95	**-61.66087221**	**-43.74601597**	**-58.23101438**	**-59.24532854**	**-66.41293983**	**-35.23204638**	**-47.50128128**	**-53.78881942**	**-58.86812584**	**-64.06973698**
+3.95	**8.22676459**	**5.732384627**	**8.203038129**	**8.794974228**	**12.96465545**	**4.59445434**	**6.206293482**	**7.109346401**	**7.962697084**	**8.863841796**
-5	**-66.36460594**	**-47.01883828**	**-62.96520334**	**-64.35612765**	**-74.45112037**	**-37.85224427**	**-51.03864662**	**-57.84520498**	**-63.40708357**	**-69.11970218**
+5	**8.22676459**	**5.732384627**	**8.203038129**	**8.794974228**	**12.91529976**	**4.59445434**	**6.206293482**	**7.109346401**	**7.962697084**	**8.863841796**

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.226749565	-7.482715352	-8.053395077	-7.591598314	-9.194349313	-9.530459704	-10.08835276	-3.999287406
End Shear	66.48762941	62.32917041	66.71311796	62.64792109	75.07126927	72.6804474	76.85691237	32.99136729
-0.05	-8.226749565	-7.482715352	-8.053395077	-7.591598314	-9.194349313	-9.530459704	-10.08835276	-3.999287406
+0.05	61.94508681	58.20741711	62.27616035	58.46710216	70.00773531	67.38306065	71.24901847	30.79486192
-0.1	-8.226749565	-7.482715352	-8.053395077	-7.591598314	-9.194349313	-9.530459704	-10.08835276	-3.999287406
+0.1	57.271375	53.9652487	57.71091821	54.16464778	64.79971175	61.94338928	65.49083652	28.51390124
-0.15	-8.226749565	-9.054003719	-9.340992426	-8.555101732	-9.506031591	-9.530459704	-10.08835276	-4.261344787
+0.15	53.27273926	50.2814833	53.74773738	50.43029188	60.2817492	57.24449207	60.51709155	26.53488401
-0.2	-12.162373	-13.27937428	-13.89422518	-12.84997618	-14.71769163	-9.788526827	-10.36833542	-6.542282573
+0.2	48.69757196	46.11624517	49.2678805	46.20990035	55.1785467	51.96034052	54.92419851	24.29919972
-0.25	-16.23770738	-16.94231022	-17.84251502	-16.57492917	-19.24015963	-13.62549716	-14.34262859	-8.521273425
+0.25	44.75622631	42.52141555	45.40269645	42.56930661	50.77891744	47.42580563	50.12502748	22.37148278
-0.3	-20.84577341	-21.07672907	-22.30033672	-20.78140839	-24.35002461	-18.81224174	-19.81949774	-10.75691498
+0.3	40.33661939	38.48253275	41.06145128	38.4811644	45.84136754	42.3618142	44.76586603	20.20777932
-0.35	-24.82283939	-24.63845776	-26.14185395	-24.40706036	-28.75680962	-23.56294179	-24.85048058	-12.68458864
+0.35	36.55537745	35.01988596	37.34083783	34.97824353	41.61329623	38.04819279	40.20114666	18.35472639
-0.4	-29.29121818	-28.63250267	-30.45104063	-28.47496098	-33.70405125	-28.91975567	-30.52366	-14.84823243
+0.4	32.34615106	31.15677789	33.19142553	31.07253141	36.90222453	33.26899835	35.14415583	16.2897043
-0.45	-33.12210633	-32.04978193	-34.13921667	-31.95740453	-37.94193242	-33.5296608	-35.40610913	-16.70122397
+0.45	28.77297432	27.8695572	29.66195236	27.75118922	32.89893045	29.23285842	30.87378362	14.53468113
-0.5	-37.39604695	-35.85403156	-38.24654558	-35.83654271	-42.66572154	-38.69325266	-40.87532139	-18.76616732
+0.5	24.82895122	24.23164656	25.7575974	24.07809152	28.47516652	24.80309925	26.18740395	12.59504588
-0.55	-41.03284893	-39.08361989	-41.73481274	-39.13186	-46.6814648	-43.1058073	-45.54935444	-20.52111306
+0.55	21.51181373	21.16309317	22.46583193	20.98224628	24.74988399	21.10099045	22.27125503	10.96141671
-0.6	-45.05759904	-42.64865095	-45.58705861	-42.77205355	-51.12097502	-48.01153244	-50.74615223	-22.46065021
+0.6	17.88781292	17.79980313	18.85975911	17.59194676	20.67425632	17.08530584	18.02392811	9.173867238
-0.65	-48.45239967	-45.64729708	-48.82883862	-45.83633795	-54.86136025	-52.17017685	-55.15188239	-24.09418466
+0.65	14.87468041	14.99316783	15.85227909	14.76550167	17.28020134	13.77379145	14.52189302	7.684997078
-0.7	-52.17320502	-48.92368718	-52.37277733	-49.18740266	-58.95576204	-56.7534045	-60.00783312	-25.88161725
+0.7	11.62552615	11.9539194	12.59771114	11.70818306	13.61353774	10.2368254	10.78206542	6.076239146
-0.75	-55.27810378	-51.64815042	-55.32150326	-51.97674774	-62.36756953	-60.60158113	-64.08537597	-27.37037627
+0.75	8.964366764	9.4524433	9.921083953	9.195052153	10.6039394	7.482907723	7.876744971	4.755491215
-0.8	-58.64021135	-54.58647737	-58.50391095	-54.98849972	-66.05603388	-64.79766421	-68.53202978	-28.9789983
+0.8	6.144877198	6.786659529	7.071245716	6.520898621	7.407069112	5.019763124	5.313902797	3.352227053
-0.85	-61.40729179	-56.9935137	-61.1130124	-57.4589909	-69.08603362	-68.2788139	-72.22149914	-30.29961726
+0.85	4.033356951	4.633586744	4.772041934	4.364996821	4.835157582	3.453616662	3.649946087	2.222968984
-0.9	-64.35594857	-59.5443552	-63.88066497	-60.0812471	-72.30773264	-72.02311912	-76.19042078	-31.70272827
+0.9	1.883163126	2.422287758	2.422287758	2.271198567	2.413920331	2.071557938	2.192544582	1.312712122
-0.95	-66.73730459	-61.5907199	-66.1035707	-62.18897371	-74.9026996	-75.08068359	-79.43193139	-32.83184186
+0.95	1.803146251	1.645422628	1.770437492	1.668761893	2.020367928	2.071557938	2.192544582	0.87602179
-1	-69.21775883	-63.70465384	-68.40324428	-64.37155138	-77.59680584	-78.30857554	-82.85468339	-34.00273813
+1	1.80E+00	1.645422628	1.770437492	1.668761893	2.020367928	2.071557938	2.192544582	0.87602179
(Span 2) -2	-6.323888347	-5.770729432	-6.209174121	-5.852583493	-7.085715261	-7.265245871	-7.6895631	-3.072332075
+2	69.40704504	63.74898443	68.47129928	64.44865868	77.73341239	78.86322959	83.44803681	34.04422697
-2.05	-6.323888347	-5.770729432	-6.209174121	-5.852583493	-7.085715261	-7.265245871	-7.6895631	-3.072332075
+2.05	66.73023713	61.46659668	65.98792183	62.09145707	74.82298416	75.39565825	79.77148016	32.77949816
-2.1	-6.323888347	-5.770729432	-6.209174121	-5.852583493	-7.085715261	-7.265245871	-7.6895631	-3.072332075
+2.1	63.56310135	58.73156858	63.01885708	59.27740564	71.3625561	71.37805063	75.51302948	31.27345139
-2.15	-6.323888347	-5.913244478	-6.209174121	-5.852583493	-7.085715261	-7.265245871	-7.6895631	-3.072332075
+2.15	60.26349029	55.85448839	59.90094971	56.32556303	67.74381215	67.26067687	71.14989265	29.69673127
-2.2	-8.482836193	-8.913446343	-9.364104798	-8.684318903	-10.03395586	-7.265245871	-7.6895631	-4.513423223
+2.2	56.52812809	52.57222503	56.34877384	52.96552819	63.63470267	62.66206352	66.27778142	27.90482355
-2.25	-11.78460614	-12.00885466	-12.67873131	-11.79802051	-13.7678952	-10.67418593	-11.2487885	-6.150800838

+2.25	52.7716846	49.25007822	52.75747216	49.57096998	59.49179502	58.09057961	61.43526801	26.0969534
-2.3	-15.52146536	-15.48558539	-16.40612785	-15.30221106	-17.97959497	-14.78617497	-15.59727936	-7.996718705
+2.3	48.6428025	45.57807021	48.79179059	45.82488358	54.92786172	53.11695292	56.16760587	24.10427657
-2.35	-19.27864269	-18.9588766	-20.13361331	-18.80881669	-22.202243	-18.97942486	-20.03280306	-9.846543341
+2.35	44.59550373	41.96048552	44.88823336	42.1395423	50.44495063	48.28705485	51.05292339	22.14609981
-2.4	-23.40762904	-22.75462866	-24.21079065	-22.64663701	-26.83145945	-23.64337934	-24.96724993	-11.87354085
+2.4	40.24781035	38.05624006	40.67866906	38.16733194	45.6200447	43.10034052	45.56143393	20.03775782
-2.45	-27.4544424	-26.45617157	-28.18999392	-26.39422129	-31.35866391	-28.26313723	-29.85581628	-13.85497223
+2.45	36.07562189	34.29285093	36.62400007	34.34313907	40.98128965	38.1233827	40.2922443	18.01011716
-2.5	-31.80106181	-30.41344166	-32.44733295	-30.4057381	-36.21153877	-33.27305587	-35.15810016	-15.97795546
+2.5	31.62355459	30.21451743	32.23324807	30.20397454	35.96729579	33.01955847	34.8897895	15.87119764
-2.55	-35.97174505	-34.29304487	-36.62420882	-34.34333653	-40.98152893	-38.12363384	-40.29251014	-18.01014707
+2.55	27.49380704	26.45597905	28.18978684	26.39403235	31.35843552	28.26289483	29.85555975	13.85494208
-2.6	-40.36150057	-38.25336671	-40.89113339	-38.36776683	-45.86334188	-43.35832276	-45.83457038	-20.14401997
+2.6	23.23465973	22.5618747	24.00366197	22.4516116	26.59604051	23.40468482	24.71468907	11.7705555
-2.65	-44.59804594	-41.96068071	-44.888444	-42.13974059	-50.44519156	-48.28728875	-51.05317106	-22.14613163
+2.65	19.31315391	18.95868909	20.13341202	18.80863264	22.20202108	18.97920282	20.03256817	9.846513004
-2.7	-48.85365923	-45.76549272	-48.99411557	-46.01595619	-55.16046733	-53.36898732	-56.4345208	-24.20578568
+2.7	15.36055489	15.30687675	16.21443619	15.1219382	17.76271446	14.5725861	15.37137713	7.901749729
-2.75	-52.77104883	-49.25024877	-52.75765655	-49.57114931	-59.49201361	-58.09080507	-61.43550683	-26.09698205
+2.75	11.81326383	12.00869531	12.67856047	11.79785496	13.76769638	10.67399406	11.24858561	6.150772633
-2.8	-56.71856828	-52.74206198	-56.53247177	-53.13922409	-63.84690222	-62.89784119	-66.52755951	-27.99732816
+2.8	8.341934287	8.756668084	9.196341683	8.526793986	9.845305002	7.265245787	7.6895632	4.430731613
-2.85	-60.26039638	-55.85464312	-59.90111727	-56.32571626	-67.74399962	-67.2608963	-71.15012515	-29.6967592
+2.85	6.323897123	5.913105385	6.209174083	5.852583406	7.085715551	7.265245787	7.6895632	3.072332112
-2.9	-63.7253534	-58.87594215	-63.17544411	-59.42573102	-71.54465983	-71.58726378	-75.73475659	-31.35269868
+2.9	6.323897123	5.770729754	6.209174083	5.852583406	7.085715551	7.265245787	7.6895632	3.072332112
-2.95	-66.72585282	-61.46672303	-65.98805908	-62.09159108	-74.82314911	-75.39584723	-79.7716805	-32.77952154
+2.95	6.323897123	5.770729754	6.209174083	5.852583406	7.085715551	7.265245787	7.6895632	3.072332112
-3	-69.53373528	-63.85999851	-68.59227198	-64.56359935	-77.87570635	-79.03557857	-83.63080748	-34.10595662
+3	6.323897123	5.770729754	6.209174083	5.852583406	7.085715551	7.265245787	7.6895632	3.072332112
(Span 3) -4	-1.80E+00	-1.64542272	-1.770437481	-1.668761868	-2.020368011	-2.071557914	-2.19254461	-0.876021801
+4	69.0835436	63.57968597	68.267177	64.24232832	77.43705035	78.1152971	82.64971411	33.93340294
-3.05	-1.80E+00	-1.64542272	-1.770437481	-1.668761868	-2.020368011	-2.071557914	-2.19254461	-0.876021801
+3.05	66.91385625	61.72985753	66.25481573	62.33244513	75.07955273	75.29072633	79.6546311	32.90880194
-3.1	-2.000471273	-2.529328899	-2.529328899	-2.384333623	-2.538839876	-2.071557914	-2.19254461	-1.359757639
+3.1	64.19311681	59.39128319	63.71449025	59.9237418	72.11403038	71.79653062	75.95022088	31.6184599
-3.15	-3.880189975	-4.486615094	-4.615195011	-4.217988152	-4.659995832	-3.346657425	-3.536317926	-2.145993824
+3.15	61.61323679	57.15915916	61.292646	57.62913147	69.2948791	68.52008248	72.47722273	30.39067118
-3.2	-6.300269463	-6.94715153	-7.242729517	-6.681754775	-7.599176947	-5.136453024	-5.437891206	-3.436504765
+3.2	58.45110679	54.40838042	58.31094486	54.80584193	65.83217836	64.54180722	68.26087855	28.88146803
-3.25	-8.76547778	-9.279839451	-9.736474882	-9.021774948	-10.39660292	-7.301768625	-7.686072237	-4.664430181
+3.25	55.50900026	51.83721937	55.52620391	52.17042407	62.60460889	60.87005332	64.36986462	27.47385589
-3.3	-11.80428185	-12.13854907	-12.79534801	-11.89379571	-13.83598816	-10.45002784	-11.00747444	-6.173779475
+3.3	51.96030496	48.72366666	52.15636015	48.98273215	58.70555947	56.47230473	59.70999309	25.77248611
-3.35	-14.64527534	-14.79801555	-15.64322876	-14.56908337	-17.04448114	-13.54504375	-14.28000426	-7.581510428
+3.35	48.70394051	45.85670361	49.0552827	46.05041863	55.12279797	52.46182325	55.46086969	24.20841735
-3.4	-18.08620096	-18.00547879	-19.08021955	-17.7991765	-20.92324405	-17.32946725	-18.28215607	-9.283001188
+3.4	44.82350093	42.42979981	45.35052089	42.54850723	50.84822722	47.70925573	50.42592838	22.34159609
-3.45	-21.25508092	-20.94847922	-22.23566434	-20.76582113	-24.48957894	-20.84335325	-21.99873864	-10.84717309
+3.45	41.30084404	39.31027721	41.97967624	39.36320601	46.96349609	43.41656797	45.87854159	20.64443363
-3.5	-25.04336157	-24.45527452	-25.99754971	-24.30380333	-28.74689112	-25.07416861	-26.47416152	-12.71411006
+3.5	37.14349247	35.61944508	37.99322083	35.59725971	42.37423382	38.37383856	40.53699092	18.63885747
-3.55	-28.49222208	-27.63856466	-29.41398792	-27.51788018	-32.61782609	-28.95038317	-30.57492935	-14.41135722
+3.55	33.38434704	32.29060886	34.39918136	32.20288276	38.2407593	33.85552218	35.7512465	16.83196718
-3.6	-32.57310232	-31.39526746	-33.44754156	-31.31356615	-37.19285741	-33.56295181	-35.45518245	-16.41702223
+3.6	29.0061494	28.38526923	30.1842549	28.22308308	33.39763163	28.58723036	30.17148591	14.71433054

-3.65	**-36.25403314**	**-34.77560399**	**-37.07840332**	**-34.73119346**	**-41.31520185**	**-37.74490393**	**-39.88021567**	**-18.22398192**
+3.65	**25.09602946**	**24.89036334**	**26.41359098**	**24.66354137**	**29.06863944**	**23.89986357**	**25.2072902**	**12.82107663**
-3.7	**-40.57274496**	**-38.73279098**	**-41.33039992**	**-38.73440006**	**-46.14712426**	**-42.67458627**	**-45.09685709**	**-20.34168792**
+3.7	**20.55082577**	**20.81994055**	**22.02341955**	**20.52007344**	**24.03247652**	**18.47066887**	**19.45778272**	**10.6180981**
-3.75	**-44.43785318**	**-42.26693006**	**-45.1291151**	**-42.31165336**	**-50.46763654**	**-47.10573404**	**-49.7862878**	**-22.23499455**
+3.75	**16.51853014**	**17.20220826**	**18.12270086**	**16.83927648**	**19.56119027**	**13.93249448**	**14.66578367**	**8.661845341**
-3.8	**-48.9396593**	**-46.37518029**	**-49.54633208**	**-46.47219751**	**-55.49562173**	**-52.28789163**	**-55.27087681**	**-24.43802368**
+3.8	**11.86107475**	**13.016124**	**13.61050795**	**12.58233975**	**14.39284024**	**9.598270905**	**10.16591153**	**6.400210895**
-3.85	**-52.94102047**	**-50.01987696**	**-53.46632905**	**-50.16516663**	**-59.96107759**	**-56.91169712**	**-60.1648413**	**-26.39431256**
+3.85	**8.22676459**	**9.318794274**	**9.626288812**	**8.824198317**	**9.83248495**	**9.530459694**	**10.08835292**	**4.40432368**
-3.9	**-57.57116684**	**-54.22976807**	**-57.9955425**	**-54.43286514**	**-65.1242977**	**-62.28169275**	**-65.84893851**	**-28.65596967**
+3.9	**8.22676459**	**7.482715815**	**8.05339522**	**7.591598401**	**9.194349786**	**9.530459694**	**10.08835292**	**3.999287345**
-3.95	**-61.66087221**	**-57.94179439**	**-61.99026818**	**-58.19763894**	**-69.68147139**	**-67.04155634**	**-70.88750778**	**-30.65187564**
+3.95	**8.22676459**	**7.482715815**	**8.05339522**	**7.591598401**	**9.194349786**	**9.530459694**	**10.08835292**	**3.999287345**
-5	**-66.36460594**	**-62.20388768**	**-66.57823634**	**-62.52230772**	**-74.91909693**	**-72.53475192**	**-76.70267287**	**-32.94546729**
+5	**8.22676459**	**7.482715815**	**8.05339522**	**7.591598401**	**9.194349786**	**9.530459694**	**10.08835292**	**3.999287345**

3-Span: Shear (Max and Min) Raw Data Results - 150' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.226749565	-17.70502004	-19.57734486	-11.12945495	-13.39919576	-14.45462195
End Shear	66.48762941	128.4453946	138.2795865	83.94577488	101.2161441	107.5254047
-0.05	-8.226749565	-17.70502004	-19.57734486	-11.12945495	-13.39919576	-14.45462195
+0.05	61.94508681	118.5914047	127.5670193	77.73802109	93.75810197	99.47517231
-0.1	-8.226749565	-17.70502004	-19.57734486	-11.12945495	-13.39919576	-14.45462195
+0.1	57.271375	108.4892976	116.413341	71.36680064	86.10197604	91.21478096
-0.15	-8.226749565	-17.70502004	-19.57734486	-11.12945495	-13.39919576	-14.45462195
+0.15	53.27273926	99.78755966	106.8186576	65.86784933	79.49257365	84.08996468
-0.2	-12.162373	-17.70502004	-19.57734486	-11.59120176	-13.39919576	-14.45462195
+0.2	48.69757196	90.03105214	96.07622401	59.6894649	72.06480713	76.09033746
-0.25	-16.23770738	-19.83990254	-21.04133624	-14.68784201	-18.08951109	-17.76294561
+0.25	44.75622631	81.68495477	86.90062949	54.39250878	65.69513534	69.23694423
-0.3	-20.84577341	-28.09684419	-28.93283861	-20.53646861	-25.14603652	-25.34454465
+0.3	40.33661939	72.39573376	76.70490238	48.48300736	58.58698314	61.59694667
-0.35	-24.82283939	-36.00236142	-36.21733312	-26.13433317	-31.86242504	-32.38654435
+0.35	36.55537745	64.51173667	68.06692333	43.45459836	52.5369035	55.10148039
-0.4	-29.29121818	-46.12010668	-46.90027889	-32.45147229	-39.44027107	-40.62096875
+0.4	32.34615106	55.81148851	58.5533299	37.89001909	45.83961293	47.91997237
-0.45	-33.12210633	-54.90395403	-56.71394922	-37.89233976	-45.96559977	-47.71788656
+0.45	28.77297432	48.49606883	50.57149419	33.1966919	40.18896747	41.86893743
-0.5	-37.39604695	-64.77168149	-67.75309071	-43.99203227	-53.27946508	-55.67971677
+0.5	24.82895122	40.5064621	41.87550117	28.05309079	33.99380645	35.24478092
-0.55	-41.03284893	-73.23033456	-77.2289681	-49.2093657	-59.53388853	-62.49486539
+0.55	21.51181373	33.8660972	34.66831118	23.76138148	28.8224385	29.72468812
-0.6	-45.05759904	-82.66557515	-87.81434648	-55.01556414	-66.49251661	-70.08524373
+0.6	17.88781292	26.70880516	26.92535224	19.11480547	23.22066284	23.75674648
-0.65	-48.45239967	-90.69254882	-96.83390825	-59.94281522	-72.39617697	-76.53212008
+0.65	14.87468041	20.84995498	21.09035774	15.291255	18.60842117	18.85408212
-0.7	-52.17320502	-99.57361108	-106.830067	-65.37947402	-78.90831271	-83.65218374
+0.7	11.62552615	15.14455853	15.62078254	11.21774461	13.69127952	13.76399338
-0.75	-55.27810378	-107.0624524	-115.2747973	-69.95011235	-84.3813741	-89.64428261
+0.75	8.964366764	10.863128	11.39948594	8.225409862	9.980025548	9.852416929
-0.8	-58.64021135	-115.2676497	-124.5462849	-74.941185	-90.35576178	-96.19517037
+0.8	6.144877198	7.039362114	7.228125065	5.984777438	6.558884249	6.964157437
-0.85	-61.40729179	-122.1118836	-132.2976802	-79.08866025	-95.31836314	-101.645981
+0.85	4.033356951	4.483023825	4.426128053	4.11120899	4.520921315	4.672174402
-0.9	-64.35594857	-129.5195392	-140.7090489	-83.55810052	-100.6637474	-107.5288306
+0.9	1.883163126	3.825287829	4.221225724	2.410932093	2.906908499	3.129970193
-0.95	-66.73730459	-135.6127023	-147.6485802	-87.21587764	-105.0360467	-112.3518666
+0.95	1.803146251	3.825287829	4.221225724	2.410932093	2.906908499	3.129970193
-1	-69.21775883	-142.1011459	-155.0643655	-91.08764345	-109.6611775	-117.4678157
+1	1.80E+00	3.825287829	4.221225724	2.410932093	2.906908499	3.129970193
(Span 2) -2	-6.323888347	-13.4158241	-14.80443426	-8.455479165	-10.19493811	-10.97724713
+2	69.40704504	143.7010232	157.0521413	91.84557639	110.5377246	118.5538272
-2.05	-6.323888347	-13.4158241	-14.80443426	-8.455479165	-10.19493811	-10.97724713
+2.05	66.73023713	136.7691468	149.1440881	87.69546488	105.5759777	113.0743796
-2.1	-6.323888347	-13.4158241	-14.80443426	-8.455479165	-10.19493811	-10.97724713
+2.1	63.56310135	128.8453964	140.1564141	82.90662898	99.84499681	106.7725061
-2.15	-6.323888347	-13.4158241	-14.80443426	-8.455479165	-10.19493811	-10.97724713
+2.15	60.26349029	120.8134512	131.0895333	78.0150186	93.98636043	100.3525876
-2.2	-8.482836193	-13.4158241	-14.80443426	-8.455479165	-10.19493811	-10.97724713
+2.2	56.52812809	111.9256201	121.0978754	72.56684084	87.45670547	93.21828754
-2.25	-11.78460614	-15.9813514	-16.27073356	-11.77694622	-14.35567077	-14.43441333

+2.25	**52.7716846**	**103.1619867**	**111.2822428**	**67.1639666**	**80.97746123**	**86.15720339**
-2.3	**-15.52146536**	**-23.02030371**	**-23.23349582**	**-16.51950217**	**-20.07963033**	**-20.51540306**
+2.3	**48.6428025**	**93.69784751**	**100.7182531**	**61.29879447**	**73.93995013**	**78.50552683**
-2.35	**-19.27864269**	**-30.5177406**	**-31.36047311**	**-21.37390943**	**-25.93262135**	**-26.75776256**
+2.35	**44.59550373**	**84.57091523**	**90.56394553**	**55.61489913**	**67.11638987**	**71.10258503**
-2.4	**-23.40762904**	**-38.94523118**	**-40.54307049**	**-26.79004192**	**-32.457409**	**-33.73914659**
+2.4	**40.24781035**	**74.67719595**	**79.85927345**	**49.46108829**	**59.76051**	**63.07401796**
-2.45	**-27.4544424**	**-47.36871868**	**-49.76138264**	**-32.16923395**	**-38.93305136**	**-40.68721895**
+2.45	**36.07562189**	**65.55782163**	**69.77636746**	**43.69004237**	**52.78950637**	**55.60807537**
-2.5	**-31.80106181**	**-56.57710878**	**-59.87691777**	**-38.01659381**	**-45.96784773**	**-48.25393621**
+2.5	**31.62355459**	**56.10947759**	**59.36271328**	**37.72038538**	**45.61158945**	**47.87033455**
-2.55	**-35.97174505**	**-65.55825852**	**-69.77648652**	**-43.6903361**	**-52.78985977**	**-55.60843293**
+2.55	**27.49380704**	**47.36833347**	**49.7612854**	**32.16896033**	**38.93272162**	**40.68687652**
-2.6	**-40.36150057**	**-75.15977712**	**-80.39331992**	**-49.76242801**	**-60.12297431**	**-63.46732848**
+2.6	**23.23465973**	**38.5119824**	**40.07024897**	**26.51247049**	**32.12314156**	**33.3809873**
-2.65	**-44.59804594**	**-84.57136155**	**-90.56406763**	**-55.61517535**	**-67.11672214**	**-71.10294442**
+2.65	**19.31315391**	**30.51739404**	**31.36037511**	**21.37365212**	**25.93231118**	**26.75744188**
-2.7	**-48.85365923**	**-94.17578687**	**-101.2504925**	**-61.59571074**	**-74.2963057**	**-78.89255166**
+2.7	**15.36055489**	**22.64081019**	**22.72051133**	**16.27269375**	**19.78190486**	**20.19846341**
-2.75	**-52.77104883**	**-103.1624194**	**-111.2823422**	**-67.16424927**	**-80.97780089**	**-86.15756103**
+2.75	**11.81326383**	**15.98108274**	**16.2706776**	**11.77673229**	**14.35541208**	**14.43413902**
-2.8	**-56.71856828**	**-112.3794417**	**-121.6067632**	**-72.84583397**	**-87.79117977**	**-93.58327239**
+2.8	**8.341934287**	**13.41582433**	**14.80443421**	**8.455479461**	**10.19493852**	**10.97724729**
-2.85	**-60.26039638**	**-120.8138507**	**-131.0896433**	**-78.01526995**	**-93.98666129**	**-100.3529059**
+2.85	**6.323897123**	**13.41582433**	**14.80443421**	**8.455479461**	**10.19493852**	**10.97724729**
-2.9	**-63.7253534**	**-129.2556995**	**-140.6203391**	**-83.15558918**	**-100.143058**	**-107.099663**
+2.9	**6.323897123**	**13.41582433**	**14.80443421**	**8.455479461**	**10.19493852**	**10.97724729**
-2.95	**-66.72585282**	**-136.7694977**	**-149.1441707**	**-87.69568928**	**-105.5762458**	**-113.0746565**
+2.95	**6.323897123**	**13.41582433**	**14.80443421**	**8.455479461**	**10.19493852**	**10.97724729**
-3	**-69.53373528**	**-144.0483963**	**-157.4495404**	**-92.05236315**	**-110.7848045**	**-118.8273972**
+3	**6.323897123**	**13.41582433**	**14.80443421**	**8.455479461**	**10.19493852**	**10.97724729**
(Span 3) -4	**-1.80E+00**	**-3.825287893**	**-4.221225712**	**-2.410932178**	**-2.906908617**	**-3.129970238**
+4	**69.0835436**	**141.7107473**	**154.6175719**	**90.85546696**	**109.3839266**	**117.1606507**
-3.05	**-1.80E+00**	**-3.825287893**	**-4.221225712**	**-2.410932178**	**-2.906908617**	**-3.129970238**
+3.05	**66.91385625**	**136.0330242**	**148.1284256**	**87.46746714**	**105.3366911**	**112.6839342**
-3.1	**-2.000471273**	**-3.825287893**	**-4.221225712**	**-2.410932178**	**-2.906908617**	**-3.129970238**
+3.1	**64.19311681**	**129.0697244**	**140.1978891**	**83.28734636**	**100.3400126**	**107.1721547**
-3.15	**-3.880189975**	**-4.345727771**	**-4.259596451**	**-3.985549562**	**-4.381342057**	**-4.51585505**
+3.15	**61.61323679**	**122.5876897**	**132.837621**	**79.37637826**	**95.66255206**	**102.0244042**
-3.2	**-6.300269463**	**-7.264282985**	**-7.467400868**	**-6.121977843**	**-6.708923952**	**-7.135126318**
+3.2	**58.45110679**	**114.766049**	**123.9792389**	**74.63660505**	**89.99124515**	**95.79515785**
-3.25	**-8.76547778**	**-10.58273048**	**-11.11019092**	**-8.078199505**	**-9.727144811**	**-9.622125062**
+3.25	**55.50900026**	**107.5861756**	**115.8663672**	**70.26920882**	**84.76340699**	**90.06287583**
-3.3	**-11.80428185**	**-15.48617502**	**-15.93428347**	**-11.4629335**	**-13.98736417**	**-14.06088973**
+3.3	**51.96030496**	**99.02781258**	**106.2156291**	**65.04582921**	**78.50872827**	**83.21499914**
-3.35	**-14.64527534**	**-20.45477348**	**-20.51713089**	**-15.02745089**	**-18.29009735**	**-18.51614538**
+3.35	**48.70394051**	**91.25656801**	**97.46863646**	**60.28854838**	**72.81036457**	**76.98469221**
-3.4	**-18.08620096**	**-27.14242848**	**-27.39326165**	**-19.39703364**	**-23.56100351**	**-24.11892978**
+3.4	**44.82350093**	**82.08319027**	**87.16095302**	**54.6576072**	**66.0635669**	**69.61709722**
-3.45	**-21.25508092**	**-33.40535536**	**-34.16870064**	**-23.46298211**	**-28.46279038**	**-29.34113567**
+3.45	**41.30084404**	**73.82707804**	**77.89839008**	**49.57697973**	**59.97452297**	**62.97526763**
-3.5	**-25.04336157**	**-40.99404428**	**-42.40510479**	**-28.36760802**	**-34.37270332**	**-35.6495628**
+3.5	**37.14349247**	**64.16036614**	**67.06921195**	**43.61452518**	**52.82686482**	**55.18679381**
-3.55	**-28.49222208**	**-47.98527459**	**-50.01442508**	**-32.86844417**	**-39.79369152**	**-41.4459518**
+3.55	**33.38434704**	**55.52578582**	**57.40964125**	**38.2770923**	**46.42699005**	**48.21994653**
-3.6	**-32.57310232**	**-56.34544298**	**-59.13617764**	**-38.2320669**	**-46.25135637**	**-48.36115934**
+3.6	**29.0061494**	**45.48741939**	**46.19437337**	**32.05916871**	**38.9697247**	**40.10945378**

-3.65	**-36.25403314**	**-63.95844977**	**-67.46089001**	**-43.10125159**	**-52.11169885**	**-54.64525662**
+3.65	**25.09602946**	**36.5809153**	**37.0965796**	**26.53149553**	**32.33889757**	**32.9040932**
-3.7	**-40.57274496**	**-72.96841636**	**-77.33251019**	**-48.84780199**	**-59.02583198**	**-62.06838332**
+3.7	**20.55082577**	**27.53257107**	**28.44196429**	**20.13412659**	**24.6632529**	**24.86171093**
-3.75	**-44.43785318**	**-81.09679896**	**-86.25409526**	**-54.01881803**	**-65.24570798**	**-68.75362914**
+3.75	**16.51853014**	**20.32549414**	**21.53668418**	**15.02010761**	**18.52614677**	**18.19501799**
-3.8	**-48.9396593**	**-90.63488838**	**-96.74009508**	**-60.07226981**	**-72.52507767**	**-76.58581129**
+3.8	**11.86107475**	**17.70501976**	**19.57743705**	**11.36861927**	**13.39919619**	**14.45462212**
-3.85	**-52.94102047**	**-99.17210726**	**-106.1400783**	**-65.47855588**	**-79.02461376**	**-83.58572936**
+3.85	**8.22676459**	**17.70501976**	**19.57743705**	**11.12945525**	**13.39919619**	**14.45462212**
-3.9	**-57.57116684**	**-109.1166362**	**-117.1050456**	**-71.76286271**	**-86.57796534**	**-91.7281048**
+3.9	**8.22676459**	**17.70501976**	**19.57743705**	**11.12945525**	**13.39919619**	**14.45462212**
-3.95	**-61.66087221**	**-117.9562933**	**-126.8648691**	**-77.33787815**	**-93.27731234**	**-98.95619028**
+3.95	**8.22676459**	**17.70501976**	**19.57743705**	**11.12945525**	**13.39919619**	**14.45462212**
-5	**-66.36460594**	**-128.1855864**	**-138.1733542**	**-83.77699489**	**-101.013391**	**-107.309897**
+5	**8.22676459**	**17.70501976**	**19.57743705**	**11.12945525**	**13.39919619**	**14.45462212**

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-61.700622	-42.992883	-61.522785	-65.962305	-96.864748	-34.458407	-46.547199	-53.320097	-59.720227	-66.478813
+0.05	464.636016	329.937102	439.250902	447.128991	507.008346	265.613995	358.318371	405.775669	444.434613	483.774638
-0.1	-123.401243	-85.985766	-123.045570	-131.924610	-193.729496	-68.916814	-93.094398	-106.640193	-119.440453	-132.957625
+0.1	864.342398	614.404912	813.176577	823.891494	919.993512	494.857780	667.428110	755.173296	827.317941	902.513607
-0.15	-185.101865	-128.978649	-184.568355	-197.886915	-290.594244	-103.375221	-139.641597	-159.960290	-179.160680	-199.436438
+0.15	1199.191220	853.643671	1122.318566	1131.225068	1257.979160	687.865672	927.624575	1048.562134	1161.757437	1264.694413
-0.2	-246.802487	-171.971532	-246.091140	-263.849220	-387.458992	-137.833628	-186.188796	-213.280386	-238.880907	-265.915250
+0.2	1470.469347	1048.485462	1368.281888	1387.117877	1527.335378	845.287782	1139.789610	1287.003980	1434.903479	1567.540185
-0.25	-308.503109	-214.964415	-307.613925	-329.811525	-484.323739	-172.292034	-232.735996	-266.600483	-298.601134	-332.394063
+0.25	1679.848577	1200.029709	1565.448047	1578.228107	1760.021891	967.988041	1305.093551	1476.399220	1647.777007	1811.148044
-0.3	-370.203730	-257.957298	-369.136710	-395.773829	-581.188487	-206.750441	-279.283195	-319.920580	-358.321360	-398.872875
+0.3	1832.620707	1309.643320	1705.352951	1719.601288	1922.179337	1057.044474	1431.558873	1621.660786	1802.256716	1989.539841
-0.35	-431.904352	-300.950181	-430.659495	-461.736134	-678.053235	-241.208848	-325.830394	-373.240676	-418.041587	-465.351688
+0.35	1940.851617	1387.102811	1788.474290	1818.880252	2041.995711	1113.748497	1517.782814	1716.884929	1910.075642	2104.949677
-0.4	-493.604974	-343.943065	-492.182280	-527.698439	-774.917983	-275.667255	-372.377593	-426.560773	-477.761814	-531.830501
+0.4	1993.156523	1426.450695	1827.699999	1880.033897	2099.044084	1139.605724	1562.059111	1763.736494	1966.855475	2165.390613
-0.45	-555.305596	-386.935948	-553.705065	-593.660744	-871.782731	-310.125662	-418.924792	-479.880869	-537.482040	-598.309313
+0.45	1992.567824	1428.982123	1816.471388	1886.540141	2102.393723	1136.335469	1566.082873	1764.801861	1972.344698	2175.835712
-0.5	-617.006217	-429.928831	-615.227850	-659.623049	-968.647479	-344.584069	-465.471991	-533.200966	-597.202267	-664.788126
+0.5	1960.914591	1405.740512	1790.781227	1851.838005	2051.319746	1119.832864	1539.746772	1736.029700	1938.687468	2136.582115
-0.55	-678.706839	-472.921714	-676.750635	-725.585354	-1065.512227	-379.042476	-512.019190	-586.521062	-656.922494	-731.266938
+0.55	1886.464667	1351.266754	1729.475509	1772.832442	1980.908395	1080.370607	1479.590785	1670.347380	1861.716886	2047.172428
-0.6	-740.407461	-515.914597	-738.273420	-791.547659	-1162.376975	-413.500883	-558.566389	-639.841159	-716.642720	-797.745751
+0.6	1766.702083	1265.692479	1622.598659	1646.420917	1860.051342	1015.335379	1386.004260	1565.780645	1741.750188	1917.225263
-0.65	-802.108083	-558.907480	-799.796205	-857.509964	-1259.241723	-447.959290	-605.113588	-693.161256	-776.362947	-864.224563
+0.65	1605.849243	1151.986514	1477.348400	1486.926159	1685.105541	927.037800	1262.210601	1425.980949	1582.935516	1744.360150
-0.7	-863.808704	-601.900363	-861.318990	-923.472269	-1356.106470	-482.417696	-651.660787	-746.481352	-836.083174	-930.703376
+0.7	1408.537529	1013.385307	1291.204503	1283.915285	1450.538326	818.002398	1111.722081	1254.931667	1390.077866	1532.058510
-0.75	-925.509326	-644.893246	-922.841775	-989.434574	-1452.971218	-516.876103	-698.207987	-799.801449	-895.803401	-997.182188
+0.75	1179.687097	854.382110	1068.909854	1047.267376	1167.756380	690.967485	938.339765	1056.947637	1169.810890	1285.681589
-0.8	-987.209948	-687.886129	-984.364560	-1055.396879	-1549.835966	-551.334510	-744.755186	-853.121545	-955.523627	-1063.661001
+0.8	924.746994	677.053532	815.598389	779.109460	823.799333	548.885145	746.153041	836.674763	923.344664	1011.004273
-0.85	-1048.910569	-730.879012	-1045.887344	-1121.359184	-1660.670926	-585.792917	-791.302385	-906.441642	-1015.243854	-1130.139814
+0.85	649.455908	484.590563	536.795831	479.182342	498.564886	394.921619	539.540536	599.090834	656.174778	714.216516
-0.9	-1110.611191	-773.871895	-1107.410129	-1187.321488	-1809.957061	-620.251324	-837.849584	-959.761739	-1074.964081	-1196.618626
+0.9	359.960887	284.112130	256.243983	255.734186	348.476303	232.456685	323.169159	349.504681	377.344623	401.922436
-0.95	-1172.311813	-816.864778	-1168.932914	-1253.283793	-1992.136663	-654.709731	-884.396783	-1013.081835	-1134.684307	-1263.097439
+0.95	256.948341	179.304443	254.009945	269.941640	342.587530	143.829577	194.337368	222.389934	248.992846	276.962632
-1	-1234.012443	-859.857649	-1230.455692	-1319.246119	-2202.204753	-689.168112	-930.943983	-1066.401927	-1194.404537	-1329.576278
+1	270.471939	188.741518	267.378891	284.149094	353.337260	151.399557	204.565650	234.094668	262.097733	291.539617
(Span 2) -2	-1234.012443	-859.857649	-1230.455692	-1319.246119	-2202.204753	-689.168112	-930.943983	-1066.401927	-1194.404537	-1329.576278
+2	270.471939	188.741518	267.378891	284.149094	353.337260	151.399557	204.565650	234.094668	262.097733	291.539617
-2.05	-901.029629	-628.758276	-890.724454	-946.591380	-1477.240102	-504.360254	-681.473515	-779.844079	-873.131240	-971.211538
+2.05	208.814028	145.715214	206.426083	219.373281	282.272020	116.885883	157.932010	180.729471	202.348840	225.079030
-2.1	-839.371632	-585.731971	-829.771645	-881.815565	-1214.671902	-469.846580	-634.839873	-726.478882	-813.382346	-904.750951
+2.1	455.049644	352.771905	328.140839	291.281264	300.943366	282.759744	398.716588	433.030306	474.063501	503.183320
-2.15	-777.713635	-542.705666	-768.818837	-817.039750	-1051.996183	-435.332905	-588.206232	-673.113684	-753.633453	-838.290364
+2.15	796.050315	589.773006	664.429180	611.323676	584.477704	474.578540	653.921579	727.161803	802.581720	872.797075
-2.2	-716.055638	-499.679361	-707.866028	-752.263934	-937.558270	-400.819231	-541.572591	-619.748487	-693.884559	-771.829777
+2.2	1118.452074	812.240986	990.467599	962.327515	969.768724	654.492079	894.845718	1004.502639	1111.260564	1217.857950

-2.25	-654.397641	-456.653056	-646.913220	-687.488119	-865.292843	-366.305557	-494.938950	-566.383290	-634.135666	-705.369190
+2.25	1401.628530	1010.905044	1273.149947	1269.807394	1429.422453	812.407494	1109.247915	1249.661084	1387.437664	1525.268181
-2.3	-592.739644	-413.626751	-585.960411	-622.712303	-801.711489	-331.791883	-448.305309	-513.018093	-574.386772	-638.908603
+2.3	1647.814032	1181.588761	1512.365415	1529.551664	1809.916013	948.719015	1294.714256	1461.922554	1624.912522	1787.814958
-2.35	-531.081648	-370.600446	-525.007603	-557.936488	-738.130136	-297.278209	-401.671668	-459.652896	-514.637879	-572.448015
+2.35	1839.527170	1317.226752	1694.750174	1733.230927	2107.421286	1054.571006	1441.420879	1628.284761	1814.142909	1996.382070
-2.4	-469.423651	-327.574141	-464.054795	-493.160673	-674.548783	-262.764535	-355.038026	-406.287699	-454.888985	-505.987428
+2.4	1981.450972	1416.891737	1829.020683	1887.920192	2317.194012	1132.156848	1550.435356	1751.617432	1953.400219	2150.471815
-2.45	-407.765654	-284.547836	-403.101986	-428.384857	-610.967430	-228.250861	-308.404385	-352.922502	-395.140091	-439.526841
+2.45	2061.185696	1474.205995	1901.483291	1976.513746	2420.453768	1175.014384	1612.696201	1821.706129	2034.132791	2244.422974
-2.5	-346.107657	-241.521531	-342.149178	-363.609042	-547.386072	-193.737186	-261.770744	-299.557305	-335.391198	-373.066257
+2.5	2084.330616	1492.565543	1915.884618	2003.241816	2428.847895	1186.118744	1633.946748	1842.656761	2060.644285	2275.832939
-2.55	-407.765086	-284.547824	-403.101992	-428.384842	-610.967425	-228.250859	-308.404387	-352.922494	-395.140092	-439.526844
+2.55	2061.322552	1474.208646	1901.484178	1976.514137	2420.453504	1175.017939	1612.700443	1821.707573	2034.136579	2244.424729
-2.6	-469.422997	-327.574128	-464.054800	-493.160655	-674.548778	-262.764533	-355.038026	-406.287690	-454.888985	-505.987432
+2.6	1981.538656	1416.893793	1829.024322	1887.923432	2317.197168	1132.165611	1550.438882	1751.622620	1953.403121	2150.472676
-2.65	-531.080909	-370.600432	-525.007607	-557.936467	-738.130131	-297.278207	-401.671666	-459.652887	-514.637878	-572.448019
+2.65	1839.611753	1317.228212	1694.750964	1733.233261	2107.423160	1054.573505	1441.423510	1628.284840	1814.144752	1996.385611
-2.7	-592.738820	-413.626736	-585.960415	-622.712280	-801.711484	-331.791882	-448.305306	-513.018083	-574.386771	-638.908606
+2.7	1647.731922	1181.589750	1512.369294	1529.554130	1809.919147	948.726407	1294.716388	1461.926071	1624.913769	1787.821551
-2.75	-654.396732	-456.653040	-646.913222	-687.488092	-865.292836	-366.305556	-494.938945	-566.383280	-634.135664	-705.369194
+2.75	1401.681623	1010.906013	1273.153582	1269.809585	1429.424739	812.409485	1109.250038	1249.664370	1387.438780	1525.270500
-2.8	-716.054643	-499.679344	-707.866030	-752.263904	-937.558253	-400.819230	-541.572585	-619.748476	-693.884557	-771.829781
+2.8	1118.207249	812.241826	990.470964	962.329468	969.771062	654.499518	894.847734	1004.505899	1111.261584	1217.864447
-2.85	-777.712554	-542.705648	-768.818837	-817.039717	-1051.996145	-435.332904	-588.206225	-673.113673	-753.633450	-838.290369
+2.85	796.108617	589.773829	664.428409	611.325375	584.478772	474.580505	653.923615	727.161055	802.582862	872.799617
-2.9	-839.370466	-585.731952	-829.771645	-881.815529	-1214.671857	-469.846578	-634.839865	-726.478869	-813.382344	-904.750956
+2.9	454.552922	352.773277	328.143669	291.282865	300.944461	282.767281	398.719205	433.034081	474.065350	503.182432
-2.95	-901.028377	-628.758256	-890.724452	-946.591341	-1477.240150	-504.360253	-681.473504	-779.844066	-873.131237	-971.211543
+2.95	208.814316	145.715214	206.426098	219.373297	282.272014	116.885881	157.932026	180.729468	202.348844	225.079029
-3	-1234.014698	-859.857682	-1230.455712	-1319.246155	-2202.204759	-689.168125	-930.944024	-1066.401956	-1194.404566	-1329.576296
+3	270.472315	188.741523	267.378894	284.149107	353.337262	151.399557	204.565657	234.094670	262.097735	291.539616
(Span 3) -4	-1234.014698	-859.857682	-1230.455712	-1319.246155	-2202.204759	-689.168125	-930.944024	-1066.401956	-1194.404566	-1329.576296
+4	270.472315	188.741523	267.378894	284.149107	353.337262	151.399557	204.565657	234.094670	262.097735	291.539616
-3.05	-1172.313964	-816.864797	-1168.932926	-1253.283848	-1992.136651	-654.709718	-884.396822	-1013.081858	-1134.684338	-1263.097483
+3.05	256.948699	179.304447	254.009950	269.941651	342.587531	143.829579	194.337374	222.389936	248.992848	276.962635
-3.1	-1110.613229	-773.871912	-1107.410140	-1187.321541	-1809.957050	-620.251310	-837.849621	-959.761760	-1074.964110	-1196.618669
+3.1	360.162124	284.111444	256.243681	255.734196	348.476307	232.460452	323.167306	349.501837	377.343870	401.924567
-3.15	-1048.912495	-730.879028	-1045.887354	-1121.359235	-1660.670916	-585.792902	-791.302420	-906.441662	-1015.243882	-1130.139856
+3.15	649.789812	484.590818	536.793505	479.185429	498.566915	394.925646	539.539137	599.088282	656.175361	714.219189
-3.2	-987.211760	-687.886143	-984.364568	-1055.396928	-1549.835962	-551.334495	-744.755219	-853.121564	-955.523653	-1063.661043
+3.2	925.310219	677.053951	815.596216	779.112254	823.798143	548.889297	746.151891	836.672443	923.345438	1011.007084
-3.25	-925.511026	-644.893258	-922.841782	-989.434621	-1452.971214	-516.876087	-698.208018	-799.801466	-895.803425	-997.182229
+3.25	1180.374338	854.382389	1068.907419	1047.269848	1167.754255	690.971476	938.338508	1056.945235	1169.811402	1285.684367
-3.3	-863.810292	-601.900374	-861.318996	-923.472314	-1356.106466	-482.417680	-651.660817	-746.481368	-836.083197	-930.703416
+3.3	1409.219753	1013.385095	1291.201723	1283.913986	1450.535832	818.006219	1111.720742	1254.929132	1390.078230	1532.061077
-3.35	-802.109557	-558.907489	-799.796210	-857.510008	-1259.241718	-447.959272	-605.113616	-693.161270	-776.362969	-864.224602
+3.35	1606.470397	1151.985790	1477.344753	1486.924174	1685.103688	927.041518	1262.208731	1425.977905	1582.934752	1744.361944
-3.4	-740.408823	-515.914604	-738.273424	-791.547701	-1162.376969	-413.500865	-558.566415	-639.841172	-716.642741	-797.745789
+3.4	1767.135484	1265.691292	1622.594161	1646.417923	1860.052717	1015.338631	1386.001999	1565.776871	1741.748693	1917.226367
-3.45	-678.708088	-472.921719	-676.750638	-725.585394	-1065.512221	-379.042457	-512.019213	-586.521074	-656.922513	-731.266975
+3.45	1886.609175	1351.265052	1729.472069	1772.829592	1980.906615	1080.373193	1479.587812	1670.342784	1861.714587	2047.172119
-3.5	-617.007354	-429.928835	-615.227852	-659.623088	-968.647473	-344.584050	-465.472012	-533.200976	-597.202285	-664.788162
+3.5	1961.018125	1405.737767	1790.783512	1851.833738	2051.320771	1119.834698	1539.742773	1736.023920	1938.683877	2136.580572
-3.55	-555.306619	-386.935950	-553.705066	-593.660781	-871.782725	-310.125642	-418.924811	-479.880878	-537.482057	-598.309348
+3.55	1992.486840	1428.977026	1816.469770	1886.537672	2102.391789	1136.334145	1566.079040	1764.799916	1972.340800	2175.837905
-3.6	-493.605885	-343.943065	-492.182281	-527.698474	-774.917977	-275.667235	-372.377610	-426.560780	-477.761828	-531.830535

+3.6	1993.030781	1426.452970	1827.697096	1880.029913	2099.042641	1139.603502	1562.054173	1763.733306	1966.850166	2165.391436
-3.65	-431.905151	-300.950181	-430.659495	-461.736167	-678.053228	-241.208827	-325.830409	-373.240682	-418.041600	-465.351721
+3.65	1940.675910	1387.103967	1788.470968	1818.877970	2041.994250	1113.745334	1517.776713	1716.880350	1910.076932	2104.948639
-3.7	-370.204416	-257.957296	-369.136709	-395.773861	-581.188480	-206.750419	-279.283208	-319.920584	-358.321372	-398.872908
+3.7	1832.391111	1309.643074	1705.348039	1719.602677	1922.177367	1057.040336	1431.559821	1621.654480	1802.256247	1989.537066
-3.75	-308.503682	-214.964411	-307.613923	-329.811554	-484.323732	-172.292012	-232.736007	-266.600486	-298.601144	-332.394094
+3.75	1679.680254	1200.028463	1565.449707	1578.225568	1760.019578	967.983015	1305.093091	1476.399872	1647.774986	1811.143341
-3.8	-246.802947	-171.971527	-246.091137	-263.849247	-387.458984	-137.833604	-186.188806	-213.280388	-238.880916	-265.915281
+3.8	1470.240836	1048.482802	1368.281575	1387.113380	1527.333656	845.281492	1139.787580	1287.002815	1434.899360	1567.541329
-3.85	-185.102213	-128.978642	-184.568351	-197.886941	-290.594236	-103.375197	-139.641605	-159.960290	-179.160688	-199.436467
+3.85	1198.900373	853.639565	1122.316281	1131.224871	1257.977384	687.858208	927.621075	1048.559135	1161.751205	1264.693497
-3.9	-123.401478	-85.985757	-123.045565	-131.924634	-193.729488	-68.916789	-93.094403	-106.640192	-119.440460	-132.957654
+3.9	863.986435	614.399428	813.172412	823.889479	919.994116	494.849170	667.422905	755.168743	827.318147	902.510543
-3.95	-61.700744	-42.992872	-61.522779	-65.962327	-96.864739	-34.458382	-46.547202	-53.320094	-59.720231	-66.478840
+3.95	464.655548	329.930034	439.244781	447.124701	507.006498	265.604307	358.311610	405.769293	444.432751	483.773030
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-61.700622	-56.120365	-60.400463	-56.936987	-68.957620	-71.478448	-75.662646	-29.994656
+0.05	464.636016	437.002521	467.594206	439.018859	525.786888	505.797285	534.821937	230.961464
-0.1	-123.401243	-112.240730	-120.800926	-113.873975	-137.915240	-142.956896	-151.325291	-59.989311
+0.1	864.342398	814.691285	871.328309	817.857256	978.650433	935.765972	989.370660	429.838951
-0.15	-185.101865	-168.361095	-181.201389	-170.810962	-206.872860	-214.435343	-226.987937	-89.983967
+0.15	1199.191220	1133.363105	1211.576933	1136.880527	1359.164186	1290.627752	1364.421354	597.034890
-0.2	-246.802487	-224.481461	-241.601852	-227.747949	-275.830479	-285.913791	-302.650583	-119.978622
+0.2	1470.469347	1394.029291	1489.455934	1397.157202	1668.679747	1581.843083	1672.614221	733.139450
-0.25	-308.503109	-280.601826	-302.002315	-284.684937	-344.788099	-357.392239	-378.313229	-149.973278
+0.25	1679.848577	1598.048328	1706.455068	1600.108425	1922.171072	1817.146506	1922.430457	839.144082
-0.3	-370.203730	-336.722191	-362.402778	-341.621924	-413.745719	-428.870687	-453.975874	-179.967933
+0.3	1832.620707	1747.126691	1864.438811	1758.517844	2111.925257	1986.191832	2100.774957	915.984906
-0.35	-431.904352	-392.842556	-422.803242	-398.558911	-482.703339	-500.349134	-529.638520	-209.962589
+0.35	1940.851617	1846.653945	1976.200879	1864.960313	2236.302299	2100.261095	2222.163000	964.600553
-0.4	-493.604974	-448.962921	-483.203705	-455.495899	-551.660959	-571.827582	-605.301166	-239.957244
+0.4	1993.156523	1903.506448	2035.177534	1919.814456	2298.096779	2150.555691	2275.904673	986.327652
-0.45	-555.305596	-505.083286	-543.604168	-512.432886	-620.618579	-643.306030	-680.963811	-269.951900
+0.45	1992.567824	1911.553372	2042.182341	1925.386468	2300.627285	2140.164447	2265.414071	981.116628
-0.5	-617.006217	-561.203651	-604.004631	-569.369874	-689.576199	-714.784478	-756.626457	-299.946555
+0.5	1960.914591	1878.545664	2007.574736	1892.598406	2263.087749	2109.067830	2232.310526	969.397599
-0.55	-678.706839	-617.324017	-664.405094	-626.306861	-758.533818	-786.262926	-832.289103	-329.941211
+0.55	1886.464667	1802.844349	1927.772780	1818.390669	2176.263924	2035.243861	2153.741717	936.481561
-0.6	-740.407461	-673.444382	-724.805557	-683.243848	-827.491438	-857.741373	-907.951749	-359.935867
+0.6	1766.702083	1687.425050	1804.915749	1703.413584	2039.707131	1906.387274	2016.973807	880.981849
-0.65	-802.108083	-729.564747	-785.206020	-740.180836	-896.449058	-929.219821	-983.614394	-389.930522
+0.65	1605.849243	1537.432087	1643.209513	1551.616108	1858.133738	1727.308259	1827.106489	804.906407
-0.7	-863.808704	-785.685112	-845.606483	-797.117823	-965.406678	-1000.698269	-1059.277040	-419.925178
+0.7	1408.537529	1358.431531	1447.234246	1367.300280	1636.439993	1503.271840	1589.721043	710.450885
-0.75	-925.509326	-841.805477	-906.006946	-854.054810	-1034.364298	-1072.176717	-1134.939686	-449.919833
+0.75	1179.687097	1150.765710	1223.073720	1155.121153	1380.211938	1241.543996	1313.603108	599.998898
-0.8	-987.209948	-897.925842	-966.407409	-910.991798	-1103.321918	-1143.655165	-1210.602331	-479.914489
+0.8	924.746994	919.277095	973.958031	920.086110	1095.462674	946.792525	1001.496964	476.121312
-0.85	-1048.910569	-954.046207	-1026.807872	-967.928785	-1172.279537	-1215.133612	-1286.264977	-509.909144
+0.85	649.455908	669.155996	705.110155	667.556121	788.634031	623.045024	658.790427	341.577050
-0.9	-1110.611191	-1010.166572	-1087.208335	-1024.865772	-1241.237157	-1286.612060	-1361.927623	-539.903800
+0.9	359.960887	405.939803	425.345513	403.244445	466.866776	301.673929	319.054622	199.313066
-0.95	-1172.311813	-1066.286938	-1147.608799	-1081.802760	-1310.194777	-1358.090508	-1437.590269	-569.898455
+0.95	256.948341	234.472724	252.287343	237.798570	287.902430	295.197006	312.437603	124.833105
-1	-1234.012443	-1122.407313	-1208.009239	-1138.739752	-1379.152382	-1429.568952	-1513.252900	-599.893120
+1	270.471939	246.813397	265.565625	250.314286	303.055189	310.733688	328.881690	131.403270
(Span 2) -2	-1234.012443	-1122.407313	-1208.009239	-1138.739752	-1379.152382	-1429.568952	-1513.252900	-599.893120
+2	270.471939	246.813397	265.565625	250.314286	303.055189	310.733688	328.881690	131.403270
-2.05	-901.029629	-822.214268	-884.683863	-833.876785	-1009.573634	-1035.153104	-1095.609915	-437.746253
+2.05	208.814028	190.548785	205.026177	193.251597	233.969465	239.897541	253.908450	105.873664
-2.1	-839.371632	-765.949653	-824.144416	-776.814096	-940.487908	-964.316958	-1020.636674	-407.791015
+2.1	455.049644	499.249274	524.927687	496.296519	575.918777	377.642787	398.553793	241.407649
-2.15	-777.713635	-709.685038	-763.604969	-719.751408	-871.402181	-893.480811	-945.663433	-377.835777
+2.15	796.050315	805.702298	855.530282	807.807507	955.923974	783.049948	827.601435	408.765748
-2.2	-716.055638	-653.420423	-703.065521	-662.688720	-802.316454	-822.644665	-870.690192	-347.880539
+2.2	1118.452074	1094.082471	1166.881999	1102.489389	1313.475844	1159.107806	1225.585487	566.263730

-2.25	-654.397641	-597.155808	-642.526074	-605.626032	-733.230728	-751.808518	-795.716950	-317.925301
+2.25	1401.628530	1353.482296	1445.694284	1364.478810	1630.687325	1491.205848	1577.294314	703.645139
-2.3	-592.739644	-540.891193	-581.986627	-548.563344	-664.145001	-680.972372	-720.743709	-287.970063
+2.3	1647.814032	1576.771863	1686.043133	1591.654805	1904.947077	1772.928935	1875.624902	822.451930
-2.35	-531.081648	-484.626578	-521.447180	-491.500655	-595.059275	-610.136225	-645.770468	-258.014825
+2.35	1839.527170	1756.071286	1877.836613	1771.128608	2121.482748	1992.940440	2108.848180	914.066512
-2.4	-469.423651	-428.361963	-460.907732	-434.437967	-525.973548	-539.300079	-570.797227	-228.059587
+2.4	1981.450972	1888.345955	2019.612810	1905.018432	2280.587224	2150.717926	2276.087331	981.142957
-2.45	-407.765654	-372.097348	-400.368285	-377.375279	-456.887821	-468.463933	-495.823986	-198.104349
+2.45	2061.185696	1966.706173	2102.306444	1981.804290	2373.023918	2236.070280	2366.710214	1017.624975
-2.5	-346.107657	-315.832732	-339.828852	-320.312591	-387.802095	-397.627786	-420.850745	-168.149111
+2.5	2084.330616	1993.710605	2130.512824	2008.039590	2400.044596	2255.326341	2387.466082	1026.790209
-2.55	-407.765086	-372.097334	-400.368299	-377.375294	-456.887772	-468.463932	-495.823953	-198.104345
+2.55	2061.322552	1966.709062	2102.310415	1981.804648	2373.027355	2236.070468	2366.710296	1017.625777
-2.6	-469.422997	-428.361946	-460.907747	-434.437983	-525.973496	-539.300079	-570.797193	-228.059583
+2.6	1981.538656	1888.347973	2019.615843	1905.023163	2280.594935	2150.721651	2276.091123	981.145501
-2.65	-531.080909	-484.626558	-521.447195	-491.500672	-595.059220	-610.136226	-645.770433	-258.014821
+2.65	1839.611753	1756.072407	1877.838637	1771.132225	2121.484370	1992.943081	2108.850831	914.066846
-2.7	-592.738820	-540.891170	-581.986642	-548.563361	-664.144944	-680.972373	-720.743673	-287.970058
+2.7	1647.731922	1576.772445	1686.044626	1591.657832	1904.952603	1772.930856	1875.626789	822.453658
-2.75	-654.396732	-597.155782	-642.526090	-605.626050	-733.230668	-751.808521	-795.716914	-317.925296
+2.75	1401.681623	1353.482790	1445.695645	1364.481832	1630.687712	1491.207419	1577.295837	703.645359
-2.8	-716.054643	-653.420394	-703.065538	-662.688739	-802.316391	-822.644668	-870.690154	-347.880534
+2.8	1118.207249	1094.082848	1166.883248	1102.492296	1313.481240	1159.109243	1225.586868	566.265652
-2.85	-777.712554	-709.685006	-763.604985	-719.751428	-871.402115	-893.480815	-945.663394	-377.835772
+2.85	796.108617	805.702797	855.531603	807.810428	955.924691	783.051223	827.602655	408.765936
-2.9	-839.370466	-765.949618	-824.144433	-776.814117	-940.487839	-964.316962	-1020.636634	-407.791009
+2.9	454.552922	499.250483	524.929730	496.300143	575.924880	377.644756	398.555753	241.406074
-2.95	-901.028377	-822.214230	-884.683881	-833.876806	-1009.573563	-1035.153109	-1095.609874	-437.746247
+2.95	208.814316	190.548803	205.026188	193.251603	233.969445	239.897532	253.908426	105.820205
-3	-1234.014698	-1122.407382	-1208.009261	-1138.739765	-1379.152452	-1429.568950	-1513.252924	-599.893111
+3	270.472315	246.813411	265.565623	250.314282	303.055202	310.733684	328.881694	131.403271
(Span 3) -4	-1234.014698	-1122.407382	-1208.009261	-1138.739765	-1379.152452	-1429.568950	-1513.252924	-599.893111
+4	270.472315	246.813411	265.565623	250.314282	303.055202	310.733684	328.881694	131.403271
-3.05	-1172.313964	-1066.287014	-1147.608797	-1081.802777	-1310.194829	-1358.090503	-1437.590277	-569.898456
+3.05	256.948699	234.472741	252.287342	237.798568	287.902442	295.197000	312.437610	124.833108
-3.1	-1110.613229	-1010.166645	-1087.208332	-1024.865789	-1241.237206	-1286.612055	-1361.927631	-539.903800
+3.1	360.162124	405.940338	425.344484	403.241726	466.871631	301.674655	319.055311	199.311427
-3.15	-1048.912495	-954.046277	-1026.807868	-967.928801	-1172.279582	-1215.133607	-1286.264984	-509.909145
+3.15	649.789812	669.157027	705.109729	667.553969	788.629646	623.045789	658.791369	341.575354
-3.2	-987.211760	-897.925908	-966.407404	-910.991813	-1103.321959	-1143.655159	-1210.602337	-479.914490
+3.2	925.310219	919.278466	973.958685	920.084277	1095.458656	946.793333	1001.497953	476.119393
-3.25	-925.511026	-841.805539	-906.006940	-854.054825	-1034.364335	-1072.176712	-1134.939690	-449.919835
+3.25	1180.374338	1150.766849	1223.074148	1155.119176	1380.207654	1241.544487	1313.603765	599.997177
-3.3	-863.810292	-785.685171	-845.606476	-797.117837	-965.406712	-1000.698264	-1059.277043	-419.925180
+3.3	1409.219753	1358.432433	1447.234011	1367.298215	1636.435540	1503.271393	1589.720712	710.449196
-3.35	-802.109557	-729.564802	-785.206012	-740.180849	-896.449089	-929.219816	-983.614396	-389.930525
+3.35	1606.470397	1537.432440	1643.208611	1551.613392	1858.128493	1727.306851	1827.105144	804.904413
-3.4	-740.408823	-673.444434	-724.805548	-683.243861	-827.491465	-857.741369	-907.951749	-359.935870
+3.4	1767.135484	1687.424355	1804.914153	1703.410425	2039.701442	1906.384891	2016.971433	880.979988
-3.45	-678.708088	-617.324065	-664.405083	-626.306873	-758.533842	-786.262921	-832.289102	-329.941215
+3.45	1886.609175	1802.842779	1927.770185	1818.386660	2176.266694	2035.240391	2153.738190	936.479379
-3.5	-617.007354	-561.203696	-604.004619	-569.369885	-689.576218	-714.784473	-756.626455	-299.946560
+3.5	1961.018125	1878.542903	2007.570869	1892.593133	2263.089129	2109.063031	2232.305594	969.395038
-3.55	-555.306619	-505.083328	-543.604155	-512.432897	-620.618595	-643.306025	-680.963808	-269.951905
+3.55	1992.486840	1911.556661	2042.174601	1925.382553	2300.626636	2140.161302	2265.410643	982.689285
-3.6	-493.605885	-448.962959	-483.203691	-455.495909	-551.660972	-571.827578	-605.301161	-239.957250

+3.6	**1993.030781**	**1903.508529**	**2035.180682**	**1919.809190**	**2298.094499**	**2150.551041**	**2275.899648**	**986.326328**
-3.65	**-431.905151**	**-392.842591**	**-422.803227**	**-398.558921**	**-482.703348**	**-500.349130**	**-529.638514**	**-209.962595**
+3.65	**1940.675910**	**1846.654471**	**1976.202344**	**1864.953642**	**2236.298357**	**2100.263485**	**2222.165374**	**964.599089**
-3.7	**-370.204416**	**-336.722222**	**-362.402763**	**-341.621933**	**-413.745725**	**-428.870682**	**-453.975867**	**-179.967939**
+3.7	**1832.391111**	**1747.125520**	**1864.438494**	**1758.519400**	**2111.919280**	**1986.192272**	**2100.775264**	**915.983107**
-3.75	**-308.503682**	**-280.601853**	**-302.002299**	**-284.684945**	**-344.788101**	**-357.392235**	**-378.313220**	**-149.973284**
+3.75	**1679.680254**	**1598.045641**	**1706.453055**	**1600.108241**	**1922.173034**	**1817.145004**	**1922.428703**	**839.142035**
-3.8	**-246.802947**	**-224.481485**	**-241.601834**	**-227.747957**	**-275.830478**	**-285.913787**	**-302.650573**	**-119.978629**
+3.8	**1470.240836**	**1394.024495**	**1489.451712**	**1397.155112**	**1668.679293**	**1581.839319**	**1672.610073**	**733.140829**
-3.85	**-185.102213**	**-168.361116**	**-181.201370**	**-170.810969**	**-206.872855**	**-214.435339**	**-226.987927**	**-89.983974**
+3.85	**1198.900373**	**1133.356764**	**1211.571029**	**1136.876635**	**1359.161573**	**1290.625775**	**1364.419316**	**597.035883**
-3.9	**-123.401478**	**-112.240747**	**-120.800906**	**-113.873981**	**-137.915231**	**-142.956891**	**-151.325280**	**-59.989319**
+3.9	**863.986435**	**814.682847**	**871.320179**	**817.851311**	**978.645305**	**935.761819**	**989.366318**	**429.839439**
-3.95	**-61.700744**	**-56.120379**	**-60.400442**	**-56.936993**	**-68.957608**	**-71.478444**	**-75.662633**	**-29.994664**
+3.95	**464.655548**	**436.991962**	**467.583815**	**439.010970**	**525.779393**	**505.790836**	**534.815164**	**230.961791**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 150' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-61.700622**	**-132.787650**	**-146.830086**	**-83.470912**	**-100.493968**	**-108.409665**
+0.05	**464.636016**	**890.734984**	**956.752645**	**583.464874**	**704.037516**	**746.992432**
-0.1	**-123.401243**	**-265.575301**	**-293.660173**	**-166.941824**	**-200.987936**	**-216.819329**
+0.1	**864.342398**	**1640.223100**	**1767.325804**	**1078.177581**	**1301.138751**	**1378.605063**
-0.15	**-185.101865**	**-398.362951**	**-440.490259**	**-250.412736**	**-301.481905**	**-325.228994**
+0.15	**1199.191220**	**2282.428946**	**2454.999570**	**1485.028012**	**1797.143159**	**1907.109831**
-0.2	**-246.802487**	**-531.150601**	**-587.320346**	**-333.883648**	**-401.975873**	**-433.638659**
+0.2	**1470.469347**	**2792.790109**	**3049.946072**	**1830.930557**	**2211.131971**	**2341.886455**
-0.25	**-308.503109**	**-663.938252**	**-734.150432**	**-417.354560**	**-502.469841**	**-542.048323**
+0.25	**1679.848577**	**3196.183496**	**3512.489008**	**2097.589513**	**2525.138792**	**2693.553412**
-0.3	**-370.203730**	**-796.725902**	**-880.980519**	**-500.825473**	**-602.963809**	**-650.457988**
+0.3	**1832.620707**	**3510.426407**	**3862.778595**	**2287.744480**	**2743.547487**	**2944.697492**
-0.35	**-431.904352**	**-929.513552**	**-1027.810605**	**-584.296385**	**-703.457778**	**-758.867652**
+0.35	**1940.851617**	**3717.169496**	**4090.623113**	**2413.179739**	**2888.608293**	**3094.867992**
-0.4	**-493.604974**	**-1062.301203**	**-1174.640691**	**-667.767297**	**-803.951746**	**-867.277317**
+0.4	**1993.156523**	**3843.481523**	**4194.868202**	**2464.483136**	**2945.284358**	**3169.230225**
-0.45	**-555.305596**	**-1195.088853**	**-1321.470778**	**-751.238209**	**-904.445714**	**-975.686982**
+0.45	**1992.567824**	**3852.701826**	**4234.081321**	**2445.535278**	**2917.961187**	**3152.231465**
-0.5	**-617.006217**	**-1327.876503**	**-1468.300864**	**-834.709121**	**-1004.939682**	**-1084.096646**
+0.5	**1960.914591**	**3785.242360**	**4149.916806**	**2411.681396**	**2878.747758**	**3105.941567**
-0.55	**-678.706839**	**-1460.664154**	**-1615.130951**	**-918.180033**	**-1105.433650**	**-1192.506311**
+0.55	**1886.464667**	**3625.199383**	**3956.471546**	**2333.583446**	**2788.382564**	**2997.348285**
-0.6	**-740.407461**	**-1593.451804**	**-1761.961037**	**-1001.650945**	**-1205.927619**	**-1300.915976**
+0.6	**1766.702083**	**3367.568205**	**3702.460184**	**2189.759062**	**2618.547703**	**2805.702737**
-0.65	**-802.108083**	**-1726.239454**	**-1908.791124**	**-1085.121857**	**-1306.421587**	**-1409.325640**
+0.65	**1605.849243**	**3031.079465**	**3342.973516**	**1985.757336**	**2375.806836**	**2548.422027**
-0.7	**-863.808704**	**-1859.027105**	**-2055.621210**	**-1168.592769**	**-1406.915555**	**-1517.735305**
+0.7	**1408.537529**	**2625.535078**	**2886.300588**	**1727.662816**	**2070.872503**	**2218.999476**
-0.75	**-925.509326**	**-1991.814755**	**-2202.451296**	**-1252.063681**	**-1507.409523**	**-1626.144970**
+0.75	**1179.687097**	**2142.326167**	**2347.811006**	**1425.463429**	**1711.147136**	**1825.885575**
-0.8	**-987.209948**	**-2124.602405**	**-2349.281383**	**-1335.534594**	**-1607.903491**	**-1734.554634**
+0.8	**924.746994**	**1592.840704**	**1737.734302**	**1081.948239**	**1298.861158**	**1378.274594**
-0.85	**-1048.910569**	**-2257.390056**	**-2496.111469**	**-1419.005506**	**-1708.397460**	**-1842.964299**
+0.85	**649.455908**	**988.978258**	**1069.740560**	**702.825731**	**842.942419**	**885.859939**
-0.9	**-1110.611191**	**-2390.177706**	**-2642.941556**	**-1502.476418**	**-1808.891428**	**-1951.373964**
+0.9	**359.960887**	**516.413857**	**569.865473**	**358.363229**	**404.938592**	**435.609832**
-0.95	**-1172.311813**	**-2522.965356**	**-2789.771642**	**-1585.947330**	**-1909.385396**	**-2059.783628**
+0.95	**256.948341**	**545.103516**	**601.524666**	**343.557823**	**414.234461**	**446.020752**
-1	**-1234.012443**	**-2655.753030**	**-2936.601754**	**-1669.418282**	**-2009.879360**	**-2168.193270**
+1	**270.471939**	**573.793177**	**633.183864**	**361.639818**	**436.036271**	**469.495530**
(Span 2) -2	**-1234.012443**	**-2655.753030**	**-2936.601754**	**-1669.418282**	**-2009.879360**	**-2168.193270**
+2	**270.471939**	**573.793177**	**633.183864**	**361.639818**	**436.036271**	**469.495530**
-2.05	**-901.029629**	**-1911.488279**	**-2109.337577**	**-1204.737719**	**-1452.576089**	**-1564.039514**
+2.05	**208.814028**	**442.988892**	**488.840630**	**279.198896**	**336.635625**	**362.467370**
-2.1	**-839.371632**	**-1780.683992**	**-1964.994344**	**-1122.296795**	**-1353.175439**	**-1457.011353**
+2.1	**455.049644**	**568.029528**	**634.013408**	**434.961741**	**505.739468**	**534.940855**
-2.15	**-777.713635**	**-1649.879705**	**-1820.651110**	**-1039.855870**	**-1253.774788**	**-1349.983192**
+2.15	**796.050315**	**1272.130487**	**1394.056595**	**880.995033**	**1047.544743**	**1114.186471**
-2.2	**-716.055638**	**-1519.075418**	**-1676.307877**	**-957.414945**	**-1154.374137**	**-1242.955031**
+2.2	**1118.452074**	**1976.196019**	**2173.162355**	**1322.242706**	**1577.955557**	**1688.388356**

-2.25	-654.397641	-1388.271131	-1531.964643	-874.974020	-1054.973487	-1135.926870
+2.25	1401.628530	2594.115878	2859.543741	1710.414336	2044.315476	2191.013485
-2.3	-592.739644	-1257.466843	-1387.621409	-792.533096	-955.572836	-1028.898709
+2.3	1647.814032	3118.968697	3438.532857	2037.844630	2436.046915	2611.927286
-2.35	-531.081648	-1126.662556	-1243.278176	-710.092171	-856.172186	-921.870548
+2.35	1839.527170	3542.749299	3889.580537	2291.945690	2739.738352	2940.149277
-2.4	-469.423651	-995.858269	-1098.934942	-627.651246	-756.771535	-814.842387
+2.4	1981.450972	3850.641038	4209.532197	2472.151873	2953.450790	3177.052455
-2.45	-407.765654	-865.053982	-954.591709	-545.210321	-657.370884	-707.814226
+2.45	2061.185696	4029.693704	4423.956158	2566.924791	3065.907231	3306.797303
-2.5	-346.107657	-734.249694	-810.248475	-462.769397	-557.970234	-600.786065
+2.5	2084.330616	4080.130769	4497.112155	2584.318117	3082.614947	3332.940829
-2.55	-407.765086	-865.053958	-954.591710	-545.210323	-657.370841	-707.814225
+2.55	2061.322552	4029.695465	4423.955611	2566.924845	3065.903882	3306.800896
-2.6	-469.422997	-995.858243	-1098.934944	-627.651245	-756.771488	-814.842384
+2.6	1981.538656	3850.645214	4208.730622	2472.156288	2953.455259	3177.054512
-2.65	-531.080909	-1126.662528	-1243.278178	-710.092167	-856.172134	-921.870544
+2.65	1839.611753	3542.747412	3889.839017	2291.948824	2739.741342	2940.149812
-2.7	-592.738820	-1257.466813	-1387.621412	-792.533088	-955.572781	-1028.898704
+2.7	1647.731922	3118.970014	3438.531847	2037.846674	2436.048640	2611.934856
-2.75	-654.396732	-1388.271098	-1531.964646	-874.974010	-1054.973427	-1135.926863
+2.75	1401.681623	2594.118530	2859.543415	1710.415990	2044.316790	2191.015655
-2.8	-716.054643	-1519.075383	-1676.307880	-957.414932	-1154.374074	-1242.955023
+2.8	1118.207249	1976.202179	2173.551647	1322.244201	1577.956518	1688.395317
-2.85	-777.712554	-1649.879668	-1820.651114	-1039.855854	-1253.774721	-1349.983182
+2.85	796.108617	1272.132323	1394.056218	880.996158	1047.545338	1114.188772
-2.9	-839.370466	-1780.683953	-1964.994348	-1122.296776	-1353.175367	-1457.011342
+2.9	454.552922	568.030782	634.012490	434.962281	505.744961	534.945036
-2.95	-901.028377	-1911.488238	-2109.337582	-1204.737698	-1452.576014	-1564.039501
+2.95	208.814316	442.988891	488.840627	279.198926	336.635622	362.467385
-3	-1234.014698	-2655.752987	-2936.615588	-1669.418327	-2009.879424	-2168.193295
+3	270.472315	573.793187	633.183862	361.639830	436.036289	469.495536
(Span 3) -4	-1234.014698	-2655.752987	-2936.615588	-1669.418327	-2009.879424	-2168.193295
+4	270.472315	573.793187	633.183862	361.639830	436.036289	469.495536
-3.05	-1172.313964	-2522.965339	-2789.784810	-1585.947412	-1909.385453	-2059.783629
+3.05	256.948699	545.103527	601.524669	343.557839	414.234474	446.020760
-3.1	-1110.613229	-2390.177691	-2642.954032	-1502.476498	-1808.891482	-1951.373963
+3.1	360.162124	516.413868	569.865476	358.364174	404.936625	435.606616
-3.15	-1048.912495	-2257.390042	-2496.123255	-1419.005584	-1708.397510	-1842.964297
+3.15	649.789812	988.982407	1070.738326	702.826977	842.944716	885.864422
-3.2	-987.211760	-2124.602394	-2349.292477	-1335.534669	-1607.903539	-1734.554631
+3.2	925.310219	1592.836162	1738.593145	1081.949433	1298.863282	1378.270022
-3.25	-925.511026	-1991.814746	-2202.461699	-1252.063755	-1507.409567	-1626.144965
+3.25	1180.374338	2142.329831	2348.888035	1425.464238	1711.148840	1825.889935
-3.3	-863.810292	-1859.027098	-2055.630921	-1168.592841	-1406.915596	-1517.735299
+3.3	1409.219753	2625.538044	2887.928562	1727.662442	2070.873467	2219.003043
-3.35	-802.109557	-1726.239450	-1908.800143	-1085.121926	-1306.421624	-1409.325633
+3.35	1606.470397	3031.080846	3342.088684	1985.755769	2375.805588	2548.424091
-3.4	-740.408823	-1593.451801	-1761.969365	-1001.651012	-1205.927653	-1300.915968
+3.4	1767.135484	3367.565957	3702.461029	2189.756194	2618.544938	2805.703178
-3.45	-678.708088	-1460.664153	-1615.138587	-918.180098	-1105.433682	-1192.506302
+3.45	1886.609175	3626.063815	3956.471833	2333.579357	2788.378288	2997.346374
-3.5	-617.007354	-1327.876505	-1468.307810	-834.709183	-1004.939710	-1084.096636
+3.5	1961.018125	3785.244608	4151.203261	2411.675276	2878.750600	3105.937432
-3.55	-555.306619	-1195.088857	-1321.477032	-751.238269	-904.445739	-975.686970
+3.55	1992.486840	3852.700071	4234.080364	2445.531291	2917.959206	3152.227275
-3.6	-493.605885	-1062.301209	-1174.646254	-667.767355	-803.951767	-867.277304

+3.6	1993.030781	3843.485888	4194.868197	2464.477509	2945.280390	3169.233150
-3.65	-431.905151	-929.513561	-1027.815476	-584.296440	-703.457796	-758.867638
+3.65	1940.675910	3717.170710	4090.622058	2413.182635	2888.611157	3094.868189
-3.7	-370.204416	-796.725912	-880.984698	-500.825526	-602.963824	-650.457972
+3.7	1832.391111	3510.423462	3863.348648	2287.745032	2743.547802	2944.694418
-3.75	-308.503682	-663.938264	-734.153920	-417.354612	-502.469853	-542.048306
+3.75	1679.680254	3196.177261	3512.488078	2097.587748	2525.136203	2693.547514
-3.8	-246.802947	-531.150616	-587.323142	-333.883697	-401.975881	-433.638641
+3.8	1470.240836	2793.603061	3049.944235	1830.926164	2211.126465	2341.881791
-3.85	-185.102213	-398.362968	-440.492364	-250.412783	-301.481910	-325.228975
+3.85	1198.900373	2282.432566	2454.999142	1485.025597	1797.143672	1907.111271
-3.9	-123.401478	-265.575320	-293.661587	-166.941869	-200.987939	-216.819309
+3.9	863.986435	1640.222732	1767.325898	1078.172388	1301.136045	1378.602797
-3.95	-61.700744	-132.787671	-146.830809	-83.470954	-100.493967	-108.409643
+3.95	464.655548	890.730247	956.753656	583.457308	704.031664	746.986747
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 160’ Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-19.16909779**	***-30.119608***	***-44.688145***	**-14.43931207**	**-15.5417172**	**-14.65088604**	**-17.74569808**	**-18.45027044**	**-19.53087067**	**-7.725562142**
End Shear	**143.5439038**	***196.873156***	***269.902599***	**120.5220973**	**129.0503583**	**121.2183286**	**145.3655824**	**141.6241574**	**149.7758363**	**63.86979475**
-0.05	**-19.16909779**	***-30.378784***	***-44.921403***	**-14.43931207**	**-15.5417172**	**-14.65088604**	**-17.74569808**	**-18.45027044**	**-19.53087067**	**-7.725562142**
+0.05	**133.0568947**	***180.782131***	***245.769465***	**112.5838756**	**120.5047216**	**113.1654759**	**135.6116993**	**131.4020663**	**138.9543327**	**59.63610584**
-0.1	**-19.16909779**	***-31.259228***	***-45.713802***	**-14.43931207**	**-15.5417172**	**-14.65088604**	**-17.74569808**	**-18.45027044**	**-19.53087067**	**-7.725562142**
+0.1	**122.4772296**	***164.552303***	***221.017062***	**104.4301218**	**111.729463**	**104.8950343**	**125.5993362**	**120.9262515**	**127.8648295**	**55.25055195**
-0.15	**-19.16909779**	***-38.321056***	***-51.466047***	**-17.81817311**	**-18.44862018**	**-16.93856702**	**-18.97014288**	**-18.45027044**	**-19.53087067**	**-8.485787943**
+0.15	**113.3680225**	***150.790188***	***199.983217***	**97.28943919**	**104.0465463**	**97.65535562**	**116.8391697**	**111.7968377**	**118.2011218**	**51.4129574**
-0.2	**-29.11544845**	***-47.881756***	***-62.525185***	**-25.93438788**	**-27.19445453**	**-25.18803515**	**-28.98028637**	**-19.09053998**	**-20.22777672**	**-12.86744813**
+0.2	**104.0025937**	***135.844201***	***177.110328***	**89.28185247**	**95.43326266**	**89.54043713**	**107.0249465**	**101.6109877**	**107.4197571**	**47.11304373**
-0.25	**-38.64014659**	***-56.754657***	***-73.184895***	**-33.02820939**	**-34.84064056**	**-32.40153561**	**-37.73768941**	**-27.44633136**	**-28.89087512**	**-16.70017978**
+0.25	**95.75018405**	***123.245074***	***157.822454***	**82.3119837**	**87.93832717**	**82.48047101**	**98.49110834**	**92.79214801**	**98.08587832**	**43.37362017**
-0.3	**-49.31727446**	***-67.275758***	***-85.670070***	**-40.96710896**	**-43.40008397**	**-40.478079**	**-47.54785368**	**-37.77285727**	**-39.81537189**	**-20.99296705**
+0.3	**86.56188845**	***109.647900***	***137.024475***	**74.54541856**	**79.5891699**	**74.61738762**	**88.99176735**	**83.0203082**	**87.74399452**	**39.21059046**
-0.35	**-58.60715481**	***-76.942563***	***-97.011159***	**-47.86262063**	**-50.83673324**	**-47.49649755**	**-56.07728828**	**-46.96638881**	**-49.5513146**	**-24.72467235**
+0.35	**78.62403941**	***98.263097***	***119.649592***	**67.83006231**	**72.37235242**	**67.822129**	**80.7872812**	**74.62151066**	**78.85585183**	**35.61455383**
-0.4	**-68.95473583**	***-88.299319***	***-110.193266***	**-55.52934301**	**-59.1076275**	**-55.30379424**	**-65.57072064**	**-57.2413886**	**-60.43311522**	**-28.87733714**
+0.4	**69.84868924**	***86.066104***	***101.109688***	**60.39937515**	**64.38947452**	**60.30720113**	**71.71957428**	**65.38775499**	**69.08482126**	**31.63965331**
-0.45	**-77.89789848**	***-98.643966***	***-122.080230***	**-62.14284934**	**-66.24460649**	**-62.04214717**	**-73.76917661**	**-66.1534189**	**-69.87198347**	**-32.462797**
+0.45	**62.32500876**	***75.934958***	***86.017546***	**54.02223982**	**57.54092226**	**53.86163399**	**63.94745097**	**57.51846592**	**60.75832025**	**28.23222268**
-0.5	**-87.78911501**	***-110.698034***	***-135.799580***	**-69.4425367**	**-74.12479697**	**-69.48387964**	**-82.82912808**	**-76.04736336**	**-80.35143084**	**-36.42409754**
+0.5	**54.07548671**	***65.175925***	***73.850299***	**47.0222869**	**50.02647688**	**46.79117759**	**55.42812469**	**48.94683705**	**51.68948223**	**24.49669269**
-0.55	**-96.27364306**	***-121.592458***	***-148.086101***	**-75.69034696**	**-80.87197668**	**-75.85718301**	**-90.59359428**	**-84.56843902**	**-89.37733277**	**-39.81809904**
+0.55	**47.06557495**	***56.325765***	***63.924314***	**41.06705415**	**43.63630907**	**40.78028517**	**48.19137472**	**41.71651817**	**44.04052356**	**21.32308415**
-0.6	**-105.5816652**	***-134.191898***	***-162.651464***	**-82.52814647**	**-88.25931425**	**-82.83703437**	**-99.10331721**	**-93.95725797**	**-99.32305845**	**-43.53679068**
+0.6	**39.45476817**	***47.028878***	***53.458863***	**34.5926949**	**36.69245205**	**34.250622**	**40.33718263**	**33.93109286**	**35.80525342**	**17.87817213**
-0.65	**-113.4956552**	***-145.496034***	***-182.900530***	**-88.32655094**	**-94.52654606**	**-88.76030073**	**-106.3307788**	**-101.9779052**	**-107.8200807**	**-46.69411779**
+0.65	**33.05822879**	***39.475039***	***44.926066***	**29.14307379**	**30.85081669**	**28.75939025**	**33.7388191**	**27.44920775**	**28.94973971**	**14.98359486**
-0.7	**-122.0936515**	***-158.475317***	***-205.839468***	**-94.60760746**	**-101.318879**	**-95.18195011**	**-114.1735205**	**-110.7375538**	**-117.1007431**	**-50.11895478**
+0.7	**26.19902077**	***31.650865***	***36.060360***	**23.28916314**	**24.57969975**	**22.86684079**	**26.66651337**	**20.57403637**	**21.67938496**	**11.88054416**
-0.75	**-129.3251942**	***-170.037107***	***-226.006472***	**-99.87291588**	**-107.0160349**	**-100.5701941**	**-120.7609648**	**-118.148305**	**-124.9529786**	**-52.99439132**
+0.75	**20.51545805**	***25.396686***	***28.954810***	**18.42884634**	**19.37672739**	**17.98025225**	**20.80954536**	**15.01288322**	**15.80303497**	**9.310217667**
-0.8	**-137.0863354**	***-183.217094***	***-248.701768***	**-105.5023626**	**-113.1111989**	**-106.3373249**	**-127.819978**	**-126.1547161**	**-133.4372126**	**-56.07412998**
+0.8	**14.52074009**	***19.042214***	***21.721328***	**13.29024165**	**13.88050467**	**12.82112432**	**14.6358629**	**9.814715501**	**10.39338701**	**6.600272014**
-0.85	**-143.5235234**	***-194.872477***	***-268.518251***	**-110.1508778**	**-118.1481436**	**-111.1055645**	**-133.6643966**	**-132.8461145**	**-140.5287661**	**-58.62245764**
+0.85	**9.649757001**	***14.079032***	***16.279821***	**9.1029173**	**9.406321058**	**8.624179139**	**9.623320811**	**6.770117132**	**7.158352094**	**4.399411798**
-0.9	**-150.3209807**	***-208.060432***	***-290.659534***	**-115.0338631**	**-123.4439906**	**-116.1218588**	**-139.8229324**	**-139.9752336**	**-148.0852197**	**-61.30585358**
+0.9	**4.632407809**	***9.177652***	***11.101452***	**4.774476475**	**4.78714714**	**4.488905765**	**4.788533453**	**4.021070099**	**4.256125694**	**2.538483623**
-0.95	**-155.8519062**	***-219.633353***	***-310.136265***	**-118.9818882**	**-127.7305891**	**-120.185094**	**-144.8212946**	**-145.8378211**	**-154.3001946**	**-63.4818605**
+0.95	**4.207745243**	***6.064656***	***8.833064***	**3.178992637**	**3.420898818**	**3.224549434**	**3.904500714**	**4.021070099**	**4.256125694**	**1.695098648**
-1	**-161.5588502**	***-232.622956***	***-332.014697***	**-123.0235553**	**-132.1249658**	**-124.3542341**	**-149.9626043**	**-151.9655726**	**-160.7974936**	**-65.7176684**
+1	**4.21E+00**	***5.933347***	***8.714886***	**3.18E+00**	**3.42E+00**	**3.22E+00**	**3.90E+00**	**4.02E+00**	**4.26E+00**	**1.70E+00**
(Span 2) -2	**-1.47E+01**	***-20.797541***	***-30.547378***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.41E+01**	**-1.49E+01**	**-5.94E+00**
+2	**1.56E+02**	***242.062886***	***349.081445***	**123.1034466**	**132.2476461**	**124.4931944**	**150.2088073**	**152.9552515**	**161.8561259**	**65.7920118**
-2.05	**-1.47E+01**	***-20.979356***	***-30.711012***	**-1.11E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.41E+01**	**-1.49E+01**	**-5.94E+00**
+2.05	**1.50E+02**	***227.200010***	***325.082050***	**118.7843718**	**127.5506539**	**120.036338**	**144.7108841**	**146.4309773**	**154.9389165**	**63.40124686**
-2.1	**-14.74896991**	***-21.585738***	***-31.256756***	**-11.14299067**	**-11.99091943**	**-11.30267605**	**-13.68603842**	**-14.0946369**	**-14.91855265**	**-5.941652033**
+2.1	**141.6598804**	***211.408925***	***299.487506***	**113.6236598**	**121.9504526**	**114.7298258**	**138.1897935**	**138.880334**	**146.9358402**	**60.5615334**
-2.15	**-14.74896991**	***-24.450286***	***-35.935132***	**-11.60554852**	**-12.11228319**	**-11.30267605**	**-13.68603842**	**-14.0946369**	**-14.91855265**	**-5.941652033**
+2.15	**133.1940938**	***195.557224***	***273.722498***	**107.8969897**	**115.746344**	**108.8573451**	**130.9944624**	**130.7105025**	**138.27852**	**57.42487791**
-2.2	**-20.09512038**	***-31.531719***	***-44.001198***	**-17.31986373**	**-18.22554151**	**-16.92128866**	**-19.61611054**	**-14.30629948**	**-15.0602217**	**-8.80176608**
+2.2	**124.2052614**	***179.768878***	***248.328602***	**101.6805485**	**109.0203761**	**102.4962464**	**123.2186493**	**122.0211389**	**129.0724741**	**54.03244309**

-2.25	-27.71247455	-39.225086	-52.757524	-23.22018437	-24.54624134	-22.86037499	-26.74369221	-21.18353308	-22.33177721	-11.92771108
+2.25	115.2515419	164.898187	224.779910	95.37447767	102.2045703	96.05456906	115.3592335	113.3536958	119.8911732	50.60140553
-2.3	-36.29695095	-48.269296	-63.025204	-29.82337003	-31.62765163	-29.51903219	-34.75141741	-29.05616433	-30.65810672	-15.43791706
+2.3	105.53556	149.563597	200.443522	88.42138183	94.69618879	88.96246649	106.7203591	103.9371484	109.9178373	46.82820532
-2.35	-45.38175792	-58.265158	-74.330492	-36.7693728	-39.0838358	-36.53448927	-43.2034092	-37.49815471	-39.5886542	-19.14115058
+2.35	95.59771345	134.616522	176.705570	81.20342203	86.90815553	81.61013638	97.77783945	94.29524058	99.70725145	42.92072593
-2.4	-54.86499879	-69.166832	-86.603885	-43.98198647	-46.83272635	-43.8293794	-52.00589097	-46.40986748	-49.01792196	-22.99624913
+2.4	85.9877091	120.152622	153.762106	73.79680675	78.92254159	74.07493912	88.62544575	84.52760271	89.36490692	38.92013912
-2.45	-64.64484153	-80.921373	-99.769442	-51.38505883	-54.79231212	-51.32635483	-61.06510607	-55.691687	-58.84043459	-26.9620678
+2.45	77.03962363	106.260350	131.802724	66.27769939	70.82136867	66.43424537	79.35695968	74.5012057	78.74999554	34.86758858
-2.5	-74.619391	-93.468608	-113.744763	-58.90237584	-62.88051727	-58.94804064	-70.2872686	-65.24395366	-68.95067015	-30.99743318
+2.5	68.06564897	92.853797	113.040060	58.54261165	62.49330332	58.58310541	69.84542973	64.78401957	68.46383737	30.80425504
-2.55	-84.20680578	-106.260676	-131.802724	-66.27802888	-70.82172354	-66.43455699	-79.35733713	-74.50160395	-78.75041715	-34.86765417
+2.55	59.47377071	80.921048	99.756468	51.38472117	54.79194901	51.32602455	61.06470706	55.69128779	58.84001209	26.96201265
-2.6	-94.27937115	-120.152932	-153.762103	-73.7971317	-78.92289192	-74.07526991	-88.62584736	-84.51234517	-89.34884876	-38.92018841
+2.6	50.71359969	69.166525	86.600302	43.9816581	46.83237316	43.82906893	52.00551579	46.40949809	49.01753108	22.99619689
-2.65	-104.4580751	-134.616845	-176.705571	-81.20375107	-86.90851053	-81.61044982	-97.77822079	-94.29563657	-99.70767076	-42.92078149
+2.65	42.1962834	58.264836	74.136531	36.76904024	39.08347876	36.53417443	43.20302981	37.49779946	39.58827835	19.14110366
-2.7	-114.199143	-149.563899	-200.443518	-88.42170005	-94.69653219	-88.96278057	-106.7207414	-103.9375358	-109.9182475	-46.8282464
+2.7	34.01248384	48.268999	62.848980	29.82307482	31.62733479	29.5187438	34.75107	29.05583307	30.65775632	15.43786898
-2.75	-123.1876786	-164.160956	-223.610431	-95.05080539	-101.8549014	-95.72418709	-114.9564867	-112.9122534	-119.4235959	-50.4254288
+2.75	26.61141629	39.633309	53.063638	23.52544419	24.87344241	23.16793829	27.113214	21.54372623	22.7126801	12.08983827
-2.8	-132.2245709	-179.769153	-248.328601	-101.6808302	-109.0206807	-102.4965346	-123.2190012	-122.0215039	-129.0728608	-54.03249145
+2.8	19.34006922	31.531455	43.862429	17.31959464	18.22525324	16.92103546	19.61580681	14.30602114	15.05992745	8.801728019
-2.85	-140.7504447	-195.557477	-273.722497	-107.897259	-115.7466356	-108.8576028	-130.9947774	-130.7108474	-138.2788854	-57.42491851
+2.85	14.75680264	24.450043	35.799600	11.60530223	12.11201977	11.30267642	13.68603841	14.09463753	14.91855244	5.941652249
-2.9	-148.6634079	-211.409150	-299.487508	-113.623908	-121.9507215	-114.7300716	-138.1900945	-138.8806691	-146.9361953	-60.56157167
+2.9	14.75680264	21.585739	31.256756	11.14299078	11.99091993	11.30267642	13.68603841	14.09463753	14.91855244	5.941652249
-2.95	-155.8615974	-227.200207	-325.082048	-118.7845918	-127.550893	-120.0365492	-144.711144	-146.4312834	-154.939241	-63.40128353
+2.95	14.75680264	20.979357	30.711012	11.14299078	11.99091993	11.30267642	13.68603841	14.09463753	14.91855244	5.941652249
-3	-162.2431336	-242.799526	-350.267918	-123.3031149	-132.4650931	-124.6997085	-150.464196	-153.2630772	-162.1825497	-65.90288991
+3	14.75680264	20.797542	30.547378	11.14299078	11.99091993	11.30267642	13.68603841	14.09463753	14.91855244	5.941652249
(Span 3) -4	-4.209979919	-5.933347	-8.714886	-3.178992668	-3.42089896	-3.224549539	-3.904500711	-4.02107028	-4.256125636	-1.69509871
+4	154.9338512	231.863416	330.711014	122.7987818	131.8803731	124.1220627	149.6758731	151.6205929	160.4316693	65.5931334
-3.05	-4.209979919	-6.048905	-8.818888	-3.178992668	-3.42089896	-3.224549539	-3.904500711	-4.02107028	-4.256125636	-1.69509871
+3.05	149.3245217	220.401482	311.427072	119.232366	128.0027245	120.4431724	145.139136	146.2134489	154.6984361	63.62024261
-3.1	-4.892712051	-9.445049	-11.348522	-5.016592744	-5.045334607	-4.694140643	-5.01524358	-4.02107028	-4.256125636	-2.623480255
+3.1	142.4427299	207.286032	289.367965	114.7581579	123.1448171	115.8383827	139.4745802	139.5694717	147.6551035	61.15422682
-3.15	-9.316322608	-13.769747	-15.909719	-8.836060729	-9.121351041	-8.356947528	-9.304518138	-6.575985063	-6.952095748	-4.259331672
+3.15	135.9351514	195.649110	269.830798	110.449405	118.4717565	111.4120062	134.0402942	133.2787835	140.9873386	58.78640789
-3.2	-15.07928631	-19.394773	-22.064801	-13.5814648	-14.191845	-13.11325777	-14.98512376	-10.02636979	-10.61829838	-6.75350562
+3.2	128.0988353	182.440171	247.372941	105.1813106	112.7634591	106.0082239	127.41689	125.695485	132.9505477	55.89842686
-3.25	-20.88259399	-25.001630	-28.437159	-18.11576285	-19.04170658	-17.66567927	-20.43279329	-14.6815543	-15.45426769	-9.144758002
+3.25	120.8050598	170.810319	227.346966	100.2139194	107.3851233	100.91935	121.1880718	118.6306871	125.4641228	53.18089637
-3.3	-27.97047967	-32.089749	-36.477874	-23.62389832	-24.93816788	-23.20357083	-27.07039714	-20.96434863	-22.09209643	-12.05765766
+3.3	112.1412427	157.707421	204.491820	94.24679696	100.9285911	94.81291351	113.7225923	110.2321518	116.5652571	49.92220535
-3.35	-34.64780571	-38.993451	-44.289434	-28.78934651	-30.47175738	-28.40311318	-33.31095111	-27.03100306	-28.5074613	-14.79577156
+3.35	104.1733602	146.254674	184.250900	88.70446185	94.93511255	89.14650203	106.8022227	102.5027317	108.3761003	46.9001635
-3.4	-42.66286029	-47.554457	-53.946681	-34.96535582	-37.0920322184233	-34.62628976	-40.7888307795248	-34.37682	-36.276705245691	-18.07615433
+3.4	95.70416601	133.443768	161.302721	82.13314047	87.83246916	82.43370835	98.61139273	93.41299448	98.74649086	43.32199768
-3.45	-50.10235135	-55.757648	-63.169075	-40.67825732	-43.21921434	-40.38798458	-47.71927631	-41.24663839	-43.54346467	-21.11591019
+3.45	88.46912677	122.326206	148.817715	76.09956025	81.31398506	76.27479518	91.10254659	85.1284194	89.97050849	40.04067221
-3.5	-58.91774604	-65.787804	-74.404642	-47.42728569	-50.46115116	-47.20011146	-55.92066233	-49.44067679	-52.21194254	-24.71253143
+3.5	79.98783087	109.979586	134.899625	69.01894447	73.66743542	69.05193788	82.30308521	75.47153864	79.74151123	36.19427608
-3.55	-67.00743951	-75.281126	-85.058741	-53.60394447	-57.09179187	-53.43897285	-63.43798579	-57.00419738	-60.21419589	-28.00871609

+3.55	*72.28025743*	*99.343296*	*122.800062*	*62.57781773*	*66.7140825666656*	*62.485483065509*	74.30874335	*66.74127324*	*70.49460712*	*32.69888448*
-3.6	*-76.49634565*	*-86.763029*	*-102.165583*	*-60.83113288*	-64.85323482	*-60.74370271*	-72.24609367	*-65.92242655*	*-69.65058103*	*-31.87033224*
+3.6	*63.31987528*	*87.619723*	*109.336316*	*55.08274373*	58.6257582	*54.84890301*	65.01742707	*56.64130579*	*59.79757635*	*28.63550044*
-3.65	*-85.12439209*	*-97.525166*	*-118.524718*	*-67.38784634*	-71.89719254	*-67.37476917*	-80.24731207	*-74.07015036*	*-78.27238815*	*-35.37772611*
+3.65	*55.19898937*	*77.598743*	*97.712054*	*48.31776656*	51.32767084	*47.95989398*	56.64060509	*47.57481435*	*50.19565387*	*24.97125643*
-3.7	*-95.15998249*	*-110.427838*	*-138.215789*	*-74.99834006*	-80.07599085	*-75.07581123*	-89.54542616	*-83.5884846*	*-88.34529575*	*-39.45309165*
+3.7	*45.87561965*	*66.643358*	*84.868084*	*40.50309181*	42.89972557	*40.00593989*	*46.97422027*	*37.15578624*	*39.16191122*	*20.74213173*
-3.75	*-104.2144023*	*-122.425461*	*-156.567366*	*-81.85141519*	-87.44313502	*-82.01404353*	*-97.92746138*	*-92.21097848*	*-97.47078627*	*-43.1264814*
+3.75	*37.52487213*	*57.359753*	*73.859654*	*33.49796069*	35.34703865	*32.87933286*	*38.31789556*	*28.00121885*	*29.47496721*	*16.95425281*
-3.8	*-114.6698457*	*-136.704329*	*-178.426458*	*-89.75035591*	-95.93713299	*-90.01510822*	*-107.5988664*	*-102.2053569*	*-108.0488577*	*-47.36435288*
+3.8	*27.94868139*	*47.304094*	*61.788783*	*25.45853977*	26.68162372	*24.70429223*	*28.39315447*	*18.74664607*	*19.86189024*	*12.6106301*
-3.85	*-124.0388085*	*-149.892134*	*-198.608867*	*-96.81609403*	-103.5373264	*-97.1755477*	*-116.2587383*	*-111.1931564*	*-117.5621281*	*-51.15850598*
+3.85	*19.42462633*	*38.867906*	*52.046339*	*18.29695336*	18.96447406	*17.42510282*	*19.5603761*	*18.45027077*	*19.53087128*	*8.744331083*
-3.9	*-134.7872777*	*-165.488995*	*-222.446701*	*-104.9086253*	-112.2443712	*-105.3802889*	*-126.1866512*	*-121.5395188*	*-128.5140057*	*-55.5076534*
+3.9	*19.17686417*	*31.190218*	*45.651693*	*14.43931213*	15.54171761	*14.65088633*	*17.74569802*	*18.45027077*	*19.53087128*	*7.725562073*
-3.95	*-144.3587979*	*-179.809627*	*-244.287538*	*-112.1033296*	-119.9874789	*-112.6779497*	*-135.0213468*	*-130.7831595*	*-138.2991523*	*-59.37737066*
+3.95	*19.17686417*	*30.413334*	*44.952498*	*14.43931213*	15.54171761	*14.65088633*	*17.74569802*	*18.45027077*	*19.53087128*	*7.725562073*
-5	*-155.2735005*	*-196.652738*	*-269.902599*	*-120.2945939*	-128.8054162	*-120.9900507*	*-145.0890205*	*-141.3574481*	*-149.4934805*	*-63.78653464*
+5	*19.17686417*	*30.119609*	*44.688145*	*14.43931213*	15.54171761	*14.65088633*	*17.74569802*	*18.45027077*	*19.53087128*	*7.725562073*

3-Span: Shear (Max and Min) Raw Data Results - 160' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.06711825	-15.88119866	-17.0668772	-24.63628159	-8.868312822	-11.97850611	-13.72526969	-15.37428704	-17.11785922
End Shear	91.20398699	122.868245	126.1769135	144.3720904	73.39540998	98.96873519	112.2615351	123.240301	134.5514032
-0.05	-11.06711825	-15.88119866	-17.0668772	-24.70338962	-8.868312822	-11.97850611	-13.72526969	-15.37428704	-17.11785922
+0.05	85.10961893	114.059404	116.6646804	129.8558046	68.51410542	92.381667	104.7100309	114.7920828	125.1532946
-0.1	-11.06711825	-15.88119866	-17.0668772	-24.93136155	-8.868312822	-11.97850611	-13.72526969	-15.37428704	-17.11785922
+0.1	78.85196158	105.0289462	106.9283395	115.2410567	63.50332064	85.61730101	96.95640282	106.1225169	115.5143312
-0.15	-12.19862638	-15.88119866	-17.0668772	-25.26602633	-10.19308711	-13.64773512	-14.29899508	-15.37428704	-17.11785922
+0.15	73.37597493	97.15656657	98.46448571	102.9921682	59.11724624	79.69657973	90.17360384	98.54569712	107.0983546
-0.2	-18.44974319	-17.36980721	-17.0668772	-25.79555159	-15.19221627	-20.39806122	-22.05682281	-22.14388139	-22.14043482
+0.2	67.2400161	88.37024005	89.04589511	90.04811893	54.20115972	73.06075469	82.57597886	90.06700807	97.68995989
-0.25	-23.91756725	-24.53773582	-20.95459272	-26.39405202	-19.56374168	-26.30125927	-28.84486321	-29.77474492	-30.35496553
+0.25	61.90359677	80.76039607	80.91391474	79.34102181	49.92439304	67.28821378	75.97074558	82.70334983	89.52732336
-0.3	-30.04156017	-33.41491449	-29.38490988	-28.94103454	-24.45850404	-32.91139643	-36.45016858	-38.33263646	-39.92984948
+0.3	55.9622989	72.3250254	71.92983229	68.49303147	45.16137748	60.85973021	68.61960704	74.51697339	80.46260215
-0.35	-35.36501871	-41.32080426	-37.00547651	-35.51332006	-28.7121833	-38.65612453	-43.06370718	-45.78201816	-48.27269699
+0.35	50.82983574	65.07198848	64.23275802	59.46022551	41.0454273	55.3049103	62.27178049	67.45598621	72.65310621
-0.4	-41.28891641	-50.15372424	-46.75057945	-43.93403959	-33.44419638	-45.0472633	-50.42600363	-54.08352167	-57.57941368
+0.4	45.15617503	57.09442341	55.79994343	50.39656033	36.4938561	49.16257588	55.25760979	59.66333837	64.04517615
-0.45	-46.40362976	-57.81226851	-55.22391253	-51.39221895	-37.52852394	-50.56398935	-56.78520449	-61.2619337	-65.63574648
+0.45	40.29205155	50.29246344	48.64080694	42.86501067	32.59022691	43.89500971	49.24702887	52.99451486	56.6886252
-0.5	-52.05446022	-66.31145264	-64.65525265	-60.04915979	-42.03941997	-56.65732508	-63.81400932	-69.20561376	-74.56118183
+0.5	34.95898511	42.87952647	40.87604566	35.68892388	28.30847166	38.11762851	42.66030704	45.69703892	48.65058401
-0.55	-56.89604842	-73.62839246	-72.80022351	-68.39618833	-45.90289058	-61.8765162	-69.83903764	-76.023553	-82.23119851
+0.55	30.42758307	36.6229091	34.35786929	29.95981594	24.66866934	33.20684767	37.06680568	39.50986787	41.84677684
-0.6	-62.20084774	-81.68699461	-81.80101757	-78.78808367	-50.13429584	-67.59324417	-76.44386977	-83.50799168	-90.66226033
+0.6	25.50809182	29.88145242	27.37792308	23.89817681	20.71510463	27.87322834	30.99801717	32.80898817	34.49172671
-0.65	-66.7049157	-88.56805404	-89.51458657	-88.46044595	-53.72540365	-72.44536572	-82.05488464	-89.87596271	-97.84614791
+0.65	21.37379483	24.26444517	21.60375783	18.94484564	17.39063453	23.38876681	25.90143306	27.19297325	28.34046511
-0.7	-71.5907186	-96.07924952	-97.96808331	-100.7179801	-57.61894404	-77.70667744	-88.14526213	-96.79971735	-105.6697227
+0.7	16.94083665	18.30129788	16.00113629	14.15027452	13.82363285	18.57771705	20.44105409	21.19011824	21.781531
-0.75	-75.69288856	-102.4301574	-105.1472214	-111.5420125	-60.88618294	-82.12219577	-93.26242859	-102.6282308	-112.2676925
+0.75	13.2680335	13.47402124	11.54280315	10.38276166	10.86600448	14.58910601	15.92122542	16.23476158	16.38260882
-0.8	-80.08671803	-109.2871027	-112.9366365	-125.3434994	-64.38348499	-86.84928705	-98.74786877	-108.8898772	-119.3706703
+0.8	9.394580795	8.788343889	7.726655342	7.139087049	7.743939706	10.37942312	11.15975163	11.12707174	11.1265515
-0.85	-83.72260952	-115.0135974	-119.4783106	-137.7322961	-67.27534911	-90.75867145	-103.2913488	-114.0894301	-125.2829213
+0.85	6.247644355	5.800356746	5.004881454	4.929558826	5.204649496	6.956208121	7.296514794	7.289896673	7.289388817
-0.9	-87.55149827	-121.1094596	-126.4868838	-152.271609	-70.31804018	-94.87273674	-108.0813659	-119.5875396	-131.5521959
+0.9	3.335175644	3.460313341	3.690202915	4.740412399	2.585894965	3.620811903	3.799596643	3.79919259	3.798788538
-0.95	-90.65672402	-126.1172785	-132.2880704	-165.1084294	-72.78302156	-98.20644169	-111.9713225	-124.06863	-136.6789274
+0.95	2.432736097	3.460313341	3.690202915	4.645611859	1.950821887	2.635568554	3.017218544	3.378636683	3.759320039
-1	-93.8477072	-131.3452066	-138.3990319	-179.2645876	-75.31272845	-101.6286755	-115.9754463	-128.7017733	-142.0013926
+1	2.43E+00	3.46E+00	3.69E+00	4.61E+00	1.95E+00	2.64E+00	3.02E+00	3.38E+00	3.76E+00
(Span 2) -2	-8.53E+00	-1.21E+01	-1.29E+01	-1.62E+01	-6.84E+00	-9.24E+00	-1.06E+01	-1.18E+01	-1.32E+01
+2	9.40E+01	132.1504042	139.8156907	192.6274957	75.40047491	101.7534375	116.1898629	129.0748546	142.5688971
-2.05	-8.53E+00	-1.21E+01	-1.29E+01	-1.62E+01	-6.84E+00	-9.24E+00	-1.06E+01	-1.18E+01	-1.32E+01
+2.05	90.57720026	126.5842121	133.3460869	178.406875	72.69676169	98.09527648	111.9096455	124.120323	136.8781104
-2.1	-8.527215613	-12.12907474	-12.93488239	-16.36868922	-6.838012128	-9.238182974	-10.57594085	-11.84278194	-13.17715156
+2.1	86.5265721	120.1300865	125.9475721	163.2238872	69.47850848	93.74290714	106.8384228	118.2903896	130.2240358
-2.15	-8.527215613	-12.12907474	-12.93488239	-16.65127286	-6.838012128	-9.238182974	-10.57594085	-11.84278194	-13.17715156
+2.15	82.05192604	113.135902	118.0211714	147.9372711	65.91778887	88.92905736	101.2476559	111.8976458	122.964042
-2.2	-12.49541257	-12.81516542	-12.93488239	-17.07321604	-10.22595009	-13.73317865	-15.01249225	-15.36325682	-15.56475438
+2.2	77.21186047	105.6874797	109.6606741	132.4963661	62.06147445	83.71701379	95.21002066	105.0235508	115.1889863
-2.25	-16.96094844	-18.78209912	-16.5167529	-17.61556539	-13.82036108	-18.581617	-20.51314216	-21.40819572	-22.16398797

+2.25	72.31616385	98.24993568	101.3804954	118.0808576	58.15688635	78.44087246	89.11092012	98.10381231	107.3884181
-2.3	-21.97456022	-25.60180085	-23.33260395	-22.38263794	-17.8511499	-24.01980093	-26.69769083	-28.23284104	-29.64680144
+2.3	66.93157242	90.16194735	92.44273718	103.3888902	53.85859443	72.63382838	82.41025387	90.52473054	98.86955843
-2.35	-27.26322462	-32.90499237	-30.91518494	-28.96709292	-22.09870749	-29.75149688	-33.22955691	-35.46642826	-37.60732192
+2.35	61.35458466	81.87305489	83.34775038	89.35415764	49.40313287	66.61545512	75.47726307	82.7047979	90.10382632
-2.4	-32.76832817	-40.60586852	-38.99478537	-36.09989968	-26.51615949	-35.71340412	-40.03605278	-43.02746884	-45.95469316
+2.4	55.64380791	73.46905765	73.97127256	76.25003707	44.83737675	60.44904846	68.38463035	74.72549932	81.18208097
-2.45	-38.43127417	-48.61864331	-47.47763112	-44.63872195	-31.05661261	-41.84223842	-47.04453528	-50.83451525	-54.59809976
+2.45	49.85784672	64.8353288	64.84508354	64.49274226	40.20822063	54.19791025	61.16098543	66.59202009	72.06426435
-2.5	-44.19346169	-56.85749183	-56.26993464	-54.1784557	-35.67318895	-48.0746931	-54.18230842	-58.80608957	-63.44668721
+2.5	43.91743497	56.46095896	55.84525613	53.71071171	35.45211431	47.77623925	53.84024471	58.42363985	63.02160767
-2.55	-49.85808312	-64.83567188	-64.8454522	-64.4930435	-40.20842335	-54.19816504	-61.13128444	-66.57824744	-72.05053251
+2.55	38.43103265	48.61829885	47.4772788	44.63844605	31.05641183	41.84196831	47.04421637	50.83418271	54.59770646
-2.6	-55.64404071	-73.45489821	-73.97164468	-76.25038566	-44.83757758	-60.44931877	-68.38494163	-74.72585084	-81.18247344
+2.6	32.76809322	40.60554958	38.99444947	36.09968391	26.51596325	35.71315028	40.03574297	43.0271461	45.95432367
-2.65	-61.35481402	-81.87339531	-83.34809491	-89.35452046	-49.40332456	-66.61571194	-75.47757856	-82.70514095	-90.10423799
+2.65	27.26299475	32.90468507	30.91486394	28.9668864	22.09852398	29.75123946	33.22926406	35.46611493	37.60696567
-2.7	-66.93181043	-90.16228018	-92.44307788	-103.389318	-53.85877731	-72.63408565	-82.41056063	-90.52505423	-98.86994675
+2.7	21.9743437	25.60151407	23.3323073	22.38245539	17.85097627	24.0195654	26.69741349	28.23255444	29.64645314
-2.75	-72.06521443	-97.87094507	-100.9601722	-117.3725308	-57.95664574	-78.17031412	-88.79846197	-97.74988743	-106.9900722
+2.75	17.19238386	19.0943458	16.80258727	17.64644906	14.00652644	18.83275712	20.79843212	21.72242954	22.50781621
-2.8	-77.21207941	-105.6877927	-109.6609949	-132.4819736	-62.06164853	-83.71724976	-95.2102943	-105.023851	-115.1893365
+2.8	12.4952221	12.81492369	12.9348827	17.07321648	10.22579153	13.73297214	15.01224231	15.36299978	15.56445523
-2.85	-82.05212971	-113.1361974	-118.0214902	-147.9377109	-65.91794559	-88.92926847	-101.2479189	-111.8979262	-122.9643705
+2.85	8.527215514	12.12907459	12.9348827	16.65127331	6.838012431	9.238182885	10.57594056	11.84278161	13.17715215
-2.9	-86.5267607	-120.1303732	-125.9478752	-163.2243239	-69.47865312	-93.74310876	-106.8386653	-118.2906493	-130.2243521
+2.9	8.527215514	12.12907459	12.9348827	16.36868968	6.838012431	9.238182885	10.57594056	11.84278161	13.17715215
-2.95	-90.57736736	-126.5844734	-133.3463657	-178.4072978	-72.69688911	-98.09544978	-111.9098626	-124.1205578	-136.8783973
+2.95	8.527215514	12.12907459	12.9348827	16.21168001	6.838012431	9.238182885	10.57594056	11.84278161	13.17715215
-3	-94.14534652	-132.4127134	-140.1231805	-193.3302751	-75.52577162	-101.9230241	-116.3888275	-129.3061873	-142.8356859
+3	8.527215514	12.12907459	12.9348827	16.16460292	6.838012431	9.238182885	10.57594056	11.84278161	13.17715215
(Span 3) -4	-2.432736069	-3.46E+00	-3.69E+00	-4.61E+00	-1.950821973	-2.635568529	-3.017218462	-3.37863659	-3.759320207
+4	93.66985135	131.0510939	138.0534701	178.4439136	75.17184061	101.4380432	115.7520259	128.4425921	141.7029147
-3.05	-2.432736069	-3.46E+00	-3.69E+00	-4.64E+00	-1.950821973	-2.635568529	-3.017218462	-3.37863659	-3.759320207
+3.05	90.85408828	126.4379538	132.6611567	165.9526676	72.93959611	98.41823137	112.2187496	124.3542591	137.0063417
-3.1	-3.471687598	-3.475383369	-3.690203002	-4.749058526	-2.732176681	-3.781302638	-3.987087201	-3.986663261	-3.986273694
+3.1	87.33500555	120.7626742	126.086746	151.4048549	70.14608068	94.64020409	107.8103495	119.2759302	131.196306
-3.15	-6.047423792	-5.650540828	-4.831929988	-4.915882074	-5.042983526	-6.738292711	-7.050926603	-7.045919833	-7.045429901
+3.15	*83.95638369*	*115.3837232*	*119.9024252*	*138.5496833*	*67.46121495*	*91.00995496*	*103.5836314*	*114.424413*	*125.6643161*
-3.2	*-9.613776725*	*-9.052051421*	*-7.916460265*	*-7.300642541*	*-7.920709278*	*-10.61774976*	*-11.42904594*	*-11.394507*	*-11.39400036*
+3.2	*79.8358825*	*108.8939423*	*112.4888156*	*124.5094935*	*64.18390234*	*86.57950127*	*98.43457617*	*108.5318373*	*118.9640307*
-3.25	*-13.03171238*	*-13.18672355*	*-11.25819732*	*-10.14412566*	*-10.67562208*	*-14.33238033*	*-15.630576*	*-15.91657974*	*-16.03651248*
+3.25	*75.95880464*	*102.8434229*	*105.6155194*	*112.3209661*	*61.09789977*	*82.40835105*	*93.59425688*	*103.0065945*	*112.6964249*
-3.3	*-17.19405519*	*-18.64000471*	*-16.31072941*	*-14.41386016*	*-14.02745797*	*-18.85260812*	*-20.75282901*	*-21.53240899*	*-22.15501694*
+3.3	*71.30985357*	*95.6459994*	*97.47945563*	*99.99465956*	*57.39517835*	*77.40429334*	*87.7950064*	*96.40119766*	*105.218991*
-3.35	*-21.10567192*	*-23.90188658*	*-21.23252805*	*-18.62833872*	*-17.17496052*	*-23.0978434*	*-25.5710315*	*-26.82928586*	*-27.94259681*
+3.35	*66.99866896*	*89.01819965*	*90.02021718*	*89.10180097*	*53.9595534*	*72.76175459*	*82.42092022*	*90.29174339*	*98.31556841*
-3.4	*-25.79101574*	*-30.2675525442768*	*-27.77630397*	*-24.24194996*	*-20.94254356*	*-28.1800536605468*	*-31.34693496*	*-33.19385009*	*-34.9137556452195*
+3.4	*61.89423387*	81.21994941	*81.27843314*	*78.14011808*	*49.88978211*	67.26288148	*76.06199529*	*83.07495534*	90.17409426
-3.45	*-30.13192847*	-36.21617704	*-33.93536479*	*-29.59063062*	*-24.43113023*	-32.88637464	*-36.70197039*	*-39.10665095*	-41.40380212
+3.45	*57.2133462*	74.10913983	*73.33628067*	*68.9474817*	*46.15604139*	62.21852895	*70.23398189*	*76.47081526*	82.7346578
-3.5	*-35.2673417*	-43.30673155	*-41.32236114*	*-36.08344208*	*-28.55610227*	-38.4517479	*-43.04106811*	*-46.11852495*	-49.11448208
+3.5	*51.72639463*	65.81689896	*64.10561165*	*59.52019305*	*41.77757944*	56.30362549	*63.40584703*	*68.74406814*	74.04225285
-3.55	*-39.97316842*	-49.84783281	*-48.17390465*	*-42.41180213*	*-32.33425487*	*-43.54962012*	*-48.85310329*	*-52.55773364*	-56.20717517
+3.55	*46.74020633*	*58.3173480148946*	*55.783578523389*	*51.8895614306797*	*37.7972482025847*	*50.9269726789073*	*57.2037428192588*	*61.7346825194963*	66.16659974

-3.6	*-45.48566461*	-57.55646371	*-56.28730229*	-50.91496964	-36.75822957	*-49.51932692*	-55.6648667	*-60.1154842*	-64.54429223
+3.6	*40.9437098*	49.63795161	*46.18076031*	43.43719919	33.16848081	*44.67486342*	49.99687928	*53.59940476*	57.03636965
-3.65	*-50.491999*	-64.59574329	*-63.72829308*	-58.91258938	-40.77445242	*-54.93923642*	-61.85405876	*-66.99157314*	-72.1398276
+3.65	*35.71656504*	41.84392729	*37.58183992*	36.00691324	28.99304608	*39.03544494*	43.50052181	*46.27429936*	48.82430163
-3.7	*-56.30860898*	-72.81559061	*-72.45134824*	-69.11263589	-45.43905695	*-61.23449349*	-69.04802814	*-74.99377222*	-80.99030956
+3.7	*29.6834909*	*32.88418351*	*28.89094731*	28.51775797	24.17234902	*32.52496068*	*36.00538582*	*37.8319215*	39.36935482
-3.75	*-61.55110784*	*-80.25880767*	*-80.37878902*	-78.6618286	-49.64186223	*-66.90686307*	*-75.53454309*	*-82.2173014*	-88.98885456
+3.75	*24.27979157*	*25.01322913*	*21.4521772*	26.43829145	19.85330081	*26.69228616*	*29.29461033*	*30.2805914*	30.92063708
-3.8	*-67.59886477*	*-88.88303321*	*-89.59473437*	-90.79235394	-54.4887052	*-73.44888788*	*-83.02023582*	*-90.56251909*	-98.23956248
+3.8	*18.08313057*	*16.88981187*	*17.06687802*	25.76001108	14.89906456	*20.00220776*	*21.60173578*	*21.63257199*	21.62907504
-3.85	*-73.01312394*	*-96.63591955*	*-97.90552962*	-102.213968	-58.8265715	*-79.3042055*	*-89.72423645*	*-98.04396481*	-106.5413476
+3.85	*12.5672625*	*15.88119916*	*17.06687802*	25.29276917	10.48794222	*14.04583549*	*14.75640942*	*15.37428753*	17.11785965
-3.9	*-79.21905924*	*-105.5576857*	*-107.4975958*	-116.0841201	-63.79729746	*-86.0141695*	*-97.41119877*	*-106.6307711*	-116.0791747
+3.9	*11.06711874*	*15.88119916*	*17.06687802*	24.91349341	8.868313059	*11.97850664*	*13.72527016*	*15.37428753*	17.11785965
-3.95	*-84.74067273*	*-113.5259729*	*-116.088781*	-128.9798736	-68.2187369	*-91.98290154*	*-104.2528475*	*-114.2806043*	-124.5843652
+3.95	*11.06711874*	*15.88119916*	*17.06687802*	24.71233605	8.868313059	*11.97850664*	*13.72527016*	*15.37428753*	17.11785965
-5	*-91.03181679*	*-122.6384438*	*-125.9401637*	-144.1490881	-73.25495328	*-98.78199996*	*-112.0505144*	*-123.0076032*	-134.2962407
+5	*11.06711874*	*15.88119916*	*17.06687802*	*24.6362821*	8.868313059	*11.97850664*	*13.72527016*	*15.37428753*	*17.11785965*

3-Span: Shear (Max and Min) Raw Data Results - 160' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-30.77920379	-34.05270733	-19.3342	-23.2677	-25.114
End Shear	225.4052909	243.2218918	146.8423	176.9933	188.2878
-0.05	-30.77920379	-34.05270733	-19.3342	-23.2677	-25.114
+0.05	208.3343043	224.6384117	136.0978	164.0865	174.3505
-0.1	-30.77920379	-34.05270733	-19.3342	-23.2677	-25.114
+0.1	190.8669367	205.3395554	125.092	150.8632	160.0773
-0.15	-30.77920379	-34.05270733	-19.3342	-23.2677	-25.114
+0.15	175.6844854	188.5859556	115.5082	139.3461	147.6559
-0.2	-30.77920379	-34.05270733	-20.2503	-23.2677	-25.114
+0.2	158.7917338	169.9694481	104.8241	126.5039	133.8173
-0.25	-36.14028855	-38.16072355	-26.7435	-32.9048	-32.4998
+0.25	144.2086638	153.9207145	95.58199	115.3924	121.8543
-0.3	-51.10068252	-51.74129967	-37.2582	-45.522	-45.9091
+0.3	128.0998899	136.2195787	85.35057	103.0885	108.6204
-0.35	-65.6452497	-66.01451546	-46.9716	-57.1755	-58.4916
+0.35	114.3009526	121.0813376	76.56552	92.52117	97.26604
-0.4	-83.14978872	-85.35831326	-57.8358	-70.2073	-72.6525
+0.4	99.1855656	104.5285982	66.91756	80.91252	84.80687
-0.45	-98.37248147	-102.3649137	-67.2663	-81.5171	-84.9523
+0.45	86.35550366	90.50647649	58.70508	71.02793	74.2112
-0.5	-115.3192626	-121.3212362	-77.7445	-94.0808	-98.6276
+0.5	72.44285651	75.33519244	49.77144	60.27155	62.69694
-0.55	-129.9574509	-137.7166574	-86.7767	-104.908	-110.424
+0.55	60.76641385	62.63481278	42.24697	51.20824	53.01005
-0.6	-146.137122	-155.8637916	-96.7381	-116.847	-123.444
+0.6	48.26587717	49.07804729	34.15853	41.46118	42.61077
-0.65	-160.0060521	-171.4424107	-105.256	-127.053	-134.586
+0.65	37.92779129	38.06802087	27.43753	33.35771	33.98277
-0.7	-175.2092017	-188.5473382	-114.57	-138.21	-146.78
+0.7	27.55363107	28.03717075	20.32512	24.77698	24.90326
-0.75	-188.1241357	-203.1035349	-122.459	-147.657	-157.12
+0.75	19.68663207	20.6225536	14.74903	18.04305	17.87961
-0.8	-202.1414028	-218.9331861	-130.994	-157.874	-168.318
+0.8	12.74752571	13.15102562	10.47785	11.63051	12.27128
-0.85	-213.9175974	-232.2613445	-138.139	-166.423	-177.703
+0.85	7.976743055	8.064017318	7.217218	7.930424	8.271712
-0.9	-226.5396168	-246.5826703	-145.765	-175.544	-187.735
+0.9	6.673011316	7.369678156	4.201322	5.062568	5.455316
-0.95	-236.9923305	-258.4771471	-152.049	-183.057	-196.017
+0.95	6.673011316	7.369678156	4.201322	5.062568	5.455316
-1	-248.0096908	-271.0571509	-158.634	-190.925	-204.713
+1	6.67E+00	7.37E+00	4.20E+00	5.06E+00	5.46E+00
(Span 2) -2	-2.34E+01	-2.58E+01	-1.47E+01	-1.77E+01	-1.91E+01
+2	250.5553728	274.2143389	159.844	192.3245	206.4446
-2.05	-2.34E+01	-2.58E+01	-1.47E+01	-1.77E+01	-1.91E+01
+2.05	238.8788696	260.9008716	152.8455	183.9573	197.2089
-2.1	-23.39020887	-25.83216232	-14.7265	-17.7453	-19.122
+2.1	225.5387893	245.7743458	144.7775	174.3024	186.5954
-2.15	-23.39020887	-25.83216232	-14.7265	-17.7453	-19.122
+2.15	211.2581197	229.6566423	136.076	163.8812	175.1781
-2.2	-23.39020887	-25.83216232	-14.7265	-17.7453	-19.122
+2.2	196.2050188	212.7349238	126.8459	152.8198	163.0937
-2.25	-28.65356935	-28.84617789	-21.0481	-25.6306	-25.9217

+2.25	**181.3044877**	**196.0427728**	**117.6602**	**141.8053**	**151.0895**
-2.3	**-41.11918317**	**-41.81985207**	**-29.2036**	**-35.4683**	**-36.3916**
+2.3	**165.2279619**	**178.0907556**	**107.7012**	**129.8574**	**138.0963**
-2.35	**-54.71822672**	**-56.59724699**	**-37.9792**	**-46.044**	**-47.6875**
+2.35	**148.8754894**	**159.8873142**	**97.52399**	**117.6416**	**124.8393**
-2.4	**-69.21445542**	**-72.42446765**	**-47.2698**	**-57.2317**	**-59.6728**
+2.4	**132.1028495**	**141.619614**	**87.14814**	**105.2081**	**111.261**
-2.45	**-84.43969005**	**-89.11435841**	**-56.9702**	**-68.9052**	**-72.2108**
+2.45	**115.6270005**	**123.4748299**	**76.69082**	**92.61711**	**97.76338**
-2.5	**-100.2257462**	**-106.4797445**	**-66.9753**	**-80.9384**	**-85.1649**
+2.5	**99.46313784**	**105.6401174**	**66.49313**	**80.35858**	**84.54001**
-2.55	**-115.627663**	**-123.475018**	**-76.6912**	**-92.6176**	**-97.764**
+2.55	**84.4390381**	**89.11417728**	**56.96978**	**68.9047**	**72.21021**
-2.6	**-132.0739757**	**-141.6198062**	**-87.1153**	**-105.179**	**-111.23**
+2.6	**69.2138306**	**72.42429534**	**47.26941**	**57.23124**	**59.67227**
-2.65	**-148.8761613**	**-159.887504**	**-97.5244**	**-117.642**	**-124.84**
+2.65	**54.71763499**	**56.59708133**	**37.97888**	**46.04357**	**47.68703**
-2.7	**-165.2286271**	**-178.0909454**	**-107.702**	**-129.858**	**-138.097**
+2.7	**41.11861404**	**41.81970372**	**29.2033**	**35.46784**	**36.39117**
-2.75	**-180.5483221**	**-195.1965543**	**-117.193**	**-141.245**	**-150.479**
+2.75	**29.17344953**	**29.64674128**	**21.42054**	**26.08003**	**26.39912**
-2.8	**-196.2056701**	**-212.7351098**	**-126.846**	**-152.82**	**-163.094**
+2.8	**23.39019832**	**25.83203656**	**14.72645**	**17.74529**	**19.12195**
-2.85	**-211.2587416**	**-229.6568183**	**-136.076**	**-163.882**	**-175.179**
+2.85	**23.39019832**	**25.83203656**	**14.72645**	**17.74529**	**19.12195**
-2.9	**-225.5393759**	**-245.7745134**	**-144.778**	**-174.303**	**-186.596**
+2.9	**23.39019832**	**25.83203656**	**14.72645**	**17.74529**	**19.12195**
-2.95	**-238.879411**	**-260.901028**	**-152.846**	**-183.958**	**-197.209**
+2.95	**23.39019832**	**25.83203656**	**14.72645**	**17.74529**	**19.12195**
-3	**-251.1106874**	**-274.849192**	**-160.175**	**-192.72**	**-206.882**
+3	**23.39019832**	**25.83203656**	**14.72645**	**17.74529**	**19.12195**
(Span 3) -4	**-6.673008385**	**-7.369642234**	**-4.20132**	**-5.06257**	**-5.45532**
+4	**247.3864529**	**270.3445921**	**158.263**	**190.4813**	**204.2218**
-3.05	**-6.673008385**	**-7.369642234**	**-4.20132**	**-5.06257**	**-5.45532**
+3.05	**237.6646965**	**259.2440495**	**152.452**	**183.5388**	**196.5484**
-3.1	**-6.673008385**	**-7.369642234**	**-4.20132**	**-5.06257**	**-5.45532**
+3.1	**225.8188009**	**245.7642549**	**145.3301**	**175.0248**	**187.1631**
-3.15	**-7.695882884**	**-7.663217977**	**-7.0128**	**-7.70676**	**-8.01701**
+3.15	***214.6812417***	***233.1272282***	***138.6012***	***166.9765***	***178.3108***
-3.2	***-13.1160313***	***-13.543189***	***-10.7009***	***-11.9445***	***-12.5496***
+3.2	***201.335358***	***218.0225572***	***130.5045***	***157.2877***	***167.6744***
-3.25	***-19.22609277***	***-20.14790834***	***-14.4053***	***-17.6277***	***-17.4314***
+3.25	***188.9666946***	***204.0546748***	***122.9732***	***148.2722***	***157.7934***
-3.3	***-28.1157061***	***-28.55072061***	***-20.7284***	***-25.2637***	***-25.3912***
+3.3	***174.3302425***	***187.5582716***	***114.0324***	***137.5658***	***146.076***
-3.35	***-37.26331091***	***-37.27229439***	***-27.0044***	***-32.8353***	***-33.4272***
+3.35	***160.9152159***	***172.4651527***	***105.8142***	***127.7215***	***135.3163***
-3.4	***-48.97929112***	***-49.84992032***	***-34.6212***	***-42.0188***	***-43.2052***
+3.4	***145.1976295***	***154.8100053***	***96.1603***	***116.1544***	***122.6882***
-3.45	***-60.0096652***	***-61.81233101***	***-41.7584***	***-50.6196***	***-52.3814***
+3.45	***130.9209295***	***138.7972806***	***87.37056***	***105.6201***	***111.1998***
-3.5	***-73.24249479***	***-76.20553439***	***-50.2858***	***-60.891***	***-63.3595***
+3.5	***114.3315285***	***120.216364***	***77.1344***	***93.34934***	***97.83104***
-3.55	***-85.51885087***	***-89.59249981***	***-58.1687***	***-70.3822***	***-73.5195***
+3.55	***99.37795428***	***103.48972***	***67.88859***	***82.26336***	***85.76418***
-3.6	***-100.0591132***	***-105.4836236***	***-67.4759***	***-81.5844***	***-85.5276***
+3.6	***82.12605694***	***84.21607566***	***57.20101***	***69.44599***	***71.82481***

-3.65	***-113.3967056***	***-120.0895129***	***-75.9891***	***-91.8277***	***-96.5214***
+3.65	***66.6804211***	***67.0677629***	***47.61461***	***57.94698***	***59.32961***
-3.7	***-129.0349629***	***-137.2455679***	***-85.9452***	***-103.804***	***-109.389***
+3.7	***50.18672382***	***50.94638886***	***36.6065***	***44.74008***	***45.12712***
-3.75	***-143.2491074***	***-152.8647601***	***-94.9732***	***-114.66***	***-121.067***
+3.75	***36.92712713***	***38.96321912***	***27.33313***	***33.61236***	***33.28731***
-3.8	***-159.7760443***	***-171.0527683***	***-105.447***	***-127.253***	***-134.624***
+3.8	***30.77920346***	***34.052707***	***19.8896***	***23.26766***	***25.11397***
-3.85	***-174.6819448***	***-187.4796439***	***-114.875***	***-138.585***	***-146.835***
+3.85	***30.77920346***	***34.052707***	***19.33419***	***23.26766***	***25.11397***
-3.9	***-191.888175***	***-206.4664334***	***-125.736***	***-151.637***	***-160.912***
+3.9	***30.77920346***	***34.052707***	***19.33419***	***23.26766***	***25.11397***
-3.95	***-207.3010755***	***-223.49537***	***-135.447***	***-163.305***	***-173.507***
+3.95	***30.77920346***	***34.052707***	***19.33419***	***23.26766***	***25.11397***
-5	***-224.977228***	***-243.0479607***	***-146.565***	***-176.66***	***-187.933***
+5	***30.77920346***	***34.052707***	***19.33419***	***23.26766***	***25.11397***

3-Span: Moment (Max and Min) Raw Data Results - 160' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-9.62E-13	-4.78E-13	-9.06E-13	-4.17E-13	-4.51E-13	-3.56E-13	-4.11E-13	-3.41E-13	-3.63E-13	-3.10E-13
End Shear	1.06E-12	6.29E-13	1.01E-12	4.65E-13	4.65E-13	3.72E-13	3.90E-13	3.69E-13	3.89E-13	3.06E-13
-0.05	-153.3527824	-240.9568676	-357.5051592	-115.514497	-124.333738	-117.207088	-141.965585	-147.602164	-156.246965	-61.80449714
+0.05	1066.409007	1478.918787	1994.529651	901.5760301	965.0897575	906.3593579	1086.340927	1052.120128	1112.600638	477.0888468
-0.1	-306.7055647	-481.9137353	-715.0103184	-231.028993	-248.667475	-234.414177	-283.931169	-295.204327	-312.493931	-123.6089943
+0.1	1994.654816	2772.03878	3698.101522	1680.982966	1798.645458	1688.758299	2022.474619	1947.695726	2059.477748	888.1213535
-0.15	-460.0583471	-722.8706029	-1072.515478	-346.54349	-373.001213	-351.621265	-425.896754	-442.806491	-468.740896	-185.4134914
+0.15	2876.342302	3880.208327	5167.889657	2338.905712	2501.50739	2348.012844	2809.633529	2688.289704	2842.30695	1233.910978
-0.2	-613.4111294	-963.8274706	-1430.020637	-462.057986	-497.33495	-468.828353	-567.862339	-590.408654	-624.987862	-247.2179885
+0.2	3599.966865	4805.157395	6320.023961	2877.408126	3075.94968	2886.298771	3450.563689	3296.805283	3486.348104	1515.657119
-0.25	-766.7639118	-1204.784338	-1787.525796	-577.572483	-621.668688	-586.035442	-709.827923	-738.010818	-781.234827	-309.0224857
+0.25	4167.72191	5549.278527	7166.702372	3299.267785	3525.015182	3306.516824	3974.502357	3787.310165	4007.003306	1735.38002
-0.3	-920.1166941	-1445.741206	-2145.030955	-693.086979	-746.002426	-703.24253	-851.793508	-885.612981	-937.481792	-370.8269828
+0.3	4584.247559	6115.628034	7845.773059	3607.977364	3852.516727	3633.665998	4366.587359	4141.114349	4380.373415	1894.948891
-0.35	-1073.469476	-1686.698074	-2502.536115	-808.601476	-870.336163	-820.449618	-993.759093	-1033.21514	-1093.72876	-432.63148
+0.35	4855.137475	6507.924223	8286.325317	3814.305216	4083.562935	3853.470133	4624.000856	4379.327317	4633.774086	1996.327984
-0.4	-1226.822259	-1927.654941	-2860.041274	-924.115973	-994.669901	-937.656707	-1135.72468	-1180.81731	-1249.97572	-494.4359771
+0.4	4986.941965	6730.549584	8446.649376	3931.576724	4205.508561	3966.990898	4752.525053	4485.874345	4747.531087	2042.25136
-0.45	-1380.175041	-2168.611809	-3217.546433	-1039.63047	-1119.00364	-1054.86379	-1277.69026	-1328.41947	-1406.22269	-556.2404742
+0.45	4987.164629	6788.548794	8343.574014	3948.403117	4220.449853	3979.048644	4758.971208	4466.976695	4728.51006	2032.821056
-0.5	-1533.527824	-2409.568676	-3575.051592	-1155.14497	-1243.33738	-1172.07088	-1419.65585	-1476.02164	-1562.46965	-618.0449714
+0.5	4864.264965	6700.529075	8134.315654	3880.161719	4148.734878	3911.142305	4680.928317	4401.453594	4658.780218	2007.811927
-0.55	-1686.880606	-2650.525544	-3932.556751	-1270.65946	-1367.67111	-1289.27797	-1561.62143	-1623.6238	-1718.71662	-679.8494685
+0.55	4653.517029	6461.25426	8021.8729	3724.014208	3983.884129	3757.699226	4500.935203	4245.195596	4492.555546	1938.742668
-0.6	-1840.233388	-2891.482412	-4290.061911	-1386.17396	-1492.00485	-1406.48506	-1703.58702	-1771.22596	-1874.96358	-741.6539656
+0.6	4377.447843	6073.916393	7618.560163	3486.213703	3730.554622	3520.495668	4218.779667	3976.133055	4207.027255	1823.382728
-0.65	-1993.586171	-3132.439279	-4647.56707	-1501.68846	-1616.33859	-1523.69215	-1845.5526	-1918.82813	-2031.21055	-803.4584628
+0.65	3994.904904	5545.978792	6940.021603	3176.867583	3397.40685	3207.665738	3844.227205	3604.210044	3812.736995	1665.879321
-0.7	-2146.938953	-3373.396147	-5005.072229	-1617.20295	-1740.67233	-1640.89924	-1987.51819	-2066.43029	-2187.45752	-865.2629599
+0.7	3516.936015	4885.568555	6003.626814	2807.856858	2993.871267	2828.069179	3387.384759	3140.306066	3321.216845	1470.766288
-0.75	-2300.291735	-3614.353015	-5362.577388	-1732.71745	-1865.00606	-1758.10632	-2129.48377	-2214.03245	-2343.70448	-927.0674571
+0.75	2955.544844	4101.475922	4903.403905	2380.168445	2531.745781	2391.29105	2859.761764	2597.66265	2748.621485	1242.963234
-0.8	-2453.644518	-3855.309882	-5720.082548	-1848.23195	-1989.3398	-1875.31341	-2271.44935	-2361.63462	-2499.95145	-988.8719542
+0.8	2323.688341	3203.15333	3772.546678	1903.783977	2019.027634	1907.640781	2273.745685	1988.976859	2104.104132	987.7754935
-0.85	-2606.9973	-4185.662142	-6158.043558	-1963.74644	-2113.67354	-1992.5205	-2413.41494	-2509.23678	-2656.19841	-1050.676451
+0.85	1635.280601	2290.112962	2793.628263	1389.399731	1466.776148	1388.154309	1642.604974	1321.597348	1397.636119	710.8938528
-0.9	-2760.350082	-4760.804025	-6816.315225	-2079.26094	-2238.00728	-2109.72759	-2555.38052	-2656.83894	-2812.44538	-1112.480948
+0.9	906.2122401	1528.527752	1939.002076	848.4255965	891.3738131	844.5919679	981.0726639	629.3573406	665.8734995	418.395562
-0.95	-2913.702865	-5545.41472	-7663.108818	-2194.77543	-2362.34101	-2226.93468	-2697.34611	-2804.44111	-2968.69234	-1174.285446
+0.95	639.5772769	945.924548	1364.312851	483.2068808	519.9766203	490.131514	593.4841085	611.2026551	646.9311055	257.6549945
-1	-3067.055608	-6507.7042	-8837.510543	-2310.28992	-2486.67477	-2344.14178	-2839.31164	-2952.04331	-3124.93935	-1236.08995
+1	673.2392424	949.3355272	1394.381729	508.638813	547.3438143	515.927897	624.7201223	643.3712088	680.9801032	271.2157748
(Span 2) -2	-3067.055608	-6507.7042	-8837.510543	-2310.28992	-2486.67477	-2344.14178	-2839.31164	-2952.04331	-3124.93935	-1236.08995
+2	673.2392424	949.3355272	1394.381729	508.638813	547.3438143	515.927897	624.7201223	643.3712088	680.9801032	271.2157748
-2.05	-2242.347452	-4736.660513	-6674.645208	-1693.21613	-1822.06188	-1717.48094	-2079.64104	-2141.7291	-2266.92582	-902.8546988
+2.05	519.8499553	904.0580676	1186.943737	395.3012962	422.6382522	398.3800661	482.3853227	496.786985	525.8271557	220.6058268
-2.1	-2088.876705	-3697.022822	-5001.840142	-1577.32903	-1697.35631	-1599.9331	-1937.30624	-1995.14487	-2111.77288	-841.0615154
+2.1	1155.874863	1606.846677	1843.3004	1040.428999	1095.121856	1033.785093	1204.530376	820.8848271	866.7690033	503.703173
-2.15	-1935.405957	-2957.391567	-4213.14428	-1461.44193	-1572.65074	-1482.38527	-1794.97144	-1848.56064	-1956.61993	-779.268332
+2.15	2009.338226	2473.486013	2723.325029	1671.851841	1776.696763	1677.201351	1988.933995	1656.79059	1751.371078	851.1786603
-2.2	-1781.93521	-2525.006371	-3700.969864	-1345.55482	-1447.94517	-1364.83743	-1652.63664	-1701.97641	-1801.46699	-717.4751486
+2.2	2805.753252	3489.675805	4027.930674	2264.630598	2415.49401	2281.323935	2722.231895	2429.655365	2569.516166	1173.473639

-2.25	-1628.464462	-2361.160657	-3430.480978	-1229.66772	-1323.23961	-1247.2896	-1510.30184	-1555.39217	-1646.31404	-655.6819652
+2.25	3519.207531	4598.10982	5701.571314	2799.411219	2992.482339	2825.759923	3380.183466	3118.394349	3298.550185	1460.406249
-2.3	-1474.993715	-2253.032031	-3210.13747	-1113.78061	-1198.53404	-1129.74176	-1367.96704	-1408.80794	-1491.16109	-593.8887818
+2.3	4119.888736	5566.83438	7118.560686	3258.189851	3485.19645	3289.093821	3938.851052	3697.694035	3912.194674	1700.803303
-2.35	-1321.522967	-2144.903405	-2989.793962	-997.89351	-1073.82847	-1012.19393	-1225.63224	-1262.22371	-1336.00815	-532.0955984
+2.35	4601.287176	6334.682118	8192.208355	3627.827923	3881.269416	3660.909671	4386.963988	4154.283598	4396.076466	1891.405773
-2.4	-1168.05222	-2036.77478	-2769.450454	-882.006406	-949.122906	-894.646092	-1083.29744	-1115.63948	-1180.8552	-470.3024151
+2.4	4951.619427	6888.392925	8910.752322	3897.572176	4169.295255	3931.86469	4713.742974	4476.699465	4737.759061	2028.901337
-2.45	-1014.581472	-1928.646154	-2642.436867	-766.119302	-824.417338	-777.098257	-940.962642	-969.055254	-1025.70226	-408.5092317
+2.45	5157.505819	7221.031455	9277.109368	4060.415849	4343.966494	4097.16218	4907.465952	4661.815155	4934.377763	2107.521427
-2.5	-861.1107248	-1820.517529	-2642.436622	-650.232198	-699.711771	-659.550423	-798.627842	-822.471023	-870.549313	-346.7160483
+2.5	5213.655941	7328.510055	9284.39282	4117.045683	4401.715513	4148.7324	4963.089934	4700.940333	4976.457548	2126.123937
-2.55	-1014.042915	-1928.646109	-2642.436269	-766.11932	-824.417368	-777.098243	-940.962673	-969.055253	-1025.70232	-408.5092178
+2.55	5115.455964	7221.052525	9277.109636	4060.416367	4343.968945	4097.168177	4907.477389	4661.820378	4934.383052	2107.52507
-2.6	-1167.432203	-2036.774731	-2769.450454	-882.006423	-949.122931	-894.646074	-1083.29747	-1115.63948	-1180.85527	-470.3023989
+2.6	4883.025495	6888.406704	8910.752001	3897.575954	4169.300885	3931.865809	4713.749296	4476.699809	4737.759194	2028.902665
-2.65	-1320.82149	-2144.903352	-2989.793962	-997.893525	-1073.82849	-1012.1939	-1225.63227	-1262.2237	-1336.00821	-532.0955801
+2.65	4551.382716	6334.689277	8192.207472	3627.829651	3881.272863	3660.916131	4386.965691	4154.287714	4396.080574	1891.405828
-2.7	-1474.210777	-2253.031974	-3210.13747	-1113.78063	-1198.53405	-1129.74174	-1367.96707	-1408.80792	-1491.16116	-593.8887612
+2.7	4080.64632	5566.834335	7118.560401	3258.191024	3485.199276	3289.099231	3938.860943	3697.697219	3912.197796	1700.801848
-2.75	-1627.600064	-2361.160595	-3430.480978	-1229.66773	-1323.23962	-1247.28957	-1510.30187	-1555.39215	-1646.31411	-655.6819423
+2.75	3487.741769	4598.132055	5701.57079	2799.411757	2992.484458	2825.764911	3380.192832	3118.397142	3298.55289	1460.409404
-2.8	-1780.989351	-2525.006314	-3700.969872	-1345.55483	-1447.94518	-1364.8374	-1652.63667	-1701.97637	-1801.46706	-717.4751235
+2.8	2778.887151	3489.691808	4027.93101	2264.631113	2415.496047	2281.32547	2722.237648	2429.65785	2569.518557	1173.475912
-2.85	-1934.378638	-2957.391499	-4213.144281	-1461.44194	-1572.65074	-1482.38523	-1794.97147	-1848.5606	-1956.62	-779.2683046
+2.85	1978.913494	2473.498024	2722.801615	1671.853248	1776.699738	1677.200248	1988.93707	1656.793392	1751.373813	851.1796275
-2.9	-2087.767925	-3697.022745	-5001.840139	-1577.32904	-1697.3563	-1599.93306	-1937.30627	-1995.14482	-2111.77295	-841.0614858
+2.9	1112.391336	1606.853901	1843.093672	1040.431339	1095.125811	1033.791707	1204.531644	820.8882851	866.7724438	503.7408819
-2.95	-2241.157212	-4736.660431	-6674.650129	-1693.21614	-1822.06187	-1717.48089	-2079.64107	-2141.72904	-2266.9259	-902.8546669
+2.95	520.1260025	904.0611992	1186.752286	395.3038972	422.6383343	398.38009	482.385353	496.7870498	525.8271959	219.3132327
-3	-3068.298284	-6507.704255	-8837.510429	-2310.28993	-2486.67484	-2344.14183	-2839.31163	-2952.04336	-3124.93945	-1236.089939
+3	673.5968145	949.3355451	1394.381729	508.6388179	547.3438371	515.9279137	624.7201218	643.3712377	680.980094	271.2157846
(Span 3) -4	-3.07E+03	-6507.704255	-8837.510429	-2.31E+03	-2.49E+03	-2.34E+03	-2.84E+03	-2.95E+03	-3.12E+03	-1.24E+03
+4	6.74E+02	949.3355451	1394.381729	5.09E+02	5.47E+02	5.16E+02	6.25E+02	6.43E+02	6.81E+02	2.71E+02
-3.05	-2914.883371	-5545.41485	-7663.108931	-2194.77543	-2362.3411	-2226.93474	-2697.34604	-2804.4412	-2968.69248	-1174.285442
+3.05	639.9169751	945.9245582	1364.312854	483.2068766	519.9766454	490.1315174	593.4841161	611.2026754	646.9310889	257.654995
-3.1	-2761.468457	-4760.804148	-6816.315333	-2079.26093	-2238.00736	-2109.72765	-2555.38046	-2656.83903	-2812.44551	-1112.480945
+3.1	923.869965	1528.534054	1936.704879	848.4266	891.3717624	844.5871765	981.0808452	629.3586776	665.8747739	418.3922847
-3.15	-2608.053544	-4185.662261	-6158.043665	-1963.74644	-2113.67362	-1992.52056	-2413.41487	-2509.23686	-2656.19854	-1050.676449
+3.15	1642.765275	2290.12025	2790.873496	1389.401498	1466.775101	1388.150644	1642.597515	1321.598245	1397.637306	710.8909335
-3.2	-2454.638631	-3855.309974	-5720.082633	-1848.23194	-1989.33988	-1875.31347	-2271.44929	-2361.6347	-2499.95157	-988.8719523
+3.2	2327.075874	3203.161105	3769.429457	1903.78613	2019.028418	1907.637634	2273.738889	1988.978034	2104.105621	987.7727971
-3.25	-2301.223717	-3614.353104	-5362.577474	-1732.71744	-1865.00613	-1758.10638	-2129.4837	-2214.03253	-2343.7046	-927.0674557
+3.25	2960.997928	4101.48341	4903.404154	2380.170454	2531.746418	2391.287536	2859.754202	2597.663402	2748.622533	1242.960303
-3.3	-2147.808804	-3373.396233	-5005.072315	-1617.20294	-1740.67239	-1640.89929	-1987.51812	-2066.43037	-2187.45763	-865.2629591
+3.3	3530.202034	4885.57583	6003.627218	2807.858474	2993.870522	2828.065636	3387.377168	3140.304882	3321.215848	1470.763678
-3.35	-1994.39389	-3132.439363	-4647.567155	-1501.68845	-1616.33865	-1523.6922	-1845.55254	-1918.8282	-2031.21066	-803.4584625
+3.35	4021.314046	5545.985202	6940.021503	3176.868391	3397.40501	3207.661096	3844.218198	3604.207527	3812.734592	1665.875985
-3.4	-1840.978977	-2891.482492	-4290.061996	-1386.17395	-1492.00491	-1406.48511	-1703.58695	-1771.22603	-1874.96369	-741.6539659
+3.4	4421.919174	6073.92167	7618.559661	3486.212372	3730.551598	3520.490049	4218.769497	3976.128679	4207.022892	1823.379518
-3.45	-1687.564064	-2650.525622	-3932.556837	-1270.65945	-1367.67117	-1289.27801	-1561.62137	-1623.62387	-1718.71671	-679.8494694
+3.45	4720.55594	6461.258349	8021.87283	3724.011436	3983.87953	3757.692247	4500.940296	4245.189322	4492.54917	1938.738924
-3.5	-1534.14915	-2409.568752	-3575.051678	-1155.14496	-1243.33743	-1172.07092	-1419.65578	-1476.0217	-1562.46974	-618.0449728
+3.5	4907.486888	6700.530978	8134.315573	3880.156957	4148.728111	3911.132933	4680.930801	4401.4446	4658.770969	2007.808304
-3.55	-1380.734237	-2168.611881	-3217.546518	-1039.63046	-1119.00369	-1054.86383	-1277.6902	-1328.41954	-1406.22277	-556.2404762
+3.55	4972.64663	6788.547977	8343.573855	3948.40937	4220.43559	3979.041564	4758.969914	4466.971121	4728.503984	2035.836493
-3.6	-1227.319323	-1927.655011	-2860.041359	-924.115961	-994.669948	-937.656743	-1135.72462	-1180.81737	-1249.9758	-494.4359796

+3.6	4907.396895	6730.546555	8446.649251	3931.58054	4205.514357	3966.981769	4752.521166	4485.866193	4747.522275	2042.249038
-3.65	-1073.90441	-1686.69814	-2502.5362	-808.601464	-870.336208	-820.449652	-993.759031	-1033.2152	-1093.72883	-432.631483
+3.65	4809.430759	6507.918774	8286.325668	3814.306401	4083.5659	3853.458826	4623.994133	4379.331697	4633.778447	1996.32547
-3.7	-920.4894967	-1445.74127	-2145.031041	-693.086967	-746.002467	-703.242561	-851.793447	-885.613037	-937.481864	-370.8269865
+3.7	4576.015444	6115.61968	7845.772843	3607.975056	3852.515955	3633.668559	4366.576758	4141.115142	4380.373977	1894.945441
-3.75	-767.0745833	-1204.7844	-1787.525882	-577.57247	-621.668726	-586.035471	-709.827863	-738.010871	-781.234893	-309.0224899
+3.75	4199.67308	5549.267635	7166.702509	3299.262655	3525.011352	3306.5164	3974.505792	3787.307262	4006.999948	1735.376566
-3.8	-613.65967	-963.8275293	-1430.020722	-462.057973	-497.334985	-468.82838	-567.862279	-590.408705	-624.987923	-247.2179933
+3.8	3674.39231	4805.143026	6320.02373	2877.399402	3075.942049	2886.29507	3450.562778	3296.798567	3486.34071	1515.659294
-3.85	-460.2447566	-722.8706589	-1072.515563	-346.543476	-373.001244	-351.62129	-425.896695	-442.806539	-468.740953	-185.4134967
+3.85	2995.118664	3880.189872	5167.889673	2338.893853	2501.496384	2348.005811	2809.628764	2688.286317	2842.303462	1233.912933
-3.9	-306.8298432	-481.9137886	-715.0104039	-231.028979	-248.667503	-234.414199	-283.931111	-295.204372	-312.493983	-123.6090001
+3.9	2157.749765	2772.018123	3698.101472	1680.968265	1798.631237	1688.74737	2022.465352	1947.688528	2059.470221	888.122478
-3.95	-153.4149298	-240.9569182	-357.5052447	-115.514482	-124.333762	-117.207108	-141.965526	-147.602206	-156.247012	-61.80450355
+3.95	1159.993486	1478.895328	1994.529986	901.5571316	965.07112	906.344888	1086.327108	1052.109306	1112.589276	477.0894882
-5	-8.69E-13	-7.70E-13	-1.16E-12	-4.64E-13	-4.64E-13	-4.79E-13	-5.28E-13	-4.68E-13	-4.93E-13	-3.67E-13
+5	5.95E-13	5.57E-13	8.95E-13	3.71E-13	3.96E-13	3.06E-13	3.45E-13	3.30E-13	3.47E-13	2.09E-13

3-Span: Moment (Max and Min) Raw Data Results - 160’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.90E-13	-2.97E-13	-4.16E-13	-3.35E-13	-4.07E-13	-3.15E-13	-3.05E-13	-2.99E-13	-2.99E-13
End Shear	3.42E-13	3.35E-13	3.68E-13	2.65E-13	3.98E-13	3.16E-13	3.71E-13	3.70E-13	3.64E-13
-0.05	-88.53694602	-127.0495892	-136.5350176	-197.0902527	-70.94650258	-95.82804885	-109.802158	-122.994296	-136.942874
+0.05	681.5181223	913.1525439	934.1884379	1047.759089	548.4361465	739.8709643	838.6186386	919.9122222	1002.980311
-0.1	-177.073892	-254.0991785	-273.0700353	-394.1805055	-141.8930052	-191.6560977	-219.604315	-245.988593	-273.885748
+0.1	1269.350523	1691.446585	1722.88584	1903.148997	1021.931098	1378.374873	1561.077805	1712.862118	1871.36031
-0.15	-265.6108381	-381.1487677	-409.6050529	-591.2707582	-212.8395077	-287.4841465	-329.406473	-368.982889	-410.828621
+0.15	1764.051669	2336.079192	2368.127703	2591.857502	1420.821927	1916.173807	2168.197601	2404.199402	2621.445533
-0.2	-354.1477841	-508.198357	-546.1400705	-788.361011	-283.7860103	-383.3121954	-439.20863	-491.977185	-547.771495
+0.2	2167.313495	2850.272641	2905.314874	3165.07899	1746.432448	2355.062592	2662.133835	2969.20051	3248.228133
-0.25	-442.6847301	-635.2479462	-682.6750882	-985.4512637	-354.7325129	-479.1402442	-549.010788	-614.971482	-684.714369
+0.25	2481.377484	3262.456646	3307.83579	3633.441339	2000.52557	2697.429153	3054.560128	3410.045504	3751.885245
-0.3	-531.2216761	-762.2975355	-819.2101058	-1182.541516	-425.6790155	-574.9682931	-658.812945	-737.965778	-821.657243
+0.3	2709.034773	3555.770329	3607.528464	3984.299447	2185.304259	2959.036383	3354.943955	3730.573033	4121.136608
-0.35	-619.7586222	-889.3471247	-955.7451234	-1379.631769	-496.625518	-670.7963419	-768.615103	-860.960074	-958.600116
+0.35	2869.502593	3731.589381	3815.880347	4218.762326	2303.410309	3137.201203	3552.158885	3953.894326	4360.629006
-0.4	-708.2955682	-1016.396714	-1092.280141	-1576.722022	-567.5720206	-766.6243908	-878.41726	-983.954371	-1095.54299
+0.4	2951.21058	3816.083207	3943.663207	4354.498654	2357.925957	3228.907717	3649.729646	4071.52709	4486.390674
-0.45	-796.8325142	-1143.446303	-1228.815159	-1773.812275	-638.5185232	-862.4524396	-988.219418	-1106.94867	-1232.48586
+0.45	2957.084248	3795.37397	3957.107084	4330.632007	2352.371955	3237.731402	3652.963075	4083.43936	4507.998748
-0.5	-885.3694602	-1270.495892	-1365.350176	-1970.902527	-709.4650258	-958.2804885	-1098.02158	-1229.94296	-1369.42874
+0.5	2908.726309	3741.099322	3884.693433	4201.61194	2317.730081	3183.117013	3593.116727	4013.62462	4426.80691
-0.55	-973.9064062	-1397.545482	-1501.885194	-2167.99278	-780.4115284	-1054.108537	-1207.82373	-1352.93726	-1506.37161
+0.55	2795.804747	3610.855997	3719.047478	4086.615565	2235.314904	3058.640401	3456.681137	3854.245034	4242.161707
-0.6	-1062.443352	-1524.595071	-1638.420212	-2365.083033	-851.3580309	-1149.936586	-1317.62589	-1475.93156	-1643.31449
+0.6	2619.010107	3386.224064	3454.680173	3860.230855	2100.464373	2865.48906	3240.425431	3606.532412	3973.041623
-0.65	-1150.980298	-1651.64466	-1774.955229	-2562.173286	-922.3045335	-1245.764635	-1427.42805	-1598.92585	-1780.25736
+0.65	2384.460566	3082.996581	3121.57883	3471.786572	1917.948676	2610.303623	2951.879011	3279.032436	3615.925678
-0.7	-1239.517244	-1778.694249	-1911.490247	-2759.263538	-993.2510361	-1341.592684	-1537.23021	-1721.92015	-1917.20023
+0.7	2098.824727	2696.336197	2699.541058	2993.756238	1692.977924	2300.31829	2599.252289	2881.054595	3177.982326
-0.75	-1328.05419	-1905.743839	-2048.025265	-2956.353791	-1064.197539	-1437.420733	-1647.03236	-1844.91445	-2054.14311
+0.75	1770.69568	2236.064043	2204.116595	2389.88717	1431.201744	1943.360827	2191.438071	2427.035537	2670.264375
-0.8	-1416.591136	-2032.793428	-2184.560282	-3153.444044	-1135.144041	-1533.248782	-1756.83452	-1967.90874	-2191.08598
+0.8	1405.559073	1712.806262	1647.907988	1673.590019	1138.708735	1547.851573	1738.009103	1919.543374	2104.675644
-0.85	-1505.128082	-2159.843017	-2321.0953	-3373.681319	-1206.090544	-1629.07683	-1866.63668	-2090.90304	-2328.02885
+0.85	1010.320471	1137.992236	1027.733987	1000.490029	822.0274863	1122.80528	1249.220093	1369.904348	1493.972146
-0.9	-1593.665028	-2286.892606	-2457.630317	-3657.301623	-1277.037046	-1724.904879	-1976.43884	-2213.89733	-2464.97173
+0.9	598.0072384	552.7933721	531.3892198	714.3328706	488.126342	677.8294277	736.0070402	797.2900528	851.7615686
-0.95	-1682.201974	-2413.942196	-2594.165335	-3995.15939	-1347.983549	-1820.732928	-2086.24099	-2336.89163	-2601.9146
+0.95	369.7758868	525.9676278	560.9108431	712.3723708	296.5249268	400.6064202	458.6172186	513.5527758	571.4166459
-1	-1770.738915	-2540.991779	-2730.700349	-4379.023266	-1418.930074	-1916.560989	-2196.04308	-2459.88596	-2738.85746
+1	389.2377704	553.6501318	590.4324536	737.8579644	312.1314931	421.6909569	482.7549614	540.5818574	601.491219
(Span 2) -2	-1770.738915	-2540.991779	-2730.700349	-4379.023266	-1418.930074	-1916.560989	-2196.04308	-2459.88596	-2738.85746
+2	389.2377704	553.6501318	590.4324536	737.8579644	312.1314931	421.6909569	482.7549614	540.5818574	601.491219
-2.05	-1295.740025	-1843.055011	-1965.500369	-2864.443021	-1039.059703	-1403.773967	-1607.05088	-1799.55182	-2002.31404
+2.05	300.5547281	427.5077545	455.9096768	585.394252	241.0161669	325.613854	372.7651766	417.4169252	464.4488428
-2.1	-1207.056983	-1716.912636	-1830.977588	-2483.144049	-967.9443734	-1307.696865	-1497.0611	-1676.38689	-1865.27166
+2.1	738.8761733	703.152505	612.3839756	595.4821834	591.091097	831.7828521	906.4028313	995.6685065	1061.324495
-2.15	-1118.373942	-1590.77026	-1696.454808	-2179.525319	-896.8290441	-1211.619763	-1387.07132	-1553.22196	-1728.22928
+2.15	1227.386883	1405.955099	1311.98678	1191.718476	987.6247965	1358.500123	1514.277524	1672.880119	1822.339
-2.2	-1029.690901	-1464.627884	-1561.932028	-1955.461374	-825.7137148	-1115.542661	-1277.08154	-1430.05703	-1591.1869
+2.2	1683.928861	2075.646844	2034.962997	1997.320034	1356.114491	1852.303627	2082.840891	2306.631168	2531.714809

-2.25	-941.0078593	-1338.485508	-1427.409248	-1800.929976	-754.5983855	-1019.465559	-1167.09176	-1306.8921	-1454.14451
+2.25	2095.115178	2664.768039	2673.809677	2943.114082	1684.830234	2297.764813	2592.602285	2877.83588	3166.128721
-2.3	-852.324818	-1212.343133	-1292.886468	-1660.825325	-683.4830563	-923.3884571	-1057.10197	-1183.72717	-1317.10213
+2.3	2445.200728	3153.862159	3207.983886	3714.413926	1960.088005	2676.556707	3024.820044	3365.127383	3704.829896
-2.35	-763.6417766	-1086.200757	-1158.363688	-1520.720674	-612.367727	-827.3113551	-947.112192	-1060.56224	-1180.05975
+2.35	2725.523693	3535.146423	3633.447316	4324.650784	2181.124451	2980.316362	3369.794098	3756.012466	4136.146169
-2.4	-674.9587353	-960.058381	-1023.840908	-1380.616023	-541.2523977	-731.2342531	-837.12241	-937.397315	-1043.01737
+2.4	2928.165789	3811.183582	3949.485642	4747.478172	2340.093591	3200.560689	3621.14738	4039.345886	4453.338657
-2.45	-586.2756939	-833.9160052	-889.3181282	-1240.511372	-470.1370684	-635.1571511	-727.132628	-814.232386	-905.974985
+2.45	3049.648875	3967.089504	4138.789489	4960.514759	2431.982403	3335.302334	3770.407098	4211.190074	4647.00752
-2.5	-497.5926526	-707.7736412	-754.7953482	-1100.406721	-399.0217682	-539.0800491	-617.142846	-691.067457	-768.932603
+2.5	3087.39104	3997.223932	4192.658698	4978.994409	2454.480127	3376.99388	3812.626325	4264.401301	4712.710799
-2.55	-586.2756957	-833.9160185	-889.3180917	-1240.511351	-470.1370943	-635.1571752	-727.132672	-814.232397	-905.974919
+2.55	3049.650806	3967.094988	4138.793958	4960.513772	2431.994418	3335.30649	3770.414756	4211.193562	4647.007525
-2.6	-674.9587381	-960.0583958	-1023.840869	-1380.615997	-541.2524205	-731.2342782	-837.122457	-937.397329	-1043.0173
+2.6	2928.169689	3811.18517	3949.485823	4747.480417	2340.10089	3200.560868	3621.150215	4039.350764	4453.339875
-2.65	-763.6417805	-1086.200773	-1158.363645	-1520.720644	-612.3677466	-827.3113811	-947.112241	-1060.56226	-1180.05967
+2.65	2725.526099	3535.150715	3633.451022	4324.654126	2181.12735	2980.321019	3369.801329	3756.015588	4136.151516
-2.7	-852.3248228	-1212.34315	-1292.886422	-1660.82529	-683.4830727	-923.388484	-1057.10203	-1183.72719	-1317.10205
+2.7	2445.2027	3153.869777	3207.988345	3714.417475	1960.086122	2676.560609	3024.826706	3365.129721	3704.830656
-2.75	-941.0078652	-1338.485528	-1427.409199	-1800.929937	-754.5983988	-1019.465587	-1167.09181	-1306.89213	-1454.14442
+2.75	2095.116777	2664.774679	2673.813586	2943.117815	1684.843372	2297.768276	2592.608432	2877.837656	3166.140954
-2.8	-1029.690908	-1464.627905	-1561.931976	-1955.461332	-825.713725	-1115.54269	-1277.0816	-1430.05706	-1591.1868
+2.8	1683.930462	2075.650389	2034.964431	1997.322948	1356.123708	1852.304184	2082.843679	2306.632636	2531.7235
-2.85	-1118.37395	-1590.770282	-1696.454753	-2179.52527	-896.8290511	-1211.619793	-1387.07138	-1553.22199	-1728.22918
+2.85	1227.38873	1405.955585	1311.98636	1191.718181	987.6304396	1358.503936	1514.277939	1672.882348	1822.345228
-2.9	-1207.056992	-1716.91266	-1830.97753	-2483.143995	-967.9443772	-1307.696896	-1497.06117	-1676.38692	-1865.27155
+2.9	738.8786872	703.1578693	612.3868936	595.4839998	591.0933826	831.7876254	906.4013782	995.6718291	1061.323423
-2.95	-1295.740035	-1843.055037	-1965.500306	-2864.442962	-1039.059703	-1403.773999	-1607.05095	-1799.55185	-2002.31393
+2.95	300.5547196	427.5077526	455.9096721	585.3942767	241.0162244	325.6138689	372.7651905	417.4169019	464.4488383
-3	-1770.738993	-2540.99186	-2730.700479	-4379.023348	-1418.930112	-1916.561075	-2196.04316	-2459.88603	-2738.85753
+3	389.2377659	553.6501252	590.4324676	737.8579849	312.1315069	421.6909529	482.7549483	540.5818425	601.491246
(Span 3) -4	-1.77E+03	-2.54E+03	-2.73E+03	-4.38E+03	-1.42E+03	-1.92E+03	-2.20E+03	-2.46E+03	-2.74E+03
+4	3.89E+02	5.54E+02	5.90E+02	7.38E+02	3.12E+02	4.22E+02	4.83E+02	5.41E+02	6.01E+02
-3.05	-1682.202043	-2413.942267	-2594.165455	-3995.159481	-1347.983608	-1820.733022	-2086.241	-2336.89173	-2601.91465
+3.05	369.7758774	525.9676188	560.9108436	712.3723889	296.5249311	400.6064046	458.6172007	513.5527498	571.4166844
-3.1	-1593.665093	-2286.892674	-2457.63043	-3657.301709	-1277.037103	-1724.904969	-1976.43883	-2213.89743	-2464.97178
+3.1	598.006041	552.7898587	531.3892196	714.332887	488.1328833	677.8261591	736.0012753	797.2884632	851.7653302
-3.15	*-1505.128143*	*-2159.84308*	*-2321.095406*	*-3373.6814*	*-1206.090599*	*-1629.076916*	*-1866.63667*	*-2090.90313*	*-2328.0289*
+3.15	1010.319804	1137.988125	1027.738581	1000.492936	822.0346804	1122.802888	1249.215373	1369.90521	1493.977005
-3.2	-1416.591193	-2032.793487	-2184.560382	-3153.444115	-1135.144094	-1533.248863	-1756.83451	-1967.90883	-2191.08602
+3.2	1405.559842	1712.802039	1647.9125	1673.587373	1138.715675	1547.849579	1738.004821	1919.544462	2104.680642
-3.25	-1328.054243	-1905.743894	-2048.025358	-2956.353858	-1064.19759	-1437.420809	-1647.03235	-1844.91453	-2054.14314
+3.25	1770.696056	2236.059674	2204.120825	2389.882804	1431.208723	1943.358566	2191.433813	2427.03634	2670.269382
-3.3	-1239.517293	*-1778.6943*	-1911.490334	*-2759.263601*	-993.2510852	-1341.592756	-1537.23019	-1721.92023	-1917.20027
+3.3	2098.824377	2696.330651	2699.538814	2993.759664	1692.984934	2300.315991	2599.247847	2881.054381	3177.987162
-3.35	-1150.980344	-1651.644707	-1774.95531	-2562.173345	-922.3045807	-1245.764703	-1427.42803	-1598.92593	-1780.25739
+3.35	2384.45938	3082.989702	3121.575317	3471.784302	1917.954791	2610.300413	2951.872965	3279.030984	3615.929266
-3.4	-1062.443394	-1524.595114	-1638.420286	-2365.083088	-851.3580762	-1149.93665	-1317.62587	-1475.93163	-1643.31451
+3.4	2619.007937	3386.215548	3454.674632	3860.233051	2100.469821	2865.485034	3240.418405	3606.529789	3973.043662
-3.45	-973.9064437	-1397.545521	-1501.885261	-2167.992831	-780.4115718	-1054.108597	-1207.82371	-1352.93733	-1506.37164
+3.45	2795.801538	3610.849775	3719.042041	4086.6143	2235.319438	3058.635216	3456.672615	3854.241097	4242.161229
-3.5	-885.3694938	-1270.495927	-1365.350237	-1970.902574	-709.4650673	-958.2805437	-1098.02154	-1229.94303	-1369.42876
+3.5	2908.721612	3741.103134	3884.686034	4201.613851	2317.733235	3183.10994	3593.106393	4013.618665	4426.804017
-3.55	-796.8325439	-1143.446334	-1228.815213	-1773.812317	-638.5185628	-862.4524906	-988.219383	-1106.94873	-1232.48588
+3.55	2957.074765	*3795.37110674256*	*3957.102659*	4330.63331	2352.369518	*3237.724482*	3652.959505	4083.432566	4508.00297

-3.6	**-708.295594**	**-1016.396741**	**-1092.280189**	**-1576.72206**	**-567.5720583**	**-766.6244375**	**-878.417222**	**-983.954431**	**-1095.543**
+3.6	**2951.214706**	**3816.078133**	**3943.656141**	**4354.496552**	**2357.922298**	**3228.899147**	**3649.724151**	**4071.518021**	**4486.392275**
-3.65	**-619.7586441**	**-889.3471474**	**-955.7451648**	**-1379.631804**	**-496.6255539**	**-670.7963843**	**-768.615061**	**-860.960131**	**-958.600127**
+3.65	**2869.504715**	**3731.583798**	**3815.876177**	**4218.764755**	**2303.404946**	**3137.190862**	**3552.150364**	**3953.896789**	**4360.627043**
-3.7	**-531.2216942**	**-762.2975541**	**-819.2101407**	**-1182.541547**	**-425.6790494**	**-574.9683312**	**-658.812899**	**-737.965831**	**-821.65725**
+3.7	**2709.034503**	**3555.761707**	***3607.53089***	**3984.296455**	**2185.29734**	**2959.037918**	**3354.932421**	**3730.572135**	**4121.130991**
-3.75	**-442.6847443**	**-635.2479608**	**-682.6751166**	**-985.4512899**	**-354.7325449**	**-479.1402781**	**-549.010738**	**-614.971531**	**-684.714373**
+3.75	**2481.375125**	**3262.459588**	**3307.831252**	**3633.438589**	**2000.516939**	**2697.42825**	**3054.561201**	**3410.041756**	**3751.876525**
-3.8	**-354.1477943**	**-508.1983675**	**-546.1400924**	**-788.3610331**	**-283.7860405**	**-383.3122249**	**-439.208577**	**-491.97723**	**-547.771496**
+3.8	**2167.308568**	**2850.272008**	**2905.307293**	**3165.080992**	**1746.421399**	**2355.058994**	**2662.131842**	**2969.193675**	**3248.230461**
-3.85	**-265.6108444**	**-381.1487742**	**-409.6050683**	**-591.2707763**	**-212.839536**	**-287.4841718**	**-329.406415**	**-368.98293**	**-410.828619**
+3.85	**1764.044332**	**2336.075211**	**2368.127862**	**2591.854975**	**1420.809391**	**1916.167481**	**2168.192277**	**2404.189063**	**2621.443646**
-3.9	**-177.0738945**	**-254.0991809**	**-273.0700441**	**-394.1805195**	**-141.8930315**	**-191.6561186**	**-219.604254**	**-245.98863**	**-273.885741**
+3.9	**1269.339923**	**1691.439396**	**1722.882058**	**1903.149948**	**1021.915958**	**1378.365327**	**1561.068701**	**1712.862428**	**1871.354621**
-3.95	**-88.53694459**	**-127.0495877**	**-136.53502**	**-197.0902626**	**-70.94652704**	**-95.82806551**	**-109.802093**	**-122.99433**	**-136.942864**
+3.95	**681.5056218**	**913.1422471**	**934.1810756**	**1047.75641**	**548.4198864**	**739.8585654**	**838.6061873**	**919.9091434**	**1002.97747**
-5	**-3.42E-13**	**-4.03E-13**	**-3.84E-13**	**-4.12E-13**	**-4.03E-13**	**-3.82E-13**	**-3.77E-13**	**-3.72E-13**	**-3.90E-13**
+5	**2.60E-13**	**2.75E-13**	**2.82E-13**	**3.20E-13**	**2.31E-13**	**2.70E-13**	**2.25E-13**	**2.25E-13**	**2.28E-13**

3-Span: Moment (Max and Min) Raw Data Results - 160' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-5.13E-13**	**-5.86E-13**	**-3.89E-13**	**-4.14E-13**	**-4.17E-13**
End Shear	**4.61E-13**	**5.32E-13**	**3.77E-13**	**4.89E-13**	**4.67E-13**
-0.05	**-246.2336303**	**-272.4216587**	**-154.673528**	**-186.141261**	**-200.911775**
+0.05	**1669.027728**	**1797.107294**	**1089.621927**	**1314.252845**	**1396.505051**
-0.1	**-492.4672606**	**-544.8433173**	**-309.347055**	**-372.282522**	**-401.823549**
+0.1	**3076.341093**	**3322.715333**	**2014.88069**	**2430.560998**	**2579.344646**
-0.15	**-738.7008909**	**-817.264976**	**-464.020583**	**-558.423783**	**-602.735324**
+0.15	**4281.748315**	**4616.446316**	**2777.500958**	**3359.641384**	**3570.479296**
-0.2	**-984.9345212**	**-1089.686635**	**-618.694111**	**-744.565045**	**-803.647099**
+0.2	**5241.99231**	**5733.221399**	**3424.952155**	**4134.146622**	**4385.657894**
-0.25	**-1231.168152**	**-1362.108293**	**-773.367638**	**-930.706306**	**-1004.55887**
+0.25	**6002.993291**	**6601.159723**	**3924.561898**	**4723.317484**	**5044.654264**
-0.3	**-1477.401782**	**-1634.529952**	**-928.041166**	**-1116.84757**	**-1205.47065**
+0.3	**6592.019686**	**7259.281307**	**4282.602048**	**5136.081404**	**5516.058706**
-0.35	**-1723.635412**	**-1906.951611**	**-1082.71469**	**-1302.98883**	**-1406.38242**
+0.35	**6982.096314**	**7686.838442**	**4518.515228**	**5409.731756**	**5801.383927**
-0.4	**-1969.869042**	**-2179.373269**	**-1237.38822**	**-1489.13009**	**-1607.2942**
+0.4	**7216.368468**	**7887.372793**	**4617.101149**	**5519.581621**	**5942.73327**
-0.45	**-2216.102673**	**-2451.794928**	**-1392.06175**	**-1675.27135**	**-1808.20597**
+0.45	**7234.150751**	**7957.230873**	**4585.307807**	**5473.502841**	**5914.808588**
-0.5	**-2462.336303**	**-2724.216587**	**-1546.73528**	**-1861.41261**	**-2009.11775**
+0.5	**7107.312952**	**7799.003033**	**4521.470044**	**5399.500172**	**5827.489252**
-0.55	**-2708.569933**	**-2996.638245**	**-1701.4088**	**-2047.55387**	**-2210.02952**
+0.55	**6806.975711**	**7437.893315**	**4371.582402**	**5225.400576**	**5620.478743**
-0.6	**-2954.803564**	**-3269.059904**	**-1856.08233**	**-2233.69513**	**-2410.9413**
+0.6	**6326.598956**	**6959.45765**	**4100.989559**	**4905.468403**	**5259.508383**
-0.65	**-3201.037194**	**-3541.481562**	**-2010.75586**	**-2419.8364**	**-2611.85307**
+0.65	**5697.290561**	**6287.214763**	**3719.991729**	**4451.851807**	**4777.704542**
-0.7	**-3447.270824**	**-3813.903221**	**-2165.42939**	**-2605.97766**	**-2812.76484**
+0.7	**4941.523116**	**5436.909443**	**3239.873657**	**3881.873091**	**4163.877605**
-0.75	**-3693.504455**	**-4086.32488**	**-2320.10292**	**-2792.11892**	**-3013.67662**
+0.75	**4043.814929**	**4436.755741**	**2676.837574**	**3213.176153**	**3433.712969**
-0.8	**-3939.738085**	**-4358.746538**	**-2474.77644**	**-2978.26018**	**-3214.58839**
+0.8	**3025.127202**	**3305.899565**	**2040.063435**	**2448.918082**	**2604.176161**
-0.85	**-4185.971715**	**-4631.168197**	**-2629.44997**	**-3164.40144**	**-3415.50017**
+0.85	**1907.997348**	**2069.662371**	**1338.770836**	**1605.673418**	**1693.515137**
-0.9	**-4432.205346**	**-4903.589856**	**-2784.1235**	**-3350.5427**	**-3616.41194**
+0.9	**960.9136295**	**1061.233654**	**669.6796306**	**769.8013136**	**817.0132134**
-0.95	**-4678.438976**	**-5176.011514**	**-2938.79703**	**-3536.68396**	**-3817.32372**
+0.95	**1014.29772**	**1120.19108**	**638.6009256**	**769.5104047**	**829.2080921**
-1	**-4924.672606**	**-5448.433082**	**-3093.47052**	**-3722.82519**	**-4018.23554**
+1	**1067.681805**	**1179.148494**	**672.2115042**	**810.0109389**	**872.8506119**
(Span 2) -2	**-4924.672606**	**-5448.433082**	**-3093.47052**	**-3722.82519**	**-4018.23554**
+2	**1067.681805**	**1179.148494**	**672.2115042**	**810.0109389**	**872.8506119**
-2.05	**-3554.221911**	**-3925.267724**	**-2237.7359**	**-2696.45879**	**-2905.64674**
+2.05	**824.4236327**	**910.494006**	**519.0563775**	**625.4599033**	**673.9823292**
-2.1	**-3310.963849**	**-3656.614544**	**-2084.58077**	**-2511.90775**	**-2706.77846**
+2.1	**1097.795684**	**1221.142573**	**811.4979662**	**960.4460201**	**1003.480698**
-2.15	**-3067.705786**	**-3387.961363**	**-1931.42564**	**-2327.35671**	**-2507.91018**
+2.15	**2440.233961**	**2677.864648**	**1675.412853**	**1994.137551**	**2123.020299**
-2.2	**-2824.447724**	**-3119.308183**	**-1778.27051**	**-2142.80567**	**-2309.0419**
+2.2	**3741.038431**	**4117.881982**	**2489.187048**	**2973.177521**	**3183.177368**

-2.25	**-2581.189661**	**-2850.655003**	**-1625.11539**	**-1958.25464**	**-2110.17362**
+2.25	**4886.992314**	**5391.79154**	**3211.003117**	**3838.546046**	**4115.957693**
-2.3	**-2337.931599**	**-2582.001823**	**-1471.96026**	**-1773.7036**	**-1911.30534**
+2.3	**5861.775074**	**6461.990812**	**3815.520083**	**4562.805162**	**4894.197839**
-2.35	**-2094.673536**	**-2313.348642**	**-1318.80513**	**-1589.15256**	**-1712.43705**
+2.35	**6647.88344**	**7301.974142**	**4288.966853**	**5128.412842**	**5507.495309**
-2.4	**-1851.415474**	**-2044.695462**	**-1165.65**	**-1404.60152**	**-1513.56877**
+2.4	**7216.309031**	**7898.127566**	**4619.630217**	**5522.759692**	**5945.894271**
-2.45	**-1608.157411**	**-1776.042282**	**-1012.49487**	**-1220.05049**	**-1314.70049**
+2.45	**7552.250853**	**8298.083032**	**4805.429462**	**5740.277398**	**6192.90481**
-2.5	**-1364.899349**	**-1507.389102**	**-859.339746**	**-1035.49945**	**-1115.83221**
+2.5	**7646.610881**	**8432.581129**	**4837.421741**	**5772.868446**	**6243.0884**
-2.55	**-1608.15809**	**-1776.050875**	**-1012.49489**	**-1220.05045**	**-1314.7005**
+2.55	**7552.258137**	**8296.817598**	**4805.435324**	**5740.272321**	**6192.908146**
-2.6	**-1851.416262**	**-2044.705364**	**-1165.65002**	**-1404.60149**	**-1513.56878**
+2.6	**7216.309911**	**7898.697816**	**4619.630317**	**5522.760701**	**5945.897858**
-2.65	**-2094.674434**	**-2313.359852**	**-1318.80514**	**-1589.15252**	**-1712.43706**
+2.65	**6647.887287**	**7301.974068**	**4288.971195**	**5128.416981**	**5507.495935**
-2.7	**-2337.932607**	**-2582.01434**	**-1471.96027**	**-1773.70356**	**-1911.30535**
+2.7	**5861.777139**	**6461.989334**	**3815.523085**	**4562.808035**	**4894.198885**
-2.75	**-2581.190779**	**-2850.668828**	**-1625.1154**	**-1958.2546**	**-2110.17363**
+2.75	**4887.003934**	**5391.926669**	**3211.005411**	**3838.54798**	**4115.969508**
-2.8	**-2824.448951**	**-3119.323316**	**-1778.27052**	**-2142.80563**	**-2309.04191**
+2.8	**3741.046538**	**4117.882454**	**2489.189029**	**2973.179105**	**3183.185586**
-2.85	**-3067.707123**	**-3387.977804**	**-1931.42565**	**-2327.35667**	**-2507.91019**
+2.85	**2440.239784**	**2677.308338**	**1675.415586**	**1994.139366**	**2123.025835**
-2.9	**-3310.965296**	**-3656.632293**	**-2084.58078**	**-2511.9077**	**-2706.77848**
+2.9	**1097.801797**	**1221.141492**	**811.4989231**	**960.4465723**	**1003.485613**
-2.95	**-3554.223468**	**-3925.286781**	**-2237.7359**	**-2696.45874**	**-2905.64676**
+2.95	**824.4232141**	**910.4895207**	**519.0564036**	**625.4598901**	**673.9823164**
-3	**-4924.672554**	**-5448.433029**	**-3093.47065**	**-3722.82537**	**-4018.23567**
+3	**1067.681325**	**1179.142758**	**672.211509**	**810.0109477**	**872.850604**
(Span 3) -4	**-4.92E+03**	**-5.45E+03**	**-3.09E+03**	**-3.72E+03**	**-4.02E+03**
+4	**1.07E+03**	**1.18E+03**	**6.72E+02**	**8.10E+02**	**8.73E+02**
-3.05	**-4678.438926**	**-5176.011373**	**-2938.79712**	**-3536.6841**	**-3817.32389**
+3.05	**1014.297258**	**1120.18562**	**638.6009337**	**769.5103996**	**829.2080732**
-3.1	**-4432.205299**	**-4903.589717**	**-2784.12358**	**-3350.54283**	**-3616.41211**
+3.1	**960.913191**	**1061.228482**	**669.6810966**	**769.8086778**	**817.0076143**
-3.15	***-4185.971671***	***-4631.168061***	***-2629.45005***	***-3164.40156***	***-3415.50033***
+3.15	**1908.004102**	**2071.621363**	**1338.772302**	**1605.676158**	**1693.522076**
-3.2	**-3939.738043**	**-4358.746405**	**-2474.77651**	**-2978.26029**	**-3214.58855**
+3.2	**3025.134149**	**3307.586177**	**2040.065136**	**2448.921187**	**2604.183781**
-3.25	**-3693.504415**	**-4086.324749**	**-2320.10298**	**-2792.11902**	**-3013.67676**
+3.25	**4043.821228**	**4438.788891**	**2676.83834**	**3213.1785**	**3433.719671**
-3.3	**-3447.270788**	**-3813.903093**	**-2165.42945**	**-2605.97775**	**-2812.76498**
+3.3	**4941.528126**	**5439.86742**	**3239.87272**	**3881.874116**	**4163.882772**
-3.35	**-3201.03716**	**-3541.481437**	**-2010.75591**	**-2419.83648**	**-2611.8532**
+3.35	**5697.292715**	**6285.795874**	**3719.98906**	**4451.849884**	**4777.707661**
-3.4	**-2954.803532**	**-3269.059781**	**-1856.08238**	**-2233.69521**	**-2410.94142**
+3.4	**6326.595183**	**6959.458682**	**4100.985346**	**4905.464017**	**5259.509089**
-3.45	**-2708.569905**	**-2996.638125**	**-1701.40884**	**-2047.55394**	**-2210.02964**
+3.45	**6808.449837**	**7437.893581**	**4371.575576**	**5225.39375**	**5620.475497**
-3.5	**-2462.336277**	**-2724.216469**	**-1546.73531**	**-1861.41267**	**-2009.11786**
+3.5	**7107.316944**	**7801.43198**	**4521.460494**	**5399.504258**	**5827.482174**
-3.55	**-2216.102649**	**-2451.794813**	**-1392.06178**	**-1675.2714**	**-1808.20608**
+3.55	**7234.148518**	**7957.229006**	**4585.301579**	**5473.499854**	**5914.801892**
-3.6	**-1969.869022**	**-2179.373157**	**-1237.38824**	**-1489.13013**	**-1607.2943**

+3.6	**7216.376103**	**7887.37291**	**4617.09241**	**5519.575849**	**5942.738306**
-3.65	**-1723.635394**	**-1906.951501**	**-1082.71471**	**-1302.98886**	**-1406.38251**
+3.65	**6982.098217**	**7686.836651**	**4518.51998**	**5409.736804**	**5801.384537**
-3.7	**-1477.401766**	**-1634.529845**	**-928.041173**	**-1116.84759**	**-1205.47073**
+3.7	**6592.014638**	**7260.174325**	**4282.603144**	**5136.08187**	**5516.05402**
-3.75	**-1231.168138**	**-1362.108189**	**-773.367639**	**-930.706319**	**-1004.55895**
+3.75	**6002.981931**	**6601.158249**	**3924.559176**	**4723.313137**	**5044.64445**
-3.8	**-984.9345107**	**-1089.686533**	**-618.694104**	**-744.565049**	**-803.647171**
+3.8	**5243.328867**	**5733.218011**	**3424.945284**	**4134.137564**	**4385.649757**
-3.85	**-738.700883**	**-817.264877**	**-464.02057**	**-558.423779**	**-602.735389**
+3.85	**4281.754939**	**4616.445606**	**2777.497398**	**3359.642414**	**3570.481342**
-3.9	**-492.4672553**	**-544.843221**	**-309.347036**	**-372.282509**	**-401.823608**
+3.9	**3076.340369**	**3322.715842**	**2014.872409**	**2430.556572**	**2579.341157**
-3.95	**-246.2336276**	**-272.421565**	**-154.673502**	**-186.141238**	**-200.911827**
+3.95	**1669.020046**	**1797.109132**	**1089.610621**	**1314.243969**	**1396.495896**
-5	**-6.54E-13**	**-6.84E-13**	**-5.22E-13**	**-5.97E-13**	**-5.94E-13**
+5	**4.46E-13**	**5.00E-13**	**3.73E-13**	**3.76E-13**	**3.51E-13**

3-Span: Shear (Max and Min) Raw Data Results - 160' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.239252887	-5.738718306	-8.235000599	-8.849819655	-13.51332261	-4.598554743	-6.211307288	-7.117070103	-7.972147805	-8.876255754
End Shear	66.82930136	47.2927078	63.71182007	65.42748952	78.50857568	38.05828881	51.31902266	58.21184087	63.90474513	69.76997834
-0.05	-8.239252887	-5.738718306	-8.235000599	-8.849819655	-13.559604	-4.598554743	-6.211307288	-7.117070103	-7.972147805	-8.876255754
+0.05	62.29033088	44.13254806	59.14410369	60.49503782	70.59582478	35.52714826	47.90337931	54.29610106	59.52402532	64.89670447
-0.1	-8.239252887	-5.738718306	-8.235000599	-8.849819655	-13.71682603	-4.598554743	-6.211307288	-7.117070103	-7.972147805	-8.876255754
+0.1	57.6816301	40.88771666	54.46147066	55.44637777	62.63473214	32.92886733	44.39580037	50.27555241	55.02852832	59.89853837
-0.15	-8.239252887	-6.325447954	-8.235000599	-8.849819655	-13.94762932	-5.285500188	-7.076865503	-7.414568359	-7.972147805	-8.876255754
+0.15	53.60490847	38.04821101	50.37934487	51.05755027	55.9683079	30.65452229	41.32568303	46.75841526	51.09966146	55.53453699
-0.2	-12.50932264	-9.566887834	-9.00690029	-8.849819655	-14.31281915	-7.877737244	-10.57716423	-11.43729469	-11.48243785	-11.48065067
+0.2	49.04080325	34.86648489	45.82330311	46.17365575	48.92513654	28.10534598	37.88475742	42.8187601	46.70314134	50.65592942
-0.25	-16.60156674	-12.40216087	-12.72374167	-10.86574681	-14.72557807	-10.14453808	-13.63819511	-14.9571497	-15.43932845	-15.74019473
+0.25	45.07500345	32.09935015	41.87731193	41.95691716	43.10333618	25.88768112	34.8914772	39.39369748	42.88480676	46.42329446
-0.3	-21.18894714	-15.57768223	-17.3268937	-15.23718428	-16.18747375	-12.68265701	-17.06580059	-18.90078744	-19.87691805	-20.70513326
+0.3	40.66388938	29.01856308	37.50325403	37.2983315	37.19762861	23.41787788	31.55806596	35.58185483	38.63986175	41.72289456
-0.35	-25.18030282	-18.3380963	-21.42639578	-19.18873555	-19.74184413	-14.88835017	-20.04465882	-22.33015669	-23.73970348	-25.03121441
+0.35	36.85715207	26.35718732	33.74228078	33.30710812	32.28798992	21.28360244	28.67768229	32.2902673	34.97847354	37.67337631
-0.4	-29.62609488	-21.40986073	-26.006598	-24.24193904	-24.29844682	-17.34207746	-23.35870537	-26.14778513	-28.04434621	-29.8570981
+0.4	32.65358546	23.41518021	29.60561235	28.93437564	27.35647505	18.92344107	25.49265018	28.6531552	30.93769166	33.20983985
-0.45	-33.46848485	-24.06203255	-29.97784211	-28.63568189	-28.35446517	-19.45995538	-26.21933593	-29.44527067	-31.76662364	-34.03461057
+0.45	29.05404779	20.89294869	26.07853951	25.22209331	23.26757297	16.89926208	22.76121842	25.53644225	27.4796551	29.39519067
-0.5	-37.71820194	-26.9922013	-34.3849897	-33.52618753	-33.08028244	-21.79902514	-29.37896037	-33.08997113	-35.88572142	-38.6627855
+0.5	25.11258271	18.12755256	22.23465205	21.19577167	19.36156362	14.67901046	19.76542832	22.1209785	23.69563854	25.22716309
-0.55	-41.36354159	-29.50274743	-38.17909902	-37.74966218	-37.63724964	-23.80238039	-32.08530785	-36.2141756	-39.42108012	-42.63997849
+0.55	21.76837994	15.77784966	18.99035992	17.81585133	16.2473426	12.79163564	17.2190032	19.22053704	20.48735695	21.6991324
-0.6	-45.36269183	-32.25348599	-42.35778824	-42.41691344	-43.30660085	-25.99652364	-35.04964696	-39.63903021	-43.30204391	-47.01180209
+0.6	18.14357257	13.22690786	15.49466032	14.19648591	12.96311098	10.7415632	14.45332037	16.07364126	17.01269804	17.88526145
-0.65	-48.76290235	-34.58901514	-45.92587713	-46.41668995	-48.58808747	-27.85864851	-37.56565503	-42.54855309	-46.60407711	-50.7369188
+0.65	15.10284105	11.08311892	12.58203016	11.20236341	10.28844335	9.017700041	12.1279579	13.43087014	14.10058245	14.69560026
-0.7	-52.45699311	-37.12248825	-49.82071533	-50.80014691	-55.2653045	-29.87759608	-40.29384363	-45.70664357	-50.19430508	-54.79373746
+0.7	11.84924583	8.784462872	9.489913344	8.297192789	7.701696041	7.168075111	9.633247109	10.59945766	10.98787568	11.2945455
-0.75	-55.56399323	-39.24961813	-53.11390064	-54.52280082	-61.17796463	-31.5717827	-42.58345645	-48.36008742	-53.21660916	-58.21503371
+0.75	9.160123659	6.87997589	6.9867883	5.985378869	5.675909025	5.634433229	7.565001818	8.255755986	8.418336312	8.495000686
-0.8	-58.89853293	-41.52798446	-56.66948543	-58.5619064	-68.69220588	-33.38526575	-45.03463161	-51.20449509	-56.46350904	-61.89819566
+0.8	6.332296353	4.87144454	4.557087834	4.006562272	3.929786496	4.015524867	5.382122438	5.786752205	5.769806451	5.769536689
-0.85	-61.66424208	-43.41333135	-59.63888898	-61.95401118	-75.44641801	-34.88480638	-47.06179489	-53.56046086	-59.1596734	-64.96392084
+0.85	4.14746998	3.239639282	3.007703783	2.595219836	2.742036004	2.698807102	3.607056324	3.783518171	3.780086426	3.779823084
-0.9	-64.5847393	-45.39875461	-62.79982348	-65.5882208	-83.37503848	-36.46255648	-49.19509294	-56.04426542	-62.01065056	-68.21477618
+0.9	1.991608474	1.729414387	1.794303003	1.913509419	2.611590192	1.340884089	1.877527562	1.970234194	1.970024677	1.969815161
-0.95	-66.96107679	-47.0089313	-65.3965665	-68.59635487	-90.38737256	-37.74074232	-50.92374472	-58.06135467	-64.33426495	-70.87317987
+0.95	1.80879822	1.261465438	1.794303003	1.913509419	2.546210509	1.01157474	1.366641719	1.564541635	1.751950575	1.949349255
-1	-69.41303984	-48.66357646	-68.10744442	-71.76511896	-98.14386122	-39.05249077	-52.69830205	-60.1376439	-66.73672453	-73.63307887
+1	1.81E+00	1.261465438	1.794303003	1.913509419	2.52E+00	1.01157474	1.366641719	1.564541635	1.751950575	1.949349255
(Span 2) -2	-6.340191368	-4.421682973	-6.289382805	-6.707224469	-8.842775776	-3.545767243	-4.79034637	-5.484024293	-6.140929189	-6.832850172
+2	69.58959887	48.73586009	68.52496976	72.49970998	105.4939391	39.09799062	52.76299585	60.248827	66.9301813	73.92735138
-2.05	-6.340191368	-4.421682973	-6.289382805	-6.707224469	-8.875242725	-3.545767243	-4.79034637	-5.484024293	-6.140929189	-6.832850172
+2.05	66.96971363	46.96769524	65.63868916	69.14497634	97.63182588	37.69601332	50.86610136	58.0293728	64.36106975	70.97646377
-2.1	-6.340191368	-4.421682973	-6.289382805	-6.707224469	-8.983525257	-3.545767243	-4.79034637	-5.484024293	-6.140929189	-6.832850172
+2.1	63.87662445	44.86729173	62.29198158	65.30856732	89.26468837	36.02722763	48.60923367	55.39975256	61.33802934	67.52607507
-2.15	-6.340191368	-4.421682973	-6.289382805	-6.707224469	-9.178410526	-3.545767243	-4.79034637	-5.484024293	-6.140929189	-6.832850172
+2.15	60.47610879	42.54701895	58.6652331	61.19842955	80.86530365	34.18086019	46.11307097	52.50072899	58.02315054	63.76149444
-2.2	-8.633778897	-6.479342791	-6.645146705	-6.707224469	-9.469405824	-5.30254088	-7.121171195	-7.784543555	-7.966428221	-8.070912305
+2.2	56.81197233	40.03726237	54.80294514	56.8631963	72.40976108	32.18121568	43.41042976	49.36998738	54.45867298	59.72983473
-2.25	-11.90654116	-8.794891596	-9.739226923	-8.564559448	-9.843439859	-7.166378573	-9.635269383	-10.63683804	-11.10095708	-11.49286387

+2.25	53.11732467	37.49865898	50.94629799	52.56961129	64.53134095	30.15653946	40.67455144	46.20737367	50.87052751	55.68494584
-2.3	-15.59482318	-11.39463843	-13.27549954	-12.09883534	-12.43969975	-9.256494632	-12.4551729	-13.84375983	-14.63979312	-15.37298493
+2.3	49.06479642	34.7065452	46.75237094	47.9350465	56.51630195	27.92771295	37.66338003	42.73282544	46.94048771	51.26759576
-2.35	-19.49807	-14.13701043	-17.06247984	-16.03068962	-16.00729963	-11.45901348	-15.42727347	-17.2307788	-18.39068098	-19.5008151
+2.35	44.87800777	31.81466666	42.45426751	43.21895275	48.87102261	25.61738806	34.54262645	39.13780818	42.88555764	46.72223299
-2.4	-23.57250217	-16.9916143	-21.05567463	-20.22026724	-19.88930311	-13.74962898	-18.51874728	-20.76020367	-22.31136575	-23.82924198
+2.4	40.60078181	28.85341349	38.09647791	38.35689529	41.73836322	23.24987127	31.34511198	35.46001055	38.74799031	42.09597146
-2.45	-27.774368	-19.92806542	-25.21060063	-24.61894276	-24.53122751	-16.10402521	-21.69677906	-24.39436623	-26.35961382	-28.31117436
+2.45	36.27694149	25.85317434	33.6195638	33.624622	35.33493263	20.84947919	28.103661	31.71427816	34.53047451	37.36803959
-2.5	-32.05988872	-22.91597702	-29.48275438	-29.17808382	-29.72347987	-18.49789419	-24.92854193	-28.09557087	-30.49317582	-32.89950076
+2.5	31.89366236	22.77284676	29.27713713	28.95787199	29.46853095	18.38325865	24.77378234	27.91819793	30.29486121	32.67908098
-2.55	-36.17907874	-25.85329692	-33.61974171	-33.62481317	-35.33508883	-20.84958431	-28.10379312	-31.69887707	-34.52333287	-37.36091911
+2.55	27.81170775	19.92794018	25.21042201	24.61876007	24.53108444	16.10392109	21.696639	24.39420086	26.35944138	28.31097042
-2.6	-40.50671156	-28.8535342	-38.0891357	-38.35708825	-41.73854398	-23.24997541	-31.34525215	-35.46017196	-38.74817259	-42.09617498
+2.6	23.60766869	16.99149247	21.05550925	20.22009306	19.88919123	13.74952722	18.51861565	20.76004302	22.31119839	23.82905039
-2.65	-44.87994635	-31.8147856	-42.45444403	-43.2191314	-48.87121074	-25.61748746	-34.54275963	-39.13797177	-42.88573552	-46.72244645
+2.65	19.53076615	14.13689124	17.06232049	16.03052317	16.00719253	11.45891832	15.42713998	17.23062694	18.3905185	19.50063037
-2.7	-49.06515275	-34.70666862	-46.75254352	-47.93522317	-56.51652378	-27.92780778	-37.66351343	-42.73298451	-46.94065555	-51.26779712
+2.7	15.62482137	11.39452616	13.27535083	12.09868152	12.43960508	9.256404601	12.45505076	13.84361602	14.63964451	15.37280433
-2.75	-52.92703698	-37.36853224	-50.74977707	-52.35165786	-64.14451942	-30.05270715	-40.53425674	-46.04535233	-50.68700411	-55.47838849
+2.75	12.10389356	8.914899588	9.901138606	8.712775353	9.864738862	7.262912337	9.765495009	10.78477165	11.26389917	11.67115178
-2.8	-56.80969747	-40.03737589	-54.80310745	-56.86336268	-72.40229804	-32.18130595	-43.41055212	-49.37012927	-54.45882865	-59.73001632
+2.8	8.657987327	6.479244025	6.645021357	6.707224628	9.469406052	5.302458663	7.121064114	7.784413956	7.966294934	8.070757186
-2.85	-60.47280117	-42.54712456	-58.66538626	-61.19859487	-80.86553169	-34.18094145	-46.11318043	-52.5008654	-58.02329595	-63.76166479
+2.85	6.340194476	4.421682922	6.28938273	6.707224628	9.17841076	3.5457674	4.790346323	5.484024145	6.140929019	6.832850478
-2.9	-63.87257051	-44.86738952	-62.29213024	-65.30872449	-89.26491483	-36.02730263	-48.60933822	-55.3998783	-61.33816401	-67.52623908
+2.9	6.340194476	4.421682922	6.28938273	6.707224628	8.983525502	3.5457674	4.790346323	5.484024145	6.140929019	6.832850478
-2.95	-66.96524058	-46.96778188	-65.63882467	-69.1451209	-97.6320451	-37.6960794	-50.86619123	-58.02948542	-64.36119149	-70.97661255
+2.95	6.340194476	4.421682922	6.28938273	6.707224628	8.875242966	3.5457674	4.790346323	5.484024145	6.140929019	6.832850478
-3	-69.70703915	-48.81791367	-68.66098696	-72.65915505	-105.8831687	-39.16296169	-52.8509329	-60.35199767	-67.05013601	-74.0656914
+3	6.340194476	4.421682922	6.28938273	6.707224628	8.842776009	3.5457674	4.790346323	5.484024145	6.140929019	6.832850478
(Span 3) -4	-1.81E+00	-1.261465423	-1.794302981	-1.913509465	-2.52E+00	-1.011574785	-1.366641705	-1.564541593	-1.751950526	-1.949349343
+4	69.28860881	48.57135149	67.9549359	71.58593213	97.69349876	38.97943511	52.59945199	60.02179203	66.60232934	73.47830682
-3.05	-1.81E+00	-1.261465423	-1.794302981	-1.913509465	-2.54E+00	-1.011574785	-1.366641705	-1.564541593	-1.751950526	-1.949349343
+3.05	67.1257939	47.11127212	65.56284876	68.78981419	90.84925603	37.82193213	51.03356566	58.18965499	64.48237446	71.04295654
-3.1	-2.102131923	-1.800200984	-1.802117381	-1.913509465	-2.617553016	-1.416736677	-1.960748062	-2.067455121	-2.067235292	-2.067033287
+3.1	64.4333844	45.28649497	62.6200022	65.38073427	82.90226123	36.37338899	49.07451599	55.9037332	61.84906934	68.03023385
-3.15	-4.002716481	-3.135817367	-2.930018578	-2.505537977	-2.732603739	-2.614977198	-3.494058963	-3.65617143	-3.653575231	-3.653321183
+3.15	61.85667267	43.53455208	59.83081316	62.1739306	75.89273581	34.98118484	47.19209487	53.71202042	59.33337465	65.16168842
-3.2	-6.478748146	-4.985105898	-4.693830138	-4.104983285	-4.016835189	-4.107186558	-5.505703791	-5.926391464	-5.908481719	-5.908219011
+3.2	58.72244927	41.39791678	56.46561693	58.32969439	68.23820642	33.28177461	44.8947375	51.04204105	56.27785184	61.68733769
-3.25	-8.972113422	-6.75743447	-6.837813613	-5.837800011	-5.547885044	-5.535712773	-7.431879871	-8.105043298	-8.253347029	-8.315536676
+3.25	55.77996548	39.38750565	53.32819438	54.76563099	61.60241126	31.68156587	42.73183876	48.53215291	53.41280504	58.43734764
-3.3	-12.01739191	-8.915766236	-9.66554561	-8.457728498	-7.843729483	-7.273766126	-9.775788499	-10.76112472	-11.16536634	-11.48821205
+3.3	52.25848533	36.97684914	49.5960588	50.54677502	54.87077786	29.76156513	40.13704606	45.52502276	49.98765759	54.56001609
-3.35	-14.88627528	-10.94408707	-12.39402986	-11.00986676	-10.11783455	-8.905864933	-11.97710314	-13.25954447	-13.91199681	-14.48929054
+3.35	48.99837696	34.74133729	46.15929461	46.67887849	48.93897825	27.98006399	37.72971459	42.73835635	46.81967508	50.98033104
-3.4	-18.32990775	-13.37361459	-15.6948678	-14.40306143	-13.14904917	-10.85949887	-14.61242088	-16.2545683	-17.21226347	-18.10409938
+3.4	45.14419313	32.09449514	42.11560768	42.1459337	42.95347307	25.86973405	34.87834145	39.44101389	43.07749823	46.75866957
-3.45	-21.52625192	-15.6245416	-18.779454	-17.59676681	-16.04698373	-12.66846266	-17.05282584	-19.03135618	-20.27827376	-21.4694333
+3.45	41.61458344	29.6672783	38.42838467	38.02762804	37.93900574	23.93364863	32.26265437	36.41896909	39.65300247	42.90104112
-3.5	-25.31374696	-18.28744708	-22.456174	-21.42720308	-19.57635031	-14.80741627	-19.93868182	-22.31841748	-23.91419495	-25.46771173
+3.5	37.48225256	26.82208692	34.12854496	33.24117793	32.79139533	21.66325094	29.19555379	32.87832358	35.6463926	38.39370125
-3.55	-28.78944769	-20.72759576	-25.84798175	-24.97998686	-23.0210175	-16.76653091	-22.58212088	-25.33217697	-27.25316756	-29.14554066
+3.55	33.71440276	24.23656019	30.23974489	28.92588982	28.6256183	19.59929904	26.40755648	29.66229858	32.01176174	34.30987801
-3.6	-32.86631392	-23.58603299	-29.84519767	-29.1870896	-27.6382146	-19.06052868	-25.67763906	-28.86433327	-31.17214633	-33.46865037
+3.6	29.35965938	21.23085808	25.73915043	23.94646632	24.02892908	17.19910853	23.16560198	25.92526797	27.79331333	29.57550928

-3.65	**-36.57331561**	**-26.18200622**	**-33.49532968**	**-33.04552402**	**-31.98968516**	**-21.14309174**	**-28.48806659**	**-32.07366283**	**-34.73765784**	**-37.40722199**
+3.65	**25.43663466**	**18.52038633**	**21.69765481**	**19.48760172**	**20.00826809**	**15.03398811**	**20.24135076**	**22.55666156**	**23.99496985**	**25.31724222**
-3.7	**-40.88506229**	**-29.19813792**	**-37.7576306**	**-37.56875719**	**-37.53469219**	**-23.56186516**	**-31.75239486**	**-35.80400733**	**-38.88709993**	**-41.99653075**
+3.7	**20.91311036**	**15.3920098**	**17.05168966**	**14.98104605**	**15.95895218**	**12.53427483**	**16.86541907**	**18.6701508**	**19.61727846**	**20.41449563**
-3.75	**-44.7752534**	**-31.91657134**	**-41.61721943**	**-41.67943429**	**-42.73390689**	**-25.74117824**	**-34.69373247**	**-39.16751003**	**-42.63277231**	**-46.14407807**
+3.75	**16.86520202**	**12.58998785**	**12.97030289**	**11.12376313**	**14.75608794**	**10.29468541**	**13.8409573**	**15.19036056**	**15.70162894**	**16.03351676**
-3.8	**-49.26738808**	**-35.05256146**	**-46.08920571**	**-46.45824961**	**-49.3297808**	**-28.25444916**	**-38.08601912**	**-43.0491241**	**-46.96008249**	**-50.9409191**
+3.8	**12.22740513**	**9.376785364**	**8.758004602**	**8.849820077**	**14.28830837**	**7.725727019**	**10.37189928**	**11.2013149**	**11.21730464**	**11.21549134**
-3.85	**-53.29272118**	**-37.86005908**	**-50.10936974**	**-50.76771046**	**-55.54454576**	**-30.50379648**	**-41.12222219**	**-46.52540132**	**-50.83949433**	**-55.24570784**
+3.85	**8.351690035**	**6.51659969**	**8.235000861**	**8.849820077**	**13.96607257**	**5.438393683**	**7.283295561**	**7.651754948**	**7.972148056**	**8.876255975**
-3.9	**-57.91075303**	**-41.07807065**	**-54.73564204**	**-55.7415586**	**-63.09364667**	**-33.0813054**	**-44.60159165**	**-50.51138126**	**-55.29207732**	**-60.19143102**
+3.9	**8.239254209**	**5.738718558**	**8.235000861**	**8.849820077**	**13.70450308**	**4.598554866**	**6.211307566**	**7.117070344**	**7.972148056**	**8.876255975**
-3.95	**-62.02311403**	**-43.94123553**	**-58.86749957**	**-60.19641226**	**-70.11834027**	**-35.37398854**	**-47.69660438**	**-54.0590342**	**-59.25880439**	**-64.60169311**
+3.95	**8.239254209**	**5.738718558**	**8.235000861**	**8.849820077**	**13.56577387**	**4.598554866**	**6.211307566**	**7.117070344**	**7.972148056**	**8.876255975**
-5	**-66.71256733**	**-47.20343106**	**-63.59265946**	**-65.30472582**	**-78.39294059**	**-37.98545672**	**-51.22219339**	**-58.10241866**	**-63.78408257**	**-69.63766694**
+5	**8.239254209**	**5.738718558**	**8.235000861**	**8.849820077**	**13.51332287**	**4.598554866**	**6.211307566**	**7.117070344**	**7.972148056**	**8.876255975**

3-Span: Shear (Max and Min) Raw Data Results - 160' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.239252887	-7.487328012	-8.05896666	-7.597037096	-9.201813889	-9.567161233	-10.12749322	-4.005995407
End Shear	66.82930136	62.49525398	66.91747904	62.85627615	75.3775382	73.43746817	77.6644212	33.11889798
-0.05	-8.239252887	-7.487328012	-8.05896666	-7.597037096	-9.201813889	-9.567161233	-10.12749322	-4.005995407
+0.05	62.29033088	58.37898657	62.48624401	58.68056829	70.31978183	68.13692833	72.05306339	30.92357057
-0.1	-8.239252887	-7.487328012	-8.05896666	-7.597037096	-9.201813889	-9.567161233	-10.12749322	-4.005995407
+0.1	57.6816301	54.15095763	57.93594138	54.3920323	65.12799388	62.70482316	66.3027376	28.64949544
-0.15	-8.239252887	-9.239394923	-9.566305514	-8.783285985	-9.836734708	-9.567161233	-10.12749322	-4.400201163
+0.15	53.60490847	50.44824433	53.95205928	50.6379858	60.58551709	57.97087773	61.29174062	26.6595579
-0.2	-12.50932264	-13.44795845	-14.10135055	-13.06094641	-15.02737172	-9.899165144	-10.48886529	-6.672257264
+0.2	49.04080325	46.29600854	49.48574678	46.43009444	55.49647211	52.68913024	55.70119634	24.42989045
-0.25	-16.60156674	-17.12637251	-18.06618644	-16.80141852	-19.56841556	-14.23195818	-14.98100862	-8.659673208
+0.25	45.07500345	42.68186866	45.59933999	42.76923568	51.07135512	48.1162292	50.86122806	22.49085827
-0.3	-21.18894714	-21.24299142	-22.50458075	-20.98941094	-24.65535581	-19.58665142	-20.6457723	-10.88564534
+0.3	40.66388938	38.65461165	41.26998699	38.69193032	46.14558846	43.04916163	45.49857118	20.33217032
-0.35	-25.18030282	-24.81857435	-26.36076393	-24.62872572	-29.07818941	-24.35384434	-25.69422588	-12.82067532
+0.35	36.85715207	35.1724461	37.52779488	35.16833238	41.89125289	38.69406827	40.8897339	18.46748967
-0.4	-29.62609488	-28.79405912	-30.64953461	-28.67710357	-34.00089222	-29.68181934	-31.33685	-14.97398866
+0.4	32.65358546	31.3193545	33.38837154	31.27155879	37.18930479	33.90601763	35.82308595	16.4063538
-0.45	-33.46848485	-32.22341164	-34.35032745	-32.17119376	-38.25210091	-34.30304325	-36.23125926	-16.83318486
+0.45	29.05404779	28.01256926	29.83713885	27.92928908	33.15916566	29.82549438	31.50548107	14.63947248
-0.5	-37.71820194	-36.0085749	-38.43650348	-36.03001277	-42.95002752	-39.43342668	-41.66524804	-18.88726862
+0.5	25.11258271	24.38282961	25.94061544	24.26299071	28.7415736	25.38078146	26.80294645	12.70245926
-0.55	-41.36354159	-39.24830021	-41.93517069	-39.334811	-46.97619615	-43.85192586	-46.34551868	-20.64718643
+0.55	21.76837994	21.29481678	22.62707237	21.14611624	24.98904575	21.63158837	22.83667284	11.05682351
-0.6	-45.36269183	-42.7939572	-45.7657839	-42.95412723	-51.38880851	-48.72038266	-51.50275263	-22.57546833
+0.6	18.14357257	17.93761727	19.02642056	17.76023957	20.91635086	17.59455165	18.5663746	9.270506678
-0.65	-48.76290235	-45.80064866	-49.01558002	-46.02556429	-55.13651999	-52.87939081	-55.90877919	-24.21266155
+0.65	15.10284105	15.11178314	15.99731226	14.91282875	17.49485046	14.2334497	15.01153213	7.769559169
-0.7	-52.45699311	-49.05761341	-52.53766085	-49.35543174	-59.2032774	-57.42159906	-60.72115274	-25.98856872
+0.7	11.84924583	12.07630964	12.74550156	11.85731957	13.82759314	10.66841399	11.24157893	6.160510326
-0.75	-55.56399323	-51.78787445	-55.49185113	-52.14943949	-62.61911577	-61.2643531	-64.79283309	-27.47959104
+0.75	9.160123659	9.556052028	10.04756411	9.323439074	10.79053428	7.784746289	8.194469778	4.827699076
-0.8	-58.89853293	-54.70695496	-58.6524236	-55.13991437	-66.27948041	-65.4159793	-69.19222845	-29.07655171
+0.8	6.332296353	6.89149165	7.197565294	6.648236621	7.589247033	5.089300234	5.389363243	3.422490025
-0.85	-61.66424208	-57.11738544	-61.26426946	-57.61242649	-69.31003196	-68.88572179	-72.8694665	-30.39795574
+0.85	4.14746998	4.720206015	4.877532309	4.471962219	4.990054867	3.510561126	3.7118756	2.281260979
-0.9	-64.5847393	-59.64939752	-64.01036589	-60.21356433	-72.5034651	-72.58243899	-76.78777274	-31.78939776
+0.9	1.991608474	2.475746163	2.482316381	2.327666977	2.483035236	2.085076536	2.206961729	1.31629952
-0.95	-66.96107679	-61.69659748	-66.23312891	-62.32050503	-75.09530443	-75.62241178	-80.01047164	-32.91773943
+0.95	1.80879822	1.648427605	1.773865086	1.672050523	2.024630912	2.085076536	2.206961729	0.878972594
-1	-69.41303984	-63.7923543	-68.511779	-64.48236147	-77.76126747	-78.79988209	-83.37956632	-34.07709017
+1	1.81E+00	1.648427605	1.773865086	1.672050523	2.024630912	2.085076536	2.206961729	0.878972594
(Span 2) -2	-6.340191368	-5.778061016	-6.217744065	-5.86086391	-7.096727209	-7.308600934	-7.735832329	-3.08097072
+2	69.58959887	63.83378095	68.57539338	64.55441761	77.88893299	79.31306792	83.92850709	34.11564003
-2.05	-6.340191368	-5.778061016	-6.217744065	-5.86086391	-7.096727209	-7.308600934	-7.735832329	-3.08097072
+2.05	66.96971363	61.59417774	66.13982572	62.24336946	75.03805244	75.92998565	80.34167309	32.87593822
-2.1	-6.340191368	-5.778061016	-6.217744065	-5.86086391	-7.096727209	-7.308600934	-7.735832329	-3.08097072
+2.1	63.87662445	58.91815388	63.23591009	59.49174269	71.65662097	72.01469222	76.19177609	31.40343967
-2.15	-6.340191368	-6.017914711	-6.280675752	-5.86086391	-7.096727209	-7.308600934	-7.735832329	-3.08097072
+2.15	60.47610879	55.94865941	60.01884572	56.44663995	67.92557032	67.77832644	71.702629	29.77696547
-2.2	-8.633778897	-8.981002712	-9.450630807	-8.774326503	-10.17169331	-7.418355964	-7.809293077	-4.564047747
+2.2	56.81197233	52.72520014	56.53117765	53.14817031	63.89351793	63.2725636	66.92894692	28.01786004
-2.25	-11.90654116	-12.04054155	-12.72815211	-11.85396681	-13.86761328	-10.98446102	-11.57986892	-6.184968151

+2.25	53.11732467	49.45526454	52.9969252	49.80791759	59.81811434	58.77816737	62.16809602	26.23873763
-2.3	-15.59482318	-15.4645424	-16.40013048	-15.30673175	-18.01992087	-15.06671731	-15.89738487	-8.005142368
+2.3	49.06479642	45.84982206	49.10354617	46.13039486	55.33853205	53.89533235	56.99654512	24.28219099
-2.35	-19.49807	-19.06630687	-20.26644325	-18.9445109	-22.40259746	-19.44420779	-20.52821063	-9.92540865
+2.35	44.87800777	42.10703761	45.06515713	42.31793434	50.70149829	48.8956394	51.7019712	22.25601552
-2.4	-23.57250217	-22.80631915	-24.28453531	-22.72718662	-26.96701632	-24.06526704	-25.41764167	-11.92442268
+2.4	40.60078181	38.26642818	40.92431506	38.41065031	45.95563689	43.83075069	46.3390754	20.18156034
-2.45	-27.774368	-26.64509143	-28.4118808	-26.6146512	-31.66456109	-28.8782406	-30.51098501	-13.98084926
+2.45	36.27694149	34.36748737	36.72355129	34.44866236	41.14957723	38.63168561	40.83484342	18.08016001
-2.5	-32.05988872	-30.54310388	-32.60592029	-30.56678281	-36.44660026	-33.83145121	-35.75352354	-16.07333844
+2.5	31.89366236	30.35655258	32.40513524	30.37755012	36.21749014	33.59295804	35.50108238	15.97316829
-2.55	-36.17907874	-34.36765822	-36.72373531	-34.44882395	-41.14977295	-38.63189212	-40.83506204	-18.08019402
+2.55	27.81170775	26.64491634	28.41169251	26.61447994	31.66435419	28.8780336	30.51076593	13.98082066
-2.6	-40.50671156	-38.26659668	-40.92449672	-38.41082184	-45.95584514	-43.82283908	-46.33074865	-20.1815859
+2.6	23.60766869	22.80614887	24.28435217	22.72702563	26.96682177	24.06507549	25.41743898	11.92439559
-2.65	-44.87994635	-42.10720823	-45.06534121	-42.31809687	-50.70169603	-48.89584473	-51.70218863	-22.25604433
+2.65	19.53076615	19.06613442	20.26625811	18.94434765	22.40240073	19.44402357	20.52801574	9.92538432
-2.7	-49.06515275	-45.84998706	-49.10372424	-46.13055772	-55.3387303	-53.89553324	-56.99675786	-24.28221229
+2.7	15.62482137	15.46438933	16.39996619	15.30658221	18.01974073	15.06654554	15.89720317	8.005117439
-2.75	-52.92703698	-49.28742825	-52.81560873	-49.63660207	-59.60927493	-58.54926283	-61.92563955	-26.14748706
+2.75	12.10389356	12.19883027	12.89781821	12.01344998	14.05922427	11.17123476	11.77738144	6.269037214
-2.8	-56.80969747	-52.72534623	-56.53133561	-53.14831973	-63.89370037	-63.27275287	-66.92914743	-28.01788512
+2.8	8.657987327	8.98086318	9.450481329	8.774195207	10.17153581	7.418211634	7.8091405	4.564028011
-2.85	-60.47280117	-55.94879909	-60.01899692	-56.44677354	-67.92573369	-67.77850525	-71.70281847	-29.77698652
+2.85	6.340194476	6.017786998	6.280539162	5.860864099	7.096727203	7.308601262	7.735832224	3.080970832
-2.9	-63.87257051	-58.91828259	-63.23604952	-59.49187015	-71.65677705	-72.01486599	-76.19196021	-31.40345951
+2.9	6.340194476	5.778061072	6.217744324	5.860864099	7.096727203	7.308601262	7.735832224	3.080970832
-2.95	-66.96524058	-61.59429183	-66.13994971	-62.24347896	-75.03818718	-75.93014437	-80.34184133	-32.87595724
+2.95	6.340194476	5.778061072	6.217744324	5.860864099	7.096727203	7.308601262	7.735832224	3.080970832
-3	-69.70703915	-63.93731652	-68.68814786	-64.66150298	-78.02136168	-79.47268718	-84.09777016	-34.17313451
+3	6.340194476	5.778061072	6.217744324	5.860864099	7.096727203	7.308601262	7.735832224	3.080970832
(Span 3) -4	-1.81E+00	-1.648427621	-1.77386516	-1.672050577	-2.02463091	-2.085076629	-2.206961699	-0.878972626
+4	69.28860881	63.67580079	68.38494844	64.36197182	77.6125865	78.62099711	83.18987259	34.01251408
-3.05	-1.81E+00	-1.648427621	-1.77386516	-1.672050577	-2.02463091	-2.085076629	-2.206961699	-0.878972626
+3.05	67.1257939	61.82647966	66.3742414	62.45432842	75.26011721	75.81718897	80.21697488	32.98949578
-3.1	-2.102131923	-2.601292582	-2.616196322	-2.434089004	-2.600592989	-2.085076629	-2.206961699	-1.360373479
+3.1	64.4333844	59.50643396	63.85523312	60.06657126	72.3228313	72.37203612	76.56474127	31.71077357
-3.15	-4.002716481	-4.581830816	-4.729764605	-4.333392548	-4.824743654	-3.409896325	-3.604923904	-2.208624149
+3.15	61.85667267	57.27218305	61.43207495	57.77132807	69.50494902	69.11007702	73.10725363	30.48297013
-3.2	-6.478748146	-7.04250184	-7.359007001	-6.799718835	-7.770351964	-5.199050966	-5.505988272	-3.501947431
+3.2	58.72244927	54.54047738	58.47210737	54.96926312	66.07046407	65.17785068	68.93987438	28.98544302
-3.25	-8.972113422	-9.393706431	-9.873843183	-9.160321116	-10.59517412	-7.612939747	-8.013620786	-4.741901998
+3.25	55.77996548	51.96469763	55.68323739	52.33049004	62.84058687	61.51448646	65.05788065	27.57630094
-3.3	-12.01739191	-12.24988246	-12.9313808	-12.0319268	-14.03702211	-10.87080562	-11.45558539	-6.252350355
+3.3	52.25848533	48.87051955	52.33528188	49.16407234	58.96945414	57.15952906	60.44348308	25.88654672
-3.35	-14.88627528	-14.92836221	-15.80075571	-14.72808565	-17.27298476	-14.0165948	-14.78219409	-7.672165703
+3.35	48.99837696	45.99660972	49.22743715	46.22582423	55.38098146	53.15153315	56.19709632	24.31950402
-3.4	-18.32990775	-18.13085601	-19.23361795	-17.95503747	-21.15054746	-17.82567799	-18.81084016	-9.373167916
+3.4	45.14419313	42.58913169	45.54444862	42.74498748	51.13372711	48.43816151	51.20378059	22.46409006
-3.45	-21.52625192	-21.09321095	-22.41079302	-20.94269358	-24.74424491	-21.38793798	-22.57892905	-10.949396
+3.45	41.61458344	39.46049274	42.16436871	39.55135866	47.24010713	44.14229681	46.65310266	20.76259902
-3.5	-25.31374696	-24.59283676	-26.16601045	-24.47503835	-28.99697295	-25.636856	-27.07386183	-12.81437979
+3.5	37.48225256	35.78892635	38.19934427	35.80603468	42.67725445	39.13483984	41.34898171	18.76809753
-3.55	-28.78944769	-27.79566734	-29.60424779	-27.71012333	-32.89498874	-29.55882675	-31.22333206	-14.52357588
+3.55	33.71440276	32.44895915	34.59376851	32.40108015	38.53188662	34.60786789	36.5541131	16.95560512
-3.6	-32.86631392	-31.54323717	-33.62884875	-31.49790133	-37.46232495	-34.183265	-36.11645374	-16.52596953
+3.6	29.35965938	28.56248055	30.3996672	28.44122531	33.71398863	29.37065377	31.00729912	14.84858721

-3.65	**-36.57331561**	**-34.94314044**	**-37.28140655**	**-34.93635943**	**-41.61125853**	**-38.40816716**	**-40.58718597**	**-18.34468557**
+3.65	**25.43663466**	**25.05458468**	**26.6153336**	**24.86901425**	**29.37029043**	**24.66933594**	**26.02834009**	**12.94853846**
-3.7	**-40.88506229**	**-38.88946853**	**-41.52242201**	**-38.92964025**	**-46.43268144**	**-43.34378252**	**-45.81036855**	**-20.45791633**
+3.7	**20.91311036**	**21.00238102**	**22.24512604**	**20.744589**	**24.35790525**	**19.26667682**	**20.3069283**	**10.75557777**
-3.75	**-44.7752534**	**-42.44304651**	**-45.34256418**	**-42.52737544**	**-50.77908291**	**-47.81487088**	**-50.54227963**	**-22.36270749**
+3.75	**16.86520202**	**17.36995628**	**18.32877296**	**17.04917441**	**19.86927434**	**14.51968828**	**15.2838824**	**8.79141966**
-3.8	**-49.26738808**	**-46.53894525**	**-49.74702255**	**-46.67622931**	**-55.79407124**	**-52.99733309**	**-56.02740872**	**-24.56020372**
+3.8	**12.22740513**	**13.20121326**	**13.83542843**	**12.81010746**	**14.72292169**	**9.72084318**	**10.29913935**	**6.539087425**
-3.85	**-53.29272118**	**-50.20279701**	**-53.68800954**	**-50.3891873**	**-60.2845415**	**-57.65784621**	**-60.96039831**	**-26.52761524**
+3.85	**8.351690035**	**9.487660542**	**9.833795209**	**9.035573152**	**10.1427929**	**9.567161404**	**10.12749353**	**4.534265535**
-3.9	**-57.91075303**	**-54.39907975**	**-58.20294072**	**-54.64365514**	**-65.43253885**	**-63.02282543**	**-66.63935994**	**-28.78281224**
+3.9	**8.239254209**	**7.487328045**	**8.058966872**	**7.597037247**	**9.201813855**	**9.567161404**	**10.12749353**	**4.005995371**
-3.95	**-62.02311403**	**-58.12980532**	**-62.21803418**	**-58.42776753**	**-70.01366182**	**-67.8160018**	**-71.7133276**	**-30.78940662**
+3.95	**8.239254209**	**7.487328045**	**8.058966872**	**7.597037247**	**9.201813855**	**9.567161404**	**10.12749353**	**4.005995371**
-5	**-66.71256733**	**-62.37728488**	**-66.7904673**	**-62.7379055**	**-75.23413042**	**-73.29916934**	**-77.51800906**	**-33.07572447**
+5	**8.239254209**	**7.487328045**	**8.058966872**	**7.597037247**	**9.201813855**	**9.567161404**	**10.12749353**	**4.005995371**

3-Span: Shear (Max and Min) Raw Data Results - 160' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.239252887	-17.8017373	-19.69503027	-11.18229668	-13.45729187	-14.52514276
End Shear	66.82930136	130.3674326	140.6720022	84.92900729	102.3674197	108.8998348
-0.05	-8.239252887	-17.8017373	-19.69503027	-11.18229668	-13.45729187	-14.52514276
+0.05	62.29033088	120.4941031	129.9238934	78.71472772	94.90256953	100.838896
-0.1	-8.239252887	-17.8017373	-19.69503027	-11.18229668	-13.45729187	-14.52514276
+0.1	57.6816301	110.3915192	118.7620332	72.34931408	87.25460508	92.58373709
-0.15	-8.239252887	-17.8017373	-19.69503027	-11.18229668	-13.45729187	-14.52514276
+0.15	53.60490847	101.61046	109.0722704	66.80635098	80.59344317	85.39958313
-0.2	-12.50932264	-17.8017373	-19.69503027	-11.71215159	-13.45729187	-14.52514276
+0.2	49.04080325	91.84021619	98.30505964	60.62703274	73.16595229	77.39575622
-0.25	-16.60156674	-20.90242253	-22.0709795	-15.46762025	-19.03109946	-18.79685893
+0.25	45.07500345	83.40582057	89.02296962	55.28166176	66.73939373	70.47676753
-0.3	-21.18894714	-29.55505062	-29.92556372	-21.54898132	-26.32851773	-26.55238748
+0.3	40.66388938	74.08900516	78.78518143	49.3641223	59.6231973	62.82266757
-0.35	-25.18030282	-37.96717739	-38.18074925	-27.16688985	-33.06856453	-33.82974854
+0.35	36.85715207	66.10812759	70.0296921	44.28312265	53.51137829	56.25566331
-0.4	-29.62609488	-48.0912601	-49.36860223	-33.4504161	-40.60574128	-42.01993777
+0.4	32.65358546	57.36585634	60.45610074	38.70304406	46.79729459	49.04966502
-0.45	-33.46848485	-56.89559368	-59.20469271	-38.90472906	-47.14696705	-49.13376355
+0.45	29.05404779	49.94534625	52.34614025	33.95319553	41.08035	42.92145909
-0.5	-37.71820194	-66.69708653	-70.16844197	-44.96500384	-54.41340095	-57.04314449
+0.5	25.11258271	41.89870244	43.57153987	28.7862604	34.85919771	36.2619639
-0.55	-41.36354159	-75.16336082	-79.65104537	-50.18894569	-60.67567553	-63.86579285
+0.55	21.76837994	35.14540998	36.22603399	24.43433945	29.61725999	30.65936833
-0.6	-45.36269183	-84.521181	-90.14678519	-55.9502902	-67.58055198	-71.39597131
+0.6	18.14357257	27.91548709	28.3852211	19.756232	23.97986042	24.64475087
-0.65	-48.76290235	-92.54254025	-99.15697554	-60.87707716	-73.48373435	-77.84063201
+0.65	15.10284105	21.9362587	22.01736314	15.86901811	19.29306473	19.65458084
-0.7	-52.45699311	-101.3355707	-109.0499354	-66.26380796	-79.93623401	-84.89322331
+0.7	11.84924583	15.93616603	16.21583039	11.75542028	14.33023606	14.40327311
-0.75	-55.56399323	-108.8051682	-117.4687882	-70.82666432	-85.40019317	-90.87307083
+0.75	9.160123659	11.38613769	11.92744569	8.530380963	10.43554339	10.34101378
-0.8	-58.89853293	-116.9123209	-126.6241678	-75.76309705	-91.30949459	-97.34969147
+0.8	6.332296353	7.37277369	7.60614553	6.060061037	6.726727951	7.097327409
-0.85	-61.66424208	-123.7233068	-134.3327614	-79.89524277	-96.25409471	-102.777918
+0.85	4.14746998	4.613500899	4.663977628	4.174215281	4.586711142	4.784101935
-0.9	-64.5847393	-131.0234915	-142.6157723	-84.30569558	-101.5293796	-108.5801675
+0.9	1.991608474	3.859462878	4.262393381	2.429914331	2.92803265	3.155185885
-0.95	-66.96107679	-137.0690171	-149.4951689	-87.94035231	-105.8744864	-113.3699585
+0.95	1.80879822	3.859462878	4.262393381	2.429914331	2.92803265	3.155185885
-1	-69.41303984	-143.4411167	-156.7710531	-91.74914183	-110.4249349	-118.3994627
+1	1.81E+00	3.859462878	4.262393381	2.429914331	2.92803265	3.155185885
(Span 2) -2	-6.340191368	-13.5281717	-14.94052188	-8.517324748	-10.26332671	-11.05954324
+2	69.58959887	144.9134603	158.5970728	92.44880841	111.2345527	119.4011764
-2.05	-6.340191368	-13.5281717	-14.94052188	-8.517324748	-10.26332671	-11.05954324
+2.05	66.96971363	138.1601328	150.896976	88.40107816	106.3951922	114.0594951
-2.1	-6.340191368	-13.5281717	-14.94052188	-8.517324748	-10.26332671	-11.05954324
+2.1	63.87662445	130.4446439	142.1482625	83.73483046	100.8111128	107.9209929
-2.15	-6.340191368	-13.5281717	-14.94052188	-8.517324748	-10.26332671	-11.05954324
+2.15	60.47610879	122.1851473	132.8262824	78.70213312	94.78381692	101.3176049
-2.2	-8.633778897	-13.5281717	-14.94052188	-8.517324748	-10.26332671	-11.05954324
+2.2	56.81197233	113.4789004	123.039285	73.36375225	88.38622407	94.32834878
-2.25	-11.90654116	-16.57233623	-16.68373504	-12.17357568	-14.82392039	-14.9923185

+2.25	53.11732467	104.8608951	113.3850623	68.05101438	82.01576882	87.38549079
-2.3	-15.59482318	-23.78206083	-24.187306	-16.89048484	-20.51373948	-21.04778722
+2.3	49.06479642	95.56273097	103.0021721	62.29103087	75.10546587	79.87062788
-2.35	-19.49807	-31.64732604	-32.73409311	-21.96602044	-26.63043296	-27.58098571
+2.35	44.87800777	86.10496783	92.47386596	56.40485035	68.04025019	72.20320167
-2.4	-23.57250217	-40.03149533	-41.88806689	-27.33937751	-33.10103677	-34.51287901
+2.4	40.60078181	76.4041929	81.90839443	50.40378479	60.84907593	64.34992725
-2.45	-27.774368	-48.83729905	-51.54098231	-32.94979297	-39.85263367	-41.76446931
+2.45	36.27694149	66.8750726	71.41401379	44.35559461	53.56686378	56.5433064
-2.5	-32.05988872	-57.96746457	-61.58458326	-38.7364616	-46.81225835	-49.25672211
+2.5	31.89366236	57.52639551	61.09896901	38.45756264	46.47691383	48.8953216
-2.55	-36.17907874	-66.87545575	-71.41412263	-44.3558369	-53.56715463	-56.54364274
+2.55	27.81170775	48.83692198	51.54087755	32.94955185	39.85234405	41.76414696
-2.6	-40.50671156	-76.38749315	-81.90850563	-50.3848016	-60.83227855	-64.33195524
+2.6	23.60766869	40.03113395	41.88796723	27.33916214	33.10077759	34.51259045
-2.65	-44.87994635	-86.10535643	-92.4739757	-56.40509149	-68.04053932	-72.203537
+2.65	19.53076615	31.6469838	32.7339973	21.96580582	26.63017492	27.58070049
-2.7	-49.06515275	-95.56311575	-103.0022819	-62.29126825	-75.10575027	-79.87093739
+2.7	15.62482137	23.78173166	24.18722019	16.89028565	20.51349905	21.04752181
-2.75	-52.92703698	-104.4235524	-112.8956358	-67.78073237	-81.69158858	-87.03256426
+2.75	12.10389356	16.87301881	17.14675609	12.38897435	15.08388234	15.26843338
-2.8	-56.80969747	-113.4792771	-123.0393926	-73.36397615	-88.38649259	-94.32865197
+2.8	8.657987327	13.5281656	14.94044914	8.517324809	10.26332682	11.05954314
-2.85	-60.47280117	-122.185507	-132.8263842	-78.70234528	-94.78407086	-101.3178928
+2.85	6.340194476	13.5281656	14.94044914	8.517324809	10.26332682	11.05954314
-2.9	-63.87257051	-130.4449831	-142.1483594	-83.73503702	-100.8113595	-107.9212634
+2.9	6.340194476	13.5281656	14.94044914	8.517324809	10.26332682	11.05954314
-2.95	-66.96524058	-138.1604459	-150.8970665	-88.40126775	-106.3954187	-114.0597437
+2.95	6.340194476	13.5281656	14.94044914	8.517324809	10.26332682	11.05954314
-3	-69.70703915	-145.234637	-158.9642522	-92.64024197	-111.4632931	-119.6543124
+3	6.340194476	13.5281656	14.94044914	8.517324809	10.26332682	11.05954314
(Span 3) -4	-1.81E+00	-3.859461183	-4.262372605	-2.429914349	-2.928032682	-3.155185856
+4	69.28860881	143.0806552	156.3589313	91.53439909	110.1684692	118.1155643
-3.05	-1.81E+00	-3.859461183	-4.262372605	-2.429914349	-2.928032682	-3.155185856
+3.05	67.1257939	137.4578927	149.9387215	88.17352145	106.1531494	113.6775078
-3.1	-2.102131923	-3.859461183	-4.262372605	-2.429914349	-2.928032682	-3.155185856
+3.1	64.4333844	130.6065939	142.1424262	84.05442248	101.22891	108.249324
-3.15	-4.002716481	-4.451060083	-4.432167714	-4.055987504	-4.45735047	-4.636791983
+3.15	61.85667267	124.1649749	134.8335617	80.16265338	96.57401443	103.1294462
-3.2	-6.478748146	-7.585905898	-7.83296067	-6.189060346	-6.908301344	-7.258316971
+3.2	58.72244927	116.4461295	126.0974883	75.47973603	90.97035226	96.97768681
-3.25	-8.972113422	-11.11977604	-11.65292559	-8.331600238	-10.19532302	-10.08177938
+3.25	55.77996548	109.2924781	118.0188981	71.12388457	85.7560522	91.26278271
-3.3	-12.01739191	-16.26125281	-16.51285171	-11.98865571	-14.61172099	-14.68546482
+3.3	52.25848533	100.8272079	108.4778899	65.95283202	79.56378625	84.48585273
-3.35	-14.88627528	-21.55194385	-21.55713961	-15.61848039	-18.99090327	-19.3332514
+3.35	48.99837696	93.06837242	99.7484978	61.199642	73.87017361	78.26273526
-3.4	-18.32990775	-28.3281036	-28.83164853	-20.02380771	-24.30238685	-24.98852883
+3.4	45.14419313	83.97780768	89.53730788	55.61613499	67.18012137	70.95905217
-3.45	-21.52625192	-34.70773002	-35.75033604	-24.15174296	-29.27679468	-30.2958019
+3.45	41.61458344	75.72060699	80.27604428	50.53242599	61.08738024	64.31453962
-3.5	-25.31374696	-42.36118842	-44.07491868	-29.08373782	-35.21743902	-36.64515809
+3.5	37.48225256	66.12581176	69.52941818	44.61214744	53.99036253	56.58244031
-3.55	-28.78944769	-49.46145221	-51.81752447	-33.64297286	-40.7069	-42.52142589
+3.55	33.71440276	57.47712798	59.8552458	39.26465609	47.57857477	49.60334295
-3.6	-32.86631392	-57.87108916	-61.00845782	-39.02594995	-47.18588228	-49.46649429
+3.6	29.35965938	47.49916538	48.70796741	33.0832885	40.16540971	41.54124254

-3.65	**-36.57331561**	**-65.58513915**	**-69.45605139**	**-43.94974081**	**-53.11030446**	**-55.8249645**
+3.65	**25.43663466**	**38.56588843**	**38.78991492**	**27.53881471**	**33.51473671**	**34.3144057**
-3.7	**-40.88506229**	**-74.62982237**	**-79.37858176**	**-49.70801866**	**-60.03680721**	**-63.26733511**
+3.7	**20.91311036**	**29.02644524**	**29.46581195**	**21.17206584**	**25.8762735**	**26.10012531**
-3.75	**-44.7752534**	**-82.8508429**	**-88.41223834**	**-54.9295475**	**-66.31600799**	**-70.02119205**
+3.75	**16.86520202**	**21.35750557**	**22.53511806**	**15.80863411**	**19.44034486**	**19.25235005**
-3.8	**-49.26738808**	**-92.40951089**	**-98.93161842**	**-60.98744428**	**-73.59921271**	**-77.8624472**
+3.8	**12.22740513**	**17.80173711**	**19.69503008**	**11.50352718**	**13.45729253**	**14.52514324**
-3.85	**-53.29272118**	**-101.0306216**	**-108.4324141**	**-66.43997279**	**-80.15310723**	**-84.92487732**
+3.85	**8.351690035**	**17.80173711**	**19.69503008**	**11.18229715**	**13.45729253**	**14.52514324**
-3.9	**-57.91075303**	**-110.9821718**	**-119.4137845**	**-72.72180539**	**-87.70219419**	**-93.06668229**
+3.9	**8.239254209**	**17.80173711**	**19.69503008**	**11.18229715**	**13.45729253**	**14.52514324**
-3.95	**-62.02311403**	**-119.8965156**	**-129.2627935**	**-78.33851154**	**-94.4505955**	**-100.3508716**
+3.95	**8.239254209**	**17.80173711**	**19.69503008**	**11.18229715**	**13.45729253**	**14.52514324**
-5	**-66.71256733**	**-130.1198543**	**-140.5714058**	**-84.76861909**	**-102.1747725**	**-108.6947801**
+5	**8.239254209**	**17.80173711**	**19.69503008**	**11.18229715**	**13.45729253**	**14.52514324**

3-Span: Moment (Max and Min) Raw Data Results - 160' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-65.914023	-45.909746	-65.880005	-70.798557	-108.106581	-36.788438	-49.690458	-56.936561	-63.777182	-71.010046
+0.05	498.418171	353.392856	473.504041	484.411946	570.784999	284.384831	383.651006	434.855400	477.009190	520.083127
-0.1	-131.828046	-91.819493	-131.760010	-141.597114	-216.213162	-73.576876	-99.380917	-113.873122	-127.554365	-142.020092
+0.1	928.295105	658.206130	877.078862	893.381301	1038.643382	529.909825	714.739369	809.477731	888.183624	970.370915
-0.15	-197.742069	-137.729239	-197.640014	-212.395672	-324.319743	-110.365314	-149.071375	-170.809682	-191.331547	-213.030138
+0.15	1287.112717	914.727337	1211.345187	1227.963549	1416.895229	736.749768	993.608404	1124.292249	1246.668085	1359.318399
-0.2	-263.656092	-183.638986	-263.520019	-283.194229	-432.426323	-147.153752	-198.761833	-227.746243	-255.108730	-284.040184
+0.2	1578.900836	1123.833806	1477.973887	1506.515361	1732.086762	905.591106	1221.188795	1380.416819	1539.642473	1684.328822
-0.25	-329.570115	-229.548732	-329.400024	-353.992786	-540.532904	-183.942190	-248.452292	-284.682804	-318.885912	-355.050230
+0.25	1804.528903	1286.687832	1691.706842	1715.237641	1989.728935	1037.347975	1398.718773	1583.904656	1768.237233	1945.494034
-0.3	-395.484139	-275.458479	-395.280029	-424.791343	-648.639485	-220.730628	-298.142750	-341.619365	-382.663095	-426.060276
+0.3	1969.601529	1404.736724	1843.801052	1870.639597	2183.264787	1133.162696	1534.371990	1739.665001	1934.442848	2136.964795
-0.35	-461.398162	-321.368225	-461.160034	-495.589901	-756.746066	-257.519066	-347.833208	-398.555926	-446.440277	-497.070322
+0.35	2085.988174	1487.945342	1934.969863	1978.677909	2313.269381	1194.405138	1626.757170	1841.928382	2050.243363	2261.150638
-0.4	-527.312185	-367.277972	-527.040038	-566.388458	-864.852647	-294.307504	-397.523666	-455.492487	-510.217460	-568.080368
+0.4	2142.617386	1530.314016	1978.783099	2044.938142	2388.904596	1222.673558	1674.310458	1892.522503	2111.240389	2326.362807
-0.45	-593.226208	-413.187718	-592.920043	-637.187015	-972.959228	-331.095942	-447.214125	-512.429047	-573.994642	-639.090414
+0.45	2142.713052	1533.359734	1968.044578	2051.909299	2378.603706	1219.793599	1678.885871	1894.199157	2117.417350	2337.567409
-0.5	-659.140231	-459.097464	-658.800048	-707.985572	-1081.065808	-367.884379	-496.904583	-569.365608	-637.771824	-710.100460
+0.5	2108.382782	1508.284319	1939.901126	2014.360089	2310.600862	1201.830480	1650.566250	1863.166568	2081.215774	2295.466378
-0.55	-725.054254	-505.007211	-724.680053	-778.784130	-1189.172389	-404.672817	-546.595041	-626.302169	-701.549007	-781.110506
+0.55	2028.015911	1449.730229	1872.365049	1928.466413	2246.693891	1159.095102	1586.020431	1792.419568	1998.571446	2199.720875
-0.6	-790.968277	-550.916957	-790.560058	-849.582687	-1297.278970	-441.461255	-596.285500	-683.238730	-765.326189	-852.120552
+0.6	1899.424228	1358.055539	1755.884918	1791.381993	2121.851927	1089.170015	1485.864174	1680.282827	1870.123107	2060.171959
-0.65	-856.882300	-596.826704	-856.440062	-920.381244	-1405.385551	-478.249693	-645.975958	-740.175291	-829.103372	-923.130598
+0.65	1727.123357	1236.432754	1598.650029	1618.656381	1909.800020	994.528741	1353.540899	1530.660623	1700.302015	1874.993870
-0.7	-922.796323	-642.736450	-922.320067	-991.179801	-1513.492132	-515.038131	-695.666416	-797.111852	-892.880554	-994.140644
+0.7	1516.050830	1088.319796	1398.152034	1399.813875	1648.118427	877.872919	1192.801809	1347.810365	1493.935492	1647.903721
-0.75	-988.710346	-688.646197	-988.200072	-1061.978359	-1621.598713	-551.826569	-745.356875	-854.048412	-956.657737	-1065.150690
+0.75	1271.507963	918.172507	1159.483559	1142.917602	1318.008763	742.132094	1007.705900	1136.343309	1258.509483	1384.632810
-0.8	-1054.624370	-734.555943	-1054.080077	-1132.776916	-1729.705293	-588.615007	-795.047333	-910.984973	-1020.434919	-1136.160737
+0.8	999.276272	728.835402	888.154660	854.502457	926.424957	590.463435	802.619431	901.223284	995.355651	1091.353718
-0.85	-1120.538393	-780.465690	-1119.960081	-1203.575473	-1853.775338	-625.403445	-844.737791	-967.921534	-1084.212102	-1207.170783
+0.85	705.500786	523.889277	590.091903	532.918842	558.025428	426.252262	582.216894	647.767743	710.347082	774.680916
-0.9	-1186.452416	-826.375436	-1185.840086	-1274.374030	-2021.557816	-662.191883	-894.428250	-1024.858095	-1147.989284	-1278.180829
+0.9	396.748860	310.089312	286.644217	275.545356	397.940357	253.111922	351.480128	381.647415	413.424969	441.670505
-0.95	-1252.366439	-872.285182	-1251.720091	-1345.172588	-2226.745441	-698.980321	-944.118708	-1081.794656	-1211.766466	-1349.190875
+0.95	274.937329	191.742747	272.734056	290.853432	391.327010	153.759361	207.729541	237.810329	266.296487	296.301087
-1	-1318.280468	-918.194926	-1317.600093	-1415.971143	-2463.661417	-735.768771	-993.809173	-1138.731181	-1275.543664	-1420.200914
+1	289.407726	201.834467	287.088479	306.161500	403.642004	161.851954	218.662669	250.326659	280.312086	311.895887
(Span 2) -2	-1318.280468	-918.194926	-1317.600093	-1415.971143	-2463.661417	-735.768771	-993.809173	-1138.731181	-1275.543664	-1420.200914
+2	289.407726	201.834467	287.088479	306.161500	403.642004	161.851954	218.662669	250.326659	280.312086	311.895887
-2.05	-963.414587	-671.890083	-955.693550	-1019.186087	-1625.190850	-538.791653	-727.909757	-833.316507	-933.135502	-1038.275366
+2.05	223.469736	155.848965	221.678898	236.406366	322.468966	124.975975	168.843067	193.292806	216.446422	240.834246
-2.1	-897.476565	-625.904580	-890.283970	-949.430951	-1386.200392	-501.915672	-678.090156	-776.282655	-869.269840	-967.213721
+2.1	496.616483	383.135169	364.611099	317.544193	332.049262	306.503032	431.310787	470.004061	516.291681	550.336788
-2.15	-831.538542	-579.919078	-824.874389	-879.675815	-1200.782515	-465.039691	-628.270554	-719.248804	-805.404179	-896.152076
+2.15	863.303212	636.446400	729.040757	680.314638	653.495198	512.120714	704.433561	785.210020	867.451449	944.951517
-2.2	-765.600520	-533.933576	-759.464809	-809.920678	-1070.230007	-428.163710	-578.450952	-662.214953	-741.538517	-825.090431
+2.2	1205.479378	873.180638	1076.301189	1055.205080	1091.751292	703.196521	960.489306	1080.031574	1196.075275	1312.789634

-2.25	-699.662497	-487.948073	-694.055229	-740.165542	-987.630980	-391.287729	-528.631350	-605.181102	-677.672855	-754.028786
+2.25	1512.011829	1086.396255	1381.782753	1386.471183	1609.233871	873.648034	1191.477736	1344.362087	1492.266466	1641.757180
-2.3	-633.724475	-441.962571	-628.645648	-670.410406	-914.981433	-354.411748	-478.811749	-548.147251	-613.807193	-682.967141
+2.3	1770.091831	1267.928819	1635.396505	1663.460662	2033.333966	1016.379572	1387.895622	1568.483300	1744.945493	1921.094061
-2.35	-567.786452	-395.977069	-563.236068	-600.655270	-842.331886	-317.535767	-428.992147	-491.113400	-549.941531	-611.905496
+2.35	1976.922525	1413.286851	1833.106779	1884.079500	2368.549986	1130.995307	1545.406462	1747.365361	1947.634154	2144.747819
-2.4	-501.848430	-349.991566	-497.826487	-530.900134	-769.682339	-280.659786	-379.172545	-434.079549	-486.075870	-540.843851
+2.4	2127.441215	1518.364423	1976.242459	2047.957294	2601.220283	1213.426803	1659.611454	1877.701519	2094.553221	2309.224090
-2.45	-435.910407	-304.006064	-432.416907	-461.144998	-697.032792	-243.783805	-329.352943	-377.045698	-422.210208	-469.782206
+2.45	2215.899385	1581.357986	2057.085561	2146.118480	2719.739293	1261.074619	1729.480080	1955.098314	2183.660915	2409.648701
-2.5	-369.972384	-258.020561	-367.007333	-391.389862	-624.383245	-206.907839	-279.533341	-320.011847	-358.344546	-398.720561
+2.5	2240.092860	1600.928722	2072.711399	2174.051697	2732.006351	1272.740538	1751.098719	1976.990576	2211.252943	2443.718330
-2.55	-435.910166	-304.006065	-432.416914	-461.144979	-697.032781	-243.783819	-329.352956	-377.045720	-422.210213	-469.782172
+2.55	2216.087180	1581.358987	2057.088405	2146.120798	2719.738782	1261.080850	1729.482235	1955.102285	2183.662723	2409.648703
-2.6	-501.848156	-349.991568	-497.826495	-530.900113	-769.682326	-280.659798	-379.172558	-434.079573	-486.075877	-540.843814
+2.6	2127.590562	1518.366445	1976.243283	2047.957388	2601.221447	1213.430589	1659.611547	1877.702989	2094.555750	2309.224721
-2.65	-567.786147	-395.977071	-563.236076	-600.655248	-842.331870	-317.535777	-428.992160	-491.113426	-549.941541	-611.905456
+2.65	1976.957552	1413.288099	1833.109004	1884.081422	2368.551719	1130.996811	1545.408877	1747.369110	1947.635773	2144.750592
-2.7	-633.724137	-441.962573	-628.645657	-670.410382	-914.981415	-354.411757	-478.811763	-548.147278	-613.807204	-682.967097
+2.7	1769.997795	1267.929842	1635.400455	1663.462974	2033.335807	1016.378596	1387.897645	1568.486754	1744.946705	1921.094455
-2.75	-699.662127	-487.948076	-694.055239	-740.165517	-987.630959	-391.287736	-528.631365	-605.181131	-677.672868	-754.028739
+2.75	1511.839985	1086.397084	1381.786196	1386.473210	1609.235806	873.654847	1191.479531	1344.365275	1492.267387	1641.763523
-2.8	-765.600117	-533.933579	-759.464820	-809.920651	-1070.229985	-428.163715	-578.450967	-662.214984	-741.538531	-825.090381
+2.8	1205.523968	873.181469	1076.303028	1055.205824	1091.752803	703.201301	960.489595	1080.033020	1196.076036	1312.794141
-2.85	-831.538107	-579.919082	-824.874401	-879.675786	-1200.782490	-465.039695	-628.270569	-719.248836	-805.404195	-896.152023
+2.85	863.405426	636.447358	729.041009	680.314421	653.495045	512.123640	704.435538	785.210235	867.452605	944.954746
-2.9	-897.476098	-625.904585	-890.283982	-949.430920	-1386.200364	-501.915674	-678.090171	-776.282689	-869.269858	-967.213665
+2.9	496.647527	383.136472	364.613881	317.545706	332.050204	306.504217	431.313262	470.003307	516.293404	550.336232
-2.95	-963.414088	-671.890088	-955.693563	-1019.186055	-1625.190819	-538.791653	-727.909774	-833.316542	-933.135522	-1038.275306
+2.95	223.469818	155.848960	221.678897	236.406364	322.468978	124.976004	168.843074	193.292813	216.446410	240.834243
-3	-1318.280681	-918.194967	-1317.600135	-1415.971210	-2463.661459	-735.768790	-993.809217	-1138.731220	-1275.543704	-1420.200949
+3	289.407869	201.834465	287.088476	306.161508	403.642014	161.851961	218.662667	250.326652	280.312078	311.895901
(Span 3) -4	-1318.280681	-918.194967	-1317.600135	-1415.971210	-2463.661459	-735.768790	-993.809217	-1138.731220	-1275.543704	-1420.200949
+4	289.407869	201.834465	287.088476	306.161508	403.642014	161.851961	218.662667	250.326652	280.312078	311.895901
-3.05	-1252.366647	-872.285218	-1251.720128	-1345.172649	-2226.745490	-698.980351	-944.118757	-1081.794657	-1211.766520	-1349.190902
+3.05	274.937476	191.742742	272.734052	290.853432	391.327019	153.759363	207.729533	237.810319	266.296474	296.301107
-3.1	-1186.452613	-826.375470	-1185.840121	-1274.374089	-2021.557862	-662.191912	-894.428296	-1024.858094	-1147.989335	-1278.180854
+3.1	396.936612	310.088691	286.642395	275.545356	397.940365	253.115314	351.478434	381.644426	413.424145	441.672455
-3.15	-1120.538580	-780.465721	-1119.960114	-1203.575528	-1853.775381	-625.403473	-844.737835	-967.921531	-1084.212151	-1207.170806
+3.15	705.806778	523.888931	590.089772	532.921224	558.026936	426.255992	582.215653	647.765296	710.347529	774.683435
-3.2	-1054.624546	-734.555973	-1054.080107	-1132.776968	-1729.705331	-588.615035	-795.047375	-910.984969	-1020.434966	-1136.160758
+3.2	999.817776	728.835801	888.152471	854.504797	926.423584	590.467034	802.618397	901.221063	995.356216	1091.356309
-3.25	-988.710512	-688.646224	-988.200100	-1061.978407	-1621.598748	-551.826596	-745.356914	-854.048406	-956.657782	-1065.150710
+3.25	1272.179561	918.172702	1159.481293	1142.919795	1318.006498	742.135713	1007.704727	1136.341101	1258.509899	1384.635407
-3.3	-922.796479	-642.736476	-922.320094	-991.179846	-1513.492165	-515.038157	-695.666454	-797.111843	-892.880598	-994.140663
+3.3	1516.735568	1088.319615	1398.149158	1399.812711	1648.120203	877.876554	1192.800618	1347.808062	1493.935380	1647.906229
-3.35	-856.882445	-596.826727	-856.440087	-920.381286	-1405.385582	-478.249718	-645.975993	-740.175280	-829.103413	-923.130615
+3.35	1727.739655	1236.432139	1598.646462	1618.654559	1909.798842	994.531911	1353.539234	1530.657487	1700.301262	1874.995731
-3.4	-790.968411	-550.916979	-790.560080	-849.582725	-1297.278999	-441.461279	-596.285533	-683.238718	-765.326229	-852.120567
+3.4	1899.857862	1358.054414	1755.880502	1791.379120	2121.853064	1089.172839	1485.862087	1680.279183	1870.121747	2060.173017
-3.45	-725.054377	-505.007230	-724.680073	-778.784165	-1189.172416	-404.672840	-546.595072	-626.302155	-701.549044	-781.110519
+3.45	2028.165817	1449.728565	1872.361823	1928.463594	2246.693234	1159.097453	1586.017742	1792.415149	1998.569405	2199.720627
-3.5	-659.140344	-459.097482	-658.800066	-707.985604	-1081.065833	-367.884401	-496.904612	-569.365592	-637.771860	-710.100471
+3.5	2108.479866	1508.281883	1939.903103	2014.356253	2310.601852	1201.832116	1650.562582	1863.161210	2081.212686	2295.464878
-3.55	-593.226310	-413.187733	-592.920059	-637.187043	-972.959250	-331.095962	-447.214151	-512.429029	-573.994675	-639.090424
+3.55	2142.637442	1533.354817	1968.043094	2051.907005	2378.604381	1219.792335	1678.882283	1894.197306	2117.413827	2337.569598
-3.6	-527.312276	-367.277985	-527.040052	-566.388483	-864.852667	-294.307523	-397.523691	-455.492467	-510.217491	-568.080376

+3.6	2142.499537	1530.316155	1978.780468	2044.934478	2388.903505	1222.671661	1674.306014	1892.519653	2111.235686	2326.363637
-3.65	-461.398243	-321.368236	-461.160045	-495.589922	-756.746084	-257.519084	-347.833230	-398.555904	-446.440306	-497.070328
+3.65	2085.823431	1487.946443	1934.966968	1978.675746	2313.270641	1194.402357	1626.751808	1841.923964	2050.244640	2261.149620
-3.7	-395.484209	-275.458488	-395.280038	-424.791362	-648.639501	-220.730645	-298.142770	-341.619341	-382.663122	-426.060280
+3.7	1969.385849	1404.736584	1843.796582	1870.640856	2183.263235	1133.159108	1534.372786	1739.659021	1934.442383	2136.961883
-3.75	-329.570175	-229.548740	-329.400032	-353.992801	-540.532918	-183.942206	-248.452309	-284.682778	-318.885938	-355.050232
+3.75	1804.370819	1286.686609	1691.708368	1715.235288	1989.727509	1037.343500	1398.718304	1583.905212	1768.235290	1945.489513
-3.8	-263.656142	-183.638991	-263.520025	-283.194240	-432.426335	-147.153767	-198.761849	-227.746216	-255.108753	-284.040185
+3.8	1578.686277	1123.831251	1477.973559	1506.511430	1732.087800	905.585377	1221.186930	1380.415785	1539.638929	1684.330029
-3.85	-197.742108	-137.729243	-197.640018	-212.395680	-324.319752	-110.365328	-149.071388	-170.809653	-191.331569	-213.030137
+3.85	1286.839383	914.723532	1211.343122	1227.963631	1416.893919	736.743267	993.605124	1124.289488	1246.662724	1359.317421
-3.9	-131.828074	-91.819494	-131.760011	-141.597119	-216.213169	-73.576890	-99.380927	-113.873090	-127.554384	-142.020089
+3.9	927.067568	658.200634	877.075134	893.379340	1038.643875	529.901975	714.734419	809.473011	888.183784	970.367965
-3.95	-65.914041	-45.909746	-65.880004	-70.798558	-108.106586	-36.788451	-49.690467	-56.936527	-63.777200	-71.010041
+3.95	498.386030	353.386374	473.498702	484.408128	570.783611	284.376399	383.644576	434.848943	477.007593	520.081654
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 160' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-65.914023	-59.898624	-64.471733	-60.776297	-73.614511	-76.537290	-81.019946	-32.047963
+0.05	498.418171	467.501182	500.435446	469.981518	563.308752	545.563976	576.925402	247.388565
-0.1	-131.828046	-119.797248	-128.943467	-121.552594	-147.229022	-153.074580	-162.039892	-64.095927
+0.1	928.295105	871.653081	932.665521	875.684884	1048.729385	1009.953708	1067.916903	460.524425
-0.15	-197.742069	-179.695872	-193.415200	-182.328890	-220.843533	-229.611870	-243.059837	-96.143890
+0.15	1287.112717	1212.810843	1297.125947	1217.533235	1456.900975	1393.979623	1473.843376	639.829390
-0.2	-263.656092	-239.594496	-257.886933	-243.105187	-294.458044	-306.149159	-324.079783	-128.191853
+0.2	1578.900836	1492.044659	1594.995945	1496.654794	1789.247441	1709.517907	1807.803010	785.925392
-0.25	-329.570115	-299.493120	-322.358666	-303.881484	-368.072556	-382.686449	-405.099729	-160.239816
+0.25	1804.528903	1710.794807	1827.853348	1714.553707	2060.929405	1963.863191	2077.782373	899.860005
-0.3	-395.484139	-359.391745	-386.830400	-364.657781	-441.687067	-459.223739	-486.119675	-192.287780
+0.3	1969.601529	1870.872369	1997.675254	1884.192895	2264.240269	2147.324008	2271.388859	982.602485
-0.35	-461.398162	-419.290369	-451.302133	-425.434077	-515.301578	-535.761029	-567.139620	-224.335743
+0.35	2085.988174	1977.861144	2117.481429	1998.169631	2397.718878	2270.846418	2402.786666	1035.171369
-0.4	-527.312185	-479.188993	-515.773866	-486.210374	-588.916089	-612.298319	-648.159566	-256.383706
+0.4	2142.617386	2038.670845	2180.714836	2057.034430	2464.363523	2326.095071	2461.773963	1058.984371
-0.45	-593.226208	-539.087617	-580.245599	-546.986671	-662.530600	-688.835609	-729.179512	-288.431669
+0.45	2142.713052	2047.395964	2188.462459	2063.286826	2467.706097	2316.295927	2451.910843	1054.094403
-0.5	-659.140231	-598.986241	-644.717333	-607.762968	-736.145111	-765.372899	-810.199458	-320.479633
+0.5	2108.382782	2012.010225	2151.275540	2028.074828	2427.237914	2282.319727	2415.753289	1041.126226
-0.55	-725.054254	-658.884865	-709.189066	-668.539264	-809.759622	-841.910189	-891.219403	-352.527596
+0.55	2028.015911	1931.041850	2065.794207	1948.508803	2333.904694	2201.294061	2329.559526	1005.311210
-0.6	-790.968277	-718.783489	-773.660799	-729.315561	-883.374133	-918.447478	-972.239349	-384.575559
+0.6	1899.424228	1807.733317	1934.433302	1825.509809	2187.596405	2061.774983	2181.502336	945.492729
-0.65	-856.882300	-778.682113	-838.132533	-790.091858	-956.988644	-994.984768	-1053.259295	-416.623522
+0.65	1727.123357	1647.325685	1761.683614	1663.295690	1993.376824	1868.918872	1977.047962	863.821271
-0.7	-922.796323	-838.580737	-902.604266	-850.868155	-1030.603156	-1071.522058	-1134.279241	-448.671486
+0.7	1516.050830	1455.979703	1552.435192	1466.460554	1756.486782	1628.367159	1722.176222	762.647803
-0.75	-988.710346	-898.479361	-967.075999	-911.644452	-1104.217667	-1148.059348	-1215.299186	-480.719449
+0.75	1271.507963	1234.207127	1312.805694	1239.974618	1482.894355	1346.986077	1425.263928	644.523326
-0.8	-1054.624370	-958.377986	-1031.547732	-972.420748	-1177.832178	-1224.596638	-1296.319132	-512.767412
+0.8	999.276272	987.183810	1046.941993	989.183708	1179.022912	1031.359533	1091.057367	512.198856
-0.85	-1120.538393	-1018.276610	-1096.019466	-1033.197045	-1251.446689	-1301.133928	-1377.339078	-544.815375
+0.85	705.500786	720.456174	760.578765	719.810375	851.752644	685.298081	724.727052	368.625280
-0.9	-1186.452416	-1078.175234	-1160.491199	-1093.973342	-1325.061200	-1377.671218	-1458.359024	-576.863339
+0.9	396.748860	439.940677	462.210948	437.952796	508.723186	326.345523	345.280529	216.953882
-0.95	-1252.366439	-1138.073858	-1224.962932	-1154.749639	-1398.675711	-1454.208507	-1539.378969	-608.911302
+0.95	274.937329	250.560996	269.627493	254.151680	307.743899	316.931633	335.458183	133.603834
-1	-1318.280468	-1197.972474	-1289.434677	-1215.525944	-1472.290192	-1530.745818	-1620.398937	-640.959269
+1	289.407726	263.748412	283.818415	267.528077	323.940950	333.612242	353.113873	140.635610
(Span 2) -2	-1318.280468	-1197.972474	-1289.434677	-1215.525944	-1472.290192	-1530.745818	-1620.398937	-640.959269
+2	289.407726	263.748412	283.818415	267.528077	323.940950	333.612242	353.113873	140.635610
-2.05	-963.414587	-877.996440	-944.807818	-890.578654	-1078.372330	-1110.567330	-1175.486555	-468.164220
+2.05	223.469736	204.978634	219.153877	206.575093	250.134987	257.602792	272.661216	114.392443
-2.1	-897.476565	-817.904605	-880.143277	-829.625668	-1004.566367	-1034.557877	-1095.033900	-436.122124
+2.1	496.616483	539.501685	567.861994	536.056569	624.594439	425.659750	449.452426	261.189097
-2.15	-831.538542	-757.812770	-815.478736	-768.672681	-930.760404	-958.548424	-1014.581245	-404.080027
+2.15	863.303212	866.918248	921.284295	869.692171	1031.337306	859.108421	908.151972	441.368245
-2.2	-765.600520	-697.720935	-750.814195	-707.719695	-856.954441	-882.538971	-934.128590	-372.037930
+2.2	1205.479378	1174.296395	1252.524765	1182.952520	1411.579930	1259.867962	1332.391064	608.490349

-2.25	-699.662497	-637.629099	-686.149654	-646.766708	-783.148478	-806.529518	-853.675935	-339.995834
+2.25	1512.011829	1451.600321	1551.714980	1465.263118	1752.752640	1617.005107	1710.422704	757.275732
-2.3	-633.724475	-577.537264	-621.485113	-585.813721	-709.342515	-730.520065	-773.223280	-307.953737
+2.3	1770.091831	1689.494349	1807.205833	1705.519223	2042.442858	1917.393847	2028.620520	881.930673
-2.35	-567.786452	-517.445429	-556.820572	-524.860735	-635.536552	-654.510612	-692.770624	-275.911640
+2.35	1976.922525	1881.165633	2012.584608	1898.319767	2274.806320	2154.152760	2279.531484	980.765244
-2.4	-501.848430	-457.353594	-492.156031	-463.907748	-561.730589	-578.501158	-612.317969	-243.869544
+2.4	2127.441215	2021.038204	2161.936870	2038.820166	2444.253551	2321.337550	2456.706798	1052.061881
-2.45	-435.910407	-397.261759	-427.491490	-402.954761	-487.924626	-502.491705	-531.865314	-211.827447
+2.45	2215.899385	2105.478791	2252.510497	2124.533150	2544.706223	2417.327018	2558.661013	1092.829363
-2.5	-369.972384	-337.169924	-362.826949	-342.001775	-414.118663	-426.482252	-451.412659	-179.785350
+2.5	2240.092860	2134.843496	2282.455542	2151.274254	2573.549357	2437.614899	2580.480968	1102.475466
-2.55	-435.910166	-397.261768	-427.491506	-402.954754	-487.924643	-502.491705	-531.865346	-211.827440
+2.55	2216.087180	2105.479060	2252.511768	2124.536260	2544.712154	2417.329727	2558.663755	1092.831252
-2.6	-501.848156	-457.353603	-492.156044	-463.907739	-561.730606	-578.501154	-612.318002	-243.869535
+2.6	2127.590562	2021.040163	2161.939790	2038.820746	2444.256830	2321.337728	2456.706868	1052.062569
-2.65	-567.786147	-517.445437	-556.820582	-524.860723	-635.536569	-654.510604	-692.770658	-275.911631
+2.65	1976.957552	1881.166529	2012.586395	1898.323117	2274.807203	2154.154894	2279.533614	980.765272
-2.7	-633.724137	-577.537272	-621.485120	-585.813708	-709.342532	-730.520054	-773.223315	-307.953726
+2.7	1769.997795	1689.494957	1807.207299	1705.522028	2042.447987	1917.395498	2028.622139	881.929918
-2.75	-699.662127	-637.629106	-686.149659	-646.766693	-783.148494	-806.529504	-853.675971	-339.995822
+2.75	1511.839985	1451.600600	1551.716079	1465.265704	1752.757497	1617.006555	1710.424107	757.277368
-2.8	-765.600117	-697.720941	-750.814197	-707.719677	-856.954457	-882.538953	-934.128627	-372.037917
+2.8	1205.523968	1174.296662	1252.525822	1182.953316	1411.582913	1259.869251	1332.392303	608.491528
-2.85	-831.538107	-757.812775	-815.478735	-768.672662	-930.760420	-958.548403	-1014.581283	-404.080013
+2.85	863.405426	866.918977	921.285838	869.691599	1031.338901	859.109874	908.153390	441.368746
-2.9	-897.476098	-817.904610	-880.143273	-829.625647	-1004.566383	-1034.557853	-1095.033940	-436.122108
+2.9	496.647527	539.502898	567.864045	536.059998	624.595097	425.661543	449.454210	261.208650
-2.95	-963.414088	-877.996445	-944.807812	-890.578631	-1078.372346	-1110.567302	-1175.486596	-468.164204
+2.95	223.469818	204.979983	219.153920	206.575105	250.135003	257.602826	272.661237	113.722184
-3	-1318.280681	-1197.972479	-1289.434710	-1215.525969	-1472.290187	-1530.745845	-1620.398987	-640.959263
+3	289.407869	263.748415	283.818427	267.528086	323.940950	333.612257	353.113868	140.635616
(Span 3) -4	-1318.280681	-1197.972479	-1289.434710	-1215.525969	-1472.290187	-1530.745845	-1620.398987	-640.959263
+4	289.407869	263.748415	283.818427	267.528086	323.940950	333.612257	353.113868	140.635616
-3.05	-1252.366647	-1138.073855	-1224.962976	-1154.749671	-1398.675676	-1454.208554	-1539.379039	-608.911300
+3.05	274.937476	250.560994	269.627506	254.151681	307.743903	316.931644	335.458174	133.603835
-3.1	-1186.452613	-1078.175231	-1160.491241	-1093.973373	-1325.061165	-1377.671263	-1458.359091	-576.863337
+3.1	396.936612	439.941198	462.209885	437.950312	508.727428	326.346216	345.281189	216.952183
-3.15	-1120.538580	-1018.276606	-1096.019506	-1033.197075	-1251.446654	-1301.133972	-1377.339143	-544.815374
+3.15	705.806778	720.457090	760.578222	719.808475	851.748776	685.298545	724.727667	368.623766
-3.2	-1054.624546	-958.377982	-1031.547771	-972.420777	-1177.832144	-1224.596681	-1296.319194	-512.767411
+3.2	999.817776	987.184926	1046.942400	989.182076	1179.019388	1031.360142	1091.058139	512.197458
-3.25	-988.710512	-898.479357	-967.076036	-911.644479	-1104.217633	-1148.059389	-1215.299246	-480.719448
+3.25	1272.179561	1234.208169	1312.806025	1239.972796	1482.890434	1346.986467	1425.264471	644.521806
-3.3	-922.796479	-838.580733	-902.604301	-850.868181	-1030.603122	-1071.522098	-1134.279298	-448.671485
+3.3	1516.735568	1455.980542	1552.434805	1466.458717	1756.482846	1628.366545	1722.175705	762.646449
-3.35	-856.882445	-778.682109	-838.132566	-790.091883	-956.988611	-994.984807	-1053.259349	-416.623522
+3.35	1727.739655	1647.326104	1761.682660	1663.293283	1993.372153	1868.917567	1977.046716	863.819541
-3.4	-790.968411	-718.783484	-773.660831	-729.315585	-883.374100	-918.447516	-972.239401	-384.575559
+3.4	1899.857862	1807.732627	1934.431734	1825.506896	2187.591131	2061.772714	2181.500074	945.491065
-3.45	-725.054377	-658.884860	-709.189096	-668.539287	-809.759589	-841.910224	-891.219453	-352.527596
+3.45	2028.165817	1931.040413	2065.791822	1948.505184	2333.907335	2201.290807	2329.556220	1005.309268
-3.5	-659.140344	-598.986236	-644.717361	-607.762989	-736.145078	-765.372933	-810.199505	-320.479633
+3.5	2108.479866	2012.007756	2151.272031	2028.069968	2427.239202	2282.315064	2415.748493	1041.124347
-3.55	-593.226310	-539.087611	-580.245626	-546.986691	-662.530568	-688.835642	-729.179556	-288.431670
+3.55	2142.637442	2047.399206	2188.455063	2063.283155	2467.705426	2316.293037	2451.907692	1055.658021
-3.6	-527.312276	-479.188987	-515.773891	-486.210393	-588.916057	-612.298351	-648.159608	-256.383707

+3.6	**2142.499537**	**2038.672823**	**2180.717841**	**2057.029696**	**2464.361507**	**2326.090844**	**2461.769393**	**1058.983167**
-3.65	**-461.398243**	**-419.290363**	**-451.302156**	**-425.434095**	**-515.301546**	**-535.761059**	**-567.139660**	**-224.335744**
+3.65	**2085.823431**	**1977.861758**	**2117.482966**	**1998.163768**	**2397.715392**	**2270.848689**	**2402.788928**	**1035.170065**
-3.7	**-395.484209**	**-359.391738**	**-386.830421**	**-364.657797**	**-441.687035**	**-459.223768**	**-486.119712**	**-192.287781**
+3.7	**1969.385849**	**1870.871172**	**1997.674853**	**1884.194223**	**2264.234772**	**2147.324419**	**2271.389151**	**982.600695**
-3.75	**-329.570175**	**-299.493114**	**-322.358686**	**-303.881499**	**-368.072524**	**-382.686477**	**-405.099763**	**-160.239818**
+3.75	**1804.370819**	**1710.792147**	**1827.851362**	**1714.553487**	**2060.931186**	**1963.861686**	**2077.780631**	**899.858214**
-3.8	**-263.656142**	**-239.594490**	**-257.886951**	**-243.105201**	**-294.458013**	**-306.149186**	**-324.079815**	**-128.191855**
+3.8	**1578.686277**	**1492.040136**	**1594.991988**	**1496.652875**	**1789.246968**	**1709.514424**	**1807.799176**	**785.926520**
-3.85	**-197.742108**	**-179.695865**	**-193.415216**	**-182.328903**	**-220.843503**	**-229.611894**	**-243.059867**	**-96.143893**
+3.85	**1286.839383**	**1212.804695**	**1297.120241**	**1217.529588**	**1456.898504**	**1393.977867**	**1473.841567**	**639.830403**
-3.9	**-131.828074**	**-119.797241**	**-128.943481**	**-121.552605**	**-147.228992**	**-153.074603**	**-162.039918**	**-64.095930**
+3.9	**927.067568**	**871.645458**	**932.658147**	**875.679217**	**1048.724580**	**1009.949976**	**1067.913000**	**460.525008**
-3.95	**-65.914041**	**-59.898617**	**-64.471746**	**-60.776307**	**-73.614481**	**-76.537312**	**-81.019970**	**-32.047967**
+3.95	**498.386030**	**467.491383**	**500.425782**	**469.974015**	**563.301586**	**545.558364**	**576.919511**	**247.388897**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 160' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-65.914023**	**-142.413898**	**-157.560242**	**-89.458373**	**-107.658335**	**-116.201142**
+0.05	**498.418171**	**965.313897**	**1039.391147**	**630.203544**	**760.123103**	**807.695229**
-0.1	**-131.828046**	**-284.827797**	**-315.120484**	**-178.916747**	**-215.316670**	**-232.402284**
+0.1	**928.295105**	**1779.260320**	**1921.755542**	**1165.344529**	**1405.761133**	**1491.812982**
-0.15	**-197.742069**	**-427.241695**	**-472.680726**	**-268.375120**	**-322.975005**	**-348.603426**
+0.15	**1287.112717**	**2476.430489**	**2670.009437**	**1606.420450**	**1943.112425**	**2065.054538**
-0.2	**-263.656092**	**-569.655594**	**-630.240969**	**-357.833494**	**-430.633340**	**-464.804568**
+0.2	**1578.900836**	**3031.805847**	**3315.917524**	**1980.886151**	**2391.062245**	**2536.528568**
-0.25	**-329.570115**	**-712.069492**	**-787.801211**	**-447.291867**	**-538.291675**	**-581.005710**
+0.25	**1804.528903**	**3471.945223**	**3817.906144**	**2269.844938**	**2731.820407**	**2917.671639**
-0.3	**-395.484139**	**-854.483390**	**-945.361453**	**-536.750241**	**-645.950010**	**-697.206852**
+0.3	**1969.601529**	**3812.619830**	**4198.543266**	**2476.924262**	**2970.550262**	**3190.317355**
-0.35	**-461.398162**	**-996.897289**	**-1102.921695**	**-626.208614**	**-753.608345**	**-813.407994**
+0.35	**2085.988174**	**4038.228059**	**4445.829059**	**2613.369131**	**3128.821143**	**3355.340617**
-0.4	**-527.312185**	**-1139.311187**	**-1260.481937**	**-715.666988**	**-861.266680**	**-929.609137**
+0.4	**2142.617386**	**4173.723810**	**4561.811911**	**2670.388172**	**3192.354900**	**3437.092695**
-0.45	**-593.226208**	**-1281.725085**	**-1418.042179**	**-805.125361**	**-968.925015**	**-1045.810279**
+0.45	**2142.713052**	**4184.008532**	**4602.215658**	**2651.999888**	**3165.704361**	**3420.941925**
-0.5	**-659.140231**	**-1424.138984**	**-1575.602421**	**-894.583734**	**-1076.583350**	**-1162.011421**
+0.5	**2108.382782**	**4110.649481**	**4510.701580**	**2615.078105**	**3122.903512**	**3370.439128**
-0.55	**-725.054254**	**-1566.552882**	**-1733.162663**	**-984.042108**	**-1184.241685**	**-1278.212563**
+0.55	**2028.015911**	**3936.943731**	**4301.846914**	**2528.387740**	**3022.209703**	**3250.710667**
-0.6	**-790.968277**	**-1708.966781**	**-1890.722906**	**-1073.500481**	**-1291.900020**	**-1394.413705**
+0.6	**1899.424228**	**3659.108708**	**4025.134557**	**2371.885228**	**2837.170852**	**3041.936601**
-0.65	**-856.882300**	**-1851.380679**	**-2048.283148**	**-1162.958855**	**-1399.558355**	**-1510.614847**
+0.65	**1727.123357**	**3295.136241**	**3636.330111**	**2151.527894**	**2574.813075**	**2763.276195**
-0.7	**-922.796323**	**-1993.794577**	**-2205.843390**	**-1252.417228**	**-1507.216690**	**-1626.815989**
+0.7	**1516.050830**	**2858.023780**	**3144.539875**	**1873.842485**	**2245.155055**	**2408.257724**
-0.75	**-988.710346**	**-2136.208476**	**-2363.403632**	**-1341.875602**	**-1614.875025**	**-1743.017131**
+0.75	**1271.507963**	**2338.817194**	**2566.081979**	**1548.199869**	**1858.401476**	**1985.953134**
-0.8	**-1054.624370**	**-2278.622374**	**-2520.963874**	**-1431.333975**	**-1722.533360**	**-1859.218273**
+0.8	**999.276272**	**1749.639793**	**1912.029824**	**1179.909448**	**1416.378301**	**1506.174760**
-0.85	**-1120.538393**	**-2421.036273**	**-2678.524116**	**-1520.792349**	**-1830.191694**	**-1975.419415**
+0.85	**705.500786**	**1103.526517**	**1197.028554**	**774.303549**	**928.671728**	**979.476655**
-0.9	**-1186.452416**	**-2563.450171**	**-2836.084358**	**-1610.250722**	**-1937.850029**	**-2091.620557**
+0.9	**396.748860**	**555.762654**	**613.784647**	**387.321938**	**445.229216**	**472.535115**
-0.95	**-1252.366439**	**-2705.864069**	**-2993.644601**	**-1699.709095**	**-2045.508364**	**-2207.821699**
+0.95	**274.937329**	**586.638357**	**647.883794**	**369.346978**	**445.060963**	**479.588255**
-1	**-1318.280468**	**-2848.277968**	**-3151.204790**	**-1789.167450**	**-2153.166681**	**-2324.022868**
+1	**289.407726**	**617.514057**	**681.982935**	**388.786295**	**468.485216**	**504.829735**
(Span 2) -2	**-1318.280468**	**-2848.277968**	**-3151.204790**	**-1789.167450**	**-2153.166681**	**-2324.022868**
+2	**289.407726**	**617.514057**	**681.982935**	**388.786295**	**468.485216**	**504.829735**
-2.05	**-963.414587**	**-2055.651771**	**-2270.253166**	**-1294.237071**	**-1559.548171**	**-1680.535998**
+2.05	**223.469736**	**476.821072**	**526.601507**	**300.206118**	**361.746618**	**389.810485**
-2.1	**-897.476565**	**-1914.958848**	**-2114.872495**	**-1205.656893**	**-1452.809572**	**-1565.516749**
+2.1	**496.616483**	**634.930991**	**706.271008**	**469.345267**	**555.492204**	**580.382127**
-2.15	**-831.538542**	**-1774.265926**	**-1959.491824**	**-1117.076715**	**-1346.070973**	**-1450.497500**
+2.15	**863.303212**	**1411.355674**	**1548.793897**	**969.006856**	**1153.347340**	**1227.889126**
-2.2	**-765.600520**	**-1633.573004**	**-1804.111153**	**-1028.496537**	**-1239.332374**	**-1335.478252**
+2.2	**1205.479378**	**2163.700654**	**2381.655282**	**1439.668622**	**1719.593708**	**1841.051109**

-2.25	**-699.662497**	**-1492.880082**	**-1648.730482**	**-939.916359**	**-1132.593775**	**-1220.459003**
+2.25	**1512.011829**	**2826.484855**	**3118.445078**	**1857.144660**	**2220.096036**	**2380.542332**
-2.3	**-633.724475**	**-1352.187159**	**-1493.349811**	**-851.336181**	**-1025.855176**	**-1105.439754**
+2.3	**1770.091831**	**3390.268985**	**3737.415160**	**2206.778532**	**2638.985056**	**2830.652307**
-2.35	**-567.786452**	**-1211.494237**	**-1337.969140**	**-762.756003**	**-919.116577**	**-990.420506**
+2.35	**1976.922525**	**3844.929694**	**4223.235478**	**2480.605467**	**2966.115004**	**3185.364551**
-2.4	**-501.848430**	**-1070.801315**	**-1182.588469**	**-674.175825**	**-812.377978**	**-875.401257**
+2.4	**2127.441215**	**4173.689434**	**4568.032138**	**2671.850906**	**3194.192997**	**3438.920920**
-2.45	**-435.910407**	**-930.108393**	**-1027.207797**	**-585.595647**	**-705.639379**	**-760.382008**
+2.45	**2215.899385**	**4367.987769**	**4799.353981**	**2779.311429**	**3319.998495**	**3581.784158**
-2.5	**-369.972384**	**-789.415471**	**-871.827126**	**-497.015469**	**-598.900780**	**-645.362760**
+2.5	**2240.092860**	**4422.562684**	**4877.143510**	**2797.814772**	**3338.848147**	**3610.808791**
-2.55	**-435.910166**	**-930.108785**	**-1027.212768**	**-585.595656**	**-705.639360**	**-760.382012**
+2.55	**2216.087180**	**4367.991982**	**4798.622093**	**2779.314820**	**3319.995559**	**3581.786088**
-2.6	**-501.848156**	**-1070.801771**	**-1182.594195**	**-674.175833**	**-812.377958**	**-875.401261**
+2.6	**2127.590562**	**4173.689943**	**4568.361953**	**2671.850964**	**3194.193580**	**3438.922995**
-2.65	**-567.786147**	**-1211.494757**	**-1337.975623**	**-762.756011**	**-919.116555**	**-990.420511**
+2.65	**1976.957552**	**3844.931919**	**4223.235436**	**2480.607978**	**2966.117398**	**3185.364913**
-2.7	**-633.724137**	**-1352.187742**	**-1493.357050**	**-851.336188**	**-1025.855153**	**-1105.439761**
+2.7	**1769.997795**	**3390.270178**	**3737.414305**	**2206.780269**	**2638.986718**	**2830.652912**
-2.75	**-699.662127**	**-1492.880728**	**-1648.738478**	**-939.916366**	**-1132.593751**	**-1220.459010**
+2.75	**1511.839985**	**2826.491575**	**3118.523232**	**1857.145987**	**2220.097155**	**2380.549166**
-2.8	**-765.600117**	**-1633.573714**	**-1804.119905**	**-1028.496543**	**-1239.332349**	**-1335.478260**
+2.8	**1205.523968**	**2163.705343**	**2381.655554**	**1439.669768**	**1719.594624**	**1841.055862**
-2.85	**-831.538107**	**-1774.266699**	**-1959.501333**	**-1117.076720**	**-1346.070947**	**-1450.497510**
+2.85	**863.405426**	**1411.359042**	**1548.472144**	**969.008436**	**1153.348390**	**1227.892328**
-2.9	**-897.476098**	**-1914.959685**	**-2114.882760**	**-1205.656898**	**-1452.809544**	**-1565.516759**
+2.9	**496.647527**	**634.934527**	**706.270383**	**469.345820**	**555.492523**	**580.384970**
-2.95	**-963.414088**	**-2055.652671**	**-2270.264188**	**-1294.237075**	**-1559.548142**	**-1680.536009**
+2.95	**223.469818**	**476.820829**	**526.598913**	**300.206133**	**361.746611**	**389.810478**
-3	**-1318.280681**	**-2848.277938**	**-3151.204760**	**-1789.167525**	**-2153.166786**	**-2324.022944**
+3	**289.407869**	**617.513780**	**681.979617**	**388.786298**	**468.485221**	**504.829730**
(Span 3) -4	**-1318.280681**	**-2848.277938**	**-3151.204760**	**-1789.167525**	**-2153.166786**	**-2324.022944**
+4	**289.407869**	**617.513780**	**681.979617**	**388.786298**	**468.485221**	**504.829730**
-3.05	**-1252.366647**	**-2705.864041**	**-2993.644519**	**-1699.709148**	**-2045.508446**	**-2207.821798**
+3.05	**274.937476**	**586.638090**	**647.880636**	**369.346983**	**445.060960**	**479.588244**
-3.1	**-1186.452613**	**-2563.450144**	**-2836.084278**	**-1610.250771**	**-1937.850106**	**-2091.620653**
+3.1	**396.936612**	**555.762401**	**613.781655**	**387.322786**	**445.233475**	**472.531876**
-3.15	**-1120.538580**	**-2421.036247**	**-2678.524038**	**-1520.792394**	**-1830.191765**	**-1975.419507**
+3.15	**705.806778**	**1103.530423**	**1198.161575**	**774.304397**	**928.673313**	**979.480668**
-3.2	**-1054.624546**	**-2278.622350**	**-2520.963797**	**-1431.334016**	**-1722.533425**	**-1859.218361**
+3.2	**999.817776**	**1749.643811**	**1913.005308**	**1179.910432**	**1416.380097**	**1506.179168**
-3.25	**-988.710512**	**-2136.208453**	**-2363.403557**	**-1341.875639**	**-1614.875085**	**-1743.017215**
+3.25	**1272.179561**	**2338.820838**	**2567.257890**	**1548.200313**	**1858.402834**	**1985.957010**
-3.3	**-922.796479**	**-1993.794556**	**-2205.843316**	**-1252.417262**	**-1507.216745**	**-1626.816069**
+3.3	**1516.735568**	**2858.026678**	**3146.250677**	**1873.841943**	**2245.155648**	**2408.260713**
-3.35	**-856.882445**	**-1851.380659**	**-2048.283075**	**-1162.958885**	**-1399.558404**	**-1510.614923**
+3.35	**1727.739655**	**3295.137487**	**3635.509470**	**2151.526351**	**2574.811963**	**2763.277999**
-3.4	**-790.968411**	**-1708.966762**	**-1890.722835**	**-1073.500508**	**-1291.900064**	**-1394.413777**
+3.4	**1899.857862**	**3659.106526**	**4025.135155**	**2371.882791**	**2837.168315**	**3041.937009**
-3.45	**-725.054377**	**-1566.552866**	**-1733.162594**	**-984.042130**	**-1184.241724**	**-1278.212631**
+3.45	**2028.165817**	**3937.796320**	**4301.847068**	**2528.383792**	**3022.205755**	**3250.708789**
-3.5	**-659.140344**	**-1424.138969**	**-1575.602353**	**-894.583753**	**-1076.583384**	**-1162.011485**
+3.5	**2108.479866**	**4110.651789**	**4512.106408**	**2615.072582**	**3122.905875**	**3370.435034**
-3.55	**-593.226310**	**-1281.725072**	**-1418.042113**	**-805.125376**	**-968.925044**	**-1045.810339**
+3.55	**2142.637442**	**4184.007240**	**4602.214578**	**2651.996286**	**3165.702634**	**3420.938052**
-3.6	**-527.312276**	**-1139.311175**	**-1260.481872**	**-715.666999**	**-861.266703**	**-929.609194**

+3.6	**2142.499537**	**4173.728226**	**4561.811978**	**2670.383117**	**3192.351561**	**3437.095608**
-3.65	**-461.398243**	**-996.897278**	**-1102.921632**	**-626.208622**	**-753.608363**	**-813.408048**
+3.65	**2085.823431**	**4038.229159**	**4445.828022**	**2613.371880**	**3128.824063**	**3355.340970**
-3.7	**-395.484209**	**-854.483381**	**-945.361391**	**-536.750245**	**-645.950023**	**-697.206902**
+3.7	**1969.385849**	**3812.616910**	**4199.059760**	**2476.924896**	**2970.550532**	**3190.314644**
-3.75	**-329.570175**	**-712.069484**	**-787.801150**	**-447.291867**	**-538.291683**	**-581.005756**
+3.75	**1804.370819**	**3471.938653**	**3817.905291**	**2269.843364**	**2731.817893**	**2917.665963**
-3.8	**-263.656142**	**-569.655587**	**-630.240910**	**-357.833490**	**-430.633342**	**-464.804610**
+3.8	**1578.686277**	**3032.578871**	**3315.915564**	**1980.882177**	**2391.057007**	**2536.523862**
-3.85	**-197.742108**	**-427.241691**	**-472.680669**	**-268.375113**	**-322.975002**	**-348.603464**
+3.85	**1286.839383**	**2476.434320**	**2670.009026**	**1606.418391**	**1943.113021**	**2065.055721**
-3.9	**-131.828074**	**-284.827794**	**-315.120429**	**-178.916736**	**-215.316662**	**-232.402318**
+3.9	**927.067568**	**1779.259901**	**1921.755837**	**1165.339739**	**1405.758573**	**1491.810964**
-3.95	**-65.914041**	**-142.413897**	**-157.560188**	**-89.458359**	**-107.658322**	**-116.201172**
+3.95	**498.386030**	**965.309454**	**1039.392210**	**630.197004**	**760.117969**	**807.689934**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	-19.19450631	-31.164661	-46.196479	-14.44673292	-15.5506014	-14.65956271	-17.75776806	-18.50892147	-19.59342116	-7.736311483
End Shear	144.9438364	202.103490	279.367962	120.8049603	129.3984224	121.5732108	145.8872627	142.9162467	151.1541357	64.08714239
-0.05	-19.19450631	-31.441162	-46.445329	-14.44673292	-15.5506014	-14.65956271	-17.75776806	-18.50892147	-19.59342116	-7.736311483
+0.05	134.4569138	185.480749	254.601053	112.8762996	120.8627809	113.5293246	136.143571	132.6900331	140.328066	59.85561269
-0.1	-19.19450631	-32.373539	-47.284469	-14.44673292	-15.5506014	-14.65956271	-17.75776806	-18.50892147	-19.59342116	-7.736311483
+0.1	123.8863659	168.767023	229.283959	104.7467587	112.1131256	105.2827517	126.1590997	122.2282141	129.253132	55.48193197
-0.15	-19.39464634	-39.654853	-53.024779	-18.13348657	-18.83185895	-17.32671969	-19.53273558	-18.50892147	-19.59342116	-8.722058047
+0.15	114.475562	154.503158	207.604115	97.57389869	104.3950618	98.00964099	117.3573287	113.0398001	119.5267204	51.62583693
-0.2	-29.82757886	-49.310072	-64.373868	-26.22095882	-27.54656779	-25.54672061	-29.50684356	-20.08363261	-21.1406659	-13.08844683
+0.2	104.4881641	139.141121	184.192455	89.58856784	95.80498759	89.91615751	107.5674431	102.8591855	108.7505792	47.33631179
-0.25	-39.38660295	-58.362518	-75.203023	-33.34098412	-35.22074241	-32.78645791	-38.29559964	-28.59923125	-30.1115683	-16.93537994
+0.25	96.19467291	126.108464	164.293662	82.58587223	88.27398044	82.82175578	98.99030992	93.97564579	99.34790631	43.57769779
-0.3	-50.02087004	-69.044855	-87.818158	-41.24949183	-43.74699833	-40.83141036	-48.06655032	-39.08903489	-41.21971363	-21.2115795
+0.3	87.02702687	112.161304	142.980629	74.83921825	79.94522077	74.97728107	89.5112759	84.19978052	89.00137011	39.42335404
-0.35	-59.33969566	-78.955656	-99.383457	-48.16845318	-51.20844539	-47.87291544	-56.62304511	-48.3095869	-50.98426695	-24.95566504
+0.35	79.04696997	100.409635	125.028853	68.0906641	72.69170692	68.14684814	81.26212434	75.73091784	80.03869767	35.80758235
-0.4	-69.64060487	-90.538523	-112.750631	-55.80353535	-59.44452089	-55.64690913	-66.07458384	-58.53454435	-61.81303381	-29.09065011
+0.4	70.28813424	87.926149	105.994679	60.6771441	64.72598504	60.64730068	72.21020709	66.48334706	70.25257905	31.83944606
-0.45	-78.60697599	-101.188771	-124.913919	-62.43746141	-66.60280975	-62.40492642	-74.29547784	-67.46476597	-71.27110912	-32.68653235
+0.45	62.72142438	77.492447	90.144373	54.2666957	57.84038777	54.1661003	64.39238832	58.53898166	61.84618725	28.41186885
-0.5	-88.44820746	-113.531195	-138.871225	-69.70464824	-74.44696814	-69.81203045	-83.31132451	-77.30132884	-81.6896816	-36.62927807
+0.5	54.4838151	66.507045	75.478601	47.2807748	50.33943545	47.10739362	55.88384596	49.94323398	52.75128121	24.68096487
-0.55	-96.94985499	-124.789190	-151.482834	-75.9695801	-81.2116814	-76.20130245	-91.0932747	-85.83141813	-90.725018	-40.03160168
+0.55	47.43036848	57.415506	65.308915	41.29239565	43.91217698	41.06068176	48.60070035	42.63318144	45.01744542	21.48693861
-0.6	-106.205131	-137.735813	-171.077036	-82.77441331	-88.56219873	-83.14560729	-99.55717572	-95.15605118	-100.6025941	-43.73107611
+0.6	39.82638212	47.948218	54.674567	34.82853381	36.97772	34.53873341	40.75179734	34.81280522	36.74456786	18.04429017
-0.65	-114.1297878	-149.457059	-191.686419	-88.58637972	-94.84290535	-89.08087198	-106.7968341	-103.1761752	-109.0988979	-46.89448387
+0.65	33.38612099	40.210257	45.947481	29.34618679	31.09922203	29.01177028	34.10667053	28.24688567	29.79956819	15.12917235
-0.7	-122.672791	-162.838141	-214.869960	-94.83439833	-101.5980543	-95.46646132	-114.5925268	-111.8653361	-118.304668	-50.29966775
+0.7	26.5281646	32.266729	36.954464	23.49885017	24.83299328	23.1224944	27.03366591	21.325424	22.47952943	12.02581211
-0.75	-129.9081915	-174.865370	-235.409961	-100.1094388	-107.3043359	-100.8624589	-121.1865486	-119.2656937	-126.1456791	-53.17880298
+0.75	20.80100011	25.880963	29.699876	18.6065163	19.59369669	18.20053952	21.12990267	15.61344558	16.43963334	9.434958466
-0.8	-137.6126392	-188.496778	-258.362780	-105.7061779	-113.3623847	-106.5934197	-128.197775	-127.1958403	-134.548834	-56.23866447
+0.8	14.80148522	19.452450	22.375346	13.47016417	14.09742156	13.03986528	14.94907431	10.09891899	10.63044104	6.721906735
-0.85	-144.0465093	-200.659924	-278.559170	-110.3603118	-118.4038003	-111.3648911	-134.0428155	-133.866605	-141.6182656	-58.78817134
+0.85	9.887330054	14.404711	16.739078	9.251791606	9.587732201	8.808177731	9.890019064	6.867916177	7.264725865	4.500674206
-0.9	-150.7860977	-214.343152	-300.966282	-115.2113105	-123.6630222	-116.3452926	-140.153296	-140.9141961	-149.0879969	-61.45169388
+0.9	4.858657782	9.468085	11.512214	4.920887857	4.963141083	4.585571505	4.906886895	4.042751834	4.27924177	2.544596129
-0.95	-156.3061787	-226.459364	-321.498719	-119.1605891	-127.9491656	-120.4069788	-145.1460111	-146.7455596	-155.2695813	-63.62621564
+0.95	4.21903937	6.263514	9.196658	3.183797548	3.426376322	3.229799175	3.91134923	4.042751834	4.27924177	1.699835267
-1	-161.9545944	-239.981510	-344.183711	-123.1713846	-132.3078313	-124.5409212	-150.2395034	-152.787054	-161.6750807	-65.84236257
+1	4.22E+00	6.124497	9.071543	3.18E+00	3.43E+00	3.23E+00	3.91E+00	4.04E+00	4.28E+00	1.70E+00
(Span 2) -2	-1.48E+01	-21.457691	-31.782917	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.42E+01	-1.50E+01	-5.96E+00
+2	1.57E+02	250.053389	360.956727	123.2464149	132.4230619	124.6713937	150.4706712	153.7083629	162.6605009	65.9118447
-2.05	-1.48E+01	-21.664269	-31.968837	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.42E+01	-1.50E+01	-5.96E+00
+2.05	1.50E+02	233.957489	335.552331	118.7828103	127.5714283	120.0693668	144.7988505	147.0074475	155.5563377	63.44392908
-2.1	-14.78175972	-22.311588	-32.551423	-11.15470314	-12.00459843	-11.31587378	-13.70374162	-14.16412175	-14.99268416	-5.955515967
+2.1	142.4043641	217.704560	309.733132	113.6951936	122.0528923	114.8416832	138.3794367	139.6011359	147.7065352	60.6469909
-2.15	-14.78175972	-25.321966	-36.995588	-11.78514615	-12.32616746	-11.39640736	-13.70374162	-14.16412175	-14.99268416	-5.955515967
+2.15	134.1064382	201.423708	283.730493	108.056578	115.9460838	109.0624731	131.3022856	131.584926	139.2122088	57.5604757
-2.2	-20.40924672	-32.408713	-45.075843	-17.43563651	-18.37386416	-17.07563169	-19.85241418	-14.85759795	-15.64761925	-8.889320894
+2.2	125.2900319	185.236848	257.769306	101.9399797	109.329636	102.8058912	123.6572813	123.0543047	130.1744622	54.22383542

-2.25	-28.33957411	-40.522263	-54.306171	-23.56241383	-24.93959571	-23.24643297	-27.26335489	-22.06536748	-23.269605	-12.13980361
+2.25	116.0529018	169.258722	232.356351	95.41843689	102.282204	96.1460958	115.5343125	114.1048188	120.6944627	50.67650331
-2.3	-36.84745996	-49.634565	-64.634256	-30.09246007	-31.9447279	-29.83467835	-35.1910684	-29.91124561	-31.56848593	-15.61528085
+2.3	106.4928318	153.596838	207.792210	88.56495895	94.88241537	89.1572064	107.0232217	104.831891	110.873246	46.95793323
-2.35	-45.83529653	-59.710383	-76.001310	-36.95274145	-39.31060866	-36.76620721	-43.5456621	-38.2997462	-40.44315903	-19.27630791
+2.35	96.70757755	138.351544	183.807468	81.45257564	87.20891545	81.91339949	98.21391818	95.33109874	100.8120118	43.10756185
-2.4	-55.20540027	-70.707277	-88.342050	-44.07024001	-46.95860351	-43.96688876	-52.23728113	-47.13536637	-49.7925036	-23.08343853
+2.4	86.79491173	123.615960	160.591315	74.15428839	79.34032265	74.48880237	89.19625565	85.69791017	90.61184405	39.16483765
-2.45	-64.86020028	-82.575588	-101.584732	-51.37194761	-54.8100881	-51.36255939	-61.17602961	-56.32260667	-59.51540261	-26.99722989
+2.45	77.69468126	109.476027	138.326491	66.74313553	71.35529299	66.95754227	80.06008283	75.80839473	80.14155812	35.16920085
-2.5	-75.1522413	-95.853350	-117.189234	-59.12322116	-63.15064491	-59.22241436	-70.68778333	-66.19976068	-69.96991911	-31.16014268
+2.5	68.44120833	95.258230	116.258019	58.78451952	62.78607611	58.87878658	70.27168705	65.76559298	69.51034235	30.97818802
-2.55	-85.08522399	-109.476315	-138.326492	-66.74344473	-71.35562581	-66.95785798	-80.06046575	-75.80877055	-80.14195598	-35.16924536
+2.55	59.55121381	82.575319	101.574026	51.37163914	54.8097564	51.36226709	61.17567611	56.32224215	59.51501681	26.99718267
-2.6	-95.19828612	-123.616225	-160.591320	-74.15459542	-79.34065356	-74.48909223	-89.196607	-85.6982855	-90.61224141	-39.1648704
+2.6	50.90825432	70.706996	88.339988	44.06995929	46.95830176	43.96660428	52.23693738	47.13501564	49.79213246	23.08339439
-2.65	-105.0364689	-138.351809	-183.807462	-81.45285366	-87.20921552	-81.91368225	-98.21426213	-95.33147084	-100.8124058	-43.10759632
+2.65	42.4993222	59.710126	75.819385	36.95245885	39.31030518	36.7659213	43.54531732	38.29941115	40.44280453	19.27626419
-2.7	-114.6327063	-153.597092	-207.792215	-88.56524253	-94.88272101	-89.15748512	-107.0235602	-104.8322844	-110.8736626	-46.95796911
+2.7	34.41129392	49.634312	64.468592	30.09218165	31.94442909	29.83440635	35.19074077	29.91092996	31.56815203	15.61523956
-2.75	-123.9211239	-169.258968	-232.356353	-95.41871543	-102.2825052	-96.14636943	-115.5346459	-114.1051701	-120.6948348	-50.67654154
+2.75	26.73107867	40.522029	54.157766	23.56216672	24.93933072	23.24618471	27.26305663	22.06507359	23.26929419	12.1397732
-2.8	-132.8041462	-185.237091	-257.769305	-101.9402353	-109.329912	-102.8061527	-123.6576004	-123.054659	-130.1748376	-54.2238721
+2.8	19.54555052	32.408488	44.945450	17.43539957	18.3736102	17.07540154	19.8521378	14.85734165	15.64734826	8.889290348
-2.85	-141.1840898	-201.423917	-283.730491	-108.056816	-115.9463415	-109.0627081	-131.3025729	-131.5852476	-139.2125496	-57.56051465
+2.85	14.78824908	25.321758	36.867564	11.78492108	12.3259268	11.39618867	13.70374212	14.16412201	14.99268471	5.955516109
-2.9	-148.9633701	-217.704755	-309.733130	-113.695417	-122.0531345	-114.8419049	-138.3797087	-139.6014355	-147.7068527	-60.64702548
+2.9	14.78824908	22.311587	32.551423	11.15470289	12.00459848	11.31587376	13.70374212	14.16412201	14.99268471	5.955516109
-2.95	-156.044329	-233.957657	-335.552332	-118.7830029	-127.5716373	-120.0695654	-144.7990946	-147.0077229	-155.5566296	-63.44395304
+2.95	14.78824908	21.664269	31.968837	11.15470289	12.00459848	11.31587376	13.70374212	14.16412201	14.99268471	5.955516109
-3	-162.5945128	-250.779249	-362.097785	-123.433462	-132.6266512	-124.8646753	-150.709467	-153.9948964	-162.9643319	-66.01559429
+3	14.78824908	21.457691	31.782917	11.15470289	12.00459848	11.31587376	13.70374212	14.16412201	14.99268471	5.955516109
(Span 3) -4	-4.220891504	-6.124497	-9.071543	-3.183797477	-3.426376336	-3.22979917	-3.911349371	-4.042751909	-4.279241925	-1.699835308
+4	155.7841551	239.234142	342.938398	122.9608062	132.0788072	124.3235961	149.9713582	152.4661131	161.3347669	65.7258396
-3.05	-4.220891504	-6.247763	-9.182483	-3.183797477	-3.426376336	-3.22979917	-3.911349371	-4.042751909	-4.279241925	-1.699835308
+3.05	150.2180617	227.213949	322.773193	119.3954289	128.2041947	120.6487563	145.4435377	147.0955983	155.6406746	63.75581446
-3.1	-5.104567485	-9.722076	-11.746410	-5.149751522	-5.207356018	-4.779311172	-5.120978823	-4.042751909	-4.279241925	-2.624542944
+3.1	143.4290874	213.583726	299.731629	114.952696	123.3825046	116.079569	139.8269866	140.535577	148.6866702	61.30959818
-3.15	-9.571145485	-14.110134	-16.384867	-8.999674094	-9.318351983	-8.55548735	-9.588240346	-6.684587871	-7.069931548	-4.368068676
+3.15	136.9534573	201.420378	279.813478	110.6404679	118.7073943	111.6523123	134.3951669	134.2707731	142.0466142	58.94190898
-3.2	-15.45159323	-19.788924	-22.702453	-13.74512177	-14.39151393	-13.31592712	-15.27942489	-10.38798847	-10.9347247	-6.866836412
+3.2	129.2044748	187.737321	257.093331	105.4047823	113.0360332	106.2846193	127.8197532	126.7664299	134.0937865	56.07384339
-3.25	-21.31275763	-25.503133	-29.203441	-18.31099314	-19.27733431	-17.90342399	-20.7737745	-15.27110013	-16.07766907	-9.278552916
+3.25	121.9317014	175.620067	236.690138	100.4296759	107.6508564	101.1902101	121.5872841	119.7171384	126.6240272	53.3538503
-3.3	-28.41337277	-32.687169	-37.353280	-23.81467302	-25.17133229	-23.44039278	-27.41522938	-21.69679193	-22.87225161	-12.19313221
+3.3	113.3491858	162.089880	213.583395	94.49548286	101.2315345	95.11992566	114.1692673	111.3920082	117.8031779	50.11494331
-3.35	-35.14801314	-39.748072	-45.336464	-29.01251204	-30.7415357	-28.67552516	-33.70261116	-27.84950202	-29.37927005	-14.95179107
+3.35	105.3917176	150.195179	192.975140	88.94146724	95.22671968	89.44362337	107.2394929	103.6680449	109.6199909	47.08799932
-3.4	-43.16810544	-48.453308	-55.141941	-35.17994373	-37.3546215648448	-34.89314419	-41.1781196206897	-35.23587323	-37.1920894712451	-18.23117879
+3.4	96.14263082	137.009208	169.790306	82.40321031	88.16114547	82.76669067	99.09516787	94.64567384	100.0619334	43.52929859
-3.45	-50.66394903	-56.868689	-64.583470	-40.92581931	-43.51882098	-40.69065338	-48.15519161	-42.1876157	-44.54607284	-21.29142247
+3.45	88.89245587	125.500700	152.190194	76.35426855	81.62713607	76.59375219	91.57143073	86.3568146	91.2815518	40.24075982
-3.5	-59.47728225	-67.096660	-76.011295	-47.66251998	-50.74924356	-47.49298987	-56.34847103	-50.41112643	-53.24632221	-24.88458299
+3.5	80.45377938	112.835861	138.008282	69.30642989	74.01705961	69.40604251	82.81700481	76.760778	81.11713071	36.41326723
-3.55	-67.62203431	-76.861505	-89.187905	-53.87244628	-57.41699256	-53.76761368	-63.91188359	-58.05208391	-61.33099328	-28.20105711

+3.55	*72.72635655*	*101.864454*	*125.607154*	*62.84648658*	*67.0442356419841*	*62.8217296847565*	74.80265237	*68.01690478*	*71.85590023*	*32.90849167*
-3.6	*-77.1022733*	*-88.599374*	*-107.019106*	*-61.08397344*	-65.16304501	*-61.05874767*	-72.70666757	*-66.98919087*	*-70.78786207*	*-32.05694985*
+3.6	*63.806959*	*89.883289*	*111.931018*	*55.38354867*	58.99140762	*55.21917802*	65.55441116	*57.97067541*	*61.21585139*	*28.86324237*
-3.65	*-85.78373138*	*-99.695882*	*-123.938739*	*-67.6739865*	-72.24392091	*-67.72523122*	-80.75308218	*-75.20955227*	*-79.48695023*	*-35.58429562*
+3.65	*55.70219328*	*79.587080*	*100.055624*	*48.59659481*	51.67022097	*48.30872368*	57.15275534	*48.88157361*	*51.59001538*	*25.18760218*
-3.7	*-95.80454489*	*-112.916428*	*-144.134060*	*-75.26590346*	-80.40390152	*-75.40922083*	-90.03307747	*-84.7367481*	*-89.56966592*	*-39.65192223*
+3.7	*46.38008574*	*68.437759*	*87.053307*	*40.81299899*	43.27634694	*40.38730269*	*47.52702866*	*38.50872662*	*40.60518306*	*20.97562423*
-3.75	*-104.9104112*	*-125.314008*	*-163.079374*	*-82.15200896*	-87.80744901	*-82.38230205*	*-98.45914614*	*-93.42669869*	*-98.7668968*	*-43.34477144*
+3.75	*38.00079135*	*58.942077*	*75.847263*	*33.78297349*	35.6971937	*33.23601976*	*38.84147985*	*29.18420761*	*30.73101237*	*17.17442093*
-3.8	*-115.3455302*	*-139.975623*	*-185.465059*	*-90.02980096*	-96.27957325	*-90.36328107*	*-108.1081514*	*-103.4203419*	*-109.344545*	*-47.57309108*
+3.8	*28.46070211*	*48.758356*	*63.673864*	*25.77318361*	27.06400394	*25.09154211*	*28.95440409*	*19.55669919*	*20.58599914*	*12.84677054*
-3.85	*-124.7635375*	*-153.630898*	*-206.275842*	*-97.12811229*	-103.9154527	*-97.55770076*	*-116.8105293*	*-112.4700999*	*-118.9236789*	*-51.38613476*
+3.85	*19.90423931*	*40.175699*	*53.576587*	*18.58413221*	19.31739474	*17.78466144*	*20.08827229*	*18.50892205*	*19.593422*	*8.965408414*
-3.9	*-135.4867386*	*-169.677592*	*-230.665174*	*-105.1973453*	-112.5980222	*-105.7397283*	*-126.7122526*	*-122.806715*	*-129.8655206*	*-55.7240928*
+3.9	*19.20109104*	*32.304519*	*47.222351*	*14.44673312*	15.55060187	*14.6595631*	*17.75776818*	*18.50892205*	*19.593422*	*7.736339443*
-3.95	*-145.1045462*	*-184.534397*	*-253.169711*	*-112.4238426*	-120.3757508	*-113.0702266*	*-135.5875945*	*-132.1064318*	*-139.7102476*	*-59.61193558*
+3.95	*19.20109104*	*31.475717*	*46.476429*	*14.44673312*	15.55060187	*14.6595631*	*17.75776818*	*18.50892205*	*19.593422*	*7.736339443*
-5	*-155.9894562*	*-201.895793*	*-279.367962*	*-120.5900533*	-129.1670359	*-121.3573848*	*-145.6257718*	*-142.6624782*	*-150.8854753*	*-64.00856486*
+5	*19.20109104*	*31.164662*	*46.196479*	*14.44673312*	15.55060187	*14.6595631*	*17.75776818*	*18.50892205*	*19.593422*	*7.736339443*

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.0772652	-15.93232105	-17.15509171	-25.58296053	-8.874849789	-11.98655609	-13.73761302	-15.38939354	-17.13769927
End Shear	91.50923032	123.9283397	127.7891917	151.0580985	73.61460577	99.27129337	112.6886003	123.8706253	135.4212368
-0.05	-11.0772652	-15.93232105	-17.15509171	-25.65455434	-8.874849789	-11.98655609	-13.73761302	-15.38939354	-17.13769927
+0.05	85.42098936	115.1165344	118.2613542	136.1558901	68.73882277	92.69139281	105.1441538	115.4286488	126.0277829
-0.1	-11.0772652	-15.93232105	-17.15509171	-25.89597343	-8.874849789	-11.98655609	-13.73761302	-15.38939354	-17.13769927
+0.1	79.18066298	106.0989369	108.5256385	121.1681661	63.74233439	85.94633417	97.41154534	106.7807602	116.4104104
-0.15	-12.53007915	-15.93232105	-17.15509171	-26.25299807	-10.43275409	-13.97778051	-14.75867406	-15.38939354	-17.13769927
+0.15	73.67863376	98.17654466	99.99479866	108.3643982	59.33584672	79.99804664	90.59595572	99.16524653	107.9487414
-0.2	-18.75907768	-18.16897987	-17.15509171	-26.81374153	-15.41413306	-20.70403601	-22.48882135	-22.78071723	-22.77765614
+0.2	67.55791925	89.39588435	90.56576479	94.72544381	54.43255371	73.37945691	83.01644738	90.70397843	98.55607428
-0.25	-24.24687568	-25.47152359	-22.09064587	-27.45221167	-19.80164007	-26.62870805	-29.30132373	-30.43839109	-31.26440329
+0.25	62.19450581	81.7313941	82.35921531	83.45704357	50.13474076	67.57846418	76.37698959	83.29923721	90.34421202
-0.3	-30.34689877	-34.49533591	-30.48744817	-30.19785833	-24.67733557	-33.21295506	-36.87633307	-38.96095238	-40.79886329
+0.3	56.26606806	73.29406507	73.35315916	71.69340877	45.3827758	61.16482212	69.04068967	75.12559351	81.28888627
-0.35	-35.68775518	-42.42485898	-38.70262984	-37.27308372	-28.94506641	-38.97651574	-43.51088179	-46.43249108	-49.1652756
+0.35	51.1058684	65.98203651	65.57426408	62.36644508	41.24531356	55.58088284	62.65746474	68.02141735	73.42694415
-0.4	-41.58613939	-51.21536271	-48.4012418	-45.7243163	-33.65694976	-45.34028316	-50.84064672	-54.69514647	-58.42653512
+0.4	45.4423709	57.9944328	57.10744938	52.63403282	36.70280513	49.45066717	55.65447589	60.23640808	64.82160104
-0.45	-46.71546093	-58.8902115	-56.89163754	-53.26879985	-37.75323241	-50.87297749	-57.21715319	-61.89077385	-66.50005117
+0.45	40.54996679	51.12944066	49.85956939	44.87287954	32.77736656	44.15354215	49.60757565	53.52257632	57.40970189
-0.5	-52.33953857	-67.34100956	-66.2667749	-61.90457369	-42.24316862	-56.93777582	-64.21156487	-69.79251449	-75.3754724
+0.5	35.22407608	43.69794217	42.04829264	36.90585058	28.50244746	38.38522791	43.02800307	46.22720596	49.36697415
-0.55	-57.19274348	-74.66662552	-74.41794924	-71.34466515	-46.11632827	-62.16984842	-70.24994183	-76.62244157	-83.0559636
+0.55	30.66406451	37.37455684	35.43479187	31.02377565	24.84069619	33.44467194	37.39751474	39.99350251	42.50523792
-0.6	-62.46985032	-82.67133208	-83.35331084	-82.42246521	-50.32619034	-67.85720612	-76.81889779	-84.06227431	-91.4329168
+0.6	25.74844427	30.60556049	28.39531288	24.86933242	20.8914959	28.11673724	31.3314634	33.28877773	35.13775989
-0.65	-66.98233747	-89.55312957	-91.06190452	-93.19094068	-53.92456261	-72.71889671	-82.43903912	-90.43671121	-98.62026436
+0.65	21.58541337	24.91835665	22.51954603	19.79871085	17.54510856	23.60250886	26.19749595	27.62498538	28.92630743
-0.7	-71.83981048	-97.00535309	-99.44123003	-105.5759905	-57.79621907	-77.95033684	-88.49243465	-97.31362124	-106.3861138
+0.7	17.15272586	18.91825501	16.6198866	14.74719223	13.97975782	18.79342859	20.73507328	21.61191136	22.34671799
-0.75	-75.94699743	-103.3487739	-106.6038722	-117.9314808	-61.06812883	-82.37188751	-93.61425173	-103.14279	-112.980197
+0.75	13.45126304	13.96179676	12.08845693	10.89694425	11.00040549	14.77528552	16.17769644	16.60781447	16.88566931
-0.8	-80.31217035	-110.1421227	-114.3108651	-132.2164729	-64.54345015	-87.068936	-99.06198074	-109.3557695	-120.0223063
+0.8	9.574182628	9.178739902	7.911529313	7.36115974	7.877033908	10.56354725	11.40900697	11.3874024	11.38688612
-0.85	-83.94946195	-115.8525869	-120.8242175	-145.4327767	-67.43722554	-90.98058922	-103.6053815	-114.5498869	-125.9229983
+0.85	6.398882076	5.834816089	5.16197199	5.220990336	5.316388281	7.111246994	7.508337243	7.497459722	7.497021316
-0.9	-87.7496675	-121.8806702	-127.7426044	-160.2947375	-70.45808026	-95.06475721	-108.3573383	-119.9979337	-132.1287377
+0.9	3.375691683	3.479208711	3.720999602	5.020731819	2.693126643	3.688880775	3.90759925	3.90723888	3.906883888
-0.95	-90.85247338	-126.8636133	-133.5032917	-173.1902789	-72.92204986	-98.39675563	-112.2422281	-124.467215	-137.2359247
+0.95	2.4378595	3.479208711	3.720999602	4.919613871	1.95441264	2.640182028	3.023501886	3.386078584	3.768538286
-1	-94.01505138	-132.0200403	-139.5167932	-187.2901094	-75.43030848	-101.7895798	-116.2083078	-129.0493092	-142.4926522
+1	2.44E+00	3.48E+00	3.72E+00	4.88E+00	1.95E+00	2.64E+00	3.02E+00	3.39E+00	3.77E+00
(Span 2) -2	-8.54E+00	-1.22E+01	-1.30E+01	-1.71E+01	-6.85E+00	-9.25E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2	9.41E+01	132.7694221	140.8276478	199.6150111	75.51268868	101.9066666	116.409313	129.3989476	143.0240312
-2.05	-8.54E+00	-1.22E+01	-1.30E+01	-1.72E+01	-6.85E+00	-9.25E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2.05	90.62621661	127.0501692	134.1917074	184.7185316	72.72094251	98.12990583	111.9944238	124.296672	137.1714541
-2.1	-8.541246071	-12.18970082	-13.03683574	-17.33126704	-6.847449593	-9.250100364	-10.59309361	-11.86341179	-13.20339162
+2.1	86.63709841	120.7171983	126.9420559	169.530336	69.55050865	93.84269401	107.0028821	118.5659005	130.6378746
-2.15	-8.541246071	-12.18970082	-13.03683574	-17.62887536	-6.883773863	-9.250100364	-10.59309361	-11.86341179	-13.20339162
+2.15	82.23451039	113.8527496	119.1685926	154.2011073	66.04631702	89.10568257	101.5043503	112.2847192	123.510356
-2.2	-12.62773771	-13.26428513	-13.03683574	-18.07049851	-10.32047136	-13.86502417	-15.20345886	-15.65625136	-15.97207747
+2.2	77.47461092	106.5390547	110.9611738	138.799468	62.25330448	83.97954352	95.56846567	105.5312042	115.875988
-2.25	-17.27023902	-19.51416706	-17.29030758	-18.66828907	-14.05559238	-18.90348433	-20.9247644	-21.95290006	-22.85742911

+2.25	72.41358915	98.85839589	102.40973	123.4286836	58.21640883	78.5249529	89.26489231	98.38344122	107.8218291
-2.3	-22.23332895	-26.30732545	-24.29728338	-23.41941579	-18.04418215	-24.284939	-27.04932401	-28.71951013	-30.28669772
+2.3	67.10759635	90.89294893	93.60410421	108.5669741	53.98055879	72.80255279	82.66327672	90.91950373	99.43496208
-2.35	-27.46083495	-33.56153022	-31.86521928	-30.0358787	-22.24131682	-29.94871192	-33.50748092	-35.87800125	-38.17281302
+2.35	61.61281886	82.72502336	84.63423143	94.15173906	49.59071039	66.87303331	75.83329297	83.2174936	90.80242379
-2.4	-32.89658045	-41.19453616	-39.9042247	-37.40572699	-26.60205323	-35.83415028	-40.22957557	-43.35028089	-46.42871702
+2.4	55.98541856	74.43683334	75.3842501	80.58207601	45.09176372	60.79704438	68.84455534	75.35544951	82.0113034
-2.45	-38.48438089	-49.12410173	-48.32440138	-46.38912534	-31.08145935	-41.88057471	-47.14594994	-51.05830169	-54.96730449
+2.45	50.28159088	65.92161159	66.35691964	67.97525094	40.52869261	54.63523556	61.76676153	67.36535834	73.05076613
-2.5	-44.42781399	-57.64193076	-57.4373217	-56.87102632	-35.84258762	-48.30812808	-54.50885388	-59.28394587	-64.10179599
+2.5	44.16787159	57.26766184	57.03557835	56.38570412	35.63443485	48.02708612	54.18669914	58.92362976	63.70120925
-2.55	-50.28181424	-65.92193534	-66.35724345	-67.97555663	-40.52887171	-54.63549364	-61.75303045	-67.35248468	-73.03792672
+2.55	38.48416036	49.1237872	48.32409112	46.38886091	31.08128445	41.88033569	47.14567653	51.05797533	54.96696688
-2.6	-55.98565587	-74.43715638	-75.38457792	-80.58244409	-45.09194127	-60.79728163	-68.84482888	-75.35575572	-82.01164687
+2.6	32.89635013	41.19423333	39.90392667	37.40551779	26.60188158	35.83391767	40.2293104	43.34998519	46.42838952
-2.65	-61.61303276	-82.72534319	-84.63455556	-94.15210447	-49.59086909	-66.87326486	-75.83355982	-83.21779397	-90.80276147
+2.65	27.46061177	33.56124052	31.86492558	30.03569088	22.24114868	29.94847834	33.50721399	35.87769499	38.17249808
-2.7	-67.10780784	-90.89328721	-93.60442571	-108.567386	-53.98072202	-72.80278091	-82.66354025	-90.91980057	-99.43526977
+2.7	22.23313157	26.30705238	24.29702067	23.41924912	18.04402351	24.28471689	27.0490799	28.71922878	30.28640982
-2.75	-72.41379011	-98.85869757	-102.4100447	-123.429066	-58.21655939	-78.52517683	-89.2651512	-98.38373453	-107.8221489
+2.75	17.2700518	19.51391244	17.29005707	18.66828872	14.05544095	18.90328145	20.92454197	21.95262756	22.85715071
-2.8	-77.47481014	-106.5393587	-110.9614763	-138.7862581	-62.25345818	-83.97975804	-95.56870511	-105.5314758	-115.876282
+2.8	12.62755892	13.26406275	13.0368358	18.07049815	10.32033822	13.86483624	15.20323796	15.65600876	15.97183131
-2.85	-82.23469492	-113.8530253	-119.168883	-154.2014911	-66.04645932	-89.10587497	-101.5045654	-112.2849824	-123.5106443
+2.85	8.541246316	12.18970125	13.0368358	17.62887502	6.883650556	9.250100635	10.59309379	11.86341197	13.20339172
-2.9	-86.63727352	-120.7174546	-126.9423277	-169.5307135	-69.5506387	-93.84287567	-107.0030942	-118.5661355	-130.6381413
+2.9	8.541246316	12.18970125	13.0368358	17.3312667	6.847449643	9.250100635	10.59309379	11.86341197	13.20339172
-2.95	-90.62636342	-127.0504044	-134.1919679	-184.7188969	-72.72105951	-98.13006877	-111.9946071	-124.2968903	-137.1716867
+2.95	8.541246316	12.18970125	13.0368358	17.16365749	6.847449643	9.250100635	10.59309379	11.86341197	13.20339172
-3	-94.29372257	-133.0136901	-141.1134758	-200.2830675	-75.62995799	-102.0653623	-116.5953232	-129.6148537	-143.2726765
+3	8.541246316	12.18970125	13.0368358	17.11016856	6.847449643	9.250100635	10.59309379	11.86341197	13.20339172
(Span 3) -4	-2.43785957	-3.48E+00	-3.72E+00	-4.88E+00	-1.954412654	-2.640182105	-3.023501937	-3.386078636	-3.768538316
+4	93.84864753	131.7463043	139.1959587	186.5186427	75.29843646	101.6111672	115.9994352	128.80738	142.2144618
-3.05	-2.43785957	-3.48E+00	-3.72E+00	-4.92E+00	-1.954412654	-2.640182105	-3.023501937	-3.386078636	-3.768538316
+3.05	91.03728611	127.1625573	133.8503346	173.9849417	73.06872968	98.59513994	112.4738115	124.7341664	137.5415613
-3.1	-3.504393546	-3.507696683	-3.720999619	-5.029377257	-2.831566555	-3.840330522	-4.084733902	-4.084365869	-4.08400866
+3.1	87.54679504	121.5569724	127.3698452	159.4779945	70.2968946	94.84681343	108.1035185	119.7064517	131.7962237
-3.15	-6.209407562	-5.693617722	-4.998092775	-5.207314169	-5.163498402	-6.905141029	-7.275740291	-7.266432701	-7.265996769
+3.15	84.16866265	116.198436	121.2198743	146.2668481	67.61155586	91.21625106	103.8793354	114.8634912	126.2797382
-3.2	-9.781454246	-9.429582062	-8.091196716	-7.515105194	-8.044093611	-10.78880804	-11.66380127	-11.6658498	-11.66532237
+3.2	80.07687991	109.7743937	113.8926433	131.4290083	64.35619099	86.81581503	98.76820391	109.0203403	119.6417115
-3.25	-13.22792994	-13.66456659	-11.81701825	-10.6682044	-10.82055733	-14.53276428	-15.90284042	-16.30644981	-16.55726232
+3.25	76.19654487	103.7356267	107.0417172	118.7307646	61.26688578	82.64047923	93.92557675	103.4974571	113.3818073
-3.3	-17.39190818	-19.24033742	-16.91463782	-14.99963489	-14.17219571	-19.05298662	-21.02968513	-21.93582864	-22.70069107
+3.3	71.5761309	96.59951264	98.9839958	104.8916552	57.58612221	77.66640899	88.16372643	96.93987506	105.9637242
-3.35	-21.33223656	-24.57401932	-22.16506258	-19.49477973	-17.34152865	-23.32790523	-25.885375	-27.28103468	-28.54948618
+3.35	67.25821542	89.97508578	91.53545027	93.88232501	54.14450719	73.0160576	82.78273267	90.8268357	99.0604731
-3.4	-26.01549526	-30.9718750653054	-28.77504914	-25.19910033	-21.10607797	-28.4062366627577	-31.66089827	-33.65256879	-35.5371181824615
+3.4	62.18182073	82.23329493	82.86357731	81.80862197	50.09647323	67.54685238	76.46027142	83.65583113	90.97497094
-3.45	-30.38509604	-36.98901628	-35.0326207	-30.66985524	-24.61662008	-33.14236023	-37.05313972	-39.61255474	-42.08623185
+3.45	57.49089712	75.1177446	74.92074039	71.9613965	46.35424586	62.49124054	70.62100274	77.04239197	83.52854534
-3.5	-35.51494069	-44.10256753	-42.47255783	-37.31557032	-28.73595506	-38.70031006	-43.38723793	-46.62523831	-49.80543053
+3.5	52.03121987	66.87669688	65.75096583	61.35885366	41.99707536	56.60534021	63.82803502	69.35897176	74.88825987
-3.55	-40.24924255	-50.70859619	-49.4161804	-44.40300452	-32.53600973	-43.82787883	-49.23596357	-53.11023999	-56.95478937
+3.55	47.03186173	59.3646508437535	57.4172278024107	53.7405790891042	38.0058789363047	51.2142281302782	57.610586103608	62.3349675212904	66.99875376

-3.6	-45.75302351	-58.43145029	-57.56978627	-53.13406651	-36.9519953	-49.78696745	-56.03850606	-60.66306161	-65.29291934
+3.6	41.26154594	50.73067815	47.86583042	45.25325864	33.39769793	44.99012497	50.43721419	54.24010823	57.91628752
-3.65	-50.78739987	-65.53179958	-65.0961015	-61.79961461	-40.98992027	-55.23622732	-62.26360108	-67.58332422	-72.94237966
+3.65	36.01838363	42.91668099	39.24455375	37.74084986	29.20923554	39.33324841	43.92165481	46.89532712	49.68382257
-3.7	-56.59245263	-73.757595	-73.84709487	-72.29214288	-45.64442814	-61.51795672	-69.4445056	-75.57528162	-81.78677506
+3.7	30.01009652	33.99620349	30.02289133	29.79661211	24.40817585	32.84946565	36.45803704	38.49006335	40.27184139
-3.75	-61.86235087	-81.25769499	-81.85273999	-82.77064337	-49.86852123	-67.21914774	-75.96585106	-82.84096749	-89.83624787
+3.75	24.58770019	25.97482222	22.55882648	27.49645565	20.07410258	26.99662612	29.72448456	30.91426221	31.79653652
-3.8	-67.89601052	-89.87995433	-91.08480978	-95.4472503	-54.70341971	-73.74508183	-83.43503647	-91.17107933	-99.07430229
+3.8	18.41406541	17.71726612	17.15509196	26.77819686	15.1382969	20.33155584	22.0606265	22.2996031	22.29654796
-3.85	-73.3368	-97.68526355	-99.46645706	-107.5816394	-59.06202452	-79.62844661	-90.17258806	-98.69240169	-107.4235715
+3.85	12.87702482	15.93232099	17.15509196	26.27974438	10.71024994	14.35248778	15.1891727	15.38939411	17.13769981
-3.9	-79.52640284	-106.5976528	-109.0633534	-121.9855193	-64.01918429	-86.32008843	-97.8399257	-107.2596344	-116.942713
+3.9	11.07726519	15.93232099	17.15509196	25.87810266	8.874850057	11.9865561	13.73761354	15.38939411	17.13769981
-3.95	-85.07351168	-114.6135723	-117.7176098	-135.3082923	-68.46066298	-92.31586874	-104.7135128	-114.946838	-125.4917211
+3.95	11.07726519	15.93232099	17.15509196	25.66350222	8.874850057	11.9865561	13.73761354	15.38939411	17.13769981
-5	-91.34643557	-123.7097012	-127.5630522	-150.8369732	-73.48195316	-99.09474011	-112.4888958	-123.650184	-135.1791861
+5	11.07726519	15.93232099	17.15509196	25.58296104	8.874850057	11.9865561	13.73761354	15.38939411	17.13769981

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-30.91821473	-34.22169013	-19.4102	-23.3513	-25.2151
End Shear	228.3512432	246.8912911	148.3478	178.7558	190.3929
-0.05	-30.91821473	-34.22169013	-19.4102	-23.3513	-25.2151
+0.05	211.2540031	228.2571652	137.5949	165.8405	176.4414
-0.1	-30.91821473	-34.22169013	-19.4102	-23.3513	-25.2151
+0.1	193.7890347	208.9500308	126.5994	152.6312	162.1783
-0.15	-30.91821473	-34.22169013	-19.4102	-23.3513	-25.2151
+0.15	178.487433	192.0539093	116.9493	141.0361	149.6676
-0.2	-30.91821473	-34.22169013	-20.4345	-23.6474	-25.2151
+0.2	161.5769401	173.4039325	106.2653	128.1961	135.8247
-0.25	-37.79372018	-39.73038896	-27.9808	-34.3406	-34.3363
+0.25	146.8608917	157.1950973	96.95008	116.9986	123.7628
-0.3	-53.32313143	-53.63250735	-38.8014	-47.3243	-47.9988
+0.3	130.7134078	139.4343185	86.70796	104.6842	110.5096
-0.35	-68.73150718	-69.67977363	-48.544	-59.0124	-60.6898
+0.35	116.7682435	124.1189912	77.84337	94.02343	99.04705
-0.4	-86.15010872	-89.11609319	-59.3556	-71.9807	-74.7813
+0.4	101.5922462	107.4794513	68.17339	82.39099	86.55285
-0.45	-101.4011606	-106.1530783	-68.8053	-83.3132	-87.105
+0.45	88.60330292	93.26391343	59.87529	72.40593	75.84036
-0.5	-118.2442877	-124.9908054	-79.2222	-95.8032	-100.699
+0.5	74.60730254	77.9776652	50.90777	61.61183	64.2746
-0.55	-132.8911309	-141.3925806	-88.2631	-106.641	-112.504
+0.55	62.75991265	65.06815636	43.292	52.44146	54.46268
-0.6	-148.9502645	-159.3996587	-98.155	-118.496	-125.431
+0.6	50.15243063	51.36722017	35.15723	42.64207	43.99476
-0.65	-162.8075674	-174.9599572	-106.671	-128.701	-136.568
+0.65	39.63192683	39.97003681	28.33961	34.4254	35.23399
-0.7	-177.8742263	-191.9043823	-115.908	-139.765	-148.658
+0.7	28.79197854	29.11000086	21.16793	25.77711	26.03333
-0.75	-190.7566535	-206.4169489	-123.784	-149.197	-158.976
+0.75	20.56389733	21.44358924	15.34945	18.75532	18.76159
-0.8	-204.6223125	-222.0666424	-132.234	-159.314	-170.06
+0.8	13.26649263	13.73815428	10.59353	12.01333	12.47618
-0.85	-216.3445287	-235.3252392	-139.354	-167.834	-179.408
+0.85	8.242737939	8.425209958	7.31414	8.034553	8.444133
-0.9	-228.8007127	-249.4481761	-146.889	-176.847	-189.316
+0.9	6.722202602	7.428918249	4.228625	5.092945	5.49157
-0.95	-239.1773829	-261.2465055	-153.136	-184.316	-197.545
+0.95	6.722202602	7.428918249	4.228625	5.092945	5.49157
-1	-250.0155776	-273.610675	-159.625	-192.069	-206.108
+1	6.72E+00	7.43E+00	4.23E+00	5.09E+00	5.49E+00
(Span 2) -2	-2.36E+01	-2.60E+01	-1.48E+01	-1.78E+01	-1.92E+01
+2	252.3744935	276.5318866	160.7489	193.3703	207.716
-2.05	-2.36E+01	-2.60E+01	-1.48E+01	-1.78E+01	-1.92E+01
+2.05	240.4030762	262.8919131	153.5641	184.7799	198.2395
-2.1	-23.55180317	-26.02784105	-14.8153	-17.8436	-19.2402
+2.1	227.3366793	248.0843139	145.653	175.3125	187.8371
-2.15	-23.55180317	-26.02784105	-14.8153	-17.8436	-19.2402
+2.15	213.3364726	232.2884757	137.1165	165.0891	176.6398
-2.2	-23.55180317	-26.02784105	-14.8153	-17.8436	-19.2402
+2.2	198.5636352	215.6837069	128.0552	154.2305	164.7786
-2.25	-30.34507846	-30.45888829	-22.0237	-26.7904	-27.2515

+2.25	183.1793253	198.449483	118.5699	142.8575	152.3843
-2.3	-42.90512383	-43.96211575	-30.1654	-36.6064	-37.7155
+2.3	167.344782	180.7650674	108.7613	131.0911	139.588
-2.35	-56.47646754	-58.7411879	-38.8973	-47.1251	-48.9651
+2.35	151.2211002	162.8099363	98.73022	119.0522	126.5207
-2.4	-70.8979522	-74.51322856	-48.1185	-58.2255	-60.8691
+2.4	134.7584757	144.7634086	88.57728	106.8616	113.2139
-2.45	-86.00834744	-91.09893684	-57.7285	-69.787	-73.2967
+2.45	118.384276	126.8048113	78.17263	94.36306	99.79696
-2.5	-102.3672754	-109.1137471	-68.0816	-82.2357	-86.7068
+2.5	101.6459325	108.318716	67.62617	81.68814	86.11641
-2.55	-118.3849063	-126.8049446	-78.173	-94.3635	-99.7974
+2.55	86.00774728	91.09881026	57.72818	69.78659	73.29624
-2.6	-134.7295599	-144.7635394	-88.5611	-106.847	-113.187
+2.6	70.89738188	74.51310842	48.11818	58.22513	60.86865
-2.65	-151.2217299	-162.810067	-98.7306	-119.053	-126.521
+2.65	56.47596276	58.74107199	38.89693	47.12467	48.96466
-2.7	-167.3454116	-180.7651987	-108.762	-131.092	-139.588
+2.7	42.90463504	43.96199032	30.1651	36.60601	37.71515
-2.75	-183.1799395	-198.4496119	-118.57	-142.858	-152.385
+2.75	30.34464871	30.63252839	22.02348	26.79011	27.25111
-2.8	-198.5641854	-215.6838379	-128.056	-154.231	-164.779
+2.8	23.55180364	26.02784088	14.81534	17.84356	19.24018
-2.85	-213.3370148	-232.2885959	-137.117	-165.089	-176.64
+2.85	23.55180364	26.02784088	14.81534	17.84356	19.24018
-2.9	-227.3371686	-248.0844254	-145.653	-175.313	-187.837
+2.9	23.55180364	26.02784088	14.81534	17.84356	19.24018
-2.95	-240.4035488	-262.8919997	-153.564	-184.78	-198.24
+2.95	23.55180364	26.02784088	14.81534	17.84356	19.24018
-3	-252.8904386	-277.1213369	-161.057	-193.738	-208.123
+3	23.55180364	26.02784088	14.81534	17.84356	19.24018
(Span 3) -4	-6.722202736	-7.428918201	-4.22862	-5.09294	-5.49157
+4	249.4371323	272.9499518	159.2798	191.6568	205.6519
-3.05	-6.722202736	-7.428918201	-4.22862	-5.09294	-5.49157
+3.05	239.8026792	261.959106	153.5118	184.7648	198.0398
-3.1	-6.722202736	-7.428918201	-4.22862	-5.09294	-5.49157
+3.1	228.1293876	248.6865069	146.4838	176.3622	188.7831
-3.15	-7.976533772	-8.044836322	-7.12113	-7.82343	-8.20331
+3.15	*217.0567643*	*236.1322919*	*139.7858*	*168.3501*	*179.9756*
-3.2	*-13.61655916*	*-14.11077082*	*-10.7514*	*-12.3112*	*-12.7392*
+3.2	*203.8697403*	*221.2169157*	*131.7766*	*158.7654*	*169.4586*
-3.25	*-20.07161465*	*-20.99215086*	*-15.0221*	*-18.36*	*-18.3339*
+3.25	*191.5441999*	*207.3055902*	*124.2644*	*149.7723*	*159.6062*
-3.3	*-29.32779783*	*-29.448134*	*-21.5522*	*-26.2407*	*-26.5259*
+3.3	*177.0519427*	*190.9795305*	*115.4044*	*139.1621*	*147.9985*
-3.35	*-38.99736165*	*-39.28334145*	*-27.9274*	*-33.9284*	*-34.7047*
+3.35	*163.6589125*	*175.9172922*	*107.1938*	*129.3267*	*137.2518*
-3.4	*-50.83246477*	*-52.10460761*	*-35.5969*	*-43.1718*	*-44.5602*
+3.4	*148.0699254*	*158.4125415*	*97.61335*	*117.8473*	*124.7226*
-3.45	*-62.03959109*	*-64.28375343*	*-42.8281*	*-51.8828*	*-53.8654*
+3.45	*133.7946915*	*142.4057702*	*88.82027*	*107.3089*	*113.2322*
-3.5	*-75.36743849*	*-78.80635896*	*-51.3956*	*-62.1991*	*-64.9034*
+3.5	*117.317481*	*123.9542421*	*78.64956*	*95.11663*	*99.95107*
-3.55	*-87.80877476*	*-92.39467824*	*-59.367*	*-71.7942*	*-75.1844*
+3.55	*102.3453746*	*107.2091166*	*69.38978*	*84.01404*	*87.86744*
-3.6	*-102.420864*	*-108.3865778*	*-68.702*	*-83.027*	*-87.2356*
+3.6	*85.18842856*	*88.04309633*	*58.75923*	*71.26537*	*74.00372*

-3.65	***-115.9111374***	***-123.1778112***	***-77.2979***	***-93.3673***	***-98.342***
+3.65	***69.70467689***	***70.76589914***	***49.14859***	***59.73765***	***61.47753***
-3.7	***-131.598972***	***-140.4069666***	***-87.2702***	***-105.36***	***-111.237***
+3.7	***52.46360321***	***53.18125096***	***38.18847***	***46.5889***	***47.20062***
-3.75	***-145.9527847***	***-156.1948621***	***-96.3746***	***-116.307***	***-123.018***
+3.75	***38.65930913***	***40.48530999***	***28.53557***	***35.00638***	***35.07734***
-3.8	***-162.5078624***	***-174.4292298***	***-106.854***	***-128.904***	***-136.587***
+3.8	***30.91821496***	***34.22154237***	***20.09509***	***23.3513***	***25.21508***
-3.85	***-177.5398405***	***-191.0074456***	***-116.351***	***-140.317***	***-148.892***
+3.85	***30.91821496***	***34.22154237***	***19.41019***	***23.3513***	***25.21508***
-3.9	***-194.7536476***	***-210.015002***	***-127.207***	***-153.362***	***-162.966***
+3.9	***30.91821496***	***34.22154237***	***19.41019***	***23.3513***	***25.21508***
-3.95	***-210.2785032***	***-227.1775044***	***-136.981***	***-165.103***	***-175.645***
+3.95	***30.91821496***	***34.22154237***	***19.41019***	***23.3513***	***25.21508***
-5	***-227.9425604***	***-246.7261899***	***-148.084***	***-178.439***	***-190.055***
+5	***30.91821496***	***34.22154237***	***19.41019***	***23.3513***	***25.21508***

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	**-7.78E-13**	***-6.13E-13***	***-7.99E-13***	**-4.31E-13**	**-4.31E-13**	**-4.18E-13**	**-5.08E-13**	**-4.80E-13**	**-5.06E-13**	**-2.98E-13**
End Shear	**7.94E-13**	***7.11E-13***	***1.06E-12***	**5.44E-13**	**5.71E-13**	**5.44E-13**	**6.31E-13**	**4.65E-13**	**4.89E-13**	**3.07E-13**
-0.05	**-163.1533036**	***-264.899621***	***-392.6700733***	**-122.79723**	**-132.180112**	**-124.606283**	**-150.941029**	**-157.325832**	**-166.54408**	**-65.75864761**
+0.05	**1144.865975**	***1613.464204***	***2196.265725***	**960.3918359**	**1028.424039**	**966.071332**	**1158.704617**	**1128.844704**	**1193.834435**	**508.7727079**
-0.1	**-326.3066072**	***-529.799242***	***-785.3401465***	**-245.59446**	**-264.360224**	**-249.212566**	**-301.882057**	**-314.651665**	**-333.08816**	**-131.5172952**
+0.1	**2141.459606**	***3024.699535***	***4089.307663***	**1790.838845**	**1916.941331**	**1800.286807**	**2157.635358**	**2090.859271**	**2211.053693**	**947.3087555**
-0.15	**-489.4599108**	***-794.6988631***	***-1178.01022***	**-368.39169**	**-396.540336**	**-373.818849**	**-452.823086**	**-471.977497**	**-499.632239**	**-197.2759428**
+0.15	**3081.149323**	***4234.631552***	***5712.870744***	**2492.133203**	**2666.504684**	**2503.568746**	**2998.145814**	**2887.768857**	**3053.504729**	**1316.458842**
-0.2	**-652.6132144**	***-1059.598484***	***-1570.680293***	**-491.188919**	**-528.720448**	**-498.425132**	**-603.764114**	**-629.30333**	**-666.176319**	**-263.0345904**
+0.2	**3852.617214**	***5245.095318***	***6991.216221***	**3066.451953**	**3279.510147**	**3078.207826**	**3683.121189**	**3543.185553**	**3747.227444**	**1617.483393**
-0.25	**-815.766518**	***-1324.498105***	***-1963.350366***	**-613.986149**	**-660.900559**	**-623.031415**	**-754.705143**	**-786.629162**	**-832.720399**	**-328.793238**
+0.25	**4458.314621**	***6058.629929***	***7936.916116***	**3516.730396**	**3759.170293**	**3527.264919**	**4242.136991**	**4070.480185**	**4306.838429**	**1852.507992**
-0.3	**-978.9198216**	***-1589.397726***	***-2356.02044***	**-736.783379**	**-793.080671**	**-747.637698**	**-905.646171**	**-943.954995**	**-999.264479**	**-394.5518856**
+0.3	**4903.1509**	***6678.47877***	***8703.854906***	**3846.66254**	**4109.514817**	**3876.066247**	**4660.375122**	**4452.084153**	**4709.641089**	**2023.471145**
-0.35	**-1142.073125**	***-1854.297347***	***-2748.690513***	**-859.580609**	**-925.260783**	**-872.243981**	**-1056.5872**	**-1101.28083**	**-1165.80856**	**-460.3105332**
+0.35	**5193.048803**	***7108.588417***	***9194.414176***	**4067.375064**	**4356.066637**	**4110.40604**	**4935.354897**	**4708.594019**	**4982.415862**	**2132.488532**
-0.4	**-1305.226429**	***-2119.196968***	***-3141.360586***	**-982.377839**	**-1057.4409**	**-996.850264**	**-1207.52823**	**-1258.60666**	**-1332.35264**	**-526.0691808**
+0.4	**5334.944608**	***7353.610225***	***9379.668548***	**4192.286148**	**4486.231286**	**4231.671272**	**5073.247268**	**4824.758**	**5106.35575**	**2182.44999**
-0.45	**-1468.379732**	***-2384.096589***	***-3534.030659***	**-1105.17507**	**-1189.62101**	**-1121.45655**	**-1358.46926**	**-1415.93249**	**-1498.89672**	**-591.8278284**
+0.45	**5336.789479**	***7418.899191***	***9277.248946***	**4210.428501**	**4502.610825**	**4245.05124**	**5081.274543**	**4807.082457**	**5088.629641**	**2173.653881**
-0.5	**-1631.533036**	***-2648.99621***	***-3926.700733***	**-1227.9723**	**-1321.80112**	**-1246.06283**	**-1509.41029**	**-1573.25832**	**-1665.4408**	**-657.5864761**
+0.5	**5207.547594**	***7323.409147***	***9080.542204***	**4137.601265**	**4425.925675**	**4172.47144**	**4997.581489**	**4735.895119**	**5012.894348**	**2146.217206**
-0.55	**-1794.68634**	***-2913.895831***	***-4319.370806***	**-1350.76953**	**-1453.98123**	**-1370.66911**	**-1660.35131**	**-1730.58416**	**-1831.98488**	**-723.3451237**
+0.55	**4982.592497**	***7062.302549***	***8926.472418***	**3971.304029**	**4250.132318**	**4008.704969**	**4805.050786**	**4565.828071**	**4832.048985**	**2071.574332**
-0.6	**-1957.839643**	***-3178.795452***	***-4712.040879***	**-1473.56676**	**-1586.16134**	**-1495.2754**	**-1811.29234**	**-1887.90999**	**-1998.52896**	**-789.1037713**
+0.6	**4685.8683**	***6639.201714***	***8460.308011***	**3718.296921**	**3980.413243**	**3756.041919**	**4504.108919**	**4276.289372**	**4524.84079**	**1947.903943**
-0.65	**-2120.992947**	***-3443.695073***	***-5104.710952***	**-1596.36399**	**-1718.34145**	**-1619.88168**	**-1962.23337**	**-2045.23582**	**-2165.07304**	**-854.8624189**
+0.65	**4276.561746**	***6062.043956***	***7698.925163***	**3388.910478**	**3625.978275**	**3423.133607**	**4105.184999**	**3877.890746**	**4102.518323**	**1779.628233**
-0.7	**-2284.14625**	***-3708.594694***	***-5497.381026***	**-1719.16122**	**-1850.52157**	**-1744.48796**	**-2113.1744**	**-2202.56165**	**-2331.61712**	**-920.6210665**
+0.7	**3766.464777**	***5339.472522***	***6661.031865***	**2996.105896**	**3196.855739**	**3019.404488**	**3619.054554**	**3382.237657**	**3577.382333**	**1571.581083**
-0.75	**-2447.299554**	***-3973.494315***	***-5890.051099***	**-1841.95845**	**-1982.70168**	**-1869.09425**	**-2264.11543**	**-2359.88749**	**-2498.1612**	**-986.3797141**
+0.75	**3168.380193**	***4480.832614***	***5425.61424***	**2541.227354**	**2704.975021**	**2555.047021**	**3057.963274**	**2801.955436**	**2964.959679**	**1329.004407**
-0.8	**-2610.452858**	***-4238.393936***	***-6282.721172***	**-1964.75568**	**-2114.88179**	**-1993.70053**	**-2415.05646**	**-2517.21332**	**-2664.70528**	**-1052.138362**
+0.8	**2496.125985**	***3496.1744***	***4114.00963***	**2034.900234**	**2159.97967**	**2041.02397**	**2435.090732**	**2153.156152**	**2277.97368**	**1057.550645**
-0.85	**-2773.606161**	***-4604.571496***	***-6766.541388***	**-2087.55291**	**-2247.0619**	**-2118.30681**	**-2565.99749**	**-2674.53915**	**-2831.24936**	**-1117.897009**
+0.85	**1764.533622**	***2497.529053***	***3047.981553***	**1488.50677**	**1573.88678**	**1489.067959**	**1764.549568**	**1442.8969**	**1526.108311**	**763.281556**
-0.9	**-2936.759465**	***-5246.901853***	***-7498.899117***	**-2210.35014**	**-2379.24201**	**-2242.91309**	**-2716.93851**	**-2831.86498**	**-2997.79344**	**-1183.655657**
+0.9	**989.4486276**	***1671.229401***	***2124.540299***	**914.1887514**	**962.6215829**	**911.681721**	**1062.027621**	**693.886121**	**731.4550804**	**452.6684516**
-0.95	**-3099.912768**	***-6125.613012***	***-8443.999563***	**-2333.14737**	**-2511.42213**	**-2367.51938**	**-2867.87954**	**-2989.19082**	**-3164.33752**	**-1249.414305**
+0.95	**681.3748583**	***1038.840185***	***1509.814796***	**514.1833041**	**553.3597761**	**521.6125668**	**631.6829006**	**652.9044212**	**691.0975458**	**274.5233957**
-1	**-3263.066097**	***-7204.862147***	***-9659.299407***	**-2455.94462**	**-2643.60225**	**-2492.12563**	**-3018.8206**	**-3146.51668**	**-3330.88163**	**-1315.172921**
+1	**717.2367083**	***1041.164489***	***1542.162379***	**541.2455944**	**582.483984**	**549.0658681**	**664.9293546**	**687.267811**	**727.4710999**	**288.9719883**
(Span 2) -2	**-3263.066097**	***-7204.862147***	***-9659.299407***	**-2455.94462**	**-2643.60225**	**-2492.12563**	**-3018.8206**	**-3146.51668**	**-3330.88163**	**-1315.172921**
+2	**717.2367083**	***1041.164489***	***1542.162379***	**541.2455944**	**582.483984**	**549.0658681**	**664.9293546**	**687.267811**	**727.4710999**	**288.9719883**
-2.05	**-2387.241368**	***-5243.786899***	***-7288.646002***	**-1800.68431**	**-1937.88144**	**-1826.70183**	**-2212.17125**	**-2286.48957**	**-2420.24301**	**-961.3886329**
+2.05	**553.8982634**	***997.47421***	***1290.019995***	**431.7319895**	**449.8331713**	**428.8614042**	**513.5030096**	**530.7542657**	**561.8019399**	**235.0521704**
-2.1	**-2223.831215**	***-4077.205804***	***-5544.851641***	**-1677.42484**	**-1805.23063**	**-1701.66143**	**-2060.7449**	**-2129.97602**	**-2254.57384**	**-895.5801799**
+2.1	**1262.146659**	***1750.122523***	***2023.406693***	**1118.177949**	**1178.637037**	**1114.874635**	**1302.44865**	**916.1007231**	**967.4540545**	**546.5207945**
-2.15	**-2060.421063**	***-3249.23999***	***-4661.877931***	**-1554.16537**	**-1672.57981**	**-1576.62102**	**-1909.31855**	**-1973.46248**	**-2088.90468**	**-829.7717269**
+2.15	**2166.256502**	***2687.689753***	***2971.070653***	**1790.002816**	**1903.623325**	**1797.454706**	**2134.542761**	**1804.408319**	**1907.707333**	**914.2421426**
-2.2	**-1897.01091**	***-2768.035468***	***-4090.989378***	**-1430.9059**	**-1539.929**	**-1451.58062**	**-1757.8922**	**-1816.94893**	**-1923.23551**	**-763.9632739**
+2.2	**3009.316915**	***3796.972978***	***4463.781454***	**2420.158199**	**2583.171716**	**2437.855598**	**2911.646919**	**2627.479725**	**2778.928378**	**1255.128101**

-2.25	-1733.600758	-2589.833557	-3792.803168	-1307.64644	-1407.27819	-1326.54021	-1606.46584	-1660.43538	-1757.56634	-698.1548209
+2.25	3763.804813	5013.646314	6311.95843	2987.884504	3194.516875	3014.534533	3608.75278	3358.602251	3553.037222	1558.647966
-2.3	-1570.190606	-2474.891673	-3551.550982	-1184.38697	-1274.62737	-1201.49981	-1455.03949	-1503.92183	-1591.89718	-632.3463679
+2.3	4407.214643	6081.794042	7867.826358	3475.649792	3718.947652	3508.768523	4204.868138	3976.933391	4207.923881	1816.014698
-2.35	-1406.780453	-2359.94979	-3310.298796	-1061.1275	-1141.97656	-1076.4594	-1303.61314	-1347.40828	-1426.22801	-566.5379149
+2.35	4921.767233	6924.979225	9052.683646	3869.149653	4141.228756	3906.297523	4683.140966	4465.852642	4725.948708	2020.184554
-2.4	-1243.370301	-2245.007907	-3069.04661	-937.868037	-1009.32575	-951.418995	-1152.18679	-1190.89473	-1260.55885	-500.7294619
+2.4	5294.142725	7533.021405	9852.547905	4157.306565	4449.599956	4196.137088	5030.033504	4812.959698	5093.940512	2165.856932
-2.45	-1079.960148	-2130.066024	-2883.180879	-814.60857	-876.674935	-826.37859	-1000.76044	-1034.38119	-1094.88968	-434.9210089
+2.45	5514.273492	7898.736378	10261.22653	4332.271875	4635.778397	4370.581062	5236.750267	5010.07603	5303.198204	2251.806027
-2.5	-916.5499961	-2015.124135	-2883.17988	-691.349103	-744.024122	-701.338185	-849.334092	-877.867638	-929.220513	-369.1125559
+2.5	5576.44411	8018.240522	10280.31107	4389.288706	4694.820892	4425.044842	5297.82169	5053.086038	5349.323627	2272.21338
-2.55	-1079.486185	-2130.066019	-2883.178967	-814.608572	-876.674956	-826.37859	-1000.76044	-1034.38119	-1094.88966	-434.9209775
+2.55	5476.047423	7898.737792	10261.22651	4332.276418	4635.78475	4370.590472	5236.765122	5010.084312	5303.20671	2251.805143
-2.6	-1242.82463	-2245.007902	-3069.046626	-937.868042	-1009.32577	-951.418996	-1152.18678	-1190.89473	-1260.55882	-500.7294289
+2.6	5225.266027	7533.024079	9852.547975	4157.309795	4449.604992	4196.144377	5030.044475	4812.966093	5093.947022	2167.512508
-2.65	-1406.163075	-2359.949786	-3310.298811	-1061.12751	-1141.97658	-1076.4594	-1303.61313	-1347.40828	-1426.22798	-566.5378804
+2.65	4871.032096	6924.983014	9052.683752	3869.151575	4141.232382	3906.30354	4683.140313	4465.857187	4725.953265	2021.118735
-2.7	-1569.50152	-2474.891669	-3551.550997	-1184.38698	-1274.62739	-1201.49981	-1455.03947	-1503.92182	-1591.89714	-632.3463318
+2.7	4370.092683	6081.799712	7867.826195	3475.650692	3718.950113	3508.773577	4204.867908	3976.93663	4207.92706	1816.150959
-2.75	-1732.839965	-2589.833553	-3792.803183	-1307.64645	-1407.27821	-1326.54021	-1606.46582	-1660.43537	-1757.5663	-698.1547832
+2.75	3734.956357	5013.653754	6311.958597	2987.884945	3194.518794	3014.539311	3608.753916	3358.604809	3553.039683	1558.648248
-2.8	-1896.17841	-2768.035407	-4090.989342	-1430.90592	-1539.92902	-1451.58062	-1757.89216	-1816.94891	-1923.23546	-763.9632347
+2.8	2982.44553	3796.982991	4463.780839	2420.15849	2583.173519	2437.860203	2911.649488	2627.481738	2778.930269	1255.128854
-2.85	-2059.516855	-3249.239822	-4661.877799	-1554.16539	-1672.57983	-1576.62102	-1909.31851	-1973.46246	-2088.90462	-829.7716861
+2.85	2133.700356	2687.702832	2970.258357	1790.003613	1903.625576	1797.455163	2134.547418	1804.410687	1907.709615	914.2435295
-2.9	-2222.8553	-4077.205582	-5544.85146	-1677.42486	-1805.23064	-1701.66143	-2060.74485	-2129.976	-2254.57378	-895.5801375
+2.9	1214.806978	1750.118636	2021.898595	1118.179965	1178.636603	1114.877828	1302.456197	916.1017642	967.4549485	546.522814
-2.95	-2386.193745	-5243.786715	-7288.636066	-1800.68433	-1937.88146	-1826.70183	-2212.1712	-2286.48955	-2420.24294	-961.388589
+2.95	554.1413754	997.4720661	1289.820362	431.7342134	449.8331973	428.8690539	513.5030615	530.7542957	561.8019809	234.457066
-3	-3264.185421	-7204.862213	-9659.305051	-2455.94465	-2643.60233	-2492.12569	-3018.82062	-3146.51678	-3330.88177	-1315.177675
+3	717.5515527	1041.164488	1542.162379	541.2455823	582.4839864	549.0658671	664.9293787	687.2678236	727.4711263	288.9719951
(Span 3) -4	-3.26E+03	-7204.862213	-9659.305051	-2.46E+03	-2.64E+03	-2.49E+03	-3.02E+03	-3.15E+03	-3.33E+03	-1.32E+03
+4	7.18E+02	1041.164488	1542.162379	5.41E+02	5.82E+02	5.49E+02	6.65E+02	6.87E+02	7.27E+02	2.89E+02
-3.05	-3100.976147	-6125.613049	-8443.999747	-2333.14742	-2511.42221	-2367.51941	-2867.87959	-2989.19094	-3164.33768	-1249.41879
+3.05	681.6739749	1038.840199	1509.814801	514.1833038	553.3597875	521.6125742	631.682909	652.9044324	691.0975699	274.523395
-3.1	-2937.766873	-5246.901876	-7498.899292	-2210.35019	-2379.2421	-2242.91312	-2716.93856	-2831.8651	-2997.7936	-1183.659905
+3.1	1009.962754	1671.235135	2122.212137	914.1896256	962.619732	911.6772703	1062.035721	693.8846676	731.4537716	452.6658549
-3.15	-2774.557599	-4604.57151	-6766.541558	-2087.55296	-2247.06198	-2118.30683	-2565.99753	-2674.53926	-2831.24951	-1117.901019
+3.15	1773.599882	2497.53517	3045.192018	1488.508269	1573.885882	1489.064093	1764.541816	1442.897828	1526.109533	763.2785706
-3.2	-2611.348325	-4238.393926	-6282.721323	-1964.75573	-2114.88186	-1993.70055	-2415.0565	-2517.21343	-2664.70542	-1052.142134
+3.2	2500.89832	3496.180894	4110.85577	2034.901954	2159.980167	2041.020571	2435.083429	2153.156826	2277.974635	1057.548032
-3.25	-2448.139052	-3973.494302	-5890.05125	-1841.9585	-1982.70175	-1869.09426	-2264.11548	-2359.88759	-2498.16134	-986.3832489
+3.25	3175.034638	4480.839277	5425.614365	2541.229297	2704.975705	2555.043755	3057.95609	2801.955688	2964.960196	1329.001908
-3.3	-2284.929778	-3708.594677	-5497.381177	-1719.16126	-1850.52163	-1744.48797	-2113.17445	-2202.56175	-2331.61725	-920.6243636
+3.3	3780.760732	5339.479129	6661.032211	2996.107442	3196.855241	3019.401102	3619.047147	3382.236719	3577.381589	1571.578827
-3.35	-2121.720504	-3443.695053	-5104.711104	-1596.36403	-1718.34152	-1619.88169	-1962.23342	-2045.23592	-2165.07316	-854.8654783
+3.35	4303.844149	6062.049859	7698.925315	3388.911011	3625.976515	3423.12913	4105.1763	3877.88831	4102.516003	1779.625271
-3.4	-1958.51123	-3178.795429	-4712.04103	-1473.5668	-1586.1614	-1495.2754	-1811.29239	-1887.91008	-1998.52907	-789.1065931
+3.4	4731.068078	6639.206133	8460.308086	3718.295609	3980.410362	3756.035828	4504.098078	4276.285073	4524.836501	1947.90088
-3.45	-1795.301956	-2913.895804	-4319.370957	-1350.76957	-1453.98128	-1370.66912	-1660.35136	-1730.58424	-1831.98499	-723.3477078
+3.45	5050.229119	7062.30571	8926.472221	3971.301126	4250.127681	4008.697949	4805.055519	4565.82175	4832.042556	2071.571372
-3.5	-1632.092682	-2648.99618	-3926.700884	-1227.97234	-1321.80117	-1246.06283	-1509.41033	-1573.2584	-1665.4409	-657.5888225
+3.5	5250.874212	7323.410856	9080.542408	4137.596473	4425.918903	4172.462625	4997.583792	4735.886207	5012.885184	2146.213337
-3.55	-1468.883409	-2384.096556	-3534.03081	-1105.17511	-1189.62105	-1121.45654	-1358.4693	-1415.93257	-1498.89681	-591.8299373
+3.55	5322.378282	7418.898732	9277.248825	4210.434278	4502.597254	4245.044687	5081.2737	4807.076817	5088.623492	2176.653696
-3.6	-1305.674135	-2119.196931	-3141.360737	-982.377876	-1057.44094	-996.850256	-1207.52827	-1258.60673	-1332.35273	-526.071052

+3.6	5255.508803	7353.607996	9379.669205	4192.289827	4486.236829	4231.662527	5073.243917	4824.750106	5106.347208	2182.448307
-3.65	-1142.464861	-1854.297307	-2748.690664	-859.580644	-925.260821	-872.24397	-1056.58724	-1101.28089	-1165.80864	-460.3121667
+3.65	5146.840353	7108.583315	9194.413955	4067.375917	4356.069104	4110.394829	4935.348078	4708.598258	4982.420063	2132.486343
-3.7	-979.2555873	-1589.397683	-2356.020591	-736.783413	-793.080705	-747.637684	-905.64621	-943.955053	-999.264552	-394.5532815
+3.7	4894.538124	6678.471137	8703.854588	3846.660304	4109.514111	3876.068578	4660.364874	4452.08472	4709.641427	2023.468592
-3.75	-816.0463135	-1324.498058	-1963.350517	-613.986181	-660.900589	-623.031397	-754.70518	-786.629216	-832.720465	-328.7943962
+3.75	4489.993628	6058.619839	7936.915974	3516.724974	3759.166127	3527.264422	4242.140066	4070.477494	4306.835289	1852.504698
-3.8	-652.8370396	-1059.598434	-1570.680444	-491.18895	-528.720474	-498.425111	-603.764151	-629.303378	-666.176378	-263.0355109
+3.8	3926.867784	5245.082843	6991.216654	3066.444075	3279.503255	3078.204515	3683.120925	3543.179887	3747.221172	1617.485174
-3.85	-489.6277658	-794.6988097	-1178.010371	-368.391718	-396.540358	-373.818825	-452.823121	-471.977541	-499.632291	-197.2766257
+3.85	3199.835645	4234.616017	5712.870679	2492.122587	2666.494814	2503.561715	2998.141011	2887.765683	3053.501459	1316.460205
-3.9	-326.418492	-529.7991854	-785.3402977	-245.594487	-264.360242	-249.212538	-301.882092	-314.651703	-333.088204	-131.5177404
+3.9	2304.586231	3024.680268	4089.307666	1790.823178	1916.926236	1800.277024	2157.626843	2090.851593	2211.045663	947.3095995
-3.95	-163.2092182	-264.899561	-392.6702245	-122.797255	-132.180126	-124.606252	-150.941062	-157.325866	-166.544117	-65.75885512
+3.95	1238.516086	1613.442096	2196.26556	960.3736183	1028.406123	966.0585878	1158.692515	1128.83226	1193.821361	508.7734007
-5	-9.96E-13	-5.45E-13	-1.09E-12	-3.73E-13	-3.98E-13	-2.54E-13	-3.05E-13	-3.28E-13	-3.52E-13	-2.66E-13
+5	1.08E-12	8.94E-13	1.62E-12	6.68E-13	7.30E-13	6.13E-13	7.41E-13	6.13E-13	6.52E-13	4.01E-13

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.05E-13	-4.17E-13	-3.84E-13	-3.37E-13	-2.73E-13	-3.45E-13	-4.09E-13	-4.45E-13	-4.45E-13
End Shear	4.18E-13	4.36E-13	4.17E-13	3.98E-13	3.82E-13	4.50E-13	3.83E-13	4.31E-13	4.29E-13
-0.05	-94.15675417	-135.4247289	-145.8182796	-217.4551645	-75.43622321	-101.8857268	-116.769711	-130.809845	-145.670444
+0.05	726.7533845	979.237627	1006.165572	1167.48737	584.6347635	788.7255253	894.7012398	982.740788	1073.015247
-0.1	-188.3135083	-270.8494578	-291.6365591	-434.9103289	-150.8724464	-203.7714535	-233.539421	-261.61969	-291.340888
+0.1	1353.829492	1814.758216	1857.083151	2125.911224	1089.532553	1469.621776	1665.816368	1830.256934	2002.244947
-0.15	-282.4702625	-406.2741867	-437.4548387	-652.3654934	-226.3086696	-305.6571803	-350.309132	-392.429535	-437.011331
+0.15	1881.869134	2507.903334	2555.320294	2898.708858	1515.104536	2043.438941	2314.268358	2567.97309	2803.969527
-0.2	-376.6270167	-541.6989156	-583.2731182	-869.8206579	-301.7448928	-407.542907	-467.078843	-523.23938	-582.681775
+0.2	2312.651566	3062.022037	3135.938796	3553.414237	1862.744034	2512.065839	2842.320903	3171.228456	3473.499096
-0.25	-470.7837708	-677.1236445	-729.0913978	-1087.275822	-377.181116	-509.4286338	-583.848553	-654.049225	-728.352219
+0.25	2648.539241	3506.16635	3572.568521	4078.01723	2134.310924	2878.021417	3261.923039	3642.409528	4011.029135
-0.3	-564.940525	-812.5483734	-874.9096773	-1304.730987	-452.6173393	-611.3143605	-700.618264	-784.85907	-874.022663
+0.3	2892.478306	3823.048534	3899.177088	4472.816061	2332.131995	3157.343781	3582.562666	3985.570272	4405.524574
-0.35	-659.0972792	-947.9731023	-1020.727957	-1522.186151	-528.0535625	-713.2000873	-817.387975	-915.668916	-1019.69311
+0.35	3064.02656	4014.46796	4124.517679	4748.810592	2459.000505	3347.39606	3793.366837	4224.276683	4661.964749
-0.4	-753.2540333	-1083.397831	-1166.546236	-1739.641316	-603.4897857	-815.085814	-934.157685	-1046.47876	-1165.36355
+0.4	3151.571692	4107.774749	4262.082558	4895.254172	2518.176295	3445.431368	3898.170413	4350.054607	4796.922319
-0.45	-847.4107875	-1218.82256	-1312.364516	-1957.09648	-678.9260089	-916.9715408	-1050.9274	-1177.28861	-1311.03399
+0.45	3158.445443	4088.084459	4276.519763	4871.909026	2513.386251	3455.32836	3902.598565	4363.310549	4820.016269
-0.5	-941.5675417	-1354.247289	-1458.182796	-2174.551645	-754.3622321	-1018.857268	-1167.69711	-1308.09845	-1456.70444
+0.5	3106.548307	4028.973864	4198.547018	4706.349881	2475.923542	3396.88904	3838.385511	4288.584324	4733.332006
-0.55	-1035.724296	-1489.672018	-1604.001075	-2392.006809	-829.7984553	-1120.742994	-1284.46682	-1438.9083	-1602.37488
+0.55	2985.769796	3886.789197	4019.71658	4611.636363	2387.208088	3263.956114	3692.199007	4118.280475	4536.490033
-0.6	-1129.88105	-1625.096747	-1749.819355	-2609.461974	-905.2346785	-1222.628721	-1401.23653	-1569.71814	-1748.04533
+0.6	2797.223675	3643.778365	3734.948805	4345.476818	2242.940222	3058.145294	3461.362149	3854.229558	4248.901216
-0.65	-1224.037804	-1760.521476	-1895.637634	-2826.917138	-980.6709017	-1324.514448	-1518.00624	-1700.52799	-1893.71577
+0.65	2547.420676	3317.543854	3376.477115	3904.62687	2048.20388	2786.52033	3153.890625	3505.522718	3868.069916
-0.7	-1318.194558	-1895.946205	-2041.455914	-3044.372303	-1056.107125	-1426.400175	-1634.77595	-1831.33783	-2039.38621
+0.7	2243.455849	2903.315913	2924.066086	3360.334626	1808.5514	2456.777441	2778.525434	3082.06369	3401.639552
-0.75	-1412.351312	-2031.370934	-2187.274193	-3261.827467	-1131.543348	-1528.285901	-1751.54566	-1962.14768	-2185.05666
+0.75	1893.908884	2411.590807	2390.121148	2676.446659	1530.000612	2077.241363	2344.729689	2598.353218	2861.376108
-0.8	-1506.508067	-2166.795662	-2333.092473	-3479.282631	-1206.979571	-1630.171628	-1868.31537	-2092.95752	-2330.7271
+0.8	1505.639583	1853.718401	1795.11098	1866.109101	1219.035868	1656.867005	1862.689654	2058.713034	2259.950345
-0.85	-1600.664821	-2302.220391	-2478.910752	-3722.961549	-1282.415795	-1732.057355	-1985.08508	-2223.76737	-2476.39754
+0.85	1086.288591	1241.902795	1133.45561	1109.350073	882.6091175	1205.239212	1343.315155	1474.708182	1610.937463
-0.9	-1694.821575	-2437.64512	-2624.729032	-4038.144318	-1357.852018	-1833.943082	-2101.85479	-2354.57721	-2622.06799
+0.9	648.291073	613.6446468	569.3129391	803.9212221	528.1375683	732.5728358	798.2396122	867.13654	928.8165383
-0.95	-1788.978329	-2573.069849	-2770.547312	-4414.532833	-1433.288241	-1935.828808	-2218.6245	-2485.38706	-2767.73843
+0.95	393.7143093	561.8922069	600.9414357	801.5819217	315.6376414	426.3893974	488.2955546	546.8516913	608.6189331
-1	-1883.135083	-2708.494581	-2916.365658	-4842.846362	-1508.724408	-2037.714514	-2335.39424	-2616.19685	-2913.40894
+1	414.4361147	591.4654913	632.5699307	830.2151431	332.2501544	448.8309504	513.9953181	575.6333665	640.6515099
(Span 2) -2	-1883.135083	-2708.494581	-2916.365658	-4842.846362	-1508.724408	-2037.714514	-2335.39424	-2616.19685	-2913.40894
+2	414.4361147	591.4654913	632.5699307	830.2151431	332.2501544	448.8309504	513.9953181	575.6333665	640.6515099
-2.05	-1378.798555	-1967.762293	-2104.513725	-3222.934123	-1105.371886	-1493.227664	-1710.0247	-1915.08996	-2131.40057
+2.05	320.0553456	456.7692972	488.5128958	658.8137686	256.5858364	346.6173413	396.9416337	444.5426662	494.7540326
-2.1	-1284.417783	-1833.066094	-1960.456689	-2793.199479	-1029.707567	-1391.014052	-1592.97101	-1783.99926	-1985.50309
+2.1	797.9374124	777.8564887	668.564697	655.2618761	640.0099114	897.4666343	982.2158721	1078.636476	1154.018693
-2.15	-1190.037011	-1698.369895	-1816.399653	-2451.142008	-954.0432486	-1288.80044	-1475.91733	-1652.90856	-1839.60562
+2.15	1317.543543	1532.281307	1447.222473	1320.04014	1060.151958	1456.385961	1627.032389	1798.193237	1961.79453
-2.2	-1095.656239	-1563.673696	-1672.342618	-2198.870947	-878.3789301	-1186.586828	-1358.86364	-1521.81786	-1693.70814
+2.2	1803.236603	2242.231639	2215.657164	2235.562087	1450.216071	1980.918444	2228.717036	2472.375931	2715.145287

-2.25	-1001.275467	-1428.977498	-1528.285582	-2025.055922	-802.7146115	-1084.373216	-1241.80995	-1390.72715	-1547.81066
+2.25	2239.03967	2867.748165	2895.520497	3276.798625	1798.07708	2452.456235	2768.781212	3078.033115	3389.070027
-2.3	-906.8946957	-1294.281299	-1384.228547	-1867.620726	-727.050293	-982.1596037	-1124.75627	-1259.63645	-1401.91318
+2.3	2611.810553	3391.824211	3467.218949	4133.496029	2093.596494	2856.338149	3230.453944	3596.761661	3963.573939
-2.35	-812.5139239	-1159.5851	-1240.171511	-1710.18553	-651.3859744	-879.9459917	-1007.70258	-1128.54575	-1256.0157
+2.35	2910.889524	3803.256034	3925.17155	4811.141032	2328.621589	3180.944824	3600.023862	4013.610062	4422.510835
-2.4	-718.1331521	-1024.888901	-1096.114476	-1552.750334	-575.7216559	-777.7323797	-890.648896	-997.455048	-1110.11822
+2.4	3128.099615	4099.450342	4264.14834	5276.348602	2497.190357	3417.337088	3867.539786	4317.076843	4761.111507
-2.45	-623.7523803	-890.1927023	-952.0574399	-1395.315138	-500.0573373	-675.5187677	-773.595209	-866.364346	-964.220745
+2.45	3257.746553	4266.212976	4465.049573	5518.032999	2595.907206	3559.258027	4026.131677	4499.113067	4968.959705
-2.5	-529.3716085	-755.4965035	-808.0004044	-1237.879942	-424.3930188	-573.3051557	-656.541523	-735.273636	-818.323266
+2.5	3296.466759	4300.218104	4522.802944	5542.49662	2621.62354	3602.999551	4071.818137	4554.988741	5036.645129
-2.55	-623.7523453	-890.192643	-952.0574532	-1395.315141	-500.0573435	-675.5187489	-773.595211	-866.364337	-964.220741
+2.55	3257.751173	4266.220875	4465.056355	5518.02793	2595.922073	3559.265146	4026.141213	4499.119065	4968.962255
-2.6	-718.1331143	-1024.888837	-1096.114488	-1552.750341	-575.7216615	-777.7323579	-890.648895	-997.455037	-1110.11822
+2.6	3128.102973	4099.456622	4264.153775	5276.353506	2497.190142	3417.342515	3867.547833	4317.08119	4761.112498
-2.65	-812.5138834	-1159.585031	-1240.171523	-1710.18554	-651.3859795	-879.9459669	-1007.70258	-1128.54574	-1256.0157
+2.65	2910.892088	3803.260701	3925.175331	4811.144415	2328.622343	3180.949179	3600.030793	4013.613206	4422.514202
-2.7	-906.8946525	-1294.281225	-1384.228558	-1867.62074	-727.0502975	-982.1595759	-1124.75626	-1259.63644	-1401.91317
+2.7	2611.812407	3391.831294	3467.223044	4133.496583	2093.59837	2856.341699	3230.459928	3596.76379	3963.577788
-2.75	-1001.275422	-1428.977419	-1528.285593	-2025.05594	-802.7146155	-1084.373185	-1241.80995	-1390.72714	-1547.81065
+2.75	2239.041062	2867.747611	2895.523975	3276.799704	1798.080362	2452.459554	2768.786443	3078.034765	3389.074472
-2.8	-1095.656191	-1563.673613	-1672.342628	-2198.870954	-878.3789335	-1186.586794	-1358.86363	-1521.81784	-1693.70813
+2.8	1803.237769	2242.232365	2215.656838	2235.562564	1450.220973	1980.921609	2228.717129	2472.377433	2715.150632
-2.85	-1190.03696	-1698.369807	-1816.399663	-2451.141991	-954.0432515	-1288.800403	-1475.91732	-1652.90854	-1839.60561
+2.85	1317.545162	1532.28366	1447.223508	1320.040858	1060.158788	1456.385388	1627.034324	1798.195183	1961.801976
-2.9	-1284.417729	-1833.066001	-1960.456697	-2793.199451	-1029.70757	-1391.014012	-1592.971	-1783.99924	-1985.50308
+2.9	797.9370197	777.8594952	668.5678883	655.2641916	640.0193485	897.4685449	982.2202827	1078.637247	1154.017608
-2.95	-1378.798498	-1967.762195	-2104.513732	-3222.934109	-1105.371888	-1493.227621	-1710.02469	-1915.08994	-2131.40056
+2.95	320.0553376	456.7692859	488.5129158	658.8137234	256.5858482	346.6173525	396.9416547	444.5426771	494.7540405
-3	-1883.135083	-2708.494572	-2916.3657	-4842.846448	-1508.724454	-2037.714517	-2335.39433	-2616.19695	-2913.40903
+3	414.4361266	591.4655124	632.5699336	830.2151268	332.2501569	448.8309635	513.9953267	575.6333753	640.6515151
(Span 3) -4	-1.88E+03	-2.71E+03	-2.92E+03	-4.84E+03	-1.51E+03	-2.04E+03	-2.34E+03	-2.62E+03	-2.91E+03
+4	4.14E+02	5.91E+02	6.33E+02	8.30E+02	3.32E+02	4.49E+02	5.14E+02	5.76E+02	6.41E+02
-3.05	-1788.978329	-2573.069844	-2770.547418	-4414.532909	-1433.288228	-1935.82879	-2218.62461	-2485.3871	-2767.73858
+3.05	393.7143202	561.8922373	600.9414369	801.5819076	315.6376493	426.3894156	488.2955602	546.8517069	608.6189394
-3.1	-1694.821575	-2437.645115	-2624.729137	-4038.144386	-1357.852003	-1833.943063	-2101.8549	-2354.57725	-2622.06814
+3.1	648.2897847	613.6409112	569.3129401	803.921206	528.1439198	732.569793	798.2343299	867.1351395	928.8201142
-3.15	*-1600.664821*	*-2302.220174*	*-2478.910855*	*-3722.961611*	*-1282.415777*	*-1732.057336*	*-1985.08518*	*-2223.7674*	*-2476.39769*
+3.15	1086.288073	1241.898482	1133.459836	1109.352625	882.615384	1205.236647	1343.310703	1474.708742	1610.941573
-3.2	-1506.508066	-2166.795658	-2333.092573	-3479.282684	-1206.979552	-1630.171609	-1868.31547	-2092.95755	-2330.72724
+3.2	1505.640007	1853.713975	1795.114795	1866.106244	1219.042398	1656.864828	1862.68537	2058.713763	2259.954913
-3.25	-1412.351312	-2031.37093	-2187.274292	-3261.827515	-1131.543326	-1528.285882	-1751.54575	-1962.1477	-2185.05679
+3.25	1893.909313	2411.586174	2390.124735	2676.449969	1530.007292	2077.239287	2344.725638	2598.353912	2861.380682
-3.3	-1318.194558	*-1895.946201*	-2041.45601	*-3044.372347*	-1056.107101	-1426.400155	-1634.77604	-1831.33785	-2039.38634
+3.3	2243.4554	2903.310776	2924.063568	3360.337855	1808.557999	2456.775268	2778.521154	3082.063518	3401.643963
-3.35	-1224.037804	-1760.521473	-1895.637728	-2826.917178	-980.6708754	-1324.514429	-1518.00632	-1700.528	-1893.71589
+3.35	2547.419334	3317.53733	3376.473399	3904.624568	2048.209783	2786.517238	3153.885509	3505.521463	3868.073193
-3.4	-1129.88105	-1625.096744	-1749.819447	-2609.462009	-905.2346499	-1222.628702	-1401.23661	-1569.71815	-1748.04545
+3.4	2797.221536	3643.77001	3734.943686	4345.478814	2242.945049	3058.140919	3461.355408	3854.226851	4248.90272
-3.45	-1035.724296	-1489.672016	-1604.001165	-2392.00684	-829.7984244	-1120.742975	-1284.46689	-1438.9083	-1602.375
+3.45	2985.766381	3886.782967	4019.71142	4611.635302	2387.212065	3263.950938	3692.19107	4118.276128	4536.489168
-3.5	-941.5675415	-1354.247288	-1458.182883	-2174.551671	-754.3621989	-1018.857248	-1167.69718	-1308.09845	-1456.70455
+3.5	3106.543552	4028.977653	4198.539768	4706.346277	2475.926563	3396.882367	3838.375653	4288.577866	4733.329291
-3.55	-847.4107874	-1218.822559	-1312.364602	-1957.096503	-678.9259734	-916.9715212	-1050.92746	-1177.2886	-1311.0341
+3.55	3158.435895	*4088.0815320 0245*	*4276.515356*	4871.910739	2513.383945	*3455.321865*	3902.595429	4363.30393	4820.020294

-3.6	**-753.2540333**	**-1083.397754**	**-1166.54632**	**-1739.641334**	**-603.489748**	**-815.0857943**	**-934.157748**	**-1046.47875**	**-1165.36365**
+3.6	**3151.5757**	**4107.769904**	**4262.075952**	**4895.253106**	**2518.173174**	**3445.423087**	**3898.16529**	**4350.045344**	**4796.92388**
-3.65	**-659.0972791**	**-947.9731023**	**-1020.728038**	**-1522.186165**	**-528.0535225**	**-713.2000674**	**-817.388033**	**-915.668902**	**-1019.6932**
+3.65	**3064.02846**	**4014.461974**	**4124.513904**	**4748.813098**	**2458.995585**	**3347.385849**	**3793.359012**	**4224.279051**	**4661.962726**
-3.7	**-564.940525**	**-812.5483738**	**-874.9097568**	**-1304.730996**	**-452.617297**	**-611.3143406**	**-700.618318**	**-784.859052**	**-874.022756**
+3.7	**2892.477992**	**3823.039198**	*3899.179745*	**4472.813652**	**2332.125099**	**3157.345131**	**3582.552048**	**3985.56934**	**4405.51948**
-3.75	**-470.7837708**	**-677.1236454**	**-729.0914751**	**-1087.275827**	**-377.1810715**	**-509.4286137**	**-583.848603**	**-654.049202**	**-728.352308**
+3.75	**2648.536709**	**3506.169092**	**3572.564082**	**4078.019767**	**2134.303183**	**2878.020456**	**3261.924011**	**3642.405537**	**4011.021339**
-3.8	**-376.6270167**	**-541.6989004**	**-583.2731935**	**-869.8206586**	**-301.744846**	**-407.5428868**	**-467.078888**	**-523.239352**	**-582.68186**
+3.8	**2312.647267**	**3062.022003**	**3135.93125**	**3553.416564**	**1862.733513**	**2512.062559**	**2842.319315**	**3171.222086**	**3473.501276**
-3.85	**-282.4702626**	**-406.2741871**	**-437.4549118**	**-652.3654898**	**-226.3086205**	**-305.65716**	**-350.309173**	**-392.429503**	**-437.011411**
+3.85	**1881.861636**	**2507.899683**	**2555.320521**	**2898.707029**	**1515.092257**	**2043.432579**	**2314.263933**	**2567.962624**	**2803.968087**
-3.9	**-188.3135084**	**-270.8494737**	**-291.6366302**	**-434.910321**	**-150.872395**	**-203.7714331**	**-233.539458**	**-261.619653**	**-291.340963**
+3.9	**1353.819256**	**1814.75058**	**1857.079402**	**2125.91263**	**1089.518003**	**1469.613278**	**1665.80829**	**1830.257328**	**2002.239132**
-3.95	**-94.15675428**	**-135.4247603**	**-145.8183485**	**-217.4551522**	**-75.43616956**	**-101.8857062**	**-116.769743**	**-130.809803**	**-145.670515**
+3.95	**726.7410446**	**979.2258066**	**1006.15798**	**1167.484581**	**584.6186684**	**788.714591**	**894.6900179**	**982.7374067**	**1073.012321**
-5	**-2.93E-13**	**-3.00E-13**	**-3.19E-13**	**-2.88E-13**	**-2.92E-13**	**-2.16E-13**	**-2.75E-13**	**-2.72E-13**	**-2.72E-13**
+5	**5.38E-13**	**5.23E-13**	**6.72E-13**	**7.17E-13**	**5.01E-13**	**5.22E-13**	**5.23E-13**	**5.66E-13**	**5.66E-13**

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-4.97E-13	-6.45E-13	-4.80E-13	-5.65E-13	-5.26E-13
End Shear	6.44E-13	6.61E-13	5.54E-13	5.97E-13	6.23E-13
-0.05	-262.8048252	-290.8843661	-164.986577	-198.486078	-214.328172
+0.05	1798.106644	1940.185904	1170.482126	1411.282585	1501.538257
-0.1	-525.6096503	-581.7687322	-329.973154	-396.972155	-428.656345
+0.1	3317.052342	3590.072138	2165.719752	2611.599211	2775.274236
-0.15	-788.4144755	-872.6530983	-494.959731	-595.458233	-642.984517
+0.15	4617.593331	4986.264505	2987.613413	3612.215279	3843.822302
-0.2	-1051.219301	-1163.537464	-659.946307	-793.944311	-857.312689
+0.2	5655.846353	6193.618201	3684.455581	4445.527114	4722.567852
-0.25	-1314.024126	-1454.421831	-824.932884	-992.430389	-1071.64086
+0.25	6480.265433	7129.969459	4222.71652	5081.066806	5432.531433
-0.3	-1576.828951	-1745.306197	-989.919461	-1190.91647	-1285.96903
+0.3	7115.156698	7840.498847	4610.024272	5528.970348	5941.240428
-0.35	-1839.633776	-2036.190563	-1154.90604	-1389.40254	-1500.29721
+0.35	7537.692121	8301.866812	4865.068179	5825.662855	6252.238864
-0.4	-2102.438601	-2327.074929	-1319.89261	-1587.88862	-1714.62538
+0.4	7787.977469	8522.447566	4973.627566	5947.392602	6406.49196
-0.45	-2365.243427	-2617.959295	-1484.87919	-1786.3747	-1928.95355
+0.45	7807.745004	8594.518285	4942.916347	5902.613916	6380.155477
-0.5	-2628.048252	-2908.843661	-1649.86577	-1984.86078	-2143.28172
+0.5	7670.656675	8423.762491	4873.549271	5822.115379	6285.33109
-0.55	-2890.853077	-3199.728027	-1814.85235	-2183.34686	-2357.6099
+0.55	7346.851398	8036.094432	4708.910951	5630.286359	6059.199541
-0.6	-3153.657902	-3490.612393	-1979.83892	-2381.83293	-2571.93807
+0.6	6831.716761	7518.649389	4416.514967	5284.204252	5668.877954
-0.65	-3416.462727	-3781.496759	-2144.8255	-2580.31901	-2786.26624
+0.65	6155.255716	6795.987009	4007.364346	4796.819467	5150.274924
-0.7	-3679.267552	-4072.381125	-2309.81208	-2778.80509	-3000.59441
+0.7	5345.170668	5888.353439	3493.511202	4184.458271	4492.395856
-0.75	-3942.072378	-4363.265492	-2474.79865	-2977.29117	-3214.92258
+0.75	4385.50675	4816.318156	2890.271228	3469.247163	3711.979642
-0.8	-4204.877203	-4654.149858	-2639.78523	-3175.77724	-3429.25076
+0.8	3298.644164	3609.76443	2210.854778	2653.806587	2827.145326
-0.85	-4467.682028	-4945.034224	-2804.77181	-3374.26332	-3643.57893
+0.85	2108.638512	2292.609479	1463.977924	1755.848688	1857.372633
-0.9	-4730.486853	-5235.91859	-2969.75838	-3572.7494	-3857.9071
+0.9	1028.496998	1136.624492	719.8580795	842.1921394	880.9817616
-0.95	-4993.291678	-5526.802956	-3134.74496	-3771.23548	-4072.23527
+0.95	1085.63572	1199.770297	682.9228815	822.510594	886.8885452
-1	-5256.09651	-5817.687217	-3299.73152	-3969.72159	-4286.56346
+1	1142.774457	1262.916098	718.8661908	865.8006118	933.5669053
(Span 2) -2	-5256.09651	-5817.687217	-3299.73152	-3969.72159	-4286.56346
+2	1142.774457	1262.916098	718.8661908	865.8006118	933.5669053
-2.05	-3801.926726	-4201.629128	-2391.61504	-2880.45508	-3105.9086
+2.05	882.5270321	975.3084546	555.1566546	668.6292596	720.9629376
-2.1	-3541.679296	-3914.021486	-2227.9055	-2683.28373	-2893.30463
+2.1	1234.968765	1350.373991	888.9881482	1069.181573	1112.673138
-2.15	-3281.431866	-3626.413844	-2064.19597	-2486.11238	-2680.70065
+2.15	2683.308499	2948.641136	1828.840342	2178.543171	2321.416738
-2.2	-3021.184436	-3338.806203	-1900.48643	-2288.94103	-2468.09668
+2.2	4067.600969	4480.236101	2695.719308	3220.87877	3448.977902

-2.25	**-2760.937005**	**-3051.198561**	**-1736.7769**	**-2091.76968**	**-2255.4927**
+2.25	**5288.910632**	**5837.102073**	**3462.714208**	**4141.362529**	**4442.562041**
-2.3	**-2500.689575**	**-2763.590919**	**-1573.06736**	**-1894.59833**	**-2042.88872**
+2.3	**6332.225584**	**6980.563755**	**4108.464192**	**4914.687485**	**5275.177733**
-2.35	**-2240.442145**	**-2475.983277**	**-1409.35783**	**-1697.42698**	**-1830.28475**
+2.35	**7171.857918**	**7880.25352**	**4616.061383**	**5520.890747**	**5932.582996**
-2.4	**-1980.194715**	**-2188.375636**	**-1245.6483**	**-1500.25563**	**-1617.68077**
+2.4	**7778.772222**	**8523.261767**	**4973.048772**	**5945.350484**	**6403.632997**
-2.45	**-1719.947284**	**-1900.767994**	**-1081.93876**	**-1303.08428**	**-1405.07679**
+2.45	**8137.89866**	**8947.584448**	**5171.423363**	**6178.719075**	**6669.410892**
-2.5	**-1459.699854**	**-1613.160352**	**-918.229228**	**-1105.91293**	**-1192.47282**
+2.5	**8239.833097**	**9090.997348**	**5207.387006**	**6216.88285**	**6724.534526**
-2.55	**-1719.947218**	**-1900.767982**	**-1081.93871**	**-1303.08426**	**-1405.07674**
+2.55	**8137.895557**	**8948.71324**	**5171.431427**	**6178.715536**	**6669.416416**
-2.6	**-1980.194643**	**-2188.375625**	**-1245.64824**	**-1500.25561**	**-1617.68071**
+2.6	**7778.767285**	**8521.919677**	**4973.054885**	**5945.356931**	**6403.635962**
-2.65	**-2240.442069**	**-2475.983269**	**-1409.35778**	**-1697.42697**	**-1830.28467**
+2.65	**7171.862418**	**7880.007717**	**4616.065658**	**5520.894944**	**5932.583706**
-2.7	**-2500.689494**	**-2763.590913**	**-1573.06732**	**-1894.59832**	**-2042.88864**
+2.7	**6332.228012**	**6980.563781**	**4108.467172**	**4914.690091**	**5275.182369**
-2.75	**-2760.936919**	**-3051.198556**	**-1736.77685**	**-2091.76967**	**-2255.49261**
+2.75	**5288.91512**	**5837.101666**	**3462.716578**	**4141.364272**	**4442.566927**
-2.8	**-3021.184344**	**-3338.8062**	**-1900.48639**	**-2288.94102**	**-2468.09658**
+2.8	**4067.605922**	**4479.837005**	**2695.721019**	**3220.879728**	**3448.983051**
-2.85	**-3281.431769**	**-3626.413843**	**-2064.19592**	**-2486.11238**	**-2680.70054**
+2.85	**2683.315087**	**2946.913077**	**1828.842342**	**2178.544496**	**2321.423742**
-2.9	**-3541.679194**	**-3914.021487**	**-2227.90546**	**-2683.28373**	**-2893.30451**
+2.9	**1234.964934**	**1350.372626**	**888.9887742**	**1069.182169**	**1112.679**
-2.95	**-3801.926619**	**-4201.629131**	**-2391.615**	**-2880.45508**	**-3105.90848**
+2.95	**882.527018**	**975.3084238**	**555.1565789**	**668.629223**	**720.9629677**
-3	**-5256.09655**	**-5817.66214**	**-3299.73154**	**-3969.72162**	**-4286.56345**
+3	**1142.77448**	**1262.91609**	**718.8661819**	**865.8006028**	**933.5669427**
(Span 3) -4	**-5.26E+03**	**-5.82E+03**	**-3.30E+03**	**-3.97E+03**	**-4.29E+03**
+4	**1.14E+03**	**1.26E+03**	**7.19E+02**	**8.66E+02**	**9.34E+02**
-3.05	**-4993.291722**	**-5526.77903**	**-3134.74496**	**-3771.23554**	**-4072.23528**
+3.05	**1085.635757**	**1199.770285**	**682.9228728**	**822.5105719**	**886.8885964**
-3.1	**-4730.486895**	**-5235.89592**	**-2969.75839**	**-3572.74947**	**-3857.90711**
+3.1	**1028.497033**	**1136.624481**	**719.8596012**	**842.1994212**	**880.9767439**
-3.15	***-4467.682068***	***-4945.01281***	***-2804.77181***	***-3374.26339***	***-3643.57894***
+3.15	**2108.644505**	**2294.781555**	**1463.97919**	**1755.851407**	**1857.378964**
-3.2	**-4204.877241**	**-4654.1297**	**-2639.78523**	**-3175.77731**	**-3429.25077**
+3.2	**3298.650218**	**3611.634187**	**2210.855634**	**2653.808799**	**2827.151457**
-3.25	**-3942.072414**	**-4363.246589**	**-2474.79865**	**-2977.29123**	**-3214.9226**
+3.25	**4385.511966**	**4818.507257**	**2890.27156**	**3469.248707**	**3711.985154**
-3.3	**-3679.267587**	**-4072.363479**	**-2309.81207**	**-2778.80515**	**-3000.59442**
+3.3	**5345.17496**	**5888.353064**	**3493.510362**	**4184.458969**	**4492.400362**
-3.35	**-3416.46276**	**-3781.480369**	**-2144.8255**	**-2580.31907**	**-2786.26625**
+3.35	**6155.257946**	**6794.669911**	**4007.362094**	**4796.817795**	**5150.277953**
-3.4	**-3153.657932**	**-3490.597259**	**-1979.83892**	**-2381.83299**	**-2571.93808**
+3.4	**6831.713505**	**7518.650262**	**4416.510852**	**5284.20022**	**5668.877562**
-3.45	**-2890.853105**	**-3199.714149**	**-1814.85234**	**-2183.34691**	**-2357.60991**
+3.45	**7348.309013**	**8036.094828**	**4708.904514**	**5630.279915**	**6059.196467**
-3.5	**-2628.048278**	**-2908.831039**	**-1649.86576**	**-1984.86083**	**-2143.28174**
+3.5	**7670.660136**	**8426.359985**	**4873.540194**	**5822.118989**	**6285.324393**
-3.55	**-2365.243451**	**-2617.947929**	**-1484.87918**	**-1786.37475**	**-1928.95356**
+3.55	**7807.742862**	**8594.516068**	**4942.910998**	**5902.611237**	**6380.149292**
-3.6	**-2102.438624**	**-2327.064818**	**-1319.89261**	**-1587.88867**	**-1714.62539**

+3.6	7787.984285	8522.447467	4973.619551	5947.387088	6406.496431
-3.65	-1839.633797	-2036.181708	-1154.90603	-1389.40259	-1500.29722
+3.65	7537.69469	8301.86561	4865.072526	5825.653288	6252.239273
-3.7	-1576.82897	-1745.298598	-989.91945	-1190.91651	-1285.96905
+3.7	7115.152412	7841.313904	4610.025032	5528.970555	5941.236233
-3.75	-1314.024142	-1454.415488	-824.932872	-992.430431	-1071.64088
+3.75	6480.25536	7129.969741	4222.713934	5081.063103	5432.522859
-3.8	-1051.219315	-1163.532378	-659.946294	-793.944352	-857.312705
+3.8	5657.125362	6193.617857	3684.449759	4445.519376	4722.561936
-3.85	-788.4144881	-872.6492678	-494.959716	-595.458272	-642.984533
+3.85	4617.598825	4988.77834	2987.60984	3612.216231	3843.824354
-3.9	-525.609661	-581.7661576	-329.973138	-396.972193	-428.656361
+3.9	3317.05121	3590.072393	2165.712206	2611.594856	2775.270337
-3.95	-262.8048339	-290.8830475	-164.98656	-198.486113	-214.32819
+3.95	1798.098857	1940.187559	1170.471185	1411.27408	1501.530105
-5	-4.61E-13	-4.14E-13	-3.70E-13	-3.66E-13	-3.29E-13
+5	1.09E-12	1.11E-12	6.89E-13	7.83E-13	7.51E-13

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.249659171	-5.743979879	-8.261509488	-8.895562205	-14.05044703	-4.601944407	-6.215481508	-7.123470582	-7.979981094	-8.886543567
End Shear	67.13121843	47.45098798	64.26151913	66.26351655	82.20259842	38.1719501	51.47591048	58.4332903	64.23159206	70.22101983
-0.05	-8.249659171	-5.743979879	-8.261509488	-8.895562205	-14.09982208	-4.601944407	-6.215481508	-7.123470582	-7.979981094	-8.886543567
+0.05	62.59564239	44.29400537	59.69226571	61.3229734	74.06568764	35.64367269	48.06398383	54.52121015	59.85410878	65.35015965
-0.1	-8.249659171	-5.743979879	-8.261509488	-8.895562205	-14.266318	-4.601944407	-6.215481508	-7.123470582	-7.979981094	-8.886543567
+0.1	57.99606369	41.05816074	55.01630123	56.27463753	65.88868183	33.05280497	44.56641648	50.51156098	55.36985234	60.3631892
-0.15	-8.332823348	-6.497318721	-8.261509488	-8.895562205	-14.51254189	-5.409776555	-7.248006485	-7.652929252	-7.979981094	-8.886543567
+0.15	53.89892019	38.20515103	50.90824198	51.85107527	58.91354581	30.76787489	41.482005	46.97742065	51.4209212	55.97549465
-0.2	-12.8152863	-9.727289435	-9.421301464	-8.895562205	-14.89926152	-7.992809467	-10.7358237	-11.66130223	-11.81266126	-11.81107396
+0.2	49.34476022	35.03132966	46.35513837	46.96176551	51.4905699	28.22533249	38.05001654	43.04715965	47.0334345	51.10504241
-0.25	-16.92227839	-12.57291972	-13.20794586	-11.45483322	-15.33958575	-10.26789737	-13.80798966	-15.19384171	-15.78345403	-16.21177251
+0.25	45.3574541	32.25019746	42.38081104	42.70636003	45.35974018	25.99675435	35.04198298	39.60435032	43.19379684	46.84688204
-0.3	-21.49124384	-15.73601181	-17.88713296	-15.80889197	-16.9128162	-12.79612941	-17.22217011	-19.12176981	-20.20272356	-21.15574969
+0.3	40.95402216	29.17607885	38.00573766	38.03638017	38.96274431	23.53268125	31.71626763	35.80020206	38.95545424	42.15135404
-0.35	-25.49503573	-18.50544733	-21.9988898	-20.06877358	-20.73775258	-15.00910885	-20.21079374	-22.56203359	-24.07699822	-25.49405009
+0.35	37.12484178	26.50032066	34.21417501	34.00272963	33.88553441	21.387251	28.82078447	32.49025914	35.27167091	38.07464047
-0.4	-29.92077545	-21.56398205	-26.55709759	-25.09786974	-25.3213774	-17.45239811	-23.51064722	-26.36279322	-28.36149674	-30.29636252
+0.4	32.92646173	23.56358356	30.07230116	29.6123668	28.59363687	19.03178902	25.64203639	28.85894524	31.23484993	33.61244544
-0.45	-33.77313684	-24.22372877	-30.53679622	-29.50046023	-29.43473849	-19.57647519	-26.37955794	-29.66925237	-32.09270099	-34.48278516
+0.45	29.30369561	21.02668747	26.51254377	25.85406761	24.37345539	16.99630104	22.89527724	25.72339935	27.75347489	29.76909613
-0.5	-38.00137807	-27.14002518	-34.9188538	-34.36182261	-34.16352709	-21.90467649	-29.52438466	-33.29611868	-36.19005159	-39.08502587
+0.5	25.36469327	18.26501223	22.65903146	21.80362595	20.04644788	14.77959423	19.9041887	22.31164276	23.97055015	25.5986384
-0.55	-41.65407304	-29.65659501	-38.71746203	-38.58851399	-39.30254742	-23.91305588	-32.23741168	-36.42724492	-39.73162643	-43.0676503
+0.55	21.99662556	15.90047421	19.38011763	18.37427631	16.84335445	12.88083806	17.34232405	19.39202216	20.73813975	22.04056931
-0.6	-45.63056113	-32.39297398	-42.86820434	-43.22183606	-45.3440929	-26.09602818	-35.18652119	-39.83349639	-43.58946036	-47.41141654
+0.6	18.37132416	13.35153968	15.87013767	14.7240409	13.50271517	10.83302873	14.57958892	16.24654571	17.26148703	18.22025403
-0.65	-49.03535458	-34.73286879	-46.43667595	-47.21903268	-51.21169729	-27.96191994	-37.70749116	-42.74775169	-46.89484636	-51.13832739
+0.65	15.30624755	11.19285111	12.92110794	11.67723414	10.76015774	9.097800655	12.23879121	13.58438992	14.32459703	14.99938161
-0.7	-52.70581781	-37.25165179	-50.30093497	-51.56402905	-57.97393986	-29.96951987	-40.42019022	-45.88666562	-50.46078364	-55.16521327
+0.7	12.0489698	8.894335421	9.809828886	8.618038165	8.034265248	7.249031795	9.745101679	10.7519177	11.20659132	11.58761628
-0.75	-55.8144754	-39.38138316	-53.59023794	-55.2781292	-64.70072339	-31.66612851	-42.71293104	-48.54252099	-53.48342754	-58.58449414
+0.75	9.335169871	6.974987316	7.239718309	6.268320937	5.960769665	5.704125224	7.661542917	8.388745888	8.611778312	8.755856528
-0.8	-59.124657	-41.64488999	-57.11284556	-59.27449579	-72.48672366	-33.46821371	-45.14852787	-51.36737399	-56.7050918	-62.23609348
+0.8	6.500242907	4.964574865	4.759522895	4.1024264	4.059408464	4.084539232	5.477597746	5.916000503	5.904797718	5.904530009
-0.85	-61.88894061	-43.5309629	-60.07393667	-62.65191471	-79.69204229	-34.96874542	-47.17686763	-53.72329868	-59.39843761	-65.29582487
+0.85	4.249392027	3.318061745	3.025572253	2.676677205	2.904823923	2.756747877	3.687449829	3.893356102	3.887715697	3.887488367
-0.9	-64.78457474	-45.50151284	-63.19972526	-66.23935931	-87.8108784	-36.53517255	-49.2946628	-56.18736752	-62.22345539	-68.51373489
+0.9	2.088688411	1.750423481	1.804100965	1.929478663	2.766714601	1.396487759	1.91282384	2.02623762	2.026050754	2.025866678
-0.95	-67.15625293	-47.11043473	-65.78356927	-69.22649299	-94.87739255	-37.81283373	-51.02242968	-58.20182945	-64.54094634	-71.162004
+0.95	1.813488064	1.264122116	1.804100965	1.929478663	2.696978085	1.013436681	1.369033979	1.567799785	1.755809481	1.954129264
-1	-69.58306955	-48.75035073	-68.45737119	-72.34472035	-102.6291437	-39.11346045	-52.78173697	-60.25839139	-66.91693501	-73.88781549
+1	1.81E+00	1.264122116	1.804100965	1.929478663	2.67E+00	1.013436681	1.369033979	1.567799785	1.755809481	1.954129264
(Span 2) -2	-6.353708262	-4.428958295	-6.320819713	-6.760091126	-9.3621156	-3.550660924	-4.796525986	-5.492918648	-6.151626544	-6.846456633
+2	69.74858699	48.81809155	68.84595389	73.0244479	109.4688137	39.15617769	52.84245094	60.36262016	67.09823574	74.16335554
-2.05	-6.353708262	-4.428958295	-6.320819713	-6.760091126	-9.39900451	-3.550660924	-4.796525986	-5.492918648	-6.151626544	-6.846456633
+2.05	67.0482493	46.99311206	65.88030552	69.58346247	101.2077154	37.70855199	50.88405799	58.0733336	64.45251335	71.12857356
-2.1	-6.353708262	-4.428958295	-6.320819713	-6.760091126	-9.514597081	-3.550660924	-4.796525986	-5.492918648	-6.151626544	-6.846456633
+2.1	64.00558014	44.92460379	62.59642119	65.82424471	92.81487922	36.06456243	48.66097693	55.48503091	61.48089217	67.7406661
-2.15	-6.353708262	-4.428958295	-6.320819713	-6.760091126	-9.7198442	-3.569496429	-4.796525986	-5.492918648	-6.151626544	-6.846456633
+2.15	60.66257044	42.64169582	59.03694562	61.79341074	84.37115713	34.24750688	46.2046578	52.63383476	58.22386271	64.04477885
-2.2	-8.768741876	-6.547958367	-6.878032216	-6.760091126	-10.02441189	-5.351553725	-7.189538072	-7.883566948	-8.118356938	-8.282124692
+2.2	57.06121522	40.17350839	55.24451892	57.53755445	75.91453093	32.28068679	43.54656133	49.55585464	54.7219104	60.08607103
-2.25	-12.17597169	-8.955270428	-10.11883177	-8.965676736	-10.43668124	-7.288354876	-9.802169733	-10.8502797	-11.38340682	-11.85243926

+2.25	53.2435055	37.54917768	51.26180756	53.10330825	67.50062712	30.18740411	40.71815032	46.28721406	51.01552565	55.90968581
-2.3	-15.83134692	-11.52881978	-13.64134065	-12.59905801	-13.03109575	-9.356589136	-12.59265699	-14.0260949	-14.89214941	-15.70479529
+2.3	49.25144079	34.79782025	47.13142283	48.53725912	59.3791815	27.99095607	37.75087	42.86402734	47.14519249	51.56077889
-2.35	-19.69293084	-14.23947885	-17.40291948	-16.52331827	-16.62268302	-11.53296179	-15.52953691	-17.37489288	-18.6040971	-19.79404357
+2.35	45.12700995	31.94857084	42.8960453	43.88604171	51.51917532	25.71465408	34.67619047	39.32242311	43.1514097	47.08448213
-2.4	-23.71875414	-17.05811794	-21.36092101	-20.69184584	-20.63597769	-13.79416812	-18.58135871	-20.86055254	-22.47875597	-24.07504123
+2.4	40.91221091	29.0305515	38.59830612	39.08957744	44.12867878	23.38178051	31.52556099	35.69849901	39.07464325	42.52595458
-2.45	-27.86689593	-19.95560326	-25.47269989	-25.05802509	-25.51781188	-16.11690918	-21.71665787	-24.44695356	-26.47565553	-28.50262094
+2.45	36.64903089	26.07290167	34.18284241	34.40856606	37.26930299	21.01565601	28.33043068	32.02839592	34.93147956	37.87957798
-2.5	-32.28882548	-23.03749753	-29.88951556	-29.78341805	-31.22142063	-18.58573379	-25.04958677	-28.26489701	-30.74096234	-33.23919937
+2.5	32.13253905	22.90270759	29.69544301	29.57509896	30.95735674	18.47779873	24.90385591	28.09784762	30.55412484	33.03148004
-2.55	-36.55648722	-26.0730175	-34.18301029	-34.40873396	-37.26946151	-21.01574888	-28.3305645	-32.02127584	-34.92480409	-37.87292026
+2.55	27.90231336	19.95548891	25.47253679	25.0578642	25.51767476	16.11681849	21.71653393	24.44681179	26.4754863	28.50244588
-2.6	-40.90151928	-29.03067455	-38.59847362	-39.08974743	-44.12886965	-23.38187258	-31.52568402	-35.69864085	-39.07480203	-42.52613268
+2.6	23.7521377	17.05799851	21.36076398	20.6916913	20.63586921	13.79407912	18.5812381	20.86041504	22.47860264	24.07487141
-2.65	-45.12845065	-31.94868175	-42.89621114	-43.88620978	-51.51936481	-25.71473637	-34.67631053	-39.32256148	-43.15156545	-47.08465723
+2.65	19.72399124	14.23936311	17.40276926	16.52316597	16.62258562	11.5328746	15.52941578	17.37475447	18.60393829	19.79388026
-2.7	-49.25143129	-34.79792991	-47.13159824	-48.53742583	-59.37939508	-27.99104072	-37.75098828	-42.86416399	-47.14534642	-51.56093843
+2.7	15.85988264	11.52871743	13.64119905	12.59892179	13.03100932	9.356506878	12.59254181	14.02596832	14.89200352	15.704646
-2.75	-53.24215848	-37.54928188	-51.261964	-53.10347143	-67.50082542	-30.18748218	-40.71826644	-46.2873483	-51.01567775	-55.90985162
+2.75	12.20179222	8.955173349	10.11869974	8.965546833	10.43668105	7.288276354	9.802064534	10.85016436	11.38326552	11.8522949
-2.8	-57.05870944	-40.17361169	-55.24467655	-57.53771135	-75.9076811	-32.28076649	-43.54667257	-49.55597879	-54.72205124	-60.0862235
+2.8	8.791720552	6.547865655	6.877916904	6.760091158	10.0244117	5.351484685	7.189440621	7.883452406	8.118231144	8.281997051
-2.85	-60.65911484	-42.64179151	-59.03708857	-61.79356134	-84.3713562	-34.24758067	-46.20475757	-52.63394628	-58.22399917	-64.04492835
+2.85	6.353705299	4.428958421	6.320819938	6.760091158	9.719844018	3.56943249	4.796526127	5.49291874	6.151626638	6.846456688
-2.9	-64.00144796	-44.92469459	-62.5965541	-65.82438562	-92.81507494	-36.06462987	-48.66107113	-55.48514088	-61.48101401	-67.74080442
+2.9	6.353705299	4.428958421	6.320819938	6.760091158	9.5145969	3.55066095	4.796526127	5.49291874	6.151626638	6.846456688
-2.95	-67.04375037	-46.99318819	-65.8804275	-69.58359757	-101.2079048	-37.70861266	-50.88414248	-58.07342862	-64.45262255	-71.12869417
+2.95	6.353705299	4.428958421	6.320819938	6.760091158	9.399004342	3.55066095	4.796526127	5.49291874	6.151626638	6.846456688
-3	-69.85800765	-48.89485225	-68.97261607	-73.17266053	-109.8400382	-39.21698625	-52.92474065	-60.4590735	-67.21019117	-74.29228753
+3	6.353705299	4.428958421	6.320819938	6.760091158	9.362115426	3.55066095	4.796526127	5.49291874	6.151626638	6.846456688
(Span 3) -4	-1.81E+00	-1.264122152	-1.804101029	-1.929478672	-2.67E+00	-1.013436689	-1.369034019	-1.567799812	-1.755809508	-1.95412928
+4	69.46712086	48.66406406	68.31542871	72.17835556	102.2042971	39.04507983	52.68922334	60.15008309	66.7914856	73.74356331
-3.05	-1.81E+00	-1.264122152	-1.804101029	-1.929478672	-2.69E+00	-1.013436689	-1.369034019	-1.567799812	-1.755809508	-1.95412928
+3.05	67.31060889	47.2062671	65.93858299	69.40644782	95.31356935	37.88889275	51.12529943	58.32191417	64.67937072	71.3204881
-3.1	-2.193154666	-1.817160252	-1.818873053	-1.929478672	-2.772676988	-1.468274076	-1.991356247	-2.118088619	-2.11789778	-2.117712554
+3.1	64.64320756	45.39631581	63.03187575	66.04606957	87.36403374	36.45159171	49.18165073	56.05575239	62.07231095	68.34131383
-3.15	-4.112199994	-3.219812062	-2.952355573	-2.59169965	-2.8953921	-2.677468707	-3.58057611	-3.772745808	-3.767919471	-3.767693424
+3.15	62.06951021	43.64462673	60.25327247	62.85707769	80.14701156	35.05914227	47.29906718	53.86535409	59.56105324	65.48080798
-3.2	-6.638708155	-5.072053018	-4.889594017	-4.195590727	-4.142510837	-4.17116599	-5.59440396	-6.048120958	-6.049183199	-6.048909707
+3.2	58.95993084	41.52288302	56.92216423	59.05763201	72.05685738	33.37111277	45.0172751	51.21503962	56.53115909	62.03874074
-3.25	-9.156931314	-6.859180678	-7.085593255	-6.127569741	-5.837877513	-5.610867168	-7.535786508	-8.246222668	-8.455509365	-8.585565112
+3.25	56.01732538	39.51078292	53.79083572	55.50516835	65.13571234	31.76919148	42.85220598	48.70395476	53.66733579	58.79274428
-3.3	-12.20767896	-9.018360479	-9.976840765	-8.770877793	-8.170520227	-7.348818101	-9.879692311	-10.90468506	-11.37455465	-11.77116467
+3.3	52.51989229	37.11492398	50.09049139	51.32693585	57.59962807	29.86057672	40.27296292	45.71621801	50.26698214	54.94618835
-3.35	-15.10118717	-11.06156939	-12.74255604	-11.49342109	-10.59607046	-8.992236789	-12.09639887	-13.42254343	-14.14624562	-14.80398557
+3.35	49.25667865	34.87592192	46.65547616	47.46458402	51.58853065	28.0759695	37.86158029	42.92596975	47.09714063	51.36659222
-3.4	-18.54698408	-13.49001569	-16.06008559	-14.92094848	-13.68139053	-10.94429762	-14.7297053	-16.41737012	-17.45012642	-18.42733637
+3.4	45.42571525	32.24361977	42.64106556	42.96789075	45.00865826	25.97691119	35.02559107	39.64753509	43.37870424	47.17395434
-3.45	-21.76753986	-15.75581853	-19.1802003	-18.16573539	-16.65091167	-12.76464614	-17.18556403	-19.21345072	-20.54060396	-21.82329886
+3.45	41.8901674	29.81119892	38.95138429	38.84923017	39.63823623	24.03642513	32.40406561	36.619654	39.94938655	43.31270176
-3.5	-25.55414919	-18.4158365	-22.86884497	-22.02362345	-20.26911642	-14.90067672	-20.06757068	-22.49791959	-24.17694494	-25.82599457
+3.5	37.78000714	26.98015031	34.67809016	34.09435615	33.86595204	21.77706786	29.35200426	33.09724398	35.96524333	38.8323878
-3.55	-29.05350561	-20.87075061	-26.29432004	-25.62415369	-24.11825851	-16.87114842	-22.72640852	-25.53070447	-27.53966294	-29.53320683
+3.55	34.02042003	24.38779452	30.78281091	29.7729986	29.69263689	19.70748195	26.55650927	29.87326217	32.32303216	34.74138126
-3.6	-33.12664804	-23.72466866	-30.29891122	-29.85210592	-28.86584715	-19.16100353	-25.81642077	-29.05807937	-31.45608588	-33.85684176
+3.6	29.67070006	21.3956681	26.30577037	24.82023874	25.06522815	17.31796626	23.32907699	26.15359823	28.12554225	30.03177989

-3.65	-36.8565978	-26.33518272	-33.98071018	-33.75478429	-33.57727749	-21.25481995	-28.64206758	-32.28602597	-35.04450309	-37.8233755
+3.65	25.73646827	18.67689066	22.25391807	20.34978157	20.99078507	15.14609051	20.39577309	22.7750349	24.31699617	25.76293626
-3.7	-41.16199566	-29.34532156	-38.24609541	-38.29250447	-39.28898501	-23.66835786	-31.89938124	-36.00959585	-39.18863449	-42.40952816
+3.7	21.23222889	15.56136714	17.62831397	15.56800173	16.69571736	12.65655994	17.03368714	18.90486753	19.95854983	20.88246896
-3.75	-45.07429051	-32.0779626	-42.13518019	-42.44373347	-44.98657457	-25.85870948	-34.85566385	-39.39115948	-42.95616671	-46.58348347
+3.75	17.17072102	12.74965008	13.46892519	11.69760253	15.37009875	10.40917946	13.99876906	15.41326656	16.03021116	16.48770367
-3.8	-49.55769289	-35.20664274	-46.60614692	-47.23090992	-51.88358341	-28.36578673	-38.23960686	-43.26421388	-47.27564394	-51.37376318
+3.8	12.55039797	9.548387563	9.18707084	8.895562333	14.87474786	7.849778016	10.54267868	11.43926705	11.56318543	11.56160123
-3.85	-53.60409774	-38.02789733	-50.65349419	-51.57711022	-58.48742049	-30.62588775	-41.29035344	-46.75788854	-51.17573331	-55.70317424
+3.85	8.557091249	6.677223139	8.26150946	8.895562333	14.53098753	5.553668625	7.442306343	7.876159038	7.97998139	8.886543845
-3.9	-58.21127331	-41.2374399	-55.27490421	-56.55346299	-66.33426422	-33.19636209	-44.76022216	-50.73369235	-55.61816665	-60.63920818
+3.9	8.249663173	5.743979877	8.26150946	8.895562333	14.25399324	4.601944546	6.215481515	7.123470853	7.97998139	8.886543845
-3.95	-62.34352145	-44.11382509	-59.43146089	-61.0410214	-73.60289521	-35.49943634	-47.86926043	-54.29790654	-59.60427171	-65.0721914
+3.95	8.249663173	5.743979877	8.26150946	8.895562333	14.10599294	4.601944546	6.215481515	7.123470853	7.97998139	8.886543845
-5	-67.02017453	-47.36657276	-64.14814684	-66.1462547	-82.08793661	-38.10316472	-51.38436096	-58.32973599	-64.11728492	-70.09550743
+5	8.249663173	5.743979877	8.26150946	8.895562333	14.05044729	4.601944546	6.215481515	7.123470853	7.97998139	8.886543845

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.249659171	-7.491176004	-8.06357345	-7.601536277	-9.208072628	-9.597574006	-10.159928	-4.011569346
End Shear	67.13121843	62.64192909	67.09796339	63.04029596	75.64804912	74.10746521	78.37912142	33.23160093
-0.05	-8.249659171	-7.491176004	-8.06357345	-7.601536277	-9.208072628	-9.597574006	-10.159928	-4.011569346
+0.05	62.59564239	58.53061946	62.6719113	58.86923756	70.59557739	68.80478772	72.76539591	31.03739315
-0.1	-8.249659171	-7.491176004	-8.06357345	-7.601536277	-9.208072628	-9.597574006	-10.159928	-4.011569346
+0.1	57.99606369	54.31514579	58.13488495	54.59307838	65.41825235	63.37993991	67.02262484	28.76947471
-0.15	-8.332823348	-9.402896847	-9.765029274	-8.984557788	-10.12846024	-9.597574006	-10.159928	-4.522716125
+0.15	53.89892019	50.59574731	54.13277768	50.82169613	60.85420208	58.61540062	61.97911352	26.76994396
-0.2	-12.8152863	-13.5965563	-14.28393455	-13.24693835	-15.30041149	-10.41412113	-10.96223277	-6.786853427
+0.2	49.34476022	46.45505203	49.67850018	46.62491963	55.77777709	53.33636792	56.39127779	24.54566336
-0.25	-16.92227839	-17.28855801	-18.26328359	-17.00101525	-19.85771306	-14.82978027	-15.61398408	-8.781633362
+0.25	45.3574541	42.82389019	45.77338887	42.94620471	51.33020997	48.72991744	51.51563718	22.59668021
-0.3	-21.49124384	-21.3894176	-22.68446893	-21.17262658	-24.92431959	-20.26913917	-21.37397647	-10.99900415
+0.3	40.95402216	38.80695787	41.45461279	38.87854865	46.41497324	43.66076252	46.15056786	20.44249626
-0.35	-25.49503573	-24.97716006	-26.5535107	-24.82391259	-29.36118492	-25.05034322	-26.43726573	-12.94045374
+0.35	37.12484178	35.30757796	37.69339223	35.33671151	42.13747697	39.26933774	41.50308409	18.56758224
-0.4	-29.92077545	-28.93623819	-30.82422654	-28.85502158	-34.2621643	-30.35236938	-32.05238984	-15.08459948
+0.4	32.92646173	31.46338817	33.56286494	31.44791324	37.4437164	34.47412345	36.42861242	16.50995388
-0.45	-33.77313684	-32.37617911	-34.53606935	-32.35930849	-38.52500795	-34.98302617	-36.95675868	-16.94920008
+0.45	29.30369561	28.13932886	29.99242301	28.08716635	33.38988246	30.35467029	32.06958115	14.7326258
-0.5	-38.00137807	-36.14448962	-38.60356139	-36.20017135	-43.20006456	-40.08365509	-42.35918154	-18.99366247
+0.5	25.36469327	24.51686534	26.10289626	24.42696066	28.97788227	25.89745086	27.35352928	12.79801134
-0.55	-41.65407304	-39.39309313	-42.1113204	-39.51324991	-47.2352993	-44.50682817	-47.04434431	-20.75789561
+0.55	21.99662556	21.41166484	22.77012029	21.29151245	25.20129652	22.10691286	23.34324367	11.14178823
-0.6	-45.63056113	-42.92165585	-45.92284093	-43.11413393	-51.62415127	-49.34200217	-52.16624013	-22.67621265
+0.6	18.37132416	18.05990864	19.17434275	17.9096362	21.13134422	18.05175277	19.05344457	9.356645149
-0.65	-49.03535458	-45.93537968	-49.17962424	-46.19179257	-55.37818724	-53.50073903	-56.57189415	-24.31655891
+0.65	15.30624755	15.2171049	16.1261198	15.04369732	17.6855953	14.6470758	15.45220025	7.845046591
-0.7	-52.70581781	-49.17521303	-52.68242378	-49.50296153	-59.42054798	-58.00639674	-61.34543325	-26.08227521
+0.7	12.0489698	12.18504027	12.87684381	11.98988561	14.01797558	11.05803681	11.65648402	6.235837237
-0.75	-55.8144754	-51.9105205	-55.64134607	-52.30098985	-62.83979705	-61.84376133	-65.4112933	-27.57521544
+0.75	9.335169871	9.648180608	10.16007088	9.43766633	10.95665163	8.096160531	8.524570051	4.892381886
-0.8	-59.124657	-54.81264084	-58.78267289	-55.27270919	-66.47538243	-65.95584149	-69.76864611	-29.16186905
+0.8	6.500242907	6.984788268	7.310044884	6.761662058	7.751658962	5.236670462	5.512284697	3.485562217
-0.85	-61.88894061	-57.22598486	-61.39683707	-57.74689712	-69.50625643	-69.41488465	-73.43441307	-30.48388454
+0.85	4.249392027	4.797402959	4.97160083	4.56737243	5.128347972	3.561273621	3.767034413	2.333769358
-0.9	-64.78457474	-59.7414107	-64.12394203	-60.32942319	-72.67477107	-73.06932649	-77.30775055	-31.86502146
+0.9	2.088688411	2.551665988	2.573575879	2.377791809	2.544405961	2.096319333	2.218948286	1.319469084
-0.95	-67.15625293	-61.78926062	-66.34646908	-62.43556068	-75.26368216	-76.09310842	-80.51313525	-32.99259302
+0.95	1.813488064	1.650919133	1.776705378	1.674772712	2.028182126	2.096319333	2.218948286	0.88142871
-1	-69.58306955	-63.86900937	-68.60660164	-64.57916575	-77.90485011	-79.22585115	-83.8346283	-34.14174881
+1	1.81E+00	1.650919133	1.776705378	1.674772712	2.028182126	2.096319333	2.218948286	0.88142871
(Span 2) -2	-6.353708262	-5.784134373	-6.224837145	-5.867707433	-7.105906987	-7.344631448	-7.774272317	-3.088159692
+2	69.74858699	63.9079154	68.66635307	64.64682067	78.02471932	79.70358459	84.34560584	34.17777791
-2.05	-6.353708262	-5.784134373	-6.224837145	-5.867707433	-7.105906987	-7.344631448	-7.774272317	-3.088159692
+2.05	67.0482493	61.59336803	66.15059804	62.26049616	75.08366631	76.22890716	80.66182924	32.89807056
-2.1	-6.353708262	-5.784134373	-6.224837145	-5.867707433	-7.105906987	-7.344631448	-7.774272317	-3.088159692
+2.1	64.00558014	58.95524687	63.28902893	59.54974499	71.75495813	72.38845523	76.59141053	31.44775261
-2.15	-6.353708262	-6.111042856	-6.391582814	-5.909467128	-7.105906987	-7.344631448	-7.774272317	-3.088159692
+2.15	60.66257044	56.03141198	60.12241837	56.55300654	68.08518828	68.231748	72.18678184	29.84727804
-2.2	-8.768741876	-9.041035267	-9.527541698	-8.854359187	-10.29422566	-7.704225022	-8.113880864	-4.609448221
+2.2	57.06121522	52.85972501	56.69154055	53.30873279	64.12096514	63.80829902	67.50036928	28.11710418
-2.25	-12.17597169	-12.21800043	-12.93212119	-12.05415243	-14.13707798	-11.44172542	-12.06616801	-6.294946132

+2.25	53.2435055	49.47805905	53.03718121	49.85537765	59.90889939	59.167653	62.58463193	26.27767867
-2.3	-15.83134692	-15.60407574	-16.56454649	-15.47040619	-18.2478965	-15.51010921	-16.36945083	-8.097112187
+2.3	49.25144079	45.92427221	49.20011168	46.23137485	55.49557778	54.35929013	57.49196059	24.3494598
-2.35	-19.69293084	-19.16139044	-20.38403353	-19.06466539	-22.5800685	-19.85986321	-20.97130362	-9.995492822
+2.35	45.12700995	42.23623316	45.2211125	42.47518771	50.92762156	49.43277093	52.27483111	22.35289699
-2.4	-23.71875414	-22.85208193	-24.34980737	-22.79849041	-27.08700085	-24.44146558	-25.81929147	-11.96963367
+2.4	40.91221091	38.4517959	41.1409503	38.62525402	46.25162336	44.43759926	46.98565935	20.30844576
-2.45	-27.86689593	-26.63829277	-28.42109831	-26.63342463	-31.72207913	-29.20539625	-30.86098139	-13.99908213
+2.45	36.64903089	34.60883356	37.00041119	34.72001155	41.5141731	39.30951243	41.55642111	18.23655735
-2.5	-32.28882548	-30.65762051	-32.74599166	-30.70905593	-36.65428226	-34.32707321	-36.28204258	-16.15770945
+2.5	32.13253905	30.48199094	32.55694898	30.53087196	36.43852064	34.10194088	36.04373469	16.0633591
-2.55	-36.55648722	-34.6089939	-37.00058377	-34.72017526	-41.51437166	-39.30970731	-41.55662742	-18.23658043
+2.55	27.90231336	26.63813282	28.42092632	26.63327306	31.72189583	29.20520723	30.86078134	13.99905765
-2.6	-40.90151928	-38.45195511	-41.14112189	-38.62540432	-46.25180555	-44.43779388	-46.98586539	-20.30846274
+2.6	23.7521377	22.85193637	24.3496509	22.7983429	27.0868226	24.44128371	25.81909902	11.96961078
-2.65	-45.12845065	-42.23637732	-45.22126809	-42.47533433	-50.92779991	-49.43296388	-52.27503544	-22.35291486
+2.65	19.72399124	19.16124389	20.38387616	19.06451714	22.57988972	19.85968947	20.9711198	9.995470152
-2.7	-49.25143129	-45.92441926	-49.20027016	-46.23151938	-55.49575326	-54.35949411	-57.49217662	-24.34947841
+2.7	15.85988264	15.60393137	16.56439154	15.47026516	18.24772661	15.50994554	16.36927769	8.097090774
-2.75	-53.24215848	-49.47820349	-53.03733739	-49.85551954	-59.9090723	-59.16783515	-62.58482487	-26.27769849
+2.75	12.20179222	12.21787229	12.93198378	12.0540237	14.13692332	11.44157303	12.06600684	6.294930358
-2.8	-57.05870944	-52.85985757	-56.6916837	-53.30886841	-64.12113059	-63.80848278	-67.50056394	-28.11712321
+2.8	8.791720552	9.040912401	9.527410009	8.854239846	10.29408234	7.704092121	8.113740345	4.609432382
-2.85	-60.65911484	-56.03153539	-60.12255198	-56.55312838	-68.08533725	-68.23191478	-72.18695855	-29.84729823
+2.85	6.353705299	6.11092615	6.391458024	5.909353732	7.105907244	7.344631583	7.774272598	3.088159766
-2.9	-64.00144796	-58.95536271	-63.28915453	-59.54985996	-71.75509916	-72.38861056	-76.59157515	-31.44777054
+2.9	6.353705299	5.784134244	6.224837171	5.867707422	7.105907244	7.344631583	7.774272598	3.088159766
-2.95	-67.04375037	-61.59346791	-66.15070641	-62.26059909	-75.08379291	-76.22904998	-80.66198062	-32.89808299
+2.95	6.353705299	5.784134244	6.224837171	5.867707422	7.105907244	7.344631583	7.774272598	3.088159766
-3	-69.85800765	-64.00490639	-68.77192178	-64.74704448	-78.14854394	-79.852163	-84.50315369	-34.23157599
+3	6.353705299	5.784134244	6.224837171	5.867707422	7.105907244	7.344631583	7.774272598	3.088159766
(Span 3) -4	-1.81E+00	-1.650919096	-1.776705386	-1.674772709	-2.028182199	-2.096319372	-2.218948366	-0.881428731
+4	69.46712086	63.75981654	68.48784402	64.46647452	77.76580668	79.05943121	83.65816278	34.08132725
-3.05	-1.81E+00	-1.650919096	-1.776705386	-1.674772709	-2.028182199	-2.096319372	-2.218948366	-0.881428731
+3.05	67.31060889	61.91103391	66.4787113	62.56093146	75.41796094	76.27461669	80.70556113	33.0597949
-3.1	-2.193154666	-2.670340432	-2.700210536	-2.478253135	-2.655420701	-2.096319372	-2.218948366	-1.360924524
+3.1	64.64320756	59.6073093	63.97848305	60.19163545	72.50556735	72.87299818	77.09964751	31.79133947
-3.15	-4.112199994	-4.666670518	-4.831917025	-4.436342935	-4.971864322	-3.466210978	-3.666026211	-2.265008388
+3.15	62.06951021	57.37125636	61.55426204	57.89593583	69.68896389	69.62446101	73.65652798	30.56360331
-3.2	-6.638708155	-7.127364155	-7.462542872	-6.904810538	-7.922958201	-5.386563892	-5.670067255	-3.560713721
+3.2	58.95993084	54.65635587	58.61344736	55.11258453	66.27936387	65.73317598	69.53268681	29.07640311
-3.25	-9.156931314	-9.4949407	-9.996025049	-9.283600719	-10.77198574	-7.918641497	-8.336877921	-4.811279707
+3.25	56.01732538	52.0765755	55.82103002	52.47094121	63.04759351	62.07785242	65.65933485	27.66598408
-3.3	-12.20767896	-12.34880634	-13.05228535	-12.15472791	-14.21583064	-11.2506051	-11.86012528	-6.32259902
+3.3	52.51989229	48.99947257	52.49236948	49.32326973	59.20107199	57.76095838	61.08539172	25.98648862
-3.35	-15.10118717	-15.04408195	-15.94064594	-14.86934154	-17.47607527	-14.44101738	-15.23425981	-7.753067705
+3.35	49.25667865	46.11950596	49.37864645	46.37989285	55.60772252	53.75579203	56.84210052	24.41690398
-3.4	-18.54698408	-18.24212794	-19.36978043	-18.09341156	-21.35240841	-18.27112949	-19.28550141	-9.45355395
+3.4	45.42571525	42.72917309	45.71487968	42.91765137	51.38458277	49.07735226	51.88588716	22.5715834
-3.45	-21.76753986	-21.22158118	-22.56615037	-21.09963878	-24.97028344	-21.87587021	-23.09881921	-11.04040574
+3.45	41.8901674	39.59256861	42.32674933	39.7167499	47.48324124	44.77926606	47.33292808	20.86635199
-3.5	-25.55414919	-24.71481461	-26.31539723	-24.62690686	-29.2188079	-26.14007075	-27.61022671	-12.90359502
+3.5	37.78000714	35.93799839	38.3806376	35.98965129	42.94374115	39.80335909	42.0622923	18.8816527
-3.55	-29.05350561	-27.93489566	-29.77287662	-27.880536	-33.14072263	-30.10219544	-31.80243364	-14.62331196
+3.55	34.02042003	32.58827409	34.76496533	32.5754367	38.78799708	35.26933097	37.25999494	17.06429436
-3.6	-33.12664804	-31.67434454	-33.78949702	-31.66126403	-37.70114989	-34.73642254	-36.70617686	-16.6227378
+3.6	29.67070006	28.71845926	30.58927022	28.63322687	33.99243513	30.05998206	31.74272823	14.96668

-3.65	**-36.8565978**	**-35.09151491**	**-37.46119829**	**-35.11808723**	**-41.87351941**	**-38.99899003**	**-41.21698223**	**-18.45179965**
+3.65	**25.73646827**	**25.19916765**	**26.79295876**	**25.04989561**	**29.63585965**	**25.3469399**	**26.75136913**	**13.0607219**
-3.7	**-41.16199566**	**-39.02821025**	**-41.69245607**	**-39.10252571**	**-46.68554704**	**-43.93920047**	**-46.44525067**	**-20.56101749**
+3.7	**21.23222889**	**21.16307959**	**22.44041843**	**20.94234**	**24.64455725**	**19.96822744**	**21.05531919**	**10.87665244**
-3.75	**-45.07429051**	**-42.59891571**	**-45.53147473**	**-42.71833137**	**-51.05478151**	**-48.44526767**	**-51.21436183**	**-22.47589911**
+3.75	**17.17072102**	**17.51774617**	**18.51034156**	**17.23413003**	**20.14077254**	**15.13311258**	**15.9351892**	**8.905585135**
-3.8	**-49.55769289**	**-46.68384805**	**-49.92459074**	**-46.85677006**	**-56.05815472**	**-53.62734869**	**-56.69927143**	**-24.66844236**
+3.8	**12.55039797**	**13.36436796**	**14.03370699**	**13.01091113**	**15.01395078**	**10.14088628**	**10.67461713**	**6.661535151**
-3.85	**-53.60409774**	**-50.36459025**	**-53.8840823**	**-50.58734807**	**-60.57066595**	**-58.31998956**	**-61.66641373**	**-26.64564934**
+3.85	**8.557091249**	**9.636573611**	**10.0167979**	**9.22201786**	**10.41652699**	**9.597574307**	**10.15992844**	**4.64890247**
-3.9	**-58.21127331**	**-54.54879195**	**-58.38632211**	**-54.83003801**	**-65.70508301**	**-63.67991442**	**-67.34017144**	**-28.89504423**
+3.9	**8.249663173**	**7.491176105**	**8.063573695**	**7.601536477**	**9.208072687**	**9.597574307**	**10.15992844**	**4.011583844**
-3.95	**-62.34352145**	**-58.29600341**	**-62.41936782**	**-58.63117791**	**-70.30728263**	**-68.50216844**	**-72.44503376**	**-30.91103738**
+3.95	**8.249663173**	**7.491176105**	**8.063573695**	**7.601536477**	**9.208072687**	**9.597574307**	**10.15992844**	**4.011583844**
-5	**-67.02017453**	**-62.53049175**	**-66.97798077**	**-62.92838207**	**-75.51245622**	**-73.9758767**	**-78.23981088**	**-33.19085551**
+5	**8.249663173**	**7.491176105**	**8.063573695**	**7.601536477**	**9.208072687**	**9.597574307**	**10.15992844**	**4.011583844**

3-Span: Shear (Max and Min) Raw Data Results - 170' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.249659171	-17.88213692	-19.79276468	-11.22624957	-13.5056699	-14.58362007
End Shear	67.13121843	132.07128	142.794269	85.79974487	103.3868332	110.1173395
-0.05	-8.249659171	-17.88213692	-19.79276468	-11.22624957	-13.5056699	-14.58362007
+0.05	62.59564239	122.1827664	132.0168682	79.58060718	95.91700325	102.0482279
-0.1	-8.249659171	-17.88213692	-19.79276468	-11.22624957	-13.5056699	-14.58362007
+0.1	57.99606369	112.0815701	120.8502202	73.22115293	88.27718231	93.7988955
-0.15	-8.332823348	-17.88213692	-19.79276468	-11.22624957	-13.5056699	-14.58362007
+0.15	53.89892019	103.231598	111.0780273	67.63984778	81.57089854	86.56307982
-0.2	-12.8152863	-17.88213692	-19.79276468	-11.81868443	-13.67694832	-14.58362007
+0.2	49.34476022	93.4510932	100.2914589	61.46057576	74.14463311	78.55678556
-0.25	-16.92227839	-21.85871613	-22.97882531	-16.18320884	-19.86155013	-19.85903459
+0.25	45.3574541	84.93978696	90.91677113	56.07292356	67.66836728	71.58055749
-0.3	-21.49124384	-30.84044617	-31.01937961	-22.44150956	-27.37088339	-27.76102959
+0.3	40.95402216	75.60058289	80.64448725	50.14919418	60.54609124	63.91529829
-0.35	-25.49503573	-39.75217303	-40.30062096	-28.07634109	-34.1309392	-35.10108574
+0.35	37.12484178	67.53513215	71.78657673	45.02218988	54.38023495	57.28574264
-0.4	-29.92077545	-49.82655218	-51.54198565	-34.32946092	-41.63139248	-43.25116935
+0.4	32.92646173	58.75780581	62.16278272	39.42937599	47.65239606	50.05948707
-0.45	-33.77313684	-58.64728779	-61.39564971	-39.79485911	-48.18576293	-50.37880808
+0.45	29.30369561	51.24540366	53.94095629	34.63001316	41.87734361	43.86371086
-0.5	-38.00137807	-68.38883035	-72.29080705	-45.81967276	-55.40958653	-58.24092572
+0.5	25.36469327	43.15055092	45.0998642	29.4434742	35.63437174	37.17443803
-0.55	-41.65407304	-76.8601104	-81.77708539	-51.04864316	-61.67787652	-65.06904269
+0.55	21.99662556	36.29838789	37.63340449	25.03874804	30.33051731	31.49952502
-0.6	-45.63056113	-86.14821545	-92.19182114	-56.76979713	-68.53464668	-72.54521918
+0.6	18.37132416	29.00661112	29.70920773	20.33385025	24.66285243	25.44520713
-0.65	-49.03535458	-94.16284983	-101.1914154	-61.69534634	-74.4364648	-78.98673608
+0.65	15.30624755	22.92187786	23.1174302	16.39074967	19.91058223	20.37824969
-0.7	-52.70581781	-102.8769383	-110.9915455	-67.03746249	-80.83572762	-85.97899074
+0.7	12.0489698	16.65238782	16.83632207	12.24287233	14.90867987	15.05687289
-0.75	-55.8144754	-110.3277348	-119.3851642	-71.5925977	-86.29068256	-91.94680406
+0.75	9.335169871	11.89352073	12.40230726	8.877648494	10.84749532	10.85112448
-0.8	-59.124657	-118.3472021	-128.4364618	-76.48031889	-92.14200891	-98.35715906
+0.8	6.500242907	7.672928071	7.945722546	6.126969843	6.948135954	7.215837287
-0.85	-61.88894061	-125.1269686	-136.1048231	-80.5980429	-97.06970414	-103.7641828
+0.85	4.249392027	4.767344094	4.872880253	4.230271565	4.646936483	4.883824897
-0.9	-64.78457474	-132.3312393	-144.273092	-84.95600215	-102.2826539	-109.4946652
+0.9	2.088688411	3.887913593	4.296656014	2.44570541	2.94560142	3.176153811
-0.95	-67.15625293	-138.3327836	-151.09688	-88.56932675	-106.6027035	-114.253807
+0.95	1.813488064	3.887913593	4.296656014	2.44570541	2.94560142	3.176153811
-1	-69.58306955	-144.6012595	-158.2479323	-92.32214638	-111.0868232	-119.2064323
+1	1.81E+00	3.887913593	4.296656014	2.44570541	2.94560142	3.176153811
(Span 2) -2	-6.353708262	-13.62163284	-15.05369639	-8.568734897	-10.32016269	-11.12792254
+2	69.74858699	145.9655833	159.9374705	92.97220089	111.8393977	120.1364794
-2.05	-6.353708262	-13.62163284	-15.05369639	-8.568734897	-10.32016269	-11.12792254
+2.05	67.0482493	139.0416866	152.0485327	88.81670236	106.8709625	114.6555619
-2.1	-6.353708262	-13.62163284	-15.05369639	-8.568734897	-10.32016269	-11.12792254
+2.1	64.00558014	131.4844877	143.4842764	84.24118953	101.3953284	108.6391517
-2.15	-6.353708262	-13.62163284	-15.05369639	-8.568734897	-10.32016269	-11.12792254
+2.15	60.66257044	123.3872022	134.3484533	79.30392005	95.4824069	102.16299
-2.2	-8.768741876	-13.62163284	-15.05369639	-8.568734897	-10.32016269	-11.12792254
+2.2	57.06121522	114.843051	124.7447697	74.0631561	89.2021122	95.30280707
-2.25	-12.17597169	-17.55065267	-17.61647674	-12.73785398	-15.49475643	-15.76141289

+2.25	53.2435055	105.9452431	114.7770289	68.5771534	82.62434873	88.13437333
-2.3	-15.83134692	-24.81499354	-25.4263249	-17.44673503	-21.17199515	-21.81349857
+2.3	49.25144079	96.78703412	104.5489111	62.90418881	75.81905171	80.73338346
-2.35	-19.69293084	-32.66423802	-33.97408207	-22.49696547	-27.25567183	-28.31987376
+2.35	45.12700995	87.46159641	94.16421995	57.10249752	68.85610182	73.17562475
-2.4	-23.71875414	-41.00517768	-43.09614145	-27.83026226	-33.67584777	-35.20479713
+2.4	40.91221091	77.94012475	83.72666777	51.23035132	61.805426	65.47941642
-2.45	-27.86689593	-49.74456185	-52.68880095	-33.38839511	-40.36264663	-42.3925399
+2.45	36.64903089	68.46979525	73.33997183	45.21262609	54.57667062	57.71946871
-2.5	-32.28882548	-59.20605865	-63.10800872	-39.37630614	-47.56255365	-50.14854402
+2.5	32.13253905	58.78885627	62.64818742	39.11287851	47.24588508	49.80705923
-2.55	-36.55648722	-68.47015978	-73.34004892	-45.21283826	-54.57692576	-57.71974417
+2.55	27.90231336	49.74421474	52.68872774	33.38818988	40.36239981	42.39227413
-2.6	-40.90151928	-77.92340074	-83.72674343	-51.22096717	-61.79715536	-65.46382326
+2.6	23.7521377	41.00484782	43.09607196	27.83006519	33.67561067	35.20454192
-2.65	-45.12845065	-87.46196061	-94.16429557	-57.10270731	-68.85635348	-73.1758972
+2.65	19.72399124	32.66394607	33.97401503	22.49677771	27.25544558	28.31964031
-2.7	-49.25143129	-96.78739829	-104.5489871	-62.90439699	-75.81930119	-80.7336543
+2.7	15.85988264	24.81471084	25.42625235	17.44655888	21.17178263	21.8132718
-2.75	-53.24215848	-105.9455983	-114.7771035	-68.57735394	-82.62458955	-88.13463513
+2.75	12.20179222	17.55040411	17.71690479	12.737697	15.49456753	15.76119563
-2.8	-57.05870944	-114.8433692	-124.7448455	-74.06335086	-89.20234494	-95.3030805
+2.8	8.791720552	13.62163311	15.05369629	8.568734792	10.32016258	11.12792298
-2.85	-60.65911484	-123.3875158	-134.3485228	-79.3040971	-95.48261925	-102.1632316
+2.85	6.353705299	13.62163311	15.05369629	8.568734792	10.32016258	11.12792298
-2.9	-64.00144796	-131.4847707	-143.4843409	-84.24136067	-101.3955337	-108.6393864
+2.9	6.353705299	13.62163311	15.05369629	8.568734792	10.32016258	11.12792298
-2.95	-67.04375037	-139.04196	-152.0485828	-88.81686652	-106.8711587	-114.6557699
+2.95	6.353705299	13.62163311	15.05369629	8.568734792	10.32016258	11.12792298
-3	-69.85800765	-146.26399	-160.2783903	-93.15031133	-112.0522282	-120.3718477
+3	6.353705299	13.62163311	15.05369629	8.568734792	10.32016258	11.12792298
(Span 3) -4	-1.81E+00	-3.88791367	-4.296655987	-2.44570538	-2.945601389	-3.176153939
+4	69.46712086	144.2667046	157.8657905	92.12250652	110.8483636	118.94266
-3.05	-1.81E+00	-3.88791367	-4.296655987	-2.44570538	-2.945601389	-3.176153939
+3.05	67.31060889	138.6944356	151.5090261	88.78648381	106.86226	114.5401014
-3.1	-2.193154666	-3.88791367	-4.296655987	-2.44570538	-2.945601389	-3.176153939
+3.1	64.64320756	131.9429656	143.8325661	84.72167128	102.0024162	109.1862915
-3.15	-4.112199994	-4.613379857	-4.652883934	-4.118643568	-4.524829063	-4.744540297
+3.15	62.06951021	125.5389036	136.5715974	80.84775109	97.36846949	104.0923056
-3.2	-6.638708155	-7.875395697	-8.161232402	-6.218280046	-7.120444998	-7.36793494
+3.2	58.95993084	117.9119377	127.9450062	76.21547759	91.82501077	98.00961279
-3.25	-9.156931314	-11.60879968	-12.14120929	-8.688314404	-10.61882633	-10.60377945
+3.25	56.01732538	110.7832272	119.8991268	71.87067235	86.62363568	92.31129288
-3.3	-12.20767896	-16.96228909	-17.0318878	-12.46514488	-15.17680367	-15.34176272
+3.3	52.51989229	102.401355	110.45664	66.74631661	80.48701627	85.59773368
-3.35	-15.10118717	-22.55486504	-22.72026689	-16.1523307	-19.6231586	-20.07211809
+3.35	49.25667865	94.65524148	101.7451083	61.99758697	74.79856459	79.38217347
-3.4	-18.54698408	-29.39992179	-30.13568977	-20.58814036	-24.96924874	-25.77221975
+3.4	45.42571525	85.63905461	91.62090313	56.45653498	68.15924729	72.13570624
-3.45	-21.76753986	-35.88177622	-37.17973015	-24.77044762	-30.00738386	-31.15405696
+3.45	41.8901674	77.38270187	82.36308283	51.37088829	62.06412954	65.48999586
-3.5	-25.55414919	-43.59018999	-45.57915498	-29.72559929	-35.97402279	-37.53810687
+3.5	37.78000714	67.85279412	71.69129098	45.48846983	55.01251056	57.80860018
-3.55	-29.05350561	-50.7858732	-53.4382176	-34.33601676	-41.52352303	-43.48434973
+3.55	34.02042003	59.19339188	62.00642951	40.13289902	48.59111713	50.81980532
-3.6	-33.12664804	-59.23705261	-62.68743657	-39.73513003	-48.02025314	-50.45439147
+3.6	29.67070006	49.27034619	50.92139753	33.98451941	41.21768299	42.80145731

-3.65	**-36.8565978**	**-67.03940856**	**-71.24222743**	**-44.70669992**	**-54.0007704**	**-56.87795081**
+3.65	**25.73646827**	**40.31502423**	**40.92880228**	**28.426019**	**34.55040724**	**35.55669582**
-3.7	**-41.16199566**	**-76.11276579**	**-81.20703679**	**-50.47438823**	**-60.93712804**	**-64.33596045**
+3.7	**21.23222889**	**30.34332169**	**30.7583869**	**22.08702557**	**26.94557404**	**27.29937392**
-3.75	**-45.07429051**	**-84.41456607**	**-90.3382661**	**-55.7401018**	**-67.26825157**	**-71.14974349**
+3.75	**17.17072102**	**22.35934594**	**23.41544823**	**16.50408815**	**20.24660759**	**20.28764733**
-3.8	**-49.55769289**	**-93.98950979**	**-100.8844591**	**-61.8010157**	**-74.55381781**	**-78.99776482**
+3.8	**12.55039797**	**17.88213705**	**19.79267922**	**11.62237585**	**13.50567003**	**14.58362003**
-3.85	**-53.60409774**	**-102.6835399**	**-110.4727852**	**-67.29387884**	**-81.15515423**	**-86.11470759**
+3.85	**8.557091249**	**17.88213705**	**19.79267922**	**11.22624965**	**13.50567003**	**14.58362003**
-3.9	**-58.21127331**	**-112.6394723**	**-121.4661666**	**-73.57269626**	**-88.69954246**	**-94.25476391**
+3.9	**8.249663173**	**17.88213705**	**19.79267922**	**11.22624965**	**13.50567003**	**14.58362003**
-3.95	**-62.34352145**	**-121.6185675**	**-131.3924259**	**-79.22567332**	**-95.49064933**	**-101.5876913**
+3.95	**8.249663173**	**17.88213705**	**19.79267922**	**11.22624965**	**13.50567003**	**14.58362003**
-5	**-67.02017453**	**-131.8349106**	**-142.6987796**	**-85.64698503**	**-103.2033683**	**-109.9218597**
+5	**8.249663173**	**17.88213705**	**19.79267922**	**11.22624965**	**13.50567003**	**14.58362003**

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-70.122103	-48.823829	-70.222831	-75.612279	-119.428800	-39.116527	-52.831593	-60.549500	-67.829839	-75.535620
+0.05	532.200874	376.849046	507.771650	521.734805	636.410968	303.155179	408.983938	463.936344	509.588171	556.398884
-0.1	-140.244206	-97.647658	-140.445661	-151.224557	-238.857600	-78.233055	-105.663186	-121.099000	-135.659679	-151.071241
+0.1	990.471315	702.011663	941.020594	962.967670	1160.829278	564.963730	762.054330	863.788627	949.057264	1038.239537
-0.15	-210.366309	-146.471487	-210.668492	-226.836836	-358.286399	-117.349582	-158.494778	-181.648500	-203.489518	-226.606861
+0.15	1375.053223	975.820137	1300.442486	1325.029968	1585.408052	785.638857	1059.600177	1200.035446	1331.590920	1453.963976
-0.2	-280.488412	-195.295316	-280.891323	-302.449115	-477.715199	-156.466110	-211.326371	-242.198000	-271.319357	-302.142481
+0.2	1687.363618	1199.197079	1587.773937	1626.102565	1945.166198	965.903051	1302.600902	1473.850611	1644.401585	1801.140314
-0.25	-350.610515	-244.119145	-351.114153	-378.061394	-597.143999	-195.582637	-264.157964	-302.747500	-339.149196	-377.678102
+0.25	1929.254932	1373.367509	1818.079518	1852.511548	2233.876012	1106.720728	1492.362674	1691.430147	1888.726745	2079.869917
-0.3	-420.732618	-292.942974	-421.336984	-453.673672	-716.572799	-234.699165	-316.989557	-363.297000	-406.979036	-453.213722
+0.3	2106.616928	1499.859116	1982.394884	2021.870411	2451.692132	1209.298416	1637.201857	1857.693889	2066.668536	2284.430684
-0.35	-490.854721	-341.766803	-491.559815	-529.285951	-836.001598	-273.815692	-369.821150	-423.846500	-474.808875	-528.749342
+0.35	2231.170270	1588.813357	2081.653078	2138.718008	2604.318402	1275.084524	1735.751133	1967.003804	2190.446815	2417.404588
-0.4	-560.976824	-390.590632	-561.782645	-604.898230	-955.430398	-312.932220	-422.652743	-484.396000	-542.638714	-604.284963
+0.4	2292.135170	1634.208811	2130.036168	2210.050588	2686.182279	1305.769404	1786.586139	2021.348412	2255.667413	2487.385180
-0.45	-631.098927	-439.414461	-632.005476	-680.510509	-1074.859198	-352.048747	-475.484335	-544.945500	-610.468554	-679.820583
+0.45	2292.927811	1637.773110	2119.826010	2217.536823	2676.418957	1303.285585	1791.718102	2023.644576	2262.541120	2499.360264
-0.5	-701.221029	-488.238290	-702.228306	-756.122787	-1194.287998	-391.165275	-528.315928	-605.494999	-678.298393	-755.356203
+0.5	2255.923497	1610.862487	2089.174936	2177.105013	2589.326974	1283.859757	1761.415110	1990.347685	2223.792753	2454.411204
-0.55	-771.343132	-537.062119	-772.451137	-831.735066	-1313.716797	-430.281802	-581.147521	-666.044499	-746.128232	-830.891823
+0.55	2169.653834	1548.234273	2015.446822	2084.374685	2535.385783	1237.857448	1692.484373	1914.544468	2135.483783	2352.341215
-0.6	-841.465235	-585.885948	-842.673968	-907.347345	-1433.145597	-469.398330	-633.979114	-726.593999	-813.958072	-906.427444
+0.6	2032.248277	1450.465997	1889.436539	1936.711851	2388.958021	1163.049117	1585.763699	1794.846849	1998.563421	2203.215565
-0.65	-911.587338	-634.709777	-912.896798	-982.959624	-1552.574397	-508.514857	-686.810707	-787.143499	-881.787911	-981.963064
+0.65	1848.515154	1320.933719	1720.271638	1750.830757	2148.361357	1062.070977	1444.915909	1635.411265	1817.745770	2005.740169
-0.7	-981.709441	-683.533606	-983.119629	-1058.571902	-1672.003197	-547.631384	-739.642299	-847.692999	-949.617750	-1057.498684
+0.7	1623.700261	1163.316489	1505.478825	1516.238572	1850.540620	937.802126	1273.931782	1440.770253	1598.166290	1763.878430
-0.75	-1051.831544	-732.357435	-1053.342460	-1134.184181	-1791.431996	-586.747912	-792.473892	-908.242499	-1017.447589	-1133.034305
+0.75	1363.481791	982.063201	1250.500807	1239.367979	1476.748897	793.363035	1077.128008	1215.830796	1347.344163	1483.731453
-0.8	-1121.953647	-781.181263	-1123.565290	-1209.796460	-1910.860796	-625.864439	-845.305485	-968.791999	-1085.277429	-1208.569925
+0.8	1073.977435	780.730922	961.222920	930.832761	1033.802954	632.116084	859.148045	965.874853	1067.520370	1171.869508
-0.85	-1192.075750	-830.005092	-1193.788121	-1285.408739	-2048.374943	-664.980967	-898.137078	-1029.341499	-1153.107268	-1284.105545
+0.85	761.737809	563.281613	643.973448	587.739492	619.541503	457.666123	624.961998	696.559582	764.691824	835.331845
-0.9	-1262.197853	-878.828921	-1264.010952	-1361.021017	-2235.202091	-704.097494	-950.968671	-1089.890999	-1220.937107	-1359.641166
+0.9	433.750059	336.163377	318.197898	295.210235	447.961992	273.859252	379.866651	413.917351	449.643007	481.626413
-0.95	-1332.319956	-927.652750	-1334.233782	-1436.633296	-2464.240098	-743.214022	-1003.800264	-1150.440499	-1288.766947	-1435.176786
+0.95	292.878322	204.155722	291.362306	311.610804	440.433879	163.670024	221.098988	253.199665	283.563231	315.591876
-1	-1402.442035	-976.476579	-1404.456615	-1512.245610	-2729.088462	-782.330520	-1056.631846	-1210.990013	-1356.596761	-1510.712441
+1	308.292969	214.900759	306.697169	328.011372	454.266126	172.284239	232.735779	266.525962	298.487615	332.201976
(Span 2) -2	-1402.442035	-976.476579	-1404.456615	-1512.245610	-2729.088462	-782.330520	-1056.631846	-1210.990013	-1356.596761	-1510.712441
+2	308.292969	214.900759	306.697169	328.011372	454.266126	172.284239	232.735779	266.525962	298.487615	332.201976
-2.05	-1025.667612	-714.959064	-1020.358980	-1091.269756	-1829.150951	-573.177021	-774.294874	-886.712315	-993.046390	-1105.211601
+2.05	238.084493	165.960770	236.852112	253.312365	362.998191	133.049436	179.734167	205.829211	230.512142	256.548630
-2.1	-955.459169	-666.019073	-950.513920	-1016.570749	-1559.722140	-533.942218	-721.293260	-826.015563	-925.070916	-1029.558255
+2.1	542.275686	413.760649	403.347933	346.676016	366.064166	331.869283	465.370306	509.315982	559.313703	598.402226
-2.15	-885.250725	-617.079083	-880.668859	-941.871741	-1350.760345	-494.707414	-668.291646	-765.318811	-857.095442	-953.904909
+2.15	930.722450	683.196030	794.545661	750.439446	724.628536	549.728783	755.191061	843.677671	932.431028	1017.264470
-2.2	-815.042282	-568.139092	-810.823799	-867.172734	-1203.720212	-455.472611	-615.290033	-704.622059	-789.119967	-878.251562
+2.2	1292.939598	935.046204	1162.681690	1148.901822	1222.517887	751.991740	1027.180940	1155.673858	1282.020187	1407.905257

-2.25	-744.833838	-519.199102	-740.978739	-792.473727	-1110.787690	-416.237807	-562.288419	-643.925307	-721.144493	-802.598216
+2.25	1617.101961	1161.026534	1487.035605	1501.436607	1792.961096	932.370796	1271.691073	1435.717507	1596.076285	1757.360657
-2.3	-674.625394	-470.259111	-671.133678	-717.774720	-1029.151602	-377.003004	-509.286805	-583.228555	-653.169019	-726.944869
+2.3	1893.540126	1354.322299	1758.788805	1797.883821	2264.457579	1085.608760	1481.119082	1675.112234	1865.056604	2055.262608
-2.35	-604.416951	-421.319120	-601.288618	-643.075712	-947.515514	-337.768200	-456.285191	-522.531803	-585.193544	-651.291523
+2.35	2114.615352	1509.406028	1972.131726	2035.349520	2637.049540	1207.478138	1649.439888	1866.748178	2081.208225	2293.238701
-2.4	-534.208507	-372.379130	-531.443558	-568.376705	-865.879425	-298.533397	-403.283578	-461.835051	-517.218070	-575.638177
+2.4	2274.604823	1622.037653	2125.719648	2211.121773	2893.425581	1294.887403	1772.018195	2005.465277	2238.567199	2468.815923
-2.45	-464.000064	-323.439139	-461.598497	-493.677698	-784.243337	-259.298593	-350.281964	-401.138299	-449.242596	-499.984830
+2.45	2369.183025	1689.264482	2212.192365	2315.296641	3027.837325	1346.075813	1845.609555	2087.701155	2332.959848	2576.593054
-2.5	-393.791794	-274.499149	-391.753437	-418.978690	-702.607249	-220.063790	-297.280350	-340.441547	-381.267118	-424.331484
+2.5	2395.960332	1709.342369	2229.825307	2345.243943	3043.552805	1359.410703	1868.291186	2111.391308	2361.933493	2611.690500
-2.55	-464.000270	-323.439121	-461.598467	-493.677705	-784.243339	-259.298597	-350.281954	-401.138299	-449.242591	-499.984828
+2.55	2369.344260	1689.266877	2212.196461	2315.300158	3027.834698	1346.083522	1845.613247	2087.706100	2332.962958	2576.594376
-2.6	-534.208746	-372.379110	-531.443525	-568.376711	-865.879429	-298.533400	-403.283566	-461.835051	-517.218064	-575.638174
+2.6	2274.664065	1622.039395	2125.722905	2211.124592	2893.428127	1294.887292	1772.021009	2005.469449	2238.569453	2468.816436
-2.65	-604.417223	-421.319100	-601.288582	-643.075718	-947.515519	-337.768203	-456.285179	-522.531802	-585.193538	-651.291520
+2.65	2114.605647	1509.407357	1972.134146	2035.351481	2637.051299	1207.478529	1649.442146	1866.751772	2081.209855	2293.240447
-2.7	-674.625699	-470.259089	-671.133640	-717.774725	-1029.151609	-377.003006	-509.286791	-583.228553	-653.169011	-726.944865
+2.7	1893.556929	1354.323260	1758.792478	1797.885945	2264.457873	1085.609733	1481.120922	1675.115337	1865.057708	2055.264604
-2.75	-744.834175	-519.199078	-740.978698	-792.473732	-1110.787699	-416.237809	-562.288403	-643.925304	-721.144484	-802.598211
+2.75	1617.151527	1161.027255	1487.035318	1501.438411	1792.961663	932.372498	1271.692795	1435.720220	1596.077140	1757.362962
-2.8	-815.042651	-568.139067	-810.823756	-867.172739	-1203.720213	-455.472613	-615.290015	-704.622055	-789.119957	-878.251557
+2.8	1293.030184	935.046808	1162.682067	1148.901653	1222.518141	751.994282	1027.182582	1155.673907	1282.020966	1407.908028
-2.85	-885.251128	-617.079056	-880.668814	-941.871746	-1350.760329	-494.707416	-668.291627	-765.318806	-857.095431	-953.904903
+2.85	930.863564	683.196869	794.546881	750.439983	724.628909	549.732324	755.190764	843.678675	932.432037	1017.268331
-2.9	-955.459604	-666.019045	-950.513872	-1016.570753	-1559.722116	-533.942219	-721.293239	-826.015557	-925.070904	-1029.558249
+2.9	542.177381	413.760446	403.349492	346.677671	366.065365	331.874176	465.371296	509.318269	559.314102	598.401663
-2.95	-1025.668080	-714.959034	-1020.358929	-1091.269760	-1829.150936	-573.177022	-774.294851	-886.712308	-993.046377	-1105.211594
+2.95	238.084372	165.960766	236.852106	253.312375	362.998166	133.049442	179.734173	205.829222	230.512148	256.548634
-3	-1402.442716	-976.476579	-1404.456610	-1512.245631	-2729.088506	-782.330544	-1056.631847	-1210.990059	-1356.596812	-1510.712488
+3	308.292826	214.900766	306.697180	328.011373	454.266118	172.284240	232.735786	266.525967	298.487620	332.201978
(Span 3) -4	-1402.442716	-976.476579	-1404.456610	-1512.245631	-2729.088506	-782.330544	-1056.631847	-1210.990059	-1356.596812	-1510.712488
+4	308.292826	214.900766	306.697180	328.011373	454.266118	172.284240	232.735786	266.525967	298.487620	332.201978
-3.05	-1332.320579	-927.652750	-1334.233779	-1436.633351	-2464.240138	-743.214015	-1003.800254	-1150.440557	-1288.766970	-1435.176865
+3.05	292.878185	204.155727	291.362322	311.610805	440.433872	163.670028	221.098997	253.199668	283.563239	315.591879
-3.1	-1262.198442	-878.828921	-1264.010949	-1361.021072	-2235.202127	-704.097487	-950.968661	-1089.891055	-1220.937128	-1359.641243
+3.1	433.925995	336.162709	318.195961	295.210236	447.961983	273.862546	379.865073	413.914612	449.642281	481.628268
-3.15	-1192.076305	-830.005092	-1193.788008	-1285.408792	-2048.374976	-664.980958	-898.137068	-1029.341553	-1153.107286	-1284.105620
+3.15	762.019283	563.281345	643.971212	587.741683	619.542825	457.669372	624.960667	696.557274	764.692114	835.333976
-3.2	-1121.954168	-781.181263	-1123.565288	-1209.796512	-1910.860823	-625.864429	-845.305475	-968.792050	-1085.277445	-1208.569997
+3.2	1074.499815	780.731142	961.220625	930.834740	1033.801472	632.119470	859.146916	965.872631	1067.520748	1171.871876
-3.25	-1051.832031	-732.357434	-1053.342458	-1134.184232	-1791.432021	-586.747901	-792.473882	-908.242548	-1017.447603	-1133.034375
+3.25	1364.139479	982.063424	1250.498405	1239.369839	1476.750614	793.366498	1077.126931	1215.828695	1347.344523	1483.733825
-3.3	-981.709894	-683.533605	-983.119627	-1058.571952	-1672.003219	-547.631372	-739.642290	-847.693046	-949.617761	-1057.498752
+3.3	1624.386996	1163.316256	1505.476161	1516.237266	1850.542295	937.805548	1273.930655	1440.768034	1598.166201	1763.880717
-3.35	-911.587757	-634.709776	-912.896797	-982.959672	-1552.574417	-508.514843	-686.810697	-787.143544	-881.787919	-981.963129
+3.35	1849.127454	1320.933023	1720.268255	1750.828830	2148.360163	1062.074039	1444.914305	1635.408612	1817.745119	2005.741868
-3.4	-841.465620	-585.885948	-842.673967	-907.347393	-1433.145615	-469.398315	-633.979104	-726.594041	-813.958077	-906.427507
+3.4	2032.682311	1450.464888	1889.432206	1936.709197	2388.959056	1163.051620	1585.761431	1794.843354	1998.562018	2203.216344
-3.45	-771.343483	-537.062119	-772.451136	-831.735113	-1313.716813	-430.281786	-581.147511	-666.044539	-746.128235	-830.891884
+3.45	2169.808429	1548.232502	2015.443592	2084.372009	2535.385233	1237.859510	1692.481690	1914.540353	2135.481528	2352.340767
-3.5	-701.221346	-488.238290	-702.228306	-756.122833	-1194.288011	-391.165257	-528.315918	-605.495037	-678.298394	-755.356261
+3.5	2256.014699	1610.860022	2089.176901	2177.101254	2589.325105	1283.861324	1761.411650	1990.342574	2223.789404	2454.409796
-3.55	-631.099209	-439.414461	-632.005475	-680.510553	-1074.859209	-352.048729	-475.484325	-544.945534	-610.468552	-679.820639
+3.55	2292.857034	1637.768159	2119.824492	2217.534538	2676.419846	1303.284389	1791.714734	2023.642950	2262.537687	2499.362351
-3.6	-560.977072	-390.590632	-561.782605	-604.898273	-955.430407	-312.932200	-422.652732	-484.396032	-542.638710	-604.285016

+3.6	2292.024461	1634.210889	2130.033655	2210.047162	2686.181727	1305.767785	1786.581844	2021.345756	2255.662610	2487.385989
-3.65	-490.854935	-341.766803	-491.559815	-529.285993	-836.001605	-273.815671	-369.821139	-423.846530	-474.808868	-528.749393
+3.65	2231.015147	1588.814343	2081.649974	2138.716051	2604.319702	1275.081973	1735.745838	1966.999747	2190.448043	2417.403539
-3.7	-420.732798	-292.942974	-421.336984	-453.673714	-716.572803	-234.699143	-316.989547	-363.297028	-406.979026	-453.213771
+3.7	2106.412774	1499.858954	1982.390043	2021.871789	2451.690883	1209.294840	1637.202557	1857.688384	2066.668053	2284.428043
-3.75	-350.610661	-244.119145	-351.114154	-378.061434	-597.144001	-195.582614	-264.157954	-302.747525	-339.149185	-377.678148
+3.75	1929.105748	1373.366196	1818.080940	1852.509247	2233.877328	1106.716714	1492.362176	1691.430651	1888.724676	2079.865875
-3.8	-280.488524	-195.295316	-280.891315	-302.449154	-477.715199	-156.466086	-211.326361	-242.198023	-271.319343	-302.142525
+3.8	1687.161239	1199.194849	1587.773919	1626.098652	1945.167407	965.897595	1302.599201	1473.849787	1644.398282	1801.141445
-3.85	-210.366387	-146.471487	-210.668492	-226.836874	-358.286397	-117.349557	-158.494768	-181.648521	-203.489501	-226.606902
+3.85	1374.795121	975.816249	1300.440593	1325.030086	1585.407106	785.632490	1059.596878	1200.033152	1331.585494	1453.963229
-3.9	-140.244250	-97.647658	-140.445670	-151.224594	-238.857595	-78.233028	-105.663175	-121.099019	-135.659659	-151.071280
+3.9	990.155201	702.006355	941.016635	962.965726	1160.830009	564.956185	762.049924	863.784439	949.057468	1038.236522
-3.95	-70.122113	-48.823829	-70.222847	-75.612314	-119.428793	-39.116500	-52.831582	-60.549516	-67.829817	-75.535657
+3.95	532.122916	376.842647	507.765521	521.730868	636.409524	303.146834	408.978269	463.930525	509.586418	556.397367
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-70.122103	-63.674996	-68.540374	-64.613058	-78.268617	-81.579379	-86.359388	-34.098339
+0.05	532.200874	497.999396	533.276660	500.944429	600.832055	585.348563	619.048190	263.817842
-0.1	-140.244206	-127.349992	-137.080749	-129.226117	-156.537235	-163.158758	-172.718776	-68.196679
+0.1	990.471315	928.617498	994.006394	933.516623	1118.815327	1084.189407	1146.514749	491.215326
-0.15	-210.366309	-191.024988	-205.621123	-193.839175	-234.805852	-244.738137	-259.078164	-102.295018
+0.15	1375.053223	1292.265078	1382.683269	1298.194839	1554.651705	1497.417089	1583.357391	682.633571
-0.2	-280.488412	-254.699984	-274.161497	-258.452233	-313.074469	-326.317516	-345.437552	-136.393358
+0.2	1687.363618	1590.071015	1700.549726	1596.166879	1909.837277	1837.275371	1943.078789	838.726157
-0.25	-350.610515	-318.374980	-342.701872	-323.065292	-391.343087	-407.896895	-431.796940	-170.491697
+0.25	1929.254932	1823.557374	1949.271607	1829.019922	2199.708058	2110.697529	2233.258195	960.595277
-0.3	-420.732618	-382.049976	-411.242246	-387.678350	-469.611704	-489.476274	-518.156328	-204.590037
+0.3	2106.616928	1994.639637	2130.938458	2009.886569	2416.580307	2308.573582	2442.126569	1049.246121
-0.35	-490.854721	-445.724972	-479.782620	-452.291408	-547.880321	-571.055653	-604.515716	-238.688376
+0.35	2231.170270	2109.087407	2258.784878	2131.400591	2559.167694	2441.583624	2583.570579	1105.775749
-0.4	-560.976824	-509.399968	-548.322995	-516.904467	-626.148939	-652.635032	-690.875104	-272.786716
+0.4	2292.135170	2173.858516	2326.280159	2194.281188	2630.670090	2501.819030	2647.838086	1131.682650
-0.45	-631.098927	-573.074964	-616.863369	-581.517525	-704.417556	-734.214411	-777.234492	-306.885055
+0.45	2292.927811	2183.266010	2334.773567	2201.219206	2634.832535	2492.653594	2638.646431	1127.121536
-0.5	-701.221029	-636.749960	-685.403743	-646.130584	-782.686173	-815.793790	-863.593880	-340.983394
+0.5	2255.923497	2145.502341	2295.009424	2163.583842	2591.434529	2455.740274	2599.374824	1112.894584
-0.55	-771.343132	-700.424956	-753.944118	-710.743642	-860.954791	-897.373170	-949.953268	-375.081734
+0.55	2169.653834	2059.270951	2203.853937	2078.664749	2491.600096	2367.554095	2505.599681	1074.189438
-0.6	-841.465235	-764.099952	-822.484492	-775.356700	-939.223408	-978.952549	-1036.312656	-409.180073
+0.6	2032.248277	1928.077221	2063.994422	1947.649427	2335.550386	2217.417356	2346.300643	1010.061676
-0.65	-911.587338	-827.774948	-891.024866	-839.969759	-1017.492025	-1060.531928	-1122.672044	-443.278413
+0.65	1848.515154	1757.277925	1880.206521	1775.023908	2128.693285	2010.832640	2127.310512	922.804373
-0.7	-981.709441	-891.449944	-959.565241	-904.582817	-1095.760643	-1142.111307	-1209.031433	-477.376752
+0.7	1623.700261	1553.593931	1657.690297	1565.675130	1876.616310	1753.817815	1855.007691	814.924077
-0.75	-1051.831544	-955.124940	-1028.105615	-969.195875	-1174.029260	-1223.690686	-1295.390821	-511.475092
+0.75	1363.481791	1317.722247	1402.631590	1324.888266	1585.669315	1452.919593	1537.443443	689.138920
-0.8	-1121.953647	-1018.799936	-1096.645989	-1033.808934	-1252.297877	-1305.270065	-1381.750209	-545.573431
+0.8	1073.977435	1055.172535	1120.030941	1058.347923	1262.686405	1116.492690	1181.215286	548.379904
-0.85	-1192.075750	-1082.474933	-1165.186364	-1098.421992	-1330.566495	-1386.849444	-1468.109597	-579.671770
+0.85	761.737809	771.846912	816.119668	772.137910	914.985516	748.196474	791.344729	395.790281
-0.9	-1262.197853	-1146.149929	-1233.726738	-1163.035050	-1408.835112	-1468.428823	-1554.468985	-613.770110
+0.9	433.750059	474.041354	499.155604	472.741364	550.701385	359.806130	379.287052	234.725668
-0.95	-1332.319956	-1209.824925	-1302.267112	-1227.648109	-1487.103729	-1550.008202	-1640.828373	-647.868449
+0.95	292.878322	266.623440	286.937919	270.475793	327.551413	338.555572	358.360148	142.350737
-1	-1402.442035	-1273.499933	-1370.807492	-1292.261149	-1565.372364	-1631.587596	-1727.187776	-681.966772
+1	308.292969	280.656258	302.039919	284.711365	344.790954	356.374286	377.221208	149.842877
(Span 2) -2	-1402.442035	-1273.499933	-1370.807492	-1292.261149	-1565.372364	-1631.587596	-1727.187776	-681.966772
+2	308.292969	280.656258	302.039919	284.711365	344.790954	356.374286	377.221208	149.842877
-2.05	-1025.667612	-933.722741	-1004.864631	-947.213809	-1147.094242	-1185.631098	-1254.987300	-498.516273
+2.05	238.084493	223.869323	233.255469	222.380816	266.270682	275.216109	291.315499	121.883417
-2.1	-955.459169	-869.808057	-936.080180	-882.375642	-1068.573967	-1104.472919	-1169.081587	-464.392108
+2.1	542.275686	579.817448	611.167766	578.104555	675.368758	475.032784	501.661423	283.391649
-2.15	-885.250725	-805.893374	-867.295730	-817.537475	-990.053692	-1023.314740	-1083.175875	-430.267942
+2.15	930.722450	928.183985	987.100506	932.048072	1106.840944	935.653782	989.218218	474.069039
-2.2	-815.042282	-741.978691	-798.511279	-752.699308	-911.533417	-942.156561	-997.270163	-396.143777
+2.2	1292.939598	1254.943323	1339.471981	1264.120092	1509.798765	1362.447356	1440.979195	650.831269

-2.25	-744.833838	-678.064007	-729.726828	-687.861141	-833.013142	-860.998382	-911.364451	-362.019612
+2.25	1617.101961	1549.330829	1656.477508	1563.149874	1871.274451	1741.561966	1842.383833	808.217768
-2.3	-674.625394	-614.149324	-660.942377	-623.022974	-754.492867	-779.840203	-825.458738	-327.895446
+2.3	1893.540126	1802.255531	1928.414650	1819.428843	2180.382752	2062.189988	2181.967270	941.672128
-2.35	-604.416951	-550.234640	-592.157927	-558.184807	-675.972592	-698.682024	-739.553026	-293.771281
+2.35	2114.615352	2006.300053	2147.383332	2025.562626	2428.385256	2315.713063	2450.582685	1047.541900
-2.4	-534.208507	-486.319957	-523.373476	-493.346640	-597.452317	-617.523845	-653.647314	-259.647115
+2.4	2274.604823	2155.720283	2307.285432	2175.855374	2608.262123	2495.701166	2641.400317	1123.078523
-2.45	-464.000064	-422.405274	-454.589025	-428.508473	-518.932042	-536.365666	-567.741602	-225.522950
+2.45	2369.183025	2246.446396	2403.825977	2266.311155	2715.452563	2597.913420	2749.908325	1167.646371
-2.5	-393.791794	-358.490590	-385.804574	-363.670306	-440.411767	-455.207487	-481.835890	-191.398784
+2.5	2395.960332	2276.011774	2434.441738	2294.552679	2747.120399	2620.215731	2773.826097	1178.228354
-2.55	-464.000270	-422.405275	-454.589036	-428.508473	-518.932040	-536.365666	-567.741592	-225.522934
+2.55	2369.344260	2246.448752	2403.829272	2266.316034	2715.460266	2597.917714	2749.912735	1167.645913
-2.6	-534.208746	-486.319959	-523.373486	-493.346640	-597.452313	-617.523844	-653.647301	-259.647098
+2.6	2274.664065	2155.721957	2307.288043	2175.859153	2608.267812	2495.704482	2641.403693	1123.937002
-2.65	-604.417223	-550.234644	-592.157937	-558.184807	-675.972585	-698.682021	-739.553010	-293.771263
+2.65	2114.605647	2006.301050	2147.385212	2025.565746	2428.384917	2315.715420	2450.585048	1048.026308
-2.7	-674.625699	-614.149329	-660.942387	-623.022974	-754.492857	-779.840199	-825.458719	-327.895427
+2.7	1893.556929	1802.255998	1928.415926	1819.431464	2180.382633	2062.191667	2181.968919	941.742784
-2.75	-744.834175	-678.064014	-729.726838	-687.861142	-833.013129	-860.998376	-911.364428	-362.019592
+2.75	1617.151527	1549.331058	1656.478503	1563.152352	1871.275041	1741.563292	1842.385109	808.217914
-2.8	-815.042651	-741.978699	-798.511288	-752.699309	-911.533401	-942.156554	-997.270137	-396.143757
+2.8	1293.030184	1254.943474	1339.472916	1264.122480	1509.800097	1362.448400	1440.980176	650.831659
-2.85	-885.251128	-805.893384	-867.295739	-817.537476	-990.053674	-1023.314731	-1083.175847	-430.267921
+2.85	930.863564	928.184399	987.101673	932.048308	1106.843359	935.655010	989.219401	474.069759
-2.9	-955.459604	-869.808068	-936.080189	-882.375643	-1068.573946	-1104.472909	-1169.081556	-464.392086
+2.9	542.177381	579.818494	611.167541	578.106211	675.372671	475.033323	501.661887	283.392696
-2.95	-1025.668080	-933.722753	-1004.864640	-947.213810	-1147.094218	-1185.631086	-1254.987265	-498.516250
+2.95	238.084372	223.870476	233.255482	222.384783	266.270709	275.216124	291.315520	121.574833
-3	-1402.442716	-1273.499950	-1370.807533	-1292.261183	-1565.372374	-1631.587647	-1727.187851	-681.969238
+3	308.292826	280.656252	302.039920	284.711365	344.790966	356.374293	377.221222	149.842881
(Span 3) -4	-1402.442716	-1273.499950	-1370.807533	-1292.261183	-1565.372374	-1631.587647	-1727.187851	-681.969238
+4	308.292826	280.656252	302.039920	284.711365	344.790966	356.374293	377.221222	149.842881
-3.05	-1332.320579	-1209.824953	-1302.267157	-1227.648123	-1487.103756	-1550.008265	-1640.828459	-647.870775
+3.05	292.878185	266.623440	286.937925	270.475797	327.551418	338.555578	358.360161	142.350736
-3.1	-1262.198442	-1146.149956	-1233.726780	-1163.035063	-1408.835138	-1468.428884	-1554.469067	-613.772313
+3.1	433.925995	474.041807	499.154645	472.739056	550.705585	359.805376	379.286374	234.724322
-3.15	-1192.076305	-1082.474959	-1165.186404	-1098.422003	-1330.566520	-1386.849502	-1468.109676	-579.673850
+3.15	762.019283	771.847689	816.119202	772.135905	914.981496	748.196955	791.345363	395.788732
-3.2	-1121.954168	-1018.799962	-1096.646028	-1033.808943	-1252.297902	-1305.270121	-1381.750284	-545.575387
+3.2	1074.499815	1055.173427	1120.031199	1058.346161	1262.682618	1116.493039	1181.215782	548.378549
-3.25	-1051.832031	-955.124966	-1028.105651	-969.195883	-1174.029285	-1223.690739	-1295.390892	-511.476924
+3.25	1364.139479	1317.723255	1402.631945	1324.886572	1585.665590	1452.919724	1537.443711	689.137624
-3.3	-981.709894	-891.449969	-959.565275	-904.582823	-1095.760667	-1142.111357	-1209.031500	-477.378462
+3.3	1624.386996	1553.594733	1657.690039	1565.673374	1876.612469	1753.817329	1855.007306	814.922908
-3.35	-911.587757	-827.774972	-891.024898	-839.969763	-1017.492049	-1060.531976	-1122.672108	-443.279999
+3.35	1849.127454	1757.278201	1880.205608	1775.021587	2128.688773	2010.831377	2127.309309	922.802837
-3.4	-841.465620	-764.099975	-822.484522	-775.356703	-939.223431	-978.952594	-1036.312717	-409.181536
+3.4	2032.682311	1928.076541	2063.992928	1947.646268	2335.544764	2217.415127	2346.298419	1010.060088
-3.45	-771.343483	-700.424978	-753.944146	-710.743643	-860.954813	-897.373212	-949.953325	-375.083074
+3.45	2169.808429	2059.269446	2203.851533	2078.661109	2491.602551	2367.550817	2505.596347	1074.187904
-3.5	-701.221346	-636.749981	-685.403769	-646.130583	-782.686195	-815.793831	-863.593933	-340.984611
+3.5	2256.014699	2145.499857	2295.005913	2163.579272	2591.435723	2455.735653	2599.370072	1112.892578
-3.55	-631.099209	-573.074984	-616.863393	-581.517523	-704.417577	-734.214449	-777.234541	-306.886148
+3.55	2292.857034	2183.269006	2334.766531	2201.215808	2634.832097	2492.650670	2638.643242	1128.677052
-3.6	-560.977072	-509.399987	-548.323016	-516.904463	-626.148960	-652.635068	-690.875150	-272.787686

+3.6	2292.024461	2173.860424	2326.283033	2194.276654	2630.668352	2501.814937	2647.833657	1131.681777
-3.65	-490.854935	-445.724990	-479.782640	-452.291403	-547.880342	-571.055686	-604.515758	-238.689223
+3.65	2231.015147	2109.087849	2258.786157	2131.394778	2559.164158	2441.585822	2583.572758	1105.774614
-3.7	-420.732798	-382.049994	-411.242264	-387.678343	-469.611724	-489.476304	-518.156366	-204.590760
+3.7	2106.412774	1994.638478	2130.938092	2009.887777	2416.574993	2308.573876	2442.126744	1049.244798
-3.75	-350.610661	-318.374997	-342.701887	-323.065283	-391.343106	-407.896923	-431.796974	-170.492298
+3.75	1929.105748	1823.554562	1949.269446	1829.019664	2199.709653	2110.696134	2233.256567	960.593569
-3.8	-280.488524	-254.700000	-274.161511	-258.452222	-313.074488	-326.317541	-345.437583	-136.393835
+3.8	1687.161239	1590.066930	1700.546153	1596.165162	1909.837140	1837.272433	1943.075536	838.727080
-3.85	-210.366387	-191.025003	-205.621134	-193.839162	-234.805870	-244.738160	-259.078191	-102.295372
+3.85	1374.795121	1292.259573	1382.678151	1298.191192	1554.649215	1497.415443	1583.355695	682.634278
-3.9	-140.244250	-127.350006	-137.080758	-129.226102	-156.537253	-163.158778	-172.718799	-68.196910
+3.9	990.155201	928.609374	993.998567	933.511550	1118.810911	1084.185425	1146.510585	491.215763
-3.95	-70.122113	-63.675009	-68.540382	-64.613042	-78.268635	-81.579396	-86.359407	-34.098447
+3.95	532.122916	497.989950	533.267370	500.937821	600.825779	585.342110	619.041411	263.818201
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 170' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-70.122103	-151.998164	-168.238500	-95.423121	-114.798194	-123.960771
+0.05	532.200874	1039.969141	1122.143380	676.970576	816.242097	868.443180
-0.1	-140.244206	-303.996328	-336.477000	-190.846243	-229.596388	-247.921541
+0.1	990.471315	1918.480244	2076.386430	1252.585166	1510.468022	1605.132583
-0.15	-210.366309	-455.994491	-504.715499	-286.269364	-344.394583	-371.882312
+0.15	1375.053223	2670.672834	2883.900813	1727.942980	2089.193337	2223.147659
-0.2	-280.488412	-607.992655	-672.953999	-381.692486	-459.192777	-495.843082
+0.2	1687.363618	3271.166196	3582.196762	2130.974888	2571.155069	2731.386843
-0.25	-350.610515	-759.990819	-841.192499	-477.115607	-573.990971	-619.803853
+0.25	1929.254932	3747.984634	4123.753302	2442.288329	2938.731525	3142.007769
-0.3	-420.732618	-911.988983	-1009.430999	-572.538728	-688.789165	-743.764623
+0.3	2106.616928	4115.186060	4534.701473	2666.295125	3197.785048	3436.229282
-0.35	-490.854721	-1063.987146	-1177.669498	-667.961850	-803.587359	-867.725394
+0.35	2231.170270	4359.567450	4801.542401	2813.804615	3369.382796	3616.101136
-0.4	-560.976824	-1215.985310	-1345.907998	-763.384971	-918.385553	-991.686165
+0.4	2292.135170	4504.324736	4929.119472	2876.591999	3439.787508	3705.316345
-0.45	-631.098927	-1367.983474	-1514.146498	-858.808092	-1033.183748	-1115.646935
+0.45	2292.927811	4515.757666	4970.802941	2858.829582	3413.888904	3690.084140
-0.5	-701.221029	-1519.981638	-1682.384998	-954.231214	-1147.981942	-1239.607706
+0.5	2255.923497	4436.470026	4872.043083	2818.709816	3367.331046	3635.240653
-0.55	-771.343132	-1671.979802	-1850.623497	-1049.654335	-1262.780136	-1363.568476
+0.55	2169.653834	4249.191092	4647.827896	2723.488115	3256.383088	3504.453176
-0.6	-841.465235	-1823.977965	-2018.861997	-1145.077457	-1377.578330	-1487.529247
+0.6	2032.248277	3951.253188	4348.553724	2554.375343	3056.219926	3278.703270
-0.65	-911.587338	-1975.976129	-2187.100497	-1240.500578	-1492.376524	-1611.490017
+0.65	1848.515154	3560.009090	3930.588207	2317.735307	2774.331676	2978.759355
-0.7	-981.709441	-2127.974293	-2355.338997	-1335.923699	-1607.174718	-1735.450788
+0.7	1623.700261	3091.481011	3405.641087	2020.538578	2420.160943	2598.262496
-0.75	-1051.831544	-2279.972457	-2523.577497	-1431.346821	-1721.972913	-1859.411559
+0.75	1363.481791	2536.441151	2785.609113	1671.643278	2006.505011	2146.893952
-0.8	-1121.953647	-2431.970620	-2691.815996	-1526.769942	-1836.771107	-1983.372329
+0.8	1073.977435	1907.833524	2087.775842	1278.689866	1534.879461	1635.133214
-0.85	-1192.075750	-2583.968784	-2860.054496	-1622.193063	-1951.569301	-2107.333100
+0.85	761.737809	1219.571147	1325.974250	846.719447	1015.528449	1074.246751
-0.9	-1262.197853	-2735.966948	-3028.292996	-1717.616185	-2066.367495	-2231.293870
+0.9	433.750059	594.850780	657.388370	416.343597	487.097825	509.532540
-0.95	-1332.319956	-2887.965112	-3196.531496	-1813.039306	-2181.165689	-2355.254641
+0.95	292.878322	627.898045	693.909946	394.981424	475.714629	512.948840
-1	-1402.442035	-3039.963279	-3364.769935	-1908.462417	-2295.963903	-2479.215422
+1	308.292969	660.945319	730.431520	415.769919	500.752234	539.946157
(Span 2) -2	-1402.442035	-3039.963279	-3364.769935	-1908.462417	-2295.963903	-2479.215422
+2	308.292969	660.945319	730.431520	415.769919	500.752234	539.946157
-2.05	-1025.667612	-2198.916557	-2430.092035	-1383.235995	-1665.965922	-1796.361251
+2.05	238.084493	510.426277	564.088175	321.085399	386.714436	416.982613
-2.1	-955.459169	-2048.397511	-2263.748691	-1288.551476	-1551.928126	-1673.397702
+2.1	542.275686	714.267649	781.014454	514.163186	618.381476	643.535649
-2.15	-885.250725	-1897.878465	-2097.405347	-1193.866956	-1437.890329	-1550.434153
+2.15	930.722450	1551.942452	1705.402623	1057.744559	1260.001834	1342.635476
-2.2	-815.042282	-1747.359419	-1931.062003	-1099.182437	-1323.852533	-1427.470604
+2.2	1292.939598	2352.574302	2591.229671	1559.120479	1862.856432	1994.781898

-2.25	**-744.833838**	**-1596.840373**	**-1764.718659**	**-1004.497917**	**-1209.814736**	**-1304.507055**
+2.25	**1617.101961**	**3058.941950**	**3375.998885**	**2002.726552**	**2395.235702**	**2569.440163**
-2.3	**-674.625394**	**-1446.321327**	**-1598.375315**	**-909.813398**	**-1095.776940**	**-1181.543506**
+2.3	**1893.540126**	**3662.362975**	**4037.341674**	**2376.208324**	**2842.502883**	**3050.999267**
-2.35	**-604.416951**	**-1295.802282**	**-1432.031971**	**-815.128878**	**-981.739143**	**-1058.579957**
+2.35	**2114.615352**	**4147.980288**	**4557.694343**	**2669.786803**	**3193.112057**	**3431.222092**
-2.4	**-534.208507**	**-1145.283236**	**-1265.688627**	**-720.444359**	**-867.701347**	**-935.616408**
+2.4	**2274.604823**	**4499.000707**	**4929.590380**	**2876.257242**	**3438.606410**	**3703.662809**
-2.45	**-464.000064**	**-994.764190**	**-1099.345283**	**-625.759839**	**-753.663550**	**-812.652860**
+2.45	**2369.183025**	**4706.708306**	**5175.005464**	**2990.990956**	**3573.579569**	**3857.380504**
-2.5	**-393.791794**	**-844.245144**	**-933.001939**	**-531.075320**	**-639.625754**	**-689.689311**
+2.5	**2395.960332**	**4765.664024**	**5257.951040**	**3011.791212**	**3595.652314**	**3889.262305**
-2.55	**-464.000270**	**-994.764152**	**-1099.345276**	**-625.759807**	**-753.663541**	**-812.652828**
+2.55	**2369.344260**	**4706.706511**	**5175.658323**	**2990.995620**	**3573.577522**	**3857.383699**
-2.6	**-534.208746**	**-1145.283195**	**-1265.688621**	**-720.444328**	**-867.701339**	**-935.616372**
+2.6	**2274.664065**	**4498.997851**	**4928.814157**	**2876.260778**	**3438.610140**	**3703.664524**
-2.65	**-604.417223**	**-1295.802237**	**-1432.031966**	**-815.128849**	**-981.739137**	**-1058.579916**
+2.65	**2114.605647**	**4147.982891**	**4557.552179**	**2669.789276**	**3193.114485**	**3431.222502**
-2.7	**-674.625699**	**-1446.321280**	**-1598.375311**	**-909.813369**	**-1095.776934**	**-1181.543460**
+2.7	**1893.556929**	**3662.364379**	**4037.341690**	**2376.210048**	**2842.504391**	**3051.001948**
-2.75	**-744.834175**	**-1596.840323**	**-1764.718656**	**-1004.497890**	**-1209.814732**	**-1304.507004**
+2.75	**1617.151527**	**3058.944546**	**3375.998650**	**2002.727922**	**2395.236710**	**2569.442989**
-2.8	**-815.042651**	**-1747.359366**	**-1931.062001**	**-1099.182410**	**-1323.852530**	**-1427.470548**
+2.8	**1293.030184**	**2352.577167**	**2590.998846**	**1559.121468**	**1862.856985**	**1994.784876**
-2.85	**-885.251128**	**-1897.878409**	**-2097.405346**	**-1193.866931**	**-1437.890327**	**-1550.434092**
+2.85	**930.863564**	**1551.946262**	**1704.403168**	**1057.745716**	**1260.002600**	**1342.639527**
-2.9	**-955.459604**	**-2048.397452**	**-2263.748691**	**-1288.551452**	**-1551.928125**	**-1673.397636**
+2.9	**542.177381**	**714.265433**	**781.013665**	**514.163548**	**618.381821**	**643.539040**
-2.95	**-1025.668080**	**-2198.916494**	**-2430.092036**	**-1383.235972**	**-1665.965923**	**-1796.361180**
+2.95	**238.084372**	**510.426268**	**564.088157**	**321.085355**	**386.714415**	**416.982630**
-3	**-1402.442716**	**-3039.963302**	**-3364.755431**	**-1908.462430**	**-2295.963924**	**-2479.215416**
+3	**308.292826**	**660.945333**	**730.431515**	**415.769914**	**500.752228**	**539.946179**
(Span 3) -4	**-1402.442716**	**-3039.963302**	**-3364.755431**	**-1908.462430**	**-2295.963924**	**-2479.215416**
+4	**308.292826**	**660.945333**	**730.431515**	**415.769914**	**500.752228**	**539.946179**
-3.05	**-1332.320579**	**-2887.965137**	**-3196.517658**	**-1813.039308**	**-2181.165729**	**-2355.254646**
+3.05	**292.878185**	**627.898066**	**693.909939**	**394.981419**	**475.714617**	**512.948870**
-3.1	**-1262.198442**	**-2735.966972**	**-3028.279884**	**-1717.616186**	**-2066.367533**	**-2231.293875**
+3.1	**433.925995**	**594.850800**	**657.388364**	**416.344477**	**487.102037**	**509.529638**
-3.15	**-1192.076305**	**-2583.968807**	**-2860.042111**	**-1622.193064**	**-1951.569338**	**-2107.333105**
+3.15	**762.019283**	**1219.574612**	**1327.230512**	**846.720179**	**1015.530021**	**1074.250413**
-3.2	**-1121.954168**	**-2431.970643**	**-2691.804337**	**-1526.769942**	**-1836.771143**	**-1983.372335**
+3.2	**1074.499815**	**1907.837026**	**2088.857251**	**1278.690361**	**1534.880740**	**1635.136759**
-3.25	**-1051.832031**	**-2279.972478**	**-2523.566564**	**-1431.346820**	**-1721.972948**	**-1859.411565**
+3.25	**1364.139479**	**2536.444167**	**2786.875221**	**1671.643470**	**2006.505903**	**2146.897139**
-3.3	**-981.709894**	**-2127.974313**	**-2355.328791**	**-1335.923698**	**-1607.174752**	**-1735.450794**
+3.3	**1624.386996**	**3091.483493**	**3405.640870**	**2020.538093**	**2420.161347**	**2598.265102**
-3.35	**-911.587757**	**-1975.976148**	**-2187.091017**	**-1240.500576**	**-1492.376557**	**-1611.490024**
+3.35	**1849.127454**	**3560.010380**	**3929.826438**	**2317.734004**	**2774.330708**	**2978.761106**
-3.4	**-841.465620**	**-1823.977983**	**-2018.853244**	**-1145.077454**	**-1377.578362**	**-1487.529254**
+3.4	**2032.682311**	**3951.251304**	**4348.554229**	**2554.372963**	**3056.217594**	**3278.703043**
-3.45	**-771.343483**	**-1671.979818**	**-1850.615471**	**-1049.654332**	**-1262.780167**	**-1363.568483**
+3.45	**2169.808429**	**4250.034131**	**4647.828125**	**2723.484392**	**3256.379361**	**3504.451398**
-3.5	**-701.221346**	**-1519.981653**	**-1682.377697**	**-954.231210**	**-1147.981972**	**-1239.607713**
+3.5	**2256.014699**	**4436.472028**	**4873.545393**	**2818.704566**	**3367.333134**	**3635.236780**
-3.55	**-631.099209**	**-1367.983488**	**-1514.139924**	**-858.808088**	**-1033.183776**	**-1115.646943**
+3.55	**2292.857034**	**4515.756427**	**4970.801659**	**2858.826488**	**3413.887355**	**3690.080562**
-3.6	**-560.977072**	**-1215.985323**	**-1345.902151**	**-763.384966**	**-918.385581**	**-991.686173**

+3.6	**2292.024461**	**4504.328678**	**4929.119414**	**2876.587363**	**3439.784319**	**3705.318931**
-3.65	**-490.854935**	**-1063.987158**	**-1177.664377**	**-667.961844**	**-803.587386**	**-867.725402**
+3.65	**2231.015147**	**4359.568936**	**4801.541706**	**2813.807129**	**3369.377263**	**3616.101372**
-3.7	**-420.732798**	**-911.988993**	**-1009.426604**	**-572.538722**	**-688.789191**	**-743.764632**
+3.7	**2106.412774**	**4115.183581**	**4535.172877**	**2666.295565**	**3197.785168**	**3436.226855**
-3.75	**-350.610661**	**-759.990828**	**-841.188831**	**-477.115600**	**-573.990995**	**-619.803862**
+3.75	**1929.105748**	**3747.978808**	**4123.753465**	**2442.286833**	**2938.729383**	**3142.002810**
-3.8	**-280.488524**	**-607.992664**	**-672.951057**	**-381.692478**	**-459.192800**	**-495.843091**
+3.8	**1687.161239**	**3271.905935**	**3582.196563**	**2130.971520**	**2571.150593**	**2731.383421**
-3.85	**-210.366387**	**-455.994499**	**-504.713284**	**-286.269356**	**-344.394605**	**-371.882321**
+3.85	**1374.795121**	**2670.676012**	**2885.354737**	**1727.940914**	**2089.193887**	**2223.148846**
-3.9	**-140.244250**	**-303.996334**	**-336.475510**	**-190.846234**	**-229.596410**	**-247.921551**
+3.9	**990.155201**	**1918.479589**	**2076.386578**	**1252.580802**	**1510.465504**	**1605.130328**
-3.95	**-70.122113**	**-151.998169**	**-168.237737**	**-95.423112**	**-114.798215**	**-123.960781**
+3.95	**532.122916**	**1039.964637**	**1122.144337**	**676.964248**	**816.237177**	**868.438465**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	HL-93 Design Tandem (with Lane Load)	HL-93 Truck Train (with Lane Load)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-19.21588739	-31.905851	-47.617935	-14.45293317	-15.55802915	-14.66682029	-17.76788723	-18.55808492	-19.64609472	-7.745399613
End Shear	146.1903004	204.733224	289.074974	121.0565828	129.708052	121.8889181	146.351375	144.067692	152.3824342	64.28059443
-0.05	-19.21588739	-32.199673	-47.882376	-14.45293317	-15.55802915	-14.66682029	-17.76788723	-18.55808492	-19.64609472	-7.745399613
+0.05	135.704237	187.743861	263.081332	113.1366099	121.1815098	113.8532256	136.6170383	133.8388107	141.5533707	60.05111082
-0.1	-19.21588739	-33.183976	-48.768248	-14.45293317	-15.55802915	-14.66682029	-17.76788723	-18.55808492	-19.64609472	-7.745399613
+0.1	125.1424229	170.713781	237.113903	105.028714	112.454759	105.6280091	126.6575612	123.3903132	130.4923306	55.68810522
-0.15	-19.84766895	-40.534136	-54.528855	-18.41362771	-19.17236788	-17.67161364	-20.03266632	-18.55808492	-19.64609472	-8.932046447
+0.15	115.6804576	156.102600	214.817797	97.82729207	104.7055033	98.32524031	117.8188971	114.1499715	120.7107367	51.81563069
-0.2	-30.46021037	-50.118296	-66.147522	-26.47543643	-27.85926993	-25.86528006	-29.97453371	-20.9727654	-22.07659515	-13.28473892
+0.2	105.2640688	140.489465	190.891595	89.86185889	96.13619949	90.25094508	108.0508453	103.9749275	109.9402208	47.5354576
-0.25	-40.04942223	-59.198365	-77.142429	-33.61865771	-35.55820284	-33.12821126	-38.79096669	-29.80605512	-31.39891953	-17.14418461
+0.25	96.59084718	127.174414	170.414337	82.830009	88.57316157	83.12596678	99.43528144	95.0343214	100.4768754	43.75983648
-0.3	-50.6453159	-69.880539	-89.891595	-41.5000722	-44.05485936	-41.14498182	-48.52690485	-40.25750567	-42.46646446	-21.40554173
+0.3	87.44173592	113.037701	148.614769	75.10115789	80.2626636	75.29816324	89.97449692	85.25582334	90.12721672	39.61333077
-0.35	-59.98955846	-79.888175	-101.677945	-48.43977611	-51.53822158	-48.20688535	-57.10726485	-49.50126182	-52.25557772	-25.16052604
+0.35	79.42418954	101.065210	130.121233	68.32308894	72.97652995	68.43647954	81.68567421	76.72508405	81.09872933	35.98005117
-0.4	-70.24875075	-91.541870	-115.234679	-56.04667801	-59.74327429	-55.95119797	-66.52144011	-59.68098026	-63.0363914	-29.27971729
+0.4	70.68022837	88.449221	110.625740	60.92493378	65.02619138	60.95072842	72.64798872	67.46621449	71.30025066	32.01804669
-0.45	-79.23542323	-102.357104	-127.671699	-62.69866342	-66.92038727	-62.72656555	-74.76208003	-68.62653544	-72.51064384	-32.88475324
+0.45	63.07527806	77.852133	94.268562	54.48485525	58.10764888	54.43784672	64.78955246	59.45546673	62.82322393	28.57258785
-0.5	-89.03205768	-114.840636	-141.871832	-69.93694575	-74.7324906	-70.10286357	-83.7386675	-78.41142591	-82.8743895	-36.81094148
+0.5	54.84844952	66.785993	77.361406	47.51151075	50.61882424	47.38971948	56.29081028	50.83931352	53.70625356	24.8459175
-0.55	-97.54858891	-126.329920	-155.545859	-76.21699788	-81.51266182	-76.50619326	-91.5359479	-86.94865054	-91.91717334	-40.22055068
+0.55	47.75629642	57.583585	66.642058	41.49363207	44.15856029	41.31114468	48.96640287	43.4587002	45.8973094	21.6337632
-0.6	-106.7568433	-139.486449	-178.890683	-82.99253474	-88.83044915	-83.41889578	-99.95909151	-96.21562794	-101.7335256	-43.90290329
+0.6	40.15858882	48.081255	55.839225	35.03921119	37.23260175	34.79619709	41.12242868	35.6083586	37.59218347	18.1932654
-0.65	-114.6906265	-151.502657	-199.853348	-88.81645518	-95.12300323	-89.36468932	-107.209379	-104.2343927	-110.2282333	-47.0716008
+0.65	33.67942931	40.279222	46.923490	29.52774076	31.32130208	29.23743495	34.43569354	28.96800374	30.56792378	15.25989832
-0.7	-123.1846729	-165.160156	-223.290056	-95.0351263	-101.8451143	-95.71823739	-114.9632496	-112.8603704	-119.366865	-50.45927994
+0.7	26.82281997	32.339467	37.804344	23.6863735	25.05958045	23.35124211	27.36233623	22.00654143	23.20494926	12.15639805
-0.75	-130.4231314	-177.542580	-244.199571	-100.3186991	-107.5593572	-101.1209771	-121.5628864	-120.250542	-127.196885	-53.34158703
+0.75	21.05685103	25.929930	30.406421	18.7655165	19.7879277	18.39779374	21.41691094	16.21657656	17.0819839	9.547300167
-0.8	-138.0771252	-191.513859	-267.422128	-105.886392	-113.5844402	-106.8198072	-128.5316491	-128.1124396	-135.5274758	-56.38375944
+0.8	15.05332987	19.536373	22.992867	13.63130788	14.29178692	13.23591557	15.23000092	10.54009376	11.09483554	6.83164228
-0.85	-144.5076595	-204.088228	-287.998570	-110.5454125	-118.62969	-111.5939976	-134.3770042	-134.7638902	-142.5762019	-58.93418547
+0.85	10.10074732	14.497876	17.174995	9.385278112	9.750472846	8.973299141	10.12954385	6.955556844	7.360060736	4.592295686
-0.9	-151.1957568	-218.170906	-311.708113	-115.3680214	-123.8564002	-116.5425433	-140.4448214	-141.7386008	-149.9684034	-61.58001983
+0.9	5.062300187	9.618942	11.900987	5.05234539	5.12126986	4.671960981	5.012687475	4.060942879	4.298659729	2.550037716
-0.95	-156.7057929	-230.749362	-332.680850	-119.3182687	-128.1419574	-120.6026734	-145.4322449	-147.5411996	-156.1192266	-63.75308926
+0.95	4.228502506	6.394761	9.531331	3.187847123	3.430977525	3.234223251	3.917094398	4.060942879	4.298659729	1.703805043
-1	-162.3021712	-244.725904	-355.638421	-123.3016692	-132.4689299	-124.7053699	-150.4832802	-153.5056605	-162.442737	-65.95175102
+1	4.23E+00	6.248036	9.399278	3.19E+00	3.43E+00	3.23E+00	3.92E+00	4.06E+00	4.30E+00	1.70E+00
(Span 2) -2	-1.48E+01	-21.882090	-32.918481	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.42E+01	-1.51E+01	-5.97E+00
+2	1.58E+02	255.430528	372.267470	123.3724325	132.5776103	124.8283926	150.7012351	154.3678321	163.364841	66.01702098
-2.05	-1.48E+01	-22.094781	-33.109903	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.42E+01	-1.51E+01	-5.97E+00
+2.05	1.51E+02	238.930822	346.652746	118.9860191	127.8118815	120.3090773	145.1354524	147.8155678	156.418531	63.59402629
-2.1	-14.80920944	-22.761549	-33.709995	-11.16458959	-12.01608925	-11.32700944	-13.71858491	-14.22237629	-15.05491656	-5.967125328
+2.1	143.4023819	222.313971	320.611224	113.9884095	122.3926475	115.1764904	138.8362338	140.5658878	148.7349323	60.84832655
-2.15	-14.80920944	-25.904757	-38.018623	-11.94592982	-12.51776611	-11.58839808	-13.71858491	-14.22237629	-15.05491656	-6.008172634
+2.15	134.912276	204.986393	293.226712	108.1979047	116.1229257	109.2440978	131.5747477	132.3568944	140.0364929	57.68026139
-2.2	-20.6916962	-32.884582	-46.117690	-17.5391928	-18.50656495	-17.21373628	-20.06394709	-15.35913958	-16.18210358	-8.968238201
+2.2	126.2492181	188.515430	267.008539	102.1698882	109.6036373	103.0802255	124.0457658	123.9679592	131.148977	54.39318032

-2.25	-28.54721593	-40.890071	-55.365290	-23.59540224	-24.99862663	-23.31649056	-27.39738714	-22.53736516	-23.77359856	-12.18494653
+2.25	117.16612	172.289554	241.030913	95.74460113	102.6612242	96.52030906	116.0466545	115.1613679	121.8203884	50.89893983
-2.3	-37.34026417	-50.311998	-66.187207	-30.33249048	-32.22765438	-30.11640063	-35.58366916	-30.68247817	-32.38969397	-15.77407332
+2.3	107.3420335	155.732325	214.761310	88.69240769	95.04770364	89.33007056	107.2920229	105.626034	111.7212455	47.07297262
-2.35	-46.24066154	-60.333532	-77.624714	-37.1161765	-39.51276739	-36.97280775	-43.85090703	-39.02041772	-41.21147441	-19.39717722
+2.35	97.69319503	140.324029	190.533721	81.67384893	87.47599802	82.18273056	98.60116209	96.25184731	101.7940267	43.27345522
-2.4	-55.91926725	-71.784422	-90.604855	-44.45924694	-47.40442444	-44.40366655	-52.82313632	-48.17539791	-50.89929631	-23.32766931
+2.4	87.48378761	124.823133	166.055194	74.15571144	79.37072421	74.53501842	89.31317732	86.3245115	91.28227817	39.21163519
-2.45	-65.47212908	-83.663453	-103.975262	-51.67691052	-55.16651295	-51.7157161	-61.66294704	-57.28921755	-60.54494985	-27.19864519
+2.45	77.8970407	110.606525	143.548765	66.8373761	71.48579756	67.09827168	80.29180031	76.55904429	80.94314454	35.26535783
-2.5	-75.62685374	-96.945671	-122.146823	-59.31969752	-63.39097478	-59.46654281	-71.04417724	-67.05353231	-70.88040482	-31.30506564
+2.5	68.77530707	96.374749	121.243911	58.99973569	63.0465581	59.14189769	70.65102374	66.64251111	70.44531561	31.13312049
-2.55	-85.4397645	-110.606775	-143.548765	-66.83763132	-71.48607235	-67.09852991	-80.29211283	-76.55937529	-80.94349497	-35.26538879
+2.55	59.99532532	83.663206	103.966155	51.67665997	55.16624363	51.7154805	61.66266188	57.28889827	60.54461192	27.1986143
-2.6	-95.4490701	-124.823376	-166.055189	-74.15596216	-79.37099475	-74.53527276	-89.31348626	-86.32484133	-91.28262739	-39.21166537
+2.6	51.44887147	71.784180	90.603749	44.45900171	47.40416082	44.40341802	52.82283596	48.17511161	50.89899329	23.32763796
-2.65	-105.5501617	-140.324268	-190.533722	-81.67409499	-87.47626339	-82.18296089	-98.60144181	-96.25217395	-101.7943725	-43.273486
+2.65	42.76955979	60.333279	77.453519	37.11593789	39.51251119	36.97258356	43.85063629	39.02014399	41.21118478	19.39714683
-2.7	-115.0173862	-155.732558	-214.761316	-88.69264755	-95.04796238	-89.33031467	-107.2923197	-105.6263302	-111.7215592	-47.07299675
+2.7	34.76737886	50.311771	66.031012	30.33226158	32.22740861	30.11616908	35.58338997	30.6822094	32.38940962	15.77404258
-2.75	-124.1808116	-171.591498	-239.910118	-95.45754461	-102.3511995	-96.22743857	-115.6898125	-114.7707096	-121.4066043	-50.74293106
+2.75	27.15880757	41.260859	55.652446	23.86791506	25.29090493	23.59133449	27.7279827	22.86383816	24.11891185	12.3300066
-2.8	-133.3171014	-188.515638	-267.008544	-102.1701133	-109.6038804	-103.0804477	-124.0460371	-123.9682365	-131.1492708	-54.39321133
+2.8	19.72953691	32.884380	45.994816	17.53898331	18.50634051	17.2135333	20.06370345	15.35892223	16.18187374	8.968211782
-2.85	-141.5675225	-204.986593	-293.226714	-108.1981058	-116.1231431	-109.2443044	-131.5750004	-132.3571761	-140.0367914	-57.68028885
+2.85	14.8147266	25.904565	37.897462	11.94574579	12.51756932	11.58821936	13.718585	14.22237623	15.05491671	6.008148666
-2.9	-149.5463522	-222.314140	-320.611222	-113.9885997	-122.3928536	-115.1766791	-138.8364652	-140.5661517	-148.7352119	-60.84834855
+2.9	14.8147266	22.761549	33.709995	11.16458973	12.01608965	11.32700976	13.718585	14.22237623	15.05491671	5.967125447
-2.95	-156.4913098	-238.930980	-346.652745	-118.9861877	-127.8120648	-120.3092365	-145.1356479	-147.8157873	-156.4187637	-63.59404408
+2.95	14.8147266	22.094781	33.109903	11.16458973	12.01608965	11.32700976	13.718585	14.22237623	15.05491671	5.967125447
-3	-162.9032045	-256.143349	-373.367910	-123.5483455	-132.7689849	-125.0100135	-150.9254284	-154.6356782	-163.648844	-66.11448108
+3	14.8147266	21.882090	32.918481	11.16458973	12.01608965	11.32700976	13.718585	14.22237623	15.05491671	5.967125447
(Span 3) -4	-4.230077883	-6.248036	-9.399278	-3.187847163	-3.430977642	-3.234223344	-3.917094422	-4.060942862	-4.298659771	-1.703805077
+4	156.5293294	243.993282	354.444352	123.1036194	132.2536352	124.501129	150.2314912	153.2057345	162.1247235	65.84228173
-3.05	-4.230077883	-6.379011	-9.517156	-3.187847163	-3.430977642	-3.234223344	-3.917094422	-4.060942862	-4.298659771	-1.703805077
+3.05	151.0026417	231.487459	333.902620	119.5393088	128.3819017	120.8300885	145.7118938	147.8688408	156.466559	63.8749454
-3.1	-5.29530821	-9.856291	-12.123763	-5.269305215	-5.352915339	-4.855412229	-5.215476753	-4.060942862	-4.298659771	-2.625500448
+3.1	144.2963751	217.429691	310.463324	115.1245213	123.5923711	116.2925053	140.1379684	141.3838539	149.5923961	61.44634646
-3.15	-9.80012598	-14.221580	-16.835254	-9.146360833	-9.495071984	-8.733631823	-9.843050019	-6.781885787	-7.175513943	-4.466429856
+3.15	137.8500544	204.828924	289.201560	110.8093404	118.9156093	111.8646402	134.7086033	135.143044	142.9780253	59.07890943
-3.2	-15.78705218	-19.852950	-23.305433	-13.89172247	-14.57044149	-13.49753416	-15.54332004	-10.81583877	-11.38509344	-6.969106203
+3.2	130.1789718	190.775689	266.205111	105.6024046	113.2770216	106.5289904	128.1758142	127.7093411	135.1003245	56.22855414
-3.25	-21.6996645	-25.573444	-29.929315	-18.4856927	-19.48826197	-18.11627282	-21.0792383	-15.88969961	-16.7363377	-9.399017271
+3.25	122.9257493	178.274636	245.426368	100.620583	107.8859407	101.4298227	121.9403457	120.6747482	127.6463591	53.50649591
-3.3	-28.81115146	-32.737126	-38.186598	-23.9852668	-25.37988609	-23.65226816	-27.72386955	-22.3605683	-23.57936765	-12.31494352
+3.3	114.4158278	164.435888	222.057632	94.71561306	101.499649	95.39167276	114.5645316	112.4153898	118.8954199	50.28520979
-3.35	-35.59671191	-39.841083	-46.335707	-29.21197286	-30.98271552	-28.91907784	-34.0529249	-28.58951254	-30.1675754	-15.09186806
+3.35	106.4684447	152.215632	201.087311	89.1513237	95.48489683	89.70670351	107.6265963	104.697172	110.7184977	47.2540276
-3.4	-43.62090736	-48.561035	-56.288536	-35.37165273	-37.5892480939382	-35.13160538	-41.5260839576156	-36.0108148	-38.0179318777535	-18.37022658
+3.4	97.24569392	138.786160	177.659147	82.64244083	88.45226275	83.06162137	99.52359634	95.73527409	101.2246783	43.7126551
-3.45	-51.16682577	-57.063139	-65.943530	-41.14684803	-43.78635977	-40.96097848	-48.54463082	-43.03507944	-45.44912496	-21.44866802
+3.45	89.26734218	127.014154	156.771070	76.5799307	81.90456704	76.87638082	91.98686869	87.44353132	92.44137577	40.41781917
-3.5	-59.97793819	-67.348175	-78.200225	-47.87250794	-51.00643523	-47.75446822	-56.73047749	-51.28374951	-54.176503	-25.03861158
+3.5	80.86660315	114.173564	141.041634	69.56122671	74.3269199	69.71993039	83.27251768	77.90217972	82.33500227	36.60719278
-3.55	-68.17159373	-77.249505	-93.339039	-54.11202809	-57.70719056	-54.06087796	-64.33484669	-58.9931799	-62.33404718	-28.37311148

+3.55	73.12169832	103.003742	128.341288	63.08470901	67.3369713055177	63.1198551171974	75.24055586	69.14698304	73.06186519	33.09418061
-3.6	-77.64379371	-89.093266	-111.620222	-61.30953452	-65.43943336	-61.33981541	-73.11760358	-67.94611171	-71.80809921	-32.22380727
+3.6	64.23882599	90.916466	114.448164	55.65031824	59.3156872	55.5475982	66.03068743	59.14932546	62.47332931	29.06513248
-3.65	-86.37265714	-100.381333	-129.063902	-67.92914811	-72.55312217	-68.03777694	-81.20417759	-76.23059846	-80.57540795	-35.76885806
+3.65	56.11260724	80.489166	102.324604	48.84393128	51.97409648	48.61828951	57.60725156	50.04086555	52.82703022	25.37944336
-3.7	-96.38002218	-113.762274	-149.732752	-75.50445285	-80.69624967	-75.70650277	-90.46789562	-85.76470214	-90.66580357	-39.82947561
+3.7	46.82764965	69.304467	89.159660	41.08802201	43.61058697	40.72579491	48.01770612	39.70993139	41.88659832	21.18280913
-3.75	-105.5314729	-126.410973	-169.237999	-82.41990112	-88.13213131	-82.71050962	-98.93302981	-94.51418118	-99.92633844	-43.53960574
+3.75	38.42316743	59.746498	77.759491	34.03602231	36.00809162	33.552659	39.30631769	30.35833909	31.98374635	17.36989004
-3.8	-115.9482262	-141.292382	-192.123915	-90.27884376	-96.58474057	-90.67350509	-108.5619282	-104.5063069	-110.5026837	-47.75930373
+3.8	28.91530452	49.598419	65.479875	26.05266249	27.40366068	25.43549027	29.4529299	20.47523585	21.55287984	13.05653218
-3.85	-125.4096753	-155.262165	-213.531966	-97.40601605	-104.2522343	-97.89810313	-117.3020416	-113.6105854	-120.13977	-51.58902948
+3.85	20.33025537	41.022919	55.055327	18.83925797	19.63094662	18.10413432	20.55735611	18.5580849	19.64609488	9.161891233
-3.9	-136.1099809	-171.592154	-238.450688	-105.4544277	-112.9129125	-106.0598038	-127.1802847	-123.9377061	-131.0718009	-55.91697801
+3.9	19.2213787	33.114948	48.706122	14.45293343	15.55802966	14.66682072	17.76788747	18.5580849	19.64609488	7.745399606
-3.95	-145.7688404	-186.829762	-261.663073	-112.7090663	-120.7212792	-113.4193857	-136.0916113	-133.2866544	-140.9688308	-59.820817
+3.95	19.2213787	32.234234	47.913480	14.45293343	15.55802966	14.66682072	17.76788747	18.5580849	19.64609488	7.745399606
-5	-156.6269349	-204.541269	-289.074974	-120.8528812	-129.4887249	-121.6842257	-146.1033619	-143.8257507	-152.1262914	-64.20618072
+5	19.2213787	31.905851	47.617935	14.45293343	15.55802966	14.66682072	17.76788747	18.5580849	19.64609488	7.745399606

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.08585846	-15.97540761	-17.22919624	-26.43273931	-8.880314123	-11.99337298	-13.74799946	-15.40209143	-17.15432283
End Shear	91.78083388	124.8730724	129.2284772	157.3036816	73.80960603	99.54046561	113.0686092	124.4315659	136.1954703
-0.05	-11.08585846	-15.97540761	-17.22919624	-26.50881836	-8.880314123	-11.99337298	-13.74799946	-15.40209143	-17.15432283
+0.05	85.69823957	116.0594655	119.6882536	142.0558864	68.93885962	92.9671262	105.5307003	115.9955055	126.8066604
-0.1	-11.08585846	-15.97540761	-17.22919624	-26.76368238	-8.880314123	-11.99337298	-13.74799946	-15.40209143	-17.15432283
+0.1	79.47345455	107.0540279	109.9544906	126.7364743	63.9551702	86.23935355	97.81696473	107.3671537	117.208876
-0.15	-12.82463028	-15.97540761	-17.22919624	-27.14306457	-10.64570603	-14.27105187	-15.16720374	-15.40209143	-17.15432283
+0.15	73.94834545	99.08760726	101.364966	113.5418238	59.53057863	80.26661617	90.97231209	99.71738182	108.7067962
-0.2	-19.0338282	-18.87921727	-17.22919624	-27.73502215	-15.61121041	-20.97578571	-22.87255761	-23.34649614	-23.48693934
+0.2	67.84131465	90.31274056	91.92812413	99.41035378	54.63874725	73.66346654	83.40908978	91.27186537	99.32851693
-0.25	-24.53925566	-26.46340984	-23.10009268	-28.41345872	-20.01284006	-26.91943283	-29.70662834	-31.02773242	-32.07208131
+0.25	62.45395515	82.60004258	83.65609002	87.50901199	50.322254	67.8372159	76.73926843	83.83070685	91.07305537
-0.3	-30.61786335	-35.45451644	-31.50284876	-31.38620545	-24.87151807	-33.4805753	-37.25455789	-39.51865719	-41.57025048
+0.3	56.53708086	74.16175142	74.63200728	75.15727869	45.58019859	61.43688271	69.4163405	75.66867068	82.02651132
-0.35	-35.97405559	-43.404377	-40.20927381	-38.88999083	-29.15165634	-39.26076646	-43.90761405	-47.00961939	-49.95721089
+0.35	51.35224454	66.79761846	66.7811256	65.10678949	41.42362784	55.82707667	63.00168223	68.52616687	74.11806131
-0.4	-41.84967958	-52.15655383	-49.86529761	-47.37465806	-33.84559437	-45.60013058	-51.20834876	-55.23756912	-59.17777473
+0.4	45.69792293	58.80189872	58.2856625	54.96542837	36.8892652	49.70774613	56.008821	60.74823604	65.51547513
-0.45	-46.99186485	-59.84520813	-58.36955021	-55.00306935	-37.95241651	-51.1469051	-57.60006114	-62.44821536	-67.26614293
+0.45	40.78039072	51.88116756	50.95958455	46.76395361	32.94443503	44.38434504	49.92964816	53.99443158	58.05446039
-0.5	-52.59210544	-68.25244792	-67.69354824	-64.63785907	-42.42369447	-57.18630812	-64.56382798	-70.31255069	-76.09688217
+0.5	35.46101865	44.43401942	43.10858616	38.40549003	28.6756835	38.62421235	43.35662681	46.7012512	50.00804997
-0.55	-57.4555056	-75.58505505	-75.84890449	-74.6267315	-46.30538538	-62.42970939	-70.61387877	-77.15283764	-83.78624587
+0.55	30.87556793	38.05154267	36.41096303	32.01247904	24.99441509	33.65717476	37.69326412	40.42618944	43.09487329
-0.6	-62.70796173	-83.54135969	-84.72502547	-86.36552584	-50.49608603	-68.09094874	-77.15089959	-84.55293112	-92.1149342
+0.6	25.96354476	31.25897298	29.32030096	25.77143488	21.04919195	28.33442169	31.62985961	33.718386	35.71686261
-0.65	-67.22779699	-90.42307884	-92.42781329	-97.58387393	-54.10082661	-72.96102403	-82.77896745	-90.93281673	-99.30489627
+0.65	21.77495234	25.50958678	23.35479573	20.5923792	17.68330651	23.79370695	26.46262654	28.01211396	29.4519203
-0.7	-72.06007149	-97.82244891	-100.7402039	-111.1673056	-57.9530289	-78.16591519	-88.79946135	-97.76801946	-107.0193118
+0.7	17.34267578	19.47757843	17.18152472	15.30146408	14.11952779	18.98653137	20.99861704	21.9903299	22.85453231
-0.75	-76.17156977	-104.1584359	-107.8867724	-124.1468826	-61.2289916	-82.59269508	-93.9252171	-103.5974607	-113.609451
+0.75	13.61572245	14.45612547	12.58534179	11.37471765	11.12084344	14.94209489	16.40784399	16.94287619	17.33825658
-0.8	-80.51126694	-110.8948777	-115.519587	-139.1409219	-64.68478443	-87.26304964	-99.33941649	-109.7671483	-120.5973718
+0.8	9.735590083	9.533356162	8.105392271	7.592114508	7.996428017	10.72868218	11.63299907	11.70775529	11.70728862
-0.85	-84.14965131	-116.5902928	-122.0062869	-152.7031854	-67.58015526	-91.17658347	-103.8825341	-114.9560984	-126.4872868
+0.85	6.535043532	5.91698238	5.303662299	5.479747715	5.416772361	7.250493333	7.699010518	7.684279712	7.683883633
-0.9	-87.92437021	-122.5577896	-128.8436546	-167.5447548	-70.58161823	-95.23421072	-108.6006638	-120.3596287	-132.6364906
+0.9	3.411837439	3.495092284	3.746921666	5.268376407	2.789637378	3.749694613	4.004295127	4.003968809	4.003652689
-0.95	-91.02485411	-127.5177909	-134.5668206	-180.4954254	-73.04456848	-98.56453502	-112.4808189	-124.8180492	-137.7257797
+0.95	2.442150476	3.495092284	3.746921666	5.16094081	1.957422231	2.644042638	3.028764418	3.392313906	3.776276329
-1	-94.16219859	-132.6103638	-140.4929024	-194.548929	-75.53378477	-101.9312457	-116.4131039	-129.3547868	-142.9240443
+1	2.44E+00	3.50E+00	3.75E+00	5.12E+00	1.96E+00	2.64E+00	3.03E+00	3.39E+00	3.78E+00
(Span 2) -2	-8.55E+00	-1.22E+01	-1.31E+01	-1.79E+01	-6.86E+00	-9.26E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2	9.43E+01	133.3114916	141.7131854	206.0534499	75.61144485	102.0416009	116.6023502	129.6838754	143.4238022
-2.05	-8.55E+00	-1.22E+01	-1.31E+01	-1.80E+01	-6.86E+00	-9.26E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2.05	90.83012973	127.7172404	135.2313074	191.2025863	72.86990452	98.33315681	112.2705611	124.6840814	137.6950145
-2.1	-8.55298472	-12.2406343	-13.12259996	-18.16948989	-6.855352582	-9.260058487	-10.60744449	-11.88068019	-13.22540706
+2.1	86.91449279	121.5166396	128.1392666	176.0279061	69.75713793	94.12427958	107.3728712	119.0664319	131.2955239
-2.15	-8.55298472	-12.2406343	-13.12259996	-18.49251484	-7.000627815	-9.391436517	-10.60744449	-11.88068019	-13.22540706
+2.15	82.3960088	114.4856227	120.1819222	160.0061431	66.16003475	89.26202632	101.7314336	112.6270953	123.9933721
-2.2	-12.74646682	-13.67300713	-13.12259996	-18.95382708	-10.40513478	-13.98307807	-15.37474934	-15.91925286	-16.33835109
+2.2	77.70726694	107.2921687	112.1120601	144.6218364	62.42317788	84.21209758	95.8858471	105.9805864	116.48392
-2.25	-17.33998072	-19.89422148	-17.86852546	-19.57624596	-14.09943117	-18.96666706	-21.03781335	-22.15916344	-23.17072008

+2.25	72.72247474	99.73328748	103.6953519	129.0798451	58.44674292	78.8394669	89.6784111	98.94496243	108.5588192
-2.3	-22.46459994	-26.94368158	-25.17513806	-24.39113462	-18.21653496	-24.52166294	-27.36364765	-29.15491504	-30.8599564
+2.3	67.2637865	91.54179138	94.63649363	113.4240914	54.08875812	72.95230557	82.88782519	91.26984957	99.93667309
-2.35	-27.63723687	-34.151861	-32.7254999	-31.03743091	-22.36850977	-30.12460422	-33.75559748	-36.2456212	-38.67841516
+2.35	61.8421455	83.4823571	85.78005579	98.82975257	49.757244	67.10178289	76.14944653	83.67278394	91.42282832
-2.4	-33.24837504	-42.05873056	-41.08122993	-39.34564229	-26.86895236	-36.19867676	-40.69593225	-43.96540913	-47.21401268
+2.4	56.04541052	74.94101393	76.29594485	84.17748751	45.12297501	60.84317063	68.95090489	75.57554775	82.36893027
-2.45	-38.77436895	-49.92332639	-49.45633314	-48.49766349	-31.29799767	-42.17714367	-47.53681607	-51.5930876	-55.6686083
+2.45	50.41269229	66.53283481	67.3224881	71.22748106	40.61697463	54.75858791	61.9615446	67.69978765	73.53626356
-2.5	-44.63643288	-58.34267624	-58.48419014	-59.42446353	-35.99331655	-48.51585374	-54.79952805	-59.70944806	-64.68540155
+2.5	44.39081003	57.98839961	58.10310604	58.95460952	35.79664004	48.25032589	54.49512108	59.36887834	64.30664401
-2.55	-50.41288931	-66.5331199	-67.32279542	-71.22782058	-40.61714283	-54.75879907	-61.96178834	-67.68781922	-73.52432507
+2.55	38.77417629	49.92305098	49.45603911	48.49738826	31.29783084	42.17695095	47.53657744	51.59280097	55.66831272
-2.6	-56.04561797	-74.94129767	-76.27320739	-84.17785881	-45.12314047	-60.84337871	-68.9511442	-75.57583865	-82.36923176
+2.6	33.24817261	42.05848351	41.08094682	39.34540351	26.86878964	36.19847352	40.69570033	43.96514983	47.2137252
-2.65	-61.84233532	-83.48263803	-85.78038725	-98.83010606	-49.75740643	-67.1019716	-76.14968221	-83.67304816	-91.42312376
+2.65	27.63705461	34.15162451	32.72520943	31.0372596	22.36835215	30.12442115	33.75537224	36.24535013	38.67813816
-2.7	-67.26398521	-91.54204612	-94.63679922	-113.424453	-54.08891882	-72.95250544	-82.8880548	-91.27012876	-99.9369633
+2.7	22.4644122	26.94344912	25.17488608	24.3909746	18.21637856	24.52147376	27.36342479	29.15466727	30.85968383
-2.75	-72.50005054	-99.39782401	-103.323182	-128.4211774	-58.26924112	-78.59964011	-89.40156521	-98.6316645	-108.2063941
+2.75	17.54697995	20.17695784	18.15981191	19.60713134	14.26582063	19.19115381	21.2932047	22.4411032	23.48008049
-2.8	-77.70743515	-107.2924066	-112.1123461	-144.622204	-62.42332272	-84.2122795	-95.88605669	-105.9808344	-116.4841881
+2.8	12.74631393	13.67281854	13.12259983	18.95382679	10.40500734	13.98291228	15.37455451	15.91903918	16.3381345
-2.85	-82.396177	-114.4858642	-120.1821948	-160.0065063	-66.16016944	-89.2621957	-101.7316211	-112.6273349	-123.993613
+2.85	8.552984719	12.24063443	13.12259983	18.49251455	7.000506744	9.391290898	10.60744438	11.88068006	13.22540685
-2.9	-86.91463562	-121.5168654	-128.139522	-176.0282637	-69.75726119	-94.12443432	-107.3730565	-119.0666446	-131.295766
+2.9	8.552984719	12.24063443	13.12259983	18.1694896	6.85535245	9.260058487	10.60744438	11.88068006	13.22540685
-2.95	-90.8302665	-127.717428	-135.2315513	-191.2029304	-72.87001722	-98.3332874	-112.2707136	-124.6842781	-137.6952233
+2.95	8.552984719	12.24063443	13.12259983	17.99684421	6.85535245	9.260058487	10.60744438	11.88068006	13.22540685
-3	-94.42420916	-133.5399177	-141.9800513	-206.6898515	-75.7216516	-102.1907012	-116.7769586	-129.8862505	-143.656557
+3	8.552984719	12.24063443	13.12259983	17.9417724	6.85535245	9.260058487	10.60744438	11.88068006	13.22540685
(Span 3) -4	-2.442150517	-3.50E+00	-3.75E+00	-5.12E+00	-1.957422193	-2.644042691	-3.028764386	-3.392313868	-3.776276269
+4	94.00588569	132.3544508	140.1936457	193.8208299	75.40984807	101.7635999	116.2170066	129.1279997	142.663618
-3.05	-2.442150517	-3.50E+00	-3.75E+00	-5.16E+00	-1.957422193	-2.644042691	-3.028764386	-3.392313868	-3.776276269
+3.05	91.19861464	127.7977048	134.8910877	181.2461782	73.18252604	98.75111078	112.6984433	125.0685843	138.012273
-3.1	-3.533571603	-3.536532072	-3.746921628	-5.277021464	-2.921031157	-3.893058455	-4.172152895	-4.171824661	-4.171506683
+3.1	87.73352523	122.2544068	128.494862	166.7723544	70.4299308	95.02915477	108.3619895	120.0858588	132.3244885
-3.15	-6.355227137	-5.740831756	-5.147971013	-5.466072283	-5.271761055	-7.054969916	-7.478129445	-7.464908302	-7.464507644
+3.15	84.35598393	116.9148269	122.3769421	153.4926015	67.74428631	91.39846702	104.1403059	115.2508937	126.8223222
-3.2	-9.932158898	-9.772444528	-8.310197619	-7.764918863	-8.154784939	-10.94219496	-11.87475204	-11.97238563	-11.97191673
+3.2	80.28970623	110.5495965	115.1273577	138.335307	64.50841343	87.0246893	99.06289514	109.4516964	120.2397134
-3.25	-13.40401512	-14.17248891	-12.326008	-11.15507928	-10.95045003	-14.7122675	-16.14718119	-16.65667599	-17.02589356
+3.25	76.40666187	104.5220269	108.2977353	124.9047422	61.41625092	82.84577546	94.21841401	103.9312253	113.9871206
-3.3	-17.56927411	-19.78446953	-17.46270367	-15.54370629	-14.30178973	-19.23234691	-21.27785264	-22.29772024	-23.19090607
+3.3	71.8116226	97.44084081	100.3106439	110.3985555	57.7550091	77.89836677	88.48982094	97.41616956	106.6219064
-3.35	-21.53516745	-25.18175983	-23.01582442	-20.30011004	-17.49055741	-23.5336807	-26.16690114	-27.68585808	-29.09407789
+3.35	67.48783576	90.82014665	92.87302844	98.24048152	54.30817638	73.24118242	83.10286713	91.30025554	99.71929463
-3.4	-26.2163718	-31.6073112272025	-29.68289816	-26.08833953	-21.25231348	-28.6084281772221	-31.94185116	-34.06323858	-36.0958218951082
+3.4	62.4364194	83.12902962	84.26428883	85.70267728	50.27947131	67.79833456	76.81287001	84.17000021	91.68372951
-3.45	-30.61149612	-37.6851101	-36.02742476	-31.67257087	-24.78237391	-33.37106295	-37.36719329	-40.06518098	-42.69744081
+3.45	57.73668081	76.01002672	76.32223153	75.21300617	46.52977629	62.73285858	70.96376822	77.54864227	84.23148195
-3.5	-35.73625942	-44.81825048	-43.51277066	-38.83091757	-28.8966005	-38.92228496	-43.69664317	-47.0782554	-50.42369172
+3.5	52.3012856	67.81497736	67.20768951	64.04927524	42.19153451	56.87276033	64.20213957	69.9038722	75.63770253
-3.55	-40.49585176	-51.48169538	-50.53758441	-46.30978746	-32.71614522	-44.07624387	-49.57795598	-53.60396005	-57.62335093
+3.55	47.29040987	60.2924563736803	58.8649018939758	55.4521581026744	38.1907825504072	51.4688960456783	57.9712136756929	62.8671362143661	67.73630792

-3.6	-45.99174683	-59.21640897	-58.72529926	-55.48385852	-37.12493869	-50.02579209	-56.37213307	-61.15212229	-65.96191584
+3.6	41.54339476	51.69952624	49.36040881	46.92651265	33.60093684	45.26973392	50.82772667	54.80838745	58.69658867
-3.65	-51.05104908	-66.37067626	-66.32676991	-64.55796283	-41.18213449	-55.50113301	-62.62909139	-68.11154686	-73.65917801
+3.65	36.28612489	43.86838065	40.72054727	39.33475665	29.40099385	39.59751841	44.29530258	47.44631544	50.44640428
-3.7	-56.84569354	-74.60096088	-75.10102901	-75.79044033	-45.82757959	-61.77074066	-69.79822223	-76.09408468	-82.49781034
+3.7	30.29992538	34.98352001	31.06445751	31.00459315	24.61741671	33.13748545	36.85973361	39.07432872	41.07296876
-3.75	-62.13990913	-82.15126603	-83.17547235	-86.84232287	-50.07060466	-67.49750395	-76.35050017	-83.39718451	-90.59229174
+3.75	24.8610394	26.93859206	23.54209411	28.45770639	20.27007581	27.26679646	30.10613675	31.47696525	32.57440292
-3.8	-68.16090493	-90.77106775	-92.42042163	-100.1376258	-54.89478396	-74.00901947	-83.80480815	-91.71356476	-99.81876788
+3.8	18.7080927	18.45270773	17.22919673	27.69947385	15.35074757	20.62408089	22.4682606	22.89226885	22.97947398
-3.85	-73.62525726	-98.62251528	-100.86412	-112.7819398	-59.27181768	-79.91728807	-90.57208215	-99.27029716	-108.2100605
+3.85	13.15232587	15.97540775	17.22919673	27.16981367	10.90779432	14.62496077	15.57381371	15.53837692	17.15432342
-3.9	-79.80020651	-107.5258863	-110.4639686	-127.5285415	-64.21681276	-86.59252231	-98.22179276	-107.8197761	-117.7121577
+3.9	11.08585856	15.97540775	17.22919673	26.74580927	8.880314455	11.99337307	13.74799947	15.40209144	17.15432342
-3.95	-85.36987843	-115.5836351	-119.1733242	-141.2357396	-68.67600242	-92.61225373	-105.123738	-115.5400981	-126.2998533
+3.95	11.08585856	15.97540775	17.22919673	26.51776727	8.880314455	11.99337307	13.74799947	15.40209144	17.15432342
-5	-91.62642284	-124.6646339	-129.0120962	-157.0852337	-73.68392864	-99.37301662	-112.8790769	-124.2221499	-135.9653504
+5	11.08585856	15.97540775	17.22919673	26.43273964	8.880314455	11.99337307	13.74799947	15.40209144	17.15432342

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-31.03496244	-34.36376658	-19.474	-23.4215	-25.3002
End Shear	230.9800702	250.1675221	149.6901	180.3272	192.2702
-0.05	-31.03496244	-34.36376658	-19.474	-23.4215	-25.3002
+0.05	213.862069	231.4911864	138.931	167.4056	178.3079
-0.1	-31.03496244	-34.36376658	-19.474	-23.4215	-25.3002
+0.1	196.4016607	212.1799423	127.9458	154.2101	164.0554
-0.15	-31.03496244	-34.36376658	-19.474	-23.4215	-25.3002
+0.15	180.995631	195.1591791	118.2374	142.5464	151.4662
-0.2	-31.03496244	-34.36376658	-20.598	-24.8799	-25.3002
+0.2	164.0719174	176.4828409	107.5547	129.7096	137.6212
-0.25	-39.82412698	-41.12455962	-29.1351	-35.6824	-35.9681
+0.25	149.2390234	160.1335645	98.17508	118.4364	125.4722
-0.3	-55.76104767	-56.03021903	-40.1716	-48.9245	-49.9173
+0.3	133.0597525	142.3232983	87.92466	106.114	112.2036
-0.35	-71.47094919	-73.10126595	-49.9392	-60.6423	-62.6404
+0.35	118.9858617	126.8523267	78.98992	95.3708	100.6457
-0.4	-88.81095326	-92.44915091	-60.7031	-73.553	-76.6688
+0.4	103.758746	110.1393045	69.30163	83.71865	88.12222
-0.45	-104.0849396	-109.5101288	-70.1688	-84.9045	-89.0122
+0.45	90.62971368	95.75348156	60.92794	73.64483	77.3066
-0.5	-120.8338866	-128.2396714	-80.5303	-97.328	-102.532
+0.5	76.56251579	80.36884949	51.93161	62.81869	65.69698
-0.55	-135.4860905	-144.6439918	-89.5778	-108.174	-114.345
+0.55	64.5642196	67.27500146	44.23512	53.55364	55.77455
-0.6	-151.4362403	-162.5240359	-99.4071	-119.954	-127.187
+0.6	51.86463004	53.44992178	36.06058	43.70933	45.24761
-0.65	-165.2807919	-178.0648655	-107.92	-130.155	-138.318
+0.65	41.18295664	41.85487867	29.15746	35.39245	36.36941
-0.7	-180.2244041	-194.8642708	-117.088	-141.137	-150.313
+0.7	30.05873087	30.33657071	21.93455	26.68575	27.09394
-0.75	-193.0754275	-209.3347674	-124.95	-150.553	-160.612
+0.75	21.56086596	22.1855484	15.94096	19.45644	19.56477
-0.8	-206.804773	-224.8223384	-133.326	-160.58	-171.592
+0.8	13.7358349	14.34808062	10.64746	12.53208	12.65968
-0.85	-218.476438	-238.0157034	-140.422	-169.073	-180.907
+0.85	8.48262846	8.679448118	7.40092	8.127585	8.598696
-0.9	-230.7837795	-251.9602958	-147.875	-177.99	-190.704
+0.9	6.763523323	7.478727487	4.251574	5.118485	5.522057
-0.95	-241.0901747	-263.6696867	-154.089	-185.419	-198.883
+0.95	6.763523323	7.478727487	4.251574	5.118485	5.522057
-1	-251.7677845	-275.8401338	-160.491	-193.07	-207.327
+1	6.76E+00	7.48E+00	4.25E+00	5.12E+00	5.52E+00
(Span 2) -2	-2.37E+01	-2.62E+01	-1.49E+01	-1.79E+01	-1.93E+01
+2	253.9664599	278.5595267	161.5409	194.2859	208.8287
-2.05	-2.37E+01	-2.62E+01	-1.49E+01	-1.79E+01	-1.93E+01
+2.05	242.2772167	265.2487334	154.5179	185.8886	199.5697
-2.1	-23.68744772	-26.19226082	-14.89	-17.9261	-19.3395
+2.1	229.4989117	250.7729841	146.7756	176.6233	189.3925
-2.15	-23.68744772	-26.19226082	-14.89	-17.9261	-19.3395
+2.15	215.171725	234.6125729	138.0349	166.1555	177.9302
-2.2	-23.68744772	-26.19226082	-15.1393	-18.4691	-19.3395
+2.2	200.6503719	218.2930844	129.1245	155.4781	166.2687
-2.25	-31.43095644	-31.69468128	-22.5716	-27.4349	-28.0264

+2.25	**185.5121201**	**201.3340424**	**119.7901**	**144.2866**	**154.0727**
-2.3	**-44.52725206**	**-45.91356912**	**-31.0353**	**-37.6349**	**-38.9143**
+2.3	**169.2257633**	**183.1424849**	**109.7025**	**132.1865**	**140.9127**
-2.35	**-58.06593735**	**-60.68360428**	**-39.7244**	**-48.0985**	**-50.1172**
+2.35	**153.3093351**	**165.4133826**	**99.80291**	**120.3066**	**128.0163**
-2.4	**-73.05409589**	**-77.09978751**	**-49.2883**	**-59.608**	**-62.4711**
+2.4	**136.4032448**	**146.7943556**	**89.33687**	**107.7415**	**114.36**
-2.45	**-88.08192754**	**-93.61514146**	**-58.8294**	**-71.0835**	**-74.8158**
+2.45	**120.1545574**	**129.0159819**	**79.05875**	**95.39672**	**101.0462**
-2.5	**-104.2859698**	**-111.4763862**	**-69.071**	**-83.3955**	**-88.0865**
+2.5	**103.6018593**	**110.7216982**	**68.63949**	**82.87687**	**87.52697**
-2.55	**-120.1551101**	**-129.0161059**	**-79.0591**	**-95.3971**	**-101.047**
+2.55	**88.08139674**	**93.61502062**	**58.82907**	**71.08315**	**74.81534**
-2.6	**-136.3742958**	**-146.7944808**	**-89.3372**	**-107.742**	**-114.333**
+2.6	**73.05358818**	**77.09967756**	**49.288**	**59.6076**	**62.47064**
-2.65	**-153.3098853**	**-165.4135093**	**-99.8033**	**-120.307**	**-128.017**
+2.65	**58.06545444**	**60.68349819**	**39.72416**	**48.09818**	**50.11679**
-2.7	**-169.2263121**	**-183.1426558**	**-109.703**	**-132.187**	**-140.913**
+2.7	**44.52678698**	**45.91344876**	**31.035**	**37.63457**	**38.9139**
-2.75	**-184.8428845**	**-200.5849666**	**-119.376**	**-143.791**	**-153.533**
+2.75	**31.95292303**	**32.02010244**	**22.91031**	**27.84325**	**28.46156**
-2.8	**-200.650892**	**-218.2932046**	**-129.125**	**-155.478**	**-166.269**
+2.8	**23.68744775**	**26.1922611**	**15.13903**	**18.46883**	**19.33954**
-2.85	**-215.1722194**	**-234.6126917**	**-138.035**	**-166.156**	**-177.931**
+2.85	**23.68744775**	**26.1922611**	**14.89001**	**17.92614**	**19.33954**
-2.9	**-229.4993731**	**-250.7730897**	**-146.776**	**-176.624**	**-189.393**
+2.9	**23.68744775**	**26.1922611**	**14.89001**	**17.92614**	**19.33954**
-2.95	**-242.2776411**	**-265.2488323**	**-154.518**	**-185.889**	**-199.57**
+2.95	**23.68744775**	**26.1922611**	**14.89001**	**17.92614**	**19.33954**
-3	**-254.447958**	**-279.1092563**	**-161.829**	**-194.63**	**-209.209**
+3	**23.68744775**	**26.1922611**	**14.89001**	**17.92614**	**19.33954**
(Span 3) -4	**-6.763523331**	**-7.478727568**	**-4.25157**	**-5.11849**	**-5.52206**
+4	**251.2283797**	**275.2245877**	**160.1685**	**192.6847**	**206.9016**
-3.05	**-6.763523331**	**-7.478727568**	**-4.25157**	**-5.11849**	**-5.52206**
+3.05	**241.6742932**	**264.3347605**	**154.4401**	**185.8391**	**199.346**
-3.1	**-6.763523331**	**-7.478727568**	**-4.25157**	**-5.11849**	**-5.52206**
+3.1	**230.155796**	**251.2483339**	**147.496**	**177.536**	**190.2044**
-3.15	**-8.229655912**	**-8.388748837**	**-7.21813**	**-7.92768**	**-8.37034**
+3.15	***219.1435322***	***238.7710766***	***140.8267***	***169.5575***	***181.4384***
-3.2	***-14.06914987***	***-14.7424817***	***-10.8465***	***-12.8778***	***-12.9089***
+3.2	***206.0991725***	***224.0260915***	***132.8959***	***160.0661***	***171.0286***
-3.25	***-21.08994045***	***-21.75527237***	***-15.603***	***-19.0487***	***-19.1561***
+3.25	***193.8145538***	***210.1683208***	***125.4019***	***151.0941***	***161.2033***
-3.3	***-30.62236137***	***-30.61714245***	***-22.3015***	***-27.1282***	***-27.5648***
+3.3	***179.4520553***	***193.9959438***	***116.6144***	***140.5702***	***149.694***
-3.35	***-40.57608344***	***-41.19676964***	***-28.7644***	***-34.9187***	***-35.8642***
+3.35	***166.0810492***	***178.9644413***	***108.4118***	***130.7441***	***138.9605***
-3.4	***-52.51397631***	***-54.1553985***	***-36.4793***	***-44.2137***	***-45.7866***
+3.4	***150.6081478***	***161.5957081***	***98.89736***	***119.3436***	***126.5204***
-3.45	***-63.87723477***	***-66.5256802***	***-43.7937***	***-53.0221***	***-55.2058***
+3.45	***136.3365559***	***145.5973015***	***90.10246***	***108.8028***	***115.0297***
-3.5	***-77.28661026***	***-81.15948423***	***-52.3954***	***-63.3769***	***-66.2951***
+3.5	***119.9609975***	***127.263609***	***79.99077***	***96.6812***	***101.8277***
-3.55	***-89.87353646***	***-94.92510652***	***-60.445***	***-73.0637***	***-76.6831***
+3.55	***104.9746878***	***110.5051275***	***70.71967***	***85.56509***	***89.73088***
-3.6	***-104.5467158***	***-111.002936***	***-69.8036***	***-84.3224***	***-88.7707***
+3.6	***87.90420097***	***91.43752321***	***60.14073***	***72.8785***	***75.93571***

-3.65	***-118.1713897***	***-125.9571663***	***-78.4723***	***-94.7483***	***-99.9764***
+3.65	***72.38905743***	***74.12580092***	***50.50958***	***61.32647***	***63.38358***
-3.7	***-133.9006011***	***-143.24771***	***-88.4579***	***-106.755***	***-112.894***
+3.7	***54.83137514***	***55.40479446***	***39.59317***	***48.23057***	***49.16405***
-3.75	***-148.3772001***	***-159.1836679***	***-97.6296***	***-117.781***	***-124.766***
+3.75	***40.64139128***	***41.8370368***	***29.71815***	***36.38201***	***36.66769***
-3.8	***-164.9547161***	***-177.4558636***	***-108.112***	***-130.38***	***-138.344***
+3.8	***31.0349623***	***34.36376648***	***20.27747***	***24.24569***	***25.30023***
-3.85	***-180.0973814***	***-194.1667233***	***-117.671***	***-141.866***	***-150.732***
+3.85	***31.0349623***	***34.36376648***	***19.47405***	***23.42155***	***25.30023***
-3.9	***-197.3154471***	***-213.1893905***	***-128.521***	***-154.901***	***-164.802***
+3.9	***31.0349623***	***34.36376648***	***19.47405***	***23.42155***	***25.30023***
-3.95	***-212.9383102***	***-230.4683261***	***-138.35***	***-166.708***	***-177.554***
+3.95	***31.0349623***	***34.36376648***	***19.47405***	***23.42155***	***25.30023***
-5	***-230.5892006***	***-250.0104524***	***-149.438***	***-180.024***	***-191.947***
+5	***31.0349623***	***34.36376648***	***19.47405***	***23.42155***	***25.30023***

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-7.78E-13	-5.41E-13	-1.19E-12	-4.29E-13	-4.58E-13	-3.96E-13	-4.80E-13	-4.69E-13	-4.94E-13	-2.98E-13
End Shear	7.75E-13	4.92E-13	1.16E-12	3.93E-13	4.23E-13	3.51E-13	4.31E-13	3.92E-13	4.15E-13	3.05E-13
-0.05	-172.9429865	-287.1526556	-428.5614195	-130.076399	-140.022262	-132.001383	-159.910985	-167.022764	-176.814852	-69.70859652
+0.05	1223.345604	1731.023827	2403.908029	1019.206798	1091.758143	1025.783574	1231.070427	1205.596219	1275.097332	540.4599974
-0.1	-345.885973	-574.3053113	-857.1228389	-260.152797	-280.044525	-264.002765	-319.82197	-334.045529	-353.629705	-139.417193
+0.1	2288.276195	3245.729348	4490.040682	1900.698836	2035.242932	1911.821644	2292.806958	2234.097014	2362.709466	1006.504733
-0.15	-518.8289595	-861.4579669	-1285.684258	-390.229196	-420.066787	-396.004148	-479.732955	-501.068293	-530.444557	-209.1257896
+0.15	3285.974528	4545.095009	6271.568548	2645.370964	2831.515128	2659.138663	3186.680072	3087.38141	3264.84587	1399.022029
-0.2	-691.7719459	-1148.610623	-1714.245678	-520.305594	-560.089049	-528.00553	-639.64394	-668.091057	-707.25941	-278.8343861
+0.2	4105.299451	5631.017162	7679.932995	3255.513385	3483.0926	3270.140073	3915.714082	3789.695589	4008.243377	1719.333109
-0.25	-864.7149324	-1435.763278	-2142.807097	-650.381993	-700.111312	-660.006913	-799.554926	-835.113821	-884.074262	-348.5429826
+0.25	4748.955647	6506.120358	8728.080549	3734.218773	3993.357377	3748.046399	4509.80428	4353.83551	4606.868707	1969.666726
-0.3	-1037.657919	-1722.915934	-2571.368517	-780.458391	-840.133574	-792.008296	-959.465911	-1002.13659	-1060.88911	-418.2515791
+0.3	5222.121641	7173.757776	9583.731027	4085.382286	4366.555747	4118.496111	4954.202484	4763.239639	5039.104594	2152.034653
-0.35	-1210.600905	-2010.068589	-2999.929936	-910.53479	-980.155837	-924.009678	-1119.3769	-1169.15935	-1237.70397	-487.9601756
+0.35	5531.047351	7638.009723	10126.45644	4320.47523	4628.606817	4367.37612	5246.760098	5038.103497	5331.311804	2268.702119
-0.4	-1383.543892	-2297.221245	-3428.491356	-1040.61119	-1120.1781	-1056.01106	-1279.28788	-1336.18211	-1414.51882	-557.6687721
+0.4	5683.057605	7903.685787	10338.38168	4453.033003	4766.999019	4496.394253	5394.033031	5163.934584	5465.489633	2322.715078
-0.45	-1556.486878	-2584.373901	-3857.052775	-1170.68759	-1260.20036	-1188.01244	-1439.19887	-1503.20488	-1591.33367	-627.3773687
+0.45	5686.549022	7976.323048	10237.9372	4472.49833	4784.821907	4511.105188	5403.654344	5147.54785	5449.128953	2314.56537
-0.5	-1729.429865	-2871.526556	-4285.614195	-1300.76399	-1400.22262	-1320.01383	-1599.10985	-1670.22764	-1768.14852	-697.0859652
+0.5	5550.991438	7874.787394	10048.92301	4395.085188	4703.16979	4433.852802	5314.309998	5070.613544	5367.301956	2284.686912
-0.55	-1902.372851	-3158.679212	-4714.175614	-1430.84038	-1540.24489	-1452.01521	-1759.02084	-1837.25041	-1944.96338	-766.7945617
+0.55	5311.889392	7594.738439	9853.144467	4218.64479	4516.442295	4259.771499	5109.254407	4886.803977	5171.906282	2204.485369
-0.6	-2075.315838	-3445.831868	-5142.737034	-1560.91678	-1680.26715	-1584.01659	-1918.93182	-2004.27317	-2121.77823	-836.5031582
+0.6	4994.553702	7140.138889	9323.626046	3950.437127	4230.341616	3991.657096	4789.541125	4576.861199	4843.09444	2072.519536
-0.65	-2248.258824	-3732.984523	-5571.298453	-1690.99318	-1820.28941	-1716.01797	-2078.84281	-2171.29594	-2298.59308	-906.2117547
+0.65	4558.532019	6519.209901	8478.476032	3601.047992	3854.628569	3638.680077	4366.261328	4152.065904	4392.823287	1893.488597
-0.7	-2421.201811	-4020.137179	-5999.859873	-1821.06958	-1960.31167	-1848.01936	-2238.75379	-2338.3187	-2475.40793	-975.9203512
+0.7	4016.35678	5740.903249	7337.739152	3184.461615	3399.928084	3210.82769	3850.858244	3624.74865	3834.161314	1672.524511
-0.75	-2594.144797	-4307.289834	-6428.421292	-1951.14598	-2100.33394	-1980.02074	-2398.66478	-2505.34146	-2652.22279	-1045.628948
+0.75	3381.632623	4814.897039	5965.987277	2702.405751	2878.356646	2718.900211	3256.314044	3008.288896	3182.143414	1415.193594
-0.8	-2767.087784	-4594.44249	-6856.982711	-2081.22238	-2240.3562	-2112.02212	-2558.57576	-2672.36423	-2829.03764	-1115.337544
+0.8	2669.037772	3751.597895	4464.998581	2166.148239	2301.100683	2174.51372	2596.600749	2318.257257	2452.816061	1127.493907
-0.85	-2940.03077	-4995.475893	-7388.036801	-2211.29878	-2380.37846	-2244.0235	-2718.48675	-2839.38699	-3005.85249	-1185.046141
+0.85	1894.322247	2676.021484	3308.836866	1587.759856	1681.113952	1590.098905	1886.677049	1566.711603	1655.69019	815.8582488
-0.9	-3112.973757	-5705.92237	-8197.562652	-2341.37517	-2520.40072	-2376.02489	-2878.39773	-3006.40976	-3182.66734	-1254.754737
+0.9	1074.30989	1795.562829	2314.763203	980.4870565	1033.996954	978.9007205	1143.179807	773.6007679	815.8649923	487.1525094
-0.95	-3285.916743	-6681.294858	-9245.521908	-2471.45157	-2660.42298	-2508.02627	-3038.30872	-3173.43252	-3359.4822	-1324.463334
+0.95	723.0739285	1124.164991	1657.452374	545.121858	586.6971568	553.052176	669.8231421	694.4212324	735.0708137	291.3506624
-1	-3458.859777	-7881.456903	-10511.32735	-2601.52796	-2800.44521	-2640.02763	-3198.2197	-3340.45528	-3536.297	-1394.171942
+1	761.1304535	1124.646463	1691.870121	573.8124736	617.5759586	582.1601859	705.0770001	730.9697273	773.7587543	306.6848955
(Span 2) -2	-3458.859777	-7881.456903	-10511.32735	-2601.52796	-2800.44521	-2640.02763	-3198.2197	-3340.45528	-3536.297	-1394.171942
+2	761.1304535	1124.646463	1691.870121	573.8124736	617.5759586	582.1601859	705.0770001	730.9697273	773.7587543	306.6848955
-2.05	-2531.899706	-5735.510891	-7924.538313	-1908.07581	-2053.60077	-1935.83412	-2344.56437	-2430.66447	-2572.94919	-1019.807065
+2.05	587.8627031	1079.712591	1389.349977	468.7773755	476.9877144	460.0176247	544.5695566	564.5679247	597.6162305	246.0817877
-2.1	-2358.567405	-4437.42845	-6099.098266	-1777.45011	-1913.01252	-1803.3081	-2184.05693	-2264.26267	-2396.80667	-949.991697
+2.1	1363.47848	1867.10479	2200.746314	1198.796139	1265.660021	1195.065155	1398.158679	1013.737645	1070.927189	585.3947775
-2.15	-2185.235104	-3518.942774	-5117.733346	-1646.82441	-1772.42427	-1670.78209	-2023.54948	-2097.86087	-2220.66414	-880.1763293
+2.15	2323.946167	2865.836481	3224.722557	1908.233944	2030.650219	1918.537139	2280.297171	1953.204283	2065.160899	977.4647039
-2.2	-2011.902802	-2989.123143	-4486.16786	-1516.19871	-1631.83603	-1538.25607	-1863.04204	-1931.45907	-2044.52162	-810.3609616
+2.2	3213.555743	4057.538297	4935.080303	2575.775851	2750.966479	2596.66125	3101.724757	2826.103135	2989.184805	1336.967741

-2.25	-1838.570501	-2798.855246	-4160.198928	-1385.57301	-1491.24778	-1405.73006	-1702.53459	-1765.05727	-1868.37909	-740.5455938
+2.25	4021.223344	5377.971269	6947.289462	3177.272932	3399.198697	3209.12664	3844.36525	3602.762054	3811.4189	1662.310594
-2.3	-1665.2382	-2679.848714	-3898.365223	-1254.94731	-1350.65953	-1273.20404	-1542.02715	-1598.65546	-1692.23656	-670.7302261
+2.3	4699.153348	6535.550247	8639.312326	3693.171979	3952.773135	3728.516549	4473.841628	4256.708482	4504.220953	1933.70353
-2.35	-1491.905898	-2560.842181	-3636.531518	-1124.32161	-1210.07128	-1140.67803	-1381.51971	-1432.25366	-1516.09404	-600.9148584
+2.35	5244.855682	7448.699707	9938.477636	4110.535417	4401.269238	4151.768649	4980.552516	4777.984164	5056.415581	2149.088327
-2.4	-1318.573597	-2441.835649	-3374.697813	-993.69591	-1069.48303	-1008.15202	-1221.01226	-1265.85186	-1339.95151	-531.0994906
+2.4	5641.737046	8109.274698	10816.54441	4413.324418	4725.350928	4458.085558	5349.670054	5146.736443	5447.25619	2306.810693
-2.45	-1145.241296	-2322.829116	-3132.315697	-863.07021	-928.894781	-875.626002	-1060.50482	-1099.45006	-1163.80899	-461.2841229
+2.45	5870.972228	8504.762402	11267.14825	4599.429486	4922.900255	4640.248807	5567.341627	5355.144634	5668.661789	2394.726772
-2.5	-971.9089947	-2203.822584	-3132.315275	-732.44451	-788.306532	-743.099988	-899.997372	-933.048299	-987.666462	-391.4687552
+2.5	5939.436741	8634.209688	11305.97533	4661.587126	4987.994854	4701.426828	5632.659125	5405.732477	5722.719234	2418.412049
-2.55	-1144.814801	-2322.82908	-3132.314764	-863.070207	-928.894728	-875.625929	-1060.50488	-1099.4501	-1163.80901	-461.2841343
+2.55	5833.228565	8504.771086	11267.14777	4599.433666	4922.906152	4640.256806	5567.345189	5355.152035	5668.669385	2394.727041
-2.6	-1318.082551	-2441.835609	-3374.697652	-993.695905	-1069.48297	-1008.15194	-1221.01232	-1265.8519	-1339.95153	-531.0995007
+2.6	5569.748244	8109.291242	10816.5448	4413.327527	4725.351971	4458.089357	5349.678198	5146.739599	5447.259312	2306.812748
-2.65	-1491.350302	-2560.842138	-3636.531357	-1124.3216	-1210.07122	-1140.67795	-1381.51977	-1432.25371	-1516.09405	-600.914867
+2.65	5191.054333	7448.70054	9938.477789	4110.537367	4401.272778	4151.774766	4980.563023	4777.988826	5056.420288	2151.107193
-2.7	-1664.618052	-2679.848667	-3898.365063	-1254.9473	-1350.65946	-1273.20396	-1542.02721	-1598.65551	-1692.23658	-670.7302333
+2.7	4659.805257	6535.560321	8639.311525	3693.172909	3952.775513	3728.521613	4473.844927	4256.711931	4504.224385	1933.704251
-2.75	-1837.885802	-2798.855196	-4160.198768	-1385.573	-1491.2477	-1405.72997	-1702.53465	-1765.05731	-1868.3791	-740.5455997
+2.75	3987.223331	5377.990968	6947.288997	3177.273483	3399.200578	3209.130967	3844.373288	3602.764811	3811.421587	1662.313077
-2.8	-2011.153553	-2989.123017	-4486.167635	-1516.1987	-1631.83595	-1538.25598	-1863.0421	-1931.45911	-2044.52163	-810.360966
+2.8	3186.573988	4057.542494	4935.079782	2575.776341	2750.96833	2596.665297	3101.723747	2826.105183	2989.186746	1337.338514
-2.85	-2184.421303	-3518.94264	-5117.733116	-1646.8244	-1772.42419	-1670.78199	-2023.54954	-2097.86092	-2220.66415	-880.1763324
+2.85	2288.928576	2865.831488	3223.601344	1908.235173	2030.652853	1918.538717	2280.30241	1953.204183	2065.160597	977.4661739
-2.9	-2357.689054	-4437.428329	-6099.098052	-1777.45009	-1913.01244	-1803.308	-2184.05698	-2264.26272	-2396.80667	-949.9916987
+2.9	1315.364537	1867.105897	2199.079933	1198.798477	1265.66375	1195.071618	1398.157052	1013.741848	1070.931438	587.5593667
-2.95	-2530.956804	-5735.510741	-7924.535416	-1908.07579	-2053.60068	-1935.83401	-2344.56443	-2430.66452	-2572.9492	-1019.807065
+2.95	588.0817168	1079.710828	1389.306709	468.7811985	476.9877086	460.0203837	544.5696283	564.5679597	597.6162671	246.3735672
-3	-3459.848183	-7881.456985	-10511.33532	-2601.52801	-2800.4453	-2640.02771	-3198.21974	-3340.45527	-3536.29703	-1394.171941
+3	761.4140214	1124.646479	1691.870121	573.8124809	617.5759795	582.1602027	705.0770044	730.9697242	773.7587619	306.6849016
(Span 3) -4	-3.46E+03	-7881.456985	-10511.33532	-2.60E+03	-2.80E+03	-2.64E+03	-3.20E+03	-3.34E+03	-3.54E+03	-1.39E+03
+4	7.61E+02	1124.646479	1691.870121	5.74E+02	6.18E+02	5.82E+02	7.05E+02	7.31E+02	7.74E+02	3.07E+02
-3.05	-3286.855775	-6681.295006	-9245.521763	-2471.45161	-2660.42304	-2508.02632	-3038.30875	-3173.43251	-3359.48218	-1324.463344
+3.05	723.3433204	1124.165005	1657.45238	545.1218565	586.6971808	553.0521926	669.8231546	694.4212384	735.0708239	291.3506559
-3.1	-3113.863367	-5705.922514	-8197.562507	-2341.37521	-2520.40077	-2376.02494	-2878.39777	-3006.40975	-3182.66732	-1254.754748
+3.1	1096.473557	1795.568385	2312.410655	980.4866366	1033.995197	978.8966118	1143.186865	773.5993123	815.8636453	487.1502876
-3.15	-2940.870958	-4995.476031	-7388.036654	-2211.29881	-2380.3785	-2244.02355	-2718.48678	-2839.38698	-3005.85247	-1185.046151
+3.15	1904.813644	2676.027619	3306.020261	1587.761015	1681.113221	1590.095553	1886.670243	1566.710938	1655.690733	815.8560173
-3.2	-2767.87855	-4594.442621	-6856.982562	-2081.22241	-2240.35624	-2112.02217	-2558.57579	-2672.36422	-2829.03762	-1115.337555
+3.2	2675.059199	3751.604578	4461.815596	2166.149991	2301.101266	2174.510729	2596.594275	2318.257748	2452.8168	1127.491605
-3.25	-2594.886142	-4307.289961	-6428.421143	-1951.146	-2100.33397	-1980.02078	-2398.6648	-2505.34145	-2652.22276	-1045.628958
+3.25	3389.371804	4814.903437	5965.987885	2702.407391	2878.357026	2718.897348	3256.307837	3008.288393	3182.144012	1415.191267
-3.3	-2421.893734	-4020.137302	-5999.859723	-1821.0696	-1960.3117	-1848.01939	-2238.75382	-2338.31869	-2475.40791	-975.9203619
+3.3	4031.585169	5740.909749	7337.739624	3184.463083	3399.927545	3210.824695	3850.851743	3624.747253	3834.16006	1672.522711
-3.35	-2248.901325	-3732.984642	-5571.298304	-1690.9932	-1820.28944	-1716.01801	-2078.84283	-2171.29593	-2298.59305	-906.2117655
+3.35	4586.60469	6519.215498	8478.47626	3601.048468	3854.626955	3638.676048	4366.253551	4152.063513	4392.820988	1893.486417
-3.4	-2075.908917	-3445.831982	-5142.736884	-1560.9168	-1680.26717	-1584.01662	-1918.93184	-2004.27316	-2121.7782	-836.503169
+3.4	5040.41491	7140.143093	9323.626087	3950.436003	4230.339073	3991.651989	4789.531991	4576.85709	4843.090336	2072.517264
-3.45	-1902.916509	-3158.679323	-4714.175465	-1430.8404	-1540.2449	-1452.01523	-1759.02086	-1837.2504	-1944.96335	-766.7945726
+3.45	5380.070422	7594.741599	9853.144184	4218.642061	4516.437935	4259.764886	5109.258714	4886.797944	5171.900147	2204.482931
-3.5	-1729.9241	-2871.526663	-4285.614045	-1300.764	-1400.22263	-1320.01385	-1599.10987	-1670.22763	-1768.14849	-697.0859761
+3.5	5594.405209	7874.789094	10048.92274	4395.081055	4703.163922	4433.844297	5314.312095	5070.605116	5367.293283	2284.684744
-3.55	-1556.931692	-2584.374003	-3857.052626	-1170.6876	-1260.20037	-1188.01246	-1439.19888	-1503.20487	-1591.33364	-627.3773797
+3.55	5672.226478	7976.322672	10237.9375	4472.503264	4784.809946	4511.099437	5403.653594	5147.543389	5449.124085	2317.552285
-3.6	-1383.939284	-2297.221343	-3428.491206	-1040.6112	-1120.1781	-1056.01107	-1279.28789	-1336.1821	-1414.51878	-557.6687832

+3.6	**5603.712591**	***7903.683794***	***10338.38229***	**4453.036342**	**4767.004128**	**4496.386258**	**5394.029844**	**5163.927172**	**5465.481613**	**2322.713318**
-3.65	**-1210.946876**	***-2010.068684***	***-2999.929787***	**-910.534797**	**-980.155834**	**-924.009687**	**-1119.37691**	**-1169.15934**	**-1237.70393**	**-487.9601868**
+3.65	**5484.401239**	***7638.004922***	***10126.45641***	**4320.476045**	**4628.609225**	**4367.36654**	**5246.754421**	**5038.105732**	**5331.315908**	**2268.699887**
-3.7	**-1037.954467**	***-1722.916024***	***-2571.368367***	**-780.458396**	**-840.133567**	**-792.0083**	**-959.46592**	**-1002.13658**	**-1060.88908**	**-418.2515903**
+3.7	**5213.177246**	***7173.750356***	***9583.730488***	**4085.38028**	**4366.555042**	**4118.49853**	**4954.193462**	**4763.240598**	**5039.105355**	**2152.032146**
-3.75	**-864.962059**	***-1435.763364***	***-2142.806948***	**-650.381995**	**-700.1113**	**-660.006914**	**-799.554932**	**-835.113812**	**-884.074223**	**-348.5429938**
+3.75	**4780.399066**	***6506.11071***	***8728.079726***	**3734.214666**	**3993.354385**	**3748.045933**	**4509.806971**	**4353.833005**	**4606.865816**	**1969.664102**
-3.8	**-691.9696508**	***-1148.610705***	***-1714.245528***	**-520.305594**	**-560.089033**	**-528.005527**	**-639.643945**	**-668.091048**	**-707.259369**	**-278.8343974**
+3.8	**4179.398768**	***5631.004771***	***7679.93305***	**3255.505598**	**3483.085757**	**3270.137068**	**3915.713523**	**3789.69017**	**4008.237396**	**1719.334959**
-3.85	**-518.9772425**	***-861.4580449***	***-1285.684109***	**-390.229194**	**-420.066766**	**-396.004141**	**-479.732958**	**-501.068284**	**-530.444515**	**-209.1258009**
+3.85	**3404.58512**	***4545.079656***	***6271.568292***	**2645.36034**	**2831.505229**	**2659.132696**	**3186.676142**	**3087.378844**	**3264.843238**	**1399.023476**
-3.9	**-345.9848342**	***-574.3053851***	***-857.1226896***	**-260.152793**	**-280.044499**	**-264.002754**	**-319.821971**	**-334.04552**	**-353.629661**	**-139.4172045**
+3.9	**2451.433477**	***3245.710242***	***4490.04018***	**1900.684758**	**2035.229331**	**1911.811692**	**2292.798401**	**2234.090695**	**2362.702851**	**1006.505557**
-3.95	**-172.9924259**	***-287.1527254***	***-428.5612701***	**-130.076392**	**-140.022232**	**-132.001368**	**-159.910984**	**-167.022756**	**-176.814807**	**-69.70860802**
+3.95	**1317.050937**	***1731.001804***	***2402.956755***	**1019.190269**	**1091.741877**	**1025.77204**	**1231.059569**	**1205.586789**	**1275.087425**	**540.4603817**
-5	**-5.95E-13**	***-5.85E-13***	***-8.88E-13***	**-3.35E-13**	**-3.35E-13**	**-2.48E-13**	**-3.87E-13**	**-3.97E-13**	**-4.20E-13**	**-3.11E-13**
+5	**1.61E-12**	***1.42E-12***	***2.42E-12***	**9.52E-13**	**1.05E-12**	**8.59E-13**	**1.04E-12**	**9.01E-13**	**9.49E-13**	**5.71E-13**

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.14E-13	-3.99E-13	-3.48E-13	-4.25E-13	-3.07E-13	-3.25E-13	-3.22E-13	-3.44E-13	-3.43E-13
End Shear	3.17E-13	3.43E-13	3.43E-13	3.36E-13	2.94E-13	2.81E-13	3.32E-13	3.26E-13	3.54E-13
-0.05	-99.77272616	-143.7786685	-155.0627661	-237.8946538	-79.92282711	-107.9403568	-123.731995	-138.618823	-154.388905
+0.05	771.9892836	1045.3444	1078.203678	1289.964186	620.8325684	837.5804367	950.7857751	1045.576115	1143.061404
-0.1	-199.5454523	-287.5573369	-310.1255323	-475.7893075	-159.8456542	-215.8807136	-247.46399	-277.237646	-308.777811
+0.1	1438.315065	1938.13083	1991.429484	2353.942545	1157.137156	1560.874371	1770.565153	1947.664384	2133.147251
-0.15	-299.3181785	-431.3360054	-465.1882984	-713.6839613	-239.7684813	-323.8210703	-371.195985	-415.856469	-463.166716
+0.15	1999.700978	2679.837595	2742.715915	3213.511703	1609.395086	2170.716573	2460.359861	2731.765859	2986.52755
-0.2	-399.0909046	-575.1146739	-620.2510645	-951.5786151	-319.6913084	-431.7614271	-494.92798	-554.475292	-617.555622
+0.2	2458.01326	3273.94067	3366.858258	3950.124891	1979.069352	2669.089751	3022.541256	3373.288308	3698.806432
-0.25	-498.8636308	-718.8933423	-775.3138307	-1189.473269	-399.6141355	-539.7017839	-618.659976	-693.094114	-771.944527
+0.25	2815.735276	3750.055454	3837.714309	4536.983534	2268.116645	3058.643455	3469.317945	3874.820032	4270.220539
-0.3	-598.6363569	-862.6720108	-930.3765968	-1427.367923	-479.5369626	-647.6421407	-742.391971	-831.712937	-926.333433
+0.3	3075.967862	4090.556106	4191.129573	4978.701576	2478.987835	3355.677784	3810.220319	4240.630262	4689.977685
-0.35	-698.4090831	-1006.450679	-1085.439363	-1665.262576	-559.4597897	-755.5824974	-866.123966	-970.33176	-1080.72234
+0.35	3258.59105	4297.642173	4433.53829	5288.828422	2614.626491	3557.621837	4034.625615	4494.716108	4963.384869
-0.4	-798.1818093	-1150.229348	-1240.502129	-1903.15723	-639.3826168	-863.5228542	-989.855961	-1108.95058	-1235.11124
+0.4	3351.983386	4399.736104	4580.833791	5447.135085	2678.471523	3661.993719	4146.674902	4628.649196	5107.534316
-0.45	-897.9545354	-1294.008016	-1395.564895	-2141.051884	-719.305444	-971.463211	-1113.58796	-1247.56941	-1389.50015
+0.45	3359.863822	4381.126048	4596.344181	5424.738234	2674.4547	3672.972147	4152.311279	4643.263326	5132.131688
-0.5	-997.7272616	-1437.786685	-1550.627661	-2378.946538	-799.2282711	-1079.403568	-1237.31995	-1386.18823	-1543.88905
+0.5	3304.425623	4317.101555	4512.7638	5267.276614	2634.168482	3610.708254	4083.725535	4563.622377	5039.954808
-0.55	-1097.499988	-1581.565353	-1705.690427	-2616.841192	-879.1510982	-1187.343925	-1361.05195	-1524.80705	-1698.27796
+0.55	3175.800959	4163.037084	4320.832566	5144.773097	2539.162695	3469.327145	3927.802017	4382.408988	4830.934171
-0.6	-1197.272714	-1725.344022	-1860.753194	-2854.735845	-959.0739253	-1295.284281	-1484.78394	-1663.42587	-1852.66687
+0.6	2975.513904	3901.769162	4015.823068	4838.896813	2385.487816	3250.864647	3682.398511	4102.035252	4524.917843
-0.65	-1297.04544	-1869.12269	-2015.81596	-3092.630499	-1038.996752	-1403.224638	-1608.51594	-1802.0447	-2007.05577
+0.65	2710.468859	3552.617117	3632.103301	4345.947004	2178.542448	2962.809359	3356.017957	3732.138629	4120.397405
-0.7	-1396.818166	-2012.901358	-2170.878726	-3330.525153	-1118.919579	-1511.164995	-1732.24793	-1940.66352	-2161.44468
+0.7	2388.187167	3110.918107	3149.450686	3734.732668	1924.21978	2613.317896	2957.930223	3283.215481	3625.506929
-0.75	-1496.590892	-2156.680027	-2325.941492	-3568.419807	-1198.842407	-1619.105352	-1855.97993	-2079.28234	-2315.83358
+0.75	2017.285071	2587.84267	2580.224173	2973.12392	1628.906397	2211.21235	2498.169652	2769.891085	3052.726304
-0.8	-1596.363619	-2300.458695	-2481.004258	-3806.31446	-1278.765234	-1727.045708	-1979.71192	-2217.90117	-2470.22249
+0.8	1605.903348	1995.466747	1943.859351	2075.104917	1299.483211	1765.982201	1987.536221	2198.131138	2415.49392
-0.85	-1696.136345	-2444.237364	-2636.067024	-4073.696094	-1358.688061	-1834.986065	-2103.44392	-2356.51999	-2624.61139
+0.85	1162.397633	1346.7682	1240.961196	1221.350091	943.3243534	1287.783349	1437.595642	1580.115706	1728.204203
-0.9	-1795.909071	-2588.016032	-2791.12979	-4421.193617	-1438.610888	-1942.926422	-2227.17591	-2495.13881	-2779.0003
+0.9	698.7309834	675.1929038	607.0013098	893.5032201	568.2978295	787.4380361	860.6783097	937.2055991	1006.207947
-0.95	-1895.681797	-2731.794701	-2946.192557	-4837.288055	-1518.533715	-2050.866779	-2350.90791	-2633.75763	-2933.3892
+0.95	417.6077384	597.6607805	640.7236048	890.4598558	334.7192015	452.1313002	517.9187154	580.085678	645.7432522
-1	-1995.454525	-2875.573446	-3101.25535	-5311.586944	-1598.456468	-2158.807184	-2474.6399	-2772.37648	-3087.77811
+1	439.5870735	629.1165938	674.4458992	922.1309042	352.3360112	475.9276836	545.1775898	610.6165005	679.7297413
(Span 2) -2	-1995.454525	-2875.573446	-3101.25535	-5311.586944	-1598.456468	-2158.807184	-2474.6399	-2772.37648	-3087.77811
+2	439.5870735	629.1165938	674.4458992	922.1309042	352.3360112	475.9276836	545.1775898	610.6165005	679.7297413
-2.05	-1461.741422	-2091.976431	-2242.70805	-3583.086709	-1171.608827	-1582.58335	-1812.85729	-2030.45867	-2260.2782
+2.05	339.5171671	485.9011725	520.9114796	732.0149546	272.128386	367.584991	421.0704892	471.6125423	524.9924788
-2.1	-1361.671501	-1948.761008	-2089.173632	-3103.348339	-1091.401204	-1474.240664	-1688.75019	-1891.45472	-2105.54094
+2.1	859.5649138	852.4770219	731.9458384	721.6295021	687.0234721	963.3344166	1056.156494	1163.287902	1245.897748
-2.15	-1261.60158	-1805.545585	-1935.639214	-2721.898422	-1011.19358	-1365.897942	-1564.64309	-1752.45076	-1950.80368
+2.15	1407.823223	1659.444843	1583.790053	1451.609184	1132.785403	1555.2325	1739.93854	1923.809862	2101.751228
-2.2	-1161.531659	-1662.330162	-1782.104796	-2441.085251	-930.9859564	-1257.555294	-1440.53599	-1613.4468	-1796.06642
+2.2	1922.682258	2411.433925	2398.976635	2491.494974	1544.464159	2110.618735	2376.939208	2638.311409	2898.873197

-2.25	-1061.461738	-1519.114739	-1628.570378	-2248.19173	-850.7783327	-1149.212608	-1316.42889	-1474.44285	-1641.32916
+2.25	2384.889263	3078.799748	3122.828217	3625.624574	1916.317423	2611.24994	2951.773491	3280.560481	3614.103247
-2.3	-961.3918163	-1375.899316	-1475.03596	-2073.749812	-770.5707091	-1040.869923	-1192.32179	-1335.43889	-1486.5919
+2.3	2778.50642	3632.894558	3728.733477	4564.982139	2228.184615	3036.187725	3437.444574	3828.521991	4222.489826
-2.35	-861.3218952	-1232.683894	-1321.501542	-1899.307895	-690.3630854	-932.5272379	-1068.21469	-1196.43493	-1331.85464
+2.35	3096.350658	4071.883745	4217.576341	5308.973532	2476.831477	3381.650291	3830.380845	4271.341051	4709.076545
-2.4	-761.251974	-1089.468471	-1167.967124	-1724.865977	-610.1554617	-824.1845526	-944.107592	-1057.43098	-1177.11738
+2.4	3324.857916	4387.262082	4577.195002	5818.606269	2658.014112	3631.214438	4114.151074	4591.789045	5067.579669
-2.45	-661.1820626	-946.2530481	-1014.432706	-1550.424059	-529.9478381	-715.8418673	-820.000493	-918.427021	-1022.38012
+2.45	3462.55505	4563.731414	4788.839307	6086.692267	2760.620495	3780.029394	4280.184632	4783.899056	5287.822424
-2.5	-561.1121446	-803.0376252	-860.898288	-1375.982142	-449.7402409	-607.4991819	-695.893394	-779.423064	-867.642857
+2.5	3505.623149	4603.673055	4853.562269	6118.738278	2788.844678	3829.069672	4331.116868	4845.691629	5360.71977
-2.55	-661.1820451	-946.2530401	-1014.432716	-1550.424071	-529.9478661	-715.8418519	-820.000516	-918.42704	-1022.38015
+2.55	3462.559526	4563.731845	4788.845961	6086.688952	2760.624364	3780.03541	4280.185632	4783.904519	5287.824896
-2.6	-761.2519663	-1089.468461	-1167.967136	-1724.865992	-610.1554913	-824.1845362	-944.107617	-1057.431	-1177.11741
+2.6	3324.85874	4387.265699	4577.198156	5818.610017	2658.024499	3631.216931	4114.156062	4591.790859	5067.581154
-2.65	-861.3218875	-1232.683883	-1321.501555	-1899.307913	-690.3631166	-932.5272205	-1068.21472	-1196.43496	-1331.85467
+2.65	3096.353154	4071.888445	4217.580407	5308.977496	2476.830513	3381.654768	3830.387685	4271.344343	4709.078089
-2.7	-961.3918087	-1375.899304	-1475.035975	-2073.749834	-770.5707418	-1040.869905	-1192.32182	-1335.43891	-1486.59193
+2.7	2778.50832	3632.896558	3728.734182	4564.983713	2228.190386	3036.191342	3437.445395	3828.524379	4222.49606
-2.75	-1061.461695	-1519.114725	-1628.570394	-2248.191755	-850.778367	-1149.212589	-1316.42892	-1474.44287	-1641.3292
+2.75	2384.890677	3078.80558	3122.831634	3625.629252	1916.329362	2611.25298	2951.778772	3280.562132	3614.112799
-2.8	-1161.531651	-1662.330146	-1782.104814	-2441.085262	-930.9859922	-1257.555273	-1440.53602	-1613.44683	-1796.06646
+2.8	1922.683747	2411.439219	2398.980261	2491.498341	1544.465715	2110.621537	2376.944304	2638.312775	2898.875644
-2.85	-1261.601572	-1805.545568	-1935.639234	-2721.898434	-1011.193617	-1365.897958	-1564.64312	-1752.45079	-1950.80372
+2.85	1407.825032	1659.447882	1583.792242	1451.611398	1132.79391	1555.233199	1739.941281	1923.809583	2101.748755
-2.9	-1361.671449	-1948.760989	-2089.173653	-3103.34836	-1091.401243	-1474.240642	-1688.75022	-1891.45475	-2105.54099
+2.9	859.5677228	852.4829604	731.9518729	721.6335788	687.0224627	963.3391523	1056.163713	1163.291687	1245.899009
-2.95	-1461.741367	-2091.97641	-2242.708073	-3583.086726	-1171.608868	-1582.583326	-1812.85732	-2030.45871	-2260.27825
+2.95	339.5171594	485.9011801	520.9114741	732.0149254	272.1283985	367.5850071	421.070499	471.6125458	524.9924839
-3	-1995.454543	-2875.573471	-3101.255439	-5311.587004	-1598.456528	-2158.807202	-2474.6399	-2772.37648	-3087.77821
+3	439.5870883	629.1166006	674.4458923	922.1308885	352.3360044	475.9276836	545.177584	610.6164936	679.7297305
(Span 3) -4	-2.00E+03	-2.88E+03	-3.10E+03	-5.31E+03	-1.60E+03	-2.16E+03	-2.47E+03	-2.77E+03	-3.09E+03
+4	4.40E+02	6.29E+02	6.74E+02	9.22E+02	3.52E+02	4.76E+02	5.45E+02	6.11E+02	6.80E+02
-3.05	-1895.681816	-2731.794802	-2946.192669	-4837.28814	-1518.533698	-2050.866844	-2350.90791	-2633.75766	-2933.3893
+3.05	417.6077337	597.6607697	640.7235977	890.4598322	334.7192046	452.1312994	517.9187046	580.0856688	645.7432441
-3.1	-1795.909089	-2588.016132	-2791.129898	-4421.193698	-1438.610868	-1942.926487	-2227.17591	-2495.13884	-2779.00039
+3.1	698.7298287	675.1894412	607.001303	893.503199	568.3040194	787.4352143	860.6735801	937.204208	1006.211177
-3.15	*-1696.136362*	*-2444.237462*	*-2636.067127*	*-4073.696173*	*-1358.688038*	*-1834.986129*	*-2103.44392*	*-2356.52001*	*-2624.61148*
+3.15	1162.39714	1346.764111	1240.965136	1221.352599	943.3309525	1287.781148	1437.591391	1580.115049	1728.207949
-3.2	-1596.363635	-2300.458792	-2481.004357	-3806.314535	-1278.765207	-1727.045771	-1979.71192	-2217.90119	-2470.22257
+3.2	1605.903789	1995.462783	1943.863342	2075.101591	1299.490151	1765.980298	1987.532434	2198.1319	2415.498224
-3.25	-1496.590908	-2156.680123	-2325.941586	-3568.419878	-1198.842377	-1619.105414	-1855.97993	-2079.28237	-2315.83366
+3.25	2017.285365	2587.838638	2580.221997	2973.121101	1628.912878	2211.210529	2498.165807	2769.891897	3052.730582
-3.3	-1396.818181	*-2012.901453*	-2170.878816	*-3330.525221*	-1118.919547	-1511.165056	-1732.24793	-1940.66355	-2161.44475
+3.3	2388.18677	3110.913262	3149.448166	3734.736218	1924.226083	2613.315937	2957.926127	3283.21513	3625.510712
-3.35	-1297.045454	-1869.122783	-2015.816045	-3092.630564	-1038.996717	-1403.224698	-1608.51594	-1802.04472	-2007.05584
+3.35	2710.467589	3552.610848	3632.099505	4345.944589	2178.54808	2962.80654	3356.012948	3732.137287	4120.400135
-3.4	-1197.272727	-1725.344113	-1860.753274	-2854.735908	-959.0738871	-1295.284341	-1484.78394	-1663.4259	-1852.66693
+3.4	2975.511903	3901.761572	4015.817604	4838.898831	2385.49279	3250.861	3682.392356	4102.032617	4524.919054
-3.45	-1097.5	-1581.565444	-1705.690504	-2616.841251	-879.151057	-1187.343983	-1361.05195	-1524.80708	-1698.27802
+3.45	3175.797738	4163.031137	4320.82719	5144.771951	2539.166908	3469.322257	3927.794732	4382.405039	4830.933488
-3.5	-997.7272725	-1437.786774	-1550.627733	-2378.946594	-799.2282269	-1079.403625	-1237.31995	-1386.18825	-1543.88911
+3.5	3304.421166	4317.104846	4512.756738	5267.272808	2634.171351	3610.701806	4083.716112	4563.617034	5039.952534
-3.55	-897.9545455	-1294.008104	-1395.564963	-2141.051937	-719.3053968	-971.4632678	-1113.58795	-1247.56943	-1389.5002
+3.55	3359.854585	*4381.12379789132*	*4596.340147*	5424.740561	2674.452259	*3672.966438*	4152.308359	4643.256748	5132.135321

-3.6	**-798.1818184**	**-1150.229434**	**-1240.502192**	**-1903.15728**	**-639.3825667**	**-863.5229102**	**-989.855959**	**-1108.95061**	**-1235.11128**
+3.6	**3351.987109**	**4399.731584**	**4580.82667**	**5447.13405**	**2678.468005**	**3661.986154**	**4146.670549**	**4628.640628**	**5107.535556**
-3.65	**-698.4090914**	**-1006.450765**	**-1085.439421**	**-1665.262624**	**-559.4597366**	**-755.5825525**	**-866.123964**	**-970.331784**	**-1080.72237**
+3.65	**3258.592869**	**4297.637668**	**4433.534268**	**5288.831163**	**2614.621329**	**3557.613118**	**4034.618431**	**4494.7183**	**4963.383**
-3.7	**-598.6363644**	**-862.6720949**	**-930.3766509**	**-1427.367967**	**-479.5369065**	**-647.6421949**	**-742.391969**	**-831.712962**	**-926.333463**
+3.7	**3075.967452**	**4090.549068**	***4191.132122***	**4978.698283**	**2478.980699**	**3355.679244**	**3810.211476**	**4240.629427**	**4689.97259**
-3.75	**-498.8636374**	**-718.8934251**	**-775.3138803**	**-1189.47331**	**-399.6140764**	**-539.7018373**	**-618.659974**	**-693.094139**	**-771.944552**
+3.75	**2815.732925**	**3750.058163**	**3837.710356**	**4536.986539**	**2268.107692**	**3058.642591**	**3469.318956**	**3874.816194**	**4270.21247**
-3.8	**-399.0909103**	**-575.1147554**	**-620.2511097**	**-951.5786532**	**-319.6912463**	**-431.7614796**	**-494.927978**	**-554.475316**	**-617.555641**
+3.8	**2458.008439**	**3273.940487**	**3366.851016**	**3950.127815**	**1979.058523**	**2669.086795**	**3022.539627**	**3373.281678**	**3698.808327**
-3.85	**-299.3181833**	**-431.3360856**	**-465.1883391**	**-713.6839964**	**-239.7684162**	**-323.821122**	**-371.195983**	**-415.856493**	**-463.16673**
+3.85	**1999.693732**	**2679.834513**	**2742.71614**	**3213.510169**	**1609.383801**	**2170.711174**	**2460.3557**	**2731.756381**	**2986.526473**
-3.9	**-199.5454563**	**-287.5574159**	**-310.1255685**	**-475.7893396**	**-159.8455952**	**-215.8807643**	**-247.463988**	**-277.23767**	**-308.77782**
+3.9	**1438.306175**	**1938.124481**	**1991.425987**	**2353.943768**	**1157.123807**	**1560.865727**	**1770.557198**	**1947.664515**	**2133.142114**
-3.95	**-99.77272927**	**-143.7787461**	**-155.0627979**	**-237.8946828**	**-79.92278944**	**-107.9404067**	**-123.731993**	**-138.618847**	**-154.388909**
+3.95	**771.9782761**	**1045.335391**	**1078.196318**	**1289.961097**	**620.8174545**	**837.5705658**	**950.7758436**	**1045.573317**	**1143.058783**
-5	**-2.87E-13**	**-3.50E-13**	**-3.51E-13**	**-3.88E-13**	**-2.00E-13**	**-2.66E-13**	**-3.04E-13**	**-3.07E-13**	**-3.14E-13**
+5	**7.42E-13**	**7.82E-13**	**8.18E-13**	**9.29E-13**	**6.98E-13**	**7.04E-13**	**8.50E-13**	**8.51E-13**	**9.14E-13**

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.08E-13	-6.25E-13	-4.25E-13	-5.57E-13	-5.03E-13
End Shear	5.59E-13	4.89E-13	5.14E-13	5.13E-13	4.21E-13
-0.05	-279.314662	-309.2738992	-175.266435	-210.79391	-227.702046
+0.05	1927.290335	2083.420678	1251.3812	1508.35823	1606.633357
-0.1	-558.629324	-618.5477984	-350.532871	-421.58782	-455.404091
+0.1	3558.016509	3857.70739	2316.660947	2792.754696	2971.358666
-0.15	-837.9439859	-927.8216977	-525.799306	-632.38173	-683.106137
+0.15	4953.77383	5359.111164	3197.906979	3864.94523	4117.372471
-0.2	-1117.258648	-1237.095597	-701.065741	-843.17564	-910.808183
+0.2	6070.182431	6654.44683	3944.146017	4757.135673	5059.78086
-0.25	-1396.57331	-1546.369496	-876.332176	-1053.96955	-1138.51023
+0.25	6957.929054	7659.383965	4521.135883	5439.139064	5820.715722
-0.3	-1675.887972	-1855.643395	-1051.59861	-1264.76346	-1366.21227
+0.3	7638.820583	8422.273048	4937.716749	5922.187311	6366.834853
-0.35	-1955.202634	-2164.917295	-1226.86505	-1475.55737	-1593.91432
+0.35	8093.690617	8917.613781	5211.969822	6242.025959	6703.502591
-0.4	-2234.517296	-2474.191194	-1402.13148	-1686.35128	-1821.61637
+0.4	8360.100299	9158.046906	5330.578579	6375.716825	6870.847962
-0.45	-2513.831958	-2783.465093	-1577.39792	-1897.14519	-2049.31841
+0.45	8381.972936	9232.459069	5301.044371	6332.352407	6846.117532
-0.5	-2793.14662	-3092.738992	-1752.66435	-2107.9391	-2277.02046
+0.5	8234.603123	9049.323866	5225.977479	6245.134807	6743.621952
-0.55	-3072.461282	-3402.012891	-1927.93079	-2318.73301	-2504.7225
+0.55	7887.459293	8635.192203	5046.67759	6035.68468	6498.480268
-0.6	-3351.775944	-3711.286791	-2103.19722	-2529.52692	-2732.42455
+0.6	7337.71259	8078.939188	4732.575376	5663.567587	6079.996531
-0.65	-3631.090606	-4020.56069	-2278.46366	-2740.32083	-2960.12659
+0.65	6614.42335	7306.085868	4295.379149	5142.541303	5523.772167
-0.7	-3910.405268	-4329.834589	-2453.73009	-2951.11474	-3187.82864
+0.7	5750.240456	6338.405849	3747.906157	4488.109561	4822.01099
-0.75	-4189.71993	-4639.108488	-2628.99653	-3161.90865	-3415.53069
+0.75	4728.857283	5197.7196	3104.74307	3726.565447	3991.52535
-0.8	-4469.034592	-4948.382388	-2804.26296	-3372.70256	-3643.23273
+0.8	3574.075217	3915.749705	2382.845986	2860.138061	3051.590291
-0.85	-4748.349254	-5257.656287	-2979.5294	-3583.49647	-3870.93478
+0.85	2311.465782	2517.978795	1590.559629	1907.676887	2022.917474
-0.9	-5027.663916	-5566.930186	-3154.79583	-3794.29038	-4098.63682
+0.9	1095.690778	1211.553853	770.1279657	926.3494992	948.957016
-0.95	-5306.978578	-5876.204085	-3330.06227	-4005.08429	-4326.33887
+0.95	1156.562488	1278.8624	727.0191846	875.2609569	944.2717892
-1	-5586.293289	-6185.478003	-3505.32877	-4215.8782	-4554.04104
+1	1217.434214	1346.170949	765.283351	921.3273132	993.970279
(Span 2) -2	-5586.293289	-6185.478003	-3505.32877	-4215.8782	-4554.04104
+2	1217.434214	1346.170949	765.283351	921.3273132	993.970279
-2.05	-4048.285426	-4476.368668	-2544.76633	-3063.65318	-3305.20992
+2.05	940.2910757	1039.721498	591.0702145	711.5915062	767.6976411
-2.1	-3771.142287	-4169.919213	-2370.55319	-2853.91737	-3078.93728
+2.1	1375.692062	1493.968957	989.8846988	1180.410385	1223.117107
-2.15	-3493.999149	-3863.469758	-2196.34005	-2644.18156	-2852.66464
+2.15	2930.079794	3220.905512	1983.490252	2364.190384	2521.335011
-2.2	-3216.85601	-3557.020304	-2022.12691	-2434.44575	-2626.39199
+2.2	4396.161975	4846.120019	2903.314885	3469.848812	3716.337885

-2.25	**-2939.712871**	**-3250.570849**	**-1847.91377**	**-2224.70993**	**-2400.11935**
+2.25	**5693.994263**	**6288.966725**	**3718.486349**	**4447.766522**	**4772.679534**
-2.3	**-2662.569733**	**-2944.121394**	**-1673.70062**	**-2014.97412**	**-2173.84671**
+2.3	**6803.822411**	**7501.609838**	**4402.128752**	**5267.412306**	**5657.187536**
-2.35	**-2385.426594**	**-2637.671939**	**-1499.48748**	**-1805.23831**	**-1947.57407**
+2.35	**7696.923788**	**8460.683077**	**4943.912092**	**5914.269294**	**6358.601917**
-2.4	**-2108.283455**	**-2331.222484**	**-1325.27434**	**-1595.5025**	**-1721.30143**
+2.4	**8342.2182**	**9146.696097**	**5323.720961**	**6366.909958**	**6859.01976**
-2.45	**-1831.140317**	**-2024.773029**	**-1151.0612**	**-1385.76668**	**-1495.02879**
+2.45	**8723.136715**	**9597.850686**	**5534.145617**	**6615.315917**	**7143.234689**
-2.5	**-1553.997178**	**-1718.323574**	**-976.848059**	**-1176.03087**	**-1268.75614**
+2.5	**8834.020017**	**9750.534257**	**5578.043478**	**6661.720341**	**7206.825645**
-2.55	**-1831.140308**	**-2024.773018**	**-1151.06115**	**-1385.76656**	**-1495.02874**
+2.55	**8723.137702**	**9597.84982**	**5534.152828**	**6615.310945**	**7143.240138**
-2.6	**-2108.283446**	**-2331.222469**	**-1325.27429**	**-1595.50237**	**-1721.30138**
+2.6	**8342.22242**	**9146.695867**	**5323.724328**	**6366.913846**	**6859.02041**
-2.65	**-2385.426585**	**-2637.671921**	**-1499.48742**	**-1805.23818**	**-1947.57401**
+2.65	**7696.928569**	**8460.682428**	**4943.917476**	**5914.274536**	**6358.603732**
-2.7	**-2662.569723**	**-2944.121372**	**-1673.70056**	**-2014.97399**	**-2173.84665**
+2.7	**6803.8245**	**7502.531361**	**4402.132133**	**5267.415803**	**5657.194927**
-2.75	**-2939.712861**	**-3250.570824**	**-1847.9137**	**-2224.70979**	**-2400.11929**
+2.75	**5693.991822**	**6288.964601**	**3718.488759**	**4447.76854**	**4772.690601**
-2.8	**-3216.856**	**-3557.020276**	**-2022.12683**	**-2434.4456**	**-2626.39193**
+2.8	**4396.164488**	**4846.119056**	**2903.316728**	**3469.849941**	**3716.339995**
-2.85	**-3493.999138**	**-3863.469727**	**-2196.33997**	**-2644.18141**	**-2852.66456**
+2.85	**2930.078835**	**3221.608433**	**1983.489502**	**2364.1923**	**2521.34255**
-2.9	**-3771.142276**	**-4169.919179**	**-2370.55311**	**-2853.91721**	**-3078.9372**
+2.9	**1376.082164**	**1495.351414**	**989.888869**	**1180.412266**	**1223.115347**
-2.95	**-4048.285415**	**-4476.36863**	**-2544.76624**	**-3063.65302**	**-3305.20984**
+2.95	**940.29107**	**1039.721519**	**591.0702121**	**711.5914425**	**767.6976299**
-3	**-5586.293264**	**-6185.477985**	**-3505.32884**	**-4215.87829**	**-4554.0411**
+3	**1217.434215**	**1346.170964**	**765.2833721**	**921.3273374**	**993.9702955**
(Span 3) -4	**-5.59E+03**	**-6.19E+03**	**-3.51E+03**	**-4.22E+03**	**-4.55E+03**
+4	**1.22E+03**	**1.35E+03**	**7.65E+02**	**9.21E+02**	**9.94E+02**
-3.05	**-5306.978603**	**-5876.204087**	**-3330.0624**	**-4005.08437**	**-4326.33905**
+3.05	**1156.562505**	**1278.862416**	**727.0192035**	**875.2609701**	**944.2717795**
-3.1	**-5027.663942**	**-5566.930189**	**-3154.79596**	**-3794.29046**	**-4098.637**
+3.1	**1095.690795**	**1211.553868**	**770.1292699**	**926.352109**	**948.9514379**
-3.15	***-4748.349282***	***-5257.65629***	***-2979.52952***	***-3583.49654***	***-3870.93495***
+3.15	**2311.470979**	**2520.344119**	**1590.560184**	**1907.678825**	**2022.922848**
-3.2	**-4469.034621**	**-4948.382392**	**-2804.26308**	**-3372.70263**	**-3643.2329**
+3.2	**3574.080316**	**3917.787242**	**2382.847049**	**2860.140006**	**3051.596011**
-3.25	**-4189.71996**	**-4639.108494**	**-2628.99665**	**-3161.90872**	**-3415.53086**
+3.25	**4728.862097**	**5200.0518**	**3104.743719**	**3726.567062**	**3991.530904**
-3.3	**-3910.4053**	**-4329.834595**	**-2453.73021**	**-2951.1148**	**-3187.82881**
+3.3	**5750.244314**	**6338.405123**	**3747.904906**	**4488.110059**	**4822.015048**
-3.35	**-3631.090639**	**-4020.560697**	**-2278.46377**	**-2740.32089**	**-2960.12676**
+3.35	**6614.425006**	**7304.862559**	**4295.376864**	**5142.539141**	**5523.774799**
-3.4	**-3351.775978**	**-3711.286798**	**-2103.19733**	**-2529.52697**	**-2732.42471**
+3.4	**7337.709099**	**8078.939929**	**4732.5715**	**5663.56386**	**6079.995985**
-3.45	**-3072.461318**	**-3402.0129**	**-1927.93089**	**-2318.73306**	**-2504.72266**
+3.45	**7888.905007**	**8635.192801**	**5046.671547**	**6035.678285**	**6498.477184**
-3.5	**-2793.146657**	**-3092.739002**	**-1752.66445**	**-2107.93914**	**-2277.02061**
+3.5	**8234.607301**	**9052.062003**	**5225.96823**	**6245.138539**	**6743.616018**
-3.55	**-2513.831996**	**-2783.465103**	**-1577.39801**	**-1897.14523**	**-2049.31856**
+3.55	**8381.970847**	**9232.456549**	**5301.039456**	**6332.350114**	**6846.111475**
-3.6	**-2234.517335**	**-2474.191205**	**-1402.13157**	**-1686.35132**	**-1821.61652**

+3.6	**8360.108374**	**9158.048068**	**5330.570912**	**6375.711548**	**6870.838875**
-3.65	**-1955.202675**	**-2164.917307**	**-1226.86514**	**-1475.5574**	**-1593.91447**
+3.65	**8093.693322**	**8917.613169**	**5211.974139**	**6242.018162**	**6703.503147**
-3.7	**-1675.888014**	**-1855.643408**	**-1051.5987**	**-1264.76349**	**-1366.21242**
+3.7	**7638.817609**	**8423.020053**	**4937.717948**	**5922.187933**	**6366.831009**
-3.75	**-1396.573353**	**-1546.36951**	**-876.332258**	**-1053.96957**	**-1138.51037**
+3.75	**6957.921041**	**7659.38529**	**4521.133324**	**5439.135395**	**5820.706983**
-3.8	**-1117.258693**	**-1237.095612**	**-701.06582**	**-843.175659**	**-910.808323**
+3.8	**6071.410294**	**6654.445896**	**3944.139832**	**4757.127509**	**5059.774173**
-3.85	**-837.944032**	**-927.8217134**	**-525.799381**	**-632.381745**	**-683.106274**
+3.85	**4953.779021**	**5361.580032**	**3197.904253**	**3864.946273**	**4117.374798**
-3.9	**-558.6293713**	**-618.547815**	**-350.532942**	**-421.587831**	**-455.404226**
+3.9	**3558.015642**	**3857.707906**	**2316.654143**	**2792.751057**	**2971.355847**
-3.95	**-279.3147106**	**-309.2739167**	**-175.266503**	**-210.793916**	**-227.702178**
+3.95	**1927.283233**	**2083.422063**	**1251.370293**	**1508.349867**	**1606.624759**
-5	**-5.10E-13**	**-5.96E-13**	**-4.22E-13**	**-3.93E-13**	**-4.32E-13**
+5	**1.28E-12**	**1.59E-12**	**9.45E-13**	**1.06E-12**	**1.14E-12**

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.258373915	-5.748435811	-8.283851494	-8.933988197	-14.53732074	-4.60477787	-6.219016321	-7.128856343	-7.98656543	-8.895163509
End Shear	67.39992285	47.59182467	64.75139871	67.00984037	85.66824614	38.27306509	51.61548644	58.63033921	64.52246094	70.62248915
-0.05	-8.258373915	-5.748435811	-8.283851494	-8.933988197	-14.58978906	-4.60477787	-6.219016321	-7.128856343	-7.98656543	-8.895163509
+0.05	62.86755699	44.43777007	60.18121106	62.06287454	77.32809104	35.74739934	48.20696199	54.7216491	60.14804538	65.75403705
-0.1	-8.258373915	-5.748435811	-8.283851494	-8.933988197	-14.76555734	-4.60477787	-6.219016321	-7.128856343	-7.98656543	-8.895163509
+0.1	58.27619937	41.20998421	55.51155191	57.01555125	68.95658108	33.16316837	44.71835808	50.72178622	55.67391945	60.77722374
-0.15	-8.527462492	-6.65005459	-8.283851494	-8.933988197	-15.02720023	-5.520200172	-7.400078751	-7.864767303	-7.98656543	-8.895163509
+0.15	54.1609769	38.34500671	51.3806623	52.56155871	61.75777142	30.86885073	41.62126843	47.17257563	51.70722417	56.36857463
-0.2	-13.08709361	-9.869757948	-9.789586345	-8.933988197	-15.43544684	-8.095001511	-10.87673617	-11.86028396	-12.10603896	-12.17886406
+0.2	49.61580144	35.17828087	46.8305629	47.66820022	54.05993682	28.33225162	38.19728626	43.25075954	47.3279053	51.50558306
-0.25	-17.20705574	-12.72452977	-13.7222763	-11.97826947	-15.90333413	-10.37741253	-13.95874142	-15.40400744	-16.08904974	-16.63058403
+0.25	45.60943213	32.38473173	42.83123805	43.37883849	47.58292996	26.09398703	35.17615551	39.79220557	43.4693839	47.22481481
-0.3	-21.75953422	-15.87651717	-18.38450425	-16.33541548	-17.6026436	-12.89682036	-17.3609413	-19.31789364	-20.49191454	-21.55574305
+0.3	41.21297513	29.31660921	38.45566576	38.69951116	40.86448986	23.63505242	31.8573413	35.99499118	39.23706024	42.53384046
-0.35	-25.77424639	-18.6539049	-22.50680685	-20.85002531	-21.65957657	-15.11623352	-20.35818847	-22.76775424	-24.37626103	-25.90469841
+0.35	37.36388574	26.62807599	34.63708502	34.62853285	35.39706473	21.47971368	28.94844525	32.66874889	35.53340258	38.43301079
-0.4	-30.18206262	-21.70063758	-27.04514069	-25.85703791	-26.2717376	-17.55021746	-23.64538791	-26.5534606	-28.64276335	-30.6859086
+0.4	33.17027079	23.69609693	30.49100271	30.22331475	29.87949884	19.1284756	25.77534152	29.04268655	31.50025203	33.97224534
-0.45	-34.04314639	-24.36705463	-31.03199799	-30.26681369	-30.44120855	-19.67975966	-26.52159974	-29.86780458	-32.38175543	-34.88003263
+0.45	29.52688168	21.14617097	26.90234252	26.42446697	25.4187722	17.08293235	23.01495724	25.8904061	27.99814964	30.10342774
-0.5	-38.25222672	-27.27099063	-35.39146898	-35.10165841	-35.70197099	-21.99828596	-29.65325803	-33.47878039	-36.45970998	-39.45910406
+0.5	25.5902289	18.38787589	23.04071528	22.35342813	20.87792545	14.86942365	20.02811115	22.48204657	24.21636049	25.9310604
-0.55	-41.9113164	-29.79284708	-39.19370239	-39.33051827	-41.1408132	-24.01108913	-32.37215939	-36.61595995	-40.0066568	-43.44632921
+0.55	22.20096567	16.01014671	19.73116032	18.88045789	17.4003386	12.9605471	17.45251478	19.54537937	20.96250425	22.3463175
-0.6	-45.86760183	-32.51644373	-43.31934648	-43.93312184	-47.54163529	-26.1841255	-35.30772556	-40.00565185	-43.84388443	-47.76506829
+0.6	18.57539788	13.4630774	16.20895669	15.20368211	14.00650759	10.91480008	14.69246652	16.4012754	17.48425512	18.52054063
-0.65	-49.27631645	-34.86014881	-46.88777746	-47.9273079	-53.66025695	-28.05331948	-37.83304332	-42.92401734	-47.15209579	-51.49333485
+0.65	15.48868444	11.29113422	13.22768306	12.11034261	11.20065231	9.169461505	12.33793464	13.72187012	14.5253378	15.27193171
-0.7	-52.92574559	-37.36586543	-50.72462998	-52.23759603	-61.06280902	-30.05083168	-40.53197573	-46.04587055	-50.69640626	-55.49355031
+0.7	12.22831867	8.992831618	10.09985918	8.909268716	8.344714998	7.321507797	9.845232756	10.88857508	11.40281561	11.85093716
-0.75	-56.03571701	-39.49783239	-54.01007826	-55.94336137	-68.13320956	-31.74954192	-42.82742809	-48.70376827	-53.71919146	-58.91078611
+0.75	9.492578969	7.060265725	7.496046394	6.525974482	6.226744529	5.766576844	7.748039871	8.508086071	8.785520449	8.990540097
-0.8	-59.32422137	-41.74812908	-57.50317747	-59.9012637	-76.30792064	-33.54150087	-45.24918312	-51.51123489	-56.91840719	-62.53428667
+0.8	6.65153869	5.04827072	4.943404803	4.202951657	4.193629602	4.146449581	5.563226433	6.032148857	6.070912776	6.070670793
-0.85	-62.08707173	-43.63476863	-60.45646505	-63.26486229	-83.71464507	-35.04285987	-47.27849804	-53.86701275	-59.60907357	-65.58842975
+0.85	4.3409576	3.388666597	3.068178574	2.750148975	3.050662412	2.80880081	3.759654308	3.992227388	3.984588909	3.984383528
-0.9	-64.96058292	-45.59210278	-63.55083725	-66.81029538	-91.84581795	-36.59923165	-49.38253084	-56.31354101	-62.41100788	-68.77702392
+0.9	2.176071775	1.769166419	1.812337197	1.942920231	2.904889096	1.446532216	1.944358109	2.07637808	2.076208872	2.076044952
-0.95	-67.32794541	-47.19982064	-66.12278503	-69.77797285	-98.96464959	-37.87636426	-51.10942962	-58.32554777	-64.7228671	-71.41601229
+0.95	1.817432897	1.266347149	1.812337197	1.942920231	2.830795581	1.014997268	1.37103585	1.570528607	1.759042731	1.958141731
-1	-69.73240438	-48.82665211	-68.76347617	-72.85086979	-106.716849	-39.16711681	-52.8551961	-60.36458589	-67.0753367	-74.1115086
+1	1.82E+00	1.266347149	1.812337197	1.942920231	2.80E+00	1.014997268	1.37103585	1.570528607	1.759042731	1.958141731
(Span 2) -2	-6.365077015	-4.435045227	-6.347230643	-6.804563113	-9.82234947	-3.554758923	-4.801689648	-5.50036012	-6.160580861	-6.85787247
+2	69.88823974	48.89041281	69.12703741	73.48363257	113.1589595	39.20738649	52.91241947	60.46271727	67.24598156	74.37065193
-2.05	-6.365077015	-4.435045227	-6.347230643	-6.804563113	-9.860330027	-3.554758923	-4.801689648	-5.50036012	-6.160580861	-6.85787247
+2.05	67.24029672	47.09884871	66.22620709	70.12253433	104.8969735	37.78579441	50.98945129	58.21652119	64.65339974	71.40005937
-2.1	-6.365077015	-4.435045227	-6.347230643	-6.804563113	-9.979395802	-3.554758923	-4.801689648	-5.50036012	-6.160580861	-6.85787247
+2.1	64.2561036	45.06844324	63.01096167	66.44504362	96.48719531	36.17170751	48.80698967	55.6768842	61.74043655	68.08168208
-2.15	-6.365077015	-4.435045227	-6.347230643	-6.804563113	-10.20217163	-3.630089611	-4.869814113	-5.50036012	-6.160580861	-6.85787247
+2.15	60.82739226	42.72543884	59.3651142	62.31886034	87.63909329	34.30647381	46.28572793	52.75158602	58.40139762	64.29524091
-2.2	-8.890095036	-6.60952389	-7.089969993	-6.804563113	-10.52031801	-5.3954549	-7.250753472	-7.972387523	-8.254733141	-8.472051381
+2.2	57.28177704	40.29414931	55.63503693	58.13433243	79.17001175	32.36877256	43.66714938	49.72042888	54.95493204	60.40130674
-2.25	-12.26518407	-8.991434128	-10.31590432	-9.265504519	-10.9495724	-7.311086941	-9.834932362	-10.90889984	-11.49036217	-12.01489244

+2.25	53.52292837	37.70934651	51.71547186	53.76995174	70.64673303	30.30684103	40.8812377	46.50163915	51.30669558	56.29184297
-2.3	-16.04307805	-11.64874251	-13.97131531	-13.05425878	-13.58874556	-9.445960571	-12.71540728	-14.18908356	-15.11792328	-16.00205154
+2.3	49.41701709	34.87881074	47.46787212	49.07259198	62.07561715	28.04706151	37.82852246	42.98046419	47.32686003	51.82093497
-2.35	-19.86709411	-14.33094989	-17.70902826	-16.96940622	-17.20319018	-11.59891614	-15.6207437	-17.50355068	-18.79472191	-20.05621735
+2.35	45.34811178	32.06748535	43.28875141	44.48019486	54.10531448	25.80100804	34.79480575	39.48636066	43.38749491	47.40618529
-2.4	-24.02546391	-17.24053671	-21.8090384	-21.30216745	-21.72088906	-13.93256539	-18.77037945	-21.10237607	-22.79772317	-24.48224666
+2.4	41.00672595	29.06165959	38.85974277	39.56232556	46.12165144	23.39796475	31.5494792	35.75364526	39.18877249	42.7113976
-2.45	-28.12980841	-20.10597301	-25.88712802	-25.6449744	-26.70100462	-16.22919247	-21.87044007	-24.6496324	-26.7529622	-28.86627343
+2.45	36.79653659	26.1408827	34.49978471	34.90924973	39.0703552	21.06143356	28.39439352	32.12939829	35.10489378	38.13132671
-2.5	-32.4927406	-23.1456743	-30.25287853	-30.32625882	-32.64720165	-18.66389243	-25.15730036	-28.41562253	-30.96160127	-33.54182087
+2.5	32.34527989	23.01830958	30.06917273	30.12865234	32.39115861	18.56190824	25.01961415	28.25777603	30.78500303	33.3454208
-2.55	-36.70881396	-26.14098487	-34.49993254	-34.90940908	-39.07053125	-21.06152078	-28.39450302	-32.12952468	-35.09868769	-38.12513615
+2.55	28.16357415	20.10587311	25.88698521	25.64482194	26.70086191	16.22910596	21.87034013	24.64950865	26.75281357	28.86612015
-2.6	-41.0092675	-29.06176716	-38.8598899	-39.55053533	-46.12184398	-23.39805054	-31.5495871	-35.75376935	-39.18892334	-42.71155393
+2.6	24.0573167	17.24043174	21.8089103	21.30202065	21.72076525	13.93248102	18.77027406	21.10225581	22.79758871	24.48209759
-2.65	-45.34915648	-32.06758378	-43.28889709	-44.48036674	-54.10549778	-25.80109226	-34.7949036	-39.48648287	-43.38763192	-47.40633848
+2.65	19.89667504	14.33085539	17.70890563	16.9692556	17.20310136	11.59883441	15.62064877	17.50343388	18.79458135	20.05607372
-2.7	-49.41670727	-34.87891377	-47.46800421	-49.07275044	-62.07580463	-28.04714484	-37.8286261	-42.98058325	-47.3270048	-51.82108545
+2.7	16.07027685	11.64864516	13.97119478	13.05412812	13.58866259	9.445879473	12.71530918	14.188968	15.1177948	16.0019102
-2.75	-53.35373215	-37.59401117	-51.54152139	-53.57696761	-70.28566201	-30.21479965	-40.75687846	-46.35808411	-51.14423879	-56.1090973
+2.75	12.44233598	9.098771039	10.46251379	9.41654753	10.97087271	7.397366155	9.95133721	11.04132989	11.63655857	12.17530749
-2.8	-57.27909835	-40.29423653	-55.6351603	-58.13448074	-79.17020238	-32.36884766	-43.66724371	-49.72053756	-54.9550606	-60.40144575
+2.8	8.911962731	6.609444611	7.089872201	6.804563044	10.52031786	5.395388819	7.250667505	7.972286499	8.25462234	8.471939074
-2.85	-60.82385498	-42.72552606	-59.36523942	-62.3190017	-87.63928158	-34.30654366	-46.28581576	-52.75168322	-58.40152187	-64.29536583
+2.85	6.365081248	4.435045226	6.347230712	6.804563044	10.20217148	3.630026831	4.869738604	5.500360061	6.160580791	6.85787236
-2.9	-64.25192362	-45.06851731	-63.01107877	-66.44517606	-96.48738072	-36.17177142	-48.80706991	-55.67698027	-61.74054683	-68.0818076
+2.9	6.365081248	4.435045226	6.347230712	6.804563044	9.979395653	3.554758854	4.801689648	5.500360061	6.160580791	6.85787236
-2.95	-67.23579369	-47.09891963	-66.22630436	-70.12266077	-104.8971519	-37.78585285	-50.98951901	-58.21660026	-64.65350172	-71.40016766
+2.95	6.365081248	4.435045226	6.347230712	6.804563044	9.860329869	3.554758854	4.801689648	5.500360061	6.160580791	6.85787236
-3	-69.99063567	-48.96251447	-69.24548494	-73.62201262	-113.5137697	-39.26453285	-52.98973357	-60.5532583	-67.35092064	-74.49134406
+3	6.365081248	4.435045226	6.347230712	6.804563044	9.822349312	3.554758854	4.801689648	5.500360061	6.160580791	6.85787236
(Span 3) -4	-1.82E+00	-1.26634717	-1.812337216	-1.942920211	-2.80E+00	-1.014997248	-1.371035878	-1.57052859	-1.759042711	-1.9581417
+4	69.62387211	48.74559797	68.63077561	72.69569391	106.3144901	39.10285096	52.76826544	60.26290207	66.95773903	73.97646773
-3.05	-1.82E+00	-1.26634717	-1.812337216	-1.942920211	-2.83E+00	-1.014997248	-1.371035878	-1.57052859	-1.759042711	-1.9581417
+3.05	67.47315045	47.28992203	66.26793092	69.94611754	99.37805746	37.94790046	51.20617619	58.43839422	64.852779	71.56456987
-3.1	-2.275105568	-1.832290175	-1.83382529	-1.942920211	-2.910851219	-1.514664847	-2.018697669	-2.163418665	-2.163248463	-2.16308358
+3.1	64.82798491	45.49314246	63.39352181	66.62943326	91.42196652	36.52057599	49.27620159	56.18977937	62.26904785	68.61523903
-3.15	-4.210580442	-3.295425012	-2.97683783	-2.669417171	-3.041231094	-2.733606977	-3.658268041	-3.877692219	-3.870836558	-3.870628802
+3.15	62.25714	43.74175988	60.6247482	63.45706097	84.14645906	35.12796801	47.39355303	54.00067715	59.76193607	65.76215827
-3.2	-6.782836596	-5.150199066	-5.06738114	-4.309150956	-4.286510847	-4.228563619	-5.673940866	-6.15750689	-6.208133591	-6.207890446
+3.2	59.16948777	41.6332415	57.3241361	59.697878	75.86864258	33.45004585	45.12558429	51.36784814	56.75483351	62.3488273
-3.25	-9.323164125	-6.950487488	-7.348970139	-6.391500128	-6.108572104	-5.678221433	-7.628865698	-8.372922577	-8.637114852	-8.828568088
+3.25	56.22693907	39.61973652	54.19861389	56.15646113	68.54671871	31.84664294	42.95865982	48.85580192	53.89226098	59.10662205
-3.3	-12.3785828	-9.110331401	-10.25899379	-9.055070611	-8.475680325	-7.416017492	-9.972697388	-11.03336927	-11.5622091	-12.02535964
+3.3	52.75091108	37.23703531	50.52675178	52.01485296	60.64472469	29.94815095	40.39324178	45.88531032	50.51395881	55.28748063
-3.35	-15.2939686	-11.1667967	-13.05769242	-11.9345732	-11.04261259	-9.069513823	-12.20310122	-13.56852535	-14.35616182	-15.08637692
+3.35	49.48508674	34.99498873	47.0936721	48.15816875	54.01905766	28.16083815	37.97831601	43.09197155	47.34262667	51.70821604
-3.4	-18.7415284	-13.59417775	-16.38958321	-15.39170244	-14.17851238	-11.02012625	-14.83454922	-16.56305479	-17.66307419	-18.71704532
+3.4	45.67481	32.37563879	43.10553779	43.69421251	47.18078906	26.0718026	35.15599407	39.83037076	43.64532031	47.5414724
-3.45	-21.98359861	-15.87321551	-19.5411512	-18.68157882	-17.21516226	-12.85059575	-17.30415501	-19.37629935	-20.77530774	-22.14023376
+3.45	42.13413274	29.93864704	39.41406623	39.5759562	41.46070963	24.12744428	32.52935369	36.79739083	40.21189643	43.67720091
-3.5	-25.76925379	-18.53059861	-23.23995358	-22.56301305	-21.10873847	-14.98397744	-20.18267304	-22.65835788	-24.41185139	-26.14658632
+3.5	38.04373456	27.12018957	35.16462399	34.84972233	35.38216883	21.87790226	29.49067168	33.29123131	36.24779476	39.22100209
-3.55	-29.28962137	-20.99862679	-26.69520113	-26.20564398	-25.17172161	-16.96455547	-22.85519516	-25.70804043	-27.79567542	-29.87988122
+3.55	34.27662774	24.52186148	31.26391308	30.52367223	30.68734174	19.80336145	26.68856419	30.06026117	32.5989817	35.12383091
-3.6	-33.35930986	-23.84845571	-30.70594191	-30.451283	-30.16124768	-19.2506812	-25.94026035	-29.23107756	-31.70968229	-34.20374169
+3.6	29.94644865	21.54181735	26.80815465	25.59523402	26.02746852	17.4233533	23.47406478	26.35609369	28.42021646	30.43639547

-3.65	**-37.10962713**	**-26.47189478**	**-34.41569938**	**-34.39293229**	**-35.09814417**	**-21.35449027**	**-28.77943117**	**-32.47554648**	**-35.31840646**	**-38.19506249**
+3.65	**26.00239411**	**18.8157246**	**22.74741024**	**21.11513989**	**21.90068323**	**15.24552442**	**20.53280706**	**22.96878537**	**24.6027044**	**26.15836364**
-3.7	**-41.40924691**	**-29.47663653**	**-38.68341243**	**-38.94271663**	**-41.20858185**	**-23.7633288**	**-32.03045925**	**-36.19301127**	**-39.45765345**	**-42.77822678**
+3.7	**21.51539154**	**15.71165433**	**18.14027483**	**16.10809308**	**17.395725**	**12.76505922**	**17.18303627**	**19.11316236**	**20.26151347**	**21.29788372**
-3.75	**-45.3411269**	**-32.22188703**	**-42.59853048**	**-43.12962009**	**-47.21998595**	**-25.96349736**	**-35.00000205**	**-39.59061456**	**-43.24458621**	**-46.97552074**
+3.75	**17.4419349**	**12.89138678**	**13.9686762**	**12.20746389**	**15.93384971**	**10.51079897**	**14.13886256**	**15.61116762**	**16.32199391**	**16.89105674**
-3.8	**-49.81663854**	**-35.34400048**	**-47.06822284**	**-47.92347505**	**-54.45578385**	**-28.46501631**	**-38.37646848**	**-43.45595445**	**-47.5569431**	**-51.75979667**
+3.8	**12.83733784**	**9.700851801**	**9.56842506**	**8.933988454**	**15.41093071**	**7.959941703**	**10.69436395**	**11.65064071**	**11.87050498**	**11.91572413**
-3.85	**-53.88170795**	**-38.1774733**	**-51.13949457**	**-52.30185119**	**-61.34350807**	**-30.73467342**	**-41.44012864**	**-46.9650413**	**-51.47539391**	**-56.11099842**
+3.85	**8.739564959**	**6.819977115**	**8.283851569**	**8.933988454**	**15.04564783**	**5.656102836**	**7.583593867**	**8.075609909**	**8.057234596**	**8.895163817**
-3.9	**-58.47904658**	**-41.37941743**	**-55.7562283**	**-57.27973484**	**-69.38905138**	**-33.29883991**	**-44.9014894**	**-50.93170483**	**-55.90862126**	**-61.03819427**
+3.9	**8.258379677**	**5.748435861**	**8.283851569**	**8.933988454**	**14.75323101**	**4.604778043**	**6.219016371**	**7.128856351**	**7.986565433**	**8.895163817**
-3.95	**-62.62893251**	**-44.26750243**	**-59.93447501**	**-61.79586425**	**-76.87953322**	**-35.61109796**	**-48.02294723**	**-54.5106238**	**-59.91189946**	**-65.49123843**
+3.95	**8.258379677**	**5.748435861**	**8.283851569**	**8.933988454**	**14.59596066**	**4.604778043**	**6.219016371**	**7.128856351**	**7.986565433**	**8.895163817**
-5	**-67.29406442**	**-47.51175672**	**-64.64331548**	**-66.89763867**	**-85.55497269**	**-38.20789663**	**-51.52865783**	**-58.53205959**	**-64.41387082**	**-70.50316329**
+5	**8.258379677**	**5.748435861**	**8.283851569**	**8.933988454**	**14.53732092**	**4.604778043**	**6.219016371**	**7.128856351**	**7.986565433**	**8.895163817**

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.258373915	-7.494391067	-8.06742502	-7.605299607	-9.2133198	-9.623067107	-10.18724123	-4.016281884
End Shear	67.39992285	62.77240485	67.25851804	63.20400214	75.88870883	74.70453304	79.01604056	33.33191311
-0.05	-8.258373915	-7.494391067	-8.06742502	-7.605299607	-9.2133198	-9.623067107	-10.18724123	-4.016281884
+0.05	62.86755699	58.66560014	62.83718424	59.03719241	70.84108803	69.40047225	73.40076259	31.13876631
-0.1	-8.258373915	-7.494391067	-8.06742502	-7.605299607	-9.2133198	-9.623067107	-10.18724123	-4.016281884
+0.1	58.27619937	54.46135027	58.31203472	54.77210741	65.67672348	63.98253211	67.66519606	28.87638331
-0.15	-8.527462492	-9.548160599	-9.941595999	-9.163398307	-10.38769319	-9.623067107	-10.18724123	-4.631603032
+0.15	54.1609769	50.72714134	54.29375335	50.98534628	61.09354271	59.19106639	62.59307064	26.86835918
-0.2	-13.08709361	-13.72851254	-14.44608241	-13.41212344	-15.54292648	-10.87517003	-11.4475474	-6.888638276
+0.2	49.61580144	46.59676375	49.85024604	46.79851961	56.02843935	53.91492221	57.00815182	24.64892798
-0.25	-17.20705574	-17.43254224	-18.43826956	-17.17822725	-20.11457956	-15.45556397	-16.28152425	-8.889906463
+0.25	45.60943213	42.95048431	45.92852557	43.10394959	51.56094448	49.27888068	52.10105023	22.691126
-0.3	-21.75953422	-21.51935297	-22.84410649	-21.33522521	-25.16303078	-20.87503535	-22.02046381	-11.09958088
+0.3	41.21297513	38.94278345	41.61921887	39.04493816	46.65517081	44.20836056	46.73436179	20.54100636
-0.35	-25.77424639	-25.11785124	-26.7245121	-24.99708859	-29.61227112	-25.66827162	-27.09648832	-13.0466819
+0.35	37.36388574	35.42809901	37.84108372	35.48689631	42.35710356	39.78485043	42.0527505	18.65701383
-0.4	-30.18206262	-29.06231683	-30.97914145	-29.01280683	-34.49387613	-30.94683965	-32.6867469	-15.18263795
+0.4	33.17027079	31.59187648	33.71853325	31.60525197	37.6707227	34.98377728	36.97186967	16.60256505
-0.45	-34.04314639	-32.5116222	-34.70074528	-32.52609051	-38.76695879	-35.58544747	-37.59950419	-17.05198509
+0.45	29.52688168	28.25245281	30.13100797	28.22807712	33.59582705	30.82990237	32.57621153	14.81596466
-0.5	-38.25222672	-36.26494465	-38.75161555	-36.3509793	-43.42165802	-40.6592823	-42.97349728	-19.0878618
+0.5	25.5902289	24.63651063	26.24776989	24.57335726	29.18890862	26.3621019	27.84871847	12.8835455
-0.55	-41.9113164	-39.52138858	-42.26739011	-39.67134729	-47.46484206	-45.08615533	-47.66252182	-20.85587279
+0.55	22.20096567	21.51601352	22.89787933	21.42138692	25.39092708	22.53497548	23.79948634	11.21792232
-0.6	-45.86760183	-43.03476004	-46.06193889	-43.25584432	-51.83255977	-49.89143269	-52.75267076	-22.76531153
+0.6	18.57539788	18.16915281	19.30650855	18.04314083	21.32353056	18.46427721	19.49296524	9.433894425
-0.65	-49.27631645	-46.05468249	-49.32486556	-46.33896257	-55.59210734	-54.04946473	-57.15749718	-24.40840072
+0.65	15.48868444	15.31124748	16.24127668	15.16071296	17.85620614	15.02100272	15.85062161	7.912832939
-0.7	-52.92574559	-49.27929806	-52.81053373	-49.63351693	-59.61278176	-58.52235954	-61.89622244	-26.16504015
+0.7	12.22831867	12.28227819	12.9943378	12.10849993	14.18840354	11.4112219	12.03264157	6.30355097
-0.75	-56.03571701	-52.01902985	-55.77358426	-52.43504128	-63.03494238	-62.35444233	-65.95638318	-27.65962511
+0.75	9.492578969	9.730628207	10.26078698	9.539950088	11.10547625	8.408906693	8.857653045	4.950635295
-0.8	-59.32422137	-54.90608867	-58.89781707	-55.39009968	-66.64850873	-66.4311328	-70.27610878	-29.23710627
+0.8	6.65153869	7.068347359	7.410830655	6.863321531	7.897330007	5.465436227	5.753090765	3.542464237
-0.85	-62.08707173	-57.32196653	-61.5139694	-57.86569748	-69.67954586	-69.88016085	-73.93113917	-30.55959838
+0.85	4.3409576	4.866620748	5.055987994	4.65299411	5.252550608	3.606718612	3.81646914	2.381278551
-0.9	-64.96058292	-59.82267119	-64.22421582	-60.43170512	-72.82593796	-73.49681141	-77.7642745	-31.9315633
+0.9	2.176071775	2.619831678	2.655571615	2.422588012	2.599267552	2.105752076	2.22901723	1.322290752
-0.95	-67.32794541	-61.87102342	-66.44643887	-62.53703572	-75.41210524	-76.50567777	-80.95370837	-33.05838178
+0.95	1.817432897	1.65301899	1.779091276	1.677066762	2.031161213	2.105752076	2.22901723	0.883487189
-1	-69.73240438	-63.93656688	-68.69013737	-64.66443865	-78.03125756	-79.59847576	-84.23268709	-34.19847085
+1	1.82E+00	1.65301899	1.779091276	1.677066762	2.031161213	2.105752076	2.22901723	0.883487189
(Span 2) -2	-6.365077015	-5.789260872	-6.230795565	-5.873481689	-7.113603793	-7.374838627	-7.806542162	-3.094179584
+2	69.88823974	63.97326032	68.74649222	64.72823055	78.14427539	80.04554424	84.71083276	34.23231578
-2.05	-6.365077015	-5.789260872	-6.230795565	-5.873481689	-7.113603793	-7.374838627	-7.806542162	-3.094179584
+2.05	67.24029672	61.69873946	66.2752821	62.3847951	75.25820709	76.64794803	81.10890898	32.97590163
-2.1	-6.365077015	-5.789260872	-6.230795565	-5.873481689	-7.113603793	-7.374838627	-7.806542162	-3.094179584
+2.1	64.2561036	59.10729036	63.46520481	59.72335516	71.99182464	72.8887155	77.12467322	31.55215274
-2.15	-6.365077015	-6.194415254	-6.490933943	-6.009021562	-7.113603793	-7.374838627	-7.806542162	-3.115464161
+2.15	60.82739226	56.10469523	60.21411754	56.64718581	68.22647017	68.63204273	72.61420427	29.90939144
-2.2	-8.890095036	-9.094733107	-9.596352061	-8.925971623	-10.40391345	-7.964293273	-8.391031152	-4.650369822
+2.2	57.28177704	52.97894127	56.83362058	53.45098549	64.32240903	64.28206337	68.00569201	28.2049159
-2.25	-12.26518407	-12.23510617	-12.96273094	-12.09047994	-14.20657876	-11.68647403	-12.32750768	-6.318354439

+2.25	53.52292837	49.64718752	53.23371748	50.04942134	60.17456805	59.71551354	63.1684669	26.39302039
-2.3	-16.04307805	-15.72854056	-16.71125454	-15.61648982	-18.4514748	-15.91002239	-16.79527818	-8.179452069
+2.3	49.41701709	45.99035918	49.28581988	46.32101144	55.63496132	54.77108323	57.93168033	24.40911206
-2.35	-19.86709411	-19.24613767	-20.48886045	-19.17179557	-22.73834951	-20.23355858	-21.36970413	-10.05816812
+2.35	45.34811178	42.3509717	45.35960489	42.61484603	51.12842214	49.9102138	52.78404286	22.43891896
-2.4	-24.02546391	-23.0537967	-24.58098234	-23.02497617	-27.39078886	-24.98076117	-26.39320524	-12.09627654
+2.4	41.00672595	38.4525338	41.15671465	38.64921878	46.31225166	44.76251569	47.33330473	20.33271205
-2.45	-28.12980841	-26.79642755	-28.60591804	-26.8165497	-31.97456419	-29.70662046	-31.39484047	-14.10352356
+2.45	36.79653659	34.65770085	37.06808274	34.79298506	41.63432736	39.69875255	41.97207391	18.28641837
-2.5	-32.4927406	-30.75950092	-32.87061176	-30.83564574	-36.83908594	-34.769786	-36.75416376	-16.23285747
+2.5	32.34527989	30.59358864	32.69201872	30.667305	36.63522102	34.55665601	36.5285536	16.14369743
-2.55	-36.70881396	-34.6578332	-37.06822523	-34.79311896	-41.63448941	-39.69892418	-41.97225562	-18.28643442
+2.55	28.16357415	26.79629762	28.60577839	26.81642753	31.97441632	29.7064549	31.39466524	14.10350755
-2.6	-41.0092675	-38.45266381	-41.15685494	-38.64935067	-46.31241186	-44.76268672	-47.33348581	-20.3327277
+2.6	24.0573167	23.05366954	24.58084564	23.0248473	27.39063312	24.98061271	26.39304812	12.09626028
-2.65	-45.34915648	-42.3510993	-45.35974249	-42.61496546	-51.12856718	-49.91038317	-52.78422221	-22.43893492
+2.65	19.89667504	19.24601395	20.48872761	19.17167932	22.73820912	20.23341664	21.36955394	10.05815236
-2.7	-49.41670727	-45.99048356	-49.28595405	-46.32113802	-55.6351152	-54.77123683	-57.93184301	-24.40912458
+2.7	16.07027685	15.72842187	16.7111271	15.61636976	18.45133003	15.90988302	16.79513073	8.179436134
-2.75	-53.35373215	-49.49833789	-53.072958	-49.89755695	-59.98953202	-59.51294251	-62.95390421	-26.31212396
+2.75	12.44233598	12.37641434	13.11428827	12.23299689	14.37800503	11.85576259	12.50656565	6.393573553
-2.8	-57.27909835	-52.97905795	-56.83374665	-53.45110072	-64.32254968	-64.28220717	-68.00584434	-28.20493198
+2.8	8.911962731	9.094624478	9.596235681	8.92586637	10.40378711	7.964180571	8.390911975	4.650356122
-2.85	-60.82385498	-56.10479949	-60.21423029	-56.64729293	-68.22660121	-68.6321888	-72.61435904	-29.90940568
+2.85	6.365081248	6.194319829	6.490831901	6.008928887	7.113603837	7.374838595	7.806542239	3.115451732
-2.9	-64.25192362	-59.10738902	-63.46531167	-59.72345297	-71.99194462	-72.88885233	-77.12481822	-31.55216414
+2.9	6.365081248	5.789260946	6.230795776	5.873481859	7.113603837	7.374838595	7.806542239	3.094179646
-2.95	-67.23579369	-61.69882692	-66.27537714	-62.38487762	-75.25830848	-76.64806188	-81.10902965	-32.97591085
+2.95	6.365081248	5.789260946	6.230795776	5.873481859	7.113603837	7.374838595	7.806542239	3.094179646
-3	-69.99063567	-64.06447785	-68.84572721	-64.82240784	-78.26052809	-80.18443259	-84.85809903	-34.28285252
+3	6.365081248	5.789260946	6.230795776	5.873481859	7.113603837	7.374838595	7.806542239	3.094179646
(Span 3) -4	-1.82E+00	-1.653019011	-1.779091336	-1.677066811	-2.031161225	-2.105752067	-2.229017252	-0.883487206
+4	69.62387211	63.83387055	68.57849895	64.558532	77.90069546	79.44295279	84.06778504	34.14170688
-3.05	-1.82E+00	-1.653019011	-1.779091336	-1.677066811	-2.031161225	-2.105752067	-2.229017252	-0.883487206
+3.05	67.47315045	61.98564105	66.57085907	62.65495901	75.5571137	76.67557208	81.13381334	33.12156879
-3.1	-2.275105568	-2.732333531	-2.775688535	-2.517714405	-2.704421443	-2.105752067	-2.229017252	-1.361421026
+3.1	64.82798491	59.69640722	64.08730679	60.30205097	72.66682311	73.31286175	77.56930053	31.86224862
-3.15	-4.210580442	-4.742733126	-4.923553012	-4.528717564	-5.10399275	-3.516663618	-3.720774666	-2.31601237
+3.15	62.25714	57.45882311	61.66222936	58.00603588	69.85149252	70.07676639	74.13949974	30.63464321
-3.2	-6.782836596	-7.203382145	-7.555323561	-6.998980638	-8.059797791	-5.608420412	-5.903600434	-3.613744466
+3.2	59.16948777	54.75883048	58.73840894	55.23930018	66.4639949	66.222111	70.05461473	29.15662647
-3.25	-9.323164125	-9.58552901	-10.105399	-9.39397087	-10.93038024	-8.239408663	-8.678422452	-4.87374502
+3.25	56.22693907	52.17556806	55.94293012	52.59518939	63.23066929	62.57440924	66.18945247	27.74513659
-3.3	-12.3785828	-12.43726565	-13.16042836	-12.26459329	-14.37587221	-11.59479818	-12.22679162	-6.38576278
+3.3	52.75091108	49.11361839	52.63139695	49.46418084	59.4060314	58.29162032	61.6517604	26.07477822
-3.35	-15.2939686	-15.14750991	-16.06570678	-14.99563279	-17.65772616	-14.82474075	-15.64302588	-7.825702908
+3.35	49.48508674	46.22832445	49.51252104	46.51630983	55.80845026	54.28943325	57.41171778	24.5029959
-3.4	-18.7415284	-18.34153629	-19.49144314	-18.21706268	-21.53284105	-18.67296593	-19.71373185	-9.525655471
+3.4	45.67481	42.85322314	45.86583497	43.07058406	51.60673909	49.6423511	52.48881427	22.66666067
-3.45	-21.98359861	-21.33619291	-22.70487932	-21.23981254	-25.17222236	-22.31531213	-23.5670858	-11.12194349
+3.45	42.13413274	39.70958294	42.47060774	39.86330351	47.69866149	45.34276968	47.93434056	20.95816395
-3.5	-25.76925379	-24.82370129	-26.44876081	-24.76249324	-29.41689265	-26.59255873	-28.09256054	-12.98346465
+3.5	38.04373456	36.07012015	38.54131185	36.152414	43.17994176	40.39521894	42.69380465	18.98221041
-3.55	-29.28962137	-28.05912786	-29.92335523	-28.0326046	-33.36004495	-30.59018922	-32.32255493	-14.71252864
+3.55	34.27662774	32.7118014	34.91675982	32.73002599	39.01506656	35.85531918	37.88533326	17.16058108
-3.6	-33.35930986	-31.79130647	-33.93281481	-31.80700825	-37.91423572	-35.23262209	-37.2352083	-16.70925967
+3.6	29.94644865	28.85678934	30.75742141	28.80352512	34.23940235	30.67115658	32.39477797	15.07136763

-3.65	**-37.10962713**	**-35.22382583**	**-37.62153081**	**-35.28015397**	**-42.1074294**	**-39.52844099**	**-41.78138862**	**-18.54750223**
+3.65	**26.00239411**	**25.32742094**	**26.95052967**	**25.21041717**	**29.87153309**	**25.94807651**	**27.39280799**	**13.16019879**
-3.7	**-41.40924691**	**-39.1519071**	**-41.84404961**	**-39.25667761**	**-46.91101665**	**-44.47223341**	**-47.01363939**	**-20.65308562**
+3.7	**21.51539154**	**21.3056894**	**22.61373449**	**21.11786099**	**24.89899202**	**20.59109743**	**21.71978134**	**10.98408563**
-3.75	**-45.3411269**	**-42.73782791**	**-45.69983475**	**-42.88851938**	**-51.30050807**	**-49.00916836**	**-51.81557607**	**-22.57692805**
+3.75	**17.4419349**	**17.64896153**	**18.67155386**	**17.39831942**	**20.3818085**	**15.74194404**	**16.58477902**	**9.006943238**
-3.8	**-49.81663854**	**-46.81298613**	**-50.08283151**	**-47.01763292**	**-56.29345511**	**-54.19046251**	**-57.29981005**	**-24.76500064**
+3.8	**12.83733784**	**13.5092883**	**14.20983183**	**13.18926122**	**15.27245523**	**10.61718219**	**11.17598125**	**6.770304474**
-3.85	**-53.88170795**	**-50.50869383**	**-54.05871623**	**-50.76385954**	**-60.82553363**	**-58.91137435**	**-62.29700286**	**-26.75085791**
+3.85	**8.739564959**	**9.76886594**	**10.17938637**	**9.387676598**	**10.65976464**	**9.6230671**	**10.18724132**	**4.750786224**
-3.9	**-58.47904658**	**-54.68209888**	**-58.54960462**	**-54.99600921**	**-65.94777533**	**-64.26637601**	**-67.96567327**	**-28.99506249**
+3.9	**8.258379677**	**7.494391201**	**8.067425284**	**7.605299831**	**9.213319921**	**9.6230671**	**10.18724132**	**4.01628188**
-3.95	**-62.62893251**	**-58.44390266**	**-62.59853733**	**-58.81223008**	**-70.56863434**	**-69.11415838**	**-73.0976566**	**-31.01935027**
+3.95	**8.258379677**	**7.494391201**	**8.067425284**	**7.605299831**	**9.213319921**	**9.6230671**	**10.18724132**	**4.01628188**
-5	**-67.29406442**	**-62.66677792**	**-67.14478863**	**-63.09786142**	**-75.76010471**	**-74.57907735**	**-78.88322084**	**-33.29332679**
+5	**8.258379677**	**7.494391201**	**8.067425284**	**7.605299831**	**9.213319921**	**9.6230671**	**10.18724132**	**4.01628188**

3-Span: Shear (Max and Min) Raw Data Results - 180' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.258373915	-17.94966017	-19.87493729	-11.26318587	-13.54629587	-14.63286715
End Shear	67.39992285	133.5917121	144.6891394	86.57609716	104.2956417	111.2031168
-0.05	-8.258373915	-17.94966017	-19.87493729	-11.26318587	-13.54629587	-14.63286715
+0.05	62.86755699	123.6911909	133.8873258	80.35335845	96.82220421	103.1277571
-0.1	-8.258373915	-17.94966017	-19.87493729	-11.26318587	-13.54629587	-14.63286715
+0.1	58.27619937	113.592632	122.7183009	73.9998615	89.19036505	94.88453103
-0.15	-8.527462492	-17.94966017	-19.87493729	-11.26318587	-13.54629587	-14.63286715
+0.15	54.1609769	104.682262	112.8740191	68.38486304	82.4444082	87.60335123
-0.2	-13.08709361	-17.94966017	-19.87493729	-11.91322831	-14.38976093	-14.63286715
+0.2	49.61580144	94.89411072	102.0722041	62.20630326	75.01998835	79.59584097
-0.25	-17.20705574	-23.03304047	-23.7851704	-16.85084833	-20.63759662	-20.80282329
+0.25	45.60943213	86.31522462	92.61628945	56.78142427	68.4999334	72.56923249
-0.3	-21.75953422	-32.25046135	-32.40614172	-23.23400615	-28.29643894	-28.87063368
+0.3	41.21297513	76.95763591	82.31538362	50.85289691	61.37304791	64.89506171
-0.35	-25.77424639	-41.33658137	-42.27950604	-28.88328405	-35.07360531	-36.22927104
+0.35	37.36388574	68.81773376	73.36745329	45.68532126	55.15951529	58.21037761
-0.4	-30.18206262	-51.36550218	-53.46972291	-35.10879925	-42.5407709	-44.34288136
+0.4	33.17027079	60.0108421	63.70115933	40.08191409	48.42026961	50.96716144
-0.45	-34.04314639	-60.1995024	-63.33726364	-40.58342982	-49.10611857	-51.48190294
+0.45	29.52688168	52.41741682	55.38084532	35.23882922	42.59388464	44.71174019
-0.5	-38.25222672	-69.88657408	-74.16985041	-46.57620668	-56.29149365	-59.30126312
+0.5	25.5902289	44.28138565	46.48285106	30.03563067	36.3323841	37.9970947
-0.55	-41.9113164	-78.36095461	-83.6576008	-51.80901309	-62.56441087	-66.13334081
+0.55	22.20096567	37.34194309	38.90977528	25.5842205	30.97376771	32.25827188
-0.6	-45.86760183	-87.58602678	-93.99886402	-57.49396383	-69.37788987	-73.5608233
+0.6	18.57539788	29.99689418	30.91377778	20.85632231	25.28012241	26.1698175
-0.65	-49.27631645	-95.59328625	-102.9871981	-62.41775134	-75.27774276	-79.99861023
+0.65	15.48868444	23.81894542	24.2075643	16.86377235	20.46989703	21.03494123
-0.7	-52.92574559	-104.2362083	-112.7034534	-67.71979321	-81.62922597	-86.93661036
+0.7	12.22831867	17.3850381	17.54573204	12.68626276	15.43421308	15.67029469
-0.75	-56.03571701	-111.6688418	-121.0727399	-72.2673841	-87.07540218	-92.89276263
+0.75	9.492578969	12.47013647	12.83143343	9.219758681	11.25300145	11.3156587
-0.8	-59.32422137	-119.6094696	-130.0302709	-77.11142244	-92.87477606	-99.24365727
+0.8	6.65153869	7.944381085	8.298485033	6.158160094	7.248164864	7.321966308
-0.85	-62.08707173	-126.3599988	-137.6609042	-81.21562377	-97.7866435	-104.630823
+0.85	4.3409576	4.906089335	5.019923724	4.280462616	4.700743422	4.973219318
-0.9	-64.96058292	-133.4781836	-145.7260242	-85.5265612	-102.9437916	-110.2969937
+0.9	2.176071775	3.911812217	4.325464134	2.458978704	2.960373122	3.193786724
-0.95	-67.32794541	-139.4390831	-152.4983728	-89.12019924	-107.2407415	-115.0278513
+0.95	1.817432897	3.911812217	4.325464134	2.458978704	2.960373122	3.193786724
-1	-69.73240438	-145.6146816	-159.5373822	-92.82295496	-111.6655663	-119.9116802
+1	1.82E+00	3.911812217	4.325464134	2.458978704	2.960373122	3.193786724
(Span 2) -2	-6.365077015	-13.70008544	-15.14879168	-8.611921147	-10.36792212	-11.18539138
+2	69.88823974	146.8863273	161.1101947	93.43024353	112.3689271	120.7800224
-2.05	-6.365077015	-13.70008544	-15.14879168	-8.611921147	-10.36792212	-11.18539138
+2.05	67.24029672	140.1256314	153.4116445	89.3683378	107.5122259	115.4249023
-2.1	-6.365077015	-13.70008544	-15.14879168	-8.611921147	-10.36792212	-11.18539138
+2.1	64.2561036	132.7350559	145.0393199	84.89047744	102.1534507	109.5387342
-2.15	-6.365077015	-13.70008544	-15.14879168	-8.611921147	-10.36792212	-11.18539138
+2.15	60.82739226	124.4486553	135.692639	79.83510565	96.0991775	102.9093136
-2.2	-8.890095036	-13.70008544	-15.14879168	-8.756078704	-10.6819596	-11.18539138
+2.2	57.28177704	116.0499548	126.2539528	74.6816333	89.92368442	96.16466164
-2.25	-12.26518407	-18.17869083	-18.3312211	-13.05472659	-15.86749973	-16.20961578

+2.25	53.52292837	107.2944593	116.4453687	69.28287822	83.4509251	89.110858
-2.3	-16.04307805	-25.75318222	-26.55498503	-17.94985094	-21.76687061	-22.50680793
+2.3	49.41701709	97.8749354	105.9239357	63.44853512	76.45258715	81.49955206
-2.35	-19.86709411	-33.58353809	-35.09751549	-22.97538818	-27.81869467	-28.98622739
+2.35	45.34811178	88.66936674	95.66997258	57.72290879	69.58159869	74.040635
-2.4	-24.02546391	-42.25222434	-44.59212696	-28.5068246	-34.47539628	-36.13132552
+2.4	41.00672595	78.8914082	84.90130457	51.66967463	62.31434759	66.14227921
-2.45	-28.12980841	-50.9438563	-54.14409569	-34.02508719	-41.11250686	-43.27112132
+2.45	36.79653659	69.49367111	74.61884436	45.72513206	55.17450764	58.44197147
-2.5	-32.4927406	-60.31577203	-64.47448597	-39.94851273	-48.23335243	-50.94648068
+2.5	32.34527989	59.92010373	64.03799779	39.69895172	47.93341179	50.62288746
-2.55	-36.70881396	-69.49399082	-74.61891605	-45.72533257	-55.17474875	-58.44223164
+2.55	28.16357415	50.9435493	54.14402581	34.02490831	41.11229181	43.27087096
-2.6	-41.0092675	-78.87466499	-84.90137696	-51.66987459	-62.31458792	-66.12667068
+2.6	24.0573167	42.2519307	44.59206337	28.50665256	34.47518936	36.13108415
-2.65	-45.34915648	-88.66968498	-95.67004587	-57.72310812	-69.58183736	-74.0408948
+2.65	19.89667504	33.58325879	35.09745413	22.97522341	27.81849575	28.98599684
-2.7	-49.41670727	-97.87525279	-105.9240346	-63.44871654	-76.45280461	-81.49980765
+2.7	16.07027685	25.75291323	26.55491542	17.94968262	21.76666773	22.50659124
-2.75	-53.35373215	-106.9073942	-116.0121264	-69.04363003	-83.1640104	-88.79851731
+2.75	12.44233598	18.48058012	18.51943461	13.25061144	16.1036749	16.46128619
-2.8	-57.27909835	-116.0502557	-126.2540223	-74.68180189	-89.92388697	-96.16490073
+2.8	8.911962731	13.70008545	15.14879184	8.755943686	10.68179668	11.18539157
-2.85	-60.82385498	-124.4489412	-135.6927077	-79.83527804	-96.09938411	-102.9095403
+2.85	6.365081248	13.70008545	15.14879184	8.611921385	10.3679224	11.18539157
-2.9	-64.25192362	-132.7353228	-145.039381	-84.89063347	-102.1536375	-109.5389548
+2.9	6.365081248	13.70008545	15.14879184	8.611921385	10.3679224	11.18539157
-2.95	-67.23579369	-140.1258769	-153.4117017	-89.36847974	-107.5123954	-115.4250891
+2.95	6.365081248	13.70008545	15.14879184	8.611921385	10.3679224	11.18539157
-3	-69.99063567	-147.1648109	-161.4281413	-93.59667171	-112.567809	-120.9998597
+3	6.365081248	13.70008545	15.14879184	8.611921385	10.3679224	11.18539157
(Span 3) -4	-1.82E+00	-3.911812221	-4.32546418	-2.458978772	-2.9603732	-3.193786778
+4	69.62387211	145.3027066	159.1813694	92.63650595	111.4428338	119.6654734
-3.05	-1.82E+00	-3.911812221	-4.32546418	-2.458978772	-2.9603732	-3.193786778
+3.05	67.47315045	139.7769191	152.8830309	89.32334255	107.4835742	115.2955204
-3.1	-2.275105568	-3.911812221	-4.32546418	-2.458978772	-2.9603732	-3.193786778
+3.1	64.82798491	133.1149775	145.3142475	85.30709804	102.6813101	110.0083027
-3.15	-4.210580442	-4.759777856	-4.851792271	-4.174740408	-4.585123151	-4.841147563
+3.15	62.25714	126.7458255	138.0977887	81.44977155	98.06681342	104.938363
-3.2	-6.782836596	-8.137160131	-8.526594391	-6.273254219	-7.448124887	-7.466106615
+3.2	59.16948777	119.2013722	129.5697464	76.86287528	92.57726196	98.91761222
-3.25	-9.323164125	-12.19776775	-12.58257511	-9.024308416	-11.01716967	-11.07927755
+3.25	56.22693907	112.0963296	121.5548414	72.52857379	87.38815454	93.23500891
-3.3	-12.3785828	-17.7110245	-17.70800604	-12.898484	-15.69010577	-15.94259799
+3.3	52.75091108	103.7895057	112.2012399	67.44614612	81.30146025	86.5783686
-3.35	-15.2939686	-23.46794878	-23.82693443	-16.63642137	-20.19591662	-20.74275445
+3.35	49.48508674	96.05613022	103.5074848	62.70205268	75.61836053	80.37045916
-3.4	-18.7415284	-30.37245593	-31.32180364	-21.09851607	-25.57185008	-26.4815228
+3.4	45.67481	87.10708373	93.461948	57.19917	69.0246152	73.17550293
-3.45	-21.98359861	-36.94461236	-38.47639109	-25.32890339	-30.66635921	-31.92931323
+3.45	42.13413274	78.85283742	84.20896558	52.11247073	62.92814839	66.52963216
-3.5	-25.76925379	-44.70017944	-46.94012969	-30.30385538	-36.65521688	-38.34305666
+3.5	38.04373456	69.38172211	73.60532617	46.26418301	55.91741152	58.89399765
-3.55	-29.28962137	-51.98006736	-54.90173888	-34.95949358	-42.25778589	-44.35110019
+3.55	34.27662774	60.71410514	63.91274001	40.90206253	49.488197	51.89755716
-3.6	-33.35930986	-60.4665794	-64.20065702	-40.3722165	-48.76946329	-51.34224325
+3.6	29.94644865	50.84106476	52.88462881	34.78353259	42.15066552	43.91886329

-3.65	**-37.10962713**	**-68.34666843**	**-72.84972024**	**-45.38595179**	**-54.79950813**	**-57.82324063**
+3.65	**26.00239411**	**41.86758671**	**42.87206531**	**29.21317732**	**35.46932823**	**36.65909575**
-3.7	**-41.40924691**	**-77.44395666**	**-82.85003468**	**-51.16130358**	**-61.74383548**	**-65.29414578**
+3.7	**21.51539154**	**31.71276758**	**32.04441553**	**22.89945948**	**27.89506619**	**28.43496061**
-3.75	**-45.3411269**	**-85.81677273**	**-92.06689875**	**-56.4659348**	**-68.12071387**	**-72.1607329**
+3.75	**17.4419349**	**23.50572081**	**24.19724511**	**17.18805461**	**21.04222788**	**21.20745566**
-3.8	**-49.81663854**	**-95.40469408**	**-102.6349703**	**-62.52885985**	**-75.40762405**	**-80.01378274**
+3.8	**12.83733784**	**17.94966009**	**19.87493724**	**11.72785744**	**14.02295768**	**14.63286732**
-3.85	**-53.88170795**	**-104.1627423**	**-112.3000135**	**-68.05720072**	**-82.05071247**	**-87.17856467**
+3.85	**8.739564959**	**17.94966009**	**19.87493724**	**11.26318609**	**13.54629614**	**14.63286732**
-3.9	**-58.47904658**	**-114.1211377**	**-123.3021345**	**-74.33261008**	**-89.59009894**	**-95.31613974**
+3.9	**8.258379677**	**17.94966009**	**19.87493724**	**11.26318609**	**13.54629614**	**14.63286732**
-3.95	**-62.62893251**	**-123.1569174**	**-133.2957352**	**-80.01747654**	**-96.41877702**	**-102.691879**
+3.95	**8.258379677**	**17.94966009**	**19.87493724**	**11.26318609**	**13.54629614**	**14.63286732**
-5	**-67.29406442**	**-133.3656452**	**-144.5982952**	**-86.43032134**	**-104.1205809**	**-111.0163619**
+5	**8.258379677**	**17.94966009**	**19.87493724**	**11.26318609**	**13.54629614**	**14.63286732**

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-74.325365	-51.735922	-74.554663	-80.405894	-130.835887	-41.443001	-55.971147	-64.159707	-71.879089	-80.056472
+0.05	565.983924	400.305566	542.050506	559.089281	703.676842	321.925107	434.317053	493.018291	542.170659	592.720458
-0.1	-148.650730	-103.471845	-149.109327	-160.811788	-261.671773	-82.886002	-111.942294	-128.319414	-143.758178	-160.112943
+0.1	1053.547141	745.820620	1004.993948	1032.631311	1286.151960	600.019267	809.372243	918.104824	1009.937456	1106.117320
-0.15	-222.976096	-155.207767	-223.663990	-241.217681	-392.507660	-124.329002	-167.913441	-192.479121	-215.637267	-240.169415
+0.15	1463.009192	1036.920393	1389.596886	1422.201667	1758.613647	834.532064	1125.598431	1275.789402	1416.523650	1548.627198
-0.2	-297.301461	-206.943689	-298.218654	-321.623575	-523.343547	-165.772003	-223.884588	-256.638828	-287.516355	-320.225886
+0.2	1795.851952	1274.572601	1697.661742	1745.843017	2163.298476	1026.222117	1384.023724	1567.301662	1749.177240	1917.970667
-0.25	-371.626826	-258.679612	-372.773317	-402.029469	-654.179433	-207.215004	-279.855734	-320.798535	-359.395444	-400.282358
+0.25	2054.018145	1460.064961	1944.545218	1989.999641	2486.310375	1176.104042	1586.022015	1798.972230	2009.240359	2214.270438
-0.3	-445.952191	-310.415534	-447.327981	-482.435363	-785.015320	-248.658005	-335.826881	-384.958243	-431.274533	-480.338829
+0.3	2243.661285	1595.005373	2121.107652	2173.258788	2730.041848	1285.448709	1740.045520	1975.742971	2198.926763	2431.930353
-0.35	-520.277557	-362.151456	-521.882644	-562.841256	-915.851207	-290.101006	-391.798028	-449.117950	-503.153622	-560.395301
+0.35	2376.389840	1689.702386	2228.489589	2298.956853	2901.518773	1355.782469	1844.761129	2092.105582	2330.679859	2573.702291
-0.4	-594.602922	-413.887378	-596.437308	-643.247150	-1046.687094	-331.544007	-447.769175	-513.277657	-575.032711	-640.451773
+0.4	2441.700367	1738.129834	2281.429144	2375.335126	2990.251657	1388.888526	1898.881887	2150.207364	2400.129217	2648.449217
-0.45	-668.928287	-465.623301	-670.991971	-723.653044	-1177.522980	-372.987007	-503.740322	-577.437364	-646.911800	-720.508244
+0.45	2443.200439	1742.216138	2271.779128	2383.377848	2981.263404	1386.805652	1904.574616	2153.130038	2407.707195	2661.203883
-0.5	-743.253652	-517.359223	-745.546634	-804.058938	-1308.358867	-414.430008	-559.711469	-641.597071	-718.790889	-800.564716
+0.5	2403.525149	1713.469341	2238.580013	2340.038268	2898.219423	1365.915728	1872.288439	2117.565743	2366.410359	2613.406693
-0.55	-817.579018	-569.095145	-820.101298	-884.464831	-1439.194754	-455.873009	-615.682616	-705.756778	-790.669978	-880.621187
+0.55	2311.364563	1646.772600	2158.691773	2240.514683	2829.282988	1316.651644	1798.977000	2036.713517	2272.444380	2505.021608
-0.6	-891.904383	-620.831068	-894.655961	-964.870725	-1570.030640	-497.316010	-671.653763	-769.916485	-862.549066	-960.677659
+0.6	2165.157422	1542.916206	2023.214499	2082.355752	2661.241308	1236.965422	1685.695954	1909.462541	2127.060022	2346.340598
-0.65	-966.229748	-672.566990	-969.210625	-1045.276619	-1700.866527	-538.759011	-727.624910	-834.076192	-934.428155	-1040.734131
+0.65	1970.005836	1405.480352	1842.165993	1883.382578	2392.175399	1129.656442	1536.328420	1740.221912	1935.254669	2136.581491
-0.7	-1040.555113	-724.302912	-1043.765288	-1125.682513	-1831.702414	-580.202012	-783.596056	-898.235899	-1006.307244	-1120.790602
+0.7	1731.472847	1238.365137	1613.128394	1633.108990	2057.765323	997.780545	1355.103913	1533.798404	1702.471082	1879.962110
-0.75	-1114.880479	-776.038835	-1118.319952	-1206.088407	-1962.538300	-621.645012	-839.567203	-962.395606	-1078.186333	-1200.847074
+0.75	1455.583144	1046.038409	1341.894047	1337.943569	1641.350521	844.649415	1146.597019	1295.395204	1436.293018	1582.953749
-0.8	-1189.205844	-827.774757	-1192.874615	-1286.494300	-2093.374187	-663.088013	-895.538350	-1026.555313	-1150.065422	-1280.903545
+0.8	1148.821765	832.721467	1034.724785	1007.964403	1150.182308	673.831066	915.728391	1030.612507	1139.813917	1252.524719
-0.85	-1263.531209	-879.510679	-1267.429279	-1366.900194	-2244.545922	-704.531014	-951.509497	-1090.715021	-1221.944511	-1360.960017
+0.85	818.134903	602.747023	698.350117	643.485194	682.992927	489.149263	667.764246	745.447572	819.349601	896.139074
-0.9	-1337.856574	-931.246601	-1341.983942	-1447.306088	-2450.969994	-745.974015	-1007.480644	-1154.874728	-1293.823600	-1441.016488
+0.9	470.929531	362.318374	350.112991	314.753077	498.196338	294.683863	408.316327	446.294171	485.976458	521.756778
-0.95	-1412.181940	-982.982524	-1416.538606	-1527.711982	-2704.702284	-787.417016	-1063.451791	-1219.034435	-1365.702688	-1521.072960
+0.95	310.781025	216.545366	309.909661	332.239360	489.541201	173.564533	234.447135	268.560392	300.796307	334.842236
-1	-1486.507313	-1034.718447	-1491.093309	-1608.117890	-2998.575570	-828.859978	-1119.422963	-1283.194140	-1437.581790	-1601.129431
+1	327.137923	227.942480	326.220686	349.725641	504.827040	182.699513	246.786458	282.695146	316.627690	352.465513
(Span 2) -2	-1486.507313	-1034.718447	-1491.093309	-1608.117890	-2998.575570	-828.859978	-1119.422963	-1283.194140	-1437.581790	-1601.129431
+2	327.137923	227.942480	326.220686	349.725641	504.827040	182.699513	246.786458	282.695146	316.627690	352.465513
-2.05	-1087.819423	-757.968070	-1084.768696	-1162.928727	-2035.068523	-607.523374	-820.629168	-940.034891	-1052.869419	-1172.039512
+2.05	252.666521	176.052459	251.958088	270.112253	403.562648	141.108834	190.606684	218.340933	244.548894	272.228405
-2.1	-1013.347972	-706.078041	-1010.506097	-1083.315339	-1734.064531	-565.932696	-764.449398	-875.680678	-980.790623	-1091.802405
+2.1	585.812451	445.716834	442.041494	379.541529	403.677166	356.247587	499.525235	547.656984	603.208661	646.044982
-2.15	-938.876521	-654.188011	-936.243497	-1003.701952	-1500.845678	-524.342017	-708.269609	-811.326465	-908.711828	-1011.565298
+2.15	998.473111	730.009449	860.484752	821.254889	797.724271	587.391964	806.446720	902.223770	997.567987	1089.837297
-2.2	-864.405071	-602.297982	-861.980898	-924.088564	-1337.031479	-482.751339	-652.089859	-746.972253	-836.633033	-931.328192
+2.2	1380.689900	996.983281	1250.419458	1243.959884	1362.896554	800.862929	1094.435434	1232.532646	1368.063992	1503.175109

-2.25	-789.933620	-550.407953	-787.718299	-844.475177	-1233.851520	-441.160660	-595.910090	-682.618040	-764.554238	-851.091085
+2.25	1727.700685	1236.655049	1596.473813	1619.304235	1985.191339	993.682874	1354.031600	1530.605907	1701.094364	1874.048871
-2.3	-715.462170	-498.517924	-713.455700	-764.861789	-1143.396805	-399.569981	-539.730321	-618.263827	-692.475442	-770.853979
+2.3	2018.970289	1440.760394	1883.792874	1933.488969	2502.850854	1155.397778	1574.377871	1782.444685	1985.233078	2189.520262
-2.35	-640.990719	-446.627895	-639.193100	-685.248401	-1052.942090	-357.979303	-483.550551	-553.909615	-620.396647	-690.616872
+2.35	2253.428864	1605.574622	2111.425328	2186.972435	2912.414587	1284.330556	1753.513244	1986.196964	2214.851465	2441.833832
-2.4	-566.519268	-394.737866	-564.930501	-605.635014	-962.487375	-316.388624	-427.370782	-489.555402	-548.317852	-610.379765
+2.4	2423.947173	1724.064255	2274.960893	2373.448277	3193.660980	1378.280587	1882.921668	2133.342533	2381.015839	2627.731226
-2.45	-492.047818	-342.847842	-490.667902	-526.021626	-872.032661	-274.797946	-371.191012	-425.201189	-476.239057	-530.142659
+2.45	2522.437048	1795.465414	2366.466899	2483.193833	3342.862743	1431.485867	1960.087837	2219.437196	2480.632126	2741.935402
-2.5	-417.576367	-290.957814	-416.405302	-446.408239	-781.577946	-233.207281	-315.011243	-360.846976	-404.160261	-449.905552
+2.5	2551.915721	1817.797848	2387.178146	2516.755130	3362.877815	1446.121171	1985.517071	2245.847481	2512.673907	2779.735427
-2.55	-492.047489	-342.847833	-490.667897	-526.021631	-872.032666	-274.797960	-371.191004	-425.201201	-476.239067	-530.142674
+2.55	2522.513876	1795.467734	2366.467122	2483.197283	3342.861024	1431.487873	1960.090957	2219.437714	2480.634959	2741.936684
-2.6	-566.518890	-394.737862	-564.930496	-605.635020	-962.487383	-316.388640	-427.370773	-489.555414	-548.317863	-610.379782
+2.6	2424.068841	1724.064682	2274.962768	2373.449912	3193.662924	1378.285973	1882.922961	2133.345119	2381.016779	2627.731996
-2.65	-640.990291	-446.627891	-639.193094	-685.248408	-1052.942100	-357.979319	-483.550542	-553.909628	-620.396659	-690.616890
+2.65	2253.389459	1605.575916	2111.427765	2186.974544	2912.416642	1284.330056	1753.515565	1986.200511	2214.853172	2441.834633
-2.7	-715.461693	-498.517920	-713.455693	-764.861797	-1143.396816	-399.569998	-539.730311	-618.263841	-692.475455	-770.853998
+2.7	2019.069227	1440.761379	1883.793911	1933.489335	2502.851671	1155.400771	1574.379747	1782.445110	1985.234316	2189.523495
-2.75	-789.933094	-550.407931	-787.718291	-844.475185	-1233.851533	-441.160678	-595.910080	-682.618055	-764.554251	-851.091106
+2.75	1727.507558	1236.655783	1596.476837	1619.306007	1985.193765	993.689065	1354.033176	1530.608645	1701.095220	1874.053824
-2.8	-864.404495	-602.297978	-861.980890	-924.088574	-1337.031481	-482.751357	-652.089849	-746.972268	-836.633047	-931.328214
+2.8	1380.694637	996.984053	1250.422203	1243.961763	1362.898298	800.863736	1094.436887	1232.535289	1368.064700	1503.176377
-2.85	-938.875896	-654.188007	-936.243489	-1003.701962	-1500.845681	-524.342037	-708.269618	-811.326481	-908.711843	-1011.565321
+2.85	998.456533	730.010387	860.486327	821.256024	797.725418	587.396375	806.447082	902.225191	997.567842	1089.836015
-2.9	-1013.347297	-706.078014	-1010.506087	-1083.315350	-1734.064539	-565.932716	-764.449387	-875.680695	-980.790639	-1091.802429
+2.9	585.761185	445.718290	442.044574	379.544658	403.679281	356.247064	499.527691	547.660728	603.210623	646.045636
-2.95	-1087.818698	-757.968041	-1084.768686	-1162.928739	-2035.068529	-607.523395	-820.629155	-940.034908	-1052.869435	-1172.039537
+2.95	252.666688	176.052455	251.958092	270.112250	403.562632	141.108840	190.606693	218.340938	244.548896	272.228407
-3	-1486.508349	-1034.718456	-1491.093322	-1608.117936	-2998.575601	-828.860009	-1119.422972	-1283.194142	-1437.581790	-1601.129486
+3	327.138140	227.942488	326.220690	349.725638	504.827031	182.699510	246.786458	282.695143	316.627687	352.465507
(Span 3) -4	-1486.508349	-1034.718456	-1491.093322	-1608.117936	-2998.575601	-828.860009	-1119.422972	-1283.194142	-1437.581790	-1601.129486
+4	327.138140	227.942488	326.220690	349.725638	504.827031	182.699510	246.786458	282.695143	316.627687	352.465507
-3.05	-1412.182932	-982.982533	-1416.538658	-1527.712040	-2704.702328	-787.417007	-1063.451825	-1219.034435	-1365.702701	-1521.073012
+3.05	310.781233	216.545364	309.909655	332.239356	489.541189	173.564534	234.447135	268.560386	300.796302	334.842232
-3.1	-1337.857515	-931.246611	-1341.983994	-1447.306144	-2450.970037	-745.974004	-1007.480678	-1154.874727	-1293.823613	-1441.016537
+3.1	471.094976	362.317775	350.111196	314.753074	498.196328	294.687073	408.314864	446.291719	485.975737	521.758453
-3.15	-1263.532098	-879.510688	-1267.429330	-1366.900248	-2244.545963	-704.531002	-951.509530	-1090.715020	-1221.944524	-1360.960063
+3.15	818.394691	602.746767	698.347996	643.487237	682.994228	489.152685	667.763105	745.445368	819.349260	896.141016
-3.2	-1189.206681	-827.774765	-1192.874665	-1286.494351	-2093.374226	-663.088000	-895.538383	-1026.555313	-1150.065435	-1280.903589
+3.2	1149.327261	832.721695	1034.722729	1007.966472	1150.180583	673.834665	915.727404	1030.610544	1139.814311	1252.526950
-3.25	-1114.881264	-776.038842	-1118.320001	-1206.088455	-1962.538338	-621.644997	-839.567236	-962.395606	-1078.186346	-1200.847114
+3.25	1456.228487	1046.038561	1341.891956	1337.942441	1641.349059	844.652776	1146.596074	1295.393211	1436.293439	1582.955967
-3.3	-1040.555847	-724.302920	-1043.765337	-1125.682559	-1831.702449	-580.201995	-783.596088	-898.235899	-1006.307257	-1120.790640
+3.3	1732.152597	1238.364931	1613.125881	1633.107682	2057.767164	997.783813	1355.102897	1533.796280	1702.470900	1879.964072
-3.35	-966.230430	-672.566997	-969.210673	-1045.276663	-1700.866561	-538.758993	-727.624941	-834.076192	-934.428168	-1040.734166
+3.35	1970.614260	1405.479693	1842.162742	1883.380609	2392.174148	1129.659362	1536.326959	1740.219315	1935.253973	2136.582906
-3.4	-891.905013	-620.831074	-894.656009	-964.870767	-1570.030673	-497.315990	-671.653793	-769.916484	-862.549079	-960.677691
+3.4	2165.591798	1542.915169	2023.210564	2082.352919	2661.242356	1236.968001	1685.694063	1909.459350	2127.058655	2346.341226
-3.45	-817.579596	-569.095151	-820.101345	-884.464871	-1439.194784	-455.872988	-615.682646	-705.756777	-790.669990	-880.621217
+3.45	2311.523275	1646.770930	2158.688689	2240.511895	2829.282395	1316.653828	1798.974466	2036.709739	2272.442333	2505.021254
-3.5	-743.254178	-517.359229	-745.546681	-804.058975	-1308.358896	-414.429985	-559.711499	-641.597070	-718.790901	-800.564743
+3.5	2403.611260	1713.467029	2238.581719	2340.034606	2898.217450	1365.917216	1872.285095	2117.560856	2366.407588	2613.405514
-3.55	-668.928761	-465.623306	-670.992017	-723.653079	-1177.523008	-372.986983	-503.740351	-577.437363	-646.911812	-720.508268
+3.55	2443.133745	1742.211348	2271.777961	2383.375757	2981.264611	1386.804387	1904.571656	2153.128524	2407.703784	2661.205767
-3.6	-594.603344	-413.887383	-596.437353	-643.247183	-1046.687120	-331.543981	-447.769204	-513.277656	-575.032724	-640.451794

+3.6	2441.595641	1738.131765	2281.426800	2375.331434	2990.251121	1388.886702	1898.877964	2150.205107	2400.124775	2648.449861
-3.65	-520.277927	-362.151460	-521.882688	-562.841287	-915.851231	-290.100978	-391.798057	-449.117949	-503.153635	-560.395319
+3.65	2376.242522	1689.703328	2228.487253	2298.954767	2901.520195	1355.779792	1844.756608	2092.101857	2330.680995	2573.701322
-3.7	-445.952510	-310.415538	-447.328024	-482.435391	-785.015343	-248.657976	-335.826909	-384.958242	-431.274546	-480.338845
+3.7	2243.468443	1595.005160	2121.104002	2173.260110	2730.040141	1285.445009	1740.046277	1975.738385	2198.926330	2431.927711
-3.75	-371.627093	-258.679615	-372.773360	-402.029495	-654.179455	-207.214973	-279.855762	-320.798534	-359.395457	-400.282371
+3.75	2053.877150	1460.063741	1944.546623	1989.997592	2486.311933	1176.099400	1586.021567	1798.972754	2009.238369	2214.266254
-3.8	-297.301676	-206.943692	-298.218696	-321.623598	-523.343567	-165.771971	-223.884615	-256.638827	-287.516368	-320.225896
+3.8	1795.660051	1274.570100	1697.661647	1745.839261	2163.299992	1026.216502	1384.022191	1567.300818	1749.173803	1917.971650
-3.85	-222.976259	-155.207769	-223.664032	-241.217702	-392.507678	-124.328969	-167.913467	-192.479120	-215.637279	-240.169422
+3.85	1462.764821	1036.916636	1389.595288	1422.201784	1758.612852	834.526213	1125.595631	1275.787244	1416.518735	1548.626639
-3.9	-148.650842	-103.471847	-149.109368	-160.811806	-261.671790	-82.885971	-111.942320	-128.319413	-143.758190	-160.112948
+3.9	1053.247466	745.816010	1004.990656	1032.629498	1286.152595	600.012345	809.367761	918.100699	1009.937524	1106.114656
-3.95	-74.325425	-51.735924	-74.554704	-80.405910	-130.835902	-41.442981	-55.971173	-64.159706	-71.879101	-80.056473
+3.95	565.865064	400.299858	542.045834	559.085464	703.675242	321.917270	434.311935	493.013142	542.169208	592.719099
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-74.325365	-67.449520	-72.606825	-68.447696	-82.919878	-86.607604	-91.685171	-36.146537
+0.05	565.983924	528.497173	566.117782	531.907480	638.356457	625.147119	661.186068	280.248897
-0.1	-148.650730	-134.899039	-145.213650	-136.895393	-165.839756	-173.215208	-183.370342	-72.293074
+0.1	1053.547141	985.584048	1055.350237	991.351643	1188.906901	1158.463580	1225.153988	521.910673
-0.15	-222.976096	-202.348559	-217.820476	-205.343089	-248.759635	-259.822812	-275.055513	-108.439611
+0.15	1463.009192	1371.724638	1468.247409	1378.863709	1652.413831	1600.923728	1692.945745	725.445698
-0.2	-297.301461	-269.798078	-290.427301	-273.790786	-331.679513	-346.430416	-366.740684	-144.586148
+0.2	1795.851952	1688.106500	1806.114908	1695.690990	2030.445466	1965.100124	2078.425396	891.539077
-0.25	-371.626826	-337.247598	-363.034126	-342.238482	-414.599391	-433.038020	-458.425855	-180.732685
+0.25	2054.018145	1936.333302	2070.706444	1943.503448	2338.503645	2257.627954	2388.835213	1021.346500
-0.3	-445.952191	-404.697118	-435.640951	-410.686179	-497.519269	-519.645624	-550.111027	-216.879222
+0.3	2243.661285	2118.424831	2264.223877	2135.595598	2568.940878	2469.919439	2612.965825	1115.911150
-0.35	-520.277557	-472.146637	-508.247776	-479.133875	-580.439147	-606.253228	-641.796198	-253.025759
+0.35	2376.389840	2240.329391	2400.107242	2264.649271	2720.643038	2612.446719	2764.486287	1176.407633
-0.4	-594.602922	-539.596157	-580.854601	-547.581572	-663.359026	-692.860832	-733.481369	-289.172296
+0.4	2441.700367	2309.065597	2471.868820	2331.550041	2797.009609	2677.694884	2834.062553	1204.415389
-0.45	-668.928287	-607.045676	-653.461427	-616.029268	-746.278904	-779.468436	-825.166540	-325.318833
+0.45	2443.200439	2319.159103	2481.110659	2339.178215	2801.998623	2669.197744	2825.578923	1200.189458
-0.5	-743.253652	-674.495196	-726.068252	-684.476965	-829.198782	-866.076040	-916.851711	-361.465370
+0.5	2403.525149	2279.017468	2438.770957	2299.119939	2755.670209	2629.304405	2783.148538	1184.696351
-0.55	-817.579018	-741.944716	-798.675077	-752.924661	-912.118660	-952.683644	-1008.536882	-397.611907
+0.55	2311.364563	2187.526466	2341.945706	2208.852216	2649.341150	2533.992210	2681.828510	1143.108825
-0.6	-891.904383	-809.394235	-871.281902	-821.372358	-995.038538	-1039.291248	-1100.222053	-433.758443
+0.6	2165.157422	2048.450675	2193.591712	2069.824784	2483.557752	2373.275188	2511.327166	1074.679562
-0.65	-966.229748	-876.843755	-943.888727	-889.820054	-1077.958417	-1125.898852	-1191.907224	-469.904980
+0.65	1970.005836	1867.279228	1998.770323	1886.792884	2264.071210	2153.002802	2277.844587	981.845267
-0.7	-1040.555113	-944.293274	-1016.495553	-958.267750	-1160.878295	-1212.506456	-1283.592395	-506.051517
+0.7	1731.472847	1651.263477	1762.990969	1664.935281	1996.815268	1879.568914	1988.157280	867.267052
-0.75	-1114.880479	-1011.742794	-1089.102378	-1026.715447	-1243.798173	-1299.114060	-1375.277566	-542.198054
+0.75	1455.583144	1401.299326	1492.536503	1409.852326	1688.521672	1559.911276	1650.061402	733.831265
-0.8	-1189.205844	-1079.192314	-1161.709203	-1095.163143	-1326.718051	-1385.721663	-1466.962737	-578.344591
+0.8	1148.821765	1123.229577	1193.207510	1127.567394	1346.435441	1202.103841	1271.877657	584.648124
-0.85	-1263.531209	-1146.641833	-1234.316028	-1163.610840	-1409.637929	-1472.329267	-1558.647908	-614.491128
+0.85	818.134903	823.313381	871.721002	824.526267	978.313222	812.399068	858.537822	423.053279
-0.9	-1337.856574	-1214.091353	-1306.922853	-1232.058536	-1492.557808	-1558.936871	-1650.333080	-650.637665
+0.9	470.929531	508.419526	536.166427	507.596951	592.781855	401.141181	423.056776	252.606953
-0.95	-1412.181940	-1281.540872	-1379.529678	-1300.506233	-1575.477686	-1645.544475	-1742.018251	-686.784202
+0.95	310.781025	282.666247	304.224608	286.778416	347.328567	360.083605	381.161946	151.076309
-1	-1486.507313	-1348.990387	-1452.136486	-1368.953919	-1658.397562	-1732.152075	-1833.703397	-722.930745
+1	327.137923	297.543414	320.236432	301.872018	365.609023	379.035378	401.223103	159.027688
(Span 2) -2	-1486.507313	-1348.990387	-1452.136486	-1368.953919	-1658.397562	-1732.152075	-1833.703397	-722.930745
+2	327.137923	297.543414	320.236432	301.872018	365.609023	379.035378	401.223103	159.027688
-2.05	-1087.819423	-989.409287	-1064.869470	-1003.803016	-1215.745073	-1260.391223	-1334.171217	-528.808434
+2.05	252.666521	243.078753	247.336124	238.536492	282.379858	292.749767	309.886560	127.602690
-2.1	-1013.347972	-921.674934	-991.969159	-935.083278	-1132.515908	-1174.105612	-1242.834673	-492.606532
+2.1	585.812451	621.621021	656.292466	619.686365	724.998019	525.661211	555.316147	303.549275
-2.15	-938.876521	-853.940581	-919.068849	-866.363540	-1049.286743	-1087.820000	-1151.498128	-456.404630
+2.15	998.473111	989.491285	1052.968742	994.833881	1182.420104	1012.810103	1070.863832	506.852322
-2.2	-864.405071	-786.206228	-846.168538	-797.643803	-966.057578	-1001.534389	-1060.161584	-420.202728
+2.2	1380.689900	1335.636946	1426.479896	1346.466814	1608.361295	1465.441087	1550.005084	693.268209

-2.25	-789.933620	-718.471874	-773.268228	-728.924065	-882.828413	-915.248777	-968.825040	-384.000826
+2.25	1727.700685	1647.535873	1762.612754	1664.053223	1993.448406	1868.168034	1976.364480	861.970751
-2.3	-715.462170	-650.737521	-700.367917	-660.204327	-799.599248	-828.963166	-877.488496	-347.798925
+2.3	2018.970289	1915.048991	2049.661983	1933.376484	2319.855654	2207.263926	2335.608480	1002.698226
-2.35	-640.990719	-583.003168	-627.467606	-591.484589	-716.370083	-742.677554	-786.151952	-311.597023
+2.35	2253.428864	2131.467678	2282.224132	2152.848664	2582.604364	2477.565032	2621.942225	1114.383369
-2.4	-566.519268	-515.268815	-554.567296	-522.764852	-633.140918	-656.391942	-694.815407	-275.395121
+2.4	2423.947173	2288.475197	2450.272714	2311.685537	2774.005732	2668.776999	2824.607825	1196.168365
-2.45	-492.047818	-447.534462	-481.666985	-454.045114	-549.911753	-570.106331	-603.478863	-239.193219
+2.45	2522.437048	2384.977696	2552.709492	2406.144053	2886.876654	2776.844508	2939.414980	1241.756169
-2.5	-417.576367	-379.800109	-408.766675	-385.325376	-466.682589	-483.820741	-512.142319	-202.991317
+2.5	2551.915721	2417.208777	2586.463497	2437.867165	2920.746241	2803.076213	2967.445805	1254.037879
-2.55	-492.047489	-447.534460	-481.666957	-454.045076	-549.911786	-570.106353	-603.478873	-239.193225
+2.55	2522.513876	2384.979863	2552.712550	2406.148201	2886.878501	2776.848346	2939.418919	1241.756308
-2.6	-566.518890	-515.268813	-554.567266	-522.764812	-633.140950	-656.391965	-694.815416	-275.395126
+2.6	2424.068841	2288.476810	2450.273254	2311.687507	2774.009955	2668.778636	2824.609444	1196.169431
-2.65	-640.990291	-583.003165	-627.467574	-591.484547	-716.370114	-742.677577	-786.151960	-311.597027
+2.65	2253.389459	2131.468689	2282.225968	2152.851836	2582.609812	2477.567450	2621.944666	1115.430227
-2.7	-715.461693	-650.737517	-700.367882	-660.204283	-799.599279	-828.963189	-877.488503	-347.798928
+2.7	2019.069227	1915.049473	2049.663216	1933.379110	2319.857364	2207.265715	2335.610259	1002.698600
-2.75	-789.933094	-718.471869	-773.268190	-728.924019	-882.828443	-915.248801	-968.825046	-384.000829
+2.75	1727.507558	1647.536159	1762.613730	1664.055466	1993.452573	1868.169464	1976.365873	861.972039
-2.8	-864.404495	-786.206221	-846.168498	-797.643755	-966.057607	-1001.534412	-1060.161590	-420.202731
+2.8	1380.694637	1335.637200	1426.480855	1346.468912	1608.360771	1465.442148	1550.006091	693.460469
-2.85	-938.875896	-853.940574	-919.068806	-866.363490	-1049.286772	-1087.820024	-1151.498133	-456.404632
+2.85	998.456533	989.491923	1052.970108	994.834699	1182.422821	1012.810051	1070.863675	506.853085
-2.9	-1013.347297	-921.674926	-991.969114	-935.083226	-1132.515936	-1174.105636	-1242.834676	-492.606533
+2.9	585.761185	621.622234	656.294400	619.689716	724.997175	525.663390	555.318350	304.671697
-2.95	-1087.818698	-989.409278	-1064.869422	-1003.802962	-1215.745101	-1260.391248	-1334.171220	-528.808434
+2.95	252.666688	243.080736	247.336121	238.537923	282.379895	292.749785	309.886579	127.753989
-3	-1486.508349	-1348.990411	-1452.136533	-1368.953960	-1658.397584	-1732.152074	-1833.703413	-722.930744
+3	327.138140	297.543418	320.236443	301.872026	365.609025	379.035377	401.223107	159.027691
(Span 3) -4	-1486.508349	-1348.990411	-1452.136533	-1368.953960	-1658.397584	-1732.152074	-1833.703413	-722.930744
+4	327.138140	297.543418	320.236443	301.872026	365.609025	379.035377	401.223107	159.027691
-3.05	-1412.182932	-1281.540891	-1379.529706	-1300.506261	-1575.477705	-1645.544470	-1742.018241	-686.784208
+3.05	310.781233	282.666247	304.224621	286.778425	347.328574	360.083608	381.161952	151.076306
-3.1	-1337.857515	-1214.091370	-1306.922878	-1232.058563	-1492.557825	-1558.936866	-1650.333069	-650.637671
+3.1	471.094976	508.419309	536.165516	507.594821	592.785515	401.140426	423.056077	252.605801
-3.15	-1263.532098	-1146.641849	-1234.316050	-1163.610864	-1409.637946	-1472.329262	-1558.647897	-614.491134
+3.15	818.394691	823.313982	871.720623	824.524528	978.309693	812.398723	858.538104	423.052122
-3.2	-1189.206681	-1079.192328	-1161.709223	-1095.163166	-1326.718067	-1385.721658	-1466.962725	-578.344597
+3.2	1149.327261	1123.230486	1193.207812	1127.565844	1346.432084	1202.104096	1271.878040	584.646930
-3.25	-1114.881264	-1011.742807	-1089.102395	-1026.715467	-1243.798187	-1299.114054	-1375.277553	-542.198060
+3.25	1456.228487	1401.300177	1492.536700	1409.850842	1688.518453	1559.911015	1650.061712	733.830058
-3.3	-1040.555847	-944.293287	-1016.495568	-958.267769	-1160.878308	-1212.506450	-1283.592381	-506.051523
+3.3	1732.152597	1651.264238	1762.990689	1664.933729	1996.811897	1879.568189	1988.156630	867.266119
-3.35	-966.230430	-876.843766	-943.888740	-889.820070	-1077.958429	-1125.898846	-1191.907210	-469.904986
+3.35	1970.614260	1867.279475	1998.769487	1886.790795	2264.067177	2153.001562	2277.843395	981.844136
-3.4	-891.905013	-809.394245	-871.281913	-821.372372	-995.038550	-1039.291243	-1100.222038	-433.758449
+3.4	2165.591798	2048.450092	2193.590393	2069.822136	2483.553016	2373.273057	2511.325038	1074.678384
-3.45	-817.579596	-741.944724	-798.675085	-752.924673	-912.118670	-952.683639	-1008.536866	-397.611912
+3.45	2311.523275	2187.525051	2341.943446	2208.848787	2649.343383	2533.989082	2681.825329	1143.107561
-3.5	-743.254178	-674.495203	-726.068258	-684.476975	-829.198791	-866.076035	-916.851694	-361.465375
+3.5	2403.611260	2279.015325	2438.767914	2299.115529	2755.671296	2629.300034	2783.144041	1184.695226
-3.55	-668.928761	-607.045683	-653.461430	-616.029276	-746.278912	-779.468431	-825.166522	-325.318838
+3.55	2443.133745	2319.161661	2481.104457	2339.175233	2801.998234	2669.195431	2825.576399	1201.738286
-3.6	-594.603344	-539.596162	-580.854602	-547.581578	-663.359032	-692.860827	-733.481350	-289.172301

+3.6	**2441.595641**	**2309.067328**	**2471.871469**	**2331.545895**	**2797.007957**	**2677.691041**	**2834.058394**	**1204.414477**
-3.65	**-520.277927**	**-472.146641**	**-508.247775**	**-479.133880**	**-580.439153**	**-606.253223**	**-641.796179**	**-253.025764**
+3.65	**2376.242522**	**2240.329813**	**2400.108491**	**2264.644304**	**2720.640094**	**2612.447878**	**2764.488415**	**1176.406475**
-3.7	**-445.952510**	**-404.697120**	**-435.640947**	**-410.686181**	**-497.519274**	**-519.645619**	**-550.111007**	**-216.879228**
+3.7	**2243.468443**	**2118.423791**	**2264.223512**	**2135.596852**	**2568.936200**	**2469.919937**	**2612.966220**	**1115.909850**
-3.75	**-371.627093**	**-337.247599**	**-363.034120**	**-342.238483**	**-414.599395**	**-433.038015**	**-458.425835**	**-180.732691**
+3.75	**2053.877150**	**1936.331172**	**2070.704892**	**1943.503206**	**2338.505041**	**2257.626656**	**2388.833713**	**1021.345139**
-3.8	**-297.301676**	**-269.798079**	**-290.427292**	**-273.790784**	**-331.679515**	**-346.430411**	**-366.740663**	**-144.586154**
+3.8	**1795.660051**	**1688.102462**	**1806.111359**	**1695.689431**	**2030.445177**	**1965.097314**	**2078.422295**	**891.540036**
-3.85	**-222.976259**	**-202.348558**	**-217.820465**	**-205.343086**	**-248.759636**	**-259.822807**	**-275.055491**	**-108.439617**
+3.85	**1462.764821**	**1371.719129**	**1468.242276**	**1378.860615**	**1652.411793**	**1600.922398**	**1692.944380**	**725.446449**
-3.9	**-148.650842**	**-134.899037**	**-145.213637**	**-136.895387**	**-165.839757**	**-173.215204**	**-183.370319**	**-72.293080**
+3.9	**1053.247466**	**985.576748**	**1055.343184**	**991.346483**	**1188.902464**	**1158.460303**	**1225.150558**	**521.911100**
-3.95	**-74.325425**	**-67.449516**	**-72.606810**	**-68.447689**	**-82.919877**	**-86.607600**	**-91.685147**	**-36.146543**
+3.95	**565.865064**	**528.488602**	**566.109348**	**531.901499**	**638.350826**	**625.142229**	**661.180931**	**280.249096**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 180' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-74.325365	-161.546942	-178.874436	-101.368673	-121.916663	-131.695804
+0.05	565.983924	1114.684983	1204.985933	723.760092	872.387640	929.226927
-0.1	-148.650730	-323.093883	-357.748871	-202.737346	-243.833326	-263.391609
+0.1	1053.547141	2057.846448	2231.178363	1339.884874	1615.242739	1718.541739
-0.15	-222.976096	-484.640825	-536.623307	-304.106018	-365.749989	-395.087413
+0.15	1463.009192	2865.109213	3099.543762	1849.570260	2235.364506	2381.360597
-0.2	-297.301461	-646.187766	-715.497743	-405.474691	-487.666651	-526.783217
+0.2	1795.851952	3510.805339	3848.725755	2281.171785	2751.379799	2926.420393
-0.25	-371.626826	-807.734708	-894.372178	-506.843364	-609.583314	-658.479022
+0.25	2054.018145	4024.250465	4429.950240	2614.884837	3145.829418	3366.521528
-0.3	-445.952191	-969.281649	-1073.246614	-608.212037	-731.499977	-790.174826
+0.3	2243.661285	4418.057017	4871.181636	2855.822296	3425.209550	3682.379903
-0.35	-520.277557	-1130.828591	-1252.121049	-709.580710	-853.416640	-921.870630
+0.35	2376.389840	4681.139744	5157.671360	3014.441771	3610.194308	3877.098086
-0.4	-594.602922	-1292.375533	-1430.995485	-810.949382	-975.333303	-1053.566435
+0.4	2441.700367	4835.222845	5296.730426	3083.041399	3687.516961	3973.885461
-0.45	-668.928287	-1453.922474	-1609.869921	-912.318055	-1097.249966	-1185.262239
+0.45	2443.200439	4847.873300	5339.768114	3065.959729	3662.436326	3959.582147
-0.5	-743.253652	-1615.469416	-1788.744356	-1013.686728	-1219.166629	-1316.958044
+0.5	2403.525149	4762.639169	5233.848390	3022.543365	3611.992370	3900.301881
-0.55	-817.579018	-1777.016357	-1967.618792	-1115.055401	-1341.083292	-1448.653848
+0.55	2311.364563	4561.861939	4994.327474	2918.841868	3490.852909	3758.519530
-0.6	-891.904383	-1938.563299	-2146.493228	-1216.424074	-1462.999954	-1580.349652
+0.6	2165.157422	4243.905489	4672.607974	2737.174885	3275.631918	3516.481510
-0.65	-966.229748	-2100.110240	-2325.367663	-1317.792746	-1584.916617	-1712.045457
+0.65	1970.005836	3825.577415	4225.613573	2484.314140	2974.286468	3194.778581
-0.7	-1040.555113	-2261.657182	-2504.242099	-1419.161419	-1706.833280	-1843.741261
+0.7	1731.472847	3325.760819	3665.937449	2167.672734	2595.783436	2788.901672
-0.75	-1114.880479	-2423.204124	-2683.116535	-1520.530092	-1828.749943	-1975.437065
+0.75	1455.583144	2735.024455	3006.199885	1795.687143	2155.329929	2308.574523
-0.8	-1189.205844	-2584.751065	-2861.990970	-1621.898765	-1950.666606	-2107.132870
+0.8	1148.821765	2067.134307	2264.748239	1378.164249	1654.215189	1764.945224
-0.85	-1263.531209	-2746.298007	-3040.865406	-1723.267437	-2072.583269	-2238.828674
+0.85	818.134903	1336.880152	1456.320876	919.930381	1103.341172	1169.992755
-0.9	-1337.856574	-2907.844948	-3219.739842	-1824.636110	-2194.499932	-2370.524478
+0.9	470.929531	633.713579	700.725190	445.418141	535.771833	548.847320
-0.95	-1412.181940	-3069.391890	-3398.614277	-1926.004783	-2316.416595	-2502.220283
+0.95	310.781025	668.919889	739.654367	420.485358	506.223804	546.137530
-1	-1486.507313	-3230.938860	-3577.488723	-2027.373493	-2438.333259	-2633.916162
+1	327.137923	704.126208	778.583545	442.616166	532.867156	574.881596
(Span 2) -2	-1486.507313	-3230.938860	-3577.488723	-2027.373493	-2438.333259	-2633.916162
+2	327.137923	704.126208	778.583545	442.616166	532.867156	574.881596
-2.05	-1087.819423	-2341.402791	-2588.992868	-1471.813957	-1771.922026	-1911.630954
+2.05	252.666521	543.835209	601.342682	341.856689	411.562467	444.012517
-2.1	-1013.347972	-2181.111791	-2411.752003	-1371.054476	-1650.617334	-1780.761873
+2.1	585.812451	795.657641	864.065331	572.518623	682.712773	707.413017
-2.15	-938.876521	-2020.820792	-2234.511138	-1270.294996	-1529.312642	-1649.892791
+2.15	998.473111	1694.667319	1862.871898	1147.189272	1367.374427	1458.262007
-2.2	-864.405071	-1860.529792	-2057.270274	-1169.535516	-1408.007950	-1519.023710
+2.2	1380.689900	2542.603803	2802.845587	1679.187325	2006.852986	2149.414624

-2.25	-789.933620	-1700.238792	-1880.029409	-1068.776036	-1286.703258	-1388.154629
+2.25	1727.700685	3293.229765	3637.343392	2150.657229	2572.450273	2760.369887
-2.3	-715.462170	-1539.947792	-1702.788545	-968.016555	-1165.398566	-1257.285547
+2.3	2018.970289	3935.119960	4338.698576	2546.054801	3046.507985	3271.941894
-2.35	-640.990719	-1379.656792	-1525.547680	-867.257075	-1044.093874	-1126.416466
+2.35	2253.428864	4451.662110	4893.396806	2859.405490	3420.630014	3677.618228
-2.4	-566.519268	-1219.365793	-1348.306816	-766.497595	-922.789182	-995.547385
+2.4	2423.947173	4824.880394	5290.165470	3079.075166	3682.423342	3967.044396
-2.45	-492.047818	-1059.074793	-1171.065951	-665.738115	-801.484490	-864.678303
+2.45	2522.437048	5045.191853	5551.099298	3200.778263	3826.093648	4131.425500
-2.5	-417.576367	-898.783793	-993.825086	-564.978635	-680.179798	-733.809222
+2.5	2551.915721	5109.323318	5639.406742	3226.167425	3852.932528	4168.204537
-2.55	-492.047489	-1059.074788	-1171.065944	-665.738086	-801.484421	-864.678275
+2.55	2522.513876	5045.192424	5551.098797	3200.782434	3826.090772	4131.428651
-2.6	-566.518890	-1219.365787	-1348.306807	-766.497563	-922.789110	-995.547354
+2.6	2424.068841	4824.882834	5290.165337	3079.077113	3682.425590	3967.044771
-2.65	-640.990291	-1379.656787	-1525.547670	-867.257040	-1044.093799	-1126.416433
+2.65	2253.389459	4451.664875	4893.396430	2859.408604	3420.633046	3677.619278
-2.7	-715.461693	-1539.947787	-1702.788532	-968.016518	-1165.398488	-1257.285512
+2.7	2019.069227	3935.121168	4339.231556	2546.056757	3046.510008	3271.946169
-2.75	-789.933094	-1700.238786	-1880.029395	-1068.775995	-1286.703177	-1388.154592
+2.75	1727.507558	3293.228353	3637.342163	2150.658623	2572.451440	2760.376287
-2.8	-864.404495	-1860.529786	-2057.270258	-1169.535473	-1408.007865	-1519.023671
+2.8	1380.694637	2542.605256	2802.845030	1679.188391	2006.853639	2149.415844
-2.85	-938.875896	-2020.820785	-2234.511120	-1270.294950	-1529.312554	-1649.892750
+2.85	998.456533	1694.666764	1863.278446	1147.188838	1367.375535	1458.266368
-2.9	-1013.347297	-2181.111785	-2411.751983	-1371.054428	-1650.617243	-1780.761829
+2.9	585.761185	795.883264	864.864901	572.521035	682.713861	707.411999
-2.95	-1087.818698	-2341.402785	-2588.992846	-1471.813905	-1771.921932	-1911.630908
+2.95	252.666688	543.835205	601.342695	341.856687	411.562431	444.012510
-3	-1486.508349	-3230.938845	-3577.488713	-2027.373533	-2438.333306	-2633.916193
+3	327.138140	704.126209	778.583553	442.616178	532.867170	574.881605
(Span 3) -4	-1486.508349	-3230.938845	-3577.488713	-2027.373533	-2438.333306	-2633.916193
+4	327.138140	704.126209	778.583553	442.616178	532.867170	574.881605
-3.05	-1412.182932	-3069.391905	-3398.614278	-1926.004858	-2316.416641	-2502.220387
+3.05	310.781233	668.919899	739.654376	420.485369	506.223811	546.137524
-3.1	-1337.857515	-2907.844964	-3219.739843	-1824.636183	-2194.499976	-2370.524581
+3.1	471.094976	633.713589	700.725198	445.418895	535.773342	548.844094
-3.15	-1263.532098	-2746.298023	-3040.865408	-1723.267509	-2072.583311	-2238.828775
+3.15	818.394691	1336.883157	1457.688906	919.930702	1103.342293	1169.995864
-3.2	-1189.206681	-2584.751082	-2861.990973	-1621.898834	-1950.666645	-2107.132969
+3.2	1149.327261	2067.137256	2265.926687	1378.164864	1654.216313	1764.948532
-3.25	-1114.881264	-2423.204141	-2683.116538	-1520.530159	-1828.749980	-1975.437163
+3.25	1456.228487	2735.027240	3007.548756	1795.687518	2155.330863	2308.577735
-3.3	-1040.555847	-2261.657200	-2504.242102	-1419.161484	-1706.833315	-1843.741357
+3.3	1732.152597	3325.763050	3665.937029	2167.672010	2595.783724	2788.904018
-3.35	-966.230430	-2100.110260	-2325.367667	-1317.792810	-1584.916650	-1712.045552
+3.35	1970.614260	3825.578373	4224.906049	2484.312819	2974.285218	3194.780103
-3.4	-891.905013	-1938.563319	-2146.493232	-1216.424135	-1462.999984	-1580.349746
+3.4	2165.591798	4243.903469	4672.608403	2737.172643	3275.629763	3516.481194
-3.45	-817.579596	-1777.016378	-1967.618797	-1115.055460	-1341.083319	-1448.653940
+3.45	2311.523275	4562.698095	4994.327820	2918.838373	3490.849211	3758.517746
-3.5	-743.254178	-1615.469437	-1788.744362	-1013.686785	-1219.166654	-1316.958134
+3.5	2403.611260	4762.641586	5235.432044	3022.538016	3611.994528	3900.298449
-3.55	-668.928761	-1453.922496	-1609.869927	-912.318110	-1097.249989	-1185.262328
+3.55	2443.133745	4847.872092	5339.766656	3065.956886	3662.434999	3959.578643
-3.6	-594.603344	-1292.375555	-1430.995492	-810.949436	-975.333323	-1053.566522

+3.6	**2441.595641**	**4835.227515**	**5296.731098**	**3083.036965**	**3687.513908**	**3973.880205**
-3.65	**-520.277927**	**-1130.828615**	**-1252.121057**	**-709.580761**	**-853.416658**	**-921.870716**
+3.65	**2376.242522**	**4681.141308**	**5157.671006**	**3014.444268**	**3610.189798**	**3877.098408**
-3.7	**-445.952510**	**-969.281674**	**-1073.246621**	**-608.212086**	**-731.499993**	**-790.174910**
+3.7	**2243.468443**	**4418.055297**	**4871.613680**	**2855.822989**	**3425.209909**	**3682.377680**
-3.75	**-371.627093**	**-807.734733**	**-894.372186**	**-506.843411**	**-609.583328**	**-658.479104**
+3.75	**2053.877150**	**4024.245830**	**4429.951006**	**2614.883357**	**3145.827296**	**3366.516474**
-3.8	**-297.301676**	**-646.187792**	**-715.497751**	**-405.474737**	**-487.666662**	**-526.783298**
+3.8	**1795.660051**	**3511.515497**	**3848.725215**	**2281.168208**	**2751.375077**	**2926.416526**
-3.85	**-222.976259**	**-484.640851**	**-536.623316**	**-304.106062**	**-365.749997**	**-395.087492**
+3.85	**1462.764821**	**2865.112216**	**3100.971679**	**1849.568683**	**2235.365109**	**2381.361942**
-3.9	**-148.650842**	**-323.093911**	**-357.748881**	**-202.737387**	**-243.833332**	**-263.391687**
+3.9	**1053.247466**	**2057.845947**	**2231.178661**	**1339.880939**	**1615.240634**	**1718.540108**
-3.95	**-74.325425**	**-161.546970**	**-178.874446**	**-101.368712**	**-121.916667**	**-131.695881**
+3.95	**565.865064**	**1114.680875**	**1204.986734**	**723.753784**	**872.382803**	**929.221954**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Shear (Max and Min) Raw Data Results - 190' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Force Y (kips)**	***Force Y (kips)***	***Force Y (kips)***	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**	**Force Y (kips)**
-0	**-19.23392195**	***-33.253757***	***-48.969017***	**-14.45816453**	**-15.56435766**	**-14.67296334**	**-17.77642802**	**-18.59989341**	**-19.69068065**	**-7.753089539**
End Shear	**147.307122**	***212.531149***	***298.320280***	**121.2818627**	**129.9852711**	**122.171591**	**146.766938**	**145.1001529**	**153.4838272**	**64.45387638**
-0.05	**-19.23392195**	***-33.564900***	***-49.249046***	**-14.45816453**	**-15.56435766**	**-14.67296334**	**-17.77642802**	**-18.59989341**	**-19.69068065**	**-7.753089539**
+0.05	**136.8224618**	***194.841738***	***271.697082***	**113.3698079**	**121.4670352**	**114.1433951**	**137.0411927**	**134.86967**	**142.6529239**	**60.22632361**
-0.1	**-19.23392195**	***-34.601121***	***-50.181645***	**-14.45816453**	**-15.56435766**	**-14.67296334**	**-17.77642802**	**-18.59989341**	**-19.69068065**	**-7.753089539**
+0.1	**126.2689717**	***177.152720***	***244.660626***	**105.2813719**	**112.76089**	**105.9374016**	**127.1042441**	**124.4337854**	**131.6050586**	**55.87296578**
-0.15	**-20.27287802**	***-42.279243***	***-55.987070***	**-18.66416839**	**-19.47691161**	**-17.98009733**	**-20.47984546**	**-18.59989341**	**-19.69068065**	**-9.119891119**
+0.15	**116.7615629**	***161.894258***	***221.674065***	**98.05443836**	**104.983779**	**98.60814461**	**118.2326428**	**115.1473942**	**121.7745329**	**51.98588523**
-0.2	**-31.02591109**	***-52.131560***	***-67.858184***	**-26.7029246**	**-28.13882302**	**-26.15009137**	**-30.39270396**	**-21.76808842**	**-22.91377728**	**-13.46023439**
+0.2	**106.3527534**	***145.692813***	***197.252409***	**90.10689509**	**96.43316508**	**90.55113127**	**108.4842925**	**104.9780522**	**111.0098193**	**47.7141761**
-0.25	**-40.64188251**	***-61.535010***	***-79.015773***	**-33.86680811**	**-35.85979534**	**-33.43366261**	**-39.23373388**	**-30.88519373**	**-32.55007518**	**-17.33078782**
+0.25	**97.15205505**	***131.801877***	***176.223295***	**83.04897913**	**88.84149413**	**83.39881912**	**99.83438467**	**95.9867603**	**101.492589**	**43.92337895**
-0.3	**-51.20322676**	***-72.548096***	***-91.902446***	**-41.72392558**	**-44.32989704**	**-41.42514675**	**-48.93823294**	**-41.30167668**	**-43.58059477**	**-21.57879134**
+0.3	**87.81379454**	***117.147748***	***153.959882***	**75.33613507**	**80.5474343**	**75.58603288**	**90.39008378**	**86.20665331**	**91.14093669**	**39.7839799**
-0.35	**-60.56994477**	***-82.939383***	***-103.907236***	**-48.68211366**	**-51.83277197**	**-48.50519581**	**-57.53978415**	**-50.56554011**	**-53.39098202**	**-25.34344197**
+0.35	**79.76272565**	***104.670928***	***134.953462***	**68.53166322**	**73.23212366**	**68.69639356**	**82.06578201**	**77.62086899**	**82.05390443**	**36.13506519**
-0.4	**-70.79163093**	***-94.982847***	***-117.657355***	**-56.2637773**	**-60.01003151**	**-56.2229121**	**-66.92045977**	**-60.70419192**	**-64.12825759**	**-29.44843796**
+0.4	**71.03222306**	***91.607903***	***115.023012***	**61.14732901**	**65.29564444**	**61.22310168**	**73.04100581**	**68.35267989**	**72.24521304**	**32.17864612**
-0.45	**-79.79622488**	***-106.237438***	***-130.365982***	**-62.93184137**	**-67.20388639**	**-63.01370132**	**-75.17860839**	**-69.66278337**	**-73.61625286**	**-33.06158132**
+0.45	**63.39305966**	***80.577426***	***98.190066***	**54.68073586**	**58.34762417**	**54.68186392**	**65.14622424**	**60.28283339**	**63.70530505**	**28.7172055**
-0.5	**-89.55281698**	***-119.164920***	***-144.813072***	**-70.14423214**	**-74.98726839**	**-70.3624012**	**-84.12000799**	**-79.40091851**	**-83.93038214**	**-36.97290719**
+0.5	**55.17603978**	***69.133321***	***80.752941***	**47.71872057**	**50.8697511**	**47.64330542**	**56.65641449**	**51.64923623**	**54.56946473**	**24.99442636**
-0.55	**-98.08239402**	***-131.143918***	***-162.606708***	**-76.43774539**	**-81.78118132**	**-76.77820927**	**-91.93084848**	**-87.94383585**	**-92.97908897**	**-40.38894746**
+0.55	**48.04924025**	***59.567035***	***67.931485***	**41.67442673**	**44.3799355**	**41.53619921**	**49.29506741**	**44.20574036**	**46.69358865**	**21.76606188**
-0.6	**-107.2484836**	***-144.793103***	***-186.189301***	**-83.18706776**	**-89.06967547**	**-83.66262889**	**-100.3175007**	**-97.15875907**	**-102.7401593**	**-44.05594134**
+0.6	**40.45731464**	***49.753713***	***56.960458***	**35.22854145**	**37.46169547**	**35.02763547**	**41.455692**	**36.32943589**	**38.36051779**	**18.32758544**
-0.65	**-115.1901606**	***-157.343231***	***-207.500330***	**-89.02159926**	**-95.37272139**	**-89.61772586**	**-107.5771186**	**-105.1755895**	**-111.2326702**	**-47.22928133**
+0.65	**33.9433259**	***41.655111***	***47.860816***	**29.69098375**	**31.52101659**	**29.44039268**	**34.73169727**	**29.62270557**	**31.26558357**	**15.37789766**
-0.7	**-123.6403236**	***-171.535840***	***-231.198523***	**-95.21403124**	**-102.0652884**	**-95.94262093**	**-115.2935761**	**-113.7446254**	**-120.31079**	**-50.60127546**
+0.7	**27.08811119**	***33.468467***	***38.616488***	**23.85503383**	**25.26343103**	**23.55707738**	**27.65821543**	**22.62636188**	**23.86516608**	**12.274389**
-0.75	**-130.8812164**	***-184.489477***	***-252.475673***	**-100.5051565**	**-107.7865482**	**-101.3512731**	**-121.8980512**	**-121.124938**	**-128.1301779**	**-53.48631821**
+0.75	**21.28738121**	***26.826678***	***31.080033***	**18.90863627**	**19.96280689**	**18.57542226**	**21.67548129**	**16.76681419**	**17.66808591**	**9.648972806**
-0.8	**-138.4900173**	***-199.031267***	***-275.979327***	**-106.0468947**	**-113.7821688**	**-107.0213861**	**-128.82885**	**-128.9253912**	**-136.3954345**	**-56.51264946**
+0.8	**15.28048775**	***20.246643***	***23.579100***	**13.77644457**	**14.46691568**	**13.41260968**	**15.48335262**	**10.94240719**	**11.51832336**	**6.931100123**
-0.85	**-144.9172483**	***-212.206403***	***-297.781009***	**-110.7101722**	**-118.8307059**	**-111.7978774**	**-134.6742847**	**-135.558776**	**-143.4247948**	**-59.063796**
+0.85	**10.29347631**	***15.036418***	***17.614392***	**9.505627814**	**9.897261054**	**9.122262812**	**10.34578298**	**7.034526547**	**7.44597156**	**4.675552584**
-0.9	**-151.5592813**	***-226.887172***	***-321.899230***	**-115.5074149**	**-124.0283631**	**-116.7179461**	**-140.7039551**	**-142.4679683**	**-150.7472936**	**-61.69379948**
+0.9	**5.246513346**	***10.026967***	***12.270996***	**5.170995507**	**5.264080881**	**4.775213862**	**5.150475098**	**4.076378419**	**4.315116074**	**2.554908656**
-0.95	**-157.0599696**	***-240.087436***	***-343.254434***	**-119.4584244**	**-128.3132631**	**-120.7765396**	**-145.6864257**	**-148.2440175**	**-156.8697239**	**-63.86545292**
+0.95	**4.236518479**	***6.659552***	***9.842731***	**3.191264589**	**3.434886032**	**3.237967626**	**3.921956693**	**4.076378419**	**4.315116074**	**1.707186362**
-1	**-162.60979**	***-254.681025***	***-366.500993***	**-123.4173472**	**-132.611915**	**-124.8513249**	**-150.6995266**	**-154.1392625**	**-163.1195615**	**-66.04846421**
+1	**4.24E+00**	***6.505118***	***9.703741***	**3.19E+00**	**3.43E+00**	**3.24E+00**	**3.92E+00**	**4.08E+00**	**4.32E+00**	**1.71E+00**
(Span 2) -2	**-1.48E+01**	***-22.775028***	***-33.973706***	**-1.12E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.43E+01**	**-1.51E+01**	**-5.98E+00**
+2	**1.58E+02**	***266.015686***	***383.101758***	**123.4843373**	**132.7147924**	**124.9677238**	**150.9057352**	**154.9497334**	**163.9863189**	**66.11003177**
-2.05	**-1.48E+01**	***-22.993910***	***-34.170700***	**-1.12E+01**	**-1.20E+01**	**-1.13E+01**	**-1.37E+01**	**-1.43E+01**	**-1.51E+01**	**-5.98E+00**
+2.05	**1.52E+02**	***248.928683***	***357.259432***	**119.166671**	**128.0255584**	**120.5220593**	**145.4343515**	**148.5302896**	**157.1810597**	**63.72708729**
-2.1	**-14.83244814**	***-23.720097***	***-34.824268***	**-11.17291623**	**-12.02585803**	**-11.33642799**	**-13.73113757**	**-14.27178245**	**-15.10762545**	**-5.977019208**
+2.1	**143.9664677**	***231.020007***	***329.881696***	**114.0323232**	**122.4598102**	**115.2517938**	**138.9697747**	**141.110939**	**149.3178675**	**60.90824381**
-2.15	**-14.83244814**	***-27.035682***	***-39.009609***	**-12.0907142**	**-12.69039017**	**-11.76142255**	**-13.73113757**	**-14.27178245**	**-15.10762545**	**-6.103271206**
+2.15	**135.6290903**	***213.140794***	***302.282600***	**108.3239209**	**116.2805759**	**109.4060057**	**131.8175646**	**133.0432198**	**140.7693239**	**57.78682128**
-2.2	**-20.94693541**	***-34.155036***	***-47.131777***	**-17.63235349**	**-18.62596903**	**-17.3380364**	**-20.25440245**	**-15.81690518**	**-16.67001366**	**-9.039706677**
+2.2	**127.1032669**	***196.129700***	***275.804223***	**102.3750226**	**109.8480609**	**103.3249334**	**124.3921943**	**124.7814125**	**132.0166136**	**54.54406163**

-2.25	-29.07165119	-42.681562	-56.813951	-23.88371017	-25.3291431	-23.6404148	-27.83186414	-23.2778903	-24.56125864	-12.36357931
+2.25	117.7778606	178.691349	248.467006	95.76410662	102.7061522	96.57716455	116.1662114	115.7340591	122.4330773	50.94980836
-2.3	-37.78387013	-52.317009	-67.692737	-30.54793103	-32.48166639	-30.36938664	-35.93637637	-31.38124124	-33.13381229	-15.91704915
+2.3	108.1003928	161.656602	221.603277	88.80628054	95.19537436	89.48452647	107.5321731	106.3354312	112.4787599	47.17566221
-2.35	-46.6051063	-62.579669	-79.208182	-37.26276612	-39.69411703	-37.15818225	-44.12485405	-39.67159536	-41.90575606	-19.50591339
+2.35	98.57419313	145.784583	196.931727	81.87166531	87.71474832	82.42347542	98.94727554	97.07544428	102.6724402	43.42171875
-2.4	-56.17121218	-74.284614	-92.256277	-44.51359558	-47.48763635	-44.4972128	-52.98836923	-48.74279142	-51.50535387	-23.38915925
+2.4	88.50472415	129.850242	172.228895	74.45654574	79.72076456	74.88094151	89.78744754	87.2794588	92.29965825	39.41519901
-2.45	-66.02111183	-86.975586	-106.306226	-51.95011238	-55.48585308	-52.03217633	-62.09934829	-58.1592275	-61.47165661	-27.37933139
+2.45	78.38729845	114.618380	148.520101	66.9217145	71.60258641	67.22419972	80.49915321	77.23242418	81.66224016	35.35146752
-2.5	-76.05222767	-100.594056	-126.867821	-59.49561045	-63.60616038	-59.6851445	-71.3633308	-67.82058392	-71.69844338	-31.43497403
+2.5	69.07445951	100.032101	125.991610	59.19242697	63.27978895	59.37750016	70.99073088	67.43039431	71.28539469	31.27196975
-2.55	-85.75729398	-114.618604	-148.520101	-66.92195495	-71.6028454	-67.22446272	-80.49947207	-77.23271247	-81.66254536	-35.35150737
+2.55	60.39327366	86.975364	106.298326	51.94989305	55.48561705	52.03193451	62.09905536	58.15894606	61.47135872	27.37929292
-2.6	-96.04677084	-129.850463	-172.228891	-74.45678364	-79.72102096	-74.88120198	-89.78776368	-87.27974732	-92.29996374	-39.41522886
+2.6	51.5853235	74.284396	92.256131	44.51336216	47.4873854	44.49697741	52.98808507	48.74249756	51.50504288	23.38913029
-2.65	-106.0093589	-145.784795	-196.931723	-81.87189631	-87.71499786	-82.42372839	-98.94758353	-97.07572764	-102.6727403	-43.42174648
+2.65	43.01204824	62.579456	79.046375	37.26255682	39.69389216	37.15795271	44.12457682	39.67131377	41.90545808	19.50587484
-2.7	-115.3610146	-161.656812	-221.603276	-88.80650867	-95.1956206	-89.48475787	-107.5324543	-106.3357122	-112.4790575	-47.17570116
+2.7	35.08723367	52.316805	67.544859	30.54771451	32.4814339	30.3691514	35.93609296	31.38097437	33.13352993	15.91701288
-2.75	-124.7817895	-178.691548	-248.467011	-95.76430626	-102.7063678	-96.57738409	-116.1664785	-115.7343302	-122.4333644	-50.94984869
+2.75	27.23875774	42.681367	56.681507	23.88351206	25.32893052	23.64019844	27.83160347	23.27765303	24.56100766	12.36354324
-2.8	-133.7742744	-196.129888	-275.804225	-102.3752278	-109.8482826	-103.3251427	-124.3924497	-124.781671	-132.0168875	-54.54409906
+2.8	19.89520626	34.154854	47.015454	17.63216072	18.6257624	17.3378352	20.25416091	15.81669712	16.66979364	9.039681865
-2.85	-141.9088973	-213.140970	-302.282602	-108.3241053	-116.2807751	-109.4062081	-131.8178113	-133.043468	-140.7695869	-57.78684842
+2.85	14.83709846	27.035507	38.894575	12.09053781	12.69020142	11.76124595	13.73113736	14.27178283	15.10762533	6.103249494
-2.9	-149.7642933	-231.020163	-329.881697	-114.0324949	-122.4599962	-115.2519784	-138.9700014	-141.1111664	-149.3181085	-60.90827051
+2.9	14.83709846	23.720097	34.824268	11.17291611	12.02585813	11.33642804	13.73113736	14.27178283	15.10762533	5.977019287
-2.95	-156.8876859	-248.928820	-357.259431	-119.1668178	-128.0257178	-120.5222222	-145.4345518	-148.5305061	-157.1812892	-63.72711165
+2.95	14.83709846	22.993910	34.170700	11.17291611	12.02585813	11.33642804	13.73113736	14.27178283	15.10762533	5.977019287
-3	-163.1764695	-266.723531	-384.165756	-123.6503557	-132.8953203	-125.1390158	-151.1170095	-155.2011219	-164.2528601	-66.20192473
+3	14.83709846	22.775028	33.973706	11.17291611	12.02585813	11.33642804	13.73113736	14.27178283	15.10762533	5.977019287
(Span 3) -4	-4.237846738	-6.505118	-9.703741	-3.191264556	-3.434886061	-3.237967641	-3.921956631	-4.076378528	-4.31511604	-1.707186385
+4	157.1874987	253.954016	365.352174	123.2304189	132.4087993	124.6586855	150.4622228	153.8578516	162.8211944	65.94524044
-3.05	-4.237846738	-6.643803	-9.828557	-3.191264556	-3.434886061	-3.237967641	-3.921956631	-4.076378528	-4.31511604	-1.707186385
+3.05	151.6968417	240.819303	344.429552	119.6671817	128.5397898	120.9911723	145.9501818	148.5518599	157.1960534	63.98043094
-3.1	-5.467885308	-10.258308	-12.483528	-5.377247122	-5.484404604	-4.981848144	-5.397145364	-4.076378528	-4.31511604	-2.626372748
+3.1	145.0647518	226.152835	320.702339	115.2773585	123.7789916	116.4818226	140.4143443	142.1342864	150.3936272	61.56758681
-3.15	-10.0069839	-14.766725	-17.264473	-9.27860852	-9.654474115	-8.894402717	-10.0731777	-6.869558665	-7.270661404	-4.555782508
+3.15	138.6453866	212.939673	298.995242	110.9596379	119.1008823	112.0535496	134.9873856	135.9157648	143.8031153	59.20048306
-3.2	-16.09077208	-20.555983	-23.878630	-14.02376427	-14.73165714	-13.66125436	-15.78134559	-11.2059438	-11.79573032	-7.061843201
+3.2	131.0442003	198.301098	274.808893	105.7784097	113.4916028	106.7465243	128.492685	128.5455908	135.9929834	56.36598067
-3.25	-22.0494536	-26.477941	-30.620536	-18.64294196	-19.67818027	-18.30799126	-21.35451141	-16.45419368	-17.33748433	-9.508026945
+3.25	123.8091775	185.213069	253.654971	100.7906408	108.095324	101.6432363	122.2547399	121.5249148	128.5539686	53.64218523
-3.3	-29.17030891	-33.857790	-38.983940	-24.13874799	-25.56755636	-23.84296858	-28.00175731	-22.96455346	-24.22286554	-12.42505312
+3.3	115.3644774	170.820574	230.014386	94.91181701	101.7385886	95.63380252	114.9166516	113.324798	119.8660039	50.43669724
-3.35	-36.00143322	-41.225746	-47.294138	-29.39130163	-31.19959779	-29.13815468	-34.36813612	-29.2615009	-30.88349345	-15.21830819
+3.35	107.4267728	158.046823	208.685401	89.33841905	95.71505296	89.94119426	107.9715954	105.6124529	111.6954708	47.40180452
-3.4	-44.02896774	-50.224216	-57.393639	-35.54395002	-37.8001436664708	-35.34602415	-41.8390254763913	-36.71317316	-38.7664886805455	-18.49563449
+3.4	98.26414126	144.102624	185.007142	82.85582589	88.7119057	83.32462255	99.905599	96.70510111	102.2595992	43.87596885
-3.45	-51.6197208	-59.056232	-67.257387	-41.34542735	-44.02675422	-41.20393416	-48.89470911	-43.80211492	-46.26653598	-21.59035925
+3.45	89.73683845	131.818009	163.782224	76.78121517	82.15202319	77.12844005	92.35736399	88.41140453	93.47435456	40.57557832
-3.5	-60.42852819	-69.685426	-81.592544	-48.06113007	-51.23746728	-47.98940446	-57.07373746	-52.07243717	-55.0172672	-25.17732539
+3.5	81.23485426	118.508394	144.012002	69.78864743	74.60347332	69.99997173	83.67890368	78.9195612	83.4205398	36.7800816
-3.55	-68.66592417	-79.985136	-97.286246	-54.32712145	-57.96774458	-54.32430654	-64.71480804	-59.84288456	-63.23974585	-28.52792944

+3.55	73.47446761	106.873305	131.014367	63.29726906	67.5981851148463	63.3859416873625	75.6314012	70.15498201	74.13755073	33.25978933
-3.6	-78.13056608	-92.241214	-115.989179	-61.51204775	-65.68757652	-61.5921398	-73.48653534	-68.80914807	-72.72828621	-32.37386557
+3.6	64.62432149	94.368548	116.900324	55.88853314	59.60525501	55.84082748	66.45593236	60.20121745	63.59557305	29.24529133
-3.65	-86.90177993	-103.997987	-133.926903	-68.15812743	-72.83060034	-68.31830974	-81.6090849	-77.15078819	-81.55639429	-35.93474327
+3.65	56.47910109	83.529111	104.530969	49.06481722	52.24548559	48.89468224	58.01308115	51.07623254	53.93181508	25.55069691
-3.7	-96.89683836	-117.861029	-155.044779	-75.71846838	-80.95852581	-75.973254	-90.85805429	-86.69025279	-91.65278365	-39.98898901
+3.7	47.22739296	71.983550	91.199927	41.33372564	43.90920417	41.02817794	48.45606495	40.78329348	43.03164161	21.36786122
-3.75	-106.0890445	-131.049864	-175.082199	-82.66020298	-88.42336819	-83.00495719	-99.35816214	-95.49261257	-100.9695497	-43.71454461
+3.75	38.80051791	62.071526	79.608523	34.26210036	36.28587633	33.83564357	39.72177503	31.40819592	33.10389563	17.54456177
-3.8	-116.4890963	-146.484110	-198.447478	-90.5021492	-96.85836161	-90.95175881	-108.9689142	-105.4827074	-111.5440071	-47.92643466
+3.8	29.32161816	51.623486	67.219420	26.3024592	27.70726543	25.74300042	29.89866778	21.29681333	22.41769824	13.24405181
-3.85	-125.9892925	-161.065563	-220.427342	-97.65511324	-104.5541028	-98.2032703	-117.7426714	-114.6353109	-121.2324566	-51.77107136
+3.85	20.71114446	42.756184	56.542542	19.06740335	19.91135647	18.38980647	20.97685412	18.59989358	19.69068099	9.337644773
-3.9	-136.6689127	-178.019246	-245.987476	-105.6848536	-113.195137	-106.3466748	-127.5997468	-124.953291	-132.1550168	-56.08994097
+3.9	19.23853611	34.532085	50.119513	14.45816486	15.56435768	14.67296331	17.77642835	18.59989358	19.69068099	7.753089547
-3.95	-146.3642789	-193.939497	-270.320713	-112.964617	-121.0308522	-113.7322644	-136.5432379	-134.3458441	-142.0983677	-60.00806048
+3.95	19.23853611	33.599464	49.280154	14.45816486	15.56435768	14.67296331	17.77642835	18.59989358	19.69068099	7.753089547
-5	-157.1981082	-212.344936	-298.320280	-121.0883429	-129.7769028	-121.9770179	-146.5311769	-144.8689598	-153.2390605	-64.38324651
+5	19.23853611	33.253757	48.969017	14.45816486	15.56435768	14.67296331	17.77642835	18.59989358	19.69068099	7.753089547

3-Span: Shear (Max and Min) Raw Data Results - 190’ Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.0931227	-16.01189358	-17.29211314	-27.20217303	-8.884983737	-11.99912892	-13.7568688	-15.41294174	-17.16850382
End Shear	92.0240597	125.7202037	130.5209066	163.1482874	73.98419918	99.78148213	113.4089165	124.9339571	136.8890015
-0.05	-11.0931227	-16.01189358	-17.29211314	-27.28273684	-8.884983737	-11.99912892	-13.7568688	-15.41294174	-17.16850382
+0.05	85.94667029	116.905641	120.9707902	147.5869268	69.1180616	93.21415486	105.8770678	116.5034788	127.504752
-0.1	-11.0931227	-16.01189358	-17.29211314	-27.551044	-8.884983737	-11.99912892	-13.7568688	-15.41294174	-17.16850382
+0.1	79.73590402	107.9116565	111.2398979	131.9683353	64.14590199	86.50194944	98.1803623	107.8928211	117.9248038
-0.15	-13.08810616	-16.01189358	-17.29211314	-27.9527818	-10.83616158	-14.53336837	-15.53265318	-15.49295047	-17.16850382
+0.15	74.19019383	99.90618247	102.5985704	118.4188522	59.70514627	80.50737983	91.3097768	100.2125059	109.3867409
-0.2	-19.27947471	-19.51451017	-17.29211314	-28.57595009	-15.7873923	-21.2187479	-23.21567597	-23.85244811	-24.18608007
+0.2	68.09551945	91.13709204	93.15588682	103.9702882	54.82364432	73.91814523	83.76127674	91.78131025	100.0216671
-0.25	-24.80056987	-27.35035996	-24.00282784	-29.29435029	-20.20158483	-27.17927433	-30.06889811	-31.55455001	-32.79411203
+0.25	62.68676483	83.381569	84.8259077	91.54907921	50.49045728	68.06931886	77.06433978	84.30764527	91.72732054
-0.3	-30.85993467	-36.31166648	-32.78616772	-32.78228781	-25.0449875	-33.71967855	-37.59249298	-40.01699355	-42.25954183
+0.3	56.78034374	74.9430324	75.7868961	78.69675674	45.75733907	61.68098458	69.75352088	76.15621063	82.6889705
-0.35	-36.22975045	-44.27918576	-41.55546125	-40.38657441	-29.33615803	-39.51465675	-44.2619584	-47.5251177	-50.66455942
+0.35	51.57349247	67.53254142	67.87219271	67.9210751	41.58367928	56.0480428	63.31076539	68.97947242	74.73901352
-0.4	-42.08495006	-52.99658442	-51.17236996	-48.90729546	-34.01400222	-45.83214795	-51.53664092	-55.72187433	-59.84848674
+0.4	45.92748438	59.53021032	59.35234279	57.33822549	37.05667864	49.93855473	56.32711941	61.20811275	66.13924859
-0.45	-47.23853794	-60.69702905	-59.68798944	-56.74206528	-38.13019199	-51.39142912	-57.94181973	-62.94573753	-67.94981838
+0.45	40.98748016	52.55985127	51.9568468	48.56696604	33.09449522	44.59163896	50.2190802	54.41857861	58.6343573
-0.5	-52.81740957	-69.06486604	-68.96530672	-67.5566566	-42.58475164	-57.40807537	-64.87810219	-70.7764998	-76.74038872
+0.5	35.67405323	45.09936959	44.07161686	40.02557189	28.83133854	38.83891985	43.65208272	47.1275998	50.58503143
-0.55	-57.68982757	-76.40316034	-77.12333143	-77.64054284	-46.47400572	-62.66152436	-70.93846013	-77.62582927	-84.43735651
+0.55	31.06584401	38.66422746	37.29923739	33.01549976	25.13259729	33.84817293	37.95929624	40.81554333	43.62587124
-0.6	-62.92020126	-84.3157733	-85.94558249	-90.28954911	-50.64754957	-68.29938303	-77.44686902	-84.99028749	-92.72271206
+0.6	26.15715812	31.85126227	30.16412056	26.61289034	21.19100944	28.53016404	31.8984259	34.10525481	36.23884107
-0.65	-67.4465029	-91.19683241	-93.64208514	-102.0474344	-54.25791149	-73.1768567	-83.08186538	-91.37480583	-99.91465823
+0.65	21.94568836	26.04642371	24.11879534	21.33280431	17.80766433	23.96573023	26.70142917	28.36096332	29.92607611
-0.7	-72.25622125	-98.54857619	-101.893802	-116.7374017	-58.09271314	-78.35800085	-89.07291308	-98.17265011	-107.5829364
+0.7	17.51390232	19.98661379	17.84925215	15.93742035	14.24537828	19.16036631	21.23617258	22.33167295	23.31319789
-0.75	-76.37146051	-104.8772996	-109.0248507	-130.2505847	-61.37222561	-82.78935349	-94.20201851	-104.0020793	-114.1691844
+0.75	13.76411848	14.90716749	13.03927329	11.82040301	11.22937709	15.09238364	16.6154955	17.24541809	17.74750495
-0.8	-80.68836428	-111.562512	-116.5905558	-145.6790251	-64.81055427	-87.43584489	-99.5862249	-110.1330043	-121.1085425
+0.8	9.881398891	9.85664658	8.38545335	7.885653835	8.104126791	10.87759993	11.83533565	11.99743461	12.02063498
-0.85	-84.32759427	-117.2438171	-123.0522301	-159.3179865	-67.70726777	-91.35094543	-104.1289048	-115.3170661	-126.9884206
+0.85	6.658246831	6.064597372	5.432074761	5.711648161	5.50743069	7.376203411	7.871511584	7.853268245	7.852910441
-0.9	-88.07951783	-123.1568504	-129.8164485	-174.1456288	-70.69139033	-95.38484215	-108.8167868	-120.680763	-133.0869968
+0.9	3.444286363	3.508557619	3.768936036	5.489163472	2.876939453	3.829940762	4.091364428	4.091073649	4.090787717
-0.95	-91.17779217	-128.0956567	-135.5048321	-187.1501752	-73.15334419	-98.71354219	-112.6925078	-125.1291803	-138.1598338
+0.95	2.445799925	3.508557619	3.768936036	5.375410017	1.959980374	2.647327245	3.033240152	3.397615873	3.782853182
-1	-94.29257305	-133.1308562	-141.3520813	-201.1677546	-75.62554062	-102.0569215	-116.5945829	-129.6253404	-143.305772
+1	2.45E+00	3.51E+00	3.77E+00	5.34E+00	1.96E+00	2.65E+00	3.03E+00	3.40E+00	3.78E+00
(Span 2) -2	-8.56E+00	-1.23E+01	-1.32E+01	-1.87E+01	-6.86E+00	-9.27E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2	9.44E+01	133.7898166	142.4939593	212.0190294	75.69902117	102.1612976	116.773429	129.9362596	143.7776048
-2.05	-8.56E+00	-1.23E+01	-1.32E+01	-1.87E+01	-6.86E+00	-9.27E+00	-1.06E+01	-1.19E+01	-1.32E+01
+2.05	91.01111735	128.307258	136.1503383	197.2120718	73.00219049	98.51369095	112.5156369	125.0277058	138.1590617
-2.1	-8.562974553	-12.28378861	-13.19539794	-18.92452003	-6.862075222	-9.268540692	-10.61965773	-11.8953714	-13.24412324
+2.1	86.99148201	121.9598459	128.8985345	181.4178729	69.80594609	94.19229781	107.4898754	119.2688625	131.6043111
-2.15	-8.660161356	-12.28378861	-13.19539794	-19.26259214	-7.106010178	-9.5368243	-10.61965773	-11.8953714	-13.24412324
+2.15	82.53986294	115.0482967	121.0829603	165.4040206	66.26135642	89.40136283	101.9337312	112.9320487	124.4234013
-2.2	-12.85357941	-14.04615917	-13.19539794	-19.74360126	-10.48138441	-14.08939362	-15.52922649	-16.1565892	-16.66937384
+2.2	77.91468578	107.9627208	113.137265	149.9709882	62.57466542	84.41950461	96.16880436	106.3811338	117.0255941
-2.25	-17.59945328	-20.50950008	-18.67816015	-20.42144035	-14.29687075	-19.23666275	-21.38223688	-22.61297925	-23.74754719

+2.25	72.78761919	100.1962101	104.4906683	133.7919336	58.48432035	78.89321327	89.78545994	99.14953388	108.8828689
-2.3	-22.67251669	-27.52025393	-25.97634554	-25.30541798	-18.37134034	-24.73430323	-27.64624543	-29.54668976	-31.37633897
+2.3	67.40329218	92.12141267	95.55990134	117.9799279	54.18541856	73.08609645	83.08841323	91.58285752	100.3848485
-2.35	-27.79567688	-34.68532173	-33.50741483	-32.07192987	-22.48265125	-30.28246712	-33.97843409	-36.57592542	-39.13305914
+2.35	62.04713082	84.1598113	86.80672757	103.2380635	49.90610091	67.30624676	76.43208204	84.07979132	91.97744096
-2.4	-33.33879372	-42.51823736	-41.80759231	-40.82036294	-26.92774295	-36.28187406	-40.83568018	-44.2071275	-47.57563273
+2.4	56.32985825	75.73149508	77.50402187	88.41321731	45.33542283	61.13366105	69.33252507	76.09440266	83.04848547
-2.45	-39.03434481	-50.64268822	-50.47921051	-50.79583466	-31.49202909	-42.44293033	-47.88725416	-52.07274899	-56.29796821
+2.45	50.53006586	67.08118346	68.19099413	74.38856793	40.6959828	54.86897315	62.13595048	67.99894359	73.97014513
-2.5	-44.82331206	-58.97228146	-59.42778446	-62.03510052	-36.1282858	-48.70187661	-55.05995272	-60.09072554	-65.20855673
+2.5	44.59052065	58.63599181	59.06544446	61.5449623	35.94189072	48.45024487	54.77141602	59.76786382	64.84939371
-2.55	-50.53025078	-67.08143182	-68.19126383	-74.38886872	-40.69613078	-54.86918831	-62.13616289	-67.9878805	-73.95910993
+2.55	39.03416259	50.64244564	50.47895213	50.79559114	31.49187206	42.44273262	47.88704584	52.07251506	56.29770885
-2.6	-56.33004069	-75.7317434	-77.48451718	-88.41354691	-45.33556845	-61.13387419	-69.33273573	-76.09463923	-83.04874834
+2.6	33.33860091	42.51798375	41.8073436	40.82015259	26.92758746	36.28168148	40.83547645	44.20690168	47.57538178
-2.65	-62.04730859	-84.16005488	-86.80699519	-103.2384039	-49.90624231	-67.30645405	-76.43228583	-84.0800215	-91.97769932
+2.65	27.79550404	34.68507843	33.50717773	32.07175001	22.48250234	30.28227925	33.97823701	36.5757062	39.13281821
-2.7	-67.40346865	-92.12165428	-95.56016644	-117.980276	-54.18555831	-73.08628592	-83.08861419	-91.58308269	-100.3851015
+2.7	22.67235107	27.52002324	25.9761231	25.30526504	18.37120787	24.73411099	27.64605724	29.54648071	31.37610796
-2.75	-72.78778748	-100.1964429	-104.4909282	-133.7786911	-58.48445557	-78.89339302	-89.78565177	-99.14974989	-108.8831122
+2.75	17.59929068	20.50929459	18.67795401	20.42144065	14.29674383	19.23648592	21.38205048	22.61278276	23.74733975
-2.8	-77.91484503	-107.9629427	-113.1375143	-149.9713401	-62.57479715	-84.41967625	-96.16898699	-106.3813397	-117.0258274
+2.8	12.85343362	14.04597866	13.19539831	19.74360157	10.48126819	14.08922941	15.52905404	16.15639894	16.66917436
-2.85	-82.54000658	-115.0485095	-121.0831973	-165.4043658	-66.26148002	-89.40152886	-101.9338959	-112.9322429	-124.4236212
+2.85	8.660027635	12.28378852	13.19539831	19.26259249	7.105903786	9.536680226	10.61965792	11.8953716	13.24412341
-2.9	-86.99162157	-121.9600405	-128.898757	-181.4182103	-69.80605759	-94.19244907	-107.4900247	-119.2690411	-131.6045143
+2.9	8.562974813	12.28378852	13.19539831	18.92452038	6.862075308	9.268540969	10.61965792	11.8953716	13.24412341
-2.95	-91.01123663	-128.3074429	-136.1505427	-197.2123979	-73.00228909	-98.5138246	-112.5157686	-125.0278648	-138.1592515
+2.95	8.562974813	12.28378852	13.19539831	18.73648976	6.862075308	9.268540969	10.61965792	11.8953716	13.24412341
-3	-94.5398383	-134.0042845	-142.744069	-212.6265701	-75.80294847	-102.3018995	-116.937926	-130.1266571	-143.9963158
+3	8.562974813	12.28378852	13.19539831	18.67981499	6.862075308	9.268540969	10.61965792	11.8953716	13.24412341
(Span 3) -4	-2.445799999	-3.51E+00	-3.77E+00	-5.34E+00	-1.959980398	-2.647327324	-3.033240207	-3.397615931	-3.78285323
+4	94.1451973	132.8906538	141.0718178	200.4781802	75.50865171	101.8988203	116.4098122	129.4119395	143.0610067
-3.05	-2.445799999	-3.51E+00	-3.77E+00	-5.37E+00	-1.959980398	-2.647327324	-3.033240207	-3.397615931	-3.78285323
+3.05	91.3417414	128.3587407	135.8090416	187.8619001	73.28355572	98.88960998	112.8977571	125.3651881	138.4294223
-3.1	-3.559773399	-3.562447604	-3.768936141	-5.497808362	-3.001963881	-3.998470721	-4.250860356	-4.250567968	-4.250285325
+3.1	87.89935488	122.8714009	129.4888508	173.4128539	70.54816829	95.19121708	108.5915778	120.4226957	132.7931631
-3.15	-6.487165557	-5.896736303	-5.283792187	-5.697973504	-5.369527915	-7.190279236	-7.661225072	-7.64444105	-7.64408503
+3.15	84.52247317	117.5494568	123.4008116	160.0675254	67.86232419	91.56053732	104.3722963	115.5951652	127.3042255
-3.2	-10.06830561	-10.08499038	-8.581083757	-8.051571942	-8.254631618	-11.08055589	-12.06529512	-12.24953433	-12.29529451
+3.2	80.47903966	111.2371137	116.2213994	144.9135683	64.6438812	87.21057857	99.32505395	109.8352923	120.7712596
-3.25	-13.56290195	-14.63603713	-12.79109724	-11.60915812	-11.06747687	-14.87402923	-16.36762405	-16.97292401	-17.44971603
+3.25	76.59366575	105.2201918	109.412025	131.0276115	61.54925997	83.02858417	94.47908428	104.317259	114.5256014
-3.3	-17.72917494	-20.27965209	-18.1512869	-16.19532665	-14.41847456	-19.39385073	-21.50153066	-22.62412192	-23.63358936
+3.3	72.02133616	98.1884755	101.4888648	116.0060267	57.90546948	78.10500602	88.78026031	97.84031301	107.2077594
-3.35	-21.71794228	-25.73368587	-23.79412796	-21.05129413	-17.62464801	-23.71884374	-26.42046258	-28.05068364	-29.58541642
+3.35	67.6924388	91.57172254	94.06212853	102.7765099	54.45404311	73.44181044	83.38811507	91.72205545	100.3060695
-3.4	-26.39721142	-32.1832907227258	-30.51091803	-26.91792269	-21.38380698	-28.7902910177016	-32.19470453	-34.43303539	-36.5993676141311
+3.4	62.66334263	83.92630575	85.510695	89.65807241	50.44263423	68.02256085	77.12718895	84.62834248	92.31527852
-3.45	-30.81517845	-38.31519001	-36.93277593	-32.65988064	-24.93134971	-33.57666491	-37.64968886	-40.47249184	-43.24792895
+3.45	57.95585717	76.80472526	77.57042565	78.26444666	46.68632885	62.94832062	71.26945932	78.00013584	84.85822492
-3.5	-35.93525179	-45.46515107	-44.45740339	-40.43760549	-29.04096131	-39.12177292	-43.97482071	-47.48568626	-50.980078
+3.5	52.54222072	68.65131203	68.50619288	66.99553585	42.36506676	57.11132488	64.53591748	70.38996666	76.30624321
-3.55	-40.71748248	-52.17976506	-51.55434997	-48.10209336	-32.87791768	-44.29938348	-49.88528254	-54.04776111	-58.22470305
+3.55	47.52109363	61.1200368241199	60.1563655847419	57.2366169197537	38.3558210785279	51.6961794902342	58.2930588063024	63.3420896834138	68.39455239

-3.6	-46.20624708	-59.92440806	-59.77134112	-57.84108305	-37.28020772	-50.24022997	-56.67180199	-61.59149039	-66.56326615
+3.6	41.79504748	52.56418175	50.69480417	48.47963867	33.78240881	45.51936968	51.17638107	55.31577157	59.39328569
-3.65	-51.28779943	-67.1267386	-67.43939951	-67.34546644	-41.35462374	-55.73893898	-62.95728999	-68.58590786	-74.30328775
+3.65	36.52518893	44.71835208	42.03934717	40.81077706	29.57223616	39.83346399	44.62901281	47.9385014	51.12752175
-3.7	-57.07302453	-75.36036251	-76.23327814	-79.31264257	-45.99192029	-61.99759096	-70.11571645	-76.55986267	-83.13630783
+3.7	30.5588953	35.86576169	32.29593267	32.36178537	24.80437527	33.39477664	37.21868368	39.59634431	41.78888305
-3.75	-62.38894883	-82.95527233	-84.36862433	-90.8762566	-50.2518373	-67.74725201	-76.69560784	-83.89634219	-91.27105055
+3.75	25.10532193	27.80035942	24.42143357	29.33860088	20.44520139	27.50825007	30.44724951	31.97995717	33.26976858
-3.8	-68.39850745	-91.57232245	-93.62391902	-104.6772515	-55.06635434	-74.24577437	-84.1364589	-92.20021554	-100.4867798
+3.8	18.97094315	19.11050403	17.2921132	28.5403985	15.54067767	20.88561821	22.83274871	23.42226729	23.70549912
-3.85	-73.88385837	-99.46467229	-102.1225755	-117.6813241	-59.45981774	-80.17624875	-90.93031085	-99.7884829	-108.9155768
+3.85	13.39856593	16.01189389	17.2921132	27.97953306	11.08445967	14.86861321	15.91787474	15.87504242	17.16850388
-3.9	-80.04562511	-108.3594432	-111.7238112	-132.7359461	-64.39388552	-86.83670621	-98.56410357	-108.3219653	-118.4020462
+3.9	11.09312286	16.01189389	17.2921132	27.53316874	8.884983768	11.99912909	13.7568689	15.41294185	17.16850388
-3.95	-85.6354568	-116.4542505	-120.4818518	-146.7930484	-68.86893926	-92.8778512	-105.4912891	-116.0717414	-127.024225
+3.95	11.09312286	16.01189389	17.2921132	27.29168648	8.884983768	11.99912909	13.7568689	15.41294185	17.16850388
-5	-91.87719438	-125.5210332	-130.3135553	-162.9330584	-73.86476797	-99.62230863	-113.2285424	-124.7345247	-136.6696939
+5	11.09312286	16.01189389	17.2921132	27.20217308	8.884983768	11.99912909	13.7568689	15.41294185	17.16850388

3-Span: Shear (Max and Min) Raw Data Results - 190' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-31.1340433	-34.48425424	-19.5281	-23.481	-25.3723
End Shear	233.3398934	253.1098716	150.8942	181.7366	193.9545
-0.05	-31.1340433	-34.48425424	-19.5281	-23.481	-25.3723
+0.05	216.2053653	234.3980237	140.1305	168.8106	179.984
-0.1	-31.1340433	-34.48425424	-19.5281	-23.481	-25.3723
+0.1	198.7509904	215.0857054	129.1554	155.6285	165.7422
-0.15	-31.1340433	-34.48425424	-19.5281	-23.481	-25.3723
+0.15	183.2527237	197.955028	119.3955	143.9039	153.0836
-0.2	-31.1340433	-34.48425424	-21.0906	-25.9901	-25.4848
+0.2	166.3191905	179.2578104	108.7148	131.071	139.2381
-0.25	-41.64000005	-42.37094141	-30.396	-37.1566	-37.4274
+0.25	151.3828523	162.7844065	99.27809	119.7307	127.0119
-0.3	-58.1744809	-58.6098864	-41.3962	-50.3548	-51.6321
+0.3	135.1772146	144.9326549	89.0212	107.4022	113.7308
-0.35	-73.918373	-76.15847719	-51.1853	-62.098	-64.3828
+0.35	120.9891727	129.3238565	80.02415	96.58577	102.0883
-0.4	-91.1863489	-95.42488865	-61.9057	-74.9564	-78.3537
+0.4	105.7184784	112.5479834	70.32048	84.91711	89.54001
-0.45	-106.4790192	-112.5049241	-71.3848	-86.3239	-90.7134
+0.45	92.46506673	98.01113721	61.87955	74.76432	78.63269
-0.5	-123.1421125	-131.1355102	-81.6961	-98.6871	-104.166
+0.5	78.33638931	82.54150928	52.85849	63.9107	66.98533
-0.55	-137.7972346	-147.5396193	-90.7486	-109.539	-115.983
+0.55	66.20393575	69.28393543	45.09015	54.56133	56.96457
-0.6	-153.6483998	-165.3040074	-100.521	-121.252	-128.749
+0.6	53.42431779	55.35094313	36.88113	44.67807	46.3864
-0.65	-167.4796144	-180.8248551	-109.031	-131.449	-139.873
+0.65	42.59921519	43.58003552	29.90184	36.27189	37.40361
-0.7	-182.3117904	-197.4926384	-118.136	-142.356	-151.784
+0.7	31.37571086	31.45515011	22.63424	27.51425	28.06285
-0.75	-195.1327334	-211.922881	-125.986	-151.758	-162.063
+0.75	22.47204385	22.85898356	16.56047	20.19101	20.29853
-0.8	-208.7388969	-227.2636905	-134.293	-161.704	-172.951
+0.8	14.24918674	14.97557634	10.74306	13.07671	12.86183
-0.85	-220.363229	-240.3960028	-141.367	-170.171	-182.233
+0.85	8.700001666	8.977326586	7.47906	8.211216	8.73803
-0.9	-232.5362795	-254.1794511	-148.748	-179.001	-191.93
+0.9	6.798610332	7.5209646	4.271046	5.140156	5.547884
-0.95	-242.7776573	-265.8064403	-154.93	-186.393	-200.064
+0.95	6.798610332	7.5209646	4.271046	5.140156	5.547884
-1	-253.3105604	-277.8021415	-161.254	-193.952	-208.401
+1	6.80E+00	7.52E+00	4.27E+00	5.14E+00	5.55E+00
(Span 2) -2	-2.38E+01	-2.63E+01	-1.50E+01	-1.80E+01	-1.94E+01
+2	255.3702167	280.3469238	162.2393	195.0936	209.8099
-2.05	-2.38E+01	-2.63E+01	-1.50E+01	-1.80E+01	-1.94E+01
+2.05	243.9339783	267.3317623	155.3611	186.8691	200.7457
-2.1	-23.80257172	-26.33160151	-14.9533	-17.9962	-19.4237
+2.1	230.8716734	252.5413989	147.4399	177.3893	190.3369
-2.15	-23.80257172	-26.33160151	-14.9533	-17.9962	-19.4237
+2.15	216.8034839	236.6789564	138.8512	167.1036	179.0774
-2.2	-23.80257172	-26.33160151	-15.6581	-19.0832	-19.4237
+2.2	202.5089226	220.6173358	130.0766	156.589	167.5956
-2.25	-32.92476101	-33.46632145	-23.3947	-28.4118	-29.1496

+2.25	186.9605937	203.2003025	120.487	145.0921	155.0678
-2.3	-46.00542418	-47.69615457	-31.8252	-38.5683	-40.0038
+2.3	170.9077169	185.2690033	110.5435	133.1653	142.0967
-2.35	-59.50864595	-62.44993074	-40.4732	-48.9792	-51.1608
+2.35	155.1795603	167.7461751	100.7628	121.429	129.355
-2.4	-74.3958982	-78.77487829	-49.957	-60.3895	-63.4172
+2.4	138.5658912	149.353766	90.43243	109.0281	115.914
-2.45	-89.95417854	-95.88982581	-59.8214	-72.2515	-76.1854
+2.45	121.7458224	131.0050132	79.85429	96.3246	102.1681
-2.5	-106.0141036	-113.6063013	-69.9607	-84.4382	-89.3277
+2.5	105.3636839	112.8883878	69.55085	83.94575	88.79613
-2.55	-121.7463078	-131.0051338	-79.8546	-96.325	-102.168
+2.55	89.95367483	95.88975705	59.82113	72.25117	76.18503
-2.6	-138.5410502	-149.3538842	-90.4327	-109.029	-115.914
+2.6	74.3954493	78.77481135	49.95671	60.38918	63.41685
-2.65	-155.18004	-167.7462895	-100.763	-121.429	-129.355
+2.65	59.50822063	62.44986501	40.47297	48.97892	51.16042
-2.7	-170.9081968	-185.2691227	-110.544	-133.166	-142.097
+2.7	46.00502545	47.69609749	31.82497	38.56795	40.00345
-2.75	-186.9610577	-203.2003726	-120.487	-145.092	-155.068
+2.75	32.9243805	33.46626436	23.39443	28.41156	29.14923
-2.8	-202.5094089	-220.6174029	-130.077	-156.589	-167.596
+2.8	23.80257172	26.33174787	15.65791	19.08292	19.42366
-2.85	-216.8039501	-236.6790254	-138.852	-167.104	-179.078
+2.85	23.80257172	26.33174787	14.95333	17.99617	19.42366
-2.9	-230.872076	-252.5414687	-147.44	-177.39	-190.337
+2.9	23.80257172	26.33174787	14.95333	17.99617	19.42366
-2.95	-243.9343472	-267.3318173	-155.361	-186.869	-200.746
+2.95	23.80257172	26.33174787	14.95333	17.99617	19.42366
-3	-255.8213425	-280.8616007	-162.509	-195.416	-210.166
+3	23.80257172	26.33174787	14.95333	17.99617	19.42366
(Span 3) -4	-6.79861033	-7.521006344	-4.27105	-5.14016	-5.54788
+4	252.8055425	277.2262948	160.9514	193.5905	208.0025
-3.05	-6.79861033	-7.521006344	-4.27105	-5.14016	-5.54788
+3.05	243.3254971	266.4297035	155.2594	186.7876	200.4987
-3.1	-6.79861033	-7.521006344	-4.32038	-5.14016	-5.54788
+3.1	231.9466088	253.5113255	148.3908	178.5741	191.4608
-3.15	-8.459027973	-8.700138976	-7.30545	-8.0214	-8.52093
+3.15	*220.9903902*	*241.1057662*	*141.7482*	*170.6268*	*182.7335*
-3.2	*-14.61598642*	*-15.35267324*	*-10.9397*	*-13.4075*	*-13.1719*
+3.2	*208.0749331*	*226.5148345*	*133.8882*	*161.2193*	*172.4202*
-3.25	*-22.02087424*	*-22.44805218*	*-16.2368*	*-19.8006*	*-19.9073*
+3.25	*195.8289305*	*212.7076458*	*126.4114*	*152.2675*	*162.6207*
-3.3	*-31.91635547*	*-31.99868112*	*-22.9852*	*-27.9373*	*-28.5135*
+3.3	*181.583907*	*196.6745455*	*117.6893*	*141.8214*	*151.2001*
-3.35	*-42.01794133*	*-42.94852075*	*-29.5263*	*-35.8194*	*-36.9206*
+3.35	*168.2344773*	*181.6730813*	*109.4948*	*132.0046*	*140.4798*
-3.4	*-54.04541249*	*-56.02680506*	*-37.2808*	*-45.1593*	*-46.9011*
+3.4	*152.8669466*	*164.4281971*	*100.0399*	*120.6752*	*128.1203*
-3.45	*-65.54753433*	*-68.56695701*	*-44.6692*	*-54.0546*	*-56.4218*
+3.45	*138.6004318*	*148.4397997*	*91.2443*	*110.1333*	*116.6307*
-3.5	*-79.02754964*	*-83.2970699*	*-53.3004*	*-64.4425*	*-67.5556*
+3.5	*122.3173549*	*130.2135168*	*81.18617*	*98.07584*	*103.5005*
-3.55	*-91.74382727*	*-97.22018886*	*-61.4196*	*-74.211*	*-78.0386*
+3.55	*107.3202065*	*113.4455331*	*71.9058*	*86.94862*	*91.39293*
-3.6	*-106.4693652*	*-113.371747*	*-70.7982*	*-85.4916*	*-90.1575*
+3.6	*90.32873256*	*94.46823462*	*61.37372*	*74.31832*	*77.66019*

-3.65	*-120.2134599*	*-128.4704922*	*-79.5317*	*-95.9937*	*-101.451*
+3.65	*74.78720703*	*77.12800963*	*51.72509*	*62.7455*	*65.08605*
-3.7	*-135.9774718*	*-145.8130968*	*-89.5282*	*-108.012*	*-114.387*
+3.7	*57.29439121*	*57.6300818*	*40.84859*	*49.69781*	*50.91903*
-3.75	*-150.5630137*	*-161.8801186*	*-98.7597*	*-119.108*	*-126.34*
+3.75	*42.41397333*	*43.04565235*	*30.94815*	*37.81915*	*38.13707*
-3.8	*-167.1584438*	*-180.1833986*	*-109.245*	*-131.708*	*-139.925*
+3.8	*31.13404338*	*34.48425399*	*20.58996*	*25.38934*	*25.3723*
-3.85	*-182.3990927*	*-197.0113516*	*-118.857*	*-143.258*	*-152.386*
+3.85	*31.13404338*	*34.48425399*	*19.5281*	*23.481*	*25.3723*
-3.9	*-199.6188842*	*-216.044918*	*-129.702*	*-156.284*	*-166.451*
+3.9	*31.13404338*	*34.48425399*	*19.5281*	*23.481*	*25.3723*
-3.95	*-215.3282847*	*-233.4264558*	*-139.579*	*-168.149*	*-179.269*
+3.95	*31.13404338*	*34.48425399*	*19.5281*	*23.481*	*25.3723*
-5	*-232.9654947*	*-252.9599244*	*-150.653*	*-181.447*	*-193.646*
+5	*31.13404338*	*34.48425399*	*19.5281*	*23.481*	*25.3723*

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)	*Moment Z (kips-ft)*	*Moment Z (kips-ft)*	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.95E-13	-5.89E-13	-1.11E-12	-4.31E-13	-4.60E-13	-4.26E-13	-5.08E-13	-4.79E-13	-5.04E-13	-2.40E-13
End Shear	7.03E-13	6.48E-13	1.08E-12	4.70E-13	4.29E-13	3.76E-13	3.84E-13	4.07E-13	4.32E-13	3.04E-13
-0.05	-182.7222585	-315.9106922	-465.2056657	-137.352563	-147.861398	-139.393152	-168.876066	-176.698987	-187.061466	-73.65435062
+0.05	1301.843547	1897.090578	2621.554005	1078.021086	1155.092105	1085.496091	1303.438011	1282.369678	1356.383927	572.1500743
-0.1	-365.444517	-631.8213844	-930.4113315	-274.705126	-295.722796	-278.786303	-337.752132	-353.397975	-374.122932	-147.3087012
+0.1	2435.102426	3557.418488	4900.044374	2010.562106	2153.549146	2023.361794	2427.987582	2377.395202	2514.430262	1065.707697
-0.15	-548.1667755	-947.7320766	-1395.616997	-412.057689	-443.584193	-418.179455	-506.628199	-530.096962	-561.184398	-220.9630519
+0.15	3490.814654	4982.058639	6843.569982	2798.61719	2996.536411	2814.720162	3375.232475	3287.103096	3476.304283	1481.597729
-0.2	-730.889034	-1263.642769	-1860.822663	-549.410252	-591.445591	-557.572607	-675.504265	-706.79595	-748.245865	-294.6174025
+0.2	4358.008641	6173.056373	8385.58515	3444.589497	3686.693405	3462.091569	4148.336256	4036.312805	4269.37214	1821.202248
-0.25	-913.6112925	-1579.553461	-2326.028329	-686.762815	-739.306989	-696.965759	-844.380331	-883.494937	-935.307331	-368.2717531
+0.25	5039.637105	7133.242376	9539.41005	3951.728544	4227.571026	3968.855699	4777.498873	4637.344199	4907.060525	2086.851024
-0.3	-1096.333551	-1895.464153	-2791.233994	-824.115378	-887.168387	-836.35891	-1013.2564	-1060.19392	-1122.3688	-441.9261037
+0.3	5541.14796	7866.234267	10484.81902	4324.130926	4623.632453	4360.950987	5248.063331	5074.549745	5368.7312	2280.632787
-0.35	-1279.055809	-2211.374845	-3256.43966	-961.467941	-1035.02978	-975.752062	-1182.13246	-1236.89291	-1309.43026	-515.5804543
+0.35	5869.119417	8376.434394	11081.72738	4573.60116	4901.177931	4624.375403	5558.20867	5367.868907	5680.419405	2404.960113
-0.4	-1461.778068	-2527.285538	-3721.645326	-1098.8205	-1182.89118	-1115.14521	-1351.00853	-1413.5919	-1496.49173	-589.2348049
+0.4	6031.2632	8669.032237	11321.90575	4713.811087	5047.804362	4761.153387	5714.872248	5503.355599	5824.881582	2463.03561
-0.45	-1644.500326	-2843.19623	-4186.850992	-1236.17307	-1330.75258	-1254.53837	-1519.8846	-1590.29089	-1683.5532	-662.8891556
+0.45	6036.421647	8750.002477	11224.58574	4734.60511	5067.074876	4777.202166	5726.098073	5488.312968	5809.944769	2455.542252
-0.5	-1827.222585	-3159.106922	-4652.056657	-1373.52563	-1478.61398	-1393.93152	-1688.76066	-1766.98987	-1870.61466	-736.5435062
+0.5	5894.570374	8638.99482	11039.41076	4652.607051	4980.459512	4695.278989	5631.102007	5405.569856	5721.96164	2423.212677
-0.55	-2009.944843	-3475.017614	-5117.262323	-1510.87819	-1626.47538	-1533.32467	-1857.63673	-1943.68886	-2057.67613	-810.1978568
+0.55	5641.375595	8331.964188	10801.76032	4466.028727	4782.804623	4510.889778	5413.532785	5208.073902	5512.075042	2337.463869
-0.6	-2192.667102	-3790.928306	-5582.467989	-1648.23076	-1774.33677	-1672.71782	-2026.51279	-2120.38785	-2244.73759	-883.8522074
+0.6	5303.465621	7833.396896	10208.29137	4182.626289	4480.329843	4227.33134	5075.061414	4877.788451	5161.724503	2197.216271
-0.65	-2375.38936	-4106.838999	-6047.673655	-1785.58332	-1922.19817	-1812.11097	-2195.38886	-2297.08684	-2431.79906	-957.506558
+0.65	4840.767944	7152.178182	9278.34189	3813.265701	4083.345546	3854.293111	4627.438151	4426.662029	4683.57401	2007.44391
-0.7	-2558.111619	-4422.749691	-6512.87932	-1922.93588	-2070.05957	-1951.50412	-2364.26493	-2473.78582	-2618.86053	-1031.160909
+0.7	4266.557353	6297.980785	8033.295544	3372.907525	3603.074401	3402.324937	4082.77476	3867.751841	4091.461407	1773.578176
-0.75	-2740.833877	-4738.660383	-6978.084986	-2060.28845	-2217.92097	-2090.89728	-2533.14099	-2650.48481	-2805.92199	-1104.815259
+0.75	3595.24017	5281.262067	6524.02167	2863.684536	3051.866239	2882.835547	3454.791432	3215.220281	3400.394778	1501.5083
-0.8	-2923.556136	-5054.571075	-7443.290652	-2197.64101	-2365.78236	-2230.29043	-2702.01706	-2827.1838	-2992.98346	-1178.46961
+0.8	2842.352952	4113.267064	4825.479071	2297.508277	2442.365265	2308.094388	2758.251734	2484.339338	2628.48823	1197.579823
-0.85	-3106.278394	-5497.685547	-8022.979717	-2334.99357	-2513.64376	-2369.68358	-2870.89312	-3003.88279	-3180.04492	-1252.12396
+0.85	2024.565977	2933.228497	3576.155216	1687.136306	1788.439716	1691.229519	2008.959966	1691.48632	1787.301507	868.5959849
-0.9	-3289.000653	-6285.381705	-8912.792293	-2472.34614	-2661.50516	-2509.07673	-3039.76919	-3180.58177	-3367.10639	-1325.778311
+0.9	1159.680342	1971.340624	2509.635046	1046.995729	1105.480178	1046.229285	1224.497692	854.1462177	901.1542451	521.8172033
-0.95	-3471.722911	-7368.153243	-10068.17271	-2609.6987	-2809.36656	-2648.46988	-3208.64526	-3357.28076	-3554.16786	-1399.432662
+0.95	764.6915855	1236.273809	1807.415208	576.0232583	619.9969288	584.4531565	707.913183	735.7863046	778.8784513	308.1471384
-1	-3654.445259	-8701.382324	-11448.96492	-2747.05118	-2957.22798	-2787.86303	-3377.52125	-3533.97976	-3741.22934	-1473.08701
+1	804.9384995	1235.972476	1843.710801	606.3402691	652.6283526	615.2138435	745.1717436	774.511902	819.8720639	324.3654016
(Span 2) -2	-3654.445259	-8701.382324	-11448.96492	-2747.05118	-2957.22798	-2787.86303	-3377.52125	-3533.97976	-3741.22934	-1473.08701
+2	804.9384995	1235.972476	1843.710801	606.3402691	652.6283526	615.2138435	745.1717436	774.511902	819.8720639	324.3654016
-2.05	-2676.334275	-6332.14636	-8582.317864	-2015.38453	-2169.23914	-2044.87901	-2476.83961	-2574.36192	-2725.13224	-1078.142212
+2.05	621.757765	1190.238173	1500.838204	509.0100773	519.2389874	492.4230449	575.5921946	598.2553888	633.2928896	261.6855349
-2.1	-2493.096109	-4889.794407	-6665.234266	-1877.39902	-2020.71979	-1904.87412	-2307.26007	-2398.1054	-2538.55307	-1004.326024
+2.1	1467.346272	2045.492957	2384.531766	1276.685924	1348.773706	1273.173401	1495.07742	1108.891747	1171.793844	628.5143392
-2.15	-2309.857943	-3870.359667	-5581.312181	-1739.4135	-1872.20044	-1764.86923	-2137.68052	-2221.84888	-2351.97389	-930.5098361
+2.15	2481.977186	3135.726987	3484.243145	2026.53242	2158.842388	2039.699593	2426.174162	2104.004763	2224.726528	1040.821699
-2.2	-2126.619777	-3283.889587	-4887.058283	-1601.42799	-1723.6811	-1624.86435	-1968.10097	-2045.59236	-2165.39472	-856.6936479
+2.2	3422.578955	4441.539546	5421.087186	2731.46954	2918.860054	2755.568671	3294.08376	3025.405006	3200.158032	1421.51963

-2.25	-1943.381611	-3075.608989	-4533.174912	-1463.44247	-1575.16175	-1484.85946	-1798.52143	-1869.33584	-1978.81555	-782.8774597
+2.25	4266.402594	5892.18366	7594.29444	3365.856219	3601.363784	3398.028485	4073.248448	3844.01837	4067.018144	1760.86876
-2.3	-1760.143445	-2947.048133	-4251.039307	-1325.45696	-1426.6424	-1344.85457	-1628.94188	-1693.07933	-1792.23637	-709.0612715
+2.3	4991.527392	7168.473704	9434.945251	3910.746748	4186.661337	3951.145265	4742.943308	4538.054859	4801.903691	2051.480572
-2.35	-1576.905279	-2818.487277	-3968.903702	-1187.47145	-1278.12305	-1204.84969	-1459.36233	-1516.82281	-1605.6572	-635.2450833
+2.35	5568.75824	8173.095572	10848.83539	4351.975489	4661.378511	4397.309719	5278.379536	5090.591737	5387.385723	2281.205646
-2.4	-1393.667113	-2689.926421	-3686.768097	-1049.48593	-1129.6037	-1064.8448	-1289.78279	-1340.56629	-1419.07803	-561.4288951
+2.4	5982.643679	8898.281305	11804.83995	4673.167216	5004.654589	4718.722961	5665.722365	5480.225242	5800.527392	2443.99248
-2.45	-1210.428947	-2561.365565	-3404.632492	-911.500418	-981.084356	-924.839915	-1120.20324	-1164.30977	-1232.49886	-487.6127069
+2.45	6231.519072	9334.887921	12310.55133	4866.636236	5210.466152	4914.701736	5898.700339	5705.12846	6039.055951	2540.047983
-2.5	-1027.190781	-2432.804709	-3389.854413	-773.514904	-832.565114	-784.835029	-950.623747	-988.05323	-1045.91968	-413.7965187
+2.5	6302.600839	9477.162528	12360.4516	4933.932186	5281.22653	4977.868204	5967.586167	5758.801488	6096.561711	2564.702545
-2.55	-1210.04958	-2561.36548	-3404.632499	-911.5004	-981.084461	-924.839898	-1120.2033	-1164.30974	-1232.49885	-487.6126578
+2.55	6190.632628	9334.903172	12310.55158	4866.640136	5210.466367	4914.705408	5898.708812	5705.131941	6039.059417	2540.049654
-2.6	-1393.230314	-2689.926336	-3686.768104	-1049.48592	-1129.60381	-1064.84478	-1289.78284	-1340.56626	-1419.07803	-561.428845
+2.6	5912.631395	8898.288072	11804.84003	4673.170051	5004.658837	4718.730064	5665.724672	5480.230978	5800.533238	2443.992897
-2.65	-1576.411049	-2818.487191	-3968.903709	-1187.47143	-1278.12315	-1204.84967	-1459.36239	-1516.82277	-1605.6572	-635.2450322
+2.65	5511.394777	8173.093493	10848.83551	4351.977211	4661.38178	4397.315177	5278.389176	5090.595862	5387.38985	2281.203757
-2.7	-1759.591783	-2947.048047	-4251.039314	-1325.45695	-1426.6425	-1344.85456	-1628.94194	-1693.07928	-1792.23638	-709.0612194
+2.7	4949.743587	7168.48798	9434.945408	3910.747873	4186.663854	3951.14733	4742.949401	4538.055813	4801.904478	2051.482833
-2.75	-1942.772518	-3075.608903	-4533.174919	-1463.44246	-1575.16185	-1484.85944	-1798.52149	-1869.3358	-1978.81555	-782.8774067
+2.75	4235.433302	5892.190148	7594.294328	3365.857183	3601.36619	3398.033546	4073.249369	3844.020928	4067.020619	1760.869136
-2.8	-2125.953252	-3283.88953	-4887.058317	-1601.42798	-1723.68119	-1624.86433	-1968.10104	-2045.59231	-2165.39472	-856.6935939
+2.8	3391.185533	4441.539572	5421.087546	2731.470108	2918.861998	2755.573357	3294.092491	3025.407261	3200.160192	1421.518168
-2.85	-2309.133987	-3870.359604	-5581.31221	-1739.41349	-1872.20054	-1764.86921	-2137.68059	-2221.84882	-2351.9739	-930.5097811
+2.85	2444.62425	3135.72242	3482.793385	2026.533585	2158.842907	2039.703014	2426.181537	2104.006281	2224.727938	1040.824296
-2.9	-2492.314721	-4889.794363	-6665.234311	-1877.39901	-2020.71989	-1904.8741	-2307.26014	-2398.10534	-2538.55307	-1004.325968
+2.9	1418.143321	2045.489503	2383.576422	1276.688003	1348.777252	1273.173274	1495.081499	1108.894988	1171.79707	628.5152817
-2.95	-2675.495456	-6332.146301	-8582.320252	-2015.38452	-2169.23923	-2044.87898	-2476.83969	-2574.36185	-2725.13225	-1078.142156
+2.95	621.9527127	1190.236814	1500.838223	509.0141491	519.2445126	492.4213697	575.5922222	598.2554082	633.2928725	260.7990634
-3	-3655.321978	-8701.38232	-11448.96492	-2747.05124	-2957.22799	-2787.86303	-3377.52131	-3533.97979	-3741.2294	-1473.087011
+3	805.1908744	1235.972477	1843.710801	606.340263	652.6283581	615.2138464	745.171732	774.5119227	819.8720575	324.3654059
(Span 3) -4	-3.66E+03	-8701.38232	-11448.96492	-2.75E+03	-2.96E+03	-2.79E+03	-3.38E+03	-3.53E+03	-3.74E+03	-1.47E+03
+4	8.05E+02	1235.972477	1843.710801	6.06E+02	6.53E+02	6.15E+02	7.45E+02	7.75E+02	8.20E+02	3.24E+02
-3.05	-3472.555885	-7368.153167	-10068.17266	-2609.69868	-2809.36659	-2648.46987	-3208.64524	-3357.28081	-3554.16793	-1399.43266
+3.05	764.9313304	1236.273801	1807.415214	576.0232497	619.9969405	584.4531538	707.913144	735.7863267	778.8784552	308.1471353
-3.1	-3289.789792	-6285.381626	-8912.792242	-2472.34611	-2661.50519	-2509.07672	-3039.76918	-3180.58182	-3367.10646	-1325.77831
+3.1	1183.337213	1971.345942	2507.257249	1046.995249	1105.47841	1046.225061	1224.505256	854.1447436	901.1528809	521.8142126
-3.15	-3107.023699	-5497.685464	-8022.979661	-2334.99354	-2513.64379	-2369.68357	-2870.89311	-3003.88283	-3180.045	-1252.123959
+3.15	2036.34779	2933.23417	3573.309684	1687.137306	1788.438778	1691.22587	2008.952591	1691.485295	1787.300634	868.5929806
-3.2	-2924.257606	-5054.571008	-7443.29061	-2197.64098	-2365.7824	-2230.29042	-2702.01704	-2827.18384	-2992.98353	-1178.469608
+3.2	2849.506068	4113.273326	4822.266953	2297.509834	2442.365683	2308.091283	2758.244975	2484.338909	2628.4889	1197.576925
-3.25	-2741.491513	-4738.660316	-6978.084945	-2060.28841	-2217.921	-2090.89727	-2533.14097	-2650.48485	-2805.92206	-1104.815258
+3.25	3603.963173	5281.268805	6524.021833	2863.686221	3051.866766	2882.832603	3454.784844	3215.219809	3400.394491	1501.505387
-3.3	-2558.72542	-4422.749624	-6512.879279	-1922.93584	-2070.0596	-1951.50412	-2364.2649	-2473.78586	-2618.86059	-1031.160907
+3.3	4282.632277	6297.986503	8033.295679	3372.908717	3603.07371	3402.321607	4082.767624	3867.750635	4091.460338	1773.576027
-3.35	-2375.959327	-4106.838932	-6047.673613	-1785.58328	-1922.1982	-1812.11097	-2195.38883	-2297.08687	-2431.79912	-957.5065562
+3.35	4869.561184	7152.183491	9278.342141	3813.266139	4083.344078	3854.289314	4627.430682	4426.659939	4683.572016	2007.441475
-3.4	-2193.193234	-3790.92824	-5582.467948	-1648.23071	-1774.3368	-1672.71781	-2026.51276	-2120.38788	-2244.73765	-883.8522055
+3.4	5349.929087	7833.400912	10208.2911	4182.625175	4480.327218	4227.32628	5075.052175	4877.784563	5161.720632	2197.213129
-3.45	-2010.427141	-3475.017548	-5117.262282	-1510.87815	-1626.47541	-1533.32466	-1857.63669	-1943.68889	-2057.67618	-810.1978548
+3.45	5710.053278	8331.967338	10801.76074	4466.026074	4782.800339	4510.883601	5413.537298	5208.068484	5512.069522	2337.460623
-3.5	-1827.661048	-3159.106856	-4652.056616	-1373.52558	-1478.61401	-1393.93151	-1688.76062	-1766.9899	-1870.61471	-736.5435041
+3.5	5938.057267	8638.996173	11039.41029	4652.602778	4980.45347	4695.270505	5631.104156	5405.562098	5721.953662	2423.209003
-3.55	-1644.894954	-2843.196164	-4186.85095	-1236.17301	-1330.75261	-1254.53836	-1519.88455	-1590.29092	-1683.55324	-662.8891534
+3.55	6022.174547	8750.00186	11224.58564	4734.610451	5067.062969	4777.196642	5726.097467	5488.308965	5809.940387	2458.516979
-3.6	-1462.128861	-2527.285472	-3721.645285	-1098.82045	-1182.89121	-1115.14521	-1351.00848	-1413.59193	-1496.49177	-589.2348028

+3.6	**5951.995048**	***8669.030042***	***11321.9062***	**4713.814272**	**5047.809198**	**4761.145241**	**5714.869036**	**5503.34868**	**5824.8741**	**2463.034024**
-3.65	**-1279.362768**	***-2211.37478***	***-3256.439619***	**-961.467881**	**-1035.02981**	**-975.752057**	**-1182.13241**	**-1236.89294**	**-1309.4303**	**-515.5804521**
+3.65	**5822.087654**	***8376.430217***	***11081.72728***	**4573.602062**	**4901.180308**	**4624.36547**	**5558.202748**	**5367.858693**	**5680.423438**	**2404.958009**
-3.7	**-1096.596675**	***-1895.464088***	***-2791.233953***	**-824.115314**	**-887.168416**	**-836.358905**	**-1013.25634**	**-1060.19395**	**-1122.36883**	**-441.9261014**
+3.7	**5531.912852**	***7866.227694***	***10484.8189***	**4324.129052**	**4623.631913**	**4360.95328**	**5248.053774**	**5074.55066**	**5368.731901**	**2280.629786**
-3.75	**-913.8305823**	***-1579.553396***	***-2326.028287***	**-686.762748**	**-739.307018**	**-696.965754**	**-844.380274**	**-883.49496**	**-935.307363**	**-368.2717507**
+3.75	**5070.873555**	***7133.232958***	***9539.410328***	**3951.72385**	**4227.567507**	**3968.855224**	**4777.501816**	**4637.341487**	**4907.057412**	**2086.84782**
-3.8	**-731.0644893**	***-1263.642704***	***-1860.822622***	**-549.410182**	**-591.44562**	**-557.572602**	**-675.504205**	**-706.795971**	**-748.245893**	**-294.6174**
+3.8	**4431.9766**	***6173.044098***	***8385.584779***	**3444.581998**	**3686.686875**	**3462.088169**	**4148.335567**	**4036.306868**	**4269.365591**	**1821.204587**
-3.85	**-548.2983963**	***-947.7320123***	***-1395.616956***	**-412.057616**	**-443.584222**	**-418.179451**	**-506.628136**	**-530.096982**	**-561.184424**	**-220.9630493**
+3.85	**3609.35884**	***4982.043463***	***6843.570713***	**2798.606792**	**2996.526792**	**2814.714268**	**3375.228519**	**3287.100298**	**3476.301404**	**1481.599528**
-3.9	**-365.5323032**	***-631.8213203***	***-930.4112901***	**-274.70505**	**-295.722824**	**-278.786299**	**-337.752066**	**-353.397993**	**-374.122955**	**-147.3086986**
+3.9	**2598.288984**	***3557.3999***	***4900.04378***	**2010.548155**	**2153.535649**	**2023.351997**	**2427.979121**	**2377.388492**	**2514.423248**	**1065.708928**
-3.95	**-182.7662102**	***-315.9106283***	***-465.2056243***	**-137.352483**	**-147.861426**	**-139.393148**	**-168.875997**	**-176.699004**	**-187.061485**	**-73.6543479**
+3.95	**1395.594719**	***1897.069033***	***2619.653523***	**1078.004251**	**1155.075508**	**1085.484501**	**1303.42709**	**1282.359291**	**1356.373023**	**572.1506605**
-5	**-1.57E-12**	***-1.64E-12***	***-2.48E-12***	**-1.00E-12**	**-1.06E-12**	**-9.90E-13**	**-1.19E-12**	**-1.06E-12**	**-1.13E-12**	**-5.85E-13**
+5	**9.89E-13**	***1.22E-12***	***1.79E-12***	**7.48E-13**	**8.00E-13**	**6.14E-13**	**6.84E-13**	**7.75E-13**	**8.19E-13**	**3.85E-13**

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.30E-13	-4.13E-13	-4.14E-13	-4.60E-13	-2.65E-13	-3.50E-13	-3.64E-13	-3.93E-13	-4.03E-13
End Shear	3.04E-13	3.57E-13	3.62E-13	4.52E-13	2.53E-13	3.25E-13	3.18E-13	3.47E-13	4.00E-13
-0.05	-105.3846657	-152.112989	-164.2750748	-258.4206438	-84.4073455	-113.9917247	-130.690254	-146.422947	-163.100786
+0.05	817.2255189	1111.468861	1150.290558	1414.888217	657.029585	886.4356797	1006.871707	1108.416905	1213.116663
-0.1	-210.7693314	-304.2259781	-328.5501496	-516.8412876	-168.814691	-227.9834494	-261.380507	-292.845893	-326.201573
+0.1	1522.805981	2061.553118	2125.896239	2586.666716	1224.744017	1652.131738	1875.322247	2065.082103	2264.064075
-0.15	-316.1539971	-456.3389671	-492.8252244	-775.2619314	-253.2220365	-341.9751741	-392.070761	-439.26884	-489.302359
+0.15	2117.54463	2851.861921	2930.277182	3537.344311	1703.691988	2298.004534	2606.468275	2895.574254	3169.113536
-0.2	-421.5386627	-608.4519562	-657.1002992	-1033.682575	-337.629382	-455.9668988	-522.761014	-585.691786	-652.403145
+0.2	2603.39451	3485.998391	3598.019404	4354.398921	2095.406164	2826.130791	3202.789181	3575.374633	3924.144016
-0.25	-526.9233284	-760.5649452	-821.375374	-1292.103219	-422.0367275	-569.9586236	-653.451268	-732.114733	-815.503932
+0.25	2982.959696	3994.092652	4103.199413	5004.375519	2401.939396	3239.290279	3676.739611	4107.269256	4529.451891
-0.3	-632.3079941	-912.6779343	-985.6504488	-1550.523863	-506.444073	-683.9503483	-784.141522	-878.537679	-978.604718
+0.3	3259.495874	4358.253565	4483.366622	5493.912455	2625.86654	3554.034248	4037.910957	4495.742748	4974.4851
-0.35	-737.6926598	-1064.790923	-1149.925524	-1808.944507	-590.8514185	-797.942073	-914.831775	-1024.96063	-1141.7055
+0.35	3453.189603	4581.062059	4742.877289	5838.270188	2770.282693	3767.874026	4275.927298	4765.203444	5264.875667
-0.4	-843.0773255	-1216.903912	-1314.200598	-2067.365151	-675.258764	-911.9337977	-1045.52203	-1171.38357	-1304.80629
+0.4	3552.437087	4691.922488	4899.86248	6009.218786	2838.804201	3878.588908	4395.232571	4907.299887	5418.213694
-0.45	-948.4619912	-1369.016901	-1478.475673	-2325.785794	-759.6661095	-1025.925522	-1176.21228	-1317.80652	-1467.90708
+0.45	3561.329743	4674.443556	4916.513524	5988.154265	2835.568443	3890.655193	4402.088401	4923.284554	5444.329494
-0.5	-1053.846657	-1521.12989	-1642.750748	-2584.206438	-844.073455	-1139.917247	-1306.90254	-1464.22947	-1631.00786
+0.5	3502.350438	4605.446104	4827.290883	5835.740897	2792.456965	3824.567886	4329.126993	4838.727419	5346.660864
-0.55	-1159.231323	-1673.242879	-1807.025823	-2842.627082	-928.4808005	-1253.908972	-1437.59279	-1610.65241	-1794.10865
+0.55	3365.887931	4439.554428	4622.32871	5685.799034	2691.169545	3674.745221	4163.477952	4646.616951	5125.476751
-0.6	-1264.615988	-1825.355869	-1971.300898	-3101.047726	-1012.888146	-1367.900697	-1568.28304	-1757.07536	-1957.20944
+0.6	3153.869751	4160.136457	4297.218024	5340.24562	2528.096509	3443.63808	3903.519763	4349.93352	4801.067918
-0.65	-1370.000654	-1977.468858	-2135.575972	-3359.46837	-1097.295492	-1481.892421	-1698.9733	-1903.49831	-2120.31022
+0.65	2873.591799	3788.141487	3888.352149	4795.39174	2308.951095	3139.159557	3558.242889	3958.860625	4372.879853
-0.7	-1475.38532	-2129.581847	-2299.851047	-3617.889013	-1181.702837	-1595.884146	-1829.66355	-2049.92125	-2283.41101
+0.7	2533.003434	3319.052653	3375.569955	4116.81076	2039.968286	2769.926867	3137.446144	3484.487835	3849.551964
-0.75	-1580.769985	-2281.694836	-2464.126122	-3876.309657	-1266.110183	-1709.875871	-1960.3538	-2196.3442	-2446.51179
+0.75	2140.798878	2764.714954	2771.966714	3280.793595	1727.903372	2345.259825	2651.735142	2941.616032	3244.278682
-0.8	-1686.154651	-2433.807825	-2628.401197	-4134.730301	-1350.517528	-1823.867595	-2091.04406	-2342.76714	-2609.61258
+0.8	1706.322867	2137.929235	2093.939668	2292.670856	1380.032469	1875.182358	2112.523666	2337.760161	2571.265617
-0.85	-1791.539317	-2585.920814	-2792.676271	-4426.087639	-1434.924874	-1937.85932	-2221.73431	-2489.19009	-2772.71337
+0.85	1238.626041	1452.447893	1350.000299	1337.925254	1004.153193	1370.421104	1532.032882	1686.039201	1845.726175
-0.9	-1896.923982	-2738.033803	-2956.951346	-4806.667024	-1519.332219	-2051.851045	-2352.42456	-2635.61304	-2935.81415
+0.9	749.3029902	737.333325	644.4880621	983.194322	608.5833479	842.4063647	923.2914027	1007.462804	1083.883717
-0.95	-2002.308648	-2890.146792	-3121.226421	-5263.649859	-1603.739565	-2165.84277	-2483.11482	-2782.03598	-3098.91494
+0.95	441.4668864	633.2946503	680.2929544	979.1232537	353.7764574	477.8425678	547.4998474	613.2696651	682.8049994
-1	-2107.693251	-3042.25973	-3285.501508	-5785.483301	-1688.146977	-2279.834494	-2613.8051	-2928.45893	-3262.0157
+1	464.7019812	666.6259399	716.0978381	1013.730315	372.3962713	502.9921707	576.3156114	645.5470109	718.7420987
(Span 2) -2	-2107.693251	-3042.25973	-3285.501508	-5785.483301	-1688.146977	-2279.834494	-2613.8051	-2928.45893	-3262.0157
+2	464.7019812	666.6259399	716.0978381	1013.730315	372.3962713	502.9921707	576.3156114	645.5470109	718.7420987
-2.05	-1544.6001	-2215.765099	-2380.202368	-3945.334603	-1237.789662	-1671.870957	-1915.5871	-2145.70193	-2388.99146
+2.05	358.9492455	514.9211506	553.1346735	805.1018429	287.6496423	389.0205169	445.1628385	498.6391741	555.1771767
-2.1	-1438.847361	-2064.060311	-2217.239199	-3414.002	-1153.043032	-1557.404476	-1784.43432	-1998.79409	-2225.42654
+2.1	918.504721	925.7243487	802.4288414	793.9172893	735.3751795	1026.961266	1130.180513	1245.295446	1338.999977
-2.15	-1333.094622	-1912.355522	-2054.27603	-2992.17475	-1068.296402	-1442.937995	-1653.28155	-1851.88625	-2061.86161
+2.15	1498.944726	1787.320822	1721.371577	1593.540989	1205.508578	1654.389831	1852.972232	2050.655276	2241.922953
-2.2	-1227.341883	-1760.650734	-1891.312861	-2682.454425	-983.5497716	-1328.471514	-1522.12877	-1704.97841	-1898.29669
+2.2	2042.244796	2582.532582	2583.541961	2757.082972	1640.053143	2240.413428	2526.003368	2804.408163	3082.853191

-2.25	**-1121.589144**	**-1608.945946**	**-1728.349692**	**-2470.658167**	**-898.8031415**	**-1214.005033**	**-1390.976**	**-1558.07057**	**-1734.73177**
+2.25	**2528.971731**	**3283.119954**	**3346.231447**	**3979.955215**	**2029.818412**	**2766.061711**	**3128.151084**	**3480.992926**	**3837.548038**
-2.3	**-1015.836405**	**-1457.241157**	**-1565.386523**	**-2279.503628**	**-814.0565115**	**-1099.538552**	**-1259.82322**	**-1411.16273**	**-1571.16684**
+2.3	**2945.2751**	**3875.303811**	**3991.791154**	**5006.402278**	**2362.828605**	**3217.629695**	**3646.370255**	**4060.421139**	**4481.550983**
-2.35	**-910.0836662**	**-1305.536369**	**-1402.423354**	**-2088.349089**	**-729.3098814**	**-985.0720708**	**-1128.67044**	**-1264.2549**	**-1407.60192**
+2.35	**3281.892215**	**4340.949896**	**4510.55669**	**5817.355919**	**2626.298775**	**3582.420546**	**4060.846037**	**4529.184671**	**4995.813245**
-2.4	**-804.3309272**	**-1153.831581**	**-1239.460185**	**-1897.19455**	**-644.5632514**	**-870.6055899**	**-997.517669**	**-1117.34706**	**-1244.03699**
+2.4	**3524.044593**	**4673.438529**	**4889.966939**	**6370.205638**	**2815.076103**	**3844.916084**	**4357.7443**	**4867.483845**	**5375.620319**
-2.45	**-698.5781883**	**-1002.126793**	**-1076.497015**	**-1706.040011**	**-559.8166214**	**-756.1391089**	**-866.364894**	**-970.439217**	**-1080.47207**
+2.45	**3667.837989**	**4865.084793**	**5117.27535**	**6666.624702**	**2926.772285**	**4003.889662**	**4537.708786**	**5071.076093**	**5606.806631**
-2.5	**-592.8254493**	**-850.4220044**	**-913.5338076**	**-1514.885484**	**-475.0699913**	**-641.6726279**	**-735.212118**	**-823.531377**	**-916.907122**
+2.5	**3714.847704**	**4907.516728**	**5184.839201**	**6706.793344**	**2956.131279**	**4055.194805**	**4590.506033**	**5136.491908**	**5684.91226**
-2.55	**-698.5781117**	**-1002.126743**	**-1076.496972**	**-1706.040019**	**-559.8166475**	**-756.1390823**	**-866.364891**	**-970.439194**	**-1080.47204**
+2.55	**3667.838117**	**4865.088841**	**5117.278399**	**6666.62388**	**2926.781165**	**4003.891936**	**4537.713667**	**5071.077981**	**5606.809112**
-2.6	**-804.3308475**	**-1153.831532**	**-1239.460137**	**-1897.194554**	**-644.5632765**	**-870.6055599**	**-997.517664**	**-1117.34703**	**-1244.03697**
+2.6	**3524.048218**	**4673.444111**	**4889.972409**	**6370.207082**	**2815.079132**	**3844.921358**	**4357.74438**	**4867.488066**	**5375.621549**
-2.65	**-910.0835832**	**-1305.536321**	**-1402.423301**	**-2088.349089**	**-729.3099055**	**-985.0720374**	**-1128.67044**	**-1264.25487**	**-1407.60189**
+2.65	**3281.894565**	**4340.954157**	**4510.560359**	**5817.359314**	**2626.311016**	**3582.424529**	**4060.851982**	**4529.187465**	**4995.81348**
-2.7	**-1015.836319**	**-1457.241111**	**-1565.386466**	**-2279.503624**	**-814.0565345**	**-1099.538515**	**-1259.82321**	**-1411.1627**	**-1571.16681**
+2.7	**2945.276851**	**3875.308152**	**3991.79349**	**5006.405488**	**2362.836954**	**3217.630712**	**3646.373129**	**4060.420769**	**4481.559005**
-2.75	**-1121.589055**	**-1608.9459**	**-1728.34963**	**-2470.658159**	**-898.8031635**	**-1214.004992**	**-1390.97598**	**-1558.07054**	**-1734.73173**
+2.75	**2528.973536**	**3283.119725**	**3346.231102**	**3979.956476**	**2029.821789**	**2766.06533**	**3128.15597**	**3480.994451**	**3837.551583**
-2.8	**-1227.34179**	**-1760.650689**	**-1891.312795**	**-2682.454422**	**-983.5497925**	**-1328.47147**	**-1522.12876**	**-1704.97838**	**-1898.29665**
+2.8	**2042.246115**	**2582.537887**	**2583.54512**	**2757.086693**	**1640.051118**	**2240.416669**	**2526.008207**	**2804.409714**	**3082.853378**
-2.85	**-1333.094526**	**-1912.355479**	**-2054.27596**	**-2992.174741**	**-1068.296421**	**-1442.937948**	**-1653.28153**	**-1851.88621**	**-2061.86158**
+2.85	**1498.94531**	**1787.325567**	**1721.37433**	**1593.543734**	**1205.518765**	**1654.391997**	**1852.976288**	**2050.656123**	**2241.920968**
-2.9	**-1438.847262**	**-2064.060268**	**-2217.239124**	**-3414.001992**	**-1153.04305**	**-1557.404425**	**-1784.4343**	**-1998.79405**	**-2225.4265**
+2.9	**918.5071988**	**925.7243205**	**802.427895**	**793.9166217**	**735.3809875**	**1026.960371**	**1130.181841**	**1245.298403**	**1338.999192**
-2.95	**-1544.599998**	**-2215.765057**	**-2380.202289**	**-3945.334588**	**-1237.789679**	**-1671.870903**	**-1915.58707**	**-2145.70189**	**-2388.99142**
+2.95	**358.9492011**	**514.9210901**	**553.1346759**	**805.1018944**	**287.6496791**	**389.0205811**	**445.1628596**	**498.6391766**	**555.177172**
-3	**-2107.693281**	**-3042.259788**	**-3285.501521**	**-5785.483309**	**-1688.146982**	**-2279.834528**	**-2613.80512**	**-2928.45895**	**-3262.01571**
+3	**464.7019954**	**666.6259353**	**716.0978581**	**1013.730332**	**372.396276**	**502.9921858**	**576.3156218**	**645.5470219**	**718.7421078**
(Span 3) -4	**-2.11E+03**	**-3.04E+03**	**-3.29E+03**	**-5.79E+03**	**-1.69E+03**	**-2.28E+03**	**-2.61E+03**	**-2.93E+03**	**-3.26E+03**
+4	**4.65E+02**	**6.67E+02**	**7.16E+02**	**1.01E+03**	**3.72E+02**	**5.03E+02**	**5.76E+02**	**6.46E+02**	**7.19E+02**
-3.05	**-2002.308614**	**-2890.146796**	**-3121.226445**	**-5263.649839**	**-1603.739637**	**-2165.842801**	**-2483.11487**	**-2782.036**	**-3098.91493**
+3.05	**441.4668954**	**633.2946381**	**680.2929648**	**979.1232673**	**353.7764622**	**477.8425762**	**547.4998399**	**613.2696705**	**682.8050021**
-3.1	**-1896.923947**	**-2738.033804**	**-2956.95137**	**-4806.667003**	**-1519.332291**	**-2051.851075**	**-2352.42461**	**-2635.61305**	**-2935.81414**
+3.1	**749.3018089**	**737.3299593**	**644.4880715**	**983.1943357**	**608.5891964**	**842.4034784**	**923.2868733**	**1007.461542**	**1083.886487**
-3.15	***-1791.53928***	***-2585.920812***	***-2792.676294***	***-4426.087617***	***-1434.924945***	***-1937.859349***	***-2221.73436***	***-2489.19011***	***-2772.71335***
+3.15	**1238.62531**	**1452.443577**	**1350.003799**	**1337.923267**	**1004.15911**	**1370.418659**	**1532.028966**	**1686.038638**	**1845.729502**
-3.2	**-1686.154612**	**-2433.80782**	**-2628.401219**	**-4134.730282**	**-1350.517599**	**-1823.867622**	**-2091.0441**	**-2342.76716**	**-2609.61256**
+3.2	**1706.32321**	**2137.925496**	**2093.942798**	**2292.667289**	**1380.038903**	**1875.180364**	**2112.520372**	**2337.760875**	**2571.269439**
-3.25	**-1580.769945**	**-2281.694828**	**-2464.126144**	**-3876.309638**	**-1266.110254**	**-1709.875896**	**-1960.35385**	**-2196.34421**	**-2446.51178**
+3.25	**2140.799386**	**2764.710869**	**2771.964973**	**3280.790634**	**1727.909611**	**2345.257948**	**2651.731547**	**2941.616838**	**3244.282987**
-3.3	**-1475.385278**	***-2129.581836***	**-2299.851068**	***-3617.888994***	**-1181.702908**	**-1595.884169**	**-1829.66359**	**-2049.92126**	**-2283.41099**
+3.3	**2533.003108**	**3319.047383**	**3375.567752**	**4116.813449**	**2039.974545**	**2769.924716**	**3137.442147**	**3484.487488**	**3849.555757**
-3.35	**-1370.000611**	**-1977.468844**	**-2135.575993**	**-3359.46835**	**-1097.295562**	**-1481.892443**	**-1698.97334**	**-1903.49832**	**-2120.3102**
+3.35	**2873.590766**	**3788.136005**	**3888.348736**	**4795.389534**	**2308.957133**	**3139.15698**	**3558.238409**	**3958.859635**	**4372.882544**
-3.4	**-1264.615944**	**-1825.355852**	**-1971.300917**	**-3101.047705**	**-1012.888216**	**-1367.900717**	**-1568.28308**	**-1757.07537**	**-1957.20942**
+3.4	**3153.867643**	**4160.129186**	**4297.21254**	**5340.247894**	**2528.100983**	**3443.634442**	**3903.514522**	**4349.931484**	**4801.069263**
-3.45	**-1159.231276**	**-1673.24286**	**-1807.025842**	**-2842.627061**	**-928.4808703**	**-1253.90899**	**-1437.59283**	**-1610.65242**	**-1794.10863**
+3.45	**3365.885034**	**4439.549088**	**4622.324582**	**5685.798229**	**2691.173295**	**3674.740623**	**4163.471667**	**4646.613446**	**5125.476112**
-3.5	**-1053.846609**	**-1521.129868**	**-1642.750767**	**-2584.206417**	**-844.0735245**	**-1139.917264**	**-1306.90257**	**-1464.22947**	**-1631.00784**
+3.5	**3502.346136**	**4605.449304**	**4827.284876**	**5835.73715**	**2792.459685**	**3824.561466**	**4329.118322**	**4838.722351**	**5346.658477**
-3.55	**-948.4619419**	**-1369.016876**	**-1478.475691**	**-2325.785773**	**-759.6661787**	**-1025.925537**	**-1176.21232**	**-1317.80653**	**-1467.90706**
+3.55	**3561.32156**	***4674.4416674 1781***	***4916.509907***	**5988.156806**	**2835.566609**	***3890.649767***	**4402.086089**	**4923.279515**	**5444.33329**

-3.6	**-843.0772746**	**-1216.903884**	**-1314.200616**	**-2067.365128**	**-675.2588329**	**-911.933811**	**-1045.52207**	**-1171.38358**	**-1304.80627**
+3.6	**3552.440828**	**4691.918209**	**4899.856982**	**6009.218328**	**2838.801095**	**3878.581215**	**4395.228057**	**4907.292977**	**5418.214916**
-3.65	**-737.6926074**	**-1064.790892**	**-1149.92554**	**-1808.944484**	**-590.8514871**	**-797.9420846**	**-914.831811**	**-1024.96063**	**-1141.70548**
+3.65	**3453.191644**	**4581.056811**	**4742.874032**	**5838.266276**	**2770.277675**	**3767.864941**	**4275.920799**	**4765.205556**	**5264.874009**
-3.7	**-632.3079402**	**-912.6779005**	**-985.6504649**	**-1550.52384**	**-506.4441413**	**-683.9503582**	**-784.141556**	**-878.537684**	**-978.604696**
+3.7	**3259.495841**	**4358.246129**	***4483.360312***	**5493.90963**	**2625.859585**	**3554.035595**	**4037.902515**	**4495.742051**	**4974.480563**
-3.75	**-526.923273**	**-760.5649085**	**-821.3753894**	**-1292.103196**	**-422.0367955**	**-569.9586318**	**-653.451302**	**-732.114736**	**-815.503909**
+3.75	**2982.957121**	**3994.09518**	**4103.195822**	**5004.378198**	**2401.931971**	**3239.289412**	**3676.740603**	**4107.265809**	**4529.444997**
-3.8	**-421.5386058**	**-608.4519165**	**-657.100314**	**-1033.682552**	**-337.6294497**	**-455.9669054**	**-522.761047**	**-585.691788**	**-652.403122**
+3.8	**2603.390181**	**3485.998014**	**3598.013012**	**4354.40157**	**2095.3967**	**2826.127447**	**3202.787707**	**3575.3683**	**3924.145846**
-3.85	**-316.1539386**	**-456.3389245**	**-492.8252386**	**-775.2619074**	**-253.2221039**	**-341.9751791**	**-392.070792**	**-439.268841**	**-489.302335**
+3.85	**2117.538056**	**2851.858659**	**2930.27729**	**3537.345241**	**1703.680499**	**2297.999191**	**2606.464759**	**2895.565106**	**3169.11226**
-3.9	**-210.7692713**	**-304.2259326**	**-328.5501632**	**-516.8412632**	**-168.8147581**	**-227.9834527**	**-261.380538**	**-292.845893**	**-326.201548**
+3.9	**1522.796572**	**2061.546425**	**2125.893023**	**2586.668082**	**1224.729626**	**1652.123237**	**1875.31506**	**2065.082331**	**2264.059525**
-3.95	**-105.3846041**	**-152.1129406**	**-164.2750878**	**-258.420619**	**-84.40741235**	**-113.9917263**	**-130.690283**	**-146.422946**	**-163.100761**
+3.95	**817.21521**	**1111.458953**	**1150.283634**	**1414.885711**	**657.0152878**	**886.4257445**	**1006.862563**	**1108.414392**	**1213.114381**
-5	**-7.62E-13**	**-8.98E-13**	**-1.02E-12**	**-1.16E-12**	**-6.58E-13**	**-8.16E-13**	**-7.90E-13**	**-8.86E-13**	**-8.95E-13**
+5	**5.23E-13**	**6.62E-13**	**6.76E-13**	**9.03E-13**	**4.21E-13**	**5.01E-13**	**5.55E-13**	**6.16E-13**	**6.44E-13**

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-6.40E-13	-6.61E-13	-5.52E-13	-5.54E-13	-5.75E-13
End Shear	5.69E-13	5.42E-13	5.32E-13	5.17E-13	4.81E-13
-0.05	-295.7734114	-327.6004153	-185.516945	-223.06951	-241.03682
+0.05	2056.55811	2226.781226	1332.311384	1605.47073	1711.778212
-0.1	-591.5468227	-655.2008306	-371.033889	-446.139021	-482.073641
+0.1	3799.185757	4125.568417	2467.685047	2974.005488	3167.568884
-0.15	-887.3202341	-982.8012459	-556.550834	-669.208531	-723.110461
+0.15	5290.228147	5732.332915	3408.348726	4117.802984	4391.092211
-0.2	-1183.093645	-1310.401661	-742.067779	-892.278042	-964.147281
+0.2	6484.91368	7115.629505	4203.989878	5068.931809	5397.242598
-0.25	-1478.867057	-1638.002076	-927.584723	-1115.34755	-1205.1841
+0.25	7435.916189	8189.295831	4819.773422	5797.477777	6209.153759
-0.3	-1774.640468	-1965.602492	-1113.10167	-1338.41706	-1446.22092
+0.3	8162.921165	9004.508814	5265.633411	6315.675931	6792.770803
-0.35	-2070.413879	-2293.202907	-1298.61861	-1561.48657	-1687.25774
+0.35	8650.026295	9533.957081	5559.185022	6658.729386	7155.106405
-0.4	-2366.187291	-2620.803322	-1484.13556	-1784.55608	-1928.29456
+0.4	8932.653703	9794.089839	5687.882063	6804.467387	7335.629582
-0.45	-2661.960702	-2948.403738	-1669.6525	-2007.62559	-2169.33138
+0.45	8955.549516	9870.950769	5659.603932	6762.612189	7312.59174
-0.5	-2957.734114	-3276.004153	-1855.16945	-2230.6951	-2410.3682
+0.5	8799.061663	9675.562257	5578.707011	6668.503873	7202.299451
-0.55	-3253.507525	-3603.604568	-2040.68639	-2453.76461	-2651.40502
+0.55	8428.689285	9235.061692	5384.821169	6441.524859	6938.240956
-0.6	-3549.280936	-3931.204983	-2226.20334	-2676.83413	-2892.44184
+0.6	7844.453987	8640.172408	5049.095489	6043.470738	6491.697678
-0.65	-3845.054348	-4258.805399	-2411.72028	-2899.90364	-3133.47866
+0.65	7074.621698	7817.320748	4583.943604	5488.908615	5898.064814
-0.7	-4140.827759	-4586.405814	-2597.23723	-3122.97315	-3374.51548
+0.7	6156.527475	6789.798879	4002.947757	4794.038567	5152.565229
-0.75	-4436.60117	-4914.006229	-2782.75417	-3346.04266	-3615.5523
+0.75	5073.626899	5580.693107	3320.857672	3984.953614	4272.165973
-0.8	-4732.374582	-5241.606645	-2968.27112	-3569.11217	-3856.58912
+0.8	3851.139625	4223.545089	2555.864488	3067.704388	3277.296255
-0.85	-5028.147993	-5569.20706	-3153.78806	-3792.18168	-4097.62595
+0.85	2516.157549	2745.410822	1718.314014	2060.916351	2189.90008
-0.9	-5323.921404	-5896.807475	-3339.305	-4015.25119	-4338.66277
+0.9	1162.562367	1286.084947	834.8720315	1016.534998	1041.911981
-0.95	-5619.694816	-6224.40789	-3524.82195	-4238.3207	-4579.69959
+0.95	1227.149165	1357.53411	770.9238119	927.7982482	1001.393124
-1	-5915.468217	-6552.008312	-3710.33894	-4461.3902	-4820.73632
+1	1291.73596	1428.983254	811.4987575	976.6297353	1054.098012
(Span 2) -2	-5915.468217	-6552.008312	-3710.33894	-4461.3902	-4820.73632
+2	1291.73596	1428.983254	811.4987575	976.6297353	1054.098012
-2.05	-4293.537451	-4749.753356	-2697.30066	-3246.17143	-3503.66446
+2.05	997.7741996	1103.787975	626.8251044	754.3770405	814.2157792
-2.1	-3999.57569	-4424.55627	-2512.627	-3023.91874	-3263.78222
+2.1	1534.45487	1654.10033	1088.312983	1290.830531	1349.480489
-2.15	-3705.613929	-4099.359184	-2327.95335	-2801.66604	-3023.89999
+2.15	3181.19674	3496.417566	2140.518429	2552.251737	2722.73011
-2.2	-3411.652169	-3774.162097	-2143.27969	-2579.41334	-2784.01776
+2.2	4726.426218	5214.246585	3111.815826	3719.899524	3985.10361

-2.25	**-3117.690408**	**-3448.965011**	**-1958.60604**	**-2357.16064**	**-2544.13553**
+2.25	**6099.149178**	**6737.353676**	**3971.610737**	**4752.226783**	**5101.919625**
-2.3	**-2823.728647**	**-3123.767925**	**-1773.93239**	**-2134.90795**	**-2304.25329**
+2.3	**7277.107503**	**8026.18542**	**4697.377016**	**5621.938973**	**6040.178053**
-2.35	**-2529.766887**	**-2798.570839**	**-1589.25873**	**-1912.65525**	**-2064.37106**
+2.35	**8222.913118**	**9042.680021**	**5272.405616**	**6308.412598**	**6785.40987**
-2.4	**-2235.805126**	**-2473.373753**	**-1404.58508**	**-1690.40255**	**-1824.48883**
+2.4	**8904.773921**	**9773.068542**	**5674.417022**	**6787.336881**	**7317.447909**
-2.45	**-1941.843365**	**-2148.176666**	**-1219.91142**	**-1468.14986**	**-1584.6066**
+2.45	**9310.906477**	**10249.38224**	**5902.022974**	**7056.896027**	**7619.898382**
-2.5	**-1647.881605**	**-1822.97958**	**-1035.23777**	**-1245.89716**	**-1344.72436**
+2.5	**9429.020231**	**10411.01426**	**5949.282731**	**7107.251973**	**7689.828137**
-2.55	**-1941.843408**	**-2148.164811**	**-1219.91143**	**-1468.14991**	**-1584.60655**
+2.55	**9310.911969**	**10249.09709**	**5902.026326**	**7056.891458**	**7619.900278**
-2.6	**-2235.805169**	**-2473.360089**	**-1404.58508**	**-1690.4026**	**-1824.48878**
+2.6	**8904.772723**	**9771.758252**	**5674.423271**	**6787.343215**	**7317.451784**
-2.65	**-2529.76693**	**-2798.555368**	**-1589.25873**	**-1912.6553**	**-2064.37101**
+2.65	**8222.916725**	**9042.679924**	**5272.409824**	**6308.416793**	**6785.411131**
-2.7	**-2823.728691**	**-3123.750646**	**-1773.93239**	**-2134.90799**	**-2304.25325**
+2.7	**7277.107543**	**8026.184332**	**4697.377575**	**5621.939783**	**6040.17714**
-2.75	**-3117.690451**	**-3448.945925**	**-1958.60604**	**-2357.16069**	**-2544.13548**
+2.75	**6099.153853**	**6737.278428**	**3971.613002**	**4752.228658**	**5101.923567**
-2.8	**-3411.652212**	**-3774.141204**	**-2143.27969**	**-2579.41338**	**-2784.01771**
+2.8	**4726.426512**	**5214.245615**	**3111.81816**	**3719.900917**	**3985.103857**
-2.85	**-3705.613973**	**-4099.336482**	**-2327.95334**	**-2801.66608**	**-3023.89994**
+2.85	**3181.196993**	**3496.437993**	**2140.519474**	**2552.252914**	**2722.727425**
-2.9	**-3999.575734**	**-4424.531761**	**-2512.627**	**-3023.91877**	**-3263.78218**
+2.9	**1534.453195**	**1653.654302**	**1088.316384**	**1290.831263**	**1349.47935**
-2.95	**-4293.537494**	**-4749.72704**	**-2697.30065**	**-3246.17147**	**-3503.66441**
+2.95	**997.7742418**	**1103.794196**	**626.8251237**	**754.3771115**	**814.2157289**
-3	**-5915.468231**	**-6552.008265**	**-3710.33904**	**-4461.39032**	**-4820.73642**
+3	**1291.73596**	**1428.991215**	**811.498764**	**976.6297445**	**1054.098011**
(Span 3) -4	**-5.92E+03**	**-6.55E+03**	**-3.71E+03**	**-4.46E+03**	**-4.82E+03**
+4	**1.29E+03**	**1.43E+03**	**8.11E+02**	**9.77E+02**	**1.05E+03**
-3.05	**-5619.694819**	**-6224.407852**	**-3524.82209**	**-4238.3208**	**-4579.69959**
+3.05	**1227.149162**	**1357.541654**	**770.9238262**	**927.7982573**	**1001.39311**
-3.1	**-5323.921407**	**-5896.807439**	**-3339.30514**	**-4015.25129**	**-4338.66277**
+3.1	**1162.562364**	**1286.092094**	**834.875301**	**1016.537659**	**1041.918988**
-3.15	***-5028.147995***	***-5569.207026***	***-3153.78819***	***-3792.18177***	***-4097.62594***
+3.15	**2516.161812**	**2747.953491**	**1718.314678**	**2060.918056**	**2189.9053**
-3.2	**-4732.374583**	**-5241.606614**	**-2968.27124**	**-3569.11225**	**-3856.58912**
+3.2	**3851.144573**	**4225.735551**	**2555.865209**	**3067.706298**	**3277.301818**
-3.25	**-4436.601171**	**-4914.006201**	**-2782.75429**	**-3346.04274**	**-3615.55229**
+3.25	**5073.631488**	**5583.156478**	**3320.857247**	**3984.955023**	**4272.171526**
-3.3	**-4140.827759**	**-4586.405788**	**-2597.23734**	**-3122.97322**	**-3374.51547**
+3.3	**6156.531027**	**6789.797499**	**4002.946463**	**4794.038035**	**5152.569209**
-3.35	**-3845.054347**	**-4258.805375**	**-2411.72039**	**-2899.90371**	**-3133.47864**
+3.35	**7074.62333**	**7816.184739**	**4583.941293**	**5488.906954**	**5898.06693**
-3.4	**-3549.280935**	**-3931.204962**	**-2226.20344**	**-2676.83419**	**-2892.44182**
+3.4	**7844.45136**	**8640.173656**	**5049.091413**	**6043.467113**	**6491.697315**
-3.45	**-3253.507523**	**-3603.604549**	**-2040.68649**	**-2453.76467**	**-2651.40499**
+3.45	**8430.124297**	**9235.063033**	**5384.815059**	**6441.517789**	**6938.23764**
-3.5	**-2957.734111**	**-3276.004136**	**-1855.16954**	**-2230.69516**	**-2410.36817**
+3.5	**8799.065667**	**9678.41991**	**5578.698266**	**6668.507604**	**7202.292534**
-3.55	**-2661.960698**	**-2948.403723**	**-1669.65259**	**-2007.62564**	**-2169.33134**
+3.55	**8956.731113**	**9870.949412**	**5659.599279**	**6762.610351**	**7312.586552**
-3.6	**-2366.187286**	**-2620.80331**	**-1484.13564**	**-1784.55612**	**-1928.29452**

+3.6	**8932.661909**	**9794.091207**	**5687.874934**	**6804.462555**	**7335.620536**
-3.65	**-2070.413874**	**-2293.202897**	**-1298.61869**	**-1561.48661**	**-1687.25769**
+3.65	**8650.029586**	**9533.957626**	**5559.174204**	**6658.720168**	**7155.107213**
-3.7	**-1774.640462**	**-1965.602484**	**-1113.10174**	**-1338.41709**	**-1446.22087**
+3.7	**8162.918094**	**9005.195757**	**5265.634618**	**6315.676518**	**6792.767149**
-3.75	**-1478.86705**	**-1638.002071**	**-927.584794**	**-1115.34757**	**-1205.18404**
+3.75	**7435.909074**	**8189.297048**	**4819.770739**	**5797.473926**	**6209.145127**
-3.8	**-1183.093638**	**-1310.401658**	**-742.067844**	**-892.278056**	**-964.147216**
+3.8	**6486.097013**	**7115.630042**	**4203.983962**	**5068.924117**	**5397.236234**
-3.85	**-887.320226**	**-982.8012454**	**-556.550895**	**-669.208539**	**-723.110391**
+3.85	**5290.234021**	**5734.762571**	**3408.345479**	**4117.803612**	**4391.094098**
-3.9	**-591.546814**	**-655.2008325**	**-371.033945**	**-446.139022**	**-482.073565**
+3.9	**3799.184905**	**4125.568548**	**2467.678147**	**2974.001574**	**3167.565704**
-3.95	**-295.7734019**	**-327.6004196**	**-185.516995**	**-223.069506**	**-241.03674**
+3.95	**2056.551486**	**2226.782241**	**1332.301653**	**1605.463263**	**1711.77078**
-5	**-1.89E-12**	**-2.34E-12**	**-1.26E-12**	**-1.39E-12**	**-1.45E-12**
+5	**1.09E-12**	**1.11E-12**	**7.52E-13**	**8.79E-13**	**9.78E-13**

3-Span: Shear (Max and Min) Raw Data Results - 190' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.265744374	-5.752202595	-8.30277085	-8.966612982	-14.98252887	-4.607199242	-6.222000994	-7.133455431	-7.992191725	-8.90251689
End Shear	67.64059305	47.71794643	65.19066826	67.68001378	88.92597366	38.36359823	51.7404626	58.80680138	64.78296971	70.98211125
-0.05	-8.265744374	-5.752202595	-8.30277085	-8.966612982	-15.03809011	-4.607199242	-6.222000994	-7.133455431	-7.992191725	-8.90251689
+0.05	63.11125533	44.56659076	60.61998497	62.72791817	80.39917849	35.84032232	48.33505567	54.90125371	60.41144871	66.11602388
-0.1	-8.265744374	-5.752202595	-8.30277085	-8.966612982	-15.22312953	-4.607199242	-6.222000994	-7.133455431	-7.992191725	-8.90251689
+0.1	58.52734263	41.34607416	55.95626472	57.68208342	71.85002101	33.26207	44.85452395	50.91022157	55.94649785	61.14845931
-0.15	-8.710151672	-6.786676774	-8.30277085	-8.966612982	-15.50019009	-5.61895856	-7.536099753	-8.054266623	-8.033679267	-8.90251689
+0.15	54.39600567	38.47041422	51.80512444	53.20122913	64.44623069	30.95937064	41.74611347	47.3475638	51.96396471	56.72115164
-0.2	-13.3301444	-9.997134927	-10.11900968	-8.966612982	-15.92996132	-8.186358463	-11.00272123	-12.03820377	-12.36839414	-12.5413949
+0.2	49.85898535	35.31009564	47.25802024	48.30484149	56.56449959	28.42812773	38.32934676	43.43338177	47.59207169	51.86500759
-0.25	-17.46160366	-12.86003104	-14.18219339	-12.44637171	-16.42540973	-10.47528381	-14.09347904	-15.59185798	-16.36222453	-17.0049842
+0.25	45.83560401	32.50545234	43.23648898	43.98543308	49.7999484	26.18120678	35.29650965	39.96076732	43.71669446	47.56407599
-0.3	-21.99923814	-16.00204027	-18.82896888	-17.00086477	-18.4001834	-12.98677081	-17.48492536	-19.49312574	-20.75032074	-21.91316662
+0.3	41.44550881	29.44275019	38.86078942	39.29836458	42.80544023	23.72690644	31.98391733	36.16983193	39.4898681	42.87735053
-0.35	-26.02360678	-18.78649233	-22.96042819	-21.54807428	-22.51900159	-15.21190461	-20.48984016	-22.95149515	-24.64356635	-26.27148531
+0.35	37.57863557	26.74280138	35.0181703	35.19429231	36.94693499	21.56270639	29.06302453	32.82902016	35.7684586	38.75499794
-0.4	-30.41530867	-21.8226342	-27.48072824	-26.53480423	-27.16105621	-17.63754328	-23.76569767	-26.72369247	-28.89389387	-31.03369807
+0.4	33.38940692	23.8151332	30.86865974	30.77642872	31.18682696	19.21528579	25.89502449	29.20773627	31.73871545	34.2956954
-0.45	-34.28409232	-24.49496393	-31.47369927	-30.95047417	-31.4501215	-19.77194295	-26.64839467	-30.04501931	-32.63973945	-35.23454414
+0.45	29.72758613	21.25355466	27.25426563	26.94158507	26.41842308	17.16074422	23.12244696	26.04048753	28.21808587	30.40412616
-0.5	-38.47596863	-27.38781932	-35.81273842	-35.76111316	-37.33660131	-22.08180018	-29.76825272	-33.64174342	-36.70028509	-39.79278648
+0.5	25.79316544	18.49834235	23.38572444	22.85279588	21.77185364	14.95013666	20.13944509	22.63525161	24.43743832	26.23024705
-0.55	-42.14066338	-29.91435187	-39.61792084	-39.99135672	-42.83996957	-24.09852514	-32.4923642	-36.78426763	-40.2519208	-43.78395464
+0.55	22.38494735	16.10881204	20.04886049	19.34106165	17.96474309	13.03219979	17.55155454	19.68332706	21.16439893	22.62165996
-0.6	-46.07883292	-32.62649793	-43.72090915	-44.5660267	-49.72929647	-26.26266506	-35.4158066	-40.15912316	-44.0706702	-48.08022404
+0.6	18.75927565	13.56347323	16.51608103	15.64123441	14.47884795	10.98833779	14.79396632	16.54053716	17.68486119	18.79120616
-0.65	-49.49093905	-34.97355608	-47.28899788	-48.55695366	-56.14542953	-28.13477391	-37.94496069	-43.08108135	-47.38128381	-51.80951943
+0.65	15.65320699	11.37966728	13.50605326	12.50650523	11.61353359	9.233945725	12.4271352	13.8456983	14.70622936	15.51779938
-0.7	-53.12151388	-37.46757648	-51.10115436	-52.83578016	-64.140665	-30.12326323	-40.63157939	-46.18766558	-50.90622251	-55.78581094
+0.7	12.3902237	9.081619043	10.36381322	9.255510576	8.697516154	7.386766025	9.935372733	11.01175659	11.57981486	12.08877256
-0.75	-56.2325312	-39.60148328	-54.38283619	-56.53349791	-71.50776463	-31.82381416	-42.9294029	-48.84730024	-53.92900143	-59.20102896
+0.75	9.634850911	7.137214662	7.729928694	6.761355087	6.476075264	5.822855635	7.825970255	8.615761215	8.942399838	9.202750817
-0.8	-59.50161859	-41.83996074	-57.84937099	-60.45660141	-79.9287719	-33.60671728	-45.33878397	-51.63921436	-57.10811736	-62.79934796
+0.8	6.788502849	5.123878087	5.11104308	4.348173891	4.360297689	4.202295458	5.640445908	6.137068005	6.221122434	6.2331527
-0.85	-62.26304975	-43.72703877	-60.79534205	-63.80722328	-87.39727967	-35.1087725	-47.3689113	-53.99476528	-59.79624896	-65.84828657
+0.85	4.432372593	3.452552155	3.144722516	2.816735681	3.182568945	2.855810573	3.824839726	4.081675698	4.072215839	4.072030304
-0.9	-65.11676961	-45.67255267	-63.86147285	-67.31472568	-95.54414116	-36.65615262	-49.46063892	-56.42560889	-62.57752814	-69.01062836
+0.9	2.255122214	1.78599241	1.819319481	1.954335512	3.029131228	1.491801635	1.985968764	2.121526797	2.121376017	2.121227751
-0.95	-67.48011584	-47.2791248	-66.42243024	-70.26436717	-102.7146403	-37.93276857	-51.18669546	-58.43531646	-64.8842003	-71.64108571
+0.95	1.820772101	1.268239525	1.819319481	1.954335512	2.95068057	1.016323761	1.372739043	1.572849444	1.761792001	1.961552078
-1	-69.86457144	-48.89425618	-69.03337113	-73.29638646	-110.4726822	-39.21469568	-52.92036378	-60.4586896	-67.21562894	-74.30944879
+1	1.82E+00	1.268239525	1.819319481	1.954335512	2.92E+00	1.016323761	1.372739043	1.572849444	1.761792001	1.961552078
(Span 2) -2	-6.374693706	-4.440225332	-6.369607783	-6.84231161	-10.23405783	-3.558244865	-4.806087992	-5.506693145	-6.168198808	-6.867577517
+2	70.01184285	48.95450126	69.37506694	73.88849329	116.6038996	39.25279812	52.9744867	60.55142807	67.37685228	74.55411192
-2.05	-6.374693706	-4.440225332	-6.369607783	-6.84231161	-10.27314386	-3.558244865	-4.806087992	-5.506693145	-6.168198808	-6.867577517
+2.05	67.41057145	47.19269761	66.53215346	70.59908649	108.3401428	37.85438968	51.08306505	58.34360222	64.83158194	71.64068534
-2.1	-6.374693706	-4.440225332	-6.369607783	-6.84231161	-10.40282014	-3.558244865	-4.806087992	-5.506693145	-6.168198808	-6.867577517
+2.1	64.34974062	45.10836505	63.24078088	66.83875268	99.56212943	36.19701638	48.84225969	55.73755531	61.84540446	68.24179991
-2.15	-6.374693706	-4.490620356	-6.369607783	-6.84231161	-10.63597332	-3.684734342	-4.945203163	-5.506693145	-6.168198808	-6.867577517
+2.15	60.9741151	42.80003264	59.65688187	62.78608263	90.69589222	34.35901292	46.35797917	52.85648493	58.55952745	64.51822727
-2.2	-8.999757428	-6.665065806	-7.283463401	-6.84231161	-10.96770375	-5.434993215	-7.305882097	-8.052489753	-8.377800985	-8.643699164
+2.2	57.47831485	40.4017038	55.98274348	58.66593986	82.18010304	32.44732456	43.77469775	49.8671529	55.16263097	60.68218516
-2.25	-12.49050534	-9.125980439	-10.63494948	-9.685330644	-11.43517898	-7.413466812	-9.974935311	-11.08749644	-11.72568279	-12.31399906

+2.25	53.6136939	37.74312636	51.95551472	54.18235326	73.28634221	30.32632634	40.90910722	46.55714801	51.41277359	56.45987497
-2.3	-16.23367138	-11.75655519	-14.27028982	-13.46971508	-14.11660396	-9.526233001	-12.82566929	-14.33562117	-15.32107325	-16.26981539
+2.3	49.56489077	34.95114969	47.76842762	49.55141371	64.61581836	28.09718359	37.89789808	43.08447665	47.48916646	52.05333085
-2.35	-20.02367618	-14.41310702	-17.98564777	-17.37485861	-17.80077046	-11.6581028	-15.70260156	-17.61909986	-18.96599711	-20.29196741
+2.35	45.54573434	32.17377797	43.64003697	45.01256291	56.55159166	25.87819596	34.90082798	39.63291783	43.59854359	47.69377286
-2.4	-24.13371093	-17.2874222	-22.04731002	-21.67881375	-22.55511074	-13.96305053	-18.81352038	-21.17484064	-22.92306326	-24.6697603
+2.4	41.2639513	29.20915647	39.26963706	40.18875907	48.46199661	23.50812695	31.70010944	35.95152972	39.45781834	43.06377261
-2.45	-28.36567641	-20.2407803	-26.26014427	-26.17537491	-27.98252353	-16.32980508	-22.00826048	-24.83134776	-27.00168472	-29.19262028
+2.45	36.92861094	26.20174532	34.78412417	35.35960287	40.82414047	21.10240228	28.45163244	32.21983432	35.26001742	38.35631067
-2.5	-32.67550061	-23.2425782	-30.57935259	-30.81554807	-34.10263129	-18.73387908	-25.25376023	-28.55066255	-31.15930803	-33.81309657
+2.5	32.53592863	23.12186707	30.40497372	30.62766111	33.83607011	18.6372262	25.12327968	28.40104538	30.99189205	33.62685699
-2.55	-36.84523909	-26.20184121	-34.78425295	-35.35974272	-40.82429645	-21.10247901	-28.45174401	-32.21994446	-35.25428079	-38.35058851
+2.55	28.39792498	20.24068581	26.26001848	26.17524093	27.98239725	16.32972365	22.00815796	24.83123974	27.00156342	29.19248579
-2.6	-41.26606695	-29.20925107	-39.26976583	-40.17864516	-48.46216752	-23.50820246	-31.70021996	-35.95163896	-39.45794101	-43.06390891
+2.6	24.16407855	17.28732222	22.04717851	21.67868478	22.55500166	13.9629699	18.81342052	21.174735	22.92294616	24.66963017
-2.65	-45.54644851	-32.17387015	-43.64016328	-45.01270168	-56.55176815	-25.87826928	-34.90093547	-39.63302351	-43.59866295	-47.69390683
+2.65	20.05191115	14.41301739	17.98552161	17.37473566	17.80067719	11.65802558	15.70250415	17.61899767	18.96588343	20.29184247
-2.7	-49.56434569	-34.9512412	-47.76855291	-49.55155117	-64.61599889	-28.09725606	-37.89799633	-43.08458086	-47.48928322	-52.05346201
+2.7	16.25966368	11.75646931	14.27017021	13.46959974	14.11652465	9.526164307	12.82556961	14.33552359	15.32096485	16.2696956
-2.75	-53.61193964	-37.74321363	-51.95563544	-54.18248805	-73.27947552	-30.32639646	-40.90920042	-46.55724748	-51.41288561	-56.46000114
+2.75	12.51399102	9.125896125	10.63484293	9.685223755	11.43517913	7.413401002	9.974843619	11.08739978	11.7255809	12.3138915
-2.8	-57.47552071	-40.40178638	-55.98285857	-58.66606913	-82.18028552	-32.44739287	-43.77478675	-49.8672476	-55.16273771	-60.68230612
+2.8	9.020615877	6.664990212	7.283369802	6.842311802	10.9677039	5.434932948	7.305796947	8.052400329	8.377702331	8.643595725
-2.85	-60.97052516	-42.80010712	-59.65699221	-62.78620549	-90.69607121	-34.35907702	-46.35806526	-52.85657035	-58.55962816	-64.5183413
+2.85	6.374693216	4.490551017	6.369607739	6.842311802	10.63597351	3.684679173	4.945128455	5.506693245	6.168198913	6.867577604
-2.9	-64.34556104	-45.10843742	-63.24088179	-66.83886805	-99.56230444	-36.1970742	-48.84233812	-55.73763269	-61.84549709	-68.24190527
+2.9	6.374693216	4.440225467	6.369607739	6.842311802	10.40282033	3.558244909	4.806088135	5.506693245	6.168198913	6.867577604
-2.95	-67.40609489	-47.19275946	-66.53224937	-70.59919246	-108.340312	-37.8544408	-51.08313436	-58.34367053	-64.83166439	-71.64078377
+2.95	6.374693216	4.440225467	6.369607739	6.842311802	10.27314404	3.558244909	4.806088135	5.506693245	6.168198913	6.867577604
-3	-70.10804275	-49.02247254	-69.48627665	-74.01818458	-116.9437444	-39.30668834	-53.04739408	-60.63672594	-67.47558056	-74.66752181
+3	6.374693216	4.440225467	6.369607739	6.842311802	10.23405799	3.558244909	4.806088135	5.506693245	6.168198913	6.867577604
(Span 3) -4	-1.82E+00	-1.268239564	-1.819319468	-1.954335567	-2.92E+00	-1.016323774	-1.372739084	-1.572849472	-1.761792031	-1.961552103
+4	69.76257779	48.8178363	68.90881709	73.15105926	110.0902998	39.15408437	52.83838232	60.36287904	67.10497253	74.18252873
-3.05	-1.82E+00	-1.268239564	-1.819319468	-1.954335567	-2.95E+00	-1.016323774	-1.372739084	-1.572849472	-1.761792031	-1.961552103
+3.05	67.61718766	47.36413865	66.5588492	70.4221113	103.1078108	38.00028816	51.27799325	58.54174595	65.00657925	71.78087751
-3.1	-2.349252549	-1.845876795	-1.847263471	-1.954335567	-3.035093206	-1.556631517	-2.073357905	-2.204231453	-2.204079838	-2.203933277
+3.1	64.99192806	45.57913139	63.71345652	67.14485395	95.14083699	36.58188659	49.36023701	56.30882955	62.4437105	68.85826451
-3.15	-4.299456027	-3.363840061	-3.057680219	-2.739845573	-3.173138131	-2.784302782	-3.728431027	-3.972634209	-3.96393106	-3.963746451
+3.15	62.42377013	43.82809083	60.95382772	63.98797592	87.80841592	35.1891751	47.4775926	54.12097291	59.94045382	66.01204331
-3.2	-6.913328498	-5.220796271	-5.229447953	-4.449615638	-4.449607991	-4.280337889	-5.745686227	-6.256310667	-6.351845645	-6.375574026
+3.2	59.35574746	41.73141802	57.68063971	60.26517988	79.51031715	33.520291	45.22197489	51.50378737	56.95374245	62.62445401
-3.25	-9.473449454	-7.032876302	-7.589337374	-6.632666443	-6.362255389	-5.738904263	-7.712745258	-8.487230519	-8.801101379	-9.048336029
+3.25	56.41338486	39.71670508	54.56063876	56.73426238	71.93121294	31.91561315	43.05345303	48.99096929	54.09243399	59.38584462
-3.3	-12.53289319	-9.193246017	-10.51576463	-9.412126987	-8.836603624	-7.476522975	-10.05644321	-11.14935476	-11.73146068	-12.25490763
+3.3	52.95653922	37.34577971	50.91442857	52.62580491	63.74196078	30.02617033	40.50039203	46.03591408	50.73389318	55.59126753
-3.35	-15.46785531	-11.26157235	-13.34388689	-12.33815295	-11.46107316	-9.139044856	-12.29911524	-13.70000652	-14.54533764	-15.34115448
+3.35	49.68849505	35.10108312	47.48339255	48.77476201	56.54180796	28.23647556	38.0823492	43.23988337	47.56134584	52.01248095
-3.4	-18.91684973	-13.68794992	-16.68825031	-15.82106198	-14.64469609	-11.08831059	-14.92885197	-16.6941688	-17.85482779	-18.97815277
+3.4	45.89676949	32.49330704	43.51895554	44.34052113	49.38471732	26.15640873	35.27226386	39.99335699	43.88298806	47.86895438
-3.45	-22.17818294	-15.97883249	-19.86787141	-19.15103756	-17.77142048	-12.92784533	-17.41076739	-19.52278396	-20.98651379	-22.42568263
+3.45	42.35162078	30.05229825	39.8261474	40.22319194	43.1793786	24.20862268	32.64107888	36.9559032	40.44601288	44.00219078
-3.5	-25.96284777	-18.63378366	-23.57539594	-23.05284075	-21.99572086	-15.05883397	-20.28611507	-22.80260343	-24.62311966	-26.4350936
+3.5	38.27895561	27.24512352	35.59829506	35.52304531	37.03103928	21.96788528	29.6143764	33.46430774	36.49985308	39.56766565
-3.55	-29.50200824	-21.11355068	-27.05717659	-26.73287528	-26.1658213	-17.04844059	-22.97090147	-25.86740085	-28.02580301	-30.19170498
+3.55	34.50523492	24.64147971	31.69304476	31.19334487	31.71982947	19.88894015	26.80641923	30.22715002	32.84526299	35.46515551
-3.6	-33.56844945	-23.95968218	-31.07306614	-30.99369516	-31.46050023	-19.33119405	-26.05145448	-29.3864672	-31.93751122	-34.5155645
+3.6	30.2055568	21.67230878	27.25651115	26.28716835	26.92741067	17.51745336	23.60351033	26.53688414	28.68331427	30.79765916

-3.65	**-37.33696238**	**-26.59465877**	**-34.80774623**	**-34.9698727**	**-36.63412753**	**-21.44393246**	**-28.90274254**	**-32.64572984**	**-35.56438054**	**-38.52905769**
+3.65	**26.23984925**	**18.93968832**	**23.18815249**	**21.79898739**	**22.74944606**	**15.33432002**	**20.65515374**	**23.14182671**	**24.85792139**	**26.51154874**
-3.7	**-41.63129468**	**-29.59451622**	**-39.07719083**	**-39.52983051**	**-43.14057347**	**-23.84854565**	**-32.14808969**	**-36.357644**	**-39.69917691**	**-43.10931181**
+3.7	**21.76835372**	**15.84594**	**18.59775042**	**16.74665941**	**18.1730982**	**12.86200429**	**17.31645146**	**19.29929151**	**20.53219824**	**21.66911229**
-3.75	**-45.58068507**	**-32.35102351**	**-43.01543808**	**-43.74831441**	**-49.43382449**	**-26.05747332**	**-35.12950584**	**-39.7695659**	**-43.5034183**	**-47.32748279**
+3.75	**17.68431548**	**13.01805649**	**14.41553509**	**12.66343457**	**16.45592738**	**10.60160819**	**14.26406537**	**15.78804745**	**16.58281419**	**17.25163007**
-3.8	**-50.04902095**	**-35.46720635**	**-47.48370363**	**-48.54753384**	**-56.94981524**	**-28.55398203**	**-38.49923483**	**-43.62792787**	**-47.80928988**	**-52.10618607**
+3.8	**13.09386551**	**9.837149678**	**9.909517258**	**8.966613016**	**15.90544297**	**8.058427622**	**10.82998092**	**11.83964154**	**12.14532916**	**12.29219555**
-3.85	**-54.13073791**	**-38.31156773**	**-51.57618475**	**-52.95440782**	**-64.04356011**	**-30.83215854**	**-41.57440952**	**-47.1507964**	**-51.74409277**	**-56.47683528**
+3.85	**8.926989953**	**6.94766188**	**8.30277101**	**8.966613016**	**15.51863923**	**5.747710483**	**7.709936846**	**8.254018533**	**8.231808361**	**8.902516922**
-3.9	**-58.71918911**	**-41.50667623**	**-56.18845901**	**-57.93301075**	**-72.26980942**	**-33.39065881**	**-45.02810797**	**-51.10920589**	**-56.16902533**	**-61.39592753**
+3.9	**8.265751282**	**5.752202678**	**8.30277101**	**8.966613016**	**15.21080176**	**4.607199258**	**6.222001086**	**7.133455485**	**7.992191782**	**8.902516922**
-3.95	**-62.88475998**	**-44.40521483**	**-60.38592194**	**-62.47438517**	**-79.96424196**	**-35.71114299**	**-48.16066954**	**-54.7012129**	**-60.18757657**	**-65.86685247**
+3.95	**8.265751282**	**5.752202678**	**8.30277101**	**8.966613016**	**15.04426227**	**4.607199258**	**6.222001086**	**7.133455485**	**7.992191782**	**8.902516922**
-5	**-67.53946646**	**-47.64179123**	**-65.08739083**	**-67.57249431**	**-88.81436935**	**-38.30166864**	**-51.65792514**	**-58.7132706**	**-64.67955649**	**-70.86839197**
+5	**8.265751282**	**5.752202678**	**8.30277101**	**8.966613016**	**14.98252889**	**4.607199258**	**6.222001086**	**7.133455485**	**7.992191782**	**8.902516922**

3-Span: Shear (Max and Min) Raw Data Results - 190' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.265744374	-7.497103725	-8.070706592	-7.608485008	-9.217748518	-9.644746388	-10.21036072	-4.0202694
End Shear	67.64059305	62.88922101	67.40226656	63.35057867	76.10419393	75.23990297	79.58715439	33.42176634
-0.05	-8.265744374	-7.497103725	-8.070706592	-7.608485008	-9.217748518	-9.644746388	-10.21036072	-4.0202694
+0.05	63.11125533	58.7865221	62.98523993	59.18765625	71.0610281	69.93501167	73.97092241	31.22962075
-0.1	-8.265744374	-7.497103725	-8.070706592	-7.608485008	-9.217748518	-9.644746388	-10.21036072	-4.0202694
+0.1	58.52734263	54.59236293	58.47077522	54.93253907	65.9083454	64.52361184	68.24218748	28.97224049
-0.15	-8.710151672	-9.678075388	-10.09951341	-9.323358742	-10.61957245	-9.644746388	-10.21036072	-4.72900758
+0.15	54.39600567	50.84492526	54.43804978	51.13204284	61.30808547	59.70826769	63.14468911	26.95664259
-0.2	-13.3301444	-13.84647373	-14.59104123	-13.55980885	-15.75976353	-11.28757501	-11.88165791	-6.979639298
+0.2	49.85898535	46.72382426	50.0042339	46.95417748	56.25319807	54.43508021	57.562779	24.74160026
-0.25	-17.46160366	-17.56121759	-18.59465665	-17.3366153	-20.34417105	-16.01513805	-16.87844189	-8.986667266
+0.25	45.83560401	43.06402859	46.06766613	43.24543382	51.76789456	49.77275619	52.62773604	22.77592894
-0.3	-21.99923814	-21.63542939	-22.9867239	-21.4805013	-25.37631991	-21.41647741	-22.5981824	-11.18941734
+0.3	41.44550881	39.06462799	41.76688323	39.19420943	46.87066828	44.70140177	47.26001384	20.62949437
-0.35	-26.02360678	-25.2435124	-26.87724759	-25.15177382	-29.83654869	-26.22014006	-27.68523828	-13.14153071
+0.35	37.57863557	35.53625264	37.9736187	35.62167154	42.55420379	40.24934871	42.54804482	18.73739445
-0.4	-30.41530867	-29.174891	-31.11746513	-29.15370085	-34.70078287	-31.47741349	-33.25292071	-15.27012599
+0.4	33.38940692	31.70719679	33.85825483	31.74648778	37.87451688	35.44344303	37.46186831	16.68584191
-0.45	-34.28409232	-32.63253377	-34.84775027	-32.67498124	-38.98294446	-36.12278111	-38.17280418	-17.14367712
+0.45	29.72758613	28.3540243	30.25544422	28.35460924	33.78077482	31.2589232	33.03360386	14.89095437
-0.5	-38.47596863	-36.37243046	-38.88372745	-36.48555935	-43.61939745	-41.17237154	-43.5210693	-19.17184713
+0.5	25.79316544	24.74395674	26.37788494	24.70485114	29.3784882	26.78207738	28.29632602	12.96055295
-0.55	-42.14066338	-39.6358545	-42.4066276	-39.81239786	-47.6696129	-45.60219645	-48.21316514	-20.94319288
+0.55	22.38494735	21.60976237	23.01267073	21.53808618	25.56135204	22.92234398	24.21238717	11.28652418
-0.6	-46.07883292	-43.13563275	-46.18598676	-43.38222914	-52.01840844	-50.38048176	-53.27464835	-22.84466753
+0.6	18.75927565	18.26732769	19.42530229	18.16315036	21.49634016	18.83818299	19.89137557	9.503544434
-0.65	-49.49093905	-46.16105743	-49.45435385	-46.47017156	-55.78279421	-54.53751078	-57.6783356	-24.49016403
+0.65	15.65320699	15.39589512	16.34483619	15.2659542	18.00969524	15.36049031	16.21238453	7.974020049
-0.7	-53.12151388	-49.37206701	-52.92470229	-49.74986825	-59.78406847	-58.98087912	-62.38568317	-26.23867019
+0.7	12.3902237	12.36973494	13.10004201	12.21523328	14.34182807	11.73262218	12.37498889	6.364733732
-0.75	-56.2325312	-52.11571505	-55.89139134	-52.55445842	-63.20873799	-62.8078496	-66.44033077	-27.73467369
+0.75	9.634850911	9.804841206	10.35146844	9.632057173	11.23955473	8.694225665	9.161569049	5.003356394
-0.8	-59.50161859	-54.98931536	-59.00034682	-55.49462594	-66.80261862	-66.85267888	-70.72617811	-29.30394061
+0.8	6.788502849	7.143606205	7.501641523	6.954944093	8.02870242	5.674050917	5.972685176	3.59403688
-0.85	-62.26304975	-57.40740068	-61.61820375	-57.97141686	-69.83369699	-70.29233915	-74.37116663	-30.62680632
+0.85	4.432372593	4.929026608	5.132103217	4.730237393	5.364678755	3.647667383	3.861017143	2.424450394
-0.9	-65.11676961	-59.89495196	-64.31338507	-60.52265805	-72.96030856	-73.87501599	-78.16815844	-31.99056235
+0.9	2.255122214	2.681356239	2.729624517	2.476128526	2.670715633	2.113755986	2.237550466	1.324816518
-0.95	-67.48011584	-61.94369946	-66.53526738	-62.62719192	-75.54390754	-76.87011539	-81.34286955	-33.11664657
+0.95	1.820772101	1.654791075	1.781117984	1.679008362	2.033682495	2.113755986	2.237550466	0.88524053
-1	-69.86457144	-63.99655026	-68.76428055	-64.7401218	-78.14338948	-79.92702229	-84.5836461	-34.24862028
+1	1.82E+00	1.654791075	1.781117984	1.679008362	2.033682495	2.113755986	2.237550466	0.88524053
(Span 2) -2	-6.374693706	-5.793578546	-6.235861048	-5.878365562	-7.12011282	-7.400457583	-7.833873708	-3.099309934
+2	70.01184285	64.03128719	68.81762637	64.80047902	78.25031639	80.34728204	85.03309253	34.28054538
-2.05	-6.374693706	-5.793578546	-6.235861048	-5.878365562	-7.12011282	-7.400457583	-7.833873708	-3.099309934
+2.05	67.41057145	61.7924143	66.38608161	62.49523427	75.41319758	77.01855825	81.50430891	33.04489878
-2.1	-6.374693706	-5.793578546	-6.235861048	-5.878365562	-7.12011282	-7.400457583	-7.833873708	-3.099309934
+2.1	64.34974062	59.13006131	63.50003122	59.7624028	72.06107064	73.1713451	77.42694712	31.5832221
-2.15	-6.374693706	-6.269491416	-6.580446033	-6.098741274	-7.12011282	-7.400457583	-7.833873708	-3.164776358
+2.15	60.9741151	56.17003934	60.29586511	56.73114114	68.35237987	68.98792833	72.99420478	29.96464676
-2.2	-8.999757428	-9.143040441	-9.658267582	-8.990425925	-10.50267174	-8.201662008	-8.644030937	-4.687428923
+2.2	57.47831485	53.08531119	56.96036344	53.57787576	64.50204526	64.70386959	68.4555943	28.28315356
-2.25	-12.49050534	-12.3846047	-13.1341162	-12.25844687	-14.43187148	-12.07046425	-12.73593914	-6.410982273

+2.25	53.6136939	49.65730185	53.25701438	50.07890306	60.23656284	60.01247555	63.48616919	26.41939764
-2.3	-16.23367138	-15.84025462	-16.84296935	-15.74767262	-18.6343668	-16.2723574	-17.1811316	-8.253590433
+2.3	49.56489077	46.04940656	49.36239272	46.40110266	55.75948824	55.13893241	58.3244801	24.46236049
-2.35	-20.02367618	-19.32214992	-20.58289709	-19.26791924	-22.88040138	-20.57121875	-21.72971536	-10.11455192
+2.35	45.54573434	42.45354696	45.48340592	42.73968132	51.30789502	50.3372799	53.23953341	22.5157992
-2.4	-24.13371093	-23.08197852	-24.62413085	-23.07348343	-27.47646836	-25.27497611	-26.70746895	-12.12816139
+2.4	41.2639513	38.60852774	41.33822378	38.82859295	46.55817866	45.25769189	47.86085468	20.43826757
-2.45	-28.36567641	-26.93809301	-28.77150795	-26.98064627	-32.2008547	-30.15775343	-31.87537289	-14.19721617
+2.45	36.92861094	34.7014335	37.12864216	34.8582835	41.74184766	40.04792543	42.34495212	18.3310695
-2.5	-32.67550061	-30.85071841	-32.98219361	-30.94899896	-37.00457911	-35.1675312	-37.17834761	-16.30021988
+2.5	32.53592863	30.69350634	32.81295772	30.78947377	36.81137199	34.96520317	36.96416629	16.21569601
-2.55	-36.84523909	-34.70155818	-37.12877646	-34.85841987	-41.742013	-40.04807491	-42.34511038	-18.33109016
+2.55	28.39792498	26.93797928	28.77138556	26.98052088	32.2007028	30.1576075	31.87521842	14.19719623
-2.6	-41.26606695	-38.6086511	-41.33835673	-38.82872802	-46.55834259	-45.2578415	-47.86101309	-20.43828305
+2.6	24.16407855	23.08185749	24.62400072	23.07336137	27.47632101	25.27482373	26.70730769	12.12814638
-2.65	-45.54644851	-42.45366674	-45.48353532	-42.73981249	-51.30805472	-50.33742683	-53.23968901	-22.51581357
+2.65	20.05191115	19.32204139	20.58278048	19.26780021	22.88025762	20.57107274	21.72956084	10.11453194
-2.7	-49.56434569	-46.04952485	-49.3625204	-46.40122264	-55.75963408	-55.13907813	-58.32463442	-24.46238069
+2.7	16.25966368	15.84014234	16.8428488	15.74755063	18.63421984	16.27221902	17.18098518	8.253571625
-2.75	-53.61193964	-49.65740537	-53.25712616	-50.0790169	-60.23670131	-60.01261612	-63.48631808	-26.41941856
+2.75	12.51399102	12.38450198	13.13400597	12.25833469	14.43173631	12.07034121	12.735809	6.410963565
-2.8	-57.47552071	-53.08541756	-56.96047841	-53.57798427	-64.50217768	-64.70400365	-68.45573631	-28.28317296
+2.8	9.020615877	9.142940483	9.658160435	8.990321597	10.50254649	8.201554121	8.643916846	4.687416056
-2.85	-60.97052516	-56.17013498	-60.29596844	-56.73124611	-68.3525078	-68.98805703	-72.99434112	-29.96466084
+2.85	6.374693216	6.269399953	6.580348158	6.098649702	7.120112708	7.400457781	7.833873647	3.164765099
-2.9	-64.34556104	-59.13015033	-63.50012765	-59.7624985	-72.06118816	-73.17146302	-77.42707208	-31.58323594
+2.9	6.374693216	5.793578487	6.2358611	5.878365589	7.120112708	7.400457781	7.833873647	3.099309975
-2.95	-67.40609489	-61.79249042	-66.38616426	-62.49531872	-75.41330141	-77.01867053	-81.50442791	-33.04491141
+2.95	6.374693216	5.793578487	6.2358611	5.878365589	7.120112708	7.400457781	7.833873647	3.099309975
-3	-70.10804275	-64.11737396	-68.91123689	-64.88930038	-78.35987011	-80.47763646	-85.17130418	-34.32819535
+3	6.374693216	5.793578487	6.2358611	5.878365589	7.120112708	7.400457781	7.833873647	3.099309975
(Span 3) -4	-1.82E+00	-1.654791059	-1.781117999	-1.67900837	-2.033682464	-2.113756043	-2.237550449	-0.885240542
+4	69.76257779	63.89962091	68.65895737	64.64023102	78.02033852	79.78110014	84.42893153	34.19509486
-3.05	-1.82E+00	-1.654791059	-1.781117999	-1.67900837	-2.033682464	-2.113756043	-2.237550449	-0.885240542
+3.05	67.61718766	62.05194798	66.65273001	62.73848707	75.68067502	77.02974329	81.51208371	33.17626702
-3.1	-2.349252549	-2.788305482	-2.843870679	-2.583276196	-2.798623471	-2.113756043	-2.237550449	-1.361873346
+3.1	64.99192806	59.77565905	64.18407656	60.40021916	72.81013445	73.70198932	77.9847691	31.92511631
-3.15	-4.299456027	-4.811308541	-5.00620903	-4.612083338	-5.223322633	-3.562125312	-3.770112213	-2.362345091
+3.15	62.42377013	57.53675805	61.7583004	58.10399253	69.99605163	70.4774513	74.56734004	30.69768372
-3.2	-6.913328498	-7.271850801	-7.638919959	-7.083875735	-8.18322302	-5.81070459	-6.116531147	-3.661832098
+3.2	59.35574746	54.85009576	58.84967736	55.35209971	66.62830436	66.65573804	70.51749203	29.2278873
-3.25	-9.473449454	-9.667068683	-10.2038788	-9.493384114	-11.07311973	-8.532120132	-8.990139659	-4.930270648
+3.25	56.41338486	52.26374945	56.05150322	52.70585235	63.39369453	63.0152527	66.66008225	27.81549662
-3.3	-12.53289319	-12.51685143	-13.25774247	-12.36347865	-14.51996749	-11.90798727	-12.56046956	-6.442858763
+3.3	52.95653922	49.21535754	52.75529613	49.58973426	59.58861892	58.76318279	62.1550448	26.15333017
-3.35	-15.46785531	-15.24049864	-16.17816841	-15.1092324	-17.82117507	-15.17319206	-16.01425639	-7.891266886
+3.35	49.68849505	46.32534044	49.63186568	46.63790213	55.98734531	54.76404092	57.91831515	24.57962381
-3.4	-18.91684973	-18.43087893	-19.60080045	-18.3282469	-21.69511303	-19.03716524	-20.10188679	-9.590684204
+3.4	45.89676949	42.96387135	46.00046964	43.2069601	51.80482188	50.14524299	53.02545978	22.75134501
-3.45	-22.17818294	-21.43916378	-22.82953291	-21.36579422	-25.35375116	-22.71304896	-23.99094424	-11.19541574
+3.45	42.35162078	39.81395653	42.59892309	39.99400573	47.89077728	45.84464845	48.46997903	21.03996802
-3.5	-25.96284777	-24.92150898	-26.56855965	-24.88431655	-29.5948859	-27.00152303	-28.52852849	-13.05539299
+3.5	38.27895561	36.18804637	38.68471523	36.29762599	43.39066823	40.92276961	43.25669681	19.07185979
-3.55	-29.50200824	-28.17066189	-30.05846232	-28.16920225	-33.55706925	-31.03079313	-32.79219385	-14.79280759
+3.55	34.50523492	32.82202181	35.05220903	32.86800191	39.21773461	36.37800467	38.44311679	17.24645544
-3.6	-33.56844945	-31.89631722	-34.0614864	-31.93784796	-38.10554075	-35.680139	-37.71235997	-16.78707056
+3.6	30.2055568	28.98031275	30.90757325	28.95557557	34.45990789	31.21660226	32.97670368	15.16478679

-3.65	**-37.33696238**	**-35.34256024**	**-37.76541371**	**-35.42562082**	**-42.31738911**	**-40.00559409**	**-42.29006704**	**-18.63351997**
+3.65	**26.23984925**	**25.44195863**	**27.09125517**	**25.35373722**	**30.08197104**	**26.48495335**	**27.96568062**	**13.24900021**
-3.7	**-41.63129468**	**-39.26288223**	**-41.98004968**	**-39.39499818**	**-47.11332864**	**-44.95216634**	**-47.5254258**	**-20.73579933**
+3.7	**21.76835372**	**21.433096**	**22.76857877**	**21.27465799**	**25.12629762**	**21.14767616**	**22.31352948**	**11.08004212**
-3.75	**-45.58068507**	**-42.86243348**	**-45.85085206**	**-43.04120155**	**-51.52095522**	**-49.51652194**	**-52.35652045**	**-22.66764045**
+3.75	**17.68431548**	**17.76619153**	**18.81559571**	**17.5450576**	**20.5972388**	**16.28633441**	**17.16561868**	**9.097517124**
-3.8	**-50.04902095**	**-46.92877843**	**-50.22471434**	**-47.16191797**	**-56.50449271**	**-54.69676299**	**-57.83977554**	**-24.85166433**
+3.8	**13.09386551**	**13.63881732**	**14.36726235**	**13.34871684**	**15.50358713**	**11.0432011**	**11.62442222**	**6.867540479**
-3.85	**-54.13073791**	**-50.63786012**	**-54.21524645**	**-50.92210023**	**-61.05401678**	**-59.44273318**	**-62.86360209**	**-26.84525349**
+3.85	**8.926989953**	**9.887167927**	**10.32478946**	**9.535808386**	**10.87729018**	**9.644746474**	**10.2103609**	**4.841921065**
-3.9	**-58.71918911**	**-54.80158339**	**-58.69594866**	**-55.14476267**	**-66.16528223**	**-64.79299509**	**-68.5273616**	**-29.08475031**
+3.9	**8.265751282**	**7.497103896**	**8.070706603**	**7.608484996**	**9.217748691**	**9.644746474**	**10.2103609**	**4.020269405**
-3.95	**-62.88475998**	**-58.57641534**	**-62.75906257**	**-58.97446949**	**-70.80281975**	**-69.66338817**	**-73.68336412**	**-31.11644308**
+3.95	**8.265751282**	**7.497103896**	**8.070706603**	**7.608484996**	**9.217748691**	**9.644746474**	**10.2103609**	**4.020269405**
-5	**-67.53946646**	**-62.7888737**	**-67.29421973**	**-63.24968519**	**-75.9819429**	**-75.12002064**	**-79.46023362**	**-33.38514209**
+5	**8.265751282**	**7.497103896**	**8.070706603**	**7.608484996**	**9.217748691**	**9.644746474**	**10.2103609**	**4.020269405**

3-Span: Shear (Max and Min) Raw Data Results - 190' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.265744374	-18.00696547	-19.94462362	-11.29444733	-13.58068311	-14.67454996
End Shear	67.64059305	134.9565607	146.3909032	87.27252021	105.110806	112.1772909
-0.05	-8.265744374	-18.00696547	-19.94462362	-11.29444733	-13.58068311	-14.67454996
+0.05	63.11125533	125.0464808	135.5685505	81.04712957	97.63479096	104.0971488
-0.1	-8.265744374	-18.00696547	-19.94462362	-11.29444733	-13.58068311	-14.67454996
+0.1	58.52734263	114.9514115	124.3989042	74.6994781	90.01067392	95.86013032
-0.15	-8.710151672	-18.00696547	-19.94462362	-11.29444733	-13.58068311	-14.67454996
+0.15	54.39600567	105.9876944	114.4910515	69.0546499	83.22957448	88.53881411
-0.2	-13.3301444	-18.00696547	-19.94462362	-12.19812045	-15.03186531	-14.73959804
+0.2	49.85898535	96.19386381	103.6771604	62.87727085	75.80741922	80.5309808
-0.25	-17.46160366	-24.08328516	-24.50603899	-17.58009479	-21.49022294	-21.64683382
+0.25	45.83560401	87.55514884	94.14945428	57.41936729	69.2485009	73.45971736
-0.3	-21.99923814	-33.64631631	-33.89814136	-23.94227697	-29.1236478	-29.86242906
+0.3	41.44550881	78.18231036	83.82455461	51.48710469	62.11811995	65.77836953
-0.35	-26.02360678	-42.75209543	-44.04770225	-29.60399147	-35.91556573	-37.23700043
+0.35	37.57863557	69.97638674	74.79690948	46.28348624	55.86221443	59.04472213
-0.4	-30.41530867	-52.73935737	-55.19079737	-35.8043616	-43.35244881	-45.31732494
+0.4	33.38940692	61.14429056	65.09426453	40.67118643	49.11342337	51.78716679
-0.45	-34.28409232	-61.58416381	-65.06936038	-41.28676332	-49.92706324	-52.46584001
+0.45	29.72758613	53.47892813	56.68660336	35.78921226	43.24136275	45.47871086
-0.5	-38.47596863	-71.22158039	-75.84471384	-47.25046329	-57.07757826	-60.24634189
+0.5	25.79316544	45.3073391	47.73945013	30.57171259	36.96396705	38.74223811
-0.55	-42.14066338	-79.69764868	-85.33234199	-52.486191	-63.35405411	-67.08123586
+0.55	22.38494735	38.29030408	40.07168041	26.07874453	31.55658458	32.94654375
-0.6	-46.07883292	-88.86547126	-95.60671334	-58.13838413	-70.12839562	-74.46461841
+0.6	18.75927565	30.89896923	32.01326959	21.33090281	25.84041295	26.82845424
-0.65	-49.49093905	-96.86501701	-104.5834905	-63.06007354	-76.02589749	-80.89831808
+0.65	15.65320699	24.63806547	25.20534154	17.29429862	20.97853834	21.63308851
-0.7	-53.12151388	-105.4434878	-114.2236196	-68.32591991	-82.33425719	-87.78728095
+0.7	12.3902237	18.1467385	18.19268369	13.09094438	15.9133865	16.23068099
-0.75	-56.2325312	-112.8587238	-122.5696246	-72.8662105	-87.77195162	-93.73221984
+0.75	9.634850911	12.99713352	13.22092745	9.578065108	11.67785302	11.74004046
-0.8	-59.50161859	-120.7281069	-131.4422733	-77.67085752	-93.52450711	-100.0294661
+0.8	6.788502849	8.241287877	8.661409104	6.213453877	7.563163487	7.438881259
-0.85	-62.26304975	-127.4512603	-139.0375956	-81.76239152	-98.42156471	-105.3980735
+0.85	4.432372593	5.031811258	5.192207395	4.325656667	4.74911273	5.053805407
-0.9	-65.11676961	-134.4917753	-147.0095148	-86.03100583	-103.5285157	-111.0063035
+0.9	2.255122214	3.932105455	4.34989277	2.47024063	2.972907172	3.208724317
-0.95	-67.48011584	-140.4150708	-153.7342049	-89.60642386	-107.8041054	-115.711011
+0.95	1.820772101	3.932105455	4.34989277	2.47024063	2.972907172	3.208724317
-1	-69.86457144	-146.5069754	-160.6721466	-93.26414876	-112.1756235	-120.5329266
+1	1.82E+00	3.932105455	4.34989277	2.47024063	2.972907172	3.208724317
(Span 2) -2	-6.374693706	-13.76666959	-15.22938202	-8.6485438	-10.40842661	-11.23404428
+2	70.01184285	147.6982167	162.1439698	93.83417562	112.836071	121.34757
-2.05	-6.374693706	-13.76666959	-15.22938202	-8.6485438	-10.40842661	-11.23404428
+2.05	67.41057145	141.0838509	154.6164039	89.85602081	108.0792981	116.1050742
-2.1	-6.374693706	-13.76666959	-15.22938202	-8.6485438	-10.40842661	-11.23404428
+2.1	64.34974062	133.5290187	146.0621162	85.27464011	102.59648	110.0849594
-2.15	-6.374693706	-13.76666959	-15.22938202	-8.6485438	-10.40842661	-11.23404428
+2.15	60.9741151	125.392414	136.8877712	80.30725419	96.64751651	103.5728025
-2.2	-8.999757428	-13.76666959	-15.22938202	-9.056176899	-11.03712229	-11.23404428
+2.2	57.47831485	117.1248829	127.5982278	75.23227611	90.5661977	96.93210075
-2.25	-12.49050534	-19.04266108	-19.35588285	-13.5307486	-16.43253294	-16.85919682

+2.25	53.6136939	108.1322115	117.5247557	69.68597285	83.91676753	89.68642448
-2.3	-16.23367138	-26.60811115	-27.5859772	-18.40672196	-22.30668413	-23.13696035
+2.3	49.56489077	98.84772524	107.153848	63.93491266	77.01868805	82.18430631
-2.35	-20.02367618	-34.41795601	-36.11910396	-23.40846893	-28.32807787	-29.58982224
+2.35	45.54573434	89.751047	97.01918747	58.27808779	70.23079571	74.81490629
-2.4	-24.13371093	-43.0282812	-45.56094753	-28.89358022	-34.9274298	-36.67856801
+2.4	41.2639513	80.14221585	86.3815882	52.30331634	63.05849815	67.04106012
-2.45	-28.36567641	-52.02670823	-55.45970261	-34.59885567	-41.7880388	-44.06327862
+2.45	36.92861094	70.41400951	75.76923841	46.1852469	55.71116054	59.09083571
-2.5	-32.67550061	-61.31527101	-65.70636283	-40.46308614	-48.83645155	-51.66435844
+2.5	32.53592863	60.93908845	65.29114393	40.22605718	48.55161945	51.35693171
-2.55	-36.84523909	-70.41429025	-75.76930817	-46.1854233	-55.71137228	-59.09106465
+2.55	28.39792498	52.02641691	55.45966284	34.5986858	41.78783428	44.06305837
-2.6	-41.26606695	-80.12784858	-86.38165657	-52.3034915	-63.05870856	-67.04128815
+2.6	24.16407855	43.02802157	45.56090882	28.89341511	34.92723186	36.67833753
-2.65	-45.54644851	-89.75132444	-97.01925362	-58.27826077	-70.23100315	-74.81513086
+2.65	20.05191115	34.41771002	36.11906594	23.4083125	28.32788991	29.58960306
-2.7	-49.56434569	-98.8480028	-107.1539171	-63.93508509	-77.01889464	-82.18453023
+2.7	16.25966368	26.60788054	27.58594418	18.40657374	22.30650587	23.13675366
-2.75	-53.61193964	-108.1324799	-117.5247962	-69.68613864	-83.91696605	-89.68664091
+2.75	12.51399102	19.042441	19.35584983	13.53061151	16.43236758	16.85901324
-2.8	-57.47552071	-117.1251642	-127.5982666	-75.23243524	-90.56638813	-96.93230914
+2.8	9.020615877	13.76666959	15.22946667	9.056052036	11.03697149	11.23404427
-2.85	-60.97052516	-125.3926837	-136.8878111	-80.30741937	-96.64771344	-103.5730168
+2.85	6.374693216	13.76666959	15.22946667	8.648543869	10.40842671	11.23404427
-2.9	-64.34556104	-133.5292516	-146.0621565	-85.27478033	-102.5966484	-110.0851594
+2.9	6.374693216	13.76666959	15.22946667	8.648543869	10.40842671	11.23404427
-2.95	-67.40609489	-141.0840643	-154.6164357	-89.85614958	-108.0794519	-116.1052507
+2.95	6.374693216	13.76666959	15.22946667	8.648543869	10.40842671	11.23404427
-3	-70.10804275	-147.9591339	-162.441643	-93.99029881	-113.0226506	-121.5536927
+3	6.374693216	13.76666959	15.22946667	8.648543869	10.40842671	11.23404427
(Span 3) -4	-1.82E+00	-3.932105454	-4.349916914	-2.47024065	-2.9729072	-3.208724315
+4	69.76257779	146.2148887	160.3390948	93.08931492	111.9667411	120.3021927
-3.05	-1.82E+00	-3.932105454	-4.349916914	-2.47024065	-2.9729072	-3.208724315
+3.05	67.61718766	140.7319243	154.094681	89.79719651	108.0321755	115.9622587
-3.1	-2.349252549	-3.932105454	-4.349916914	-2.498771393	-2.9729072	-3.208724315
+3.1	64.99192806	134.150728	146.6230917	85.82466295	103.2817037	110.7349993
-3.15	-4.299456027	-4.892439545	-5.031890675	-4.225248664	-4.639326213	-4.928240217
+3.15	62.42377013	127.8139909	139.4481007	81.98275075	98.68525681	105.6874003
-3.2	-6.913328498	-8.453433442	-8.879510258	-6.327165375	-7.754486279	-7.618232938
+3.2	59.35574746	120.3440908	131.0091582	77.43675714	93.24426824	99.72247759
-3.25	-9.473449454	-12.736191	-12.98325748	-9.390873879	-11.45208019	-11.5137756
+3.25	56.41338486	113.2613826	123.0235083	73.11242438	88.06678684	94.05474739
-3.3	-12.53289319	-18.45943058	-18.50704518	-13.29392154	-16.15804564	-16.49134436
+3.3	52.95653922	105.0225026	113.7504601	68.06781561	82.02509412	87.44945759
-3.35	-15.46785531	-24.30187468	-24.84009297	-17.07708727	-20.71685845	-21.35372015
+3.35	49.68849505	97.30160628	105.0740782	63.32837523	76.34735697	81.24918243
-3.4	-18.91684973	-31.25819114	-32.40416719	-21.56204743	-26.11875492	-27.12613587
+3.4	45.89676949	88.41350293	95.10017182	57.85999382	69.79477216	74.10082518
-3.45	-22.17818294	-37.91066184	-39.65700232	-25.83528562	-31.26352592	-32.63262458
+3.45	42.35162078	80.16219308	85.85297842	52.77287222	63.69768738	67.45557471
-3.5	-25.96284777	-45.70708481	-48.17644297	-30.82731676	-37.2715422	-39.07208874
+3.5	38.27895561	70.74456617	75.3114614	46.95556326	56.72402419	59.86149602
-3.55	-29.50200824	-53.06178558	-56.22914336	-35.52320832	-42.9213679	-45.13512063
+3.55	34.50523492	62.07068044	65.61337948	41.58808774	50.28838587	52.85883963
-3.6	-33.56844945	-61.57858023	-65.57070387	-40.94746396	-49.44568864	-52.14431726
+3.6	30.2055568	52.24333867	54.63749834	35.49665811	42.98341287	44.91624561

-3.65	**-37.33696238**	**-69.52773854**	**-74.30335004**	**-45.99867885**	**-55.51977404**	**-58.67632418**
+3.65	**26.23984925**	**43.2546021**	**44.60844976**	**29.91618774**	**36.29005217**	**37.64375202**
-3.7	**-41.63129468**	**-78.64515428**	**-84.33377492**	**-51.7803174**	**-62.47058847**	**-66.15795615**
+3.7	**21.76835372**	**33.13729972**	**33.33145275**	**23.62555676**	**28.74367243**	**29.44998873**
-3.75	**-45.58068507**	**-87.08097956**	**-93.6264422**	**-57.11953074**	**-68.88814323**	**-73.0713676**
+3.75	**17.68431548**	**24.53092732**	**24.89627088**	**17.89945187**	**21.87342152**	**22.0572973**
-3.8	**-50.04902095**	**-96.67926186**	**-104.212492**	**-63.18370751**	**-76.17563821**	**-80.92808509**
+3.8	**13.09386551**	**18.00696552**	**19.94462348**	**11.90859699**	**14.68440762**	**14.67455026**
-3.85	**-54.13073791**	**-105.4939807**	**-113.9452583**	**-68.7434879**	**-82.85574506**	**-88.13533263**
+3.85	**8.926989953**	**18.00696552**	**19.94462348**	**11.29444764**	**13.58068349**	**14.67455026**
-3.9	**-58.71918911**	**-115.4533743**	**-124.953683**	**-75.01535727**	**-90.39010592**	**-96.26993311**
+3.9	**8.265751282**	**18.00696552**	**19.94462348**	**11.29444764**	**13.58068349**	**14.67455026**
-3.95	**-62.88475998**	**-124.5392045**	**-135.0066257**	**-80.72838097**	**-97.25197587**	**-103.6834475**
+3.95	**8.265751282**	**18.00696552**	**19.94462348**	**11.29444764**	**13.58068349**	**14.67455026**
-5	**-67.53946646**	**-134.7400201**	**-146.3041783**	**-87.13313871**	**-104.9434373**	**-111.998585**
+5	**8.265751282**	**18.00696552**	**19.94462348**	**11.29444764**	**13.58068349**	**14.67455026**

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-78.524572	-54.645925	-78.876323	-85.182823	-142.334024	-43.768393	-59.109009	-67.767827	-75.925821	-84.573910
+0.05	599.767183	423.762260	576.338533	596.469047	772.426378	340.694625	459.650340	522.100963	574.755979	629.046753
-0.1	-157.049143	-109.291849	-157.752646	-170.365647	-284.668048	-87.536786	-118.218019	-135.535653	-151.851643	-169.147821
+0.1	1116.628622	789.632347	1068.993061	1102.357396	1414.312624	635.075974	856.692630	972.425329	1070.822973	1174.002632
-0.15	-235.573715	-163.937774	-236.628969	-255.548470	-427.002073	-131.305178	-177.327028	-203.303480	-227.777464	-253.721731
+0.15	1550.977860	1098.026772	1478.797988	1519.459259	1937.071139	883.428565	1191.602040	1351.552126	1501.464482	1643.304919
-0.2	-314.098286	-218.583699	-315.505292	-340.731293	-569.336097	-175.073571	-236.436038	-271.071306	-303.703286	-338.295642
+0.2	1904.361525	1349.958263	1807.621670	1865.708791	2386.062524	1086.547143	1465.455427	1660.767011	1853.966623	2034.816705
-0.25	-392.622858	-273.229623	-394.381615	-425.914117	-711.670121	-218.841964	-295.545047	-338.839133	-379.629107	-422.869552
+0.25	2178.812454	1546.777130	2071.087712	2127.663683	2743.939086	1245.496187	1679.694207	1906.528188	2129.774050	2348.691673
-0.3	-471.147429	-327.875548	-473.257938	-511.096940	-854.004145	-262.610357	-354.654057	-406.606960	-455.554928	-507.443463
+0.3	2380.729521	1690.171571	2259.918883	2324.794723	3014.143060	1361.610858	1842.900828	2093.809156	2331.212210	2579.458180
-0.35	-549.672001	-382.521473	-552.134262	-596.279763	-996.338170	-306.378750	-413.763066	-474.374786	-531.480750	-592.017373
+0.35	2521.640996	1790.609076	2375.453492	2459.360793	3204.587568	1436.496082	1953.784820	2217.229607	2470.937746	2730.036644
-0.4	-628.196572	-437.167397	-631.010585	-681.462587	-1138.672194	-350.147142	-472.872076	-542.142613	-607.406571	-676.591284
+0.4	2591.305349	1842.072640	2432.938806	2540.763537	3300.634326	1472.027068	2011.194663	2279.093892	2544.620112	2809.548195
-0.45	-706.721144	-491.813322	-709.886908	-766.645410	-1281.006218	-393.915535	-531.981085	-609.910439	-683.332392	-761.165194
+0.45	2593.521653	1846.683818	2423.875321	2549.397731	3292.636468	1470.349206	2017.451487	2282.648898	2552.908766	2823.090222
-0.5	-785.245716	-546.459246	-788.763231	-851.828233	-1423.340242	-437.683928	-591.090094	-677.678266	-759.258214	-845.739105
+0.5	2551.178180	1816.100823	2388.097539	2503.132426	3212.050706	1447.994278	1983.182726	2244.815656	2509.062701	2772.445353
-0.55	-863.770287	-601.105171	-867.639554	-937.011057	-1565.674267	-481.452321	-650.199104	-745.446093	-835.184035	-930.313015
+0.55	2453.136867	1745.339866	2302.076447	2396.851807	3128.267941	1395.472930	1905.494022	2158.920379	2409.446176	2657.753047
-0.6	-942.294859	-655.751096	-946.515877	-1022.193880	-1708.008291	-525.220714	-709.308113	-813.213919	-911.109857	-1014.886925
+0.6	2298.138846	1635.400441	2157.187688	2228.269652	2938.574636	1310.913409	1785.656251	2024.122252	2255.604625	2489.534829
-0.65	-1020.819430	-710.397020	-1025.392200	-1107.376703	-1850.342315	-568.989106	-768.417123	-880.981746	-987.035678	-1099.460836
+0.65	2091.579409	1490.065750	1964.294263	2016.257272	2641.057950	1197.278245	1627.772651	1845.083168	2052.818577	2267.503165
-0.7	-1099.344002	-765.042945	-1104.268523	-1192.559527	-1992.676339	-612.757499	-827.526132	-948.749572	-1062.961499	-1184.034746
+0.7	1839.341162	1313.457835	1721.054007	1750.360361	2269.720146	1057.800511	1436.311572	1626.884182	1806.838390	1996.137912
-0.75	-1177.868573	-819.688870	-1183.144846	-1277.742350	-2135.010364	-656.525892	-886.635142	-1016.517399	-1138.887321	-1268.608657
+0.75	1547.792289	1110.084977	1433.608999	1437.369310	1812.267170	895.983081	1216.105691	1375.024704	1525.338881	1682.280883
-0.8	-1256.393145	-874.334794	-1262.021169	-1362.925173	-2277.344388	-700.294285	-945.744151	-1084.285225	-1214.813142	-1353.182567
+0.8	1223.787434	884.792775	1108.596959	1085.786709	1271.463144	715.598895	972.352791	1095.423213	1212.216832	1333.298220
-0.85	-1334.917716	-928.980719	-1340.897492	-1448.107997	-2442.393374	-744.062678	-1004.853161	-1152.053052	-1290.738964	-1437.756478
+0.85	874.667318	642.274328	753.149024	700.026082	749.123894	520.691311	710.615040	794.416843	874.274929	957.078649
-0.9	-1413.442288	-983.626644	-1419.773815	-1533.290820	-2668.974805	-787.831070	-1063.962170	-1219.820879	-1366.664785	-1522.330388
+0.9	508.259137	388.541867	382.335144	334.191373	548.703763	315.573424	436.819479	478.761422	522.407469	562.034595
-0.95	-1491.966859	-1038.272568	-1498.650138	-1618.473643	-2948.248272	-831.599463	-1123.071179	-1287.588705	-1442.590606	-1606.904299
+0.95	328.649364	228.917234	328.387166	352.757560	538.709392	183.446439	247.779397	283.899325	318.003456	354.060150
-1	-1570.491479	-1092.918460	-1577.526435	-1703.656473	-3272.246299	-875.367890	-1182.180189	-1355.356547	-1518.516427	-1691.478196
+1	345.946697	240.965508	345.670697	371.323743	555.389593	193.101515	260.820415	298.841385	334.740478	372.694892
(Span 2) -2	-1570.491479	-1092.918460	-1577.526435	-1703.656473	-3272.246299	-875.367890	-1182.180189	-1355.356547	-1518.516427	-1691.478196
+2	345.946697	240.965508	345.670697	371.323743	555.389593	193.101515	260.820415	298.841385	334.740478	372.694892
-2.05	-1149.875091	-800.933420	-1148.957790	-1234.224718	-2243.167524	-641.840634	-866.928160	-993.304172	-1112.627395	-1238.782194
+2.05	267.219229	186.128725	267.006041	286.821194	444.217764	149.157191	201.721813	230.833725	258.563222	287.880309
-2.1	-1071.147630	-746.096635	-1070.293135	-1149.722167	-1909.441123	-597.896309	-807.572972	-925.296511	-1036.450138	-1153.967611
+2.1	630.438785	476.279347	480.022996	416.089625	444.542242	381.319772	532.518157	586.041231	645.732666	694.322000
-2.15	-992.420169	-691.259851	-991.628479	-1065.219616	-1651.235655	-553.951984	-748.217783	-857.288849	-960.272882	-1069.153028
+2.15	1066.370435	777.259386	926.793270	892.596099	876.471993	625.101674	857.863537	960.836003	1063.342119	1162.521624
-2.2	-913.692708	-636.423066	-912.963824	-980.717066	-1470.345308	-510.007660	-688.862595	-789.281188	-884.095625	-984.338444
+2.2	1470.495792	1058.980968	1339.140566	1339.663967	1508.720403	850.429423	1161.738879	1309.828036	1454.191425	1598.575676

-2.25	-834.965246	-581.586282	-834.299168	-896.214515	-1356.988800	-466.063335	-629.507406	-721.273526	-807.918369	-899.523861
+2.25	1833.040857	1311.367244	1702.421547	1735.147237	2180.921398	1052.537419	1434.307343	1622.064342	1805.026148	1989.913424
-2.3	-756.237785	-526.749497	-755.634513	-811.711964	-1257.867960	-422.119010	-570.152218	-653.265865	-731.741112	-814.709277
+2.3	2144.587494	1527.236246	2009.491216	2069.894298	2747.233016	1225.215766	1668.462378	1890.780532	2105.481534	2323.853245
-2.35	-677.510324	-471.912713	-676.969857	-727.209413	-1158.747121	-378.174686	-510.797029	-585.258203	-655.563855	-729.894694
+2.35	2392.592155	1701.784918	2250.946277	2338.893798	3194.234255	1361.834988	1857.620195	2105.701860	2348.553109	2590.517627
-2.4	-598.782863	-417.075928	-598.305201	-642.706863	-1059.626281	-334.230361	-451.441841	-517.250541	-579.386599	-645.080110
+2.4	2570.416189	1827.350061	2423.354176	2535.632325	3499.828724	1459.723154	1993.734034	2259.654810	2523.973993	2787.461923
-2.45	-520.055402	-362.239144	-519.640546	-558.204312	-960.505442	-290.286036	-392.086652	-449.242880	-503.209342	-560.265527
+2.45	2677.344392	1901.912362	2522.729994	2653.500311	3664.886555	1517.641838	2076.167831	2352.973184	2629.544253	2907.340747
-2.5	-441.327976	-307.402359	-440.975890	-473.701741	-861.384602	-246.341712	-332.731464	-381.235218	-427.032086	-475.450932
+2.5	2707.945264	1926.288672	2544.732553	2688.534717	3689.501207	1532.865584	2102.771483	2380.350548	2663.464821	2947.841462
-2.55	-520.055443	-362.239104	-519.640520	-558.204289	-960.505446	-290.286050	-392.086638	-449.242879	-503.209331	-560.265514
+2.55	2677.510073	1901.912428	2522.732093	2653.501892	3664.886130	1517.646443	2076.169010	2352.975715	2629.545233	2907.342034
-2.6	-598.782910	-417.075887	-598.305176	-642.706838	-1059.626284	-334.230374	-451.441825	-517.250539	-579.386586	-645.080096
+2.6	2570.467573	1827.351941	2423.357071	2535.635161	3499.829472	1459.724725	1993.736768	2259.654851	2523.976181	2787.462561
-2.65	-677.510378	-471.912670	-676.969832	-727.209386	-1158.747121	-378.174698	-510.797012	-585.258199	-655.563841	-729.894679
+2.65	2392.541343	1701.786137	2250.948487	2338.895701	3194.236015	1361.841336	1857.622260	2105.704943	2348.554558	2590.517750
-2.7	-756.237845	-526.749452	-755.634488	-811.711935	-1257.867959	-422.119022	-570.152199	-653.265860	-731.741096	-814.709261
+2.7	2144.655450	1527.237154	2009.493467	2069.895510	2747.234680	1225.220095	1668.462905	1890.782022	2105.481342	2323.857405
-2.75	-834.965312	-581.586235	-834.299144	-896.214483	-1356.988796	-466.063346	-629.507385	-721.273520	-807.918352	-899.523843
+2.75	1833.087477	1311.368181	1702.421429	1735.147058	2180.922050	1052.539170	1434.309220	1622.066876	1805.026938	1989.915262
-2.8	-913.692779	-636.423018	-912.963801	-980.717031	-1470.345308	-510.007670	-688.862572	-789.281180	-884.095607	-984.338426
+2.8	1470.211118	1058.981652	1339.143317	1339.665606	1508.722334	850.428373	1161.740560	1309.830546	1454.192229	1598.575773
-2.85	-992.420247	-691.259801	-991.628457	-1065.219580	-1651.235651	-553.951995	-748.217759	-857.288841	-960.272862	-1069.153008
+2.85	1066.162764	777.259689	926.795731	892.597526	876.473416	625.106956	857.864660	960.838106	1063.342558	1162.520595
-2.9	-1071.147714	-746.096584	-1070.293113	-1149.722128	-1909.441120	-597.896319	-807.572945	-925.296501	-1036.450117	-1153.967590
+2.9	630.547075	476.280632	480.022982	416.089134	444.541896	381.322783	532.517693	586.041919	645.734199	694.321593
-2.95	-1149.875181	-800.933367	-1148.957769	-1234.224677	-2243.167517	-641.840643	-866.928132	-993.304161	-1112.627373	-1238.782173
+2.95	267.219211	186.128702	267.006010	286.821196	444.217792	149.157210	201.721847	230.833736	258.563224	287.880307
-3	-1570.492794	-1092.918476	-1577.526465	-1703.656479	-3272.246303	-875.367893	-1182.180206	-1355.356557	-1518.516438	-1691.478202
+3	345.946670	240.965515	345.670695	371.323753	555.389602	193.101517	260.820423	298.841391	334.740483	372.694896
(Span 3) -4	-1570.492794	-1092.918476	-1577.526465	-1703.656479	-3272.246303	-875.367893	-1182.180206	-1355.356557	-1518.516438	-1691.478202
+4	345.946670	240.965515	345.670695	371.323753	555.389602	193.101517	260.820423	298.841391	334.740483	372.694896
-3.05	-1491.968157	-1038.272551	-1498.650141	-1618.473656	-2948.248261	-831.599500	-1123.071196	-1287.588730	-1442.590616	-1606.904291
+3.05	328.649336	228.917239	328.387160	352.757565	538.709399	183.446441	247.779402	283.899321	318.003459	354.060151
-3.1	-1413.443520	-983.626625	-1419.773816	-1533.290832	-2668.974794	-787.831108	-1063.962186	-1219.820903	-1366.664794	-1522.330380
+3.1	508.415559	388.541254	382.333399	334.191377	548.703770	315.576457	436.817982	478.759074	522.406814	562.036032
-3.15	-1334.918882	-928.980700	-1340.897491	-1448.108009	-2442.393361	-744.062715	-1004.853175	-1152.053076	-1290.738972	-1437.756469
+3.15	874.907751	642.273949	753.146786	700.027897	749.122864	520.694379	710.613772	794.414813	874.274637	957.080375
-3.2	-1256.394245	-874.334774	-1262.021167	-1362.925185	-2277.344378	-700.294322	-945.744165	-1084.285249	-1214.813150	-1353.182559
+3.2	1224.277580	884.792953	1108.595020	1085.788332	1271.461295	715.602231	972.351758	1095.421505	1212.217203	1333.300202
-3.25	-1177.869608	-819.688849	-1183.144842	-1277.742361	-2135.010353	-656.525929	-886.635155	-1016.517421	-1138.887328	-1268.608648
+3.25	1548.426712	1110.085240	1433.606880	1437.368407	1812.265635	895.986316	1216.104718	1375.022840	1525.339299	1682.283115
-3.3	-1099.344971	-765.042923	-1104.268518	-1192.559538	-1992.676329	-612.757536	-827.526144	-948.749594	-1062.961506	-1184.034737
+3.3	1840.013868	1313.457665	1721.051274	1750.359218	2269.721541	1057.803757	1436.310457	1626.882109	1806.838210	1996.139879
-3.35	-1020.820334	-710.396998	-1025.392193	-1107.376714	-1850.342304	-568.989143	-768.417134	-880.981767	-987.035684	-1099.460826
+3.35	2092.185256	1490.065215	1964.291421	2016.255502	2641.056807	1197.281376	1627.771315	1845.080845	2052.818063	2267.504560
-3.4	-942.295696	-655.751073	-946.515868	-1022.193890	-1708.008280	-525.220750	-709.308124	-813.213940	-911.109862	-1014.886916
+3.4	2298.573185	1635.399348	2157.183918	2228.266809	2938.575817	1310.915729	1785.654365	2024.119534	2255.603570	2489.535527
-3.45	-863.771059	-601.105147	-867.639544	-937.011067	-1565.674255	-481.452357	-650.199113	-745.446113	-835.184040	-930.313005
+3.45	2453.298938	1745.338363	2302.073678	2396.849667	3128.267525	1395.474874	1905.491638	2158.917121	2409.444359	2657.752715
-3.5	-785.246422	-546.459222	-788.763219	-851.828243	-1423.340231	-437.683964	-591.090103	-677.678286	-759.258218	-845.739094
+3.5	2551.259835	1816.098593	2388.099198	2503.129311	3212.048764	1447.995689	1983.179396	2244.811160	2509.060073	2772.444116
-3.55	-706.721785	-491.813296	-709.886895	-766.645419	-1281.006207	-393.915571	-531.981093	-609.910459	-683.332396	-761.165183
+3.55	2593.458818	1846.679575	2423.874341	2549.395855	3292.637787	1470.348255	2017.448674	2282.647700	2552.906152	2823.092191
-3.6	-628.197148	-437.167371	-631.010570	-681.462596	-1138.672182	-350.147178	-472.872082	-542.142632	-607.406574	-676.591273

+3.6	2591.206288	1842.074580	2432.936588	2540.760685	3300.634091	1472.025458	2011.190674	2279.091552	2544.616529	2809.548829
-3.65	-549.672511	-382.521445	-552.134245	-596.279772	-996.338158	-306.378785	-413.763072	-474.374805	-531.480753	-592.017362
+3.65	2521.500965	1790.610134	2375.450771	2459.359104	3204.585542	1436.493479	1953.780109	2217.226238	2470.938842	2730.035784
-3.7	-471.147873	-327.875520	-473.257921	-511.096948	-854.004133	-262.610392	-354.654062	-406.606978	-455.554931	-507.443451
+3.7	2380.545634	1690.171553	2259.915027	2324.791450	3014.141597	1361.607252	1842.901527	2093.804778	2331.211849	2579.455827
-3.75	-392.623236	-273.229594	-394.381596	-425.914125	-711.670109	-218.841999	-295.545052	-338.839150	-379.629109	-422.869540
+3.75	2178.678219	1546.775795	2071.089022	2127.661821	2743.940478	1245.492337	1679.693758	1906.528703	2129.772263	2348.688098
-3.8	-314.098599	-218.583669	-315.505272	-340.731301	-569.336084	-175.073606	-236.436041	-271.071323	-303.703287	-338.295630
+3.8	1904.178990	1349.956018	1807.621475	1865.705477	2386.063901	1086.542235	1465.453693	1660.766247	1853.963339	2034.817654
-3.85	-235.573962	-163.937744	-236.628947	-255.548477	-427.002060	-131.305213	-177.327031	-203.303496	-227.777465	-253.721719
+3.85	1550.744936	1098.023363	1478.796297	1519.459316	1937.071624	883.422608	1191.599269	1351.550303	1501.459739	1643.304257
-3.9	-157.049325	-109.291818	-157.752623	-170.365654	-284.668035	-87.536820	-118.218021	-135.535669	-151.851643	-169.147808
+3.9	1116.343280	789.627468	1068.989590	1102.355729	1414.313335	635.068512	856.688222	972.421603	1070.823091	1174.000272
-3.95	-78.524688	-54.645893	-78.876298	-85.182830	-142.334011	-43.768427	-59.109010	-67.767842	-75.925821	-84.573897
+3.95	599.611050	423.756915	576.333395	596.465457	772.425081	340.687212	459.645188	522.096221	574.754675	629.045569
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-78.524572	-71.222485	-76.671713	-72.280608	-87.568611	-91.625091	-96.998427	-38.192559
+0.05	599.767183	558.994600	598.958831	562.870672	675.881779	664.957054	703.336234	296.681397
-0.1	-157.049143	-142.444971	-153.343425	-144.561215	-175.137222	-183.250181	-193.996854	-76.385119
+0.1	1116.628622	1042.552298	1116.696472	1049.189419	1259.003154	1232.769096	1303.826944	552.609643
-0.15	-235.573715	-213.667456	-230.015138	-216.841823	-262.705833	-274.875272	-290.995281	-114.577678
+0.15	1550.977860	1451.188587	1553.817169	1459.538586	1750.185364	1704.486957	1802.594910	768.264314
-0.2	-314.098286	-284.889942	-306.686850	-289.122430	-350.274444	-366.500363	-387.993707	-152.770237
+0.2	1904.361525	1786.149597	1911.689606	1795.225081	2151.068839	2092.980454	2213.830511	944.362068
-0.25	-392.622858	-356.112427	-383.358563	-361.403038	-437.843055	-458.125453	-484.992134	-190.962797
+0.25	2178.812454	2049.120324	2192.155056	2058.001400	2477.313390	2404.637904	2544.495994	1082.110980
-0.3	-471.147429	-427.334912	-460.030276	-433.683645	-525.411666	-549.750544	-581.990561	-229.155356
+0.3	2380.729521	2242.225007	2397.527847	2261.317598	2721.318813	2631.345473	2783.889655	1182.594134
-0.35	-549.672001	-498.557398	-536.701988	-505.964253	-612.980276	-641.375635	-678.988988	-267.347915
+0.35	2521.640996	2371.584734	2541.445647	2397.913095	2882.140871	2783.442524	2945.511747	1247.062542
-0.4	-628.196572	-569.779883	-613.373701	-578.244861	-700.548887	-733.000725	-775.987415	-305.540474
+0.4	2591.305349	2444.288870	2617.476983	2468.837639	2963.376846	2853.697485	3020.420836	1277.176879
-0.45	-706.721144	-641.002368	-690.045414	-650.525468	-788.117498	-824.625816	-872.985842	-343.733034
+0.45	2593.521653	2455.071356	2627.469472	2477.159537	2969.197860	2845.897313	3012.675535	1273.291290
-0.5	-785.245716	-712.224854	-766.717126	-722.806076	-875.686109	-916.250907	-969.984268	-381.925593
+0.5	2551.178180	2412.552269	2582.556138	2434.679279	2919.938816	2802.991888	2967.052964	1256.527186
-0.55	-863.770287	-783.447339	-843.388839	-795.086683	-963.254720	-1007.875998	-1066.982695	-420.118152
+0.55	2453.136867	2315.804370	2480.064622	2339.066517	2807.120967	2700.582786	2858.218845	1212.063194
-0.6	-942.294859	-854.669825	-920.060551	-867.367291	-1050.823331	-1099.501088	-1163.981122	-458.310712
+0.6	2298.138846	2168.849515	2323.220038	2192.030770	2631.610793	2529.317320	2676.548874	1139.339523
-0.65	-1020.819430	-925.892310	-996.732264	-939.647898	-1138.391942	-1191.126179	-1260.979549	-496.503271
+0.65	2091.579409	1977.322116	2117.368704	1998.596376	2399.501245	2295.391252	2428.609806	1040.935395
-0.7	-1099.344002	-997.114795	-1073.403977	-1011.928506	-1225.960553	-1282.751270	-1357.977976	-534.695830
+0.7	1839.341162	1748.979790	1868.329998	1764.233828	2117.072730	2005.575235	2121.577084	919.667190
-0.75	-1177.868573	-1068.337281	-1150.075689	-1084.209114	-1313.529164	-1374.376360	-1454.976403	-572.888390
+0.75	1547.792289	1484.928460	1582.507772	1494.858982	1791.439685	1667.213005	1763.232968	778.588696
-0.8	-1256.393145	-1139.559766	-1226.747402	-1156.489721	-1401.097775	-1466.001451	-1551.974829	-611.080949
+0.8	1223.787434	1191.344712	1266.458525	1196.834010	1430.257575	1288.223665	1362.970303	620.990315
-0.85	-1334.917716	-1210.782252	-1303.419115	-1228.770329	-1488.666386	-1557.626542	-1648.973256	-649.273508
+0.85	874.667318	874.843819	927.373459	876.966305	1041.721528	877.099466	926.783255	450.399785
-0.9	-1413.442288	-1282.004737	-1380.090827	-1301.050936	-1576.234997	-1649.251632	-1745.971683	-687.466067
+0.9	508.259137	542.906782	573.233175	542.509352	634.948246	442.907035	467.282471	270.581905
-0.95	-1491.966859	-1353.227222	-1456.762540	-1373.331544	-1663.803608	-1740.876723	-1842.970110	-725.658627
+0.95	328.649364	298.689789	321.491796	303.061009	367.079690	381.532955	403.877859	159.785916
-1	-1570.491479	-1424.449665	-1533.434267	-1445.612149	-1751.372181	-1832.501822	-1939.968545	-763.851185
+1	345.946697	314.410303	338.412420	319.011586	386.399660	401.613639	425.134594	168.195697
(Span 2) -2	-1570.491479	-1424.449665	-1533.434267	-1445.612149	-1751.372181	-1832.501822	-1939.968545	-763.851185
+2	345.946697	314.410303	338.412420	319.011586	386.399660	401.613639	425.134594	168.195697
-2.05	-1149.875091	-1045.052906	-1124.832325	-1060.346905	-1284.334774	-1334.903767	-1413.083867	-559.057409
+2.05	267.219229	263.940927	269.245003	255.339925	298.466266	310.217987	328.386253	135.693822
-2.1	-1071.147630	-973.502212	-1047.819441	-987.749090	-1196.401382	-1243.508114	-1316.335528	-520.780930
+2.1	630.438785	662.009813	699.390047	660.188437	775.254042	575.002202	607.619312	325.908395
-2.15	-992.420169	-901.951518	-970.806556	-915.151275	-1108.467991	-1152.112460	-1219.587188	-482.504452
+2.15	1066.370435	1050.833508	1119.441218	1057.661184	1258.062827	1091.005841	1153.604629	539.705315
-2.2	-913.692708	-830.400823	-893.793671	-842.553460	-1020.534599	-1060.716806	-1122.838849	-444.227974
+2.2	1470.495792	1416.369997	1513.539048	1428.866306	1708.106694	1568.786625	1659.402661	737.111553

-2.25	-834.965246	-758.850129	-816.780787	-769.955645	-932.601207	-969.321153	-1026.090509	-405.951496
+2.25	1833.040857	1745.323422	1867.442979	1762.005955	2112.132978	1993.268535	2108.902331	913.076878
-2.3	-756.237785	-687.299435	-739.767902	-697.357830	-844.667815	-877.925499	-929.342170	-367.675018
+2.3	2144.587494	2027.869716	2170.941839	2048.817872	2459.395026	2353.152636	2489.968209	1063.770066
-2.35	-677.510324	-615.748741	-662.755018	-624.760015	-756.734423	-786.529846	-832.593830	-329.398539
+2.35	2392.592155	2256.663463	2417.100602	2280.170972	2737.038909	2639.663851	2793.562729	1182.891183
-2.4	-598.782863	-544.198046	-585.742133	-552.162200	-668.801031	-695.134192	-735.845491	-291.122061
+2.4	2570.416189	2423.213490	2595.102198	2446.835863	2937.890778	2841.703522	3007.792270	1267.302297
-2.45	-520.055402	-472.647352	-508.729249	-479.564384	-580.867639	-603.738538	-639.097151	-252.845583
+2.45	2677.344392	2523.534475	2701.823258	2548.458251	3058.698646	2958.324325	3131.478325	1317.110699
-2.5	-441.327976	-401.096658	-431.716419	-406.966569	-492.934274	-512.342873	-542.348811	-214.569105
+2.5	2707.945264	2558.429964	2738.515183	2581.212447	3094.418547	2986.155814	3161.297232	1329.895020
-2.55	-520.055443	-472.647343	-508.729303	-479.564376	-580.867667	-603.738524	-639.097150	-252.845558
+2.55	2677.510073	2523.536498	2701.823369	2548.460154	3058.703040	2958.326130	3131.480123	1317.111566
-2.6	-598.782910	-544.198038	-585.742187	-552.162190	-668.801060	-695.134175	-735.845490	-291.122035
+2.6	2570.467573	2423.214960	2595.104401	2446.839546	2937.891974	2841.706496	3007.795301	1267.302513
-2.65	-677.510378	-615.748733	-662.755071	-624.760005	-756.734454	-786.529826	-832.593830	-329.398513
+2.65	2392.541343	2256.664356	2417.102297	2280.173802	2737.043908	2639.665990	2793.564869	1182.890203
-2.7	-756.237845	-687.299428	-739.767955	-697.357820	-844.667847	-877.925478	-929.342170	-367.674991
+2.7	2144.655450	2027.870300	2170.943144	2048.818942	2459.398186	2353.153131	2489.968617	1063.771238
-2.75	-834.965312	-758.850123	-816.780839	-769.955634	-932.601240	-969.321129	-1026.090511	-405.951468
+2.75	1833.087477	1745.323922	1867.444226	1762.008580	2112.133456	1993.269862	2108.903614	913.077074
-2.8	-913.692779	-830.400818	-893.793723	-842.553449	-1020.534634	-1060.716780	-1122.838851	-444.227946
+2.8	1470.211118	1416.370292	1513.540056	1428.868736	1708.111222	1568.787794	1659.403781	737.110795
-2.85	-992.420247	-901.951513	-970.806607	-915.151264	-1108.468027	-1152.112431	-1219.587191	-482.504424
+2.85	1066.162764	1050.834112	1119.441487	1057.662958	1258.066651	1091.006628	1153.605361	539.706661
-2.9	-1071.147714	-973.502208	-1047.819491	-987.749078	-1196.401420	-1243.508082	-1316.335532	-520.780901
+2.9	630.547075	662.010891	699.391886	660.188371	775.256157	575.003883	607.620985	325.908883
-2.95	-1149.875181	-1045.052903	-1124.832375	-1060.346893	-1284.334814	-1334.903733	-1413.083872	-559.057379
+2.95	267.219211	263.943038	269.247868	255.339056	298.466281	310.217997	328.386244	135.234153
-3	-1570.492794	-1424.449697	-1533.434269	-1445.612147	-1751.372214	-1832.501838	-1939.968578	-763.851185
+3	345.946670	314.410300	338.412423	319.011587	386.399654	401.613649	425.134590	168.195699
(Span 3) -4	-1570.492794	-1424.449697	-1533.434269	-1445.612147	-1751.372214	-1832.501838	-1939.968578	-763.851185
+4	345.946670	314.410300	338.412423	319.011587	386.399654	401.613649	425.134590	168.195699
-3.05	-1491.968157	-1353.227210	-1456.762556	-1373.331540	-1663.803601	-1740.876747	-1842.970150	-725.658626
+3.05	328.649336	298.689785	321.491802	303.061008	367.079670	381.532967	403.877861	159.785914
-3.1	-1413.443520	-1282.004723	-1380.090844	-1301.050932	-1576.234989	-1649.251655	-1745.971721	-687.466067
+3.1	508.415559	542.906533	573.232258	542.507161	634.952168	442.906271	467.281764	270.580354
-3.15	-1334.918882	-1210.782236	-1303.419131	-1228.770325	-1488.666376	-1557.626563	-1648.973293	-649.273507
+3.15	874.907751	874.844338	927.372973	876.964413	1041.717704	877.098934	926.782802	450.398227
-3.2	-1256.394245	-1139.559749	-1226.747418	-1156.489717	-1401.097763	-1466.001472	-1551.974864	-611.080948
+3.2	1224.277580	1191.345519	1266.458741	1196.832400	1430.254071	1288.223443	1362.970651	620.988813
-3.25	-1177.869608	-1068.337262	-1150.075705	-1084.209110	-1313.529151	-1374.376380	-1454.976436	-572.888389
+3.25	1548.426712	1484.929334	1582.508046	1494.857455	1791.436268	1667.212761	1763.232819	778.587186
-3.3	-1099.344971	-997.114775	-1073.403993	-1011.928502	-1225.960538	-1282.751289	-1357.978007	-534.695829
+3.3	1840.013868	1748.980408	1868.329640	1764.232101	2117.069030	2005.574610	2121.576530	919.666076
-3.35	-1020.820334	-925.892288	-996.732280	-939.647895	-1138.391926	-1191.126197	-1260.979579	-496.503270
+3.35	2092.185256	1977.322343	2117.367943	1998.594407	2399.497372	2295.390168	2428.608772	1040.934133
-3.4	-942.295696	-854.669801	-920.060567	-867.367288	-1050.823313	-1099.501106	-1163.981150	-458.310711
+3.4	2298.573185	2168.848937	2323.218677	2192.028146	2631.606002	2529.315303	2676.546866	1139.337894
-3.45	-863.771059	-783.447314	-843.388854	-795.086680	-963.254701	-1007.876014	-1066.982722	-420.118151
+3.45	2453.298938	2315.802994	2480.062400	2339.063314	2807.123307	2700.579976	2858.215983	1212.061510
-3.5	-785.246422	-712.224827	-766.717142	-722.806073	-875.686088	-916.250923	-969.984293	-381.925592
+3.5	2551.259835	2412.550053	2582.553005	2434.674880	2919.939931	2802.987865	2967.048826	1256.525280
-3.55	-706.721785	-641.002340	-690.045429	-650.525465	-788.117476	-824.625831	-872.985865	-343.733033
+3.55	2593.458818	2455.074125	2627.463297	2477.156672	2969.197546	2845.895237	3012.673263	1274.833798
-3.6	-628.197148	-569.779853	-613.373716	-578.244858	-700.548863	-733.000740	-775.987436	-305.540473

+3.6	**2591.206288**	**2444.290522**	**2617.479491**	**2468.833415**	**2963.375181**	**2853.693897**	**3020.416956**	**1277.176056**
-3.65	**-549.672511**	**-498.557366**	**-536.702004**	**-505.964250**	**-612.980250**	**-641.375648**	**-678.989008**	**-267.347914**
+3.65	**2521.500965**	**2371.585202**	**2541.446880**	**2397.907944**	**2882.137800**	**2783.437227**	**2945.513839**	**1247.061451**
-3.7	**-471.147873**	**-427.334879**	**-460.030291**	**-433.683643**	**-525.411638**	**-549.750557**	**-581.990579**	**-229.155355**
+3.7	**2380.545634**	**2242.224035**	**2397.527567**	**2261.318787**	**2721.313857**	**2631.345947**	**2783.890019**	**1182.592577**
-3.75	**-392.623236**	**-356.112392**	**-383.358578**	**-361.403035**	**-437.843025**	**-458.125465**	**-484.992151**	**-190.962795**
+3.75	**2178.678219**	**2049.117890**	**2192.153231**	**2058.001153**	**2477.314916**	**2404.636498**	**2544.494380**	**1082.109318**
-3.8	**-314.098599**	**-284.889905**	**-306.686865**	**-289.122428**	**-350.274413**	**-366.500374**	**-387.993722**	**-152.770236**
+3.8	**1904.178990**	**1786.145708**	**1911.686220**	**1795.223318**	**2151.068482**	**2092.977375**	**2213.827115**	**944.363281**
-3.85	**-235.573962**	**-213.667418**	**-230.015153**	**-216.841820**	**-262.705800**	**-274.875282**	**-290.995294**	**-114.577677**
+3.85	**1550.744936**	**1451.183195**	**1553.812182**	**1459.535529**	**1750.183313**	**1704.485506**	**1802.593417**	**768.265247**
-3.9	**-157.049325**	**-142.444931**	**-153.343440**	**-144.561213**	**-175.137188**	**-183.250191**	**-193.996865**	**-76.385117**
+3.9	**1116.343280**	**1042.545063**	**1116.689473**	**1049.184339**	**1258.998767**	**1232.765617**	**1303.823307**	**552.610282**
-3.95	**-78.524688**	**-71.222444**	**-76.671727**	**-72.280605**	**-87.568575**	**-91.625099**	**-96.998437**	**-38.192558**
+3.95	**599.611050**	**558.985870**	**598.950224**	**562.864662**	**675.876116**	**664.951668**	**703.330580**	**296.681701**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**

3-Span: Moment (Max and Min) Raw Data Results - 190' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-78.524572	-171.066172	-189.473924	-107.297250	-129.016490	-139.408225
+0.05	599.767183	1189.449456	1287.901229	770.567602	928.554500	990.039452
-0.1	-157.049143	-342.132344	-378.947849	-214.594499	-258.032979	-278.816449
+0.1	1116.628622	2197.331265	2386.100877	1427.232531	1720.072578	1832.023646
-0.15	-235.573715	-513.198516	-568.421773	-321.891749	-387.049469	-418.224674
+0.15	1550.977860	3059.703960	3315.403652	1971.283242	2381.609592	2539.671608
-0.2	-314.098286	-684.264688	-757.895698	-429.188999	-516.065958	-557.632898
+0.2	1904.361525	3750.673036	4115.459517	2431.457419	2931.713019	3121.597801
-0.25	-392.622858	-855.330860	-947.369622	-536.486248	-645.082448	-697.041123
+0.25	2178.812454	4300.703406	4736.434836	2787.607531	3353.081421	3591.182047
-0.3	-471.147429	-1026.397032	-1136.843546	-643.783498	-774.098937	-836.449347
+0.3	2380.729521	4721.180547	5207.928753	3045.479127	3652.791169	3928.728053
-0.35	-549.672001	-1197.463204	-1326.317471	-751.080748	-903.115427	-975.857572
+0.35	2521.640996	5002.907053	5514.145217	3215.260279	3851.202652	4138.291732
-0.4	-628.196572	-1368.529376	-1515.791395	-858.377997	-1032.131916	-1115.265797
+0.4	2591.305349	5166.369984	5664.597941	3289.694658	3935.492994	4242.700742
-0.45	-706.721144	-1539.595548	-1705.265320	-965.675247	-1161.148406	-1254.674021
+0.45	2593.521653	5179.612213	5709.051920	3273.339463	3911.285245	4229.376368
-0.5	-785.245716	-1710.661720	-1894.739244	-1072.972497	-1290.164896	-1394.082246
+0.5	2551.178180	5089.104490	5596.045261	3226.551192	3856.855912	4165.586727
-0.55	-863.770287	-1881.727892	-2084.213168	-1180.269746	-1419.181385	-1533.490470
+0.55	2453.136867	4874.892588	5341.273390	3114.413632	3725.578288	4012.863479
-0.6	-942.294859	-2052.794064	-2273.687093	-1287.566996	-1548.197875	-1672.898695
+0.6	2298.138846	4536.989004	4997.207870	2920.240306	3495.356124	3754.596691
-0.65	-1020.819430	-2223.860236	-2463.161017	-1394.864246	-1677.214364	-1812.306920
+0.65	2091.579409	4091.741873	4521.295979	2651.210876	3174.614584	3411.257845
-0.7	-1099.344002	-2394.926408	-2652.634942	-1502.161495	-1806.230854	-1951.715144
+0.7	1839.341162	3560.744635	3927.009184	2315.180889	2772.723289	2980.083996
-0.75	-1177.868573	-2565.992580	-2842.108866	-1609.458745	-1935.247343	-2091.123369
+0.75	1547.792289	2934.428513	3227.699888	1920.681129	2304.773634	2470.888359
-0.8	-1256.393145	-2737.058752	-3031.582790	-1716.755995	-2064.263833	-2230.531593
+0.8	1223.787434	2227.379771	2442.767547	1478.232787	1774.265117	1895.486556
-0.85	-1334.917716	-2908.124924	-3221.056715	-1824.053244	-2193.280322	-2369.939818
+0.85	874.667318	1455.267524	1587.860510	993.819557	1191.970128	1266.570318
-0.9	-1413.442288	-3079.191096	-3410.530639	-1931.350494	-2322.296812	-2509.348042
+0.9	508.259137	672.390033	743.831664	482.864101	587.932330	602.609590
-0.95	-1491.966859	-3250.257268	-3600.004564	-2038.647744	-2451.313301	-2648.756267
+0.95	328.649364	709.745035	785.155645	445.878434	536.609744	579.174739
-1	-1570.491479	-3421.323434	-3789.478492	-2145.945020	-2580.329785	-2788.164442
+1	345.946697	747.100035	826.479615	469.345724	564.852363	609.657612
(Span 2) -2	-1570.491479	-3421.323434	-3789.478492	-2145.945020	-2580.329785	-2788.164442
+2	345.946697	747.100035	826.479615	469.345724	564.852363	609.657612
-2.05	-1149.875091	-2483.248959	-2747.110096	-1560.035083	-1877.484923	-2026.410906
+2.05	267.219229	577.081665	638.396747	362.536208	436.308294	470.917166
-2.1	-1071.147630	-2313.230590	-2559.026183	-1453.225566	-1748.940853	-1887.670459
+2.1	630.438785	887.481128	956.680353	629.446491	746.576362	780.497680
-2.15	-992.420169	-2143.212221	-2370.942269	-1346.416049	-1620.396783	-1748.930012
+2.15	1066.370435	1839.905575	2022.219529	1238.009502	1476.143284	1574.742689
-2.2	-913.692708	-1973.193851	-2182.858356	-1239.606532	-1491.852714	-1610.189565
+2.2	1470.495792	2733.618403	3015.758580	1799.777806	2151.474566	2304.860388

-2.25	-834.965246	-1803.175482	-1994.774443	-1132.797015	-1363.308644	-1471.449119
+2.25	1833.040857	3527.558808	3896.676504	2297.056528	2748.540650	2950.792148
-2.3	-756.237785	-1633.157112	-1806.690529	-1025.987499	-1234.764574	-1332.708672
+2.3	2144.587494	4208.853385	4642.096830	2716.817245	3251.555219	3493.451737
-2.35	-677.510324	-1463.138743	-1618.606616	-919.177982	-1106.220504	-1193.968225
+2.35	2392.592155	4755.878033	5230.005796	3049.395961	3648.590282	3924.470717
-2.4	-598.782863	-1293.120374	-1430.522702	-812.368465	-977.676434	-1055.227778
+2.4	2570.416189	5150.245183	5652.439874	3281.906896	3925.585241	4232.185025
-2.45	-520.055402	-1123.102004	-1242.438789	-705.558948	-849.132364	-916.487331
+2.45	2677.344392	5385.139663	5927.924950	3413.547122	4081.489894	4407.113003
-2.5	-441.327976	-953.083635	-1054.354876	-598.749431	-720.588294	-777.746885
+2.5	2707.945264	5453.452996	6021.407901	3440.880700	4110.614212	4447.558205
-2.55	-520.055443	-1123.102029	-1242.431932	-705.558951	-849.132393	-916.487303
+2.55	2677.510073	5385.142839	5927.760027	3413.549061	4081.487252	4407.114099
-2.6	-598.782910	-1293.120398	-1430.514800	-812.368467	-977.676462	-1055.227750
+2.6	2570.467573	5150.244490	5651.682043	3281.910510	3925.588904	4232.187267
-2.65	-677.510378	-1463.138768	-1618.597668	-919.177983	-1106.220530	-1193.968197
+2.65	2392.541343	4755.880119	5230.005740	3049.398395	3648.592708	3924.471447
-2.7	-756.237845	-1633.157137	-1806.680536	-1025.987499	-1234.764599	-1332.708644
+2.7	2144.655450	4208.853408	4642.096201	2716.817568	3251.555687	3493.451209
-2.75	-834.965312	-1803.175507	-1994.763404	-1132.797015	-1363.308668	-1471.449091
+2.75	1833.087477	3527.561511	3896.632983	2297.057838	2748.541734	2950.794429
-2.8	-913.692779	-1973.193876	-2182.846272	-1239.606531	-1491.852736	-1610.189538
+2.8	1470.211118	2733.618572	3015.758019	1799.779155	2151.475371	2304.860530
-2.85	-992.420247	-2143.212246	-2370.929140	-1346.416046	-1620.396805	-1748.929985
+2.85	1066.162764	1839.905722	2022.231343	1238.010106	1476.143964	1574.741136
-2.9	-1071.147714	-2313.230615	-2559.012007	-1453.225562	-1748.940874	-1887.670431
+2.9	630.547075	887.480159	956.422384	629.448458	746.576786	780.497021
-2.95	-1149.875181	-2483.248985	-2747.094875	-1560.035078	-1877.484942	-2026.410878
+2.95	267.219211	577.081690	638.400345	362.536220	436.308335	470.917136
-3	-1570.492794	-3421.323442	-3789.478465	-2145.945077	-2580.329856	-2788.164500
+3	345.946670	747.100035	826.484219	469.345728	564.852368	609.657612
(Span 3) -4	-1570.492794	-3421.323442	-3789.478465	-2145.945077	-2580.329856	-2788.164500
+4	345.946670	747.100035	826.484219	469.345728	564.852368	609.657612
-3.05	-1491.968157	-3250.257270	-3600.004542	-2038.647825	-2451.313363	-2648.756272
+3.05	328.649336	709.745033	785.160008	445.878442	536.609750	579.174731
-3.1	-1413.443520	-3079.191097	-3410.530618	-1931.350572	-2322.296870	-2509.348045
+3.1	508.415559	672.390031	743.835798	482.865992	587.933869	602.613643
-3.15	-1334.918882	-2908.124925	-3221.056695	-1824.053320	-2193.280377	-2369.939817
+3.15	874.907751	1455.269989	1589.331111	993.819941	1191.971114	1266.573337
-3.2	-1256.394245	-2737.058752	-3031.582772	-1716.756067	-2064.263884	-2230.531590
+3.2	1224.277580	2227.382633	2444.034442	1478.233203	1774.266222	1895.489773
-3.25	-1177.869608	-2565.992580	-2842.108849	-1609.458815	-1935.247391	-2091.123363
+3.25	1548.426712	2934.431167	3229.124626	1920.680883	2304.774450	2470.891571
-3.3	-1099.344971	-2394.926408	-2652.634926	-1502.161562	-1806.230897	-1951.715135
+3.3	1840.013868	3560.746690	3927.008386	2315.180140	2772.722982	2980.086298
-3.35	-1020.820334	-2223.860235	-2463.161003	-1394.864310	-1677.214404	-1812.306908
+3.35	2092.185256	4091.742817	4520.638947	2651.209539	3174.613623	3411.259069
-3.4	-942.295696	-2052.794063	-2273.687080	-1287.567057	-1548.197911	-1672.898680
+3.4	2298.573185	4536.987484	4997.208592	2920.237949	3495.354027	3754.596481
-3.45	-863.771059	-1881.727890	-2084.213157	-1180.269804	-1419.181418	-1533.490453
+3.45	2453.298938	4875.722555	5341.274166	3114.410098	3725.574198	4012.861561
-3.5	-785.246422	-1710.661718	-1894.739234	-1072.972552	-1290.164925	-1394.082225
+3.5	2551.259835	5089.106805	5597.698040	3226.546134	3856.858071	4165.582726
-3.55	-706.721785	-1539.595546	-1705.265311	-965.675299	-1161.148432	-1254.673998
+3.55	2593.458818	5180.295612	5709.051135	3273.336772	3911.284182	4229.373367
-3.6	-628.197148	-1368.529373	-1515.791388	-858.378047	-1032.131939	-1115.265770

+3.6	2591.206288	5166.374730	5664.598732	3289.690534	3935.490200	4242.695509
-3.65	-549.672511	-1197.463201	-1326.317465	-751.080794	-903.115446	-975.857543
+3.65	2521.500965	5002.908956	5514.145533	3215.254022	3851.197321	4138.292200
-3.7	-471.147873	-1026.397028	-1136.843542	-643.783542	-774.098952	-836.449315
+3.7	2380.545634	4721.178770	5208.326059	3045.479825	3652.791508	3928.725939
-3.75	-392.623236	-855.330856	-947.369619	-536.486289	-645.082459	-697.041088
+3.75	2178.678219	4300.699291	4736.435540	2787.605980	3353.079194	3591.177054
-3.8	-314.098599	-684.264684	-757.895696	-429.189037	-516.065966	-557.632861
+3.8	1904.178990	3751.357440	4115.459828	2431.453998	2931.708570	3121.594120
-3.85	-235.573962	-513.198511	-568.421773	-321.891784	-387.049473	-418.224633
+3.85	1550.744936	3059.707357	3316.808890	1971.281364	2381.609955	2539.672700
-3.9	-157.049325	-342.132339	-378.947850	-214.594531	-258.032980	-278.816406
+3.9	1116.343280	2197.330772	2386.100953	1427.228541	1720.070315	1832.021807
-3.95	-78.524688	-171.066167	-189.473927	-107.297279	-129.016487	-139.408178
+3.95	599.611050	1189.445625	1287.901817	770.561974	928.550181	990.035153
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Shear (Max and Min) Raw Data Results - 200' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)	*Force Y (kips)*	*Force Y (kips)*	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-19.24926945	-34.297993	-50.262535	-14.46261676	-15.56981146	-14.67828524	-17.78370038	-18.63556845	-19.72872248	-7.7596529
End Shear	148.3134747	217.731760	307.159375	121.4847233	130.2349061	122.4261483	147.1411796	146.0310707	154.4769132	64.60997872
-0.05	-19.24926945	-34.626455	-50.558150	-14.46261676	-15.56981146	-14.67828524	-17.78370038	-18.63556845	-19.72872248	-7.7596529
+0.05	137.8305963	199.507695	279.926890	113.5799166	121.7242849	114.4048444	137.4233591	135.7997882	143.6450397	60.38424364
-0.1	-19.24926945	-35.714588	-51.537470	-14.46261676	-15.56981146	-14.67828524	-17.78370038	-18.63556845	-19.72872248	-7.7596529
+0.1	127.2849987	181.328022	252.335987	105.5090749	113.0367801	106.216246	127.5068204	125.3758255	132.6096424	56.03964804
-0.15	-20.78744684	-43.574182	-57.561734	-18.88954462	-19.7508791	-18.25762526	-20.88217408	-18.63556845	-19.72872248	-9.288905873
+0.15	117.7369585	165.575819	228.306922	98.25921724	105.2346432	98.86319332	118.6056398	116.0483246	122.7354375	52.13946749
-0.2	-31.53473877	-53.528290	-69.515513	-26.9074914	-28.39022199	-26.40623203	-30.76880056	-22.48363282	-23.66698191	-13.61805957
+0.2	107.335459	148.951731	203.314123	90.32783488	96.70092578	90.82181294	108.8751411	105.8846967	111.9765698	47.8754513
-0.25	-41.17459027	-63.104016	-80.833217	-34.08990794	-36.13095093	-33.70829772	-39.63184488	-31.85576945	-33.58542976	-17.49854299
+0.25	98.0895862	134.635170	181.755220	83.24648362	89.08351457	83.6449245	100.1943621	96.84808734	102.4111648	44.07102585
-0.3	-51.70466618	-74.285795	-93.860367	-41.92511236	-44.57709464	-41.67696128	-49.30795178	-42.24026857	-44.58207636	-21.73446119
+0.3	88.14944827	119.624752	159.046222	75.54811124	80.80433118	75.84574691	90.76503555	87.06713052	92.05835935	39.93810317
-0.35	-61.09140779	-84.914327	-106.081396	-48.89986539	-52.09744296	-48.77325074	-57.92844002	-51.52168806	-54.41103162	-25.50774019
+0.35	80.06823036	106.788797	139.550929	68.71988403	73.46277274	68.93095893	82.40882507	78.43208299	82.91893465	36.27514157
-0.4	-71.27920737	-97.191434	-120.028171	-56.45878067	-60.24964499	-56.46699356	-67.27890324	-61.62291112	-65.10861994	-29.59991232
+0.4	71.34996089	93.433379	119.206894	61.3480532	65.53884941	61.46895129	73.39578271	69.1561317	73.10172194	32.32382195
-0.45	-80.2997006	-108.745459	-133.006600	-63.14125088	-67.45848455	-63.27158076	-75.55268346	-70.59269797	-74.60840833	-33.22028125
+0.45	63.68001246	82.107847	101.924096	54.85757721	58.56428047	54.90219051	65.46829317	61.0333239	64.50546586	28.84801935
-0.5	-90.02016211	-121.968805	-147.834752	-70.33034456	-75.21601718	-70.59541957	-84.46237126	-80.28833066	-84.87742903	-37.11819654
+0.5	55.47194793	70.432005	84.102049	47.90582742	51.09635241	47.8723365	56.98666648	52.38469136	55.35335404	25.12882274
-0.55	-98.56125815	-134.305852	-169.225238	-76.63590106	-82.02220732	-77.02237567	-92.28528697	-88.83580985	-93.9308653	-40.53995399
+0.55	48.31395293	60.631557	69.254209	41.83774288	44.57992393	41.73953636	49.59205994	44.88479689	47.41745038	21.88588063
-0.6	-107.6893242	-148.309589	-193.050873	-83.36163888	-89.2843417	-83.88133721	-100.6390805	-98.00351978	-103.6417901	-44.19309341
+0.6	40.72737078	50.643115	58.044442	35.39960832	37.66872026	35.23681579	41.75697646	36.98581727	39.05996976	18.44931218
-0.65	-115.6378709	-161.272030	-214.706880	-89.20565123	-95.59674154	-89.84472408	-107.9069638	-106.0180139	-112.1316863	-47.37054271
+0.65	34.18201853	42.367252	48.764927	29.83854313	31.70156982	29.62390396	34.99940762	30.21953105	31.90162492	15.48493987
-0.7	-124.0484866	-175.873569	-238.674455	-95.37448828	-102.2627368	-96.14383396	-115.5897428	-114.5354705	-121.1549885	-50.72839793
+0.7	27.3282016	34.057281	39.396170	24.00756124	25.44782324	23.74328871	27.92598446	23.19253161	24.46829849	12.38151636
-0.75	-131.2913295	-189.288619	-260.318432	-100.6723244	-107.9902042	-101.5577137	-122.1984271	-121.9062973	-128.9641518	-53.6158277
+0.75	21.49616339	27.290348	31.725265	19.03813058	20.12107512	18.73620044	21.90961732	17.27050803	18.20467594	9.741409149
-0.8	-138.8594366	-204.288601	-284.800615	-106.1907282	-113.9593332	-107.2020015	-129.0950756	-129.6511744	-137.1703098	-56.62788372
+0.8	15.48639545	20.633183	24.138299	13.9078391	14.62551833	13.57266846	15.71297923	11.31055784	11.90585035	7.021648471
-0.85	-145.2834457	-217.968320	-307.161005	-110.8577708	-119.0107419	-111.9804508	-134.9404113	-136.2676741	-144.181571	-59.17960107
+0.85	10.46836503	15.344369	18.079617	9.614688235	10.03032888	9.257342925	10.54198243	7.106055141	7.523793486	4.751511699
-0.9	-151.8839843	-233.150659	-331.576666	-115.6322049	-124.1822729	-116.8749313	-140.9357956	-143.1176434	-151.4410605	-61.79534093
+0.9	5.413924996	10.297564	12.624838	5.278623261	5.393693203	4.905863783	5.337244196	4.089585899	4.329199647	2.559300323
-0.95	-157.3759918	-246.891949	-353.317598	-119.5838104	-128.4664682	-120.9320186	-145.9136233	-148.8691163	-157.537208	-63.96563895
+0.95	4.243371142	6.856925	10.135091	3.194199141	3.438215651	3.241166009	3.926128104	4.089585899	4.329199647	1.710067882
-1	-162.8839037	-262.023781	-376.868184	-123.5207383	-132.7396698	-124.9817093	-150.8926135	-154.7018508	-163.7205065	-66.13455655
+1	4.24E+00	6.694783	9.989163	3.19E+00	3.44E+00	3.24E+00	3.93E+00	4.09E+00	4.33E+00	1.71E+00
(Span 2) -2	-1.49E+01	-23.432541	-34.963267	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.43E+01	-1.52E+01	-5.99E+00
+2	1.59E+02	273.989399	393.531486	123.5843577	132.8373579	125.0922069	151.0883416	155.4667385	164.538472	66.19286099
-2.05	-1.49E+01	-23.657680	-35.165892	-1.12E+01	-1.20E+01	-1.13E+01	-1.37E+01	-1.43E+01	-1.52E+01	-5.99E+00
+2.05	1.52E+02	256.397933	367.444588	119.3283012	128.2166662	120.7125316	145.7015189	149.1666584	157.8599794	63.84583521
-2.1	-14.85230691	-24.443363	-35.873006	-11.18007934	-12.03416619	-11.34446896	-13.74191833	-14.31404023	-15.15271703	-5.985442307
+2.1	144.4710005	237.312340	338.784709	114.0715668	122.5198923	115.3192128	139.0893853	141.5977768	149.8385381	60.96169898
-2.15	-14.85230691	-27.616982	-39.671616	-12.01204261	-12.62215128	-11.70722546	-13.74191833	-14.31404023	-15.15271703	-6.078829884
+2.15	136.5969038	219.694841	312.029729	108.6631781	116.6666553	109.7825954	132.3179839	133.9732847	141.7597894	58.00566071
-2.2	-21.47639323	-35.332974	-48.472231	-17.94601119	-18.97989969	-17.68166103	-20.70457512	-16.50873454	-17.40521678	-9.22661218
+2.2	127.5230719	200.866857	283.147762	102.3156329	109.8042651	103.2958663	124.3997025	125.1750489	132.4389064	54.54679355

-2.25	-29.22547937	-43.574879	-57.818788	-23.89795087	-25.36363607	-23.68469968	-27.92562406	-23.6554614	-24.96467033	-12.39421639
+2.25	118.6878113	183.736116	256.634894	96.03956984	103.025037	96.89135984	116.5940893	116.5984084	123.3540631	51.13546916
-2.3	-38.18526934	-53.638961	-69.157730	-30.74235921	-32.71096002	-30.59777633	-36.25491815	-32.01696571	-33.81085907	-16.04641988
+2.3	108.7816835	165.683790	228.481649	88.90864708	95.32811152	89.62336668	107.7480196	106.9728804	113.1594511	47.26791163
-2.35	-46.93447959	-64.005839	-80.757617	-37.39497723	-39.85770119	-37.32541571	-44.37204641	-40.26261841	-42.53594365	-19.60420712
+2.35	99.36629106	149.486315	203.061421	82.04956126	87.92944121	82.63999677	99.25852931	97.81636064	103.4626805	43.55501762
-2.4	-56.76888226	-76.293657	-94.409121	-44.84239338	-47.86352067	-44.8649709	-53.47990696	-49.6099437	-52.42817033	-23.59480896
+2.4	89.03938547	132.656086	177.175838	74.44271096	79.72908023	74.90293446	89.86308783	87.76559416	92.82004353	39.4447723
-2.45	-66.13760698	-88.637238	-109.116526	-51.91102832	-55.46670781	-52.02814824	-62.14273472	-58.58225962	-61.92472552	-27.38907476
+2.45	79.42490472	117.772118	154.166980	67.28525985	72.01752167	67.62972408	81.04005154	78.21422211	82.70727545	35.58403642
-2.5	-76.43561144	-102.952880	-131.375101	-59.65402436	-63.79994641	-59.8820207	-71.65078396	-68.51334853	-72.43728238	-31.55204859
+2.5	69.34385315	102.405004	130.523968	59.36594873	63.48982588	59.5896869	71.29669894	68.14202085	72.04419181	31.39713228
-2.55	-86.04328566	-117.192052	-153.267839	-66.99785609	-71.70795291	-67.33782425	-80.68613068	-77.84005324	-82.31113524	-35.42905917
+2.55	60.7518797	89.149392	109.913161	52.19605614	55.77337796	52.31712436	62.49239491	58.94598219	62.30972251	27.54228838
-2.6	-96.58460896	-133.266185	-178.116207	-74.72741117	-80.0359063	-75.19237102	-90.21437914	-88.13986409	-93.21633276	-39.59837765
+2.6	51.70840081	75.818707	93.749266	44.56242417	47.56246744	44.58137762	53.13712828	49.25652555	52.05412537	23.4447485
-2.65	-106.0474566	-148.850289	-202.067898	-81.77125665	-87.62933466	-82.35677587	-98.9144177	-97.44671757	-103.0712491	-43.40440707
+2.65	43.55162874	64.440806	81.089084	37.66622171	40.1491909	37.59985341	44.70337354	40.60101594	42.89404342	19.74950181
-2.7	-116.0340815	-166.342907	-229.512757	-89.17857386	-95.61936507	-89.89832734	-108.0824756	-107.3351169	-113.5430816	-47.41406569
+2.7	35.06907832	53.244831	68.575647	30.48188998	32.43124435	30.33452708	35.93751093	31.69635946	33.47163868	15.90734809
-2.75	-124.9710686	-183.058679	-255.581892	-95.78172195	-102.7466242	-96.62838666	-116.2738103	-116.248246	-122.9831758	-50.99539062
+2.75	27.60102316	43.926060	58.090118	24.1440342	25.62769204	23.93306507	28.22463747	23.95365318	25.28011687	12.52543326
-2.8	-134.1842253	-201.559094	-284.214319	-102.5593713	-110.0676528	-103.5447475	-124.7032588	-125.5103727	-132.7941236	-54.67935743
+2.8	20.04516839	35.024968	48.011755	17.71643197	18.73378738	17.4503033	20.42653571	16.23585201	17.11660996	9.104695139
-2.85	-142.2147466	-218.993159	-310.958286	-108.4371668	-116.422191	-109.5514392	-132.03556	-133.6574618	-141.4251791	-57.88224719
+2.85	14.8562887	27.880469	39.863809	12.22157972	12.84651307	11.91797283	13.78493054	14.31404035	15.15271732	6.189834555
-2.9	-150.2434075	-238.019161	-339.852086	-114.277707	-122.7431275	-115.5304639	-139.3480412	-141.89126	-150.1495361	-61.07450079
+2.9	14.8562887	24.403269	35.836922	11.18007949	12.03416604	11.34446879	13.74191846	14.31404035	15.15271732	5.985442205
-2.95	-156.9868613	-255.691865	-366.390524	-119.1454933	-128.0183916	-120.5247188	-145.4709217	-148.9000579	-157.5774046	-63.74524558
+2.95	14.8562887	23.676236	35.182592	11.18007949	12.03416604	11.34446879	13.74191846	14.31404035	15.15271732	5.985442205
-3	-163.420008	-274.689620	-394.562688	-123.7415228	-133.0081882	-125.2542581	-151.2880728	-155.7034727	-164.7894654	-66.27976354
+3	14.8562887	23.432541	34.963267	11.18007949	12.03416604	11.34446879	13.74191846	14.31404035	15.15271732	5.985442205
(Span 3) -4	-4.244508749	-6.694783	-9.989163	-3.194199183	-3.438215608	-3.24116596	-3.926128143	-4.089585935	-4.329199729	-1.710067853
+4	157.7728952	261.305382	375.759560	123.3437441	132.5474243	124.799444	150.6682462	154.4368818	163.4395851	66.0369293
-3.05	-4.244508749	-6.841177	-10.120917	-3.194199183	-3.438215608	-3.24116596	-3.926128143	-4.089585935	-4.329199729	-1.710067853
+3.05	152.3152982	247.614187	354.451189	119.7815786	128.6809974	121.1352398	146.1632056	149.1593883	157.8448994	64.07447904
-3.1	-5.624746124	-10.519237	-12.828197	-5.475152182	-5.603725403	-5.102903762	-5.572664381	-4.097855313	-4.329199729	-2.627152539
+3.1	145.7500672	232.426935	330.422494	115.4141828	123.9460154	116.6512608	140.6616022	142.802745	151.1073147	61.67583122
-3.15	-10.26428616	-15.085297	-17.738632	-9.398442159	-9.798974721	-9.040151031	-10.28194945	-6.948952806	-7.356832221	-4.637268565
+3.15	139.3555818	218.690083	308.331462	111.0942632	119.2668025	112.2227469	135.2369961	136.6049158	144.5389531	59.30910997
-3.2	-16.36696474	-20.930940	-24.426130	-14.14333261	-14.87768423	-13.80954815	-15.99705238	-11.56285536	-12.17142669	-7.146261877
+3.2	131.8174528	203.570854	283.618073	105.9361461	113.6838748	106.94146	128.7765517	129.2921669	136.789902	56.4888949
-3.25	-22.36710671	-26.954029	-31.281939	-18.78521933	-19.8500638	-18.48149851	-21.60375642	-16.97100383	-17.8879196	-9.607099193
+3.25	124.5993605	189.999017	261.455207	100.9431117	108.2830268	101.8345482	122.5365147	122.2846607	129.3650327	53.76360401
-3.3	-29.49614498	-34.433348	-39.750388	-24.27757096	-25.73733183	-24.01544938	-28.25318385	-23.51615727	-24.81061563	-12.5250094
+3.3	116.2135452	175.172270	237.533591	95.08778046	101.9528531	95.85098056	115.232415	114.1381672	120.7340743	50.57232657
-3.35	-36.36827492	-41.951851	-48.217558	-29.55337784	-31.3956526	-29.33621733	-34.65320386	-29.87415588	-31.53625745	-15.33296407
+3.35	108.2851559	161.960968	215.848049	89.50625868	95.92150677	90.15157115	108.2810691	106.4316621	112.5698855	47.53417229
-3.4	-44.39856557	-51.098916	-58.463258	-35.69964822	-37.9907405941277	-35.53976217	-42.1218538213841	-37.35243022	-39.4478448944994	-18.60927999
+3.4	99.17685514	147.634471	191.913099	83.04729868	88.94487167	83.56066119	100.24839	97.57380189	103.1865965	44.02235655
-3.45	-52.02960747	-60.136073	-68.531629	-41.52481885	-44.24394089	-41.42339258	-49.21100166	-44.49936165	-47.00962442	-21.7186534
+3.45	90.65140722	134.964070	170.356006	76.96192282	82.37417028	77.35476108	92.68998634	89.27897845	94.40027954	40.71703723
-3.5	-60.83611595	-70.968168	-84.919687	-48.23147227	-51.44611889	-48.20154904	-57.38374373	-52.78849427	-55.78064875	-25.30285318
+3.5	81.56542009	121.328728	146.929210	69.99279851	74.85172771	70.25144808	84.04380587	79.83198057	84.39407867	36.93521598
-3.55	-69.11282086	-81.532050	-101.044664	-54.52134143	-58.20302118	-54.56206255	-65.05780149	-60.61368043	-64.06137751	-28.66793987

+3.55	*73.79119771*	*109.364428*	*133.635845*	*63.48819323*	*67.8328063445934*	*63.6249459941252*	75.9824518	*71.0595132*	*75.10281825*	*33.40843558*
-3.6	*-78.57048268*	*-94.049692*	*-120.146388*	*-61.69480344*	-65.91151647	*-61.81990251*	-73.81957102	*-69.59130522*	*-73.56227454*	*-32.50949368*
+3.6	*64.9705559*	*96.594497*	*119.297523*	*56.10248013*	59.86532999	*56.1042906*	66.8379952	*61.14581229*	*64.60334229*	*29.40707578*
-3.65	*-87.37981568*	*-106.133219*	*-138.553193*	*-68.36474094*	-73.08098049	*-68.5714085*	-81.97442972	*-77.98406938*	*-82.44476539*	*-36.08459258*
+3.65	*56.80834763*	*85.486349*	*106.684511*	*49.26331872*	52.48937455	*49.14307583*	58.37779865	*52.00637795*	*54.92432573*	*25.70453638*
-3.7	*-97.36357654*	*-120.320276*	*-160.100277*	*-75.91155004*	-81.19514202	*-76.2138642*	-91.20999395	*-87.52779914*	*-92.5459488*	*-40.13302865*
+3.7	*47.61452265*	*73.739339*	*93.184175*	*41.55455435*	44.17759686	*41.30001322*	*48.85013871*	*41.74818902*	*44.0609788*	*21.53417402*
-3.75	*-106.5923306*	*-133.901214*	*-180.646843*	*-82.87693091*	-88.6860331	*-83.27047758*	*-99.74154956*	*-96.37746298*	*-101.9130129*	*-43.87243804*
+3.75	*39.13970512*	*63.622238*	*81.403962*	*34.46537888*	36.53565301	*34.09010585*	*40.09536665*	*32.35246634*	*34.11139525*	*17.70157884*
-3.8	*-116.9771347*	*-149.724700*	*-204.474728*	*-90.70351465*	-97.10509056	*-91.20261953*	*-109.3358417*	*-106.3650814*	*-112.4850771*	*-48.07722485*
+3.8	*29.68697777*	*53.038781*	*68.902728*	*26.52709782*	27.98030379	*26.01956402*	*30.29956762*	*22.03599017*	*23.19577912*	*13.41272601*
-3.85	*-126.5121018*	*-164.765653*	*-227.067664*	*-97.87970781*	-104.8262677	*-98.47831573*	*-118.1398223*	*-115.5609689*	*-122.219528*	*-51.93524098*
+3.85	*21.05368822*	*44.032462*	*58.094110*	*19.2725802*	20.16355648	*18.6468521*	*21.35432703*	*18.63556873*	*19.72872291*	*9.495776067*
-3.9	*-137.1728889*	*-182.175816*	*-253.625676*	*-105.8924795*	-113.4494356	*-106.6052122*	*-127.9777738*	*-125.8700317*	*-133.1328262*	*-56.2458637*
+3.9	*19.25319127*	*35.645546*	*51.475333*	*14.46261711*	15.56981157	*14.67828531*	*17.78370076*	*18.63556873*	*19.72872291*	*7.759652913*
-3.95	*-146.9010423*	*-198.624237*	*-278.589276*	*-113.1948571*	-121.3097611	*-114.0141076*	*-136.9500783*	*-135.3014648*	*-143.1174755*	*-60.17678583*
+3.95	*19.25319127*	*34.661022*	*50.589261*	*14.46261711*	15.56981157	*14.67828531*	*17.78370076*	*18.63556873*	*19.72872291*	*7.759652913*
-5	*-157.7127531*	*-217.554705*	*-307.159375*	*-121.3003723*	-130.0364068	*-122.2406873*	*-146.9164515*	*-145.809765*	*-154.242612*	*-64.5427313*
+5	*19.25319127*	*34.297993*	*50.262535*	*14.46261711*	15.56981157	*14.67828531*	*17.78370076*	*18.63556873*	*19.72872291*	*7.759652913*

3-Span: Shear (Max and Min) Raw Data Results - 200' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-11.09931571	-16.04304083	-17.34603487	-27.90507358	-8.888977374	-12.00403161	-13.76442989	-15.42219347	-17.18064228
End Shear	92.24312482	126.4840359	131.6876588	168.6304557	74.14142468	99.99853369	113.7154234	125.3864922	137.513795
-0.05	-11.09931571	-16.04304083	-17.34603487	-27.99012172	-8.888977374	-12.00403161	-13.76442989	-15.42219347	-17.18064228
+0.05	86.17054837	117.6691496	122.1296006	152.7813006	69.27952174	93.43674115	106.1892001	116.9612722	128.1339755
-0.1	-11.09931571	-16.04304083	-17.34603487	-28.27187047	-8.888977374	-12.00403161	-13.76442989	-15.42219347	-17.18064228
+0.1	79.97248946	108.6859449	112.4021849	136.88942	64.31780007	86.73862885	98.50794483	108.3667167	118.5703425
-0.15	-13.32515763	-16.04304083	-17.34603487	-28.69596217	-11.00749939	-14.7693656	-15.86147405	-15.81492865	-17.18064228
+0.15	74.40828537	100.6455995	103.7148025	123.0146719	59.86252524	80.72444964	91.61407815	100.6589962	110.0000248
-0.2	-19.50039983	-20.08607004	-17.34603487	-29.35033823	-15.94582495	-21.43725407	-23.52428383	-24.3075655	-24.81501544
+0.2	68.32481296	91.88218792	94.26778606	108.2786612	54.99037522	74.14780949	84.07893785	92.24085616	100.6470899
-0.25	-25.03551257	-28.14808738	-24.81482505	-30.10869967	-20.37127132	-27.41289917	-30.39463352	-32.0282764	-33.44340092
+0.25	62.89683752	84.08836983	85.88618638	95.5249809	50.64218141	68.27868872	77.35763908	84.73800387	92.31786234
-0.3	-31.0774949	-37.08215126	-33.97902044	-34.10682512	-25.20088267	-33.9345824	-37.89623237	-40.46494798	-42.87914732
+0.3	56.99990967	75.65010485	76.83471182	82.11013874	45.91716728	61.90123555	70.0578353	76.59629348	83.28716345
-0.35	-36.45948625	-45.06511805	-42.76529829	-41.78091107	-29.50192528	-39.74278914	-44.58035704	-47.98833906	-51.30015402
+0.35	51.77325707	68.19812058	68.86305529	70.97627898	41.72813274	56.24748439	63.58982353	69.3887853	75.29993345
-0.4	-42.29625313	-53.75083027	-52.34621535	-50.34002507	-34.16525819	-46.04055851	-51.83152397	-56.15691434	-60.45092871
+0.4	46.13482399	60.19035362	60.32224773	59.59588752	37.20781374	50.14691894	56.61458141	61.62352928	66.70299714
-0.45	-47.46002387	-61.46144463	-60.87121631	-58.99227932	-38.28982282	-51.61102333	-58.24870246	-63.39250233	-68.56365771
+0.45	41.17460154	53.17551644	52.86472504	50.58877913	33.23001891	44.77884112	50.48058036	54.80186186	59.15867178
-0.5	-53.01962461	-69.79347123	-70.10578664	-70.25016525	-42.72931994	-57.60716533	-65.1602123	-71.19295871	-77.31793746
+0.5	35.86661682	45.70358088	44.94972625	41.55382757	28.97195593	39.03287692	43.91912211	47.51307101	51.10702283
-0.55	-57.90007931	-77.13642257	-78.26535226	-81.20236928	-46.62532323	-62.86958348	-71.22972148	-78.05024463	-85.02147411
+0.55	31.23791618	39.22120025	38.11048541	34.23192277	25.25747948	34.02078179	38.19985816	41.16773107	44.10651694
-0.6	-63.11055993	-85.00941348	-87.03844226	-93.9999708	-50.78342049	-68.48639224	-77.71235238	-85.38257223	-93.26771954
+0.6	26.33233062	32.39044723	30.93643173	27.40091136	21.31923218	28.70712996	32.14140753	34.4554204	36.71169516
-0.65	-67.64259498	-91.88938895	-94.72838946	-107.1151273	-54.39878572	-73.37045047	-83.35346507	-91.77106121	-100.461155
+0.65	22.10026029	26.53585114	24.81966562	22.02606438	17.92015435	24.12132187	26.91759728	28.67690937	30.35590149
-0.7	-72.43200439	-99.19799615	-102.92487	-122.0467057	-58.21792079	-78.53021988	-89.317992	-98.53525419	-108.0878421
+0.7	17.66902656	20.45162609	18.5016931	16.55999198	14.35928433	19.31768635	21.45137302	22.6410953	23.72943302
-0.75	-76.55051705	-105.5196788	-110.0410392	-136.2250781	-61.50057098	-82.96560523	-94.44999426	-104.3644671	-114.6702648
+0.75	13.89868134	15.32010736	13.4552803	12.23776998	11.32768248	15.22847604	16.80375693	17.51989811	18.11927924
-0.8	-80.84690247	-112.158558	-117.5457678	-151.663966	-64.92318566	-87.59063235	-99.80719826	-110.4604875	-121.5658615
+0.8	10.01375277	10.15241481	8.666350195	8.181594297	8.201751717	11.01256616	12.01898073	12.26059725	12.37269379
-0.85	-84.4867962	-117.82665	-123.9839705	-165.376797	-67.82103922	-91.50704394	-104.3493482	-115.6399281	-127.436379
+0.85	6.770227968	6.199556824	5.548959336	5.92133399	5.589705675	7.490267402	8.02826887	8.006817439	8.006500499
-0.9	-88.21820557	-123.6904548	-130.6818124	-180.1974811	-70.78957639	-95.51961357	-109.0100089	-120.9677712	-133.4893556
+0.9	3.503556822	3.520086649	3.787794383	5.687735419	2.956274127	3.939785602	4.170166027	4.169902823	4.169648855
-0.95	-91.31438021	-128.6096245	-136.3378981	-193.2562164	-73.25055049	-98.84674383	-112.8815902	-125.4069482	-138.5470472
+0.95	2.448920496	3.520086649	3.787794383	5.567663925	1.962158557	2.65013374	3.037055759	3.402137539	3.788463821
-1	-94.40886139	-133.5930097	-142.1137074	-207.2481619	-75.70744403	-102.169143	-116.7564909	-129.8665983	-143.6458745
+1	2.45E+00	3.52E+00	3.79E+00	5.53E+00	1.96E+00	2.65E+00	3.04E+00	3.40E+00	3.79E+00
(Span 2) -2	-8.57E+00	-1.23E+01	-1.33E+01	-1.93E+01	-6.87E+00	-9.28E+00	-1.06E+01	-1.19E+01	-1.33E+01
+2	9.45E+01	134.2148077	143.1870307	217.5766094	75.77719677	102.2681945	116.9260539	130.16131	144.092842
-2.05	-8.57E+00	-1.23E+01	-1.33E+01	-1.94E+01	-6.87E+00	-9.28E+00	-1.06E+01	-1.19E+01	-1.33E+01
+2.05	91.17282163	128.8326283	136.9681163	202.8090496	73.12043113	98.67509998	112.7345651	125.3344868	138.5730793
-2.1	-8.571514924	-12.32072483	-13.25773366	-19.60227415	-6.867790029	-9.275785139	-10.63005859	-11.90788856	-13.26007701
+2.1	87.06032851	122.3556881	129.5765771	186.4462379	69.84958902	94.25317417	107.5945755	119.450112	131.8807233
-2.15	-8.630069374	-12.32072483	-13.25773366	-19.93871131	-7.073868407	-9.496415865	-10.63005859	-11.90788856	-13.26007701
+2.15	82.84482705	115.8226538	122.1939476	171.0600291	66.49246115	89.71588134	102.3345704	113.4550661	125.0909765
-2.2	-13.12472024	-14.6242044	-13.25773366	-20.47957737	-10.69035757	-14.37441293	-15.88380972	-16.60830232	-17.22896938
+2.2	77.91172018	108.275896	113.7347903	154.3500185	62.55982166	84.40192856	96.18719732	106.4733627	117.2103107
-2.25	-17.64693938	-20.81286159	-19.15464216	-21.15850798	-14.32491057	-19.27776169	-21.46276833	-22.76844348	-23.98970053

+2.25	73.0458941	100.9125921	105.5388057	138.8400746	58.67750853	79.15693546	90.13019622	99.6144529	109.4900127
-2.3	-22.86042203	-28.04481855	-26.70982324	-26.16895127	-18.51113775	-24.92631975	-27.90169043	-29.90105487	-31.84385137
+2.3	67.52866502	92.64226324	96.39047257	122.2579878	54.27226469	73.20634865	83.26867585	91.8641482	100.7876185
-2.35	-27.9387457	-35.16954256	-34.22069194	-33.29484637	-22.5856375	-30.42491422	-34.17964729	-36.87433208	-39.54407323
+2.35	62.23145534	84.76927867	87.73153498	107.3915953	50.03993597	67.49013046	76.68619867	84.445753	92.47614291
-2.4	-33.63456808	-43.23933875	-42.79320601	-42.5768314	-27.15241584	-36.58862722	-41.22687903	-44.72076049	-48.22957358
+2.4	56.36659163	76.12161835	78.22626624	91.85974694	45.35127274	61.15834147	69.40380849	76.25557059	83.31858517
-2.45	-39.05000952	-50.97954598	-51.07087717	-52.56043129	-31.49168221	-42.44596164	-47.9323118	-52.2027924	-56.52983554
+2.45	50.85699427	67.89828429	69.32597165	78.09846469	40.94411322	55.20737144	62.56738388	68.58206819	74.71584267
-2.5	-44.99168772	-59.54093938	-60.28228346	-64.86764864	-36.24983402	-48.8694249	-55.29457769	-60.43431451	-65.68011726
+2.5	44.77045739	59.22093123	59.93699712	64.38161236	36.07271914	48.63030906	55.02035813	60.12741969	65.33865711
-2.55	-50.63593166	-67.57603551	-68.97634797	-77.56255056	-40.7672233	-54.96856165	-62.29318009	-68.25763965	-74.35136223
+2.55	39.26855438	51.29321036	51.40733742	52.97461623	31.66675616	42.6822826	48.20301288	52.50515289	56.86562784
-2.6	-56.58593054	-76.44374396	-78.57606675	-92.42380175	-45.52666415	-61.39518339	-69.67604779	-76.56143998	-83.66024658
+2.6	33.42024595	42.93434158	42.46809189	42.21896734	26.98064076	36.35675833	40.96161963	44.42509245	47.90192192
-2.65	-62.0166949	-84.45134331	-87.38284912	-106.8060418	-49.86829647	-67.2583259	-76.41943408	-84.14543071	-92.14001426
+2.65	28.14599016	35.46180935	34.53002487	33.62402316	22.75186918	30.64924469	34.4359737	37.15939769	39.8592699
-2.7	-67.73729779	-92.95361369	-96.73388896	-122.8607747	-54.43889565	-73.43144242	-83.52803311	-92.15675997	-101.1157855
+2.7	22.66179713	27.76766568	26.41888941	25.91205799	18.35172374	24.71119159	27.65625815	29.62879766	31.54363429
-2.75	-72.84618681	-100.6118447	-105.2051428	-138.2021647	-58.51810821	-78.94160189	-89.88172058	-99.33345083	-109.1741
+2.75	17.83415862	21.07091603	19.42282182	21.18939542	14.47530674	19.48066479	21.69386916	23.02404964	24.27073542
-2.8	-78.10090707	-108.5636574	-114.0561715	-154.9690036	-62.71069039	-84.60578054	-96.42280391	-106.7405341	-117.5114391
+2.8	12.95054255	14.38773781	13.25773381	20.45606871	10.55030782	14.18547357	15.66907612	16.37163343	16.9697377
-2.85	-82.66893823	-115.5518907	-121.8892762	-170.4421775	-66.35230107	-89.52648433	-102.1152378	-113.2055507	-124.8088863
+2.85	8.788490758	12.32072506	13.25773381	19.95535619	7.201428124	9.668444875	10.63005857	11.90788853	13.26007694
-2.9	-87.22127734	-122.6070048	-129.8619118	-187.0582381	-69.97768062	-94.42633335	-107.7955595	-119.6796641	-132.1412047
+2.9	8.571514975	12.32072506	13.25773381	19.59189267	6.867789977	9.275785185	10.63005857	11.90788853	13.26007694
-2.95	-91.02948121	-128.6046662	-136.706461	-202.2099531	-73.00651546	-98.52107023	-112.55523	-125.1286325	-138.3383544
+2.95	8.571514975	12.32072506	13.25773381	19.4036431	6.867789977	9.275785185	10.63005857	11.90788853	13.26007694
-3	-94.64297391	-134.4168414	-143.4222667	-218.1578654	-75.87550471	-102.4011947	-117.0815443	-130.3410517	-144.2990857
+3	8.571514975	12.32072506	13.25773381	19.34054365	6.867789977	9.275785185	10.63005857	11.90788853	13.26007694
(Span 3) -4	-2.44892051	-3.52E+00	-3.79E+00	-5.53E+00	-1.962158542	-2.650133753	-3.037055753	-3.402137531	-3.788463801
+4	94.26948057	133.3667655	141.8502374	206.5929295	75.59685776	102.0195749	116.5818083	129.6651057	143.4150327
-3.05	-2.44892051	-3.52E+00	-3.79E+00	-5.56E+00	-1.962158542	-2.650133753	-3.037055753	-3.402137531	-3.788463801
+3.05	91.46956577	128.8577664	136.6242704	193.9331134	73.37383596	99.01343244	113.0757681	125.6299719	138.8015782
-3.1	-3.65136945	-3.585846095	-3.787794424	-5.696379947	-3.075499747	-4.100520039	-4.322109933	-4.321849998	-4.32158078
+3.1	88.04761478	123.4210027	130.3730594	179.5002175	70.65391951	95.33621736	108.796822	120.7237123	133.2117157
-3.15	-6.607075402	-6.039247611	-5.40743412	-5.907659784	-5.458244005	-7.31301988	-7.82765209	-7.807600115	-7.807272533
+3.15	84.67143392	118.1154506	124.3128456	166.0905842	67.96799078	91.70565446	104.5798545	115.9030875	127.7350033
-3.2	-10.19188039	-10.37088681	-8.88435341	-8.364295159	-8.345127336	-11.20594523	-12.23825906	-12.50128879	-12.63528702
+3.2	80.64851989	111.8509104	117.1971856	150.9347573	64.76520323	87.3771175	99.55975635	110.1786306	121.2467404
-3.25	-13.70696087	-15.06046644	-13.21740968	-12.03424878	-11.17347271	-15.02049007	-16.5675237	-17.2599179	-17.83479271
+3.25	76.76118288	105.8441018	110.4069271	136.9658041	61.66844927	83.19242585	94.71258269	104.66297	115.0076588
-3.3	-17.87405844	-20.7319374	-18.79175764	-16.80889453	-14.52407735	-19.53998038	-21.70418914	-22.92000097	-24.03527464
+3.3	72.20926959	98.85715972	102.5419525	121.2954262	58.04036338	78.29031693	89.04055599	98.2203451	107.7325424
-3.35	-21.88339906	-26.23691661	-24.50827829	-21.75451272	-17.74593808	-23.88629986	-26.6499988	-28.38115164	-30.03089941
+3.35	67.87586474	92.24440789	95.12587096	107.8195675	54.58483261	73.62177807	83.64390155	92.10019777	100.8320012
-3.4	-26.56082487	-32.7075683963615	-31.26867134	-27.69501406	-21.50268862	-28.9546608382946	-32.42350133	-34.76774016	-37.0554817160001
+3.4	62.86690366	84.64045254	86.6266679	93.34316186	50.58902754	68.22377381	77.40916259	85.03941972	92.88155945
-3.45	-30.99934006	-38.88797629	-37.75970281	-33.86065959	-25.06598696	-33.76242804	-37.90513315	-40.84099456	-43.74623831
+3.45	58.15253439	77.51707327	78.68889146	81.80819832	46.8268195	63.14175769	71.54375487	78.40519937	85.42046942
-3.5	-36.11514212	-46.05251948	-45.31864404	-41.95312528	-29.17133198	-39.30194738	-44.22624611	-47.85406879	-51.48344576
+3.5	52.75847654	69.40136551	69.67064285	69.71378453	42.52083826	57.32553569	64.83552827	70.82628397	76.90628209
-3.55	-40.91772921	-52.81304269	-52.48005256	-50.13061523	-33.02398625	-44.50081526	-50.16297546	-54.44885692	-58.7684685
+3.55	47.7282385	61.8626686392089	61.3153384482064	59.5277968173237	38.5040319479087	51.900314449018	58.5820885410377	63.7685640621988	68.98549922

-3.6	-46.3999564	-60.56609838	-60.72237281	-60.10686874	-37.42039064	-50.43382394	-56.94248286	-61.98840448	-67.10673587
+3.6	42.02103921	53.3406464	51.89318094	49.93080012	33.94540696	45.74365156	51.48955512	55.77153047	60.01905296
-3.65	-51.50151685	-67.81142462	-68.44998452	-70.41013546	-41.51029956	-55.95351888	-63.25358543	-69.01432164	-74.88511581
+3.65	36.7400345	45.48194462	43.22452336	42.1866293	29.72610786	40.04549856	44.92880689	48.38071051	51.73953082
-3.7	-57.2782121	-76.04759541	-77.26054434	-82.73244355	-46.14017748	-62.20223438	-70.40230185	-76.98032268	-83.71290752
+3.7	30.79164589	36.65885666	33.51359359	33.7049633	24.97242724	33.62606911	37.54127163	40.06557393	42.43235424
-3.75	-62.61364837	-83.68241128	-85.45019163	-94.86996467	-50.41531155	-67.97248647	-77.00705414	-84.34678822	-91.88373733
+3.75	25.32497294	28.57546361	25.21235187	30.15295332	20.60266121	27.72536438	30.75394142	32.4322397	33.89500373
-3.8	-68.61286242	-92.29644796	-94.71385237	-108.9658487	-55.22107605	-74.45923923	-84.43567869	-92.63922772	-101.089526
+3.8	19.20734655	19.70231897	17.34603511	29.31478441	15.71151221	21.12083667	23.16058354	23.89901558	24.35862526
-3.85	-74.11707238	-100.2254417	-103.2613643	-122.298716	-59.62933046	-80.40966471	-91.25335412	-100.2558449	-109.5518966
+3.85	13.62006911	16.04304119	17.34603511	28.72271584	11.2433851	15.08785199	16.22739646	16.17786443	17.18064243
-3.9	-80.26685184	-109.1118978	-112.862991	-137.6336611	-64.5534468	-87.05678313	-98.87270473	-108.7747072	-119.0241506
+3.9	11.09931591	16.04304119	17.34603511	28.25399389	8.888977445	12.00403184	13.76443006	15.42219368	17.18064243
-3.95	-85.87477362	-117.2397562	-121.6641949	-152.0123197	-69.04274207	-93.11711385	-105.8225794	-116.5508873	-127.6771537
+3.95	11.09931591	16.04304119	17.34603511	27.9990725	8.888977445	12.00403184	13.76443006	15.42219368	17.18064243
-5	-92.10312892	-126.29339	-131.488595	-168.4188642	-74.02767752	-99.84681234	-113.5434334	-125.1961557	-137.304287
+5	11.09931591	16.04304119	17.34603511	27.90507387	8.888977445	12.00403184	13.76443006	15.42219368	17.18064243

3-Span: Shear (Max and Min) Raw Data Results - 200' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)	Force Y (kips)
-0	-31.21872984	-34.58725796	-19.574399	-23.53195743	-25.43382725
End Shear	235.4696542	255.7664255	151.98027	183.007743	195.4740186
-0.05	-31.21872984	-34.58725796	-19.574399	-23.53195743	-25.43382725
+0.05	218.3219223	237.0244269	141.21324	170.078616	181.4971494
-0.1	-31.21872984	-34.58725796	-19.574399	-23.53195743	-25.43382725
+0.1	200.8745307	217.7131992	130.24798	156.9093593	167.2660367
-0.15	-31.21872984	-34.58725796	-19.574399	-23.53195743	-25.43382725
+0.15	185.2942366	200.4849661	120.4421	145.1306463	154.5456598
-0.2	-31.21872984	-34.58725796	-21.951836	-26.98909183	-26.7296103
+0.2	168.3534624	181.7710957	109.76399	132.3021029	140.7006837
-0.25	-43.27342043	-43.4917874	-31.530164	-38.48266819	-38.89639235
+0.25	153.324941	165.1872264	100.2763	120.9017126	128.4055526
-0.3	-60.34469226	-61.32541053	-42.497063	-51.64054985	-53.17383496
+0.3	137.0972471	147.3003922	90.01438	108.5687246	115.1144562
-0.35	-76.11773871	-78.90610878	-52.304849	-63.4059697	-65.94829377
+0.35	122.8072861	131.5686881	80.961599	97.68672631	103.3963315
-0.4	-93.31949597	-98.09734637	-62.985535	-76.21652083	-79.86649507
+0.4	107.4991326	114.7385803	71.2449	86.00412378	90.82684795
-0.45	-108.6275263	-115.1925588	-72.475997	-87.59764998	-92.24004825
+0.45	94.13450985	100.0668719	62.743778	75.78061274	79.83749339
-0.5	-125.2120953	-133.7323659	-82.741438	-99.90603309	-105.6312717
+0.5	79.95233323	84.52318138	53.701324	64.90323185	68.15735714
-0.55	-139.8683102	-150.1342941	-91.797834	-110.7627773	-117.4521547
+0.55	67.69986664	71.11930575	45.868611	55.47830512	58.04853798
-0.6	-155.629236	-167.7929801	-101.519	-122.4141591	-130.1486719
+0.6	54.85009966	57.09172648	37.629429	45.56097652	47.42549274
-0.65	-169.4468788	-183.2937788	-110.02459	-132.6064306	-141.2651221
+0.65	43.89655728	45.16345883	30.581845	37.07470075	38.34897356
-0.7	-184.1777001	-199.841651	-119.07246	-143.445979	-153.0991667
+0.7	32.58566943	32.88168391	23.274965	28.27226119	28.95077366
-0.75	-196.9699393	-214.2335354	-126.9105	-152.8336821	-163.3594183
+0.75	23.30737567	23.55750195	17.129272	20.86474979	21.05831566
-0.8	-210.4642407	-229.4409032	-135.15603	-162.7065621	-174.1632871
+0.8	14.82052413	15.54876622	11.087167	13.5761667	13.42198004
-0.85	-222.0443107	-242.5160426	-142.2098	-171.1496315	-183.4155779
+0.85	9.03503436	9.309330277	7.5497906	8.28679168	8.864268736
-0.9	-234.095622	-256.1532115	-149.52398	-179.9010087	-193.021514
+0.9	6.828629572	7.557178251	4.2876978	5.158688224	5.569994194
-0.95	-244.2767334	-267.7037652	-155.6767	-187.2593284	-201.1140786
+0.95	6.828629572	7.557178251	4.2876978	5.158688224	5.569994194
-1	-254.6785996	-279.5410452	-161.9305	-194.7343701	-209.3543323
+1	6.83E+00	7.56E+00	4.29E+00	5.16E+00	5.57E+00
(Span 2) -2	-2.39E+01	-2.65E+01	-1.50E+01	-1.81E+01	-1.95E+01
+2	256.6164295	281.9332091	162.85942	195.8109848	210.6812849
-2.05	-2.39E+01	-2.65E+01	-1.50E+01	-1.81E+01	-1.95E+01
+2.05	245.4082293	269.1848474	156.1115	187.7419368	201.7922822
-2.1	-23.9010209	-26.45102848	-15.007456	-18.05602648	-19.49564674
+2.1	232.0976905	254.1205636	148.03292	178.0734684	191.1803263
-2.15	-23.9010209	-26.45102848	-15.007456	-18.05602648	-19.49564674
+2.15	218.811806	239.1446608	139.91745	168.3542833	180.5435334
-2.2	-23.9010209	-26.45102848	-16.417414	-19.98751522	-20.24179864
+2.2	203.5966787	222.0520842	130.57396	157.1581299	168.319604
-2.25	-33.8160842	-34.57546285	-23.8375	-28.93126716	-29.77897673

+2.25	188.8613879	205.5476401	121.48357	146.2599779	156.4454813
-2.3	-47.35688091	-49.32923238	-32.545333	-39.4185891	-40.99774455
+2.3	172.42014	187.1817029	111.29924	134.0450157	143.1608889
-2.35	-60.82322102	-64.06185384	-41.153972	-49.7795358	-52.11008173
+2.35	156.8637266	169.8477328	101.62662	122.4391153	130.5599056
-2.4	-76.19789507	-80.93945446	-50.933388	-61.54296546	-64.75437752
+2.4	139.8623152	150.9633719	91.025513	109.7142388	116.7659609
-2.45	-91.04809435	-97.28908421	-60.337882	-72.84986881	-76.93141318
+2.45	123.8116161	133.4988799	80.966293	97.63515032	103.6926327
-2.5	-107.5781069	-115.5355912	-70.764826	-85.38054075	-90.4499281
+2.5	106.9583958	114.8510249	70.37465	84.91173863	89.94375116
-2.55	-123.1839558	-132.8032108	-80.572529	-97.1622267	-103.1811904
+2.55	91.65183101	97.95502791	60.719473	73.30854913	77.42579996
-2.6	-140.493396	-151.6636885	-91.420007	-110.1878549	-117.2789328
+2.6	75.61468444	80.29861229	50.56328	61.09788389	64.27549331
-2.65	-156.2374262	-169.1502948	-101.23646	-121.9708933	-130.0519159
+2.65	61.3778839	64.67011659	41.507651	50.20508335	52.56701112
-2.7	-173.0372164	-187.8698096	-111.68219	-134.5044194	-143.6600932
+2.7	46.83538683	48.7600726	32.211032	39.01611312	40.56658621
-2.75	-188.2615898	-204.8763892	-121.11277	-145.8153351	-155.9614749
+2.75	34.29663007	35.09809102	24.147597	29.30487701	30.17804643
-2.8	-204.1745968	-222.7000073	-130.92968	-157.5844912	-168.784635
+2.8	23.90102075	26.45100772	16.134607	19.64646871	19.878812
-2.85	-218.2636982	-238.5275521	-139.58169	-167.952057	-180.1038853
+2.85	23.90102075	26.45100772	15.007456	18.05602637	19.49564649
-2.9	-232.6113391	-254.7003428	-148.34571	-178.4479483	-191.5907197
+2.9	23.90102075	26.45100772	15.007456	18.05602637	19.49564649
-2.95	-244.936859	-268.6498419	-155.82647	-187.4009428	-201.4173971
+2.95	23.90102075	26.45100772	15.007456	18.05602637	19.49564649
-3	-257.0405934	-282.4168716	-163.11353	-196.1146971	-211.0165985
+3	23.90102075	26.45100772	15.007456	18.05602637	19.49564649
(Span 3) -4	-6.828629529	-7.557172288	-4.2876978	-5.15868819	-5.56999412
+4	254.2039852	279.000277	161.64601	194.3944372	208.979111
-3.05	-6.828629529	-7.557172288	-4.2876978	-5.15868819	-5.56999412
+3.05	244.7923534	268.2899161	155.98758	187.6310191	201.5232864
-3.1	-6.828629529	-7.557172288	-4.3840518	-5.15868819	-5.56999412
+3.1	233.5399659	255.5239613	149.18744	179.4984306	192.5791763
-3.15	-8.758695979	-9.014839491	-7.38449	-8.106084681	-8.657341011
+3.15	222.6359821	243.1851163	142.56957	171.5801901	183.8877731
-3.2	-15.17208832	-15.90995606	-11.34979	-13.89317332	-13.7655341
+3.2	209.8373827	228.7341321	134.77357	162.2486894	173.66193
-3.25	-22.87450277	-23.07958293	-16.81879	-20.49040651	-20.65994155
+3.25	197.627835	214.9746312	127.31304	153.3157511	163.8866215
-3.3	-33.10493324	-33.44425451	-23.61117	-28.67738435	-29.38287446
+3.3	183.4893915	199.0682992	118.6502	142.9401678	152.5467235
-3.35	-43.33900904	-44.55677926	-30.22239	-36.6417734	-37.88633865
+3.35	170.1610731	184.0959662	110.46381	133.1326889	141.8393355
-3.4	-55.44513816	-57.74017831	-38.01157	-46.02103224	-47.91797355
+3.4	154.8893994	166.9639671	101.06315	121.8678564	129.5531178
-3.45	-67.07152993	-70.43224212	-45.46634	-54.99418384	-57.52961647
+3.45	140.6290958	150.9866143	92.267539	111.3258019	118.065414
-3.5	-80.61330773	-85.24659874	-54.1233	-65.41090703	-68.70214171
+3.5	124.4305593	132.8586513	82.258097	99.32655285	105.0006163
-3.55	-93.44523291	-99.31038177	-62.30479	-75.25261434	-79.27026499
+3.55	109.4250603	116.0840934	72.970104	88.19014139	92.88443789
-3.6	-108.2161986	-115.5259988	-71.70051	-86.55197661	-91.41601261
+3.6	92.50611575	97.1898553	62.480907	75.61131379	79.20872203

-3.65	***-122.0668617***	***-130.7536871***	***-80.49208***	***-97.12227688***	***-102.7887867***
+3.65	***76.94220842***	***79.82590985***	***52.817158***	***64.02048932***	***66.61575661***
-3.7	***-137.8606713***	***-148.1408753***	***-90.49753***	***-109.1494355***	***-115.7400071***
+3.7	***59.50920365***	***60.39509231***	***41.977234***	***51.01691503***	***52.49693539***
-3.75	***-152.5431932***	***-164.3246506***	***-99.78239***	***-120.3081841***	***-127.7656763***
+3.75	***44.00839252***	***44.57284945***	***32.05453***	***39.11183931***	***39.57894878***
-3.8	***-169.1533076***	***-182.6537188***	***-110.2685***	***-132.9083129***	***-141.3546392***
+3.8	***31.21873021***	***34.58735085***	***21.476321***	***26.41845044***	***26.09490333***
-3.85	***-184.4810857***	***-199.5857626***	***-119.9299***	***-144.5153398***	***-153.8813512***
+3.85	***31.21873021***	***34.58735085***	***19.574399***	***23.53195753***	***25.43382722***
-3.9	***-201.7009501***	***-218.6270214***	***-130.7677***	***-157.5335983***	***-167.9403959***
+3.9	***31.21873021***	***34.58735085***	***19.574399***	***23.53195753***	***25.43382722***
-3.95	***-217.4871021***	***-236.0995167***	***-140.6889***	***-169.4489687***	***-180.8164674***
+3.95	***31.21873021***	***34.58735085***	***19.574399***	***23.53195753***	***25.43382722***
-5	***-235.1103618***	***-255.6232701***	***-151.7494***	***-182.7305276***	***-195.1777793***
+5	***31.21873021***	***34.58735085***	***19.574399***	***23.53195753***	***25.43382722***

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (South Carolina Legal Trucks vs. HL-93 Design Loading)

Location (20th pts)	HL93 (Variable) + Lane Load	*HL-93 Design Tandem (with Lane Load)*	*HL-93 Truck Train (with Lane Load)*	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	**Moment Z (kips-ft)**	***Moment Z (kips-ft)***	***Moment Z (kips-ft)***	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**	**Moment Z (kips-ft)**
-0	**-5.95E-13**	***-6.02E-13***	***-1.20E-12***	**-4.12E-13**	**-4.46E-13**	**-3.90E-13**	**-4.55E-13**	**-4.39E-13**	**-4.65E-13**	**-2.35E-13**
End Shear	**5.95E-13**	***5.82E-13***	***1.10E-12***	**4.09E-13**	**4.32E-13**	**3.36E-13**	**3.62E-13**	**4.99E-13**	**5.26E-13**	**2.40E-13**
-0.05	**-192.4926945**	***-342.9799301***	***-502.6253482***	**-144.626168**	**-155.6981146**	**-146.7828524**	**-177.8370038**	**-186.3556845**	**-197.2872248**	**-77.596529**
+0.05	**1380.35651**	***2046.171528***	***2844.192738***	**1136.834569**	**1218.425712**	**1145.208598**	**1375.806858**	**1359.160566**	**1437.689359**	**603.8424364**
-0.1	**-384.9853891**	***-685.9598601***	***-1005.250696***	**-289.252335**	**-311.3962293**	**-293.5657047**	**-355.6740076**	**-372.711369**	**-394.5744496**	**-155.193058**
+0.1	**2581.9369**	***3837.476111***	***5319.123433***	**2120.428195**	**2271.85929**	**2134.906212**	**2563.175584**	**2520.742814**	**2666.204234**	**1124.916532**
-0.15	**-577.4780836**	***-1028.93979***	***-1507.876045***	**-433.878503**	**-467.0943439**	**-440.3485571**	**-533.5110114**	**-559.0670535**	**-591.8616745**	**-232.789587**
+0.15	**3697.620804**	***5375.061428***	***7428.558927***	**2951.870652**	**3161.566922**	**2970.311534**	**3563.800353**	**3486.915196**	**3687.85985**	**1564.184025**
-0.2	**-769.9707782**	***-1371.91972***	***-2010.501393***	**-578.50467**	**-622.7924586**	**-587.1314095**	**-711.3480153**	**-745.422738**	**-789.1488993**	**-310.386116**
+0.2	**4610.739878**	***6661.07732***	***9107.719494***	**3633.677896**	**3890.309556**	**3654.059218**	**4380.983081**	**4283.018973**	**4530.59454**	**1923.087684**
-0.25	**-962.4634727**	***-1714.89965***	***-2513.126741***	**-723.130838**	**-778.4905732**	**-733.9142619**	**-889.1850191**	**-931.7784225**	**-986.4361241**	**-387.982645**
+0.25	**5330.352918**	***7698.500737***	***10370.3006***	**4169.256573**	**4461.807264**	**4189.688449**	**5045.216632**	**4920.980903**	**5207.387172**	**2204.056505**
-0.3	**-1154.956167**	***-2057.87958***	***-3015.752089***	**-867.757005**	**-934.1886879**	**-880.6971142**	**-1067.022023**	**-1118.134107**	**-1183.723349**	**-465.579174**
+0.3	**5860.222006**	***8491.135521***	***11406.66865***	**4562.90414**	**4880.739579**	**4603.426844**	**5541.952444**	**5385.989392**	**5698.49445**	**2409.259571**
-0.35	**-1347.448862**	***-2400.85951***	***-3518.377437***	**-1012.38317**	**-1089.886803**	**-1027.479967**	**-1244.859027**	**-1304.489791**	**-1381.010574**	**-543.175703**
+0.35	**6207.253968**	***9043.612153***	***12059.66404***	**4826.74896**	**5173.775275**	**4881.399124**	**5869.69372**	**5697.797219**	**6029.705406**	**2541.255369**
-0.4	**-1539.941556**	***-2743.839441***	***-4021.002786***	**-1157.00934**	**-1245.584917**	**-1174.262819**	**-1422.696031**	**-1490.845476**	**-1578.297799**	**-620.772232**
+0.4	**6379.547208**	***9361.388703***	***12329.55488***	**4974.615768**	**5328.641657**	**5025.942842**	**6035.756606**	**5842.982003**	**6184.490371**	**2603.402518**
-0.45	**-1732.434251**	***-3086.819371***	***-4523.628134***	**-1301.63551**	**-1401.283032**	**-1321.045671**	**-1600.533034**	**-1677.20116**	**-1775.585023**	**-698.368761**
+0.45	**6386.390453**	***9450.749952***	***12236.374***	**4996.743676**	**5349.363711**	**5043.335892**	**6048.596467**	**5829.331002**	**6171.027679**	**2596.574558**
-0.5	**-1924.926945**	***-3429.799301***	***-5026.253482***	**-1446.26168**	**-1556.981146**	**-1467.828524**	**-1778.370038**	**-1863.556845**	**-1972.872248**	**-775.96529**
+0.5	**6238.263959**	***9331.694094***	***12051.93881***	**4910.16092**	**5257.787722**	**4956.742893**	**5947.948847**	**5740.731652**	**6076.83904**	**2561.785821**
-0.55	**-2117.41964**	***-3772.779231***	***-5528.87883***	**-1590.88784**	**-1712.679261**	**-1614.611376**	**-1956.207042**	**-2049.912529**	**-2170.159473**	**-853.561819**
+0.55	**5971.023879**	***9000.571573***	***11772.18581***	**4713.449478**	**5049.211589**	**4762.052015**	**5717.8751**	**5529.596861**	**5852.511823**	**2470.500102**
-0.6	**-2309.912335**	***-4115.759161***	***-6031.504178***	**-1735.51401**	**-1868.377376**	**-1761.394228**	**-2134.044046**	**-2236.268214**	**-2367.446698**	**-931.158348**
+0.6	**5612.571827**	***8462.299991***	***11114.09016***	**4414.857082**	**4730.368992**	**4463.056045**	**5360.656963**	**5179.021022**	**5480.677908**	**2321.981871**
-0.65	**-2502.405029**	***-4458.739091***	***-6534.129527***	**-1880.14018**	**-2024.07549**	**-1908.177081**	**-2311.88105**	**-2422.623898**	**-2564.733923**	**-1008.754877**
+0.65	**5123.232605**	***7726.239519***	***10098.22167***	**4025.551588**	**4312.119311**	**4069.962564**	**4888.70005**	**4701.620423**	**4974.708305**	**2121.480009**
-0.7	**-2694.897724**	***-4801.719021***	***-7036.754875***	**-2024.76635**	**-2179.773605**	**-2054.959933**	**-2489.718053**	**-2608.979583**	**-2762.021147**	**-1086.351406**
+0.7	**4517.02349**	***6802.577532***	***8747.299419***	**3561.430232**	**3806.283408**	**3593.885235**	**4314.787464**	**4111.177565**	**4349.208828**	**1874.725615**
-0.75	**-2887.390418**	***-5144.698951***	***-7539.380223***	**-2169.39251**	**-2335.47172**	**-2201.742786**	**-2667.555057**	**-2795.335267**	**-2959.308372**	**-1163.947935**
+0.75	**3809.151365**	***5702.328012***	***7099.23669***	**3025.049528**	**3225.64102**	**3046.84115**	**3653.376656**	**3422.639928**	**3620.01882**	**1587.930071**
-0.8	**-3079.883113**	***-5487.678881***	***-8042.005571***	**-2314.01868**	**-2491.169834**	**-2348.525638**	**-2845.392061**	**-2981.690952**	**-3156.595597**	**-1241.544464**
+0.8	**3016.013555**	***4437.331997***	***5211.981561***	**2428.963476**	**2583.930398**	**2441.752179**	**2920.022217**	**2652.119575**	**2804.873221**	**1267.787395**
-0.85	**-3272.375807**	***-5971.905814***	***-8671.753219***	**-2458.64485**	**-2646.867949**	**-2495.30849**	**-3023.229065**	**-3168.046636**	**-3353.882822**	**-1319.140993**
+0.85	**2155.198309**	***3161.504978***	***3849.90185***	**1786.617549**	**1895.849441**	**1792.444842**	**2131.374905**	**1816.893223**	**1920.090026**	**921.4706611**
-0.9	**-3464.868502**	***-6837.772138***	***-9644.976312***	**-2603.27102**	**-2802.566064**	**-2642.091343**	**-3201.066069**	**-3354.402321**	**-3551.170047**	**-1396.737522**
+0.9	**1245.48717**	***2128.73442***	***2709.101725***	**1113.576571**	**1177.055138**	**1113.650578**	**1305.957558**	**935.4028145**	**987.1961747**	**556.6346367**
-0.95	**-3657.361196**	***-8030.538586***	***-10912.40951***	**-2747.89718**	**-2958.264178**	**-2788.874195**	**-3378.903072**	**-3540.758005**	**-3748.457272**	**-1474.334051**
+0.95	**806.2405169**	***1340.822646***	***1959.873511***	**606.8978368**	**653.2609737**	**615.8215417**	**745.9643398**	**777.0213209**	**822.547933**	**324.9128975**
-1	**-3849.85384**	***-9500.762722***	***-12429.55478***	**-2892.52341**	**-3113.962337**	**-2935.656988**	**-3556.740022**	**-3727.113595**	**-3945.744397**	**-1551.930613**
+1	**848.6742211**	***1338.956544***	***1997.832661***	**638.8398159**	**687.6431092**	**648.2331881**	**785.2256324**	**817.9171545**	**865.8399027**	**342.013585**
(Span 2) -2	**-3849.85384**	***-9500.762722***	***-12429.55478***	**-2892.52341**	**-3113.962337**	**-2935.656988**	**-3556.740022**	**-3727.113595**	**-3945.744397**	**-1551.930613**
+2	**848.6742211**	***1338.956544***	***1997.832661***	**638.8398159**	**687.6431092**	**648.2331881**	**785.2256324**	**817.9171545**	**865.8399027**	**342.013585**
-2.05	**-2820.60147**	***-6913.357588***	***-9262.097917***	**-2122.63979**	**-2284.795874**	**-2153.850557**	**-2609.028304**	**-2717.650687**	**-2876.881134**	**-1136.390642**
+2.05	**655.5942312**	***1293.837381***	***1631.617059***	**549.3503341**	**563.0107349**	**530.9831165**	**606.5806941**	**631.8346315**	**668.8545813**	**278.113544**
-2.1	**-2627.469717**	***-5322.218519***	***-7243.736123***	**-1977.29876**	**-2128.351716**	**-2006.37253**	**-2430.383364**	**-2531.568162**	**-2679.895809**	**-1058.579893**
+2.1	**1575.63918**	***2201.550219***	***2576.425295***	**1357.50223**	**1436.638016**	**1356.797937**	**1593.351978**	**1209.929384**	**1278.61615**	**672.1223819**
-2.15	**-2434.337964**	***-4199.632179***	***-6053.046693***	**-1831.95772**	**-1971.907557**	**-1858.894378**	**-2251.738424**	**-2345.485637**	**-2482.910484**	**-980.7691445**
+2.15	**2640.239237**	***3369.220982***	***3749.600795***	**2146.342596**	**2288.138989**	**2160.93059**	**2572.156167**	**2255.387954**	**2385.037255**	**1104.294768**
-2.2	**-2241.206211**	***-3556.714815***	***-5294.059333***	**-1686.61669**	**-1815.463399**	**-1711.416288**	**-2073.093484**	**-2159.403113**	**-2285.925158**	**-902.9583958**
+2.2	**3633.782503**	***4781.530278***	***5921.066805***	**2887.228379**	**3086.838251**	**2914.56343**	**3487.317062**	**3225.28824**	**3411.745434**	**1506.161231**

-2.25	-2048.074458	-3332.712129	-4912.095175	-1541.27566	-1659.01924	-1563.938198	-1894.448544	-1973.320588	-2088.939833	-825.1476471
+2.25	4524.169228	6355.114045	8265.852675	3555.365825	3806.205707	3592.787721	4309.002827	4089.310985	4326.596089	1864.694873
-2.3	-1854.942705	-3197.345166	-4609.903166	-1395.93462	-1502.575081	-1416.460154	-1715.803604	-1787.238064	-1891.954508	-747.3368984
+2.3	5284.452732	7740.189992	10255.92595	4129.809375	4423.855547	4174.601568	5012.117026	4822.168484	5102.772212	2169.333789
-2.35	-1661.810951	-3061.978204	-4307.711157	-1250.59359	-1346.130923	-1268.982019	-1537.158664	-1601.155539	-1694.969183	-669.5261498
+2.35	5892.836645	8832.16418	11783.13453	4593.461691	4921.546191	4642.910529	5576.299411	5403.60702	5718.786831	2411.59268
-2.4	-1468.679198	-2926.611241	-4005.519148	-1105.25256	-1189.686764	-1121.503929	-1358.513724	-1415.073014	-1497.983858	-591.7154011
+2.4	6332.677882	9618.945451	12828.38025	4933.075591	5285.182399	4984.530275	5985.929801	5818.406012	6158.48223	2585.110245
-2.45	-1275.547445	-2791.244278	-3703.327139	-959.911522	-1033.242606	-974.0258709	-1179.868784	-1228.99049	-1300.998533	-513.9046524
+2.45	6592.482707	10092.01589	13381.84509	5139.249567	5504.810261	5190.181261	6230.120675	6056.377023	6411.028829	2685.762351
-2.5	-1082.415692	-2655.877315	-3655.838344	-814.570499	-876.7984958	-826.5477495	-1001.223844	-1042.908075	-1104.013311	-436.0939038
+2.5	6665.910921	10246.3483	13442.99486	5206.318287	5574.508555	5254.359897	6302.589543	6112.230447	6470.784851	2711.071763
-2.55	-1275.205667	-2791.244194	-3703.327156	-959.91153	-1033.242656	-974.025873	-1179.868689	-1228.990598	-1300.998633	-513.904665
+2.55	6551.627302	10092.03578	13381.84508	5139.253941	5504.816276	5190.1891	6230.132942	6056.384446	6411.036458	2685.761128
-2.6	-1468.285657	-2926.611153	-4005.519165	-1105.25256	-1189.686817	-1121.503969	-1358.513627	-1415.073121	-1497.983954	-591.715415
+2.6	6257.376125	9618.966353	12828.38088	4933.078104	5285.1863	4984.537379	5985.941453	5818.411174	6158.487486	2585.109539
-2.65	-1661.365647	-3061.978112	-4307.711174	-1250.59359	-1346.130977	-1268.982066	-1537.158566	-1601.155644	-1694.969276	-669.526165
+2.65	5834.712419	8832.183106	11783.13376	4593.463528	4921.54952	4642.916298	5576.309419	5403.611294	5718.791148	2411.594401
-2.7	-1854.445637	-3197.345071	-4609.903183	-1395.93462	-1502.575138	-1416.460068	-1715.803504	-1787.238167	-1891.954597	-747.336915
+2.7	5239.872623	7740.208035	10255.92606	4129.810083	4423.857667	4174.605968	5012.125197	4822.171598	5102.775306	2169.334994
-2.75	-2047.525627	-3332.712031	-4912.095192	-1541.27566	-1659.019298	-1563.938259	-1894.448442	-1973.32069	-2088.939919	-825.147665
+2.75	4488.101353	6355.13219	8265.851677	3555.366582	3806.207912	3592.792082	4309.011024	4089.312817	4326.597833	1864.697121
-2.8	-2240.605616	-3556.714748	-5294.059382	-1686.61669	-1815.463459	-1711.416355	-2073.09338	-2159.403213	-2285.92524	-902.958415
+2.8	3599.784825	4781.525881	5921.067353	2887.229402	3086.840705	2914.568129	3487.325627	3225.290397	3411.747524	1506.163922
-2.85	-2433.685606	-4199.632091	-6053.046726	-1831.95772	-1971.907619	-1858.894452	-2251.738319	-2345.485736	-2482.910561	-980.769165
+2.85	2601.051608	3369.216446	3747.811377	2146.343521	2288.141252	2160.935484	2572.164909	2255.390385	2385.039639	1104.296674
-2.9	-2626.765596	-5322.218463	-7243.736189	-1977.29875	-2128.35178	-2006.372548	-2430.383257	-2531.568259	-2679.895883	-1058.579915
+2.9	1522.787295	2201.546459	2574.026511	1357.504131	1436.641238	1356.803846	1593.361983	1209.933233	1278.62003	672.1206934
-2.95	-2819.845586	-6913.357539	-9262.088905	-2122.63978	-2284.79594	-2153.850645	-2609.028195	-2717.650782	-2876.881204	-1136.390665
+2.95	655.7700852	1293.835582	1630.870601	549.3540662	563.0159141	530.9907092	606.5806168	631.8347564	668.8547187	277.0327357
-3	-3850.638207	-9500.762733	-12429.55478	-2892.52348	-3113.962358	-2935.657002	-3556.740098	-3727.113651	-3945.744483	-1551.930616
+3	848.9017247	1338.95656	1997.832661	638.8398243	687.6431005	648.2331783	785.22564	817.9171616	865.8399191	342.0135792
(Span 3) -4	-3.85E+03	-9500.762733	-12429.55478	-2.89E+03	-3.11E+03	-2.94E+03	-3.56E+03	-3.73E+03	-3.95E+03	-1.55E+03
+4	8.49E+02	1338.95656	1997.832661	6.39E+02	6.88E+02	6.48E+02	7.85E+02	8.18E+02	8.66E+02	3.42E+02
-3.05	-3658.106294	-8030.538523	-10912.4096	-2747.89731	-2958.264242	-2788.874148	-3378.90309	-3540.757964	-3748.457254	-1474.334087
+3.05	806.4566372	1340.822637	1959.873544	606.8978325	653.2609444	615.8214912	745.9643586	777.0213022	822.5479218	324.9129006
-3.1	-3465.574381	-6837.772059	-9644.976384	-2603.27113	-2802.566126	-2642.091295	-3201.066082	-3354.402277	-3551.170025	-1396.737558
+3.1	1270.50077	2128.739669	2706.708694	1113.576168	1177.053462	1113.646625	1305.964326	935.4014242	987.1948767	556.6331716
-3.15	-3273.042469	-5971.905736	-8671.753293	-2458.64496	-2646.868011	-2495.308442	-3023.229075	-3168.046589	-3353.882796	-1319.141028
+3.15	2168.154949	3161.5106	3847.038855	1786.618929	1895.848251	1792.441539	2131.368257	1816.892081	1920.088991	921.4686817
-3.2	-3080.510556	-5487.678823	-8042.005663	-2314.01879	-2491.169895	-2348.525589	-2845.392067	-2981.690902	-3156.595567	-1241.544499
+3.2	3024.198278	4437.33833	5211.981496	2428.964946	2583.929943	2441.749203	2920.015707	2652.118928	2804.873868	1267.785517
-3.25	-2887.978643	-5144.698893	-7539.380315	-2169.39262	-2335.471779	-2201.742736	-2667.55506	-2795.335215	-2959.308338	-1163.94797
+3.25	3818.771415	5702.333831	7099.236186	3025.050831	3225.64079	3046.838269	3653.370411	3422.639412	3620.01847	1587.92826
-3.3	-2695.446731	-4801.718962	-7036.754967	-2024.76645	-2179.773664	-2054.959883	-2489.718052	-2608.979527	-2762.021108	-1086.351441
+3.3	4533.87053	6802.583378	8747.300036	3561.431438	3806.282964	3593.88184	4314.78022	4111.176588	4349.207982	1874.722853
-3.35	-2502.914818	-4458.739031	-6534.129619	-1880.14028	-2024.075548	-1908.17703	-2311.881044	-2422.62384	-2564.733879	-1008.754912
+3.35	5152.682429	7726.244934	10098.22183	4025.552116	4312.117935	4069.958872	4888.692654	4701.618414	4974.706393	2121.477074
-3.4	-2310.382906	-4115.759101	-6031.50427	-1735.51411	-1868.377432	-1761.394177	-2134.044037	-2236.268153	-2367.44665	-931.1583828
+3.4	5659.587758	8462.304482	11114.09017	4414.855588	4730.366021	4463.051308	5360.648532	5179.017373	5480.674252	2321.978538
-3.45	-2117.850993	-3772.77917	-5528.878922	-1590.88794	-1712.679316	-1614.611324	-1956.207029	-2049.912466	-2170.159421	-853.5618536
+3.45	6040.159609	9000.575059	11772.18601	4713.446907	5049.207402	4762.045596	5717.8796	5529.59191	5852.506782	2470.496734
-3.5	-1925.31908	-3429.79924	-5026.253574	-1446.26177	-1556.981201	-1467.828471	-1778.370022	-1863.556778	-1972.872192	-775.9653245
+3.5	6281.812673	9331.695626	12051.93865	4910.157297	5257.782589	4956.73494	5947.950862	5740.724081	6076.831259	2561.78359
-3.55	-1732.787168	-3086.819309	-4523.628226	-1301.63559	-1401.283085	-1321.045618	-1600.533014	-1677.201091	-1775.584963	-698.3687954
+3.55	6372.207073	9450.7495	12236.37433	4996.7485	5349.352311	5043.330146	6048.595623	5829.326834	6171.023132	2599.538696
-3.6	-1540.255255	-2743.839378	-4021.002878	-1157.00942	-1245.584969	-1174.262765	-1422.696006	-1490.845404	-1578.297734	-620.7722662

+3.6	6300.344528	9361.386238	12329.55524	4974.619122	5328.646657	5025.935321	6035.753318	5842.975431	6184.483256	2603.402107
-3.65	-1347.723342	-2400.859448	-3518.377529	-1012.38325	-1089.886854	-1027.479912	-1244.858999	-1304.489716	-1381.010505	-543.1757371
+3.65	6159.879801	9043.607498	12059.66414	4826.749656	5173.777475	4881.388319	5869.687138	5697.787856	6029.708831	2541.254656
-3.7	-1155.19143	-2057.879517	-3015.752181	-867.757081	-934.1887379	-880.6970585	-1067.021991	-1118.134029	-1183.723275	-465.579208
+3.7	5850.730085	8491.128458	11406.66845	4562.902411	4880.739077	4603.429148	5541.943662	5385.989928	5698.494797	2409.25842
-3.75	-962.6595169	-1714.899587	-2513.126833	-723.13091	-778.4906222	-733.9142054	-889.1849837	-931.7783418	-986.4360463	-387.9826788
+3.75	5361.409129	7698.491335	10370.30062	4169.252634	4461.804436	4189.688346	5045.219508	4920.979258	5207.385211	2204.054848
-3.8	-770.1276042	-1371.919656	-2010.501485	-578.504739	-622.7925064	-587.1313524	-711.3479761	-745.4226545	-789.1488172	-310.3861497
+3.8	4684.594877	6661.066085	9107.719863	3633.67066	3890.303264	3654.055823	4380.982018	4283.014014	4530.58908	1923.089033
-3.85	-577.5956915	-1028.939725	-1507.876137	-433.878568	-467.0943907	-440.3484993	-533.5109685	-559.0669672	-591.8615881	-232.7896206
+3.85	3814.154741	5375.047324	7428.558367	2951.861593	3161.558426	2970.305842	3563.796367	3486.912833	3687.857414	1564.185207
-3.9	-385.0637789	-685.9597947	-1005.250788	-289.252397	-311.396275	-293.5656462	-355.6739609	-372.7112799	-394.574359	-155.1930914
+3.9	2745.15431	3837.458748	5319.12234	2120.416137	2271.847634	2134.896904	2563.167624	2520.737265	2666.198429	1124.917171
-3.95	-192.5318662	-342.9798641	-502.6254402	-144.626225	-155.6981593	-146.7827931	-177.8369533	-186.3555926	-197.2871298	-77.59656232
+3.95	1474.146974	2046.151229	2842.373032	1136.819716	1218.411071	1145.197251	1375.796239	1359.151171	1437.679491	603.8429627
-5	-7.12E-13	-6.76E-13	-1.26E-12	-4.00E-13	-4.30E-13	-3.62E-13	-4.21E-13	-3.99E-13	-4.22E-13	-3.02E-13
+5	1.14E-12	1.12E-12	1.81E-12	6.94E-13	7.19E-13	6.73E-13	7.69E-13	6.78E-13	7.20E-13	4.26E-13

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (AAHSTO Legal Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-3.21E-13	-3.85E-13	-3.66E-13	-4.16E-13	-2.74E-13	-3.12E-13	-3.42E-13	-3.04E-13	-3.72E-13
End Shear	3.43E-13	4.32E-13	3.48E-13	3.51E-13	2.62E-13	2.68E-13	3.40E-13	3.73E-13	3.72E-13
-0.05	-110.9931571	-160.4304083	-173.4603487	-279.0507358	-88.88977374	-120.0403161	-137.6442989	-154.221935	-171.8064228
+0.05	862.4619712	1177.607297	1222.417134	1542.03126	693.2257893	935.2909952	1062.958741	1171.262221	1283.179369
-0.1	-221.9863143	-320.8608167	-346.9206974	-558.1014715	-177.7795475	-240.0806321	-275.2885977	-308.443869	-343.6128455
+0.1	1607.301383	2185.015964	2260.461868	2823.645423	1292.352783	1743.392948	1980.086165	2182.508439	2394.99282
-0.15	-332.9794714	-481.291225	-520.3810462	-837.1522073	-266.6693212	-360.1209482	-412.9328966	-462.665804	-515.4192683
+0.15	2235.398241	3023.960831	3117.975185	3869.611926	1797.994414	2425.301268	2752.59113	3059.395999	3351.723145
-0.2	-443.9726286	-641.7216333	-693.8413949	-1116.202943	-355.559095	-480.1612643	-550.5771955	-616.887739	-687.2256911
+0.2	2748.792239	3698.1715	3829.380563	4765.614199	2211.752352	2983.186184	3383.06025	3777.483214	4149.507002
-0.25	-554.9657857	-802.1520417	-867.3017436	-1395.253679	-444.4488687	-600.2015804	-688.2214944	-771.109673	-859.0321139
+0.25	3150.208171	4238.253609	4368.966031	5479.644333	2535.776554	3419.958004	3884.18376	4339.751162	4788.716487
-0.3	-665.9589429	-962.58245	-1040.762092	-1674.304415	-533.3386425	-720.2418964	-825.8657932	-925.331608	-1030.838537
+0.3	3443.056352	4626.109392	4775.830927	6017.510474	2772.76515	3752.409527	4265.629131	4750.899239	5259.038478
-0.35	-776.9521	-1123.012858	-1214.222441	-1953.35515	-622.2284162	-840.2822125	-963.5100921	-1079.55354	-1202.644959
+0.35	3647.817199	4864.687504	5052.483526	6396.305253	2925.964305	3978.148308	4517.26517	5035.731353	5566.425993
-0.4	-887.9452572	-1283.443267	-1387.68279	-2232.405886	-711.1181899	-960.3225286	-1101.154391	-1233.77548	-1374.451382
+0.4	3752.926601	4984.29803	5219.125876	6580.788435	2999.168567	4095.211604	4643.835457	5185.998514	5728.950289
-0.45	-998.9384143	-1443.873675	-1561.143138	-2511.456622	-800.0079637	-1080.362845	-1238.79869	-1387.99741	-1546.257805
+0.45	3762.836709	4967.993843	5236.974097	6561.404804	2996.7207	4108.371702	4651.920425	5203.364122	5756.59711
-0.5	-1109.931571	-1604.304083	-1734.603487	-2790.507358	-888.8977374	-1200.403161	-1376.442989	-1542.21935	-1718.064228
+0.5	3700.315681	4893.978353	5142.084645	6411.608938	2950.783028	4038.46167	4574.580709	5113.889827	5653.437748
-0.55	-1220.924729	-1764.734492	-1908.063836	-3069.558093	-977.7875112	-1320.443477	-1514.087288	-1696.44128	-1889.87065
+0.55	3556.023014	4716.303682	4924.15196	6234.507188	2843.22075	3880.203254	4399.216017	4910.892821	5420.103267
-0.6	-1331.917886	-1925.1649	-2081.524185	-3348.608829	-1066.677285	-1440.483793	-1651.731586	-1850.66322	-2061.677073
+0.6	3332.280927	4418.829237	4579.142005	5849.29229	2670.757477	3636.457616	4124.713867	4597.910812	5077.332444
-0.65	-1442.911043	-2085.595308	-2254.984533	-3627.659565	-1155.567059	-1560.524109	-1789.375885	-2004.88515	-2233.483496
+0.65	3036.778865	4024.055934	4145.139004	5252.639551	2439.420162	3315.561828	3760.551578	4185.673399	4625.495194
-0.7	-1553.9042	-2246.025717	-2428.444882	-3906.710301	-1244.456832	-1680.564425	-1927.020184	-2159.10709	-2405.289919
+0.7	2677.892273	3527.646188	3602.322291	4506.37728	2155.785584	2926.594302	3317.057296	3685.863241	4073.749175
-0.75	-1664.897357	-2406.456125	-2601.905231	-4185.761037	-1333.346606	-1800.604741	-2064.664483	-2313.32902	-2577.096342
+0.75	2264.681665	2942.121627	2964.445156	3596.056227	1826.977501	2479.372633	2805.40837	3113.500913	3436.00431
-0.8	-1775.890514	-2566.886533	-2775.365579	-4464.811772	-1422.23638	-1920.645057	-2202.308782	-2467.55095	-2748.902764
+0.8	1806.892646	2281.006471	2246.437272	2517.988431	1460.668598	1984.454712	2237.631517	2477.569448	2727.231876
-0.85	-1886.883672	-2727.316942	-2948.825928	-4780.435394	-1511.126154	-2040.685373	-2339.953081	-2621.77289	-2920.709187
+0.85	1314.955728	1558.827495	1464.324998	1465.301889	1065.078367	1453.138395	1626.604381	1792.107367	1963.465934
-0.9	-1997.876829	-2887.74735	-3122.286277	-5194.876362	-1600.015927	-2160.725689	-2477.59738	-2775.99482	-3092.51561
+0.9	799.9876831	799.9814445	687.598688	1073.100017	648.9766958	897.4622194	986.0530549	1077.88046	1161.802333
-0.95	-2108.869986	-3048.177758	-3295.746626	-5693.961115	-1688.905701	-2280.766005	-2615.241679	-2930.21676	-3264.322033
+0.95	465.2948942	668.8164633	719.6809327	1067.697195	372.8101258	503.5254105	577.0405942	646.4061325	719.8081261
-1	-2219.863139	-3208.608187	-3469.20696	-6264.887565	-1777.795454	-2400.806278	-2752.885944	-3084.43866	-3436.128507
+1	489.7841128	704.0173426	757.5588713	1105.136126	392.4317082	530.0267462	607.4111502	680.4274953	757.6927592
(Span 2) -2	-2219.863139	-3208.608187	-3469.20696	-6264.887565	-1777.795454	-2400.806278	-2752.885944	-3084.43866	-3436.128507
+2	489.7841128	704.0173426	757.5588713	1105.136126	392.4317082	530.0267462	607.4111502	680.4274953	757.6927592
-2.05	-1627.38006	-2339.201627	-2517.101334	-4310.101526	-1303.912371	-1761.092222	-2018.213378	-2260.82101	-2517.546216
+2.05	378.3544188	543.8479199	585.2083337	878.1680201	303.1504379	418.9160595	469.2203884	525.624944	585.3117581
-2.1	-1515.950366	-2179.032201	-2344.750794	-3725.558688	-1214.631102	-1640.507014	-1880.022616	-2106.01846	-2345.165216
+2.1	980.7939764	1004.755477	883.9899582	876.1670749	784.7821825	1095.311163	1207.171351	1331.665442	1432.358982
-2.15	-1404.520671	-2018.862775	-2172.400255	-3262.337543	-1125.349832	-1519.921807	-1741.831855	-1951.21591	-2172.784215
+2.15	1590.925457	1915.808675	1859.821895	1745.395766	1278.308795	1753.612031	1966.115189	2177.881885	2382.277895
-2.2	-1293.090976	-1858.693349	-2000.049715	-2923.316406	-1036.068562	-1399.3366	-1603.641093	-1796.41336	-2000.403215
+2.2	2161.907237	2754.293382	2768.977272	3031.132154	1737.692629	2370.289059	2675.203189	2970.643041	3268.599167

-2.25	-1181.661282	-1698.523923	-1827.699176	-2692.764251	-946.7872925	-1278.751392	-1465.450332	-1641.61081	-1828.022215
+2.25	2675.013998	3495.266461	3575.190397	4350.434904	2148.150784	2925.010802	3311.407197	3683.784584	4062.845943
-2.3	-1070.231587	-1538.354497	-1655.348636	-2485.162419	-857.5060228	-1158.166185	-1327.25957	-1486.80825	-1655.641215
+2.3	3114.480687	4118.118537	4255.44058	5460.415899	2497.520082	3400.642456	3855.369417	4295.256647	4740.735099
-2.35	-958.8018924	-1378.185072	-1482.998097	-2277.560587	-768.2247531	-1037.580977	-1189.068809	-1332.0057	-1483.260215
+2.35	3467.502491	4610.391657	4804.028488	6335.636317	2776.001546	3783.246105	4291.40264	4787.124562	5283.131215
-2.4	-847.3721977	-1218.015646	-1310.647557	-2069.958755	-678.9434834	-916.9957699	-1050.878047	-1177.20315	-1310.879215
+2.4	3724.235726	4964.839408	5207.02069	6934.029146	2976.169101	4062.083062	4607.492706	5145.569627	5683.791925
-2.45	-735.9425031	-1057.84622	-1138.297018	-1862.356923	-589.6622137	-796.4105625	-912.6872858	-1022.4006	-1138.498214
+2.45	3877.79599	5166.718138	5446.591728	7259.203684	3092.961214	4229.609368	4795.293938	5360.886791	5929.226744
-2.5	-624.5128084	-897.6767941	-965.9464782	-1654.75508	-500.3809955	-675.8253551	-774.4965244	-867.598051	-966.1172143
+2.5	3924.131003	5211.691328	5516.556545	7305.919661	3123.473462	4281.366507	4849.972255	5427.375408	6009.20634
-2.55	-735.9425214	-1057.846308	-1138.297042	-1862.356911	-589.6622659	-796.4105286	-912.6872289	-1022.40057	-1138.498253
+2.55	3877.800155	5166.725189	5446.597544	7259.198859	3092.973002	4229.61531	4795.302297	5360.892596	5929.229362
-2.6	-847.3722154	-1218.015731	-1310.64758	-2069.958742	-678.9435363	-916.9957354	-1050.877991	-1177.20312	-1310.879254
+2.6	3724.238751	4964.84446	5207.025526	6934.034191	2976.18142	4062.088327	4607.500037	5145.573813	5683.793028
-2.65	-958.8019094	-1378.185154	-1482.998118	-2277.560573	-768.2248066	-1037.580942	-1189.068752	-1332.00567	-1483.260255
+2.65	3467.504738	4610.395965	4804.032434	6335.639809	2776.013143	3783.250367	4291.408631	4787.127338	5283.130418
-2.7	-1070.231603	-1538.354576	-1655.348655	-2485.162404	-857.506077	-1158.166149	-1327.259514	-1486.80822	-1655.641256
+2.7	3114.482244	4118.124576	4255.444876	5460.41808	2497.530048	3400.645606	3855.37463	4295.258532	4740.745055
-2.75	-1181.661297	-1698.523999	-1827.699193	-2692.764235	-946.7873474	-1278.751356	-1465.450276	-1641.61077	-1828.022258
+2.75	2675.015559	3495.271985	3575.194467	4350.437744	2148.161288	2925.013821	3311.411961	3683.786011	4062.855446
-2.8	-1293.090991	-1858.693422	-2000.04973	-2923.316398	-1036.068618	-1399.336563	-1603.641038	-1796.41333	-2000.403259
+2.8	2161.908506	2754.298568	2768.980227	3031.136413	1737.702335	2370.292331	2675.20824	2970.644791	3268.597408
-2.85	-1404.520685	-2018.862845	-2172.400268	-3262.337529	-1125.349888	-1519.921769	-1741.831799	-1951.21588	-2172.78426
+2.85	1590.926892	1915.814101	1859.825268	1745.398882	1278.319617	1753.615478	1966.120512	2177.884006	2382.276205
-2.9	-1515.950379	-2179.032268	-2344.750806	-3725.558682	-1214.631159	-1640.506976	-1880.022561	-2106.01843	-2345.165261
+2.9	980.7962553	1004.761817	883.9932289	876.1691644	784.7781897	1095.315486	1207.177326	1331.668349	1432.357916
-2.95	-1627.380073	-2339.20169	-2517.101343	-4310.101522	-1303.912429	-1761.092183	-2018.213323	-2260.82098	-2517.546262
+2.95	378.3544436	543.8480385	585.2083772	878.1680221	303.1504833	418.9217895	469.2203289	525.6249073	585.3117872
-3	-2219.863179	-3208.608259	-3469.207009	-6264.887624	-1777.795468	-2400.806325	-2752.885979	-3084.4387	-3436.128537
+3	489.7841157	704.0173561	757.5588796	1105.136131	392.4317053	530.0267488	607.411149	680.4274937	757.692755
(Span 3) -4	-2.22E+03	-3.21E+03	-3.47E+03	-6.26E+03	-1.78E+03	-2.40E+03	-2.75E+03	-3.08E+03	-3.44E+03
+4	4.90E+02	7.04E+02	7.58E+02	1.11E+03	3.92E+02	5.30E+02	6.07E+02	6.80E+02	7.58E+02
-3.05	-2108.87002	-3048.177847	-3295.746657	-5693.961124	-1688.905694	-2280.766007	-2615.241678	-2930.21677	-3264.322112
+3.05	465.2949106	668.8164889	719.6809353	1067.697212	372.8101199	503.5254113	577.0405915	646.4061183	719.808117
-3.1	-1997.876861	-2887.747435	-3122.286306	-5194.876364	-1600.015919	-2160.725688	-2477.597378	-2775.99483	-3092.515688
+3.1	799.9866415	799.978112	687.5949523	1073.100034	648.9818076	897.459514	986.048536	1077.8791	1161.804988
-3.15	*-1886.883702*	*-2727.317023*	*-2948.825955*	*-4780.435393*	*-1511.126145*	*-2040.68537*	*-2339.953077*	*-2621.77289*	*-2920.709264*
+3.15	1314.955132	1558.823217	1464.323312	1465.300152	1065.08373	1453.136213	1626.600465	1792.106787	1963.469222
-3.2	-1775.890543	-2566.886611	-2775.365604	-4464.811774	-1422.23637	-1920.645051	-2202.308776	-2467.55095	-2748.902839
+3.2	1806.892267	2281.002766	2246.435462	2517.984635	1460.674148	1984.452757	2237.628152	2477.570255	2727.235435
-3.25	-1664.897384	-2406.456199	-2601.905253	-4185.761035	-1333.346596	-1800.604733	-2064.664476	-2313.32902	-2577.096415
+3.25	2264.681397	2942.117584	2964.44331	3596.053129	1826.982676	2479.370783	2805.404651	3113.501608	3436.008136
-3.3	-1553.904224	*-2246.025787*	-2428.444902	*-3906.710296*	-1244.456821	-1680.564415	-1927.020175	-2159.10708	-2405.289991
+3.3	2677.891791	3527.641875	3602.319722	4506.380132	2155.791028	2926.592079	3317.053452	3685.862629	4073.752409
-3.35	-1442.911065	-2085.595375	-2254.984551	-3627.659558	-1155.567047	-1560.524096	-1789.375874	-2004.88514	-2233.483567
+3.35	3036.778064	4024.050873	4145.135513	5252.637485	2439.425461	3315.55932	3760.547271	4185.672254	4625.497861
-3.4	-1331.917906	-1925.164963	-2081.524199	-3348.608819	-1066.677272	-1440.483778	-1651.731574	-1850.66321	-2061.677142
+3.4	3332.279039	4418.821954	4579.138875	5849.294477	2670.761511	3636.454226	4124.708443	4597.908264	5077.333652
-3.45	-1220.924747	-1764.734551	-1908.063848	-3069.55808	-977.787498	-1320.443459	-1514.087273	-1696.44127	-1889.870718
+3.45	3556.020398	4716.298796	4924.147738	6234.506505	2843.224268	3880.198476	4399.209787	4910.889336	5420.102817
-3.5	-1109.931588	-1604.304139	-1734.603497	-2790.507341	-888.8977235	-1200.403141	-1376.442973	-1542.21933	-1718.064294
+3.5	3700.311516	4893.981625	5142.077818	6411.605598	2950.785167	4038.45563	4574.572962	5113.884426	5653.435307
-3.55	-998.9384287	-1443.873728	-1561.143146	-2511.456603	-800.0079491	-1080.362822	-1238.798672	-1387.9974	-1546.25787
+3.55	3762.828888	*4967.9917077 1146*	*5236.970224*	6561.407452	2996.718982	*4108.366062*	4651.917825	5203.358162	5756.600406

-3.6	-887.9452696	-1283.443316	-1387.682795	-2232.405864	-711.1181746	-960.3225041	-1101.154371	-1233.77546	-1374.451445
+3.6	3752.930131	4984.294068	5219.119772	6580.787709	2999.165522	4095.20457	4643.831117	5185.989965	5728.951493
-3.65	-776.9521104	-1123.012904	-1214.222444	-1953.355125	-622.2284002	-840.2821857	-963.5100707	-1079.55352	-1202.645021
+3.65	3647.818652	4864.683146	5052.479975	6396.302074	2925.960022	3978.138426	4517.259047	5035.733445	5566.424386
-3.7	-665.9589513	-962.5824917	-1040.762093	-1674.304387	-533.3386257	-720.2418672	-825.8657701	-925.331587	-1030.838597
+3.7	3443.05628	4626.101964	*4775.825184*	6017.508192	2772.759501	3752.410923	4265.619831	4750.898527	5259.03427
-3.75	-554.9657921	-802.1520798	-867.3017414	-1395.253648	-444.4488513	-600.2015488	-688.2214694	-771.10965	-859.0321725
+3.75	3150.20635	4238.255985	4368.962546	5479.640173	2535.769196	3419.957489	3884.184958	4339.747732	4788.710121
-3.8	-443.972633	-641.7216679	-693.8413902	-1116.202909	-355.5590768	-480.1612304	-550.5771688	-616.887714	-687.2257483
+3.8	2748.787883	3698.171173	3829.37428	4765.617416	2211.744406	2983.182926	3383.058474	3777.476394	4149.508707
-3.85	-332.9794738	-481.2912559	-520.3810391	-837.1521705	-266.6693024	-360.120912	-412.9328682	-462.665777	-515.419324
+3.85	2235.392448	3023.957997	3117.975383	3869.612358	1797.983837	2425.296157	2752.586828	3059.387331	3351.721762
-3.9	-221.9863147	-320.860844	-346.920688	-558.1014318	-177.779528	-240.0805936	-275.2885676	-308.44384	-343.6128997
+3.9	1607.292894	2185.010438	2260.458691	2823.64701	1292.341684	1743.384814	1980.079073	2182.508629	2394.988259
-3.95	-110.9931555	-160.4304321	-173.4603368	-279.0506931	-88.8897535	-120.0402752	-137.6442669	-154.221903	-171.8064754
+3.95	862.4507889	1177.598366	1222.411112	1542.029	693.2126522	935.2812267	1062.949061	1171.259369	1283.177399
-5	-3.13E-13	-3.43E-13	-3.56E-13	-4.34E-13	-2.72E-13	-2.90E-13	-2.95E-13	-2.94E-13	-3.32E-13
+5	4.79E-13	5.76E-13	6.12E-13	7.65E-13	5.06E-13	5.61E-13	5.73E-13	5.77E-13	5.84E-13

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (Permit Trucks for HL-93 Design Loading Comparison)

Location (20th pts)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)	Moment Z (kips-ft)
-0	-5.12E-13	-7.88E-13	-4.13E-13	-4.96E-13	-4.84E-13
End Shear	5.57E-13	6.30E-13	4.54E-13	5.03E-13	5.37E-13
-0.05	-312.1872984	-345.8725796	-195.743991	-235.3195743	-254.338273
+0.05	2185.894471	2370.244269	1413.266584	1702.613041	1816.963484
-0.1	-624.3745968	-691.7451592	-391.487983	-470.6391486	-508.676545
+0.1	4040.523406	4393.614882	2618.777136	3155.334532	3363.882287
-0.15	-936.5618952	-1037.617739	-587.231974	-705.9587228	-763.014818
+0.15	5626.909099	6105.864434	3618.912913	4370.766758	4664.952369
-0.2	-1248.749194	-1383.490318	-782.975965	-941.2782971	-1017.35309
+0.2	6899.972658	7577.106394	4463.961665	5380.883422	5734.910793
-0.25	-1560.936492	-1729.362898	-978.719956	-1176.597871	-1271.69136
+0.25	7914.173292	8719.621954	5118.592986	6156.0383	6597.803427
-0.3	-1873.12379	-2075.235478	-1174.46395	-1411.917446	-1526.02964
+0.3	8687.386696	9587.131338	5593.737624	6709.391744	7218.992369
-0.35	-2185.311089	-2421.108057	-1370.20794	-1647.23702	-1780.36791
+0.35	9206.647089	10150.80059	5906.685009	7075.717665	7606.996082
-0.4	-2497.498387	-2766.980637	-1565.95193	-1882.556594	-2034.70618
+0.4	9505.571644	10430.5093	6045.48137	7233.575919	7800.76201
-0.45	-2809.685686	-3112.853216	-1761.69592	-2117.876168	-2289.04445
+0.45	9530.797982	10509.91164	6018.526752	7193.310101	7779.497388
-0.5	-3121.872984	-3458.725796	-1957.43991	-2353.195743	-2543.38273
+0.5	9363.960098	10302.37533	5931.698093	7092.177442	7661.311121
-0.55	-3434.060282	-3804.598376	-2153.1839	-2588.515317	-2797.721
+0.55	8970.452181	9835.600751	5723.290942	6847.747772	7378.415937
-0.6	-3746.247581	-4150.470955	-2348.9279	-2823.834891	-3052.05927
+0.6	8351.833179	9202.220088	5366.012728	6423.840377	6903.900651
-0.65	-4058.434879	-4496.343535	-2544.67189	-3059.154466	-3306.39754
+0.65	7535.710089	8329.536908	4872.981615	5835.833938	6273.044064
-0.7	-4370.622178	-4842.216114	-2740.41588	-3294.47404	-3560.73582
+0.7	6563.864249	7242.346111	4258.546262	5100.84644	5483.9293
-0.75	-4682.809476	-5188.088694	-2936.15987	-3529.793614	-3815.07409
+0.75	5419.616619	5965.019566	3538.283122	4244.265233	4553.749921
-0.8	-4994.996774	-5533.961274	-3131.90386	-3765.113188	-4069.41236
+0.8	4129.609745	4532.896148	2729.767113	3276.335215	3504.086771
-0.85	-5307.184073	-5879.833853	-3327.64785	-4000.432763	-4323.75063
+0.85	2722.450324	2974.616281	1848.722794	2215.37141	2358.119266
-0.9	-5619.371371	-6225.706433	-3523.39184	-4235.752337	-4578.08891
+0.9	1259.798362	1360.292085	916.723065	1107.666601	1140.622854
-0.95	-5931.55867	-6571.579013	-3719.13583	-4471.071911	-4832.42718
+0.95	1297.439619	1435.863868	814.6625816	980.1507625	1058.298897
-1	-6243.746016	-6917.451586	-3914.87976	-4706.391487	-5086.76544
+1	1365.725888	1511.435637	857.5395335	1031.737649	1113.998854
(Span 2) -2	-6243.746016	-6917.451586	-3914.87976	-4706.391487	-5086.76544
+2	1365.725888	1511.435637	857.5395335	1031.737649	1113.998854
-2.05	-4537.826136	-5021.964369	-2849.30191	-3428.100782	-3701.42571
+2.05	1055.012617	1167.572267	662.4426105	797.0093048	860.5554459
-2.1	-4227.112866	-4678.101268	-2654.20499	-3193.372439	-3447.9823
+2.1	1699.636386	1819.006739	1192.63832	1409.98619	1480.290328
-2.15	-3916.399596	-4334.238168	-2459.10807	-2958.644096	-3194.5389
+2.15	3433.793944	3773.514132	2298.556015	2741.627371	2925.403489
-2.2	-3605.686326	-3990.375068	-2264.01115	-2723.915754	-2941.09549
+2.2	5059.336512	5583.957932	3321.093748	3970.878205	4256.522187

-2.25	**-3294.973057**	**-3646.511967**	**-2068.91422**	**-2489.187411**	**-2687.65209**
+2.25	**6509.427571**	**7192.224792**	**4228.899306**	**5060.445981**	**5433.756635**
-2.3	**-2984.259787**	**-3302.648867**	**-1873.8173**	**-2254.459068**	**-2434.20869**
+2.3	**7753.117324**	**8551.848178**	**4995.929028**	**5979.407481**	**6424.113605**
-2.35	**-2673.546517**	**-2958.785767**	**-1678.72038**	**-2019.730725**	**-2180.76528**
+2.35	**8749.68913**	**9625.808318**	**5601.448292**	**6703.210201**	**7212.893085**
-2.4	**-2362.833247**	**-2614.922666**	**-1483.62346**	**-1785.002383**	**-1927.32188**
+2.4	**9471.485774**	**10400.67694**	**6030.031597**	**7213.673937**	**7777.599356**
-2.45	**-2052.119978**	**-2271.059566**	**-1288.52654**	**-1550.27404**	**-1673.87847**
+2.45	**9899.965987**	**10902.77713**	**6271.561307**	**7498.967881**	**8100.11302**
-2.5	**-1741.406708**	**-1927.196466**	**-1093.42962**	**-1315.545794**	**-1420.43522**
+2.5	**10024.71164**	**11072.29622**	**6321.017702**	**7553.373311**	**8173.435504**
-2.55	**-2052.1201**	**-2271.061436**	**-1288.52662**	**-1550.274138**	**-1673.87863**
+2.55	**9899.961827**	**10904.38733**	**6271.568256**	**7498.964135**	**8100.118009**
-2.6	**-2362.833372**	**-2614.924807**	**-1483.62354**	**-1785.002482**	**-1927.32204**
+2.6	**9471.492789**	**10399.32725**	**6030.037308**	**7213.680288**	**7777.602349**
-2.65	**-2673.546643**	**-2958.788177**	**-1678.72047**	**-2019.730827**	**-2180.76545**
+2.65	**8749.692435**	**9625.807365**	**5601.452622**	**6703.215172**	**7212.894727**
-2.7	**-2984.259915**	**-3302.651547**	**-1873.81739**	**-2254.459171**	**-2434.20885**
+2.7	**7753.119239**	**8551.84557**	**4995.932226**	**5979.410511**	**6424.112408**
-2.75	**-3294.973187**	**-3646.514918**	**-2068.91431**	**-2489.187515**	**-2687.65226**
+2.75	**6509.428503**	**7192.222952**	**4228.901068**	**5060.447329**	**5433.765475**
-2.8	**-3605.686458**	**-3990.378288**	**-2264.01123**	**-2723.915859**	**-2941.09567**
+2.8	**5059.335076**	**5583.955293**	**3321.095722**	**3970.879939**	**4256.531195**
-2.85	**-3916.39973**	**-4334.241658**	**-2459.10816**	**-2958.644204**	**-3194.53908**
+2.85	**3433.796321**	**3773.512562**	**2298.558651**	**2741.629283**	**2925.401625**
-2.9	**-4227.113002**	**-4678.105028**	**-2654.20508**	**-3193.372548**	**-3447.98248**
+2.9	**1699.639695**	**1819.005107**	**1192.642196**	**1409.98949**	**1480.289654**
-2.95	**-4537.826274**	**-5021.968399**	**-2849.302**	**-3428.100892**	**-3701.42589**
+2.95	**1055.01272**	**1167.571437**	**662.44268**	**797.0093876**	**860.5555699**
-3	**-6243.746089**	**-6917.470145**	**-3914.87978**	**-4706.391507**	**-5086.76543**
+3	**1365.72588**	**1511.43447**	**857.5395281**	**1031.737642**	**1113.998839**
(Span 3) -4	**-6.24E+03**	**-6.92E+03**	**-3.91E+03**	**-4.71E+03**	**-5.09E+03**
+4	**1.37E+03**	**1.51E+03**	**8.58E+02**	**1.03E+03**	**1.11E+03**
-3.05	**-5931.558787**	**-6571.596636**	**-3719.13579**	**-4471.071932**	**-4832.42716**
+3.05	**1297.439585**	**1435.862747**	**814.6625504**	**980.1507604**	**1058.298898**
-3.1	**-5619.371485**	**-6225.723128**	**-3523.39179**	**-4235.752356**	**-4578.08888**
+3.1	**1259.804399**	**1360.291024**	**916.7219281**	**1107.669114**	**1140.626537**
-3.15	***-5307.184183***	***-5879.849619***	***-3327.6478***	***-4000.432781***	***-4323.75061***
+3.15	**2722.454185**	**2977.320172**	**1848.72195**	**2215.372633**	**2358.1231**
-3.2	**-4994.996881**	**-5533.976111**	**-3131.90381**	**-3765.113206**	**-4069.41234**
+3.2	**4129.614143**	**4535.227953**	**2729.767981**	**3276.336791**	**3504.091657**
-3.25	**-4682.809579**	**-5188.102602**	**-2936.15982**	**-3529.79363**	**-3815.07407**
+3.25	**5419.621054**	**5967.603701**	**3538.282421**	**4244.265978**	**4553.753869**
-3.3	**-4370.622277**	**-4842.229093**	**-2740.41582**	**-3294.474055**	**-3560.7358**
+3.3	**6563.868095**	**7242.345096**	**4258.545202**	**5100.846032**	**5483.93305**
-3.35	**-4058.434975**	**-4496.355585**	**-2544.67183**	**-3059.15448**	**-3306.39752**
+3.35	**7535.712458**	**8328.482557**	**4872.979696**	**5835.832303**	**6273.04633**
-3.4	**-3746.247673**	**-4150.482076**	**-2348.92784**	**-2823.834905**	**-3052.05925**
+3.4	**8351.831088**	**9202.222048**	**5366.00882**	**6423.836628**	**6903.900229**
-3.45	**-3434.060371**	**-3804.608568**	**-2153.18385**	**-2588.515329**	**-2797.72098**
+3.45	**8971.8806**	**9835.601463**	**5723.284938**	**6847.741428**	**7378.412777**
-3.5	**-3121.873068**	**-3458.735059**	**-1957.43986**	**-2353.195754**	**-2543.38271**
+3.5	**9363.963967**	**10305.33446**	**5931.690862**	**7092.181118**	**7661.305643**
-3.55	**-2809.685766**	**-3112.861551**	**-1761.69586**	**-2117.876179**	**-2289.04443**
+3.55	**9531.939681**	**10509.90907**	**6018.522121**	**7193.307875**	**7779.492521**
-3.6	**-2497.498464**	**-2766.988042**	**-1565.95187**	**-1882.556603**	**-2034.70616**

+3.6	**9505.578907**	**10430.51069**	**6045.474576**	**7233.57086**	**7800.753748**
-3.65	**-2185.311162**	**-2421.114534**	**-1370.20788**	**-1647.237028**	**-1780.36789**
+3.65	**9206.650379**	**10150.80017**	**5906.674612**	**7075.710263**	**7606.996563**
-3.7	**-1873.12386**	**-2075.241025**	**-1174.46389**	**-1411.917453**	**-1526.02962**
+3.7	**8687.384235**	**9587.764006**	**5593.738642**	**6709.392022**	**7218.988902**
-3.75	**-1560.936558**	**-1729.367517**	**-978.719895**	**-1176.597878**	**-1271.69135**
+3.75	**7914.165203**	**8719.623174**	**5118.591**	**6156.035832**	**6597.796572**
-3.8	**-1248.749256**	**-1383.494008**	**-782.975903**	**-941.2783023**	**-1017.35307**
+3.8	**6901.116632**	**7577.106057**	**4463.955539**	**5380.876546**	**5734.905061**
-3.85	**-936.5619538**	**-1037.6205**	**-587.231911**	**-705.958727**	**-763.014802**
+3.85	**5626.914794**	**6108.259424**	**3618.909903**	**4370.767539**	**4664.954238**
-3.9	**-624.3746517**	**-691.7469912**	**-391.487919**	**-470.6391517**	**-508.676529**
+3.9	**4040.522521**	**4393.615349**	**2618.771456**	**3155.331761**	**3363.880017**
-3.95	**-312.1873496**	**-345.8734826**	**-195.743927**	**-235.3195764**	**-254.338257**
+3.95	**2185.888289**	**2370.246279**	**1413.257089**	**1702.605891**	**1816.956005**
-5	**-5.20E-13**	**-5.57E-13**	**-4.36E-13**	**-4.93E-13**	**-4.87E-13**
+5	**8.97E-13**	**1.00E-12**	**6.99E-13**	**7.80E-13**	**8.39E-13**

3-Span: Shear (Max and Min) Raw Data Results - 200' Min Span Length (AAHSTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Force Y (kips)				Force Y (kips)					
-0	-8.272047847	-5.755413904	-8.318921874	-8.994573436	-15.39323392	-4.609270093	-6.224543224	-7.137376141	-7.996989094	-8.90881
End Shear	67.85738993	47.83153996	65.58674406	68.2850188	91.99576515	38.44512558	51.85301203	58.96573681	65.01762626	71.30609
-0.05	-8.272047847	-5.755413904	-8.318921874	-8.994573436	-15.45188782	-4.609270093	-6.224543224	-7.137376141	-7.996989094	-8.90881
+0.05	63.33090729	44.68267999	61.01589299	63.32880509	83.29569293	35.9240455	48.45047506	55.0631061	60.64883182	66.4423
-0.1	-8.272047847	-5.755413904	-8.318921874	-8.994573436	-15.6461973	-4.609270093	-6.224543224	-7.137376141	-7.996989094	-8.90881
+0.1	58.75376864	41.46875264	56.35776245	58.2847731	74.58231282	33.35120564	44.97725115	51.08008547	56.19223061	61.4832
-0.15	-8.931233871	-6.909596902	-8.318921874	-8.994573436	-15.93867433	-5.707803674	-7.658473217	-8.224772649	-8.200637104	-8.90881
+0.15	54.60797639	38.58350291	52.18854007	53.78003762	66.98887346	31.04097757	41.85867236	47.50535554	52.19548675	57.03916
-0.2	-13.54875994	-10.11169294	-10.41538504	-8.994573436	-16.38996817	-8.268511773	-11.11602493	-12.19822858	-12.60438968	-12.8675
+0.2	50.07838414	35.42899298	47.64438056	48.88140319	58.93861855	28.51458399	38.44843635	43.59810104	47.83036358	52.18931
-0.25	-17.69047917	-12.9818577	-14.59584516	-12.8674229	-16.91297605	-10.56327266	-14.21462233	-15.76076408	-16.60786954	-17.3417
+0.25	46.03973529	32.61438295	43.60299188	44.53522757	51.98369447	26.25988147	35.40507582	40.11285407	43.93985163	47.87029
-0.3	-22.21467935	-16.11485346	-19.2284943	-17.61940391	-19.16061913	-13.06760834	-17.59636111	-19.65062607	-20.98260201	-22.2345
+0.3	41.65545486	29.5566034	39.22743316	39.84169656	44.68100432	23.8097834	32.09812577	36.32763044	39.71806766	43.18754
-0.35	-26.24765104	-18.905619	-23.36796373	-22.17542042	-23.32540202	-15.29786118	-20.60813541	-23.11659686	-24.88376409	-26.6011
+0.35	37.77260715	26.84638686	35.3632982	35.70809193	38.62172927	21.63761096	29.16644251	32.97372234	35.98070278	39.04586
-0.4	-30.62479371	-21.93220281	-27.87183317	-27.14348735	-27.99856254	-17.71597521	-23.8737664	-26.87660045	-29.11947853	-31.3461
+0.4	33.58742148	23.92264661	31.21096895	31.27936102	32.43445139	19.29365504	26.00306919	29.35679617	31.95412459	34.58802
-0.45	-34.50040842	-24.60981274	-31.87007759	-31.56402194	-32.72411356	-19.85471756	-26.76226255	-30.20414958	-32.87140386	-35.5528
+0.45	29.90903441	21.35058415	27.57351125	27.41235418	27.53152812	17.23101836	23.21951834	26.17608523	28.4168327	30.676
-0.5	-38.67676138	-27.49267545	-36.19054769	-36.35249502	-38.85440351	-22.15676429	-29.87148838	-33.78802816	-36.91623475	-40.0923
+0.5	25.97672052	18.59819384	23.69903079	23.30812873	22.61816368	15.02305208	20.24001915	22.7737216	24.63731968	26.50092
-0.55	-42.34640522	-30.02337532	-39.99814497	-40.5835376	-44.82328472	-24.17698897	-32.6002507	-36.93529763	-40.47199618	-44.0868
+0.55	22.55145566	16.19803795	20.33767189	19.76172435	18.63980152	13.09695591	17.64105875	19.80806749	21.34702156	22.87089
-0.6	-46.26823809	-32.72520608	-44.08058775	-45.13271571	-51.80618899	-26.33311926	-35.51277793	-40.2967863	-44.27408464	-48.3628
+0.6	18.9257984	13.65430678	16.79566877	16.04170688	14.92347687	11.05482612	14.88572982	16.6665323	17.86643526	19.0364
-0.65	-49.68329578	-35.07523722	-47.64811457	-49.12024343	-58.94385907	-28.20782252	-38.04534637	-43.22191603	-47.58675717	-52.0929
+0.65	15.80231506	11.45981866	13.75983985	12.86993291	12.00195406	9.292276044	12.50781533	13.95778962	14.87005931	15.74068
-0.7	-53.29687932	-37.55872667	-51.43790311	-53.37042782	-67.08328165	-30.18818812	-40.72088145	-46.31474825	-51.09424641	-56.0476
+0.7	12.53709511	9.16205681	10.60493964	9.593825825	9.04337258	7.445830609	10.01694911	11.12334613	11.74026202	12.30461
-0.75	-56.40873446	-39.69433085	-54.71593406	-57.06042998	-74.81531111	-31.89036607	-43.02079608	-48.97588502	-54.11691318	-59.4609
+0.75	9.764048698	7.206990584	7.944053596	6.977070418	6.71071736	5.873830689	7.8965393	8.713381865	9.084728086	9.39553
-0.8	-59.66033794	-41.92216877	-58.15844334	-60.95191487	-83.26277843	-33.6651209	-45.41904711	-51.75379739	-57.27792973	-63.0365
+0.8	6.913048702	5.192508566	5.264410064	4.493829502	4.528206165	4.252917665	5.710430987	6.232294908	6.357582189	6.415708
-0.85	-62.42038484	-43.80959098	-61.0975629	-64.29036581	-90.79160283	-35.16776729	-47.44985426	-54.10907348	-59.9636651	-66.0806
+0.85	4.539104094	3.510618599	3.214704083	2.877344743	3.302951571	2.898473256	3.883986208	4.162960264	4.151836888	4.151673
-0.9	-65.25627681	-45.7444675	-64.13816687	-67.76344951	-98.95776645	-36.7070658	-49.53052298	-56.52580187	-62.7263527	-69.2193
+0.9	2.326965678	1.816726379	1.825297718	1.964114277	3.141849107	1.532939656	2.042927457	2.162388399	2.162251918	2.16212
-0.95	-67.61589336	-47.34995085	-66.6889419	-70.69634331	-106.1800956	-37.9831737	-51.25576553	-58.5333628	-65.02823342	-71.8419
+0.95	1.823632991	1.269857659	1.825297718	1.964114277	3.059041181	1.017453232	1.374194317	1.57482798	1.764136655	1.964461
-1	-69.98234317	-48.95455608	-69.27301515	-73.69131834	-113.9493157	-39.25716569	-52.97855482	-60.542645	-67.34073026	-74.4858
+1	1.82E+00	1.269857659	1.825297718	1.964114277	3.03E+00	1.017453232	1.374194317	1.57482798	1.764136655	1.964461
(Span 2) -2	-6.382933757	-4.444653837	-6.388760607	-6.874635034	-10.60566778	-3.561208208	-4.809844511	-5.512086386	-6.174689427	-6.87585
+2	70.12198119	49.01167177	69.59544088	74.24787695	119.837268	39.29333512	53.02991675	60.63056981	67.49354939	74.71757
-2.05	-6.382933757	-4.444653837	-6.388760607	-6.874635034	-10.64587108	-3.561208208	-4.809844511	-5.512086386	-6.174689427	-6.87585
+2.05	67.56254342	47.27654738	66.8045778	71.02313521	111.5694056	37.91570191	51.16676172	58.45712475	64.99065947	71.85537
-2.1	-6.382933757	-4.444653837	-6.388760607	-6.874635034	-10.78617163	-3.561208208	-4.809844511	-5.512086386	-6.174689427	-6.87585
+2.1	64.43347704	45.14406456	63.44603998	67.19034333	102.4495571	36.21964689	48.87382638	55.79184625	61.93938917	68.38513
-2.15	-6.382933757	-4.475016528	-6.388760607	-6.874635034	-11.01819726	-3.668067621	-4.924249865	-5.512086386	-6.174689427	-6.87585
+2.15	61.23873562	42.95816803	60.05841525	63.36217145	93.90849691	34.47884944	46.52106888	53.06433517	58.83073171	64.86439
-2.2	-9.227236621	-6.805662559	-7.583201661	-6.874635034	-11.39120833	-5.543353681	-7.453675358	-8.236354536	-8.612031278	-8.93387
+2.2	57.51192012	40.40016603	56.14513666	58.97577925	84.66635287	32.43962751	43.76558391	49.87669034	55.21045512	60.77797
-2.25	-12.55659694	-9.150603776	-10.79225387	-9.932404544	-11.85943634	-7.428006518	-9.996246666	-11.12925503	-11.80629685	-12.4396

+2.25	53.84554482	37.87705164	52.32698581	54.72585207	76.11973798	30.4265017	41.04585712	46.73590678	51.65385165	56.7747
-2.3	-16.40613076	-11.8539912	-14.54229637	-13.85005094	-14.61813887	-9.598723229	-12.9252371	-14.46807904	-15.50482493	-16.5122
+2.3	49.69775084	35.01616024	48.03850829	49.98209623	67.01197427	28.14221659	37.96025338	43.17794962	47.63502629	52.26218
-2.35	-20.16518994	-14.48729359	-18.23673454	-17.7447197	-18.49604293	-11.71150505	-15.77646576	-17.7234365	-19.12073222	-20.5051
+2.35	45.72341175	32.26935719	43.95606879	45.49211044	58.86574681	25.94759449	34.99617861	39.76468689	43.78830853	47.95237
-2.4	-24.39049721	-17.44079237	-22.42122829	-22.18989163	-23.54488355	-14.0795519	-18.97258347	-21.377692	-23.18940135	-25.0089
+2.4	41.33140299	29.22820411	39.4719307	40.56327002	50.37775394	23.51634573	31.71290717	35.98849287	39.54138999	43.20383
-2.45	-28.41572803	-20.24890304	-26.43481773	-26.48217639	-28.97643585	-16.32962521	-22.00983232	-24.85471185	-27.06911714	-29.3129
+2.45	37.21277779	26.37127004	35.20782177	35.94813153	42.87638836	21.23106727	28.62710471	32.44354881	35.56238952	38.74298
-2.5	-32.84021974	-23.32988733	-30.87422317	-31.25863804	-35.67312029	-18.79690641	-25.34064034	-28.67232444	-31.33747188	-34.0576
+2.5	32.70775288	23.21517106	30.70828687	31.07959405	35.40868611	18.70506567	25.21664976	28.53013126	31.17833533	33.88056
-2.55	-36.96811414	-26.25664074	-35.04072362	-35.76683846	-42.5846078	-21.13934317	-28.50327283	-32.3013638	-35.39416108	-38.554
+2.55	28.60930981	20.3622268	26.59746454	26.65664372	29.20212952	16.42040765	22.13237366	24.99508057	27.22590246	29.48697
-2.6	-41.49714671	-29.34193961	-39.63896498	-40.74465478	-50.6855947	-23.60729279	-31.83571863	-36.12965921	-39.6999948	-43.381
+2.6	24.26049284	17.32965826	22.26307575	22.02130769	23.34986254	13.99048004	18.8523507	21.240145	23.03608631	24.83895
-2.65	-45.56281702	-32.1579958	-43.79120731	-45.31130366	-58.54531939	-25.85859293	-34.87597921	-39.62635939	-43.6325801	-47.7781
+2.65	20.34597543	14.59475767	18.38828589	17.90512049	18.67474967	11.79770245	15.89278957	17.85635141	19.26854949	20.66854
-2.7	-49.85352589	-35.1243442	-48.19995525	-50.16017058	-67.34273265	-28.22862103	-38.076973	-43.31243615	-47.78675653	-52.4323
+2.7	16.28418602	11.7509967	14.39858215	13.69919078	14.47830859	9.516061055	12.81368503	14.34081314	15.36364929	16.35656
-2.75	-53.69326254	-37.77349589	-52.17103691	-54.55283526	-75.76943097	-30.34384662	-40.93419854	-46.60706278	-51.50814147	-56.6109
+2.75	12.7172615	9.247684014	10.92606483	10.07146581	11.88073801	7.505992603	10.10145958	11.24908953	11.93883829	12.58529
-2.8	-57.65165428	-40.49826656	-56.29435177	-59.14242751	-85.00810926	-32.51785864	-43.87128885	-49.99886124	-55.34899355	-60.9341
+2.8	9.119258717	6.715344854	7.460584813	6.874635109	11.37499545	5.4707326	7.355703171	8.125007063	8.489309533	8.799449
-2.85	-61.10193193	-42.86696305	-59.91801437	-63.20418783	-93.56615375	-34.40617115	-46.42285939	-52.95060296	-58.70134858	-64.7181
+2.85	6.382938216	4.557163992	6.388760728	6.874635109	11.02967647	3.734212146	5.013453397	5.512086375	6.174689413	6.87585
-2.9	-64.55141032	-45.2275226	-63.57635715	-67.33830013	-102.7899379	-36.28606721	-48.96361595	-55.89606405	-62.05842058	-68.5202
+2.9	6.382938216	4.444653863	6.388760728	6.874635109	10.77901197	3.561208181	4.809844534	5.512086375	6.174689413	6.87585
-2.95	-67.44870516	-47.20221997	-66.68637087	-70.88745708	-111.2347616	-37.85663234	-51.08689149	-58.36413273	-64.88391625	-71.7337
+2.95	6.382938216	4.444653863	6.388760728	6.874635109	10.64918468	3.561208181	4.809844534	5.512086375	6.174689413	6.87585
-3	-70.21267799	-49.07595225	-69.70020297	-74.36985569	-120.1634832	-39.34431149	-53.09888241	-60.71119743	-67.58675224	-74.8245
+3	6.382938216	4.444653863	6.388760728	6.874635109	10.60566782	3.561208181	4.809844534	5.512086375	6.174689413	6.87585
(Span 3) -4	-1.82E+00	-1.269857667	-1.825297753	-1.964114298	-3.03E+00	-1.017453224	-1.374194323	-1.574827977	-1.764136651	-1.96446
+4	69.88616472	48.88228186	69.155699	73.55469919	113.5847409	39.19982254	52.90099816	60.45206549	67.23624872	74.3661
-3.05	-1.82E+00	-1.269857667	-1.825297753	-1.964114298	-3.06E+00	-1.017453224	-1.374194323	-1.574827977	-1.764136651	-1.96446
+3.05	67.74569086	47.43042042	66.81761286	70.84483814	106.5552065	38.04710187	51.34219987	58.63405137	65.14387962	71.97385
-3.1	-2.4166471	-1.893372803	-1.859396471	-1.964114298	-3.147810847	-1.594762638	-2.126274327	-2.241177046	-2.24104226	-2.2409
+3.1	65.13834404	45.65600974	63.99844579	67.60334945	98.57287619	36.63672259	49.43542513	56.4152564	62.59979897	69.0753
-3.15	-4.410004794	-3.426017839	-3.131577708	-2.803958579	-3.293521079	-2.830305421	-3.792076682	-4.058932896	-4.048535191	-4.04837
+3.15	62.57272824	43.9053326	61.24731687	64.4609	91.18420054	35.24396722	47.55284131	54.22859967	60.10012313	66.23542
-3.2	-7.031993443	-5.284874458	-5.377696039	-4.606872393	-4.626218824	-4.327263332	-5.810705329	-6.345998992	-6.482389831	-6.55187
+3.2	59.52237836	41.81929992	57.99891646	60.77116184	82.86311957	33.58320105	45.30833161	51.62548942	57.1317763	62.87101
-3.25	-9.609927695	-7.107576286	-7.809419987	-6.853725525	-6.600902691	-5.793867102	-7.78869073	-8.590886027	-8.949918536	-9.24801
+3.25	56.58027493	39.80356903	54.88415962	57.25015666	75.21993624	31.9774173	43.13841112	49.11204703	54.27169821	59.63581
-3.3	-12.67288721	-9.268373574	-10.75029162	-9.744235228	-9.177791022	-7.531282009	-10.13221695	-11.25444083	-11.88488513	-12.4632
+3.3	53.14070598	37.44323028	51.26116656	53.17187063	66.6742559	30.09611791	40.59648272	46.17088721	50.93095416	55.86339
-3.35	-15.6254672	-11.34736793	-13.60483101	-12.70846683	-11.8546578	-9.201938335	-12.38594755	-13.81902971	-14.71669776	-15.5722
+3.35	49.87079209	35.19619639	47.83220528	49.32635259	59.32746344	28.30429484	38.17566921	43.3725183	47.7574269	52.2852
-3.4	-19.07564579	-13.77278967	-16.96010806	-16.21398565	-15.08365723	-11.14995521	-15.01408392	-16.81280857	-18.02838484	-19.2147
+3.4	46.09578315	32.59886111	43.88926759	44.91919518	51.44847375	26.23231918	35.37660037	40.13957096	44.09614712	48.16259
-3.45	-22.35428892	-16.07432723	-20.1648827	-19.57983034	-18.43836728	-12.99765982	-17.50709258	-19.65524146	-21.17759635	-22.6841
+3.45	42.54669364	30.15428281	40.19552671	40.80315865	45.15332169	24.28147239	32.7413833	37.09813579	40.6560536	44.29374
-3.5	-26.13796604	-18.72706358	-23.87996862	-23.49942652	-22.83542642	-15.12643608	-20.37954233	-22.93297698	-24.8141399	-26.6961
+3.5	38.49002787	27.35726033	35.98722609	36.12685655	38.56166967	22.04865868	29.72545278	33.61966724	36.72610006	39.87881
-3.55	-29.69401541	-21.21738616	-27.38555494	-27.21288699	-27.28240559	-17.12418265	-23.07535144	-26.0113951	-28.23378632	-30.4737
+3.55	34.71044852	24.74889214	32.07812737	31.79431602	33.01506434	19.96579308	26.91227091	30.37702284	33.06640605	35.77158
-3.6	-33.75745765	-24.06012777	-31.40580678	-31.48684097	-32.71233659	-19.40388418	-26.15184026	-29.52682544	-32.14332615	-34.7974
+3.6	30.42590638	21.78949402	27.65913736	26.90857192	27.77447411	17.60197405	23.71980895	26.6992767	28.91964245	31.12214

-3.65	**-37.54234831**	**-26.70547931**	**-35.16278176**	**-35.49389916**	**-38.31383037**	**-21.52465624**	**-29.01401031**	**-32.7993702**	**-35.78652924**	**-38.8308**
+3.65	**26.45318185**	**19.05109386**	**23.58410403**	**22.41354595**	**23.54626213**	**15.4141083**	**20.76510166**	**23.29728125**	**25.0872235**	**26.8289**
-3.7	**-41.83182666**	**-29.70091371**	**-39.43354701**	**-40.06250679**	**-45.01946556**	**-23.9254226**	**-32.25420502**	**-36.50624934**	**-39.91720129**	**-43.4083**
+3.7	**21.99571044**	**15.96662997**	**19.00900008**	**17.37806253**	**18.94319931**	**12.94914557**	**17.43638533**	**19.46656554**	**20.7755115**	**22.00278**
-3.75	**-45.79691969**	**-32.46753869**	**-43.39248705**	**-44.30914785**	**-51.62680434**	**-26.14224089**	**-35.2462984**	**-39.93106256**	**-43.73699156**	**-47.6452**
+3.75	**17.90221288**	**13.13195382**	**14.81745585**	**13.07355555**	**16.94349577**	**10.68325704**	**14.37664733**	**15.94707878**	**16.81733974**	**17.57584**
-3.8	**-50.25870447**	**-35.57835749**	**-47.85919002**	**-49.1127054**	**-59.31367927**	**-28.63421107**	**-38.60992441**	**-43.78308462**	**-48.03693426**	**-52.4187**
+3.8	**13.32457945**	**9.959733755**	**10.21639563**	**8.994573562**	**16.36544824**	**8.147011777**	**10.95195057**	**12.00963626**	**12.39254113**	**12.63087**
-3.85	**-54.35536062**	**-38.43249799**	**-51.97067238**	**-53.54491281**	**-66.59738924**	**-30.92005728**	**-41.69544449**	**-47.31830652**	**-51.98643759**	**-56.8068**
+3.85	**9.146698392**	**7.062519634**	**8.31892206**	**8.994573562**	**15.95712509**	**5.830119315**	**7.823620426**	**8.414517221**	**8.388832994**	**8.908811**
-3.9	**-58.93572027**	**-41.62139063**	**-56.57863509**	**-58.52371846**	**-74.98998288**	**-33.47339735**	**-45.14222615**	**-51.26922724**	**-56.40378907**	**-61.7185**
+3.9	**8.272047805**	**5.755414008**	**8.31892206**	**8.994573562**	**15.63386857**	**4.60927013**	**6.224543345**	**7.137376232**	**7.996989202**	**8.908811**
-3.95	**-63.11537801**	**-44.52930963**	**-60.79323629**	**-63.08747469**	**-82.8736669**	**-35.80126631**	**-48.28473625**	**-54.87299943**	**-60.4360318**	**-66.2054**
+3.95	**8.272047805**	**5.755414008**	**8.31892206**	**8.994573562**	**15.45806072**	**4.60927013**	**6.224543345**	**7.137376232**	**7.996989202**	**8.908811**
-5	**-67.76058137**	**-47.75894681**	**-65.48788693**	**-68.18179674**	**-91.88604694**	**-38.38614339**	**-51.77433878**	**-58.8765535**	**-64.91892956**	**-71.1975**
+5	**8.272047805**	**5.755414008**	**8.31892206**	**8.994573562**	**15.39323408**	**4.60927013**	**6.224543345**	**7.137376232**	**7.996989202**	**8.908811**

3-Span: Shear (Max and Min) Raw Data Results - 200’ Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Force Y (kips)							
-0	-8.272047847	-7.49941237	-8.073534594	-7.611244613	-9.221519513	-9.663245242	-10.23008685	-4.023672751
End Shear	67.85738993	62.99441189	67.53171176	63.48257625	76.29825234	75.722619	80.10210693	33.50271129
-0.05	-8.272047847	-7.49941237	-8.073534594	-7.611244613	-9.221519513	-9.663245242	-10.23008685	-4.023672751
+0.05	63.33090729	58.89547142	63.11863362	59.32322756	71.25919582	70.41731302	74.48537192	31.31150824
-0.1	-8.272047847	-7.49941237	-8.073534594	-7.611244613	-9.221519513	-9.663245242	-10.23008685	-4.023672751
+0.1	58.75376864	54.71043553	58.61383464	55.0771304	66.11709641	65.01209516	68.76310212	29.05867153
-0.15	-8.931233871	-9.794941468	-10.24157589	-9.467267439	-10.82819501	-9.663245242	-10.23008685	-4.816648106
+0.15	54.60797639	50.95111083	54.56813232	51.26429521	61.5014985	60.17543406	63.64295437	27.03628078
-0.2	-13.54875994	-13.95254934	-14.72140109	-13.69262745	-15.9547838	-11.65861178	-12.27222293	-7.061477612
+0.2	50.07838414	46.83838988	50.14307793	47.09453614	56.45586785	54.90520959	58.06407561	24.82522753
-0.25	-17.69047917	-17.67690326	-18.73526104	-17.47902396	-20.55060663	-16.51841817	-17.41531229	-9.073654646
+0.25	46.03973529	43.16644212	46.19316285	43.37304874	51.95455643	50.21938675	53.10405229	22.85248942
-0.3	-22.21467935	-21.73975232	-23.11490518	-21.61107663	-25.56803307	-21.90317271	-23.11748839	-11.27013803
+0.3	41.65545486	39.17454563	41.90009395	39.32888095	47.06509492	45.14759166	47.7357321	20.70941311
-0.35	-26.24765104	-25.35642488	-27.01448948	-25.29077041	-30.03808142	-26.71593884	-28.21417248	-13.22672554
+0.35	37.77260715	35.63385223	38.09321894	35.74330253	42.73208456	40.66999377	42.99659562	18.81002933
-0.4	-30.62479371	-29.27600761	-31.24171376	-29.2802663	-34.88664933	-31.95380406	-33.76127557	-15.34867115
+0.4	33.58742148	31.81127986	33.98436578	31.87397007	38.05848209	35.86006311	37.90600049	16.76112106
-0.45	-34.50040842	-32.7411205	-34.97976902	-32.80870146	-39.17691649	-36.60497691	-38.68727422	-17.22596902
+0.45	29.90903441	28.44572321	30.36778868	28.46885689	33.94777971	31.64808084	33.44851743	14.95878629
-0.5	-38.67676138	-36.46893677	-39.00234233	-36.60638816	-43.79692573	-41.63252821	-44.01214884	-19.24718514
+0.5	25.97672052	24.8409787	26.49538626	24.82361239	29.54973631	27.16343861	28.7028022	13.03024254
-0.55	-42.34640522	-39.73860569	-42.53160867	-39.93900735	-47.85340263	-46.06471862	-48.70669707	-21.02149546
+0.55	22.55145566	21.69444795	23.11637228	21.64352417	25.71535387	23.27446041	24.58773678	11.34865472
-0.6	-46.26823809	-43.22615446	-46.2972993	-43.49563765	-52.18515972	-50.81852205	-53.74217789	-22.91578605
+0.6	18.9257984	18.35603231	19.53265246	18.27161825	21.65256752	19.17854149	20.2540678	9.56666434
-0.65	-49.68329578	-46.25649532	-49.57051674	-46.5878787	-55.95383137	-54.97433961	-58.14450938	-24.56341338
+0.65	15.80231506	15.47241023	16.43845985	15.36111172	18.14851315	15.66996684	16.54219596	8.029525472
-0.7	-53.29687932	-49.45527004	-53.02708674	-49.8542048	-59.93764208	-59.39096212	-62.82343194	-26.30458798
+0.7	12.53709511	12.44882615	13.19565633	12.31179088	14.48067641	12.02620254	12.6877358	6.420283307
-0.75	-56.40873446	-52.20239791	-55.99699465	-52.66150567	-63.36449419	-63.2130139	-66.87277772	-27.80182924
+0.75	9.764048698	9.871988895	10.43353649	9.715426726	11.36096309	8.955409918	9.43981122	5.051288125
-0.8	-59.66033794	-55.06389848	-59.09221321	-55.58828183	-66.94066664	-67.22902486	-71.12798021	-29.36369392
+0.8	6.913048702	7.211739228	7.583882984	7.037940605	8.147772479	5.864950914	6.173632541	3.640989614
-0.85	-62.42038484	-57.48393613	-61.71155918	-58.06608805	-69.97169369	-70.65992954	-74.7635836	-30.68685562
+0.85	4.539104094	4.985578551	5.201103906	4.800281527	5.466415574	3.684757657	3.901370747	2.46383806
-0.9	-65.25627681	-59.95966033	-64.3931931	-60.6040608	-73.08052664	-74.21189702	-78.52790279	-32.04321542
+0.9	2.326965678	2.737165289	2.796833396	2.543875438	2.767562456	2.120604563	2.24485333	1.327093764
-0.95	-67.61589336	-62.00871684	-66.61470998	-62.70781363	-75.66171808	-77.19425267	-81.68898524	-33.16859681
+0.95	1.823632991	1.656312751	1.782844517	1.680666844	2.03584553	2.120604563	2.24485333	0.886734707
-1	-69.98234317	-64.05016248	-68.83052621	-64.80773104	-78.2435123	-80.21874553	-84.89525875	-34.29326241
+1	1.82E+00	1.656312751	1.782844517	1.680666844	2.03584553	2.120604563	2.24485333	0.886734707
(Span 2) -2	-6.382933757	-5.797292892	-6.240169143	-5.882535109	-7.12570305	-7.422369837	-7.857255397	-3.103677629
+2	70.12198119	64.08315152	68.88118118	64.86502823	78.34500471	80.61536867	85.31940471	34.32349546
-2.05	-6.382933757	-5.797292892	-6.240169143	-5.882535109	-7.12570305	-7.422369837	-7.857255397	-3.103677629
+2.05	67.56254342	61.87622565	66.4851782	62.59400135	75.55173396	77.3485395	81.85635437	33.10647405
-2.1	-6.382933757	-5.797292892	-6.240169143	-5.882535109	-7.12570305	-7.422369837	-7.857255397	-3.103677629
+2.1	64.43347704	59.15041056	63.53118606	59.79736209	72.12309322	73.42378887	77.69693447	31.61094062
-2.15	-6.382933757	-6.228697232	-6.545061591	-6.070638041	-7.12570305	-7.422369837	-7.857255397	-3.15210261
+2.15	61.23873562	56.345957	60.49606188	56.92641709	68.61186615	69.47020209	73.50779848	30.07812326
-2.2	-9.227236621	-9.305683789	-9.84179398	-9.168608259	-10.73610325	-8.56040163	-9.025261488	-4.784346477
+2.2	57.51192012	53.0545154	56.93765366	53.56280335	64.50593856	64.90798491	68.67456904	28.28457016
-2.25	-12.55659694	-12.39198904	-13.15200211	-12.28141026	-14.48048953	-12.26624911	-12.94512332	-6.426868755

+2.25	53.84554482	49.80013992	53.42236818	50.24182517	60.45843367	60.46067328	63.96373506	26.51566977
-2.3	-16.40613076	-15.94107296	-16.96186675	-15.86610128	-18.79954273	-16.60200452	-17.5322059	-8.320674034
+2.3	49.69775084	46.10248747	49.43122195	46.47309654	55.87141283	55.4694739	58.6774442	24.5101953
-2.35	-20.16518994	-19.39070637	-20.66772164	-19.35463609	-23.00857994	-20.8776865	-22.05649139	-10.16552094
+2.35	45.72341175	42.54579272	45.59473228	42.8519558	51.46929184	50.72147298	53.64930281	22.58491969
-2.4	-24.39049721	-23.25247259	-24.81904105	-23.26417988	-27.73134922	-25.72462728	-27.18598409	-12.23479853
+2.4	41.33140299	38.60135388	41.34253577	38.83999713	46.597401	45.50977141	48.13069408	20.45360244
-2.45	-28.41572803	-26.91782646	-28.7615804	-26.97855755	-32.2233522	-30.37711155	-32.11030621	-14.20226848
+2.45	37.21277779	34.88994548	37.34380175	35.06856318	42.02232385	40.55702469	42.88684234	18.45166524
-2.5	-32.84021974	-30.932862	-33.08267898	-31.0510867	-37.15363441	-35.52675579	-37.56146351	-16.36092745
+2.5	32.70775288	30.78348392	32.92186978	30.8995006	36.97002797	35.33420837	37.35763122	16.2805975
-2.55	-36.96811414	-34.74091578	-37.18327867	-34.9172021	-41.83880253	-40.36300401	-42.68142869	-18.37130369
+2.55	28.60930981	27.06562413	28.92060045	27.12840257	32.4046642	30.56571542	32.30994167	14.28171552
-2.6	-41.49714671	-38.74898168	-41.50163666	-38.9900809	-46.7795588	-45.70384448	-48.33618499	-20.53325261
+2.6	24.26049284	23.10729799	24.6629336	23.11712607	27.55360554	25.54136663	26.99202768	12.15698652
-2.65	-45.56281702	-42.40148128	-45.43911572	-42.70509509	-51.29085699	-50.5297991	-53.44633086	-22.50682244
+2.65	20.34597543	19.53135686	20.81887005	19.49694239	23.18038555	21.05315838	22.24217963	10.24086171
-2.7	-49.85352589	-46.24245469	-49.5822479	-46.61567402	-56.04484086	-55.6573072	-58.87637109	-24.58598169
+2.7	16.28418602	15.80600984	16.81682362	15.72959662	18.63495511	16.43575808	17.35630733	8.248560066
-2.75	-53.69326254	-49.66643606	-53.2780006	-50.10546365	-60.2923569	-60.27910084	-63.771416	-26.44303376
+2.75	12.7172615	12.51959253	13.28892509	12.41019708	14.63553927	12.42087279	13.10869425	6.49490965
-2.8	-57.65165428	-53.18090292	-57.07423015	-53.69185765	-64.66334396	-65.08186293	-68.85876256	-28.35330953
+2.8	9.119258717	9.186638303	9.714175465	9.048640551	10.59192933	8.418901743	8.875607965	4.721127891
-2.85	-61.10193193	-56.22876164	-60.3692979	-56.80655388	-68.46541871	-69.30643598	-73.33429044	-30.0141287
+2.85	6.382938216	6.337350125	6.661401644	6.179918499	7.148006503	7.422369901	7.857255545	3.20966272
-2.9	-64.55141032	-59.25730203	-63.64694194	-59.90690374	-72.25721606	-73.57597097	-77.85819864	-31.66943261
+2.9	6.382938216	5.797292968	6.240169064	5.882535021	7.125703119	7.422369901	7.857255545	3.103677576
-2.95	-67.44870516	-61.7814329	-66.38236534	-62.4966133	-75.43216061	-77.21029709	-81.70982867	-33.05431453
+2.95	6.382938216	5.797292968	6.240169064	5.882535021	7.125703119	7.422369901	7.857255545	3.103677576
-3	-70.21267799	-64.16464755	-68.96976311	-64.94905788	-78.4485729	-80.7381243	-85.44955428	-34.36855771
+3	6.382938216	5.797292968	6.240169064	5.882535021	7.125703119	7.422369901	7.857255545	3.103677576
(Span 3) -4	-1.82E+00	-1.656312773	-1.782844495	-1.680666819	-2.03584555	-2.120604581	-2.244853373	-0.886734692
+4	69.88616472	63.95838428	68.73083965	64.71321958	78.12716942	80.08134914	84.74959042	34.24263899
-3.05	-1.82E+00	-1.656312773	-1.782844495	-1.680666819	-2.03584555	-2.120604581	-2.244853373	-0.886734692
+3.05	67.74569086	62.11126711	66.72595146	62.8131915	75.7911359	77.34476964	81.84853484	33.2250345
-3.1	-2.4166471	-2.839072949	-2.905743014	-2.6460481	-2.889636703	-2.124892566	-2.244853373	-1.362277697
+3.1	65.13834404	59.84660764	64.27068469	60.48807924	72.93834699	74.04861033	78.35484297	31.98124512
-3.15	-4.410004794	-4.873446803	-5.081138045	-4.687659337	-5.331578664	-3.60329417	-3.814795033	-2.404598685
+3.15	62.57272824	57.60656632	61.84433626	58.1917277	70.1254841	70.83480209	74.94889972	30.75401087
-3.2	-7.031993443	-7.333851494	-7.714640513	-7.160771661	-8.295075124	-5.995776697	-6.311343891	-3.705606366
+3.2	59.52237836	54.93188805	58.94937765	55.45318121	66.77549998	67.04286589	70.93072442	29.29162297
-3.25	-9.609927695	-9.740844868	-10.29300689	-9.583354168	-11.20236268	-8.800105694	-9.27556111	-4.981643346
+3.25	56.58027493	52.34281136	56.14883423	52.80505479	63.53980537	63.4092096	67.08064957	27.87845684
-3.3	-12.67288721	-12.58883638	-13.34577746	-12.45291645	-14.65034164	-12.19401466	-12.86524015	-6.494689863
+3.3	53.14070598	49.30660122	52.86640037	49.70234927	59.75235417	59.18494537	62.60517205	26.2236591
-3.35	-15.6254672	-15.32454127	-16.27983023	-15.21193536	-17.96899344	-15.49087679	-16.35273915	-7.950720286
+3.35	49.87079209	46.41237163	49.73891976	46.74699048	56.14781906	55.18883177	58.37173219	24.64826149
-3.4	-19.07564579	-18.51161432	-19.69963215	-18.42870737	-21.8417702	-19.36864414	-20.45519569	-9.649613682
+3.4	46.09578315	43.06315721	46.12127128	43.32935504	51.98257193	50.59569712	53.50614285	22.82725255
-3.45	-22.35428892	-21.53218504	-22.94215239	-21.47959169	-25.51776078	-23.07459769	-24.37626364	-11.26194109
+3.45	42.54669364	39.90766026	42.71411474	40.11136172	48.06325452	46.29451825	48.95010606	21.1133198
-3.5	-26.13796604	-25.00983784	-26.67675338	-24.99432151	-29.75563585	-27.37282565	-28.92437062	-13.12048389
+3.5	38.49002787	36.29390641	38.8134445	36.42802597	43.57988378	41.39589348	43.76151344	19.15230282
-3.55	-29.69401541	-28.27137227	-30.18046211	-28.29248771	-33.73492429	-31.43047987	-33.21824087	-14.86540828
+3.55	34.71044852	32.92102319	35.17386899	32.99193466	39.39976759	36.84703822	38.94364441	17.32353414
-3.6	-33.75745765	-31.99108293	-34.17760771	-32.05595152	-38.27823232	-36.08571699	-38.14481439	-16.85739885
+3.6	30.42590638	29.09125234	31.04243193	29.09219114	34.65802188	31.70641031	33.49927005	15.24867813

-3.65	-37.54234831	-35.44969714	-37.89524526	-35.55686207	-42.50683418	-40.43768182	-42.75072097	-18.71122249
+3.65	26.45318185	25.54488915	27.21772079	25.48253868	30.27109082	26.96726883	28.48033484	13.32877178
-3.7	-41.83182666	-39.36300236	-42.10274411	-39.51976365	-47.29582263	-45.38646572	-47.98856562	-20.81048932
+3.7	21.99571044	21.54760402	22.90775051	21.41561484	25.33063973	21.6480109	22.84727965	11.16628158
-3.75	-45.79691969	-42.9748151	-45.98705372	-43.17888389	-51.71975606	-49.97535026	-52.8457417	-22.74951415
+3.75	17.90221288	17.87159911	18.94511434	17.67700589	20.79096015	16.77597425	17.68804524	9.178936396
-3.8	-50.25870447	-47.03319401	-50.35265261	-47.29199872	-56.69475845	-55.15430721	-58.32775582	-24.92985473
+3.8	13.32457945	13.75530092	14.50884303	13.4921255	15.71146882	11.42649218	12.0278865	6.955004414
-3.85	-54.35536062	-50.75432087	-54.35637423	-51.06472167	-61.25995453	-59.92272174	-63.37543585	-26.93038163
+3.85	9.146698392	9.993559865	10.45556468	9.669096239	11.07302413	9.663245388	10.23008707	4.923918106
-3.9	-58.93572027	-54.90924527	-58.82781211	-55.27882404	-66.36130351	-65.2683597	-69.03439262	-29.16560212
+3.9	8.272047805	7.499412554	8.073534649	7.61124465	9.221519709	9.663245388	10.23008707	4.023672758
-3.95	-63.11537801	-58.69580354	-62.90368738	-59.12061581	-71.01378185	-70.15891355	-74.21180996	-31.20393354
+3.95	8.272047805	7.499412554	8.073534649	7.61124465	9.221519709	9.663245388	10.23008707	4.023672758
-5	-67.76058137	-62.89881892	-67.42878237	-63.38640771	-76.18172233	-75.60786363	-79.98061289	-33.46784096
+5	8.272047805	7.499412554	8.073534649	7.61124465	9.221519709	9.663245388	10.23008707	4.023672758

3-Span: Shear (Max and Min) Raw Data Results - 200' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	Force Y (kips)					
-0	-8.272047847	-18.05594554	-20.00419778	-11.32122564	-13.61015467	-14.71013722
End Shear	67.85738993	136.1883483	147.9273716	87.90067658	105.8460052	113.0561125
-0.05	-8.272047847	-18.05594554	-20.00419778	-11.32122564	-13.61015467	-14.71013722
+0.05	63.33090729	126.2706317	137.0875806	81.67336263	98.36819893	104.9723247
-0.1	-8.272047847	-18.05594554	-20.00419778	-11.32122564	-13.61015467	-14.71013722
+0.1	58.75376864	116.1796013	125.9185652	75.33139521	90.75150914	96.74149028
-0.15	-8.931233871	-18.05594554	-20.00419778	-11.32122564	-13.61015467	-14.71013722
+0.15	54.60797639	107.1684422	115.9542892	69.65997545	83.93906669	89.38441863
-0.2	-13.54875994	-18.05594554	-20.00419778	-12.69626139	-15.60965404	-15.45957796
+0.2	50.07838414	97.37042362	105.1307668	63.48408939	76.51943487	81.37691364
-0.25	-17.69047917	-25.02800488	-25.15430156	-18.23606914	-22.2571823	-22.49646752
+0.25	46.03973529	88.6783927	95.53917087	57.99670141	69.92580253	74.26579099
-0.3	-22.21467935	-34.90149928	-35.46871633	-24.57898391	-29.86729315	-30.75409772
+0.3	41.65545486	79.29279765	85.19398048	52.06152714	62.7927846	66.57863284
-0.35	-26.24765104	-44.02414037	-45.63684719	-30.25150291	-36.67204725	-38.14244868
+0.35	37.77260715	71.0279272	76.09525049	46.82567912	56.49897415	59.80123278
-0.4	-30.62479371	-53.97310351	-56.73646407	-36.42888067	-44.08127289	-46.19230484
+0.4	33.58742148	62.17416577	66.36123789	41.20584125	49.74211902	52.53143317
-0.45	-34.50040842	-62.82679367	-66.62380495	-41.91786966	-50.66376517	-53.34878441
+0.45	29.90903441	54.44448227	57.87557659	36.28905633	43.82915717	46.17553117
-0.5	-38.67676138	-72.41879425	-77.34665467	-47.85508267	-57.78255239	-61.09385292
+0.5	25.97672052	46.24195097	48.88558784	31.05918119	37.53801727	39.42010245
-0.55	-42.34640522	-80.8954946	-86.83302147	-53.09302148	-64.0617567	-67.93068517
+0.55	22.55145566	39.15550413	41.13320171	26.52898256	32.08693182	33.57347483
-0.6	-46.26823809	-90.0111255	-97.04625801	-58.71544331	-70.8005547	-75.27395715
+0.6	18.9257984	31.72359726	33.02008472	21.763695	26.3510564	27.42943478
-0.65	-49.68329578	-98.00282174	-106.0114394	-63.63481312	-76.69544859	-81.70336733
+0.65	15.80231506	25.38840791	26.12114449	17.68759108	21.44285758	22.17985747
-0.7	-53.29687932	-106.5226722	-115.5822157	-68.8678189	-82.96470733	-88.54781188
+0.7	12.53709511	18.84654102	19.01774662	13.46151802	16.35179942	16.74422999
-0.75	-56.40873446	-113.9213067	-123.9060355	-73.4010964	-88.39426379	-94.48202329
+0.75	9.764048698	13.48026354	13.62492883	9.907039886	12.06752446	12.17947696
-0.8	-59.66033794	-121.7259923	-132.7015056	-78.1700601	-94.10443151	-100.7306461
+0.8	6.913048702	8.57173171	8.992924359	6.412473498	7.852033949	7.762857163
-0.85	-62.42038484	-128.4235458	-140.2637609	-82.2497377	-98.98764111	-106.0818843
+0.85	4.539104094	5.225583782	5.384228037	4.366564833	4.792823412	5.126818239
-0.9	-65.25627681	-135.3936507	-148.1510766	-86.4800333	-104.0491664	-111.6376599
+0.9	2.326965678	3.949467653	4.370837623	2.479871485	2.983625346	3.221511969
-0.95	-67.61589336	-141.2820899	-154.8315588	-90.03857864	-108.3049904	-116.3181484
+0.95	1.823632991	3.949467653	4.370837623	2.479871485	2.983625346	3.221511969
-1	-69.98234317	-147.2982068	-161.6778746	-93.65558016	-112.6283228	-121.0840557
+1	1.82E+00	3.949467653	4.370837623	2.479871485	2.983625346	3.221511969
(Span 2) -2	-6.382933757	-13.82360954	-15.29845488	-8.679847088	-10.44304597	-11.2756777
+2	70.12198119	148.4189875	163.061428	94.19283807	113.2510034	121.8515239
-2.05	-6.382933757	-13.82360954	-15.29845488	-8.679847088	-10.44304597	-11.2756777
+2.05	67.56254342	141.936512	155.6881709	90.29005317	108.5841161	116.7104003
-2.1	-6.382933757	-13.82360954	-15.29845488	-8.679847088	-10.44304597	-11.2756777
+2.1	64.43347704	134.238109	146.9754561	85.61765319	102.9921737	110.5727741
-2.15	-6.382933757	-13.82360954	-15.29845488	-8.679847088	-10.44304597	-11.2756777
+2.15	61.23873562	126.5539653	138.3138582	80.92391581	97.3708984	104.4207828
-2.2	-9.227236621	-13.82360954	-15.29845488	-9.495323387	-11.56015918	-11.70722882
+2.2	57.51192012	117.7540073	128.4280417	75.51993061	90.89539035	97.35084093
-2.25	-12.55659694	-19.55817478	-19.99737585	-13.78687099	-16.73294804	-17.22323697

+2.25	53.84554482	109.2315719	118.8823829	70.2623328	84.59223709	90.48321646
-2.3	-16.40613076	-27.38975183	-28.53049878	-18.82321177	-22.79848994	-23.71182449
+2.3	49.69775084	99.72246386	108.2600942	64.37202822	77.52748161	82.79982009
-2.35	-20.16518994	-35.17826548	-37.05139031	-23.80218143	-28.79094031	-30.13885583
+2.35	45.72341175	90.72511662	98.23466327	58.77768458	70.8149886	75.51180197
-2.4	-24.39049721	-44.07050033	-46.81287129	-29.45829251	-35.59454335	-37.45192453
+2.4	41.33140299	80.89202732	87.31253436	52.64633483	63.45531451	67.53381195
-2.45	-28.41572803	-52.65939523	-56.26899029	-34.89756029	-42.13410573	-44.49474446
+2.45	37.21277779	71.6088005	77.21161358	46.82839402	56.4691442	59.9726042
-2.5	-32.84021974	-62.21984203	-66.82220429	-40.92818188	-49.38145792	-52.31343441
+2.5	32.70775288	61.86142035	66.42627237	40.7025157	49.11031731	52.02067736
-2.55	-36.96811414	-71.24578124	-76.80926015	-46.60065277	-56.19561984	-59.67680187
+2.55	28.60930981	53.0085778	56.65415148	35.11826106	42.39939221	44.78068245
-2.6	-41.49714671	-81.2570249	-87.71757574	-52.87449805	-63.72923938	-67.830499
+2.6	24.26049284	43.73318938	46.44222805	29.24423365	35.33712197	37.17495275
-2.65	-45.56281702	-90.36288384	-97.83128678	-58.55203284	-70.54418352	-75.21799647
+2.65	20.34597543	35.4990653	37.40319062	24.00673884	29.03706382	30.40312962
-2.7	-49.85352589	-100.0793617	-108.6580738	-64.59351667	-77.79318649	-83.08854435
+2.7	16.28418602	27.08813582	28.2013144	18.62986221	22.56571031	23.46245587
-2.75	-53.69326254	-108.8846673	-118.4941522	-70.04787117	-84.33506945	-90.20328218
+2.75	12.7172615	19.83610761	20.29964778	13.96622147	16.94903239	17.45404652
-2.8	-57.65165428	-118.0882573	-128.8027804	-75.72566863	-91.14198453	-97.61980045
+2.8	9.119258717	13.82360946	15.29844287	9.331756319	11.36290845	11.49728861
-2.85	-61.10193193	-126.2369568	-137.9569416	-80.72972338	-97.13826313	-104.1665039
+2.85	6.382938216	13.82360946	15.29844287	8.679847034	10.4430459	11.27567755
-2.9	-64.55141032	-134.5351875	-147.3107824	-85.79856027	-103.2087613	-110.8101329
+2.9	6.382938216	13.82360946	15.29844287	8.679847034	10.4430459	11.27567755
-2.95	-67.44870516	-141.663886	-155.3787403	-90.12519865	-108.3868958	-116.4935784
+2.95	6.382938216	13.82360946	15.29844287	8.679847034	10.4430459	11.27567755
-3	-70.21267799	-148.6643108	-163.3411634	-94.33981156	-113.4266611	-122.0454589
+3	6.382938216	13.82360946	15.29844287	8.679847034	10.4430459	11.27567755
(Span 3) -4	-1.82E+00	-3.949467628	-4.370834175	-2.47987147	-2.983625327	-3.221511926
+4	69.88616472	147.0237045	161.3651111	93.49104145	112.4317162	120.8670393
-3.05	-1.82E+00	-3.949467628	-4.370834175	-2.47987147	-2.983625327	-3.221511926
+3.05	67.74569086	141.5803085	155.1705703	90.21837844	108.5199648	116.5548215
-3.1	-2.4166471	-3.949467628	-4.370834175	-2.535599671	-2.983625327	-3.221511926
+3.1	65.13834404	135.0722764	147.7871378	86.28539013	103.8163277	111.3818255
-3.15	-4.410004794	-5.06575823	-5.213903696	-4.270960089	-4.688308086	-5.007137658
+3.15	62.57272824	128.7657502	140.6507324	82.45782143	99.23666288	106.3549873
-3.2	-7.031993443	-8.77506554	-9.201825369	-6.564365691	-8.035380754	-7.961558184
+3.2	59.52237836	121.3634371	132.2927311	77.94885533	93.83961214	100.4406767
-3.25	-9.609927695	-13.22990328	-13.34851529	-9.727466872	-11.85101591	-11.94906972
+3.25	56.58027493	114.3018132	124.3346624	73.63391837	88.67307757	94.78694127
-3.3	-12.67288721	-19.14686711	-19.34312002	-13.65596945	-16.58611009	-16.9941437
+3.3	53.14070598	106.1245758	115.134933	68.62359826	82.67216183	88.22829584
-3.35	-15.6254672	-25.06593929	-25.77025984	-17.47969331	-21.19246582	-21.91228378
+3.35	49.87079209	98.41588958	106.4753998	63.88884381	76.99982008	82.03547454
-3.4	-19.07564579	-32.06774908	-33.39512916	-21.98471128	-26.61713837	-27.71427042
+3.4	46.09578315	89.58322695	96.56678258	58.45179566	70.48459017	74.9295071
-3.45	-22.35428892	-38.79209365	-40.7358254	-26.29632142	-31.80693108	-33.27334672
+3.45	42.54669364	81.33550943	87.32597706	53.36468428	64.38739265	68.28537537
-3.5	-26.13796604	-46.62423813	-49.30399002	-31.30323822	-37.83164085	-39.73518896
+3.5	38.49002787	71.96677807	76.84132522	47.57553315	57.44739899	60.72910138
-3.55	-29.69401541	-54.04582586	-57.43804614	-36.03515889	-43.52377926	-45.84746385
+3.55	34.71044852	63.28806261	67.13944098	42.20364616	51.00644384	53.72147941
-3.6	-33.75745765	-62.58889452	-66.81665632	-41.46935177	-50.05898011	-52.87218774
+3.6	30.42590638	53.50266961	56.21159936	36.13701988	43.7312399	45.81186931

-3.65	-37.54234831	-70.59968864	-75.62387916	-46.55412446	-56.1725141	-59.44984769
+3.65	26.45318185	44.5009881	46.16883161	30.54780697	37.02746635	38.5284885
-3.7	-41.83182666	-79.73433853	-85.68008984	-52.34096322	-63.12864982	-66.94043209
+3.7	21.99571044	34.41827857	34.93064911	24.27833067	29.5066021	30.36259999
-3.75	-45.79691969	-88.22625401	-95.04028376	-57.71104204	-69.58252408	-73.89570638
+3.75	17.90221288	25.45308995	25.77955434	18.53934636	22.62107537	22.891237
-3.8	-50.25870447	-97.83302925	-105.6412486	-63.77590482	-76.87004794	-81.75514124
+3.8	13.32457945	18.05594575	20.00425151	12.42123826	15.27961275	15.09248313
-3.85	-54.35536062	-106.6981409	-115.4342178	-69.36373129	-83.58319245	-89.00020314
+3.85	9.146698392	18.05594575	20.00425151	11.32122569	13.61015473	14.7101372
-3.9	-58.93572027	-116.6575767	-126.4470916	-75.63198855	-91.11254964	-97.13151872
+3.9	8.272047805	18.05594575	20.00425151	11.32122569	13.61015473	14.7101372
-3.95	-63.11537801	-125.7877977	-136.5526412	-81.37011794	-98.00403046	-104.5786393
+3.95	8.272047805	18.05594575	20.00425151	11.32122569	13.61015473	14.7101372
-5	-67.76058137	-135.9805447	-147.8445749	-87.76714589	-105.6856724	-112.8847769
+5	8.272047805	18.05594575	20.00425151	11.32122569	13.61015473	14.7101372

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (AASHTO Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	Type 3	Type 3S2	Type 3-3	2-.75 AASHTO Type 3-3 + Lane	SC-SU2	SU4	SU5	SU6	SU7
Span 1	Moment Z (kips-ft)				Moment Z (kips-ft)					
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-82.720478	-57.554139	-83.189219	-89.945734	-153.932339	-46.092701	-62.245432	-71.373761	-79.969891	-89.088111
+0.05	633.550287	447.219067	610.633807	633.869398	842.541241	359.463723	484.983664	551.184206	607.343646	665.376909
-0.1	-165.440957	-115.108278	-166.378437	-179.891469	-307.864678	-92.185402	-124.490864	-142.747523	-159.939782	-178.176223
+0.1	1179.714622	833.446400	1133.013204	1172.134751	1545.083987	670.133670	904.015010	1026.749372	1131.712958	1241.894125
-0.15	-248.161435	-172.662417	-249.567656	-269.837203	-461.797018	-138.278103	-186.736297	-214.121284	-239.909673	-267.264334
+0.15	1638.957060	1159.138315	1568.037766	1616.787754	2120.472126	932.327930	1257.610198	1427.322338	1586.412237	1737.994890
-0.2	-330.881914	-230.216556	-332.756875	-359.782937	-615.729357	-184.370804	-248.981729	-285.495046	-319.879564	-356.352445
+0.2	2012.888792	1425.352470	1917.641431	1985.678280	2613.135749	1146.877030	1546.894573	1754.244361	1958.767547	2151.675915
-0.25	-413.602392	-287.770695	-415.946094	-449.728672	-769.661696	-230.463505	-311.227161	-356.868807	-399.849455	-445.440557
+0.25	2303.632769	1633.501774	2197.694379	2265.473700	3006.477546	1314.895802	1773.377238	2014.095805	2250.324688	2483.130146
-0.3	-496.322871	-345.324834	-499.135312	-539.674406	-923.594035	-276.556206	-373.472593	-428.242568	-479.819346	-534.528668
+0.3	2517.818263	1785.354603	2398.812233	2476.448497	3303.509262	1437.783329	1945.765894	2211.889619	2463.520477	2727.009841
-0.35	-579.043349	-402.878973	-582.324531	-629.620141	-1077.526375	-322.648907	-435.718026	-499.616330	-559.789237	-623.616780
+0.35	2666.918998	1891.530826	2522.523985	2619.903306	3513.094070	1517.222870	2062.819968	2342.372398	2611.216672	2886.401863
-0.4	-661.763828	-460.433112	-665.513750	-719.565875	-1231.458714	-368.741607	-497.963458	-570.990091	-639.759128	-712.704891
+0.4	2740.944021	1946.034017	2584.546554	2706.313651	3616.958578	1555.182041	2123.521703	2408.003867	2689.135864	2970.676842
-0.45	-744.484306	-517.987251	-748.702969	-809.511609	-1385.391053	-414.834308	-560.208890	-642.363853	-719.729018	-801.793002
+0.45	2743.884190	1951.172782	2576.092218	2715.568627	3610.148047	1553.912730	2130.345710	2412.196227	2698.140587	2985.012761
-0.5	-827.204785	-575.541390	-831.892187	-899.457344	-1539.323392	-460.927009	-622.454322	-713.737614	-799.698909	-890.881114
+0.5	2698.875441	1918.753270	2537.712394	2666.364867	3530.751447	1530.092314	2094.094721	2372.092668	2651.744790	2931.520740
-0.55	-909.925263	-633.095529	-915.081406	-989.403078	-1693.255732	-507.019710	-684.699755	-785.111375	-879.668800	-979.969225
+0.55	2594.961438	1843.932079	2445.581375	2553.358548	3432.233310	1474.317216	2012.031762	2281.159459	2546.483184	2810.528010
-0.6	-992.645742	-690.649669	-998.270625	-1079.348812	-1847.188071	-553.112411	-746.945187	-856.485137	-959.638691	-1069.057336
+0.6	2431.181628	1727.913366	2291.329653	2374.457871	3220.838247	1384.888502	1885.640454	2138.819739	2384.190206	2632.788407
-0.65	-1075.366220	-748.203808	-1081.459844	-1169.294547	-2001.120410	-599.205112	-809.190619	-927.858898	-1039.608582	-1158.145448
+0.65	2213.224398	1574.684400	2086.624804	2149.410943	2894.842283	1264.931377	1719.243883	1949.987855	2170.429556	2398.493749
-0.7	-1158.086699	-805.757947	-1164.649062	-1259.240281	-2155.052749	-645.297813	-871.436051	-999.232660	-1119.578473	-1247.233559
+0.7	1947.290880	1388.588163	1829.217624	1867.940000	2486.305727	1117.856149	1517.549547	1720.019339	1911.259135	2112.392624
-0.75	-1240.807177	-863.312086	-1247.838281	-1349.186015	-2308.985089	-691.390514	-933.681484	-1070.606421	-1199.548364	-1336.321671
+0.75	1640.093310	1174.322875	1525.601051	1537.176643	1987.736097	947.356754	1285.648241	1454.710070	1614.467676	1781.697853
-0.8	-1323.527655	-920.866225	-1331.027500	-1439.131750	-2462.917428	-737.483215	-995.926916	-1141.980183	-1279.518255	-1425.409782
+0.8	1298.856191	936.941999	1182.787903	1164.862469	1397.221046	757.411770	1029.014629	1160.296353	1284.713222	1414.172609
-0.85	-1406.248134	-978.420364	-1414.216719	-1529.077484	-2642.072447	-783.575916	-1058.172348	-1213.353944	-1359.488146	-1514.497893
+0.85	931.314678	681.854150	808.310861	759.307751	821.162986	552.283312	753.507075	843.455733	929.275275	1018.131156
-0.9	-1488.968612	-1035.974503	-1497.405937	-1619.023219	-2889.377360	-829.668617	-1120.417780	-1284.727705	-1439.458037	-1603.586005
+0.9	545.716983	414.823792	414.820557	356.545858	599.538109	336.518899	465.368016	511.305706	558.921680	602.438337
-0.95	-1571.689091	-1093.528642	-1580.595156	-1708.968953	-3195.057298	-875.761318	-1182.663213	-1356.101467	-1519.427928	-1692.674116
+0.95	346.490268	241.272955	346.806566	373.181713	588.004755	193.316114	261.096920	299.217316	335.185964	373.247667
-1	-1654.409550	-1151.082779	-1663.784385	-1798.914680	-3550.283240	-921.854008	-1244.908622	-1427.475211	-1599.397801	-1781.762254
+1	364.726587	253.971539	365.059550	392.822853	606.017435	203.490645	274.838862	314.965595	352.827324	392.892279
(Span 2) -2	-1654.409550	-1151.082779	-1663.784385	-1798.914680	-3550.283240	-921.854008	-1244.908622	-1427.475211	-1599.397801	-1781.762254
+2	364.726587	253.971539	365.059550	392.822853	606.017435	203.490645	274.838862	314.965595	352.827324	392.892279
-2.05	-1211.858848	-843.857952	-1212.964287	-1305.211996	-2453.667600	-676.127753	-913.192752	-1046.519771	-1172.320980	-1305.442684
+2.05	281.748449	196.191039	282.005662	303.452597	485.012002	157.194938	217.223780	243.308472	272.556362	303.506227
-2.1	-1128.880652	-786.077452	-1129.910397	-1215.841739	-2086.058904	-629.832046	-850.664773	-974.862648	-1092.050017	-1216.056632
+2.1	676.966350	508.578676	521.003618	458.382141	490.758217	406.939166	567.960157	625.963884	690.518767	742.732166
-2.15	-1045.902455	-728.296952	-1046.856508	-1126.471483	-1802.120342	-583.536340	-788.136794	-903.205525	-1011.779055	-1126.670581
+2.15	1134.367019	824.954865	993.419069	964.387812	960.643657	662.851332	909.313991	1019.504895	1129.313915	1235.300957
-2.2	-962.924258	-670.516451	-963.802618	-1037.101226	-1603.836957	-537.240634	-725.608815	-831.548402	-931.508093	-1037.284530
+2.2	1561.238454	1121.030458	1428.205020	1435.819171	1659.370371	901.059180	1229.084293	1387.193772	1540.390480	1694.891971

-2.25	-879.946061	-612.735951	-880.748729	-947.730970	-1480.359767	-490.944927	-663.080836	-759.891279	-851.237130	-947.898478
+2.25	1943.789142	1387.095669	1812.427514	1853.871090	2385.676979	1113.897218	1516.728443	1717.089550	1910.181273	2106.738887
-2.3	-796.967864	-554.955451	-797.694839	-858.360714	-1372.710385	-444.649221	-600.552857	-688.234156	-770.966168	-858.512427
+2.3	2270.441561	1614.975726	2135.399812	2206.606472	2998.983096	1295.058378	1763.361398	1999.154481	2227.252604	2458.249987
-2.35	-713.989668	-497.174951	-714.640950	-768.990457	-1265.061004	-398.353515	-538.024878	-616.577033	-690.695205	-769.126375
+2.35	2531.830997	1798.030848	2390.661995	2491.069996	3482.170531	1439.461523	1961.755823	2225.254156	2482.304673	2739.502834
-2.4	-631.011471	-439.394450	-631.587060	-679.620201	-1157.411622	-352.057808	-475.496899	-544.919910	-610.424243	-679.740324
+2.4	2720.806824	1931.156716	2574.456525	2700.036655	3813.425952	1543.255951	2106.343304	2389.158779	2668.171961	2947.260526
-2.45	-548.033274	-381.613950	-548.533171	-590.249944	-1049.762241	-305.762102	-412.968920	-473.262788	-530.153281	-590.354272
+2.45	2832.430809	2010.783505	2679.138262	2824.263276	3994.620916	1603.817067	2193.212013	2486.540803	2779.822033	3074.527739
-2.5	-465.055077	-323.833450	-465.479281	-500.879688	-942.112859	-259.466422	-350.440941	-401.605665	-449.882318	-500.968221
+2.5	2864.037623	2034.809957	2702.458558	2860.542673	4023.038145	1619.638819	2220.050043	2514.893573	2814.298889	3116.000176
-2.55	-548.032940	-381.613960	-548.533217	-590.249957	-1049.762235	-305.762129	-412.968903	-473.262758	-530.153264	-590.354292
+2.55	2832.556266	2010.785665	2679.141918	2824.266292	3994.618414	1603.823180	2193.215095	2486.545137	2779.825043	3074.529096
-2.6	-631.011079	-439.394460	-631.587104	-679.620213	-1157.411616	-352.057836	-475.496881	-544.919881	-610.424226	-679.740344
+2.6	2720.831550	1931.158284	2574.459145	2700.039163	3813.428567	1543.262339	2106.346034	2389.162581	2668.174132	2947.261098
-2.65	-713.989218	-497.174959	-714.640992	-768.990468	-1265.060997	-398.353542	-538.024860	-616.577004	-690.695189	-769.126396
+2.65	2531.770324	1798.032014	2390.664229	2491.072043	3482.172341	1439.467536	1961.758033	2225.257263	2482.306113	2739.502420
-2.7	-796.967356	-554.955459	-797.694880	-858.360723	-1372.710378	-444.649249	-600.552838	-688.234127	-770.966151	-858.512448
+2.7	2270.305122	1614.976533	2135.402943	2206.608699	2998.984225	1295.063546	1763.363031	1999.157184	2227.253581	2458.255149
-2.75	-879.945495	-612.735959	-880.748768	-947.730979	-1480.359758	-490.944956	-663.080817	-759.891250	-851.237114	-947.898500
+2.75	1943.578402	1387.096478	1812.430378	1853.873201	2385.678450	1113.902664	1516.730008	1717.092020	1910.182013	2106.743814
-2.8	-962.923634	-670.516459	-963.802656	-1037.101234	-1603.836954	-537.240663	-725.608796	-831.548373	-931.508076	-1037.284552
+2.8	1560.944181	1121.031115	1428.207709	1435.820704	1659.372579	901.064213	1229.085990	1387.196391	1540.391388	1694.891060
-2.85	-1045.901773	-728.296959	-1046.856544	-1126.471490	-1802.120335	-583.536369	-788.136774	-903.205496	-1011.779039	-1126.670604
+2.85	1133.966166	824.955609	993.421883	964.389561	960.645271	662.856944	909.315778	1019.507655	1129.315015	1235.300081
-2.9	-1128.879912	-786.077459	-1129.910432	-1215.841745	-2086.058904	-629.832076	-850.664753	-974.862619	-1092.050001	-1216.056656
+2.9	676.419343	508.579858	521.006905	458.383837	490.759300	406.937096	567.962399	625.966983	690.520274	742.731613
-2.95	-1211.858051	-843.857959	-1212.964320	-1305.212001	-2453.667601	-676.127783	-913.192732	-1046.519742	-1172.320964	-1305.442708
+2.95	281.748694	196.191052	282.005724	303.452620	485.012004	157.194962	217.226751	243.308441	272.556343	303.506242
-3	-1654.409541	-1151.082800	-1663.784422	-1798.914705	-3550.283271	-921.854015	-1244.908647	-1427.475229	-1599.397823	-1781.762269
+3	364.726842	253.971540	365.059557	392.822857	606.017437	203.490643	274.838864	314.965595	352.827324	392.892276
(Span 3) -4	-1654.409541	-1151.082800	-1663.784422	-1798.914705	-3550.283271	-921.854015	-1244.908647	-1427.475229	-1599.397823	-1781.762269
+4	364.726842	253.971540	365.059557	392.822857	606.017437	203.490643	274.838864	314.965595	352.827324	392.892276
-3.05	-1571.689063	-1093.528660	-1580.595202	-1708.968969	-3195.057301	-875.761314	-1182.663213	-1356.101467	-1519.427931	-1692.674157
+3.05	346.490499	241.272964	346.806580	373.181714	588.004764	193.316111	261.096921	299.217315	335.185957	373.247662
-3.1	-1488.968585	-1035.974520	-1497.405981	-1619.023234	-2889.377360	-829.668612	-1120.417780	-1284.727704	-1439.458039	-1603.586045
+3.1	545.864993	414.823252	414.818829	356.543921	599.538118	336.521549	465.366613	511.303363	558.920975	602.439714
-3.15	-1406.248107	-978.420380	-1414.216761	-1529.077498	-2642.072445	-783.575911	-1058.172346	-1213.353942	-1359.488147	-1514.497933
+3.15	931.538109	681.853841	808.308643	759.306877	821.162085	552.286093	753.505944	843.453702	929.274974	1018.132861
-3.2	-1323.527629	-920.866239	-1331.027540	-1439.131762	-2462.917428	-737.483210	-995.926913	-1141.980180	-1279.518255	-1425.409821
+3.2	1299.333310	936.941803	1182.785982	1164.861531	1397.219078	757.414648	1029.013615	1160.294608	1284.713640	1414.174454
-3.25	-1240.807151	-863.312099	-1247.838319	-1349.186027	-2308.985087	-691.390509	-933.681479	-1070.606417	-1199.548363	-1336.321709
+3.25	1640.718116	1174.322736	1525.598955	1537.175686	1987.734491	947.359438	1285.647282	1454.708142	1614.468036	1781.699837
-3.3	-1158.086673	-805.757959	-1164.649099	-1259.240291	-2155.052747	-645.297807	-871.436046	-999.232655	-1119.578471	-1247.233597
+3.3	1947.957263	1388.587914	1829.215388	1867.938669	2486.307206	1117.858972	1517.548395	1720.017346	1911.258817	2112.394301
-3.35	-1075.366195	-748.203819	-1081.459878	-1169.294556	-2001.120406	-599.205106	-809.190612	-927.858893	-1039.608579	-1158.145484
+3.35	2213.827037	1574.683984	2086.622179	2149.409133	2894.841212	1264.934125	1719.242582	1949.985621	2170.428962	2398.495131
-3.4	-992.645717	-690.649679	-998.270658	-1079.348820	-1847.188065	-553.112405	-746.945179	-856.485130	-959.638687	-1069.057372
+3.4	2431.616652	1727.912387	2291.325877	2374.456248	3220.839382	1384.890594	1885.638696	2138.816927	2384.188885	2632.789034
-3.45	-909.925239	-633.095539	-915.081437	-989.403084	-1693.255724	-507.019703	-684.699746	-785.111368	-879.668795	-979.969260
+3.45	2595.127651	1843.930722	2445.578842	2553.356359	3432.232955	1474.319039	2012.029285	2281.156229	2546.481377	2810.527777
-3.5	-827.204761	-575.541399	-831.892216	-899.457349	-1539.323384	-460.927002	-622.454312	-713.737606	-799.698903	-890.881148
+3.5	2698.952813	1918.751110	2537.714091	2666.361326	3530.749715	1530.093423	2094.091589	2372.088650	2651.741989	2931.519475
-3.55	-744.484282	-517.987259	-748.702996	-809.511613	-1385.391043	-414.834301	-560.208879	-642.363843	-719.729011	-801.793036
+3.55	2743.824594	1951.168726	2576.091111	2715.566619	3610.149421	1553.911839	2130.342785	2412.194880	2698.137496	2985.014471
-3.6	-661.763804	-460.433119	-665.513775	-719.565878	-1231.458702	-368.741600	-497.963445	-570.990081	-639.759119	-712.704924

+3.6	2740.849592	1946.035847	2584.544500	2706.310486	3616.958201	1555.180463	2123.518056	2408.001616	2689.131431	2970.677466
-3.65	-579.043326	-402.878979	-582.324555	-629.620142	-1077.526361	-322.648898	-435.718012	-499.616319	-559.789227	-623.616812
+3.65	2666.785745	1891.531580	2522.521725	2619.901465	3513.092421	1517.220649	2062.814844	2342.369223	2611.217757	2886.401030
-3.7	-496.322848	-345.324839	-499.135334	-539.674406	-923.594020	-276.556197	-373.472578	-428.242556	-479.819335	-534.528699
+3.7	2517.644191	1785.354566	2398.808382	2476.445520	3303.508079	1437.780400	1945.766618	2211.884797	2463.520107	2727.007659
-3.75	-413.602370	-287.770699	-415.946113	-449.728671	-769.661680	-230.463496	-311.227145	-356.868794	-399.849443	-445.440587
+3.75	2303.505533	1633.500830	2197.695611	2265.471893	3006.475390	1314.891986	1773.376971	2014.096426	2250.322910	2483.126845
-3.8	-330.881892	-230.216558	-332.756893	-359.782935	-615.729339	-184.370794	-248.981711	-285.495032	-319.879551	-356.352475
+3.8	2012.715307	1425.350211	1917.641261	1985.675022	2613.137417	1146.872909	1546.892884	1754.243440	1958.764010	2151.676799
-3.85	-248.161414	-172.662418	-249.567672	-269.837199	-461.796998	-138.278093	-186.736278	-214.121269	-239.909659	-267.264363
+3.85	1638.734583	1159.135312	1568.036296	1616.787857	2120.472350	932.322446	1257.607548	1427.320108	1586.407742	1737.994173
-3.9	-165.440936	-115.108278	-166.378452	-179.891464	-307.864657	-92.185392	-124.490844	-142.747507	-159.939767	-178.176251
+3.9	1179.443312	833.441998	1133.010339	1172.133104	1545.084810	670.127915	904.010793	1026.745695	1131.713056	1241.891760
-3.95	-82.720458	-57.554138	-83.189231	-89.945728	-153.932317	-46.092690	-62.245411	-71.373745	-79.969875	-89.088139
+3.95	633.360676	447.213269	610.629176	633.866275	842.540069	359.456911	484.978598	551.179186	607.342167	665.375887
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (South Carolina Legal Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC SHV1A	SC SHV1B	SC SHV2A	SC SHV2B	SC SHV3A	SC SHV3B	SC School Bus
Span 1	Moment Z (kips-ft)							
-0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
End Shear	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
-0.05	-82.720478	-74.994124	-80.735346	-76.112446	-92.215195	-96.632452	-102.300868	-40.236728
+0.05	633.550287	589.491610	631.799695	593.833860	713.407756	704.776026	745.496167	313.115082
-0.1	-165.440957	-149.988247	-161.470692	-152.224892	-184.430390	-193.264905	-204.601737	-80.473455
+0.1	1179.714622	1099.522009	1178.044745	1107.029407	1329.103232	1307.100241	1382.527474	583.311658
-0.15	-248.161435	-224.982371	-242.206038	-228.337338	-276.645585	-289.897357	-306.902605	-120.710183
+0.15	1638.957060	1530.656288	1639.391715	1540.218581	1847.964923	1808.097068	1912.294452	811.088424
-0.2	-330.881914	-299.976495	-322.941384	-304.449785	-368.860781	-386.529810	-409.203474	-160.946910
+0.2	2012.888792	1884.199065	2017.272261	1894.767549	2271.704994	2220.906909	2349.284180	997.193510
-0.25	-413.602392	-374.970619	-403.676730	-380.562231	-461.075976	-483.162262	-511.504342	-201.183638
+0.25	2303.632769	2161.916813	2313.615382	2172.511511	2616.135147	2551.714235	2700.226690	1142.886443
-0.3	-496.322871	-449.964742	-484.412076	-456.674677	-553.291171	-579.794715	-613.805211	-241.420365
+0.3	2517.818263	2366.037926	2530.847591	2387.050477	2873.711405	2792.838679	2954.884340	1249.291974
-0.35	-579.043349	-524.958866	-565.147422	-532.787123	-645.506366	-676.427167	-716.106079	-281.657093
+0.35	2666.918998	2502.851418	2682.797654	2531.189590	3043.657620	2954.522799	3126.629715	1317.736774
-0.4	-661.763828	-599.952990	-645.882768	-608.899569	-737.721561	-773.059619	-818.406948	-321.893820
+0.4	2740.944021	2579.525936	2763.101715	2606.140961	3129.767491	3029.806587	3206.891559	1349.962415
-0.45	-744.484306	-674.947113	-726.618113	-685.012015	-829.936756	-869.692072	-920.707816	-362.130548
+0.45	2743.884190	2591.000091	2773.846881	2615.159913	3136.425443	3022.728028	3199.910645	1346.421860
-0.5	-827.204785	-749.941237	-807.353459	-761.124461	-922.151951	-966.324524	-1023.008685	-402.367275
+0.5	2698.875441	2546.103666	2726.361277	2570.258176	3084.235855	2976.785923	3151.070283	1328.382588
-0.55	-909.925263	-824.935361	-888.088805	-837.236907	-1014.367146	-1062.956977	-1125.309553	-442.604003
+0.55	2594.961438	2444.101363	2618.206683	2469.303611	2964.933938	2867.304569	3034.748158	1281.047499
-0.6	-992.645742	-899.929484	-968.824151	-913.349354	-1106.582342	-1159.589429	-1227.610421	-482.840730
+0.6	2431.181628	2289.269941	2452.874769	2314.262922	2779.702859	2685.517771	2841.938246	1204.035194
-0.65	-1075.366220	-974.923608	-1049.559497	-989.461800	-1198.797537	-1256.221881	-1329.911290	-523.077458
+0.65	2213.224398	2087.400357	2235.996531	2110.429123	2534.975395	2437.967551	2579.573920	1100.067414
-0.7	-1158.086699	-1049.917732	-1130.294843	-1065.574246	-1291.012732	-1352.854334	-1432.212158	-563.314185
+0.7	1947.290880	1846.735925	1973.701534	1863.565069	2237.380069	2131.800656	2255.228845	972.115953
-0.75	-1240.807177	-1124.911856	-1211.030189	-1141.686692	-1383.227927	-1449.486786	-1534.513027	-603.550913
+0.75	1640.093310	1568.602296	1672.616552	1579.902074	1894.413615	1774.767917	1877.116318	823.401644
-0.8	-1323.527655	-1199.905979	-1291.765535	-1217.799138	-1475.443122	-1546.119239	-1636.813895	-643.787640
+0.8	1298.856191	1259.509192	1339.865387	1266.140616	1514.141673	1375.224047	1454.432575	657.395590
-0.85	-1406.248134	-1274.900103	-1372.500881	-1293.911584	-1567.658317	-1642.751691	-1739.114764	-684.024368
+0.85	931.314678	926.428597	983.069454	929.450268	1105.198291	942.127676	995.639111	477.817299
-0.9	-1488.968612	-1349.894227	-1453.236227	-1370.024030	-1659.873512	-1739.384144	-1841.415632	-724.261095
+0.9	545.716983	577.431460	610.347492	577.469836	677.188259	485.041646	511.898457	288.636057
-0.95	-1571.689091	-1424.888350	-1533.971573	-1446.136477	-1752.088708	-1836.016596	-1943.716501	-764.497823
+0.95	346.490268	314.699423	338.740458	319.326700	386.810651	402.914867	426.522133	168.479594
-1	-1654.409550	-1499.882502	-1614.706941	-1522.248892	-1844.303875	-1932.648999	-2046.017318	-804.734567
+1	364.726587	331.262544	356.568893	336.133362	407.169112	424.120899	448.970652	177.346946
(Span 2) -2	-1654.409550	-1499.882502	-1614.706941	-1522.248892	-1844.303875	-1932.648999	-2046.017318	-804.734567
+2	364.726587	331.262544	356.568893	336.133362	407.169112	424.120899	448.970652	177.346946
-2.05	-1211.858848	-1100.668804	-1184.752851	-1116.852765	-1352.879598	-1409.204401	-1491.771394	-589.261417
+2.05	281.748449	284.858872	291.942305	275.334776	314.534972	327.630092	346.826332	144.212364
-2.1	-1128.880652	-1025.303996	-1103.630654	-1040.379845	-1260.245457	-1312.713592	-1389.627072	-548.913608
+2.1	676.966350	703.916116	744.951006	703.550914	826.213108	627.394028	663.010708	348.520810
-2.15	-1045.902455	-949.939187	-1022.508456	-963.906859	-1167.611317	-1216.222783	-1287.482750	-508.565800
+2.15	1134.367019	1112.959604	1186.486382	1120.524029	1333.760003	1169.503735	1236.731789	572.618495
-2.2	-962.924258	-874.574379	-941.386258	-887.433906	-1074.977176	-1119.731974	-1185.338428	-468.217991
+2.2	1561.238454	1497.136831	1600.642080	1511.311087	1808.305451	1672.433622	1769.118711	781.001416

-2.25	-879.946061	-799.209570	-860.264060	-810.960953	-982.343035	-1023.241166	-1083.194106	-427.870183
+2.25	1943.789142	1843.591301	1973.661243	1862.995966	2234.380517	2120.462009	2243.503287	966.914635
-2.3	-796.967864	-723.844761	-779.141862	-734.488024	-889.708895	-926.750357	-981.049784	-387.522374
+2.3	2270.441561	2141.461952	2293.935985	2164.688394	2598.971753	2500.476269	2645.979887	1124.881405
-2.35	-713.989668	-648.479953	-698.019664	-658.015047	-797.074754	-830.259548	-878.905462	-347.174566
+2.35	2531.830997	2381.883169	2552.007359	2407.524257	2891.521603	2801.974084	2965.406705	1250.501779
-2.4	-631.011471	-573.115144	-616.897467	-581.542094	-704.440614	-733.768740	-776.761140	-306.826757
+2.4	2720.806824	2557.985787	2740.566450	2584.666982	3103.930413	3017.063008	3193.405356	1340.477182
-2.45	-548.033274	-497.750336	-535.775269	-505.069158	-611.806473	-637.277931	-674.616818	-266.478949
+2.45	2832.430809	2664.894772	2854.451782	2691.304776	3230.552593	3140.459955	3324.360295	1392.669096
-2.5	-465.055077	-422.385532	-454.653096	-428.596189	-519.172333	-540.787179	-572.472549	-226.131140
+2.5	2864.037623	2699.672433	2890.592977	2724.583820	3268.130434	3169.422062	3355.346046	1405.792981
-2.55	-548.032940	-497.750340	-535.775295	-505.069159	-611.806424	-637.277987	-674.616870	-266.478955
+2.55	2832.556266	2664.897040	2854.454901	2691.308841	3230.558954	3140.463804	3324.364251	1392.668462
-2.6	-631.011079	-573.115147	-616.897494	-581.542115	-704.440564	-733.768795	-776.761190	-306.826764
+2.6	2720.831550	2557.987090	2740.568473	2584.670666	3103.936455	3017.065685	3193.408082	1340.476816
-2.65	-713.989218	-648.479955	-698.019693	-658.015072	-797.074703	-830.259603	-878.905510	-347.174573
+2.65	2531.770324	2381.884121	2552.009085	2407.527248	2891.526792	2801.976300	2965.408944	1250.502671
-2.7	-796.967356	-723.844762	-779.141892	-734.487979	-889.708843	-926.750411	-981.049830	-387.522383
+2.7	2270.305122	2141.462319	2293.937084	2164.690676	2598.975990	2500.477883	2645.981491	1124.882030
-2.75	-879.945495	-799.209570	-860.264090	-810.960985	-982.342983	-1023.241219	-1083.194150	-427.870192
+2.75	1943.578402	1843.591694	1973.662387	1862.998228	2234.384768	2120.462959	2243.504191	966.915800
-2.8	-962.923634	-874.574378	-941.386289	-887.433941	-1074.977122	-1119.732027	-1185.338470	-468.218001
+2.8	1560.944181	1497.137362	1600.643352	1511.313523	1808.309892	1672.434741	1769.119795	781.002812
-2.85	-1045.901773	-949.939185	-1022.508488	-963.906897	-1167.611262	-1216.222835	-1287.482790	-508.565810
+2.85	1133.966166	1112.960083	1186.487556	1120.526567	1333.764536	1169.504996	1236.733025	572.619483
-2.9	-1128.879912	-1025.303993	-1103.630687	-1040.379854	-1260.245402	-1312.713642	-1389.627111	-548.913619
+2.9	676.419343	703.917102	744.952677	703.553978	826.218295	627.396024	663.012720	348.519934
-2.95	-1211.858051	-1100.668800	-1184.752886	-1116.852810	-1352.879541	-1409.204450	-1491.771431	-589.261429
+2.95	281.748694	284.860807	291.944990	275.338714	314.534932	327.630156	346.826403	143.651924
-3	-1654.409541	-1499.882539	-1614.706952	-1522.248899	-1844.303914	-1932.649028	-2046.017362	-804.734569
+3	364.726842	331.262548	356.568888	336.133357	407.169116	424.120903	448.970661	177.346943
(Span 3) -4	-1654.409541	-1499.882539	-1614.706952	-1522.248899	-1844.303914	-1932.649028	-2046.017362	-804.734569
+4	364.726842	331.262548	356.568888	336.133357	407.169116	424.120903	448.970661	177.346943
-3.05	-1571.689063	-1424.888413	-1533.971606	-1446.136452	-1752.088717	-1836.016575	-1943.716492	-764.497841
+3.05	346.490499	314.699421	338.740443	319.326674	386.810660	402.914857	426.522127	168.479596
-3.1	-1488.968585	-1349.894288	-1453.236259	-1370.024006	-1659.873520	-1739.384121	-1841.415621	-724.261114
+3.1	545.864993	577.431251	610.346623	577.467786	677.191769	485.040925	511.897784	288.635298
-3.15	-1406.248107	-1274.900162	-1372.500913	-1293.911559	-1567.658322	-1642.751667	-1739.114750	-684.024386
+3.15	931.538109	926.429313	983.068836	929.448555	1105.194844	942.127084	995.638575	477.816273
-3.2	-1323.527629	-1199.906037	-1291.765566	-1217.799113	-1475.443125	-1546.119213	-1636.813880	-643.787658
+3.2	1299.333310	1259.509954	1339.865150	1266.139073	1514.138297	1375.223712	1454.432911	657.394616
-3.25	-1240.807151	-1124.911911	-1211.030220	-1141.686666	-1383.227928	-1449.486759	-1534.513009	-603.550931
+3.25	1640.718116	1568.602972	1672.616433	1579.900580	1894.410376	1774.767649	1877.116137	823.400705
-3.3	-1158.086673	-1049.917786	-1130.294873	-1065.574220	-1291.012731	-1352.854305	-1432.212138	-563.314203
+3.3	1947.957263	1846.736551	1973.701304	1863.563308	2237.376313	2131.800149	2255.228407	972.114520
-3.35	-1075.366195	-974.923660	-1049.559527	-989.461773	-1198.797534	-1256.221851	-1329.911267	-523.077476
+3.35	2213.827037	2087.400631	2235.995818	2110.427209	2534.971560	2437.966510	2579.572929	1100.065893
-3.4	-992.645717	-899.929535	-968.824181	-913.349327	-1106.582337	-1159.589397	-1227.610397	-482.840748
+3.4	2431.616652	2289.269167	2452.873228	2314.260466	2779.698487	2685.515879	2841.936351	1204.033465
-3.45	-909.925239	-824.935409	-888.088834	-837.236880	-1014.367140	-1062.956944	-1125.309526	-442.604021
+3.45	2595.127651	2444.100030	2618.204512	2469.300283	2964.936272	2867.302002	3034.745544	1281.045752
-3.5	-827.204761	-749.941284	-807.353488	-761.124434	-922.151943	-966.324490	-1023.008655	-402.367293
+3.5	2698.952813	2546.101787	2726.358615	2570.254053	3084.236900	2976.781997	3151.066248	1328.381431
-3.55	-744.484282	-674.947158	-726.618141	-685.011987	-829.936746	-869.692036	-920.707785	-362.130565
+3.55	2743.824594	2591.002593	2773.840970	2615.156933	3136.425006	3022.725867	3199.908288	1347.958878
-3.6	-661.763804	-599.953032	-645.882795	-608.899541	-737.721549	-773.059582	-818.406914	-321.893838

+3.6	2740.849592	2579.527675	2763.104308	2606.137061	3129.765786	3029.803179	3206.887869	1349.962202
-3.65	-579.043326	-524.958907	-565.147448	-532.787094	-645.506351	-676.427128	-716.106043	-281.657110
+3.65	2666.785745	2502.851779	2682.798794	2531.183987	3043.654207	2954.517944	3126.631492	1317.736404
-3.7	-496.322848	-449.964781	-484.412102	-456.674648	-553.291154	-579.794674	-613.805173	-241.420383
+3.7	2517.644191	2366.037029	2530.847331	2387.051671	2873.706851	2792.838956	2954.884520	1249.291377
-3.75	-413.602370	-374.970656	-403.676755	-380.562201	-461.075957	-483.162220	-511.504302	-201.183655
+3.75	2303.505533	2161.914770	2313.613916	2172.511458	2616.136639	2551.713383	2700.225673	1142.885583
-3.8	-330.881892	-299.976530	-322.941409	-304.449755	-368.860760	-386.529766	-409.203431	-160.946928
+3.8	2012.715307	1884.195313	2017.268999	1894.765788	2271.704443	2220.904337	2349.281348	997.194209
-3.85	-248.161414	-224.982405	-242.206062	-228.337308	-276.645563	-289.897313	-306.902561	-120.710200
+3.85	1638.734583	1530.651591	1639.387309	1540.215630	1847.962856	1808.095843	1912.293189	811.089036
-3.9	-165.440936	-149.988279	-161.470716	-152.224862	-184.430366	-193.264859	-204.601690	-80.473472
+3.9	1179.443312	1099.515757	1178.038701	1107.024581	1329.099105	1307.097363	1382.524464	583.311989
-3.95	-82.720458	-74.994154	-80.735369	-76.112415	-92.215169	-96.632405	-102.300819	-40.236745
+3.95	633.360676	589.483908	631.792103	593.827976	713.402250	704.771154	745.491051	313.115355
-5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
+5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

3-Span: Moment (Max and Min) Raw Data Results - 200' Min Span Length (Permit Trucks vs. HS-20 Design Truck)

Location (20th pts)	HS-20 (Variable)	SC Crane (160k)	SC Crane (177.7k)	SC-100k	SC-120k	SC-130k
Span 1	**Moment Z (kips-ft)**					
-0	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
End Shear	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
-0.05	**-82.720478**	**-180.559455**	**-200.041978**	**-113.212256**	**-136.101547**	**-147.101372**
+0.05	**633.550287**	**1264.253598**	**1370.875806**	**817.389580**	**984.738601**	**1050.875352**
-0.1	**-165.440957**	**-361.118911**	**-400.083956**	**-226.424513**	**-272.203093**	**-294.202744**
+0.1	**1179.714622**	**2336.913480**	**2541.130643**	**1514.619512**	**1824.947676**	**1945.565232**
-0.15	**-248.161435**	**-541.678366**	**-600.125933**	**-339.636769**	**-408.304640**	**-441.304117**
+0.15	**1638.957060**	**3254.429785**	**3531.442703**	**2093.067040**	**2527.915996**	**2698.063834**
-0.2	**-330.881914**	**-722.237822**	**-800.167911**	**-452.849026**	**-544.406187**	**-588.405489**
+0.2	**2012.888792**	**3990.730282**	**4382.363443**	**2581.817042**	**3112.136161**	**3316.894617**
-0.25	**-413.602392**	**-902.797277**	**-1000.209889**	**-566.061282**	**-680.507734**	**-735.506861**
+0.25	**2303.632769**	**4577.312488**	**5043.159025**	**2960.435504**	**3560.461712**	**3815.964966**
-0.3	**-496.322871**	**-1083.356732**	**-1200.251867**	**-679.273538**	**-816.609280**	**-882.608233**
+0.3	**2517.818263**	**5024.515151**	**5544.899559**	**3235.244433**	**3880.504190**	**4175.241393**
-0.35	**-579.043349**	**-1263.916188**	**-1400.293845**	**-792.485795**	**-952.710827**	**-1029.709605**
+0.35	**2666.918998**	**5324.839265**	**5870.908382**	**3416.243499**	**4092.375746**	**4399.650713**
-0.4	**-661.763828**	**-1444.475643**	**-1600.335822**	**-905.698051**	**-1088.812374**	**-1176.810978**
+0.4	**2740.944021**	**5497.727961**	**6032.683226**	**3496.519011**	**4183.676067**	**4511.718918**
-0.45	**-744.484306**	**-1625.035099**	**-1800.377800**	**-1018.910307**	**-1224.913920**	**-1323.912350**
+0.45	**2743.884190**	**5512.318092**	**6078.607079**	**3480.929296**	**4160.387566**	**4499.420120**
-0.5	**-827.204785**	**-1805.594554**	**-2000.419778**	**-1132.122564**	**-1361.015467**	**-1471.013722**
+0.5	**2698.875441**	**5415.824232**	**5958.574510**	**3430.710291**	**4101.895571**	**4431.064847**
-0.55	**-909.925263**	**-1986.154010**	**-2200.461756**	**-1245.334820**	**-1497.117014**	**-1618.115094**
+0.55	**2594.961438**	**5188.231452**	**5688.606565**	**3310.174055**	**3960.525027**	**4267.447043**
-0.6	**-992.645742**	**-2166.713465**	**-2400.503734**	**-1358.547077**	**-1633.218561**	**-1765.216466**
+0.6	**2431.181628**	**4830.441399**	**5322.278825**	**3103.535412**	**3715.350131**	**3993.002111**
-0.65	**-1075.366220**	**-2347.272920**	**-2600.545711**	**-1471.759333**	**-1769.320107**	**-1912.317838**
+0.65	**2213.224398**	**4358.421104**	**4817.545927**	**2818.381501**	**3375.265435**	**3628.134218**
-0.7	**-1158.086699**	**-2527.832376**	**-2800.587689**	**-1584.971589**	**-1905.421654**	**-2059.419211**
+0.7	**1947.290880**	**3796.335598**	**4188.748474**	**2463.011141**	**2950.171452**	**3171.734702**
-0.75	**-1240.807177**	**-2708.391831**	**-3000.629667**	**-1698.183846**	**-2041.523201**	**-2206.520583**
+0.75	**1640.093310**	**3134.538241**	**3449.982398**	**2046.433269**	**2454.751436**	**2633.747785**
-0.8	**-1323.527655**	**-2888.951287**	**-3200.671645**	**-1811.396102**	**-2177.624747**	**-2353.621955**
+0.8	**1298.856191**	**2388.438256**	**2621.686610**	**1578.812674**	**1894.930720**	**2026.655160**
-0.85	**-1406.248134**	**-3069.510742**	**-3400.713623**	**-1924.608359**	**-2313.726294**	**-2500.723327**
+0.85	**931.314678**	**1574.580870**	**1720.425842**	**1069.243952**	**1281.302146**	**1363.863080**
-0.9	**-1488.968612**	**-3250.070197**	**-3600.755600**	**-2037.820615**	**-2449.827841**	**-2647.824699**
+0.9	**545.716983**	**728.628318**	**786.750772**	**530.204202**	**640.640023**	**659.700899**
-0.95	**-1571.689091**	**-3430.629653**	**-3800.797578**	**-2151.032871**	**-2585.929388**	**-2794.926072**
+0.95	**346.490268**	**750.398854**	**830.459148**	**471.175582**	**566.888816**	**612.087274**
-1	**-1654.409550**	**-3611.189136**	**-4000.839553**	**-2264.245090**	**-2722.030935**	**-2942.027435**
+1	**364.726587**	**789.893516**	**874.167517**	**495.974282**	**596.725072**	**644.302402**
(Span 2) -2	**-1654.409550**	**-3611.189136**	**-4000.839553**	**-2264.245090**	**-2722.030935**	**-2942.027435**
+2	**364.726587**	**789.893516**	**874.167517**	**495.974282**	**596.725072**	**644.302402**
-2.05	**-1211.858848**	**-2624.537962**	**-2904.548507**	**-1647.947896**	**-1982.707219**	**-2140.789883**
+2.05	**281.748449**	**610.186592**	**675.287604**	**383.136270**	**460.965474**	**497.718592**
-2.1	**-1128.880652**	**-2444.831039**	**-2705.668750**	**-1535.109884**	**-1846.947622**	**-1994.206075**
+2.1	**676.966350**	**983.016996**	**1052.057107**	**689.785032**	**815.492302**	**856.154036**
-2.15	**-1045.902455**	**-2265.124116**	**-2506.788993**	**-1422.271873**	**-1711.188026**	**-1847.622267**
+2.15	**1134.367019**	**1985.999968**	**2182.483593**	**1329.413542**	**1585.672279**	**1691.962689**
-2.2	**-962.924258**	**-2085.417193**	**-2307.909235**	**-1309.433862**	**-1575.428429**	**-1701.038458**
+2.2	**1561.238454**	**2926.163396**	**3229.588162**	**1920.817668**	**2296.632854**	**2461.840478**

-2.25	**-879.946061**	**-1905.710270**	**-2109.029478**	**-1196.595850**	**-1439.668832**	**-1554.454650**
+2.25	**1943.789142**	**3764.851111**	**4159.759857**	**2445.864261**	**2926.805079**	**3142.716388**
-2.3	**-796.967864**	**-1726.003347**	**-1910.149721**	**-1083.757839**	**-1303.909236**	**-1407.870842**
+2.3	**2270.441561**	**4484.162709**	**4946.123874**	**2889.490473**	**3458.303922**	**3715.508158**
-2.35	**-713.989668**	**-1546.296424**	**-1711.269963**	**-970.919827**	**-1168.149639**	**-1261.287034**
+2.35	**2531.830997**	**5060.548947**	**5567.269125**	**3239.704044**	**3876.928977**	**4171.713757**
-2.4	**-631.011471**	**-1366.589501**	**-1512.390206**	**-858.081816**	**-1032.390042**	**-1114.703226**
+2.4	**2720.806824**	**5478.013750**	**6015.429114**	**3487.583341**	**4172.165377**	**4498.322357**
-2.45	**-548.033274**	**-1186.882578**	**-1313.510449**	**-745.243804**	**-896.630445**	**-968.119418**
+2.45	**2832.430809**	**5725.833422**	**6305.828302**	**3627.276638**	**4337.170550**	**4684.854263**
-2.5	**-465.055077**	**-1007.175655**	**-1114.630692**	**-632.405793**	**-760.870904**	**-821.535699**
+2.5	**2864.037623**	**5797.982441**	**6403.872887**	**3655.880683**	**4368.636964**	**4727.261714**
-2.55	**-548.032940**	**-1186.882649**	**-1313.511531**	**-745.243852**	**-896.630502**	**-968.119509**
+2.55	**2832.556266**	**5725.831016**	**6306.759591**	**3627.280657**	**4337.168383**	**4684.857148**
-2.6	**-631.011079**	**-1366.589573**	**-1512.391444**	**-858.081864**	**-1032.390100**	**-1114.703319**
+2.6	**2720.831550**	**5478.017807**	**6014.648495**	**3487.586644**	**4172.169050**	**4498.324088**
-2.65	**-713.989218**	**-1546.296497**	**-1711.271357**	**-970.919876**	**-1168.149697**	**-1261.287129**
+2.65	**2531.770324**	**5060.550859**	**5567.268574**	**3239.706548**	**3876.931852**	**4171.714706**
-2.7	**-796.967356**	**-1726.003421**	**-1910.151271**	**-1083.757888**	**-1303.909295**	**-1407.870939**
+2.7	**2270.305122**	**4484.163817**	**4946.122366**	**2889.492323**	**3458.305674**	**3715.507466**
-2.75	**-879.945495**	**-1905.710345**	**-2109.031184**	**-1196.595900**	**-1439.668893**	**-1554.454749**
+2.75	**1943.578402**	**3764.851650**	**4159.758792**	**2445.865279**	**2926.805858**	**3142.721501**
-2.8	**-962.923634**	**-2085.417269**	**-2307.911098**	**-1309.433912**	**-1575.428490**	**-1701.038559**
+2.8	**1560.944181**	**2926.162565**	**3229.586636**	**1920.818810**	**2296.633857**	**2461.845688**
-2.85	**-1045.901773**	**-2265.124193**	**-2506.791011**	**-1422.271925**	**-1711.188088**	**-1847.622370**
+2.85	**1133.966166**	**1986.001342**	**2182.482685**	**1329.415067**	**1585.673385**	**1691.961611**
-2.9	**-1128.879912**	**-2444.831117**	**-2705.670924**	**-1535.109937**	**-1846.947685**	**-1994.206180**
+2.9	**676.419343**	**983.018910**	**1052.056164**	**689.787274**	**815.494210**	**856.153646**
-2.95	**-1211.858051**	**-2624.538041**	**-2904.550838**	**-1647.947949**	**-1982.707283**	**-2140.789990**
+2.95	**281.748694**	**610.186651**	**675.287124**	**383.136310**	**460.965522**	**497.718664**
-3	**-1654.409541**	**-3611.189178**	**-4000.850286**	**-2264.245100**	**-2722.030947**	**-2942.027431**
+3	**364.726842**	**789.893511**	**874.166842**	**495.974279**	**596.725068**	**644.302394**
(Span 3) -4	**-1654.409541**	**-3611.189178**	**-4000.850286**	**-2264.245100**	**-2722.030947**	**-2942.027431**
+4	**364.726842**	**789.893511**	**874.166842**	**495.974279**	**596.725068**	**644.302394**
-3.05	**-1571.689063**	**-3430.629721**	**-3800.807771**	**-2151.032843**	**-2585.929399**	**-2794.926059**
+3.05	**346.490499**	**750.398834**	**830.458501**	**471.175564**	**566.888815**	**612.087274**
-3.1	**-1488.968585**	**-3250.070263**	**-3600.765256**	**-2037.820586**	**-2449.827852**	**-2647.824687**
+3.1	**545.864993**	**728.631810**	**786.750159**	**530.203544**	**640.641477**	**659.703029**
-3.15	**-1406.248107**	**-3069.510806**	**-3400.722741**	**-1924.608329**	**-2313.726305**	**-2500.723315**
+3.15	**931.538109**	**1574.583103**	**1721.989689**	**1069.243465**	**1281.302853**	**1363.865298**
-3.2	**-1323.527629**	**-2888.951348**	**-3200.680226**	**-1811.396072**	**-2177.624757**	**-2353.621943**
+3.2	**1299.333310**	**2388.440800**	**2623.035254**	**1578.813176**	**1894.931631**	**2026.657986**
-3.25	**-1240.807151**	**-2708.391891**	**-3000.637711**	**-1698.183815**	**-2041.523210**	**-2206.520571**
+3.25	**1640.718116**	**3134.540806**	**3451.476981**	**2046.432863**	**2454.751867**	**2633.750069**
-3.3	**-1158.086673**	**-2527.832433**	**-2800.595196**	**-1584.971558**	**-1905.421663**	**-2059.419199**
+3.3	**1947.957263**	**3796.337822**	**4188.747887**	**2463.010528**	**2950.171215**	**3171.736871**
-3.35	**-1075.366195**	**-2347.272976**	**-2600.552681**	**-1471.759302**	**-1769.320116**	**-1912.317827**
+3.35	**2213.827037**	**4358.422475**	**4816.936123**	**2818.380391**	**3375.264490**	**3628.135529**
-3.4	**-992.645717**	**-2166.713518**	**-2400.510166**	**-1358.547045**	**-1633.218568**	**-1765.216455**
+3.4	**2431.616652**	**4830.440190**	**5322.279958**	**3103.533152**	**3715.347963**	**3993.001867**
-3.45	**-909.925239**	**-1986.154060**	**-2200.467651**	**-1245.334788**	**-1497.117021**	**-1618.115083**
+3.45	**2595.127651**	**5189.057605**	**5688.606977**	**3310.170583**	**3960.521358**	**4267.445215**
-3.5	**-827.204761**	**-1805.594603**	**-2000.425136**	**-1132.122531**	**-1361.015474**	**-1471.013711**
+3.5	**2698.952813**	**5415.826470**	**5960.285981**	**3430.706109**	**4101.897697**	**4431.061679**
-3.55	**-744.484282**	**-1625.035145**	**-1800.382621**	**-1018.910274**	**-1224.913926**	**-1323.912339**
+3.55	**2743.824594**	**5512.978416**	**6078.605591**	**3480.926617**	**4160.386278**	**4499.417305**
-3.6	**-661.763804**	**-1444.475688**	**-1600.340105**	**-905.698017**	**-1088.812379**	**-1176.810967**

+3.6	**2740.849592**	**5497.732162**	**6032.684029**	**3496.515081**	**4183.673141**	**4511.714140**
-3.65	**-579.043326**	**-1263.916230**	**-1400.297590**	**-792.485760**	**-952.710832**	**-1029.709595**
+3.65	**2666.785745**	**5324.841168**	**5870.908139**	**3416.237485**	**4092.371465**	**4399.650991**
-3.7	**-496.322848**	**-1083.356773**	**-1200.255075**	**-679.273504**	**-816.609284**	**-882.608223**
+3.7	**2517.644191**	**5024.513728**	**5545.265475**	**3235.245022**	**3880.504351**	**4175.239388**
-3.75	**-413.602370**	**-902.797315**	**-1000.212560**	**-566.061247**	**-680.507737**	**-735.506851**
+3.75	**2303.505533**	**4577.307810**	**5043.159731**	**2960.434355**	**3560.460285**	**3815.961002**
-3.8	**-330.881892**	**-722.237858**	**-800.170045**	**-452.848990**	**-544.406190**	**-588.405479**
+3.8	**2012.715307**	**3991.391921**	**4382.363249**	**2581.813499**	**3112.132184**	**3316.891302**
-3.85	**-248.161414**	**-541.678400**	**-600.127530**	**-339.636733**	**-408.304643**	**-441.304107**
+3.85	**1638.734583**	**3254.433079**	**3532.827891**	**2093.065300**	**2527.916448**	**2698.064915**
-3.9	**-165.440936**	**-361.118943**	**-400.085015**	**-226.424476**	**-272.203095**	**-294.202735**
+3.9	**1179.443312**	**2336.912968**	**2541.130913**	**1514.616227**	**1824.946073**	**1945.563920**
-3.95	**-82.720458**	**-180.559485**	**-200.042500**	**-113.212219**	**-136.101548**	**-147.101363**
+3.95	**633.360676**	**1264.250022**	**1370.876969**	**817.384088**	**984.734466**	**1050.871026**
-5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**
+5	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**